

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

**FCC ID** : 2BXW7-DM03

**Company** : Shanghai Doumao Engine Technology Service Co., Ltd.

**EUT** : DOUMAO DiMi

**Model Number** : DM 03

**Report No.** : CTA26081100702

**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           | 10.240       | 2406.920 | 2417.160 | 0.5        | PASS    |
|           |         | 2437           | 10.240       | 2431.920 | 2442.160 | 0.5        | PASS    |
|           |         | 2462           | 10.200       | 2456.920 | 2467.120 | 0.5        | PASS    |
| 11G       | Ant1    | 2412           | 15.520       | 2404.120 | 2419.640 | 0.5        | PASS    |
|           |         | 2437           | 15.960       | 2429.040 | 2445.000 | 0.5        | PASS    |
|           |         | 2462           | 15.760       | 2454.080 | 2469.840 | 0.5        | PASS    |
| 11N20SISO | Ant1    | 2412           | 17.120       | 2403.440 | 2420.560 | 0.5        | PASS    |
|           |         | 2437           | 16.560       | 2428.560 | 2445.120 | 0.5        | PASS    |
|           |         | 2462           | 16.360       | 2454.240 | 2470.600 | 0.5        | PASS    |
| 11N40SISO | Ant1    | 2422           | 36.000       | 2404.080 | 2440.080 | 0.5        | PASS    |
|           |         | 2437           | 35.920       | 2419.080 | 2455.000 | 0.5        | PASS    |
|           |         | 2452           | 35.520       | 2434.560 | 2470.080 | 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



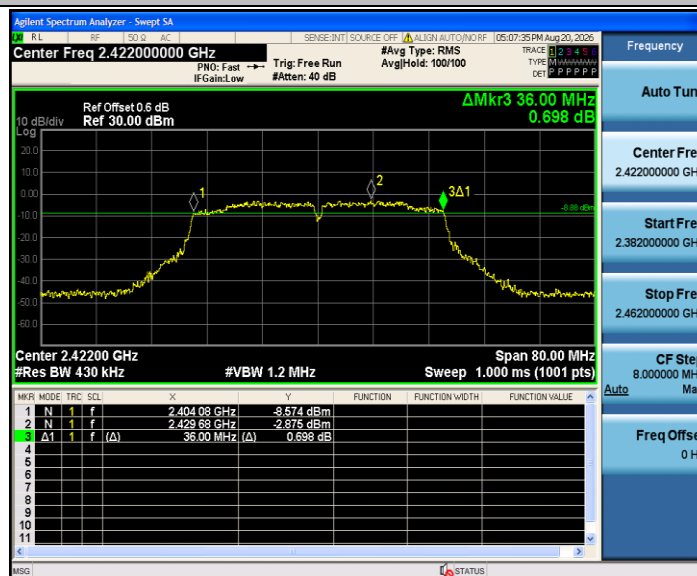
# 11N20SISO\_Ant1\_2437



11N20SISO\_Ant1\_2462



11N40SISO\_Ant1\_2422



# 11N40SISO\_Ant1\_2437



# 11N40SISO\_Ant1\_2452



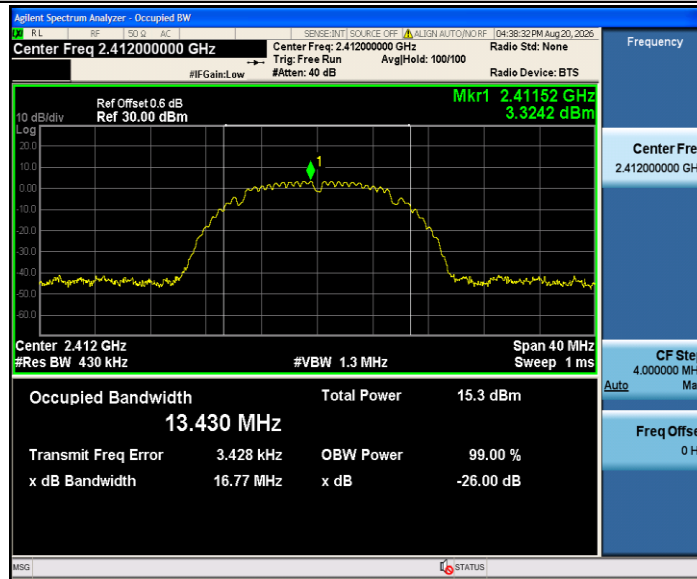
## Appendix B: Occupied Channel Bandwidth

### Test Result

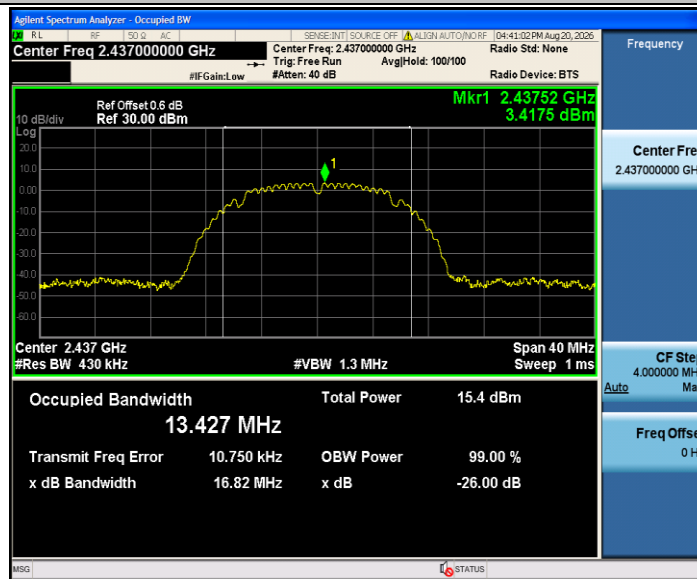
| TestMode  | Antenna | Channel Frequency[MHz] | OCB [MHz] | FL[MHz]   | FH[MHz]   | Limit[MHz] | Verdict |
|-----------|---------|------------------------|-----------|-----------|-----------|------------|---------|
| 11B       | Ant1    | 2412                   | 13.430    | 2405.2884 | 2418.7184 | ---        | ---     |
|           |         | 2437                   | 13.427    | 2430.2973 | 2443.7243 | ---        | ---     |
|           |         | 2462                   | 13.425    | 2455.3090 | 2468.7340 | ---        | ---     |
| 11G       | Ant1    | 2412                   | 16.868    | 2403.5790 | 2420.4470 | ---        | ---     |
|           |         | 2437                   | 16.813    | 2428.6559 | 2445.4689 | ---        | ---     |
|           |         | 2462                   | 16.845    | 2453.6305 | 2470.4755 | ---        | ---     |
| 11N20SISO | Ant1    | 2412                   | 17.948    | 2403.0465 | 2420.9945 | ---        | ---     |
|           |         | 2437                   | 17.868    | 2428.0678 | 2445.9358 | ---        | ---     |
|           |         | 2462                   | 17.893    | 2453.0698 | 2470.9628 | ---        | ---     |
| 11N40SISO | Ant1    | 2422                   | 36.117    | 2404.0925 | 2440.2095 | ---        | ---     |
|           |         | 2437                   | 36.042    | 2419.1077 | 2455.1497 | ---        | ---     |
|           |         | 2452                   | 36.119    | 2434.0790 | 2470.1980 | ---        | ---     |

