

**RF Test Data for RLAN(5.2G) (Conducted Measurement)****Product Name: SMARTPHONE****Trade Mark: HERITAGE****Test Model: P60 PRO+****FCC ID: 2A6U5-M6908M6904****Environmental Conditions**

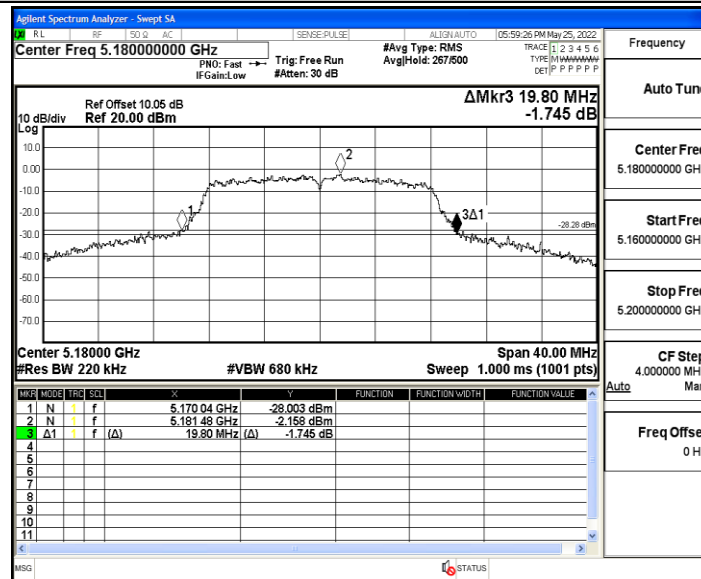
|                    |           |
|--------------------|-----------|
| Temperature:       | 23.8℃     |
| Relative Humidity: | 58%       |
| ATM Pressure:      | 100.0 kPa |
| Test Engineer:     | Anna Hu   |
| Supervised by:     | Hugo Chen |
| NOTE               | N/A       |

**Appendix A1: Emission Bandwidth****Test Result**

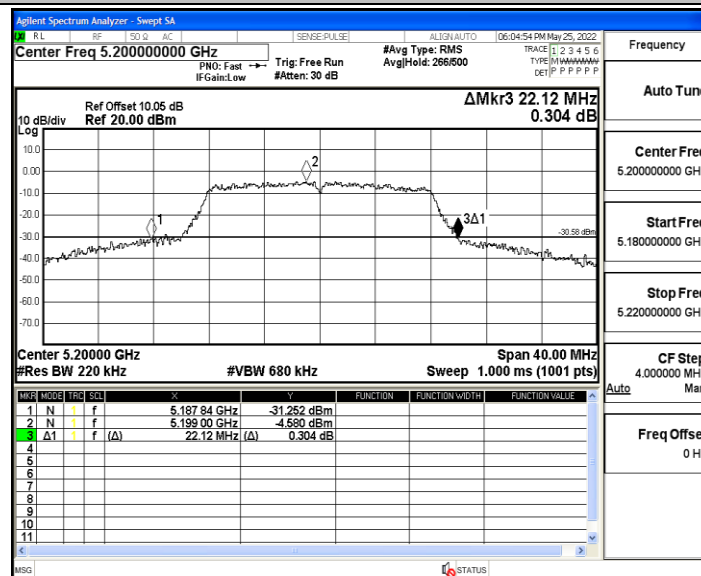
| TestMode  | Antenna | Channel | 26db EBW [MHz] | FL[MHz]  | FH[MHz]  | Limit[MHz] | Verdict |
|-----------|---------|---------|----------------|----------|----------|------------|---------|
| 11A       | Ant1    | 5180    | 19.800         | 5170.040 | 5189.840 | ---        | ---     |
|           |         | 5200    | 22.120         | 5187.840 | 5209.960 | ---        | ---     |
|           |         | 5240    | 19.960         | 5230.120 | 5250.080 | ---        | ---     |
| 11N20MIMO | Ant1    | 5180    | 20.080         | 5169.720 | 5189.800 | ---        | ---     |
|           |         | 5200    | 23.120         | 5188.640 | 5211.760 | ---        | ---     |
|           |         | 5240    | 21.840         | 5228.160 | 5250.000 | ---        | ---     |
| 11N40MIMO | Ant1    | 5190    | 41.920         | 5167.920 | 5209.840 | ---        | ---     |
|           |         | 5230    | 52.160         | 5197.840 | 5250.000 | ---        | ---     |

