| | |
|---|---|
| **Case No. :** CTA24053000104 | |
| **Ambient Condition**: 23 ℃, 48 %RH | |
| **According Standard:** ■Part15E | |
| **Test Date:** 2024.6.5 | **Test Engineer:** Evan ouyang |

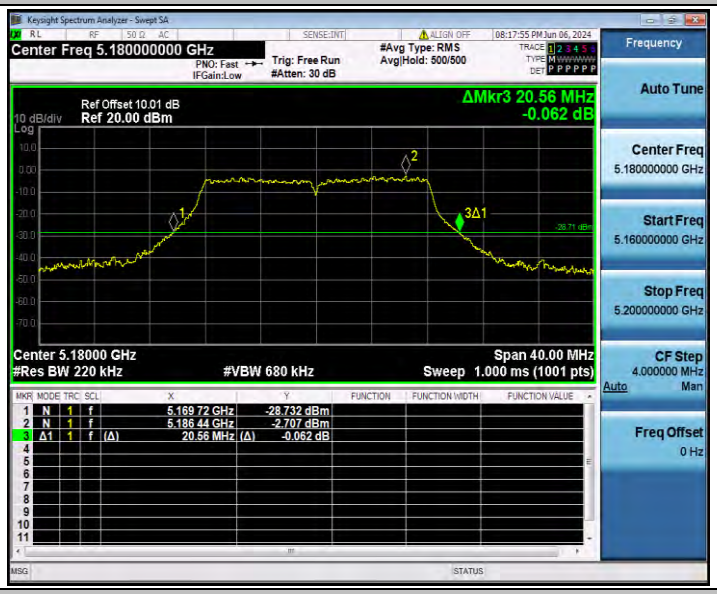
# Appendix D.1: Emission Bandwidth

## Test Result

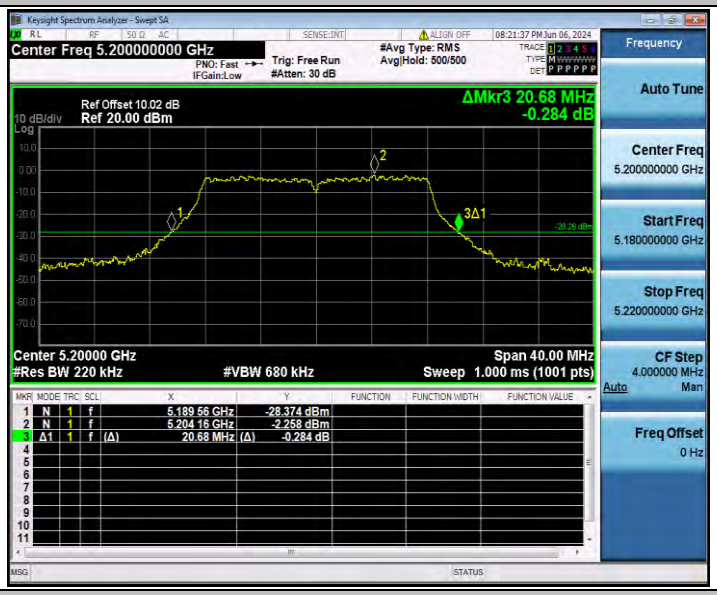
| TestMode | Antenna | Freq(MHz) | 26db EBW [MHz] | FL[MHz] | FH[MHz] |
|---|---|---|---|---|---|
| 11A | Ant1 | 5180 | 20.560 | 5169.720 | 5190.280 |
| | | 5200 | 20.680 | 5189.560 | 5210.240 |
| | | 5240 | 20.760 | 5229.480 | 5250.240 |
| 11N20SISO | Ant1 | 5180 | 21.560 | 5169.160 | 5190.720 |
| | | 5200 | 21.720 | 5189.040 | 5210.760 |
| | | 5240 | 21.680 | 5229.040 | 5250.720 |
| 11N40SISO | Ant1 | 5190 | 43.440 | 5168.160 | 5211.600 |
| | | 5230 | 43.600 | 5208.080 | 5251.680 |
| 11AC20SISO | Ant1 | 5180 | 21.520 | 5169.200 | 5190.720 |
| | | 5200 | 21.720 | 5189.120 | 5210.840 |
| | | 5240 | 21.640 | 5229.120 | 5250.760 |
| 11AC40SISO | Ant1 | 5190 | 43.200 | 5168.400 | 5211.600 |
| | | 5230 | 43.600 | 5208.080 | 5251.680 |
| 11AC80SISO | Ant1 | 5210 | 82.880 | 5169.040 | 5251.920 |

