

## **FCC Appendix RF Test Data for 2.4GWIFI**

**FCC ID** : 2AUCA-808-4X

**Company** : 8 Limited

**EUT** : 8 inch Touchscreen Controller

**Model Number** : 808-4x

**Report No.** : CTA25090501003

**Reviewed By** : Eric Wang

## Appendix A: DTS Bandwidth

### Test Result

| TestMode   | Antenna | Frequency[MHz] | DTS BW [MHz] | FL[MHz]  | FH[MHz]  | Limit[MHz] | Verdict |
|------------|---------|----------------|--------------|----------|----------|------------|---------|
| 11B        | Ant1    | 2412           | 8.560        | 2407.520 | 2416.080 | 0.5        | PASS    |
|            |         | 2437           | 8.600        | 2432.960 | 2441.560 | 0.5        | PASS    |
|            |         | 2462           | 9.040        | 2457.520 | 2466.560 | 0.5        | PASS    |
| 11G        | Ant1    | 2412           | 15.720       | 2404.440 | 2420.160 | 0.5        | PASS    |
|            |         | 2437           | 15.960       | 2428.840 | 2444.800 | 0.5        | PASS    |
|            |         | 2462           | 16.320       | 2453.840 | 2470.160 | 0.5        | PASS    |
| 11N20SISO  | Ant1    | 2412           | 16.280       | 2404.360 | 2420.640 | 0.5        | PASS    |
|            |         | 2437           | 16.600       | 2428.480 | 2445.080 | 0.5        | PASS    |
|            |         | 2462           | 17.120       | 2453.400 | 2470.520 | 0.5        | PASS    |
| 11N40SISO  | Ant1    | 2422           | 35.280       | 2404.480 | 2439.760 | 0.5        | PASS    |
|            |         | 2437           | 35.120       | 2419.480 | 2454.600 | 0.5        | PASS    |
|            |         | 2452           | 35.600       | 2434.000 | 2469.600 | 0.5        | PASS    |
| 11AX20SISO | Ant1    | 2412           | 16.120       | 2404.360 | 2420.480 | 0.5        | PASS    |
|            |         | 2437           | 15.920       | 2428.720 | 2444.640 | 0.5        | PASS    |
|            |         | 2462           | 17.120       | 2453.640 | 2470.760 | 0.5        | PASS    |
| 11AX40SISO | Ant1    | 2422           | 35.120       | 2404.480 | 2439.600 | 0.5        | PASS    |
|            |         | 2437           | 35.040       | 2419.480 | 2454.520 | 0.5        | PASS    |
|            |         | 2452           | 35.440       | 2434.160 | 2469.600 | 0.5        | PASS    |

