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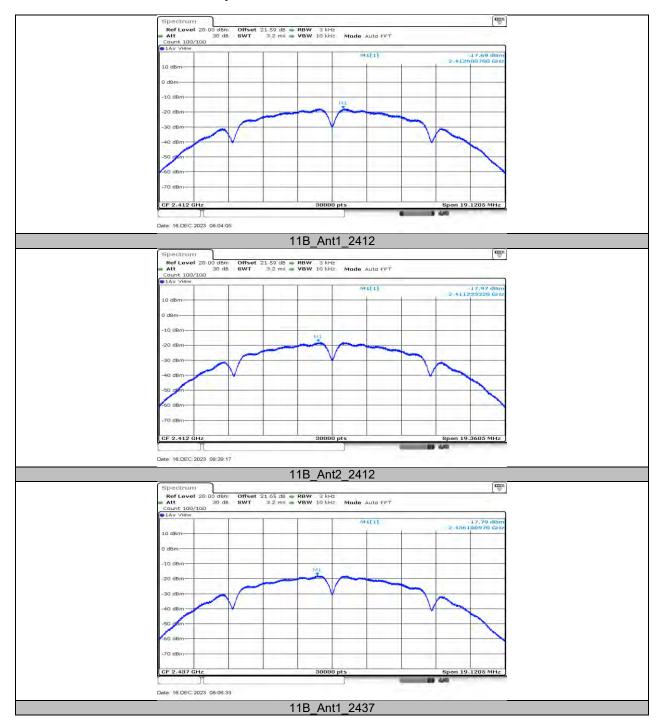
## 11.4. APPENDIX D: MAXIMUM POWER SPECTRAL DENSITY 11.4.1. Test Result

| Test Mode  | Antenna | Frequency[MHz] | Result[dBm/3kHz] | Limit[dBm/3kHz] | Verdict |
|------------|---------|----------------|------------------|-----------------|---------|
|            | Ant1    | 2412           | -17.69           | ≤8.00           | PASS    |
|            | Ant2    | 2412           | -17.97           | ≤8.00           | PASS    |
| 11B        | Ant1    | 2437           | -17.79           | ≤8.00           | PASS    |
| 110        | Ant2    | 2437           | -17.77           | ≤8.00           | PASS    |
|            | Ant1    | 2462           | -17.60           | ≤8.00           | PASS    |
|            | Ant2    | 2462           | -17.81           | ≤8.00           | PASS    |
|            | Ant1    | 2412           | -18.76           | ≤8.00           | PASS    |
|            | Ant2    | 2412           | -18.56           | ≤8.00           | PASS    |
| 11G        | Ant1    | 2437           | -19.80           | ≤8.00           | PASS    |
| 116        | Ant2    | 2437           | -19.75           | ≤8.00           | PASS    |
|            | Ant1    | 2462           | -19.70           | ≤8.00           | PASS    |
|            | Ant2    | 2462           | -19.77           | ≤8.00           | PASS    |
|            | Ant1    | 2412           | -18.38           | ≤8.00           | PASS    |
|            | Ant2    | 2412           | -17.38           | ≤8.00           | PASS    |
|            | total   | 2412           | -14.84           | ≤8.00           | PASS    |
|            | Ant1    | 2437           | -19.95           | ≤8.00           | PASS    |
| 11N20MIMO  | Ant2    | 2437           | -19.32           | ≤8.00           | PASS    |
|            | total   | 2437           | -16.61           | ≤8.00           | PASS    |
|            | Ant1    | 2462           | -19.89           | ≤8.00           | PASS    |
|            | Ant2    | 2462           | -19.70           | ≤8.00           | PASS    |
|            | total   | 2462           | -16.78           | ≤8.00           | PASS    |
|            | Ant1    | 2422           | -21.08           | ≤8.00           | PASS    |
|            | Ant2    | 2422           | -21.74           | ≤8.00           | PASS    |
|            | total   | 2422           | -18.39           | ≤8.00           | PASS    |
|            | Ant1    | 2437           | -20.41           | ≤8.00           | PASS    |
| 11N40MIMO  | Ant2    | 2437           | -21.08           | ≤8.00           | PASS    |
|            | total   | 2437           | -17.72           | ≤8.00           | PASS    |
|            | Ant1    | 2452           | -20.52           | ≤8.00           | PASS    |
|            | Ant2    | 2452           | -21.46           | ≤8.00           | PASS    |
|            | total   | 2452           | -17.95           | ≤8.00           | PASS    |
|            | Ant1    | 2412           | -20.45           | ≤8.00           | PASS    |
|            | Ant2    | 2412           | -20.10           | ≤8.00           | PASS    |
|            | total   | 2412           | -17.26           | ≤8.00           | PASS    |
|            | Ant1    | 2437           | -20.19           | ≤8.00           | PASS    |
| 11AX20MIMO | Ant2    | 2437           | -20.45           | ≤8.00           | PASS    |
|            | total   | 2437           | -17.31           | ≤8.00           | PASS    |
|            | Ant1    | 2462           | -20.85           | ≤8.00           | PASS    |
|            | Ant2    | 2462           | -21.96           | ≤8.00           | PASS    |
|            | total   | 2462           | -18.36           | ≤8.00           | PASS    |
|            | Ant1    | 2422           | -23.99           | ≤8.00           | PASS    |
|            | Ant2    | 2422           | -24.82           | ≤8.00           | PASS    |
|            | total   | 2422           | -21.37           | ≤8.00           | PASS    |
|            | Ant1    | 2437           | -23.86           | ≤8.00           | PASS    |
| 11AX40MIMO | Ant2    | 2437           | -24.43           | ≤8.00           | PASS    |
|            | total   | 2437           | -21.13           | ≤8.00           | PASS    |
|            | Ant1    | 2452           | -24.11           | ≤8.00           | PASS    |
|            | Ant2    | 2452           | -24.48           | ≤8.00           | PASS    |
|            | total   | 2452           | -21.28           | ≤8.00           | PASS    |

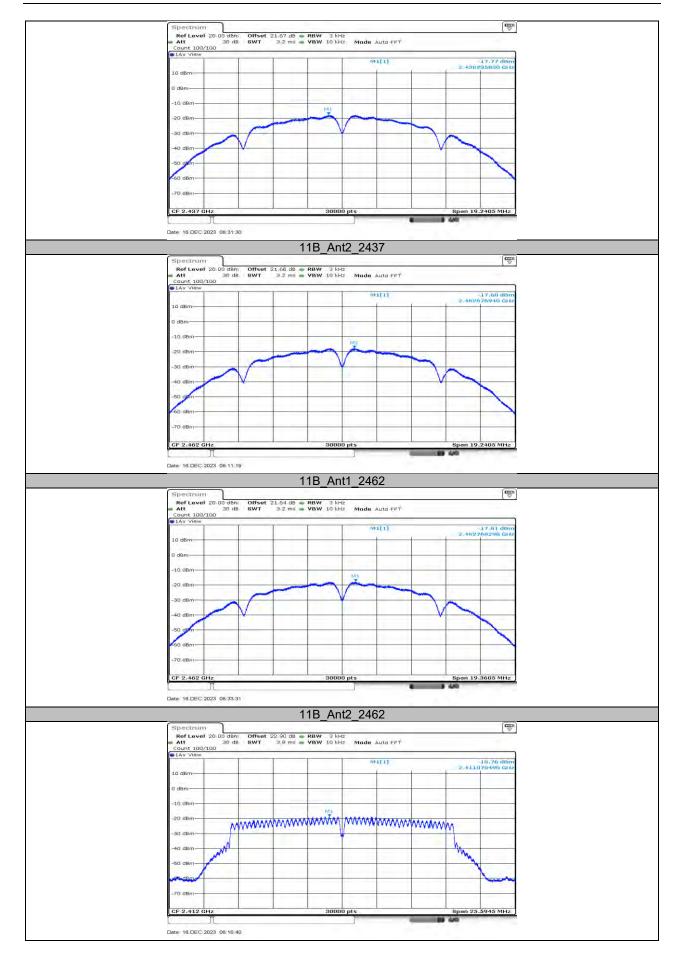
Note: 1. The Duty Cycle Factor (refer to section 7.5) had already compensated to the test data.



