

|                                                        |                                          |
|--------------------------------------------------------|------------------------------------------|
| <b>Case No. :</b> <u>GTS20250404005-1-01</u>           |                                          |
| <b>Ambient Condition:</b> <u>23</u> °C, <u>52</u> %RH, |                                          |
| <b>Test Date:</b> <u>2025.4.10</u>                     | <b>Test Engineer:</b> <u>Evan ouyang</u> |

## Appendix A.1: DTS Bandwidth

### Test Result

| TestMode  | Antenna | Frequency[MHz] | DTS BW [MHz] | FL[MHz]  | FH[MHz]  | Limit[MHz] | Verdict |
|-----------|---------|----------------|--------------|----------|----------|------------|---------|
| 11B       | Ant1    | 2412           | 8.040        | 2408.000 | 2416.040 | 0.5        | PASS    |
|           |         | 2437           | 8.080        | 2432.960 | 2441.040 | 0.5        | PASS    |
|           |         | 2462           | 8.040        | 2457.960 | 2466.000 | 0.5        | PASS    |
| 11G       | Ant1    | 2412           | 16.040       | 2404.120 | 2420.160 | 0.5        | PASS    |
|           |         | 2437           | 15.080       | 2429.440 | 2444.520 | 0.5        | PASS    |
|           |         | 2462           | 16.040       | 2454.120 | 2470.160 | 0.5        | PASS    |
| 11N20SISO | Ant1    | 2412           | 17.280       | 2403.480 | 2420.760 | 0.5        | PASS    |
|           |         | 2437           | 15.360       | 2429.440 | 2444.800 | 0.5        | PASS    |
|           |         | 2462           | 17.320       | 2453.480 | 2470.800 | 0.5        | PASS    |
| 11N40SISO | Ant1    | 2422           | 35.040       | 2404.480 | 2439.520 | 0.5        | PASS    |
|           |         | 2437           | 35.040       | 2419.480 | 2454.520 | 0.5        | PASS    |
|           |         | 2452           | 33.760       | 2434.480 | 2468.240 | 0.5        | PASS    |

Test Graphs



11B\_Ant1\_2437

Keysight Spectrum Analyzer - Sweep SA

RF 150.0 AC SENSE:INT

02:19:25 AM Apr 11, 2025

Center Freq 2.437000000 GHz

PN0: Fast IFGain:Low Trig: Free Run #Atten: 40 dB

#Avg Type: RMS Avg/Hold: 100/100

TRACE 1 2 3 4 5

TYPE M W W W W W W W W

DET P P P P P P P

Ref Offset 9.05 dB

Ref 30.00 dBm

ΔMkr3 8.08 MHz

1.142 dB

Center 2.43700 GHz

#Res BW 100 kHz

#VBW 300 kHz

Span 40.00 MHz

Sweep 3.867 ms (1001 pts)

| MKR | MODE | TRC | SCL | X            | Y           | FUNCTION | FUNCTION WIDTH | FUNCTION VALUE |
|-----|------|-----|-----|--------------|-------------|----------|----------------|----------------|
| 1   | N    | 1   | f   | 2.432 96 GHz | -11.251 dBm |          |                |                |
| 2   | N    | 1   | f   | 2.435 00 GHz | -5.693 dBm  |          |                |                |
| Δ1  | 1    | f   | (Δ) | 8.08 MHz (Δ) | 1.142 dB    |          |                |                |