## Test Graphs

11B\_Ant1\_2412



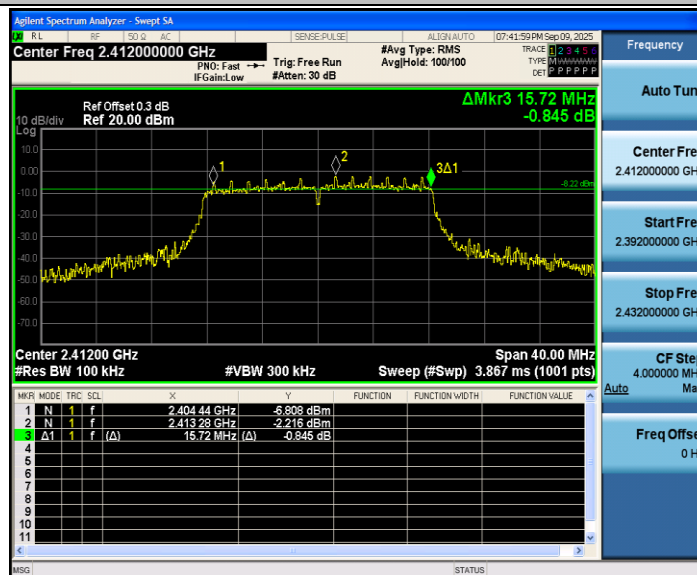
11B\_Ant1\_2437



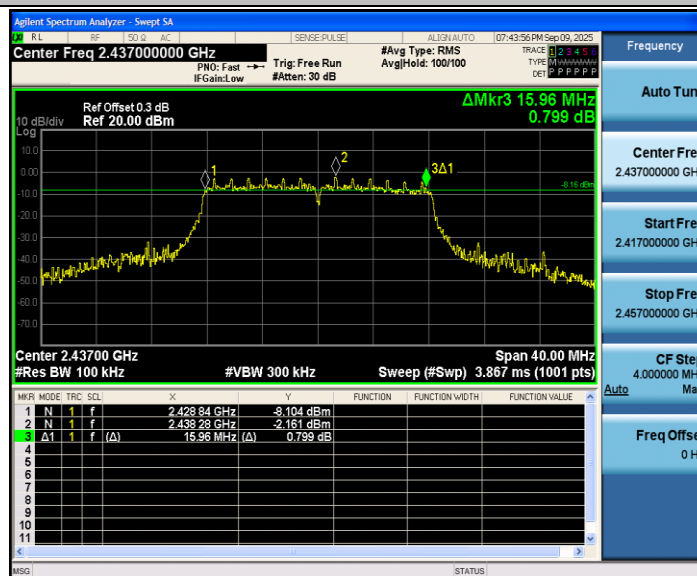
11B\_Ant1\_2462



11G\_Ant1\_2412



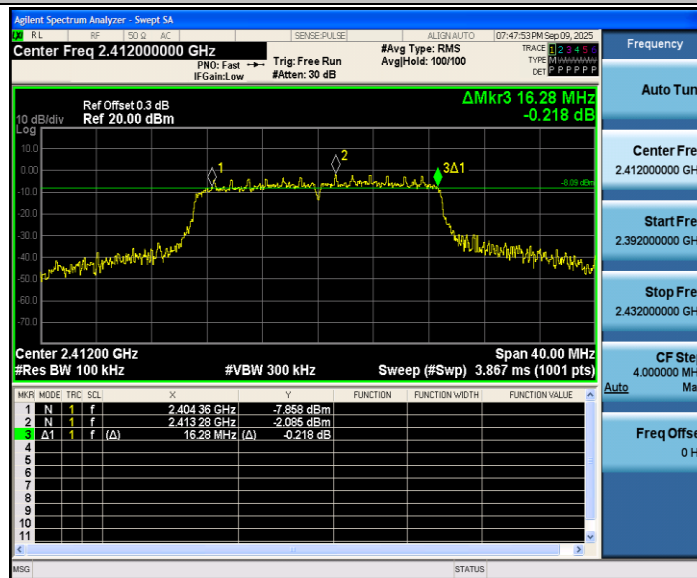
11G\_Ant1\_2437



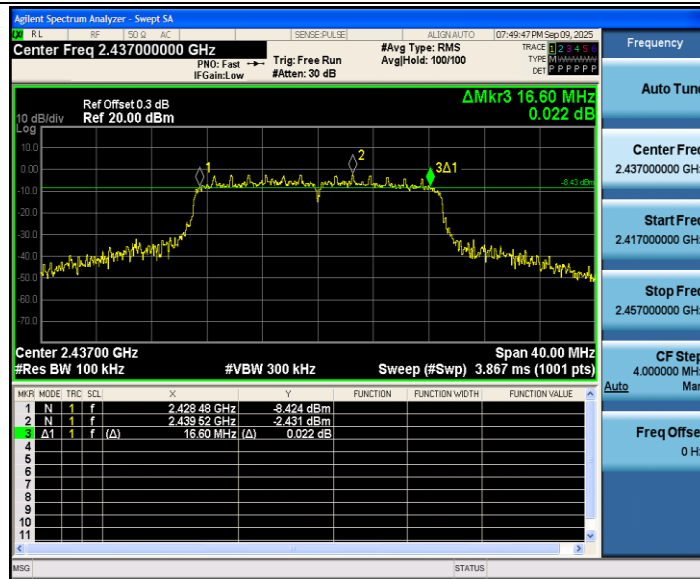
# 11G\_Ant1\_2462



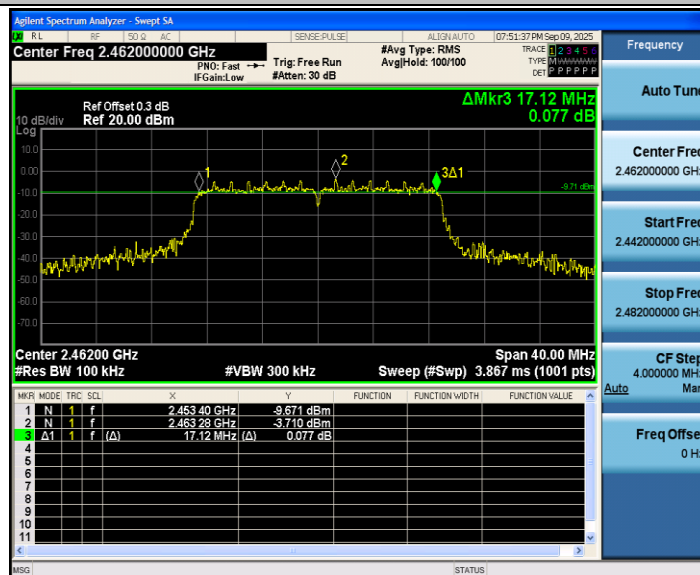
# 11N20SISO\_Ant1\_2412



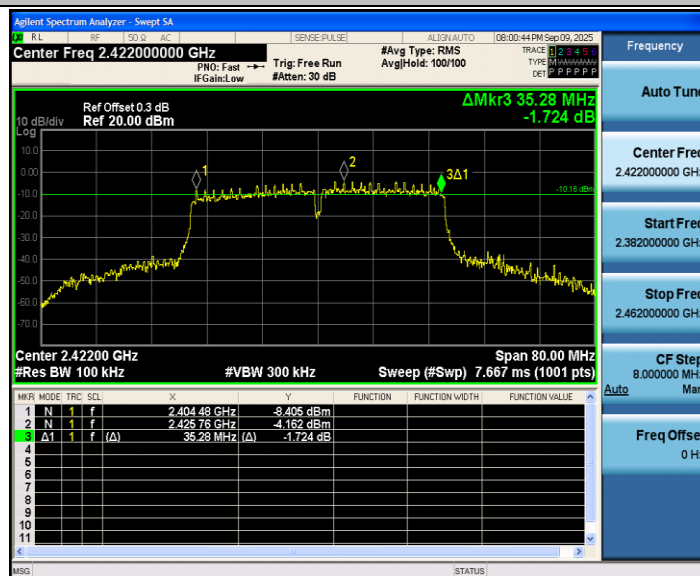
# 11N20SISO\_Ant1\_2437



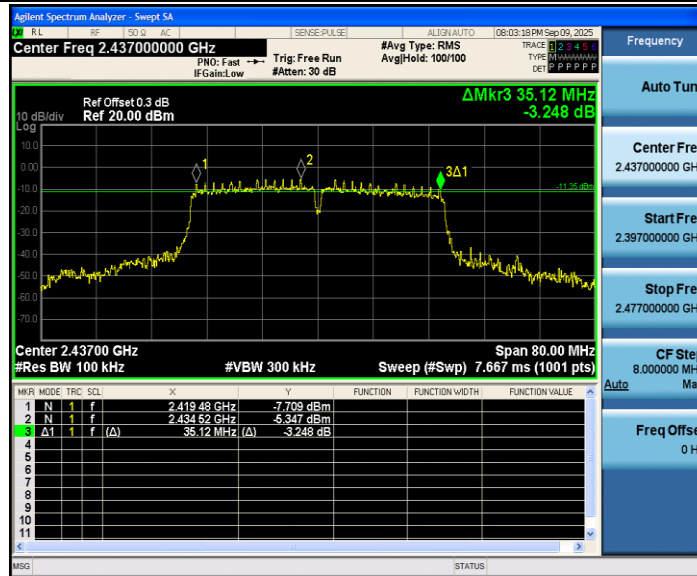
11N20SISO\_Ant1\_2462



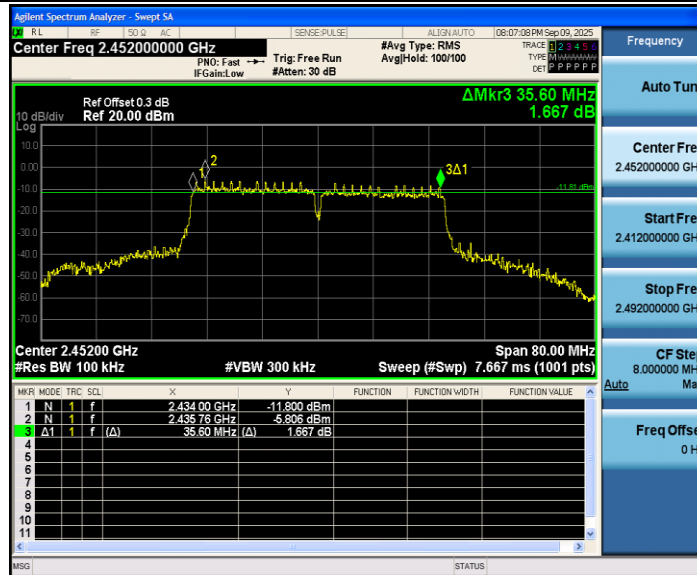
11N40SISO\_Ant1\_2422



# 11N40SISO\_Ant1\_2437



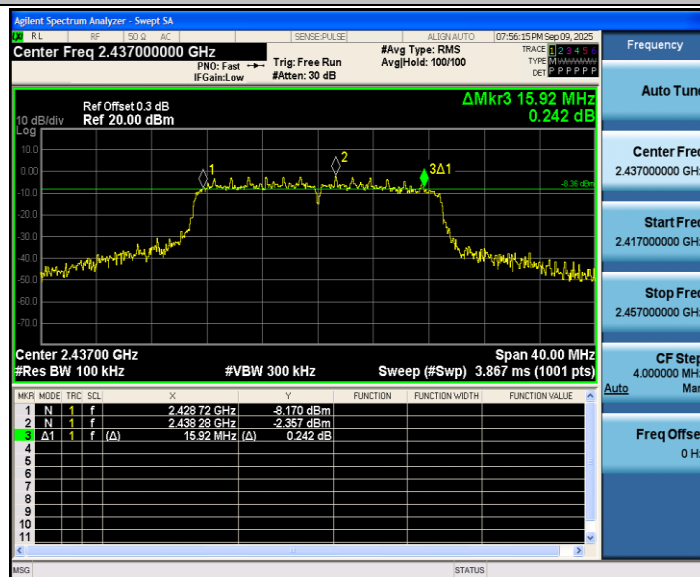
# 11N40SISO\_Ant1\_2452



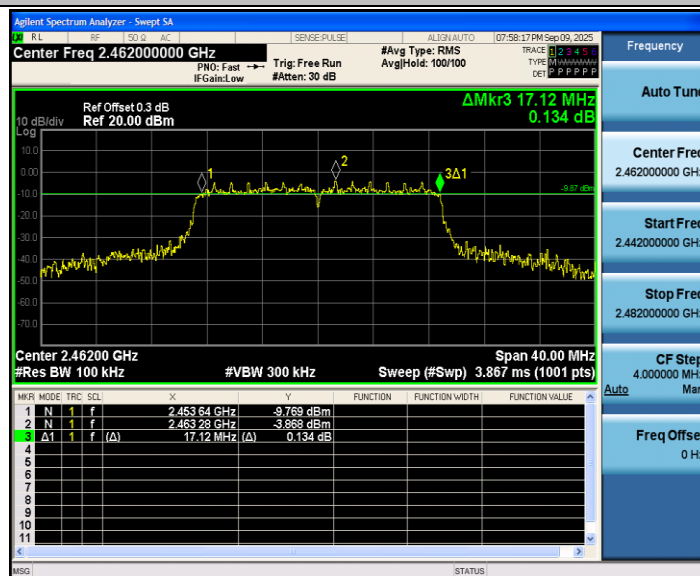
# 11AX20SISO\_Ant1\_2412



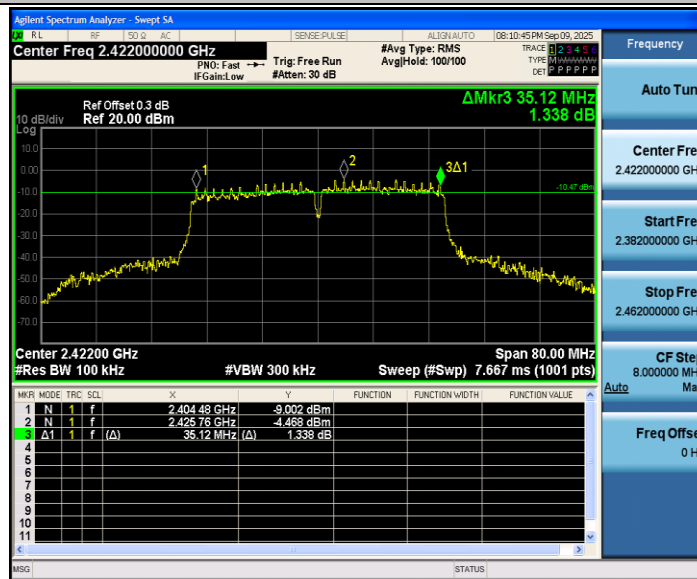
11AX20SISO\_Ant1\_2437



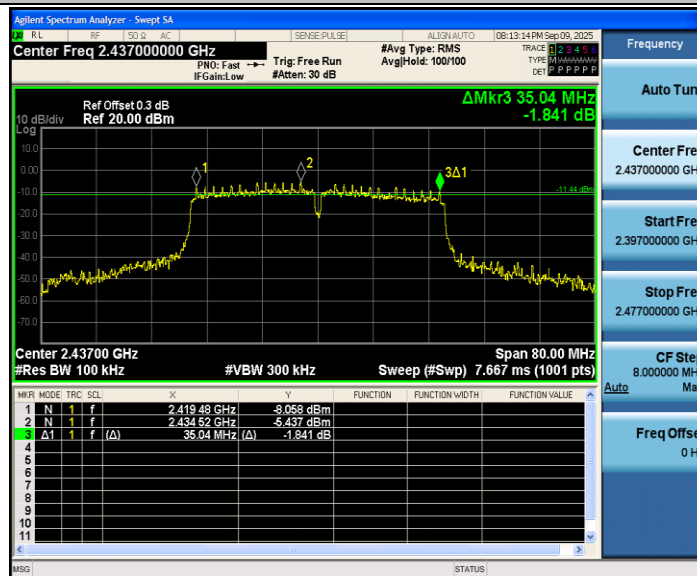
11AX20SISO\_Ant1\_2462



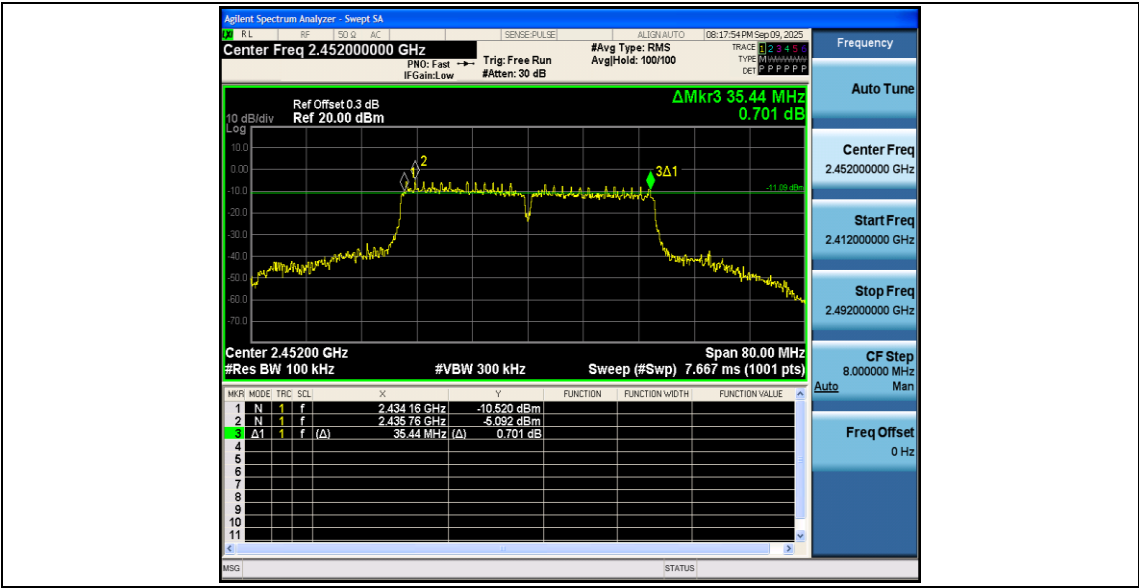
# 11AX40SISO\_Ant1\_2422



# 11AX40SISO\_Ant1\_2437



# 11AX40SISO\_Ant1\_2452



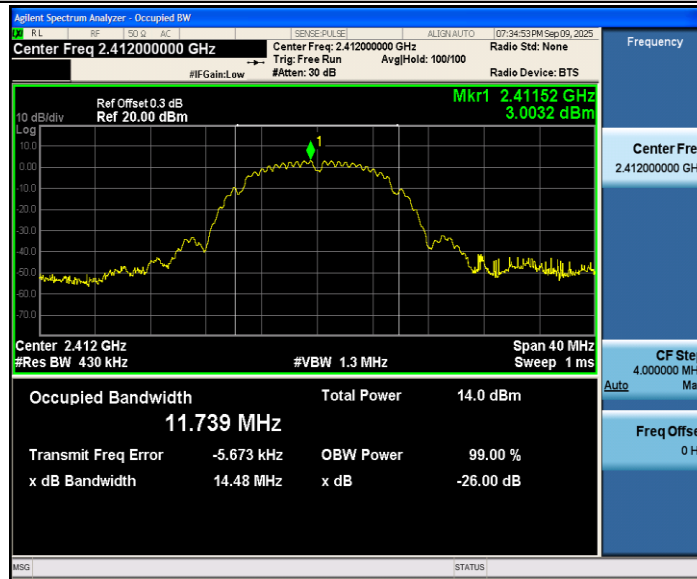
## Appendix B: Occupied Channel Bandwidth

### Test Result

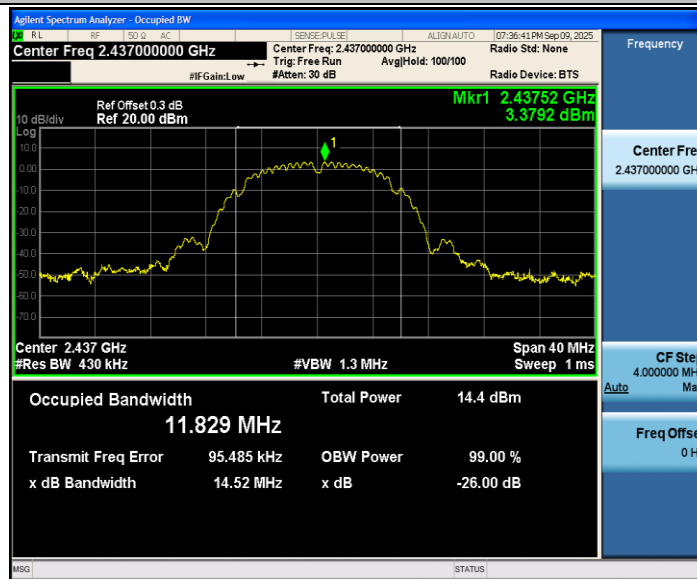
| TestMode   | Antenna | Channel Frequency[MHz] | OCB [MHz] | FL[MHz]   | FH[MHz]   | Limit[MHz] | Verdict |
|------------|---------|------------------------|-----------|-----------|-----------|------------|---------|
| 11B        | Ant1    | 2412                   | 11.739    | 2406.1248 | 2417.8638 | ---        | ---     |
|            |         | 2437                   | 11.829    | 2431.1810 | 2443.0100 | ---        | ---     |
|            |         | 2462                   | 11.851    | 2456.1456 | 2467.9966 | ---        | ---     |
