

## 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       |

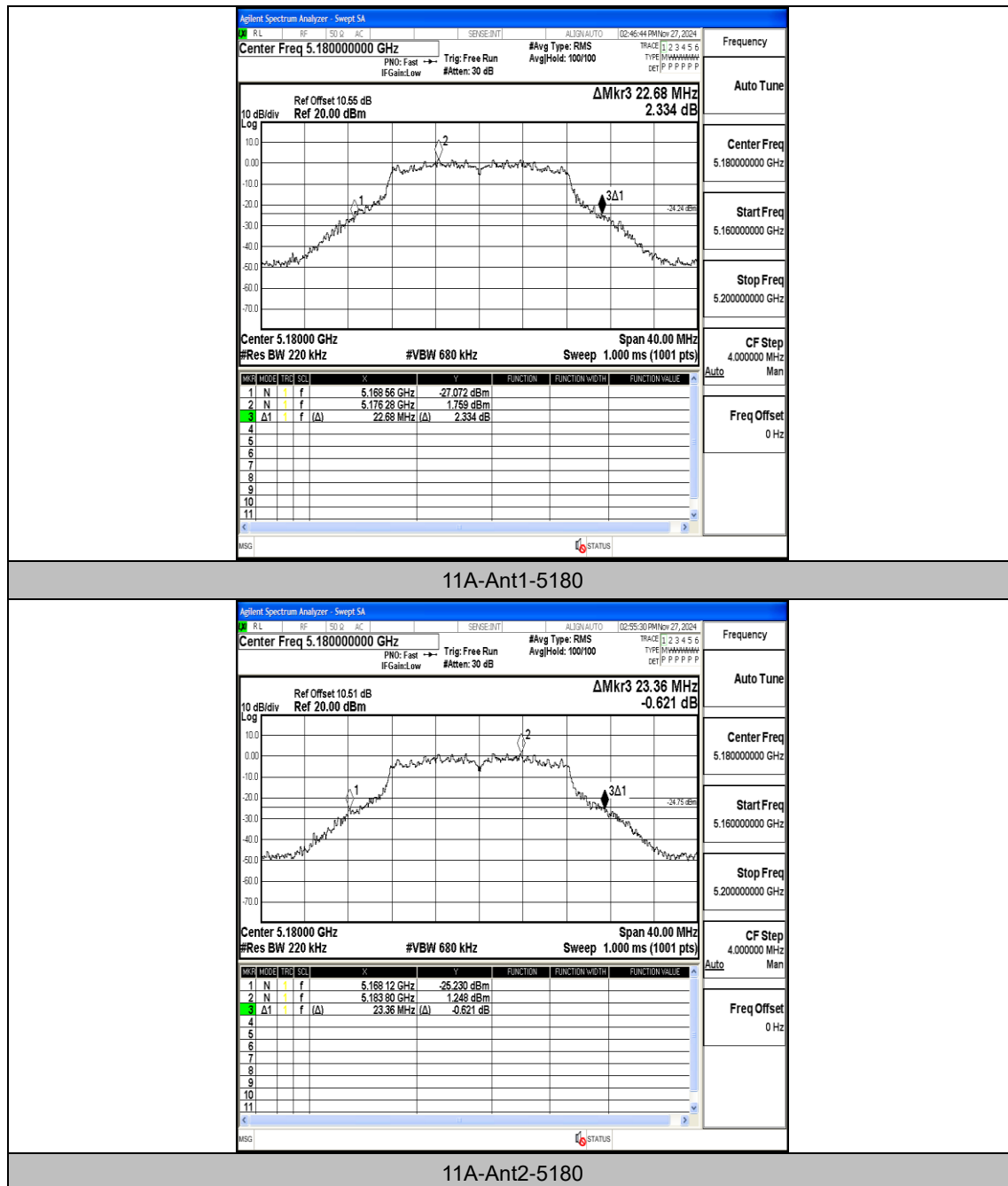
## Appendix A1: Emission Bandwidth

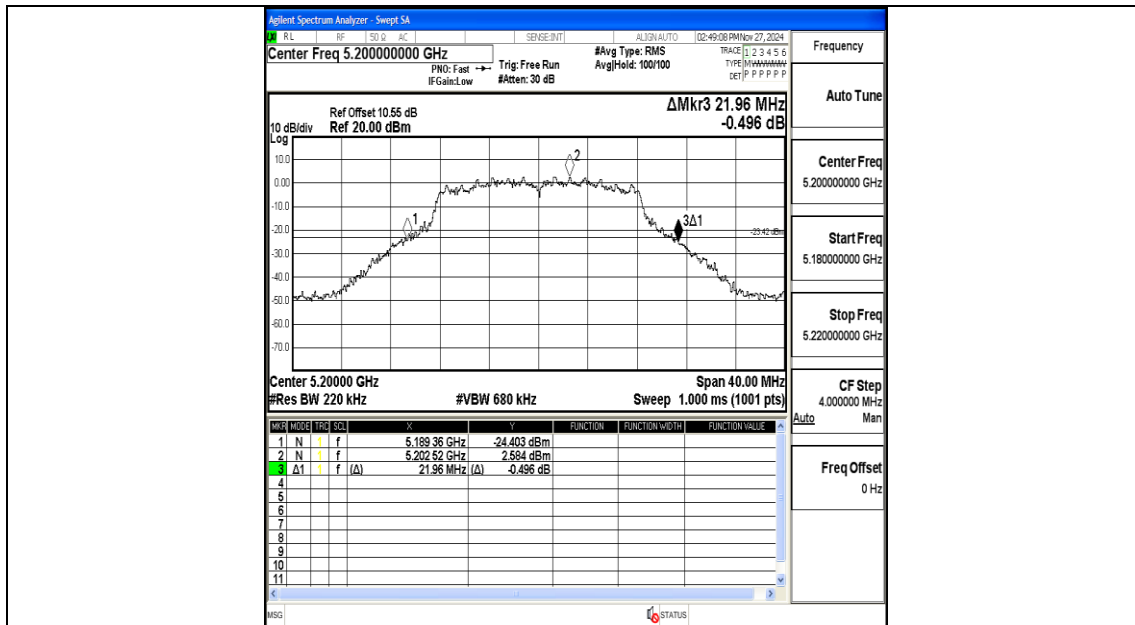
### Test Result

| 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 | ---         | ---     |

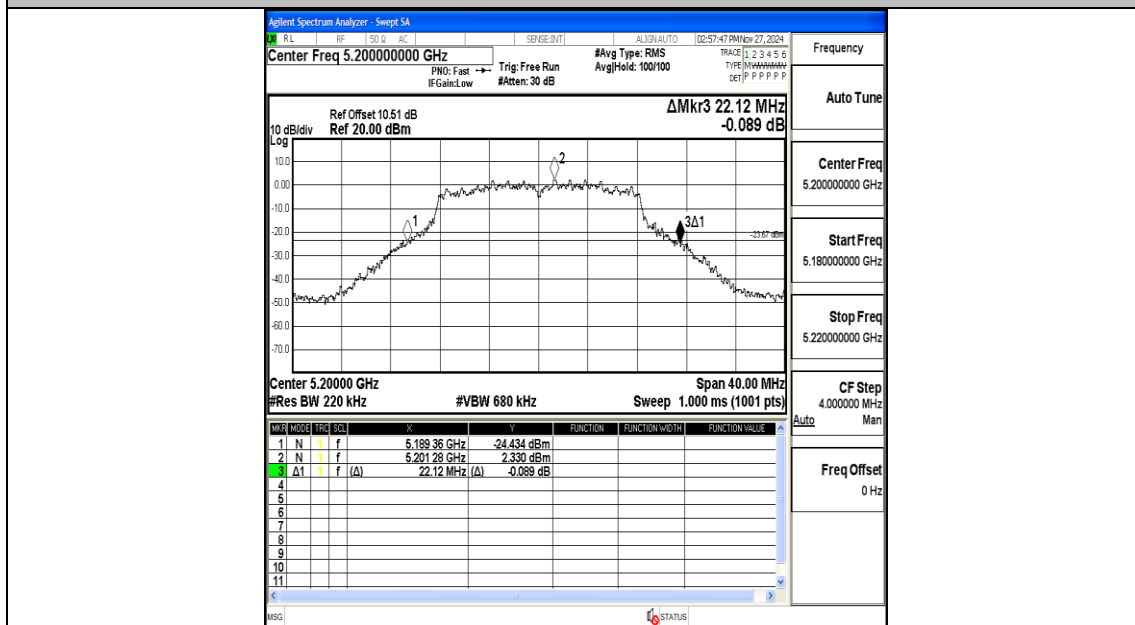
|            |      |      |        |          |          |     |     |
|------------|------|------|--------|----------|----------|-----|-----|
| 11AC40MIMO | Ant2 | 5230 | 41.120 | 5209.680 | 5250.800 | --- | --- |
| 11AC80MIMO | Ant1 | 5210 | 85.760 | 5167.280 | 5253.040 | --- | --- |
| 11AC80MIMO | 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

