

## Appendix: 2.4G WIFI

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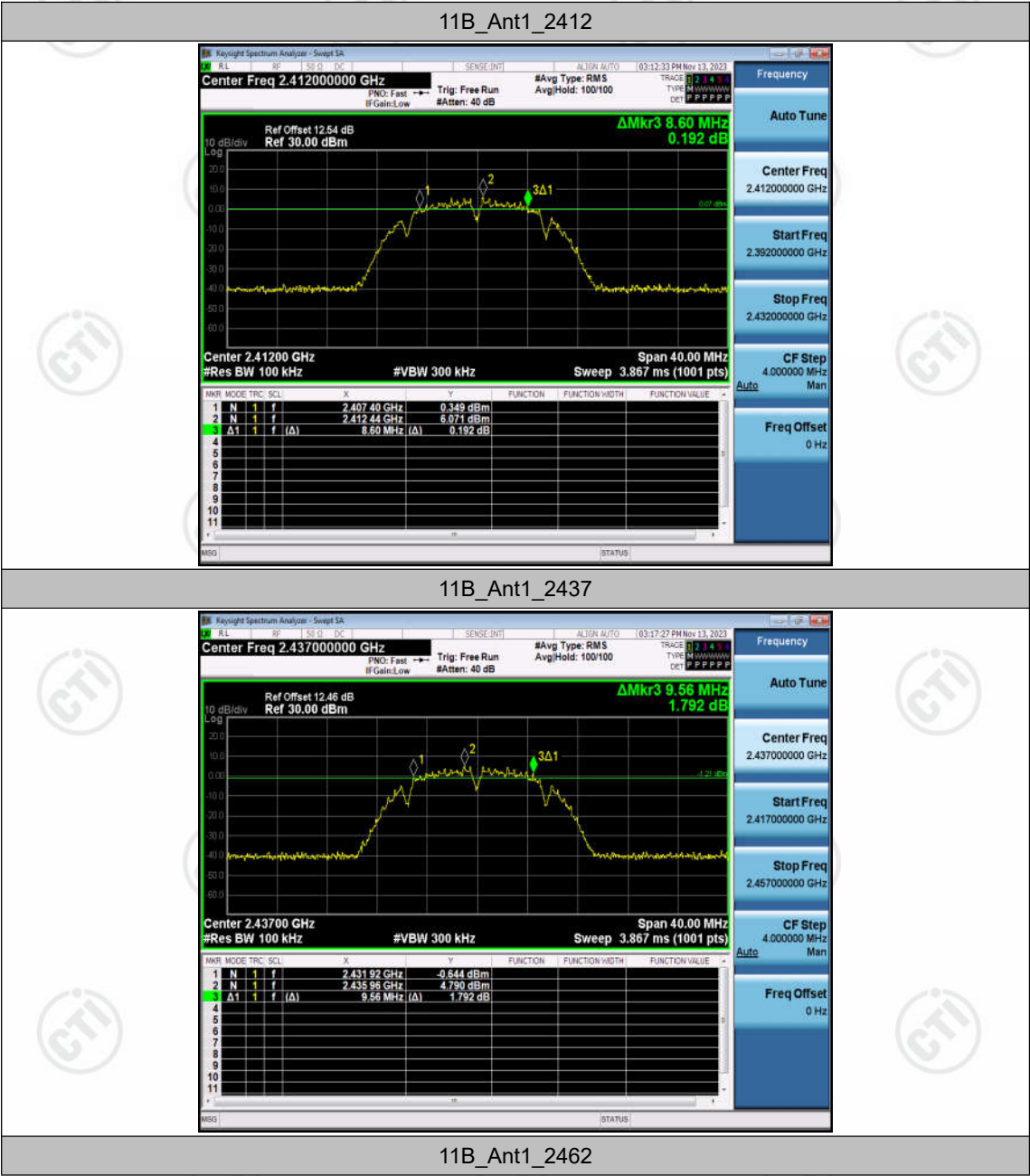
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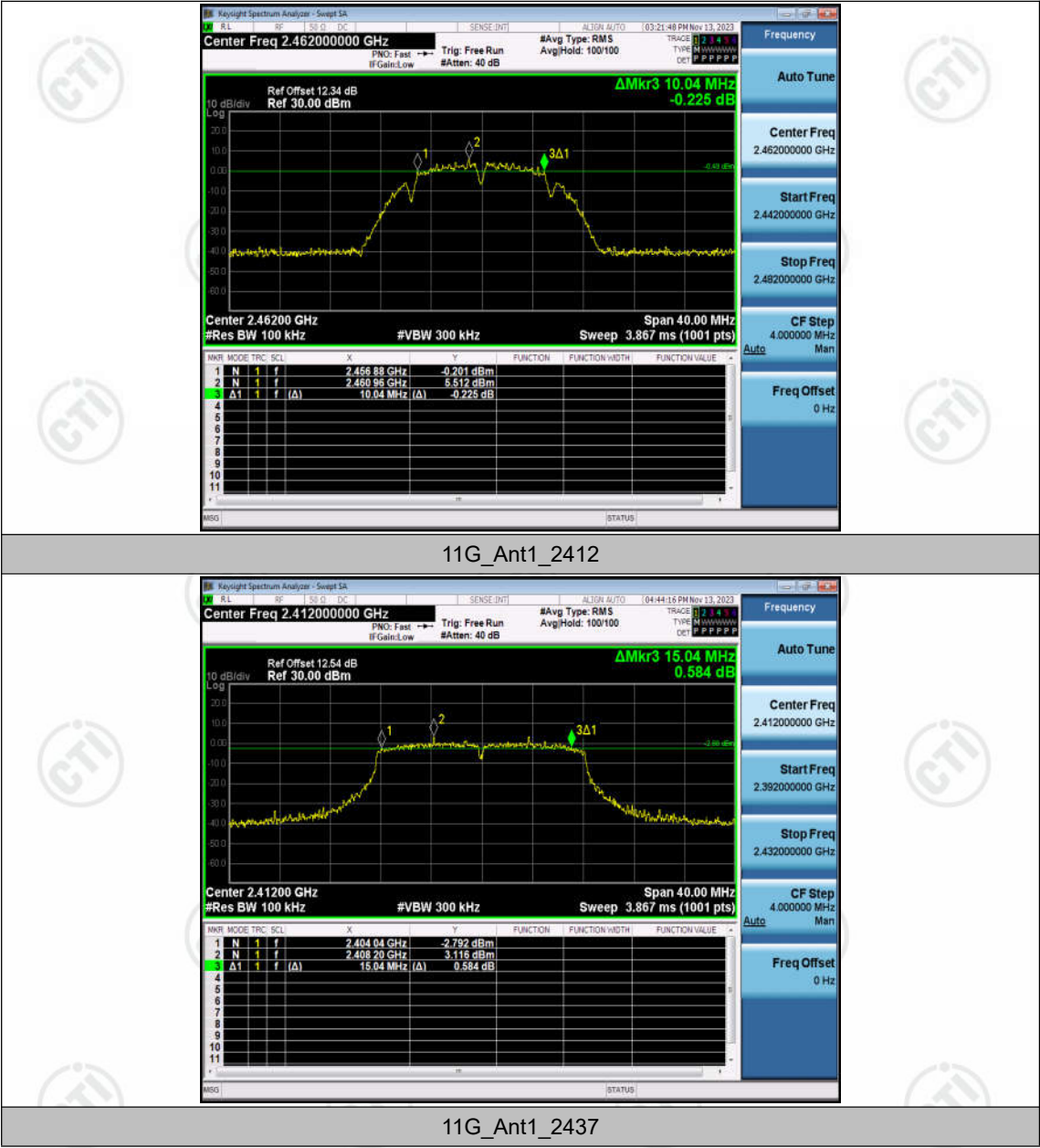
Appendix A: DTS Bandwidth

Test Result

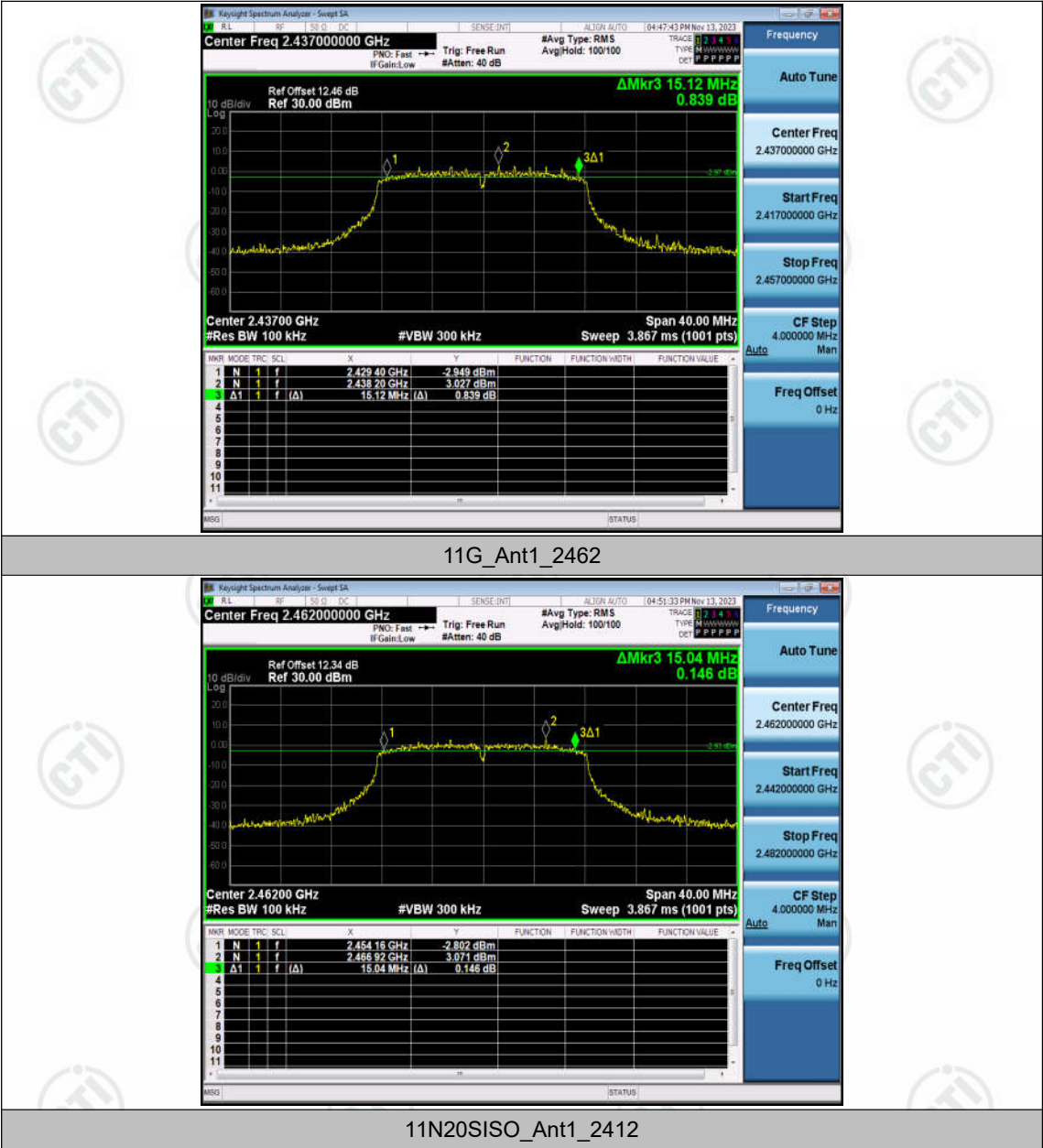
| TestMode      | Antenna | Frequency[MHz] | DTS BW [MHz] | FL[MHz]  | FH[MHz]  | Limit[MHz] | Verdict |
|---------------|---------|----------------|--------------|----------|----------|------------|---------|
| 11B           | Ant1    | 2412           | 8.600        | 2407.400 | 2416.000 | 0.5        | PASS    |
|               |         | 2437           | 9.560        | 2431.920 | 2441.480 | 0.5        | PASS    |
|               |         | 2462           | 10.040       | 2456.880 | 2466.920 | 0.5        | PASS    |
| 11G           | Ant1    | 2412           | 15.040       | 2404.040 | 2419.080 | 0.5        | PASS    |
|               |         | 2437           | 15.120       | 2429.400 | 2444.520 | 0.5        | PASS    |
|               |         | 2462           | 15.040       | 2454.160 | 2469.200 | 0.5        | PASS    |
| 11N20SI<br>SO | Ant1    | 2412           | 15.040       | 2404.400 | 2419.440 | 0.5        | PASS    |
|               |         | 2437           | 15.040       | 2429.440 | 2444.480 | 0.5        | PASS    |
|               |         | 2462           | 15.000       | 2454.480 | 2469.480 | 0.5        | PASS    |