## Test Graphs

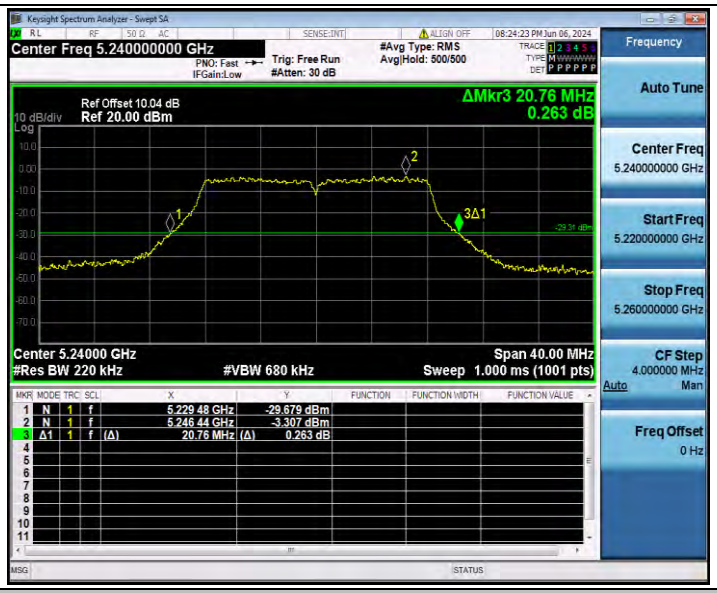
11A_Ant1_5180




11A_Ant1_5200




11A_Ant1_5240

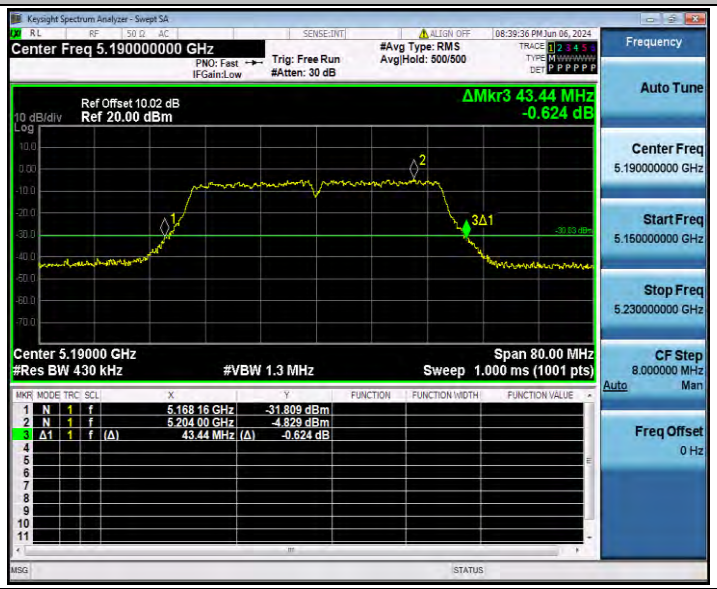



11N20SISO_Ant1_5180

11N20SISO_Ant1_5200

11N20SISO_Ant1_5240

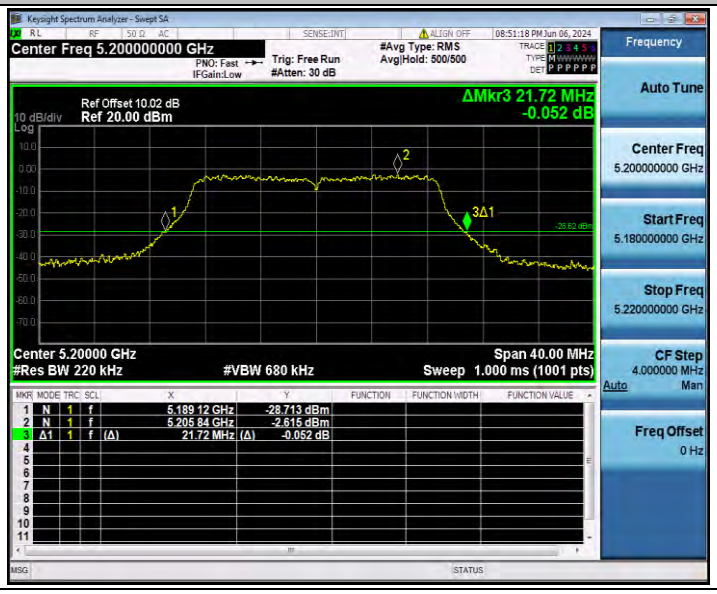
11N40SISO_Ant1_5190




11N40SISO_Ant1_5230

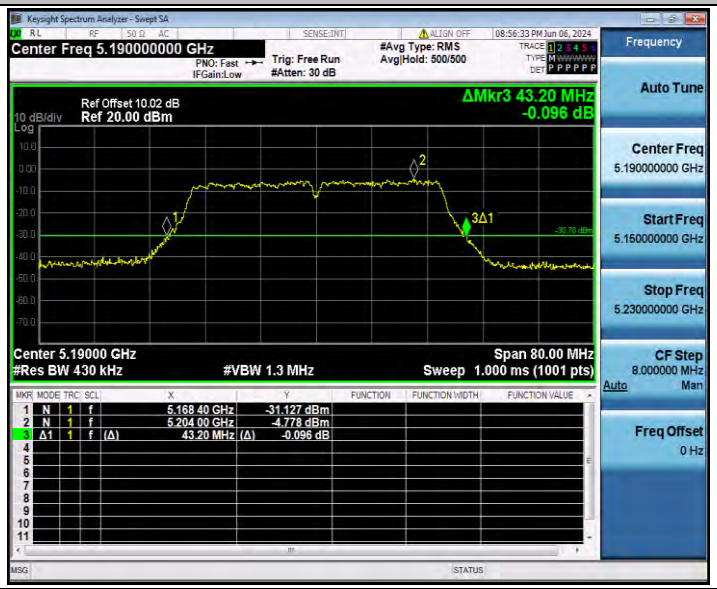
11AC20SISO_Ant1_5180

11AC20SISO_Ant1_5200



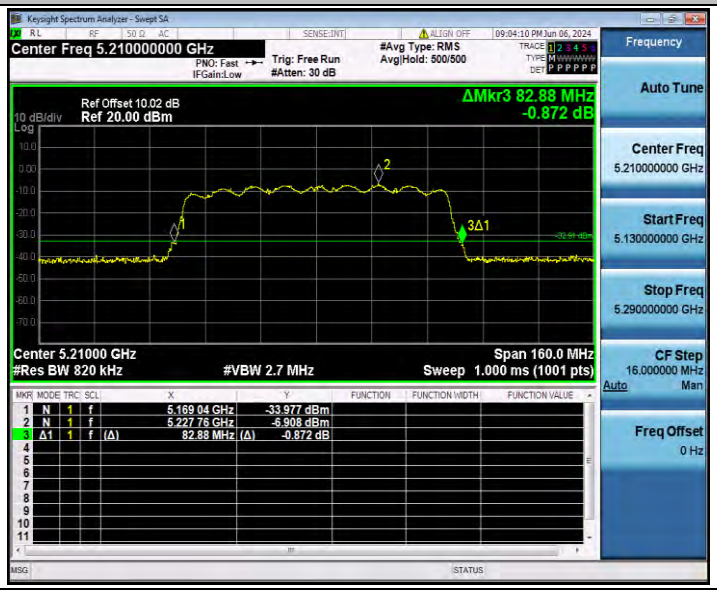
11AC20SISO_Ant1_5240

11AC40SISO_Ant1_5190




11AC40SISO_Ant1_5230

11AC80SISO_Ant1_5210



# Appendix D.2: Occupied channel bandwidth

## Test Result

| TestMode | Antenna | Freq(MHz) | OCB [MHz] | FL[MHz] | FH[MHz] |
|---|---|---|---|---|---|
| 11A | Ant1 | 5180 | 17.092 | 5171.3652 | 5188.4572 |
| | | 5200 | 17.082 | 5191.3468 | 5208.4288 |
| | | 5240 | 17.085 | 5231.3351 | 5248.4201 |
| 11N20SISO | Ant1 | 5180 | 18.104 | 5170.9162 | 5189.0202 |
| | | 5200 | 18.071 | 5190.9115 | 5208.9825 |
| | | 5240 | 18.066 | 5230.9136 | 5248.9796 |
| 11N40SISO | Ant1 | 5190 | 36.944 | 5171.6371 | 5208.5811 |
| | | 5230 | 37.045 | 5211.4866 | 5248.5316 |
| 11AC20SISO | Ant1 | 5180 | 18.110 | 5170.9421 | 5189.0521 |
| | | 5200 | 18.097 | 5190.9185 | 5209.0155 |
| | | 5240 | 18.106 | 5230.8973 | 5249.0033 |
| 11AC40SISO | Ant1 | 5190 | 36.939 | 5171.6286 | 5208.5676 |
| | | 5230 | 37.042 | 5211.4876 | 5248.5296 |
| 11AC80SISO | Ant1 | 5210 | 75.160 | 5172.6376 | 5247.7976 |