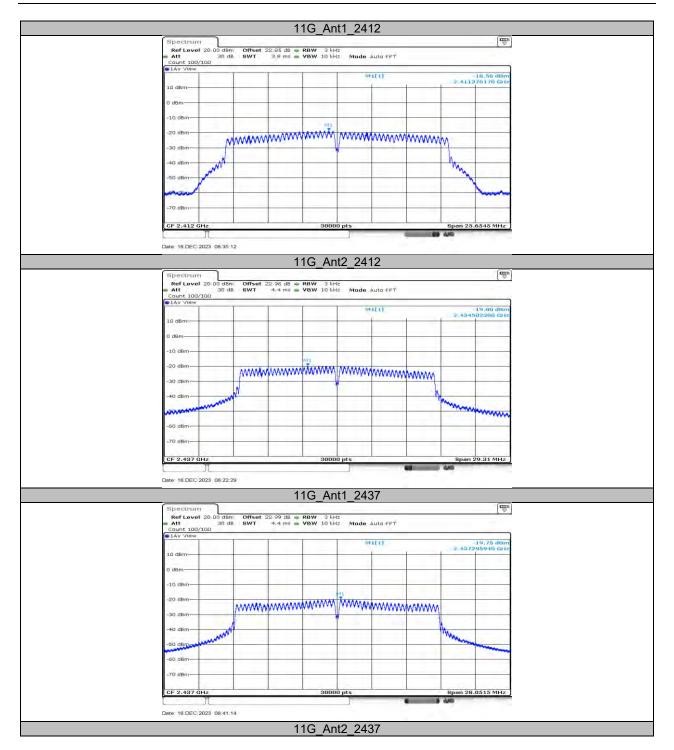
### 11.4.2. Test Graphs



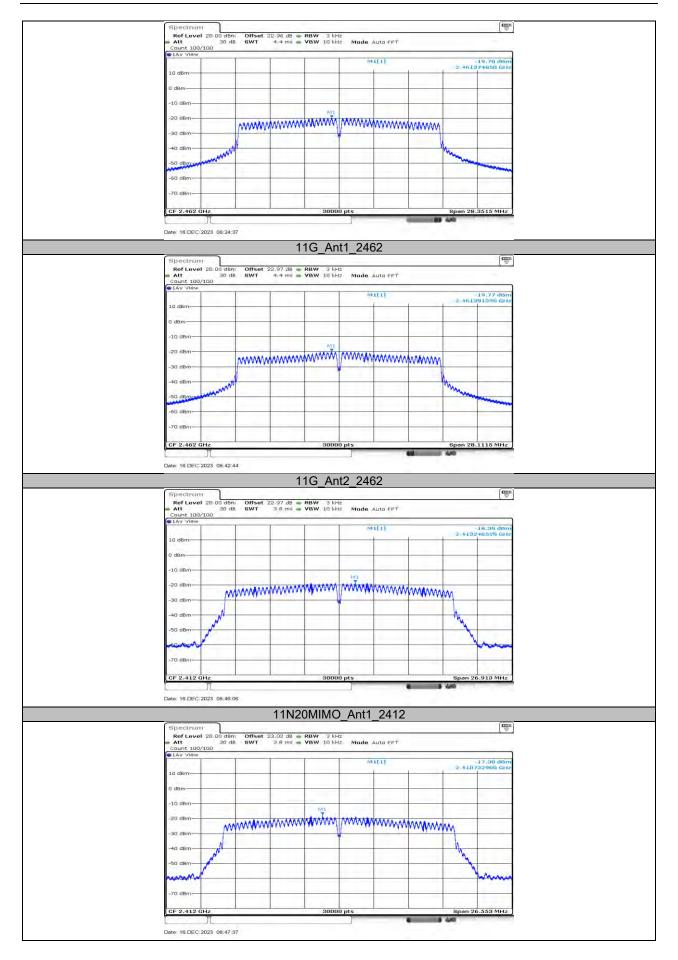






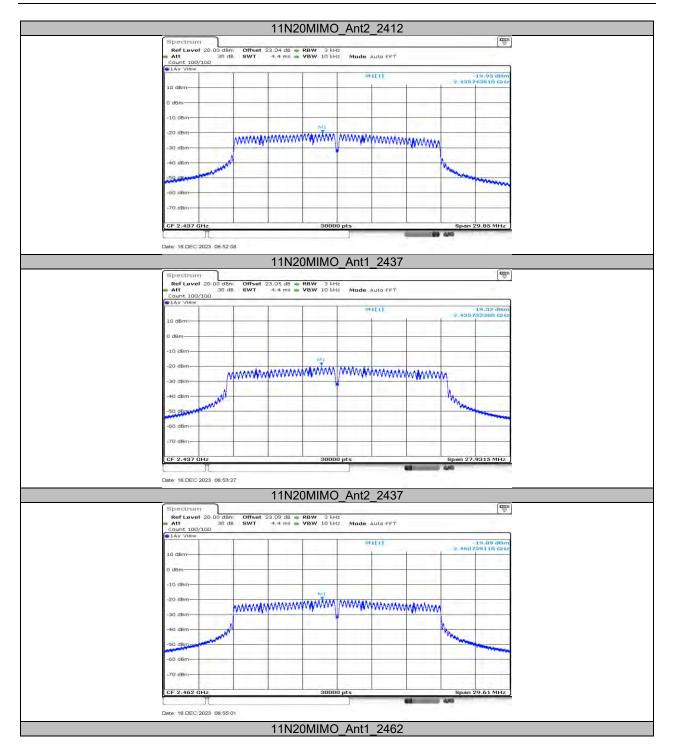




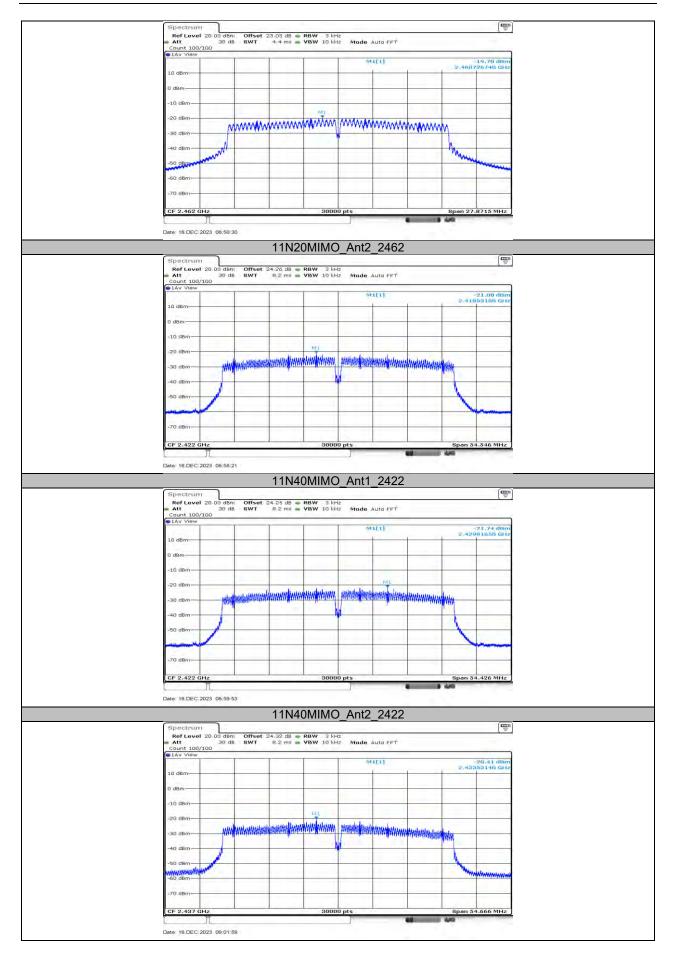


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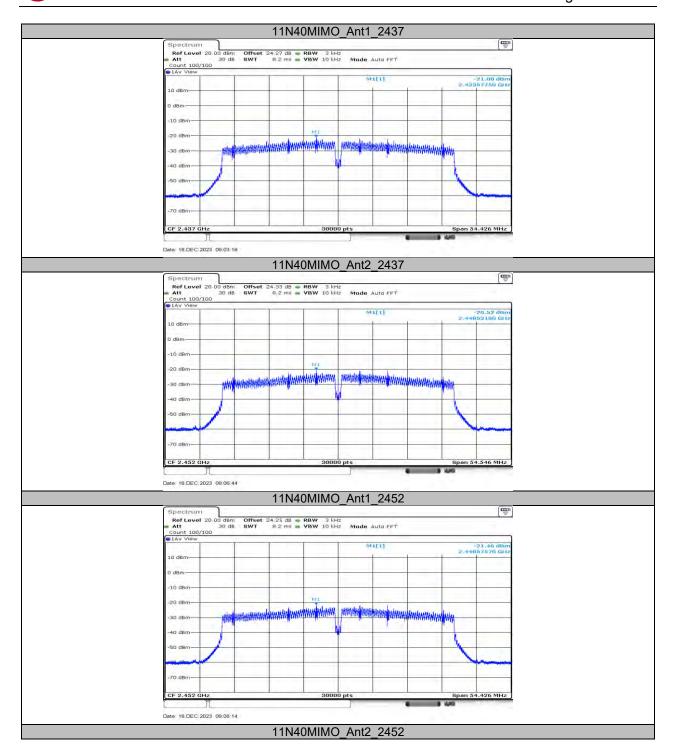




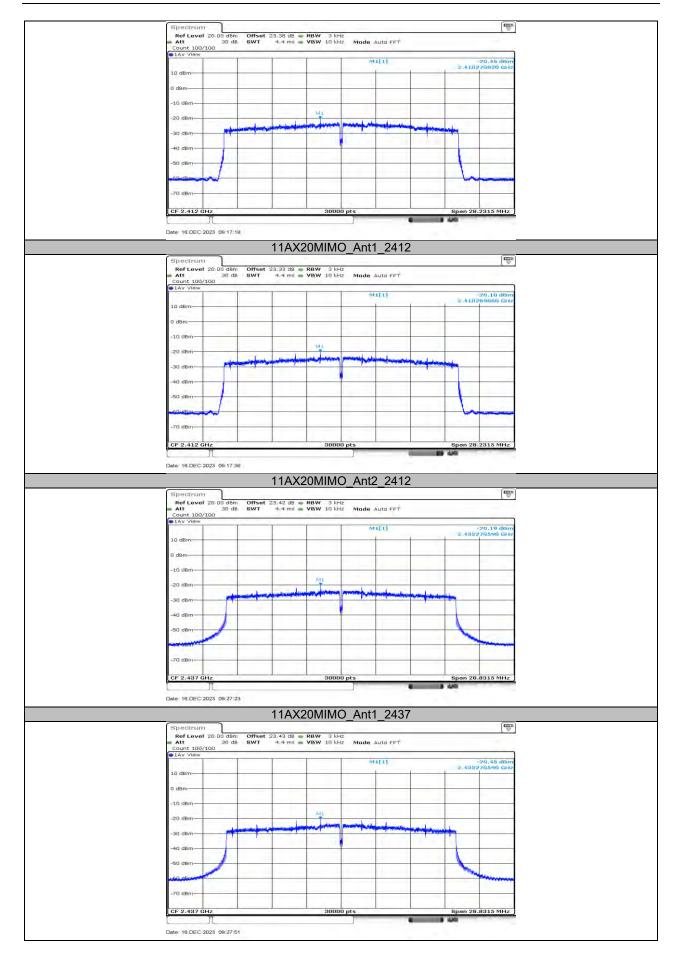






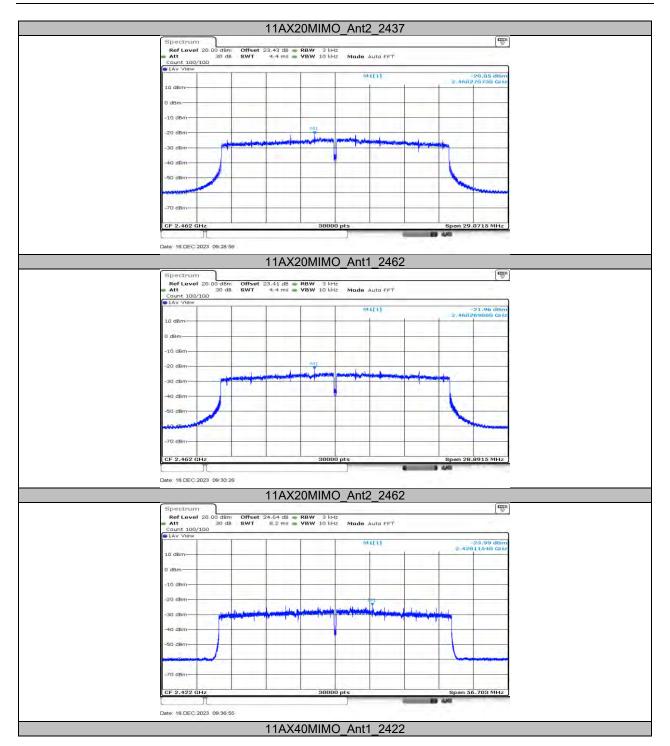




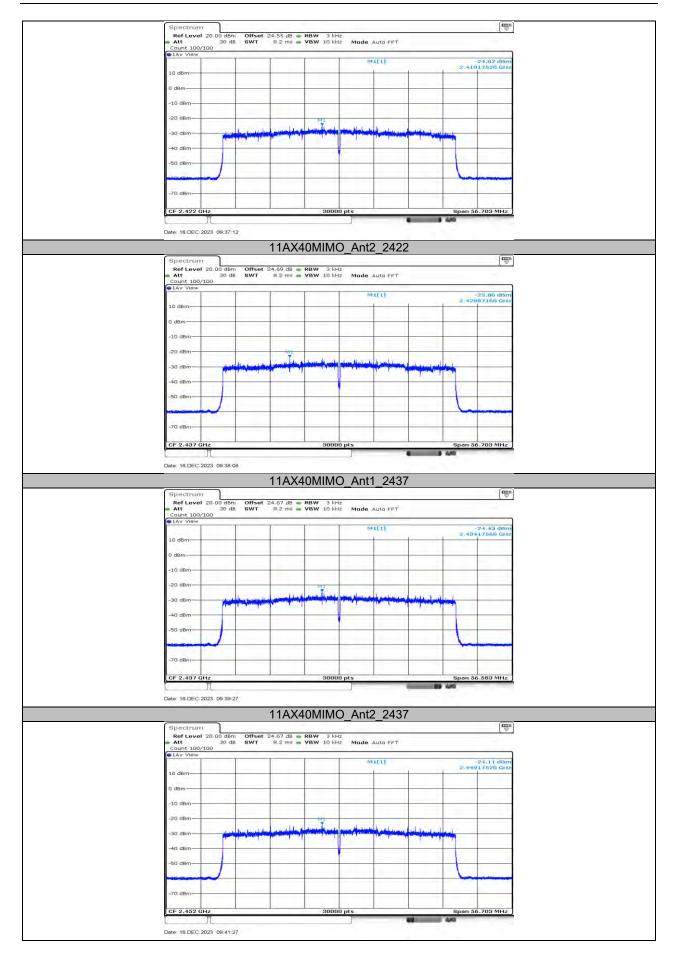


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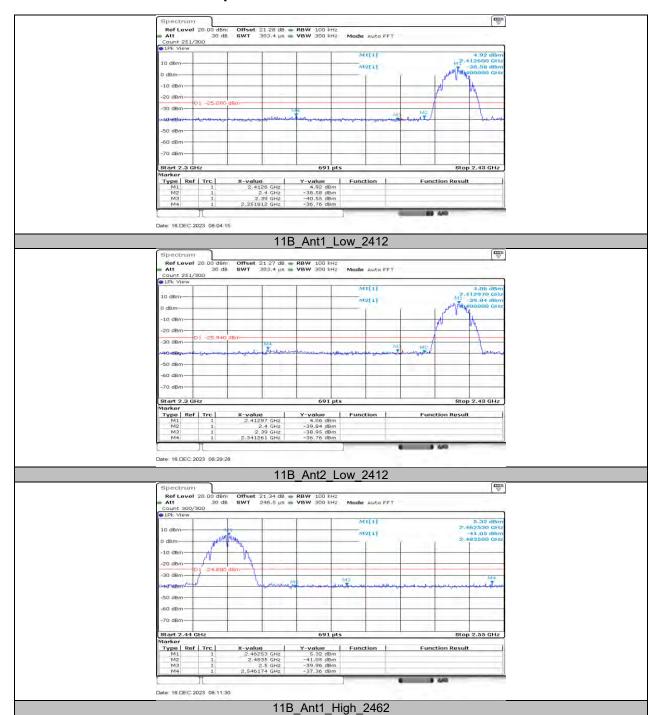
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### 11.5. APPENDIX E: BAND EDGE MEASUREMENTS 11.5.1. Test Result

| Test Mode    | Antenna | ChName | Frequency<br>[MHz] | RefLevel [dBm] | Result [dBm] | Limit [dBm] | Verdict |
|--------------|---------|--------|--------------------|----------------|--------------|-------------|---------|
| 11B          | Ant1    | Low    | 2412               | 4.92           | -36.76       | ≤-25.08     | PASS    |
|              | Ant2    | Low    | 2412               | 4.06           | -36.76       | ≤-25.94     | PASS    |
|              | Ant1    | High   | 2462               | 5.32           | -37.36       | ≤-24.68     | PASS    |
|              | Ant2    | High   | 2462               | 5.33           | -36.54       | ≤-24.67     | PASS    |
| 110          | Ant1    | Low    | 2412               | 2.46           | -35.51       | ≤-27.54     | PASS    |
|              | Ant2    | Low    | 2412               | 3.91           | -36.67       | ≤-26.09     | PASS    |
| 11G          | Ant1    | High   | 2462               | 0.68           | -36.95       | ≤-29.32     | PASS    |
|              | Ant2    | High   | 2462               | 0.12           | -37.68       | ≤-29.88     | PASS    |
|              | Ant1    | Low    | 2412               | 1.51           | -37.15       | ≤-28.49     | PASS    |
| 11N20MIMO    | Ant2    | Low    | 2412               | 2.60           | -33.84       | ≤-27.4      | PASS    |
| 11N2UMIMO    | Ant1    | High   | 2462               | 1.91           | -36.76       | ≤-28.09     | PASS    |
|              | Ant2    | High   | 2462               | 1.92           | -37.07       | ≤-28.08     | PASS    |
|              | Ant1    | Low    | 2422               | -0.22          | -37.03       | ≤-30.22     | PASS    |
| 111110111110 | Ant2    | Low    | 2422               | -1.38          | -36.16       | ≤-31.38     | PASS    |
| 11N40MIMO    | Ant1    | High   | 2452               | -0.10          | -36.97       | ≤-30.1      | PASS    |
|              | Ant2    | High   | 2452               | -2.24          | -36.94       | ≤-32.24     | PASS    |
| 11AX20MIMO   | Ant1    | Low    | 2412               | 1.68           | -37.21       | ≤-28.32     | PASS    |
|              | Ant2    | Low    | 2412               | 0.36           | -36.66       | ≤-29.64     | PASS    |
|              | Ant1    | High   | 2462               | -1.87          | -37.04       | ≤-31.87     | PASS    |
|              | Ant2    | High   | 2462               | -0.39          | -36.77       | ≤-30.39     | PASS    |
| 11AX40MIMO   | Ant1    | Low    | 2422               | -3.44          | -35.89       | ≤-33.44     | PASS    |
|              | Ant2    | Low    | 2422               | -4.24          | -37.62       | ≤-34.24     | PASS    |
|              | Ant1    | High   | 2452               | -4.12          | -35.82       | ≤-34.12     | PASS    |
|              | Ant2    | High   | 2452               | -2.70          | -35.7        | ≤-32.7      | PASS    |