| 11G        | Ant1    | 2412                   | 16.662    | 2403.8250 | 2420.4870 | ---        | ---     |
|            |         | 2437                   | 16.638    | 2428.6835 | 2445.3215 | ---        | ---     |
|            |         | 2462                   | 16.759    | 2453.6610 | 2470.4200 | ---        | ---     |
| 11N20SISO  | Ant1    | 2412                   | 17.568    | 2403.3349 | 2420.9029 | ---        | ---     |
|            |         | 2437                   | 17.588    | 2428.1933 | 2445.7813 | ---        | ---     |
|            |         | 2462                   | 17.709    | 2453.2023 | 2470.9113 | ---        | ---     |
| 11N40SISO  | Ant1    | 2422                   | 36.053    | 2404.1906 | 2440.2436 | ---        | ---     |
|            |         | 2437                   | 36.070    | 2418.9507 | 2455.0207 | ---        | ---     |
|            |         | 2452                   | 36.408    | 2433.7801 | 2470.1881 | ---        | ---     |
| 11AX20SISO | Ant1    | 2412                   | 17.576    | 2403.3423 | 2420.9183 | ---        | ---     |
|            |         | 2437                   | 17.559    | 2428.1877 | 2445.7467 | ---        | ---     |
|            |         | 2462                   | 17.697    | 2453.2204 | 2470.9174 | ---        | ---     |
| 11AX40SISO | Ant1    | 2422                   | 36.100    | 2404.1686 | 2440.2686 | ---        | ---     |
|            |         | 2437                   | 36.019    | 2418.9973 | 2455.0163 | ---        | ---     |
|            |         | 2452                   | 36.455    | 2433.6961 | 2470.1511 | ---        | ---     |

