

## **Appendix RF Test Data for 5GWIFI**

**FCC ID** : 2BH3E-CP1-G

**Company** : Shenzhen Pinwei Technology Co.,Ltd

**EUT** : Wireless Carplay

**Model Number** : CP1-G

**Report No.** : CTA25061700302

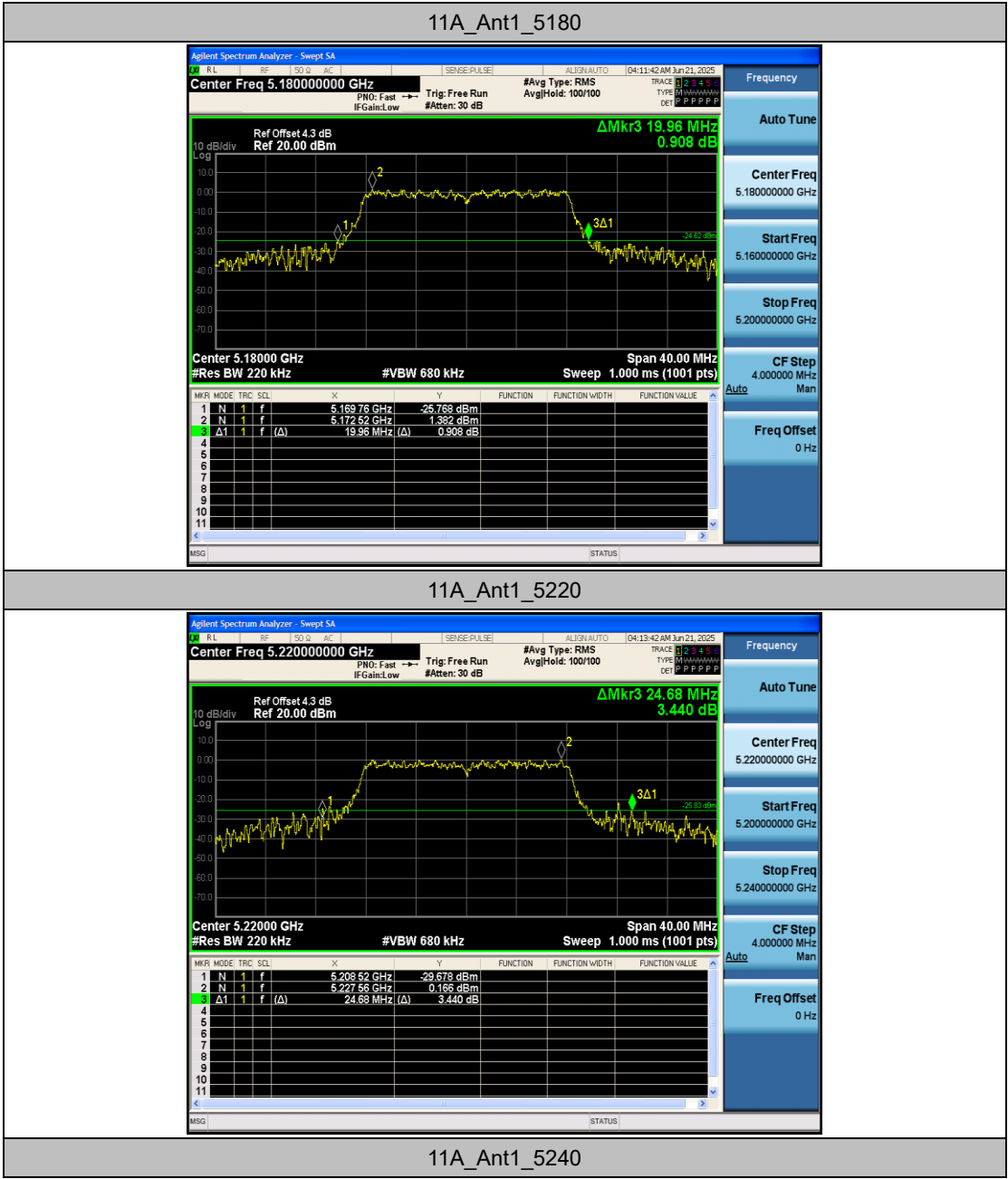
**Reviewed By** : Eric Wang

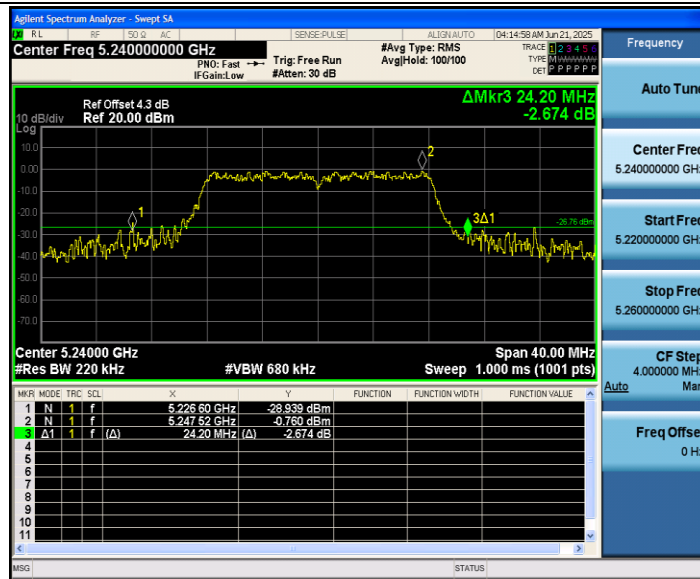
## Appendix A1: Emission Bandwidth

### Test Result

| TestMode  | Antenna | Freq(MHz) | 26db EBW<br>[MHz] | FL[MHz]  | FH[MHz]  | Limit[MHz] | Verdict |
|-----------|---------|-----------|-------------------|----------|----------|------------|---------|
| 11A       | Ant1    | 5180      | 19.960            | 5169.760 | 5189.720 | ---        | ---     |
|           |         | 5220      | 24.680            | 5208.520 | 5233.200 | ---        | ---     |