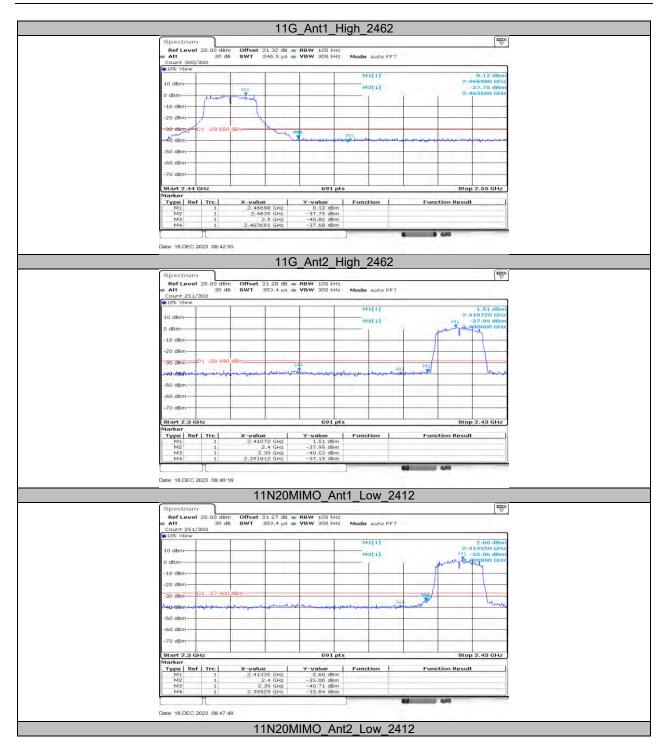
#### 11.5.2. Test Graphs







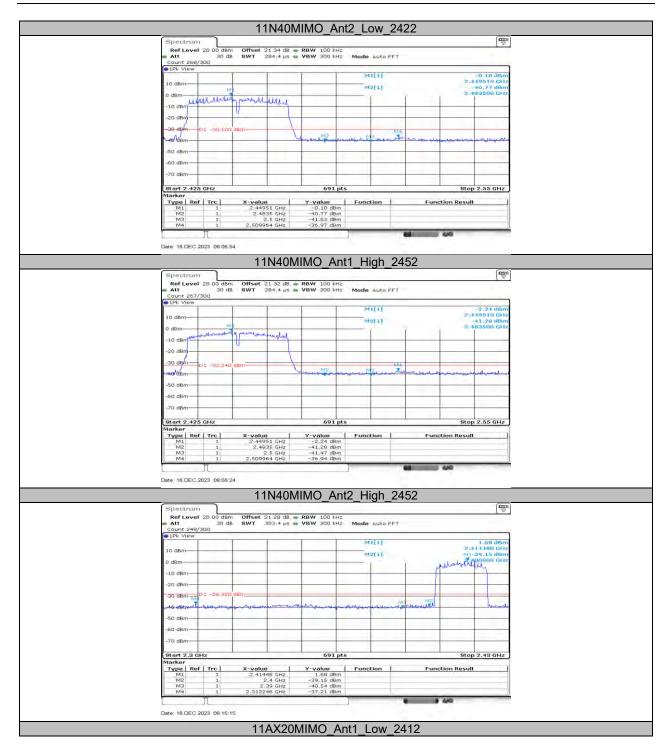






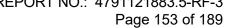




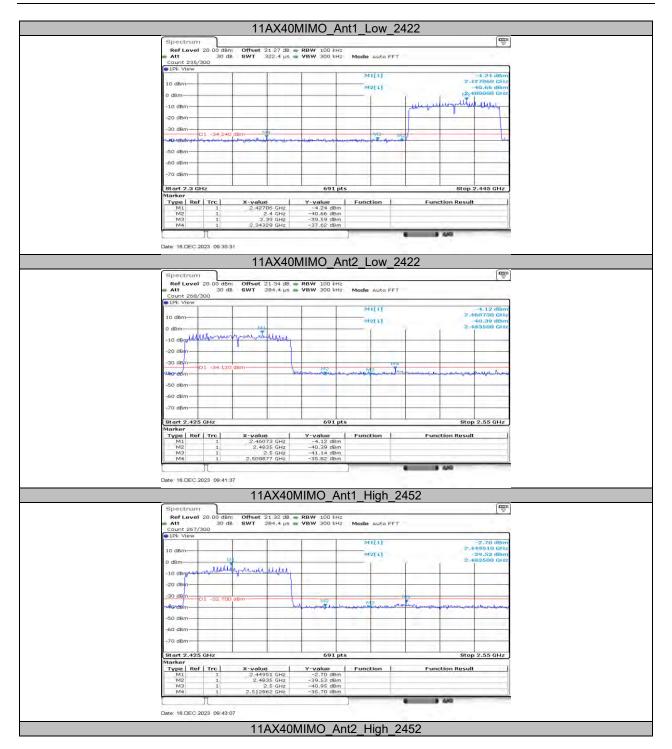














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# 11.6. APPENDIX F: CONDUCTED SPURIOUS EMISSION 11.6.1. Test Result

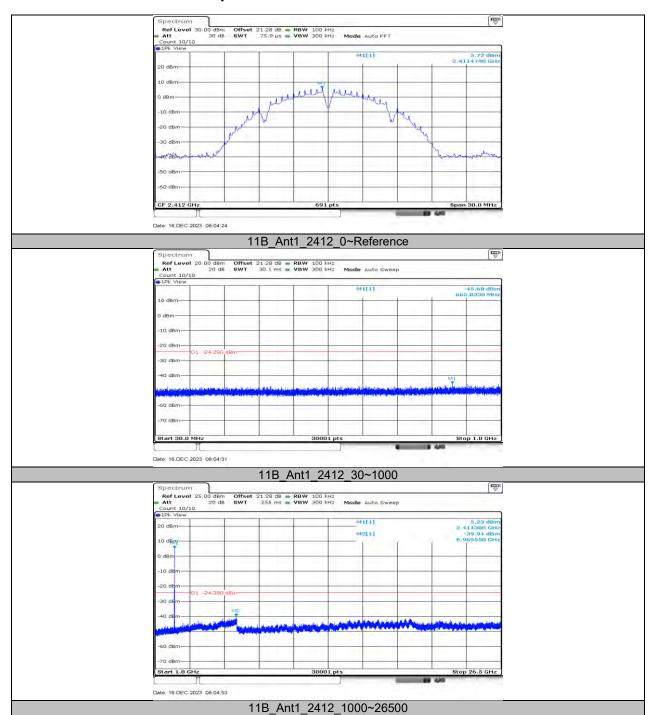
| Test Mode | Antenna | Frequency[MHz] | FreqRange<br>[Mhz] | Result [dBm]     | Limit<br>[dBm]      | Verdict |
|-----------|---------|----------------|--------------------|------------------|---------------------|---------|
|           |         |                | Reference          | 5.72             | [ubiii]             | PASS    |
|           | Ant1    | 2412           | 30~1000            | -45.68           | ≤-24.28             | PASS    |
|           | AIILI   | 2412           | 1000~26500         | -39.94           | ≤-24.28             | PASS    |
|           |         |                | Reference 4.94     |                  | 3-24.20             | PASS    |
|           | Ant2    | 2412           | 30~1000            | -45.61           | ≤-25.06             | PASS    |
|           | AIILZ   | 2412           | 1000~26500         | -40.61           | ≤-25.06<br>≤-25.06  | PASS    |
|           |         |                | Reference          | 5.82             | 3-23.00             | PASS    |
|           | Ant1    | 2437           | 30~1000            | -46.39           | <u></u><br>≤-24.18  | PASS    |
|           |         |                | 1000~26500         | -40.39           | ≤-24.18<br>≤-24.18  | PASS    |
| 11B       |         |                | Reference          | 5.37             | <u>3-24.10</u>      | PASS    |
|           | Ant2    |                | 30~1000            | -46.29           | ≤-24.63             | PASS    |
|           | AIILZ   | 2437           | 1000~26500         | -40.29           | ≤-24.63             | PASS    |
|           |         |                | Reference          | 5.08             | <u></u>             | PASS    |
|           | Ant1    | 2462           | 30~1000            | -46.17           | ≤-24.92             | PASS    |
|           | Anti    | 2402           | 1000~26500         | -40.17           | ≤-24.92<br>≤-24.92  | PASS    |
|           |         |                | Reference          | 5.43             | 3-24.92             | PASS    |
|           | Ant2    | 2462           | 30~1000            | -46.24           | <u></u><br>≤-24.57  | PASS    |
|           | AIILZ   | 2402           | 1000~26500         | -40.24           | ≤-24.57<br>≤-24.57  | PASS    |
|           | +       |                | Reference          | 4.23             | ≥-24.5 <i>1</i><br> | PASS    |
|           | Ant1    | 2412           | 30~1000            | -45.82           | <u></u><br>≤-25.77  | PASS    |
|           | Anti    | 2412           | 1000~26500         | -40.83           | ≤-25.77<br>≤-25.77  | PASS    |
|           |         |                | Reference          | 3.37             | <u>3-23.11</u>      | PASS    |
|           | Ant2    | 2412           | 30~1000            | -46.19           | ≤-26.63             | PASS    |
|           | AIILZ   | 2412           | 1000~26500         | -40.19           | ≤-26.63             | PASS    |
|           |         |                | Reference          | 3.05             | 3-20.03             | PASS    |
|           | Ant1    | 2437           | 30~1000            | -46.34           | <u></u><br>≤-26.95  | PASS    |
|           | Anti    | 2431           | 1000~26500         | -40.84           | ≤-26.95<br>≤-26.95  | PASS    |
| 11G       |         |                | Reference          |                  | 3-20.93             | PASS    |
|           | Ant2    | 2/137          | 30~1000            | 2.66<br>-46.67   | <u></u><br>≤-27.34  | PASS    |
|           | Anz     | 2437           | 1000~26500         | -40.07           | ≤-27.34<br>≤-27.34  | PASS    |
|           |         |                | Reference          | 3.00             | <u>≤-27.34</u>      | PASS    |
|           | Ant1    | 2462           | 30~1000            | -45.34           | <br>≤-27            | PASS    |
|           | Anti    | 2402           | 1000~26500         | -43.34           | ≤-27                | PASS    |
|           |         |                | Reference          | 2.67             | <u> </u>            | PASS    |
|           | Ant2    | 2462           | 30~1000            | -44.72           | ≤-27.33             | PASS    |
|           |         | 2462           | 1000~26500         | -44.72<br>-41.11 | ≤-27.33<br>≤-27.33  | PASS    |
|           |         |                | Reference          | 4.49             | <u>≤-21.33</u>      | PASS    |
|           | Ant1    | 2412<br>2412   | 30~1000            | -45.32           | ≤-25.51             | PASS    |
|           |         |                | 1000~26500         | -40.99           | ≤-25.51<br>≤-25.51  | PASS    |
|           |         |                | Reference          | 4.09             | <u></u>             | PASS    |
|           |         |                | 30~1000            | -46.11           | <u></u><br>≤-25.91  | PASS    |
|           |         |                | 1000~26500         | -40.11           | ≤-25.91<br>≤-25.91  | PASS    |
|           | Ant1    | 2437           | Reference          | 2.47             | ==ZJ.81             | PASS    |
|           |         |                | 30~1000            | -46.26           | ≤-27.53             | PASS    |
|           |         |                | 1000~26500         | -41.04           | ≤-27.53<br>≤-27.53  | PASS    |
| 11N20MIMO | Ant2    |                | Reference          | 2.46             |                     | PASS    |
|           |         | 2437           | 30~1000            | -46.33           | <br>≤-27.54         | PASS    |
|           |         |                | 1000~26500         | -40.33<br>-40.95 | ≤-27.54<br>≤-27.54  | PASS    |
|           | Ant1    | 2462           | Reference          | 3.23             | <u>3-27.34</u>      | PASS    |
|           |         |                | 30~1000            | -46.25           | ≤-26.77             | PASS    |
|           |         |                | 1000~26500         | -40.23           | ≤-26.77             | PASS    |
|           | Ant2    |                | Reference          | 2.81             | 20.11               | PASS    |
|           |         | 2462           | 30~1000            | -46.18           | <br>≤-27.19         | PASS    |
|           |         |                | 1000~26500         | -40.10<br>-41.02 | ≤-27.19<br>≤-27.19  | PASS    |
|           |         |                | Reference          | 0.22             | <u></u>             | PASS    |
|           | Ant1    | 2422           | 30~1000            | -45.59           | ≤-29.78             | PASS    |
| 11N40MIMO |         |                | 1000~26500         | -41.32           | ≤-29.78             | PASS    |
|           | Ant2    | 2422           | Reference          | -1.60            | <u></u>             | PASS    |
|           | AIIL    | <u> </u>       | TAGIGIGIDE         | 1.00             | I                   | 1 700   |



