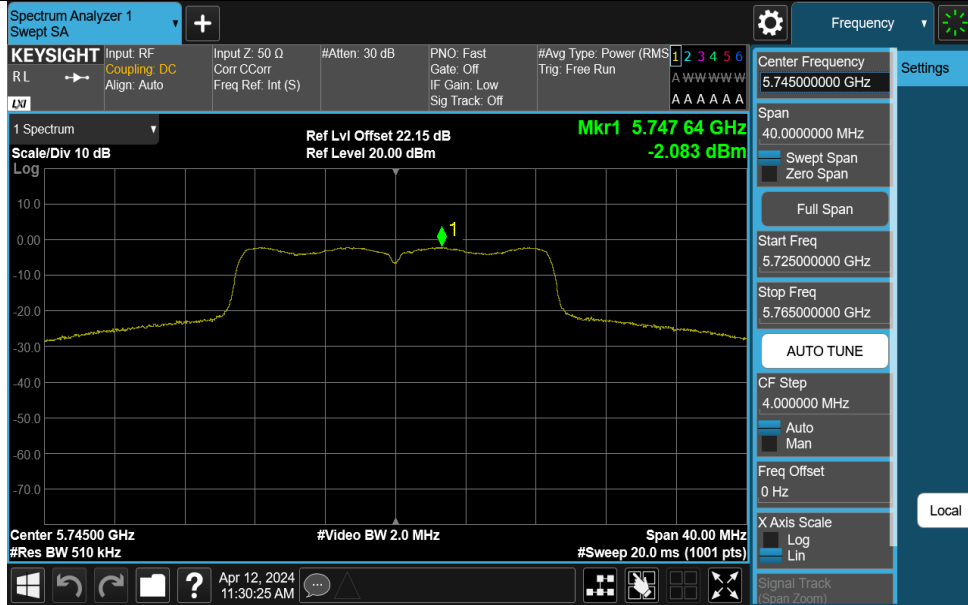
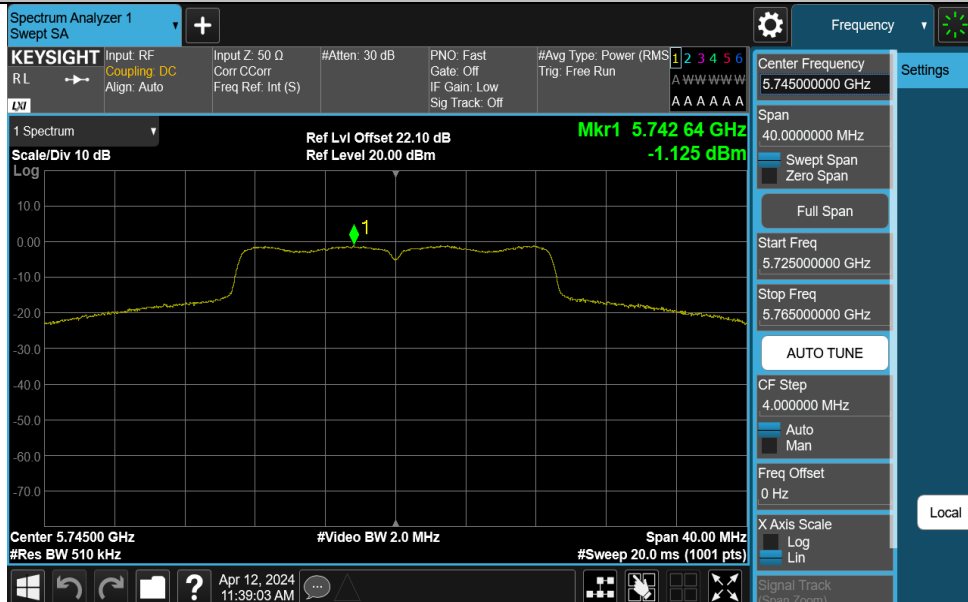