## 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

11AC20SISO_Ant1_5180

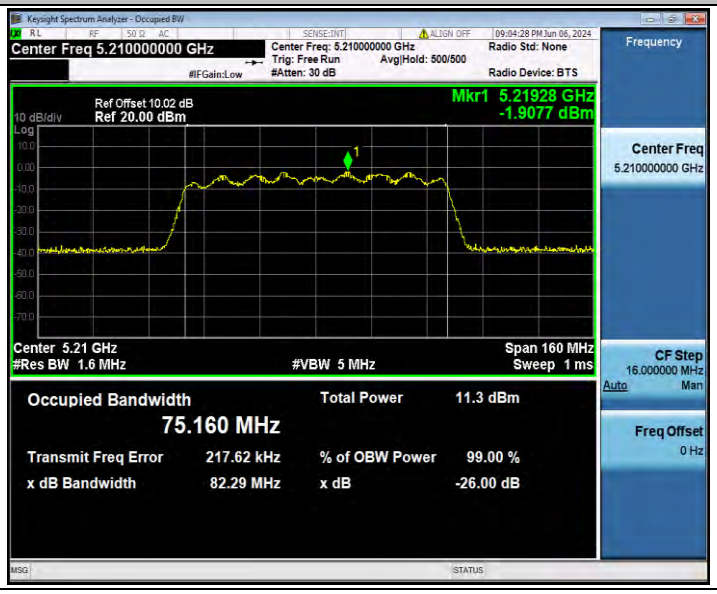
11AC20SISO_Ant1_5200

11AC20SISO_Ant1_5240

11AC40SISO_Ant1_5190

11AC40SISO_Ant1_5230

11AC80SISO_Ant1_5210

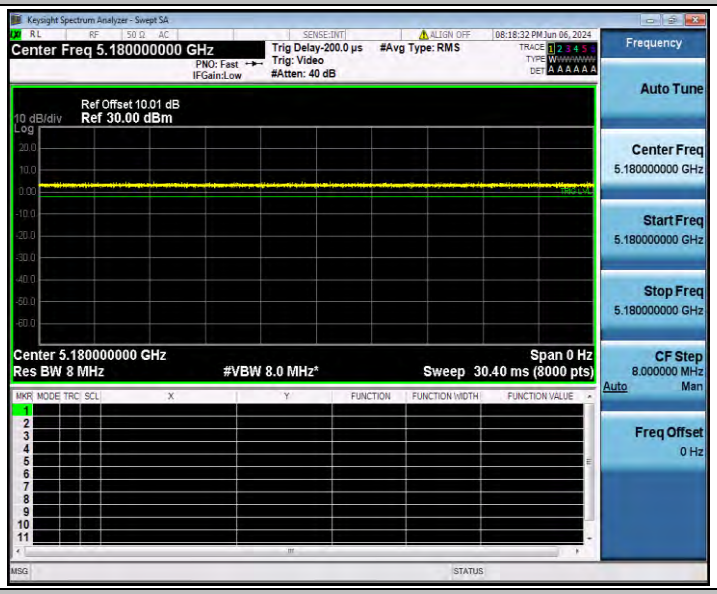
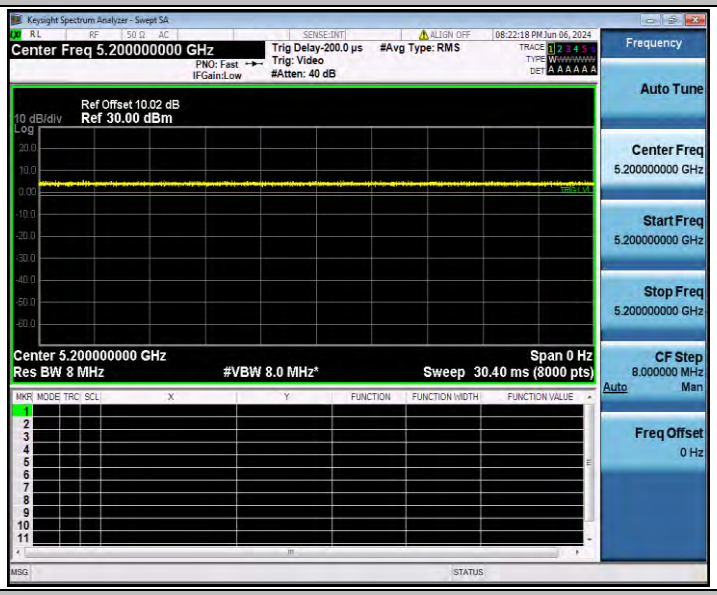


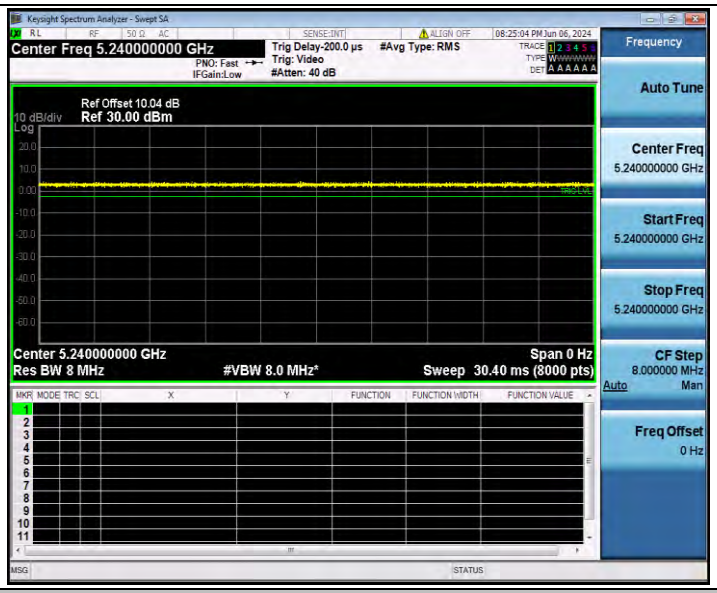
# Appendix D.3: Duty Cycle

## Test Result

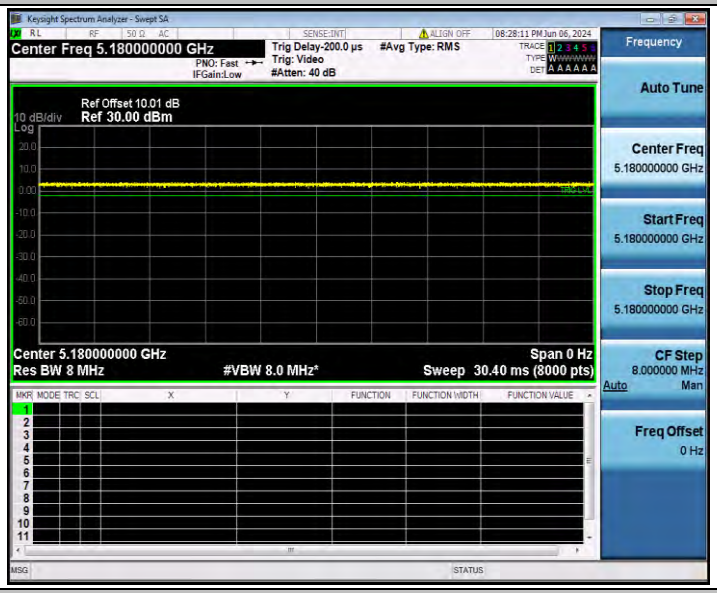
| TestMode | Antenna | Freq(MHz) | Transmission Duration [ms] | Transmission Period [ms] | Duty Cycle [%] | Duty Cycle Factor[dB] | 1/T Factor[KHz] |
|---|---|---|---|---|---|---|---|
| 11A | Ant1 | 5180 | 30.00 | 30.00 | 100.00 | 0.00 | 0.03 |
| | | 5200 | 30.00 | 30.00 | 100.00 | 0.00 | 0.03 |