## Test Graphs

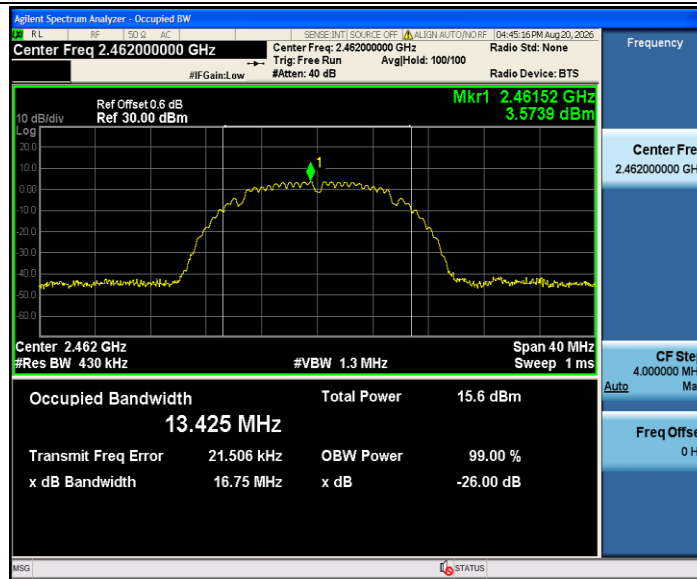
11B\_Ant1\_2412



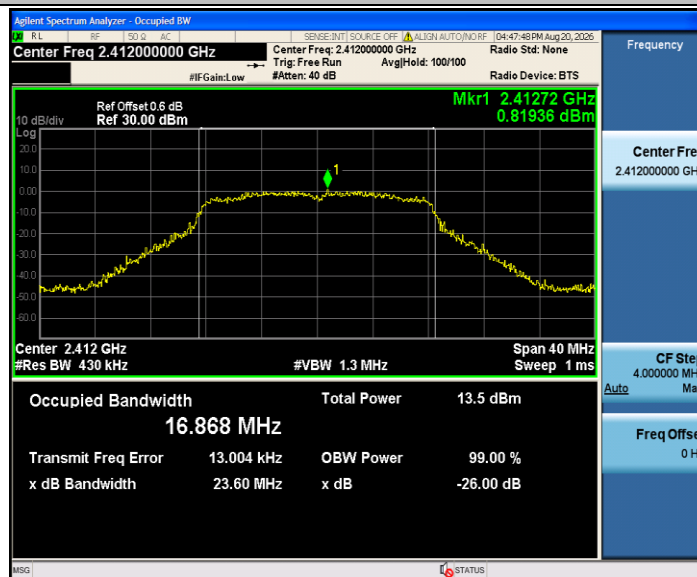
11B\_Ant1\_2437



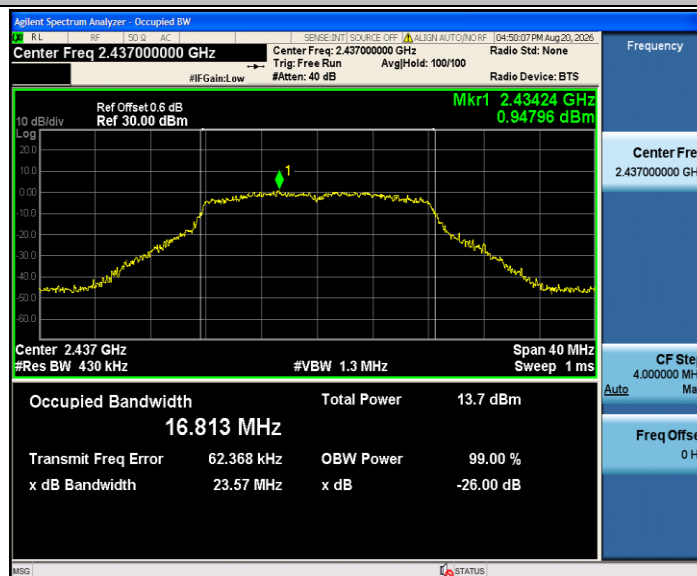
11B\_Ant1\_2462



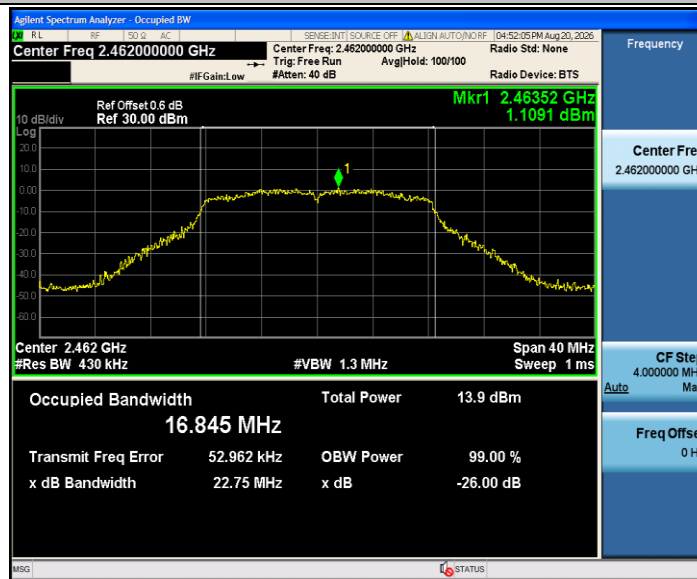
11G\_Ant1\_2412



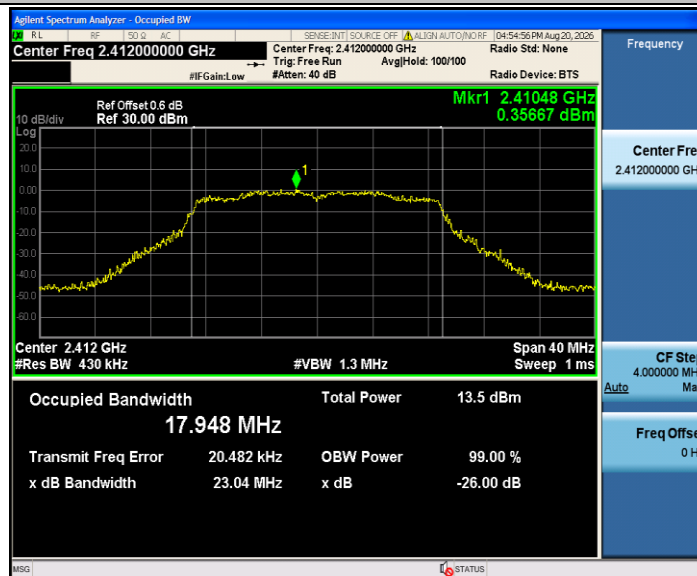
11G\_Ant1\_2437



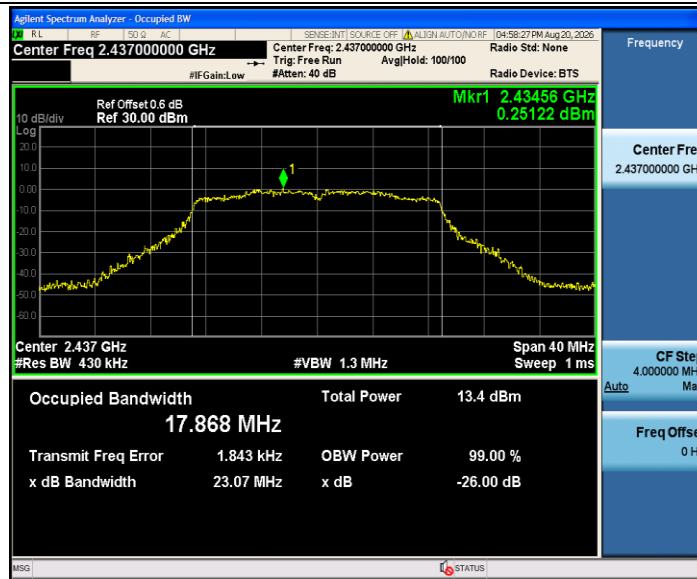
# 11G\_Ant1\_2462



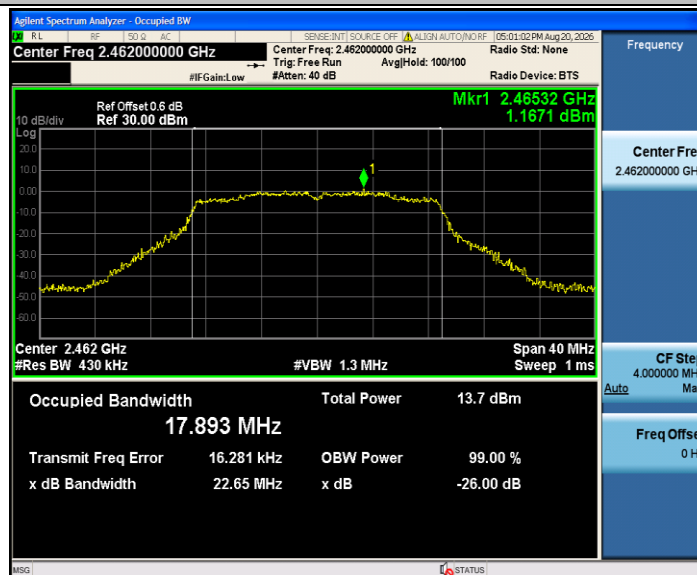
# 11N20SISO\_Ant1\_2412



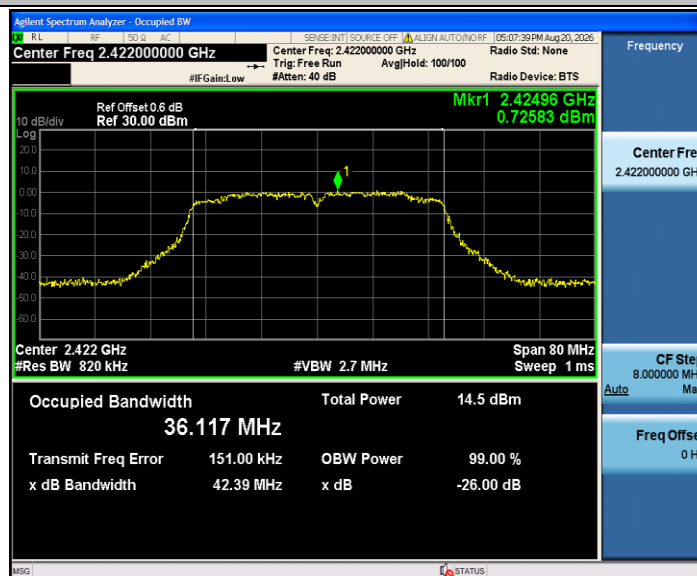
# 11N20SISO\_Ant1\_2437



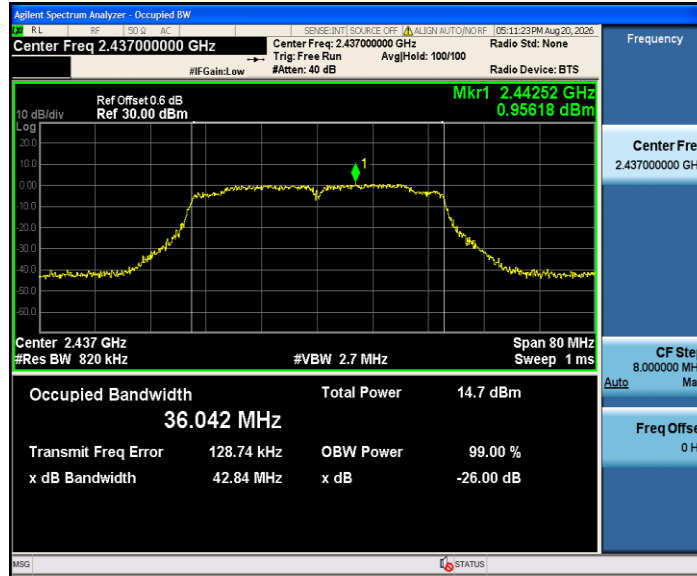
11N20SISO\_Ant1\_2462



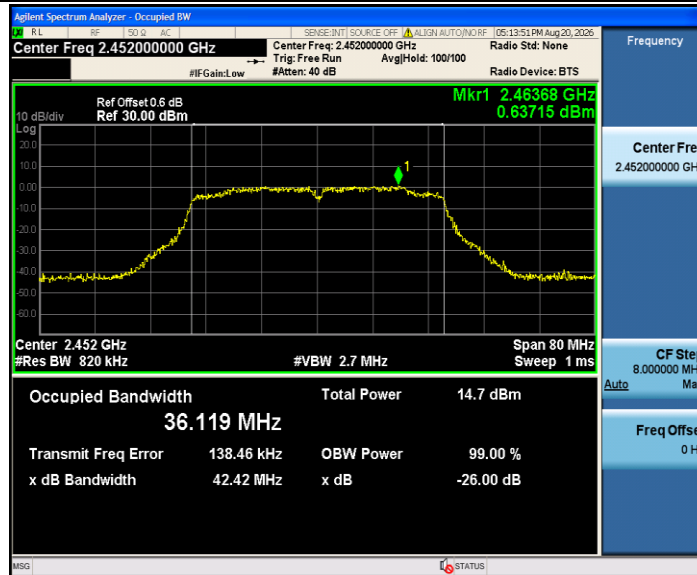
11N40SISO\_Ant1\_2422



# 11N40SISO\_Ant1\_2437



# 11N40SISO\_Ant1\_2452



## Appendix C: Maximum conducted output power

### Test Result Peak

| Test Mode | Antenna | Frequency[M Hz] | Peak Power [dBm] | Limit [dBm] | Verdict |
|-----------|---------|-----------------|------------------|-------------|---------|
| 11B       | Ant1    | 2412            | 14.97            | ≤30.00      | PASS    |
|           |         | 2437            | 15.05            | ≤30.00      | PASS    |
|           |         | 2462            | 15.31            | ≤30.00      | PASS    |
| 11G       | Ant1    | 2412            | 14.38            | ≤30.00      | PASS    |
|           |         | 2437            | 14.57            | ≤30.00      | PASS    |
|           |         | 2462            | 14.74            | ≤30.00      | PASS    |
| 11N20SISO | Ant1    | 2412            | 14.38            | ≤30.00      | PASS    |
|           |         | 2437            | 14.38            | ≤30.00      | PASS    |