## Test Graphs

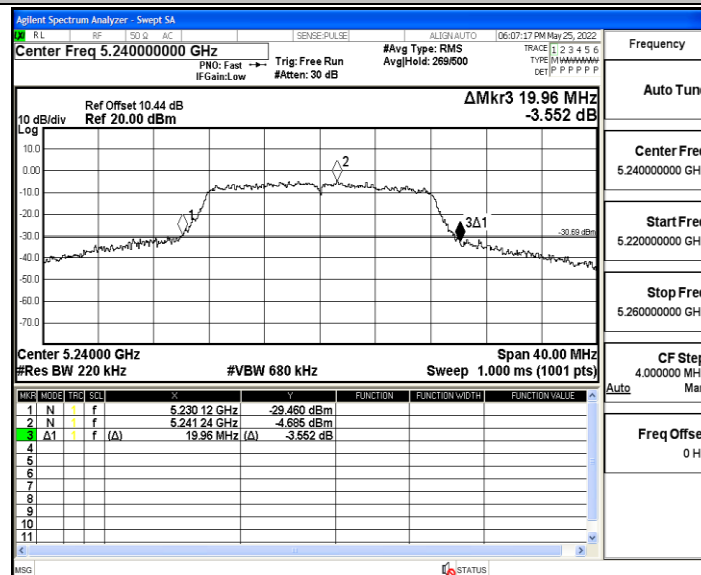
11A\_Ant1\_5180



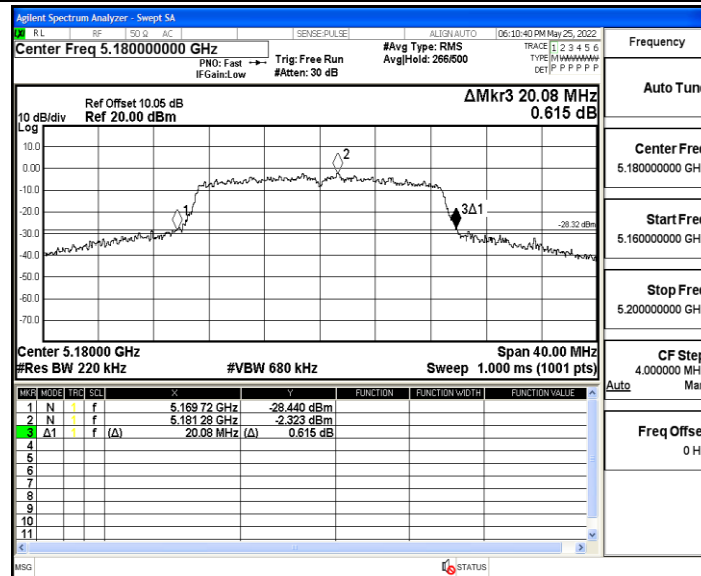
11A\_Ant1\_5200



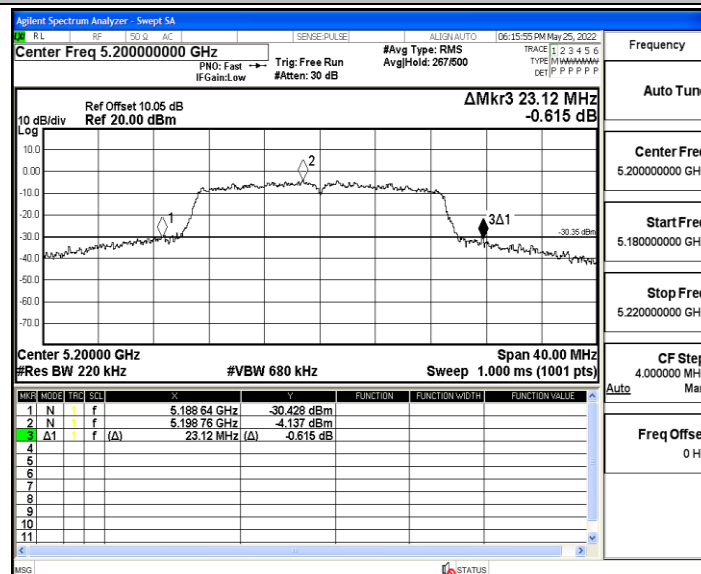
11A\_Ant1\_5240



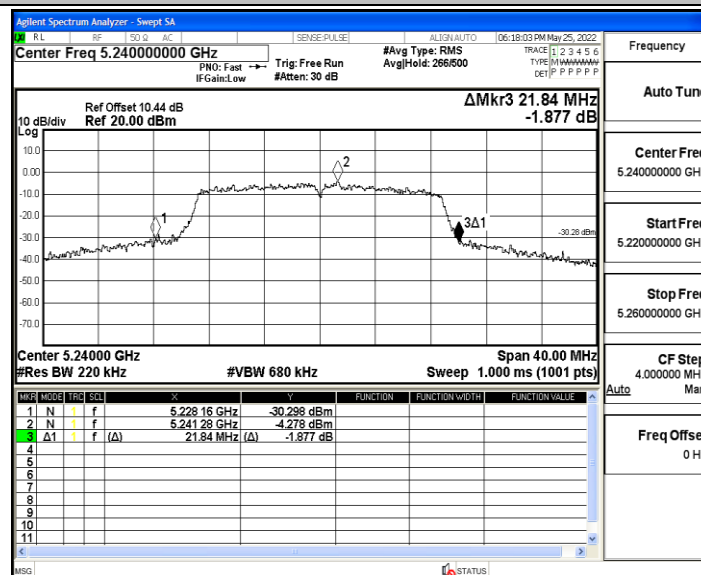
## 11N20MIMO\_Ant1\_5180



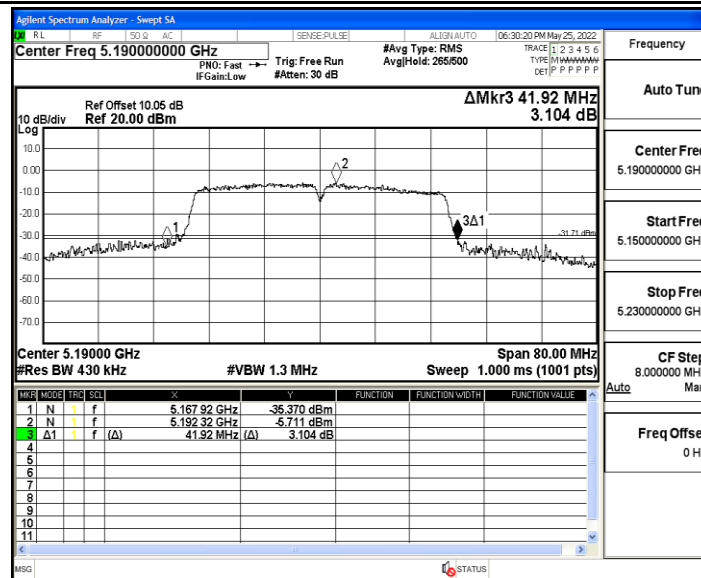
## 11N20MIMO\_Ant1\_5200



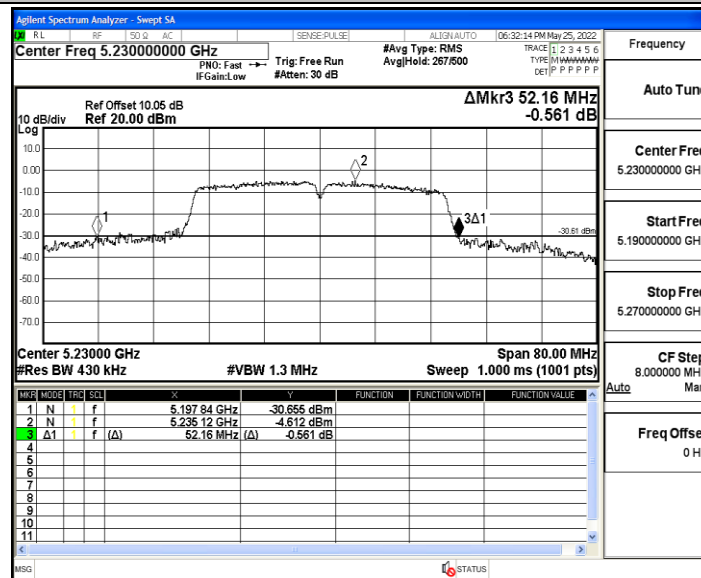
## 11N20MIMO\_Ant1\_5240



## 11N40MIMO\_Ant1\_5190



## 11N40MIMO\_Ant1\_5230



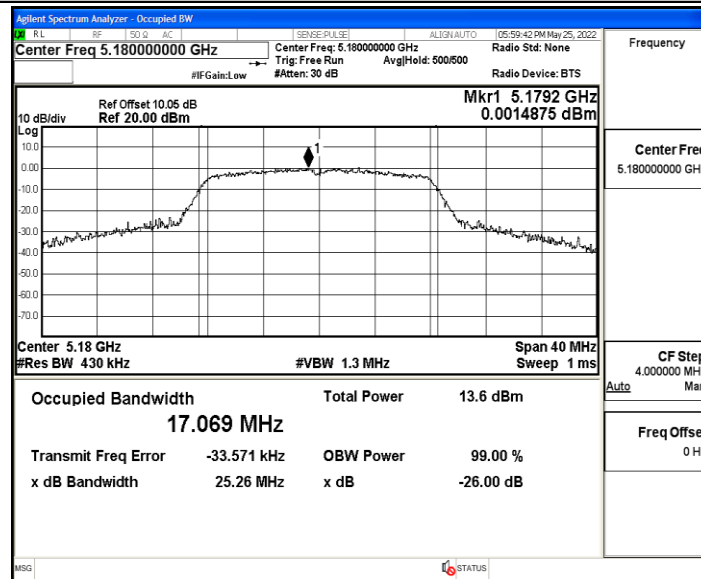
## Appendix A2: Occupied channel bandwidth

### Test Result

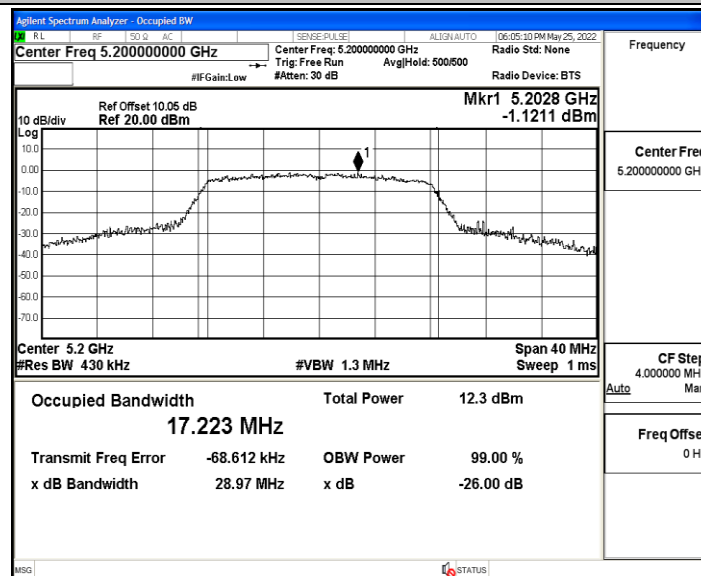
| TestMode  | Antenna | Channel | OCB [MHz] | FL[MHz]  | FH[MHz]  | Limit[MHz] | Verdict |
|-----------|---------|---------|-----------|----------|----------|------------|---------|
| 11A       | Ant1    | 5180    | 17.069    | 5171.432 | 5188.501 | ---        | ---     |
|           |         | 5200    | 17.223    | 5191.320 | 5208.543 | ---        | ---     |
|           |         | 5240    | 17.139    | 5231.337 | 5248.476 | ---        | ---     |
| 11N20MIMO | Ant1    | 5180    | 17.884    | 5171.032 | 5188.916 | ---        | ---     |
|           |         | 5200    | 17.985    | 5190.957 | 5208.942 | ---        | ---     |
|           |         | 5240    | 17.981    | 5230.950 | 5248.931 | ---        | ---     |
| 11N40MIMO | Ant1    | 5190    | 36.329    | 5171.752 | 5208.081 | ---        | ---     |
|           |         | 5230    | 36.436    | 5211.656 | 5248.092 | ---        | ---     |