## Test Graphs

11B\_Ant1\_2412



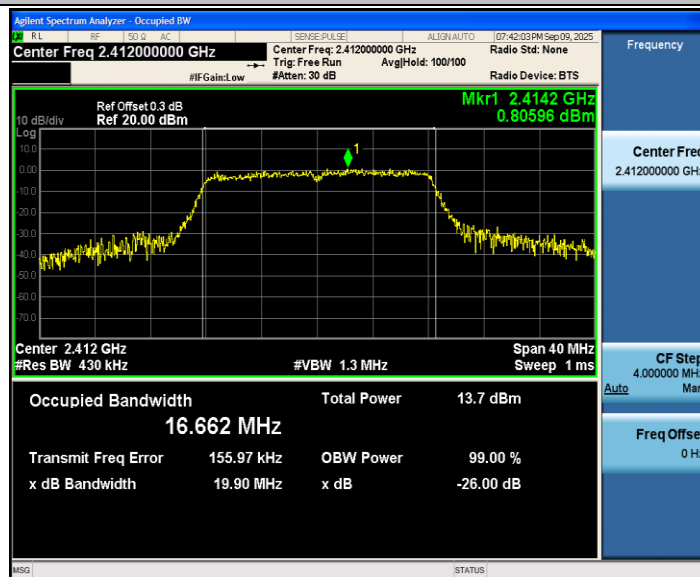
11B\_Ant1\_2437



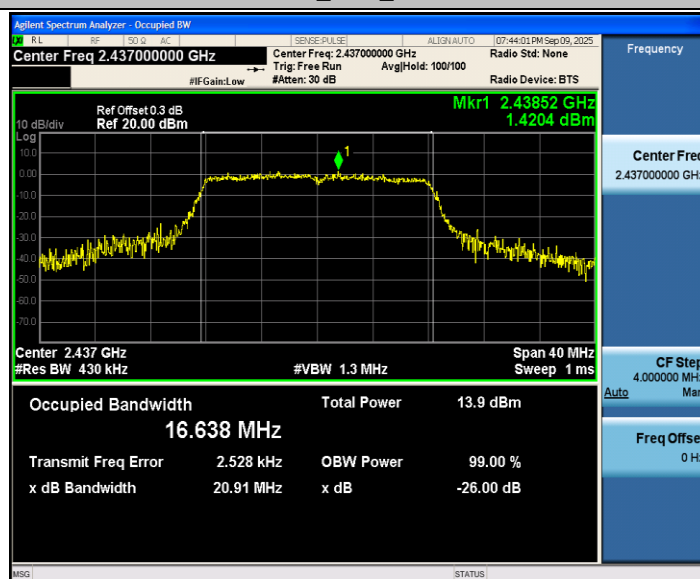
11B\_Ant1\_2462



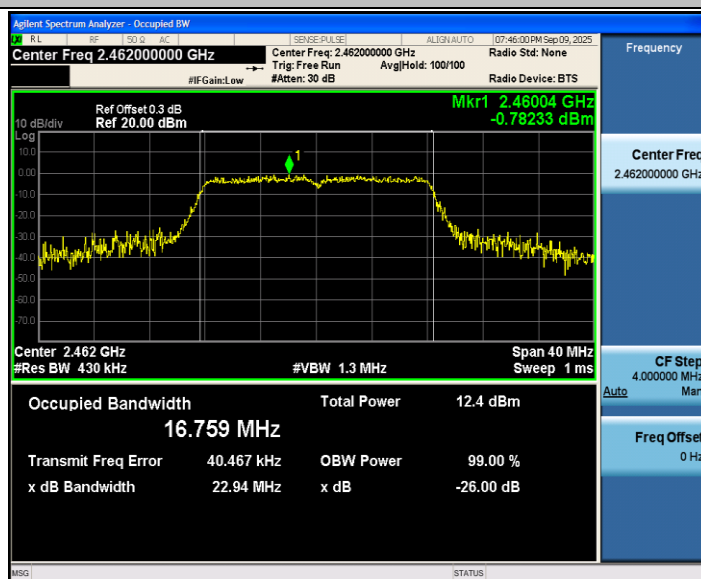
11G\_Ant1\_2412



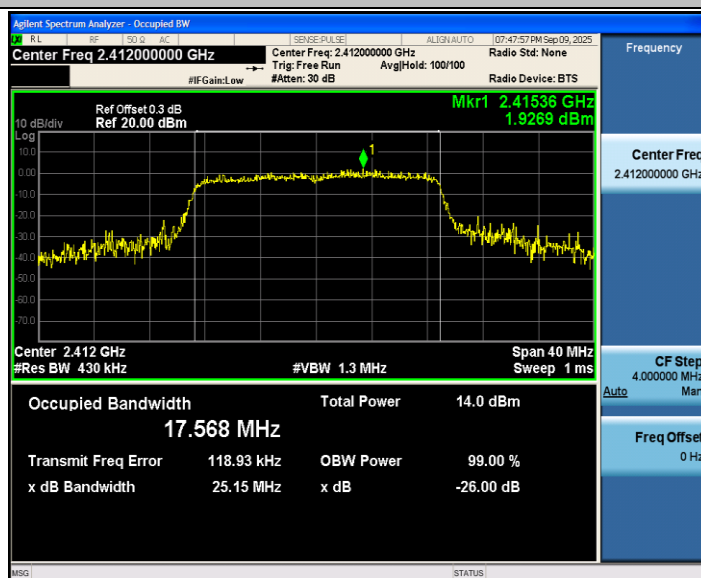
11G\_Ant1\_2437



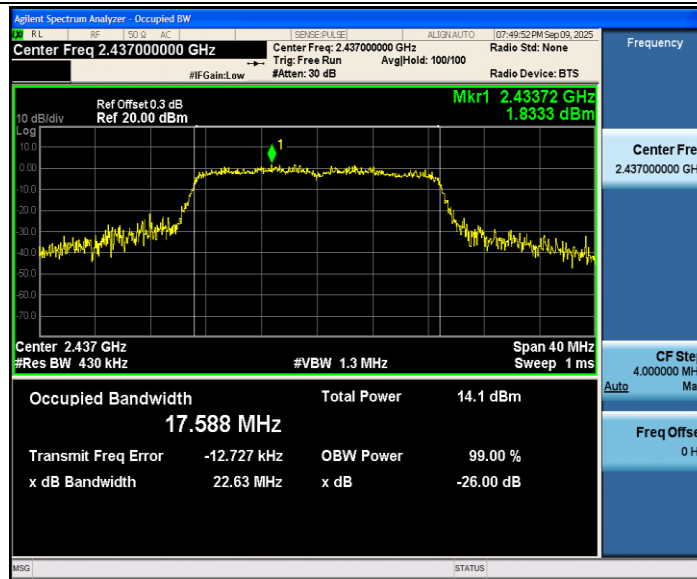
# 11G\_Ant1\_2462



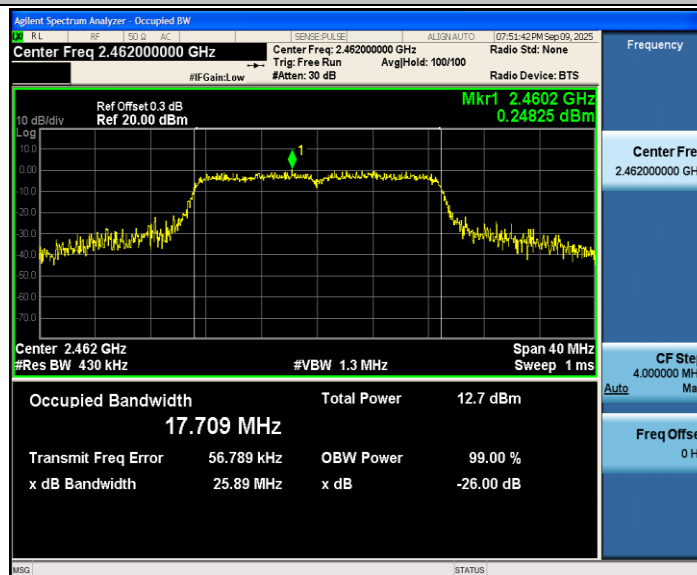
# 11N20SISO\_Ant1\_2412



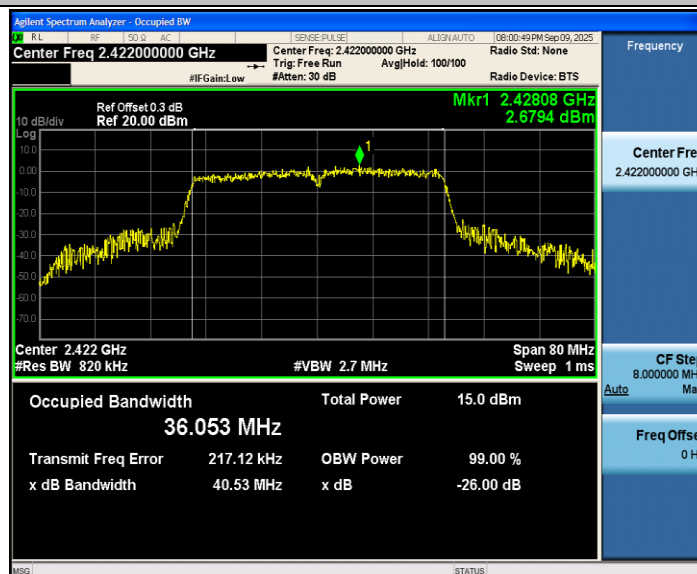
# 11N20SISO\_Ant1\_2437



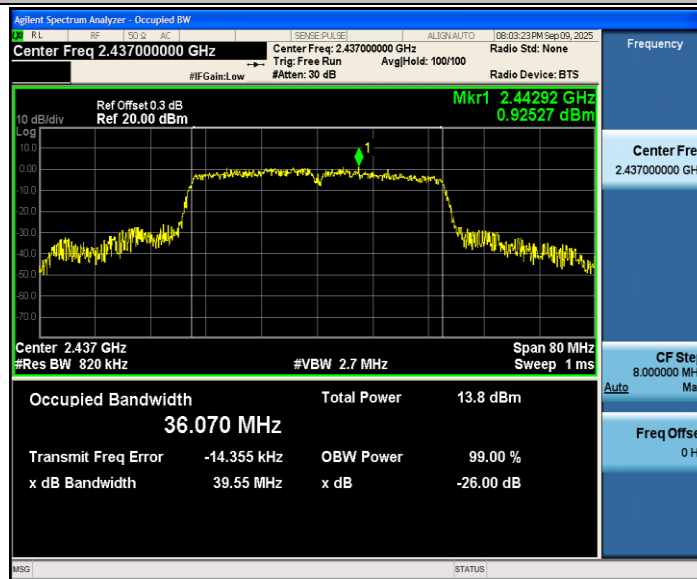
11N20SISO\_Ant1\_2462



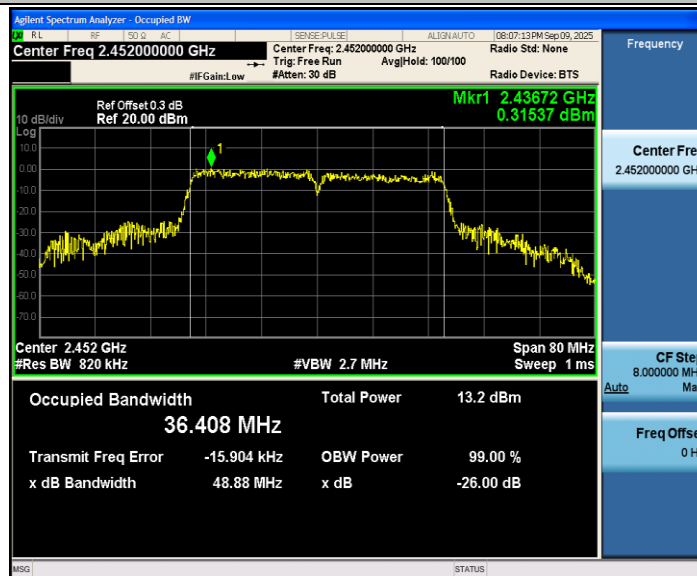
11N40SISO\_Ant1\_2422



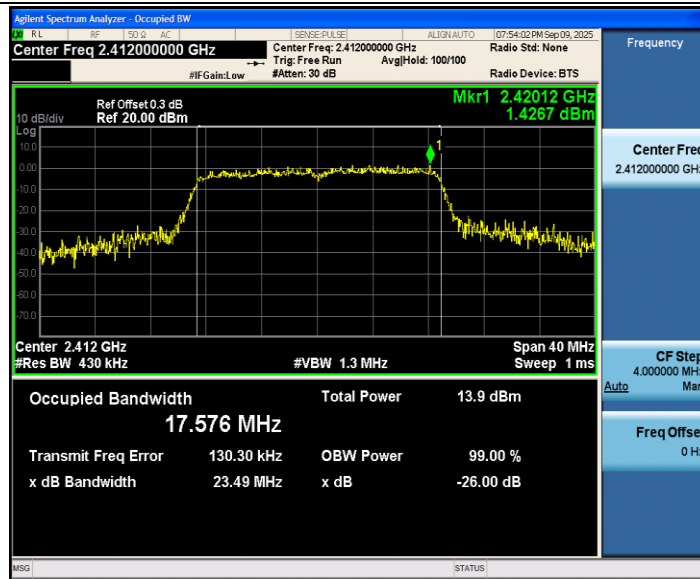
# 11N40SISO\_Ant1\_2437



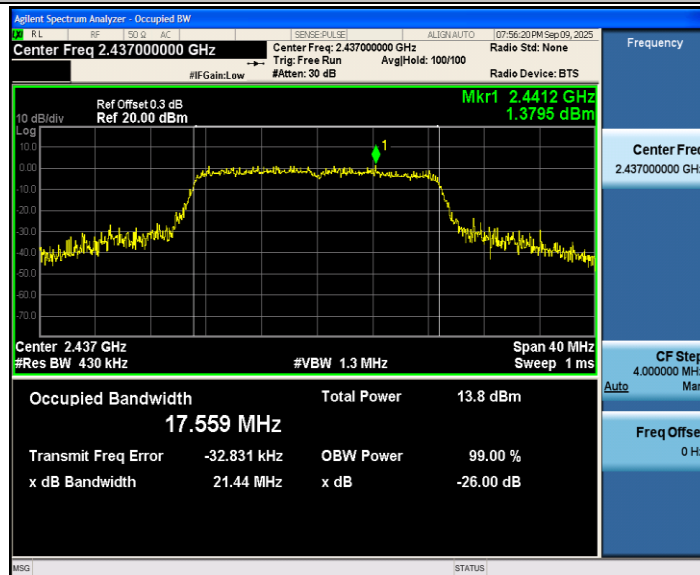
# 11N40SISO\_Ant1\_2452



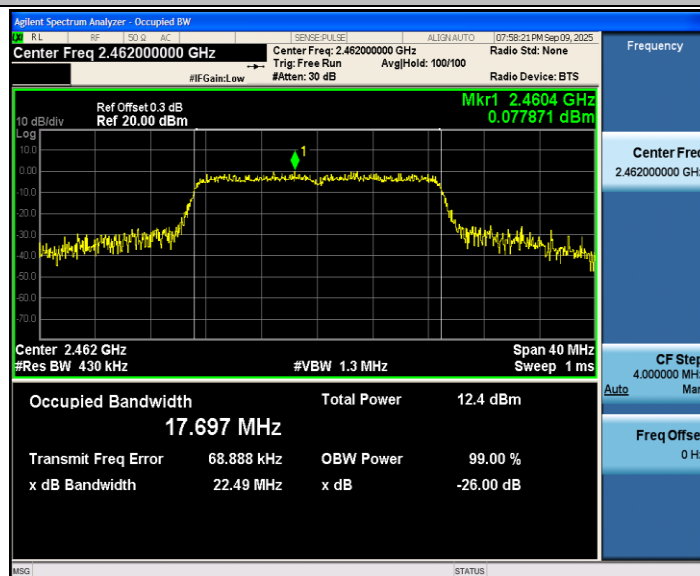
# 11AX20SISO\_Ant1\_2412



11AX20SISO\_Ant1\_2437



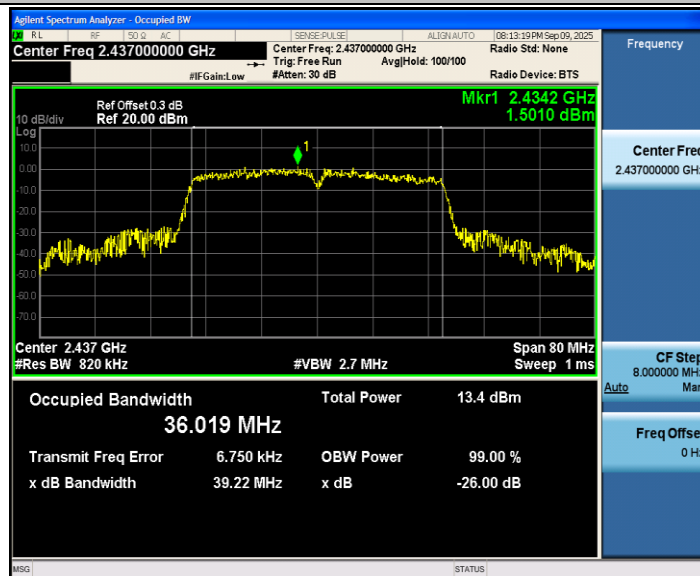
11AX20SISO\_Ant1\_2462



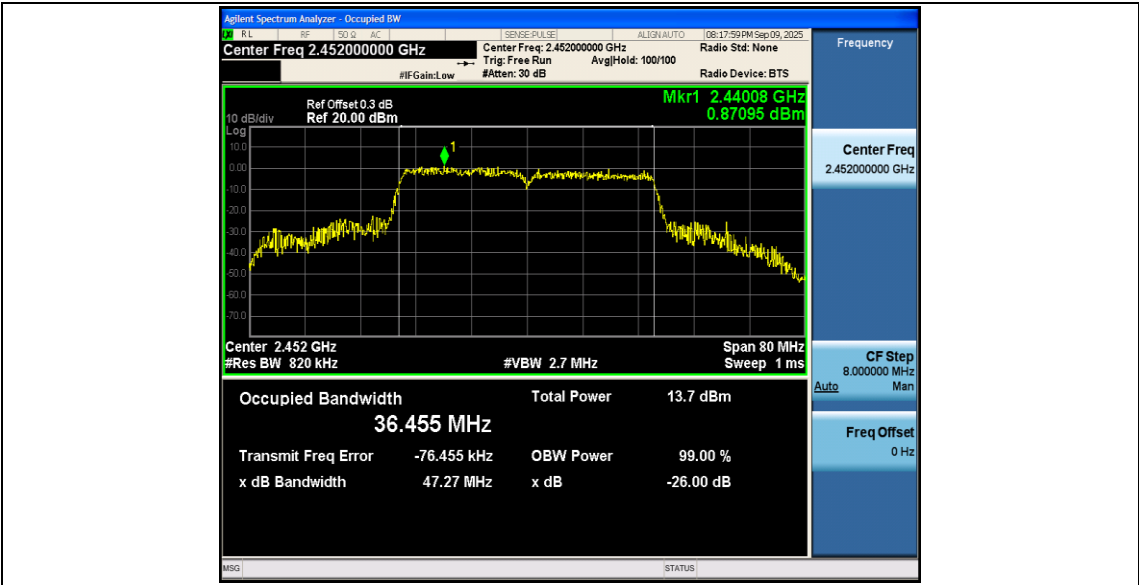
### 11AX40SISO\_Ant1\_2422



### 11AX40SISO\_Ant1\_2437



### 11AX40SISO\_Ant1\_2452



## Appendix C: Maximum conducted output power

### Test Result Peak

| Test Mode  | Antenna | Frequency[MHz] | Peak power [dBm] | Limit [dBm] | Verdict |
|------------|---------|----------------|------------------|-------------|---------|
| 11B        | Ant1    | 2412           | 13.91            | ≤30.00      | PASS    |
|            |         | 2437           | 14.20            | ≤30.00      | PASS    |
