

## RF Test Data for RLAN(5.2G) (Conducted Measurement)

Product Name: Granary Automatic Pet Feeder - Camera Monitoring 5L

Trade Mark: Petlibro

Test Model: PLAF203

FCC ID: 2A3DE-PLAF203

### Environmental Conditions

|                    |           |
|--------------------|-----------|
| Temperature:       | 25.5°C    |
| Relative Humidity: | 55%       |
| ATM Pressure:      | 100.0 kPa |
| Test Engineer:     | Anna Hu   |
| Supervised by:     | Hugo Chen |
| NOTE               | N/A       |

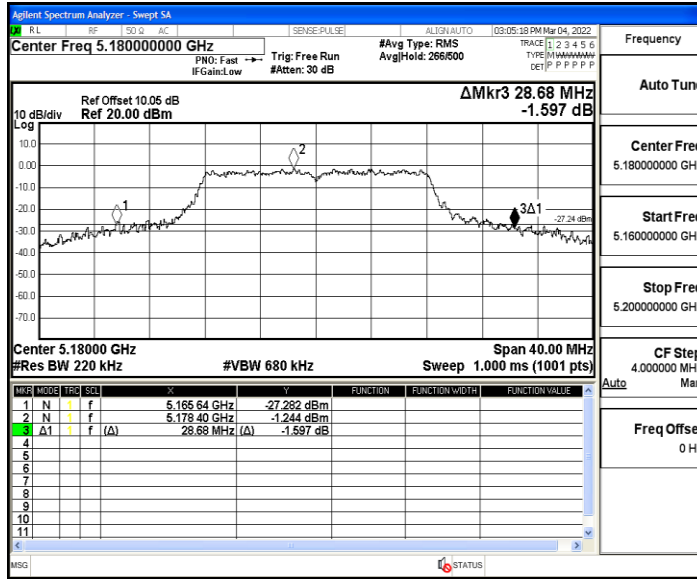
### Appendix A1: Emission Bandwidth

#### Test Result

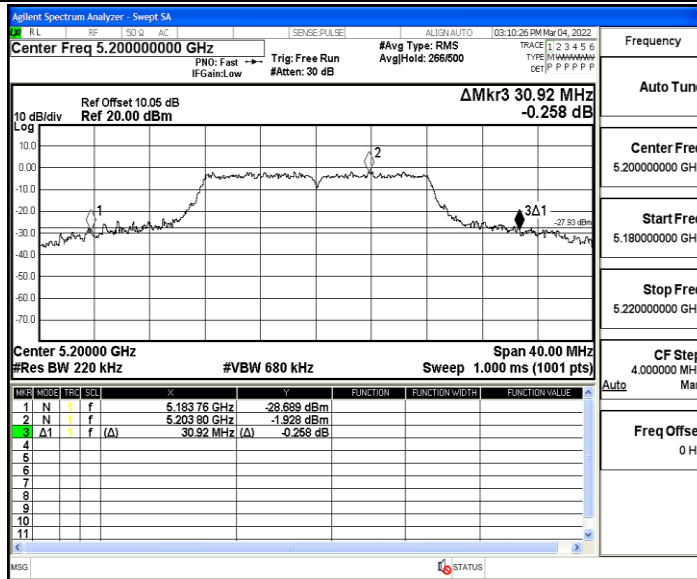
| TestMode  | Antenna | Channel | 26db EBW [MHz] | FL[MHz]  | FH[MHz]  | Limit[MHz] | Verdict |
|-----------|---------|---------|----------------|----------|----------|------------|---------|
| 11A       | Ant1    | 5180    | 28.680         | 5165.640 | 5194.320 | ---        | PASS    |
|           |         | 5200    | 30.920         | 5183.760 | 5214.680 | ---        | PASS    |
|           |         | 5240    | 28.120         | 5225.480 | 5253.600 | ---        | PASS    |
| 11N20SISO | Ant1    | 5180    | 29.240         | 5165.560 | 5194.800 | ---        | PASS    |
|           |         | 5200    | 31.560         | 5184.880 | 5216.440 | ---        | PASS    |
|           |         | 5240    | 32.680         | 5223.800 | 5256.480 | ---        | PASS    |
| 11N40SISO | Ant1    | 5190    | 40.640         | 5169.600 | 5210.240 | ---        | PASS    |
|           |         | 5230    | 40.880         | 5209.760 | 5250.640 | ---        | PASS    |

