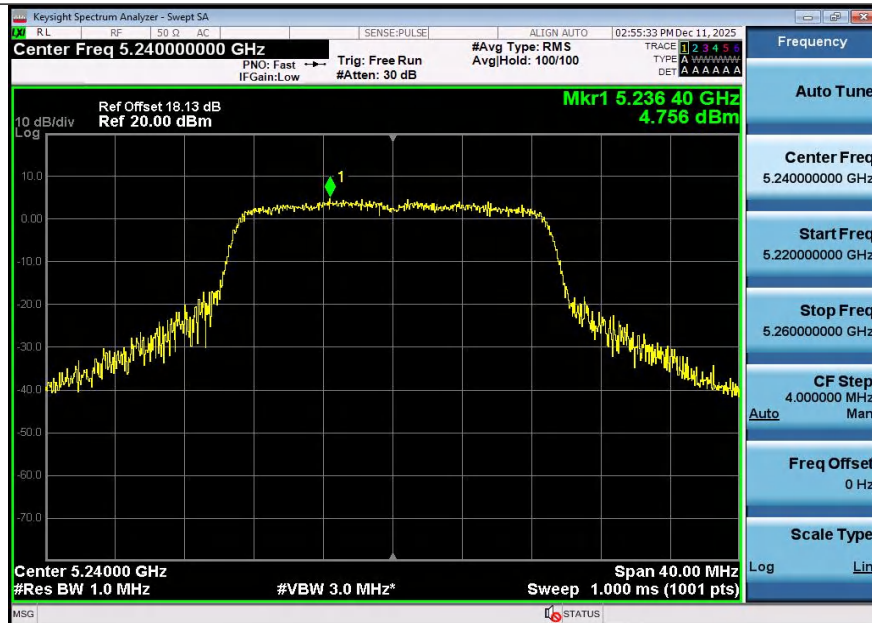




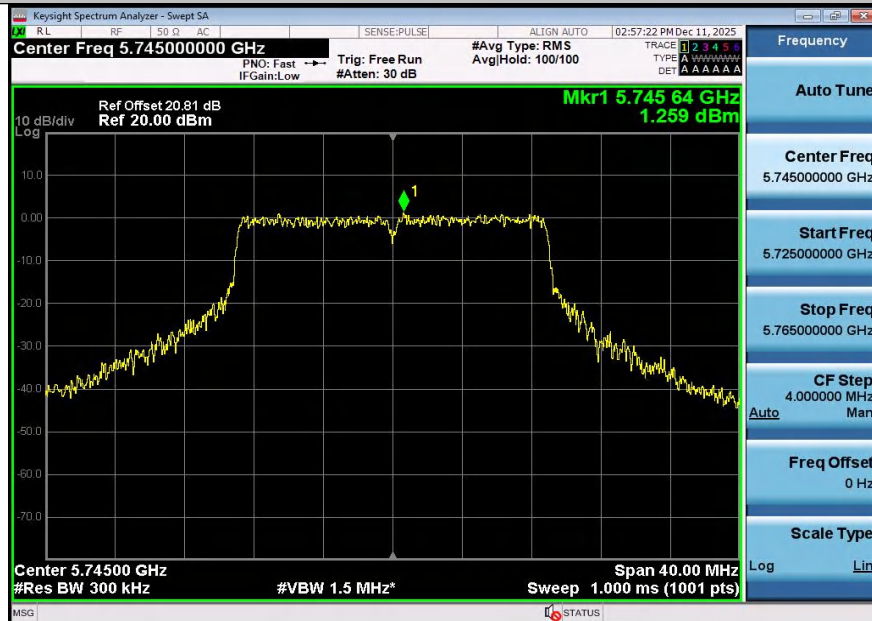
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11N20SISO-Ant1-5240-PASS



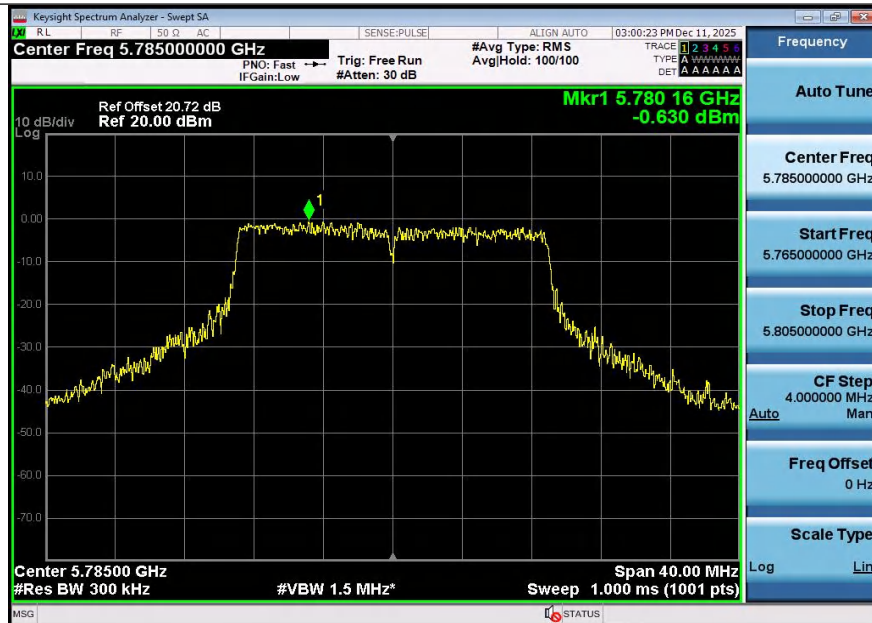
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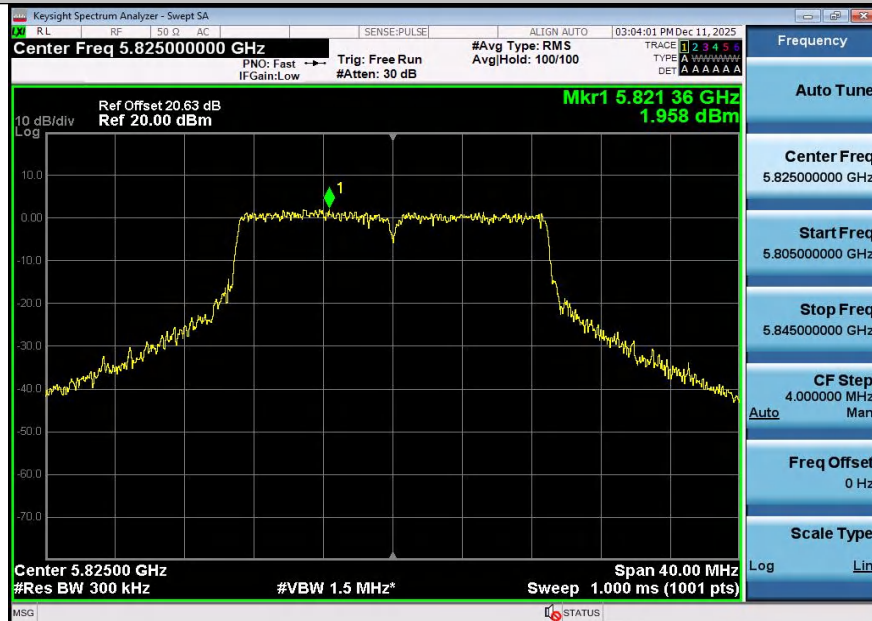
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11N20SISO-Ant1-5785-PASS



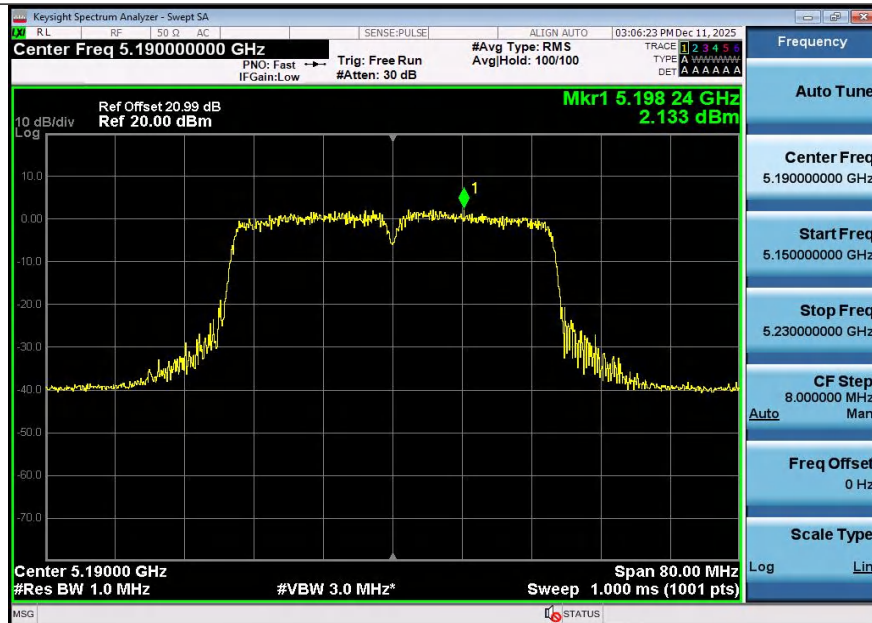
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11N40SISO-Ant1-5190-PASS