MSG

STATUS

Frequency

Auto Tune

Center Freq 2.437000000 GHz

Start Freq 2.417000000 GHz

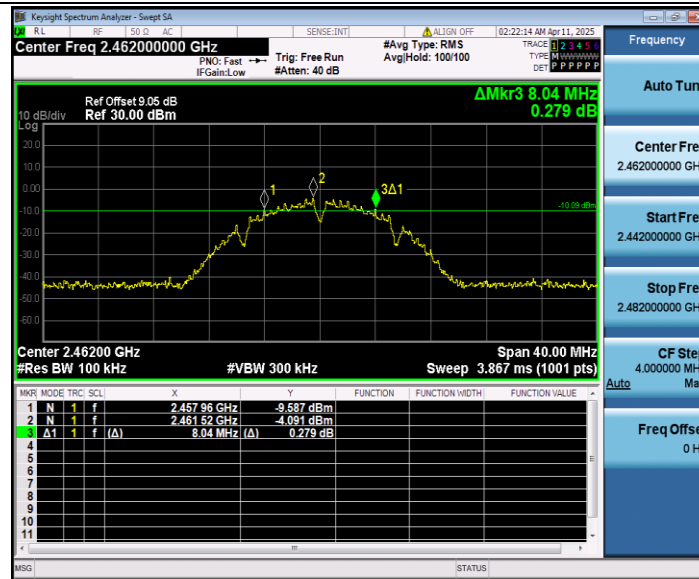
Stop Freq 2.457000000 GHz

CF Step 4.000000 MHz

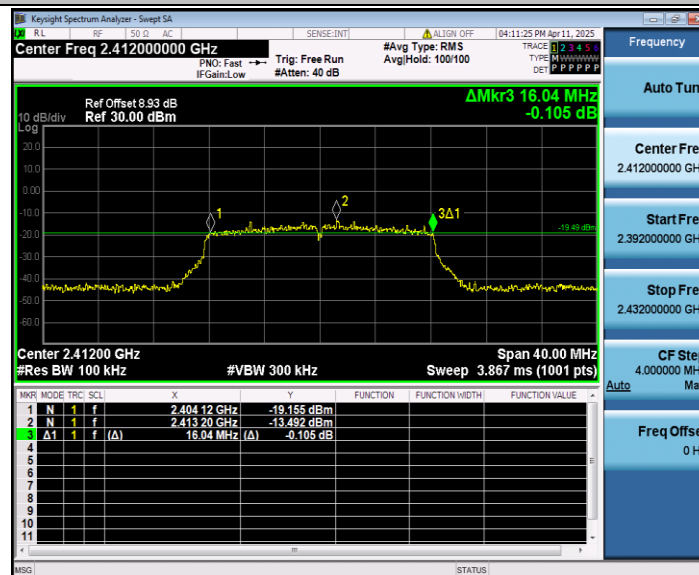
Auto Man

Freq Offset 0 Hz

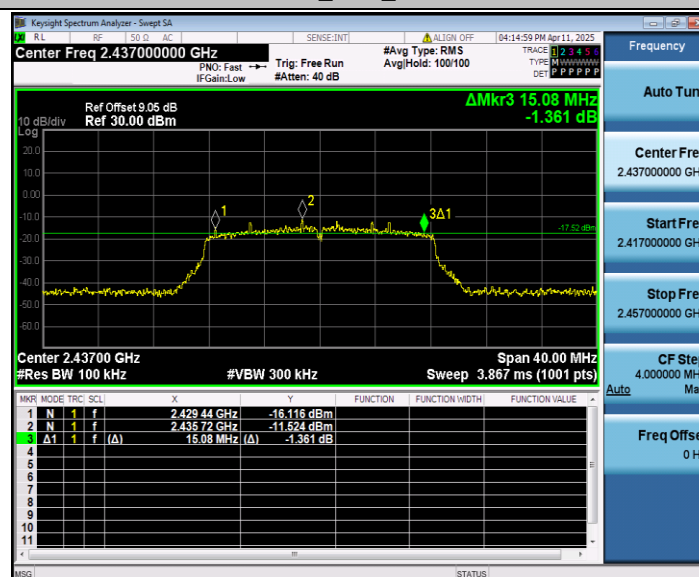
11B\_Ant1\_2462



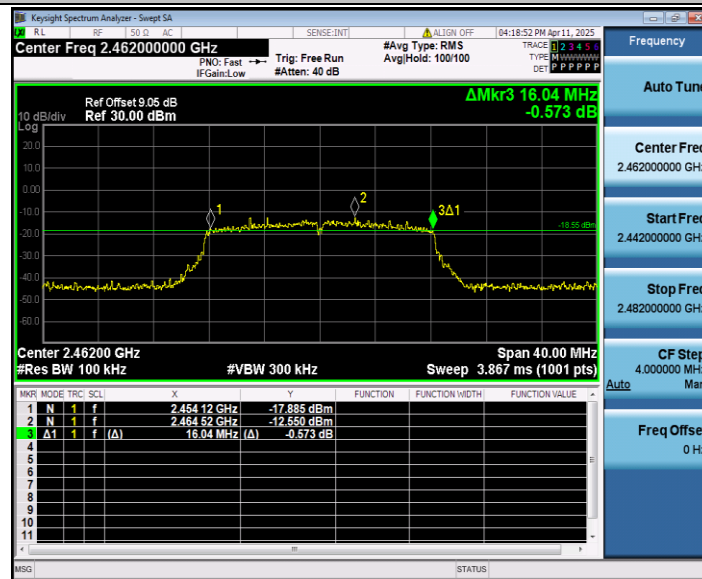
11G\_Ant1\_2412



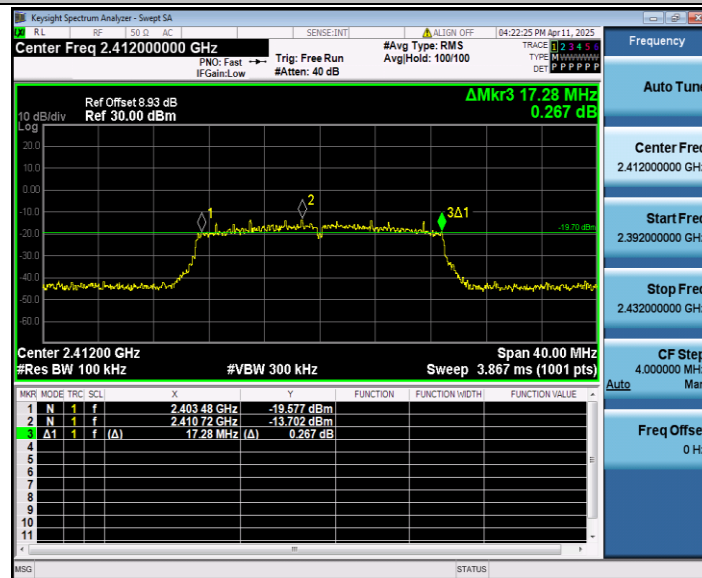
11G\_Ant1\_2437



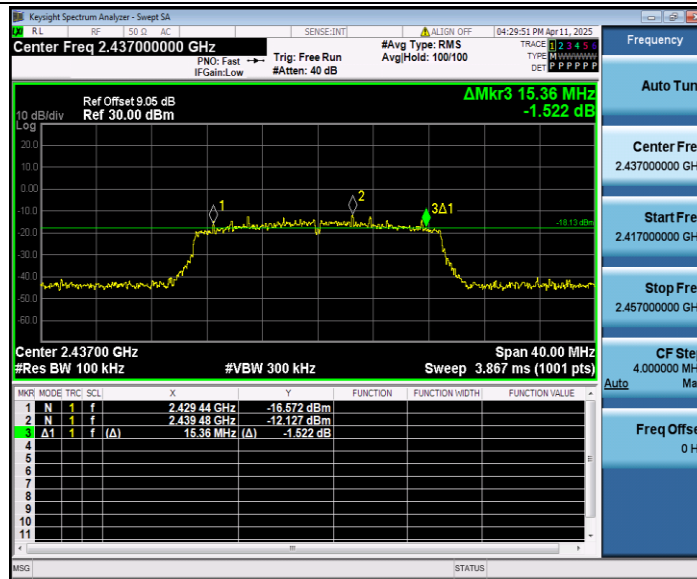
## 11G\_Ant1\_2462



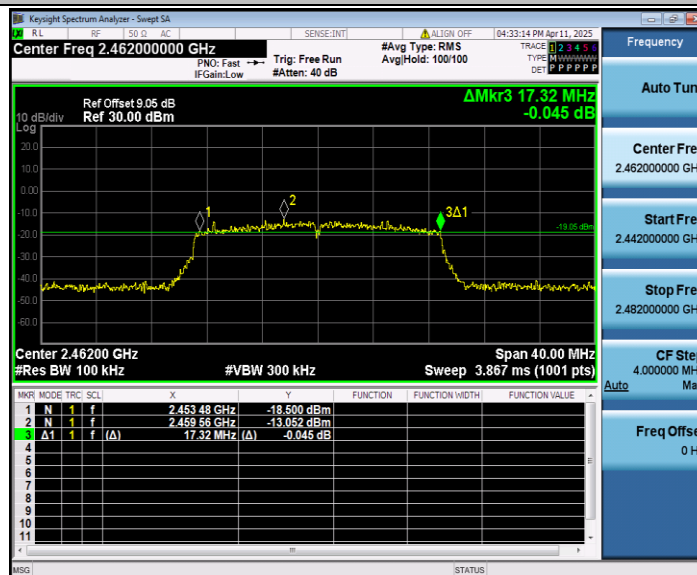
## 11N20SISO\_Ant1\_2412



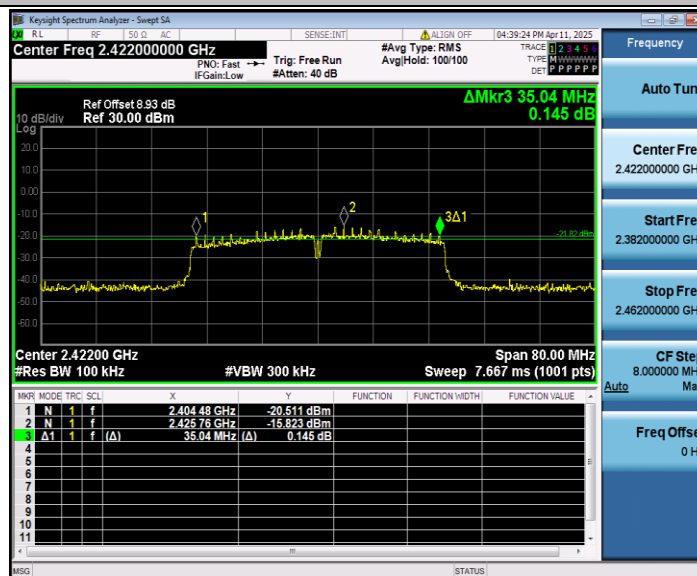
## 11N20SISO\_Ant1\_2437



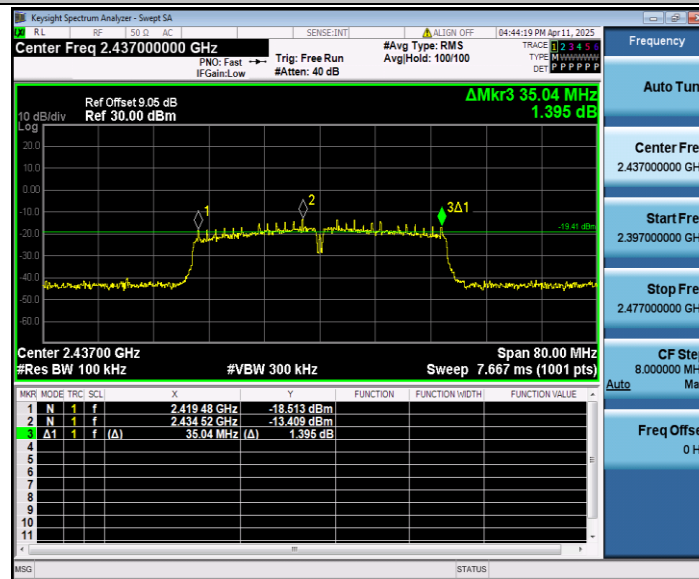
11N20SISO\_Ant1\_2462



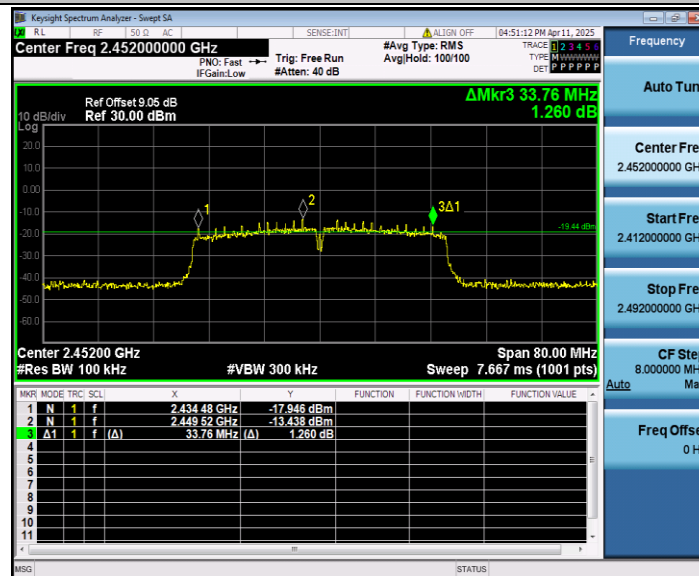
11N40SISO\_Ant1\_2422



## 11N40SISO\_Ant1\_2437



## 11N40SISO\_Ant1\_2452

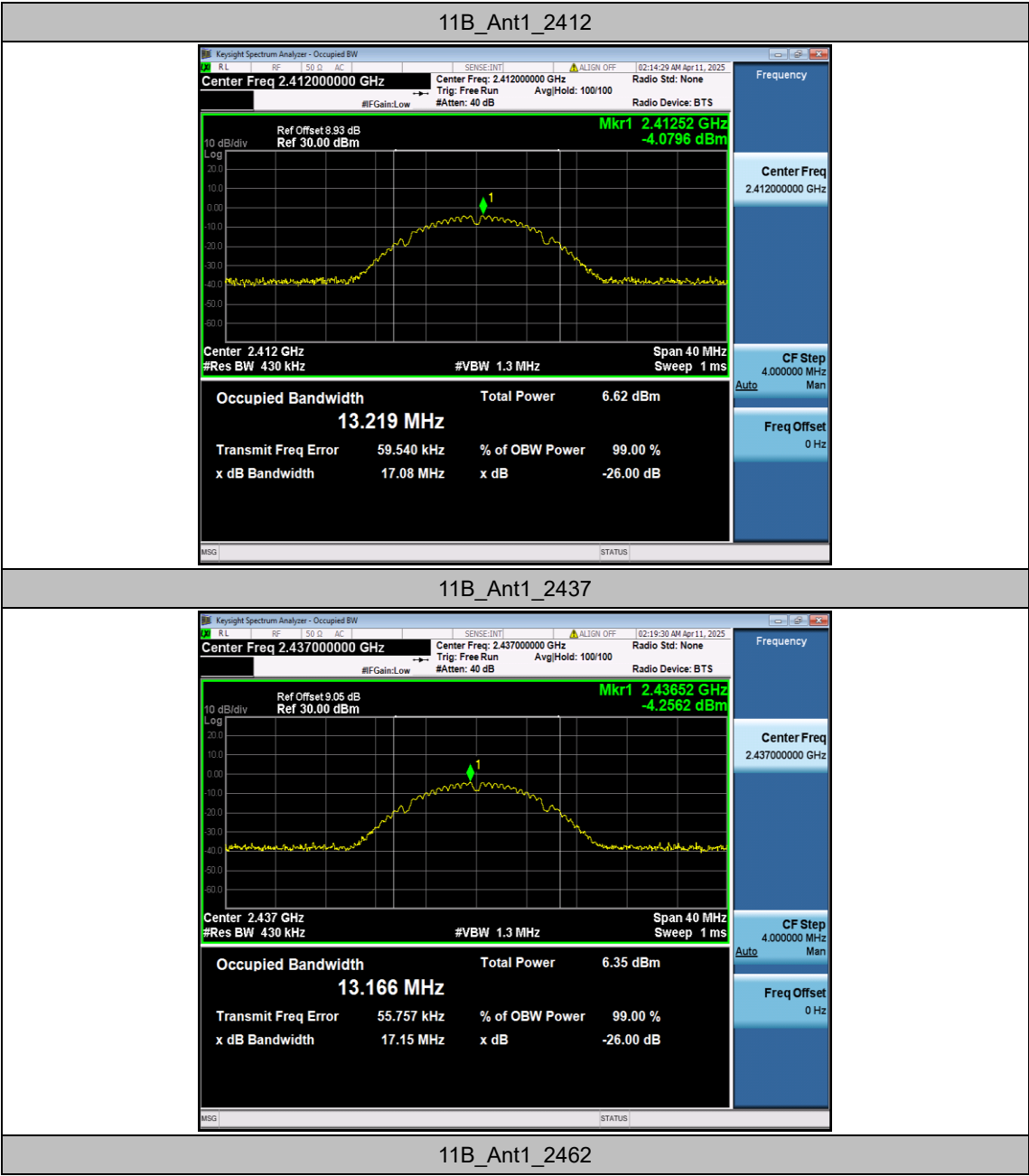


## Appendix A.2: Occupied Channel Bandwidth

### Test Result

| TestMode  | Antenna | Channel Frequency[MHz] | OCB [MHz] | FL[MHz]   | FH[MHz]   | Limit[MHz] | Verdict |
|-----------|---------|------------------------|-----------|-----------|-----------|------------|---------|
| 11B       | Ant1    | 2412                   | 13.219    | 2405.4500 | 2418.6690 | ---        | ---     |
|           |         | 2437                   | 13.166    | 2430.4728 | 2443.6388 | ---        | ---     |
|           |         | 2462                   | 13.111    | 2455.4799 | 2468.5909 | ---        | ---     |
| 11G       | Ant1    | 2412                   | 17.081    | 2403.5159 | 2420.5969 | ---        | ---     |
|           |         | 2437                   | 16.961    | 2428.5794 | 2445.5404 | ---        | ---     |
|           |         | 2462                   | 16.915    | 2453.5868 | 2470.5018 | ---        | ---     |
| 11N20SISO | Ant1    | 2412                   | 18.000    | 2403.0574 | 2421.0574 | ---        | ---     |
|           |         | 2437                   | 17.952    | 2428.0419 | 2445.9939 | ---        | ---     |
|           |         | 2462                   | 17.884    | 2453.0948 | 2470.9788 | ---        | ---     |
| 11N40SISO | Ant1    | 2422                   | 36.903    | 2403.6979 | 2440.6009 | ---        | ---     |
|           |         | 2437                   | 36.432    | 2418.9372 | 2455.3692 | ---        | ---     |
|           |         | 2452                   | 36.575    | 2433.7755 | 2470.3505 | ---        | ---     |