## Test Graphs

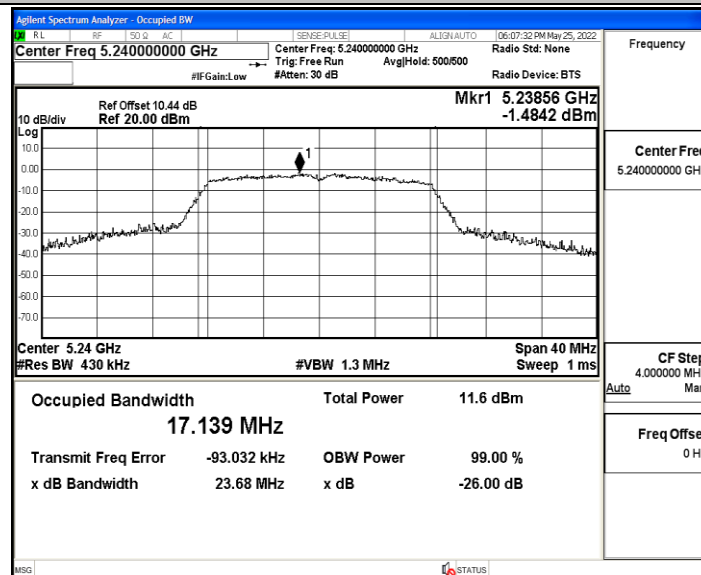
11A\_Ant1\_5180



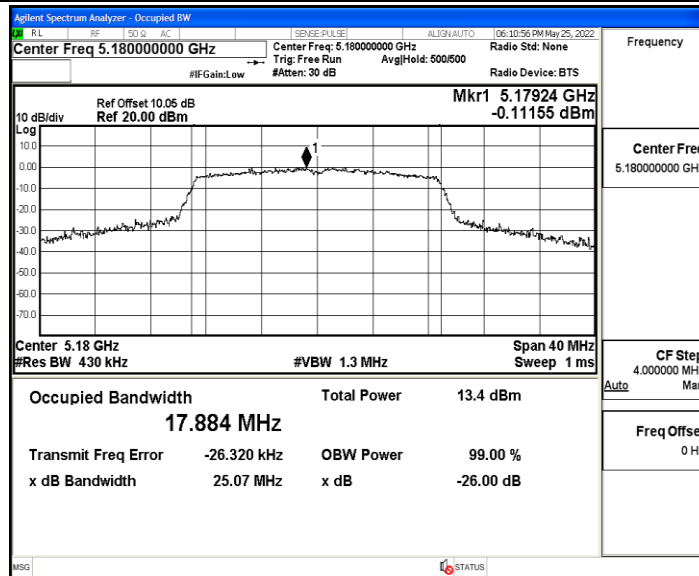
11A\_Ant1\_5200



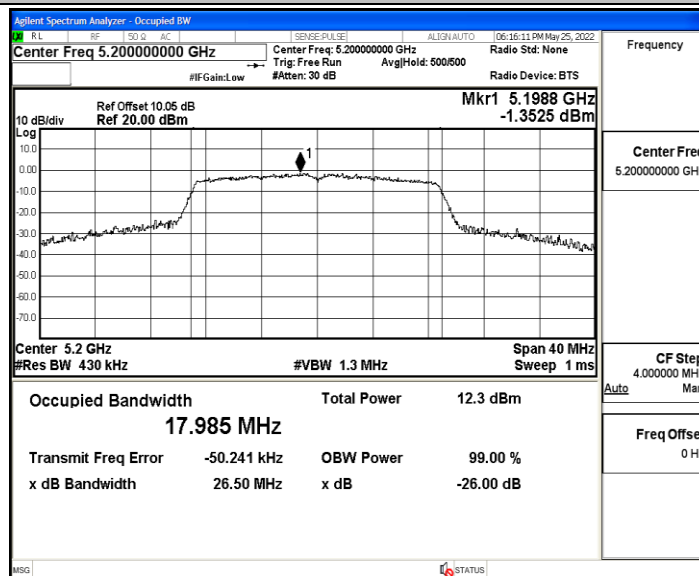
11A\_Ant1\_5240



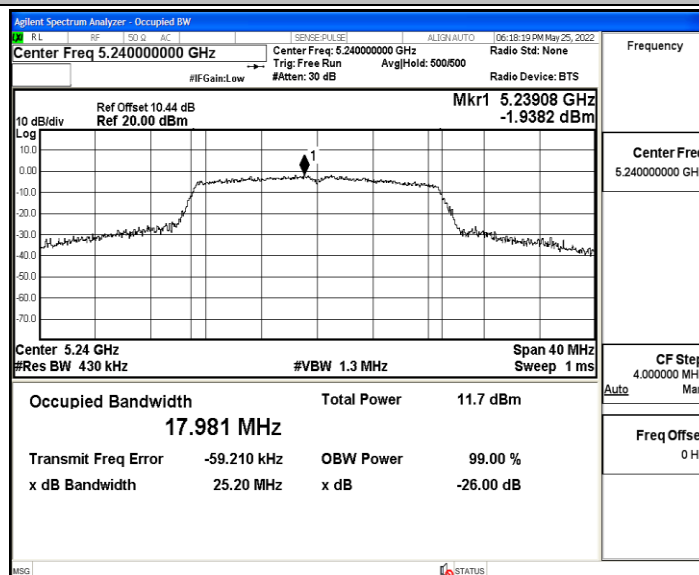
## 11N20MIMO\_Ant1\_5180



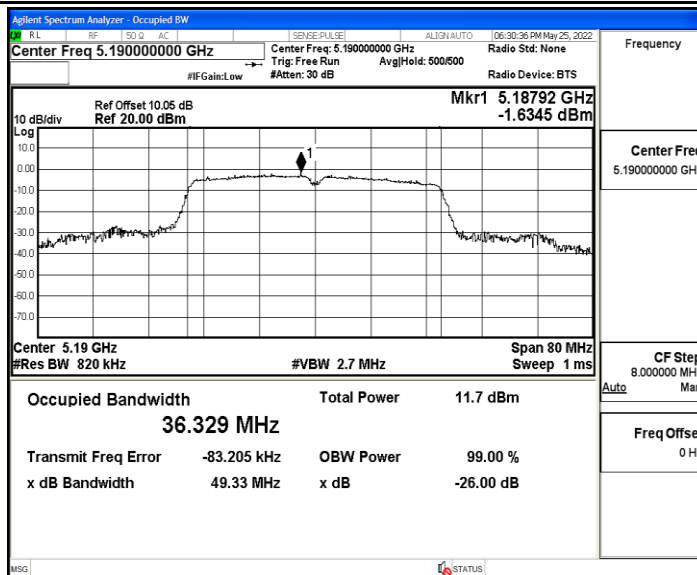
## 11N20MIMO\_Ant1\_5200



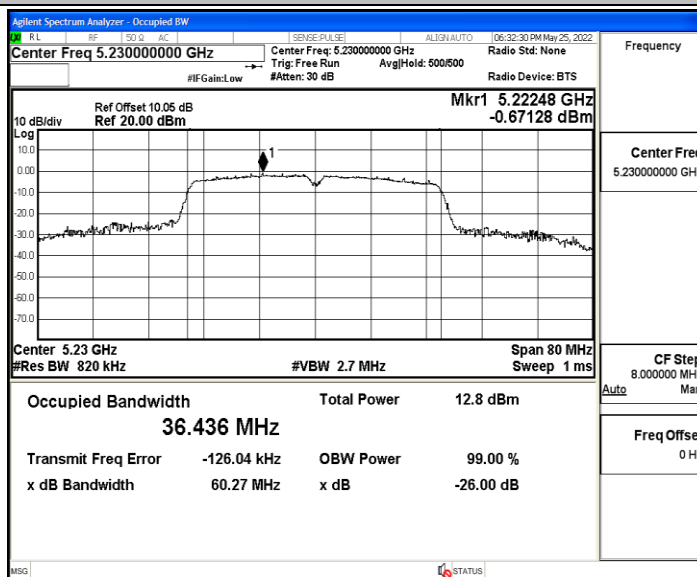
## 11N20MIMO\_Ant1\_5240



## 11N40MIMO\_Ant1\_5190



## 11N40MIMO\_Ant1\_5230



## Appendix B: Maximum conducted output power

### Test Result

| TestMode  | Antenna | Channel | Result[dBm] | Limit[dBm] | Verdict |
|-----------|---------|---------|-------------|------------|---------|
| 11A       | Ant1    | 5180    | 6.72        | ≤23.98     | PASS    |
|           |         | 5200    | 5.40        | ≤23.98     | PASS    |
|           |         | 5240    | 4.81        | ≤23.98     | PASS    |
| 11N20MIMO | Ant1    | 5180    | 6.62        | ≤23.98     | PASS    |
|           |         | 5200    | 5.46        | ≤23.98     | PASS    |
|           |         | 5240    | 4.83        | ≤23.98     | PASS    |
| 11N40MIMO | Ant1    | 5190    | 4.44        | ≤23.98     | PASS    |