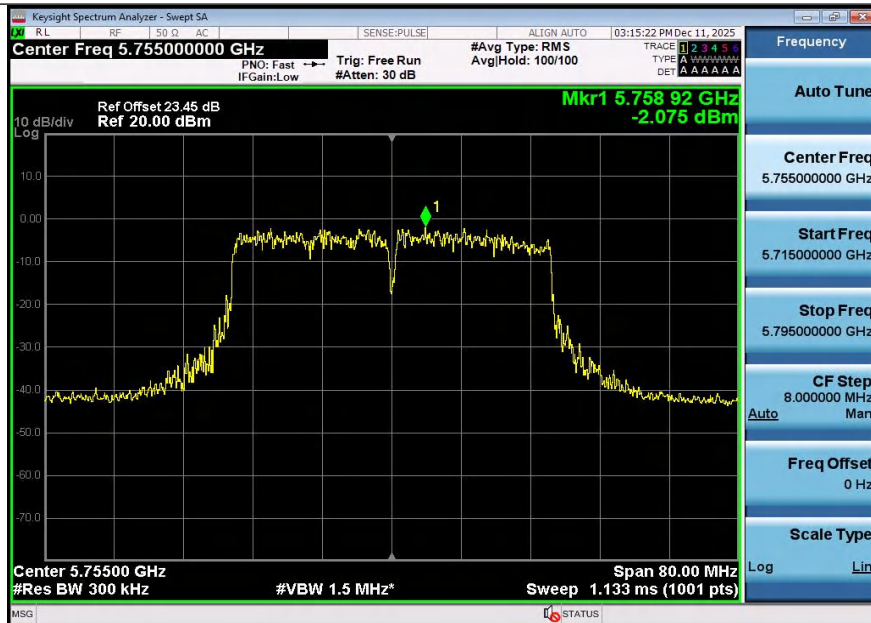
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11N40SISO-Ant1-5755-PASS



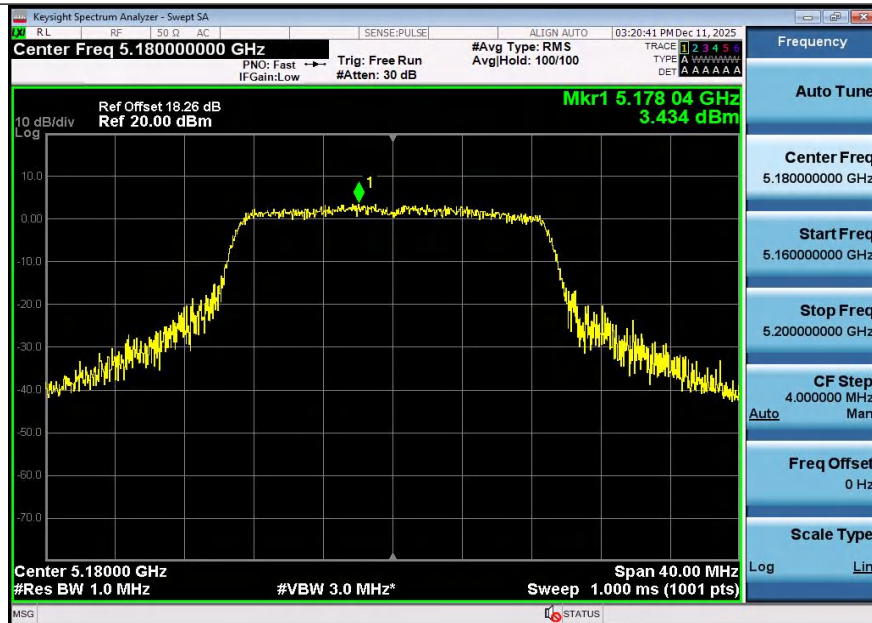
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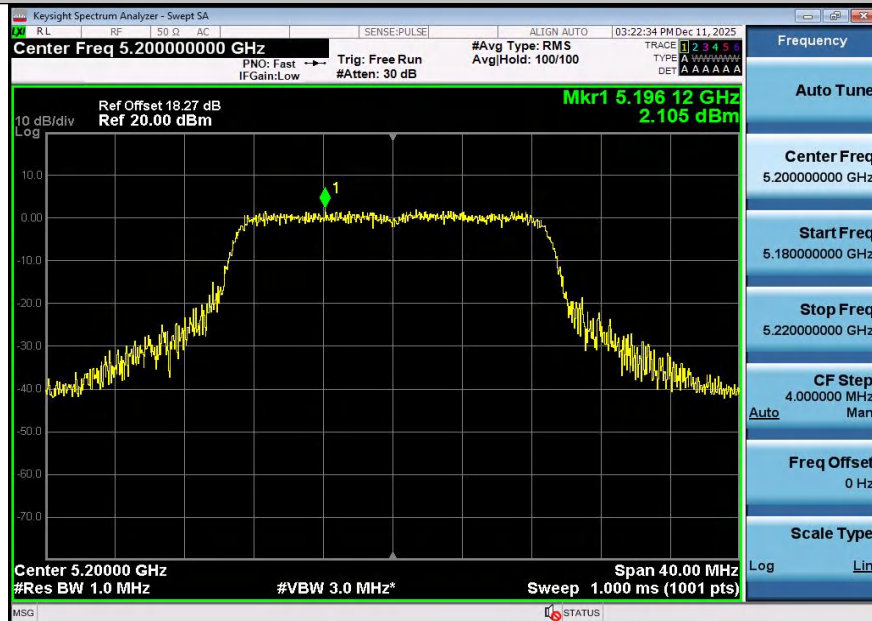
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FCC ID: 2BUDX-QD-E811301

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11AC20SISO-Ant1-5180-PASS



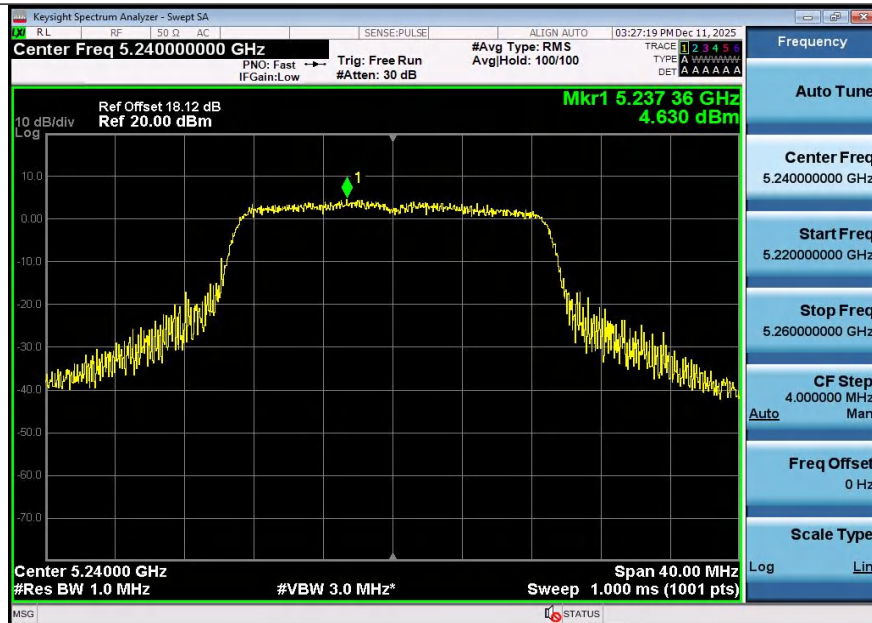
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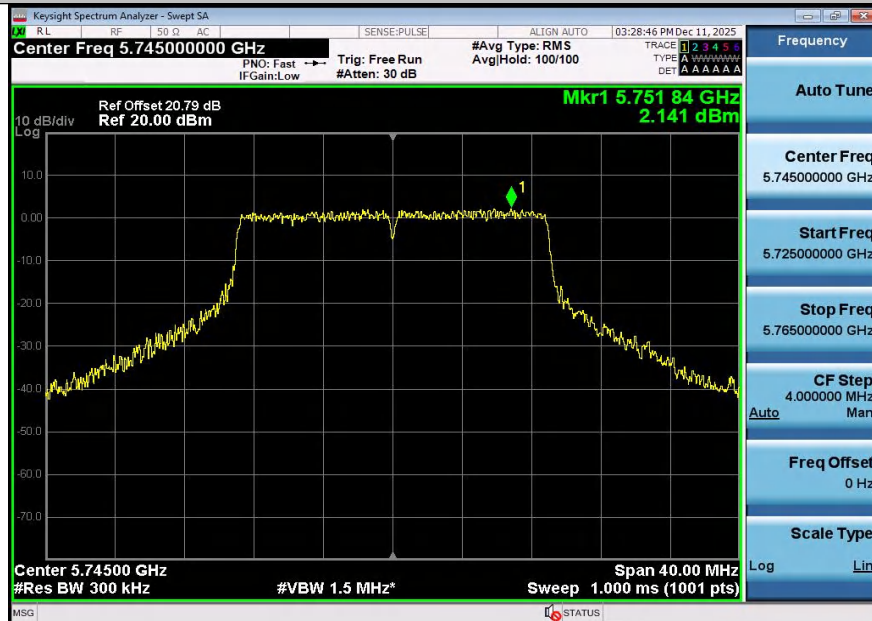
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11AC20SISO-Ant1-5240-PASS