Test Graphs



11B\_Ant1\_2437

Keysight Spectrum Analyzer - Occupied BW

Center Freq 2.437000000 GHz

Center Freq: 2.437000000 GHz

Trig: Free Run

Avg/Hold: 100/100

Radio Std: None

Radio Device: BTS

Ref Offset 9.05 dB

Ref 30.00 dBm

Mkr1 2.43652 GHz

-4.2562 dBm

10 dB/div

Log

Center 2.437 GHz

#Res BW 430 kHz

#VBW 1.3 MHz

Span 40 MHz

Sweep 1 ms

Occupied Bandwidth

13.166 MHz

Total Power

6.35 dBm

Transmit Freq Error

55.757 kHz

% of OBW Power

99.00 %

x dB Bandwidth

17.15 MHz

x dB

-26.00 dB

MSG

STATUS

Frequency

Center Freq

2.437000000 GHz

CF Step

4.000000 MHz

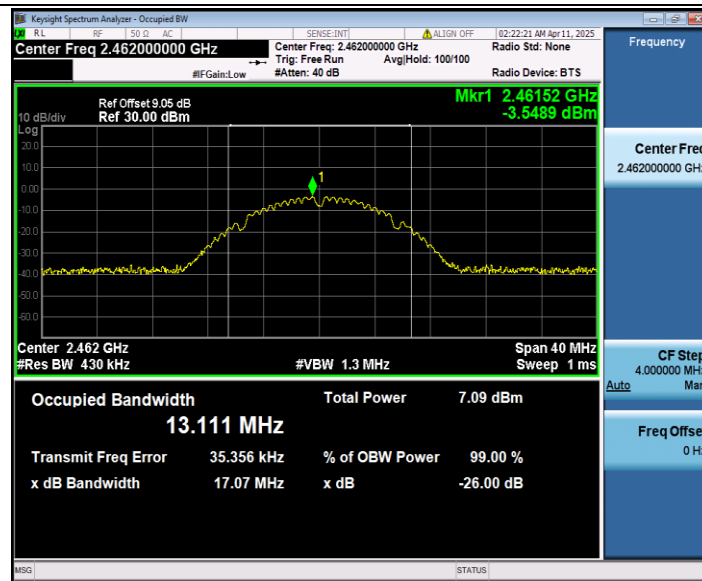
Auto

Man

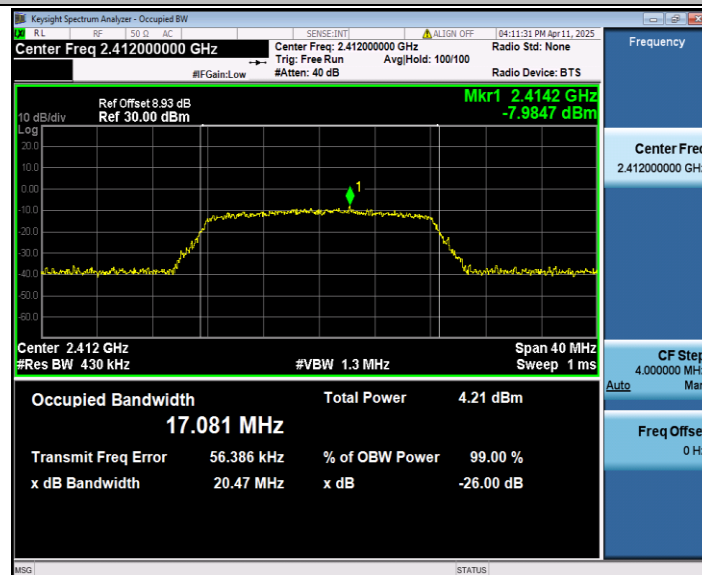
Freq Offset

0 Hz

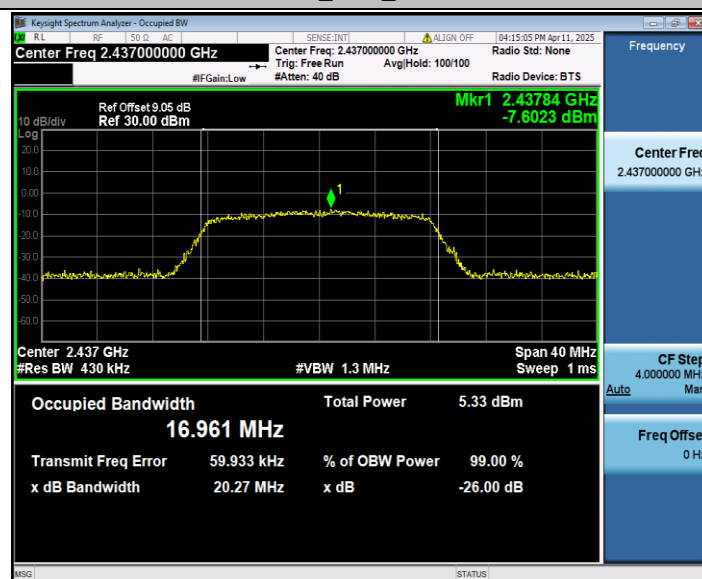
11B\_Ant1\_2462



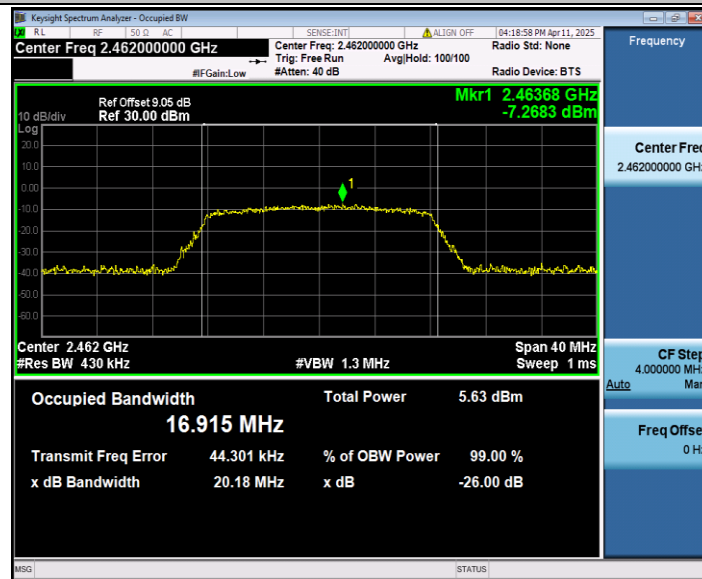
11G\_Ant1\_2412



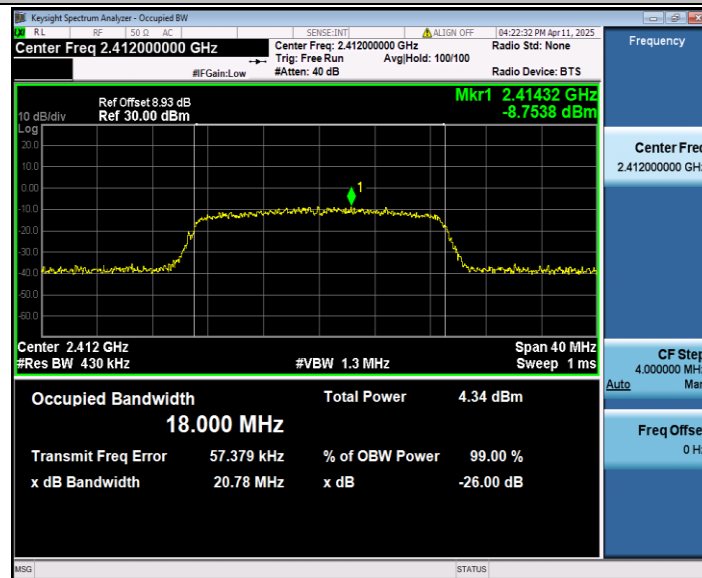
11G\_Ant1\_2437



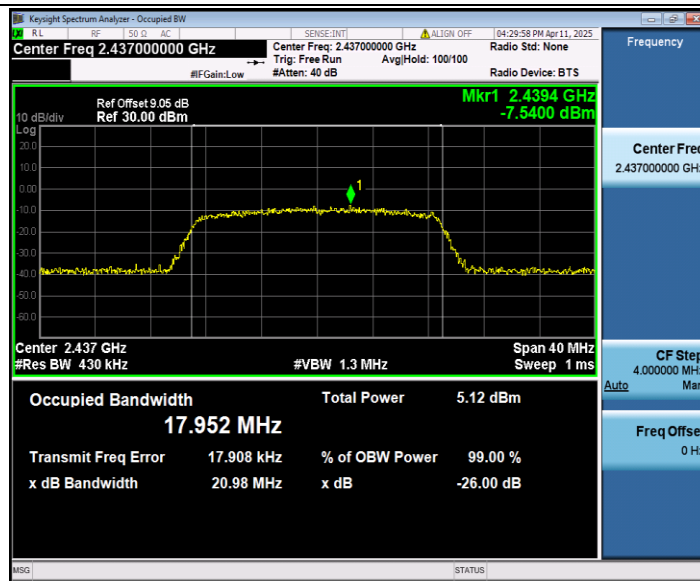
## 11G\_Ant1\_2462



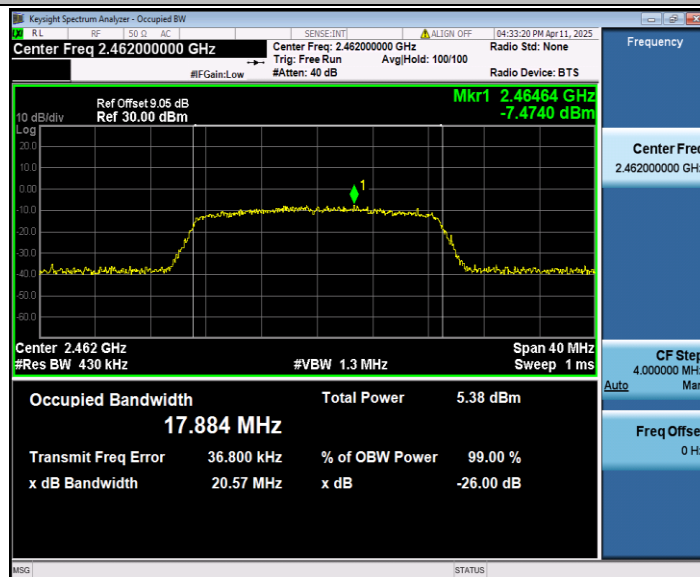
## 11N20SISO\_Ant1\_2412



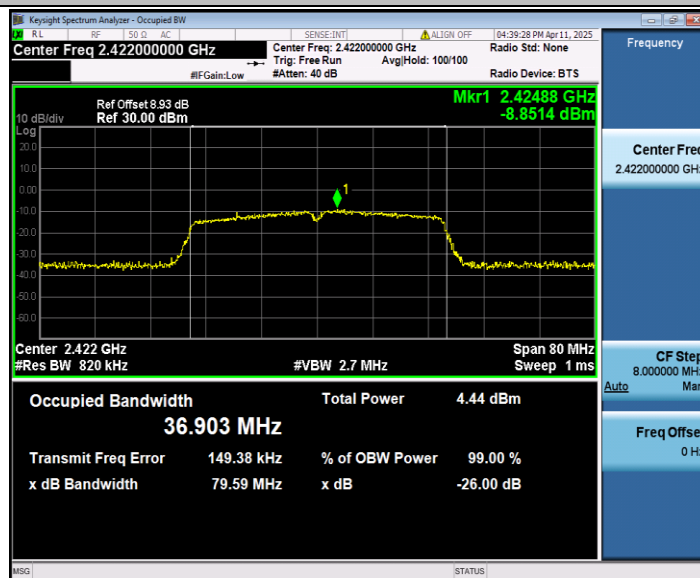
## 11N20SISO\_Ant1\_2437



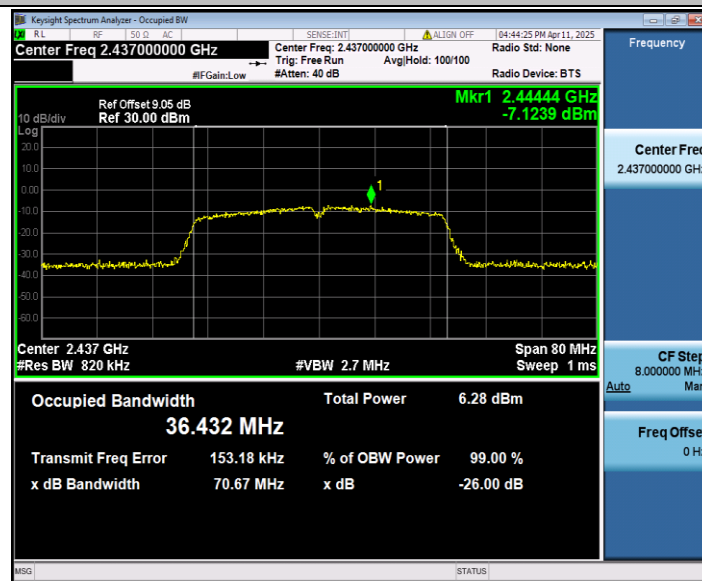
11N20SISO\_Ant1\_2462



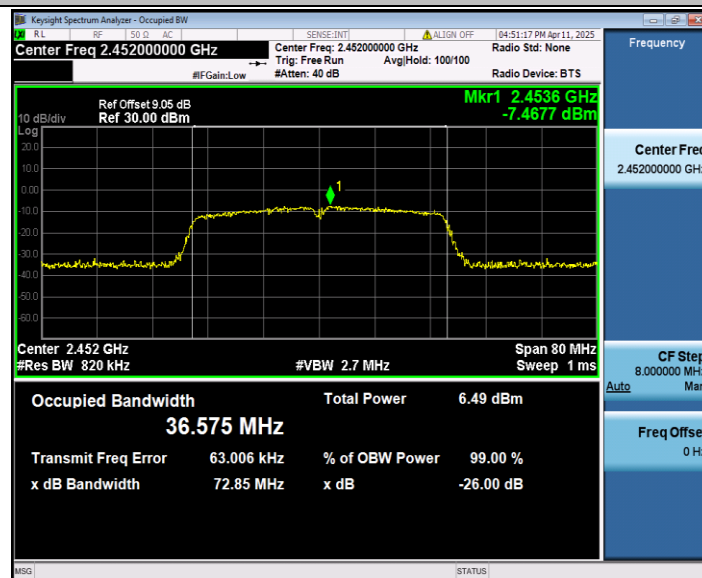
11N40SISO\_Ant1\_2422



## 11N40SISO\_Ant1\_2437



## 11N40SISO\_Ant1\_2452



### Appendix A.3: Maximum conducted output power

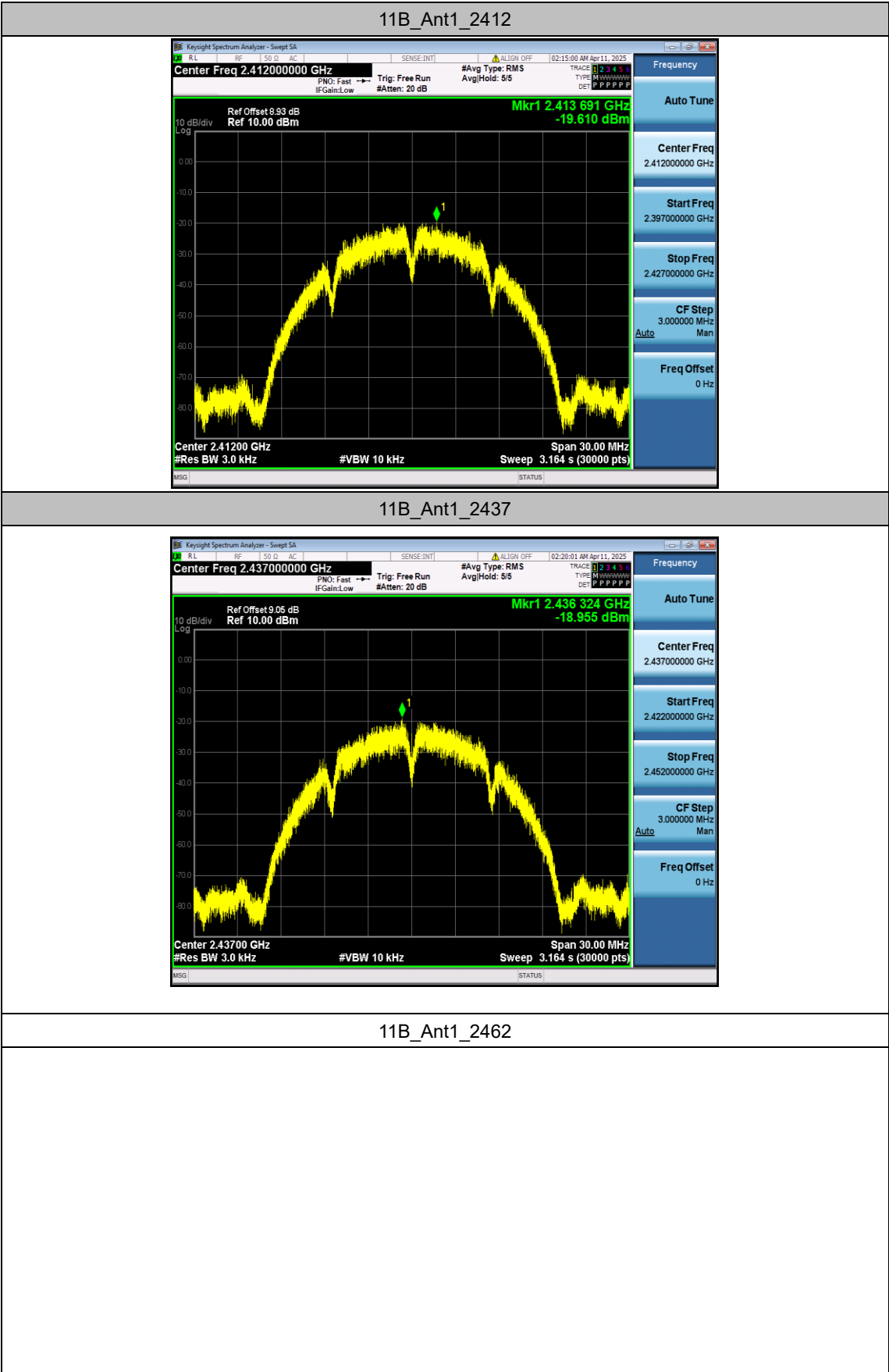
| Test Mode     | Antenna | Frequency [MHz] | Set Power | Peak power [dBm] | Limit [dBm] | Verdict |