### Test Graphs

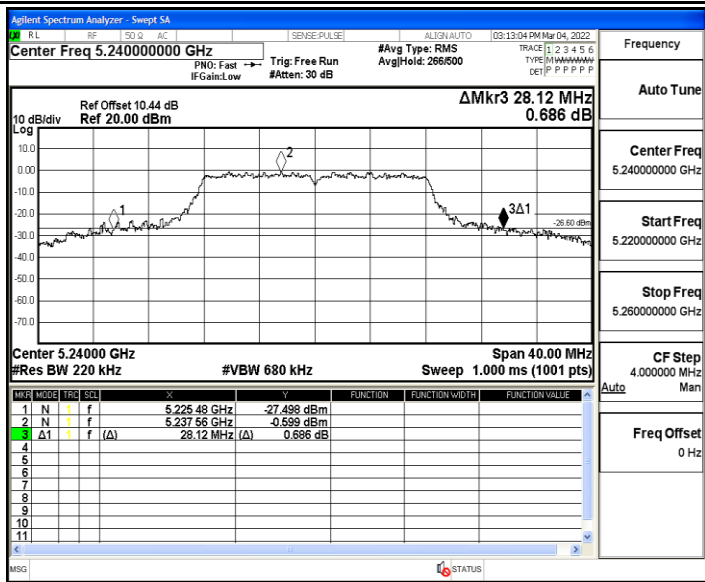
11A\_Ant1\_5180



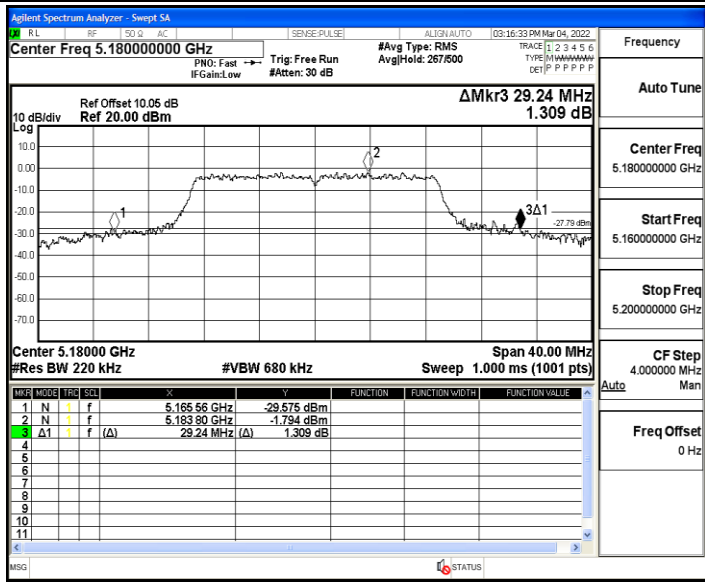
11A\_Ant1\_5200



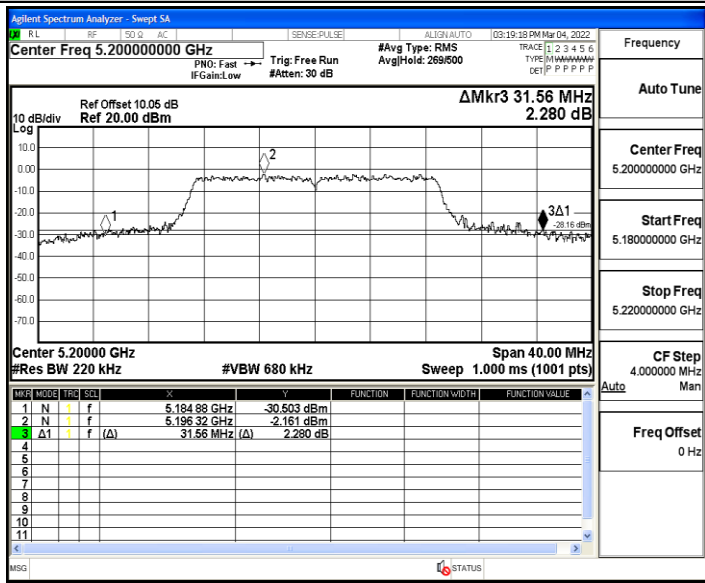
11A\_Ant1\_5240



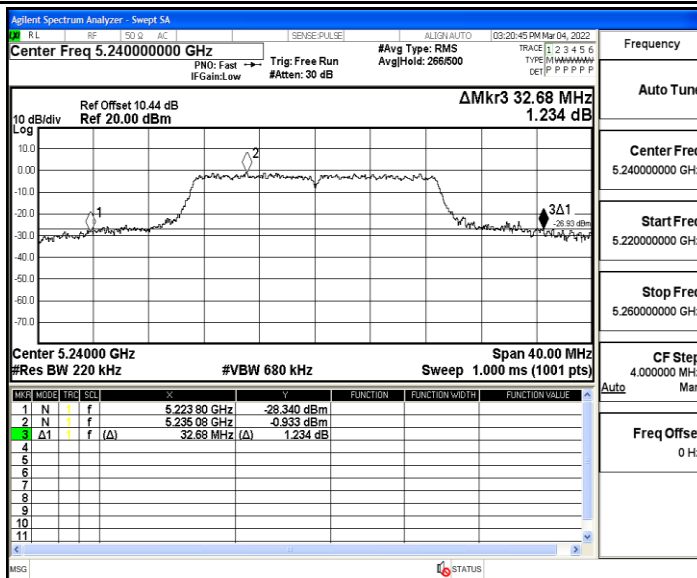
11N20SISO\_Ant1\_5180



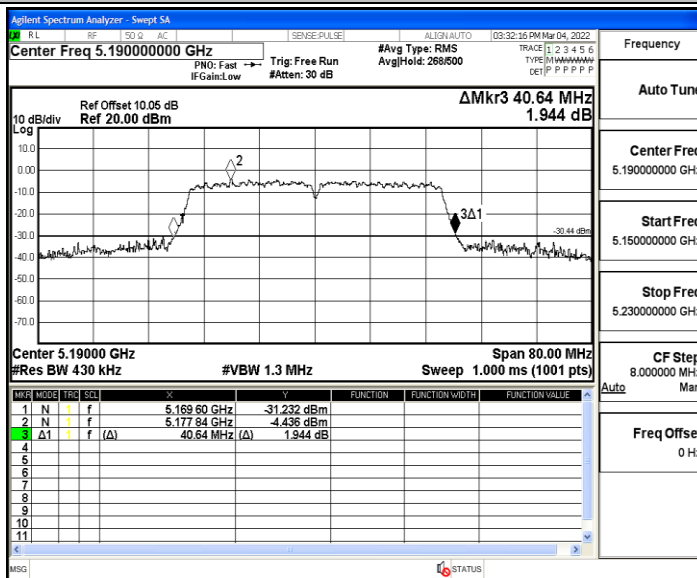
11N20SISO\_Ant1\_5200



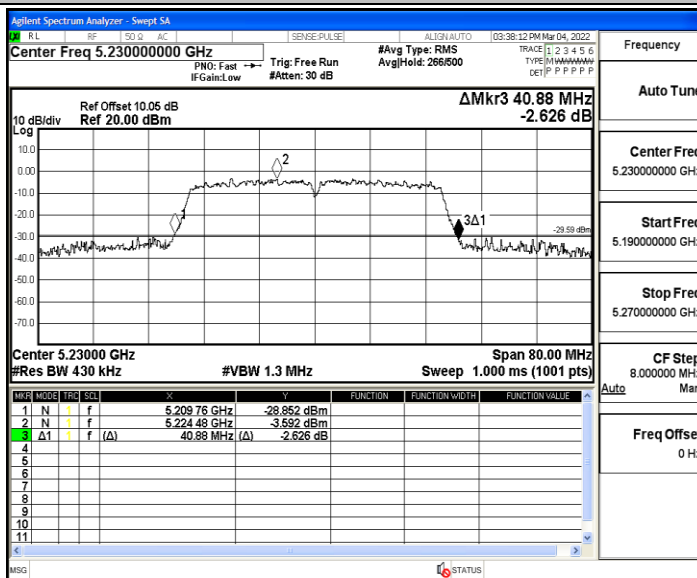
11N20SISO\_Ant1\_5240



11N40SISO\_Ant1\_5190



11N40SISO\_Ant1\_5230



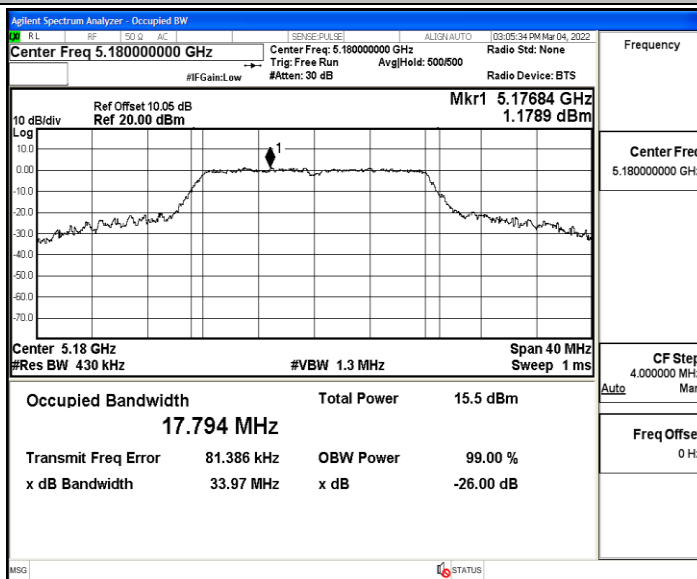
## Appendix A2: Occupied channel bandwidth

### Test Result

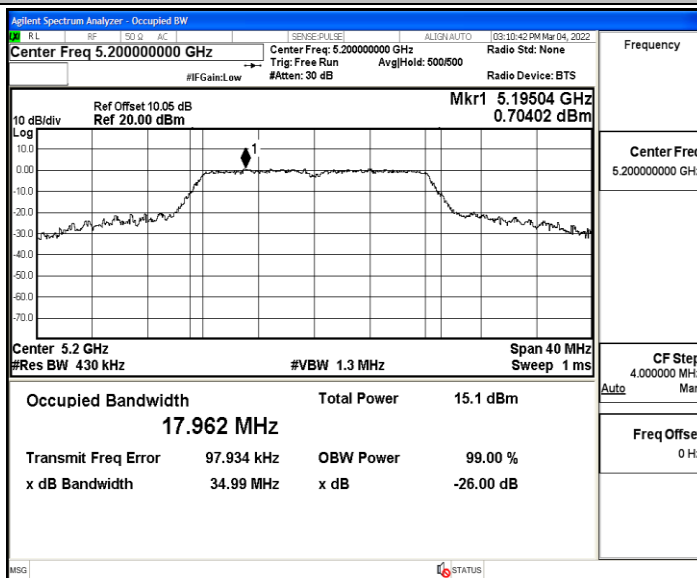
| TestMode  | Antenna | Channel | OCB [MHz] | FL[MHz]  | FH[MHz]  | Limit[MHz] | Verdict |
|-----------|---------|---------|-----------|----------|----------|------------|---------|
| 11A       | Ant1    | 5180    | 17.794    | 5171.184 | 5188.978 | ---        | PASS    |
|           |         | 5200    | 17.962    | 5191.117 | 5209.079 | ---        | PASS    |
|           |         | 5240    | 17.936    | 5231.042 | 5248.978 | ---        | PASS    |
| 11N20SISO | Ant1    | 5180    | 18.505    | 5170.864 | 5189.369 | ---        | PASS    |
|           |         | 5200    | 18.738    | 5190.760 | 5209.498 | ---        | PASS    |
|           |         | 5240    | 18.744    | 5230.711 | 5249.455 | ---        | PASS    |
| 11N40SISO | Ant1    | 5190    | 36.703    | 5171.789 | 5208.492 | ---        | PASS    |
|           |         | 5230    | 36.672    | 5211.793 | 5248.465 | ---        | PASS    |