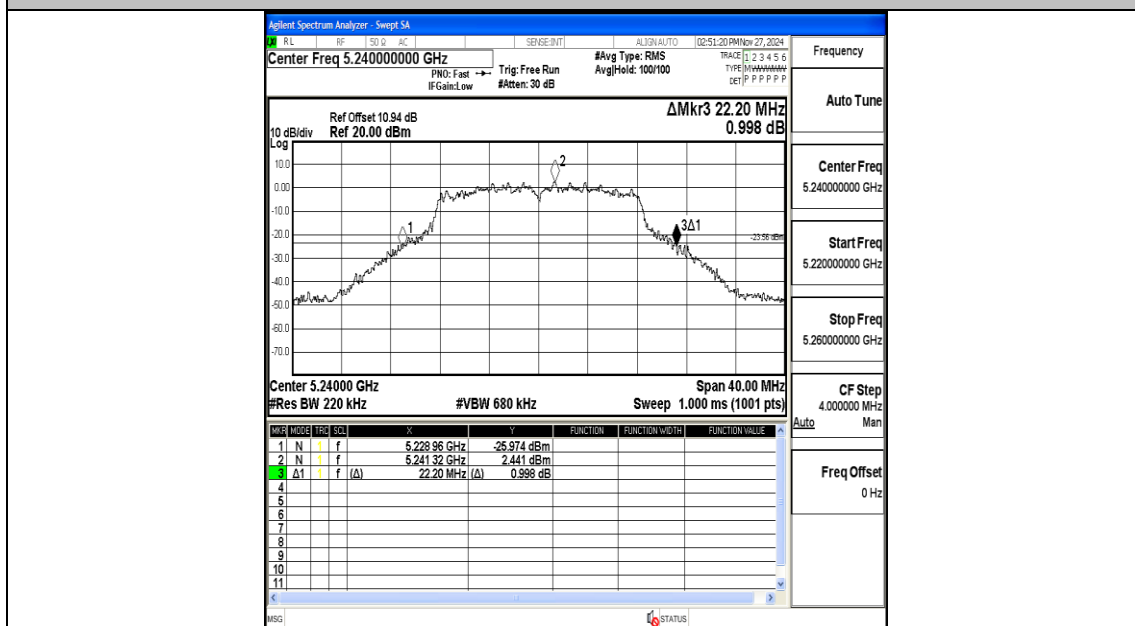




11A-Ant1-5200



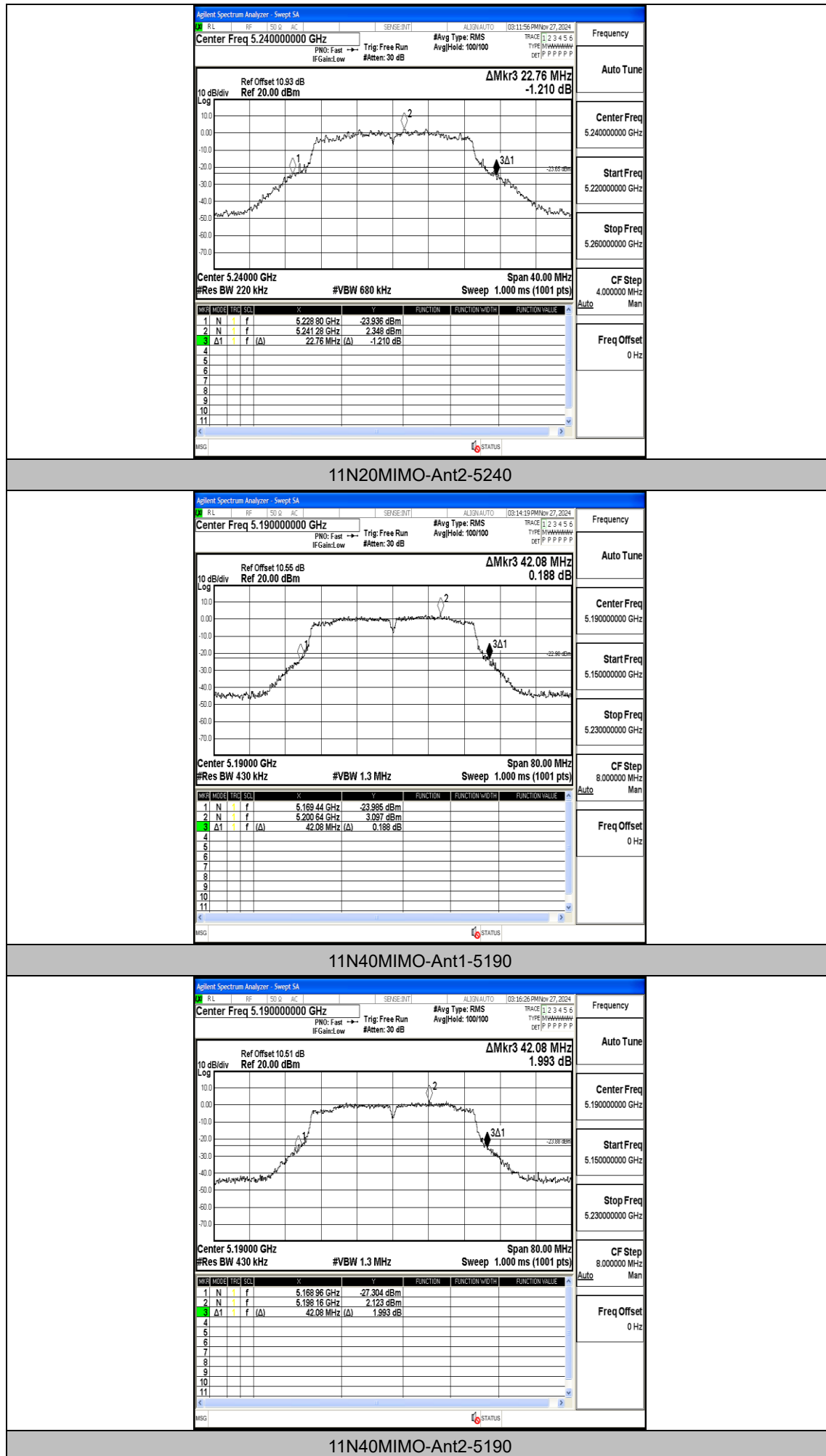
11A-Ant2-5200

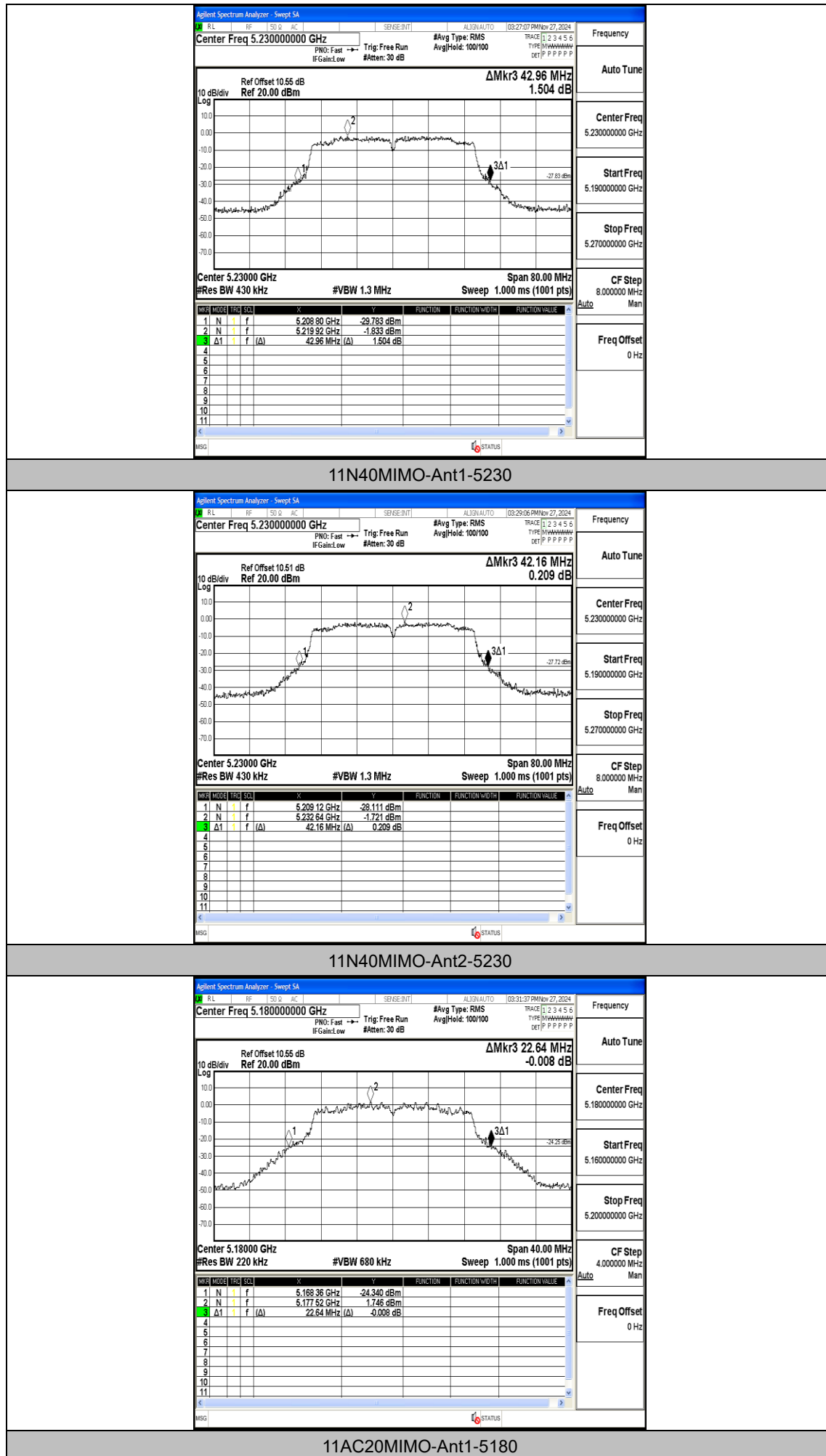


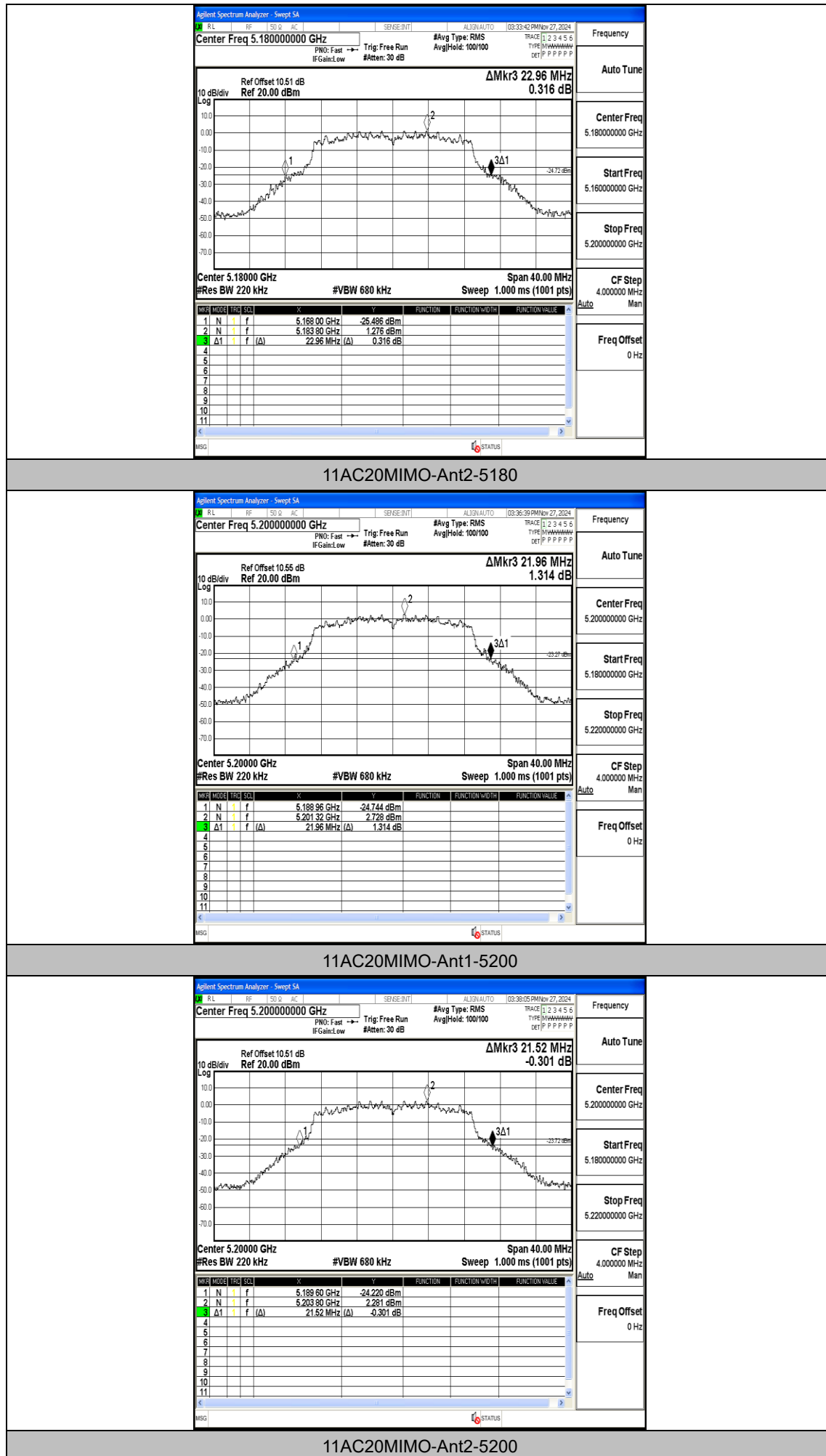