|            |         | 2462           | 13.19            | ≤30.00      | PASS    |
| 11G        | Ant1    | 2412           | 14.36            | ≤30.00      | PASS    |
|            |         | 2437           | 14.66            | ≤30.00      | PASS    |
|            |         | 2462           | 13.16            | ≤30.00      | PASS    |
| 11N20SISO  | Ant1    | 2412           | 14.61            | ≤30.00      | PASS    |
|            |         | 2437           | 14.94            | ≤30.00      | PASS    |
|            |         | 2462           | 13.46            | ≤30.00      | PASS    |
| 11N40SISO  | Ant1    | 2422           | 15.14            | ≤30.00      | PASS    |
|            |         | 2437           | 13.94            | ≤30.00      | PASS    |
|            |         | 2452           | 13.22            | ≤30.00      | PASS    |
| 11AX20SISO | Ant1    | 2412           | 14.71            | ≤30.00      | PASS    |
|            |         | 2437           | 14.33            | ≤30.00      | PASS    |
|            |         | 2462           | 13.10            | ≤30.00      | PASS    |
| 11AX40SISO | Ant1    | 2422           | 14.82            | ≤30.00      | PASS    |
|            |         | 2437           | 13.63            | ≤30.00      | PASS    |
|            |         | 2452           | 13.75            | ≤30.00      | PASS    |

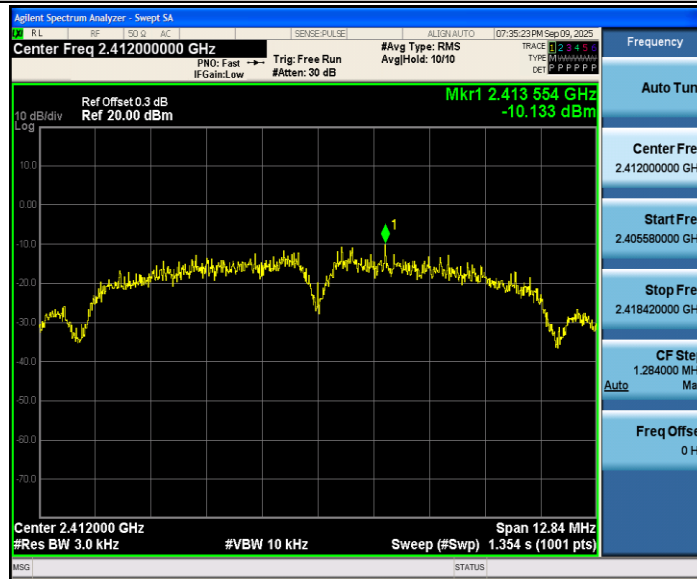
## Appendix D: Maximum power spectral density