11AC20SISO-Ant1-5745-PASS



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11AC20SISO-Ant1-5785-PASS



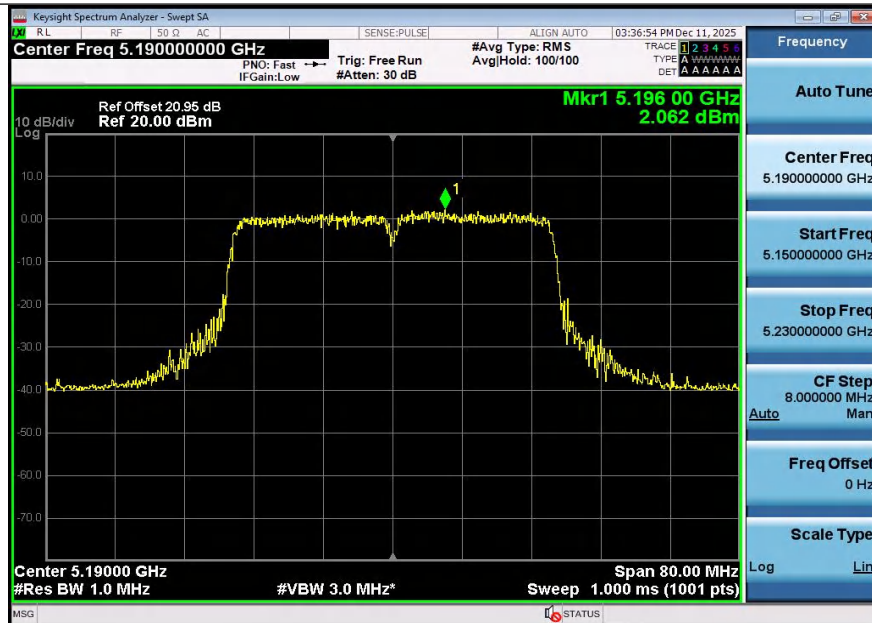
11AC20SISO-Ant1-5825-PASS



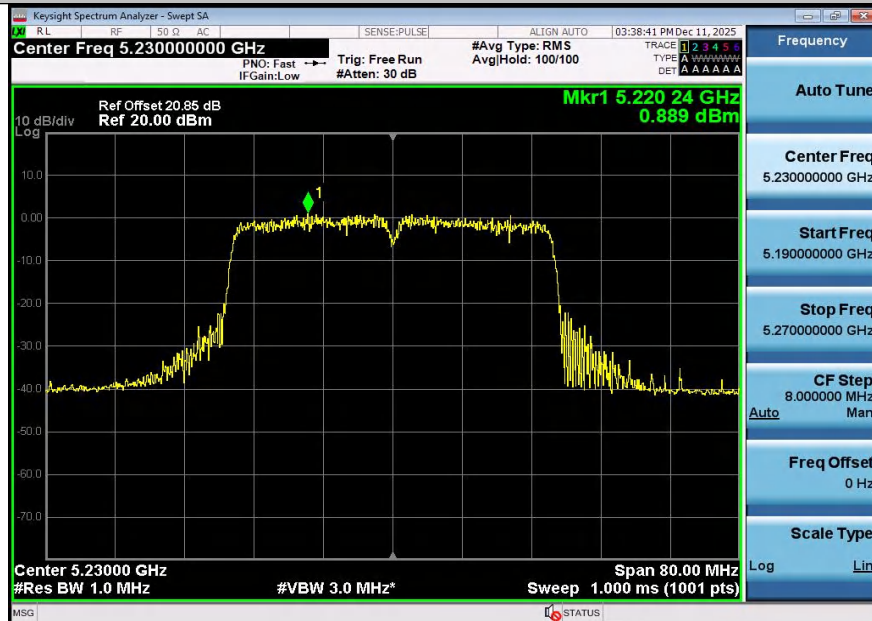
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11AC40SISO-Ant1-5190-PASS



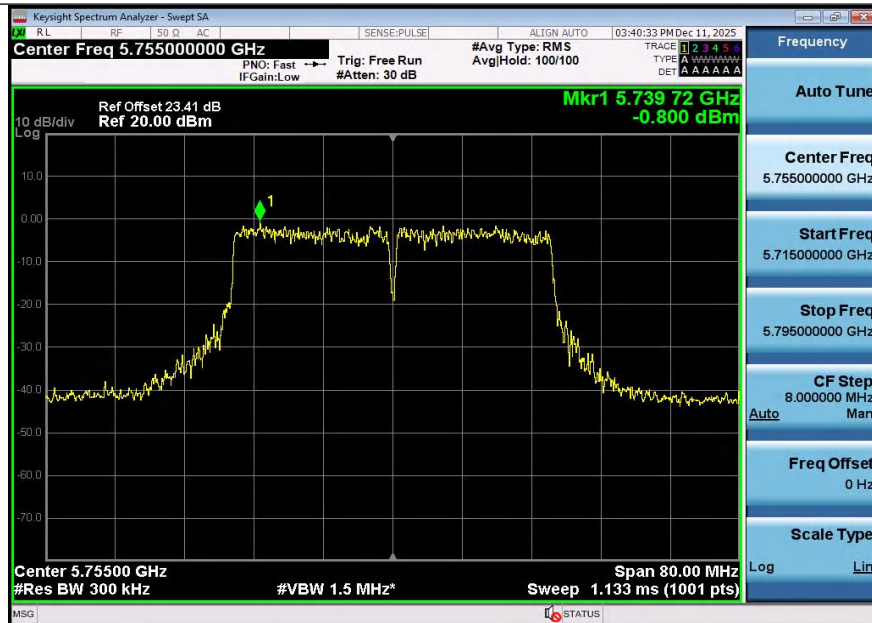
11AC40SISO-Ant1-5230-PASS



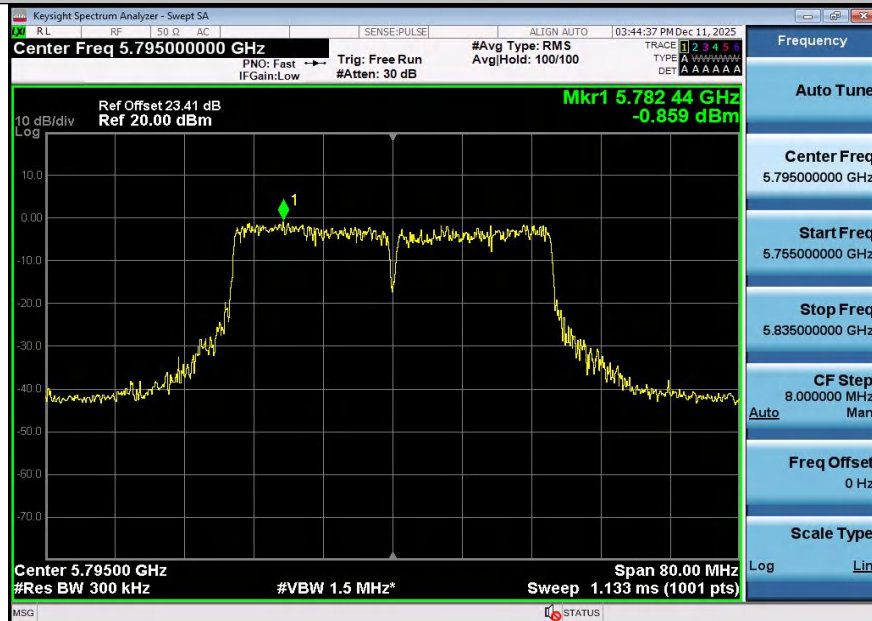
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11AC40SISO-Ant1-5755-PASS



11AC40SISO-Ant1-5795-PASS



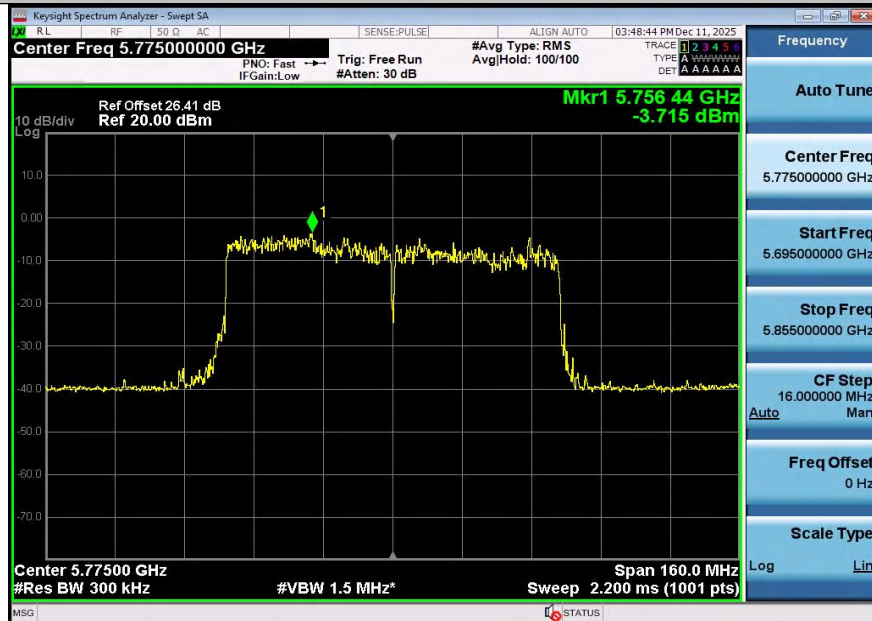
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11AC80SISO-Ant1-5210-PASS