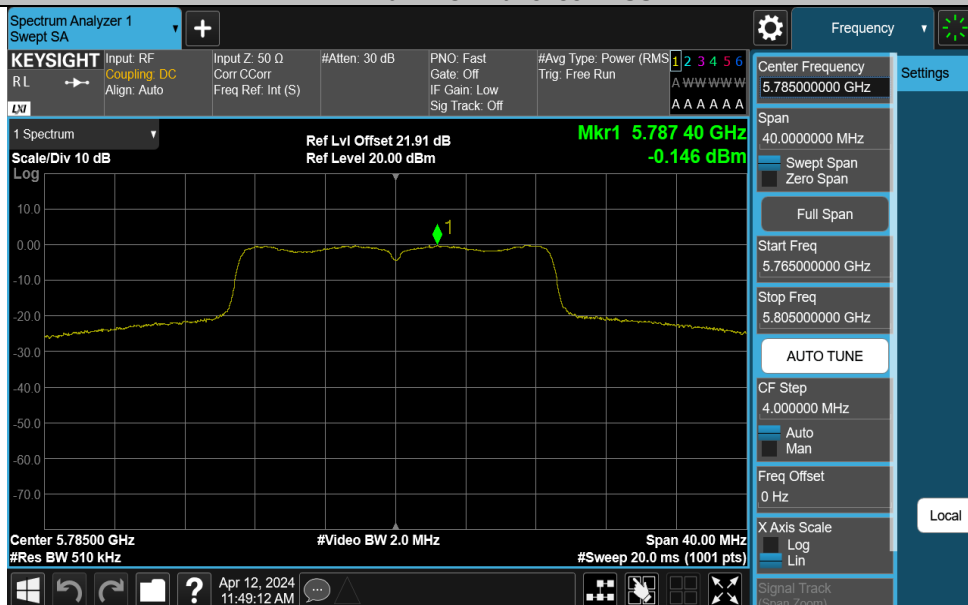
### 11N20MIMO-Ant1-5745-PASS



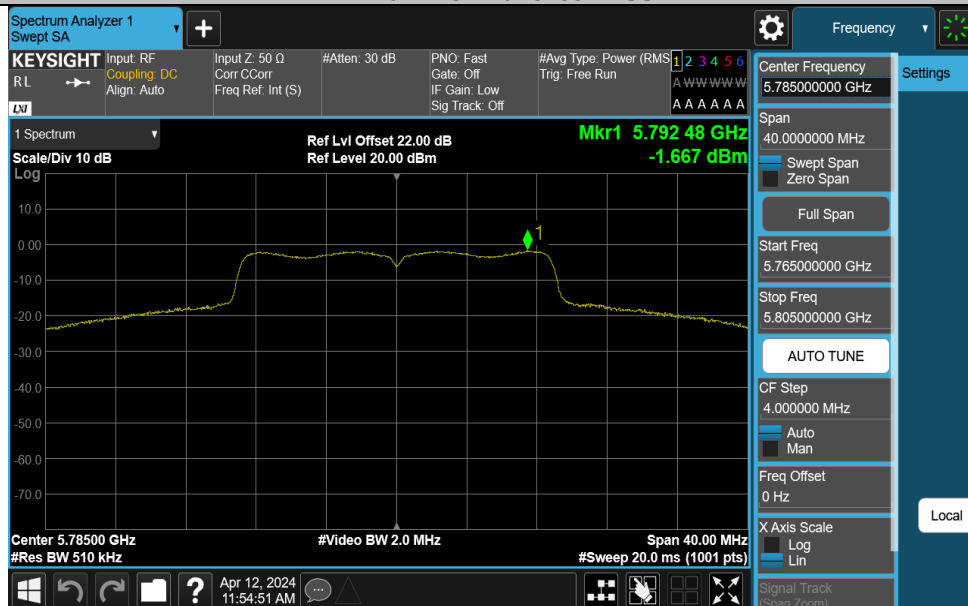
### 11N20MIMO-Ant2-5745-PASS



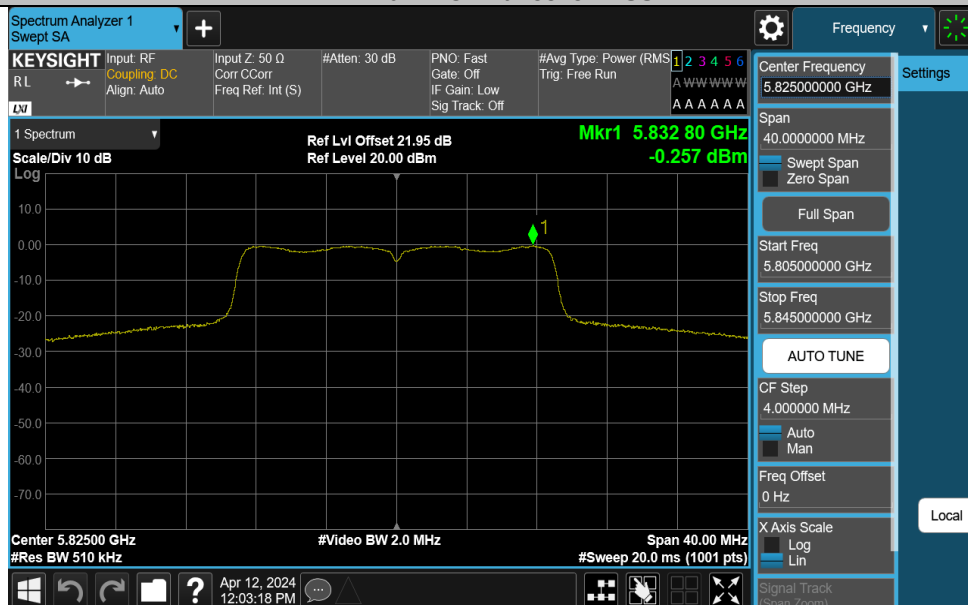
### 11N20MIMO-Ant1-5785-PASS



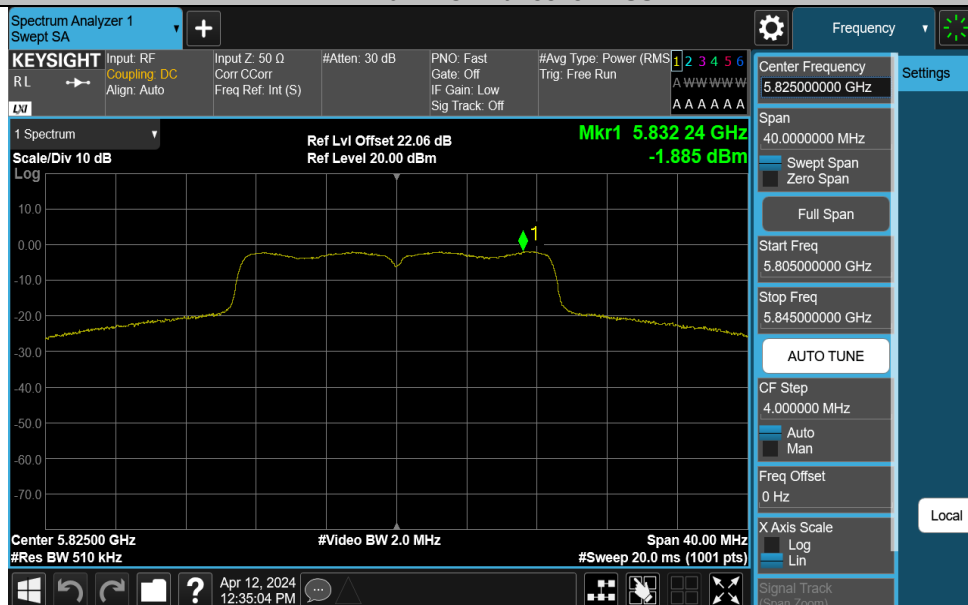
### 11N20MIMO-Ant2-5785-PASS



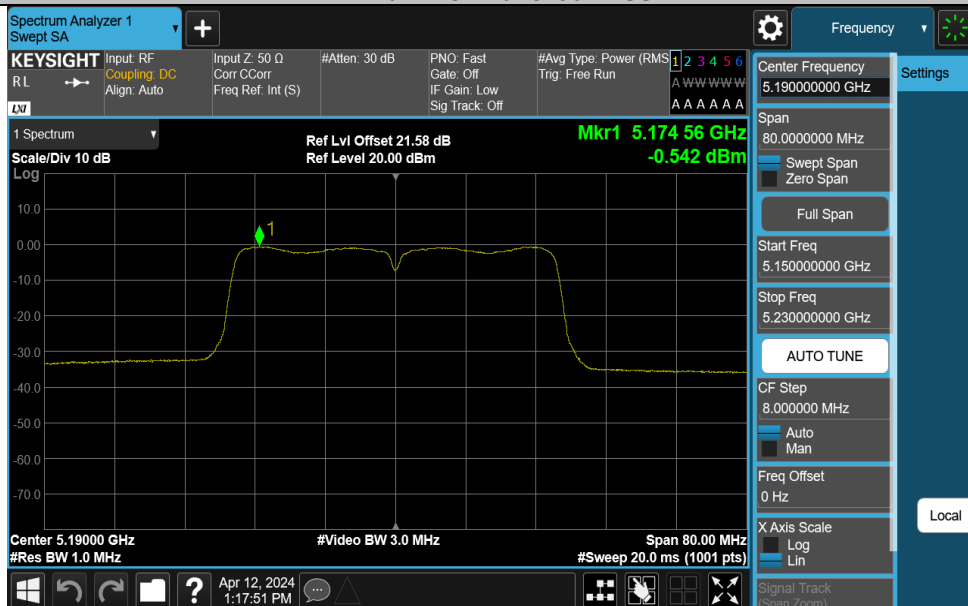
### 11N20MIMO-Ant1-5825-PASS



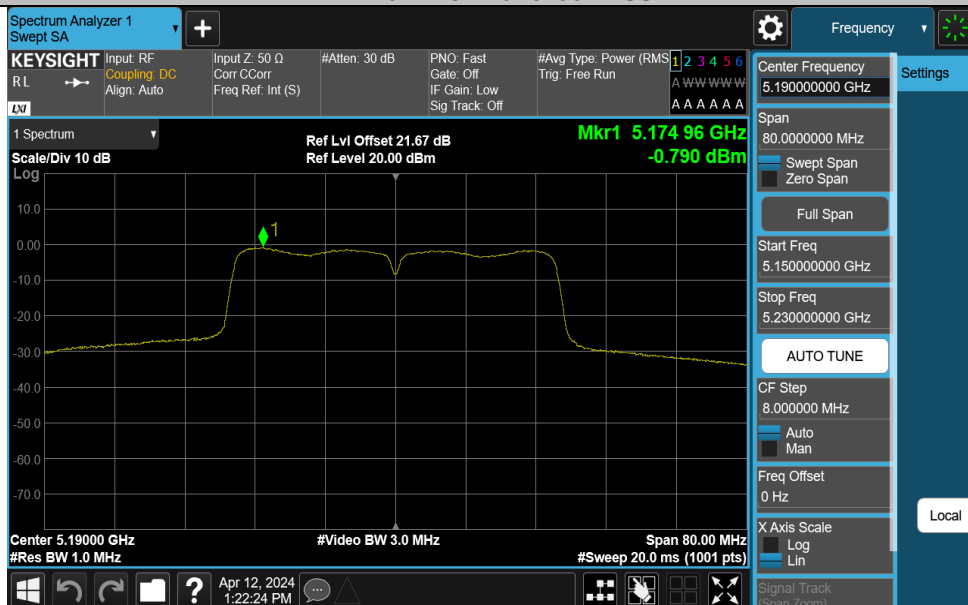
### 11N20MIMO-Ant2-5825-PASS



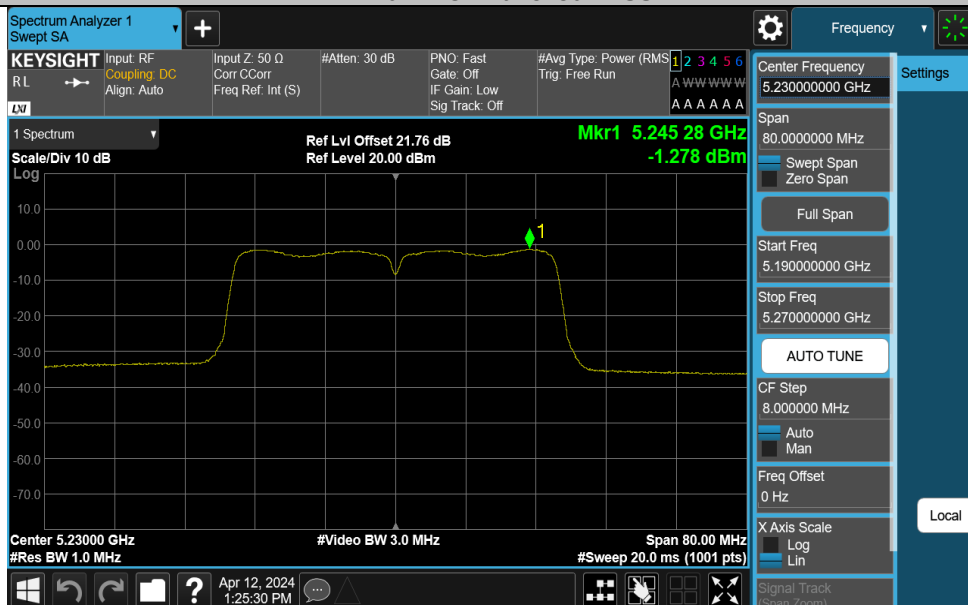
### 11N40MIMO-Ant1-5190-PASS



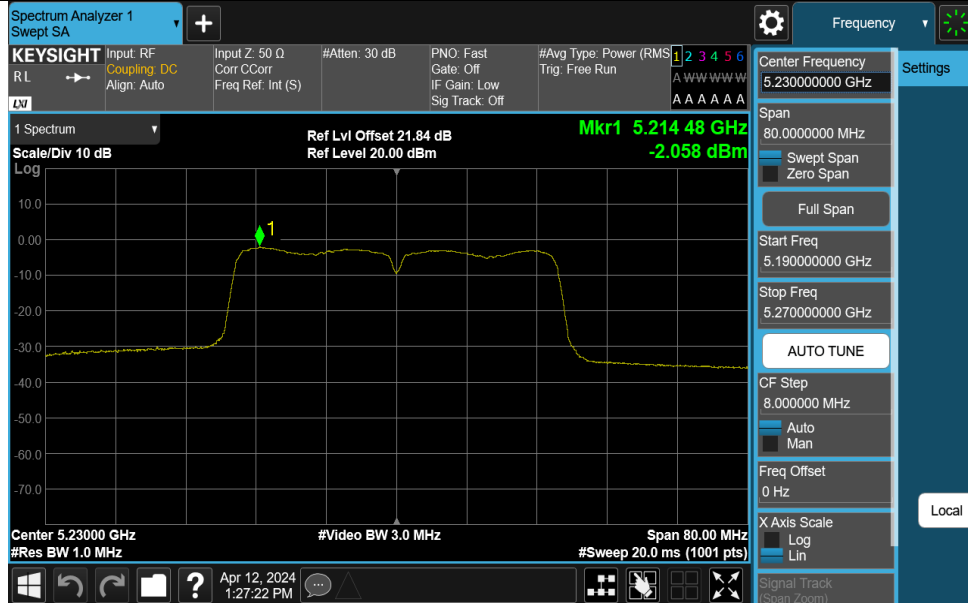
### 11N40MIMO-Ant2-5190-PASS



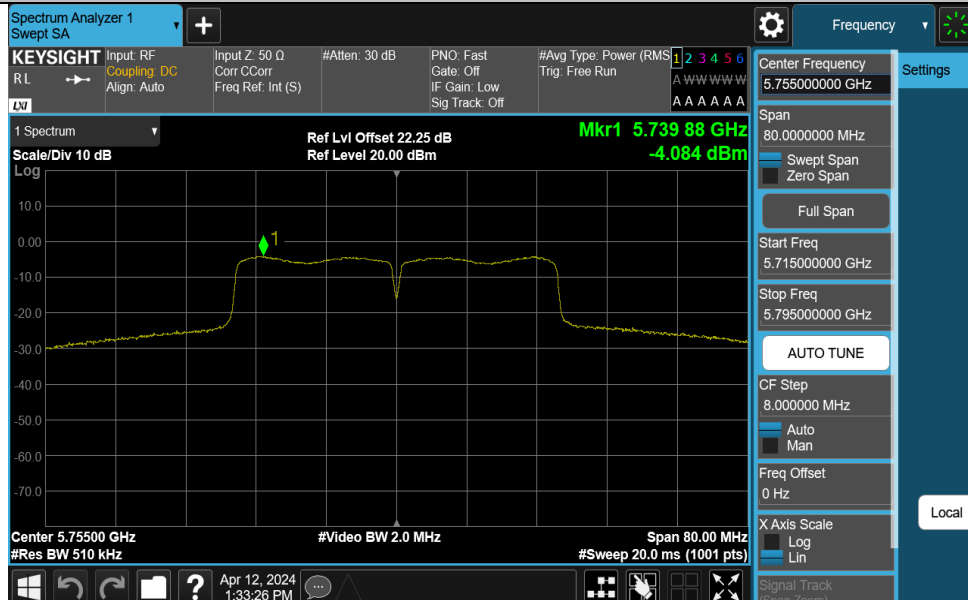
### 11N40MIMO-Ant1-5230-PASS



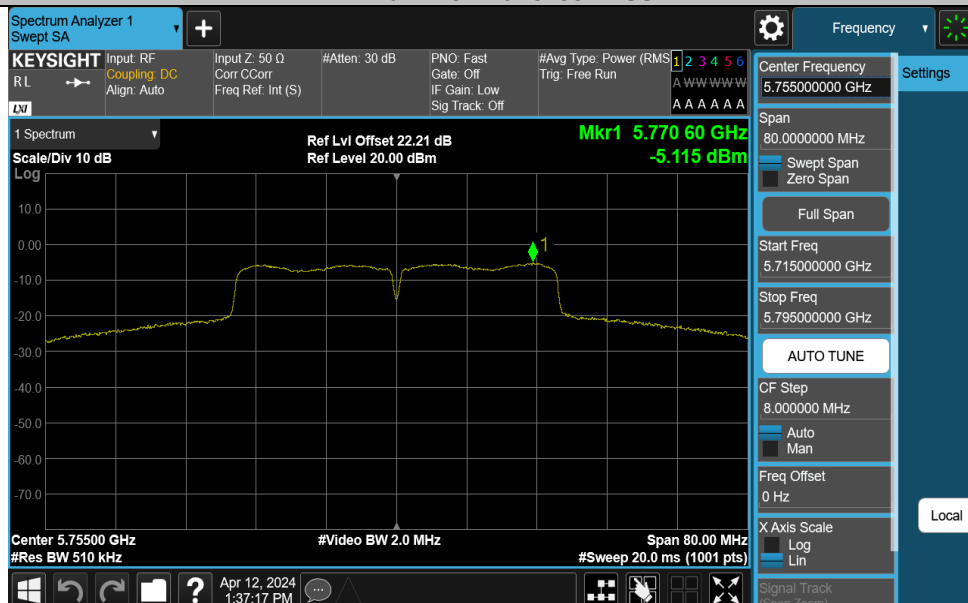
### 11N40MIMO-Ant2-5230-PASS



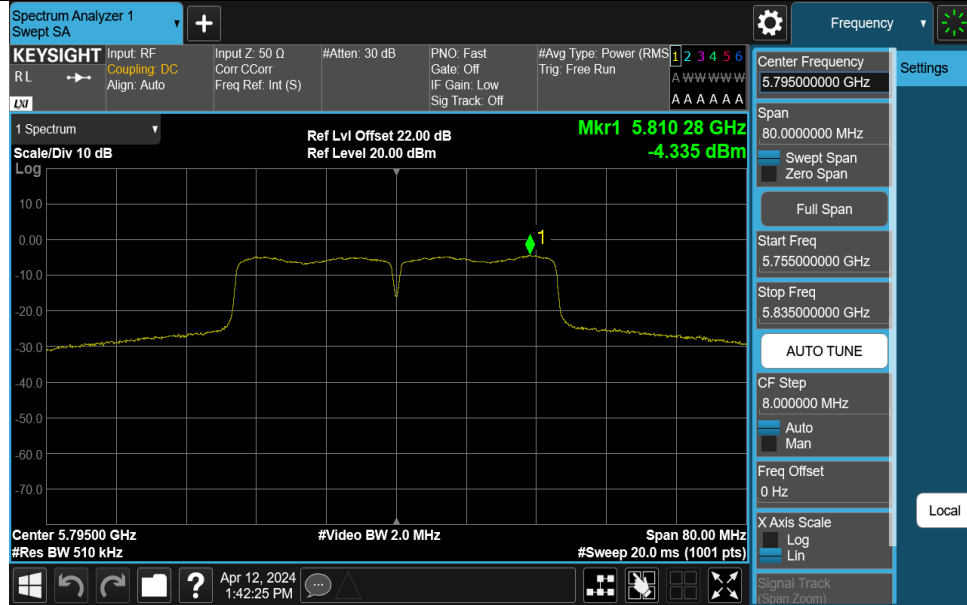
### 11N40MIMO-Ant1-5755-PASS



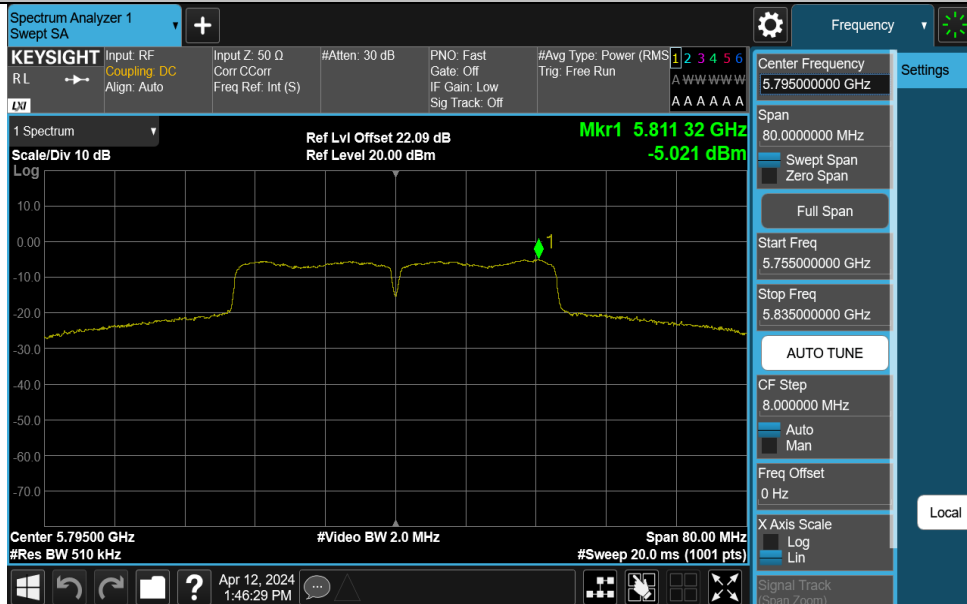
### 11N40MIMO-Ant2-5755-PASS



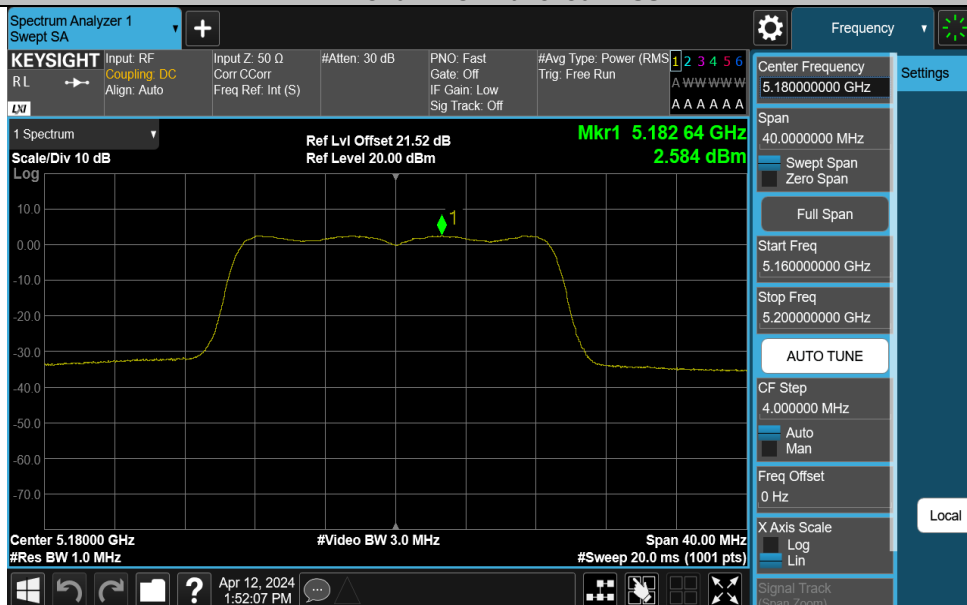
### 11N40MIMO-Ant1-5795-PASS



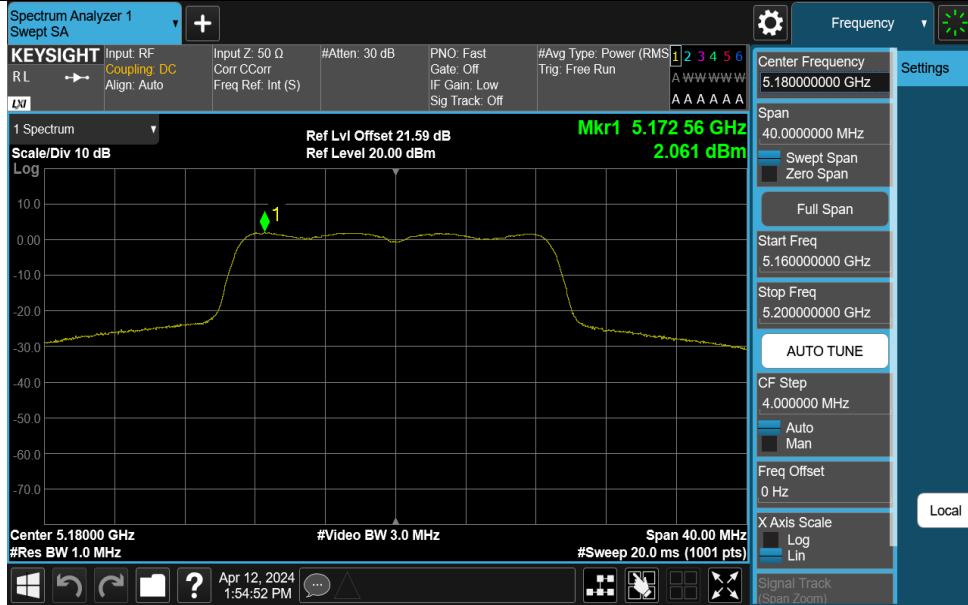
### 11N40MIMO-Ant2-5795-PASS



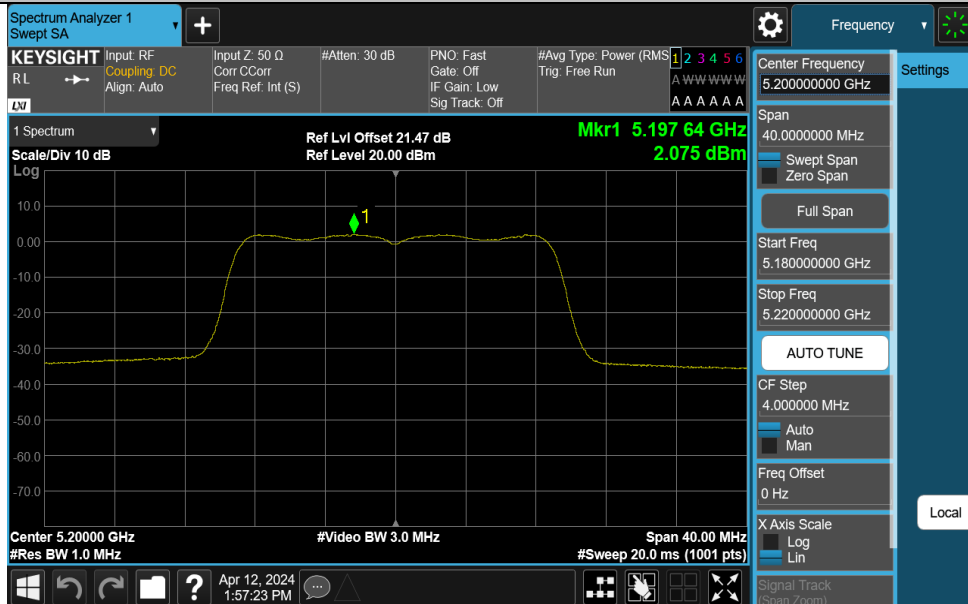
### 11AC20MIMO-Ant1-5180-PASS



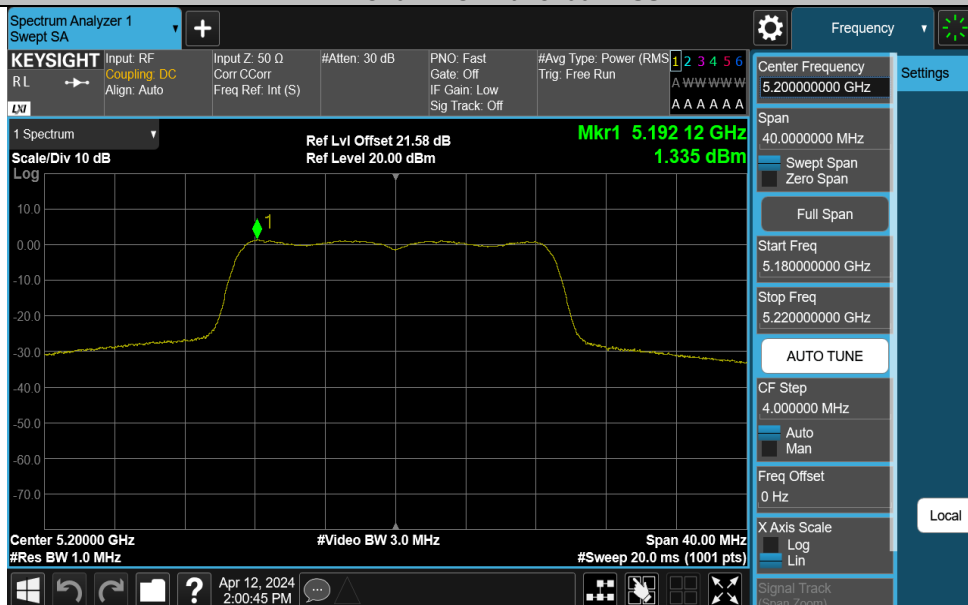
## 11AC20MIMO-Ant2-5180-PASS



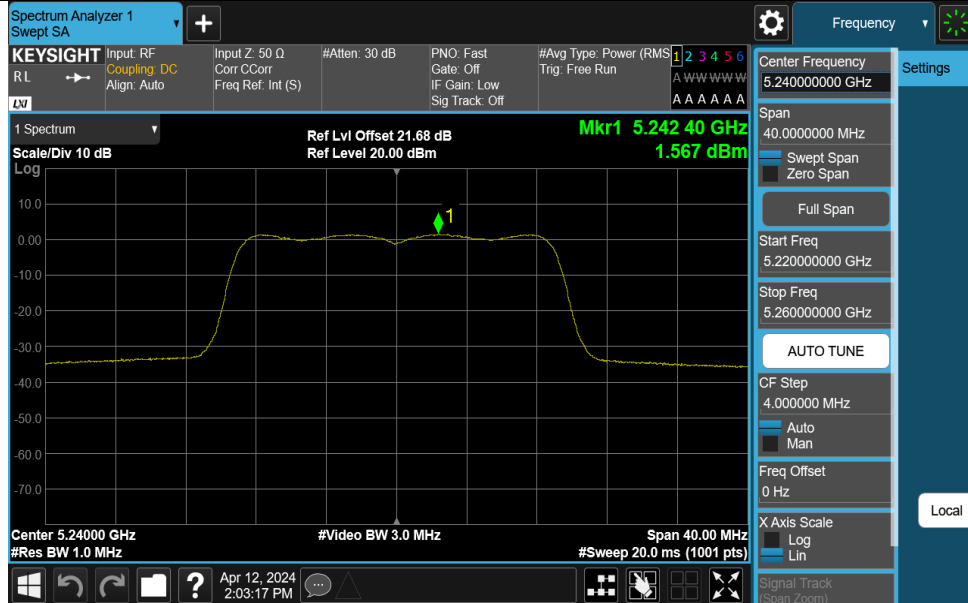
## 11AC20MIMO-Ant1-5200-PASS



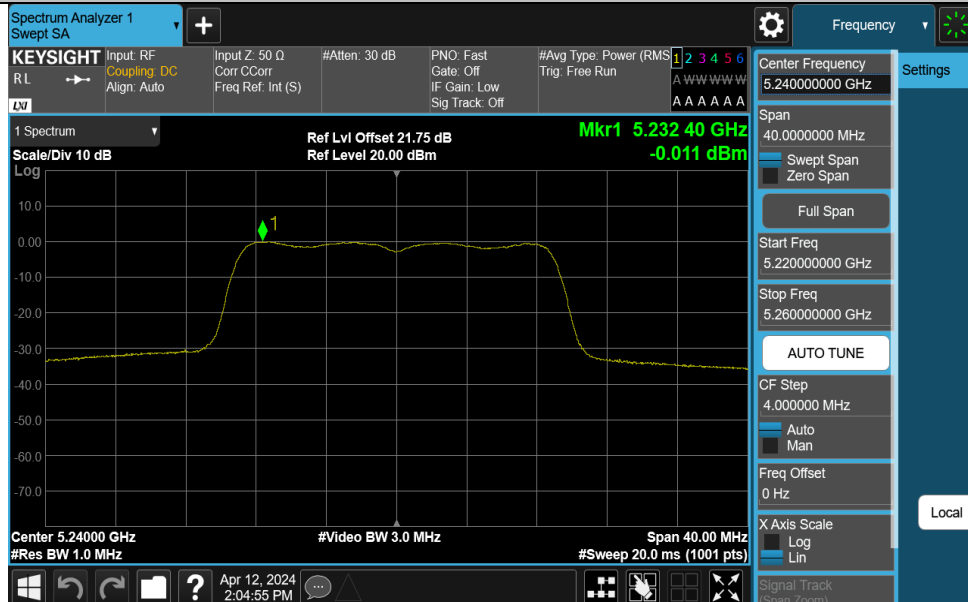
## 11AC20MIMO-Ant2-5200-PASS



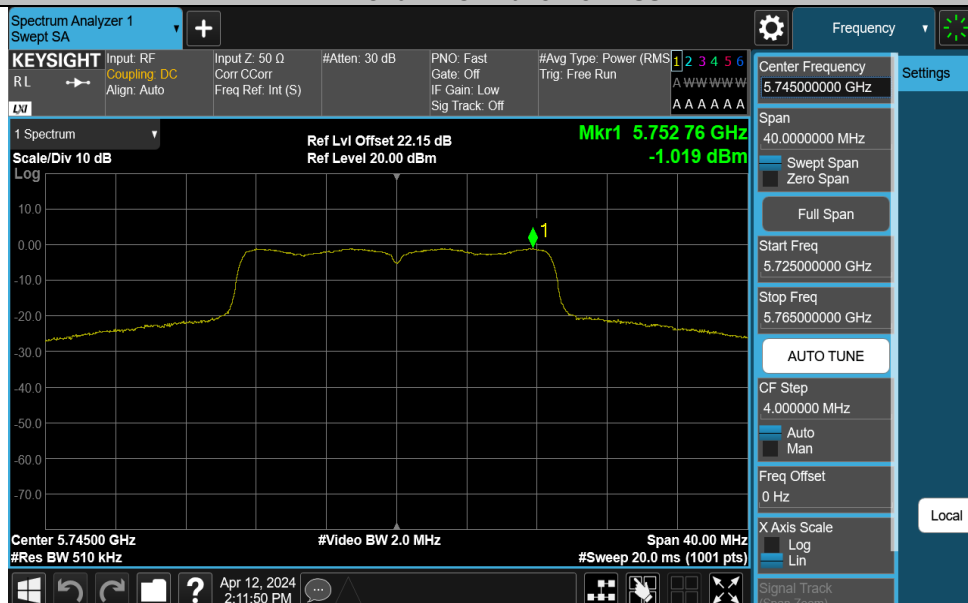
## 11AC20MIMO-Ant1-5240-PASS



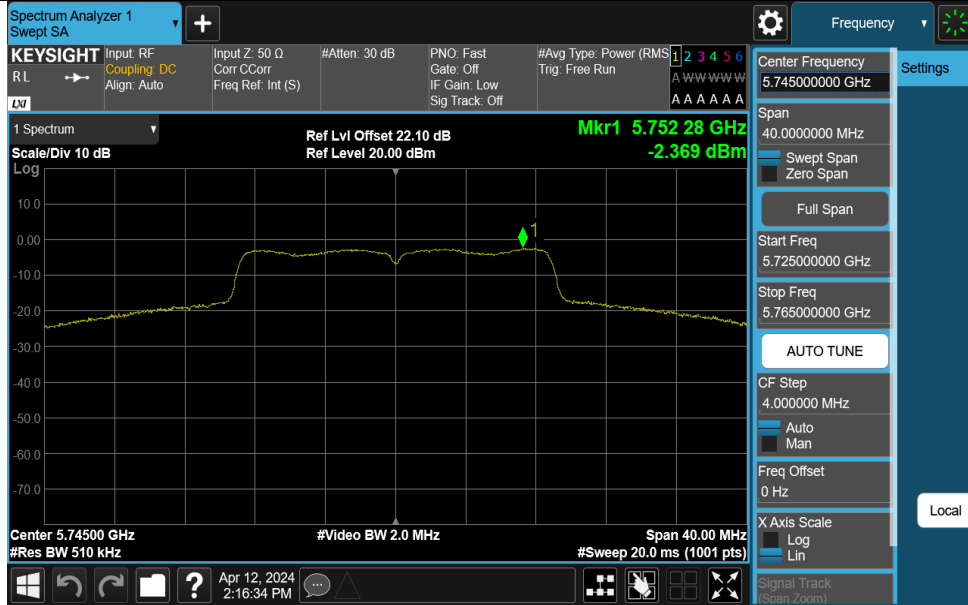
## 11AC20MIMO-Ant2-5240-PASS



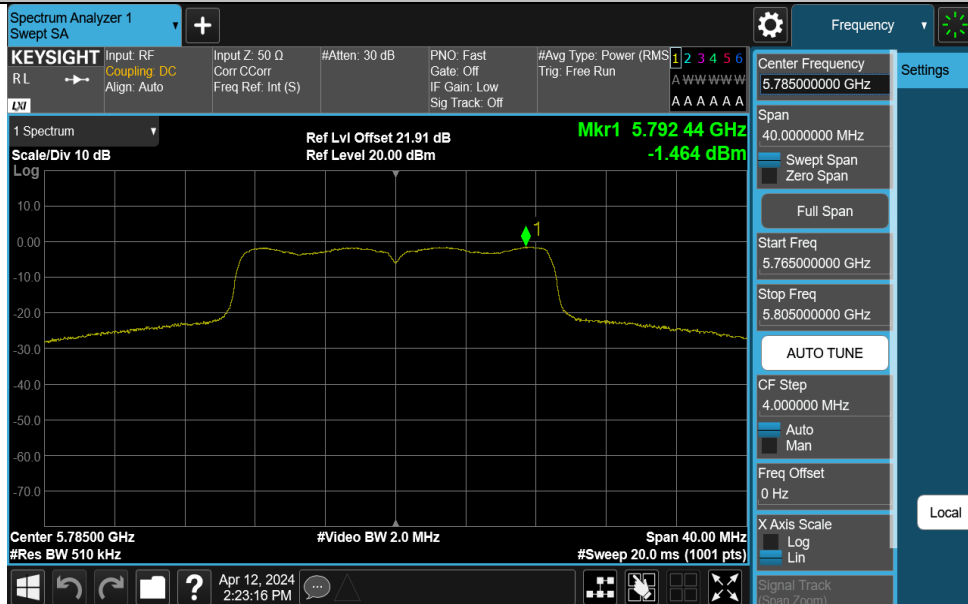
## 11AC20MIMO-Ant1-5745-PASS



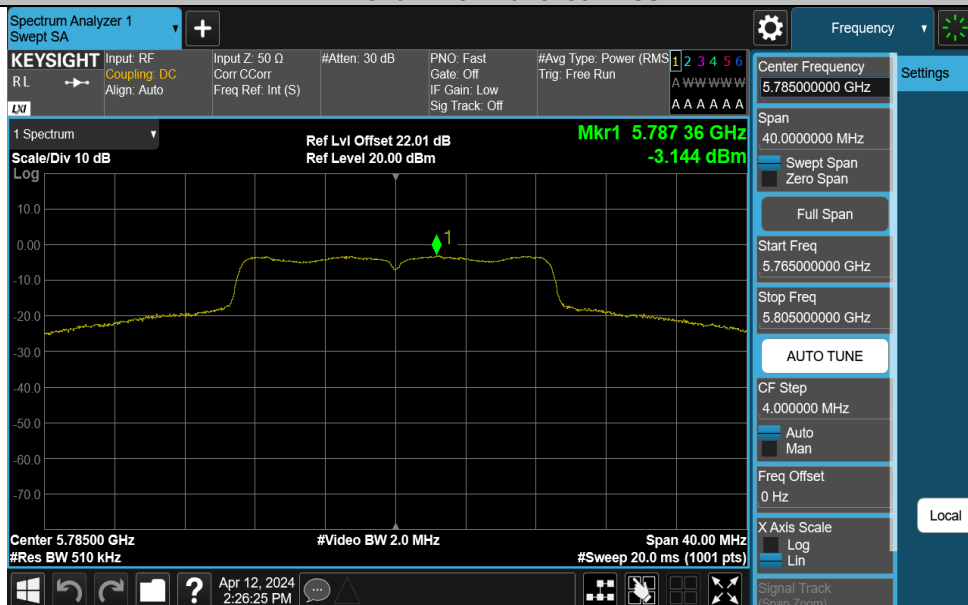
## 11AC20MIMO-Ant2-5745-PASS



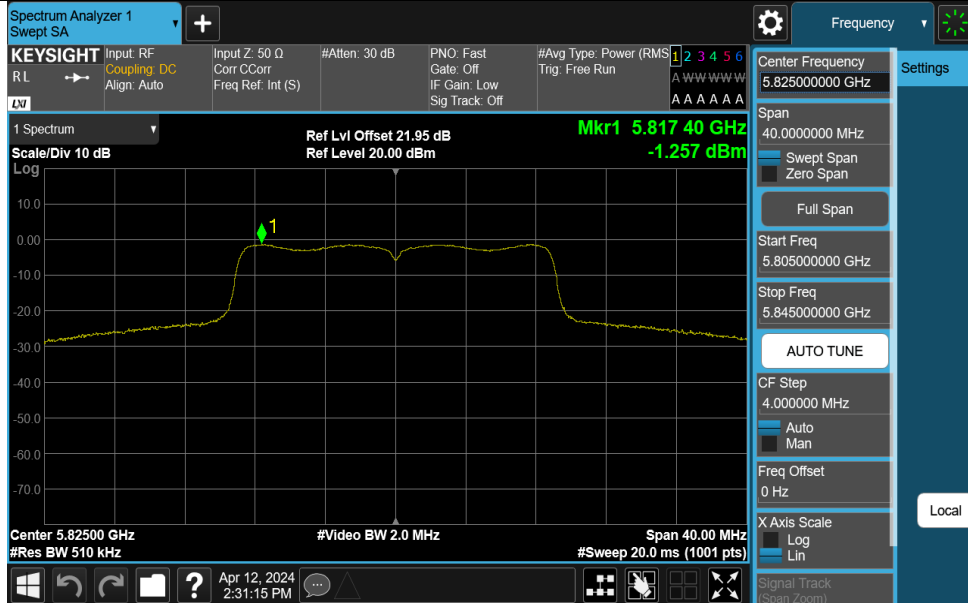
## 11AC20MIMO-Ant1-5785-PASS



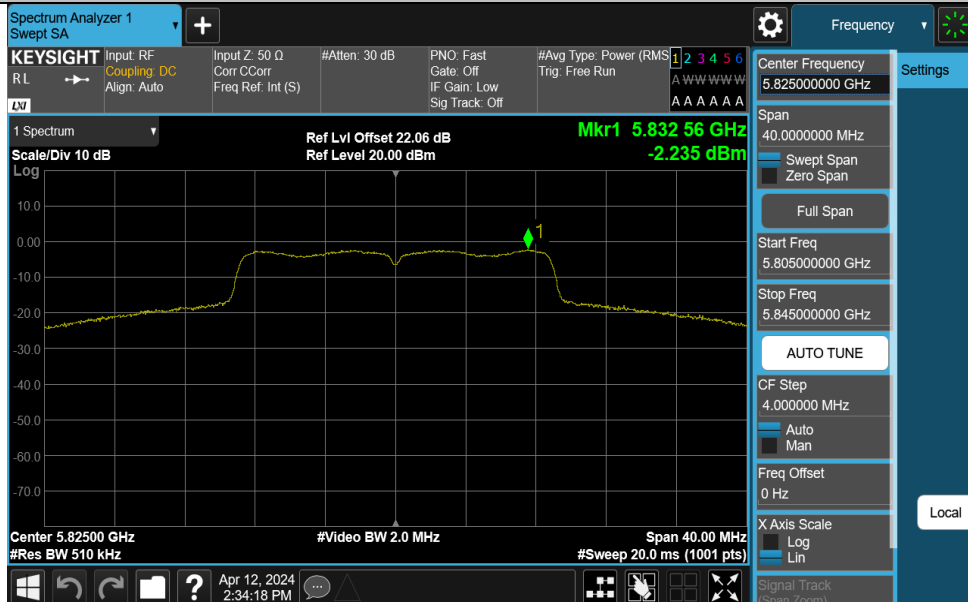
## 11AC20MIMO-Ant2-5785-PASS



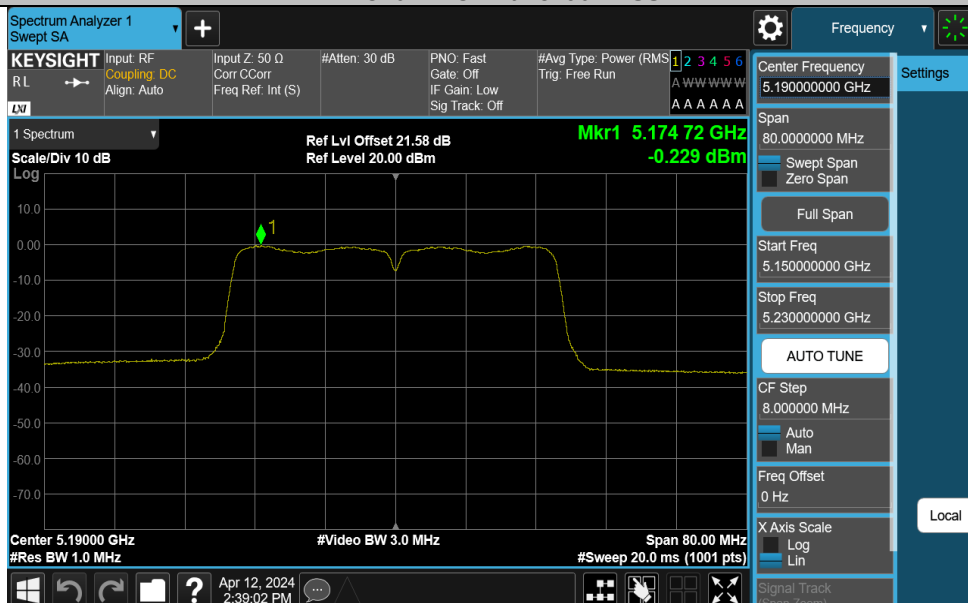
### 11AC20MIMO-Ant1-5825-PASS



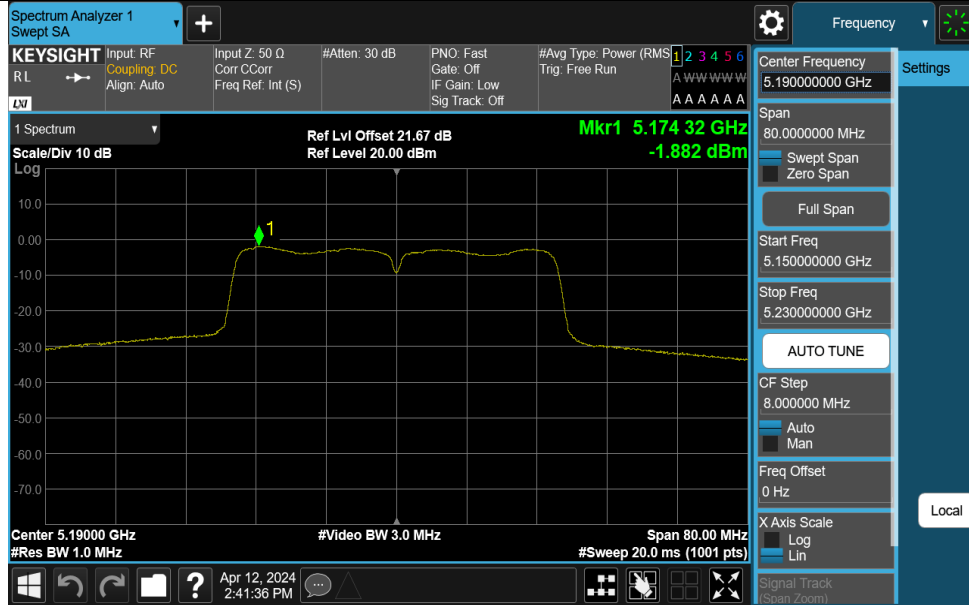
### 11AC20MIMO-Ant2-5825-PASS



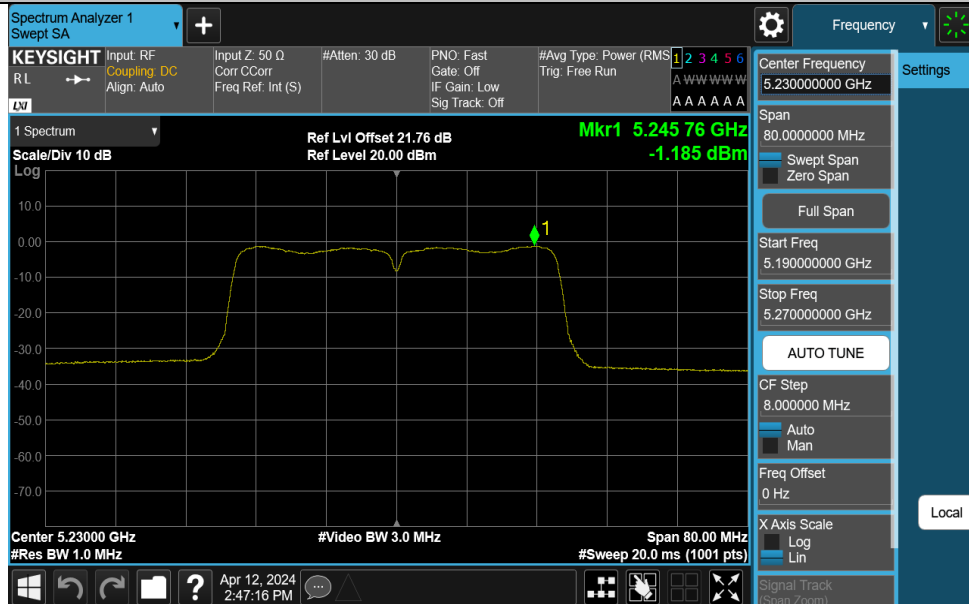
### 11AC40MIMO-Ant1-5190-PASS



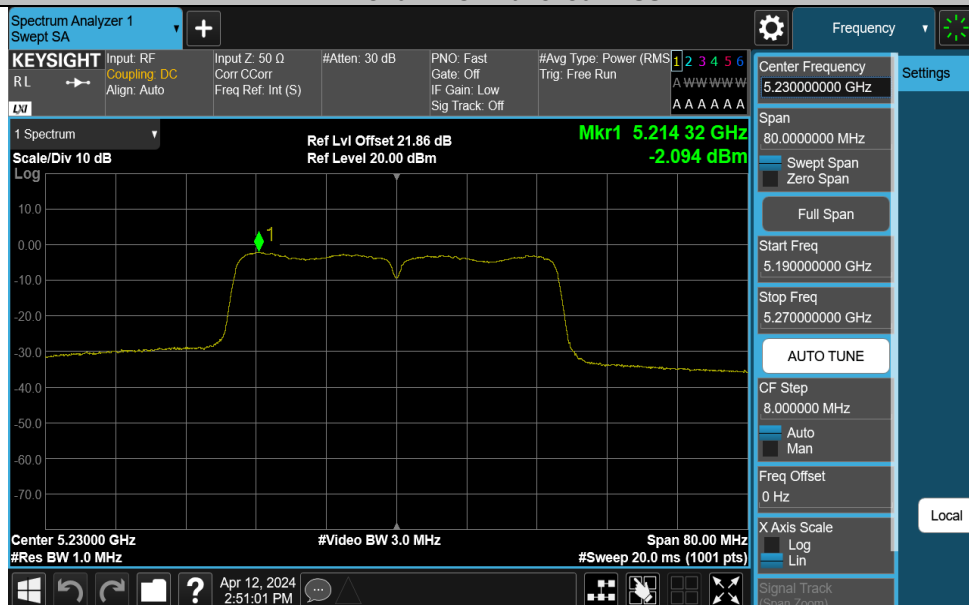