|           |         | 2462            | 14.53            | ≤30.00      | PASS    |
| 11N40SISO | Ant1    | 2422            | 14.61            | ≤30.00      | PASS    |
|           |         | 2437            | 14.83            | ≤30.00      | PASS    |
|           |         | 2452            | 14.74            | ≤30.00      | PASS    |

## Appendix D: Maximum power spectral density

### Test Result

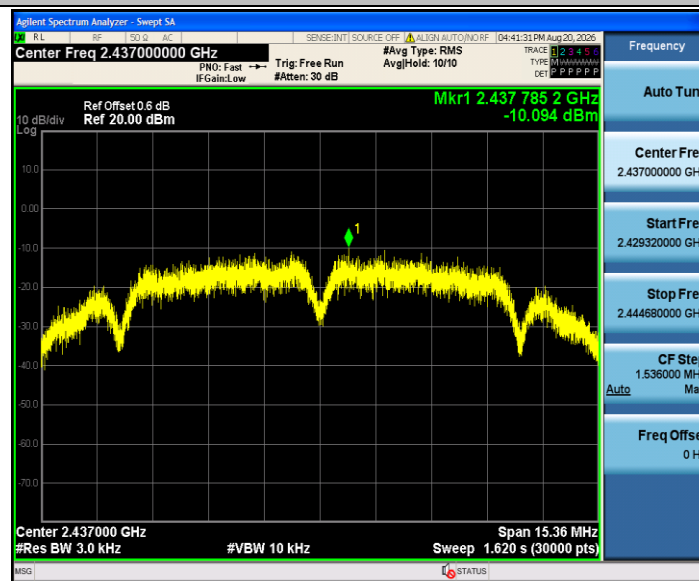
| Test Mode | Antenna | Frequency[MHz] | Peak power [dBm] | Limit [dBm] | Verdict |
|-----------|---------|----------------|------------------|-------------|---------|
| 11B       | Ant1    | 2412           | 14.97            | ≤30.00      | PASS    |
|           |         | 2437           | 15.05            | ≤30.00      | PASS    |
|           |         | 2462           | 15.31            | ≤30.00      | PASS    |
| 11G       | Ant1    | 2412           | 14.38            | ≤30.00      | PASS    |
|           |         | 2437           | 14.57            | ≤30.00      | PASS    |
|           |         | 2462           | 14.74            | ≤30.00      | PASS    |
| 11N20SISO | Ant1    | 2412           | 14.38            | ≤30.00      | PASS    |
|           |         | 2437           | 14.38            | ≤30.00      | PASS    |
|           |         | 2462           | 14.53            | ≤30.00      | PASS    |
| 11N40SISO | Ant1    | 2422           | 14.61            | ≤30.00      | PASS    |
|           |         | 2437           | 14.83            | ≤30.00      | PASS    |
|           |         | 2452           | 14.74            | ≤30.00      | PASS    |