11AC80SISO-Ant1-5775-PASS



## Appendix E: Band edge measurements

### Test Result B1/2/3

| Test Mode  | Antenna | ChName | Frequency[MHz] | Result[dBm] | Limit[dBm] | Verdict |
|------------|---------|--------|----------------|-------------|------------|---------|
| 11A        | Ant1    | Low    | 5180           | -43.17      | $\leq -27$ | PASS    |
| 11A        | Ant1    | High   | 5240           | -47.35      | $\leq -27$ | PASS    |
| 11N20SISO  | Ant1    | Low    | 5180           | -43.98      | $\leq -27$ | PASS    |
| 11N20SISO  | Ant1    | High   | 5240           | -46.99      | $\leq -27$ | PASS    |
| 11N40SISO  | Ant1    | Low    | 5190           | -45.9       | $\leq -27$ | PASS    |
| 11N40SISO  | Ant1    | High   | 5230           | -46.58      | $\leq -27$ | PASS    |
| 11AC20SISO | Ant1    | Low    | 5180           | -43.43      | $\leq -27$ | PASS    |
| 11AC20SISO | Ant1    | High   | 5240           | -46.57      | $\leq -27$ | PASS    |
| 11AC40SISO | Ant1    | Low    | 5190           | -43.79      | $\leq -27$ | PASS    |
| 11AC40SISO | Ant1    | High   | 5230           | -47.02      | $\leq -27$ | PASS    |
| 11AC80SISO | Ant1    | Low    | 5210           | -39.3       | $\leq -27$ | PASS    |
| 11AC80SISO | Ant1    | High   | 5210           | -46.47      | $\leq -27$ | PASS    |

### Test Result B4

| Test Mode | Antenna | ChName | Frequency[MHz] | FreqRange [MHz] | Result [dBm] | Limit [dBm]   | Verdict |
|-----------|---------|--------|----------------|-----------------|--------------|---------------|---------|
| 11A       | Ant1    | Low    | 5745           | 5720~5725       | -36.68       | $\leq 18.18$  | PASS    |
| 11A       | Ant1    | Low    | 5745           | 5700~5720       | -42.94       | $\leq 10.67$  | PASS    |
| 11A       | Ant1    | Low    | 5745           | 5650~5700       | -48.05       | $\leq -26.96$ | PASS    |
| 11A       | Ant1    | Low    | 5745           | 5760~5650       | -46.33       | $\leq -27$    | PASS    |
| 11A       | Ant1    | High   | 5825           | 5850~5855       | -43.52       | $\leq 16.34$  | PASS    |
| 11A       | Ant1    | High   | 5825           | 5855~5875       | -42.11       | $\leq 11.19$  | PASS    |
| 11A       | Ant1    | High   | 5825           | 5875~5925       | -47.68       | $\leq -26.91$ | PASS    |
| 11A       | Ant1    | High   | 5825           | 5925~5935       | -46.74       | $\leq -27$    | PASS    |
| 11N20SISO | Ant1    | Low    | 5745           | 5720~5725       | -35.45       | $\leq 18.18$  | PASS    |
| 11N20SISO | Ant1    | Low    | 5745           | 5700~5720       | -37.38       | $\leq 15.53$  | PASS    |
| 11N20SISO | Ant1    | Low    | 5745           | 5650~5700       | -47.34       | $\leq -26.79$ | PASS    |
| 11N20SISO | Ant1    | Low    | 5745           | 5760~5650       | -45.49       | $\leq -27$    | PASS    |
| 11N20SISO | Ant1    | High   | 5825           | 5850~5855       | -43.16       | $\leq 15.73$  | PASS    |
| 11N20SISO | Ant1    | High   | 5825           | 5855~5875       | -44.12       | $\leq 11.68$  | PASS    |



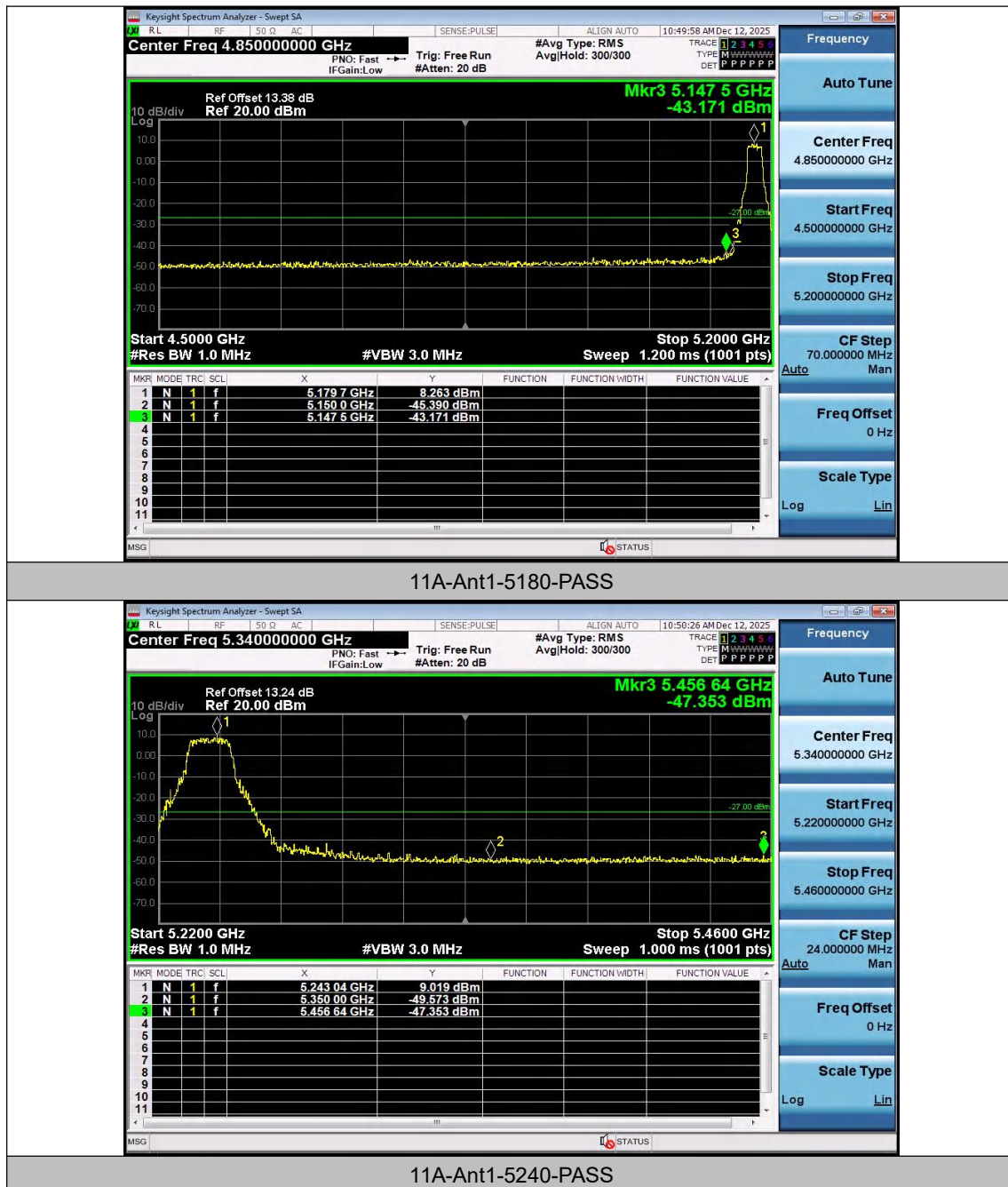
|                |      |      |      |           |        |               |      |
|----------------|------|------|------|-----------|--------|---------------|------|
| SO             |      |      |      |           |        |               |      |
| 11N20SI<br>SO  | Ant1 | High | 5825 | 5875~5925 | -47.63 | $\leq -26.91$ | PASS |
| 11N20SI<br>SO  | Ant1 | High | 5825 | 5925~5935 | -45.69 | $\leq -27$    | PASS |
| 11N40SI<br>SO  | Ant1 | Low  | 5755 | 5720~5725 | -31.02 | $\leq 25.89$  | PASS |
| 11N40SI<br>SO  | Ant1 | Low  | 5755 | 5700~5720 | -34.33 | $\leq 15.09$  | PASS |
| 11N40SI<br>SO  | Ant1 | Low  | 5755 | 5650~5700 | -47.4  | $\leq -26.40$ | PASS |
| 11N40SI<br>SO  | Ant1 | Low  | 5755 | 5780~5650 | -47.36 | $\leq -27$    | PASS |
| 11N40SI<br>SO  | Ant1 | High | 5795 | 5850~5855 | -46.39 | $\leq 16.03$  | PASS |
| 11N40SI<br>SO  | Ant1 | High | 5795 | 5855~5875 | -46.09 | $\leq 10.06$  | PASS |
| 11N40SI<br>SO  | Ant1 | High | 5795 | 5875~5925 | -47.26 | $\leq -26.46$ | PASS |
| 11N40SI<br>SO  | Ant1 | High | 5795 | 5925~5935 | -46.85 | $\leq -27$    | PASS |
| 11AC20S<br>ISO | Ant1 | Low  | 5745 | 5720~5725 | -34.93 | $\leq 17.13$  | PASS |
| 11AC20S<br>ISO | Ant1 | Low  | 5745 | 5700~5720 | -40.89 | $\leq 10.12$  | PASS |
| 11AC20S<br>ISO | Ant1 | Low  | 5745 | 5650~5700 | -47.35 | $\leq -26.62$ | PASS |
| 11AC20S<br>ISO | Ant1 | Low  | 5745 | 5760~5650 | -46.66 | $\leq -27$    | PASS |
| 11AC20S<br>ISO | Ant1 | High | 5825 | 5850~5855 | -46.16 | $\leq 15.73$  | PASS |
| 11AC20S<br>ISO | Ant1 | High | 5825 | 5875~5925 | -47.62 | $\leq -26.91$ | PASS |
| 11AC20S<br>ISO | Ant1 | High | 5825 | 5925~5935 | -45.69 | $\leq -27$    | PASS |
| 11AC20S<br>ISO | Ant1 | High | 5825 | 5855~5875 | -43.11 | $\leq 11.19$  | PASS |
| 11AC40S<br>ISO | Ant1 | Low  | 5755 | 5720~5725 | -37.44 | $\leq 17.89$  | PASS |
| 11AC40S<br>ISO | Ant1 | Low  | 5755 | 5700~5720 | -33.46 | $\leq 15.13$  | PASS |