|           |         | 5240      | 24.200            | 5226.600 | 5250.800 | ---        | ---     |
| 11N20SISO | Ant1    | 5180      | 25.920            | 5167.760 | 5193.680 | ---        | ---     |
|           |         | 5220      | 25.040            | 5207.800 | 5232.840 | ---        | ---     |
|           |         | 5240      | 28.280            | 5224.880 | 5253.160 | ---        | ---     |
| 11N40SISO | Ant1    | 5190      | 48.880            | 5168.240 | 5217.120 | ---        | ---     |
|           |         | 5230      | 45.200            | 5207.520 | 5252.720 | ---        | ---     |

Test Graphs





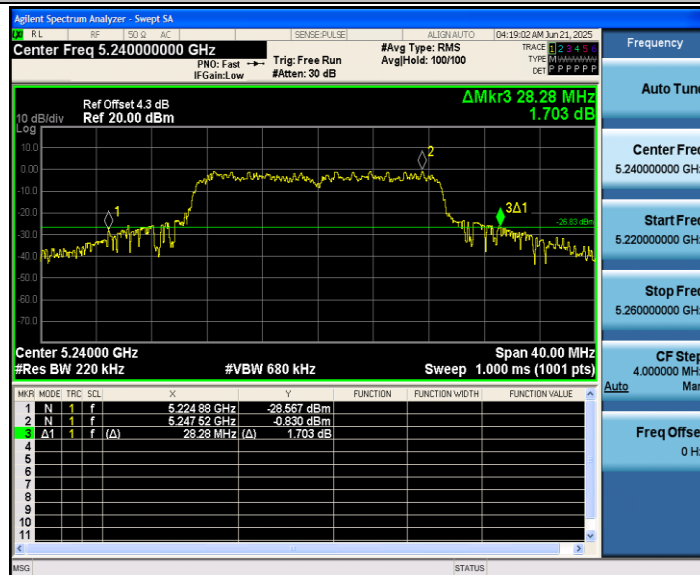
11N20SISO\_Ant1\_5180



11N20SISO\_Ant1\_5220



11N20SISO\_Ant1\_5240



11N40SISO\_Ant1\_5190



11N40SISO\_Ant1\_5230



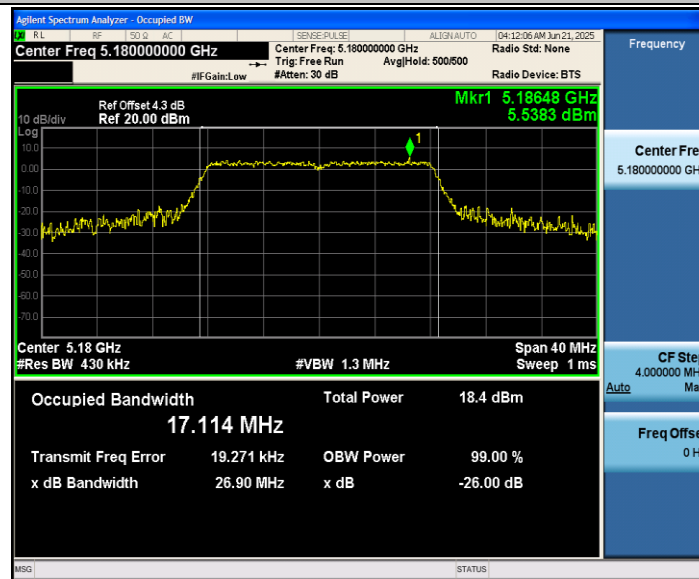
## Appendix A2: Occupied channel bandwidth