| | | 5240 | 30.00 | 30.00 | 100.00 | 0.00 | 0.03 |
| 11N20SISO | Ant1 | 5180 | 30.00 | 30.00 | 100.00 | 0.00 | 0.03 |
| | | 5200 | 30.00 | 30.00 | 100.00 | 0.00 | 0.03 |
| | | 5240 | 30.00 | 30.00 | 100.00 | 0.00 | 0.03 |
| 11N40SISO | Ant1 | 5190 | 30.00 | 30.00 | 100.00 | 0.00 | 0.03 |
| | | 5230 | 30.00 | 30.00 | 100.00 | 0.00 | 0.03 |
| 11AC20SISO | Ant1 | 5180 | 30.00 | 30.00 | 100.00 | 0.00 | 0.03 |
| | | 5200 | 30.00 | 30.00 | 100.00 | 0.00 | 0.03 |
| | | 5240 | 30.00 | 30.00 | 100.00 | 0.00 | 0.03 |
| 11AC40SISO | Ant1 | 5190 | 30.00 | 30.00 | 100.00 | 0.00 | 0.03 |
| | | 5230 | 30.00 | 30.00 | 100.00 | 0.00 | 0.03 |
| 11AC80SISO | Ant1 | 5210 | 30.00 | 30.00 | 100.00 | 0.00 | 0.03 |