## 11AC40MIMO-Ant2-5190-PASS



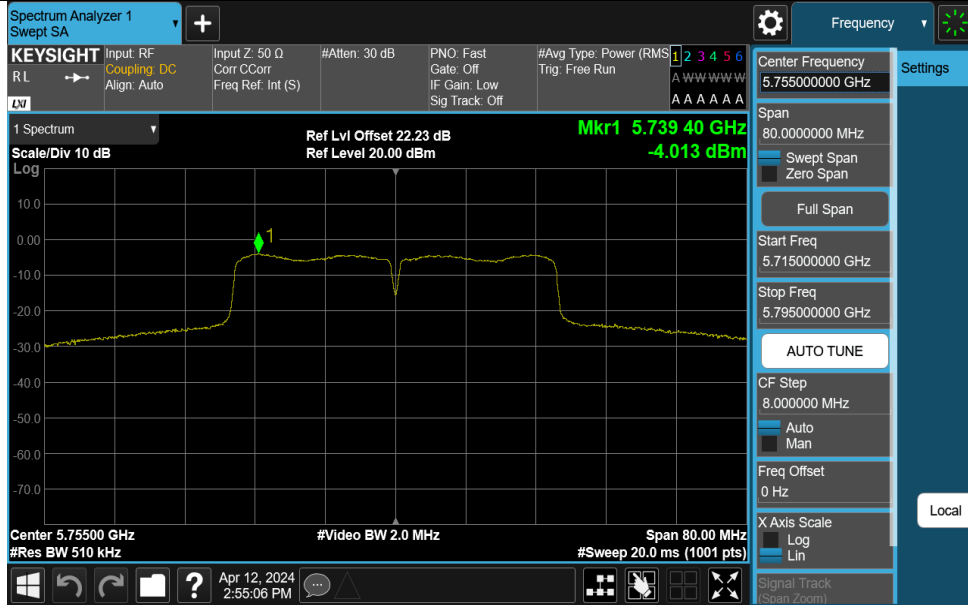
## 11AC40MIMO-Ant1-5230-PASS



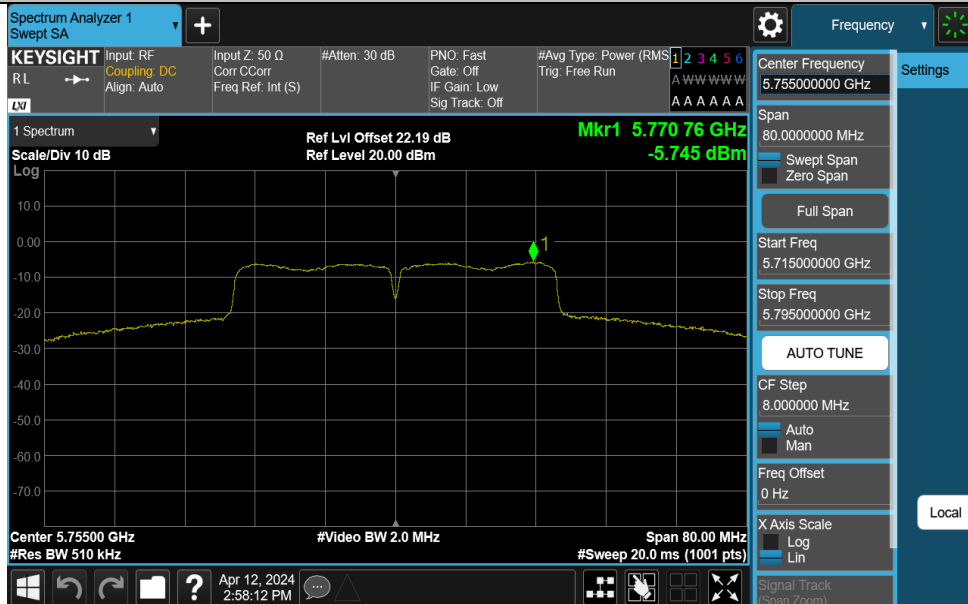
## 11AC40MIMO-Ant2-5230-PASS



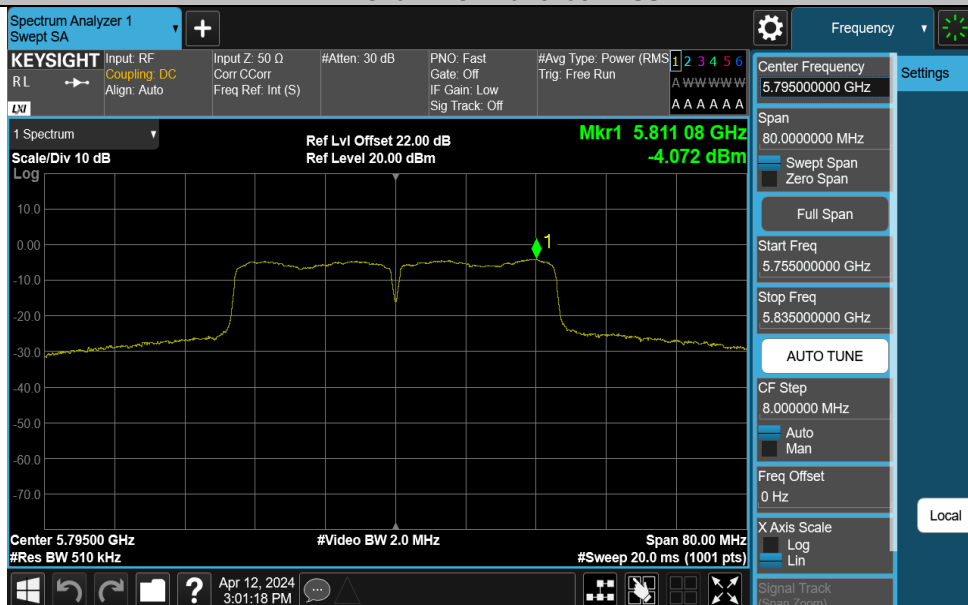
## 11AC40MIMO-Ant1-5755-PASS



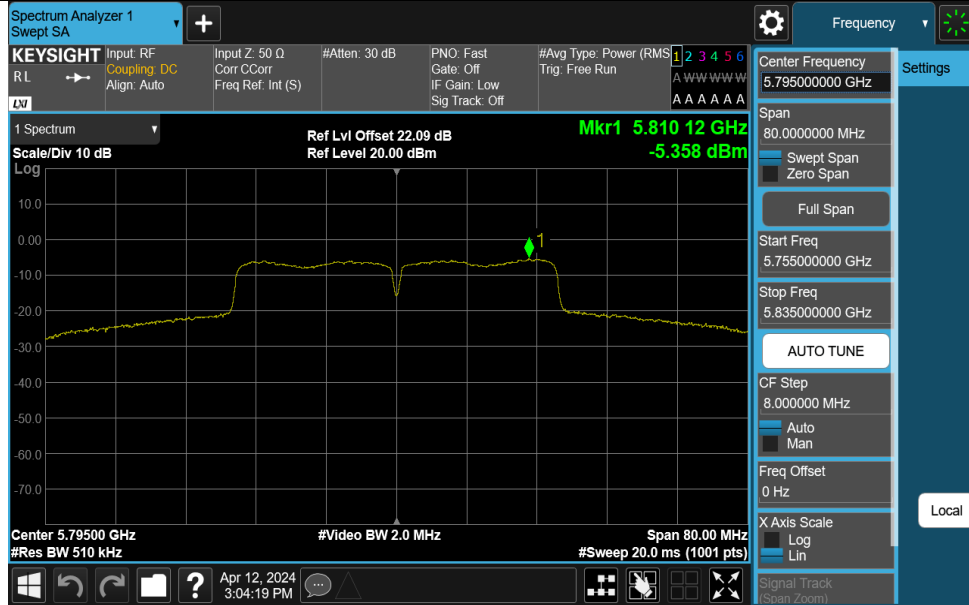
## 11AC40MIMO-Ant2-5755-PASS



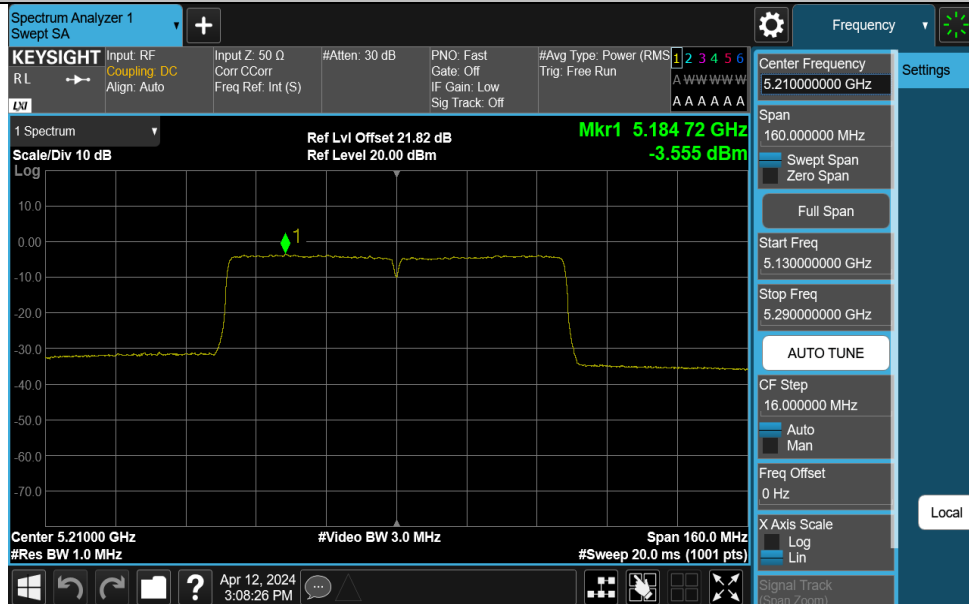
## 11AC40MIMO-Ant1-5795-PASS



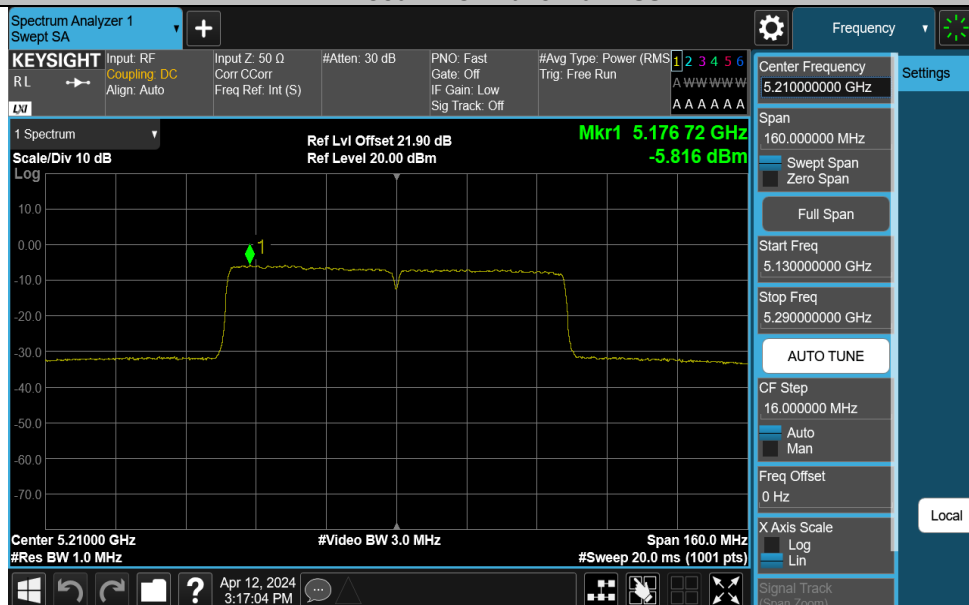
## 11AC40MIMO-Ant2-5795-PASS



## 11AC80MIMO-Ant1-5210-PASS



## 11AC80MIMO-Ant2-5210-PASS





# Appendix E: Band edge measurements

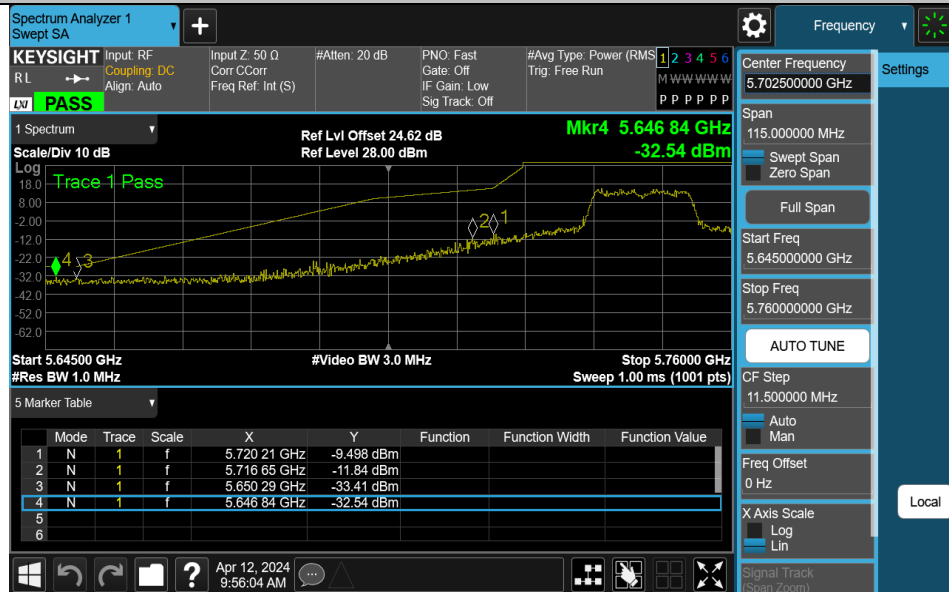
## Test Result B4

| Test Mode  | Antenna | ChName | Frequency[MHz] | FreqRange [MHz] | Result [dBm] | Limit [dBm] | Verdict |
|------------|---------|--------|----------------|-----------------|--------------|-------------|---------|
| 11A        | Ant1    | Low    | 5745           | 5720~5725       | -9.5         | ≤16.08      | PASS    |
| 11A        | Ant1    | Low    | 5745           | 5700~5720       | -11.84       | ≤14.66      | PASS    |
| 11A        | Ant1    | Low    | 5745           | 5650~5700       | -33.41       | ≤-26.79     | PASS    |
| 11A        | Ant1    | Low    | 5745           | 5760~5650       | -32.54       | ≤-27        | PASS    |
| 11A        | Ant2    | Low    | 5745           | 5720~5725       | -12.23       | ≤19.23      | PASS    |
| 11A        | Ant2    | Low    | 5745           | 5700~5720       | -16.39       | ≤14.73      | PASS    |
| 11A        | Ant2    | Low    | 5745           | 5650~5700       | -33.74       | ≤-25.93     | PASS    |
| 11A        | Ant2    | Low    | 5745           | 5760~5650       | -32.64       | ≤-27        | PASS    |
| 11A        | Ant1    | High   | 5825           | 5850~5855       | -16.48       | ≤16.03      | PASS    |
| 11A        | Ant1    | High   | 5825           | 5855~5875       | -13.52       | ≤14.86      | PASS    |