11A-Ant1-5240



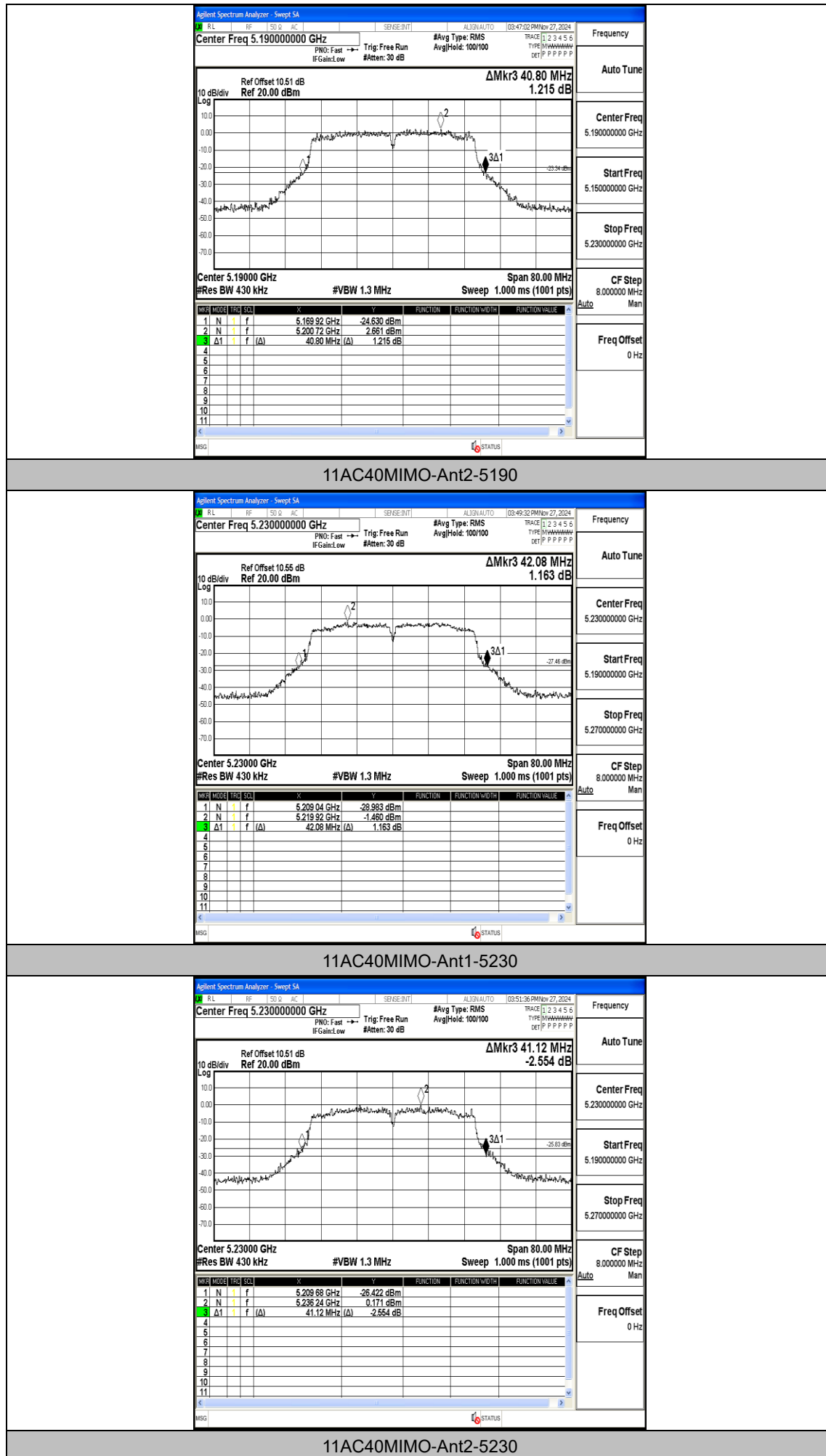








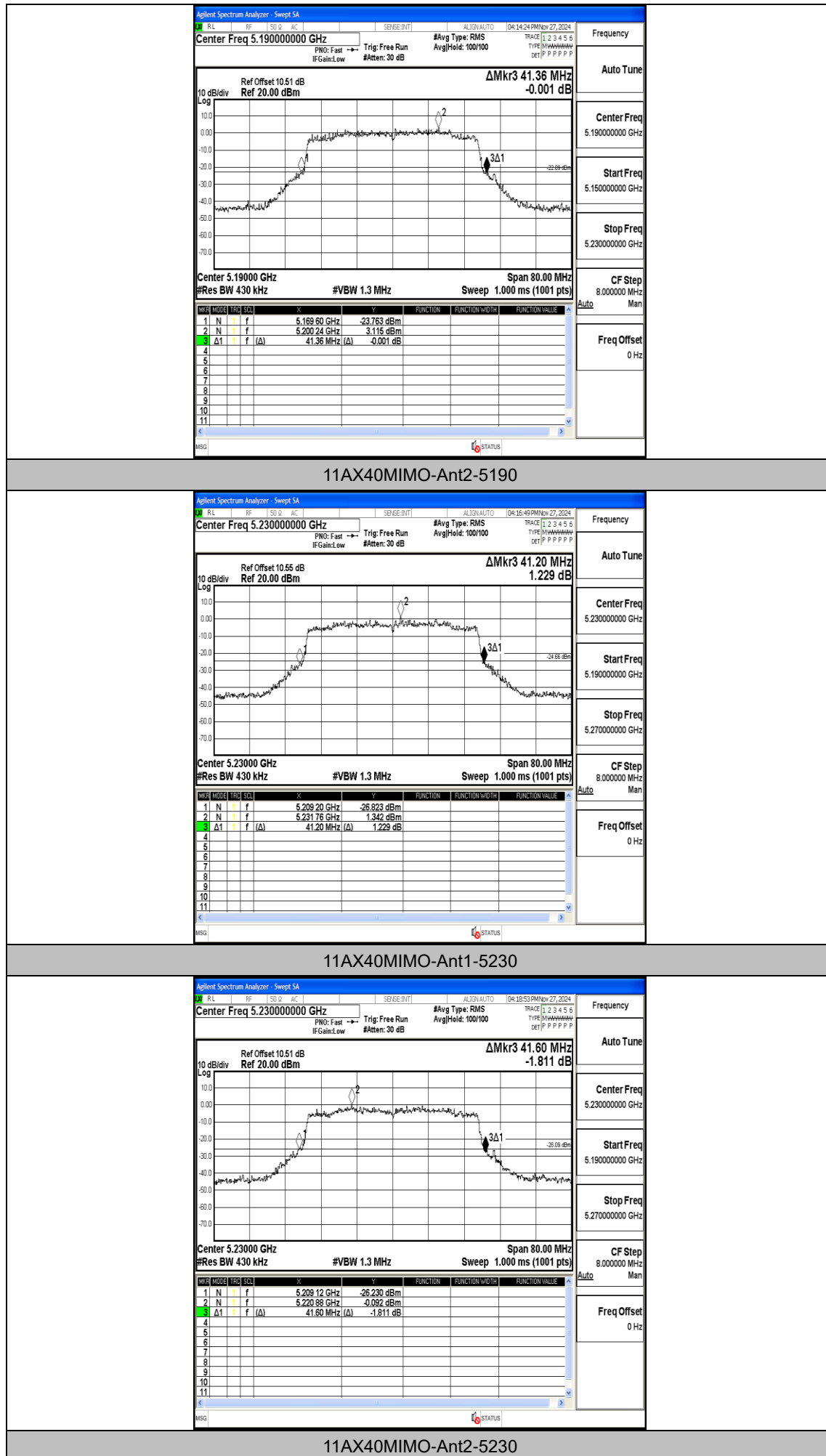


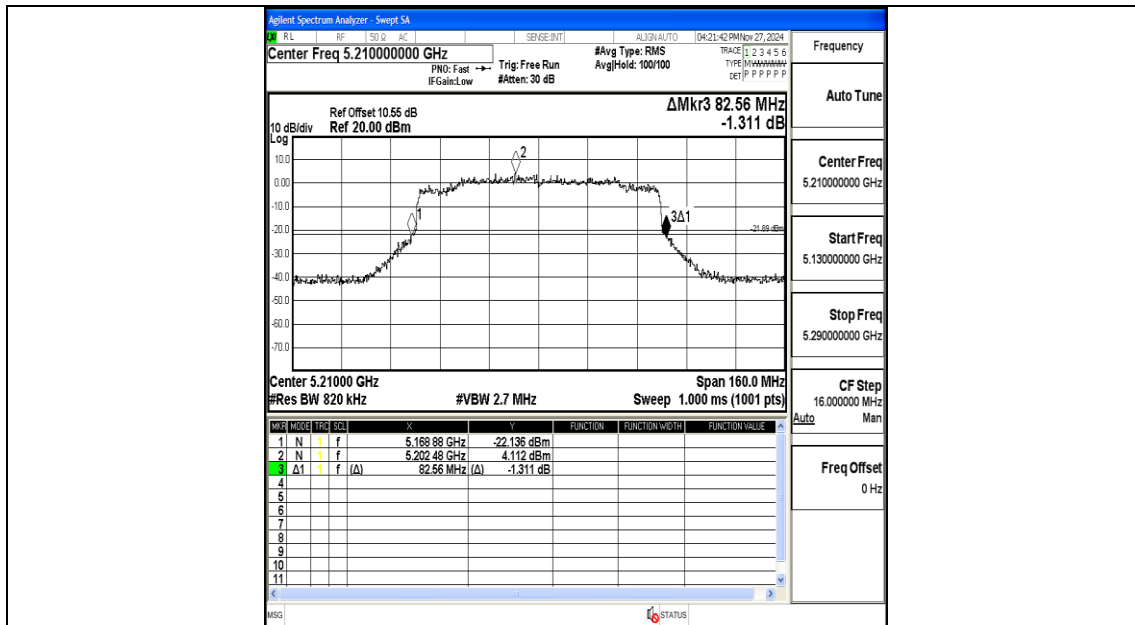




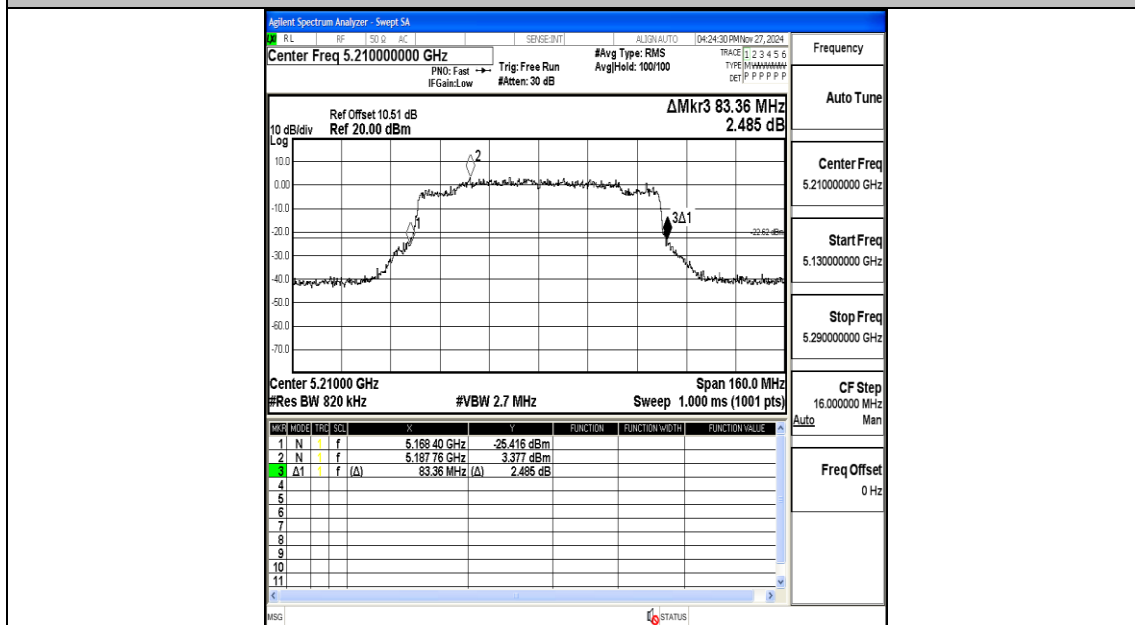