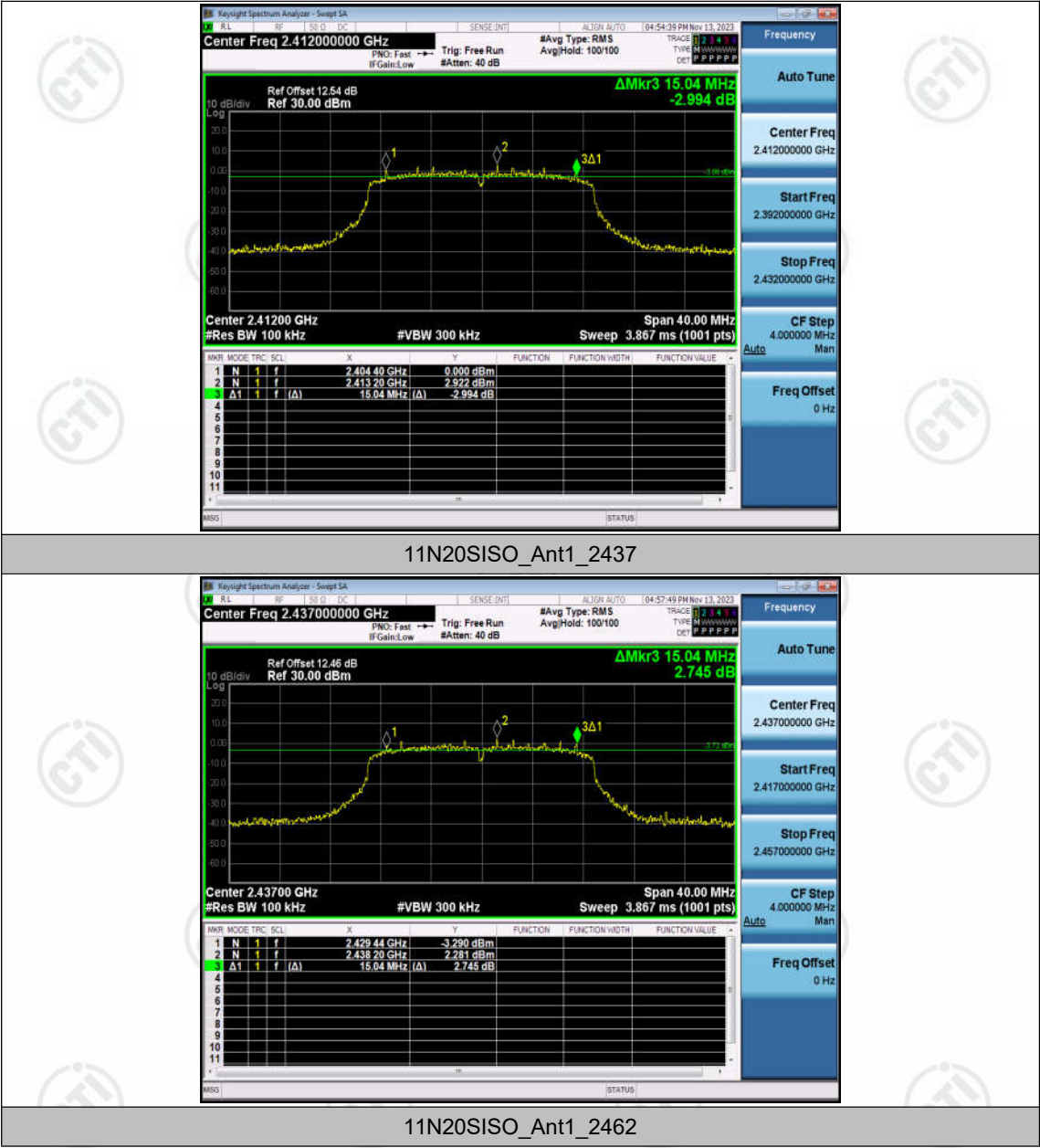
Test Graphs

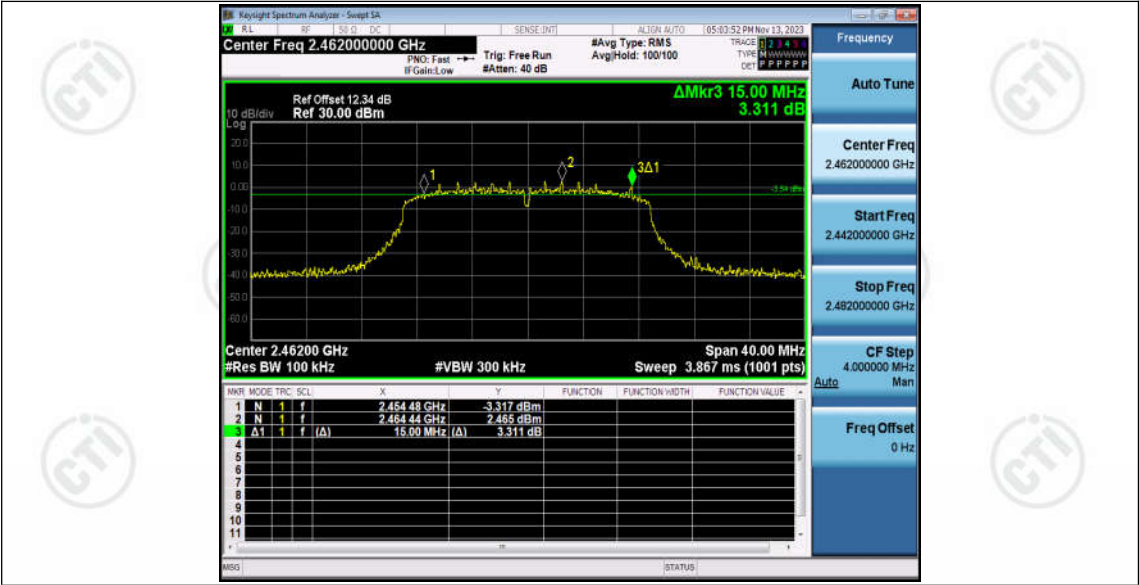












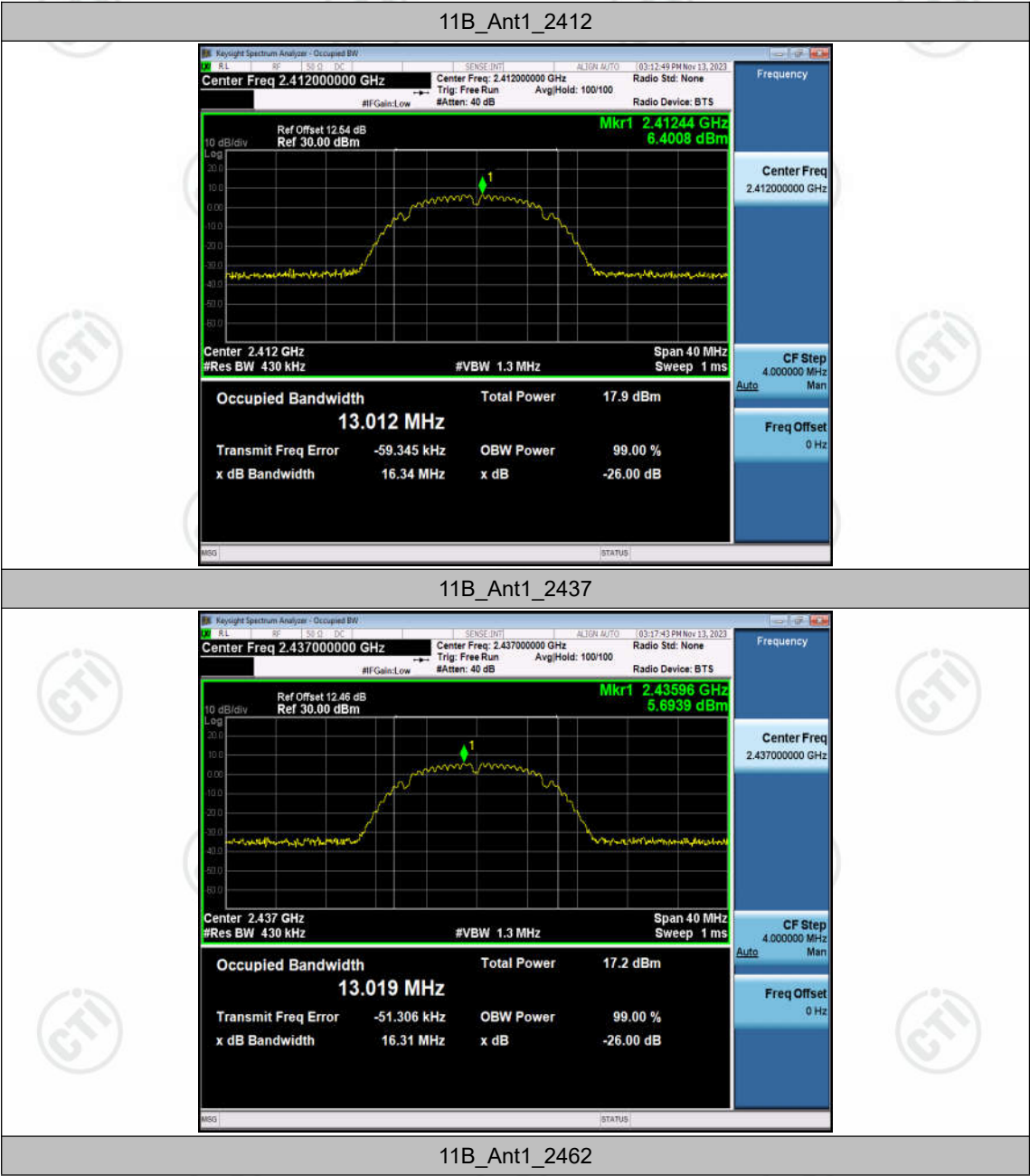


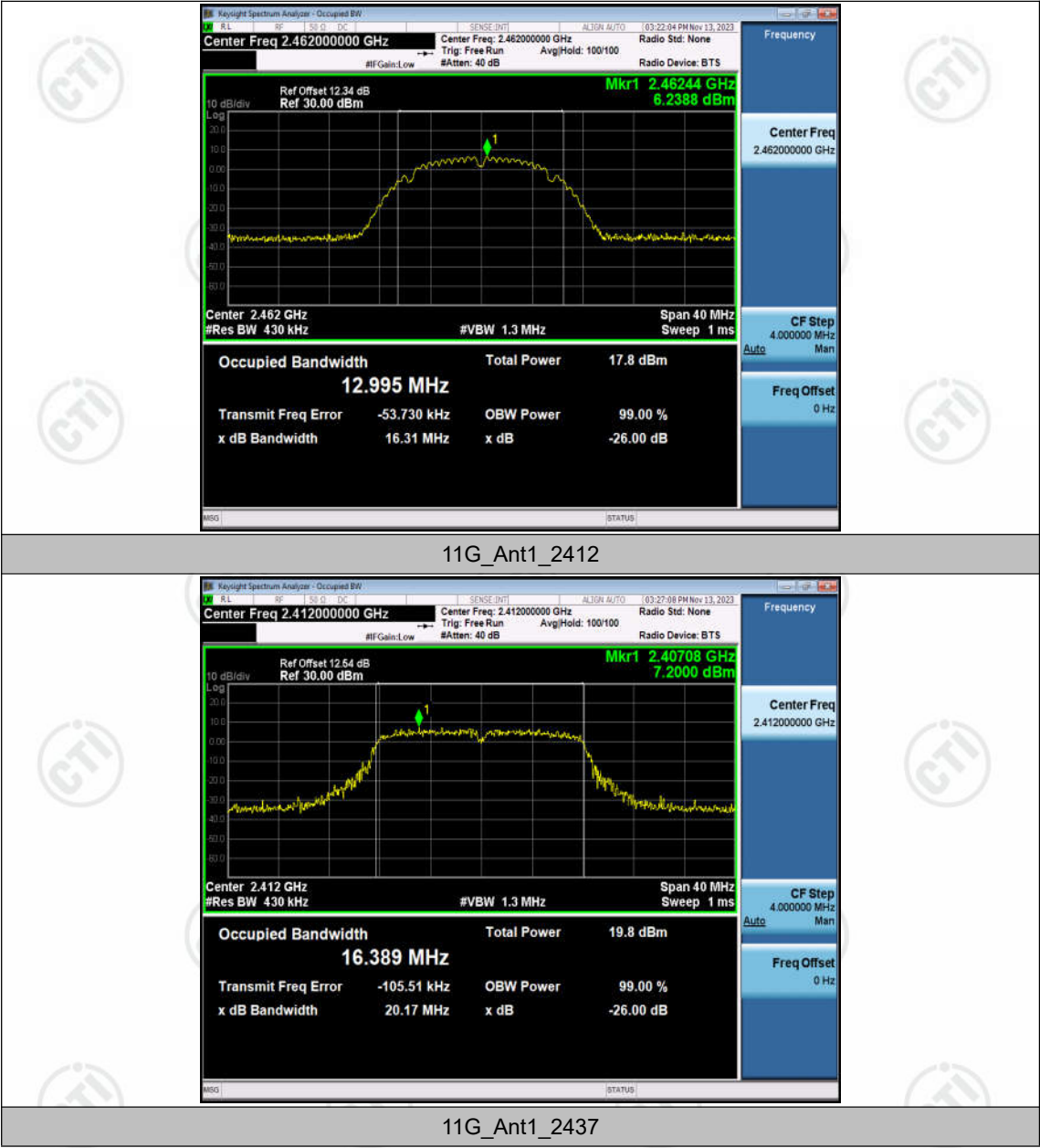
Appendix B: Occupied Channel Bandwidth

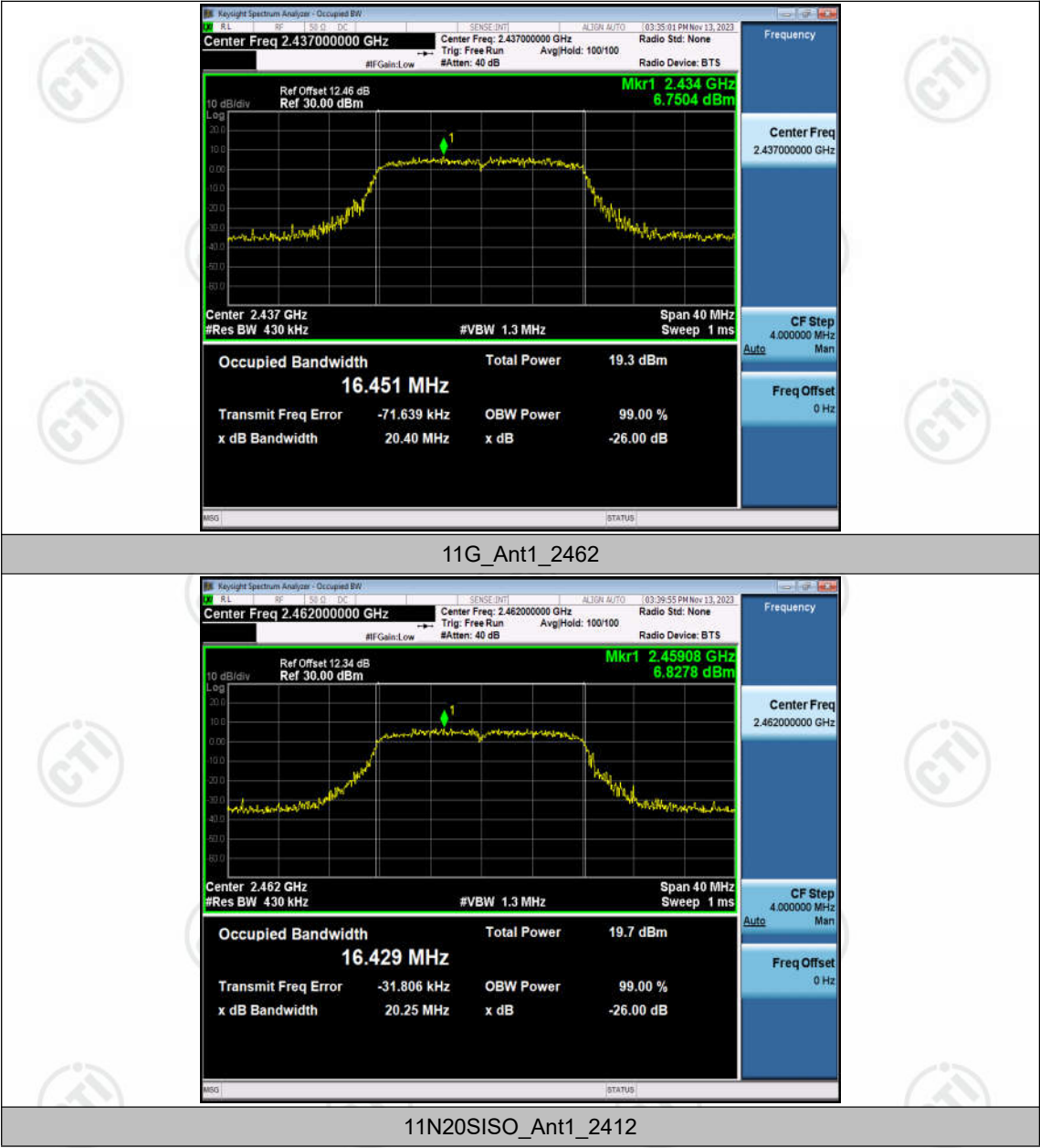
Test Result

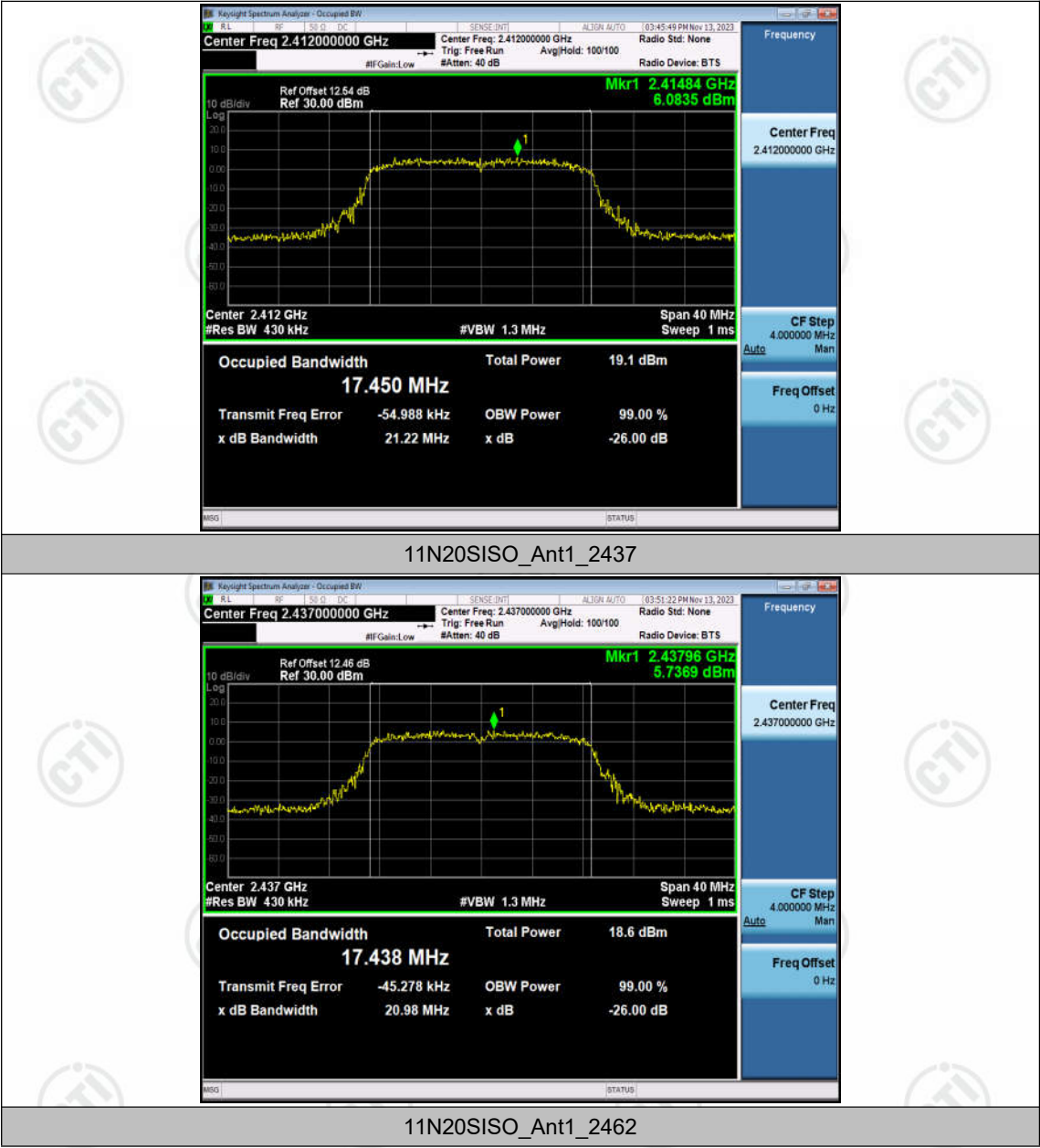
| TestMode      | Antenna | Channel<br>Frequency[MHz] | OCB [MHz] | FL[MHz]   | FH[MHz]   | Limit[MHz] | Verdict |
|---------------|---------|---------------------------|-----------|-----------|-----------|------------|---------|
| 11B           | Ant1    | 2412                      | 13.012    | 2405.4347 | 2418.4467 | ---        | ---     |
|               |         | 2437                      | 13.019    | 2430.4392 | 2443.4582 | ---        | ---     |
|               |         | 2462                      | 12.995    | 2455.4488 | 2468.4438 | ---        | ---     |
| 11G           | Ant1    | 2412                      | 16.389    | 2403.7000 | 2420.0890 | ---        | ---     |
|               |         | 2437                      | 16.451    | 2428.7029 | 2445.1539 | ---        | ---     |
|               |         | 2462                      | 16.429    | 2453.7537 | 2470.1827 | ---        | ---     |
| 11N20SI<br>SO | Ant1    | 2412                      | 17.450    | 2403.2200 | 2420.6700 | ---        | ---     |
|               |         | 2437                      | 17.438    | 2428.2357 | 2445.6737 | ---        | ---     |
|               |         | 2462                      | 17.593    | 2453.1481 | 2470.7411 | ---        | ---     |

