

# Appendix A- 5GWi-Fi(U-NII-2C&U-NII-3)

5470 ~ 5725MHz

## Emission Bandwidth

### Test Result

TestMode	Antenna	Frequency[MHz]	26dB EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11a-CDD	Ant1	5500	21.280	5489.400	5510.680	---	---
11a-CDD	Ant2	5500	21.560	5488.960	5510.520	---	---
11a-CDD	Ant1	5580	22.320	5568.880	5591.200	---	---
11a-CDD	Ant2	5580	22.040	5568.960	5591.000	---	---
11a-CDD	Ant1	5700	21.640	5689.200	5710.840	---	---
11a-CDD	Ant2	5700	22.280	5688.560	5710.840	---	---
11n20MIMO	Ant1	5500	21.800	5489.280	5511.080	---	---
11n20MIMO	Ant2	5500	22.360	5488.840	5511.200	---	---
11n20MIMO	Ant1	5580	22.640	5568.640	5591.280	---	---
11n20MIMO	Ant2	5580	22.400	5568.720	5591.120	---	---
11n20MIMO	Ant1	5700	21.280	5689.400	5710.680	---	---
11n20MIMO	Ant2	5700	21.880	5688.760	5710.640	---	---
11n40MIMO	Ant1	5510	40.960	5489.440	5530.400	---	---
11n40MIMO	Ant2	5510	42.320	5489.120	5531.440	---	---
11n40MIMO	Ant1	5590	41.920	5569.760	5611.680	---	---
11n40MIMO	Ant2	5590	40.720	5569.040	5609.760	---	---
11n40MIMO	Ant1	5670	41.280	5649.280	5690.560	---	---
11n40MIMO	Ant2	5670	40.960	5649.360	5690.320	---	---
11ac20MIMO	Ant1	5500	22.560	5488.800	5511.360	---	---
11ac20MIMO	Ant2	5500	22.480	5488.640	5511.120	---	---
11ac20MIMO	Ant1	5580	22.960	5568.560	5591.520	---	---
11ac20MIMO	Ant2	5580	22.880	5568.440	5591.320	---	---
11ac20MIMO	Ant1	5700	22.120	5688.720	5710.840	---	---
11ac20MIMO	Ant2	5700	21.840	5689.080	5710.920	---	---
11ac40MIMO	Ant1	5510	42.160	5488.960	5531.120	---	---
11ac40MIMO	Ant2	5510	40.880	5489.520	5530.400	---	---
11ac40MIMO	Ant1	5590	41.280	5569.760	5611.040	---	---
11ac40MIMO	Ant2	5590	40.320	5569.440	5609.760	---	---
11ac40MIMO	Ant1	5670	41.360	5648.960	5690.320	---	---
11ac40MIMO	Ant2	5670	40.240	5649.920	5690.160	---	---
11ac80MIMO	Ant1	5530	83.680	5488.560	5572.240	---	---
11ac80MIMO	Ant2	5530	83.840	5487.760	5571.600	---	---
11ac80MIMO	Ant1	5610	83.840	5568.240	5652.080	---	---
11ac80MIMO	Ant2	5610	82.240	5569.840	5652.080	---	---
11ac160MIMO	Ant1	5570	169.600	5486.160	5655.760	---	---
11ac160MIMO	Ant2	5570	168.960	5485.520	5654.480	---	---

11ax20MIMO	Ant1	5500	21.880	5488.920	5510.800	---	---
11ax20MIMO	Ant2	5500	21.880	5488.640	5510.520	---	---
11ax20MIMO	Ant1	5580	22.040	5568.920	5590.960	---	---
11ax20MIMO	Ant2	5580	21.880	5569.040	5590.920	---	---
11ax20MIMO	Ant1	5700	22.440	5688.960	5711.400	---	---
11ax20MIMO	Ant2	5700	21.360	5689.400	5710.760	---	---
11ax40MIMO	Ant1	5510	41.280	5488.960	5530.240	---	---
11ax40MIMO	Ant2	5510	41.040	5489.360	5530.400	---	---
11ax40MIMO	Ant1	5590	41.680	5568.800	5610.480	---	---
11ax40MIMO	Ant2	5590	41.120	5569.520	5610.640	---	---
11ax40MIMO	Ant1	5670	42.080	5648.800	5690.880	---	---
11ax40MIMO	Ant2	5670	41.120	5649.360	5690.480	---	---
11ax80MIMO	Ant1	5530	80.640	5490.160	5570.800	---	---
11ax80MIMO	Ant2	5530	83.040	5489.520	5572.560	---	---
11ax80MIMO	Ant1	5610	82.080	5568.880	5650.960	---	---
11ax80MIMO	Ant2	5610	80.800	5570.000	5650.800	---	---
11ax160MIMO	Ant1	5570	167.680	5488.080	5655.760	---	---
11ax160MIMO	Ant2	5570	167.680	5486.160	5653.840	---	---
11be20MIMO	Ant1	5500	21.760	5489.280	5511.040	---	---
11be20MIMO	Ant2	5500	21.600	5489.160	5510.760	---	---
11be20MIMO	Ant1	5580	22.360	5568.760	5591.120	---	---
11be20MIMO	Ant2	5580	21.840	5568.960	5590.800	---	---
11be20MIMO	Ant1	5700	21.200	5689.520	5710.720	---	---
11be20MIMO	Ant2	5700	20.560	5689.720	5710.280	---	---
11be40MIMO	Ant1	5510	41.520	5488.800	5530.320	---	---
11be40MIMO	Ant2	5510	42.880	5488.080	5530.960	---	---
11be40MIMO	Ant1	5590	41.360	5569.760	5611.120	---	---
11be40MIMO	Ant2	5590	40.960	5569.600	5610.560	---	---
11be40MIMO	Ant1	5670	41.600	5649.200	5690.800	---	---
11be40MIMO	Ant2	5670	41.600	5648.800	5690.400	---	---
11be80MIMO	Ant1	5530	81.440	5490.000	5571.440	---	---
11be80MIMO	Ant2	5530	82.720	5490.000	5572.720	---	---
11be80MIMO	Ant1	5610	82.240	5570.160	5652.400	---	---
11be80MIMO	Ant2	5610	80.960	5569.520	5650.480	---	---
11be160MIMO	Ant1	5570	166.720	5488.400	5655.120	---	---
11be160MIMO	Ant2	5570	166.080	5487.760	5653.840	---	---