|           |         | 5230    | 5.47        | ≤23.98     | PASS    |

Note: The Duty Cycle Factor is compensated in the test result.

## Appendix C: Maximum power spectral density

### Test Result

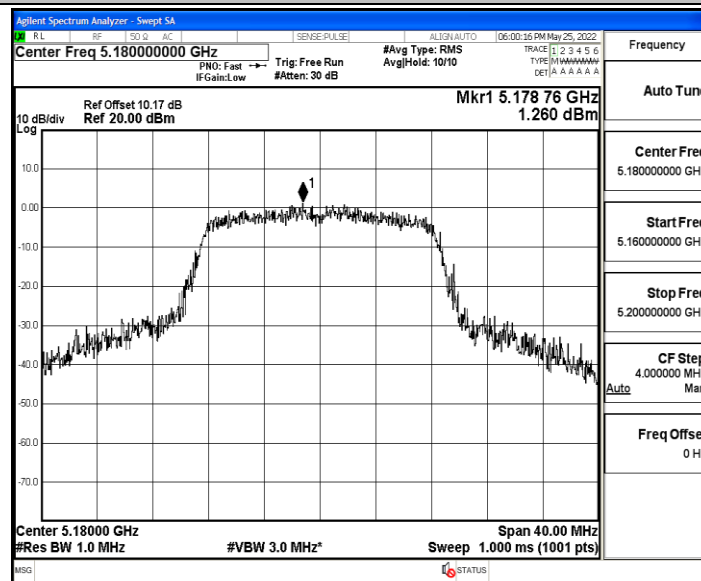
| TestMode  | Antenna | Channel | Result [dBm/MHz] | Limit[dBm/MHz] | Verdict |
|-----------|---------|---------|------------------|----------------|---------|
| 11A       | Ant1    | 5180    | 1.26             | ≤11.00         | PASS    |
|           |         | 5200    | -0.03            | ≤11.00         | PASS    |
|           |         | 5240    | -1.24            | ≤11.00         | PASS    |
| 11N20MIMO | Ant1    | 5180    | 0.81             | ≤11.00         | PASS    |
|           |         | 5200    | -0.21            | ≤11.00         | PASS    |
|           |         | 5240    | -0.52            | ≤11.00         | PASS    |
| 11N40MIMO | Ant1    | 5190    | -4.14            | ≤11.00         | PASS    |
|           |         | 5230    | -3.48            | ≤11.00         | PASS    |

Note: 1.The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.

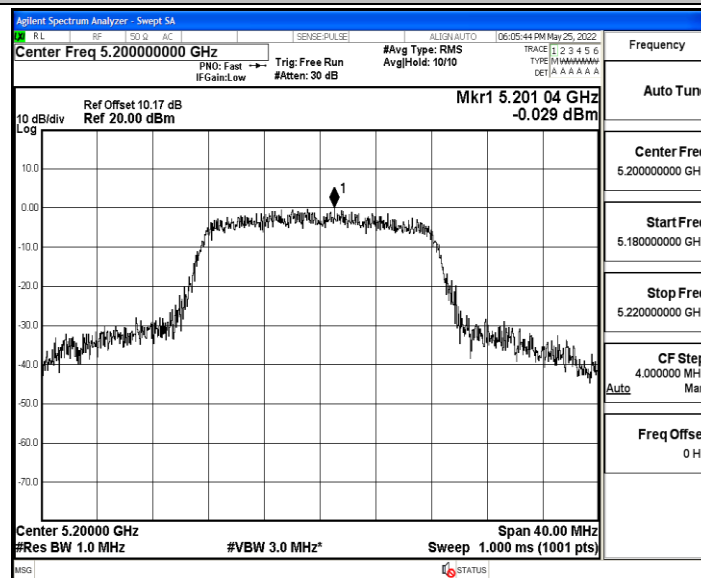
2.The Duty Cycle Factor and RBW Factor is compensated in the graph.