11AX80MIMO-Ant1-5210



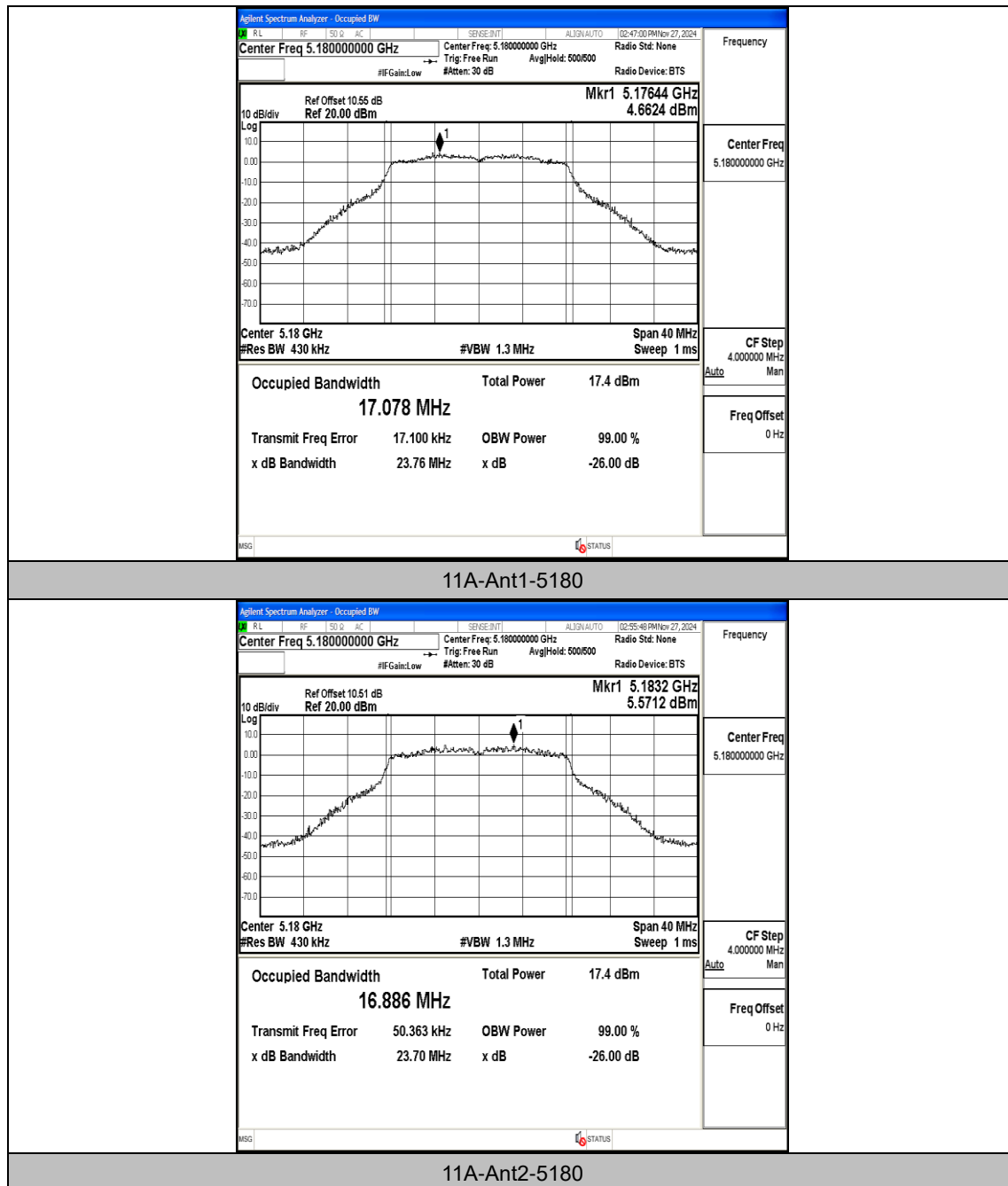
11AX80MIMO-Ant2-5210

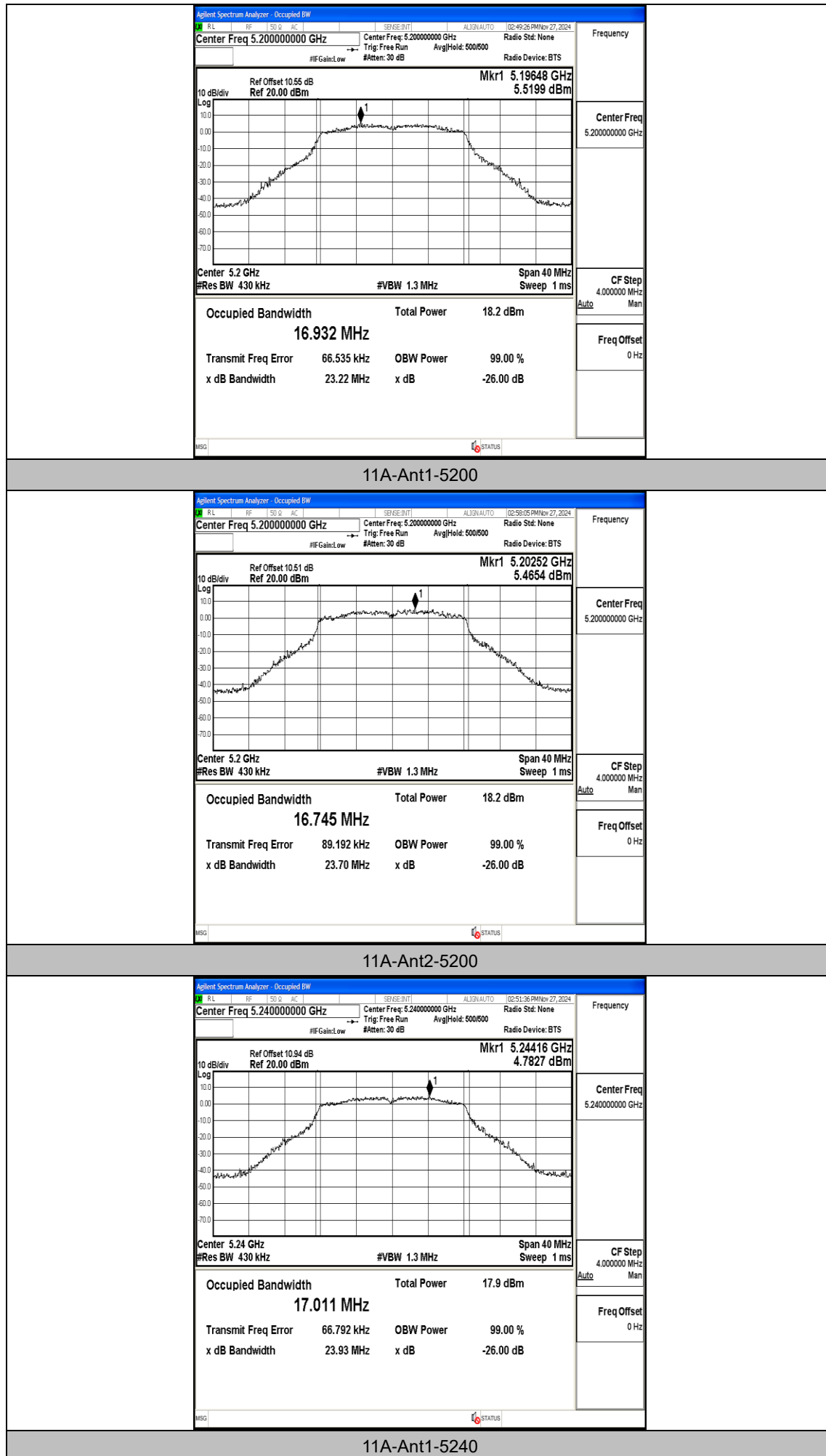
## Appendix A2: Occupied channel bandwidth

