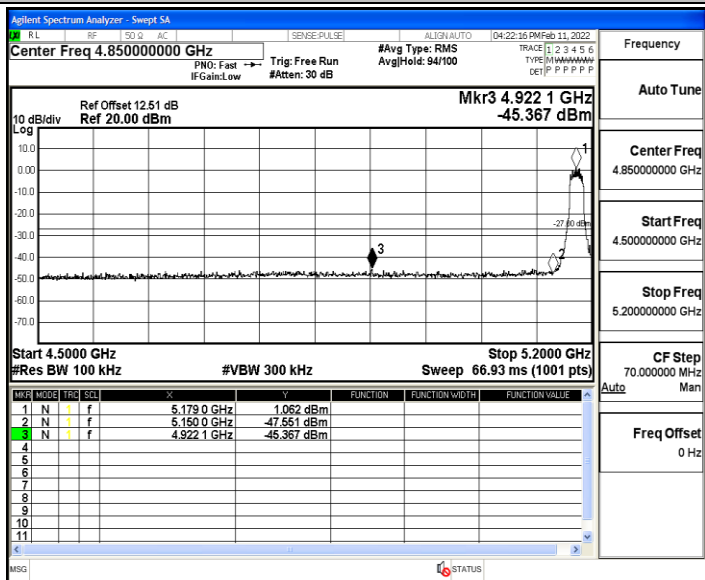
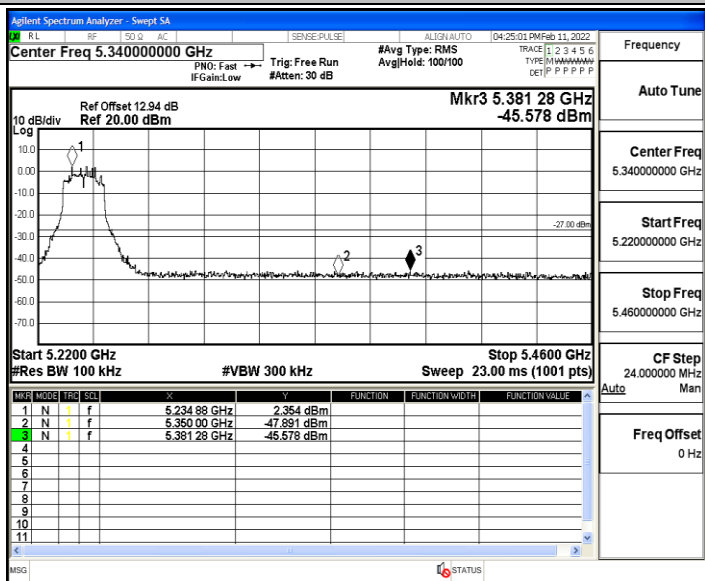