| 11A        | Ant1    | High   | 5825           | 5875~5925       | -32.15       | ≤-26.81     | PASS    |
| 11A        | Ant1    | High   | 5825           | 5925~5935       | -32.75       | ≤-27        | PASS    |
| 11A        | Ant2    | High   | 5825           | 5850~5855       | -15          | ≤16.03      | PASS    |
| 11A        | Ant2    | High   | 5825           | 5855~5875       | -14.19       | ≤15.39      | PASS    |
| 11A        | Ant2    | High   | 5825           | 5875~5925       | -29.39       | ≤-26.41     | PASS    |
| 11A        | Ant2    | High   | 5825           | 5925~5935       | -29.64       | ≤-27        | PASS    |
| 11N20MIMO  | Ant1    | Low    | 5745           | 5720~5725       | -11.77       | ≤16.08      | PASS    |
| 11N20MIMO  | Ant1    | Low    | 5745           | 5700~5720       | -13.4        | ≤15.56      | PASS    |
| 11N20MIMO  | Ant1    | Low    | 5745           | 5650~5700       | -32.94       | ≤-26.10     | PASS    |
| 11N20MIMO  | Ant1    | Low    | 5745           | 5760~5650       | -33.75       | ≤-27        | PASS    |
| 11N20MIMO  | Ant2    | Low    | 5745           | 5720~5725       | -7.55        | ≤16.08      | PASS    |
| 11N20MIMO  | Ant2    | Low    | 5745           | 5700~5720       | -9.5         | ≤15.53      | PASS    |
| 11N20MIMO  | Ant2    | Low    | 5745           | 5650~5700       | -33.04       | ≤-26.87     | PASS    |
| 11N20MIMO  | Ant2    | Low    | 5745           | 5760~5650       | -32.17       | ≤-27        | PASS    |
| 11N20MIMO  | Ant1    | High   | 5825           | 5850~5855       | -13.57       | ≤16.03      | PASS    |
| 11N20MIMO  | Ant1    | High   | 5825           | 5855~5875       | -12.32       | ≤15.16      | PASS    |
| 11N20MIMO  | Ant1    | High   | 5825           | 5875~5925       | -31.59       | ≤-26.81     | PASS    |
| 11N20MIMO  | Ant1    | High   | 5825           | 5925~5935       | -31.35       | ≤-27        | PASS    |