Test Graphs

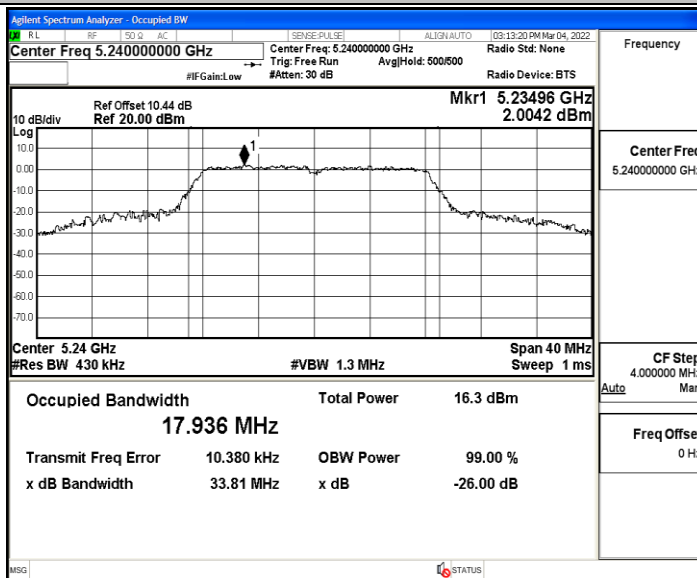
11A\_Ant1\_5180



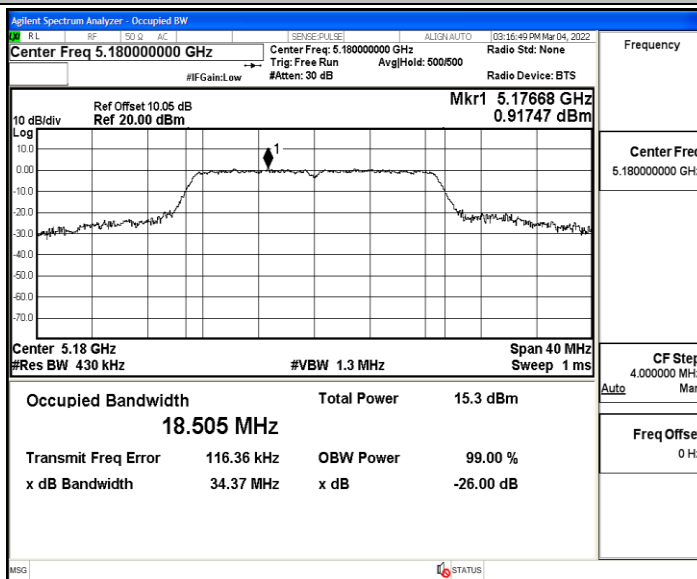
11A\_Ant1\_5200



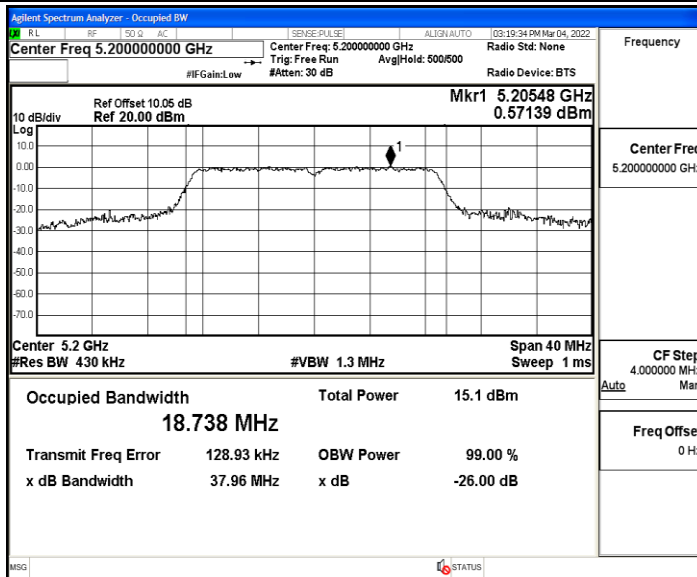
11A\_Ant1\_5240



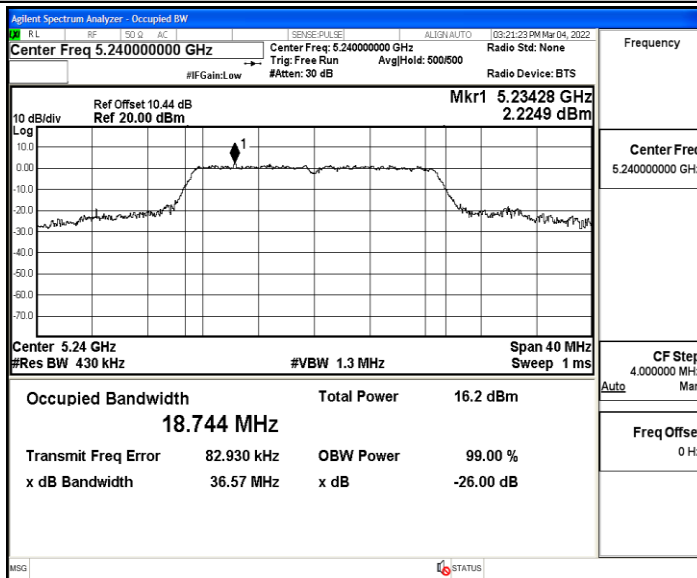
11N20SISO\_Ant1\_5180



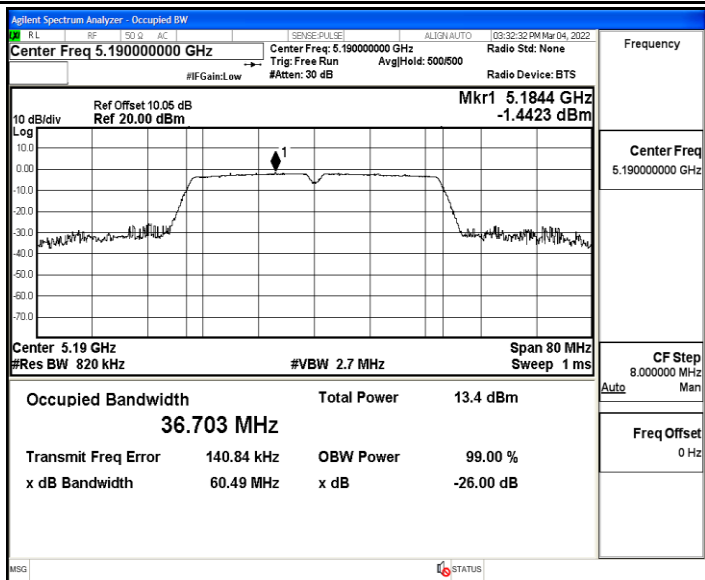
11N20SISO\_Ant1\_5200



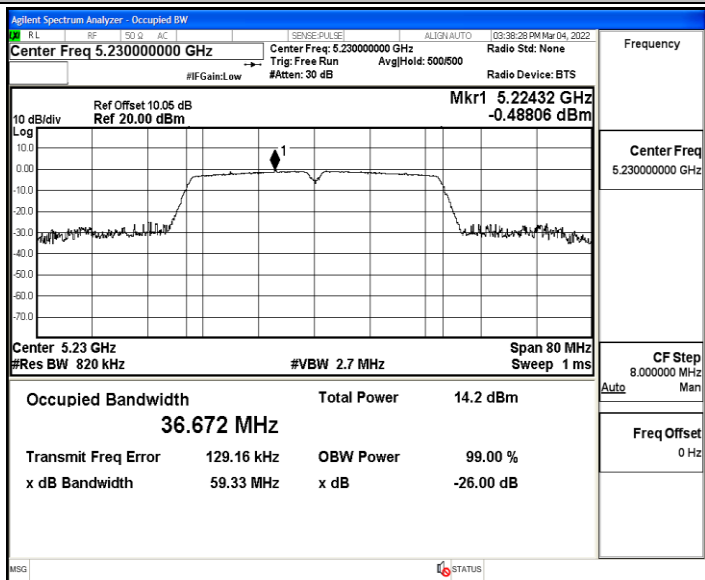
11N20SISO\_Ant1\_5240



11N40SISO\_Ant1\_5190



11N40SISO\_Ant1\_5230





## Appendix B: Maximum conducted output power

### Test Result

| TestMode  | Antenna | Channel | Result[dBm] | Limit[dBm] | Verdict |
|-----------|---------|---------|-------------|------------|---------|
| 11A       | Ant1    | 5180    | 8.74        | ≤23.98     | PASS    |
|           |         | 5200    | 8.39        | ≤23.98     | PASS    |
|           |         | 5240    | 9.61        | ≤23.98     | PASS    |
| 11N20SISO | Ant1    | 5180    | 8.44        | ≤23.98     | PASS    |
|           |         | 5200    | 8.25        | ≤23.98     | PASS    |
|           |         | 5240    | 9.44        | ≤23.98     | PASS    |
| 11N40SISO | Ant1    | 5190    | 6.17        | ≤23.98     | PASS    |