## Test Graphs



11a-CDD-Ant1-5500



11a-CDD-Ant2-5500



11a-CDD-Ant1-5580



11a-CDD-Ant2-5580



11a-CDD-Ant1-5700



11a-CDD-Ant2-5700



11n20MIMO-Ant1-5500



11n20MIMO-Ant2-5500



11n20MIMO-Ant1-5580



11n20MIMO-Ant2-5580



11n20MIMO-Ant1-5700



11n20MIMO-Ant2-5700







11n40MIMO-Ant1-5670



11n40MIMO-Ant2-5670



11ac20MIMO-Ant1-5500



11ac20MIMO-Ant2-5500



11ac20MIMO-Ant1-5580



11ac20MIMO-Ant2-5580



11ac20MIMO-Ant1-5700



11ac20MIMO-Ant2-5700





11ac40MIMO-Ant1-5510



11ac40MIMO-Ant2-5510



11ac40MIMO-Ant1-5590



11ac40MIMO-Ant2-5590





11ac80MIMO-Ant1-5610



11ac80MIMO-Ant2-5610



11ac160MIMO-Ant1-5570



11ac160MIMO-Ant2-5570



11ax20MIMO-Ant1-5500



11ax20MIMO-Ant2-5500



11ax20MIMO-Ant1-5580



11ax20MIMO-Ant2-5580



11ax20MIMO-Ant1-5700



11ax20MIMO-Ant2-5700



11ax40MIMO-Ant1-5510



11ax40MIMO-Ant2-5510





11ax40MIMO-Ant1-5590



11ax40MIMO-Ant2-5590



11ax40MIMO-Ant1-5670



11ax40MIMO-Ant2-5670



11ax80MIMO-Ant1-5530



11ax80MIMO-Ant2-5530



11ax80MIMO-Ant1-5610



11ax80MIMO-Ant2-5610



11ax160MIMO-Ant2-5570



11be20MIMO-Ant2-5500



11be20MIMO-Ant2-5580



11be20MIMO-Ant1-5700



11be20MIMO-Ant2-5700



11be40MIMO-Ant1-5510



11be40MIMO-Ant2-5510



11be40MIMO-Ant1-5590



11be40MIMO-Ant2-5590



11be40MIMO-Ant1-5670



11be40MIMO-Ant2-5670





11be80MIMO-Ant1-5530



11be80MIMO-Ant2-5530



11be80MIMO-Ant1-5610



11be80MIMO-Ant2-5610



11be160MIMO-Ant1-5570



11be160MIMO-Ant2-5570

## Occupied channel bandwidth

## Test Result

TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11a-CDD	Ant1	5500	17.137	5491.4236	5508.5606	---	---
11a-CDD	Ant2	5500	17.023	5491.5235	5508.5465	---	---
11a-CDD	Ant1	5580	17.364	5571.2463	5588.6103	---	---
11a-CDD	Ant2	5580	17.189	5571.4454	5588.6344	---	---
11a-CDD	Ant1	5700	17.167	5691.4204	5708.5874	---	---
11a-CDD	Ant2	5700	16.977	5691.4808	5708.4578	---	---
11n20MIMO	Ant1	5500	18.187	5490.9080	5509.0950	---	---
11n20MIMO	Ant2	5500	18.001	5490.9830	5508.9840	---	---
11n20MIMO	Ant1	5580	18.214	5570.8846	5589.0986	---	---
11n20MIMO	Ant2	5580	18.126	5570.9517	5589.0777	---	---
11n20MIMO	Ant1	5700	18.058	5690.9612	5709.0192	---	---
11n20MIMO	Ant2	5700	18.118	5690.9603	5709.0783	---	---
11n40MIMO	Ant1	5510	36.373	5491.8103	5528.1833	---	---
11n40MIMO	Ant2	5510	36.298	5491.8435	5528.1415	---	---
11n40MIMO	Ant1	5590	36.329	5571.8568	5608.1858	---	---
11n40MIMO	Ant2	5590	36.318	5571.8305	5608.1485	---	---
11n40MIMO	Ant1	5670	36.251	5651.8955	5688.1465	---	---
11n40MIMO	Ant2	5670	36.385	5651.8133	5688.1983	---	---
11ac20MIMO	Ant1	5500	18.158	5490.8886	5509.0466	---	---
11ac20MIMO	Ant2	5500	18.008	5490.9532	5508.9612	---	---
11ac20MIMO	Ant1	5580	18.199	5570.8647	5589.0637	---	---
11ac20MIMO	Ant2	5580	18.136	5570.9413	5589.0773	---	---
11ac20MIMO	Ant1	5700	18.131	5690.8940	5709.0250	---	---
11ac20MIMO	Ant2	5700	18.070	5690.9429	5709.0129	---	---
11ac40MIMO	Ant1	5510	36.446	5491.8043	5528.2503	---	---
11ac40MIMO	Ant2	5510	36.378	5491.7914	5528.1694	---	---
11ac40MIMO	Ant1	5590	36.276	5571.8423	5608.1183	---	---
11ac40MIMO	Ant2	5590	36.277	5571.9001	5608.1771	---	---
11ac40MIMO	Ant1	5670	36.256	5651.8740	5688.1300	---	---
11ac40MIMO	Ant2	5670	36.332	5651.8539	5688.1859	---	---
11ac80MIMO	Ant1	5530	75.631	5492.4250	5568.0560	---	---
11ac80MIMO	Ant2	5530	75.530	5492.3538	5567.8838	---	---
11ac80MIMO	Ant1	5610	75.444	5572.4411	5647.8851	---	---
11ac80MIMO	Ant2	5610	75.556	5572.3592	5647.9152	---	---
11ac160MIMO	Ant1	5570	156.10	5492.3490	5648.4490	---	---
11ac160MIMO	Ant2	5570	156.08	5492.3201	5648.4001	---	---
11ax20MIMO	Ant1	5500	19.123	5490.3870	5509.5100	---	---
11ax20MIMO	Ant2	5500	19.073	5490.4325	5509.5055	---	---
11ax20MIMO	Ant1	5580	19.107	5570.4284	5589.5354	---	---
11ax20MIMO	Ant2	5580	19.122	5570.4323	5589.5543	---	---
11ax20MIMO	Ant1	5700	19.084	5690.4314	5709.5154	---	---

11ax20MIMO	Ant2	5700	19.106	5690.4312	5709.5372	---	---
11ax40MIMO	Ant1	5510	37.742	5491.1095	5528.8515	---	---
11ax40MIMO	Ant2	5510	37.811	5491.0691	5528.8801	---	---
11ax40MIMO	Ant1	5590	37.715	5571.1382	5608.8532	---	---
11ax40MIMO	Ant2	5590	37.791	5571.0840	5608.8750	---	---
11ax40MIMO	Ant1	5670	37.857	5651.0668	5688.9238	---	---
11ax40MIMO	Ant2	5670	37.826	5651.0900	5688.9160	---	---
11ax80MIMO	Ant1	5530	77.153	5491.5088	5568.6618	---	---
11ax80MIMO	Ant2	5530	76.928	5491.6576	5568.5856	---	---
11ax80MIMO	Ant1	5610	76.974	5571.6358	5648.6098	---	---
11ax80MIMO	Ant2	5610	76.897	5571.6445	5648.5415	---	---
11ax160MIMO	Ant1	5570	157.57	5491.6263	5649.1963	---	---
11ax160MIMO	Ant2	5570	157.63	5491.2369	5648.8669	---	---
11be20MIMO	Ant1	5500	19.053	5490.4464	5509.4994	---	---
11be20MIMO	Ant2	5500	19.076	5490.4353	5509.5113	---	---
11be20MIMO	Ant1	5580	19.120	5570.4121	5589.5321	---	---
11be20MIMO	Ant2	5580	19.095	5570.4468	5589.5418	---	---
11be20MIMO	Ant1	5700	19.029	5690.4494	5709.4784	---	---
11be20MIMO	Ant2	5700	19.091	5690.4363	5709.5273	---	---
11be40MIMO	Ant1	5510	37.821	5491.0574	5528.8784	---	---
11be40MIMO	Ant2	5510	37.894	5491.0858	5528.9798	---	---
11be40MIMO	Ant1	5590	37.734	5571.0963	5608.8303	---	---
11be40MIMO	Ant2	5590	37.875	5571.0385	5608.9135	---	---
11be40MIMO	Ant1	5670	37.727	5651.1327	5688.8597	---	---
11be40MIMO	Ant2	5670	37.816	5651.0643	5688.8803	---	---
11be80MIMO	Ant1	5530	76.939	5491.7039	5568.6429	---	---
11be80MIMO	Ant2	5530	77.001	5491.6985	5568.6995	---	---
11be80MIMO	Ant1	5610	76.950	5571.5803	5648.5303	---	---
11be80MIMO	Ant2	5610	76.987	5571.5253	5648.5123	---	---
11be160MIMO	Ant1	5570	157.64	5491.4891	5649.1291	---	---
11be160MIMO	Ant2	5570	157.48	5491.5750	5649.0550	---	---