|---------------|---------|-----------------|-----------|------------------|-------------|---------|
| 11B           | Ant1    | 2412            | ---       | 6.65             | ≤30.00      | PASS    |
|               |         | 2437            | ---       | 6.54             | ≤30.00      | PASS    |
|               |         | 2462            | ---       | 7.20             | ≤30.00      | PASS    |
| 11G           | Ant1    | 2412            | ---       | 5.40             | ≤30.00      | PASS    |
|               |         | 2437            | ---       | 6.40             | ≤30.00      | PASS    |
|               |         | 2462            | ---       | 6.78             | ≤30.00      | PASS    |
| 11N20SI<br>SO | Ant1    | 2412            | ---       | 5.56             | ≤30.00      | PASS    |
|               |         | 2437            | ---       | 6.35             | ≤30.00      | PASS    |
|               |         | 2462            | ---       | 6.67             | ≤30.00      | PASS    |
| 11N40SI<br>SO | Ant1    | 2422            | ---       | 4.30             | ≤30.00      | PASS    |
|               |         | 2437            | ---       | 6.66             | ≤30.00      | PASS    |
|               |         | 2452            | ---       | 6.96             | ≤30.00      | PASS    |

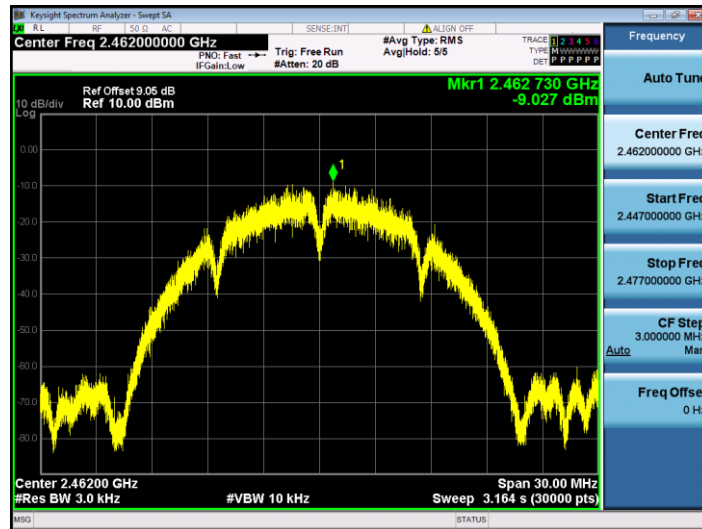
## Appendix A.4: Maximum power spectral density