### Test Result

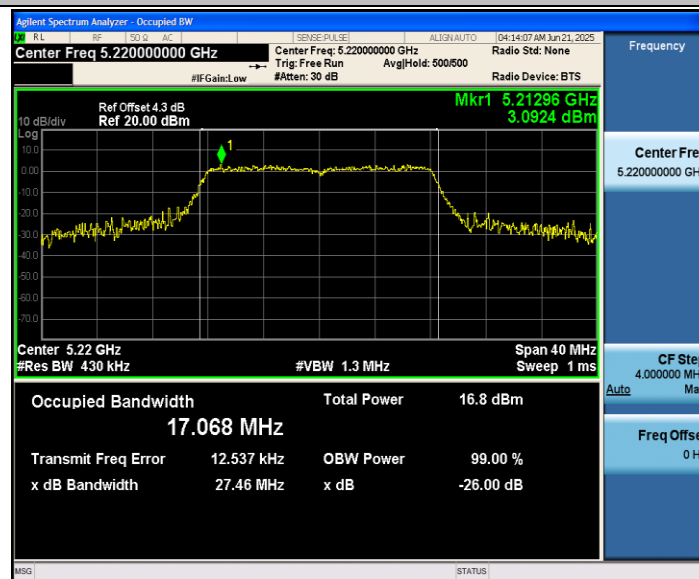
| TestMode  | Antenna | Freq(MHz) | OCB [MHz] | FL[MHz]   | FH[MHz]   | Limit[MHz] | Verdict |
|-----------|---------|-----------|-----------|-----------|-----------|------------|---------|
| 11A       | Ant1    | 5180      | 17.114    | 5171.4623 | 5188.5763 | ---        | ---     |
|           |         | 5220      | 17.068    | 5211.4785 | 5228.5465 | ---        | ---     |
|           |         | 5240      | 17.185    | 5231.4043 | 5248.5893 | ---        | ---     |
| 11N20SISO | Ant1    | 5180      | 18.228    | 5170.9376 | 5189.1656 | ---        | ---     |
|           |         | 5220      | 18.216    | 5210.9548 | 5229.1708 | ---        | ---     |
|           |         | 5240      | 18.164    | 5230.9688 | 5249.1328 | ---        | ---     |
| 11N40SISO | Ant1    | 5190      | 36.793    | 5171.7529 | 5208.5459 | ---        | ---     |
|           |         | 5230      | 36.731    | 5211.7604 | 5248.4914 | ---        | ---     |