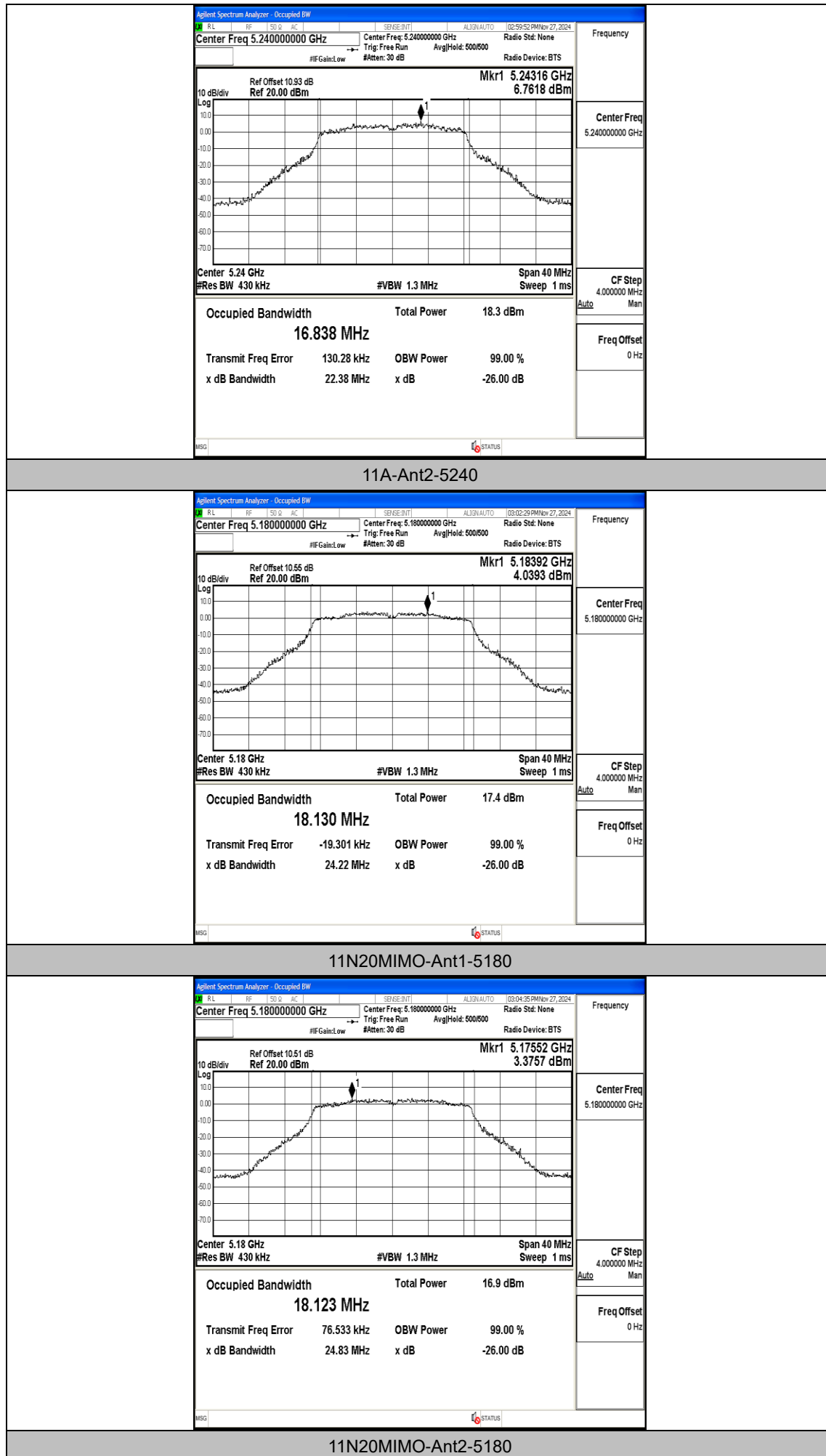
### Test Result

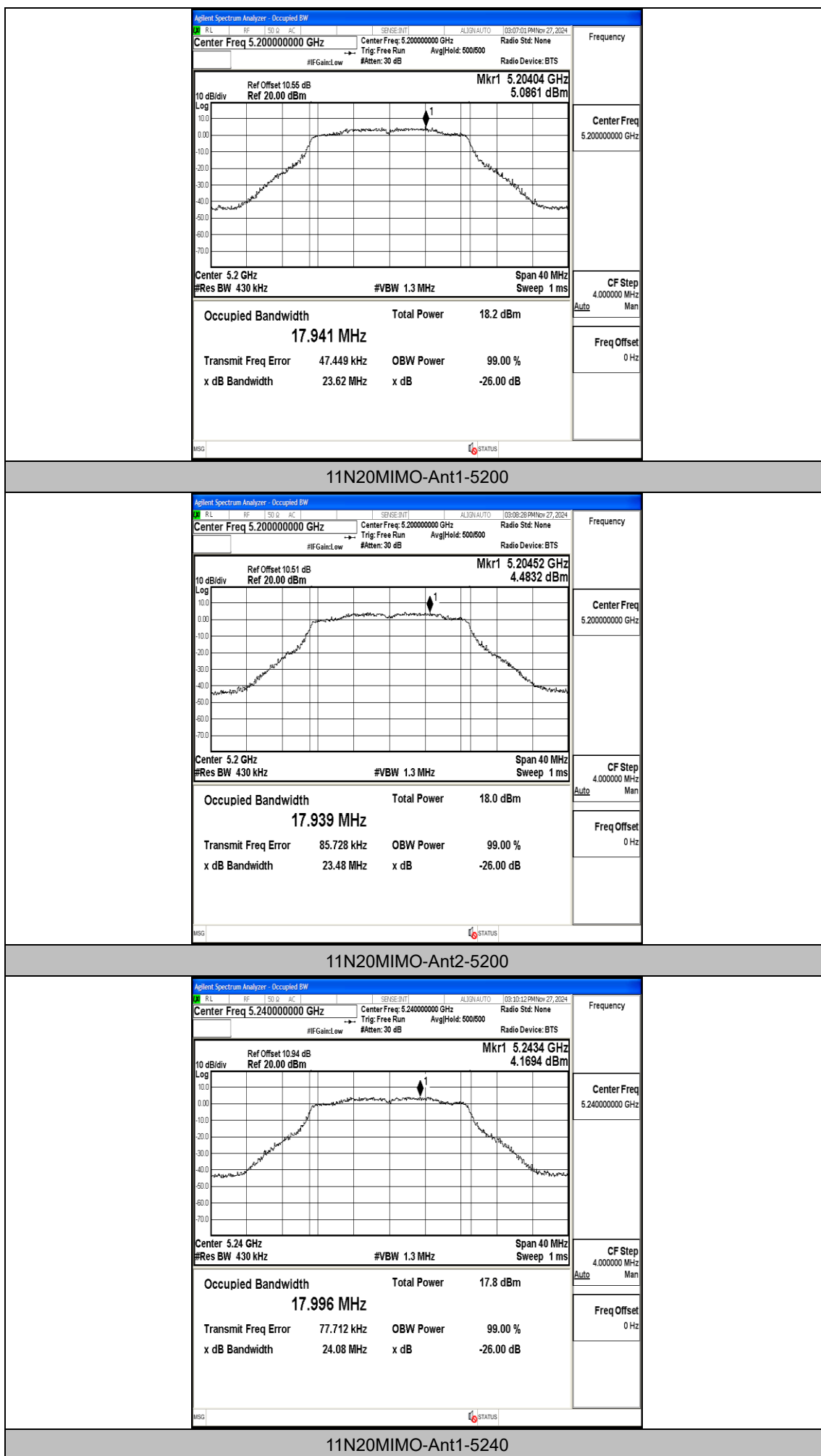
| Test Mode  | Antenna | Frequency [MHz] | OCB [MHz] | FL [MHz]  | FH [MHz]  | Limit [MHz] | Verdict |
|------------|---------|-----------------|-----------|-----------|-----------|-------------|---------|
| 11A        | Ant1    | 5180            | 17.078    | 5171.4781 | 5188.5561 | ---         | ---     |
| 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 | ---         | ---     |