### Test Result

| TestMode   | Antenna | Frequency[MHz] | Result[dBm/3-100kHz] | Limit[dBm/3kHz] | Verdict |
|------------|---------|----------------|----------------------|-----------------|---------|
| 11B        | Ant1    | 2412           | -10.13               | ≤8.00           | PASS    |
|            |         | 2437           | -10.97               | ≤8.00           | PASS    |
|            |         | 2462           | -12.64               | ≤8.00           | PASS    |
| 11G        | Ant1    | 2412           | -16.30               | ≤8.00           | PASS    |
|            |         | 2437           | -17.46               | ≤8.00           | PASS    |
|            |         | 2462           | -19.16               | ≤8.00           | PASS    |
| 11N20SISO  | Ant1    | 2412           | -16.70               | ≤8.00           | PASS    |
|            |         | 2437           | -16.78               | ≤8.00           | PASS    |
|            |         | 2462           | -19.50               | ≤8.00           | PASS    |
| 11N40SISO  | Ant1    | 2422           | -19.25               | ≤8.00           | PASS    |
|            |         | 2437           | -19.59               | ≤8.00           | PASS    |
|            |         | 2452           | -20.60               | ≤8.00           | PASS    |
| 11AX20SISO | Ant1    | 2412           | -16.34               | ≤8.00           | PASS    |
|            |         | 2437           | -18.00               | ≤8.00           | PASS    |
|            |         | 2462           | -19.70               | ≤8.00           | PASS    |
| 11AX40SISO | Ant1    | 2422           | -19.40               | ≤8.00           | PASS    |
|            |         | 2437           | -20.62               | ≤8.00           | PASS    |
|            |         | 2452           | -20.53               | ≤8.00           | PASS    |