## Test Graphs

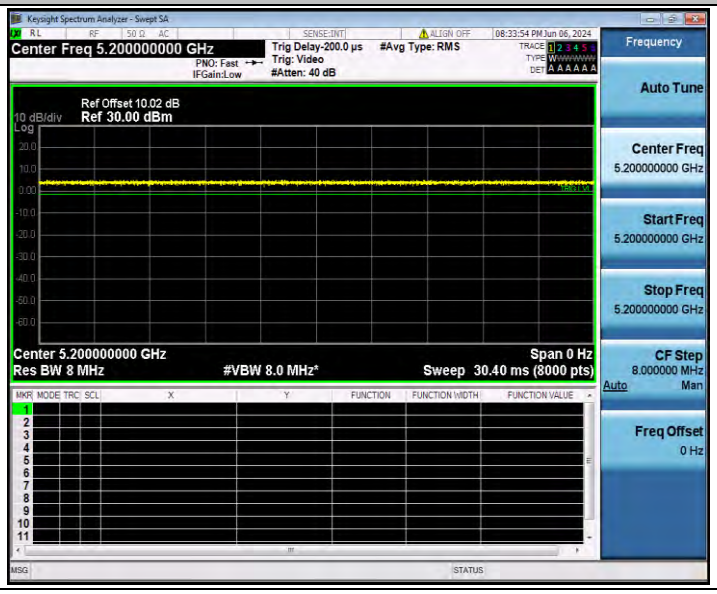
| 11A_Ant1_5180 |
|---|
|  |
| 11A_Ant1_5200 |
|  |
| 11A_Ant1_5240 |