### Test Result

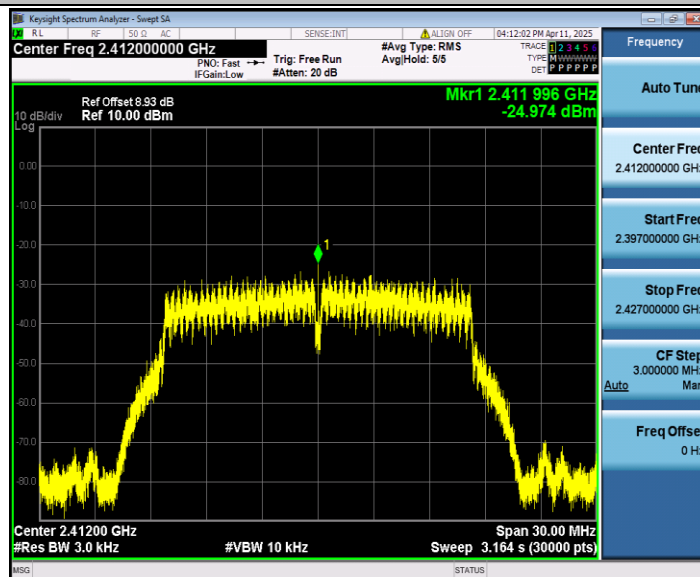
| TestMode  | Antenna | Frequency[MHz] | Result[dBm/3-100kHz] | Limit[dBm/3kHz] | Verdict |
|-----------|---------|----------------|----------------------|-----------------|---------|
| 11B       | Ant1    | 2412           | -19.61               | ≤8.00           | PASS    |
|           |         | 2437           | -18.96               | ≤8.00           | PASS    |
|           |         | 2462           | -9.027               | ≤8.00           | PASS    |
| 11G       | Ant1    | 2412           | -24.97               | ≤8.00           | PASS    |
|           |         | 2437           | -23.76               | ≤8.00           | PASS    |
|           |         | 2462           | -22.69               | ≤8.00           | PASS    |
| 11N20SISO | Ant1    | 2412           | -24.53               | ≤8.00           | PASS    |
|           |         | 2437           | -23.63               | ≤8.00           | PASS    |
|           |         | 2462           | -22.32               | ≤8.00           | PASS    |
| 11N40SISO | Ant1    | 2422           | -24.92               | ≤8.00           | PASS    |
|           |         | 2437           | -23.49               | ≤8.00           | PASS    |
|           |         | 2452           | -23.23               | ≤8.00           | PASS    |

Test Graphs

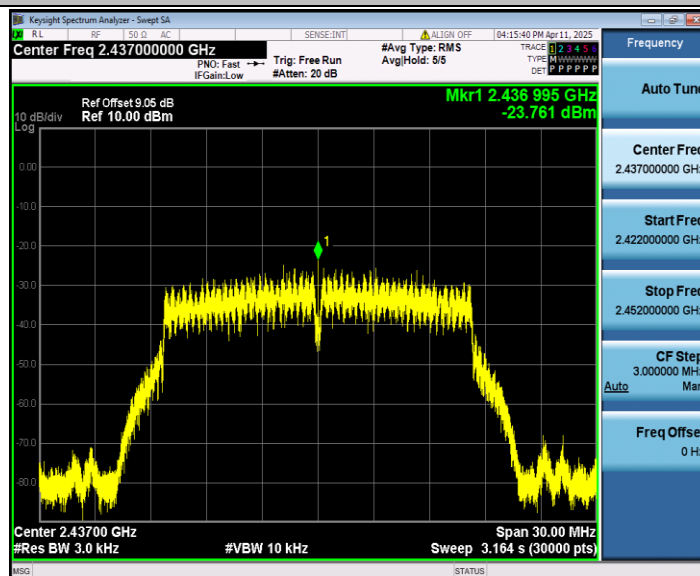




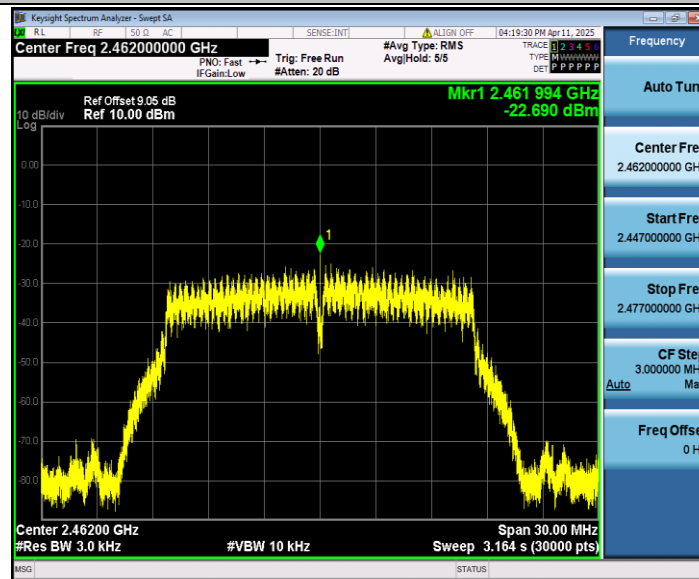
11G\_Ant1\_2412



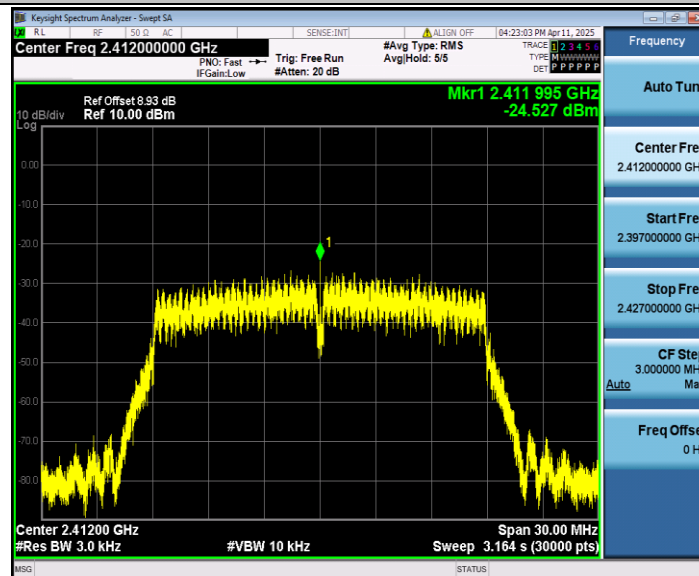
11G\_Ant1\_2437



## 11G\_Ant1\_2462



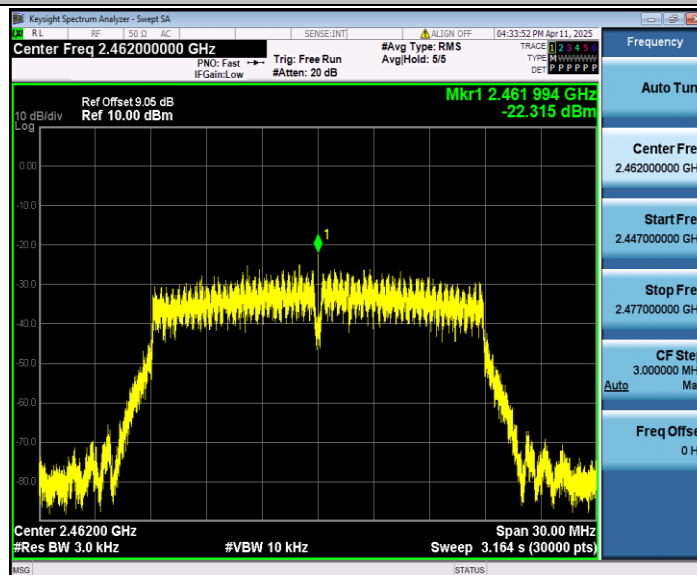
## 11N20SISO\_Ant1\_2412



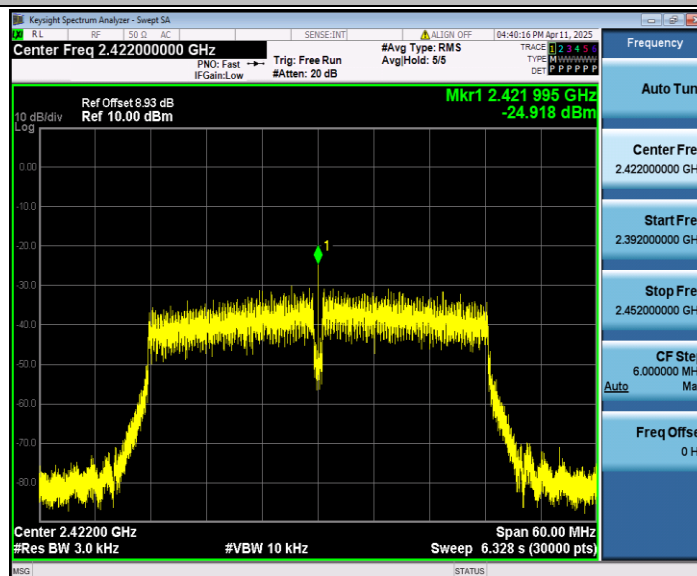
## 11N20SISO\_Ant1\_2437



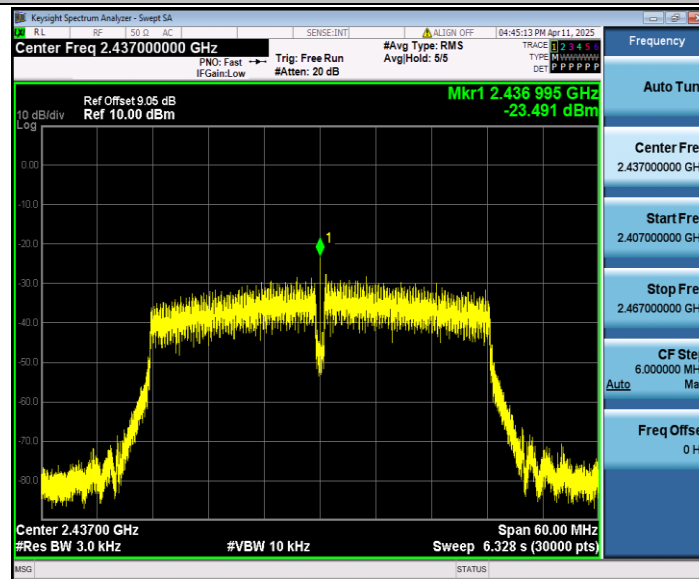
11N20SISO\_Ant1\_2462



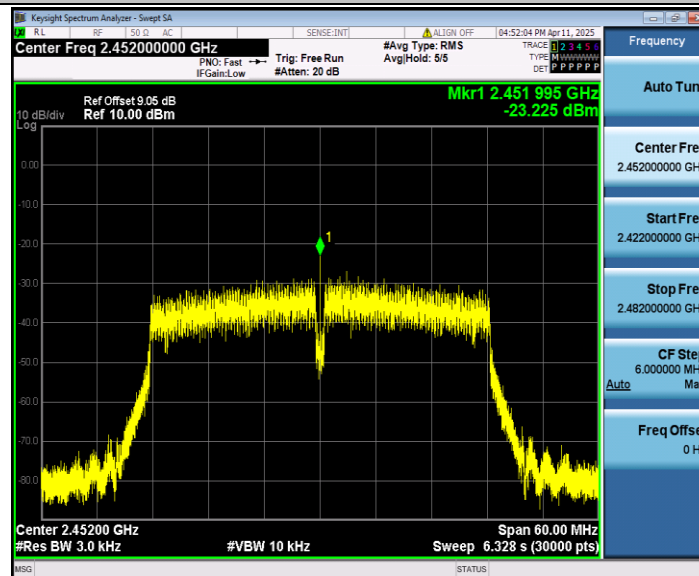
11N40SISO\_Ant1\_2422



## 11N40SISO\_Ant1\_2437



## 11N40SISO\_Ant1\_2452



## Appendix A.5: Band edge measurements

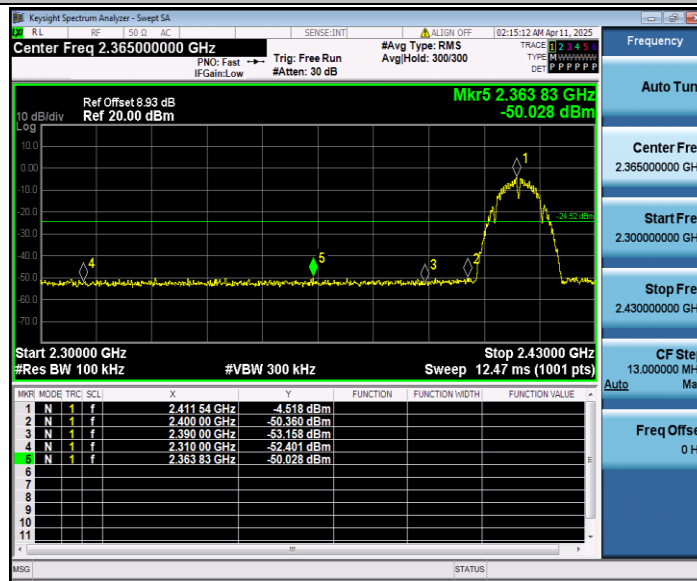
### Test Result

| TestMod<br>e | Antenn<br>a | ChNam<br>e | Frequency[MHz<br>] | RefLevel[dBm<br>] | Result[dBm<br>] | Limit[dBm<br>] | Verdic<br>t |
|--------------|-------------|------------|--------------------|-------------------|-----------------|----------------|-------------|
|--------------|-------------|------------|--------------------|-------------------|-----------------|----------------|-------------|