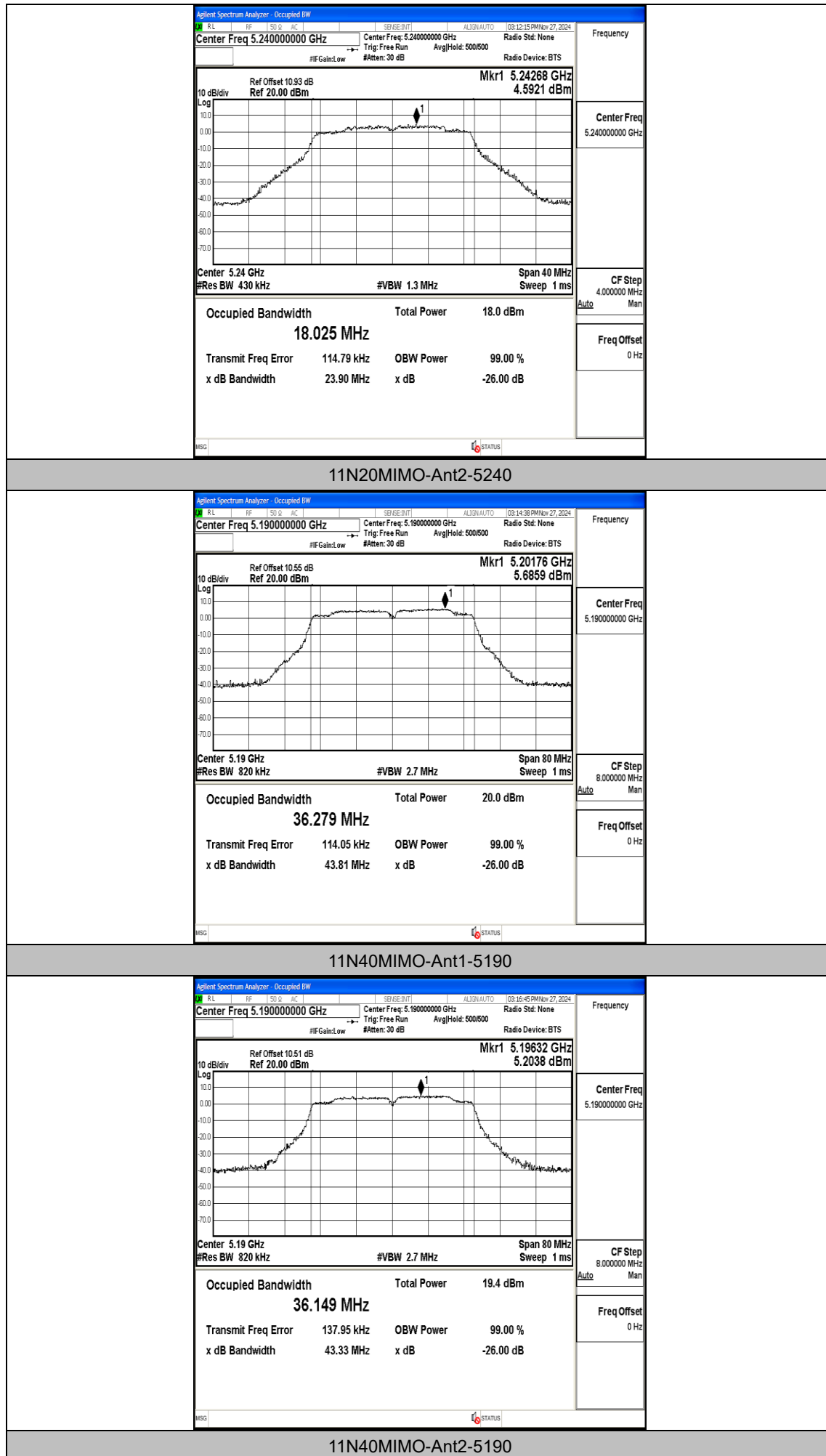
## Test Graphs

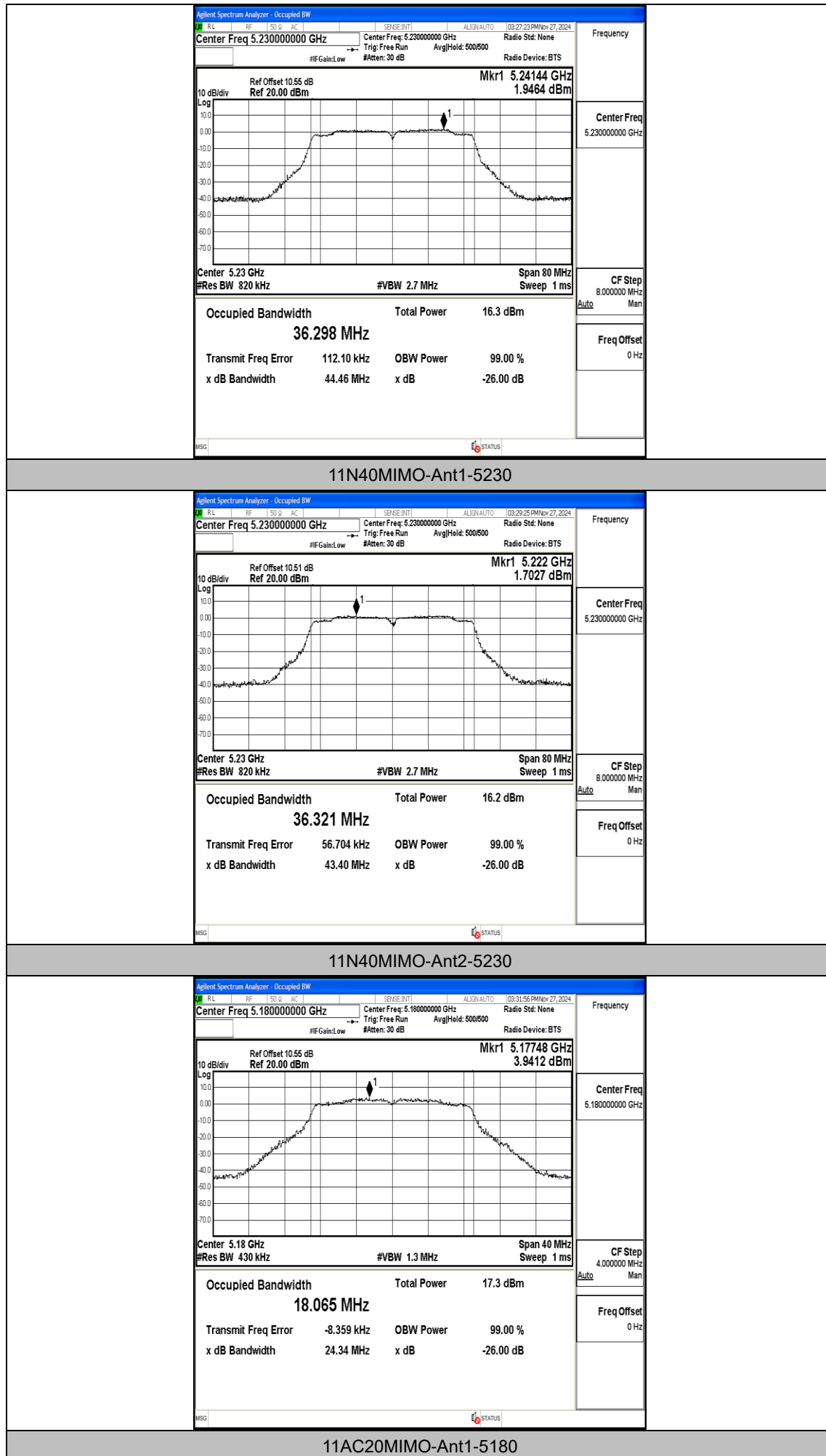


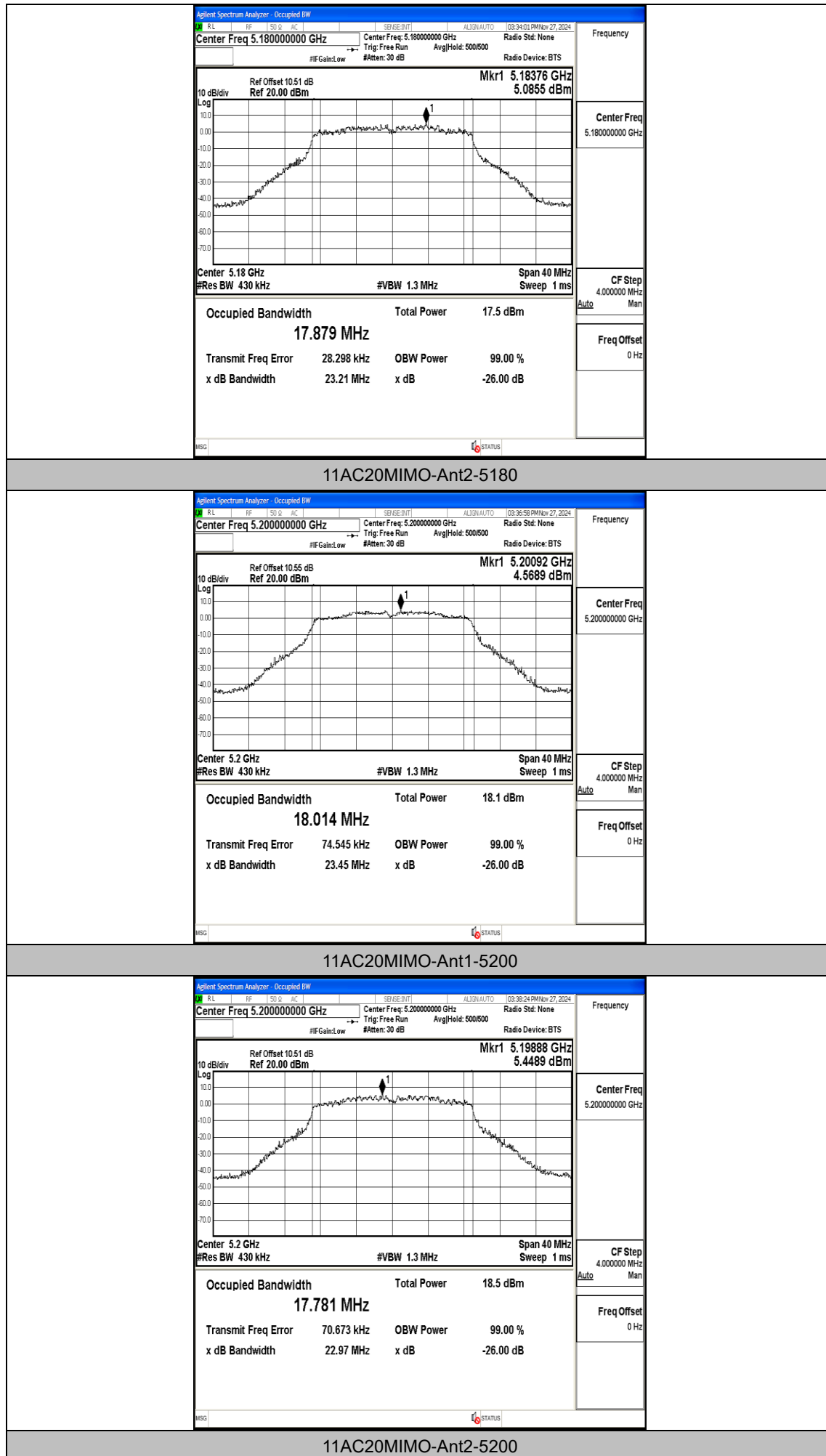


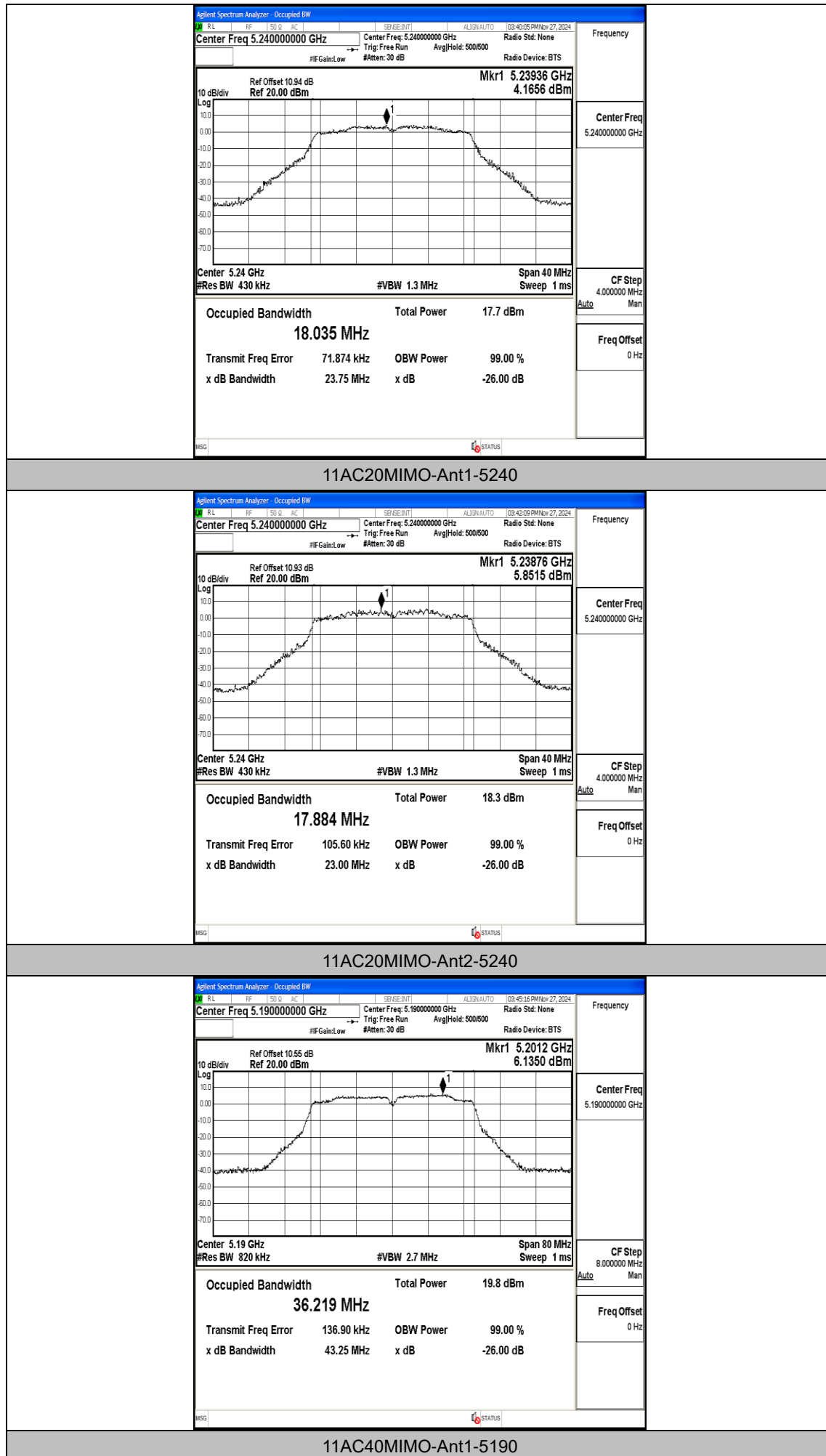


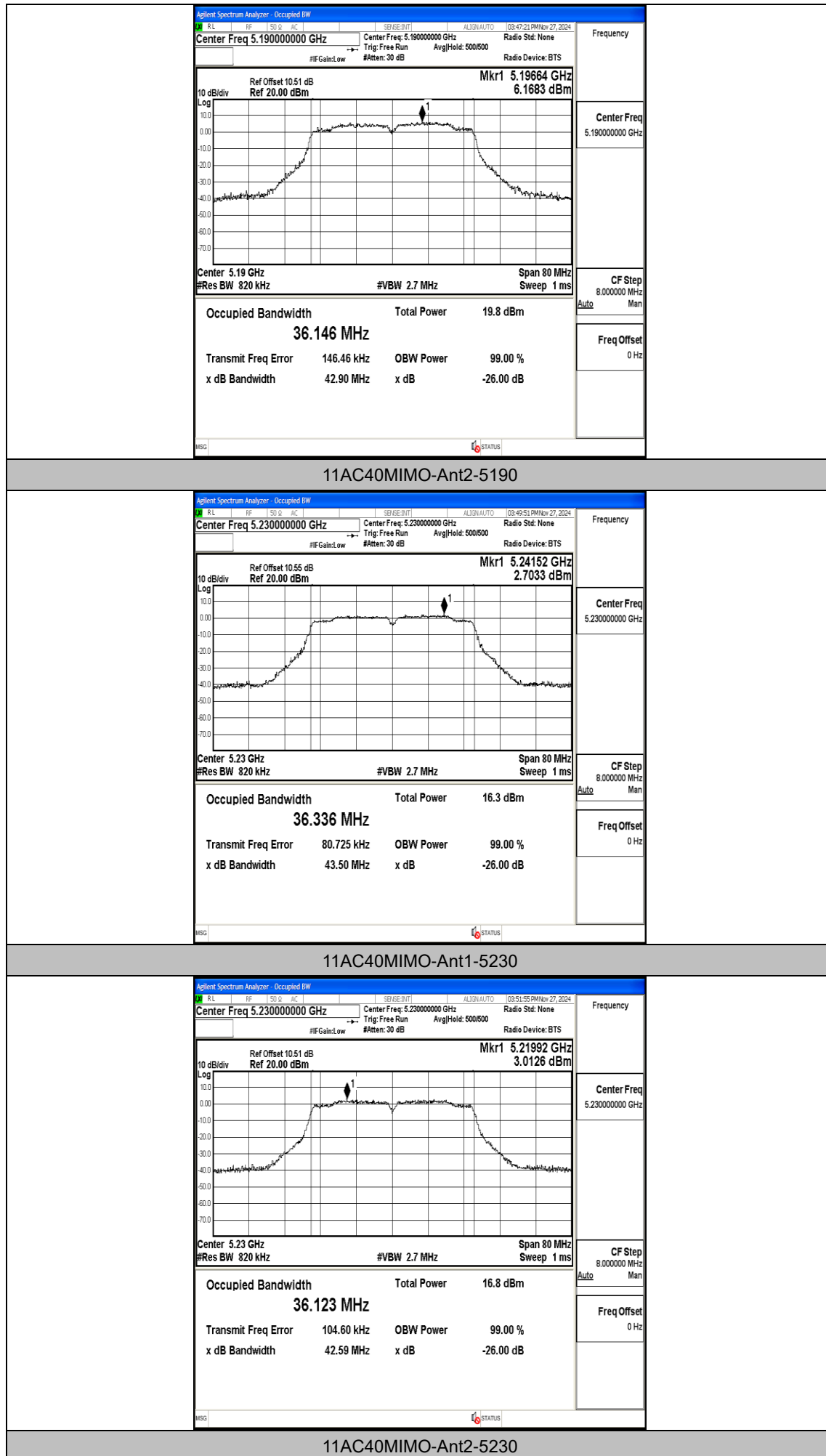


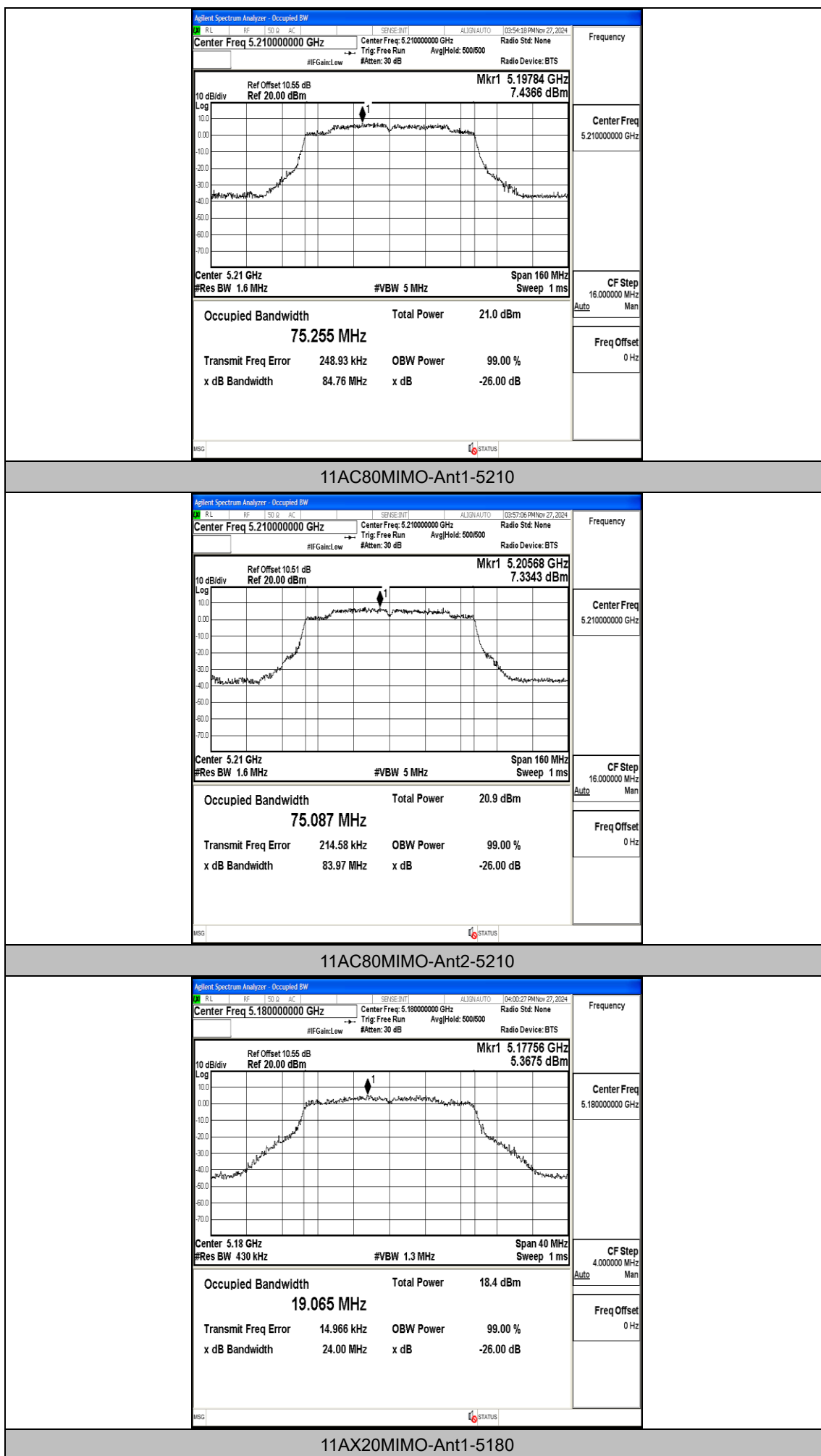


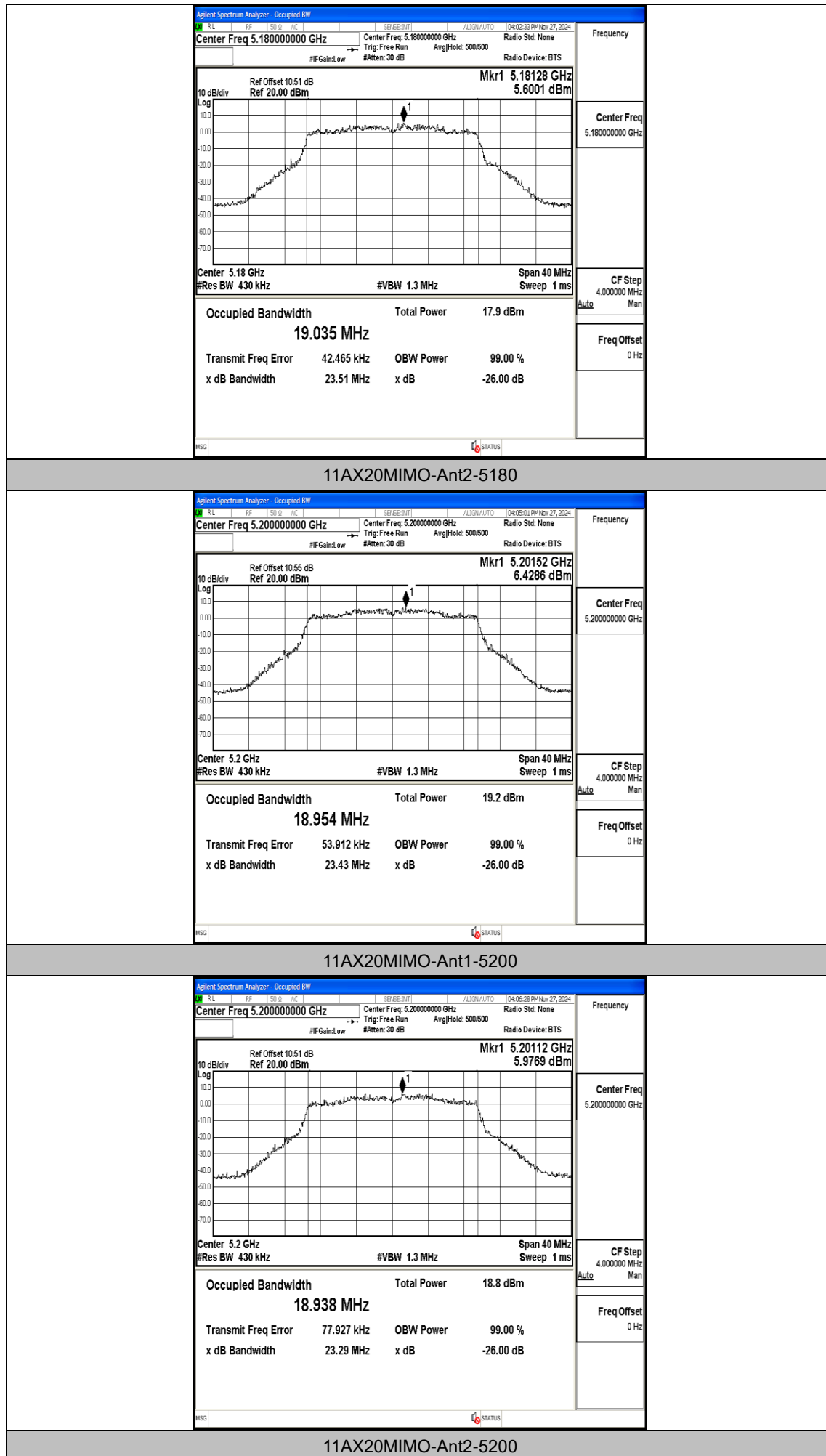


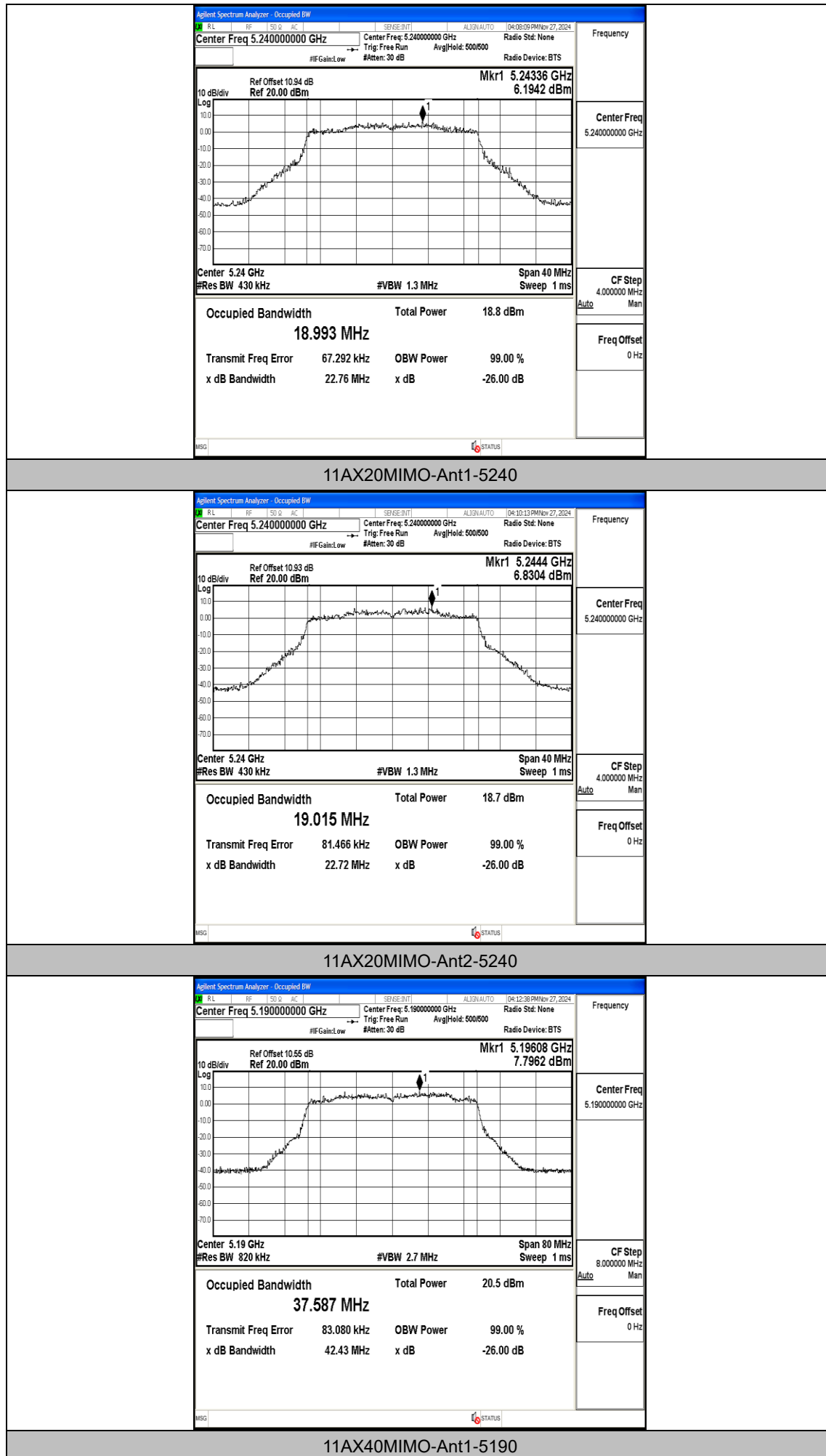


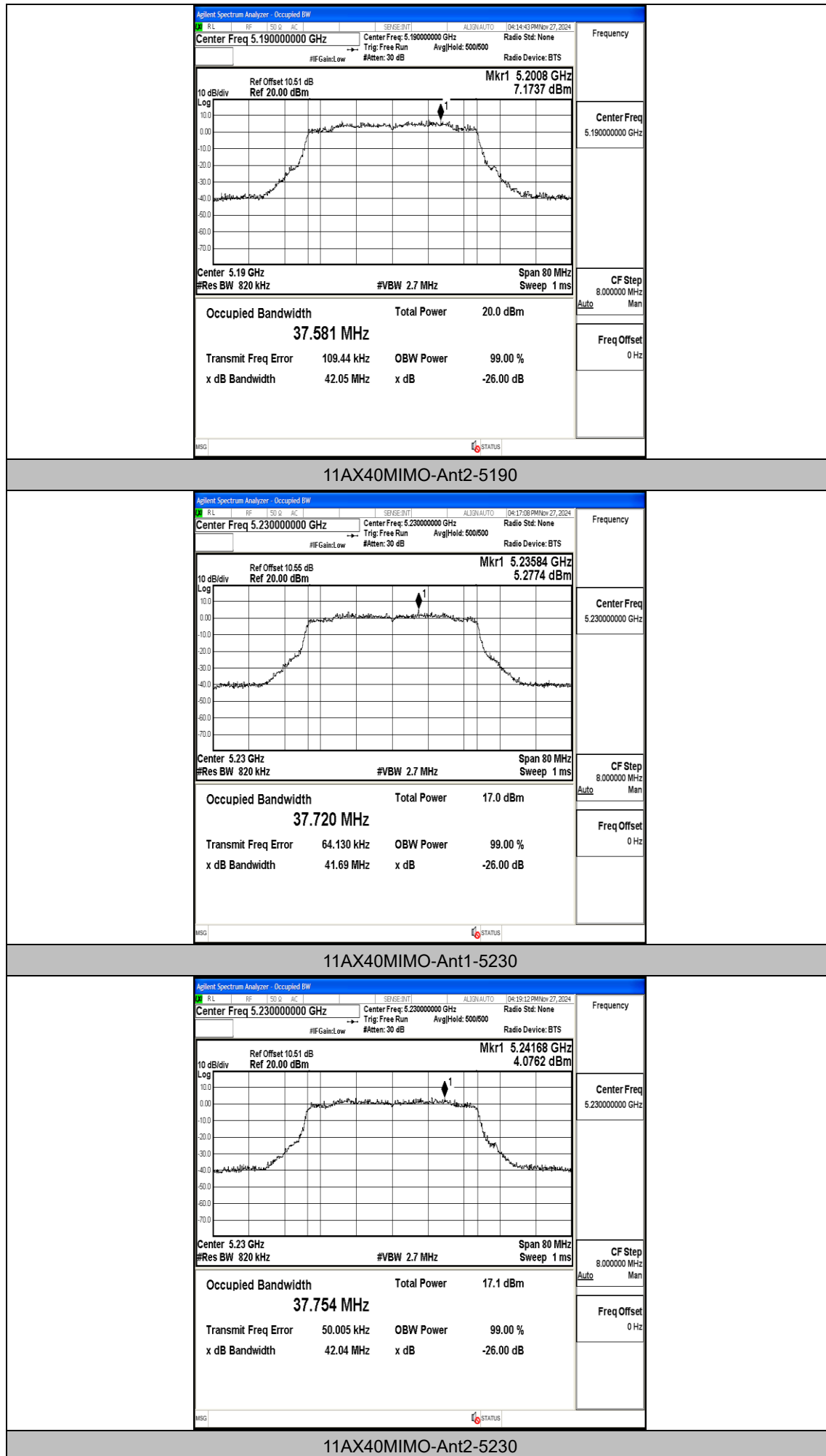


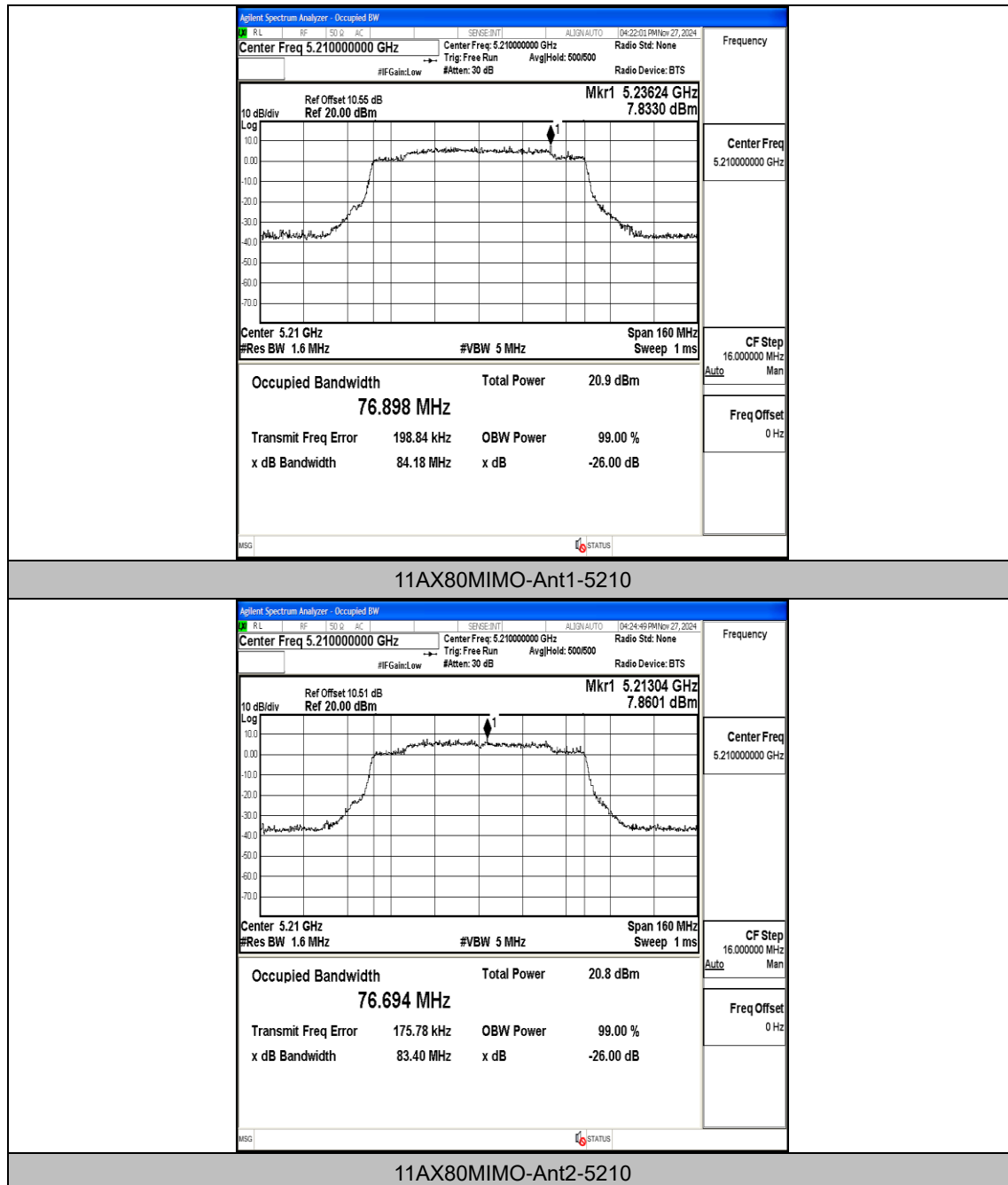