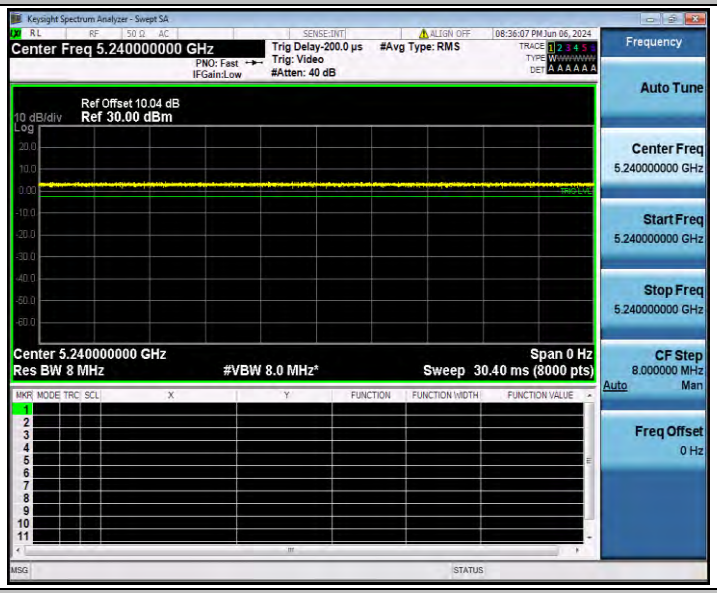

11N20SISO_Ant1_5180



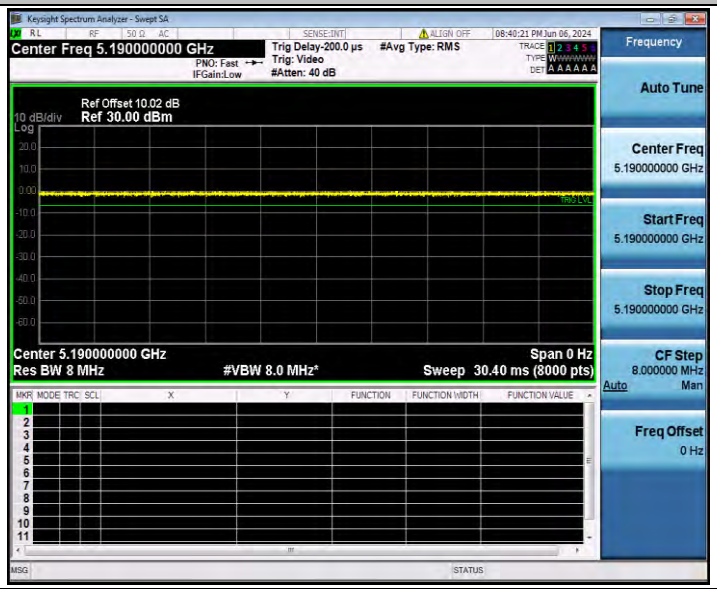

11N20SISO_Ant1_5200



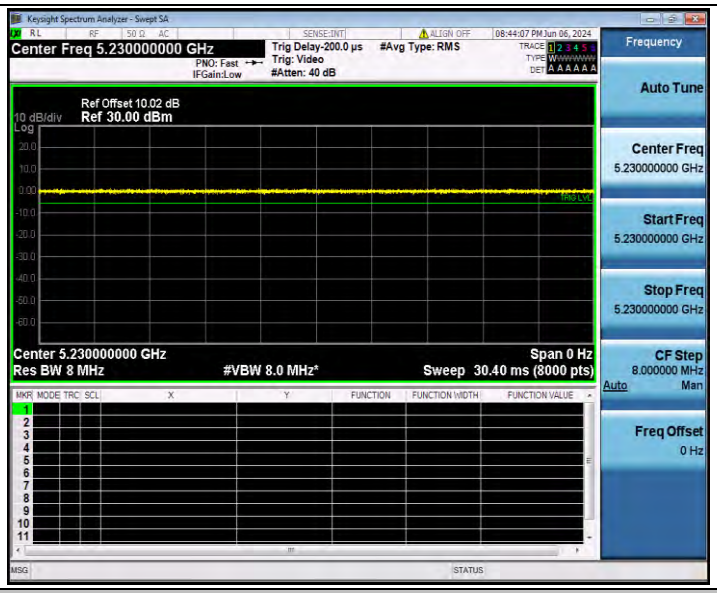
11N20SISO_Ant1_5240



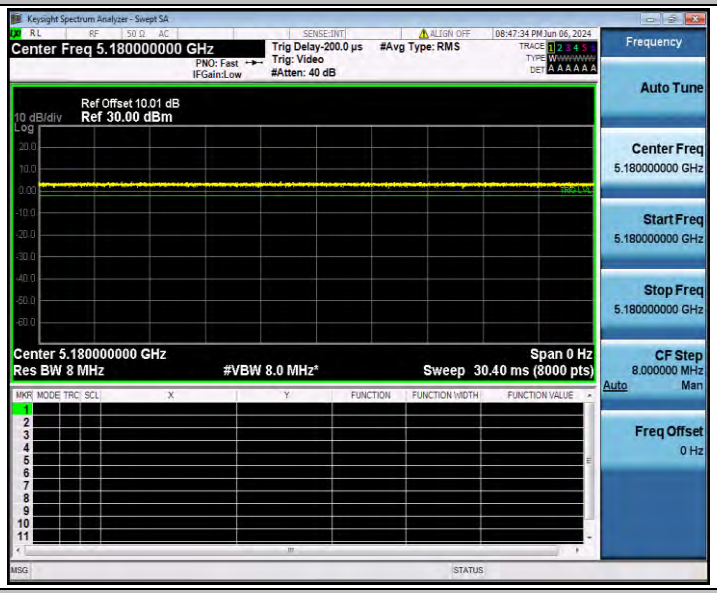

11N40SISO_Ant1_5190



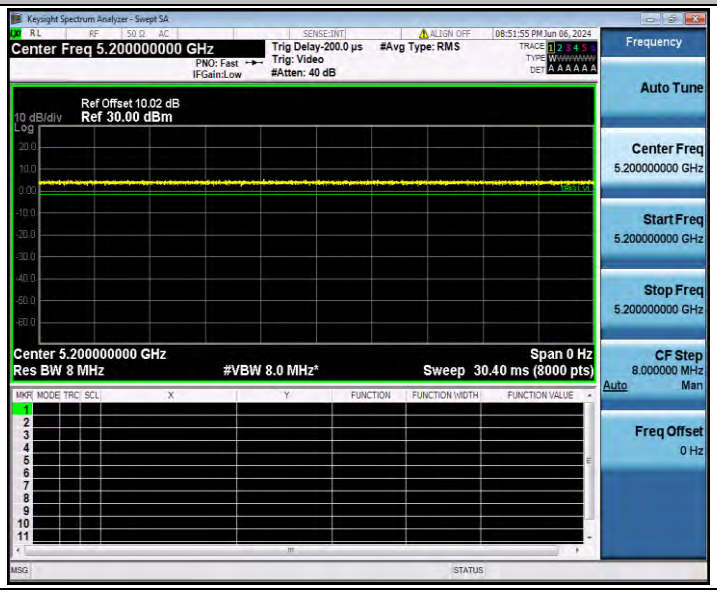

11N40SISO_Ant1_5230