|                |      |      |      |           |        |               |      |
|----------------|------|------|------|-----------|--------|---------------|------|
| 11AC40S<br>ISO | Ant1 | Low  | 5755 | 5650~5700 | -47.48 | $\leq -26.00$ | PASS |
| 11AC40S<br>ISO | Ant1 | Low  | 5755 | 5780~5650 | -47.01 | $\leq -27$    | PASS |
| 11AC40S<br>ISO | Ant1 | High | 5795 | 5850~5855 | -46.71 | $\leq 16.41$  | PASS |
| 11AC40S<br>ISO | Ant1 | High | 5795 | 5855~5875 | -46.48 | $\leq 10.11$  | PASS |
| 11AC40S<br>ISO | Ant1 | High | 5795 | 5875~5925 | -45.57 | $\leq -26.46$ | PASS |
| 11AC40S<br>ISO | Ant1 | High | 5795 | 5925~5935 | -46.01 | $\leq -27$    | PASS |
| 11AC80S<br>ISO | Ant1 | Low  | 5775 | 5720~5725 | -38.81 | $\leq 20.95$  | PASS |
| 11AC80S<br>ISO | Ant1 | Low  | 5775 | 5700~5720 | -42.87 | $\leq 11.31$  | PASS |
| 11AC80S<br>ISO | Ant1 | Low  | 5775 | 5650~5700 | -48.23 | $\leq -26.69$ | PASS |
| 11AC80S<br>ISO | Ant1 | Low  | 5775 | 5800~5650 | -46.25 | $\leq -27$    | PASS |
| 11AC80S<br>ISO | Ant1 | High | 5775 | 5850~5855 | -42.92 | $\leq 18.37$  | PASS |
| 11AC80S<br>ISO | Ant1 | High | 5775 | 5855~5875 | -42.54 | $\leq 11.54$  | PASS |
| 11AC80S<br>ISO | Ant1 | High | 5775 | 5875~5925 | -47.39 | $\leq -26.73$ | PASS |
| 11AC80S<br>ISO | Ant1 | High | 5775 | 5925~5935 | -46.04 | $\leq -27$    | PASS |



## Test Graphs B1/2/3

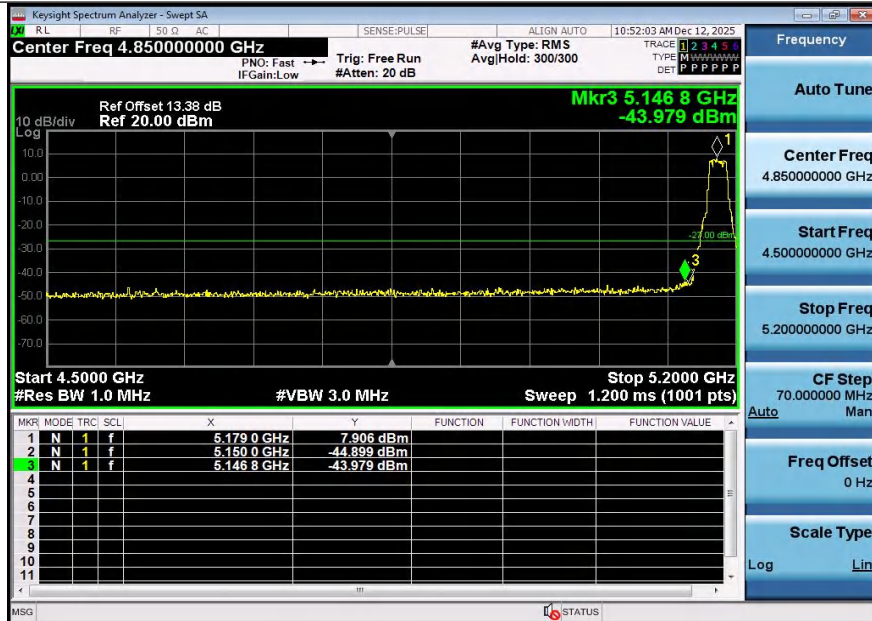




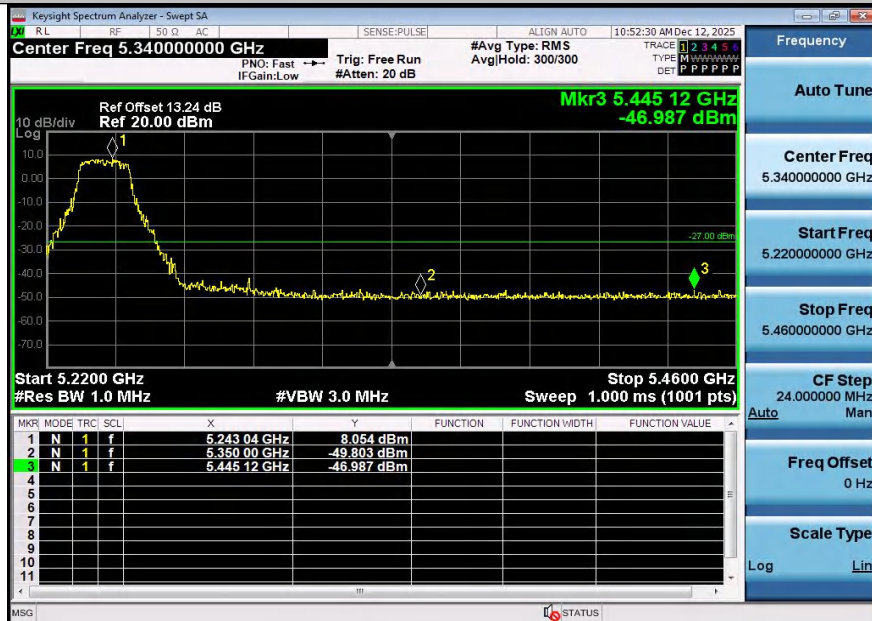
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11N20SISO-Ant1-5180-PASS



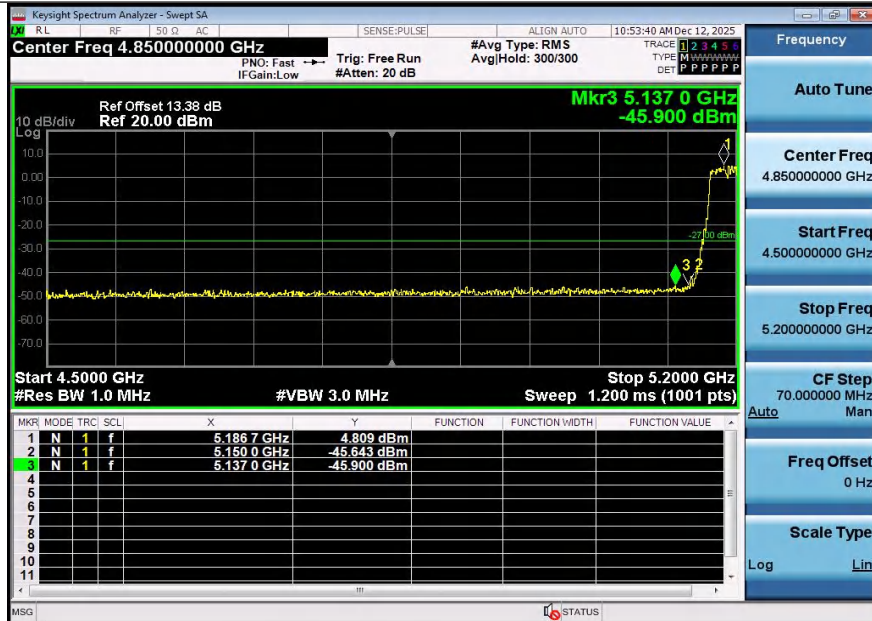
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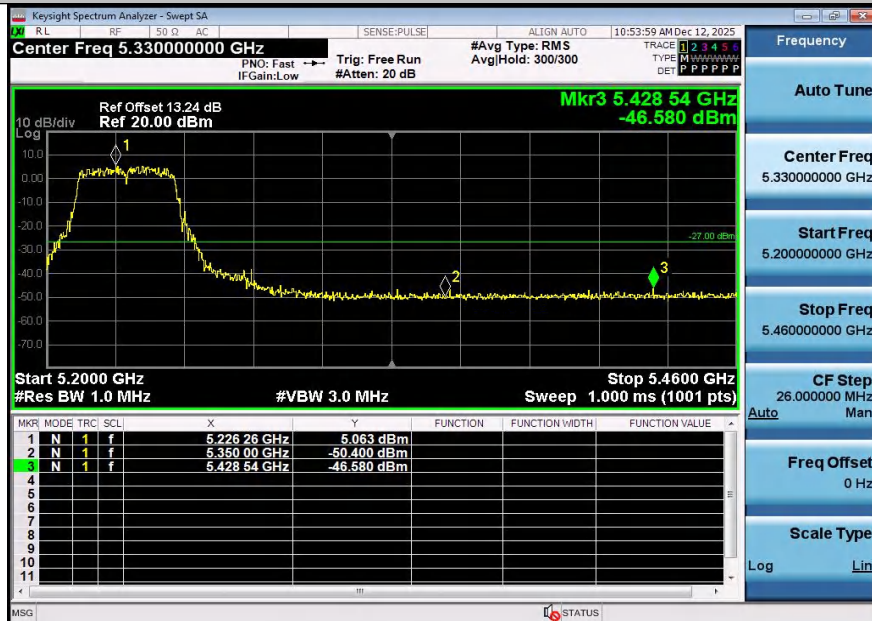
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11N40SISO-Ant1-5190-PASS