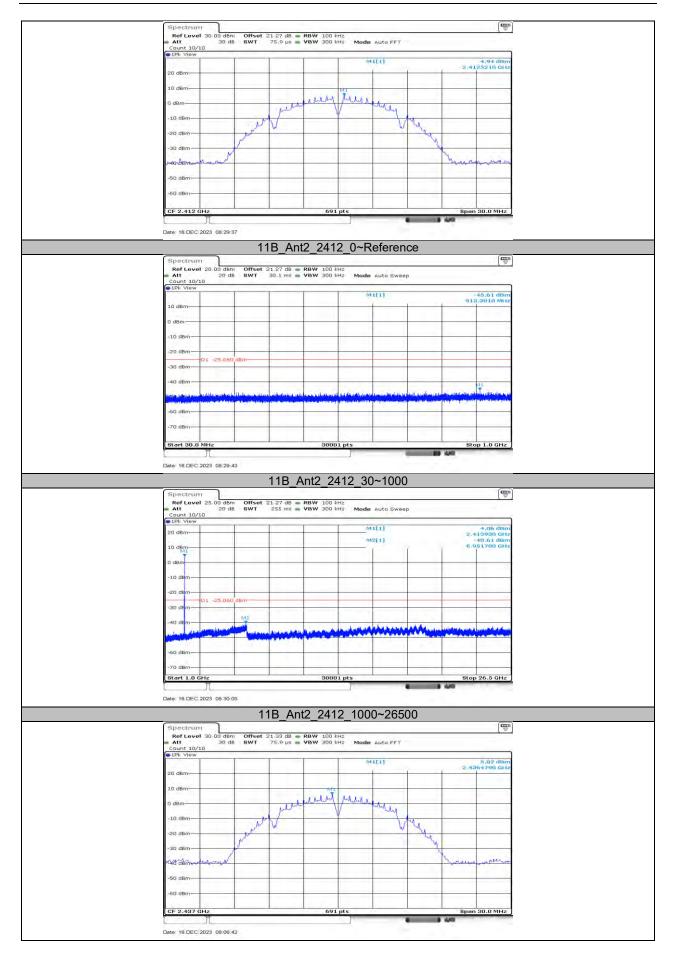
|                | T     |       | 20,4000    | 15 71  | < 21 G  | DACC         |
|----------------|-------|-------|------------|--------|---------|--------------|
|                |       |       | 30~1000    | -45.71 | ≤-31.6  | PASS         |
|                |       |       | 1000~26500 | -40.92 | ≤-31.6  | PASS         |
|                | A 4.4 | 0407  | Reference  | 0.40   |         | PASS         |
|                | Ant1  | 2437  | 30~1000    | -45.42 | ≤-29.6  | PASS<br>PASS |
|                |       |       | 1000~26500 | -41.08 | ≤-29.6  |              |
|                | A 10  |       | Reference  | 0.06   |         | PASS         |
|                | Ant2  | 2437  | 30~1000    | -46.16 | ≤-29.94 | PASS         |
|                |       |       | 1000~26500 | -40.91 | ≤-29.94 | PASS         |
|                |       | 0.450 | Reference  | 0.22   |         | PASS         |
|                | Ant1  | 2452  | 30~1000    | -45.9  | ≤-29.78 | PASS         |
|                |       |       | 1000~26500 | -40.81 | ≤-29.78 | PASS         |
|                |       |       | Reference  | -0.27  |         | PASS         |
|                | Ant2  | 2452  | 30~1000    | -46.53 | ≤-30.27 | PASS         |
|                |       |       | 1000~26500 | -41.16 | ≤-30.27 | PASS         |
|                |       |       | Reference  | 2.19   |         | PASS         |
|                | Ant1  | 2412  | 30~1000    | -46.12 | ≤-27.81 | PASS         |
|                |       |       | 1000~26500 | -41.05 | ≤-27.81 | PASS         |
|                |       | 2412  | Reference  | -0.16  |         | PASS         |
|                | Ant2  |       | 30~1000    | -45.73 | ≤-30.16 | PASS         |
|                |       |       | 1000~26500 | -41.65 | ≤-30.16 | PASS         |
|                |       |       | Reference  | -0.68  |         | PASS         |
|                | Ant1  | 2437  | 30~1000    | -45.9  | ≤-30.68 | PASS         |
| 11AX20MIMO     |       |       | 1000~26500 | -40.41 | ≤-30.68 | PASS         |
| TIAAZUIVIIIVIO |       |       | Reference  | -0.92  |         | PASS         |
|                | Ant2  | 2437  | 30~1000    | -45.72 | ≤-30.92 | PASS         |
|                |       |       | 1000~26500 | -40.82 | ≤-30.92 | PASS         |
|                |       | 2462  | Reference  | 0.41   |         | PASS         |
|                | Ant1  |       | 30~1000    | -46.29 | ≤-29.59 | PASS         |
|                |       |       | 1000~26500 | -40.29 | ≤-29.59 | PASS         |
|                | Ant2  | 2462  | Reference  | 0.12   |         | PASS         |
|                |       |       | 30~1000    | -46.34 | ≤-29.88 | PASS         |
|                |       |       | 1000~26500 | -41.12 | ≤-29.88 | PASS         |
|                |       |       | Reference  | -3.52  |         | PASS         |
|                | Ant1  | 2422  | 30~1000    | -46.05 | ≤-33.52 | PASS         |
|                |       |       | 1000~26500 | -40.75 | ≤-33.52 | PASS         |
|                | Ant2  | 2422  | Reference  | -3.73  |         | PASS         |
|                |       |       | 30~1000    | -46.27 | ≤-33.73 | PASS         |
|                |       |       | 1000~26500 | -41.18 | ≤-33.73 | PASS         |
|                |       |       | Reference  | -2.93  |         | PASS         |
|                | Ant1  | 2437  | 30~1000    | -45.67 | ≤-32.93 | PASS         |
| 44424400000    |       | 2.07  | 1000~26500 | -40.96 | ≤-32.93 | PASS         |
| 11AX40MIMO     | Ant2  | 2437  | Reference  | -2.84  |         | PASS         |
|                |       |       | 30~1000    | -46.09 | ≤-32.84 | PASS         |
|                |       |       | 1000~26500 | -40.79 | ≤-32.84 | PASS         |
|                | Ant1  |       | Reference  | -2.88  |         | PASS         |
|                |       | 2452  | 30~1000    | -46.34 | ≤-32.88 | PASS         |
|                | ,     |       | 1000~26500 | -40.18 | ≤-32.88 | PASS         |
|                | Ant2  | 2452  | Reference  | -2.84  |         | PASS         |
|                |       |       | 30~1000    | -46.01 | ≤-32.84 | PASS         |
|                |       |       | 1000~26500 | -40.78 | ≤-32.84 | PASS         |
|                |       |       | 1000 20000 | 10.70  | _ 02.07 | . ,          |