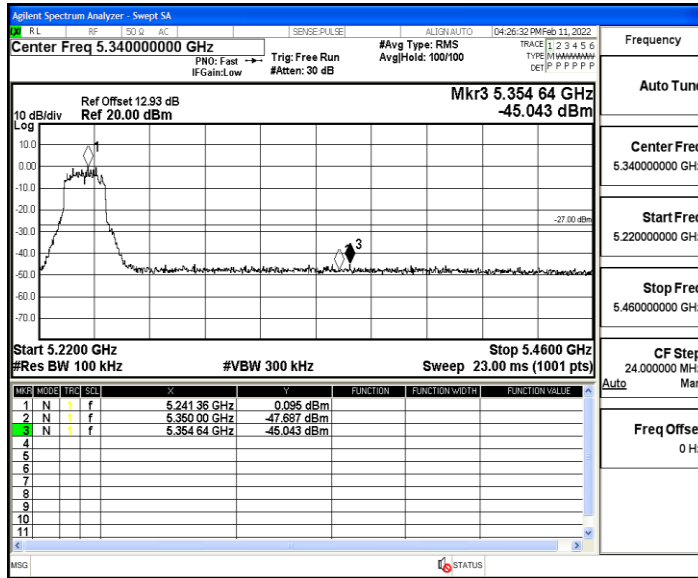
11AC20MIMO_Ant2_Low_5180



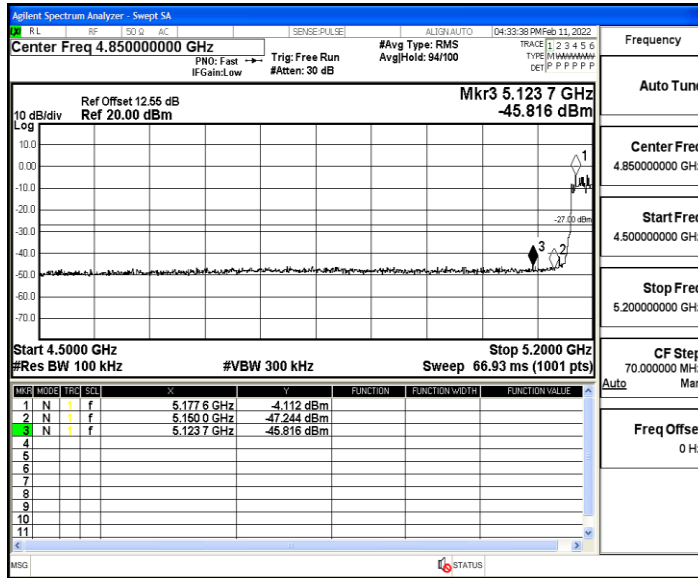
11AC20MIMO_Ant1_High_5240



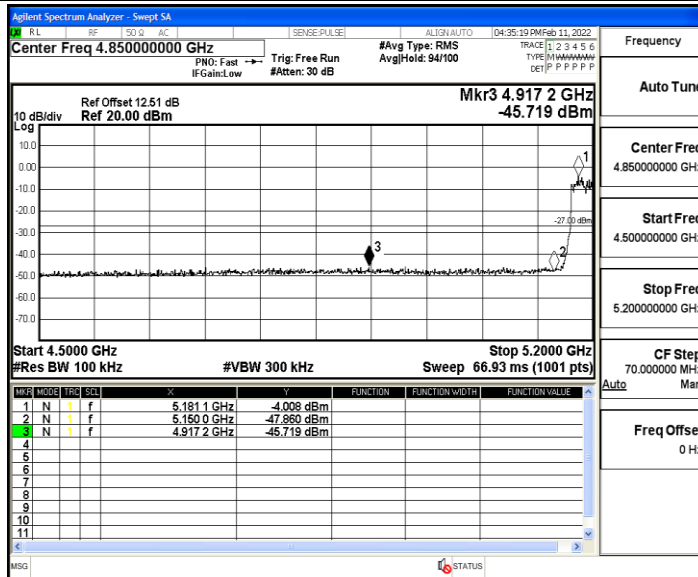
11AC20MIMO_Ant2_High_5240



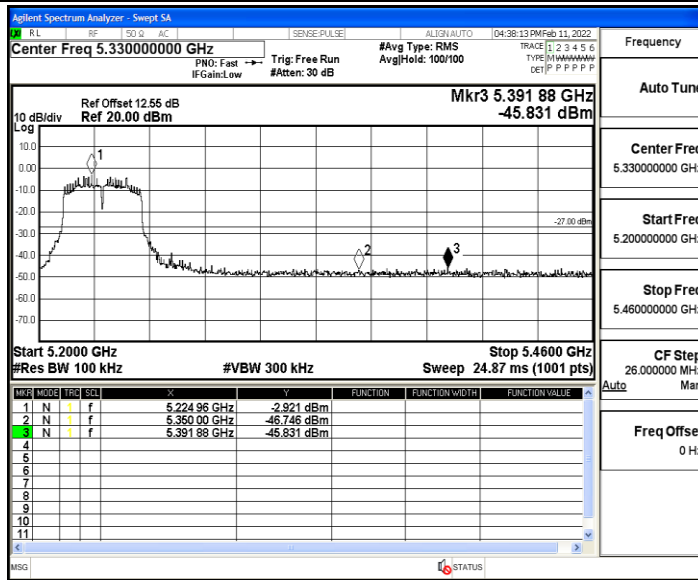
11AC40MIMO_Ant1_Low_5190



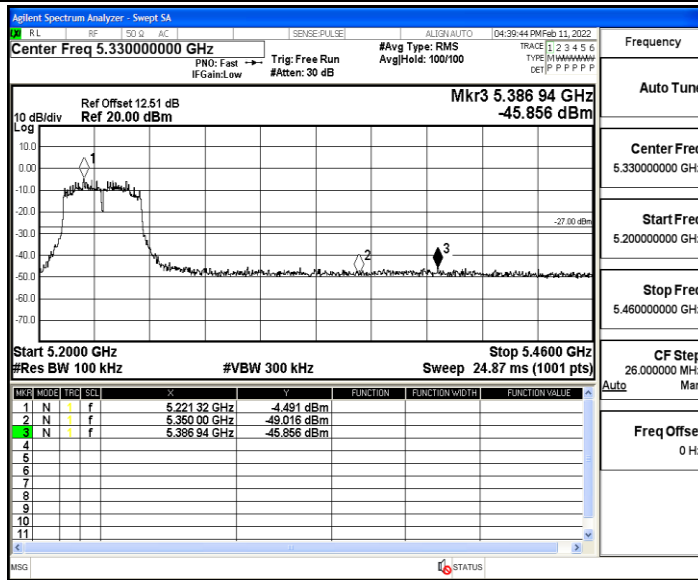
11AC40MIMO_Ant2_Low_5190



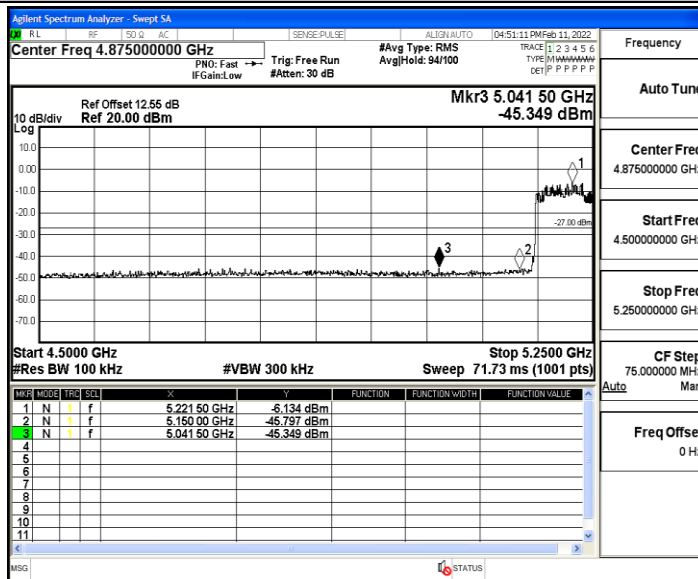
11AC40MIMO_Ant1_High_5230



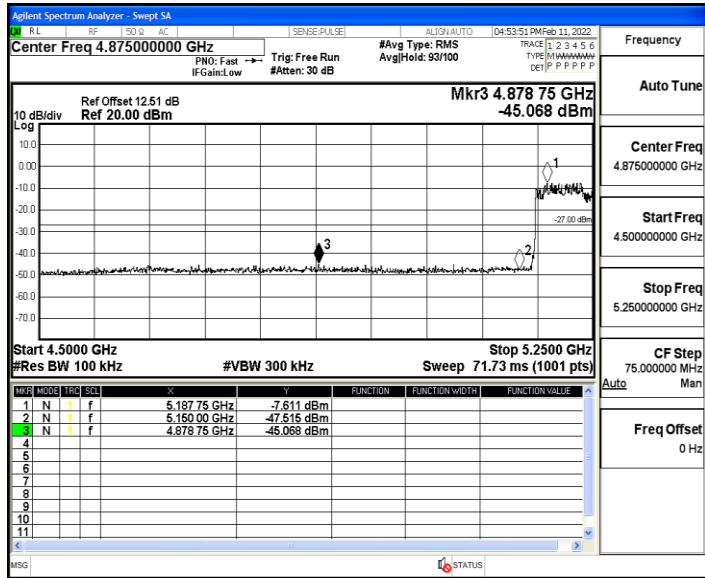
11AC40MIMO_Ant2_High_5230



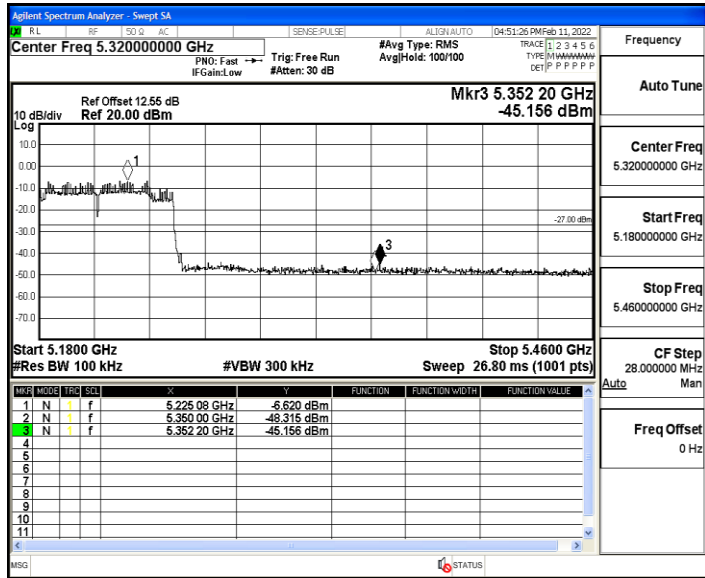
11AC80MIMO_Ant1_Low_5210



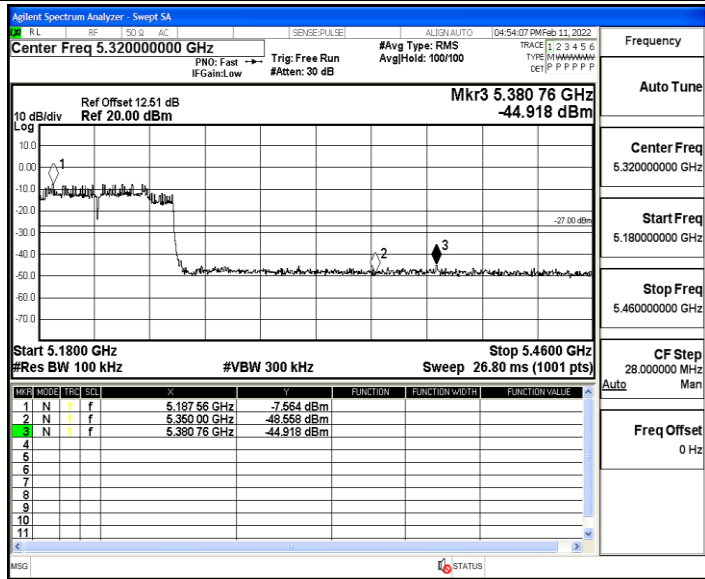
11AC80MIMO_Ant2_Low_5210



11AC80MIMO_Ant1_High_5210



11AC80MIMO_Ant2_High_5210



Appendix E: Frequency Stability

Test Result

Ant1

| Frequency (MHz) | Environment Temperature (Degree) | Voltage (VAC) | Measured Frequency (MHz) | Limit Range (MHz) | Test Results |
|-----------------|----------------------------------|---------------|--------------------------|-------------------|--------------|
| 5180 | 20 | 132 | 5179.928343 | 5150 – 5250 | PASS |
| 5180 | 20 | 108 | 5180.012057 | 5150 – 5250 | PASS |
| 5180 | 50 | 120 | 5180.029560 | 5150 – 5250 | PASS |
| 5180 | 40 | 120 | 5180.077392 | 5150 – 5250 | PASS |