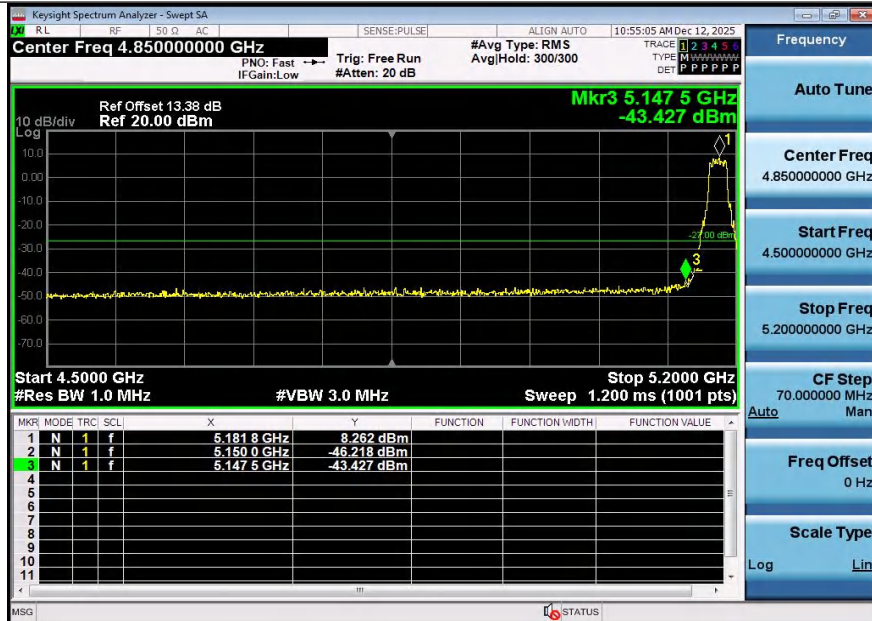
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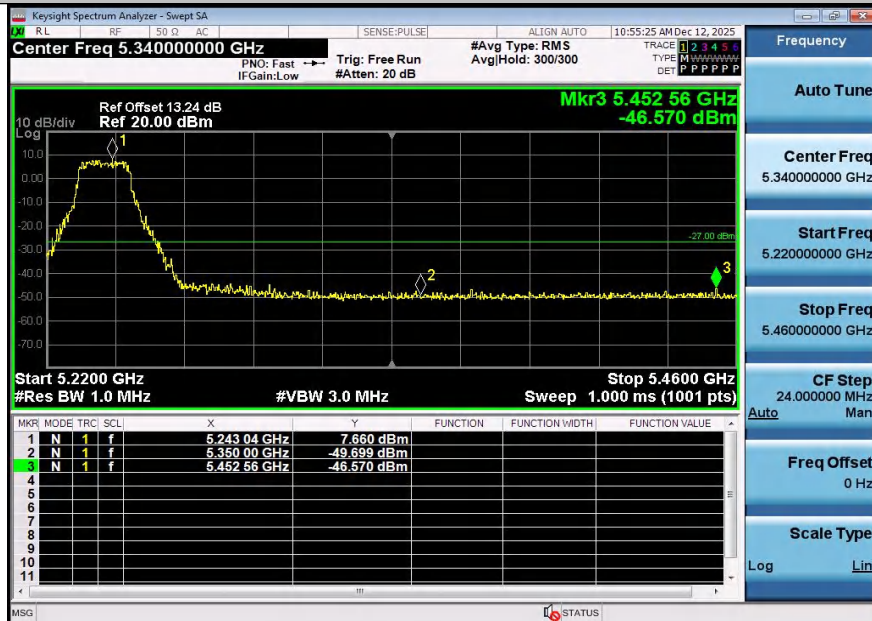
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11AC20SISO-Ant1-5180-PASS



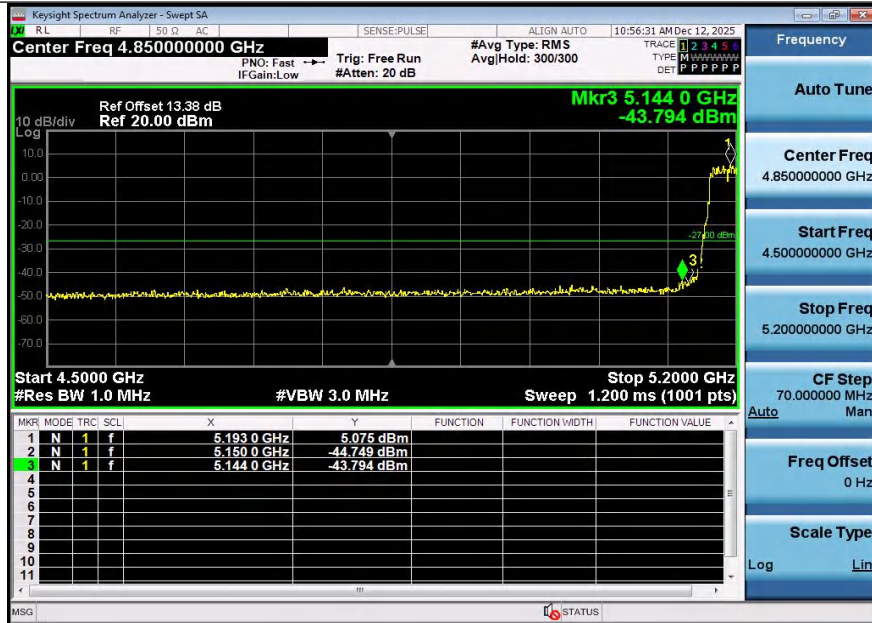
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11AC40SISO-Ant1-5190-PASS