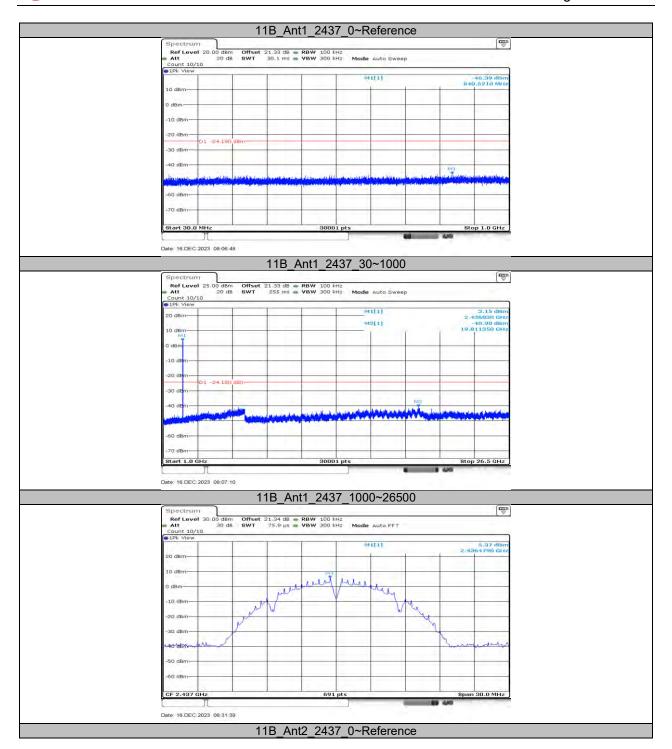
#### 11.6.2. Test Graphs



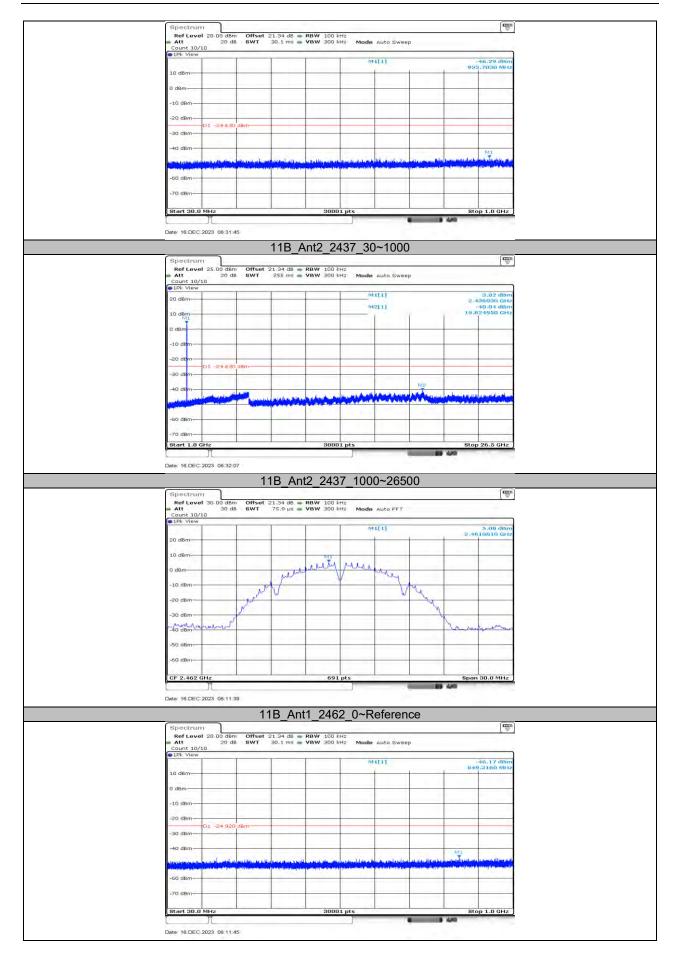




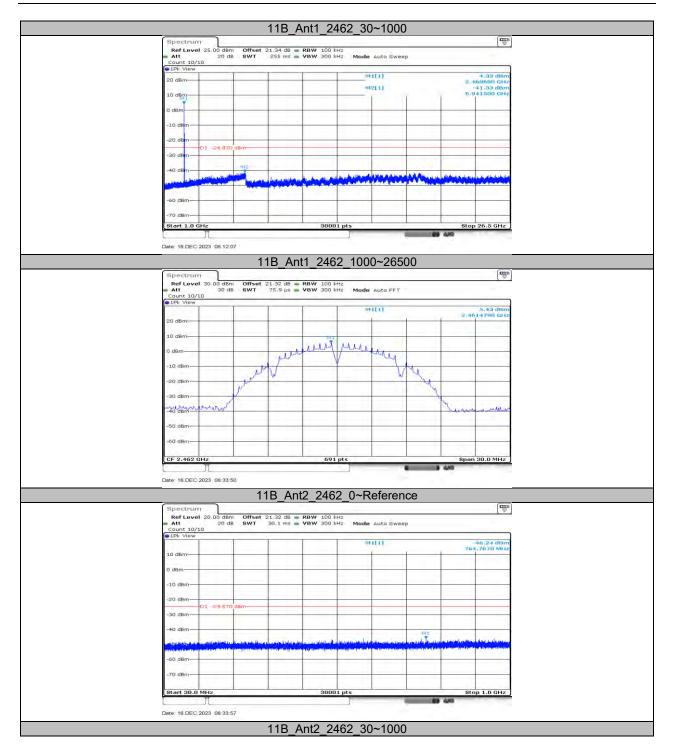




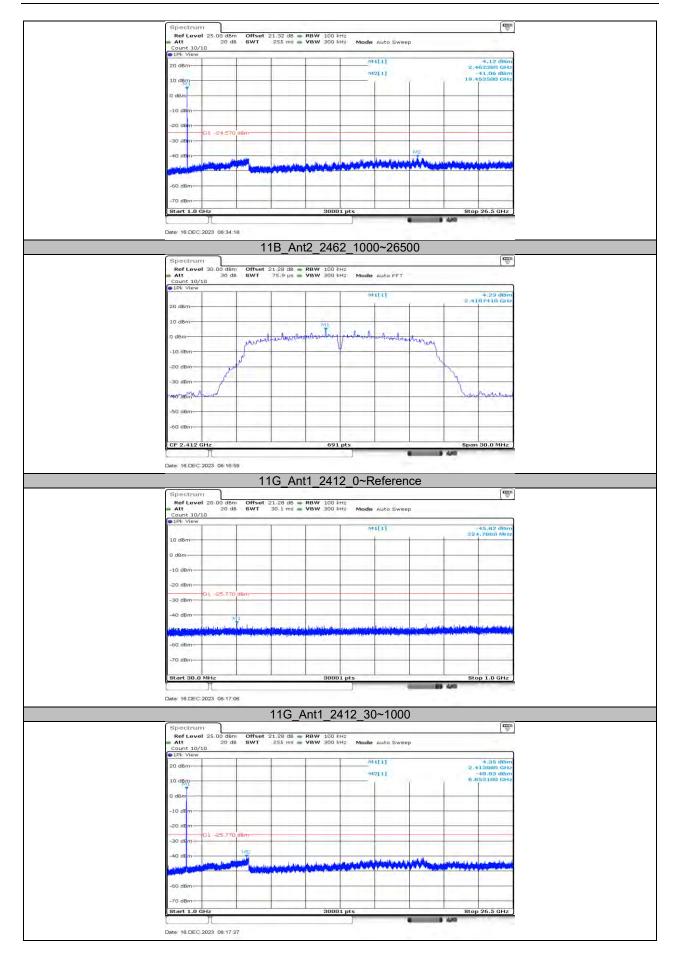






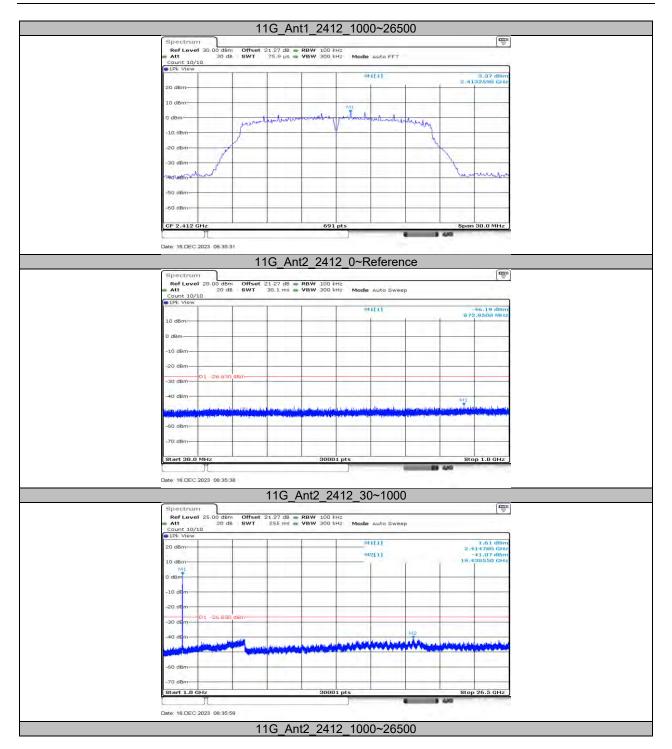




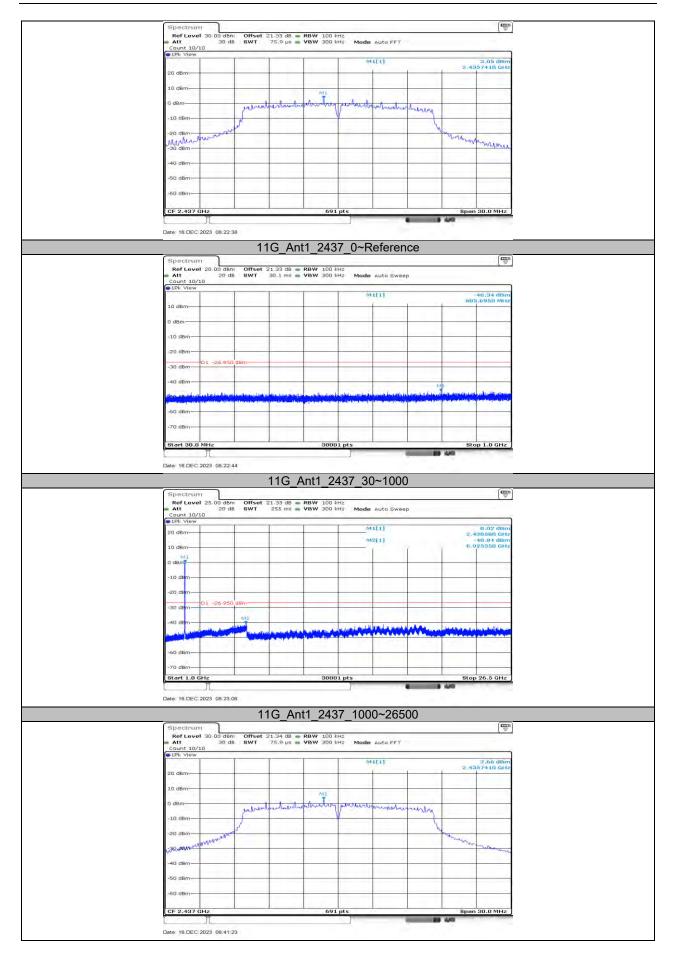


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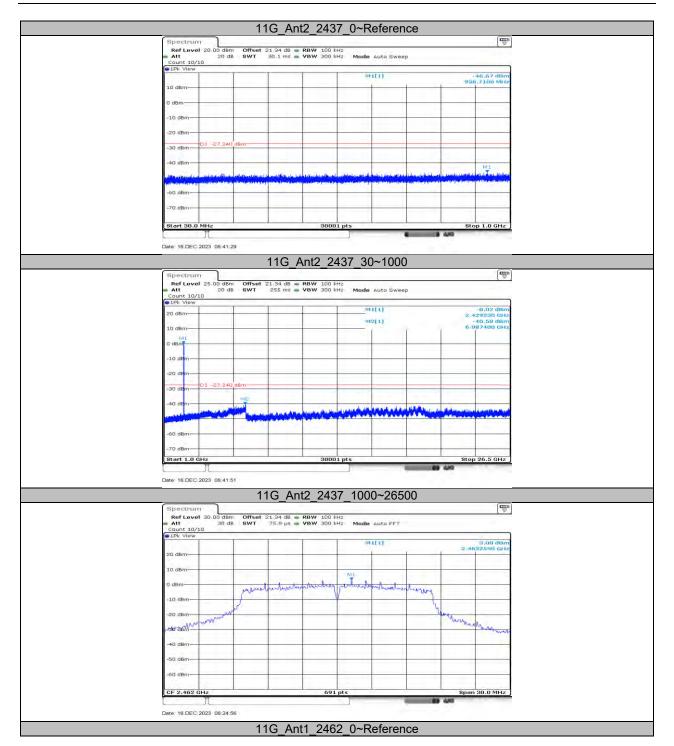