|           |         | 5230    | 6.98        | ≤23.98     | PASS    |

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

## Appendix C: Maximum power spectral density

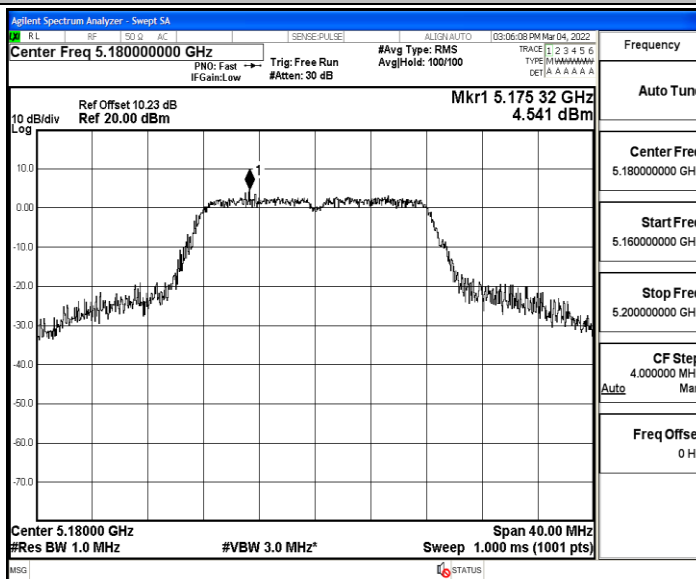
### Test Result

| TestMode  | Antenna | Channel | Result [dBm/MHz] | Limit[dBm/MHz] | Verdict |
|-----------|---------|---------|------------------|----------------|---------|
| 11A       | Ant1    | 5180    | 4.54             | ≤11            | PASS    |
|           |         | 5200    | 3.58             | ≤11            | PASS    |
|           |         | 5240    | 5.37             | ≤11            | PASS    |
| 11N20SISO | Ant1    | 5180    | 2.55             | ≤11            | PASS    |
|           |         | 5200    | 1.83             | ≤11            | PASS    |
|           |         | 5240    | 3.23             | ≤11            | PASS    |
| 11N40SISO | Ant1    | 5190    | -2.85            | ≤11            | PASS    |
|           |         | 5230    | -1.85            | ≤11            | PASS    |

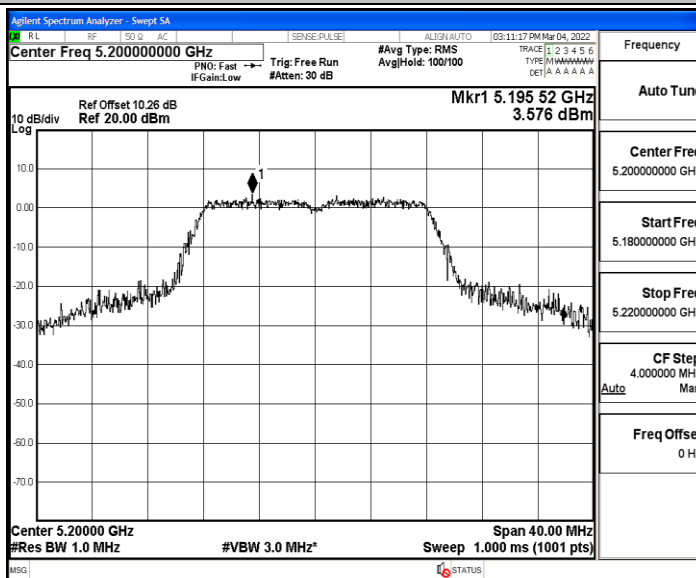
Note: 1.The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.  
2.The Duty Cycle Factor and RBW Factor is compensated in the graph.