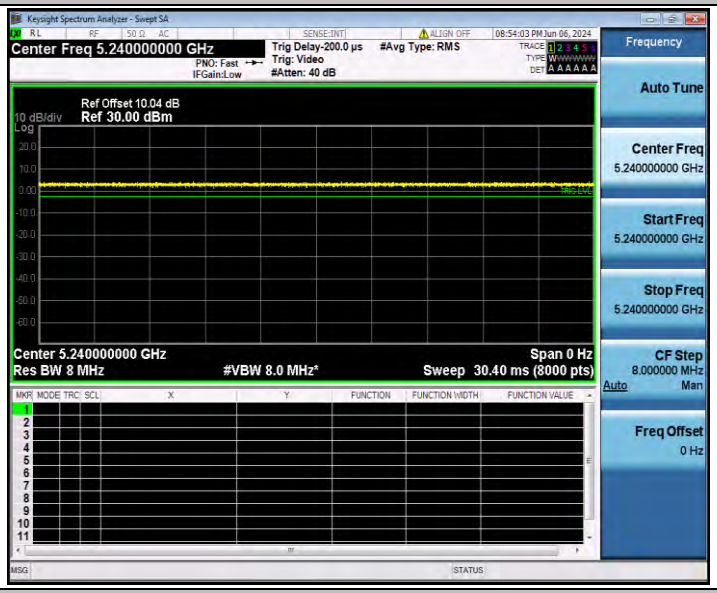
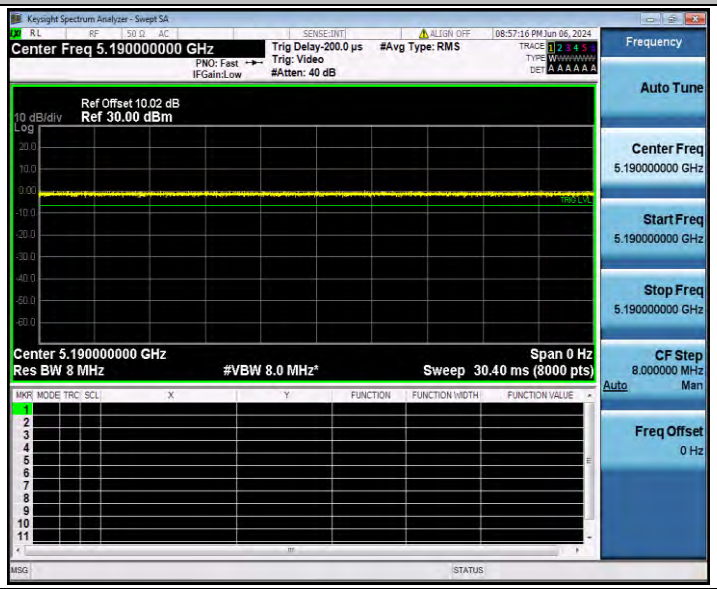


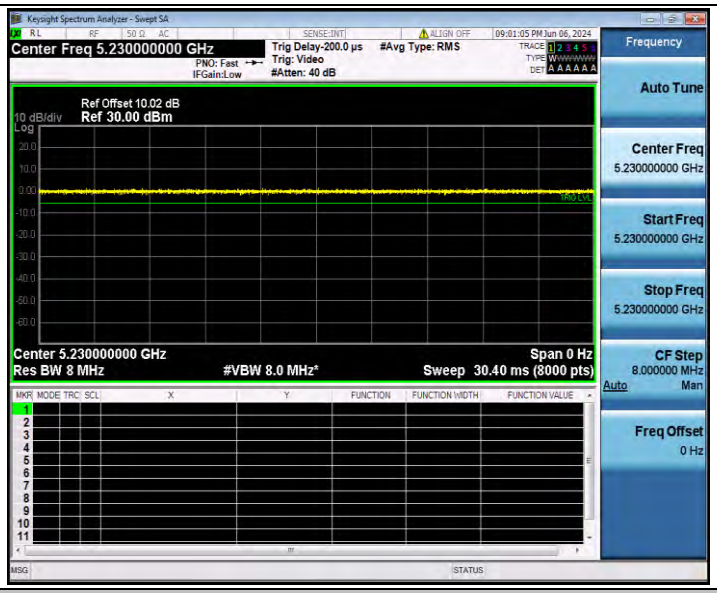

11AC20SISO_Ant1_5180



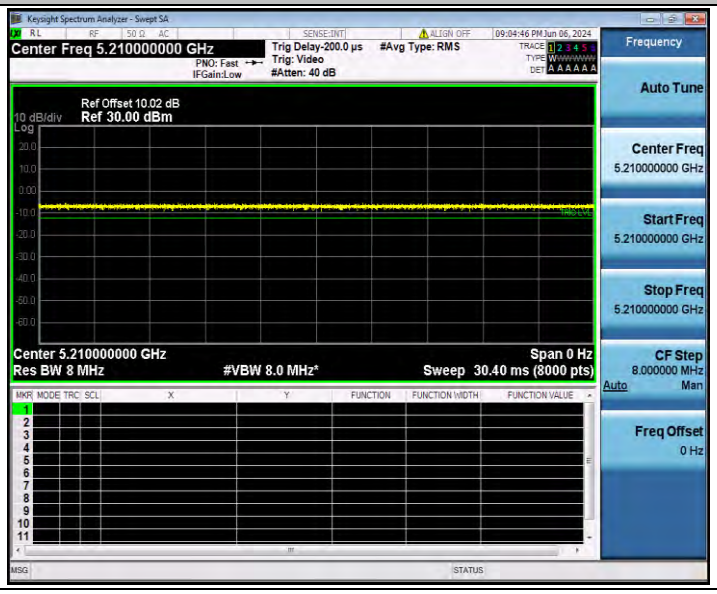

11AC20SISO_Ant1_5200



| 11AC20SISO_Ant1_5240 |
| --- |
|  |
| 11AC40SISO_Ant1_5190 |
|  |
| 11AC40SISO_Ant1_5230 |