## Test Graphs

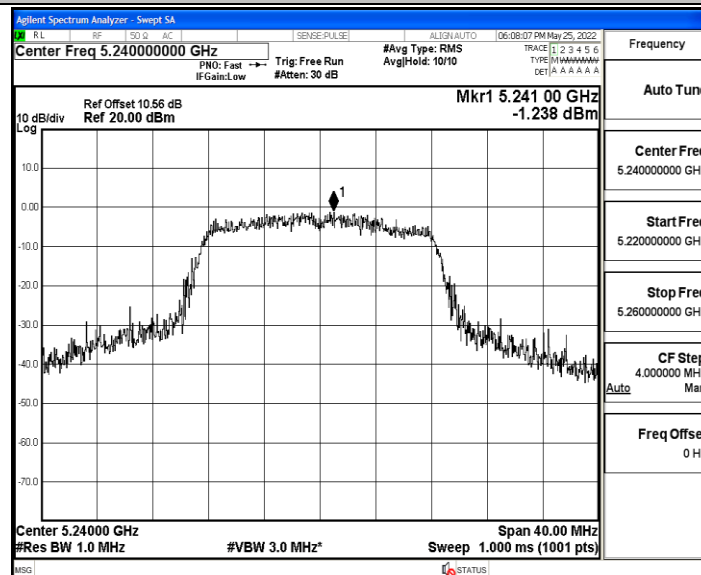
11A\_Ant1\_5180



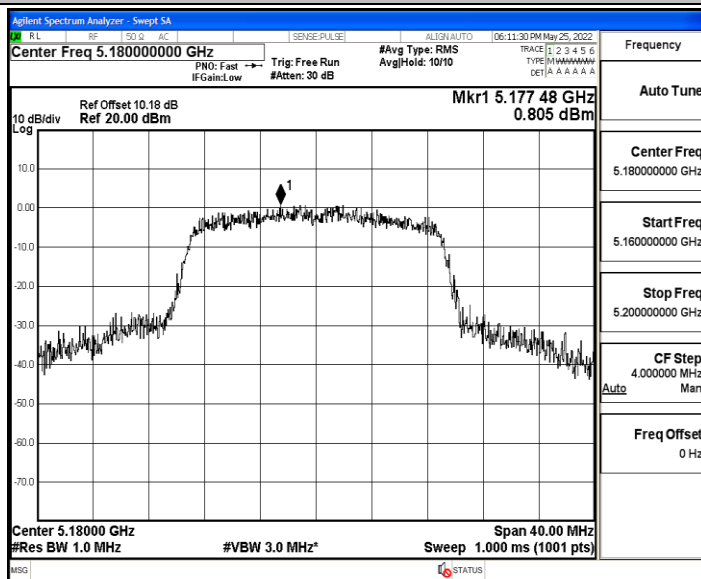
11A\_Ant1\_5200



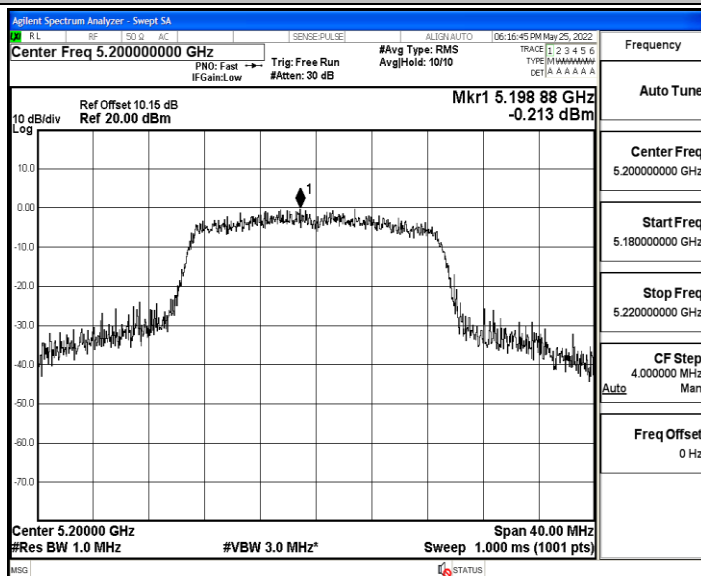
11A\_Ant1\_5240



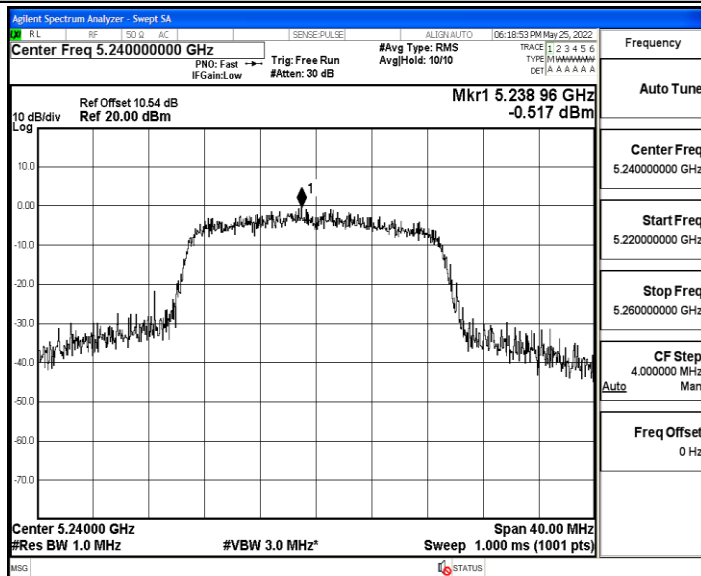
## 11N20MIMO\_Ant1\_5180



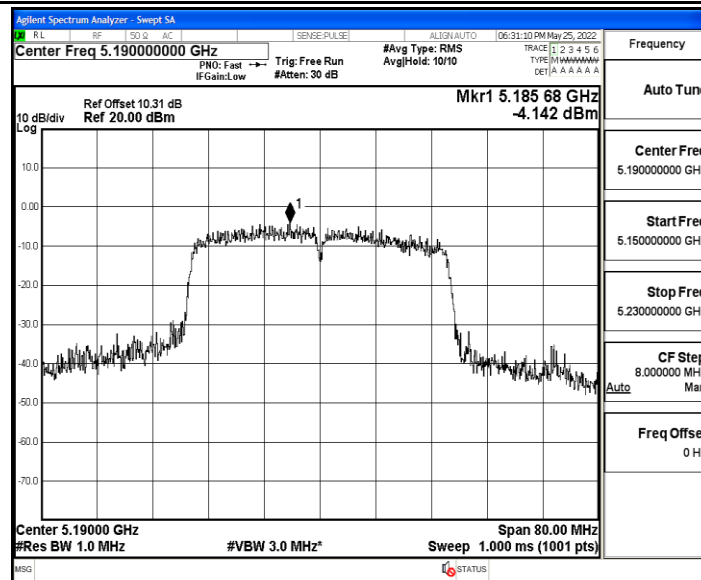
## 11N20MIMO\_Ant1\_5200



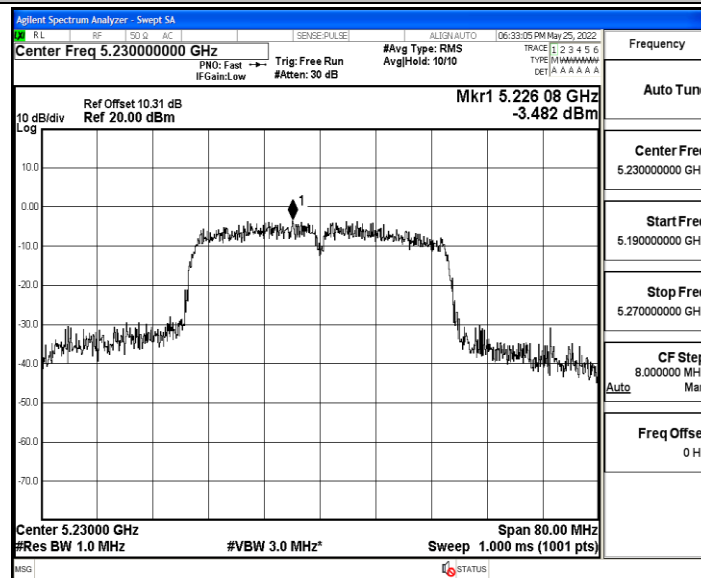
## 11N20MIMO\_Ant1\_5240



## 11N40MIMO\_Ant1\_5190



11N40MIMO\_Ant1\_5230



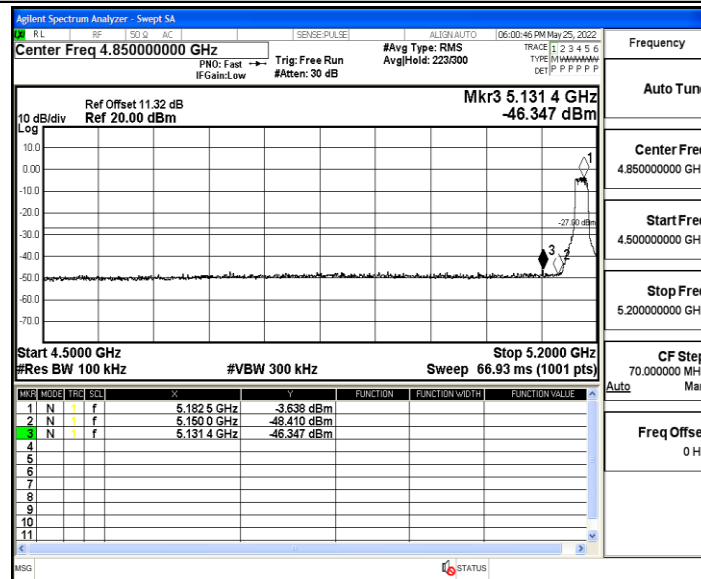
## Appendix D: Band edge measurements

### Test Result

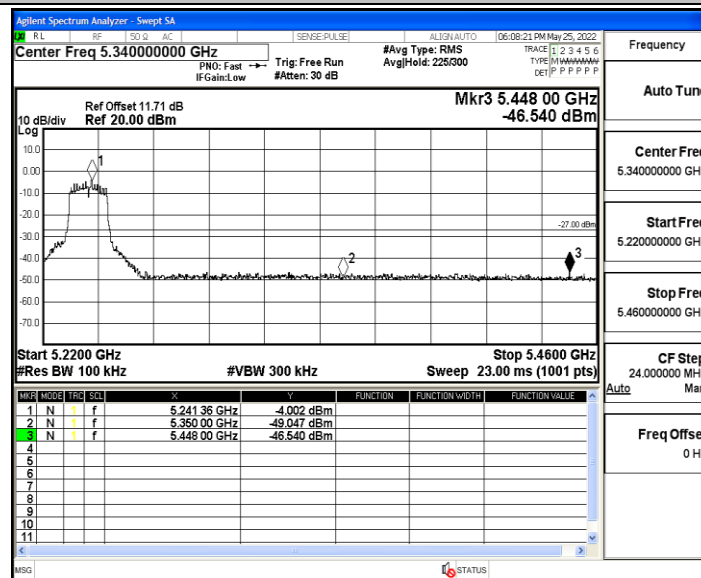
| TestMode  | Antenna | ChName | Channel | Result[dBm] | Limit[dBm] | Verdict |
|-----------|---------|--------|---------|-------------|------------|---------|
| 11A       | Ant1    | Low    | 5180    | -46.35      | $\leq -27$ | PASS    |
|           |         | High   | 5240    | -46.54      | $\leq -27$ | PASS    |
| 11N20MIMO | Ant1    | Low    | 5180    | -46.98      | $\leq -27$ | PASS    |
|           |         | High   | 5240    | -46.39      | $\leq -27$ | PASS    |
| 11N40MIMO | Ant1    | Low    | 5190    | -43.1       | $\leq -27$ | PASS    |
|           |         | High   | 5230    | -47.5       | $\leq -27$ | PASS    |