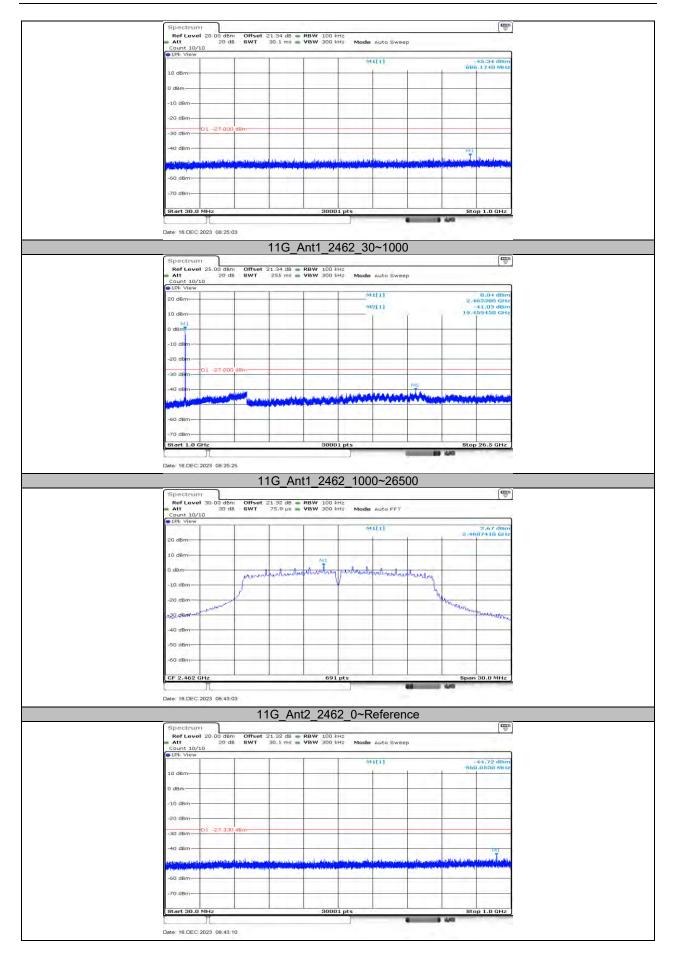




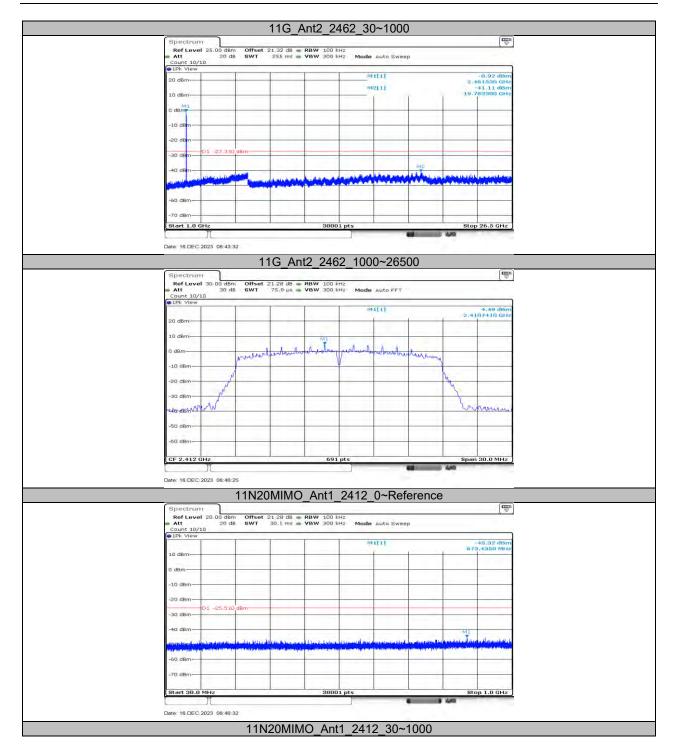




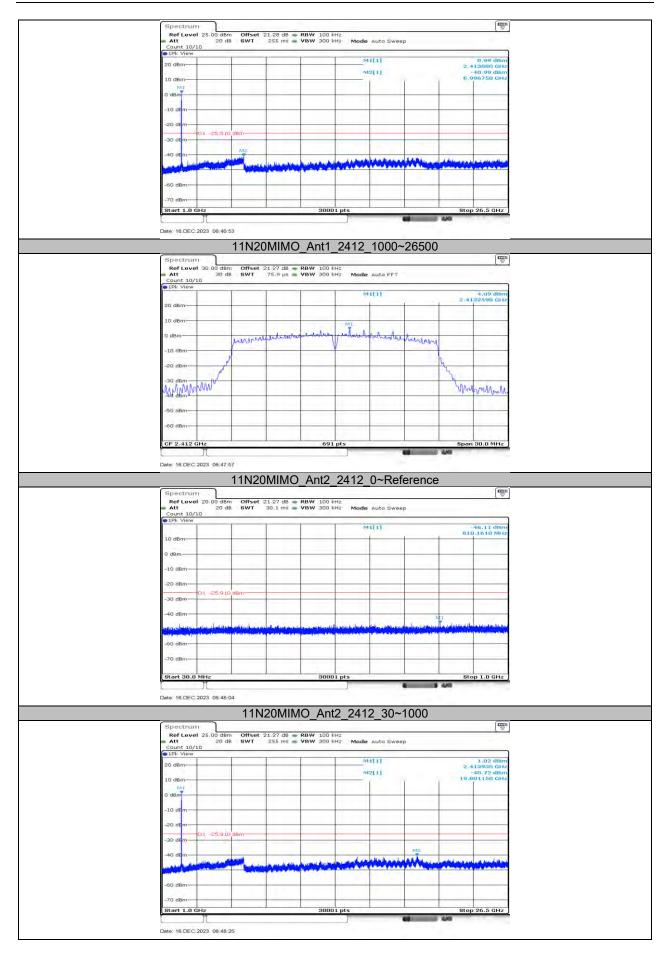


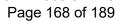




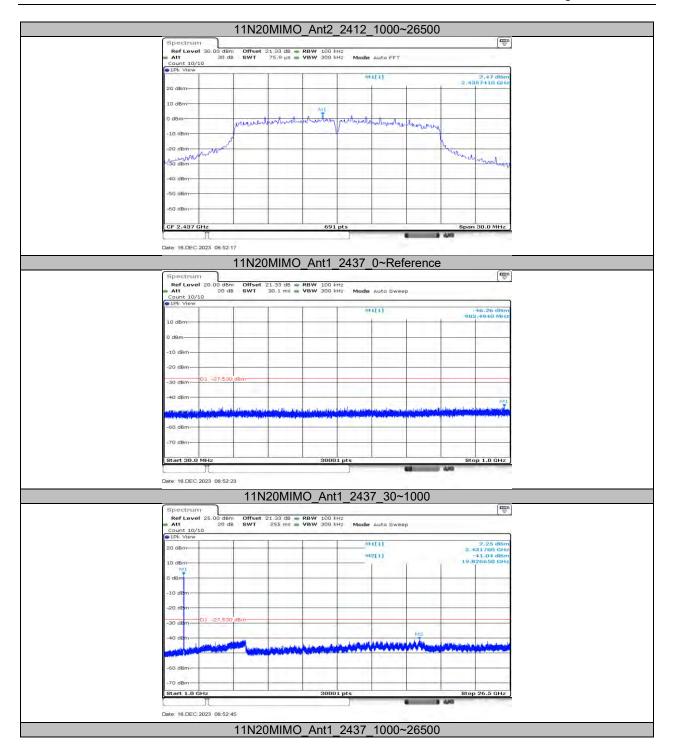




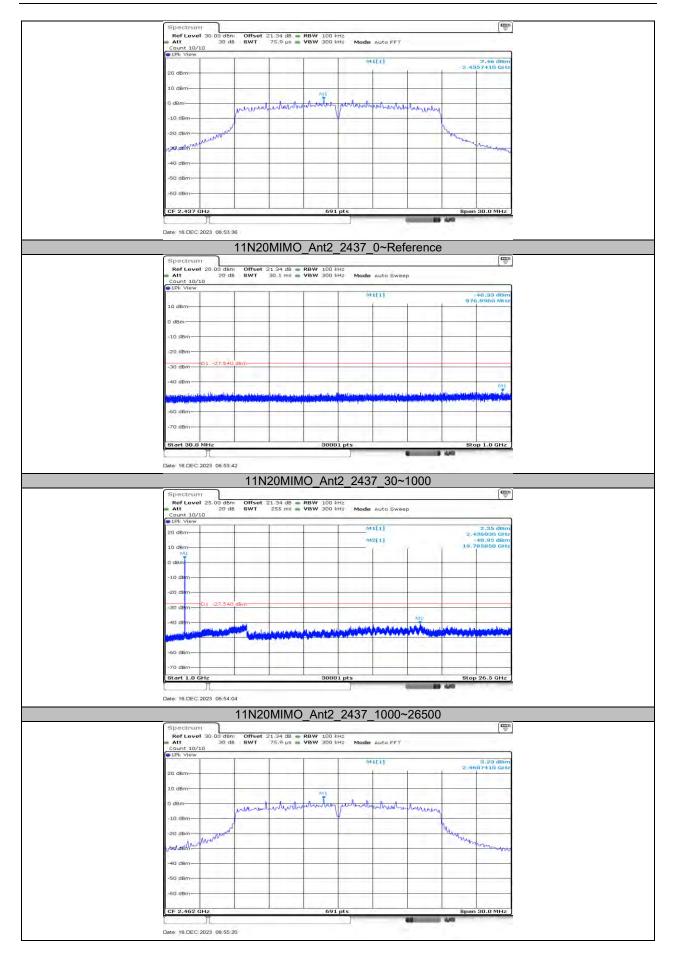




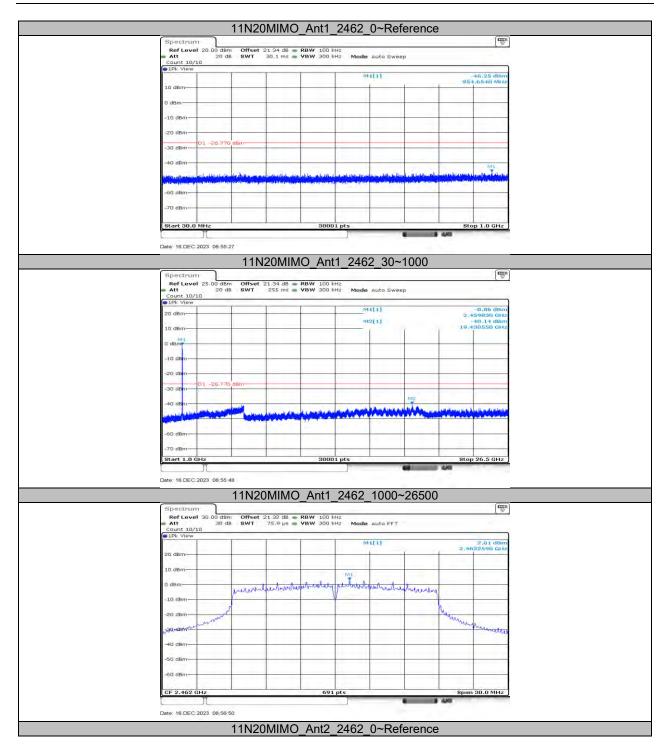




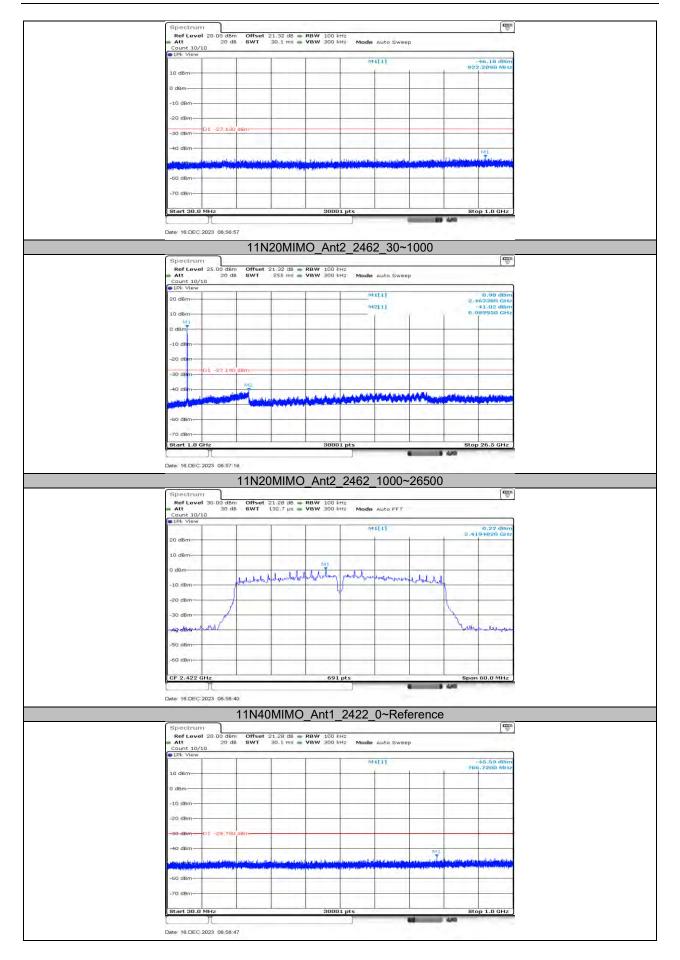




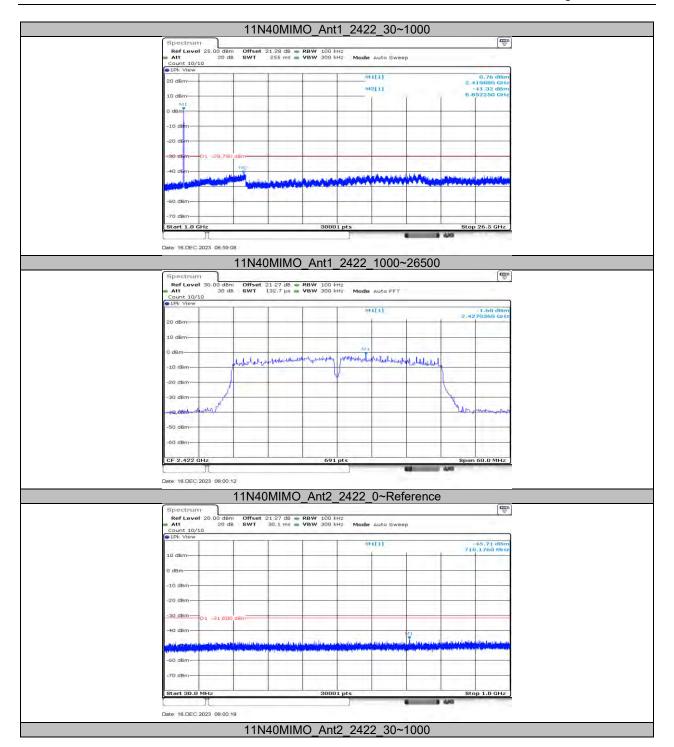




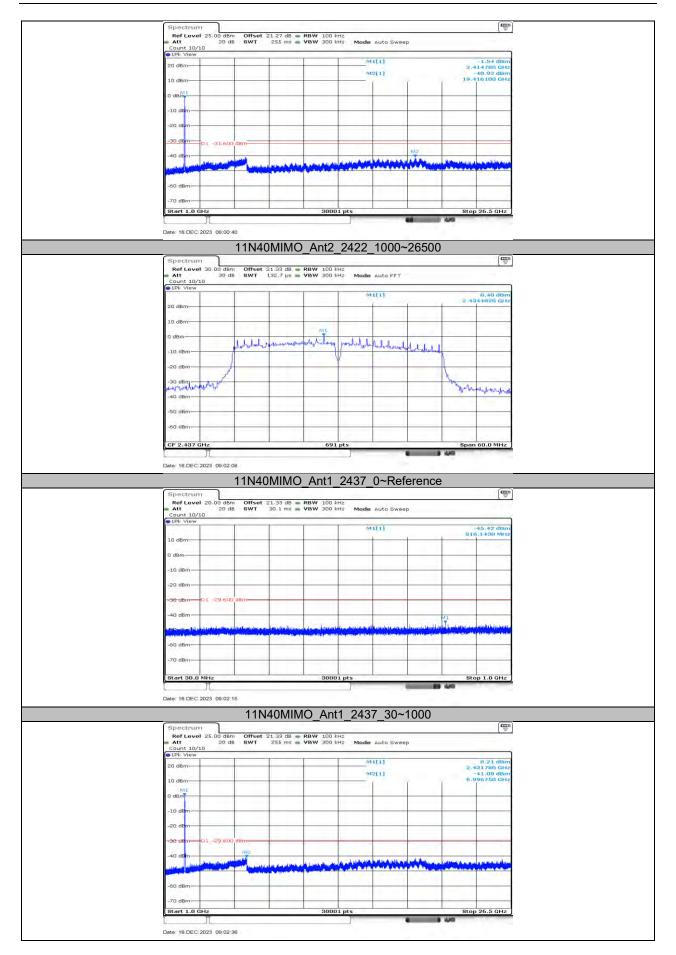




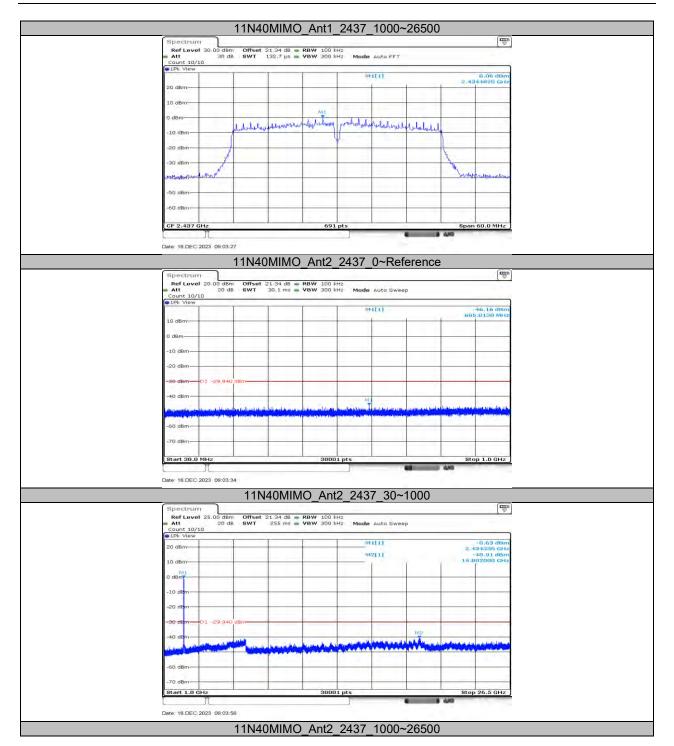




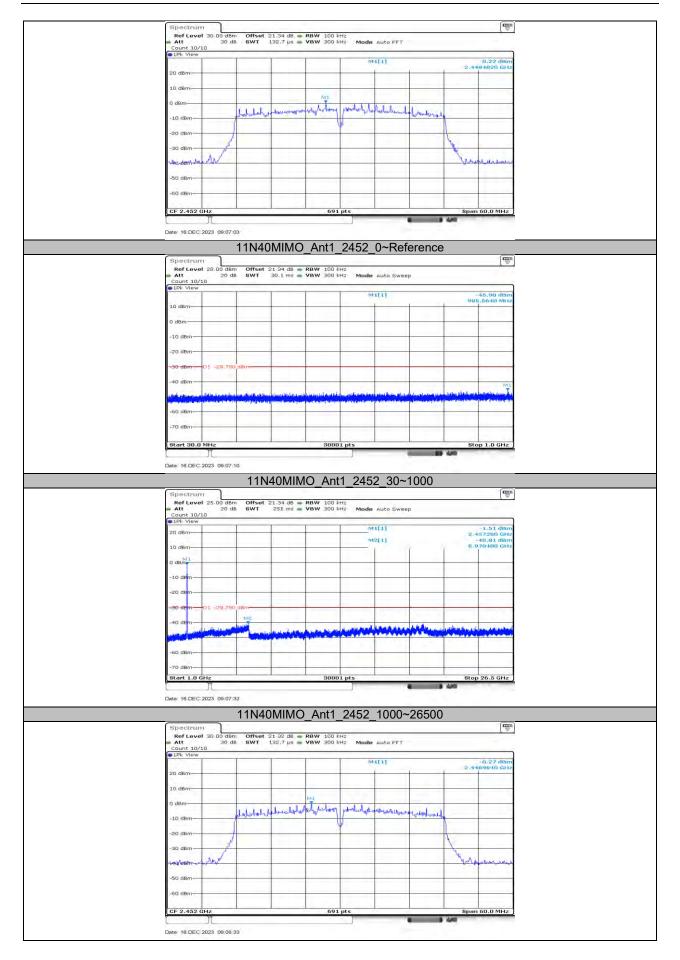


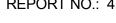




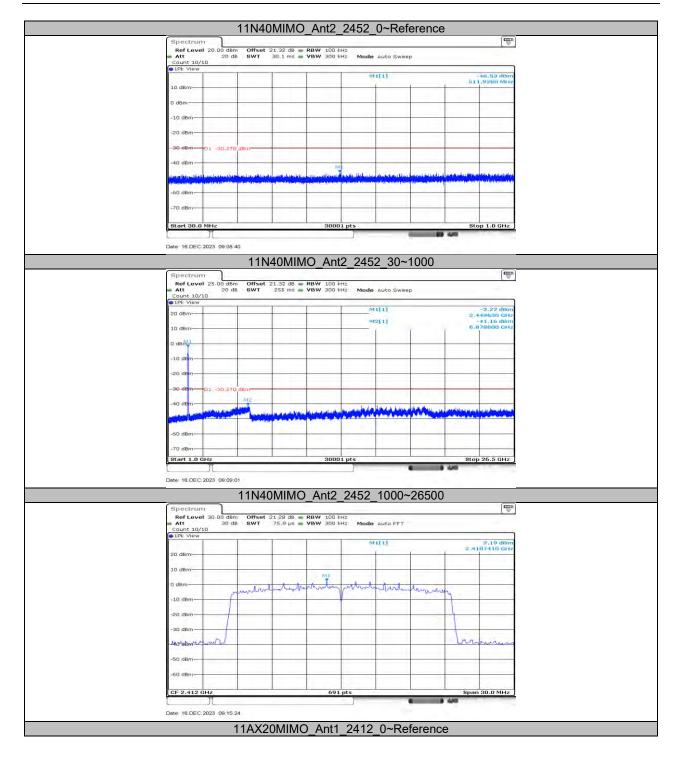




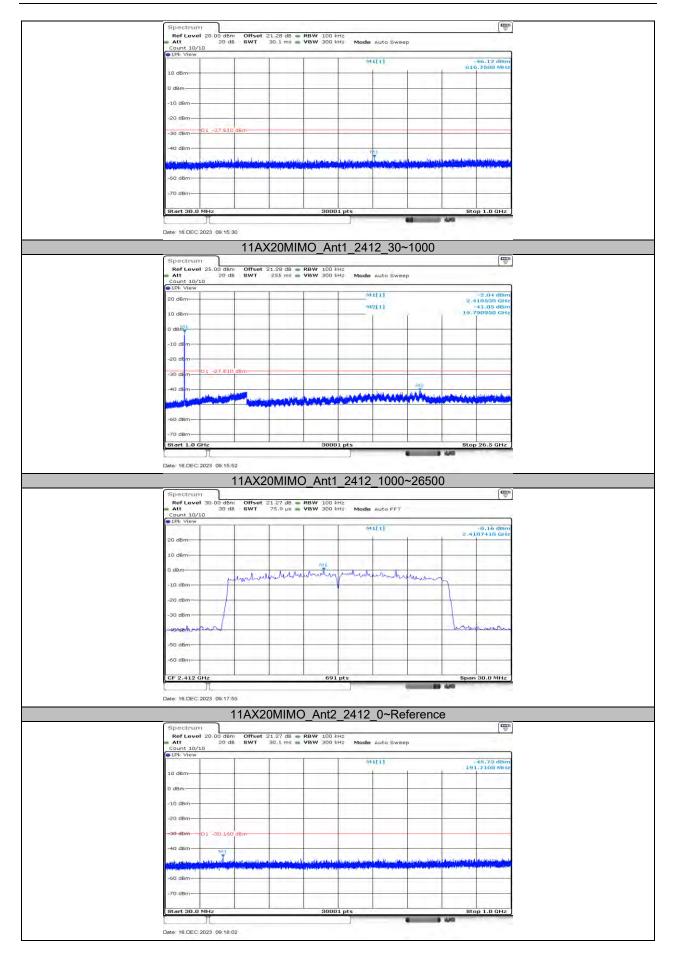




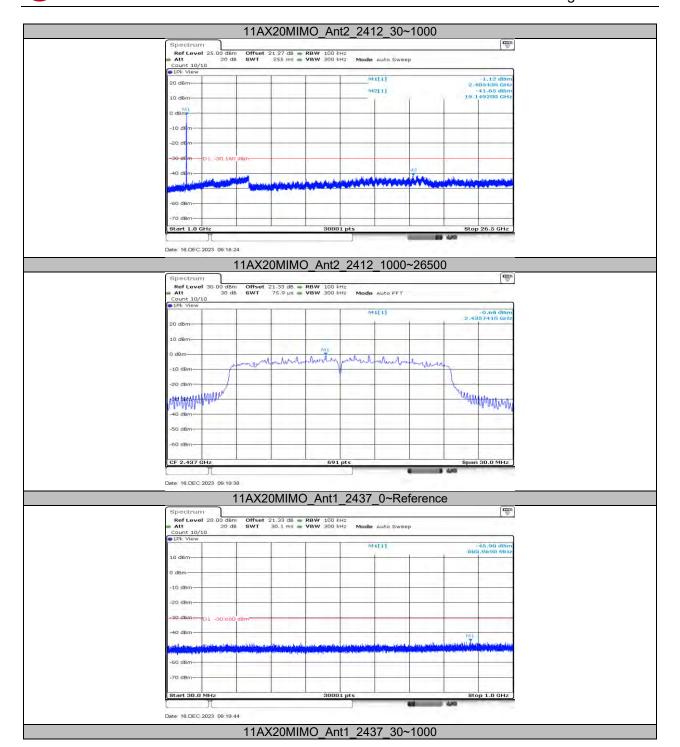




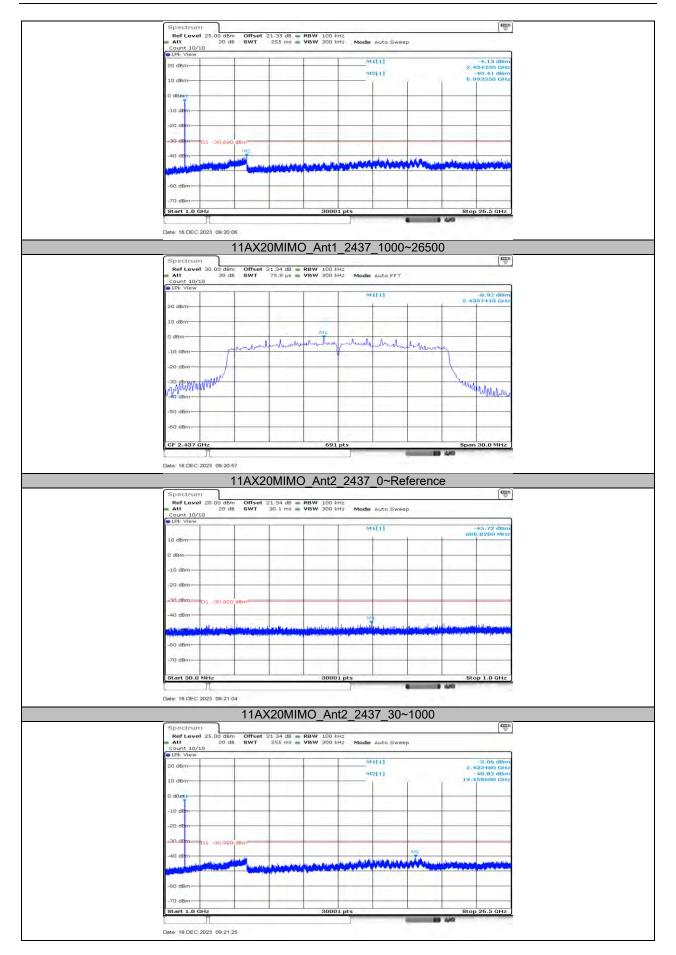


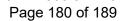




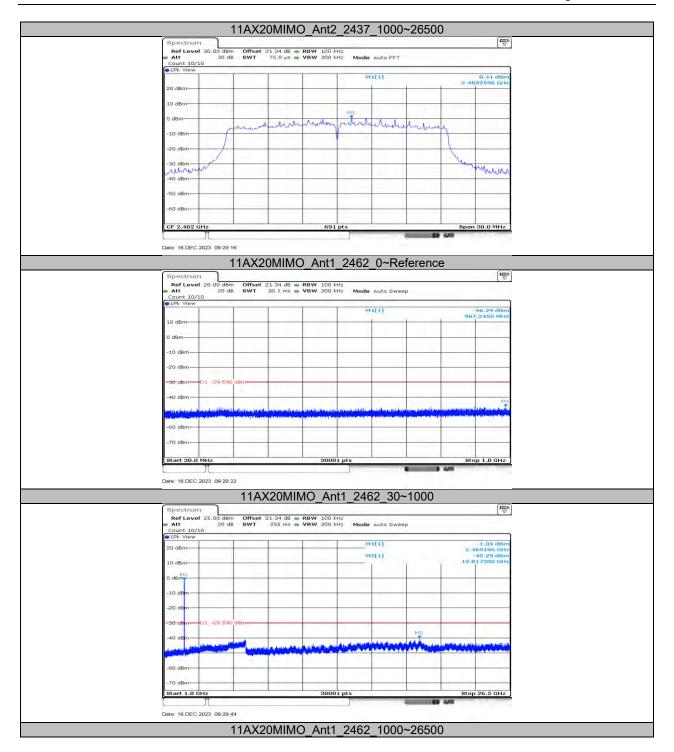


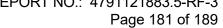




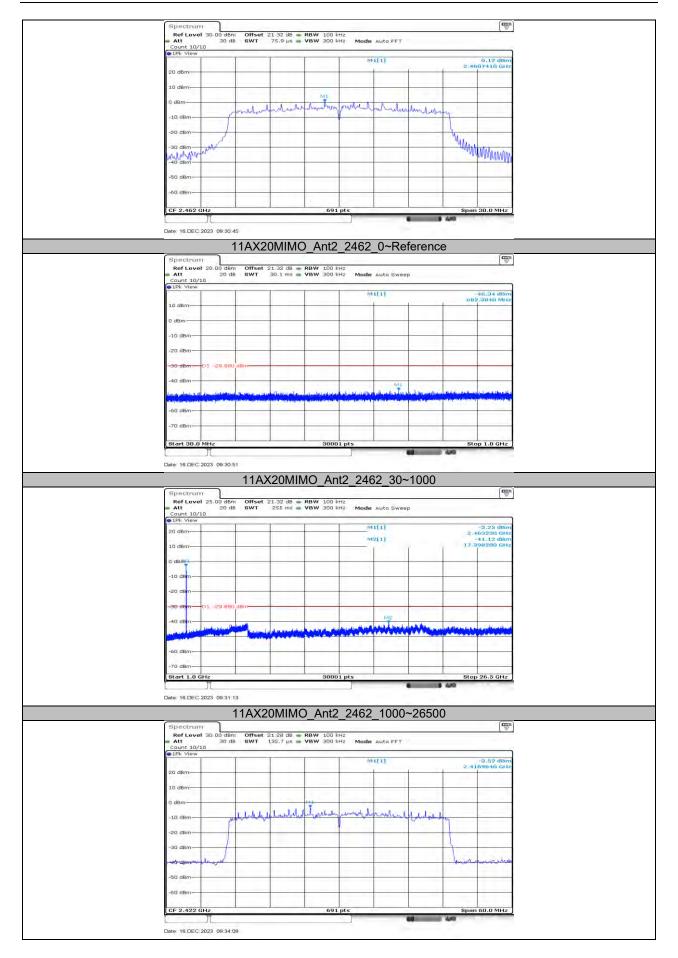




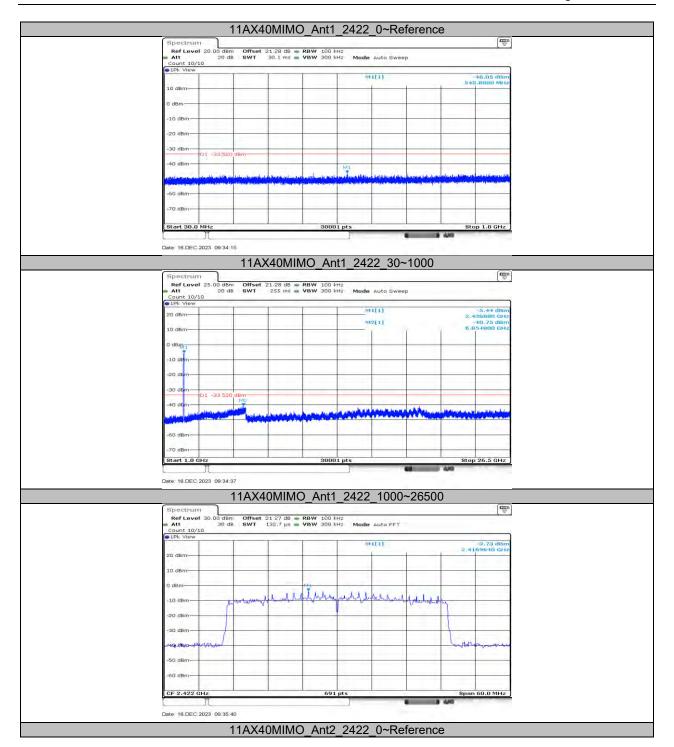




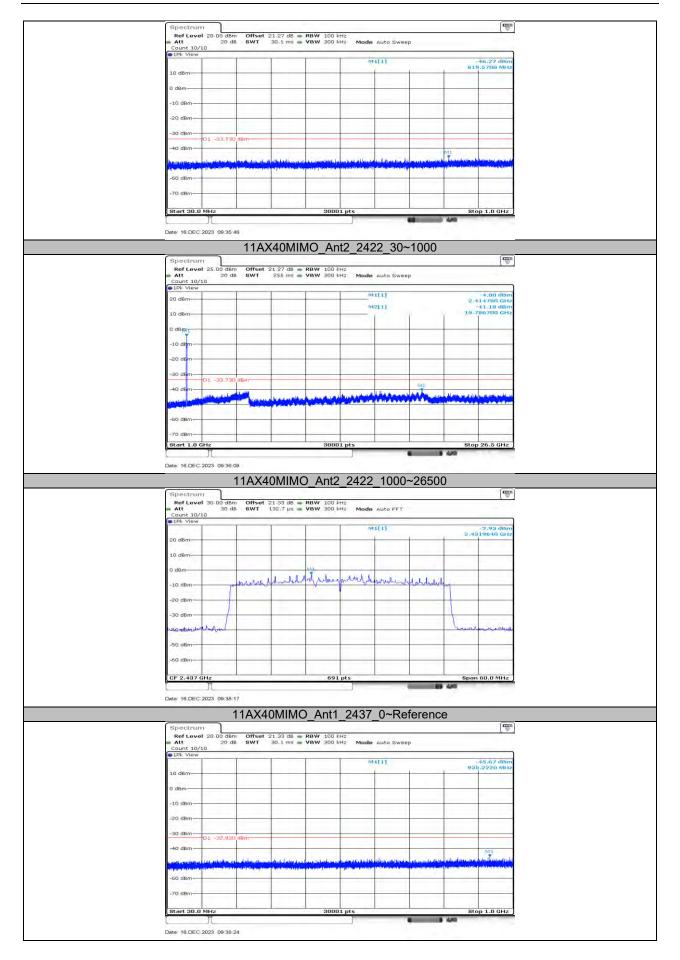




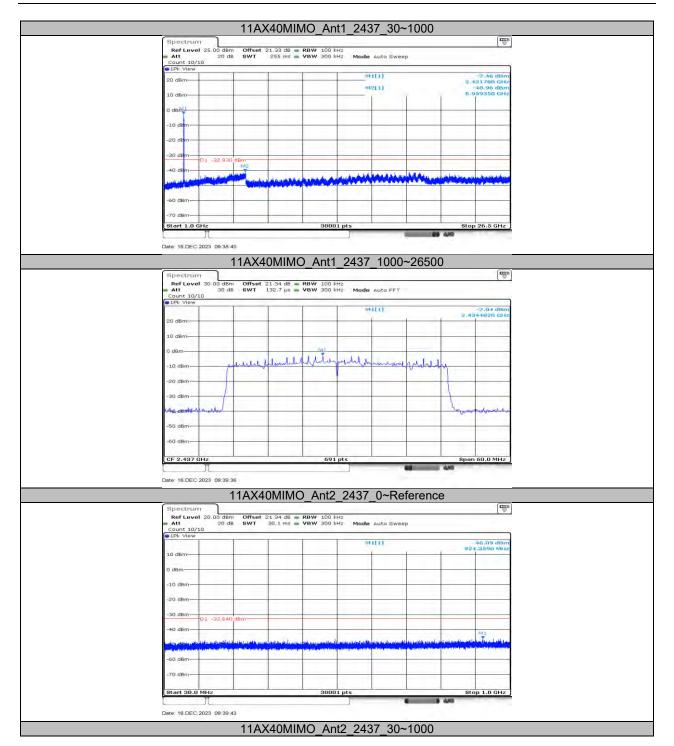




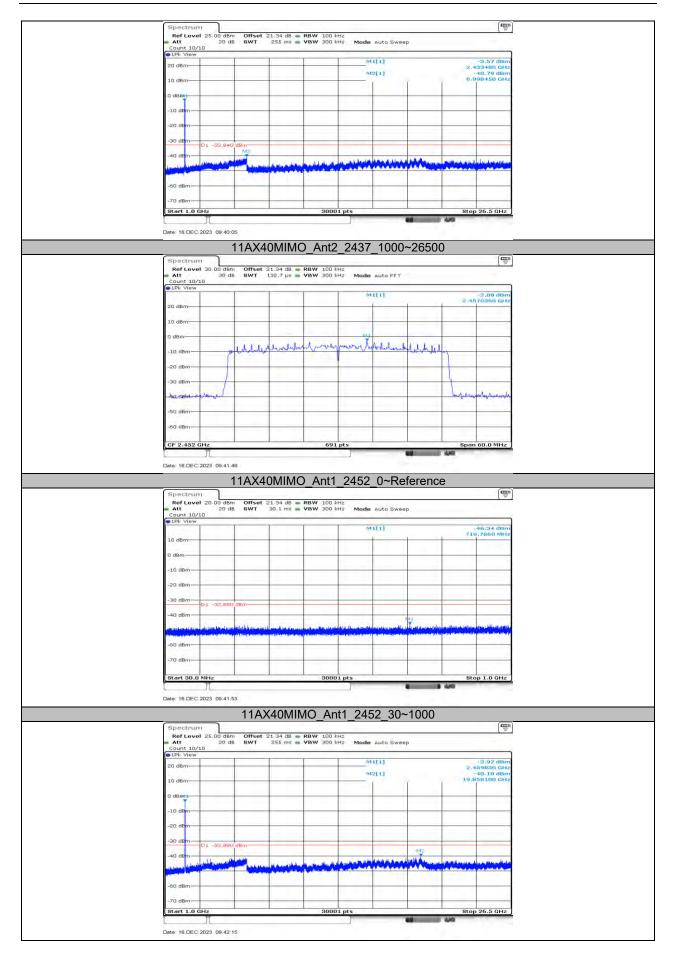