## Test Graphs

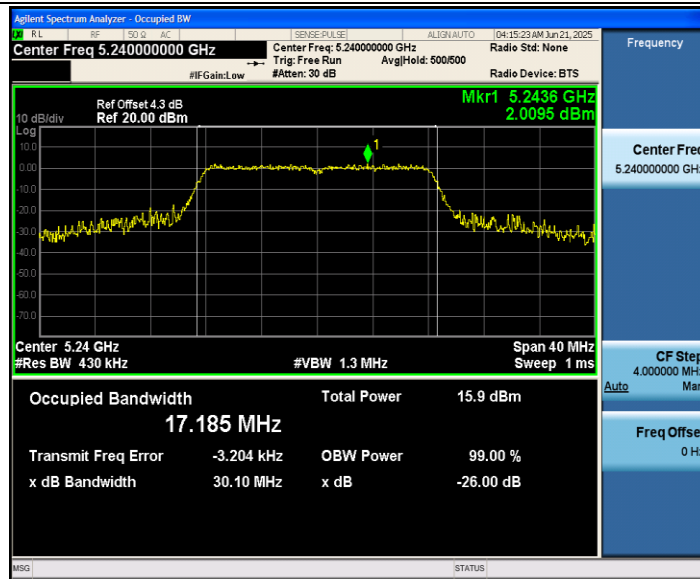
11A\_Ant1\_5180



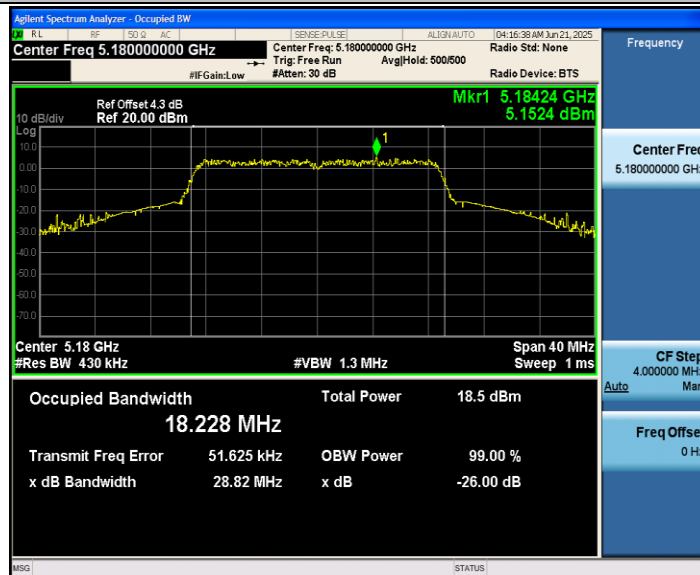
11A\_Ant1\_5220



11A\_Ant1\_5240



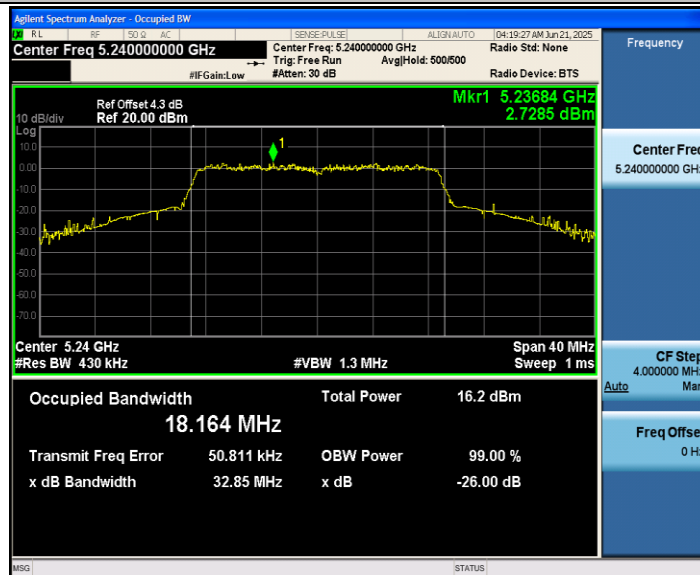
11N20SISO\_Ant1\_5180



11N20SISO\_Ant1\_5220



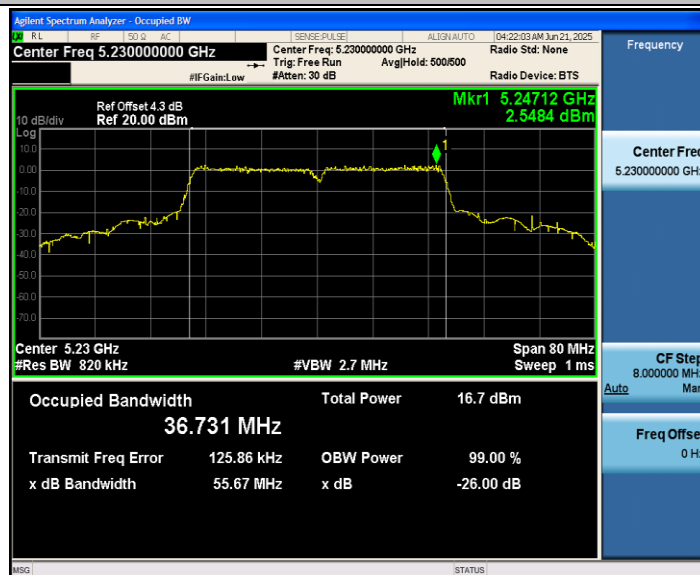
11N20SISO\_Ant1\_5240



11N40SISO\_Ant1\_5190



11N40SISO\_Ant1\_5230

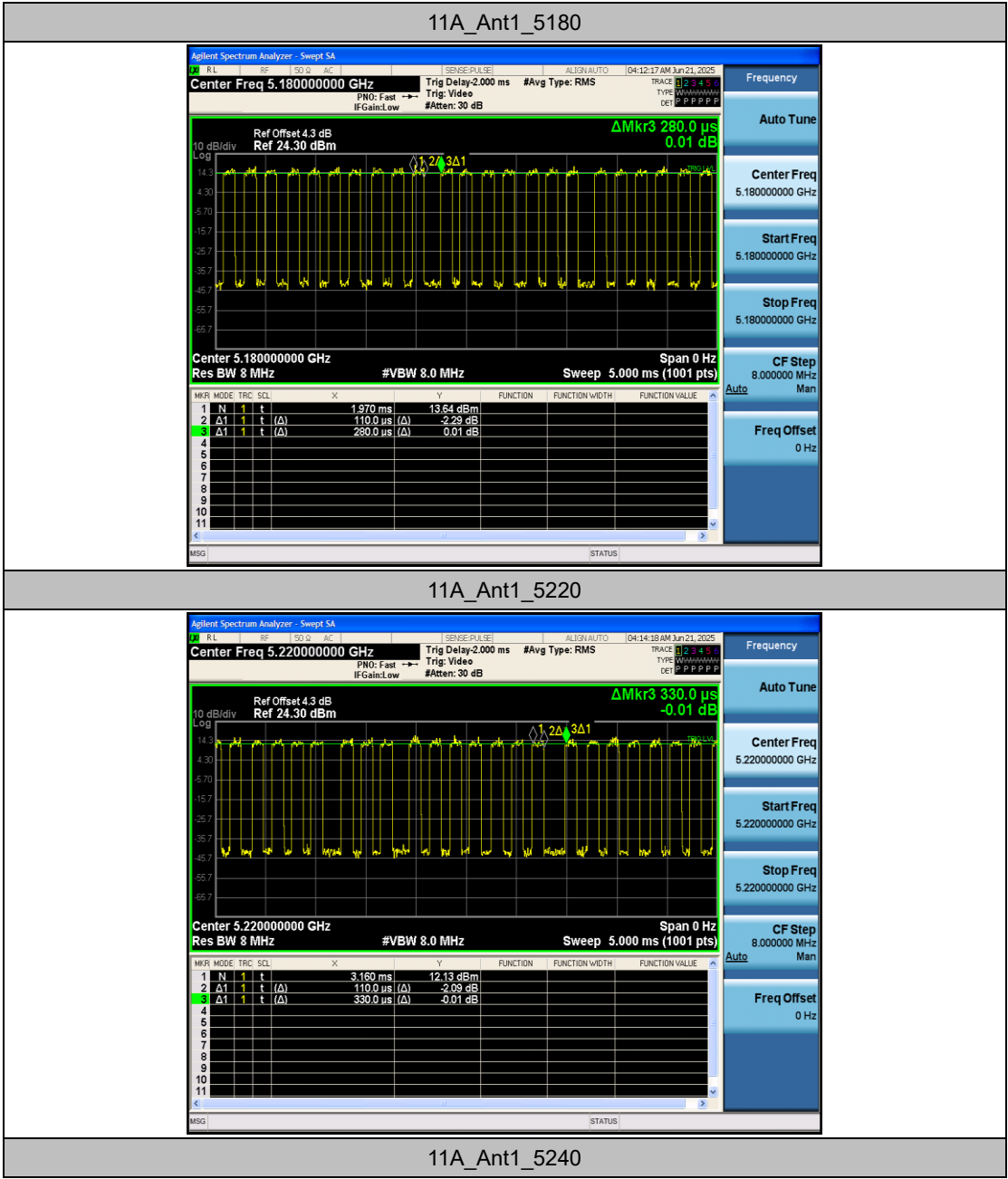


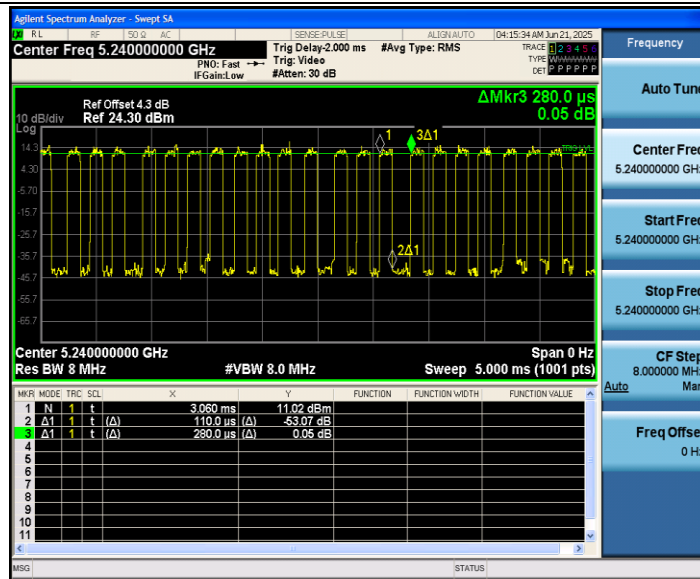
## Appendix B: Duty Cycle

### Test Result

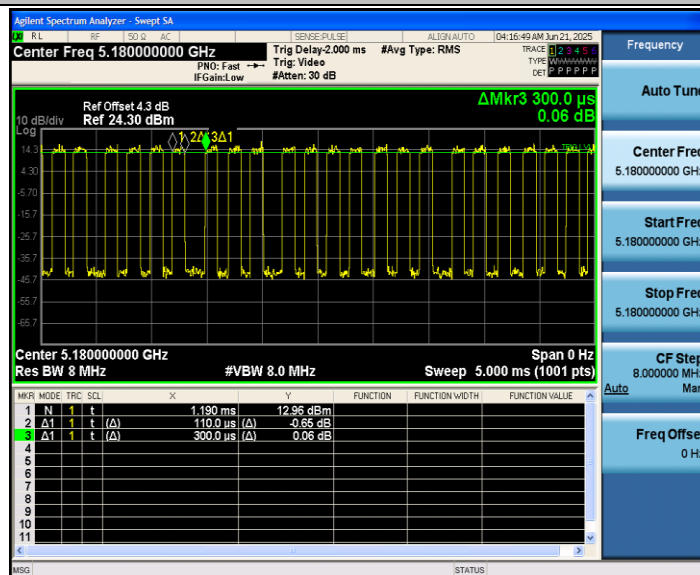
| TestMode  | Antenna | Freq(MHz) | Transmission<br>Duration [ms] | Transmission<br>Period [ms] | Duty<br>Cycle<br>[%] | Duty<br>factor(dB) | Limit | Verdict |
|-----------|---------|-----------|-------------------------------|-----------------------------|----------------------|--------------------|-------|---------|
| 11A       | Ant1    | 5180      | 0.11                          | 0.28                        | 39.29                | 4.06               | ---   | ---     |
|           |         | 5220      | 0.11                          | 0.33                        | 33.33                | 4.77               | ---   | ---     |
|           |         | 5240      | 0.11                          | 0.28                        | 39.29                | 4.06               | ---   | ---     |
| 11N20SISO | Ant1    | 5180      | 0.11                          | 0.30                        | 36.67                | 4.36               | ---   | ---     |
|           |         | 5220      | 0.11                          | 0.32                        | 34.38                | 4.64               | ---   | ---     |
|           |         | 5240      | 0.11                          | 0.29                        | 37.93                | 4.21               | ---   | ---     |
| 11N40SISO | Ant1    | 5190      | 0.07                          | 0.27                        | 25.93                | 5.86               | ---   | ---     |
|           |         | 5230      | 0.07                          | 0.24                        | 29.17                | 5.35               | ---   | ---     |