## Test Graphs

11B\_Ant1\_2412



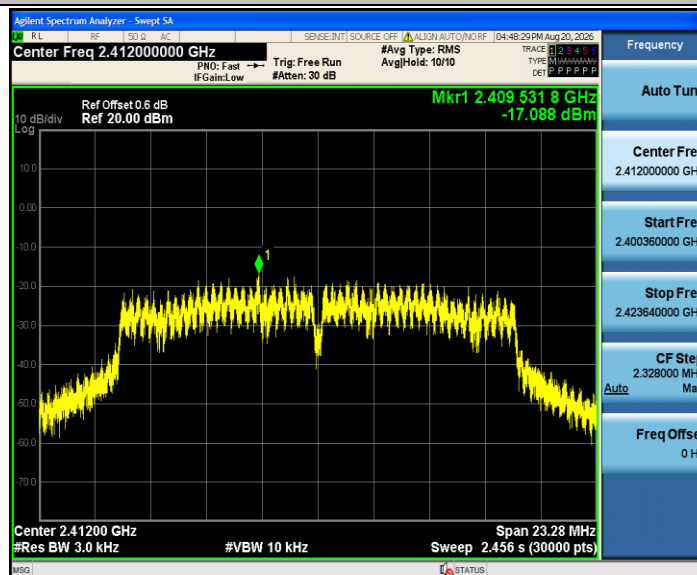
11B\_Ant1\_2437



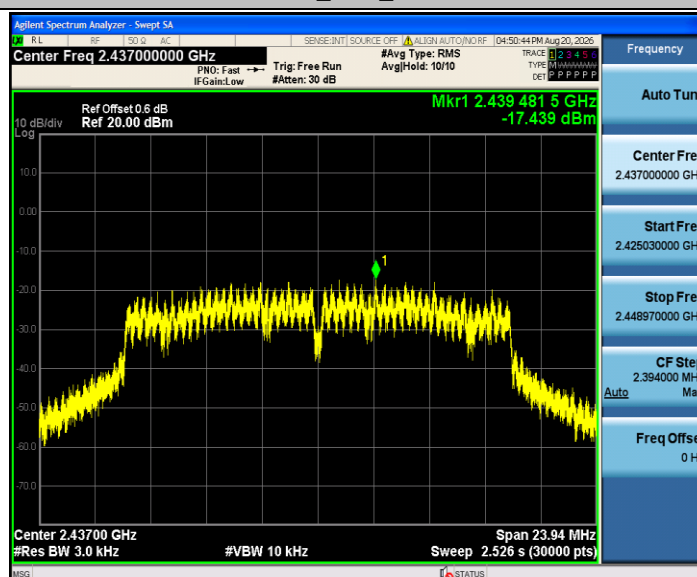
11B\_Ant1\_2462



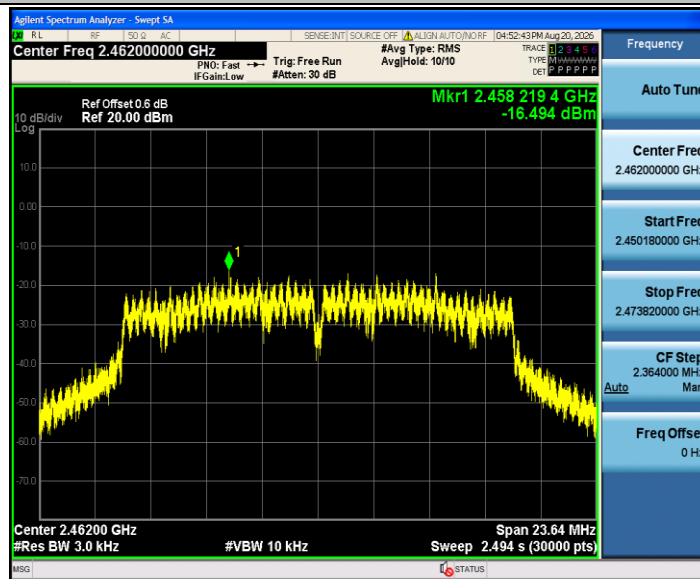
11G\_Ant1\_2412



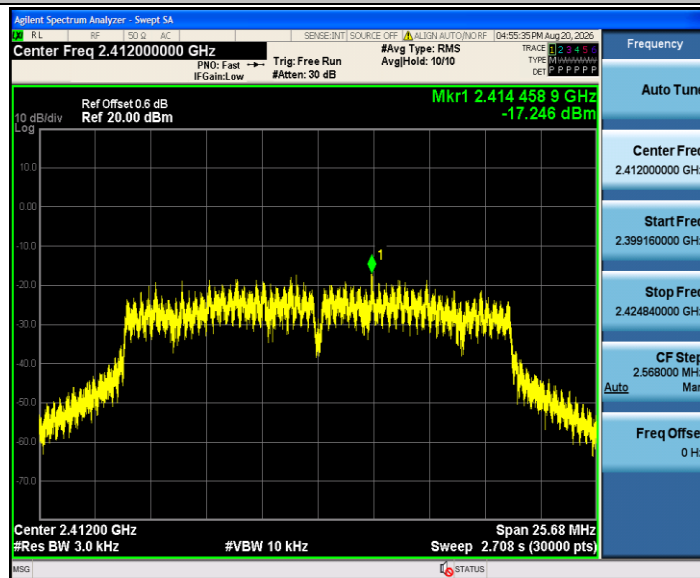
11G\_Ant1\_2437



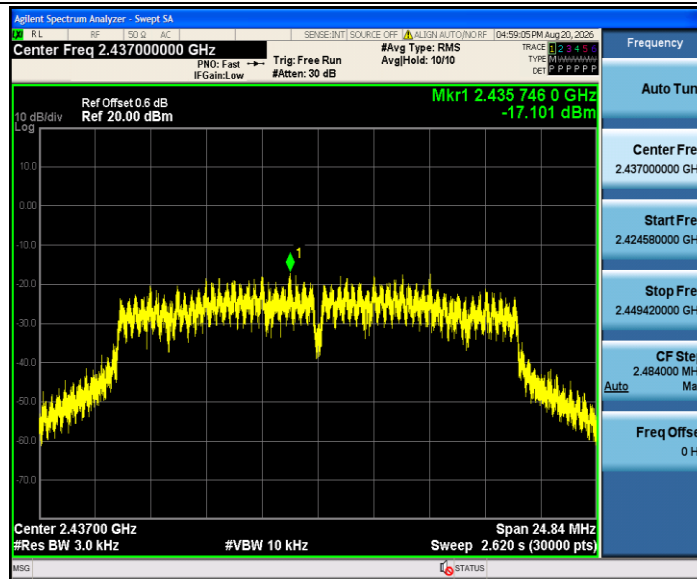
# 11G\_Ant1\_2462



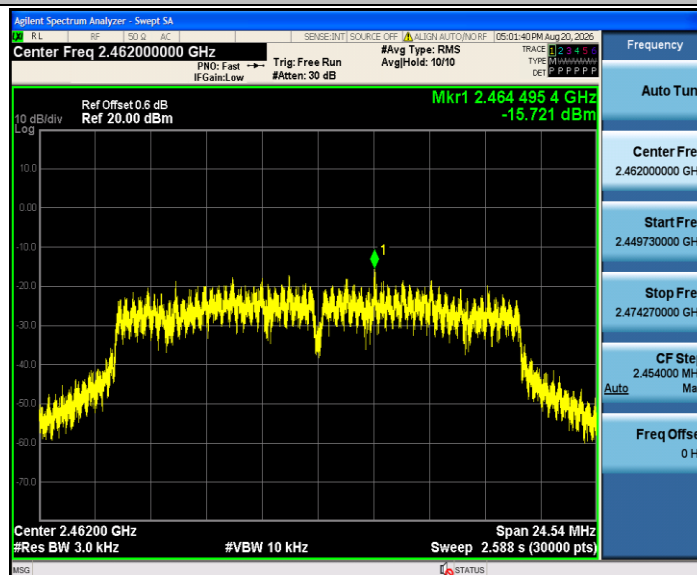
# 11N20SISO\_Ant1\_2412



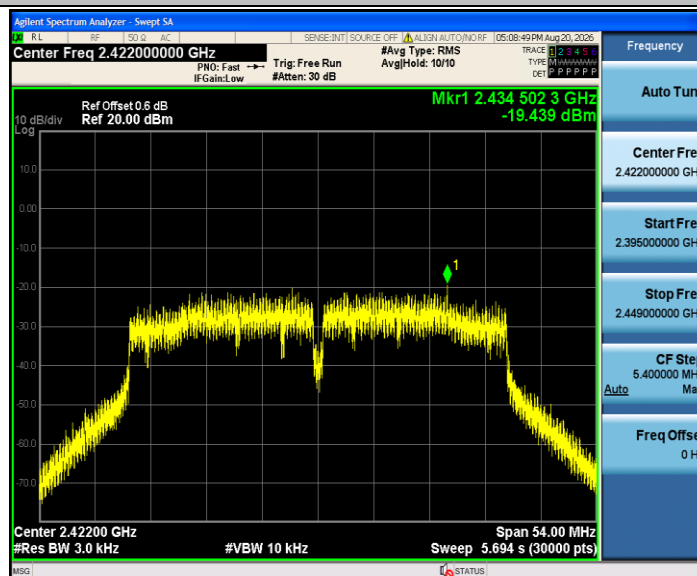
# 11N20SISO\_Ant1\_2437



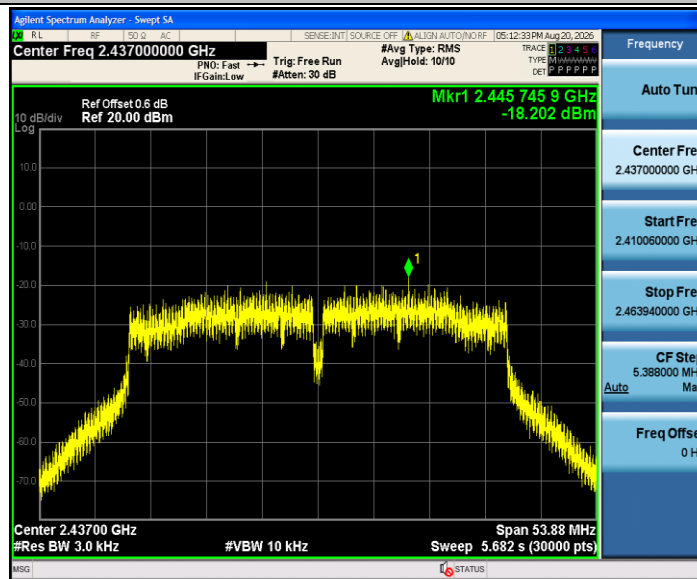
11N20SISO\_Ant1\_2462



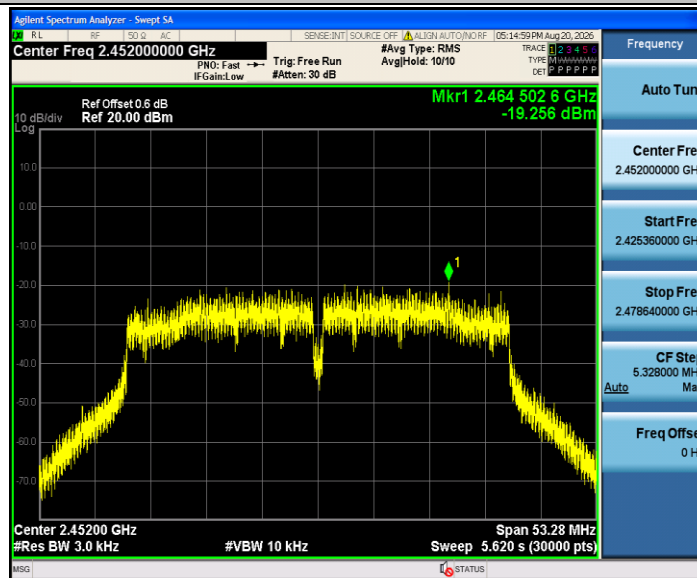
11N40SISO\_Ant1\_2422



# 11N40SISO\_Ant1\_2437



# 11N40SISO\_Ant1\_2452



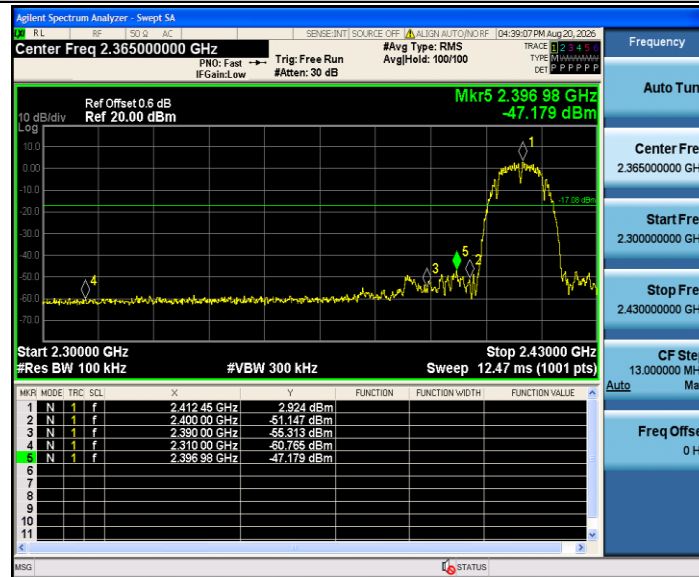
## Appendix E: Band edge measurements

### Test Result

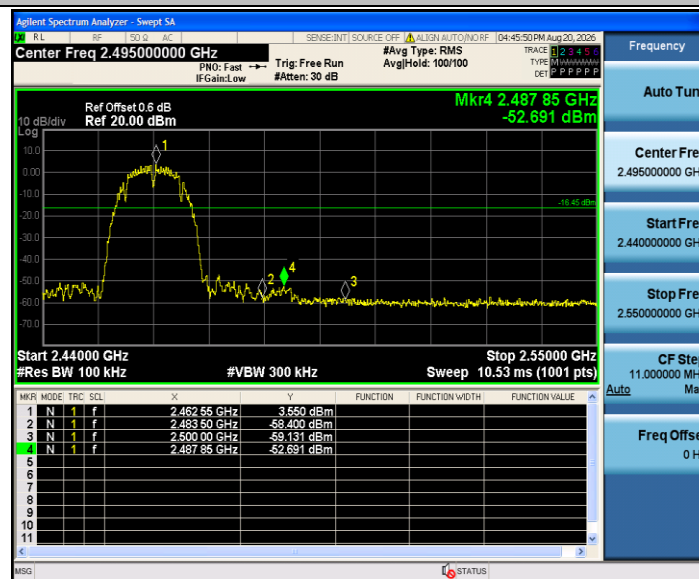
| TestMode  | Antenna | Channel Name | Frequency[MHz] | RefLevel[dBm] | Result[dBm] | Limit[dBm] | Verdict |
|-----------|---------|--------------|----------------|---------------|-------------|------------|---------|
| 11B       | Ant1    | Low          | 2412           | 2.92          | -47.18      | ≤-17.08    | PASS    |
|           |         | High         | 2462           | 3.55          | -52.69      | ≤-16.45    | PASS    |
| 11G       | Ant1    | Low          | 2412           | -1.96         | -33.7       | ≤-21.96    | PASS    |
|           |         | High         | 2462           | -2.01         | -57.83      | ≤-22.01    | PASS    |
| 11N20SISO | Ant1    | Low          | 2412           | -1.96         | -33.43      | ≤-21.96    | PASS    |
|           |         | High         | 2462           | -2.00         | -57.9       | ≤-22       | PASS    |
| 11N40SISO | Ant1    | Low          | 2422           | -5.21         | -33.76      | ≤-25.21    | PASS    |
|           |         | High         | 2452           | -4.93         | -55.97      | ≤-24.93    | PASS    |