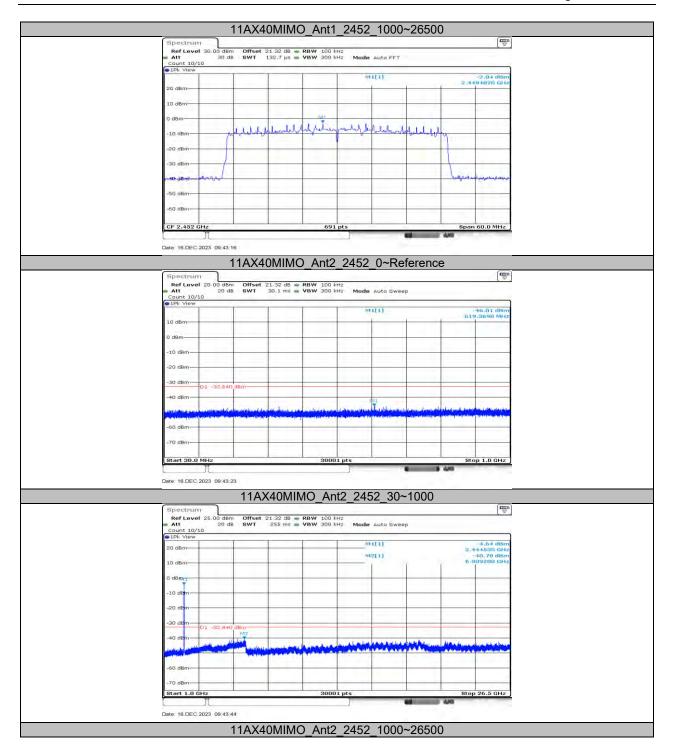






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## 11.7. APPENDIX G: DUTY CYCLE 11.7.1. Test Result

| Test Mode  | On Time<br>(msec) | Period<br>(msec) | Duty<br>Cycle<br>x<br>(Linear) | Duty<br>Cycle<br>(%) | Duty Cycle<br>Correction<br>Factor<br>(dB) | 1/T<br>Minimum<br>VBW<br>(kHz) | Final<br>setting<br>For VBW<br>(kHz) |
|------------|-------------------|------------------|--------------------------------|----------------------|--|--------------------------------|--------------------------------------|
| 11B        | 8.36              | 8.97             | 0.9320                         | 93.20                | 0.31                                       | 0.12                           | 1                                    |
| 11G        | 1.37              | 1.99             | 0.6884                         | 68.84                | 1.62                                       | 0.73                           | 1                                    |
| 11N20MIMO  | 1.30              | 1.92             | 0.6771                         | 67.71                | 1.69                                       | 0.77                           | 1                                    |