Test Graphs

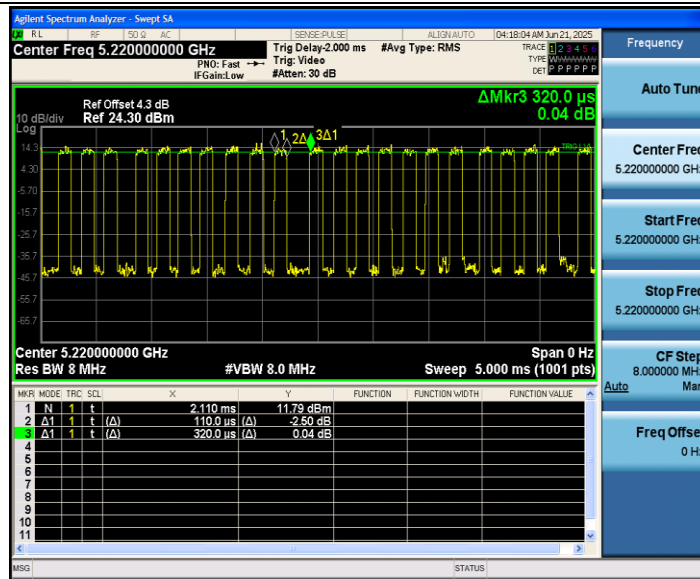




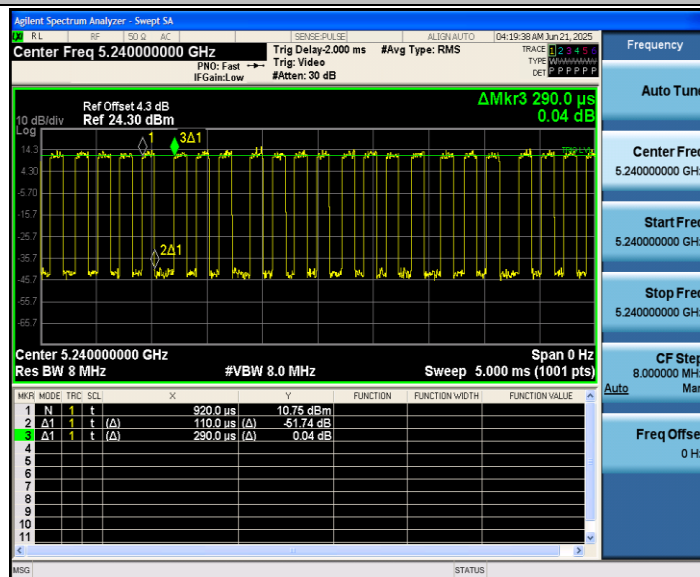
11N20SISO\_Ant1\_5180



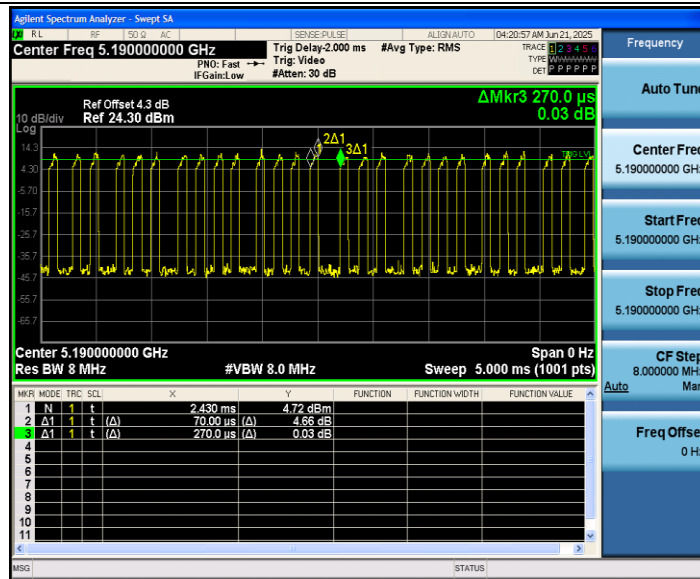
11N20SISO\_Ant1\_5220



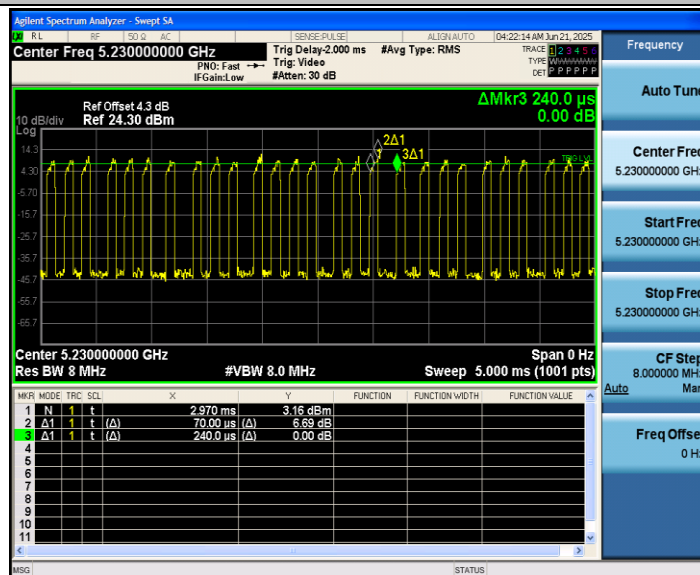
11N20SISO\_Ant1\_5240



11N40SISO\_Ant1\_5190



11N40SISO\_Ant1\_5230



## Appendix C: Maximum conducted output power

| Test Mode     | Antenna | Freq(MHz) | Channel Power [dBm] | DC Factor [dBm] | Result [dBm] | Limit [dBm] | Verdict |
|---------------|---------|-----------|---------------------|-----------------|--------------|-------------|---------|
| 11A           | Ant1    | 5180      | 8.98                | 4.06            | 13.04        | ≤23.98      | PASS    |
|               |         | 5220      | 7.53                | 4.77            | 12.30        | ≤23.98      | PASS    |
|               |         | 5240      | 6.68                | 4.06            | 10.74        | ≤23.98      | PASS    |
| 11N20SI<br>SO | Ant1    | 5180      | 8.97                | 4.36            | 13.33        | ≤23.98      | PASS    |
|               |         | 5220      | 7.53                | 4.64            | 12.17        | ≤23.98      | PASS    |
|               |         | 5240      | 6.60                | 4.21            | 10.81        | ≤23.98      | PASS    |
| 11N40SI<br>SO | Ant1    | 5190      | 6.95                | 5.86            | 12.81        | ≤23.98      | PASS    |
|               |         | 5230      | 5.39                | 5.35            | 10.74        | ≤23.98      | PASS    |

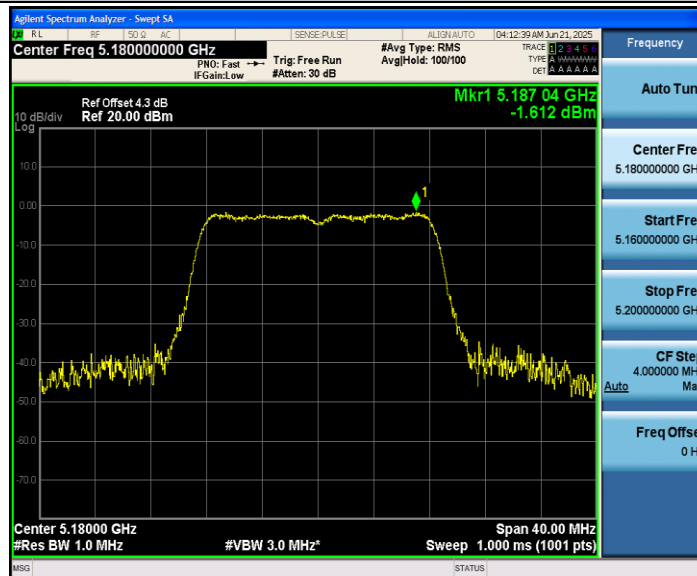
## Appendix D: Maximum power spectral density

### Test Result

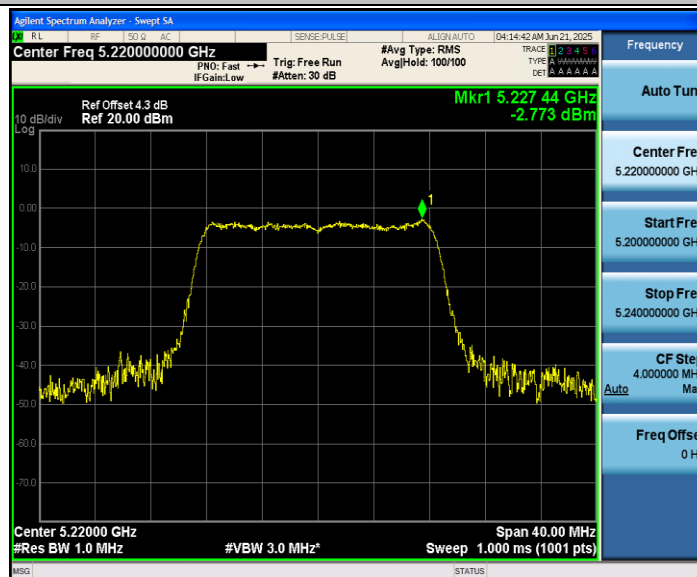