## Test Graphs

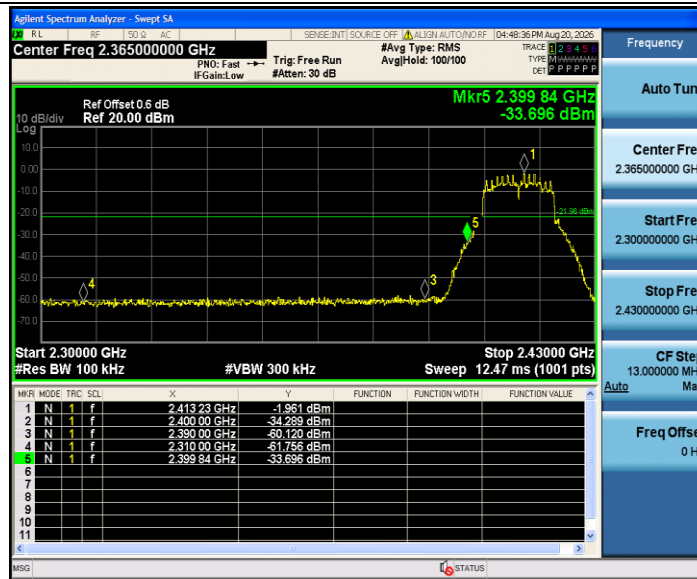
11B\_Ant1\_Low\_2412



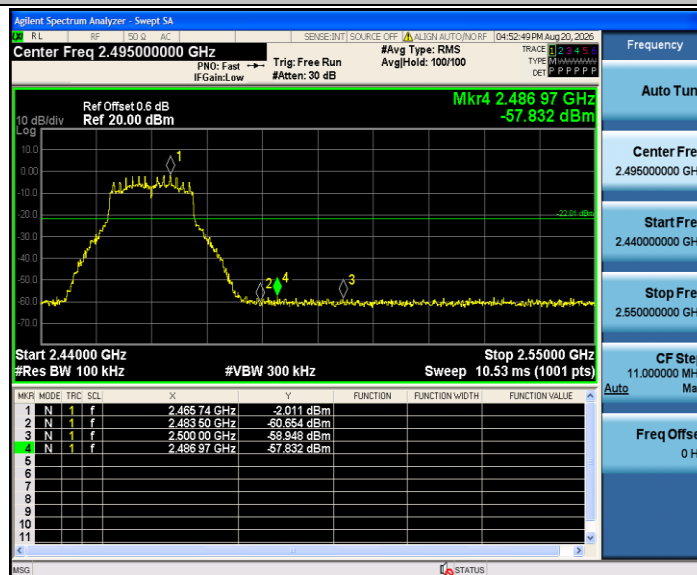
11B\_Ant1\_High\_2462



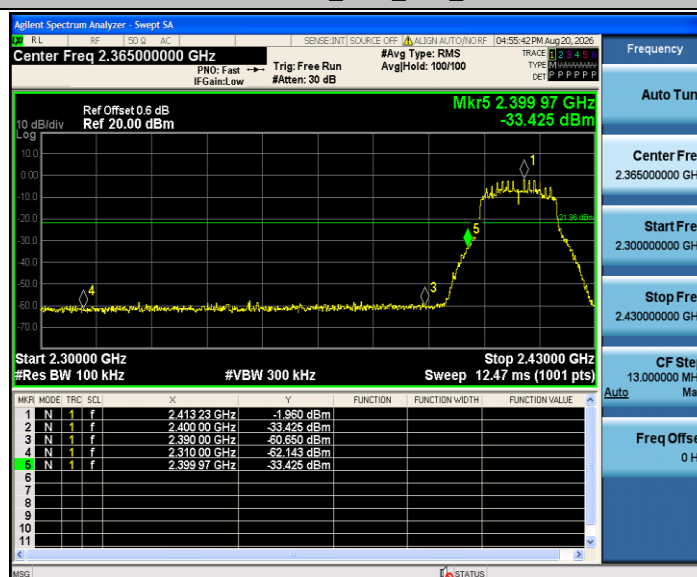
11G\_Ant1\_Low\_2412



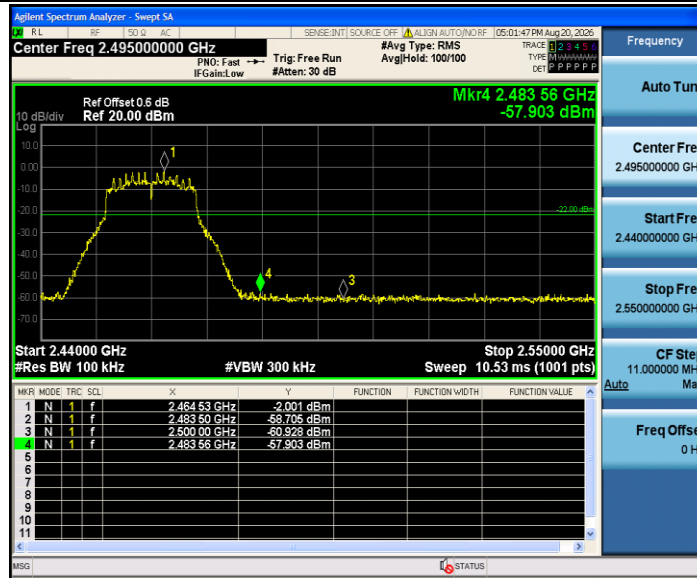
11G\_Ant1\_High\_2462



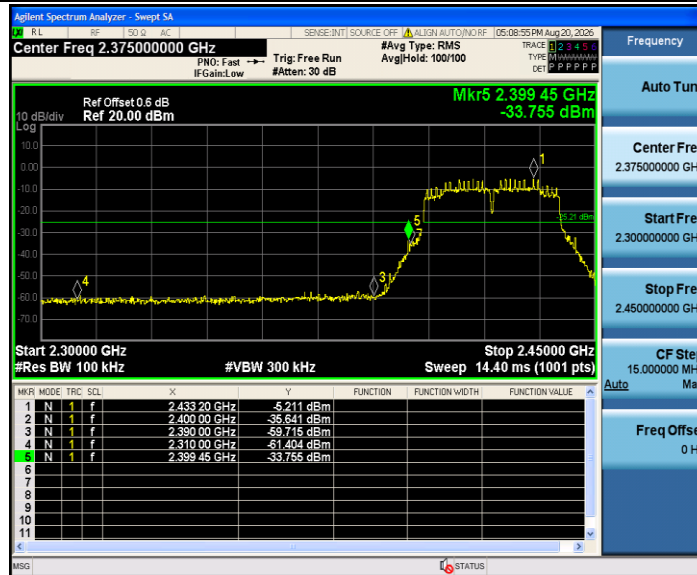
11N20SISO\_Ant1\_Low\_2412



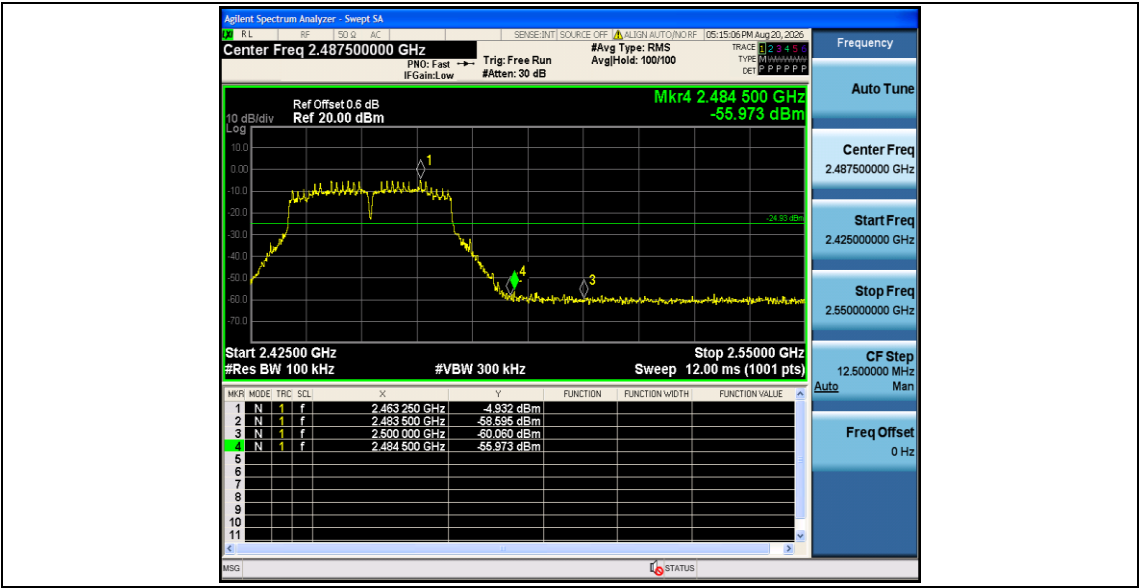
# 11N20SISO\_Ant1\_High\_2462



# 11N40SISO\_Ant1\_Low\_2422



# 11N40SISO\_Ant1\_High\_2452



## Appendix F: Conducted Spurious Emission

### Test Result

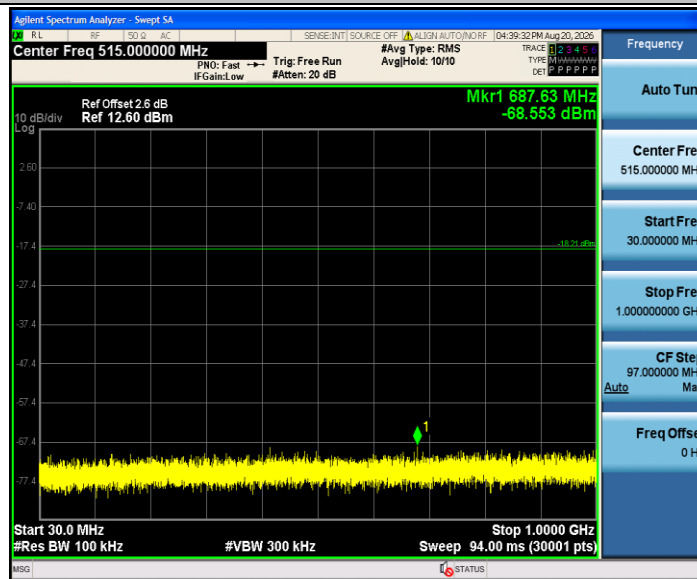
| TestMode  | Antenna | Frequency[MHz] | FreqRange [Mhz] | RefLevel [dBm] | Result [dBm] | Limit [dBm] | Verdict |
|-----------|---------|----------------|-----------------|----------------|--------------|-------------|---------|
| 11B       | Ant1    | 2412           | Reference       | 1.79           | 1.79         | ---         | PASS    |
|           |         |                | 30~1000         | 1.79           | -68.55       | ≤-18.21     | PASS    |
|           |         |                | 1000~26500      | 1.79           | -46.41       | ≤-18.21     | PASS    |
|           |         | 2437           | Reference       | 1.16           | 1.16         | ---         | PASS    |
|           |         |                | 30~1000         | 1.16           | -68.71       | ≤-18.84     | PASS    |
|           |         |                | 1000~26500      | 1.16           | -46.65       | ≤-18.84     | PASS    |
|           |         | 2462           | Reference       | 2.14           | 2.14         | ---         | PASS    |
|           |         |                | 30~1000         | 2.14           | -68.42       | ≤-17.86     | PASS    |
|           |         |                | 1000~26500      | 2.14           | -46.26       | ≤-17.86     | PASS    |
| 11G       | Ant1    | 2412           | Reference       | -2.74          | -2.74        | ---         | PASS    |
|           |         |                | 30~1000         | -2.74          | -68.49       | ≤-22.74     | PASS    |
|           |         |                | 1000~26500      | -2.74          | -46.42       | ≤-22.74     | PASS    |
|           |         | 2437           | Reference       | -2.72          | -2.72        | ---         | PASS    |
|           |         |                | 30~1000         | -2.72          | -69.5        | ≤-22.72     | PASS    |
|           |         |                | 1000~26500      | -2.72          | -45.69       | ≤-22.72     | PASS    |
|           |         | 2462           | Reference       | -2.40          | -2.40        | ---         | PASS    |
|           |         |                | 30~1000         | -2.40          | -68.92       | ≤-22.4      | PASS    |
|           |         |                | 1000~26500      | -2.40          | -46.95       | ≤-22.4      | PASS    |
| 11N20SISO | Ant1    | 2412           | Reference       | -2.84          | -2.84        | ---         | PASS    |
|           |         |                | 30~1000         | -2.84          | -68.1        | ≤-22.84     | PASS    |
|           |         |                | 1000~26500      | -2.84          | -46.75       | ≤-22.84     | PASS    |
|           |         | 2437           | Reference       | -2.71          | -2.71        | ---         | PASS    |
|           |         |                | 30~1000         | -2.71          | -68.32       | ≤-22.71     | PASS    |
|           |         |                | 1000~26500      | -2.71          | -44.91       | ≤-22.71     | PASS    |
|           |         | 2462           | Reference       | -1.65          | -1.65        | ---         | PASS    |
|           |         |                | 30~1000         | -1.65          | -69.34       | ≤-21.65     | PASS    |
|           |         |                | 1000~26500      | -1.65          | -46.15       | ≤-21.65     | PASS    |
| 11N40SISO | Ant1    | 2422           | Reference       | -5.89          | -5.89        | ---         | PASS    |
|           |         |                | 30~1000         | -5.89          | -68.69       | ≤-25.89     | PASS    |
|           |         |                | 1000~26500      | -5.89          | -46.41       | ≤-25.89     | PASS    |
|           |         | 2437           | Reference       | -6.06          | -6.06        | ---         | PASS    |
|           |         |                | 30~1000         | -6.06          | -69.06       | ≤-26.06     | PASS    |
|           |         |                | 1000~26500      | -6.06          | -45.85       | ≤-26.06     | PASS    |
|           |         | 2452           | Reference       | -5.17          | -5.17        | ---         | PASS    |
|           |         |                | 30~1000         | -5.17          | -68.65       | ≤-25.17     | PASS    |
|           |         |                | 1000~26500      | -5.17          | -46.16       | ≤-25.17     | PASS    |