Test Graphs













Appendix C: Maximum conducted output power

Test Result

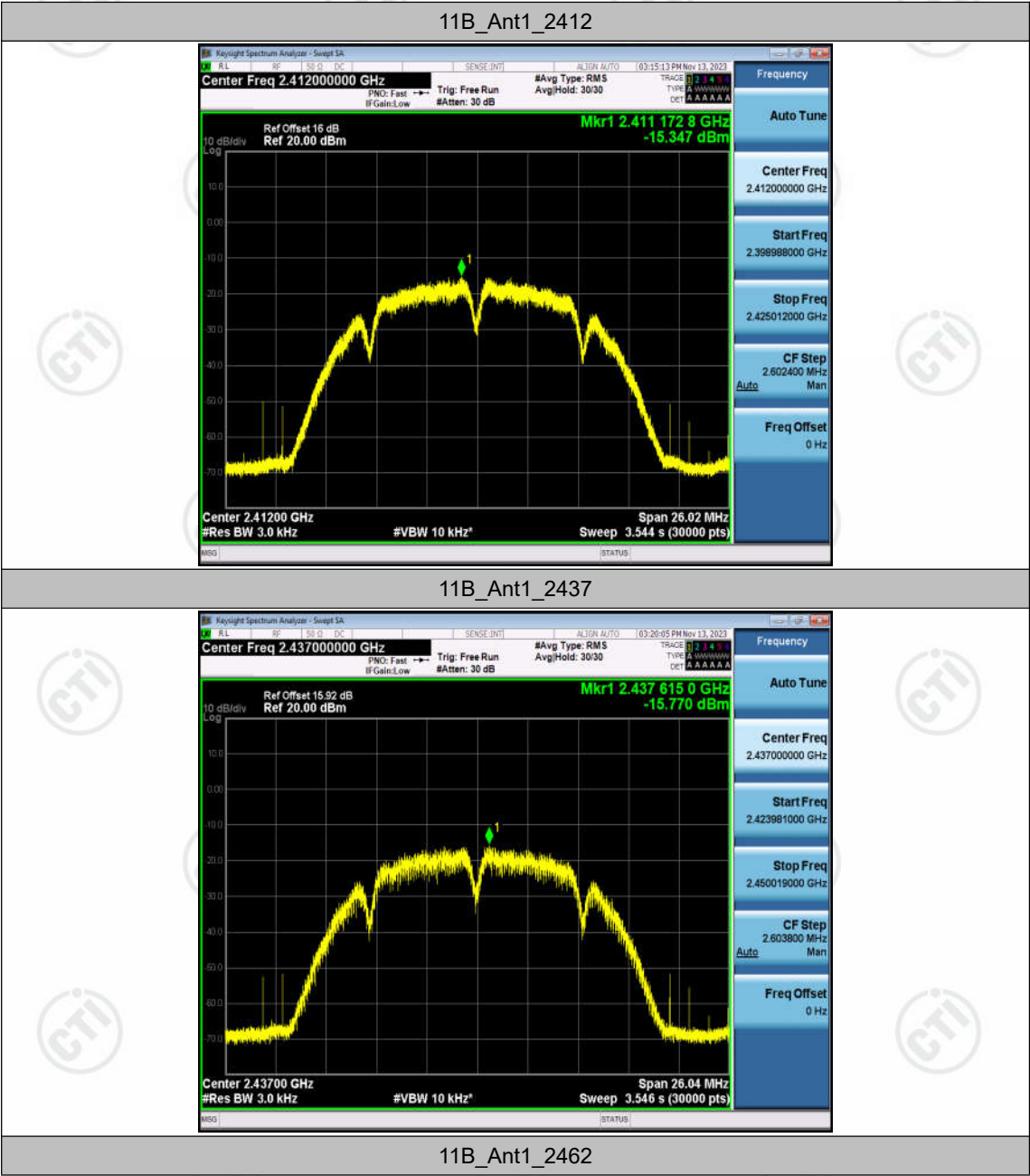
| TestMode      | Antenna | Frequency<br>[MHz] | Set<br>Power | Peak<br>Power[dBm] | Conducted<br>Limit[dBm] | Verdict |
|---------------|---------|--------------------|--------------|--------------------|-------------------------|---------|
| 11B           | Ant1    | 2412               | ---          | 14.66              | ≤30.00                  | PASS    |
|               |         | 2437               | ---          | 14.43              | ≤30.00                  | PASS    |
|               |         | 2462               | ---          | 14.48              | ≤30.00                  | PASS    |
| 11G           | Ant1    | 2412               | ---          | 14.52              | ≤30.00                  | PASS    |
|               |         | 2437               | ---          | 14.23              | ≤30.00                  | PASS    |
|               |         | 2462               | ---          | 14.25              | ≤30.00                  | PASS    |
| 11N20SIS<br>O | Ant1    | 2412               | ---          | 13.75              | ≤30.00                  | PASS    |
|               |         | 2437               | ---          | 13.53              | ≤30.00                  | PASS    |
|               |         | 2462               | ---          | 13.56              | ≤30.00                  | PASS    |

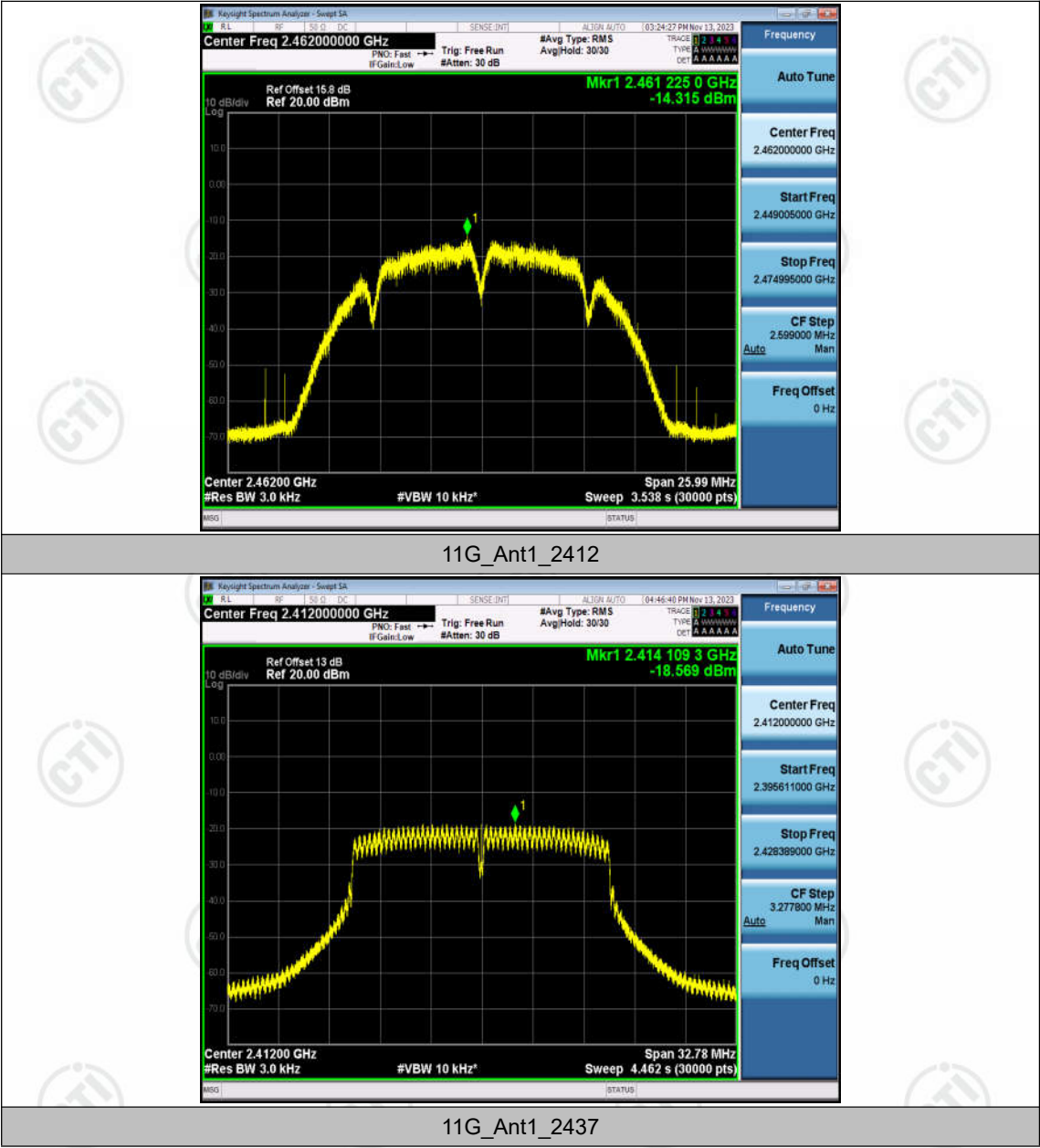
## Appendix D: Maximum power spectral density