| 5180 | 30 | 120 | 5180.066967 | 5150 – 5250 | PASS |
| 5180 | 20 | 120 | 5179.983738 | 5150 – 5250 | PASS |
| 5180 | 10 | 120 | 5179.928068 | 5150 – 5250 | PASS |
| 5180 | 0 | 120 | 5180.020957 | 5150 – 5250 | PASS |
| 5180 | -10 | 120 | 5180.096492 | 5150 – 5250 | PASS |
| 5180 | -20 | 120 | 5179.918840 | 5150 – 5250 | PASS |
| 5180 | -30 | 120 | 5180.003656 | 5150 – 5250 | PASS |

Ant2

| Frequency (MHz) | Environment Temperature (Degree) | Voltage (VAC) | Measured Frequency (MHz) | Limit Range (MHz) | Test Results |
|-----------------|----------------------------------|---------------|--------------------------|-------------------|--------------|
| 5180 | 20 | 132 | 5179.903204 | 5150 – 5250 | PASS |
| 5180 | 20 | 108 | 5180.049533 | 5150 – 5250 | PASS |
| 5180 | 50 | 120 | 5179.996052 | 5150 – 5250 | PASS |
| 5180 | 40 | 120 | 5180.033309 | 5150 – 5250 | PASS |
| 5180 | 30 | 120 | 5179.900807 | 5150 – 5250 | PASS |
| 5180 | 20 | 120 | 5179.989216 | 5150 – 5250 | PASS |
| 5180 | 10 | 120 | 5179.945025 | 5150 – 5250 | PASS |
| 5180 | 0 | 120 | 5179.967836 | 5150 – 5250 | PASS |
| 5180 | -10 | 120 | 5179.951478 | 5150 – 5250 | PASS |
| 5180 | -20 | 120 | 5180.001131 | 5150 – 5250 | PASS |
| 5180 | -30 | 120 | 5179.939437 | 5150 – 5250 | PASS |