## Test Graphs

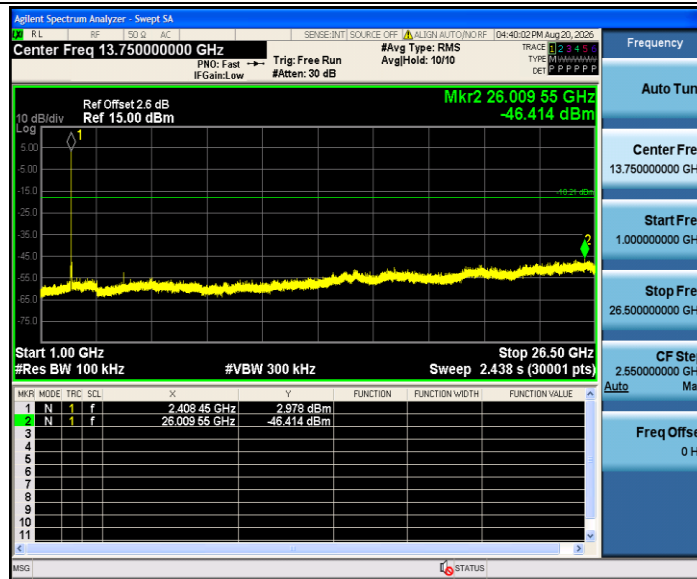
11B\_Ant1\_2412\_0~Reference



11B\_Ant1\_2412\_30~1000



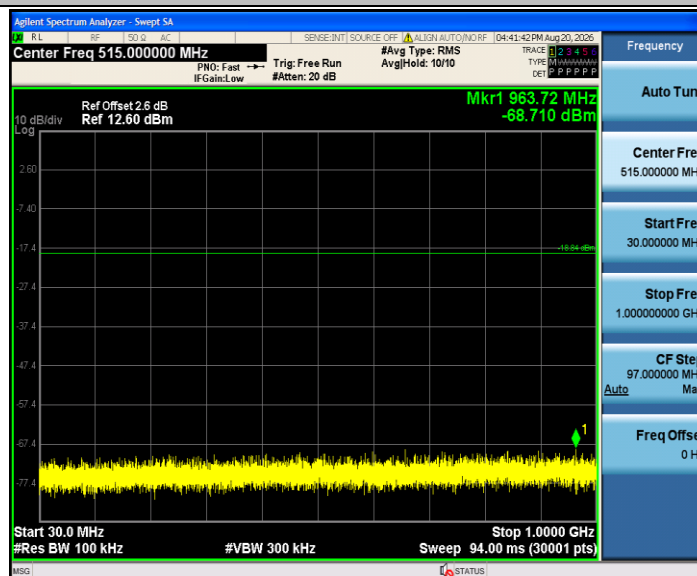
11B\_Ant1\_2412\_1000~26500



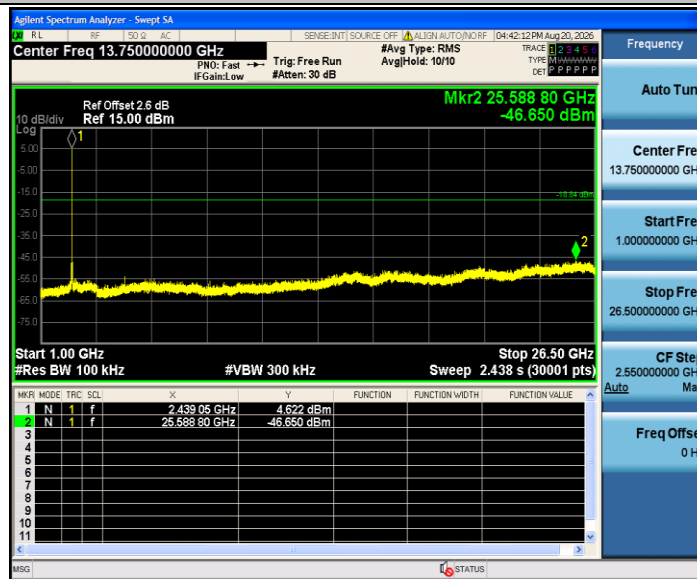
11B\_Ant1\_2437\_0~Reference



11B\_Ant1\_2437\_30~1000



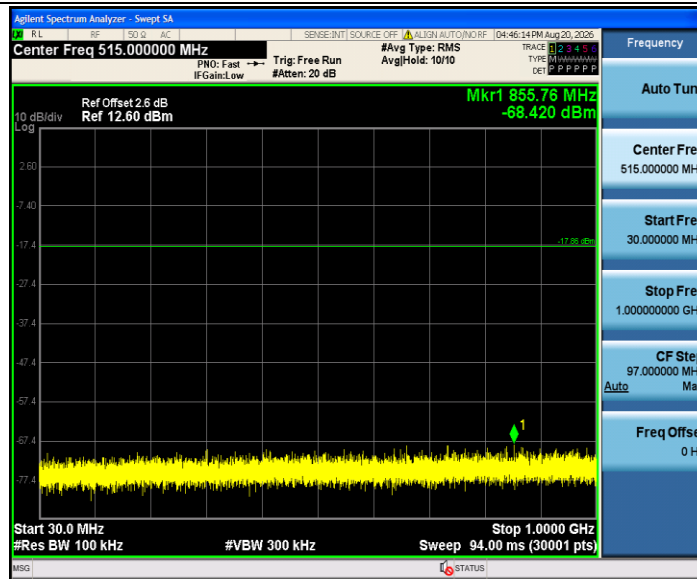
# 11B\_Ant1\_2437\_1000~26500



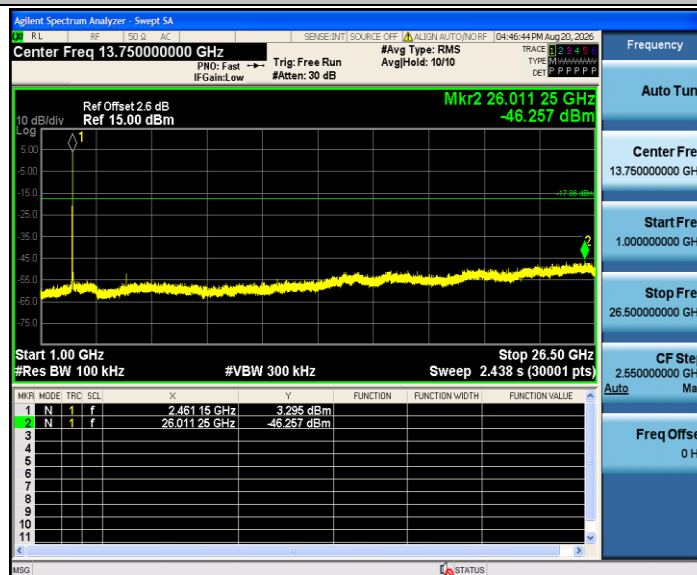
# 11B\_Ant1\_2462\_0~Reference



# 11B\_Ant1\_2462\_30~1000



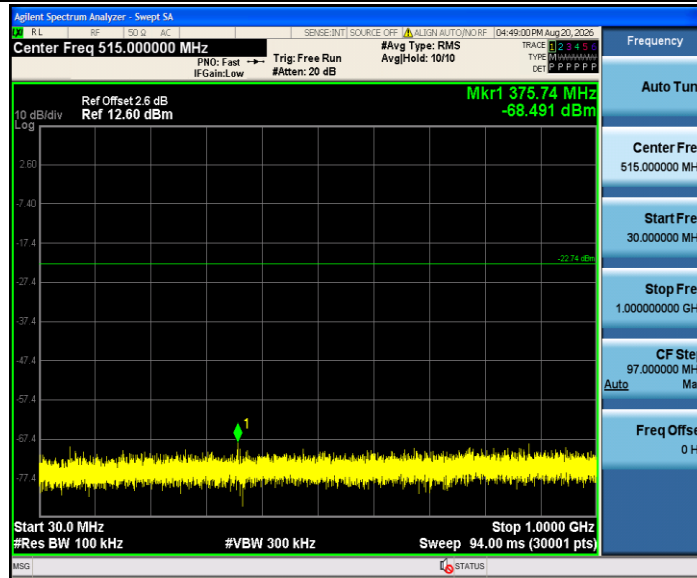
11B\_Ant1\_2462\_1000~26500



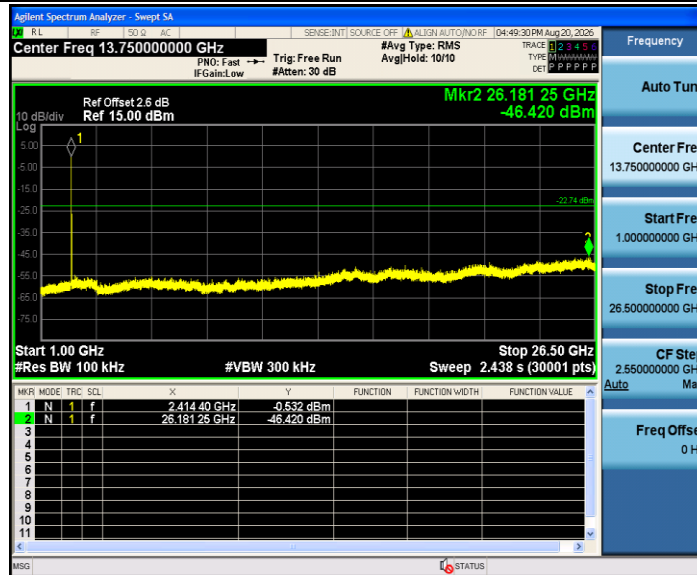