### Test Graphs

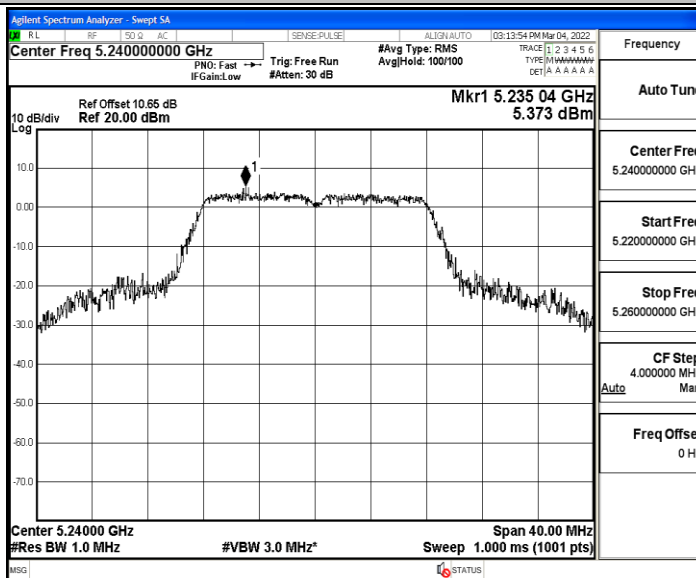
11A\_Ant1\_5180



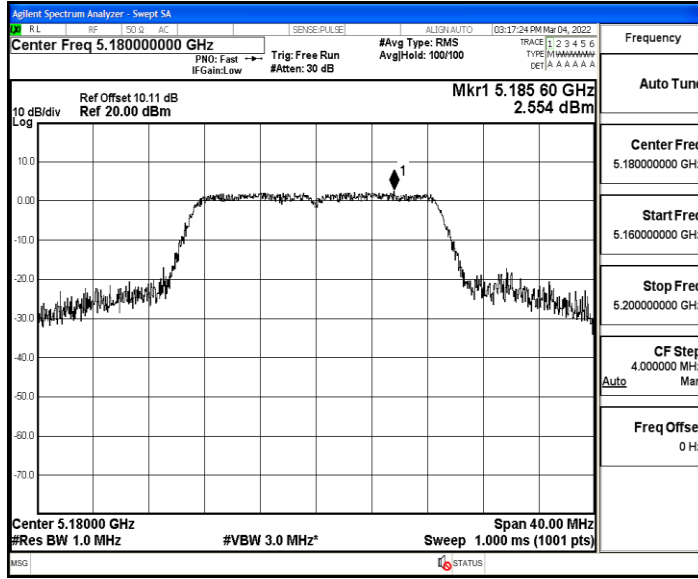
11A\_Ant1\_5200



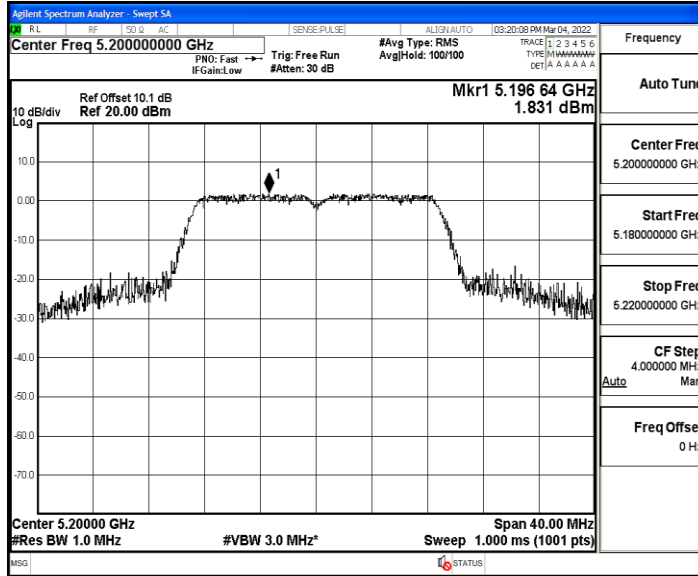
11A\_Ant1\_5240



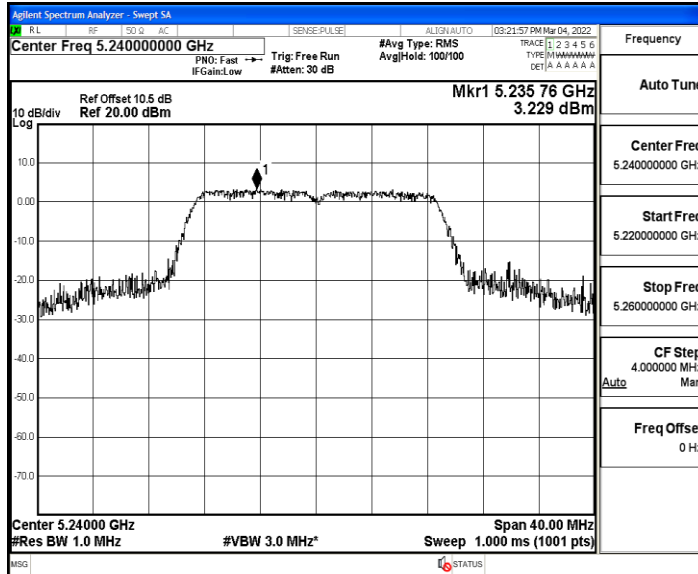
11N20SISO\_Ant1\_5180



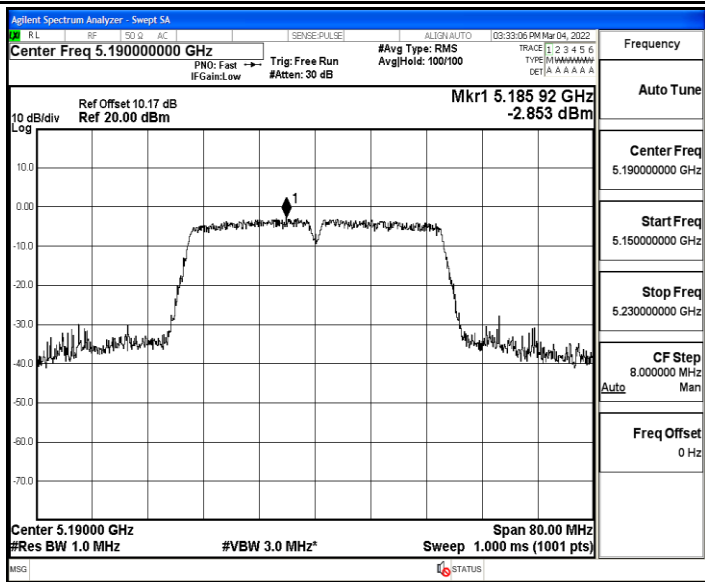
11N20SISO\_Ant1\_5200



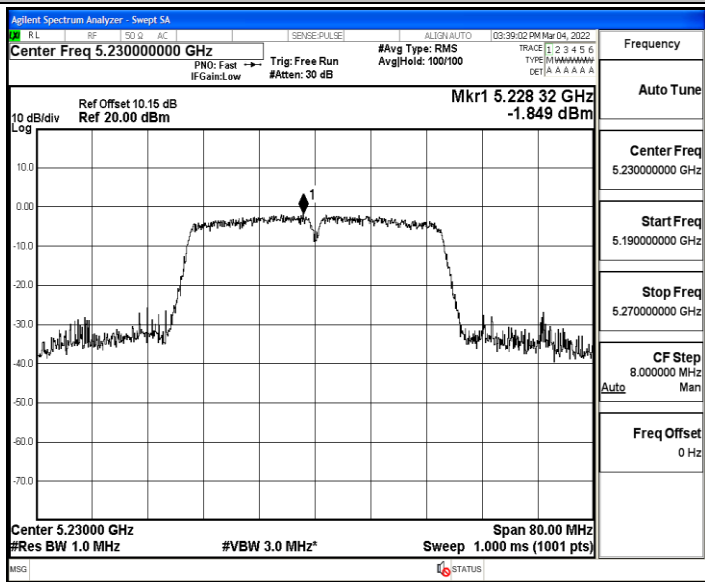
11N20SISO\_Ant1\_5240



11N40SISO\_Ant1\_5190



11N40SISO\_Ant1\_5230



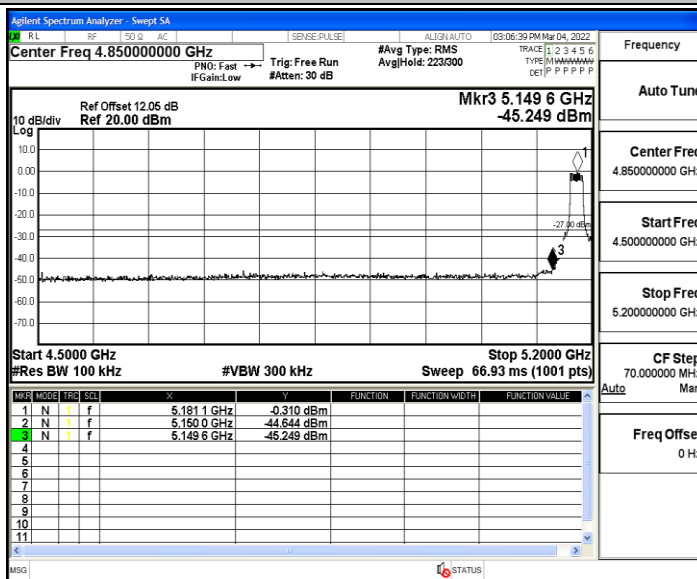
## Appendix D: Band edge measurements

### Test Result

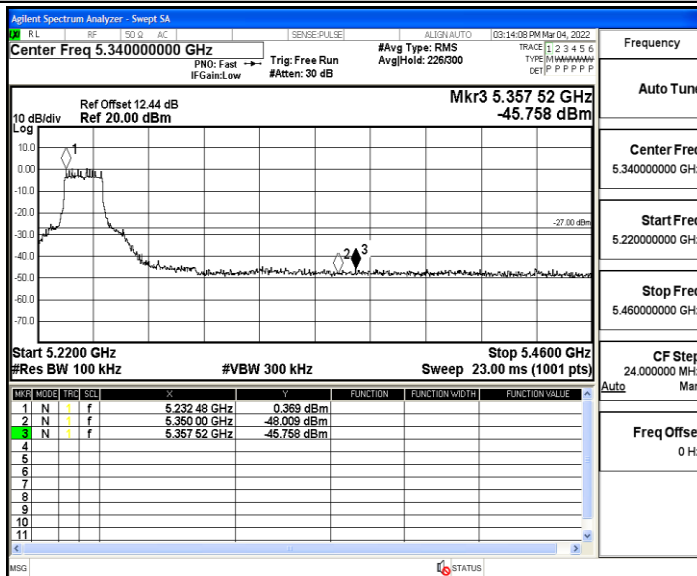
| TestMode  | Antenna | ChName | Channel | Result[dBm] | Limit[dBm] | Verdict |
|-----------|---------|--------|---------|-------------|------------|---------|
| 11A       | Ant1    | Low    | 5180    | -45.25      | $\leq -27$ | PASS    |
|           |         | High   | 5240    | -45.76      | $\leq -27$ | PASS    |
| 11N20SISO | Ant1    | Low    | 5180    | -45.2       | $\leq -27$ | PASS    |
|           |         | High   | 5240    | -45.15      | $\leq -27$ | PASS    |
| 11N40SISO | Ant1    | Low    | 5190    | -43.09      | $\leq -27$ | PASS    |
|           |         | High   | 5230    | -45.73      | $\leq -27$ | PASS    |