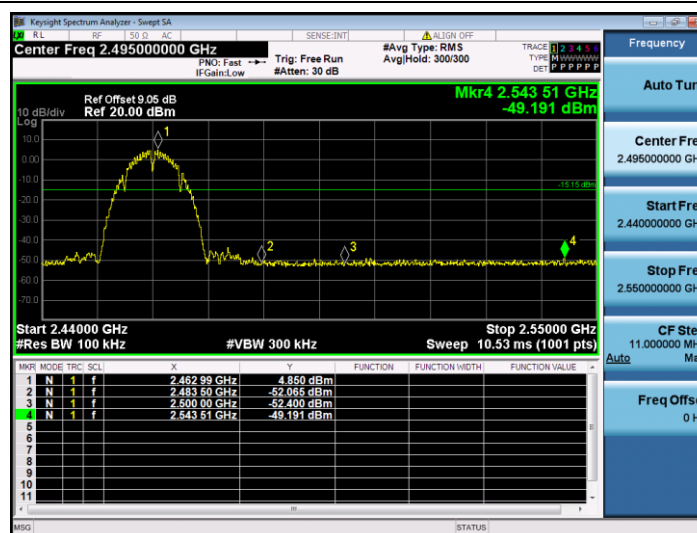
|           |      |      |      |        |        |         |      |
|-----------|------|------|------|--------|--------|---------|------|
| 11B       | Ant1 | Low  | 2412 | -4.52  | -50.03 | ≤-24.52 | PASS |
|           |      | High | 2462 | 4.85   | -49.19 | ≤-15.15 | PASS |
| 11G       | Ant1 | Low  | 2412 | -12.56 | -49.81 | ≤-32.56 | PASS |
|           |      | High | 2462 | -11.11 | -44.45 | ≤-31.11 | PASS |
| 11N20SISO | Ant1 | Low  | 2412 | -12.15 | -50.11 | ≤-32.15 | PASS |
|           |      | High | 2462 | -10.41 | -49.14 | ≤-30.41 | PASS |
| 11N40SISO | Ant1 | Low  | 2422 | -15.09 | -49.96 | ≤-35.09 | PASS |
|           |      | High | 2452 | -13.33 | -49.52 | ≤-33.33 | PASS |