### Test Result

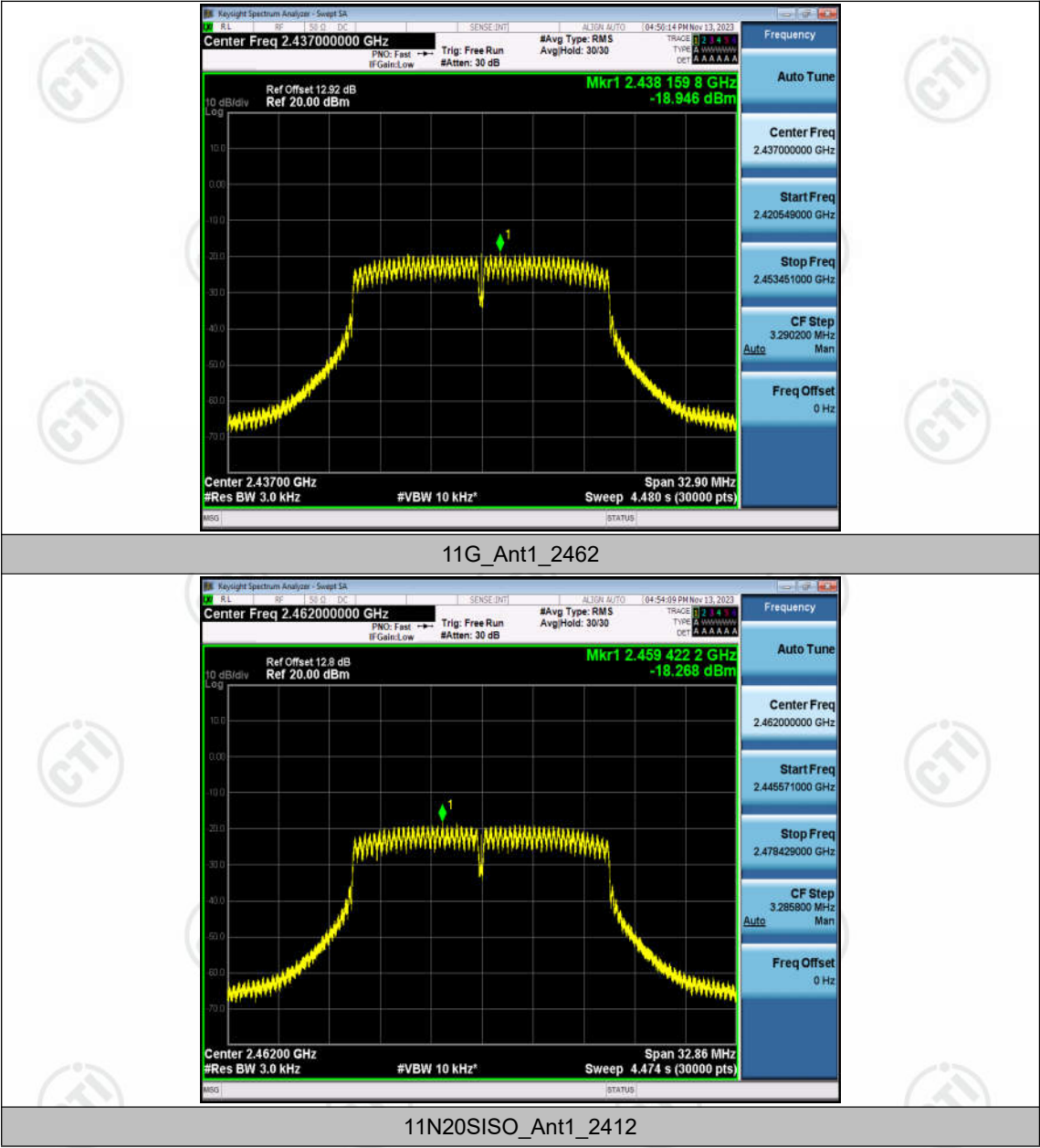
| TestMode  | Antenna | Frequency[MHz] | Result[dBm/3-100kHz] | Limit[dBm/3kHz] | Verdict |
|-----------|---------|----------------|----------------------|-----------------|---------|
| 11B       | Ant1    | 2412           | -15.35               | ≤8.00           | PASS    |
|           |         | 2437           | -15.77               | ≤8.00           | PASS    |
|           |         | 2462           | -14.32               | ≤8.00           | PASS    |
| 11G       | Ant1    | 2412           | -18.57               | ≤8.00           | PASS    |
|           |         | 2437           | -18.95               | ≤8.00           | PASS    |
|           |         | 2462           | -18.27               | ≤8.00           | PASS    |
| 11N20SISO | Ant1    | 2412           | -19.29               | ≤8.00           | PASS    |
|           |         | 2437           | -19.91               | ≤8.00           | PASS    |
|           |         | 2462           | -19.28               | ≤8.00           | PASS    |

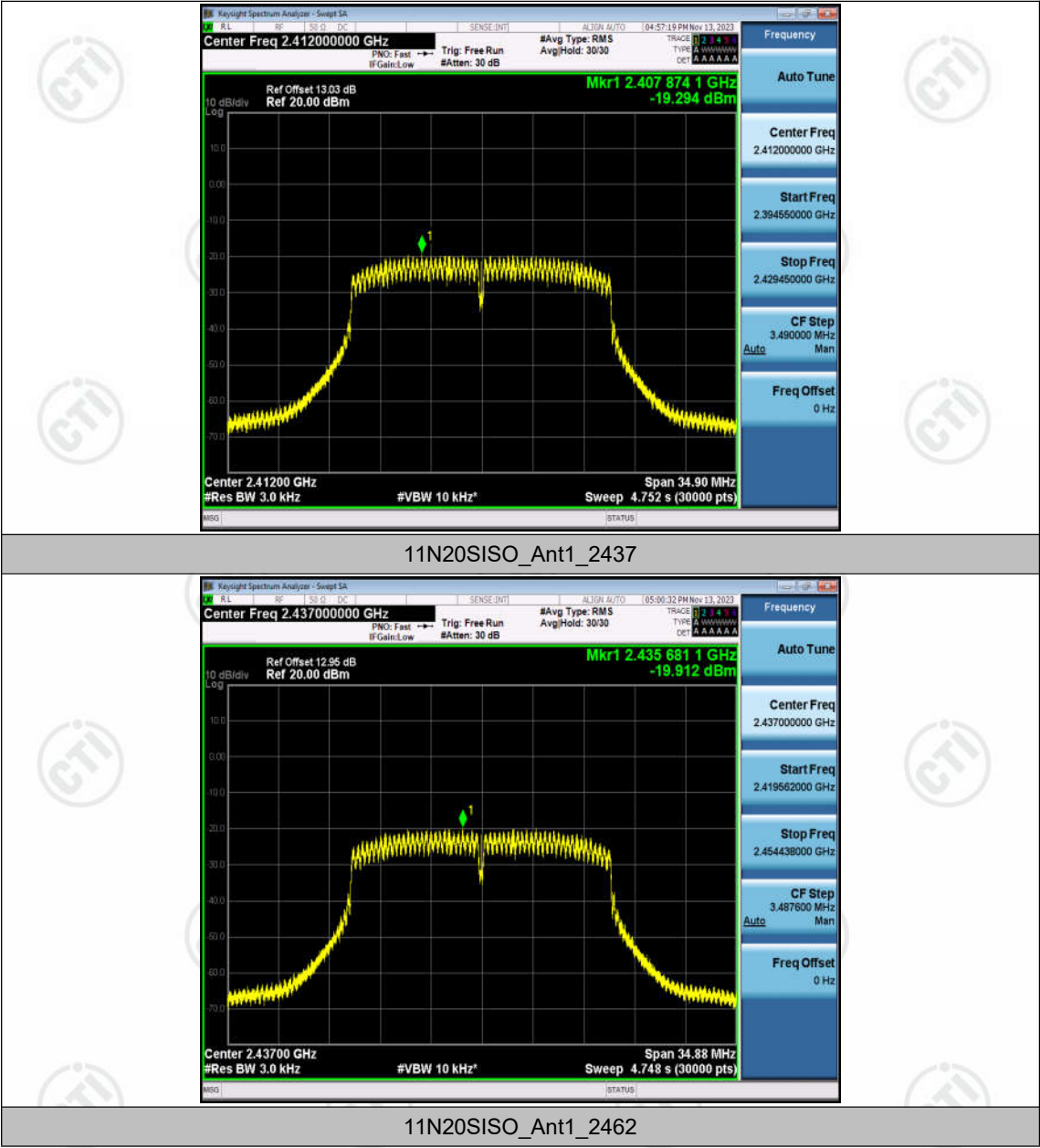
Test Graphs

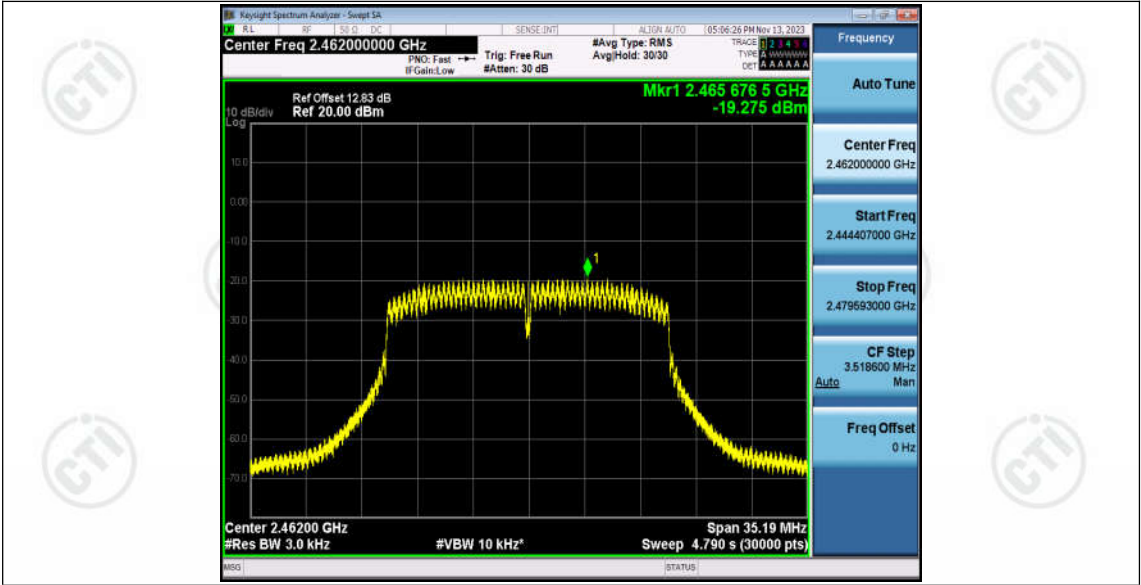












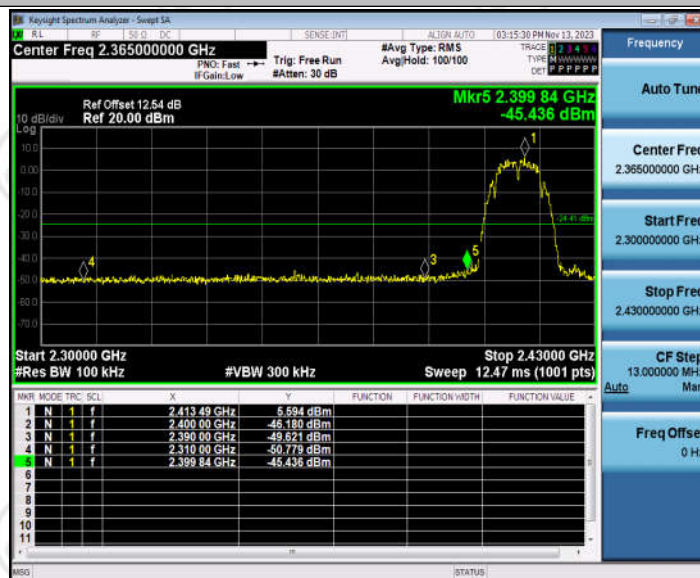
Appendix E: Band edge measurements

Test Result

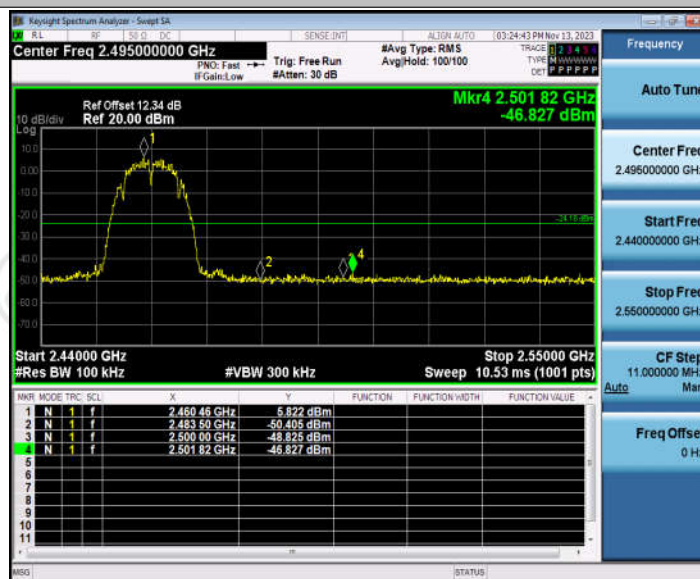
| TestMode      | Antenna | ChName | Frequency<br>[MHz] | RefLevel<br>[dBm] | Result<br>[dBm] | Limit<br>[dBm] | Verdict |
|---------------|---------|--------|--------------------|-------------------|-----------------|----------------|---------|
| 11B           | Ant1    | Low    | 2412               | 5.59              | -45.44          | ≤-24.41        | PASS    |
|               |         | High   | 2462               | 5.82              | -46.83          | ≤-24.18        | PASS    |
| 11G           | Ant1    | Low    | 2412               | 2.77              | -35.13          | ≤-27.23        | PASS    |
|               |         | High   | 2462               | 1.31              | -46.04          | ≤-28.69        | PASS    |
| 11N20SIS<br>O | Ant1    | Low    | 2412               | 0.92              | -34.59          | ≤-29.08        | PASS    |
|               |         | High   | 2462               | 2.70              | -45.72          | ≤-27.3         | PASS    |