## Test Graphs



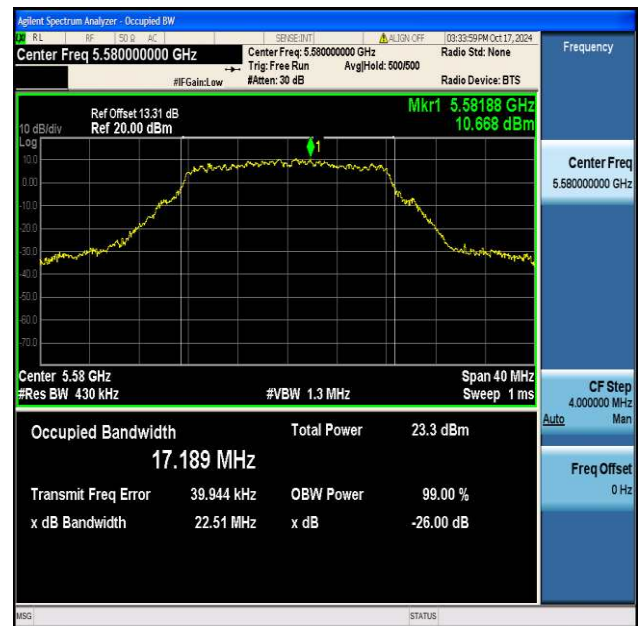
11a-CDD-Ant1-5500



11a-CDD-Ant2-5500

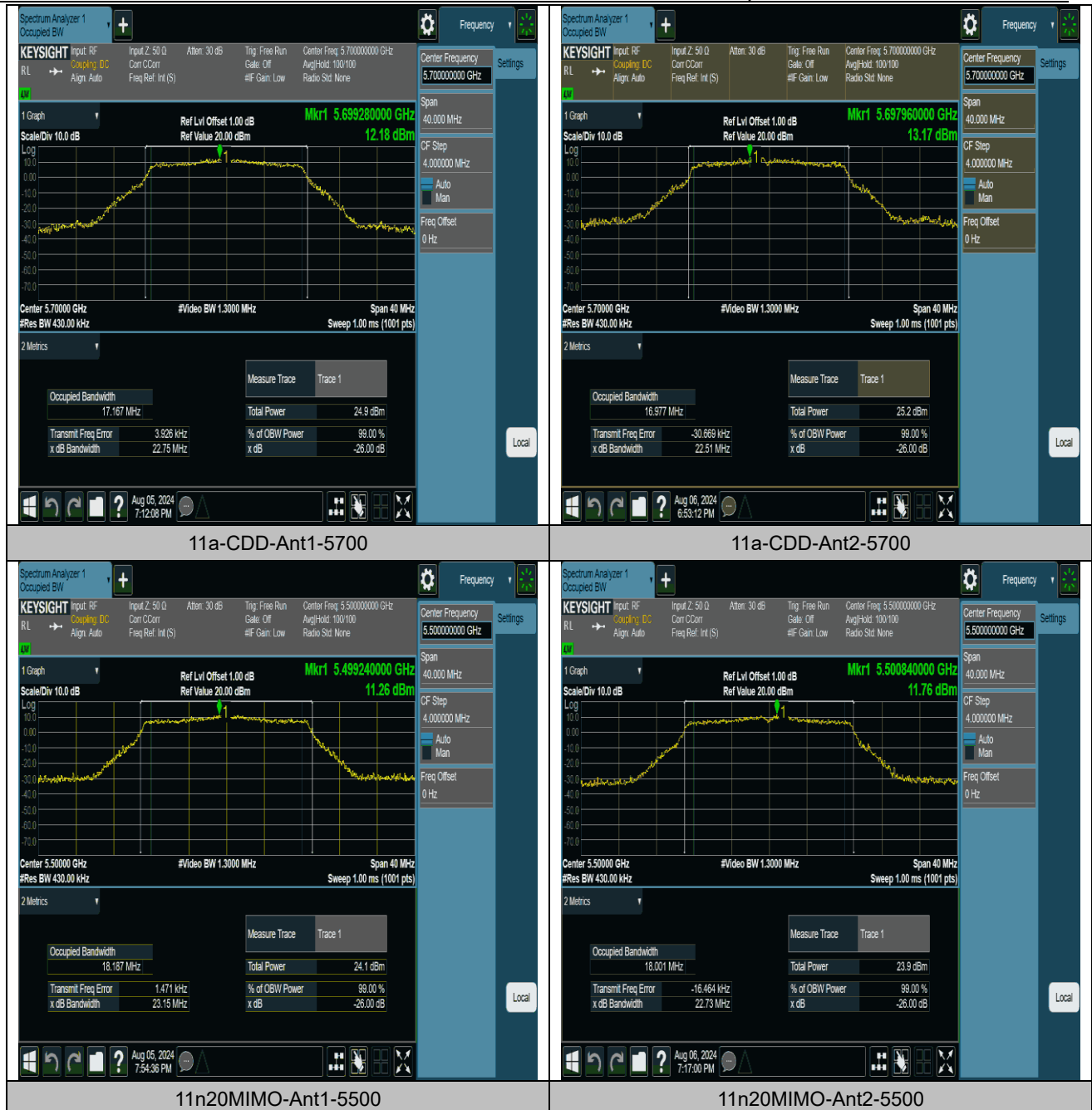


11a-CDD-Ant1-5580



11a-CDD-Ant2-5580







11n20MIMO-Ant1-5580



11n20MIMO-Ant1-5700

11n20MIMO-Ant2-5580



11n20MIMO-Ant2-5700



11n40MIMO-Ant1-5510



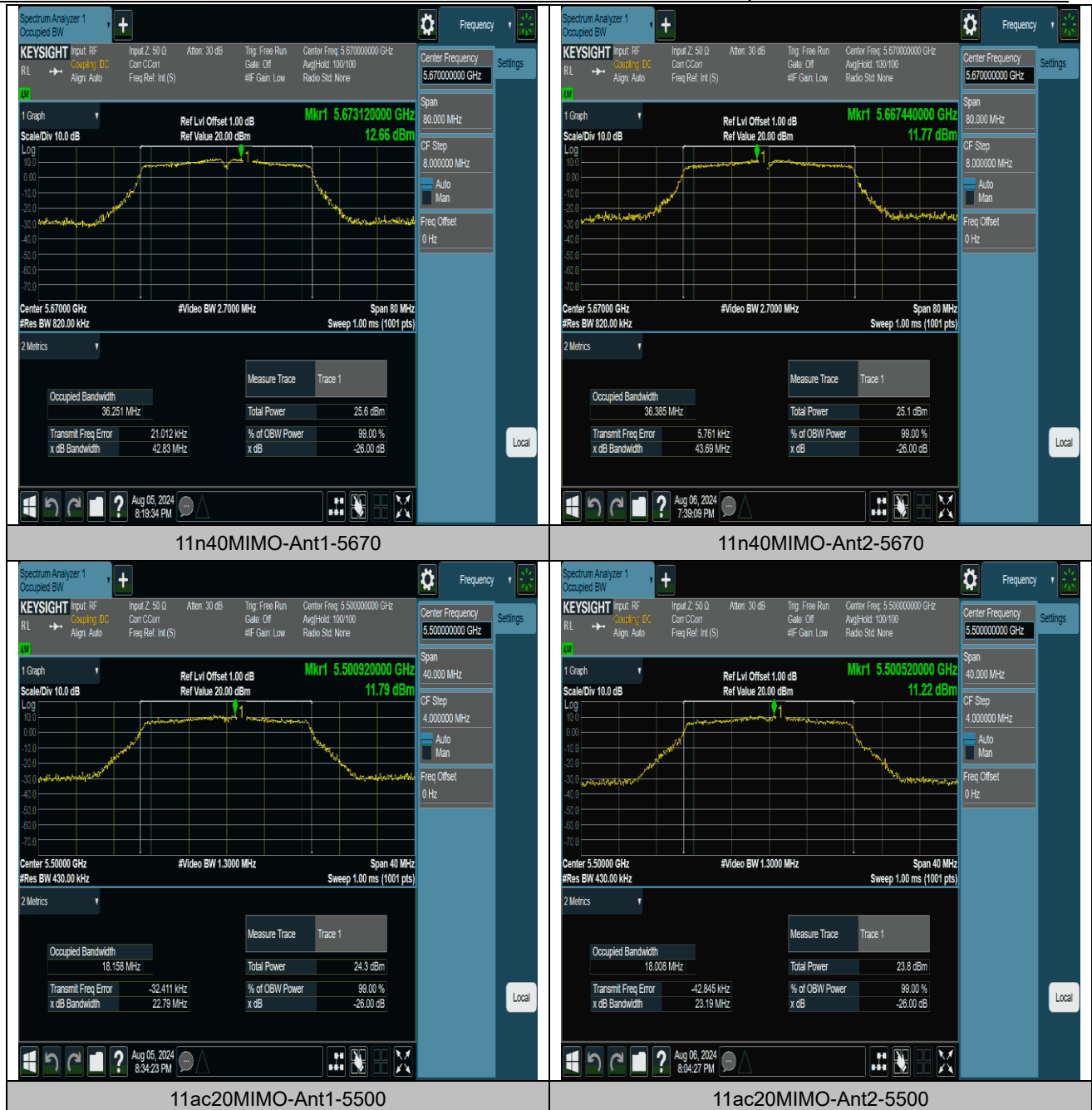
11n40MIMO-Ant2-5510

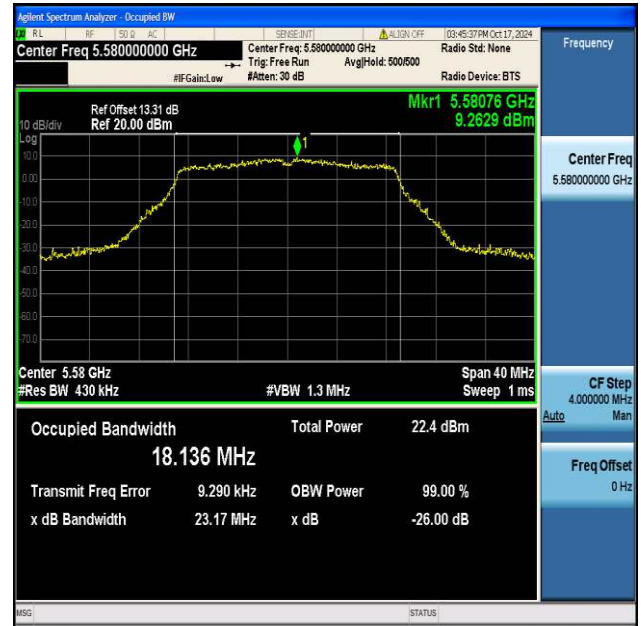


11n40MIMO-Ant1-5590



11n40MIMO-Ant2-5590





11ac20MIMO-Ant1-5580



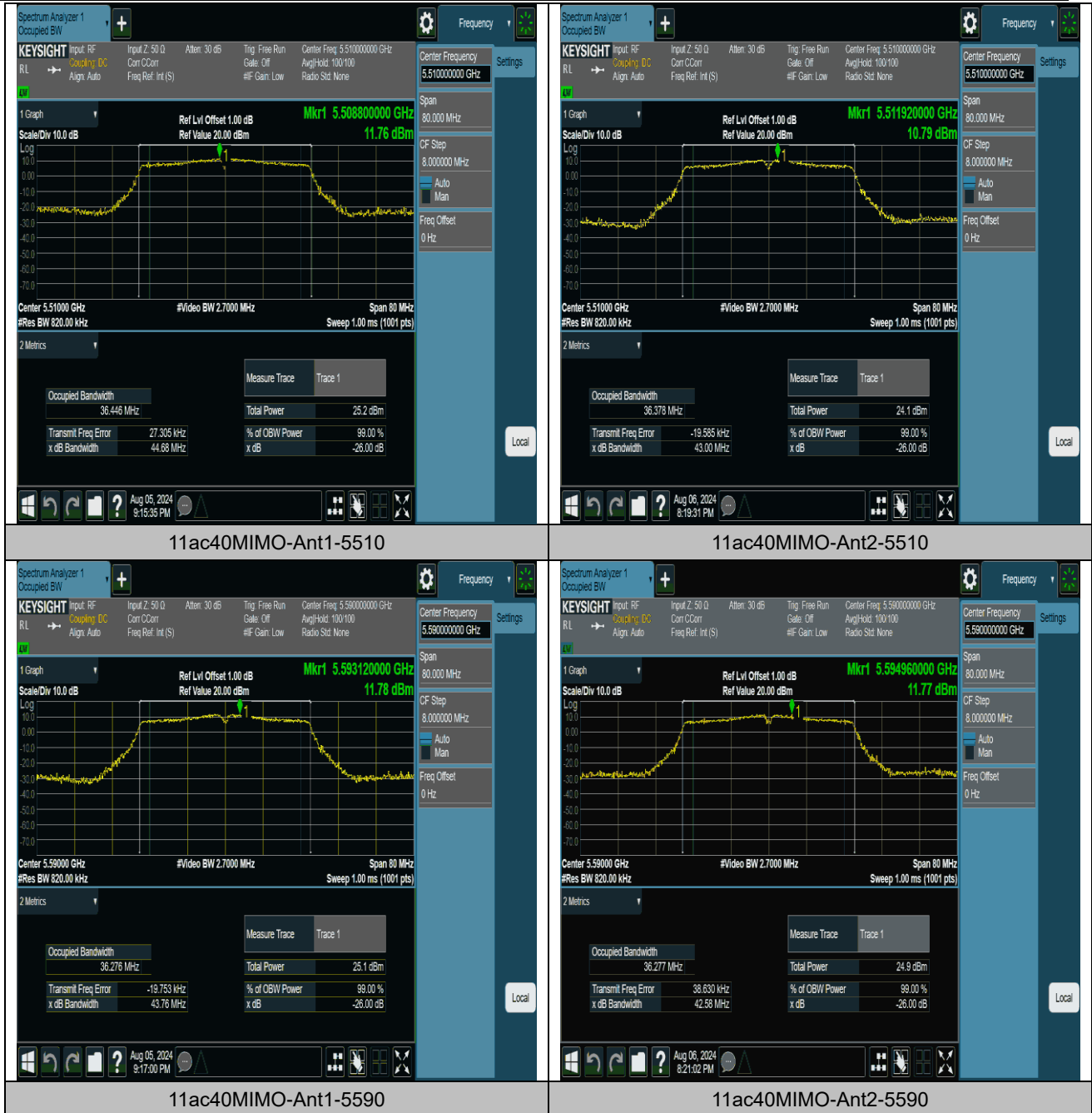
11ac20MIMO-Ant1-5700

11ac20MIMO-Ant2-5580



11ac20MIMO-Ant2-5700







11ac40MIMO-Ant1-5670



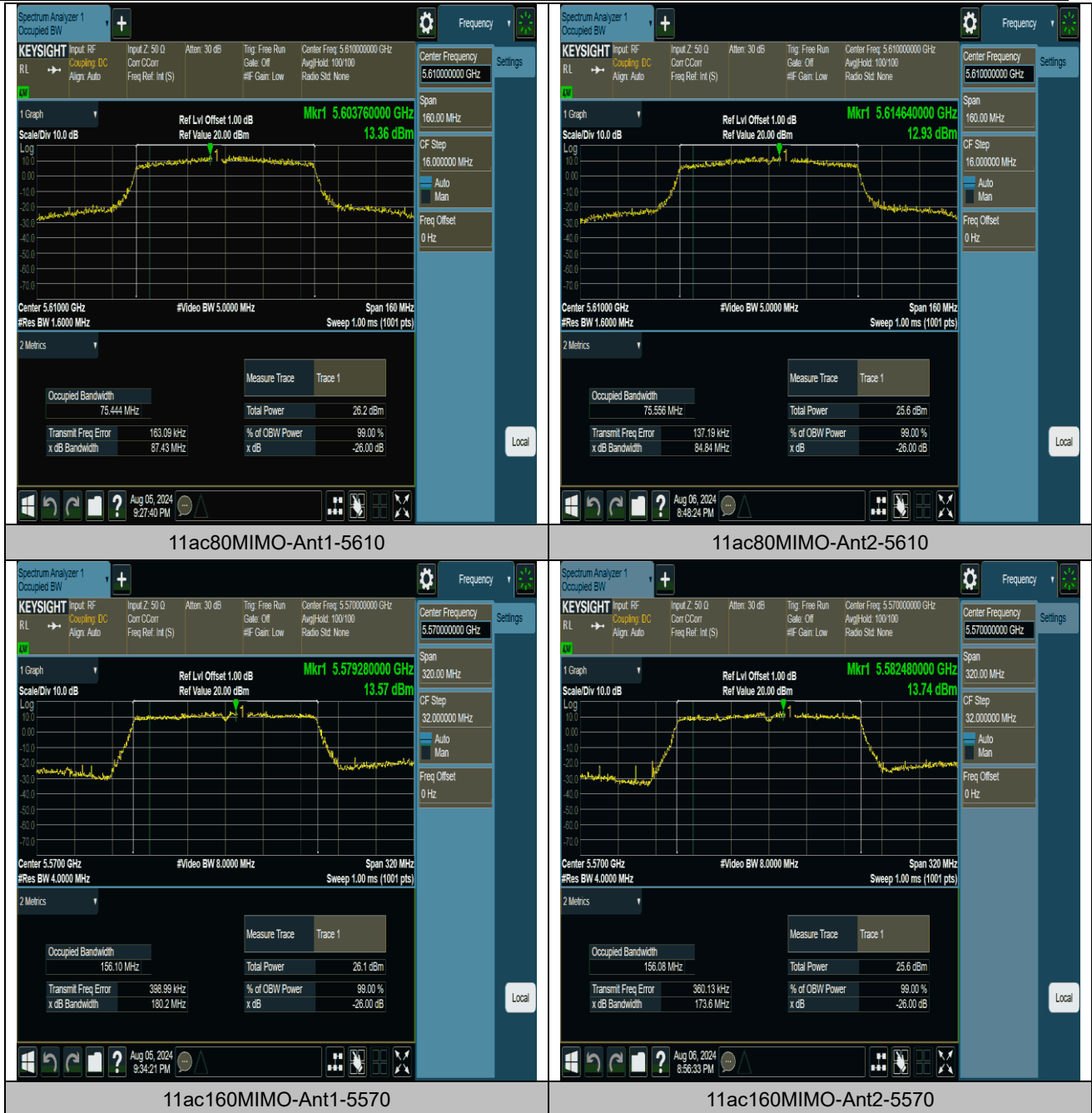
11ac40MIMO-Ant2-5670



11ac80MIMO-Ant1-5530