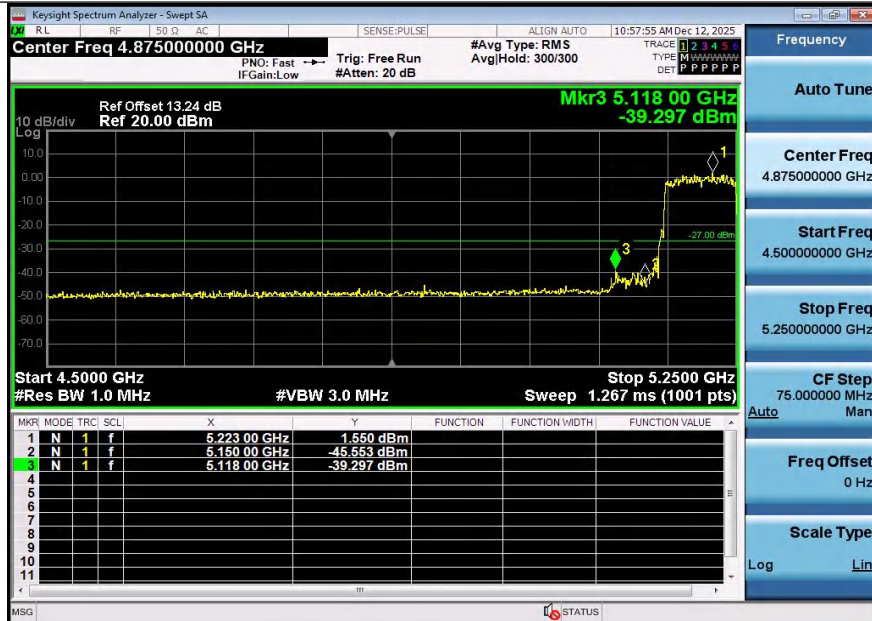
11AC40SISO-Ant1-5230-PASS



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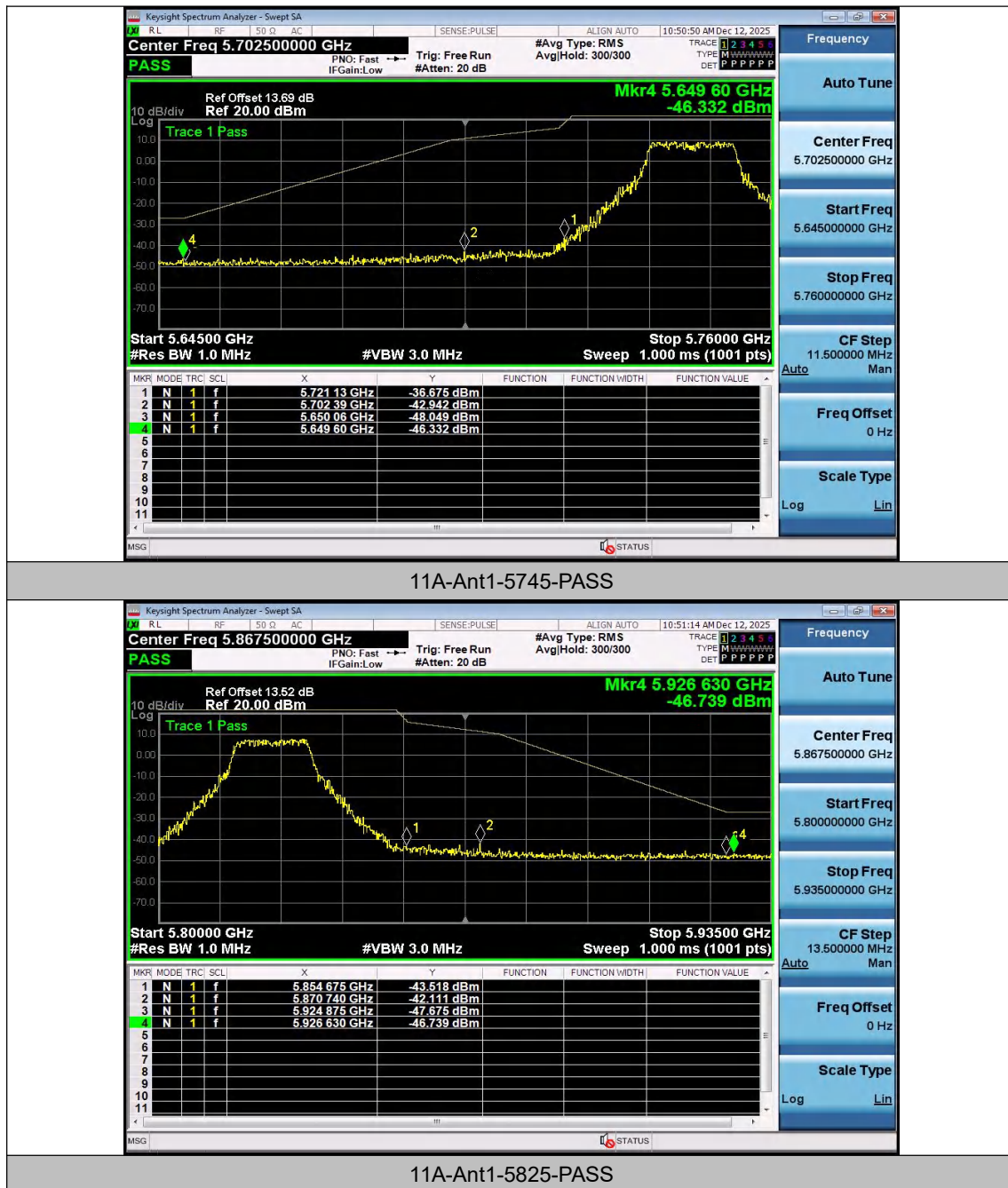
11AC80SISO-Ant1-5210-PASS



11AC80SISO-Ant1-5210-PASS



## Test Graphs B4

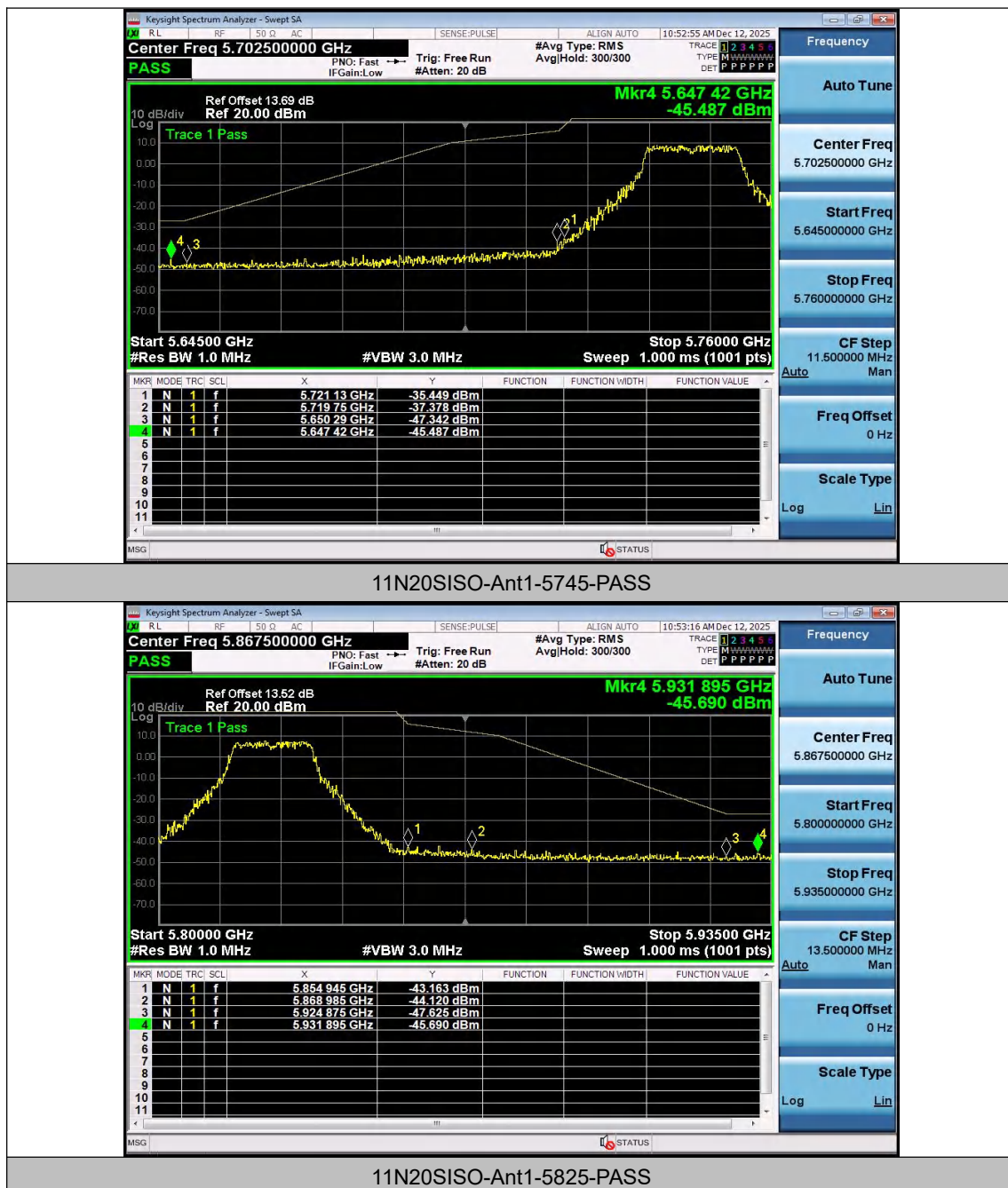




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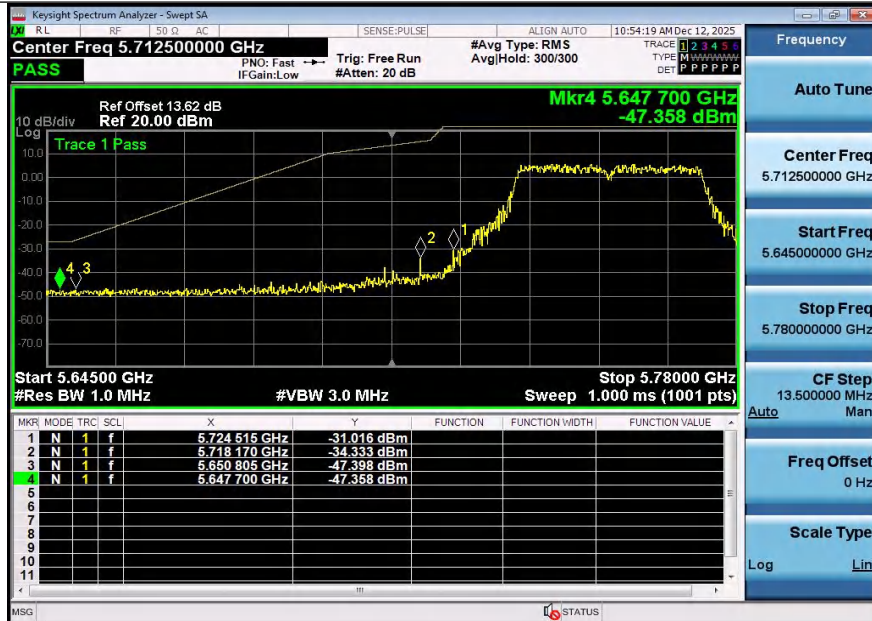