| 11N20MIMO  | Ant2    | High   | 5825           | 5850~5855       | -17.1        | ≤16.96      | PASS    |
| 11N20MIMO  | Ant2    | High   | 5825           | 5855~5875       | -20.44       | ≤10.25      | PASS    |
| 11N20MIMO  | Ant2    | High   | 5825           | 5875~5925       | -30.15       | ≤-26.01     | PASS    |
| 11N20MIMO  | Ant2    | High   | 5825           | 5925~5935       | -29.22       | ≤-27        | PASS    |
| 11N40MIMO  | Ant1    | Low    | 5755           | 5720~5725       | -13.23       | ≤16.97      | PASS    |
| 11N40MIMO  | Ant1    | Low    | 5755           | 5700~5720       | -14.48       | ≤11.57      | PASS    |
| 11N40MIMO  | Ant1    | Low    | 5755           | 5650~5700       | -26.16       | ≤-23.31     | PASS    |
| 11N40MIMO  | Ant1    | Low    | 5755           | 5780~5650       | -31.63       | ≤-27        | PASS    |
| 11N40MIMO  | Ant2    | Low    | 5755           | 5720~5725       | -18.4        | ≤16.35      | PASS    |
| 11N40MIMO  | Ant2    | Low    | 5755           | 5700~5720       | -18.82       | ≤15.24      | PASS    |
| 11N40MIMO  | Ant2    | Low    | 5755           | 5650~5700       | -36.77       | ≤-22.31     | PASS    |
| 11N40MIMO  | Ant2    | Low    | 5755           | 5780~5650       | -40.52       | ≤-27        | PASS    |
| 11N40MIMO  | Ant1    | High   | 5795           | 5850~5855       | -20.09       | ≤15.66      | PASS    |
| 11N40MIMO  | Ant1    | High   | 5795           | 5855~5875       | -18.87       | ≤11.50      | PASS    |
| 11N40MIMO  | Ant1    | High   | 5795           | 5875~5925       | -29.09       | ≤-25.49     | PASS    |
| 11N40MIMO  | Ant1    | High   | 5795           | 5925~5935       | -27.75       | ≤-27        | PASS    |
| 11N40MIMO  | Ant2    | High   | 5795           | 5850~5855       | -22.12       | ≤16.03      | PASS    |
| 11N40MIMO  | Ant2    | High   | 5795           | 5855~5875       | -23.18       | ≤10.11      | PASS    |
| 11N40MIMO  | Ant2    | High   | 5795           | 5875~5925       | -30.02       | ≤-26.95     | PASS    |