11ac80MIMO-Ant2-5530

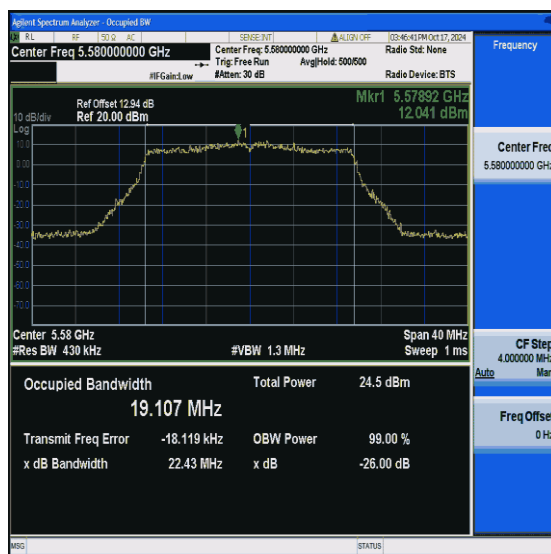




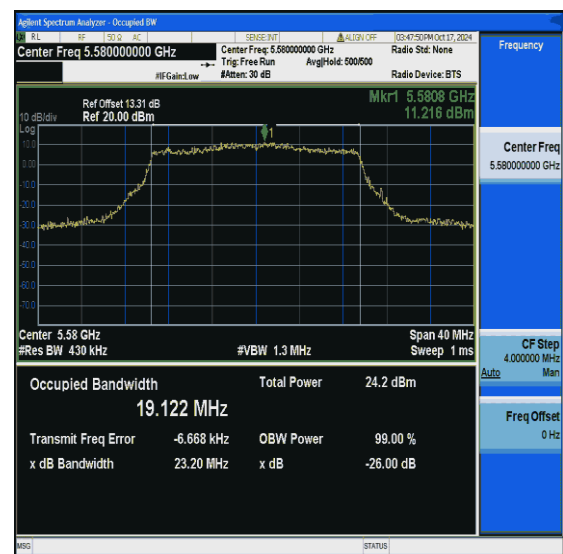
11ax20MIMO-Ant1-5500



11ax20MIMO-Ant2-5500



11ax20MIMO-Ant1-5580



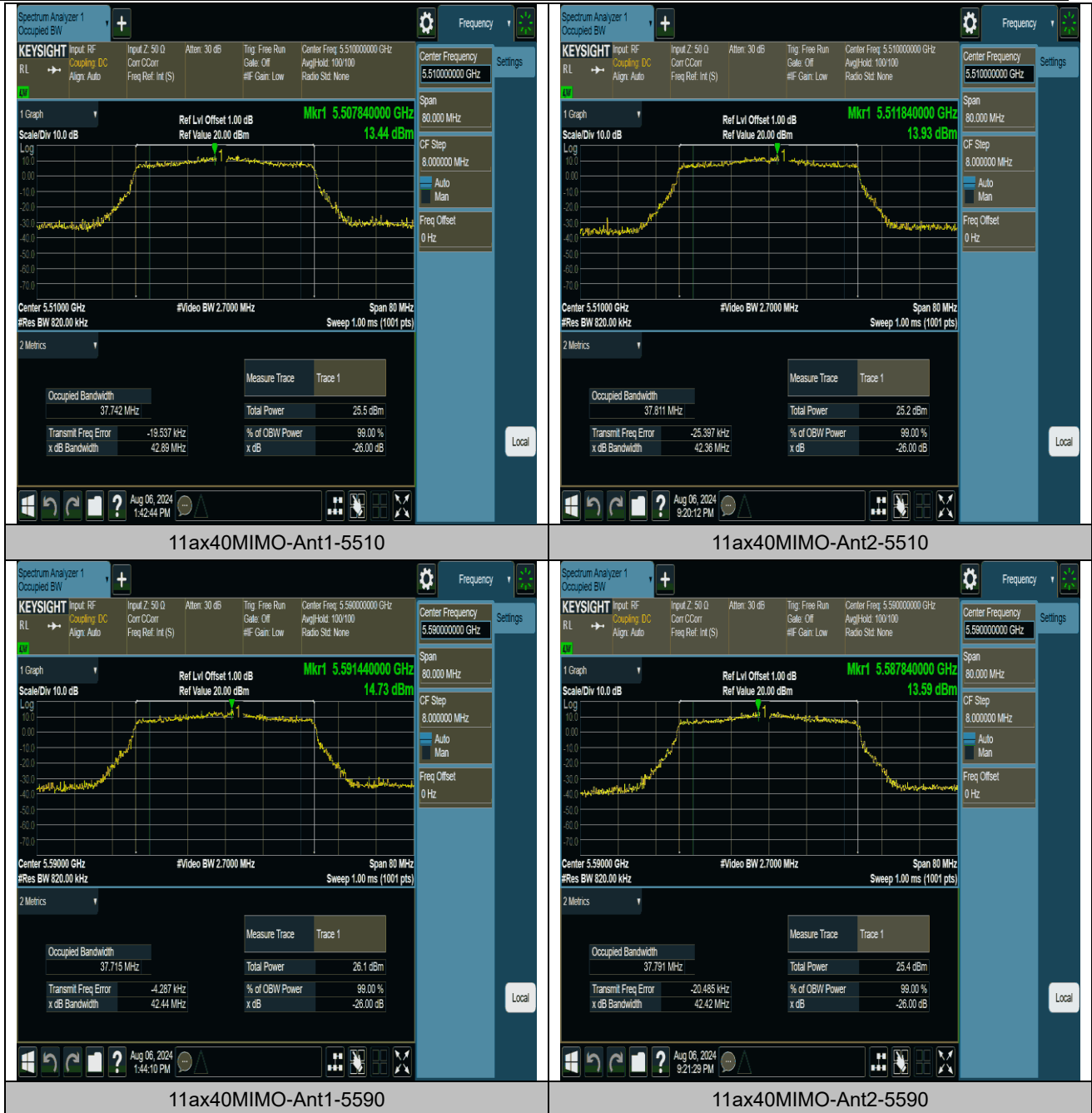
11ax20MIMO-Ant2-5580



11ax20MIMO-Ant1-5700



11ax20MIMO-Ant2-5700





11ax40MIMO-Ant1-5670



11ax40MIMO-Ant2-5670

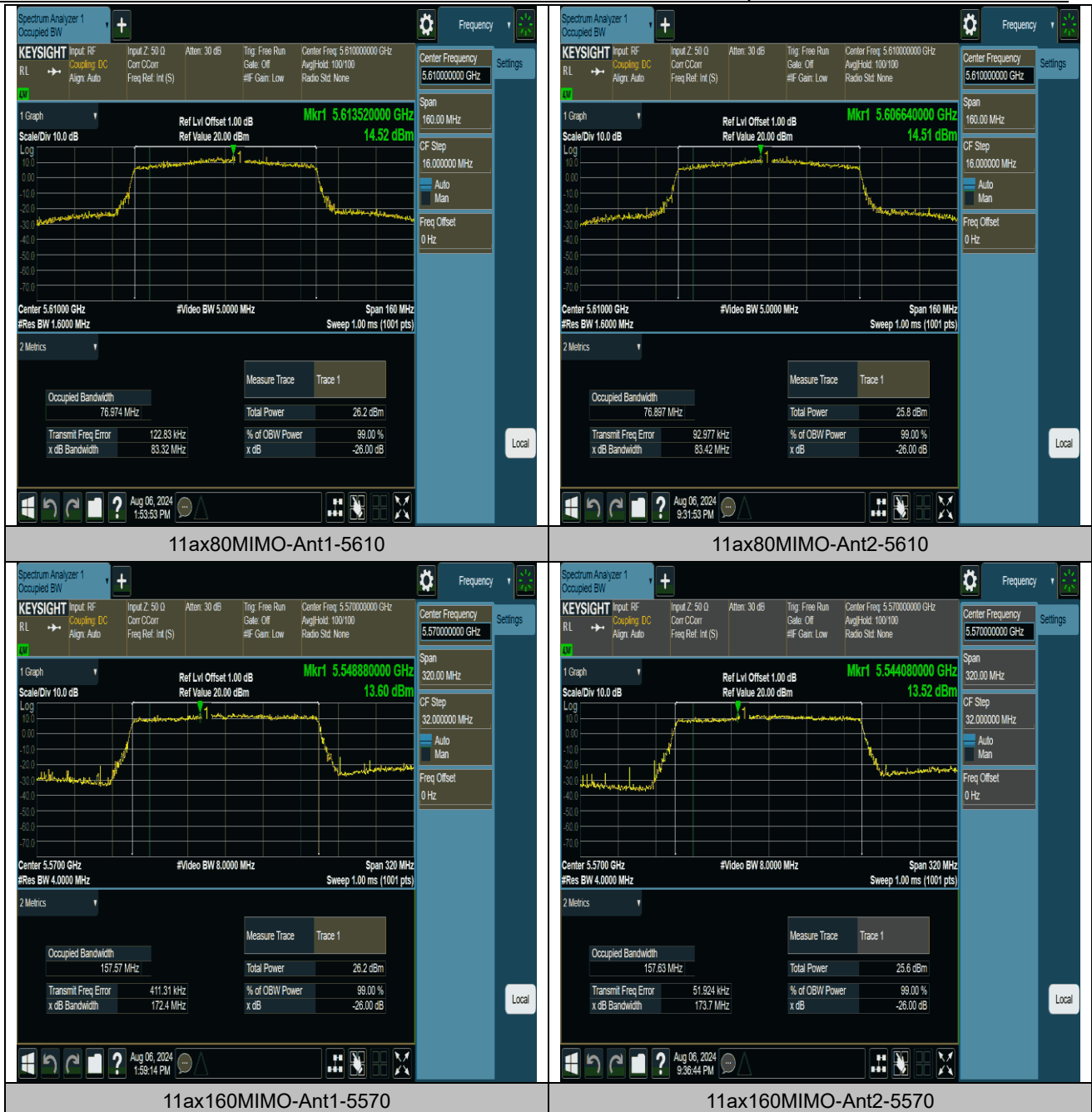


11ax80MIMO-Ant1-5530



11ax80MIMO-Ant2-5530



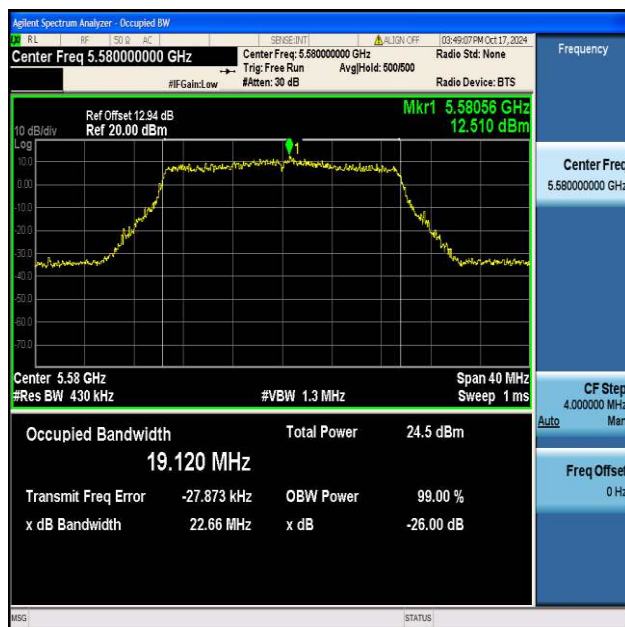




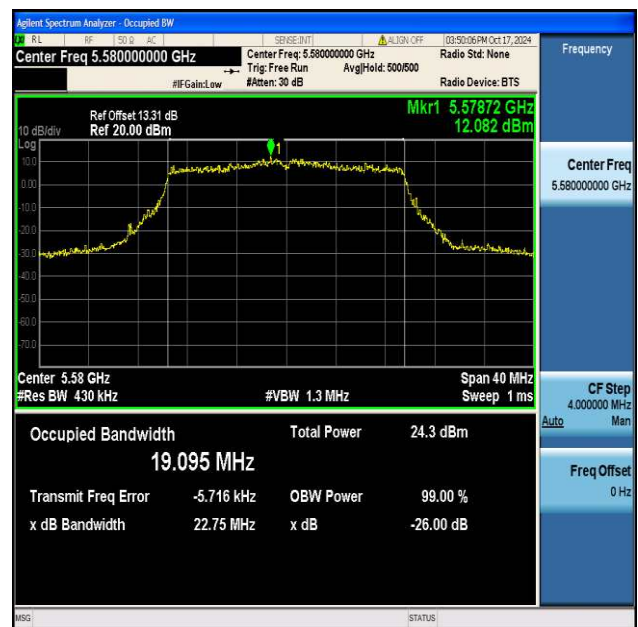
11be20MIMO-Ant1-5500



11be20MIMO-Ant2-5500

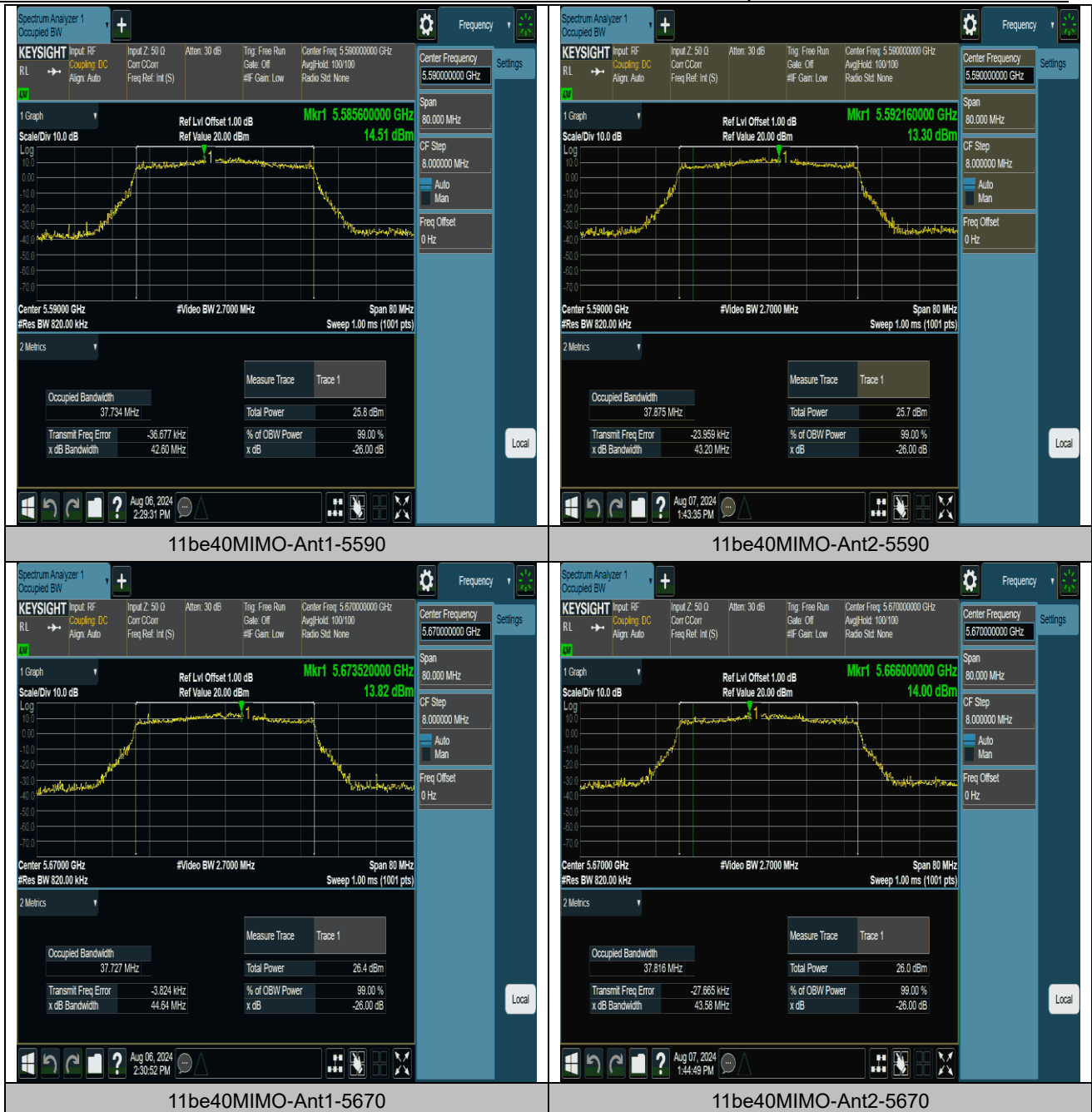


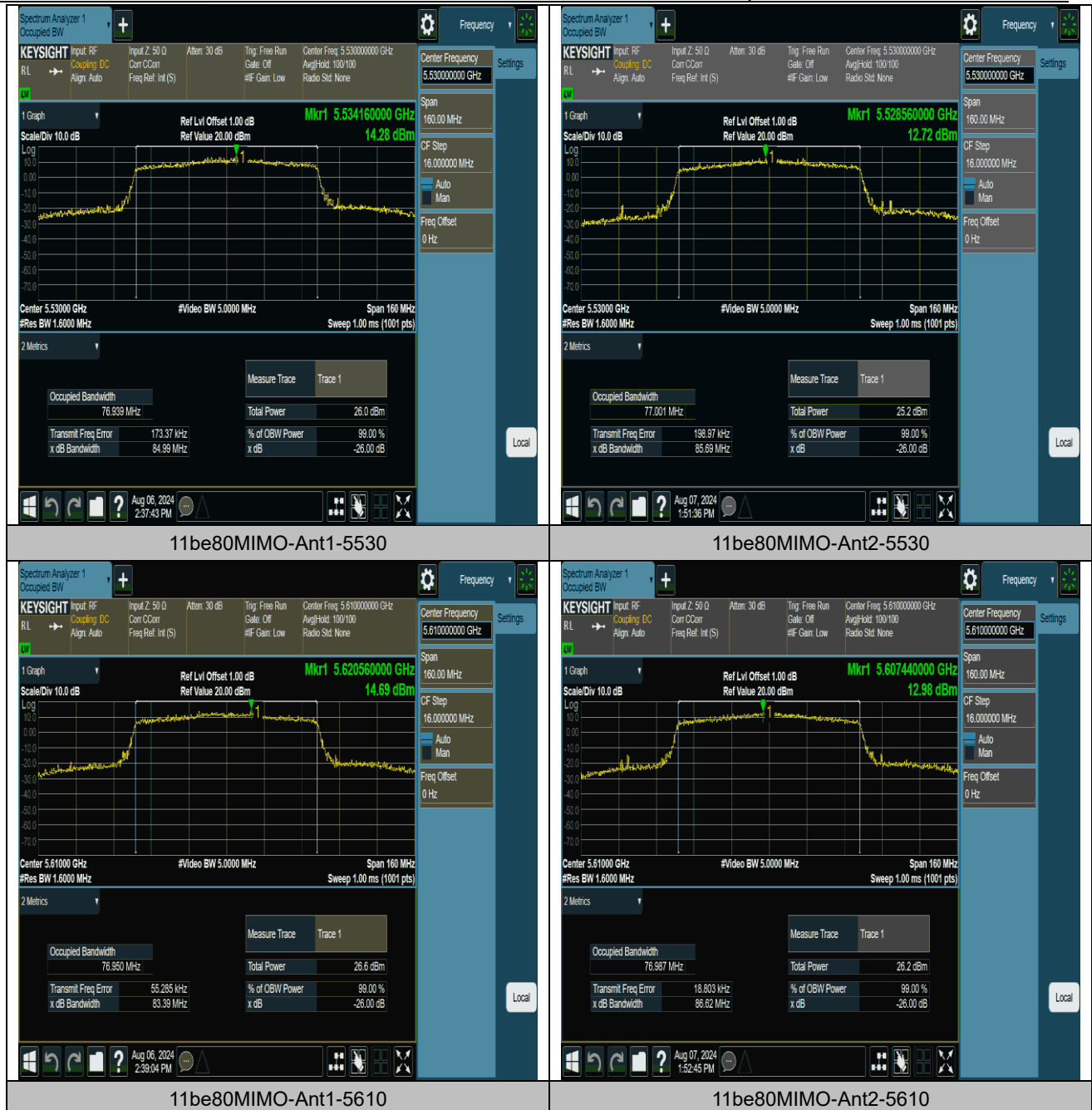
11be20MIMO-Ant1-5580