## Test Graphs

11B\_Ant1\_2412



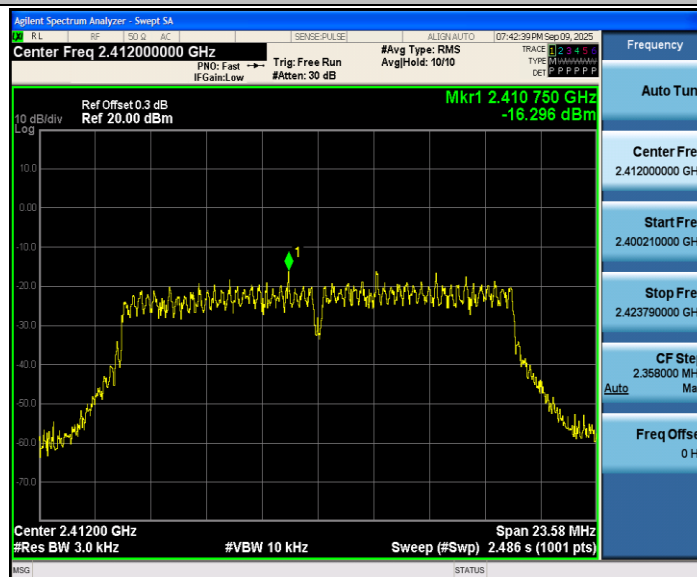
11B\_Ant1\_2437



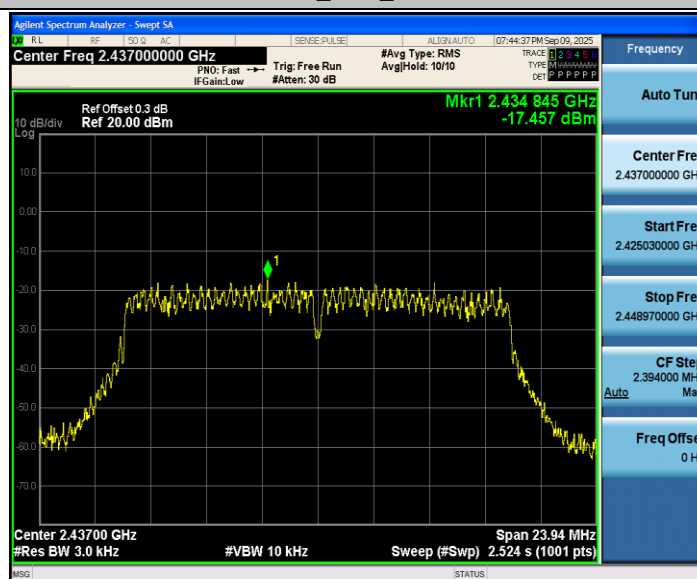
11B\_Ant1\_2462



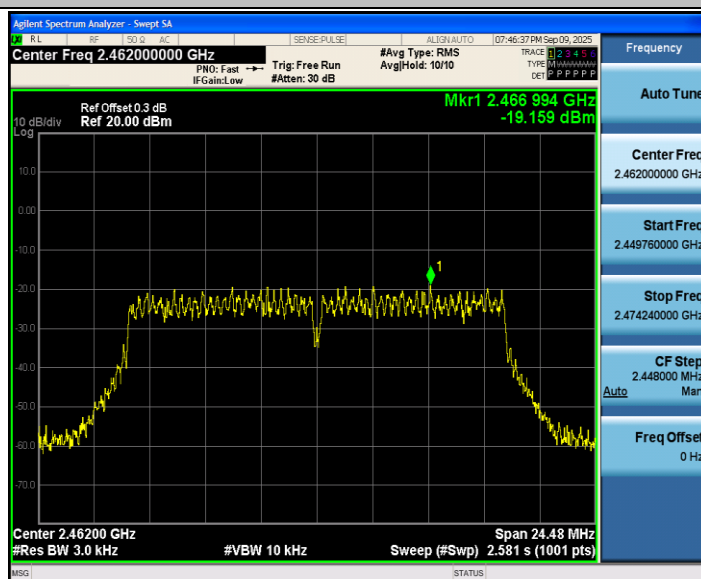
11G\_Ant1\_2412



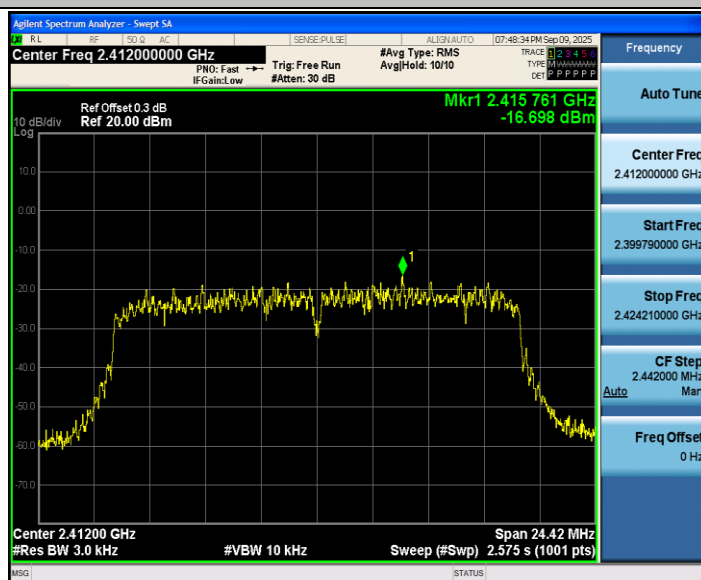
11G\_Ant1\_2437



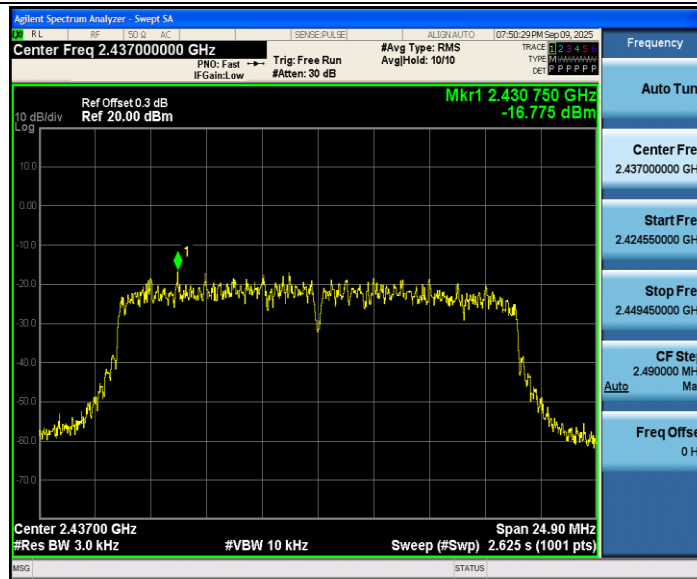
# 11G\_Ant1\_2462



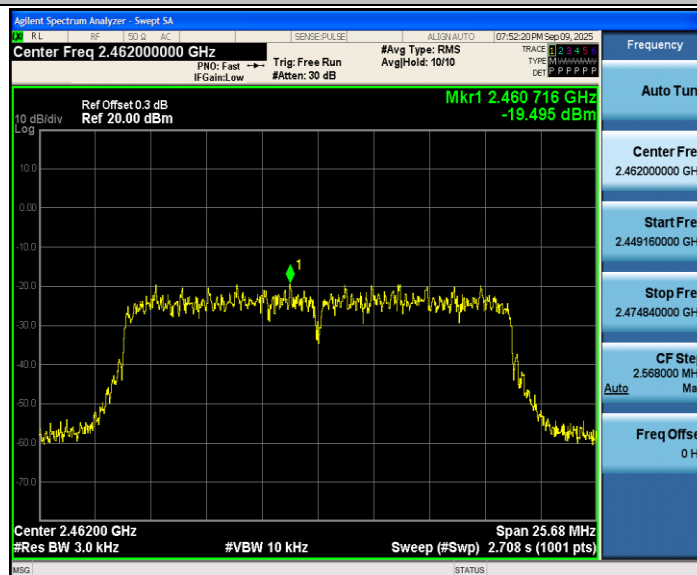
# 11N20SISO\_Ant1\_2412



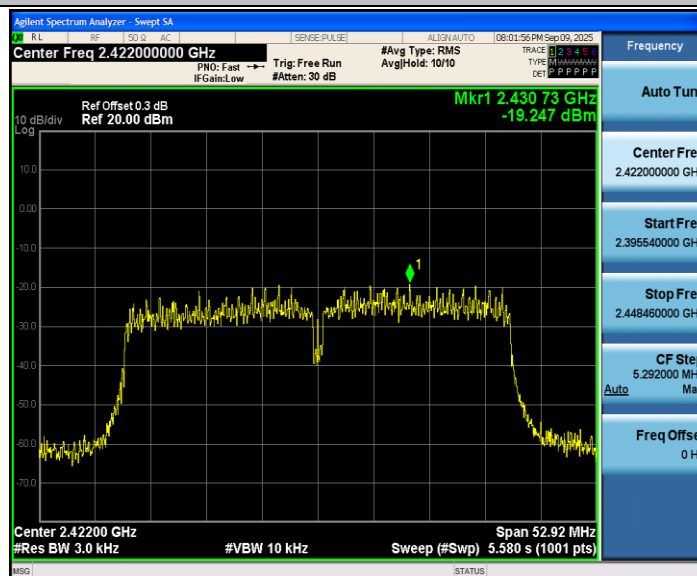
# 11N20SISO\_Ant1\_2437



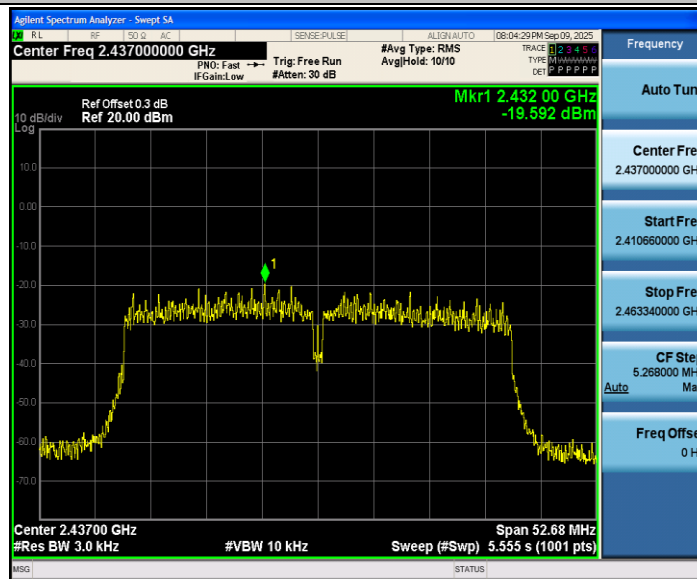
11N20SISO\_Ant1\_2462



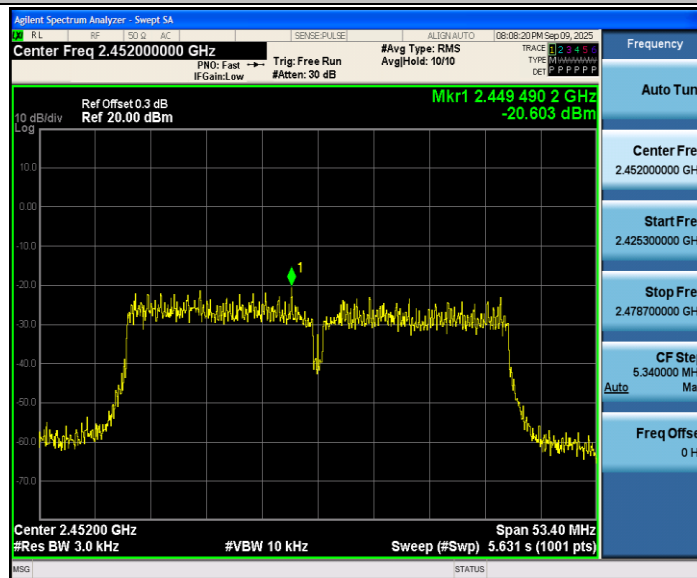
11N40SISO\_Ant1\_2422



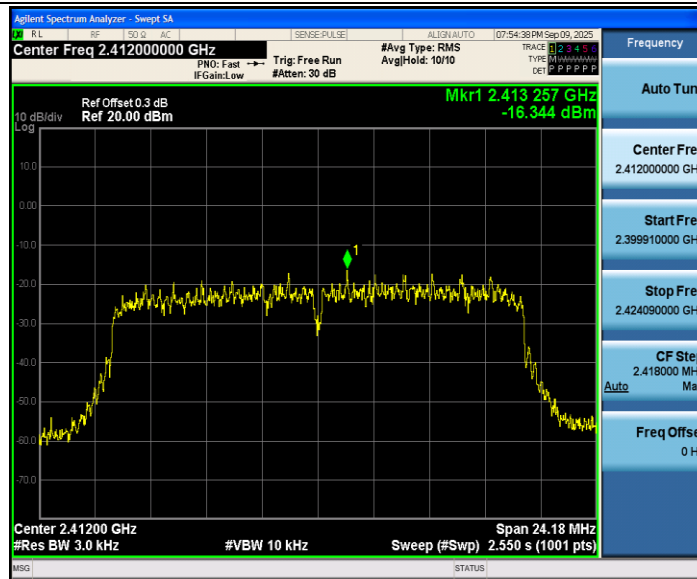
# 11N40SISO\_Ant1\_2437



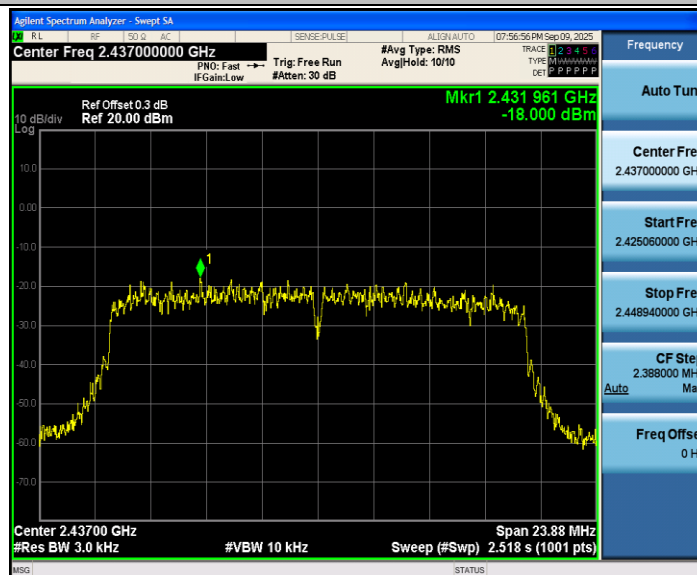
# 11N40SISO\_Ant1\_2452



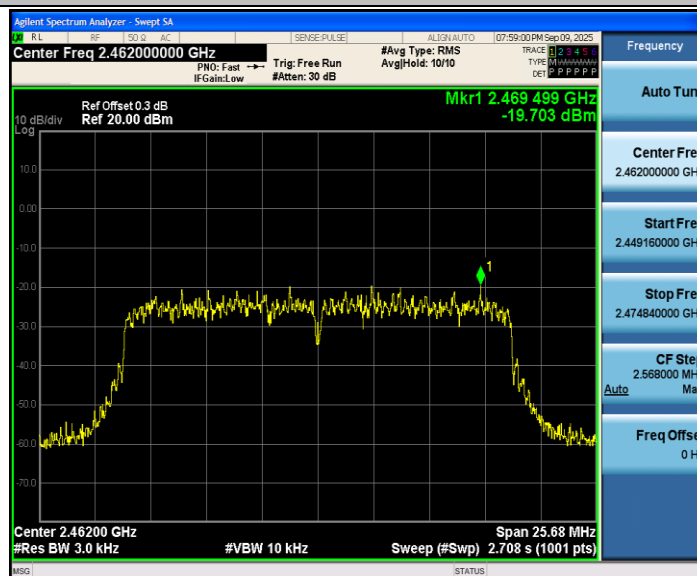
# 11AX20SISO\_Ant1\_2412



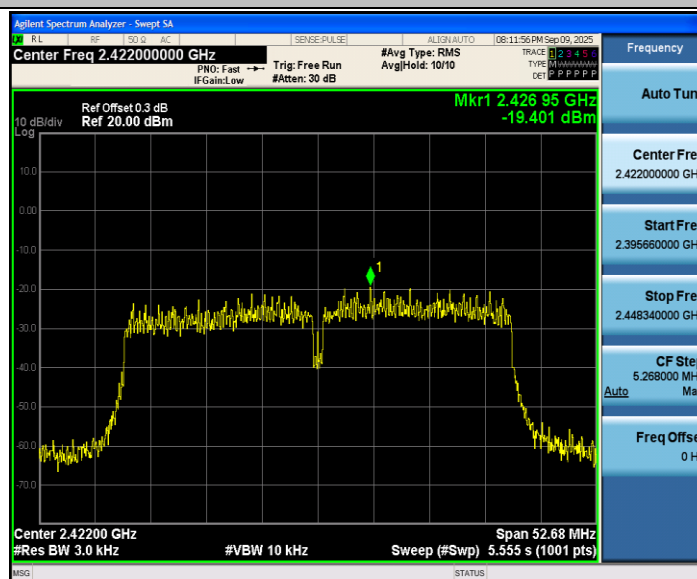
11AX20SISO\_Ant1\_2437



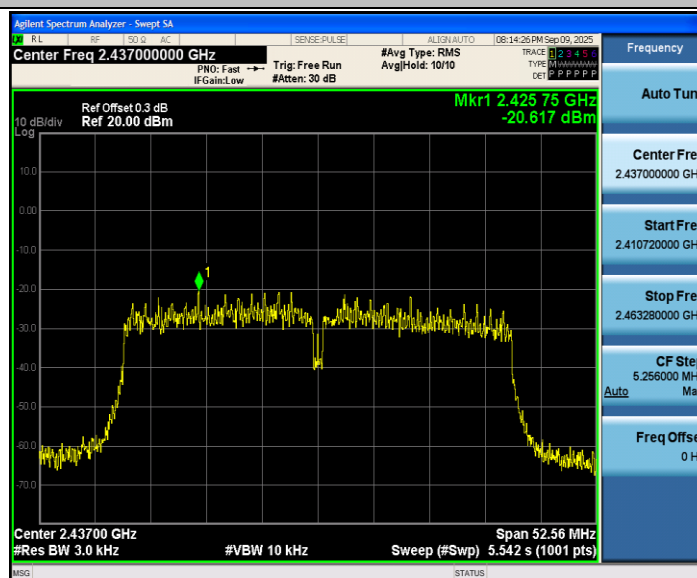
11AX20SISO\_Ant1\_2462



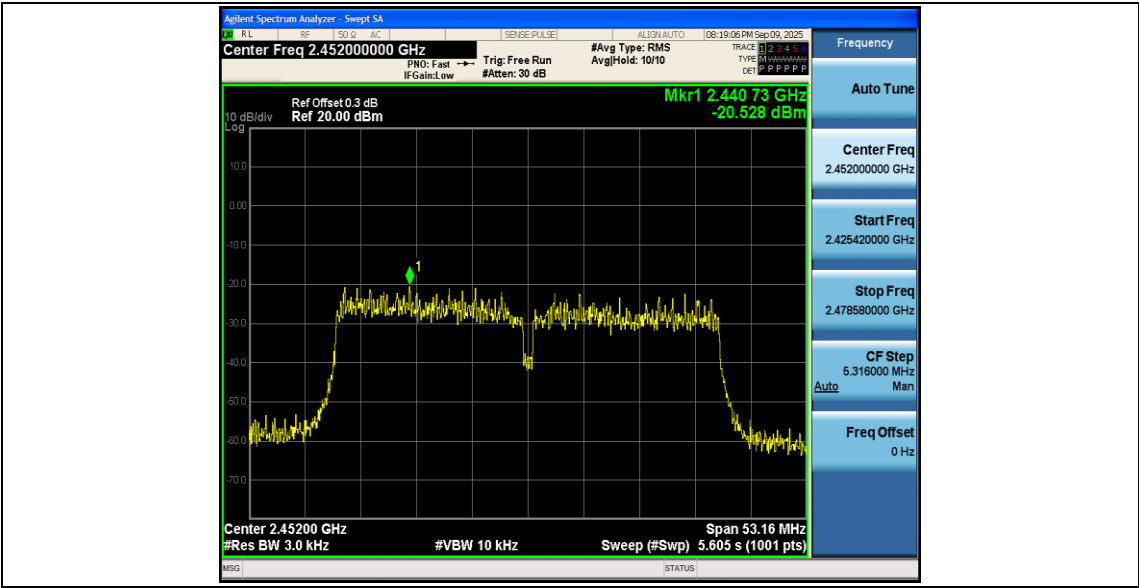
# 11AX40SISO\_Ant1\_2422



# 11AX40SISO\_Ant1\_2437



# 11AX40SISO\_Ant1\_2452



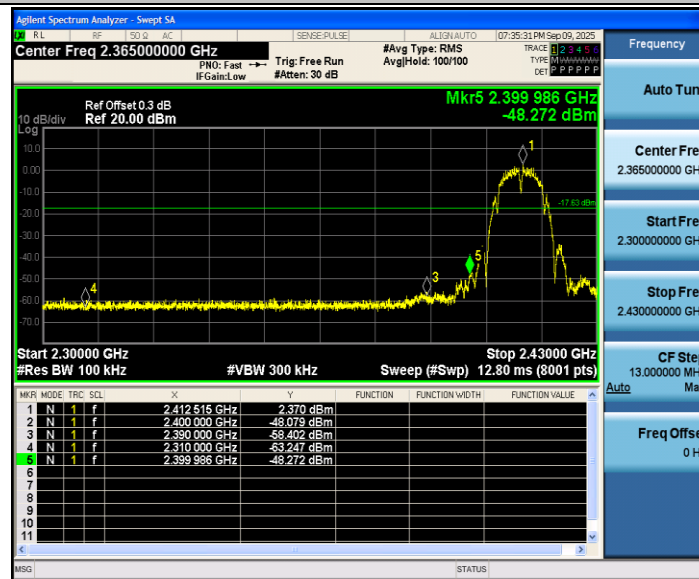
## Appendix E: Band edge measurements

### Test Result

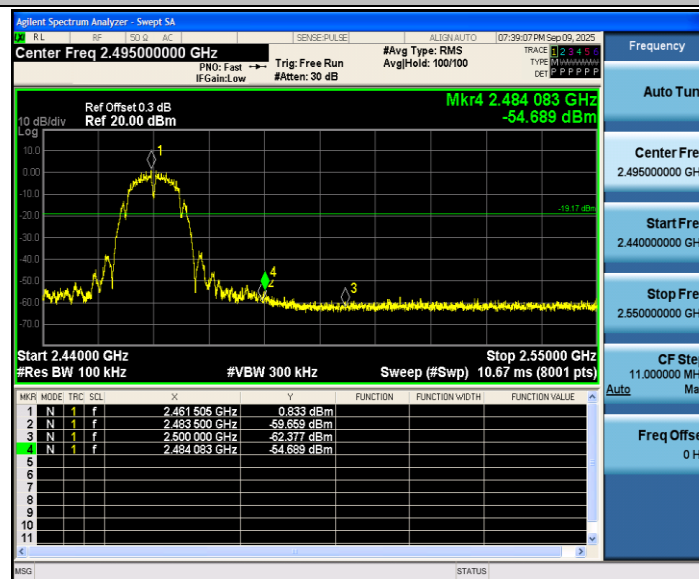
| TestMode   | Antenna | Channel | Frequency[MHz] | RefLevel[dBm] | Result[dBm] | Limit[dBm] | Verdict |
|------------|---------|---------|----------------|---------------|-------------|------------|---------|