## Test Graphs

11B\_Ant1\_Low\_2412

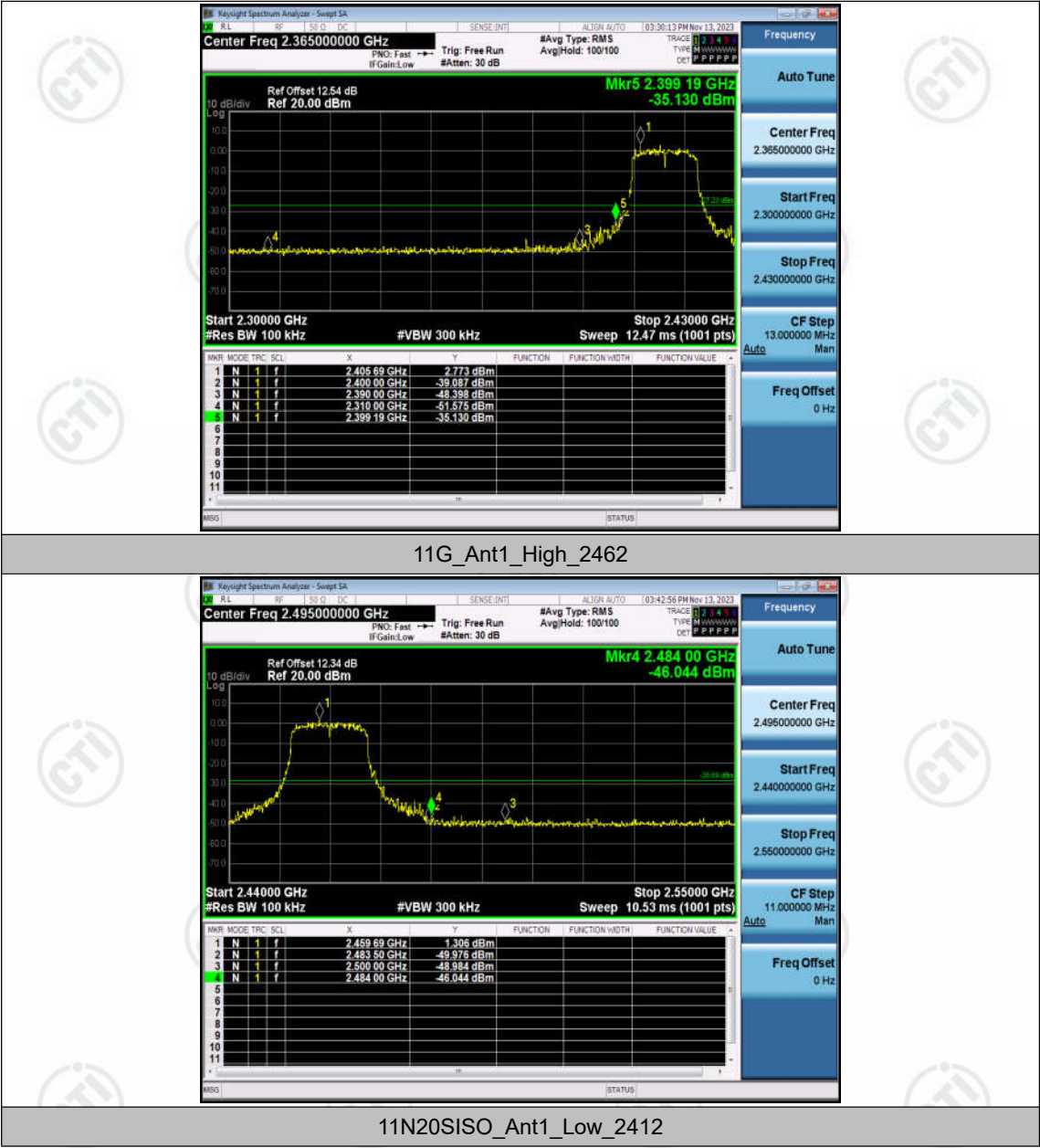


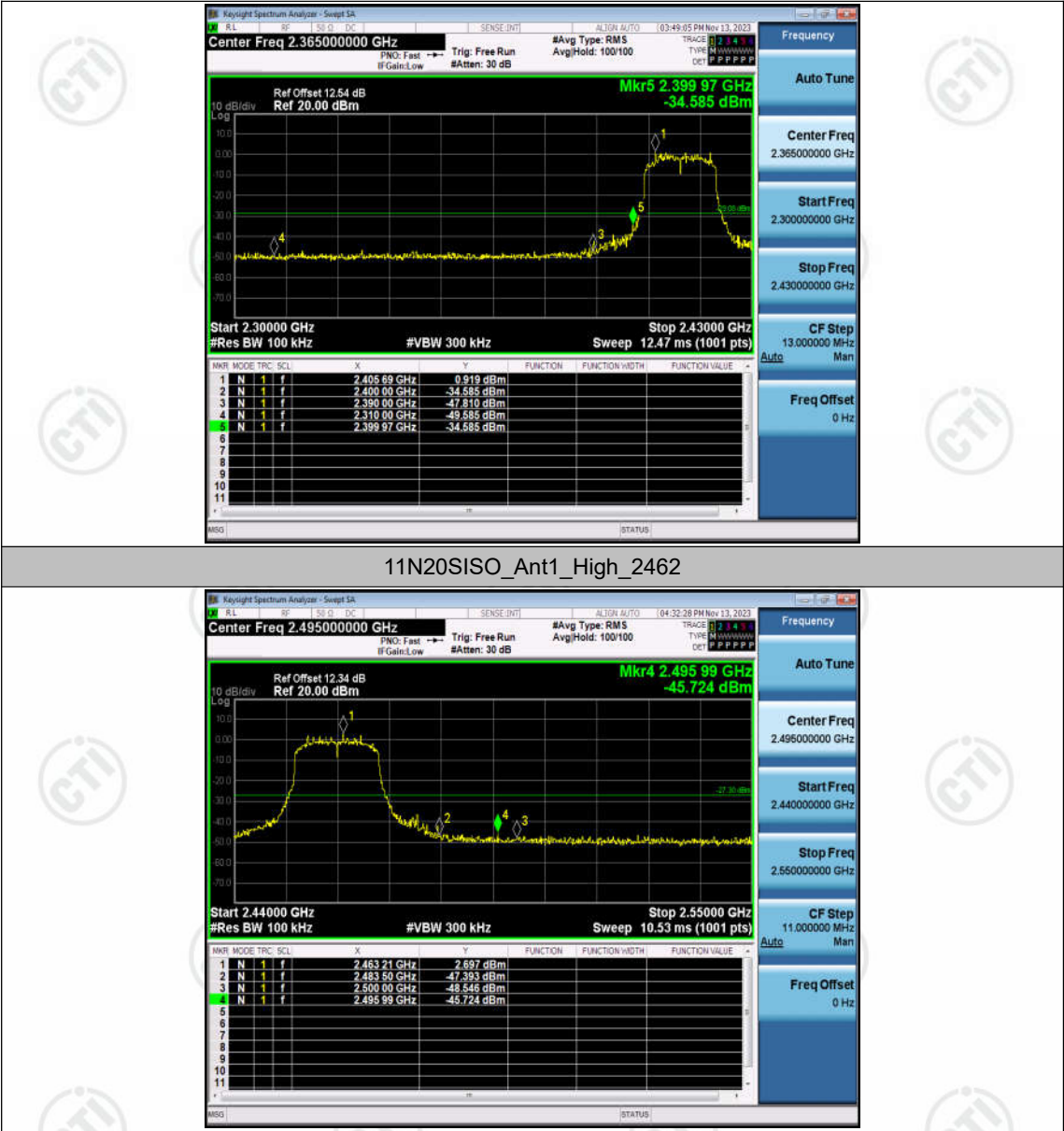
11B\_Ant1\_High\_2462



11G\_Ant1\_Low\_2412







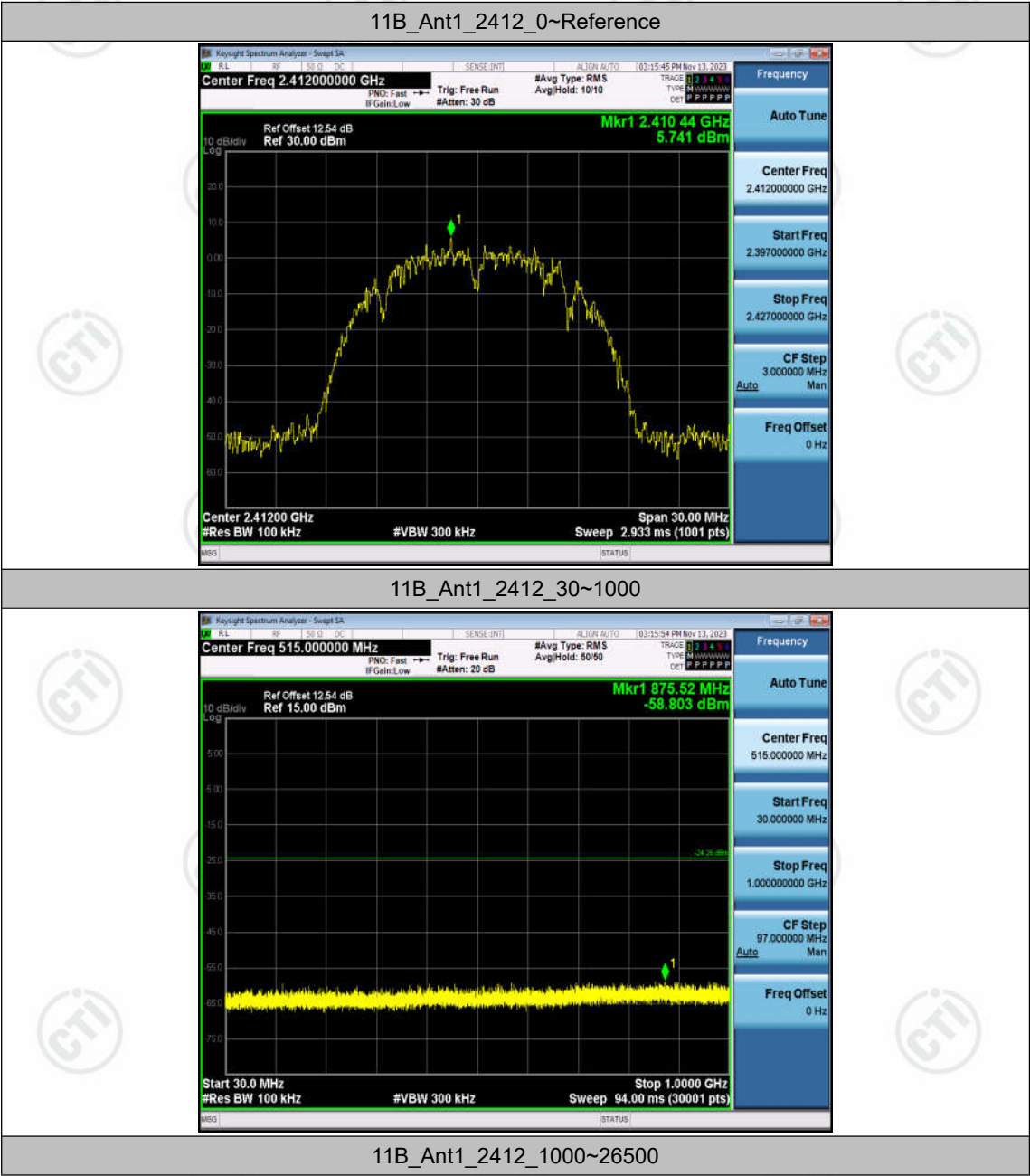
## Appendix F: Conducted Spurious Emission