## Test Graphs

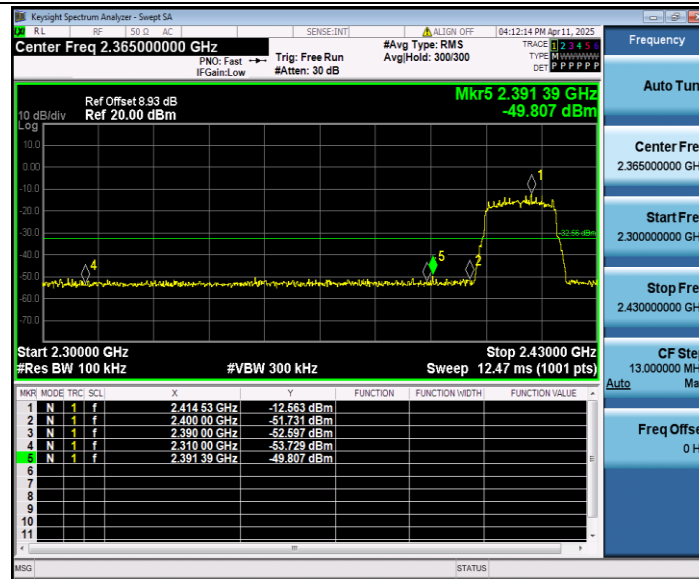
11B\_Ant1\_Low\_2412



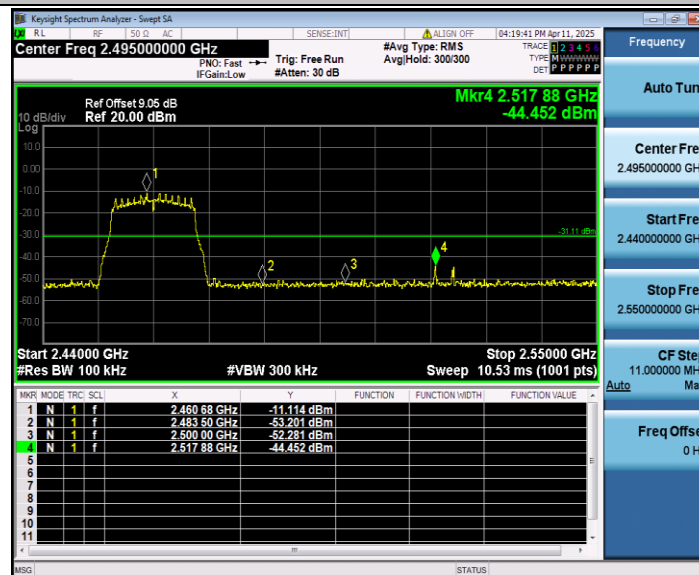
11B\_Ant1\_Low\_2462



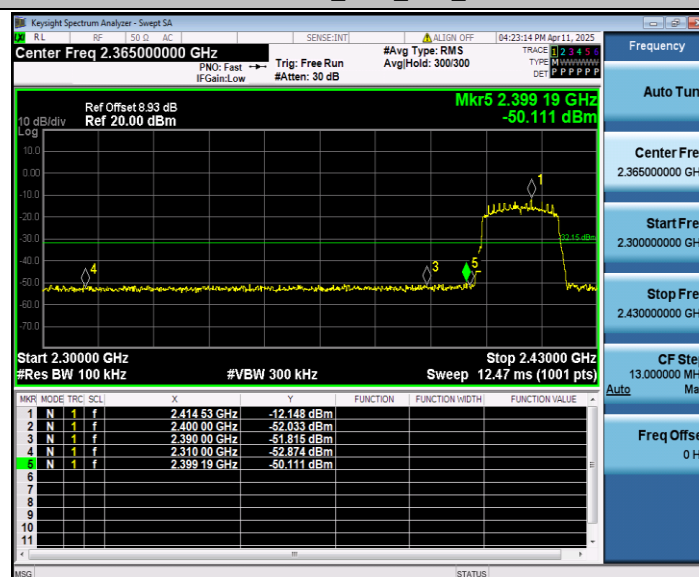
11G\_Ant1\_Low\_2412



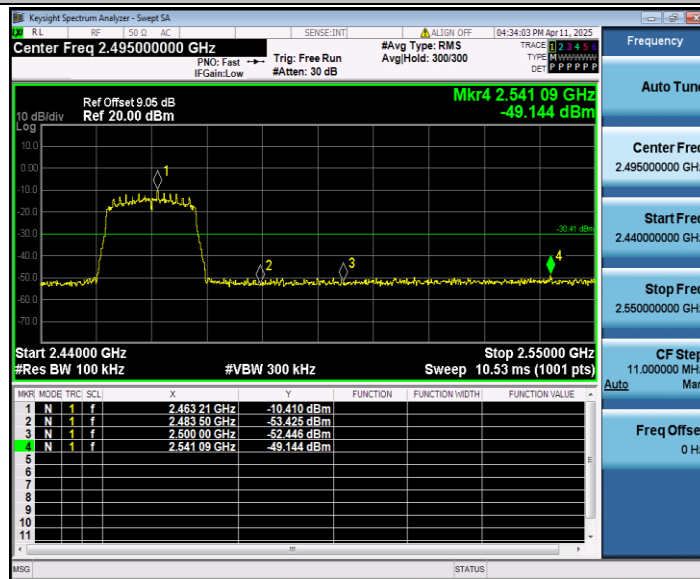
11G\_Ant1\_High\_2462



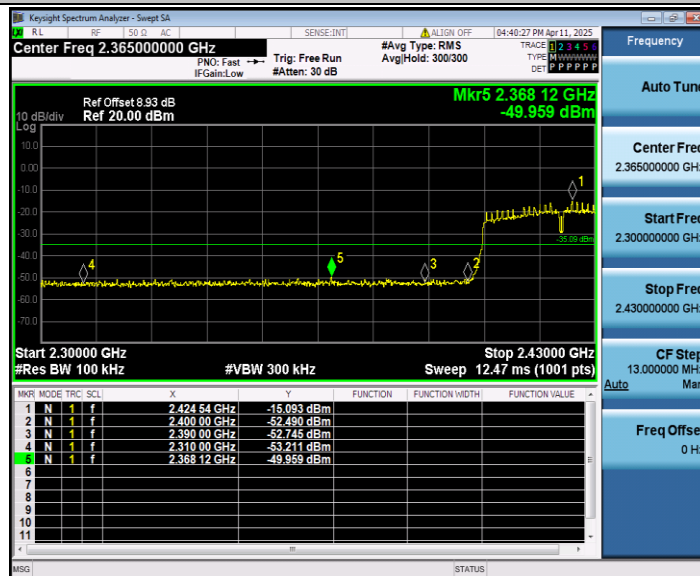
11N20SISO\_Ant1\_Low\_2412



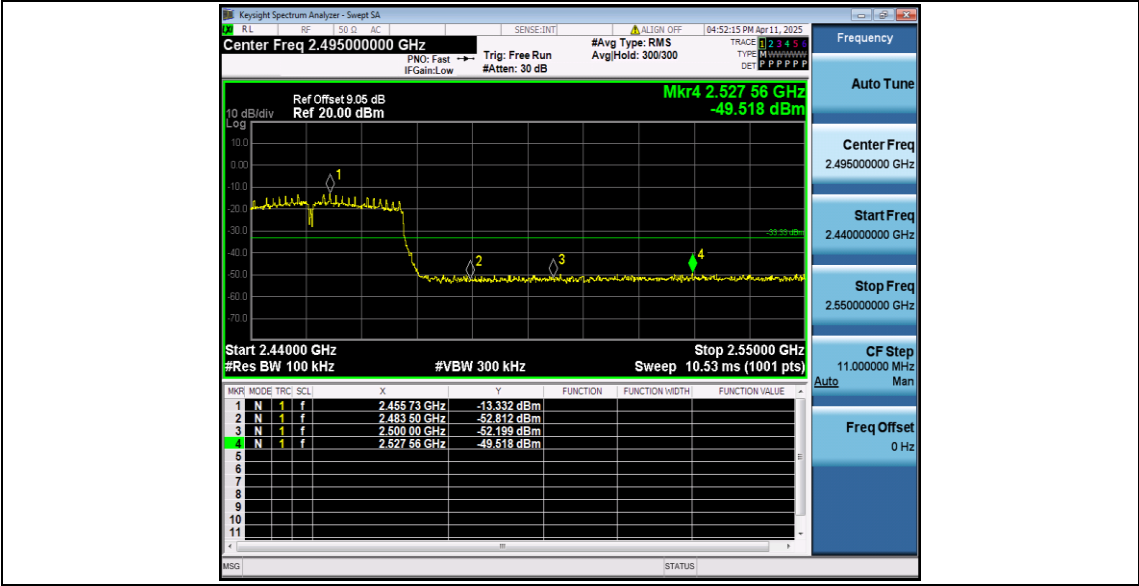
## 11N20SISO\_Ant1\_High\_2462



## 11N40SISO\_Ant1\_Low\_2422



## 11N40SISO\_Ant1\_High\_2452

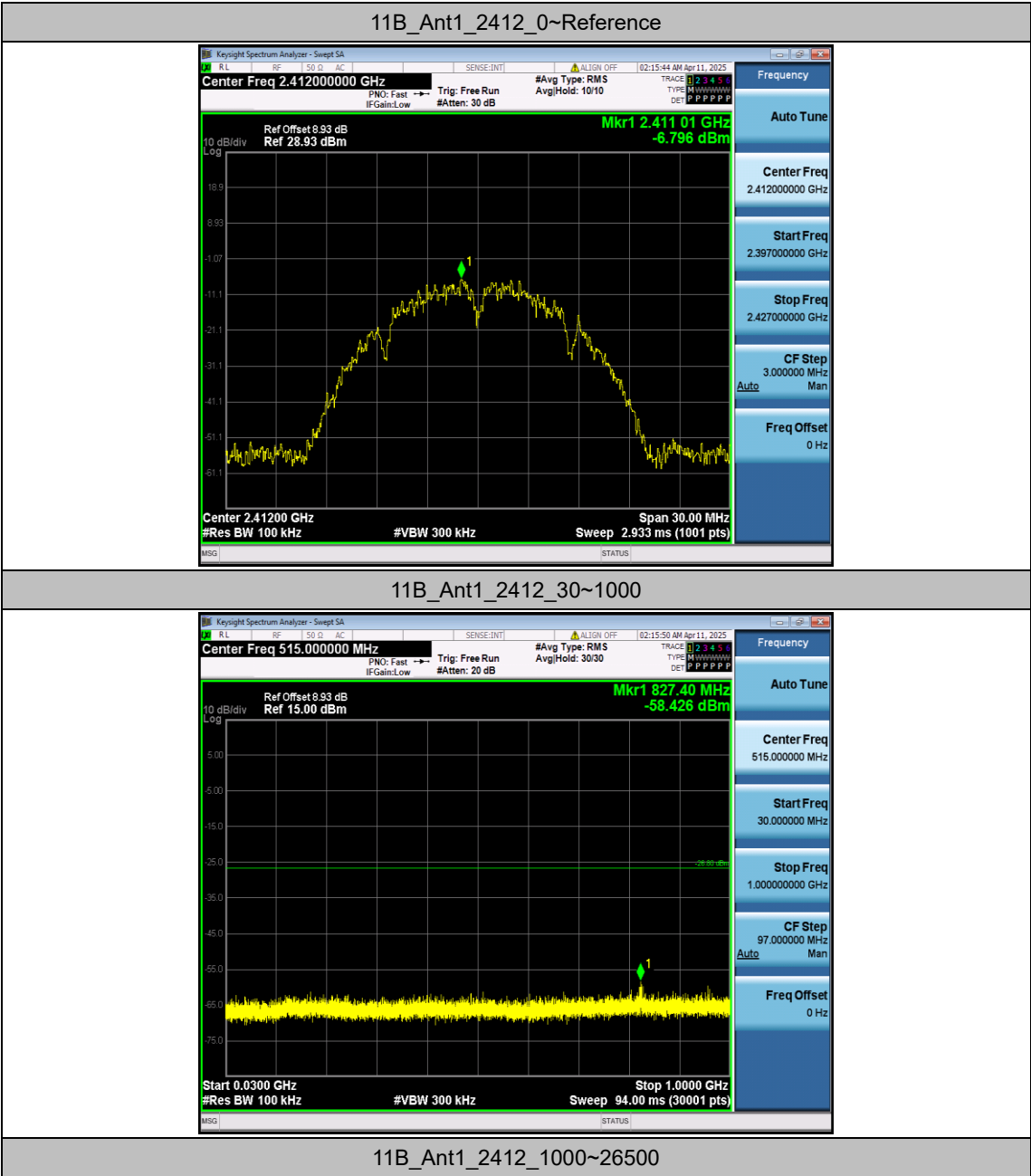


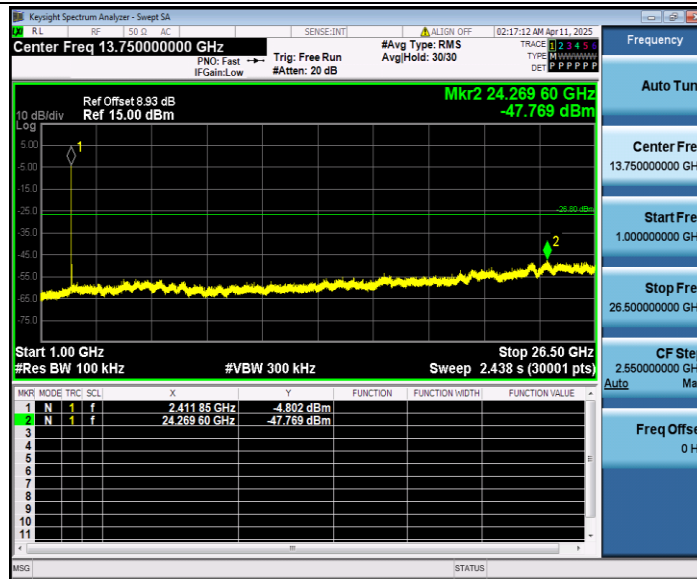
## Appendix A.6: Conducted Spurious Emission

### Test Result

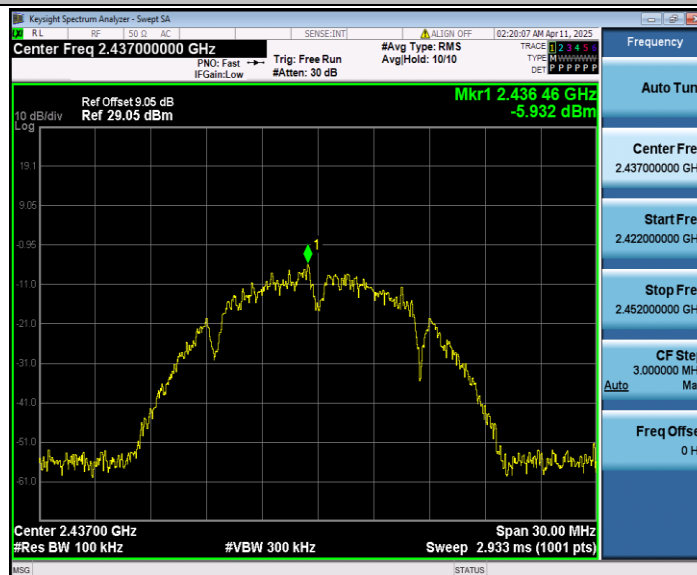
| TestMode  | Antenna | Frequency[MHz] | FreqRange [Mhz] | RefLevel [dBm] | Result [dBm] | Limit [dBm] | Verdict |
|-----------|---------|----------------|-----------------|----------------|--------------|-------------|---------|
| 11B       | Ant1    | 2412           | Reference       | -6.80          | -6.80        | ---         | PASS    |
|           |         |                | 30~1000         | -6.80          | -58.43       | ≤-26.8      | PASS    |
|           |         |                | 1000~26500      | -6.80          | -47.77       | ≤-26.8      | PASS    |
|           |         | 2437           | Reference       | -5.93          | -5.93        | ---         | PASS    |
|           |         |                | 30~1000         | -5.93          | -60.39       | ≤-25.93     | PASS    |
|           |         |                | 1000~26500      | -5.93          | -47.39       | ≤-25.93     | PASS    |
|           |         | 2462           | Reference       | 3.96           | 3.96         | ---         | PASS    |
|           |         |                | 30~1000         | 3.96           | -60.33       | ≤-16.04     | PASS    |
|           |         |                | 1000~26500      | 3.96           | -47.97       | ≤-16.04     | PASS    |
| 11G       | Ant1    | 2412           | Reference       | -15.87         | -15.87       | ---         | PASS    |
|           |         |                | 30~1000         | -15.87         | -60.89       | ≤-35.87     | PASS    |
|           |         |                | 1000~26500      | -15.87         | -48.93       | ≤-35.87     | PASS    |
|           |         | 2437           | Reference       | -14.75         | -14.75       | ---         | PASS    |
|           |         |                | 30~1000         | -14.75         | -60.32       | ≤-34.75     | PASS    |
|           |         |                | 1000~26500      | -14.75         | -49.28       | ≤-34.75     | PASS    |
|           |         | 2462           | Reference       | -14.03         | -14.03       | ---         | PASS    |
|           |         |                | 30~1000         | -14.03         | -61.07       | ≤-34.03     | PASS    |
|           |         |                | 1000~26500      | -14.03         | -48.87       | ≤-34.03     | PASS    |
| 11N20SISO | Ant1    | 2412           | Reference       | -13.46         | -13.46       | ---         | PASS    |
|           |         |                | 30~1000         | -13.46         | -60.2        | ≤-33.46     | PASS    |
|           |         |                | 1000~26500      | -13.46         | -48.29       | ≤-33.46     | PASS    |
|           |         | 2437           | Reference       | -12.31         | -12.31       | ---         | PASS    |
|           |         |                | 30~1000         | -12.31         | -59.44       | ≤-32.31     | PASS    |
|           |         |                | 1000~26500      | -12.31         | -48.15       | ≤-32.31     | PASS    |
|           |         | 2462           | Reference       | -13.27         | -13.27       | ---         | PASS    |
|           |         |                | 30~1000         | -13.27         | -60.24       | ≤-33.27     | PASS    |
|           |         |                | 1000~26500      | -13.27         | -48.01       | ≤-33.27     | PASS    |
| 11N40SISO | Ant1    | 2422           | Reference       | -15.97         | -15.97       | ---         | PASS    |
|           |         |                | 30~1000         | -15.97         | -59.96       | ≤-35.97     | PASS    |
|           |         |                | 1000~26500      | -15.97         | -48.56       | ≤-35.97     | PASS    |
|           |         | 2437           | Reference       | -14.21         | -14.21       | ---         | PASS    |
|           |         |                | 30~1000         | -14.21         | -60.05       | ≤-34.21     | PASS    |
|           |         |                | 1000~26500      | -14.21         | -47.27       | ≤-34.21     | PASS    |
|           |         | 2452           | Reference       | -14.83         | -14.83       | ---         | PASS    |
|           |         |                | 30~1000         | -14.83         | -60.85       | ≤-34.83     | PASS    |
|           |         |                | 1000~26500      | -14.83         | -47.48       | ≤-34.83     | PASS    |