## Test Graphs

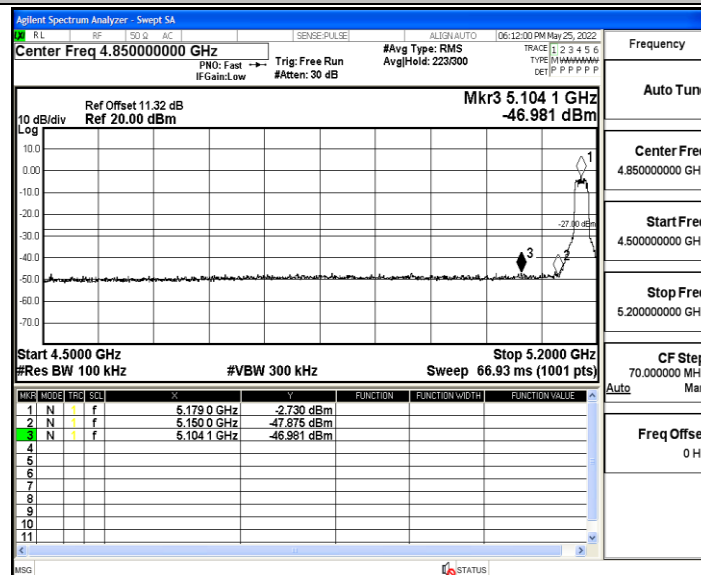
11A\_Ant1\_Low\_5180



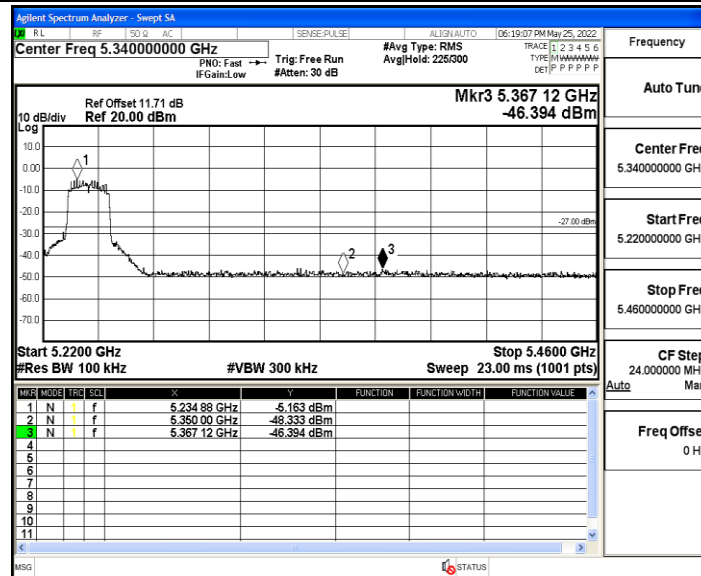
11A\_Ant1\_High\_5240



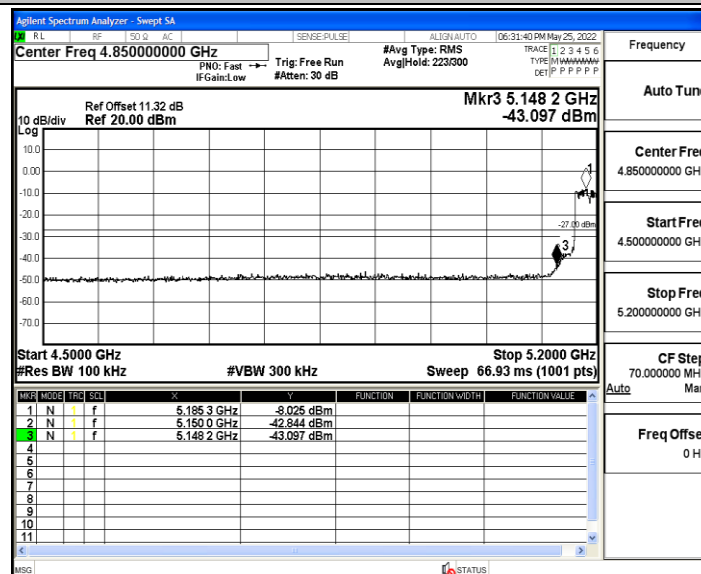
11N20MIMO\_Ant1\_Low\_5180



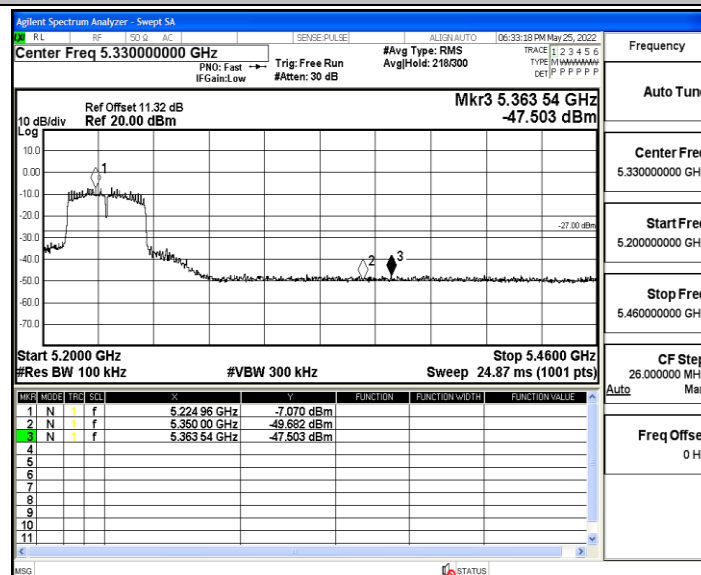
## 11N20MIMO\_Ant1\_High\_5240



## 11N40MIMO\_Ant1\_Low\_5190



## 11N40MIMO\_Ant1\_High\_5230



## Appendix E: Frequency Stability

### Test Result

| Frequency<br>(MHz) | Enviroment<br>Temperature<br>(Degree) | Voltage<br>(VAC) | Measured<br>Frequency<br>(MHz) | Limit Range<br>(MHz) | Test<br>Results |
|--------------------|---------------------------------------|------------------|--------------------------------|----------------------|-----------------|
| 5180               | 20                                    | 4.2              | 5180.005129                    | 5150 – 5250          | PASS            |
| 5180               | 20                                    | 3.5              | 5179.969335                    | 5150 – 5250          | PASS            |
| 5180               | 50                                    | 3.7              | 5180.034933                    | 5150 – 5250          | PASS            |
| 5180               | 40                                    | 3.7              | 5179.961207                    | 5150 – 5250          | PASS            |
| 5180               | 30                                    | 3.7              | 5179.944016                    | 5150 – 5250          | PASS            |
| 5180               | 20                                    | 3.7              | 5179.953366                    | 5150 – 5250          | PASS            |
| 5180               | 10                                    | 3.7              | 5179.926704                    | 5150 – 5250          | PASS            |
| 5180               | 0                                     | 3.7              | 5179.968161                    | 5150 – 5250          | PASS            |
| 5180               | -10                                   | 3.7              | 5180.093015                    | 5150 – 5250          | PASS            |
| 5180               | -20                                   | 3.7              | 5179.977630                    | 5150 – 5250          | PASS            |
| 5180               | -30                                   | 3.7              | 5179.939434                    | 5150 – 5250          | PASS            |

| Frequency<br>(MHz) | Enviroment<br>Temperature<br>(Degree) | Voltage<br>(VAC) | Measured<br>Frequency<br>(MHz) | Limit Range<br>(MHz) | Test<br>Results |
|--------------------|---------------------------------------|------------------|--------------------------------|----------------------|-----------------|
| 5200               | 20                                    | 4.2              | 5199.946412                    | 5150 – 5250          | PASS            |
| 5200               | 20                                    | 3.5              | 5200.094176                    | 5150 – 5250          | PASS            |
| 5200               | 50                                    | 3.7              | 5200.039637                    | 5150 – 5250          | PASS            |
| 5200               | 40                                    | 3.7              | 5199.934464                    | 5150 – 5250          | PASS            |
| 5200               | 30                                    | 3.7              | 5200.037124                    | 5150 – 5250          | PASS            |
| 5200               | 20                                    | 3.7              | 5200.046432                    | 5150 – 5250          | PASS            |
| 5200               | 10                                    | 3.7              | 5199.944760                    | 5150 – 5250          | PASS            |
| 5200               | 0                                     | 3.7              | 5199.947695                    | 5150 – 5250          | PASS            |