Ant1

| Frequency (MHz) | Environment Temperature (Degree) | Voltage (VAC) | Measured Frequency (MHz) | Limit Range (MHz) | Test Results |
|-----------------|----------------------------------|---------------|--------------------------|-------------------|--------------|
| 5200 | 20 | 132 | 5200.093886 | 5150 – 5250 | PASS |
| 5200 | 20 | 108 | 5200.068337 | 5150 – 5250 | PASS |
| 5200 | 50 | 120 | 5199.939506 | 5150 – 5250 | PASS |
| 5200 | 40 | 120 | 5200.010421 | 5150 – 5250 | PASS |
| 5200 | 30 | 120 | 5199.940411 | 5150 – 5250 | PASS |
| 5200 | 20 | 120 | 5200.061794 | 5150 – 5250 | PASS |
| 5200 | 10 | 120 | 5200.086724 | 5150 – 5250 | PASS |
| 5200 | 0 | 120 | 5199.968549 | 5150 – 5250 | PASS |
| 5200 | -10 | 120 | 5199.960020 | 5150 – 5250 | PASS |
| 5200 | -20 | 120 | 5199.964427 | 5150 – 5250 | PASS |
| 5200 | -30 | 120 | 5199.961072 | 5150 – 5250 | PASS |

Ant2

| Frequency (MHz) | Environment Temperature (Degree) | Voltage (VAC) | Measured Frequency (MHz) | Limit Range (MHz) | Test Results |
|-----------------|----------------------------------|---------------|--------------------------|-------------------|--------------|
| 5200 | 20 | 132 | 5199.909898 | 5150 – 5250 | PASS |
| 5200 | 20 | 108 | 5200.079868 | 5150 – 5250 | PASS |
| 5200 | 50 | 120 | 5199.970520 | 5150 – 5250 | PASS |
| 5200 | 40 | 120 | 5199.924517 | 5150 – 5250 | PASS |
| 5200 | 30 | 120 | 5200.092058 | 5150 – 5250 | PASS |
| 5200 | 20 | 120 | 5200.079326 | 5150 – 5250 | PASS |
| 5200 | 10 | 120 | 5199.944441 | 5150 – 5250 | PASS |
| 5200 | 0 | 120 | 5200.055723 | 5150 – 5250 | PASS |
| 5200 | -10 | 120 | 5200.046840 | 5150 – 5250 | PASS |
| 5200 | -20 | 120 | 5199.983519 | 5150 – 5250 | PASS |
| 5200 | -30 | 120 | 5200.027522 | 5150 – 5250 | PASS |

Ant1

| Frequency (MHz) | Environment Temperature (Degree) | Voltage (VAC) | Measured Frequency (MHz) | Limit Range (MHz) | Test Results |
|-----------------|----------------------------------|---------------|--------------------------|-------------------|--------------|
| 5240 | 20 | 132 | 5240.057424 | 5150 – 5250 | PASS |
| 5240 | 20 | 108 | 5240.097421 | 5150 – 5250 | PASS |
| 5240 | 50 | 120 | 5240.009407 | 5150 – 5250 | PASS |
| 5240 | 40 | 120 | 5239.928226 | 5150 – 5250 | PASS |
| 5240 | 30 | 120 | 5239.907013 | 5150 – 5250 | PASS |
| 5240 | 20 | 120 | 5240.097749 | 5150 – 5250 | PASS |
| 5240 | 10 | 120 | 5240.073504 | 5150 – 5250 | PASS |
| 5240 | 0 | 120 | 5239.911534 | 5150 – 5250 | PASS |
| 5240 | -10 | 120 | 5239.965178 | 5150 – 5250 | PASS |
| 5240 | -20 | 120 | 5240.047842 | 5150 – 5250 | PASS |
| 5240 | -30 | 120 | 5240.008259 | 5150 – 5250 | PASS |

Ant2

| Frequency (MHz) | Environment Temperature (Degree) | Voltage (VAC) | Measured Frequency (MHz) | Limit Range (MHz) | Test Results |
|-----------------|----------------------------------|---------------|--------------------------|-------------------|--------------|
| 5240 | 20 | 132 | 5240.003611 | 5150 – 5250 | PASS |
| 5240 | 20 | 108 | 5239.989578 | 5150 – 5250 | PASS |
| 5240 | 50 | 120 | 5239.996439 | 5150 – 5250 | PASS |
| 5240 | 40 | 120 | 5239.981767 | 5150 – 5250 | PASS |
| 5240 | 30 | 120 | 5239.960316 | 5150 – 5250 | PASS |
| 5240 | 20 | 120 | 5239.907654 | 5150 – 5250 | PASS |
| 5240 | 10 | 120 | 5239.943364 | 5150 – 5250 | PASS |
| 5240 | 0 | 120 | 5239.950591 | 5150 – 5250 | PASS |
| 5240 | -10 | 120 | 5239.970481 | 5150 – 5250 | PASS |
| 5240 | -20 | 120 | 5239.942072 | 5150 – 5250 | PASS |
| 5240 | -30 | 120 | 5239.935992 | 5150 – 5250 | PASS |

Ant1

| Frequency (MHz) | Environment Temperature (Degree) | Voltage (VAC) | Measured Frequency (MHz) | Limit Range (MHz) | Test Results |
|-----------------|----------------------------------|---------------|--------------------------|-------------------|--------------|
| 5190 | 20 | 132 | 5189.960439 | 5150 – 5250 | PASS |
| 5190 | 20 | 108 | 5189.913297 | 5150 – 5250 | PASS |
| 5190 | 50 | 120 | 5189.986314 | 5150 – 5250 | PASS |
| 5190 | 40 | 120 | 5190.042872 | 5150 – 5250 | PASS |
| 5190 | 30 | 120 | 5189.920166 | 5150 – 5250 | PASS |
| 5190 | 20 | 120 | 5190.083985 | 5150 – 5250 | PASS |
| 5190 | 10 | 120 | 5190.028542 | 5150 – 5250 | PASS |
| 5190 | 0 | 120 | 5189.933138 | 5150 – 5250 | PASS |
| 5190 | -10 | 120 | 5189.954151 | 5150 – 5250 | PASS |
| 5190 | -20 | 120 | 5189.989266 | 5150 – 5250 | PASS |
| 5190 | -30 | 120 | 5190.082067 | 5150 – 5250 | PASS |

Ant2

| Frequency (MHz) | Environment Temperature (Degree) | Voltage (VAC) | Measured Frequency (MHz) | Limit Range (MHz) | Test Results |
|-----------------|----------------------------------|---------------|--------------------------|-------------------|--------------|
| 5190 | 20 | 132 | 5189.934278 | 5150 – 5250 | PASS |
| 5190 | 20 | 108 | 5190.070281 | 5150 – 5250 | PASS |
| 5190 | 50 | 120 | 5190.074833 | 5150 – 5250 | PASS |
| 5190 | 40 | 120 | 5190.095830 | 5150 – 5250 | PASS |
| 5190 | 30 | 120 | 5189.943190 | 5150 – 5250 | PASS |
| 5190 | 20 | 120 | 5190.026830 | 5150 – 5250 | PASS |
| 5190 | 10 | 120 | 5189.923812 | 5150 – 5250 | PASS |
| 5190 | 0 | 120 | 5190.007954 | 5150 – 5250 | PASS |
| 5190 | -10 | 120 | 5189.987098 | 5150 – 5250 | PASS |
| 5190 | -20 | 120 | 5189.978954 | 5150 – 5250 | PASS |
| 5190 | -30 | 120 | 5190.004726 | 5150 – 5250 | PASS |

Ant1

| Frequency (MHz) | Environment Temperature (Degree) | Voltage (VAC) | Measured Frequency (MHz) | Limit Range (MHz) | Test Results |
|-----------------|----------------------------------|---------------|--------------------------|-------------------|--------------|
| 5230 | 20 | 132 | 5230.067759 | 5150 – 5250 | PASS |
| 5230 | 20 | 108 | 5230.060473 | 5150 – 5250 | PASS |
| 5230 | 50 | 120 | 5229.986918 | 5150 – 5250 | PASS |
| 5230 | 40 | 120 | 5229.941613 | 5150 – 5250 | PASS |
| 5230 | 30 | 120 | 5229.920029 | 5150 – 5250 | PASS |
| 5230 | 20 | 120 | 5230.090629 | 5150 – 5250 | PASS |
| 5230 | 10 | 120 | 5230.001061 | 5150 – 5250 | PASS |
| 5230 | 0 | 120 | 5230.008698 | 5150 – 5250 | PASS |
| 5230 | -10 | 120 | 5230.093173 | 5150 – 5250 | PASS |
| 5230 | -20 | 120 | 5230.001458 | 5150 – 5250 | PASS |
| 5230 | -30 | 120 | 5229.917152 | 5150 – 5250 | PASS |