| 11N40MIMO  | 0.64              | 1.27             | 0.5039                         | 50.39                | 2.98                                       | 1.56                           | 2                                    |
| 11AX20MIMO | 1.01              | 1.64             | 0.6159                         | 61.59                | 2.11                                       | 0.99                           | 1                                    |
| 11AX40MIMO | 0.53              | 1.15             | 0.4609                         | 46.09                | 3.36                                       | 1.89                           | 2                                    |

Note:

Duty Cycle Correction Factor=10log (1/x).

Where: x is Duty Cycle (Linear)

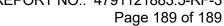
Where: T is On Time

If that calculated VBW is not available on the analyzer then the next higher value should be used.

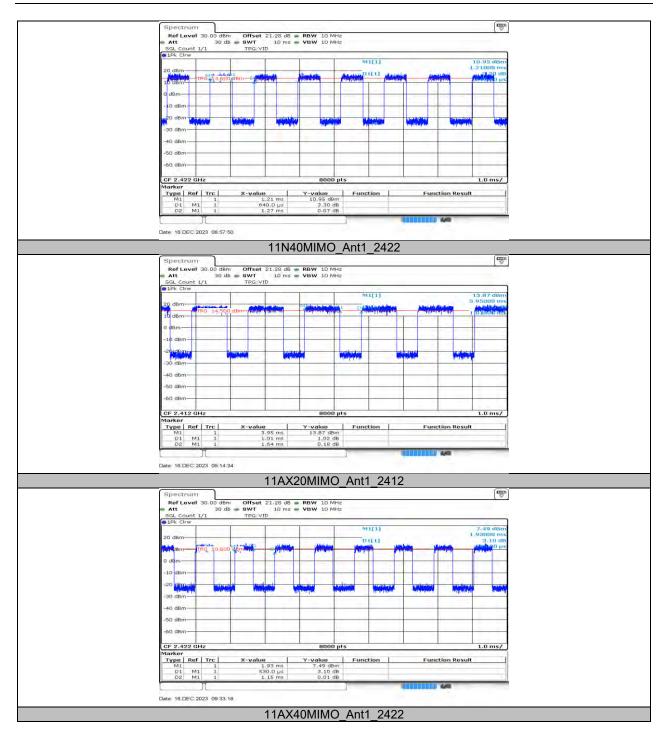


## 11.7.2. Test Graphs









## **END OF REPORT**