| 11N40MIMO  | Ant2    | High   | 5795           | 5925~5935       | -29.98       | ≤-27        | PASS    |
| 11AC20MIMO | Ant1    | Low    | 5745           | 5720~5725       | -11.64       | ≤17.13      | PASS    |
| 11AC20MIMO | Ant1    | Low    | 5745           | 5700~5720       | -13.05       | ≤14.11      | PASS    |
| 11AC20MIMO | Ant1    | Low    | 5745           | 5650~5700       | -33.4        | ≤-26.87     | PASS    |
| 11AC20MIMO | Ant1    | Low    | 5745           | 5760~5650       | -32.2        | ≤-27        | PASS    |

|            |      |      |      |           |        |         |      |
|------------|------|------|------|-----------|--------|---------|------|
| 11AC20MIMO | Ant2 | Low  | 5745 | 5720~5725 | -21.55 | ≤17.91  | PASS |
| 11AC20MIMO | Ant2 | Low  | 5745 | 5700~5720 | -22.84 | ≤15.53  | PASS |
| 11AC20MIMO | Ant2 | Low  | 5745 | 5650~5700 | -33.58 | ≤-26.70 | PASS |
| 11AC20MIMO | Ant2 | Low  | 5745 | 5760~5650 | -32.95 | ≤-27    | PASS |
| 11AC20MIMO | Ant1 | High | 5825 | 5850~5855 | -16.11 | ≤15.73  | PASS |
| 11AC20MIMO | Ant1 | High | 5825 | 5855~5875 | -13.45 | ≤15.20  | PASS |
| 11AC20MIMO | Ant1 | High | 5825 | 5875~5925 | -33.83 | ≤-26.71 | PASS |
| 11AC20MIMO | Ant1 | High | 5825 | 5925~5935 | -32.46 | ≤-27    | PASS |
| 11AC20MIMO | Ant2 | High | 5825 | 5850~5855 | -14.58 | ≤16.65  | PASS |
| 11AC20MIMO | Ant2 | High | 5825 | 5855~5875 | -14.1  | ≤14.59  | PASS |
| 11AC20MIMO | Ant2 | High | 5825 | 5875~5925 | -29.7  | ≤-26.41 | PASS |
| 11AC20MIMO | Ant2 | High | 5825 | 5925~5935 | -27.99 | ≤-27    | PASS |
| 11AC40MIMO | Ant1 | Low  | 5755 | 5720~5725 | -9.27  | ≤15.74  | PASS |
| 11AC40MIMO | Ant1 | Low  | 5755 | 5700~5720 | -10.56 | ≤15.47  | PASS |
| 11AC40MIMO | Ant1 | Low  | 5755 | 5650~5700 | -30.86 | ≤-25.31 | PASS |
| 11AC40MIMO | Ant1 | Low  | 5755 | 5780~5650 | -32.18 | ≤-27    | PASS |
| 11AC40MIMO | Ant2 | Low  | 5755 | 5720~5725 | -8.88  | ≤16.66  | PASS |