Ant2

| Frequency (MHz) | Environment Temperature (Degree) | Voltage (VAC) | Measured Frequency (MHz) | Limit Range (MHz) | Test Results |
|-----------------|----------------------------------|---------------|--------------------------|-------------------|--------------|
| 5230 | 20 | 132 | 5229.956859 | 5150 – 5250 | PASS |
| 5230 | 20 | 108 | 5229.901442 | 5150 – 5250 | PASS |
| 5230 | 50 | 120 | 5229.936817 | 5150 – 5250 | PASS |
| 5230 | 40 | 120 | 5230.081891 | 5150 – 5250 | PASS |
| 5230 | 30 | 120 | 5230.038462 | 5150 – 5250 | PASS |
| 5230 | 20 | 120 | 5230.073775 | 5150 – 5250 | PASS |
| 5230 | 10 | 120 | 5229.940352 | 5150 – 5250 | PASS |
| 5230 | 0 | 120 | 5230.015004 | 5150 – 5250 | PASS |
| 5230 | -10 | 120 | 5229.972908 | 5150 – 5250 | PASS |
| 5230 | -20 | 120 | 5229.970351 | 5150 – 5250 | PASS |
| 5230 | -30 | 120 | 5229.987833 | 5150 – 5250 | PASS |

Ant1

| Frequency (MHz) | Environment Temperature (Degree) | Voltage (VAC) | Measured Frequency (MHz) | Limit Range (MHz) | Test Results |
|-----------------|----------------------------------|---------------|--------------------------|-------------------|--------------|
| 5210 | 20 | 132 | 5210.082606 | 5150 – 5250 | PASS |
| 5210 | 20 | 108 | 5210.001789 | 5150 – 5250 | PASS |
| 5210 | 50 | 120 | 5210.097926 | 5150 – 5250 | PASS |
| 5210 | 40 | 120 | 5209.987860 | 5150 – 5250 | PASS |
| 5210 | 30 | 120 | 5210.024613 | 5150 – 5250 | PASS |
| 5210 | 20 | 120 | 5209.935115 | 5150 – 5250 | PASS |
| 5210 | 10 | 120 | 5209.978420 | 5150 – 5250 | PASS |
| 5210 | 0 | 120 | 5210.030807 | 5150 – 5250 | PASS |
| 5210 | -10 | 120 | 5209.918524 | 5150 – 5250 | PASS |
| 5210 | -20 | 120 | 5210.010406 | 5150 – 5250 | PASS |
| 5210 | -30 | 120 | 5210.019180 | 5150 – 5250 | PASS |

Ant2

| Frequency (MHz) | Environment Temperature (Degree) | Voltage (VAC) | Measured Frequency (MHz) | Limit Range (MHz) | Test Results |
|--------------------|--|------------------|--------------------------------|----------------------|-----------------|
| 5210 | 20 | 132 | 5210.067840 | 5150 – 5250 | PASS |
| 5210 | 20 | 108 | 5209.996260 | 5150 – 5250 | PASS |
| 5210 | 50 | 120 | 5209.961150 | 5150 – 5250 | PASS |
| 5210 | 40 | 120 | 5210.075642 | 5150 – 5250 | PASS |
| 5210 | 30 | 120 | 5210.047003 | 5150 – 5250 | PASS |
| 5210 | 20 | 120 | 5209.960577 | 5150 – 5250 | PASS |
| 5210 | 10 | 120 | 5210.069423 | 5150 – 5250 | PASS |
| 5210 | 0 | 120 | 5209.942099 | 5150 – 5250 | PASS |
| 5210 | -10 | 120 | 5210.000958 | 5150 – 5250 | PASS |
| 5210 | -20 | 120 | 5209.923869 | 5150 – 5250 | PASS |
| 5210 | -30 | 120 | 5209.903848 | 5150 – 5250 | PASS |

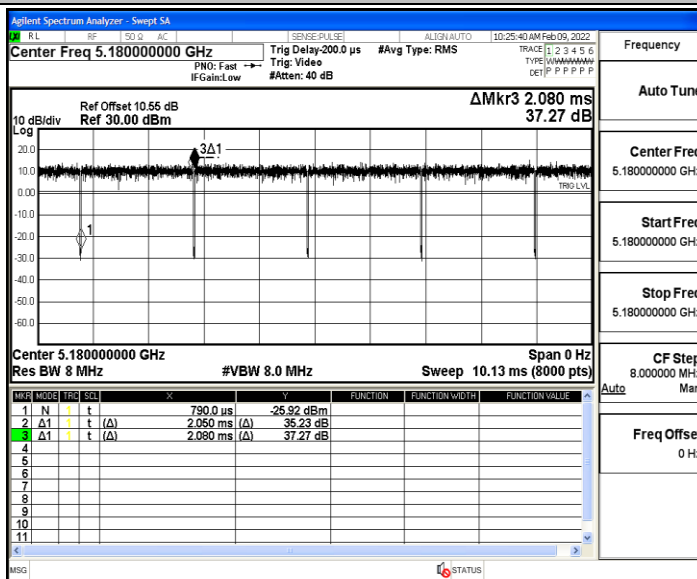
Appendix F: Duty Cycle

Test Result

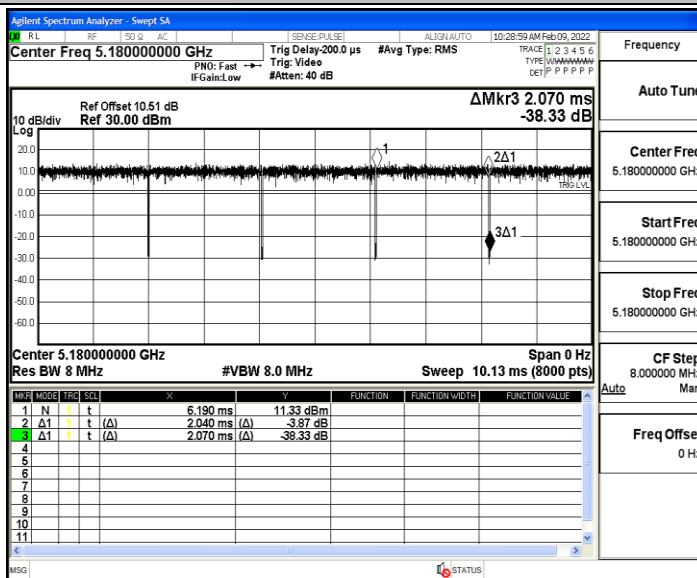
| TestMode | Antenna | Channel | Transmission Duration [ms] | Transmission Period [ms] | Duty Cycle [%] | 1/T[kHz] |
|------------|---------|---------|----------------------------|--------------------------|----------------|----------|
| 11A | Ant1 | 5180 | 2.05 | 2.08 | 98.56 | 0.49 |
| | Ant2 | 5180 | 2.04 | 2.07 | 98.55 | 0.49 |
| | Ant1 | 5200 | 2.04 | 2.07 | 98.55 | 0.49 |
| | Ant2 | 5200 | 2.04 | 2.07 | 98.55 | 0.49 |
| | Ant1 | 5240 | 2.05 | 2.08 | 98.56 | 0.49 |
| | Ant2 | 5240 | 2.05 | 2.08 | 98.56 | 0.49 |
| 11N20MIMO | Ant1 | 5180 | 1.91 | 1.94 | 98.45 | 0.52 |
| | Ant2 | 5180 | 1.91 | 1.94 | 98.45 | 0.52 |
| | Ant1 | 5200 | 1.91 | 1.93 | 98.96 | 0.52 |
| | Ant2 | 5200 | 1.91 | 1.94 | 98.45 | 0.52 |
| | Ant1 | 5240 | 1.90 | 1.93 | 98.45 | 0.53 |
| | Ant2 | 5240 | 1.90 | 1.93 | 98.45 | 0.53 |
| 11N40MIMO | Ant1 | 5190 | 0.94 | 0.97 | 96.91 | 1.06 |
| | Ant2 | 5190 | 0.94 | 0.97 | 96.91 | 1.06 |
| | Ant1 | 5230 | 0.94 | 0.97 | 96.91 | 1.06 |
| | Ant2 | 5230 | 0.93 | 0.96 | 96.88 | 1.08 |
| 11AC20MIMO | Ant1 | 5180 | 0.98 | 1.01 | 97.03 | 1.02 |
| | Ant2 | 5180 | 0.98 | 1.01 | 97.03 | 1.02 |
| | Ant1 | 5200 | 0.98 | 1.01 | 97.03 | 1.02 |
| | Ant2 | 5200 | 0.99 | 1.02 | 97.06 | 1.01 |
| | Ant1 | 5240 | 0.98 | 1.01 | 97.03 | 1.02 |
| | Ant2 | 5240 | 0.98 | 1.01 | 97.03 | 1.02 |
| 11AC40MIMO | Ant1 | 5190 | 0.50 | 0.52 | 96.15 | 2.00 |
| | Ant2 | 5190 | 0.50 | 0.53 | 94.34 | 2.00 |
| | Ant1 | 5230 | 0.94 | 0.97 | 96.91 | 1.06 |
| | Ant2 | 5230 | 0.94 | 0.97 | 96.91 | 1.06 |
| 11AC80MIMO | Ant1 | 5210 | 0.25 | 0.28 | 89.29 | 4.00 |
| | Ant2 | 5210 | 0.26 | 0.28 | 92.86 | 3.85 |