11be20MIMO-Ant2-5580











## Duty Cycle

### Test Result

TestMode	Antenna	Frequency[MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]
11a-CDD	Ant1	5500	2.10	2.11	99.53
11a-CDD	Ant2	5500	2.10	2.12	99.06
11a-CDD	Ant1	5580	2.09	2.11	99.05
11a-CDD	Ant2	5580	2.10	2.12	99.06
11a-CDD	Ant1	5700	2.09	2.11	99.05
11a-CDD	Ant2	5700	2.09	2.11	99.05
11n20MIMO	Ant1	5500	5.36	5.38	99.63
11n20MIMO	Ant2	5500	5.36	5.37	99.81
11n20MIMO	Ant1	5580	5.36	5.38	99.63
11n20MIMO	Ant2	5580	5.36	5.38	99.63
11n20MIMO	Ant1	5700	5.36	5.38	99.63
11n20MIMO	Ant2	5700	5.36	5.38	99.63
11n40MIMO	Ant1	5510	5.38	5.40	99.63
11n40MIMO	Ant2	5510	5.38	5.40	99.63
11n40MIMO	Ant1	5590	5.38	5.39	99.81
11n40MIMO	Ant2	5590	5.38	5.40	99.63
11n40MIMO	Ant1	5670	5.38	5.40	99.63
11n40MIMO	Ant2	5670	5.38	5.40	99.63
11ac20MIMO	Ant1	5500	5.36	5.38	99.63
11ac20MIMO	Ant2	5500	5.36	5.37	99.81
11ac20MIMO	Ant1	5580	5.36	5.38	99.63
11ac20MIMO	Ant2	5580	5.36	5.38	99.63
11ac20MIMO	Ant1	5700	5.36	5.38	99.63
11ac20MIMO	Ant2	5700	5.36	5.38	99.63
11ac40MIMO	Ant1	5510	5.41	5.43	99.63
11ac40MIMO	Ant2	5510	5.42	5.43	99.82
11ac40MIMO	Ant1	5590	5.41	5.43	99.63
11ac40MIMO	Ant2	5590	5.42	5.44	99.63
11ac40MIMO	Ant1	5670	5.42	5.44	99.63
11ac40MIMO	Ant2	5670	5.42	5.44	99.63
11ac80MIMO	Ant1	5530	4.24	4.25	99.76
11ac80MIMO	Ant2	5530	4.24	4.25	99.76
11ac80MIMO	Ant1	5610	4.24	4.26	99.53
11ac80MIMO	Ant2	5610	4.24	4.26	99.53
11ac160MIMO	Ant1	5570	2.34	2.36	99.15