| 11AC40MIMO | Ant2 | Low  | 5755 | 5700~5720 | -10.44 | ≤13.46  | PASS |
| 11AC40MIMO | Ant2 | Low  | 5755 | 5650~5700 | -30.43 | ≤-26.70 | PASS |
| 11AC40MIMO | Ant2 | Low  | 5755 | 5780~5650 | -31.53 | ≤-27    | PASS |
| 11AC40MIMO | Ant1 | High | 5795 | 5850~5855 | -16.05 | ≤16.41  | PASS |
| 11AC40MIMO | Ant1 | High | 5795 | 5855~5875 | -16.06 | ≤13.62  | PASS |
| 11AC40MIMO | Ant1 | High | 5795 | 5875~5925 | -28.88 | ≤-25.85 | PASS |
| 11AC40MIMO | Ant1 | High | 5795 | 5925~5935 | -28.41 | ≤-27    | PASS |
| 11AC40MIMO | Ant2 | High | 5795 | 5850~5855 | -18.28 | ≤17.16  | PASS |
| 11AC40MIMO | Ant2 | High | 5795 | 5855~5875 | -19.91 | ≤13.53  | PASS |
| 11AC40MIMO | Ant2 | High | 5795 | 5875~5925 | -29.13 | ≤-26.83 | PASS |
| 11AC40MIMO | Ant2 | High | 5795 | 5925~5935 | -28.62 | ≤-27    | PASS |
| 11AC80MIMO | Ant1 | Low  | 5775 | 5720~5725 | -19.09 | ≤17.06  | PASS |
| 11AC80MIMO | Ant1 | Low  | 5775 | 5700~5720 | -23.6  | ≤10.14  | PASS |
| 11AC80MIMO | Ant1 | Low  | 5775 | 5650~5700 | -33.92 | ≤-26.34 | PASS |
| 11AC80MIMO | Ant1 | Low  | 5775 | 5800~5650 | -32.71 | ≤-27    | PASS |
| 11AC80MIMO | Ant1 | High | 5775 | 5850~5855 | -21.91 | ≤20.90  | PASS |
| 11AC80MIMO | Ant1 | High | 5775 | 5855~5875 | -25.48 | ≤10.04  | PASS |
| 11AC80MIMO | Ant1 | High | 5775 | 5875~5925 | -30.56 | ≤-25.91 | PASS |
| 11AC80MIMO | Ant1 | High | 5775 | 5925~5935 | -29.26 | ≤-27    | PASS |
| 11AC80MIMO | Ant2 | Low  | 5775 | 5720~5725 | -16.9  | ≤18.12  | PASS |
| 11AC80MIMO | Ant2 | Low  | 5775 | 5700~5720 | -17.68 | ≤12.13  | PASS |
| 11AC80MIMO | Ant2 | Low  | 5775 | 5650~5700 | -31.97 | ≤-26.91 | PASS |
| 11AC80MIMO | Ant2 | Low  | 5775 | 5800~5650 | -31.38 | ≤-27    | PASS |
| 11AC80MIMO | Ant2 | High | 5775 | 5850~5855 | -21.66 | ≤15.84  | PASS |
| 11AC80MIMO | Ant2 | High | 5775 | 5855~5875 | -18.11 | ≤13.71  | PASS |
| 11AC80MIMO | Ant2 | High | 5775 | 5875~5925 | -27.03 | ≤-26.05 | PASS |
| 11AC80MIMO | Ant2 | High | 5775 | 5925~5935 | -27.95 | ≤-27    | PASS |