Test Graphs

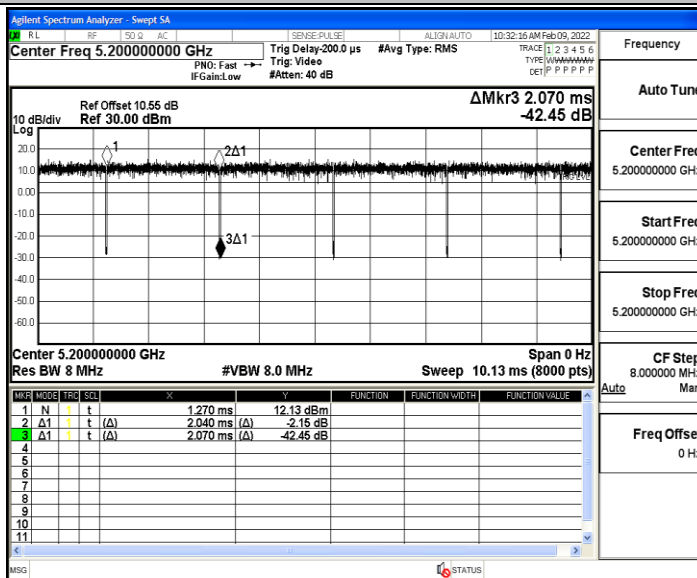
11A_Ant1_5180



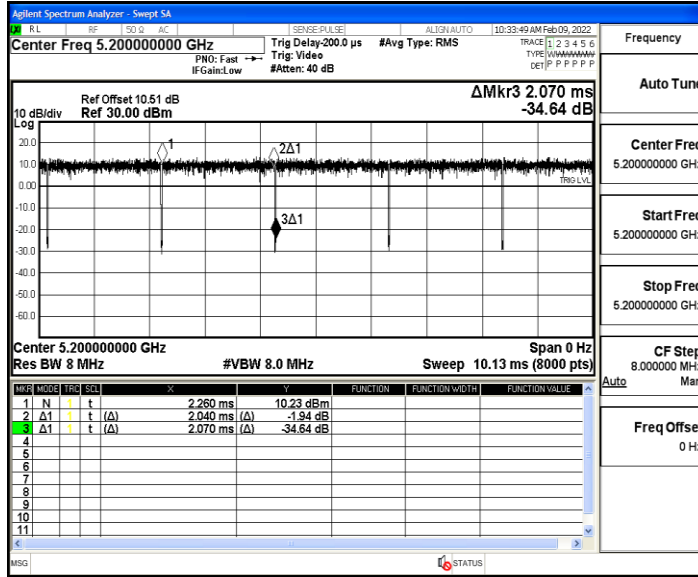
11A_Ant2_5180



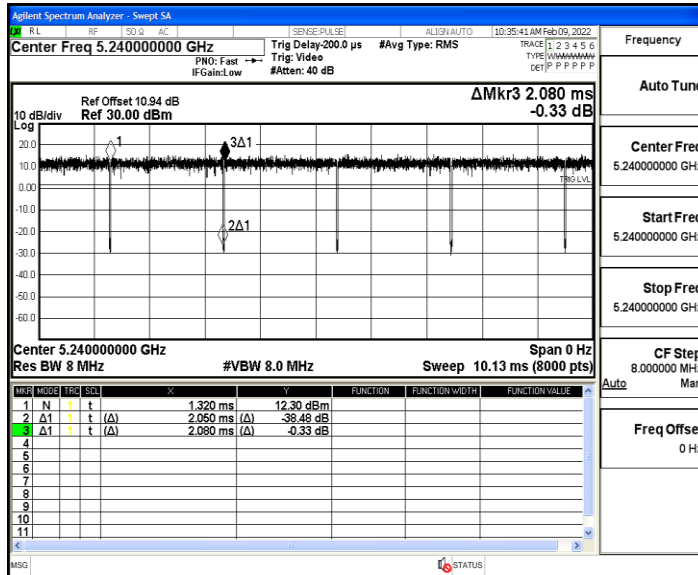
11A_Ant1_5200



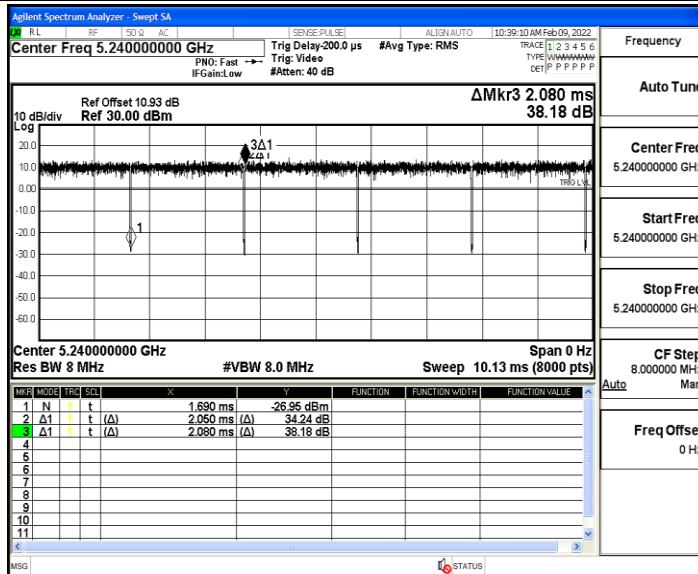
11A_Ant2_5200



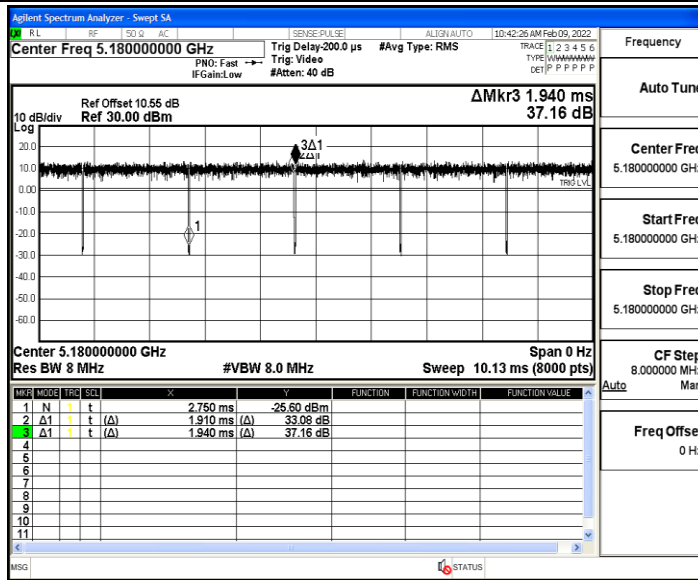
11A_Ant1_5240



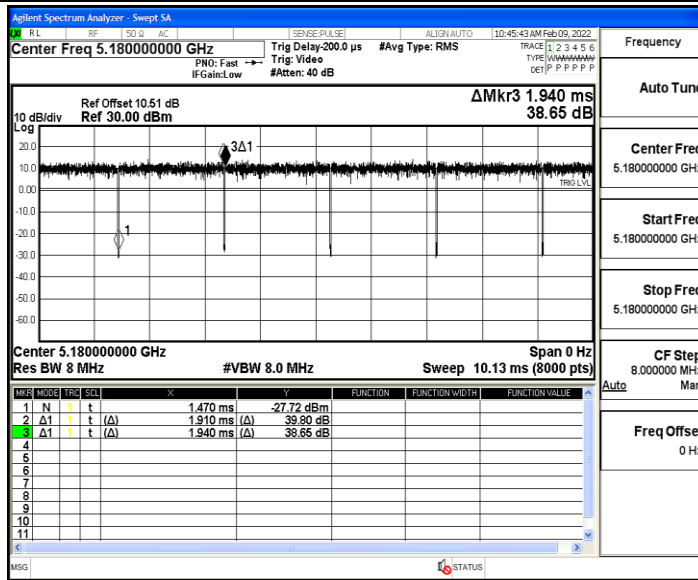
11A_Ant2_5240



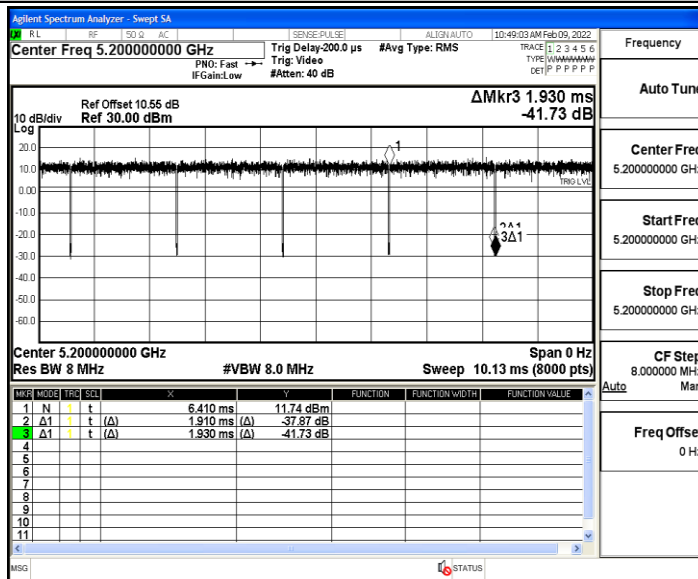
11N20MIMO_Ant1_5180



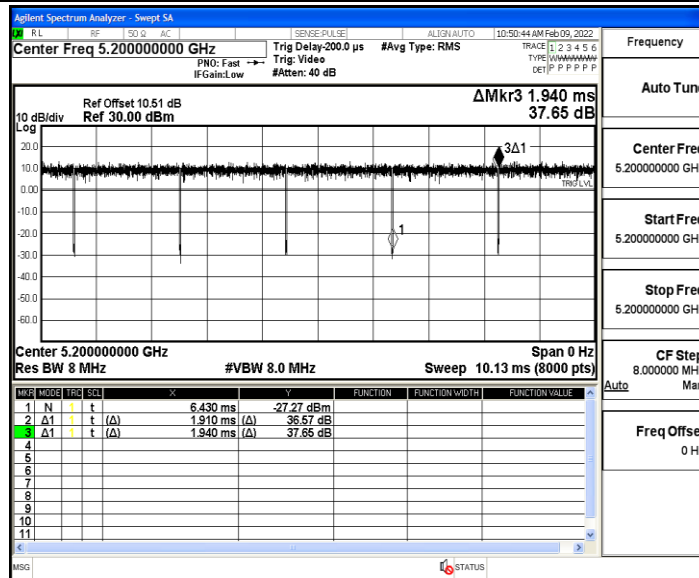
11N20MIMO_Ant2_5180



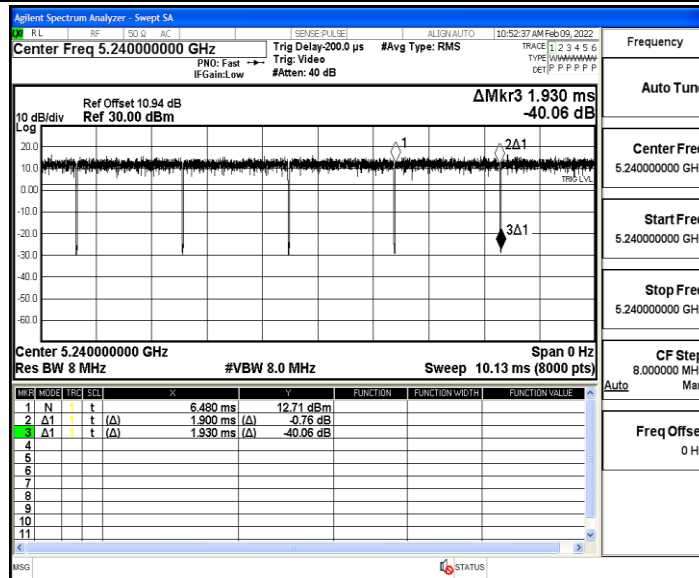
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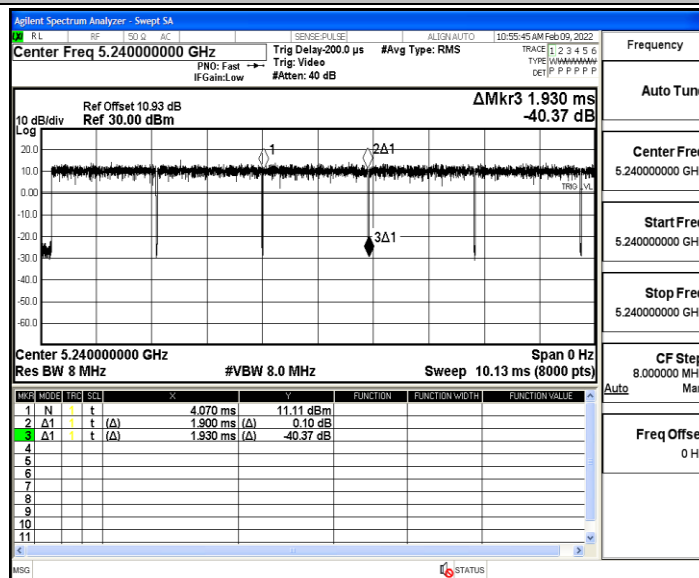
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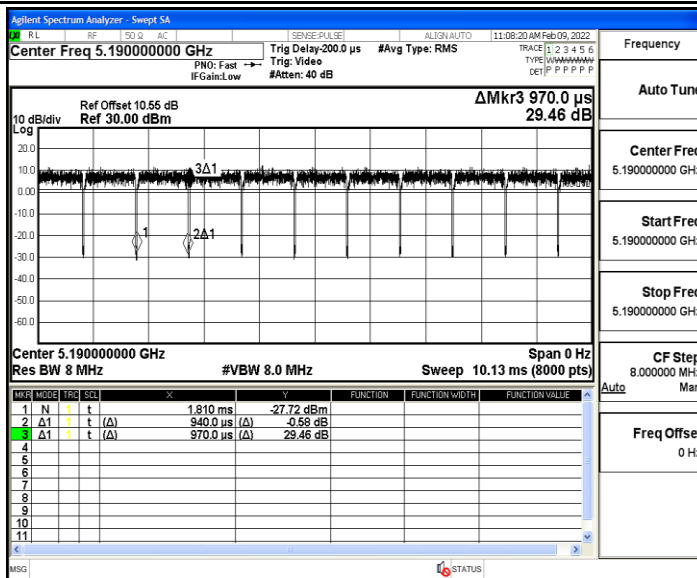
11N20MIMO_Ant1_5240