11ac160MIMO	Ant2	5570	2.35	2.37	99.16
11ax20MIMO	Ant1	5500	5.34	5.36	99.63
11ax20MIMO	Ant2	5500	5.35	5.36	99.81
11ax20MIMO	Ant1	5580	5.35	5.37	99.63
11ax20MIMO	Ant2	5580	5.35	5.37	99.63

11ax20MIMO	Ant1	5700	5.35	5.37	99.63
11ax20MIMO	Ant2	5700	5.35	5.37	99.63
11ax40MIMO	Ant1	5510	5.37	5.39	99.63
11ax40MIMO	Ant2	5510	5.38	5.39	99.81
11ax40MIMO	Ant1	5590	5.37	5.39	99.63
11ax40MIMO	Ant2	5590	5.37	5.39	99.63
11ax40MIMO	Ant1	5670	5.37	5.39	99.63
11ax40MIMO	Ant2	5670	5.38	5.39	99.81
11ax80MIMO	Ant1	5530	5.40	5.42	99.63
11ax80MIMO	Ant2	5530	5.40	5.42	99.63
11ax80MIMO	Ant1	5610	5.40	5.41	99.82
11ax80MIMO	Ant2	5610	5.40	5.42	99.63
11ax160MIMO	Ant1	5570	5.03	5.05	99.60