| 5200               | -10                                   | 3.7              | 5199.921535                    | 5150 – 5250          | PASS            |
| 5200               | -20                                   | 3.7              | 5200.068697                    | 5150 – 5250          | PASS            |
| 5200               | -30                                   | 3.7              | 5200.019136                    | 5150 – 5250          | PASS            |

| Frequency<br>(MHz) | Enviroment<br>Temperature<br>(Dregree) | Voltage<br>(VAC) | Measured<br>Frequency<br>(MHz) | Limit Range<br>(MHz) | Test<br>Results |
|--------------------|----------------------------------------|------------------|--------------------------------|----------------------|-----------------|
| 5240               | 20                                     | 4.2              | 5240.022422                    | 5150 – 5250          | PASS            |
| 5240               | 20                                     | 3.5              | 5239.979973                    | 5150 – 5250          | PASS            |
| 5240               | 50                                     | 3.7              | 5239.911140                    | 5150 – 5250          | PASS            |
| 5240               | 40                                     | 3.7              | 5240.011221                    | 5150 – 5250          | PASS            |
| 5240               | 30                                     | 3.7              | 5240.076001                    | 5150 – 5250          | PASS            |
| 5240               | 20                                     | 3.7              | 5240.097196                    | 5150 – 5250          | PASS            |
| 5240               | 10                                     | 3.7              | 5239.964981                    | 5150 – 5250          | PASS            |
| 5240               | 0                                      | 3.7              | 5239.934266                    | 5150 – 5250          | PASS            |
| 5240               | -10                                    | 3.7              | 5239.964559                    | 5150 – 5250          | PASS            |
| 5240               | -20                                    | 3.7              | 5240.005501                    | 5150 – 5250          | PASS            |
| 5240               | -30                                    | 3.7              | 5239.949387                    | 5150 – 5250          | PASS            |

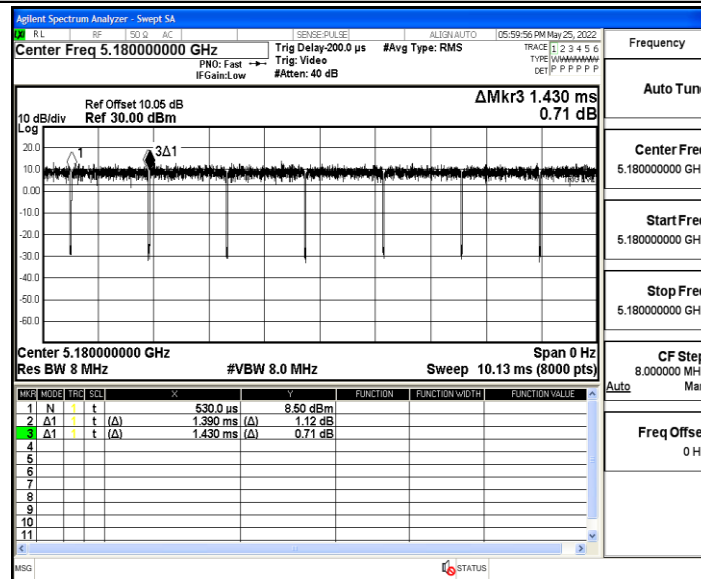
## Appendix F: Duty Cycle

### Test Result

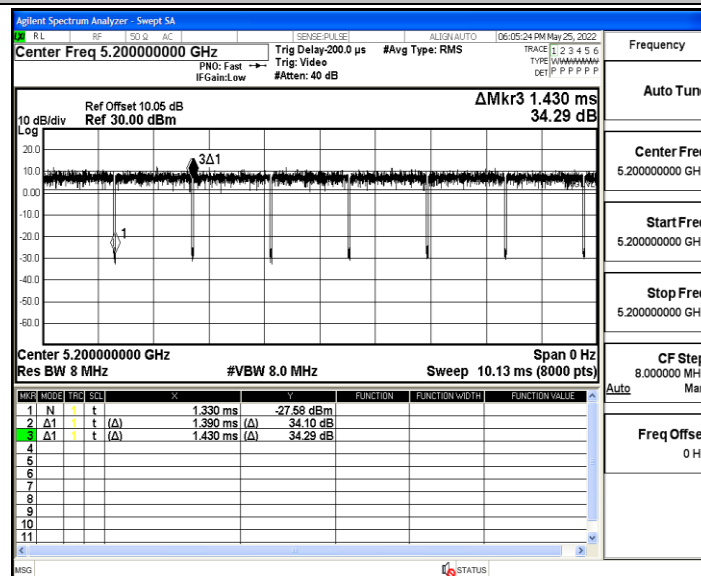
| TestMode  | Antenna | Channel | Transmission<br>Duration [ms] | Transmission<br>Period [ms] | Duty Cycle [%] | 1/T<br>[kHz] |
|-----------|---------|---------|-------------------------------|-----------------------------|----------------|--------------|
| 11A       | Ant1    | 5180    | 1.39                          | 1.43                        | 97.20          | 0.72         |
|           |         | 5200    | 1.39                          | 1.43                        | 97.20          | 0.72         |
|           |         | 5240    | 1.39                          | 1.43                        | 97.20          | 0.72         |
| 11N20MIMO | Ant1    | 5180    | 1.30                          | 1.34                        | 97.01          | 0.77         |
|           |         | 5200    | 1.30                          | 1.33                        | 97.74          | 0.77         |
|           |         | 5240    | 1.30                          | 1.33                        | 97.74          | 0.77         |
| 11N40MIMO | Ant1    | 5190    | 0.65                          | 0.69                        | 94.20          | 1.54         |
|           |         | 5230    | 0.65                          | 0.69                        | 94.20          | 1.54         |