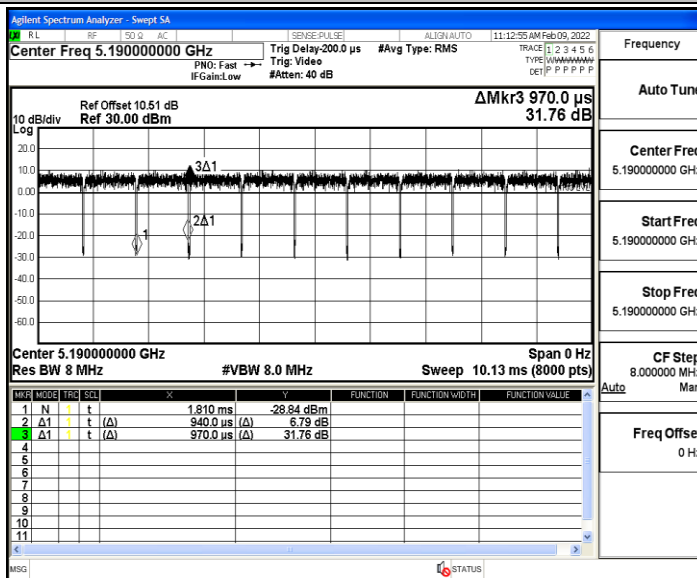
11N20MIMO_Ant2_5240



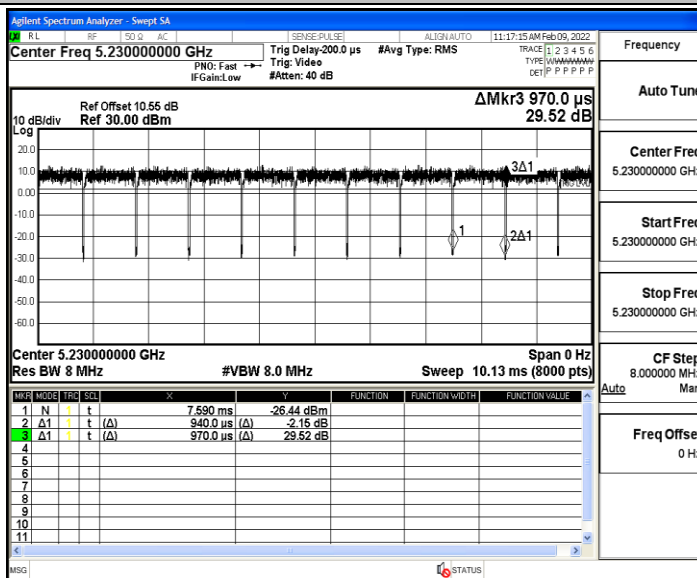
11N40MIMO_Ant1_5190



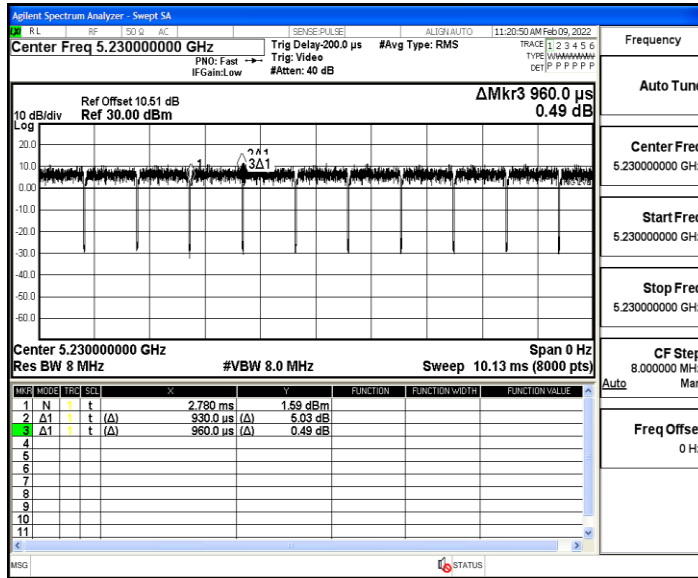
11N40MIMO_Ant2_5190



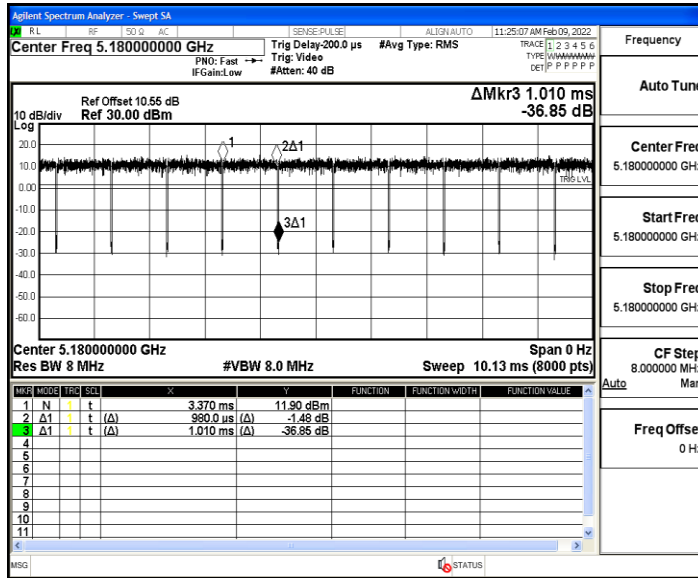
11N40MIMO_Ant1_5230



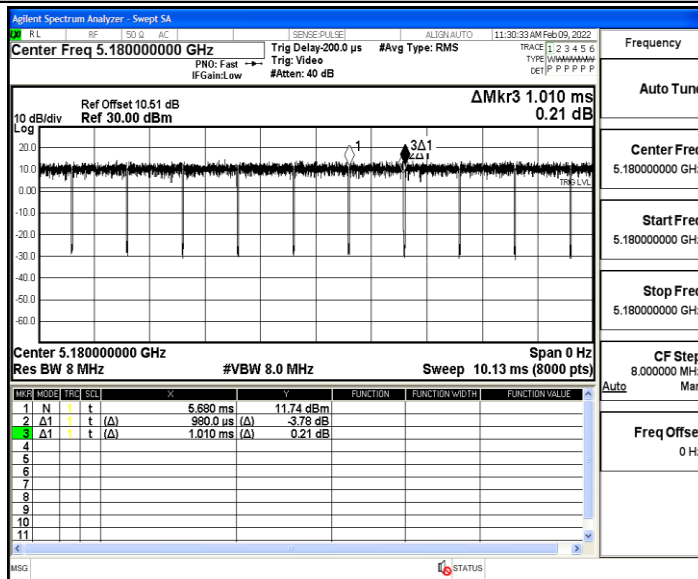
11N40MIMO_Ant2_5230



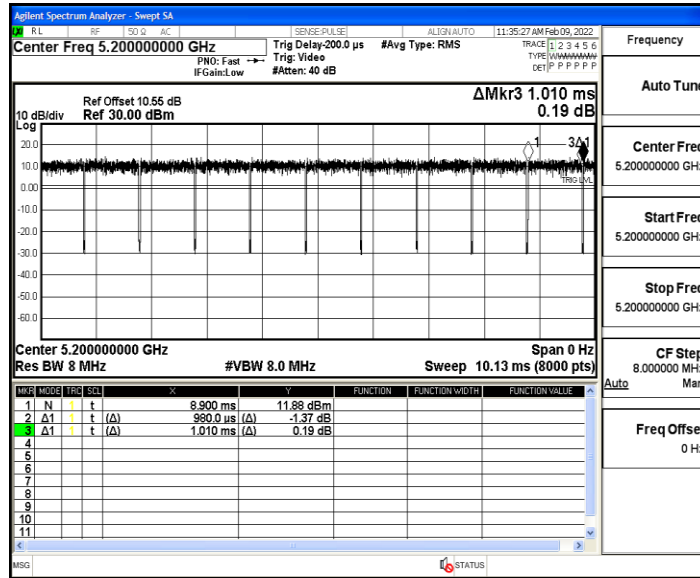
11AC20MIMO_Ant1_5180



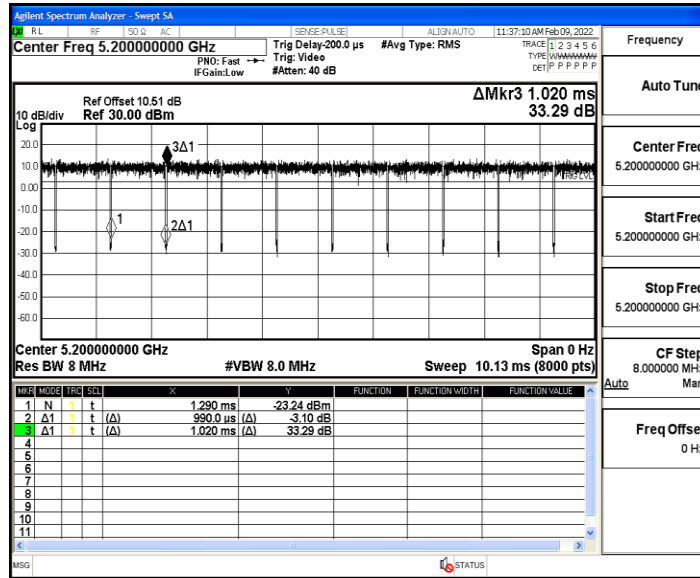
11AC20MIMO_Ant2_5180



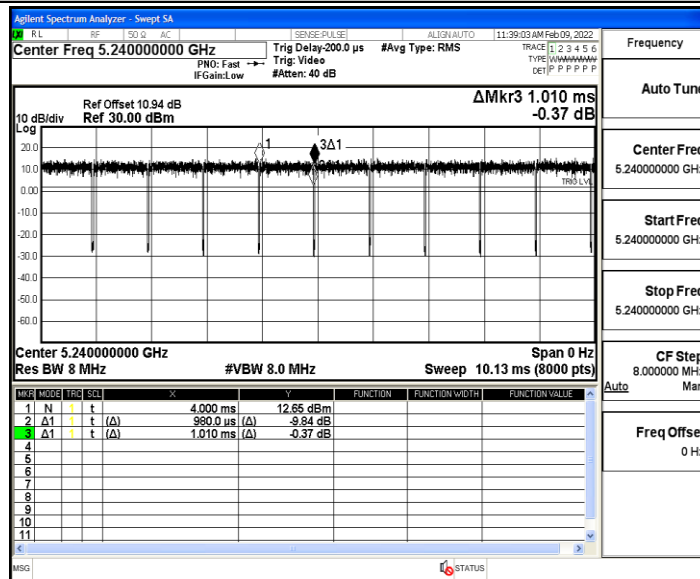
11AC20MIMO_Ant1_5200



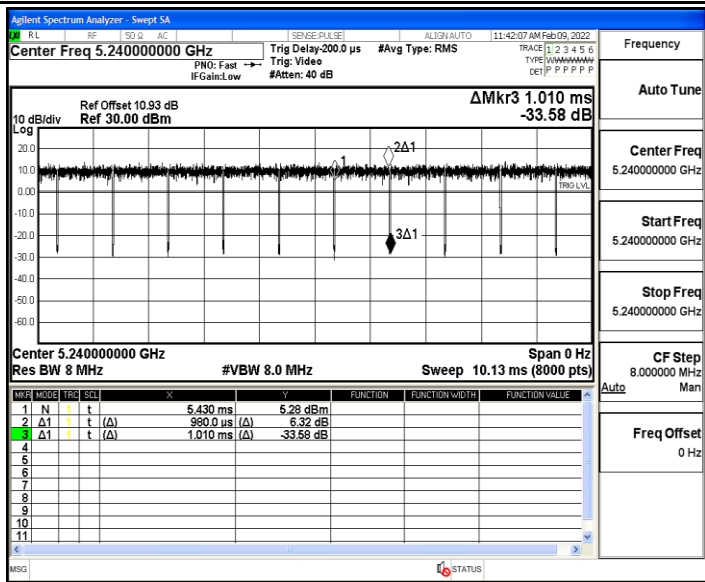