11ax160MIMO	Ant2	5570	5.03	5.05	99.60
11be20MIMO	Ant1	5500	5.35	5.37	99.63
11be20MIMO	Ant2	5500	5.36	5.38	99.63
11be20MIMO	Ant1	5580	5.36	5.38	99.63
11be20MIMO	Ant2	5580	5.35	5.37	99.63
11be20MIMO	Ant1	5700	5.36	5.38	99.63
11be20MIMO	Ant2	5700	5.36	5.38	99.63
11be40MIMO	Ant1	5510	5.38	5.40	99.63
11be40MIMO	Ant2	5510	5.38	5.40	99.63
11be40MIMO	Ant1	5590	5.38	5.39	99.81
11be40MIMO	Ant2	5590	5.38	5.40	99.63
11be40MIMO	Ant1	5670	5.38	5.40	99.63
11be40MIMO	Ant2	5670	5.38	5.40	99.63
11be80MIMO	Ant1	5530	5.41	5.43	99.63
11be80MIMO	Ant2	5530	5.41	5.42	99.82
11be80MIMO	Ant1	5610	5.41	5.42	99.82
11be80MIMO	Ant2	5610	5.41	5.43	99.63
11be160MIMO	Ant1	5570	5.04	5.06	99.60
11be160MIMO	Ant2	5570	5.04	5.06	99.60