### Test Result

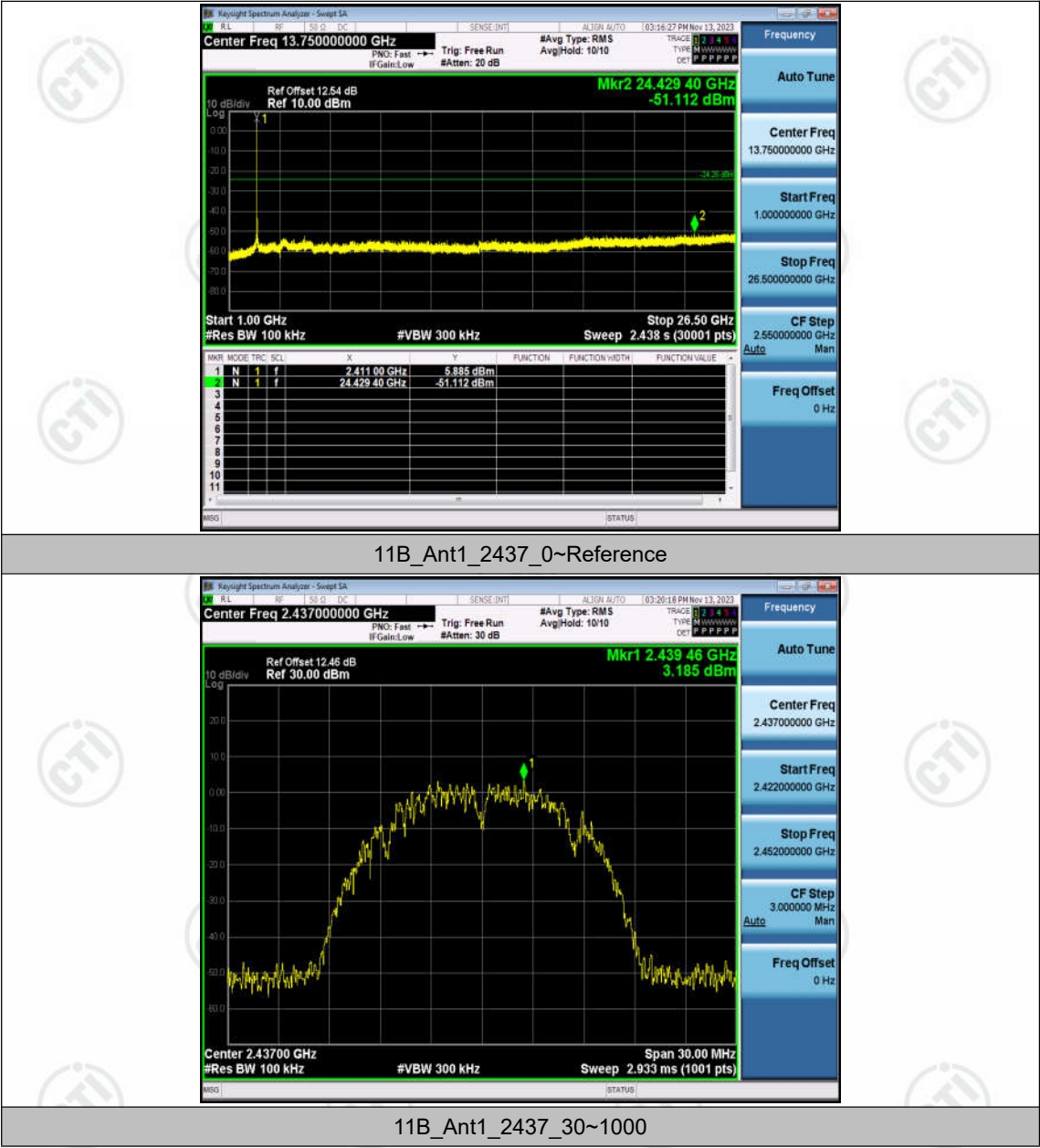
| TestMode      | Antenna | Frequency[MHz] | FreqRange [Mhz] | RefLevel [dBm] | Result [dBm] | Limit [dBm] | Verdict |
|---------------|---------|----------------|-----------------|----------------|--------------|-------------|---------|
| 11B           | Ant1    | 2412           | Reference       | 5.74           | 5.74         | ---         | PASS    |
|               |         |                | 30~1000         | 5.74           | -58.8        | ≤-24.26     | PASS    |
|               |         |                | 1000~2650<br>0  | 5.74           | -51.11       | ≤-24.26     | PASS    |
|               |         | 2437           | Reference       | 3.19           | 3.19         | ---         | PASS    |
|               |         |                | 30~1000         | 3.19           | -57.35       | ≤-26.81     | PASS    |
|               |         |                | 1000~2650<br>0  | 3.19           | -50.45       | ≤-26.81     | PASS    |
|               |         | 2462           | Reference       | 5.35           | 5.35         | ---         | PASS    |
|               |         |                | 30~1000         | 5.35           | -58.59       | ≤-24.65     | PASS    |
|               |         |                | 1000~2650<br>0  | 5.35           | -50.67       | ≤-24.65     | PASS    |
| 11G           | Ant1    | 2412           | Reference       | 4.43           | 4.43         | ---         | PASS    |
|               |         |                | 30~1000         | 4.43           | -58.32       | ≤-25.57     | PASS    |
|               |         |                | 1000~2650<br>0  | 4.43           | -50.92       | ≤-25.57     | PASS    |
|               |         | 2437           | Reference       | 3.33           | 3.33         | ---         | PASS    |
|               |         |                | 30~1000         | 3.33           | -58.49       | ≤-26.67     | PASS    |
|               |         |                | 1000~2650<br>0  | 3.33           | -51.09       | ≤-26.67     | PASS    |
|               |         | 2462           | Reference       | 3.52           | 3.52         | ---         | PASS    |
|               |         |                | 30~1000         | 3.52           | -58.32       | ≤-26.48     | PASS    |
|               |         |                | 1000~2650<br>0  | 3.52           | -50.88       | ≤-26.48     | PASS    |
| 11N20SI<br>SO | Ant1    | 2412           | Reference       | -0.39          | -0.39        | ---         | PASS    |
|               |         |                | 30~1000         | -0.39          | -58.53       | ≤-30.39     | PASS    |
|               |         |                | 1000~2650<br>0  | -0.39          | -50.22       | ≤-30.39     | PASS    |
|               |         | 2437           | Reference       | 3.34           | 3.34         | ---         | PASS    |
|               |         |                | 30~1000         | 3.34           | -57.83       | ≤-26.66     | PASS    |
|               |         |                | 1000~2650<br>0  | 3.34           | -51.2        | ≤-26.66     | PASS    |
|               |         | 2462           | Reference       | 3.01           | 3.01         | ---         | PASS    |
|               |         |                | 30~1000         | 3.01           | -58          | ≤-26.99     | PASS    |
|               |         |                | 1000~2650       | 3.01           | -51.02       | ≤-26.99     | PASS    |

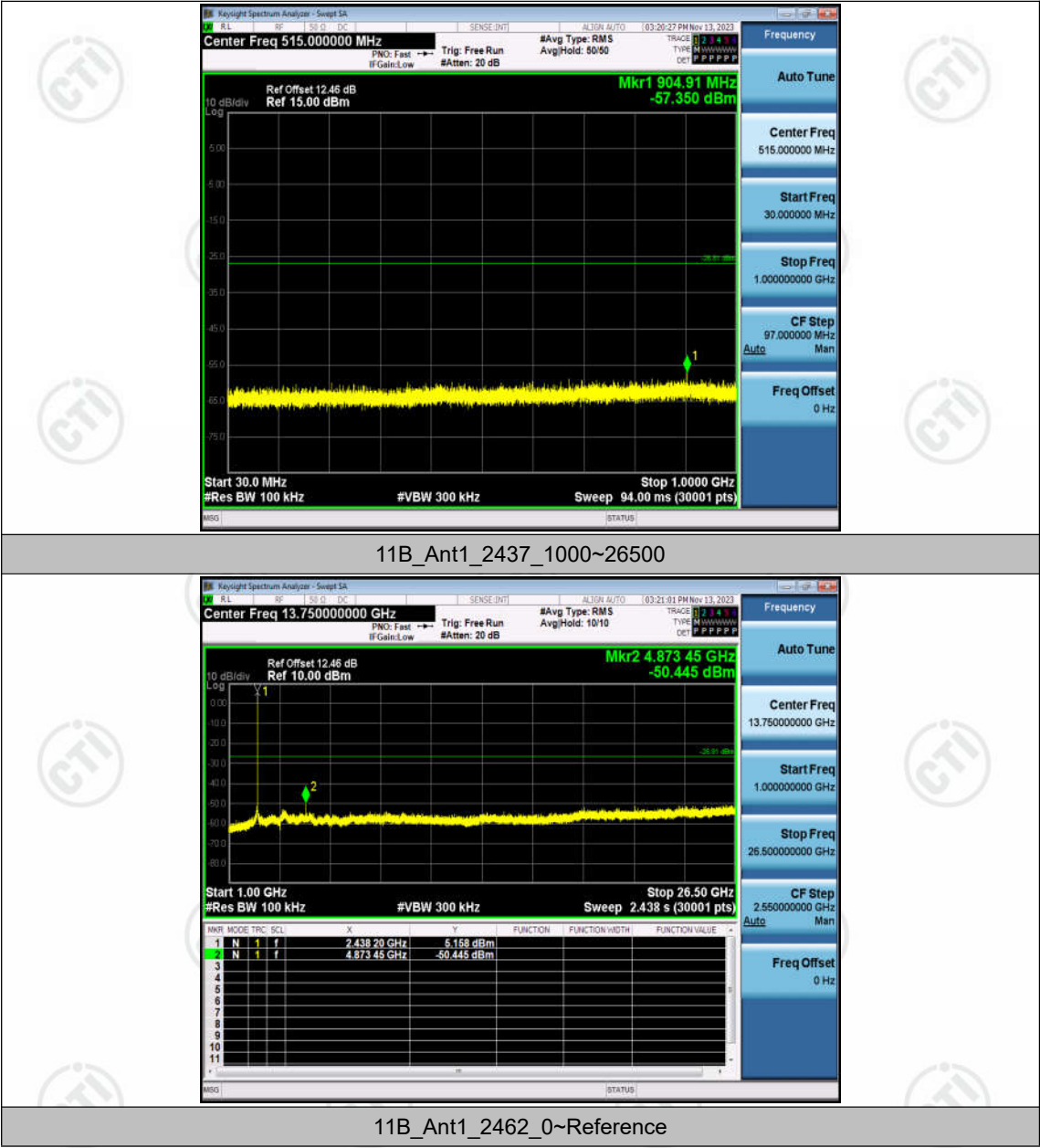
|  |  |  |   |  |  |  |  |
|--|--|--|---|--|--|--|--|
|  |  |  | 0 |  |  |  |  |
|--|--|--|---|--|--|--|--|