11AC20MIMO_Ant2_5200



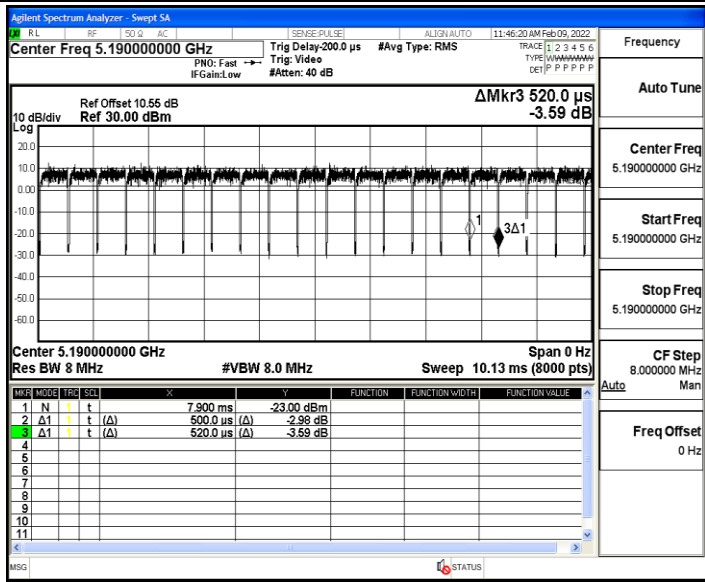
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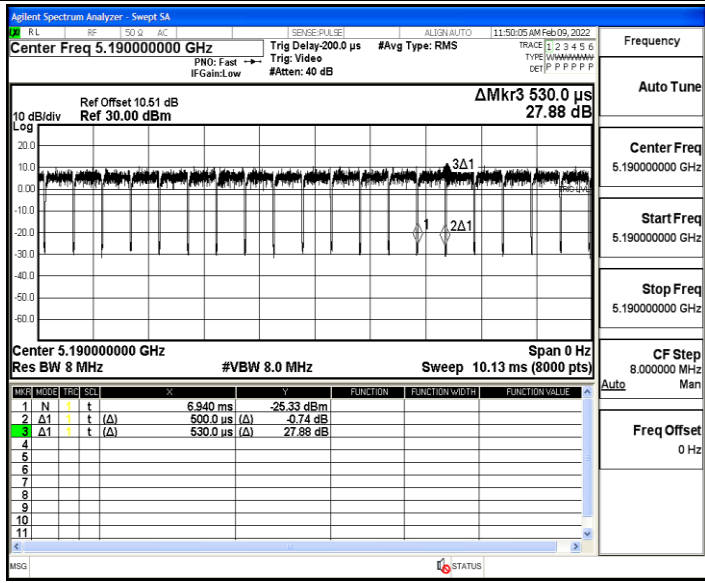
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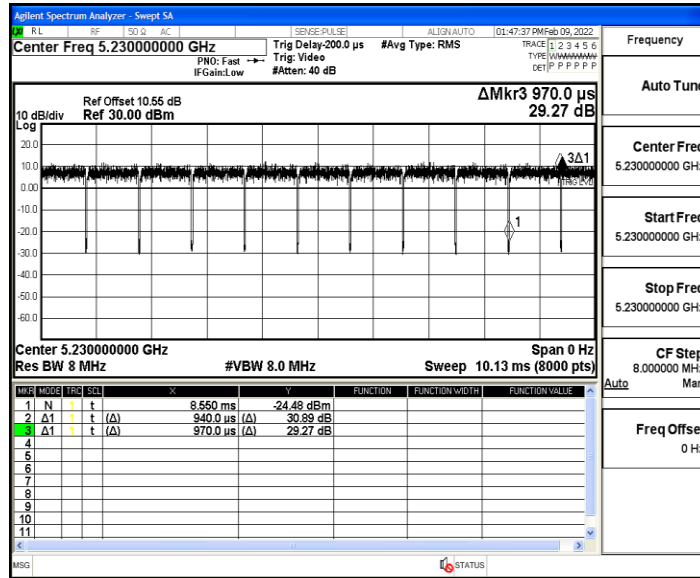
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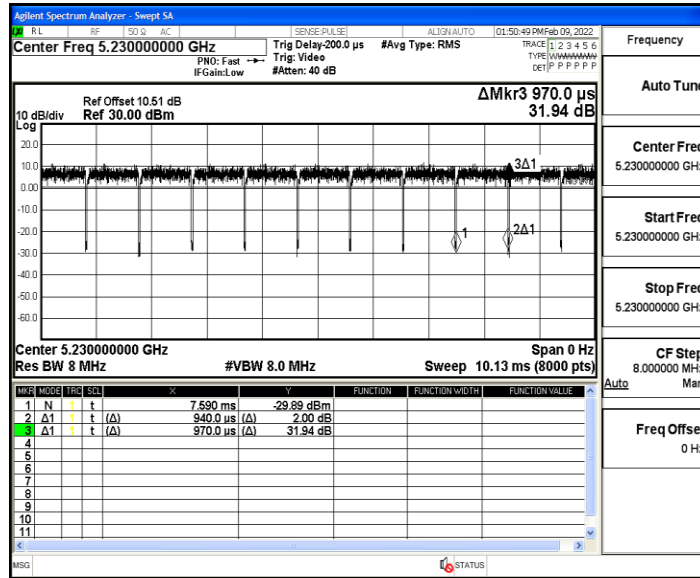
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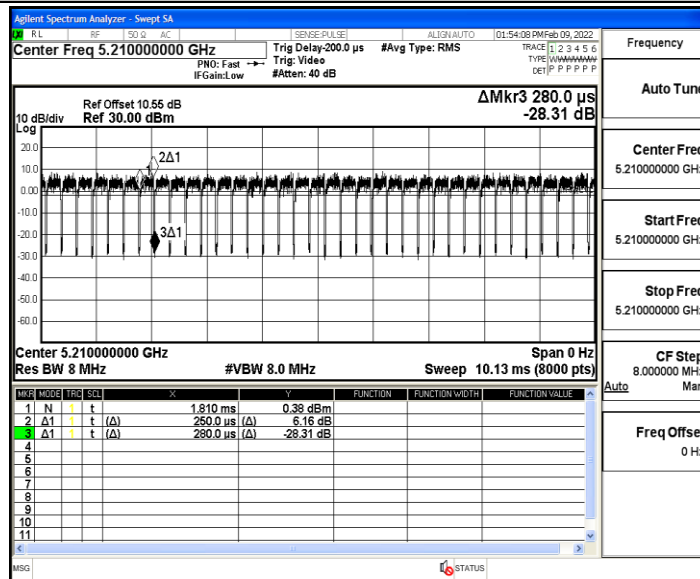
11AC40MIMO_Ant1_5230



11AC40MIMO_Ant2_5230



11AC80MIMO_Ant1_5210



11AC80MIMO_Ant2_5210