Test Graphs

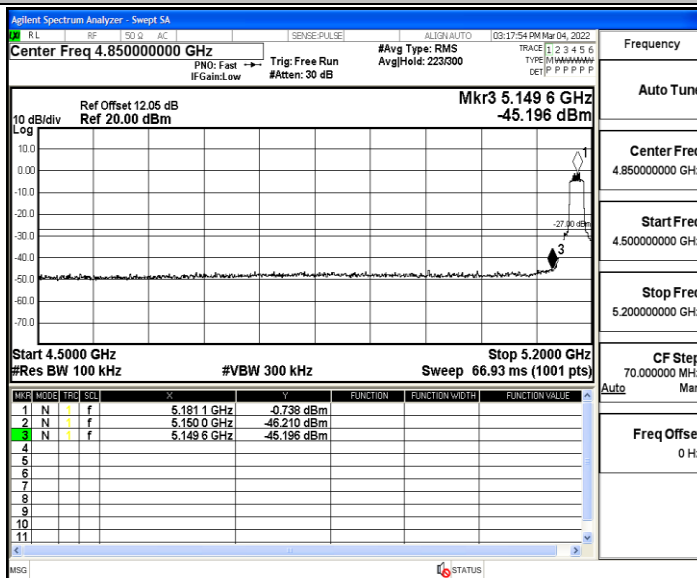
11A\_Ant1\_Low\_5180



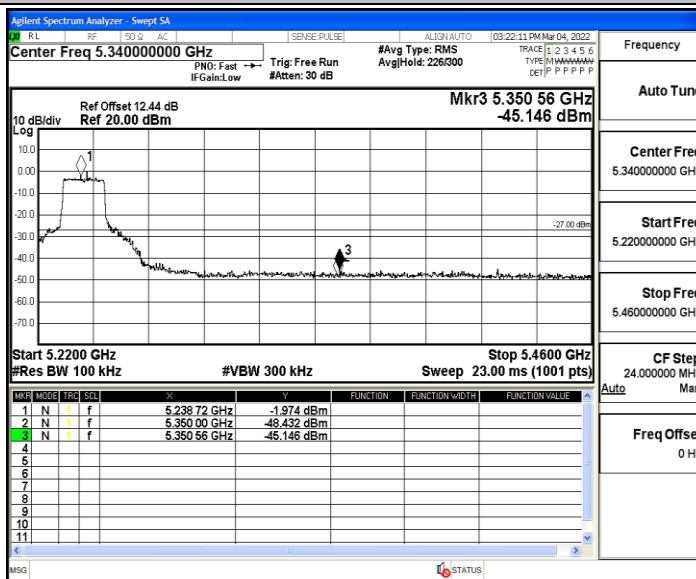
11A\_Ant1\_High\_5240



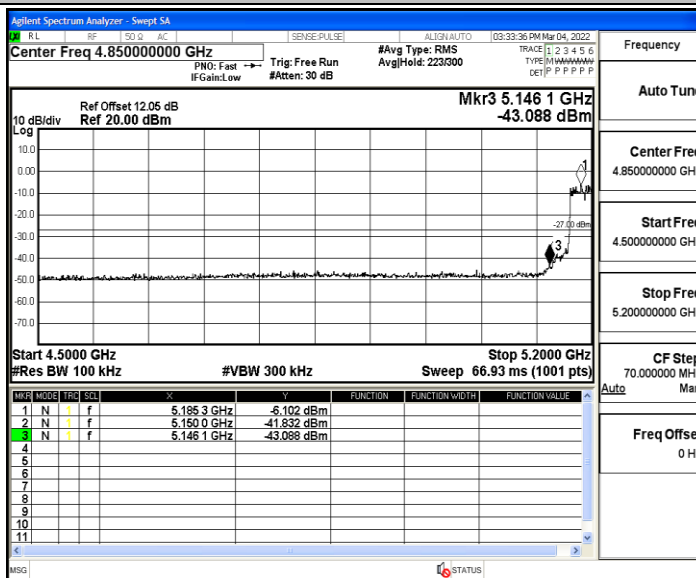
11N20SISO Ant1\_Low 5180



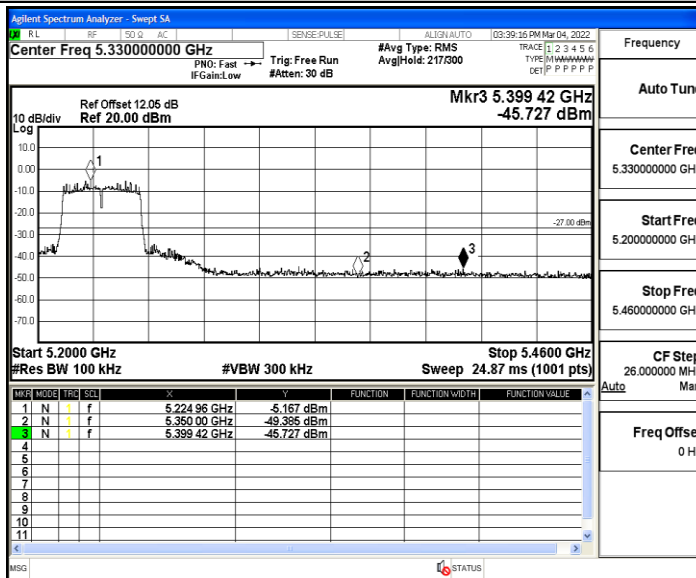
11N20SISO\_Ant1\_High\_5240



11N40SISO\_Ant1\_Low\_5190



11N40SISO\_Ant1\_High\_5230





## Appendix E: Frequency Stability

### Test Result

| Frequency (MHz) | Environment Temperature (Degree) | Voltage (VAC) | Measured Frequency (MHz) | Limit Range (MHz) | Test Results |
|-----------------|----------------------------------|---------------|--------------------------|-------------------|--------------|
| 5180            | 20                               | 132           | 5180.013578              | 5150 – 5250       | PASS         |
| 5180            | 20                               | 108           | 5180.020035              | 5150 – 5250       | PASS         |
| 5180            | 50                               | 120           | 5180.056597              | 5150 – 5250       | PASS         |
| 5180            | 40                               | 120           | 5179.915047              | 5150 – 5250       | PASS         |
| 5180            | 30                               | 120           | 5180.053699              | 5150 – 5250       | PASS         |
| 5180            | 20                               | 120           | 5180.019462              | 5150 – 5250       | PASS         |
| 5180            | 10                               | 120           | 5179.974730              | 5150 – 5250       | PASS         |
| 5180            | 0                                | 120           | 5180.060654              | 5150 – 5250       | PASS         |
| 5180            | -10                              | 120           | 5179.983011              | 5150 – 5250       | PASS         |
| 5180            | -20                              | 120           | 5179.976904              | 5150 – 5250       | PASS         |
| 5180            | -30                              | 120           | 5179.937857              | 5150 – 5250       | PASS         |