Test Graphs

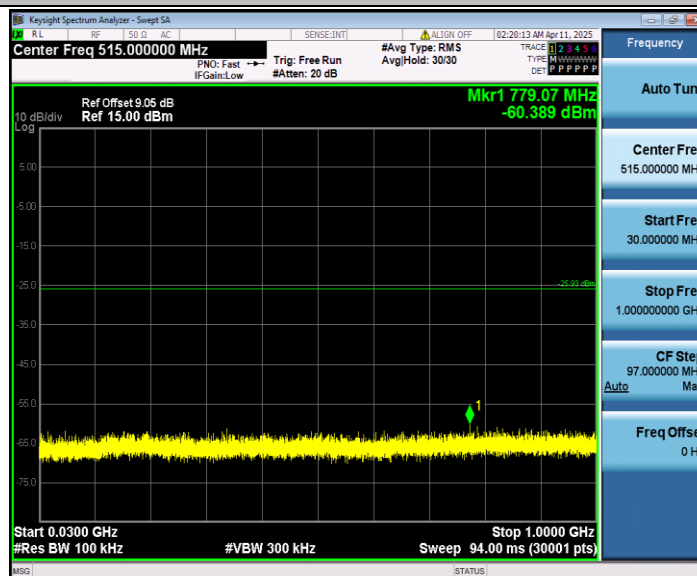


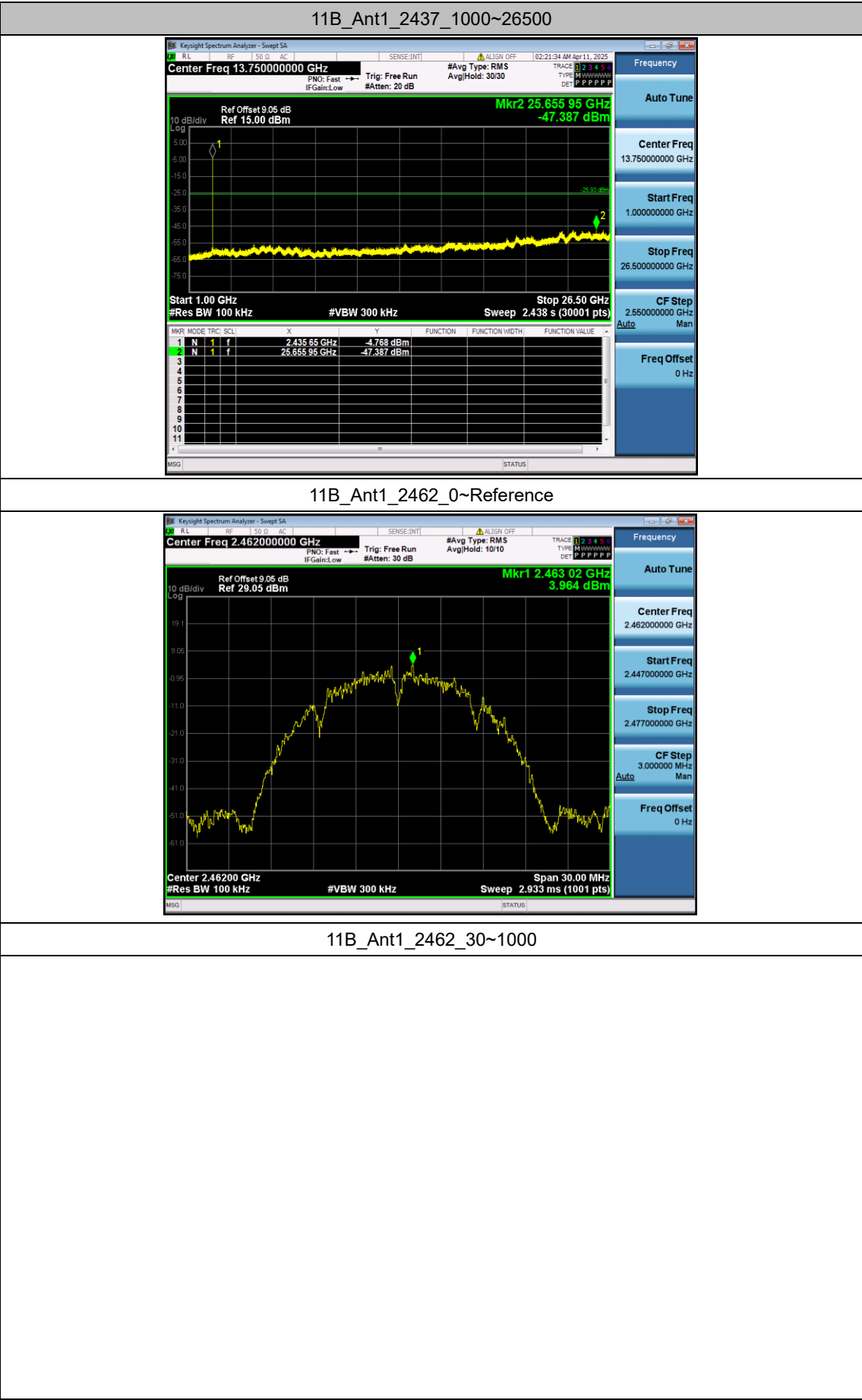


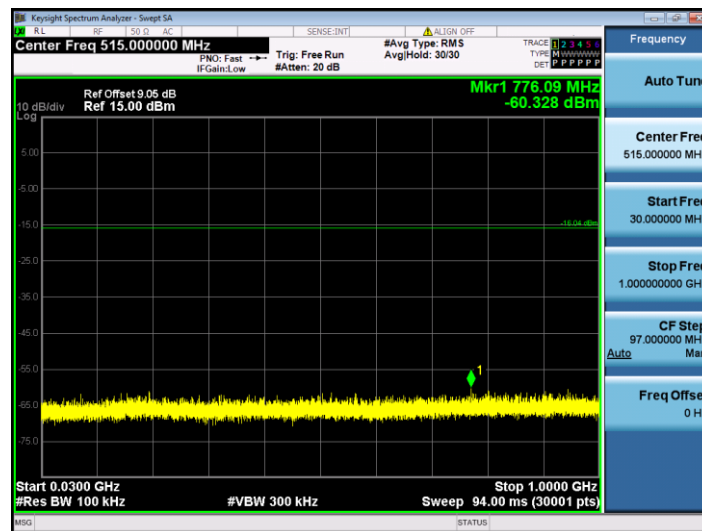
11B\_Ant1\_2437\_0~Reference



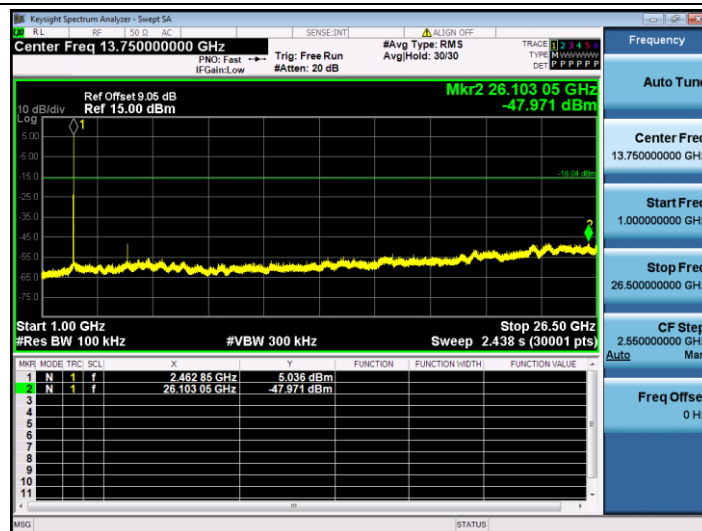
11B\_Ant1\_2437\_30~1000



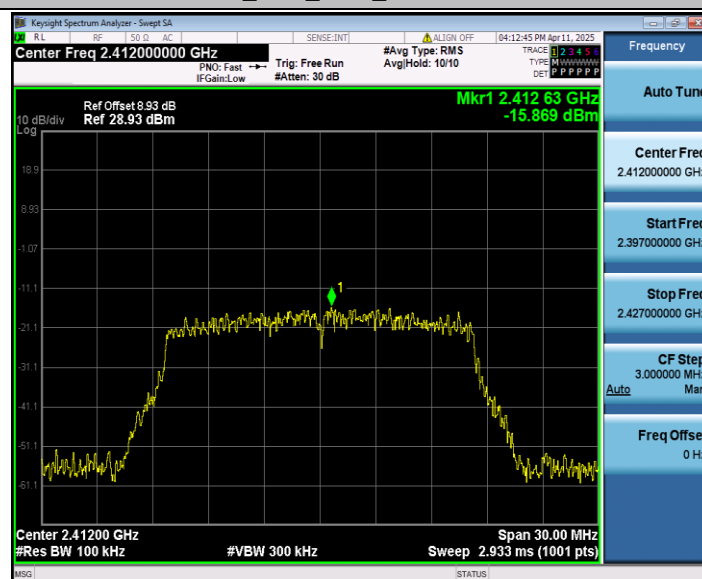




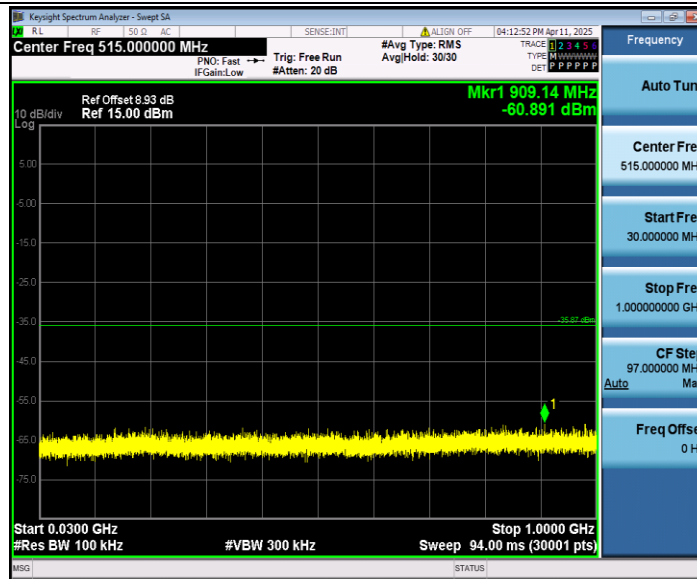
11B\_Ant1\_2462\_1000~26500



11G\_Ant1\_2412\_0~Reference



11G\_Ant1\_2412\_30~1000



11G\_Ant1\_2412\_1000~26500



11G\_Ant1\_2437\_0~Reference