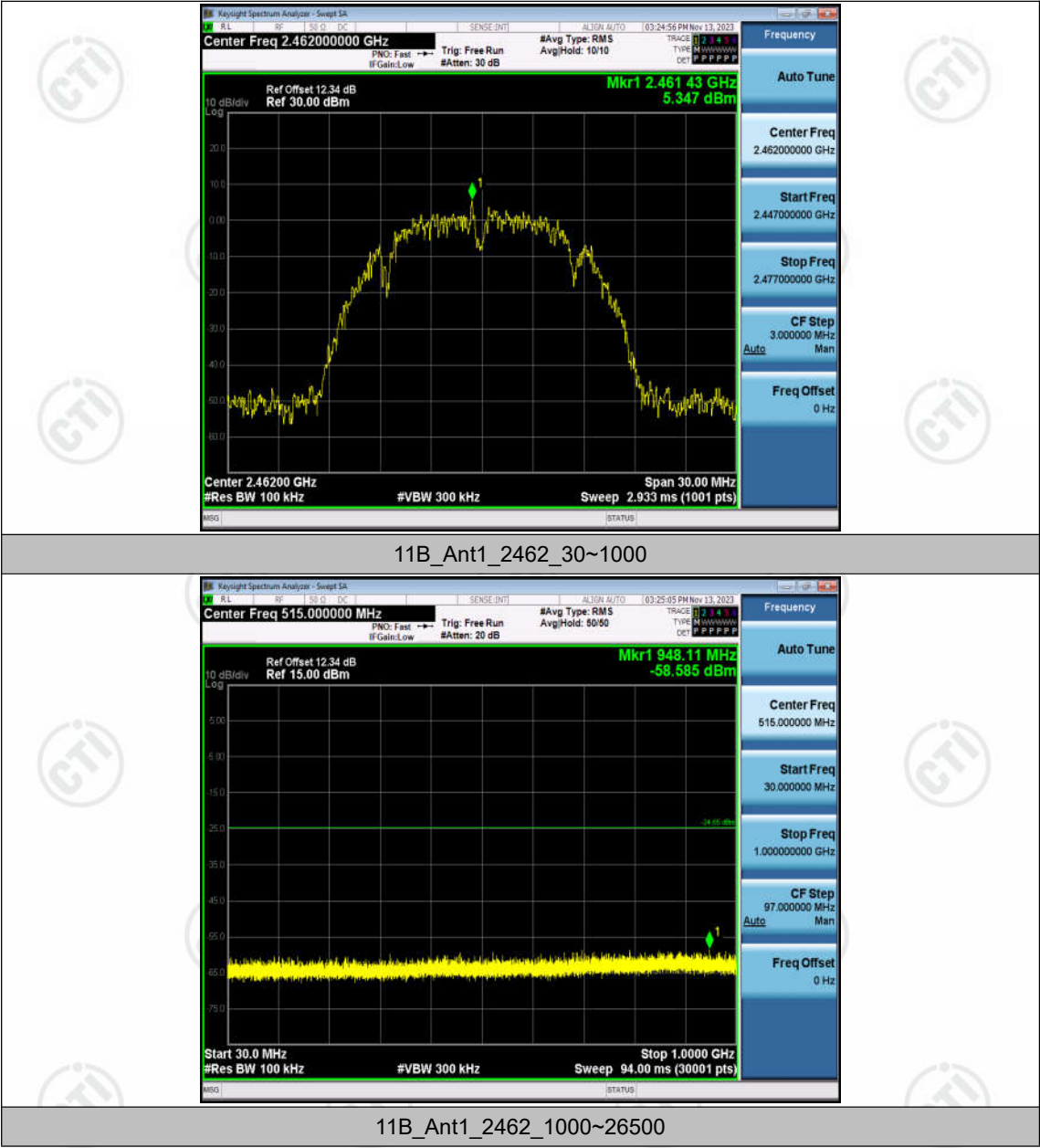
Test Graphs

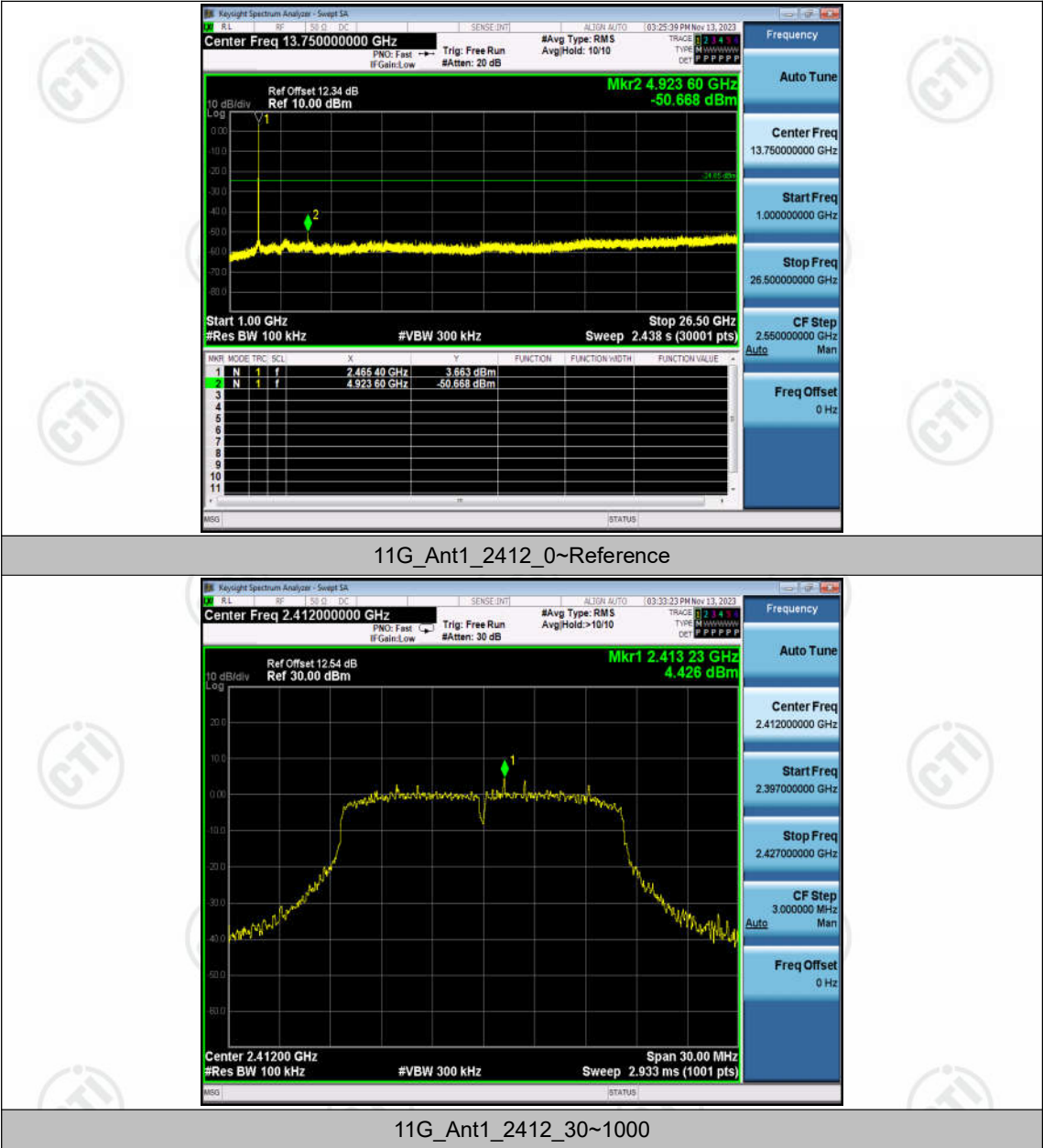




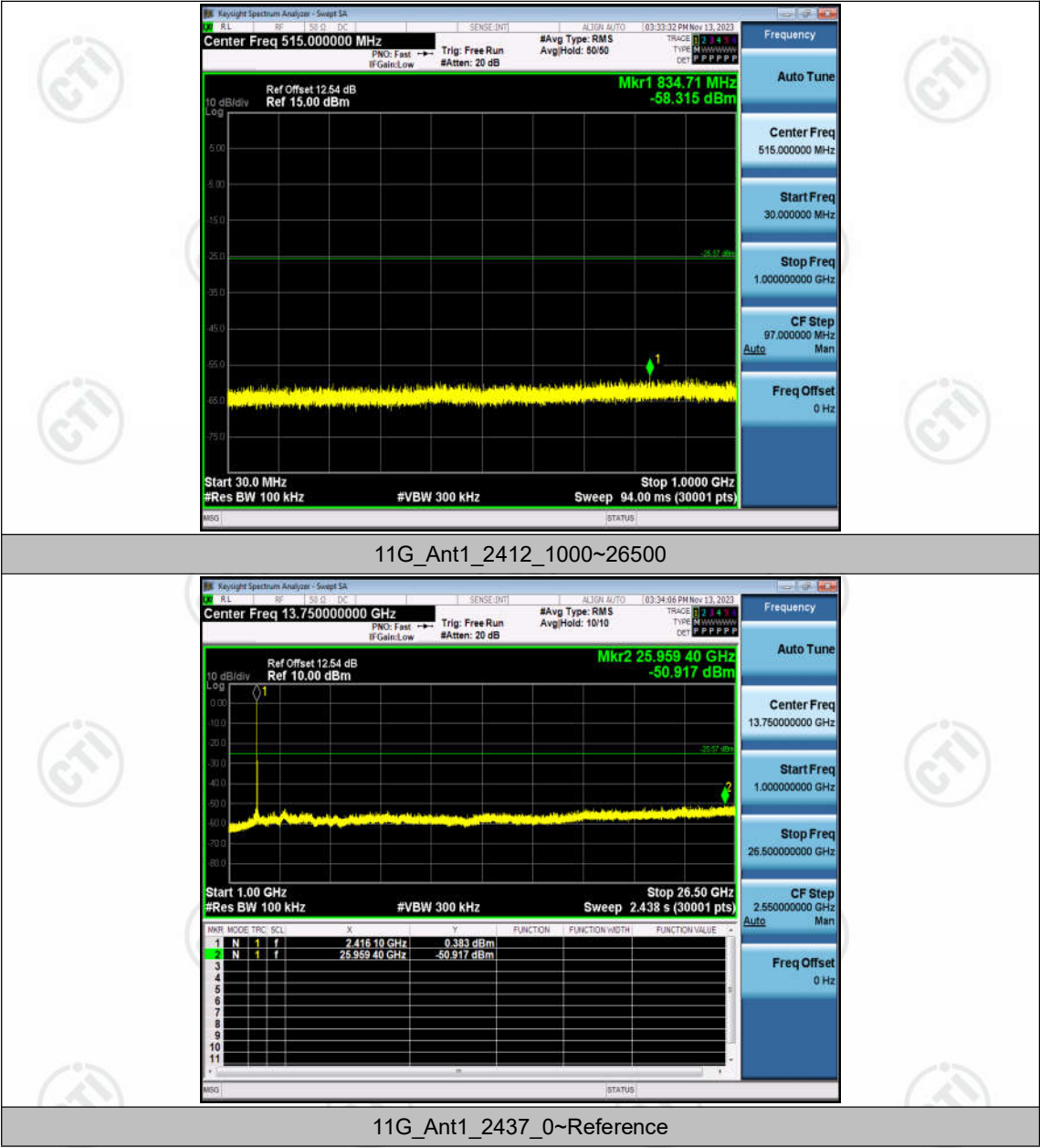




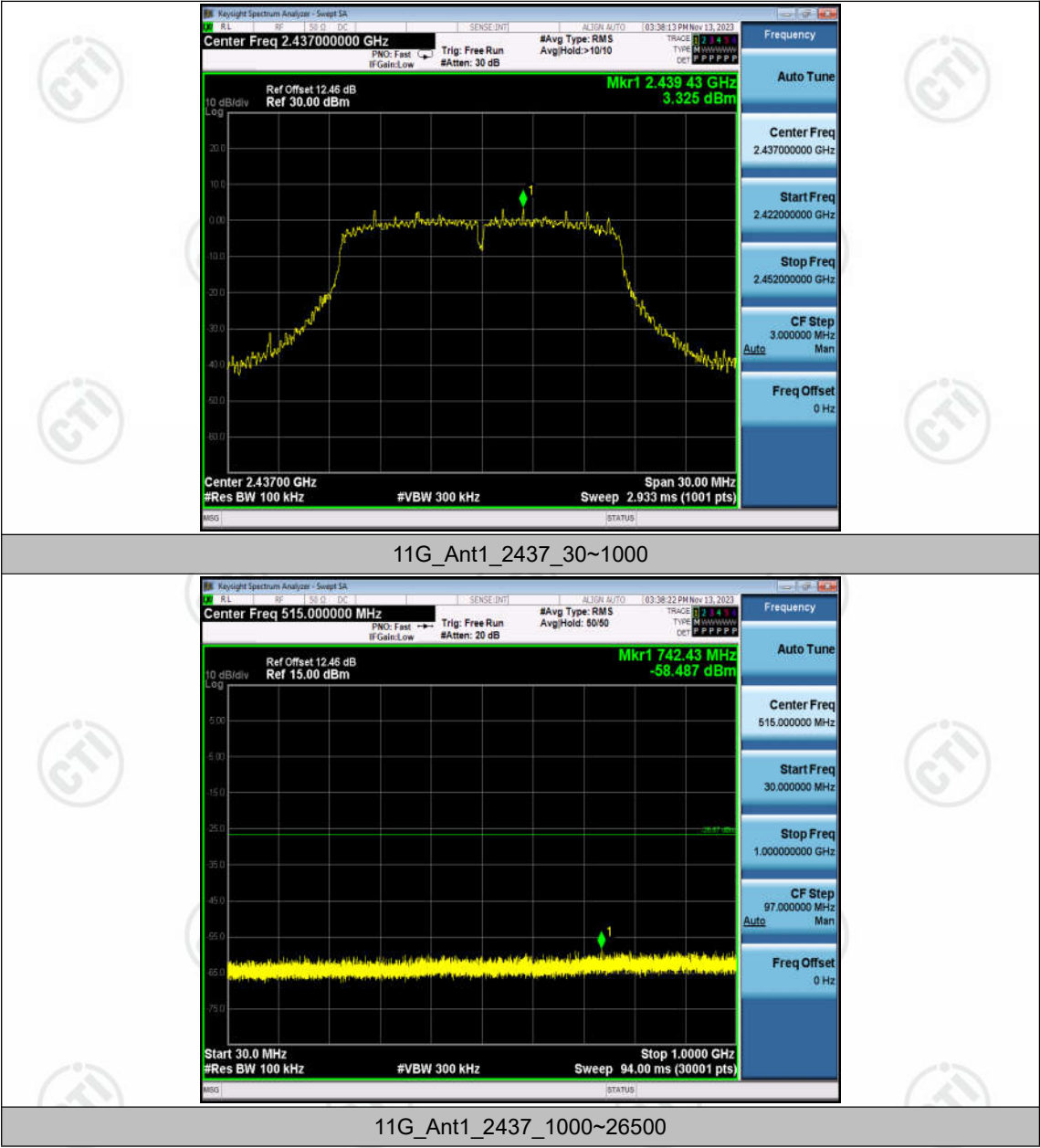