## Test Graphs

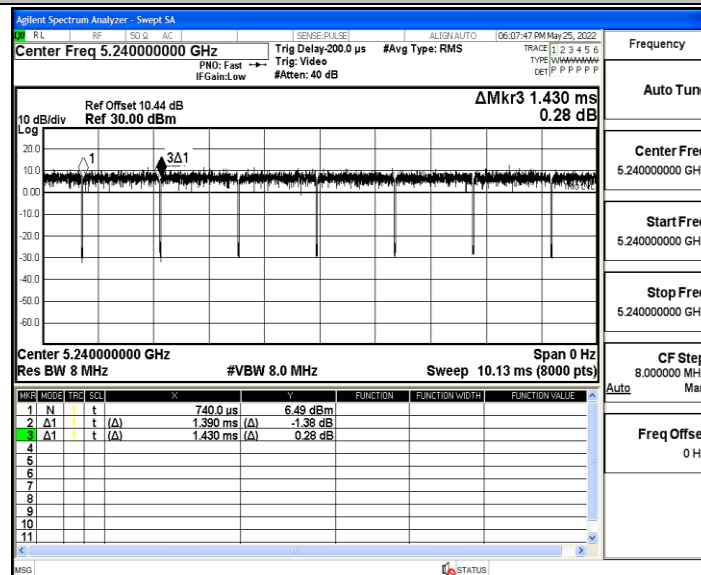
11A\_Ant1\_5180



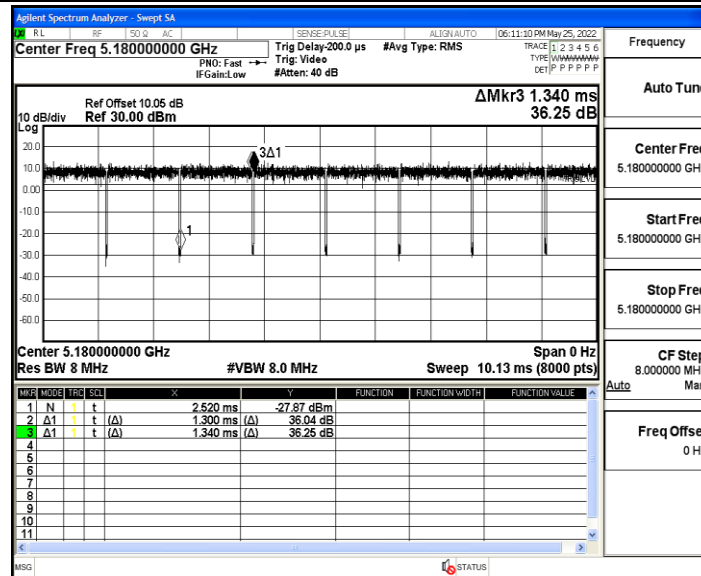
11A\_Ant1\_5200



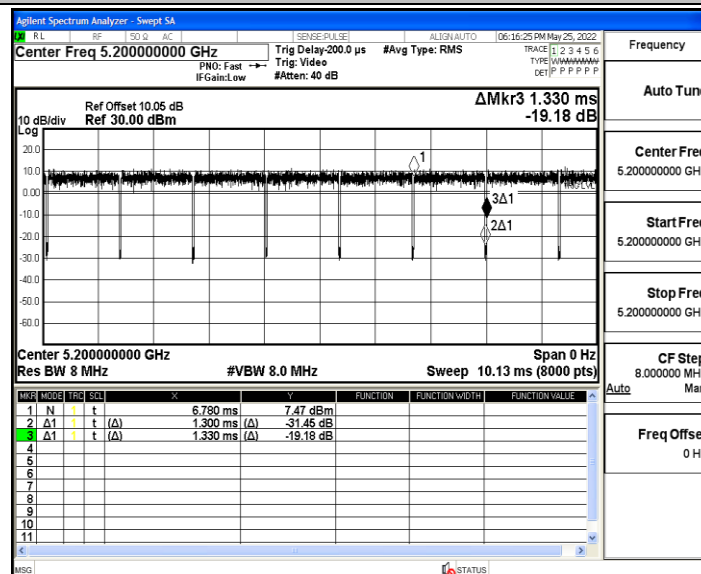
11A\_Ant1\_5240



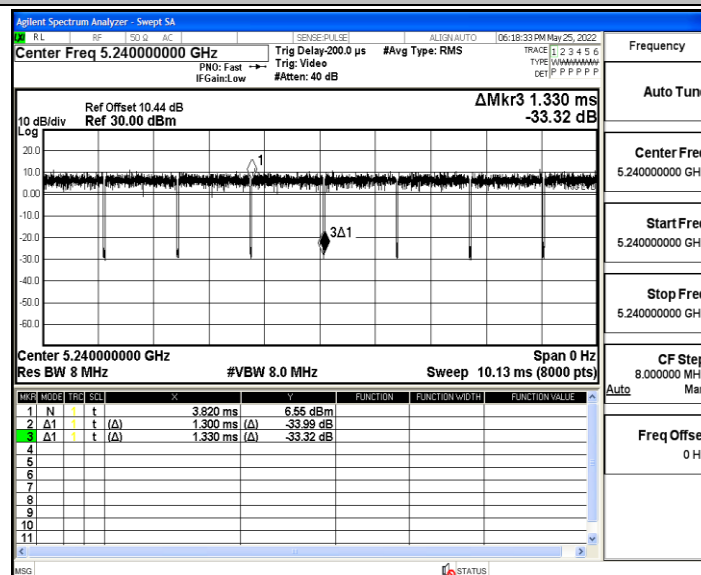
## 11N20MIMO\_Ant1\_5180



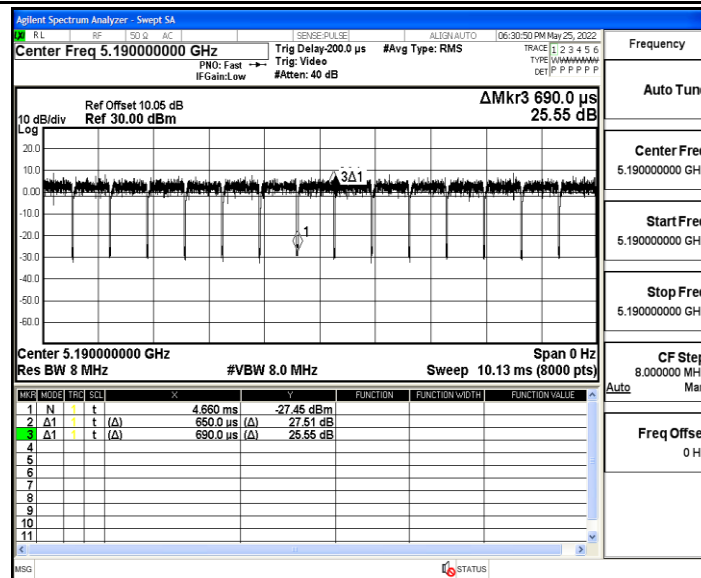
## 11N20MIMO\_Ant1\_5200



## 11N20MIMO\_Ant1\_5240



## 11N40MIMO\_Ant1\_5190



## 11N40MIMO\_Ant1\_5230