| TestMode  | Antenna | Freq(MHz) | Result<br>[dBm/1MHz]<br>For 5.2G | Duty<br>factor<br>(dB) | Result<br>[dBm/MHz]<br>For 5.2G | Limit[dBm/MHz]<br>For 5.2G | Verdict |
|-----------|---------|-----------|----------------------------------|------------------------|---------------------------------|----------------------------|---------|
| 11A       | Ant1    | 5180      | -1.612                           | 4.36                   | 2.45                            | ≤11.00                     | PASS    |
|           |         | 5220      | -2.773                           | 4.12                   | 2.00                            | ≤11.00                     | PASS    |
|           |         | 5240      | -3.954                           | 4.50                   | 0.11                            | ≤11.00                     | PASS    |
| 11N20SISO | Ant1    | 5180      | -1.890                           | 4.21                   | 2.47                            | ≤11.00                     | PASS    |
|           |         | 5220      | -3.153                           | 4.64                   | 1.49                            | ≤11.00                     | PASS    |
|           |         | 5240      | -3.964                           | 4.36                   | 0.25                            | ≤11.00                     | PASS    |
| 11N40SISO | Ant1    | 5190      | -6.428                           | 5.74                   | -0.57                           | ≤11.00                     | PASS    |
|           |         | 5230      | -8.302                           | 5.35                   | -2.95                           | ≤11.00                     | PASS    |