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11N40SISO-Ant1-5755-PASS



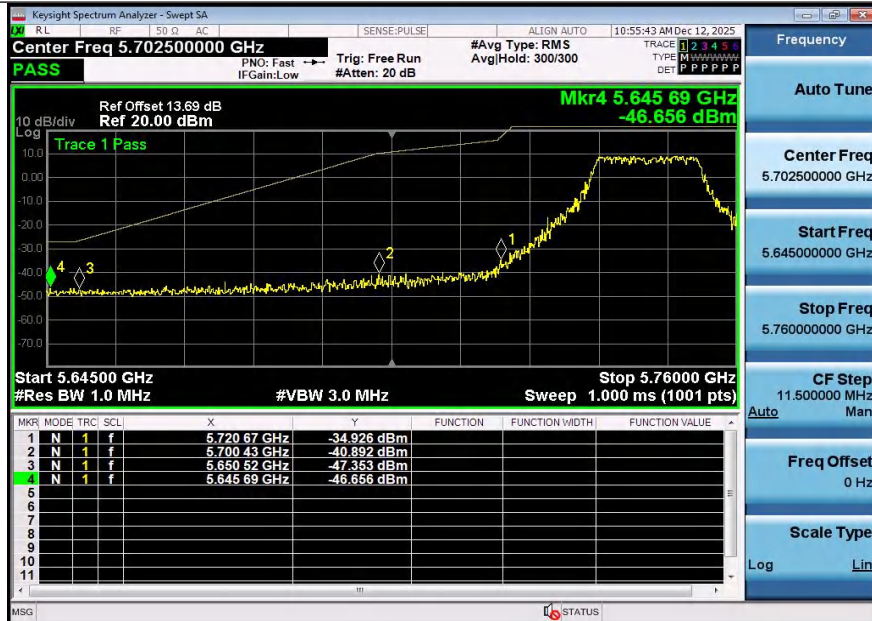
11N40SISO-Ant1-5795-PASS



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11AC20SISO-Ant1-5745-PASS



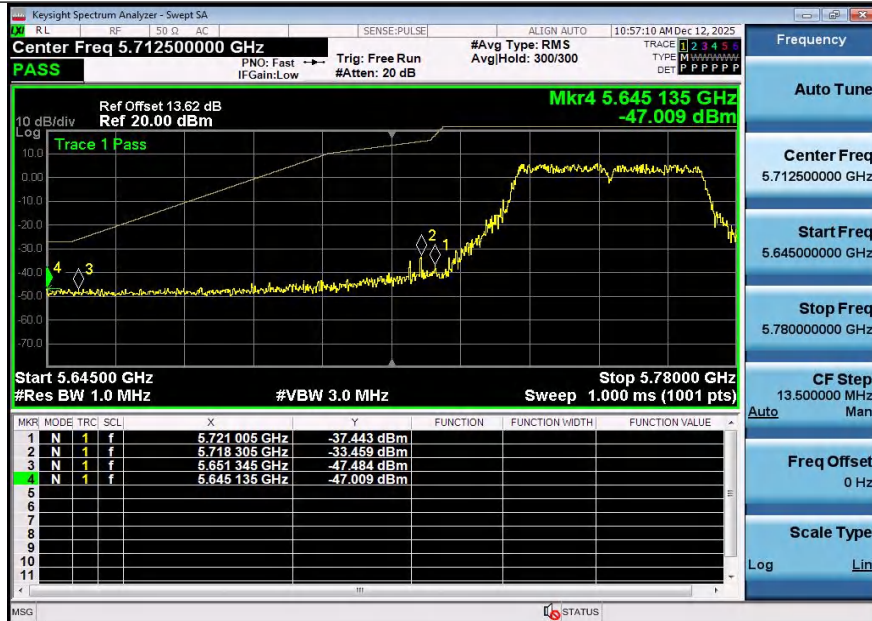
11AC20SISO-Ant1-5825-PASS



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11AC40SISO-Ant1-5755-PASS



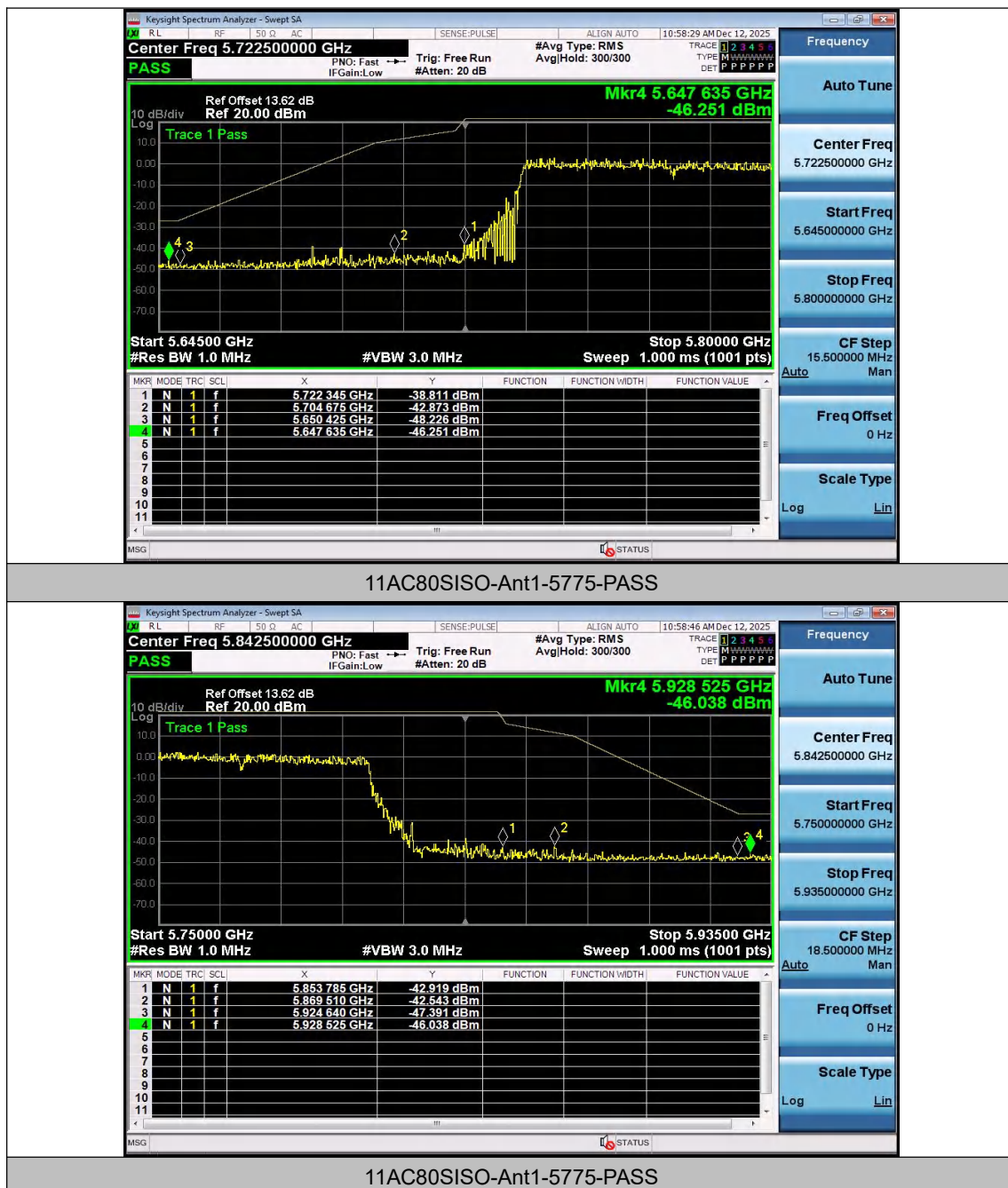
11AC40SISO-Ant1-5795-PASS



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## Appendix F: Frequency Stability

### Test Result

| Reference Frequency: 802.11ac channel=36 frequency=5180MHz |                  |                 |         |                              |        |
|------------------------------------------------------------|------------------|-----------------|---------|------------------------------|--------|
| Voltage ( V )                                              | Temperature (°C) | Frequency error |         | Limit (ppm)                  | Result |
|                                                            |                  | Hz              | ppm     |                              |        |
| 120                                                        | -30              | 167.565         | 0.03235 | Within the band of operation | Pass   |
|                                                            | -20              | 132.030         | 0.02549 |                              |        |
|                                                            | -10              | 132.309         | 0.02554 |                              |        |
|                                                            | 0                | 123.412         | 0.02382 |                              |        |
|                                                            | 10               | 121.421         | 0.02344 |                              |        |
|                                                            | 20               | 162.146         | 0.03130 |                              |        |
|                                                            | 30               | 165.022         | 0.03186 |                              |        |
|                                                            | 40               | 145.903         | 0.02817 |                              |        |
|                                                            | 50               | 122.325         | 0.02361 |                              |        |
| 132                                                        | 20               | 140.896         | 0.02720 | Within the band of operation | Pass   |
| 108                                                        | 20               | 146.185         | 0.02822 |                              |        |

| Reference Frequency: 802.11ac channel=149 frequency=5745MHz |                  |                 |         |                              |        |
|-------------------------------------------------------------|------------------|-----------------|---------|------------------------------|--------|
| Voltage ( V )                                               | Temperature (°C) | Frequency error |         | Limit (ppm)                  | Result |
|                                                             |                  | Hz              | ppm     |                              |        |
| 120                                                         | -30              | 122.098         | 0.02125 | Within the band of operation | Pass   |
|                                                             | -20              | 146.998         | 0.02559 |                              |        |
|                                                             | -10              | 114.359         | 0.01991 |                              |        |
|                                                             | 0                | 170.836         | 0.02974 |                              |        |
|                                                             | 10               | 158.324         | 0.02756 |                              |        |
|                                                             | 20               | 165.165         | 0.02875 |                              |        |
|                                                             | 30               | 127.753         | 0.02224 |                              |        |
|                                                             | 40               | 143.309         | 0.02494 |                              |        |
|                                                             | 50               | 136.932         | 0.02383 |                              |        |
| 132                                                         | 20               | 168.856         | 0.02939 | Within the band of operation | Pass   |
| 108                                                         | 20               | 116.990         | 0.02036 |                              |        |