## Test Graphs B4

## 11A-Ant1-5745-PASS



## 11A-Ant2-5745-PASS



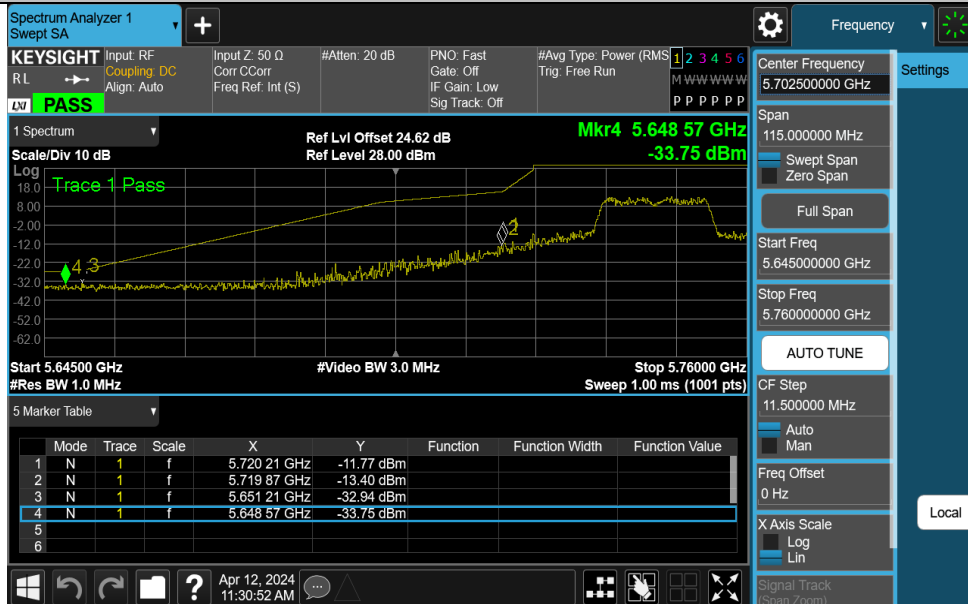
## 11A-Ant1-5825-PASS



### 11A-Ant2-5825-PASS



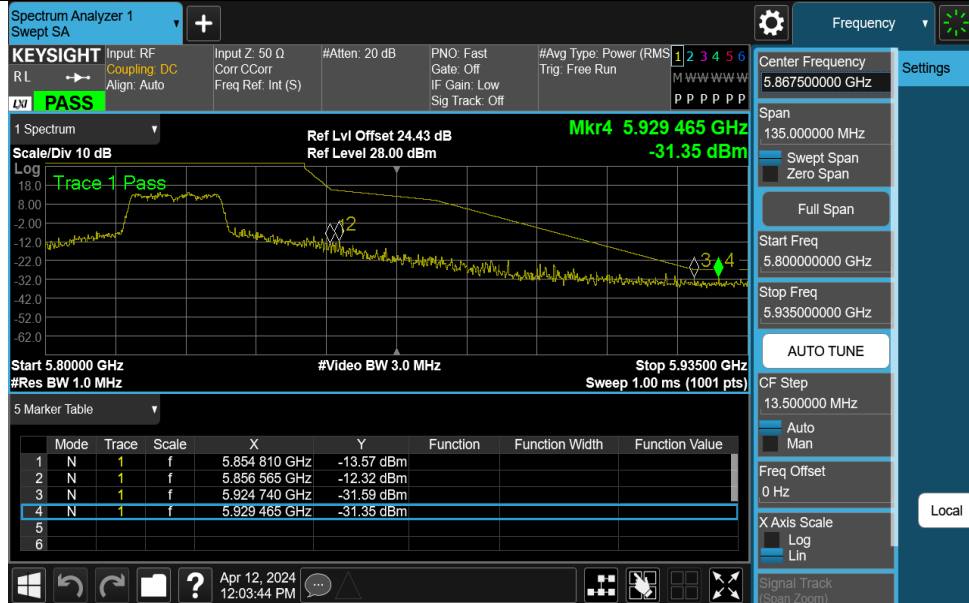
### 11N20MIMO-Ant1-5745-PASS



### 11N20MIMO-Ant2-5745-PASS



### 11N20MIMO-Ant1-5825-PASS



### 11N20MIMO-Ant2-5825-PASS



### 11N40MIMO-Ant1-5755-PASS



### 11N40MIMO-Ant2-5755-PASS



### 11N40MIMO-Ant1-5795-PASS



### 11N40MIMO-Ant2-5795-PASS



### 11AC20MIMO-Ant1-5745-PASS



### 11AC20MIMO-Ant2-5745-PASS



### 11AC20MIMO-Ant1-5825-PASS



### 11AC20MIMO-Ant2-5825-PASS



### 11AC40MIMO-Ant1-5755-PASS



### 11AC40MIMO-Ant2-5755-PASS



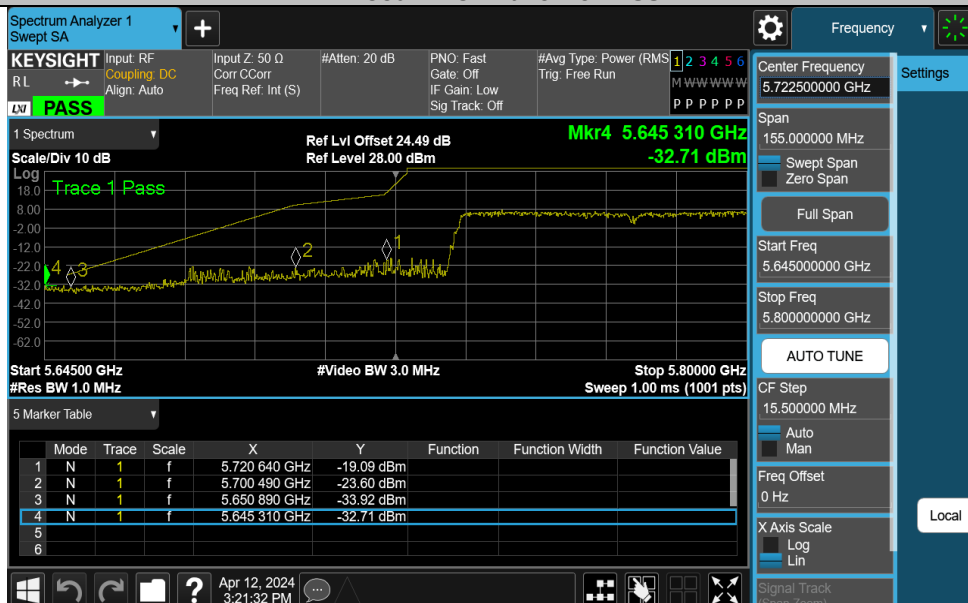
### 11AC40MIMO-Ant1-5795-PASS



### 11AC40MIMO-Ant2-5795-PASS



### 11AC80MIMO-Ant1-5775-PASS



## 11AC80MIMO-Ant1-5775-PASS



## 11AC80MIMO-Ant2-5775-PASS



## 11AC80MIMO-Ant2-5775-PASS



## Appendix G: Frequency Stability Test Result

| Test Mode | Antenna | Frequency [MHz] | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
|-----------|---------|-----------------|---------------|------------------|----------------|-----------------|-------------|---------|
| 11A       | Ant1    | 5180            | NV            | NT               | 0.00           | 0.000000        | 20          | PASS    |
| 11A       | Ant1    | 5180            | LV            | NT               | 0.00           | 0.000000        | 20          | PASS    |
| 11A       | Ant1    | 5180            | HV            | NT               | 0.00           | 0.000000        | 20          | PASS    |
| 11A       | Ant1    | 5745            | NV            | NT               | 0.00           | 0.000000        | 20          | PASS    |
| 11A       | Ant1    | 5745            | LV            | NT               | 0.00           | 0.000000        | 20          | PASS    |
| 11A       | Ant1    | 5745            | HV            | NT               | 0.00           | 0.000000        | 20          | PASS    |

| Test Mode | Antenna | Frequency [MHz] | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
|-----------|---------|-----------------|---------------|------------------|----------------|-----------------|-------------|---------|
| 11A       | Ant1    | 5180            | NV            | -30              | 0.00           | 0.000000        | 20          | PASS    |
| 11A       | Ant1    | 5180            | NV            | -20              | 0.00           | 0.000000        | 20          | PASS    |
| 11A       | Ant1    | 5180            | NV            | -10              | 0.00           | 0.000000        | 20          | PASS    |
| 11A       | Ant1    | 5180            | NV            | 0                | 0.00           | 0.000000        | 20          | PASS    |
| 11A       | Ant1    | 5180            | NV            | 10               | 0.00           | 0.000000        | 20          | PASS    |
| 11A       | Ant1    | 5180            | NV            | 20               | -20000.00      | -3.861004       | 20          | PASS    |
| 11A       | Ant1    | 5180            | NV            | 30               | 0.00           | 0.000000        | 20          | PASS    |
| 11A       | Ant1    | 5180            | NV            | 40               | 0.00           | 0.000000        | 20          | PASS    |
| 11A       | Ant1    | 5180            | NV            | 50               | 0.00           | 0.000000        | 20          | PASS    |
| 11A       | Ant1    | 5745            | NV            | -30              | 0.00           | 0.000000        | 20          | PASS    |
| 11A       | Ant1    | 5745            | NV            | -20              | 0.00           | 0.000000        | 20          | PASS    |
| 11A       | Ant1    | 5745            | NV            | -10              | 0.00           | 0.000000        | 20          | PASS    |
| 11A       | Ant1    | 5745            | NV            | 0                | 0.00           | 0.000000        | 20          | PASS    |
| 11A       | Ant1    | 5745            | NV            | 10               | 0.00           | 0.000000        | 20          | PASS    |
| 11A       | Ant1    | 5745            | NV            | 20               | -20000.00      | -3.481288       | 20          | PASS    |
| 11A       | Ant1    | 5745            | NV            | 30               | 0.00           | 0.000000        | 20          | PASS    |
| 11A       | Ant1    | 5745            | NV            | 40               | 0.00           | 0.000000        | 20          | PASS    |
| 11A       | Ant1    | 5745            | NV            | 50               | 0.00           | 0.000000        | 20          | PASS    |