| Frequency (MHz) | Environment Temperature (Degree) | Voltage (VAC) | Measured Frequency (MHz) | Limit Range (MHz) | Test Results |
|-----------------|----------------------------------|---------------|--------------------------|-------------------|--------------|
| 5200            | 20                               | 132           | 5200.068999              | 5150 – 5250       | PASS         |
| 5200            | 20                               | 108           | 5200.080479              | 5150 – 5250       | PASS         |
| 5200            | 50                               | 120           | 5200.036712              | 5150 – 5250       | PASS         |
| 5200            | 40                               | 120           | 5199.925854              | 5150 – 5250       | PASS         |
| 5200            | 30                               | 120           | 5199.957587              | 5150 – 5250       | PASS         |
| 5200            | 20                               | 120           | 5200.085441              | 5150 – 5250       | PASS         |
| 5200            | 10                               | 120           | 5200.092410              | 5150 – 5250       | PASS         |
| 5200            | 0                                | 120           | 5199.981830              | 5150 – 5250       | PASS         |
| 5200            | -10                              | 120           | 5200.040970              | 5150 – 5250       | PASS         |
| 5200            | -20                              | 120           | 5200.039302              | 5150 – 5250       | PASS         |
| 5200            | -30                              | 120           | 5200.002117              | 5150 – 5250       | PASS         |

| Frequency (MHz) | Environment Temperature (Degree) | Voltage (VAC) | Measured Frequency (MHz) | Limit Range (MHz) | Test Results |
|-----------------|----------------------------------|---------------|--------------------------|-------------------|--------------|
| 5240            | 20                               | 132           | 5239.966544              | 5150 – 5250       | PASS         |
| 5240            | 20                               | 108           | 5239.999542              | 5150 – 5250       | PASS         |
| 5240            | 50                               | 120           | 5240.045189              | 5150 – 5250       | PASS         |
| 5240            | 40                               | 120           | 5239.909195              | 5150 – 5250       | PASS         |
| 5240            | 30                               | 120           | 5240.070417              | 5150 – 5250       | PASS         |
| 5240            | 20                               | 120           | 5240.050261              | 5150 – 5250       | PASS         |
| 5240            | 10                               | 120           | 5239.992319              | 5150 – 5250       | PASS         |
| 5240            | 0                                | 120           | 5240.089444              | 5150 – 5250       | PASS         |
| 5240            | -10                              | 120           | 5240.089597              | 5150 – 5250       | PASS         |
| 5240            | -20                              | 120           | 5239.926345              | 5150 – 5250       | PASS         |
| 5240            | -30                              | 120           | 5239.950203              | 5150 – 5250       | PASS         |

| Frequency (MHz) | Environment Temperature (Degree) | Voltage (VAC) | Measured Frequency (MHz) | Limit Range (MHz) | Test Results |
|-----------------|----------------------------------|---------------|--------------------------|-------------------|--------------|
| 5190            | 20                               | 132           | 5190.015723              | 5150 – 5250       | PASS         |
| 5190            | 20                               | 108           | 5189.945899              | 5150 – 5250       | PASS         |
| 5190            | 50                               | 120           | 5189.903399              | 5150 – 5250       | PASS         |
| 5190            | 40                               | 120           | 5190.011648              | 5150 – 5250       | PASS         |
| 5190            | 30                               | 120           | 5190.085576              | 5150 – 5250       | PASS         |
| 5190            | 20                               | 120           | 5189.967763              | 5150 – 5250       | PASS         |
| 5190            | 10                               | 120           | 5190.048937              | 5150 – 5250       | PASS         |
| 5190            | 0                                | 120           | 5189.964532              | 5150 – 5250       | PASS         |
| 5190            | -10                              | 120           | 5189.937737              | 5150 – 5250       | PASS         |
| 5190            | -20                              | 120           | 5189.977971              | 5150 – 5250       | PASS         |
| 5190            | -30                              | 120           | 5189.930331              | 5150 – 5250       | PASS         |

| Frequency (MHz) | Environment Temperature (Degree) | Voltage (VAC) | Measured Frequency (MHz) | Limit Range (MHz) | Test Results |
|-----------------|----------------------------------|---------------|--------------------------|-------------------|--------------|
| 5230            | 20                               | 132           | 5229.908240              | 5150 – 5250       | PASS         |
| 5230            | 20                               | 108           | 5229.971353              | 5150 – 5250       | PASS         |
| 5230            | 50                               | 120           | 5230.062025              | 5150 – 5250       | PASS         |
| 5230            | 40                               | 120           | 5229.917389              | 5150 – 5250       | PASS         |
| 5230            | 30                               | 120           | 5229.990066              | 5150 – 5250       | PASS         |
| 5230            | 20                               | 120           | 5229.952593              | 5150 – 5250       | PASS         |
| 5230            | 10                               | 120           | 5229.942192              | 5150 – 5250       | PASS         |
| 5230            | 0                                | 120           | 5230.099458              | 5150 – 5250       | PASS         |
| 5230            | -10                              | 120           | 5230.008863              | 5150 – 5250       | PASS         |
| 5230            | -20                              | 120           | 5230.022739              | 5150 – 5250       | PASS         |
| 5230            | -30                              | 120           | 5230.093993              | 5150 – 5250       | PASS         |

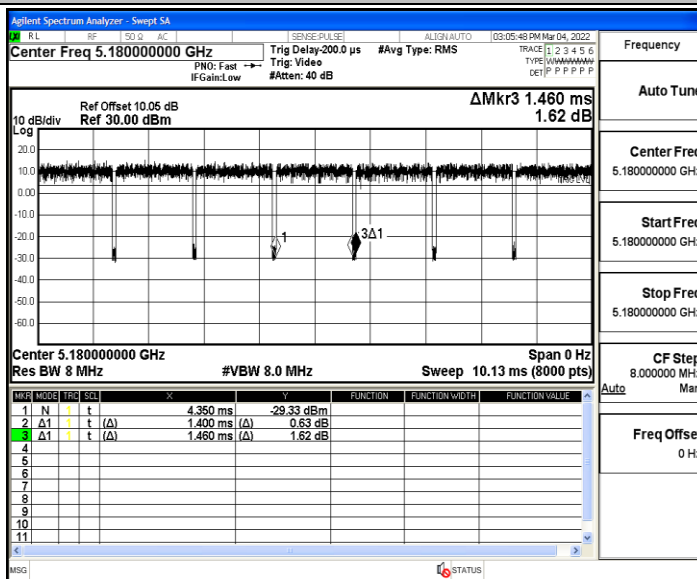
## Appendix F: Duty Cycle

### Test Result

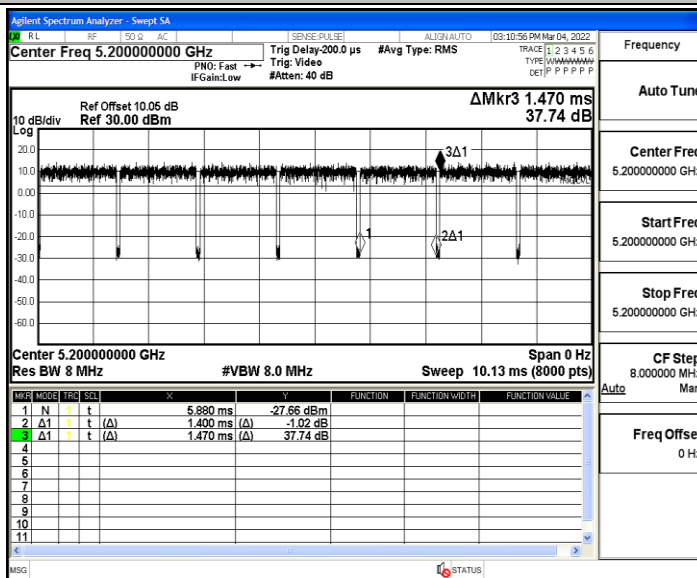
| TestMode  | Antenna | Channel | Transmission Duration [ms] | Transmission Period [ms] | Duty Cycle [%] | 1/B [kHz] |
|-----------|---------|---------|----------------------------|--------------------------|----------------|-----------|
| 11A       | Ant1    | 5180    | 1.40                       | 1.46                     | 95.89          | 0.71      |
|           |         | 5200    | 1.40                       | 1.47                     | 95.24          | 0.71      |
|           |         | 5240    | 1.39                       | 1.46                     | 95.21          | 0.72      |
| 11N20SISO | Ant1    | 5180    | 5.08                       | 5.15                     | 98.64          | 0.20      |
|           |         | 5200    | 5.09                       | 5.15                     | 98.83          | 0.20      |
|           |         | 5240    | 5.08                       | 5.15                     | 98.64          | 0.20      |
| 11N40SISO | Ant1    | 5190    | 2.46                       | 2.53                     | 97.23          | 0.41      |
|           |         | 5230    | 2.47                       | 2.53                     | 97.63          | 0.40      |