11AC80SISO_Ant1_5210



# Appendix D.4: Maximum conducted output power

## Test Result Channel Power

| Test Mode | Antenna | Freq(MHz) | Channel Powert [dBm] | Duty Cycle [%] | Result [dBm] | Limit [dBm] | Verdict |
|---|---|---|---|---|---|---|---|
| 11A | Ant1 | 5180 | 7.07 | 100.00 | 7.07 | ≤23.98 | PASS |
| | | 5200 | 7.75 | 100.00 | 7.75 | ≤23.98 | PASS |
| | | 5240 | 6.61 | 100.00 | 6.61 | ≤23.98 | PASS |
| 11N20SISO | Ant1 | 5180 | 7.18 | 100.00 | 7.18 | ≤23.98 | PASS |
| | | 5200 | 7.94 | 100.00 | 7.94 | ≤23.98 | PASS |
| | | 5240 | 6.98 | 100.00 | 6.98 | ≤23.98 | PASS |
| 11N40SISO | Ant1 | 5190 | 5.35 | 100.00 | 5.35 | ≤23.98 | PASS |
| | | 5230 | 6.51 | 100.00 | 6.51 | ≤23.98 | PASS |
| 11AC20SISO | Ant1 | 5180 | 7.17 | 100.00 | 7.17 | ≤23.98 | PASS |
| | | 5200 | 7.98 | 100.00 | 7.98 | ≤23.98 | PASS |
| | | 5240 | 6.98 | 100.00 | 6.98 | ≤23.98 | PASS |
| 11AC40SISO | Ant1 | 5190 | 5.27 | 100.00 | 5.27 | ≤23.98 | PASS |
| | | 5230 | 6.43 | 100.00 | 6.43 | ≤23.98 | PASS |
| 11AC80SISO | Ant1 | 5210 | 2.47 | 100.00 | 2.47 | ≤23.98 | PASS |

Note：

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

# Appendix D.5: Maximum power spectral density

## Test Result

| TestMode | Antenna | Freq(MHz) | Result [dBm/MHz] | Limit[dBm/MHz] | Verdict |
|---|---|---|---|---|---|
| 11A | Ant1 | 5180 | -4.23 | ≤11.00 | PASS |
| | | 5200 | -3.71 | ≤11.00 | PASS |
| | | 5240 | -4.78 | ≤11.00 | PASS |
| 11N20SISO | Ant1 | 5180 | -4.49 | ≤11.00 | PASS |
| | | 5200 | -3.81 | ≤11.00 | PASS |
| | | 5240 | -4.77 | ≤11.00 | PASS |
| 11N40SISO | Ant1 | 5190 | -9.13 | ≤11.00 | PASS |
| | | 5230 | -8.11 | ≤11.00 | PASS |
| 11AC20SISO | Ant1 | 5180 | -4.47 | ≤11.00 | PASS |
| | | 5200 | -3.75 | ≤11.00 | PASS |
| | | 5240 | -4.75 | ≤11.00 | PASS |
| 11AC40SISO | Ant1 | 5190 | -9.21 | ≤11.00 | PASS |
| | | 5230 | -8.21 | ≤11.00 | PASS |
| 11AC80SISO | Ant1 | 5210 | -13.73 | ≤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

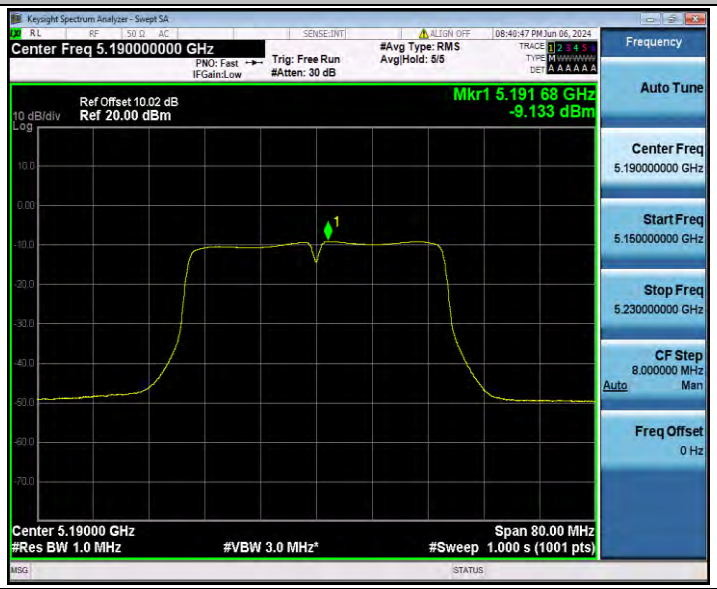
11A_Ant1_5240

11N20SISO_Ant1_5180

11N20SISO_Ant1_5200

11N20SISO_Ant1_5240

11N40SISO_Ant1_5190



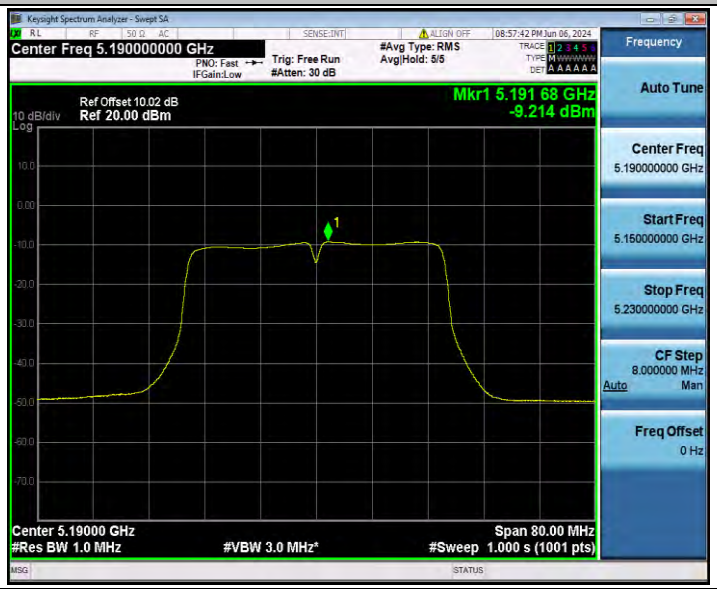

11N40SISO_Ant1_5230

11AC20SISO_Ant1_5180

11AC20SISO_Ant1_5200

11AC20SISO_Ant1_5240

11AC40SISO_Ant1_5190




11AC40SISO_Ant1_5230

11AC80SISO_Ant1_5210