| 11B        | Ant1    | Low     | 2412           | 2.37          | -48.27      | ≤-17.63    | PASS    |
|            |         | High    | 2462           | 0.83          | -54.69      | ≤-19.17    | PASS    |
| 11G        | Ant1    | Low     | 2412           | -2.19         | -35.27      | ≤-22.19    | PASS    |
|            |         | High    | 2462           | -3.72         | -47.44      | ≤-23.72    | PASS    |
| 11N20SISO  | Ant1    | Low     | 2412           | -2.07         | -34.63      | ≤-22.07    | PASS    |
|            |         | High    | 2462           | -3.74         | -46.25      | ≤-23.74    | PASS    |
| 11N40SISO  | Ant1    | Low     | 2422           | -4.19         | -39.71      | ≤-24.19    | PASS    |
|            |         | High    | 2452           | -5.84         | -47.8       | ≤-25.84    | PASS    |
| 11AX20SISO | Ant1    | Low     | 2412           | -2.21         | -36.74      | ≤-22.21    | PASS    |
|            |         | High    | 2462           | -4.86         | -48.84      | ≤-24.86    | PASS    |
| 11AX40SISO | Ant1    | Low     | 2422           | -4.41         | -38.6       | ≤-24.41    | PASS    |
|            |         | High    | 2452           | -5.13         | -46.84      | ≤-25.13    | PASS    |

## Test Graphs

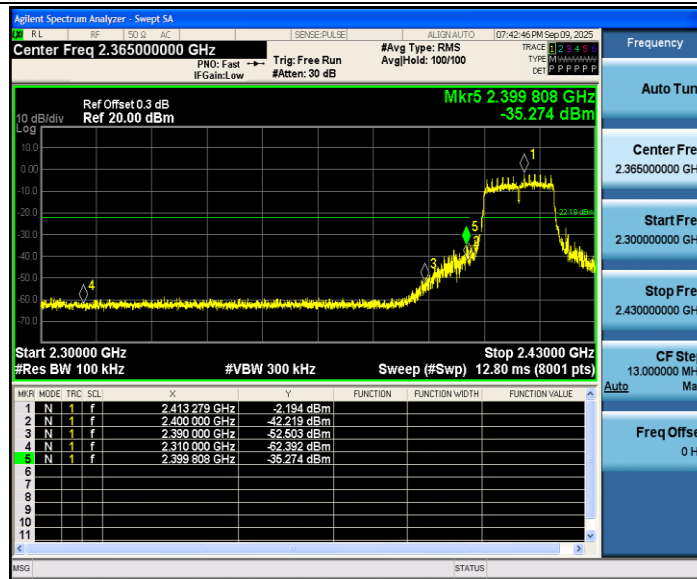
11B\_Ant1\_Low\_2412



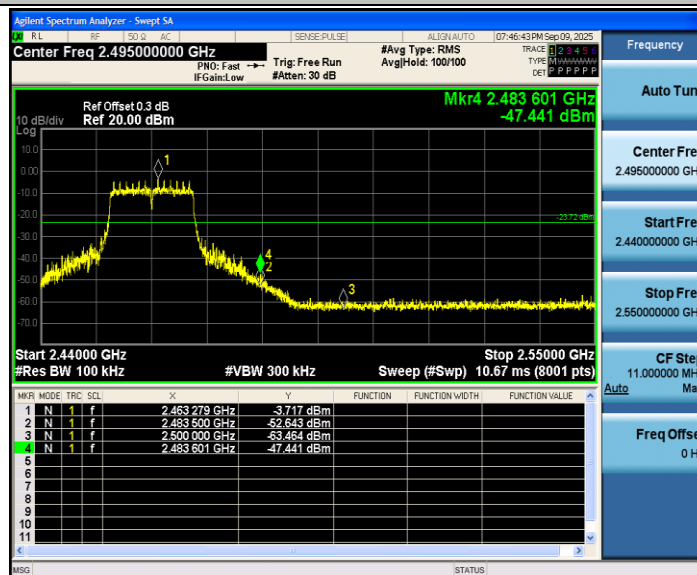
11B\_Ant1\_High\_2462



11G\_Ant1\_Low\_2412



11G\_Ant1\_High\_2462



11N20SISO\_Ant1\_Low\_2412