Test Graphs

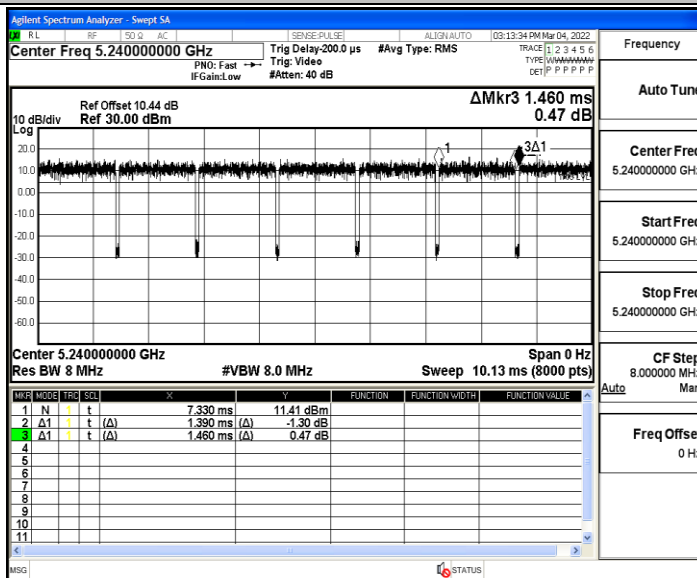
11A\_Ant1\_5180



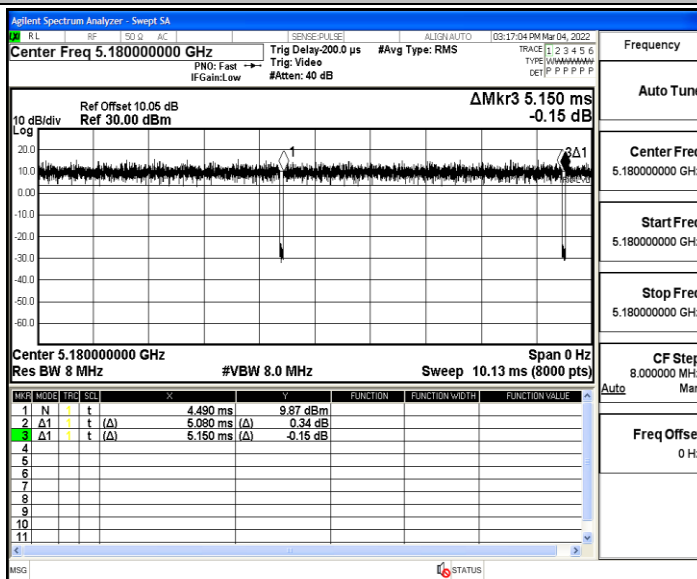
11A\_Ant1\_5200



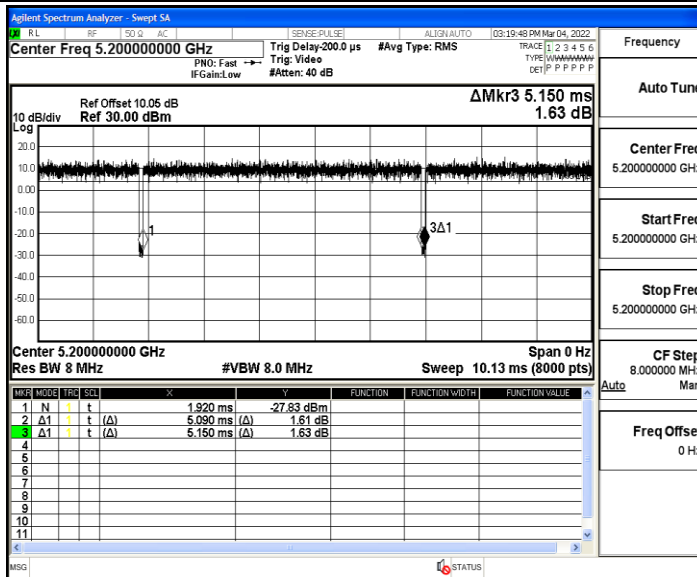
11A\_Ant1\_5240



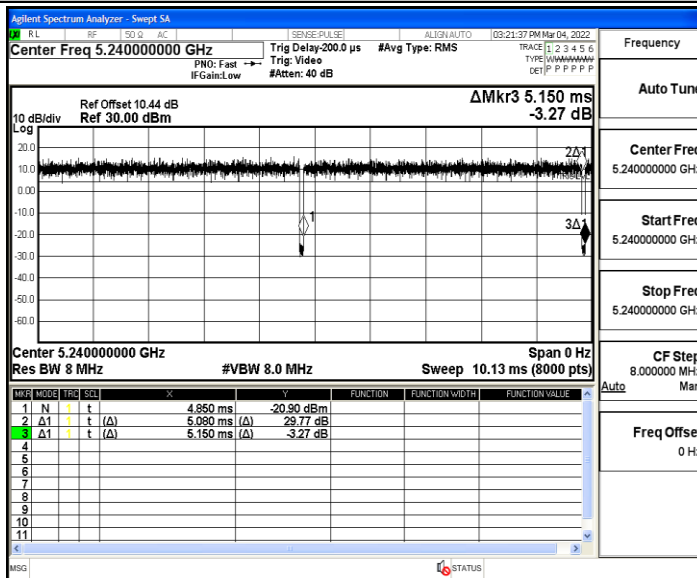
11N20SISO\_Ant1\_5180



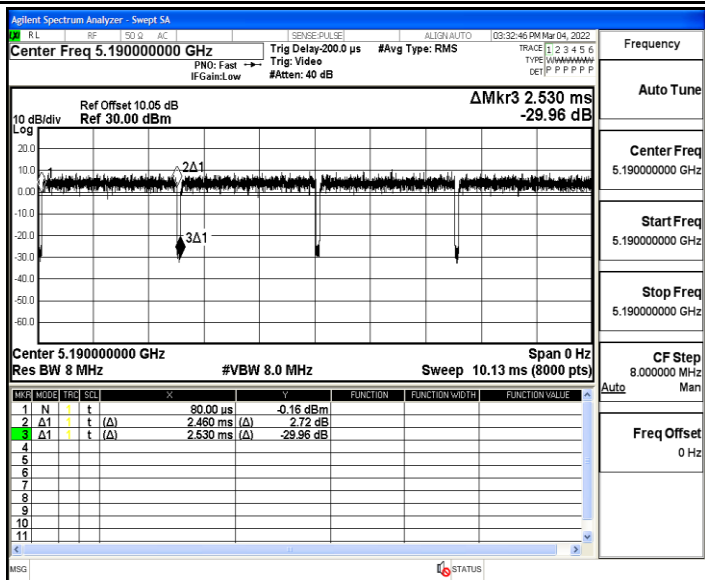
11N20SISO\_Ant1\_5200



11N20SISO\_Ant1\_5240



11N40SISO\_Ant1\_5190



11N40SISO\_Ant1\_5230