11G\_Ant1\_2412\_0~Reference



# 11G\_Ant1\_2412\_30~1000



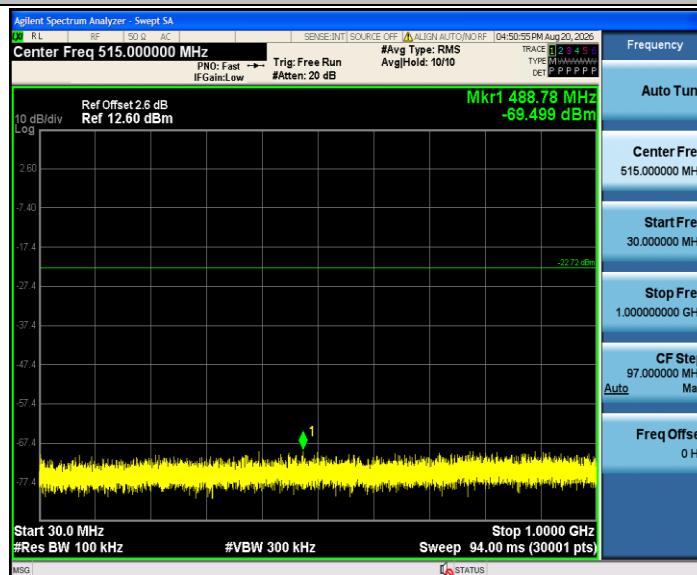
# 11G\_Ant1\_2412\_1000~26500



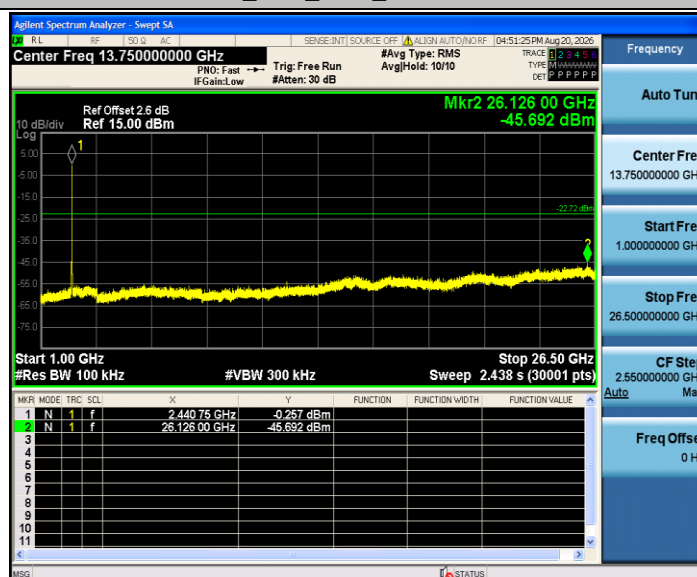
# 11G\_Ant1\_2437\_0~Reference



11G\_Ant1\_2437\_30~1000



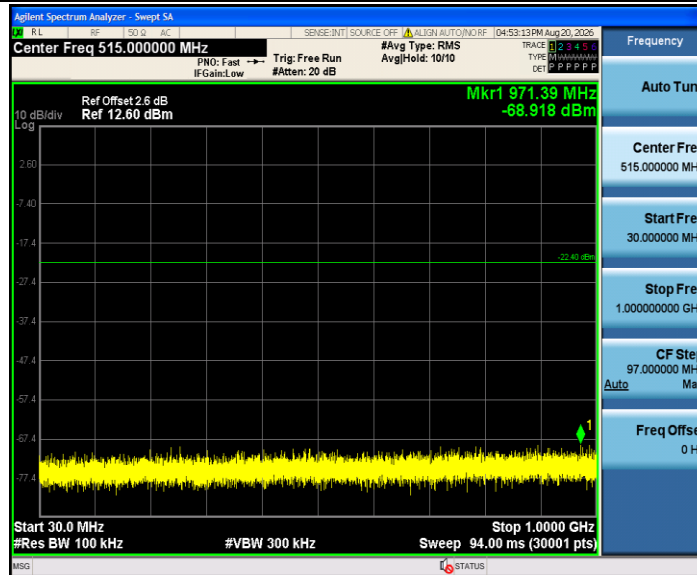
11G\_Ant1\_2437\_1000~26500



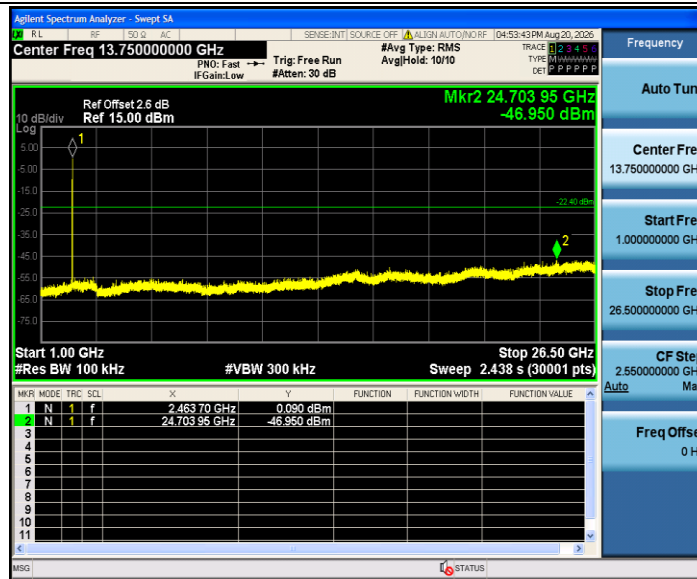
# 11G\_Ant1\_2462\_0~Reference



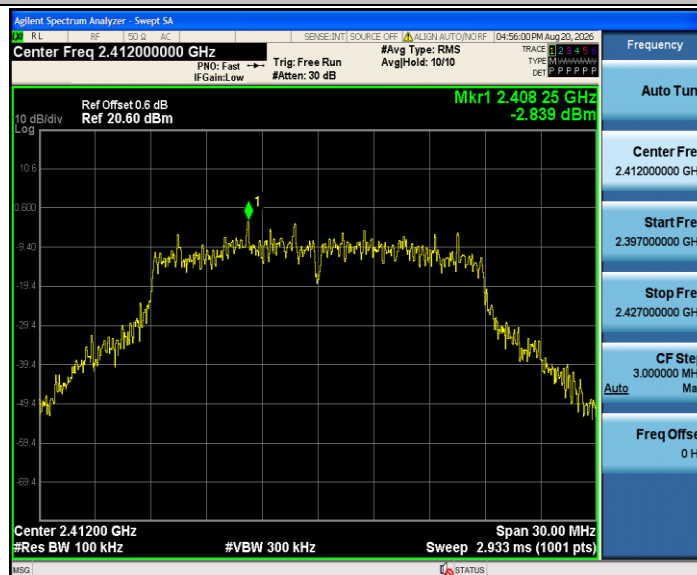
# 11G\_Ant1\_2462\_30~1000



# 11G\_Ant1\_2462\_1000~26500



11N20SISO\_Ant1\_2412\_0~Reference



11N20SISO\_Ant1\_2412\_30~1000