## Appendix B: Maximum conducted output power

### 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  | $\leq 23.98$ | PASS |
| 11AX20MIMO | total | 5180 | 13.04 | $\leq 23.98$ | PASS |
| 11AX20MIMO | Ant1  | 5200 | 11.00 | $\leq 23.98$ | PASS |
| 11AX20MIMO | Ant2  | 5200 | 10.45 | $\leq 23.98$ | PASS |
| 11AX20MIMO | total | 5200 | 13.74 | $\leq 23.98$ | PASS |
| 11AX20MIMO | Ant1  | 5240 | 10.67 | $\leq 23.98$ | PASS |
| 11AX20MIMO | Ant2  | 5240 | 10.47 | $\leq 23.98$ | PASS |
| 11AX20MIMO | total | 5240 | 13.58 | $\leq 23.98$ | PASS |
| 11AX40MIMO | Ant1  | 5190 | 11.96 | $\leq 23.98$ | PASS |
| 11AX40MIMO | Ant2  | 5190 | 11.35 | $\leq 23.98$ | PASS |
| 11AX40MIMO | total | 5190 | 14.68 | $\leq 23.98$ | PASS |
| 11AX40MIMO | Ant1  | 5230 | 8.43  | $\leq 23.98$ | PASS |
| 11AX40MIMO | Ant2  | 5230 | 8.32  | $\leq 23.98$ | PASS |
| 11AX40MIMO | total | 5230 | 11.39 | $\leq 23.98$ | PASS |
| 11AX80MIMO | Ant1  | 5210 | 11.96 | $\leq 23.98$ | PASS |
| 11AX80MIMO | Ant2  | 5210 | 11.75 | $\leq 23.98$ | PASS |
| 11AX80MIMO | total | 5210 | 14.87 | $\leq 23.98$ | 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.