## Test Graphs

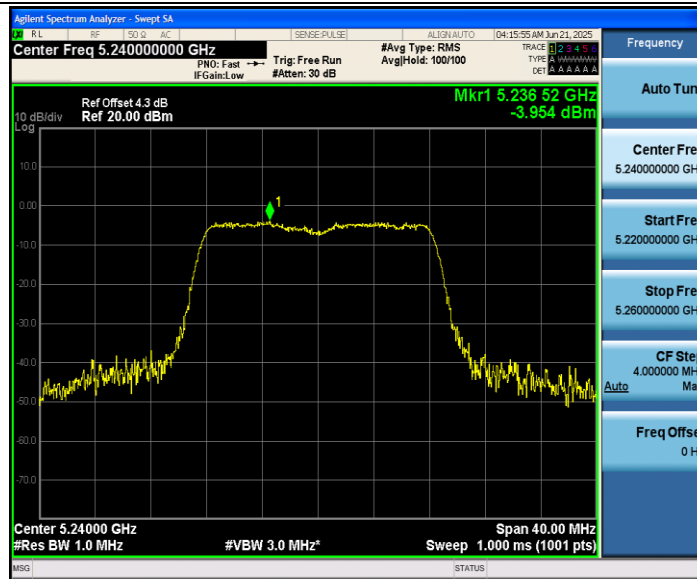
11A\_Ant1\_5180



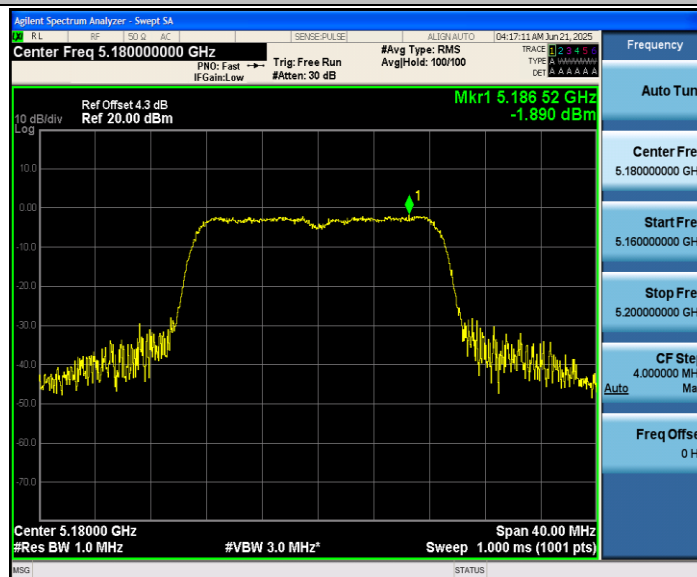
11A\_Ant1\_5220



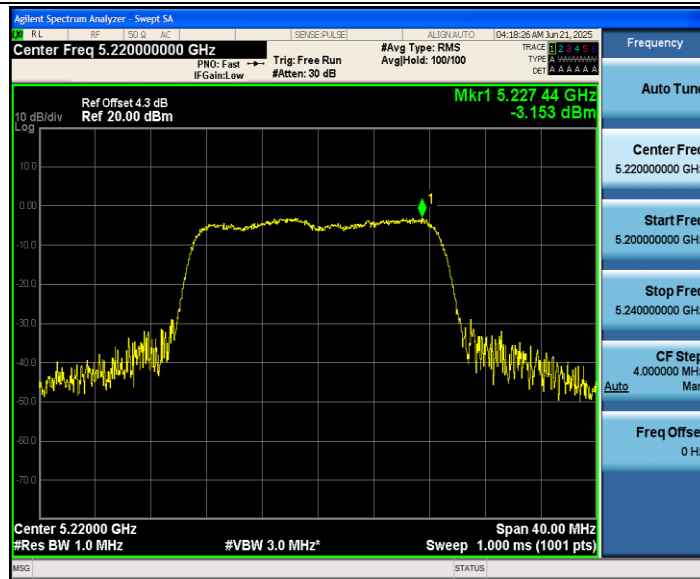
11A\_Ant1\_5240



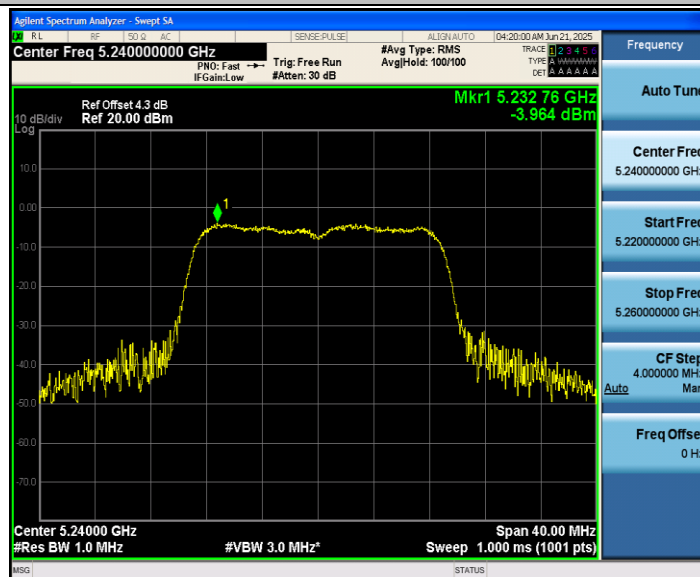
11N20SISO\_Ant1\_5180



11N20SISO\_Ant1\_5220



11N20SISO\_Ant1\_5240



11N40SISO\_Ant1\_5190



11N40SISO\_Ant1\_5230