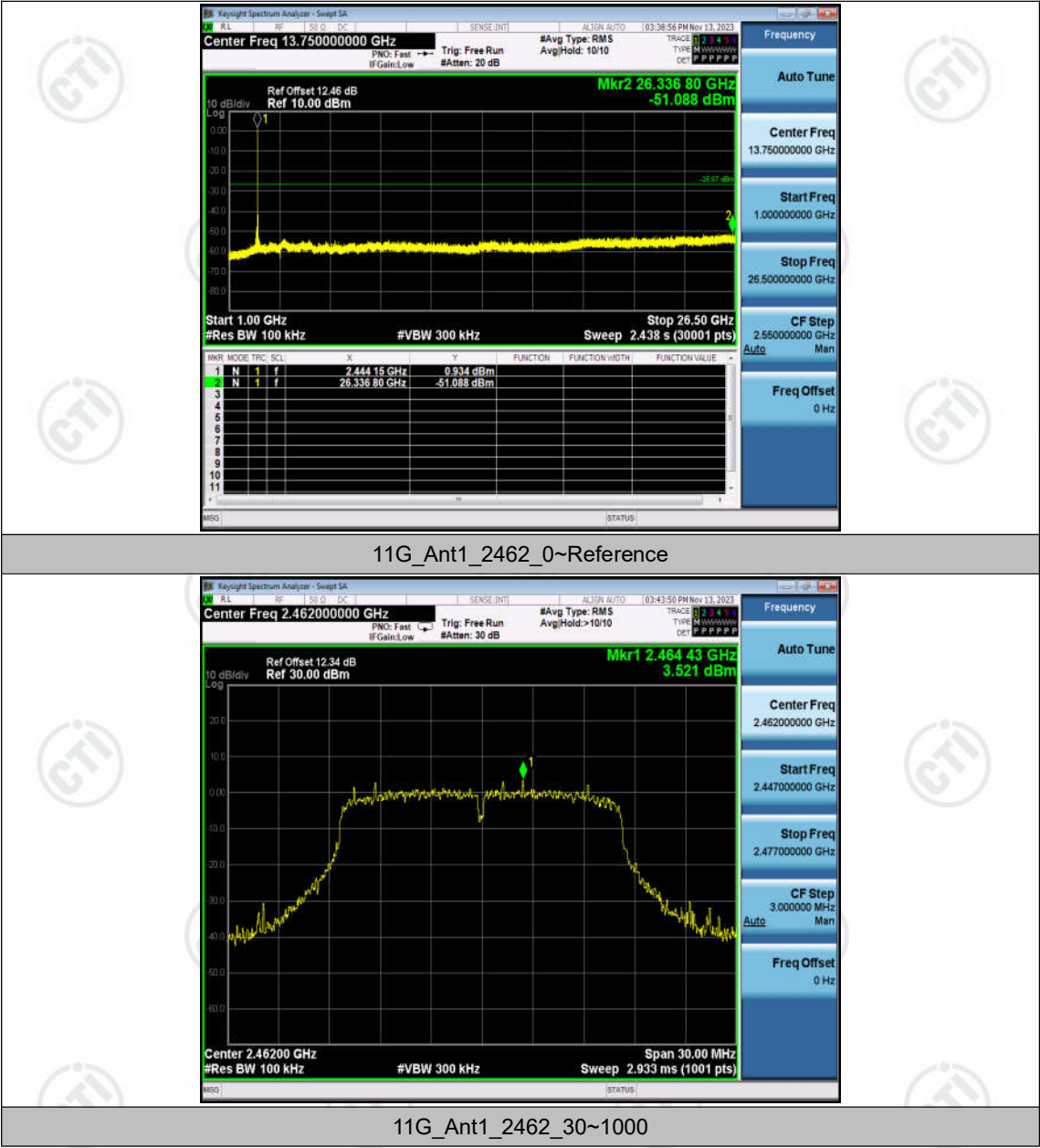


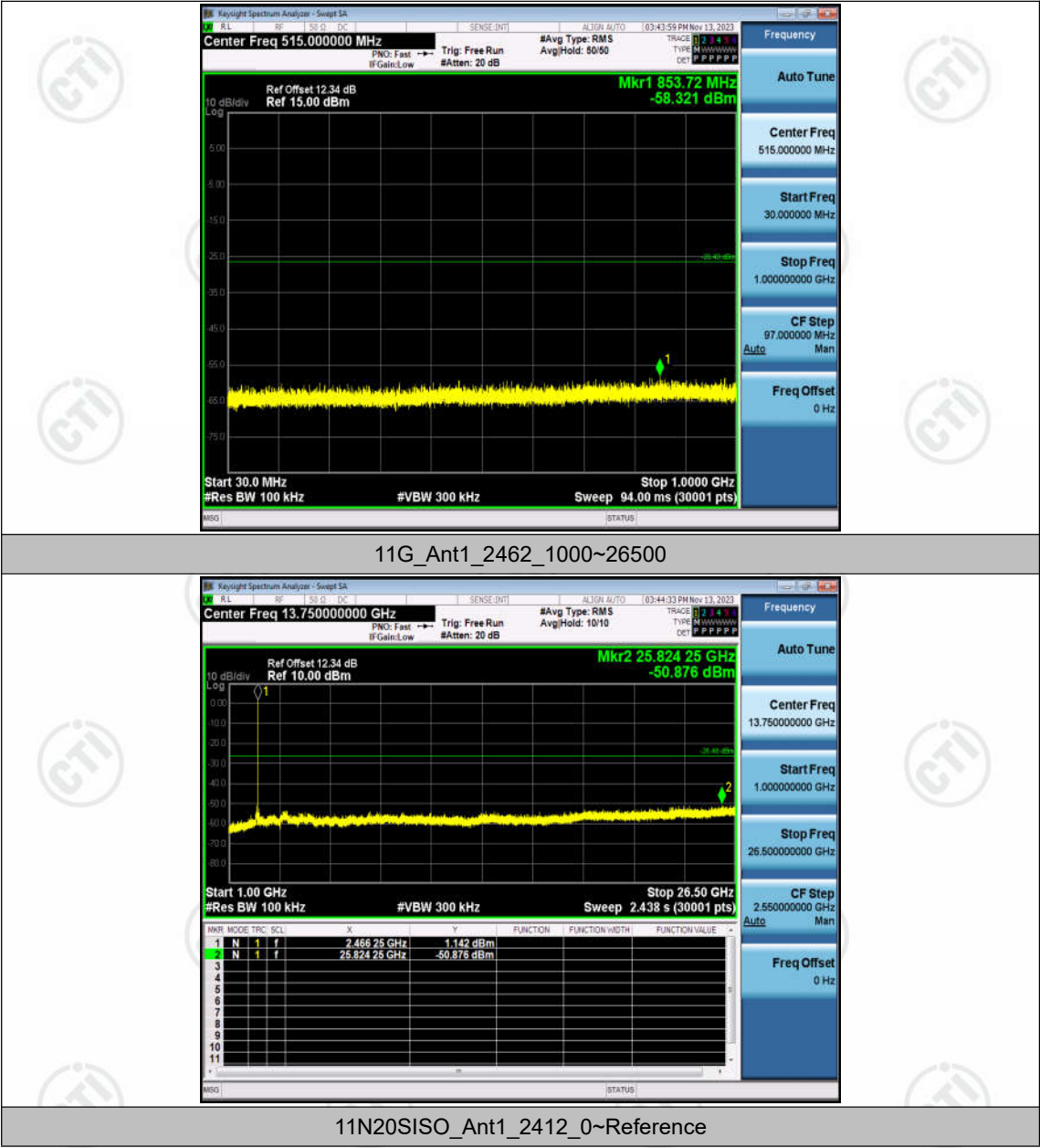


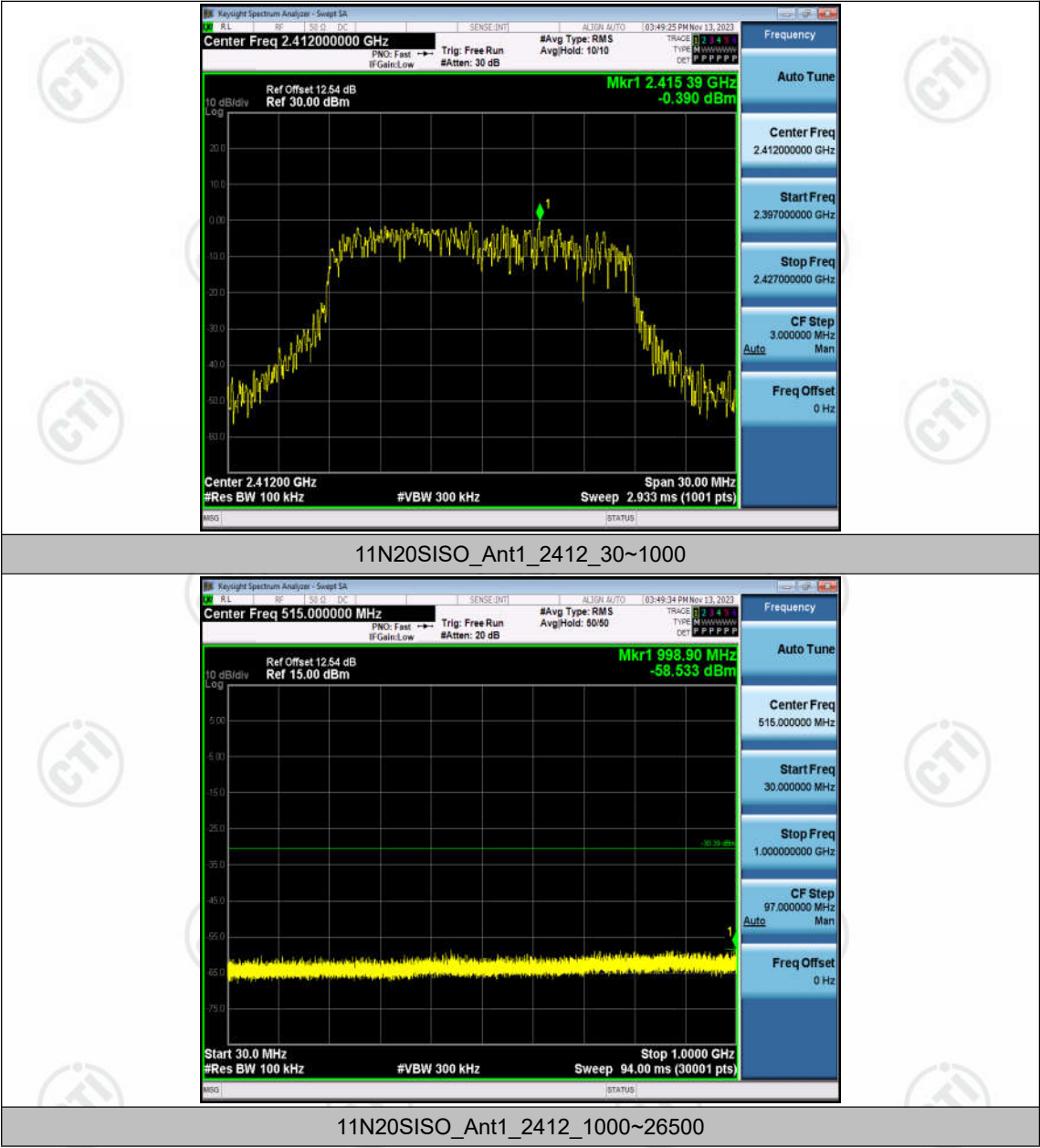




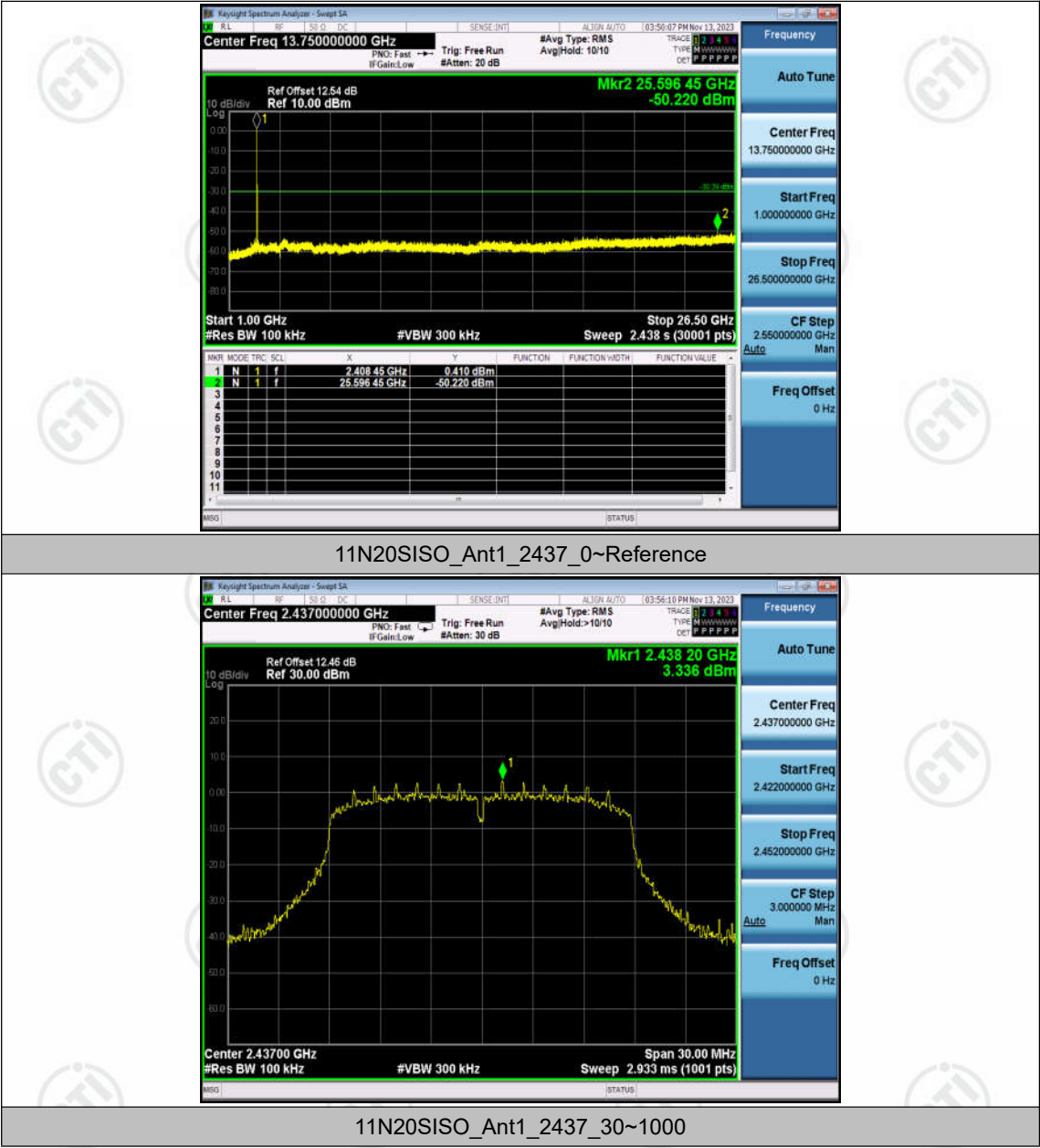




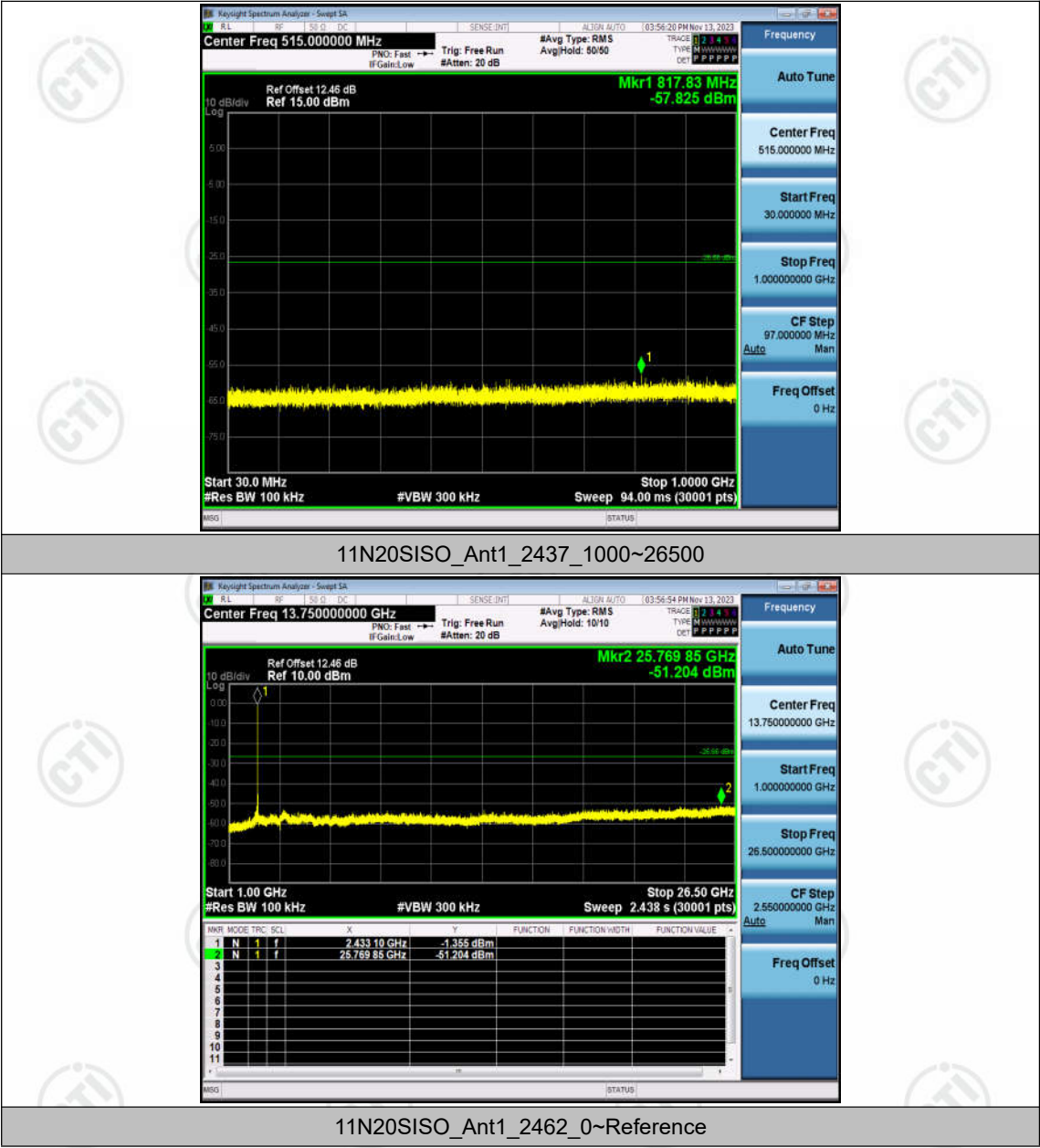


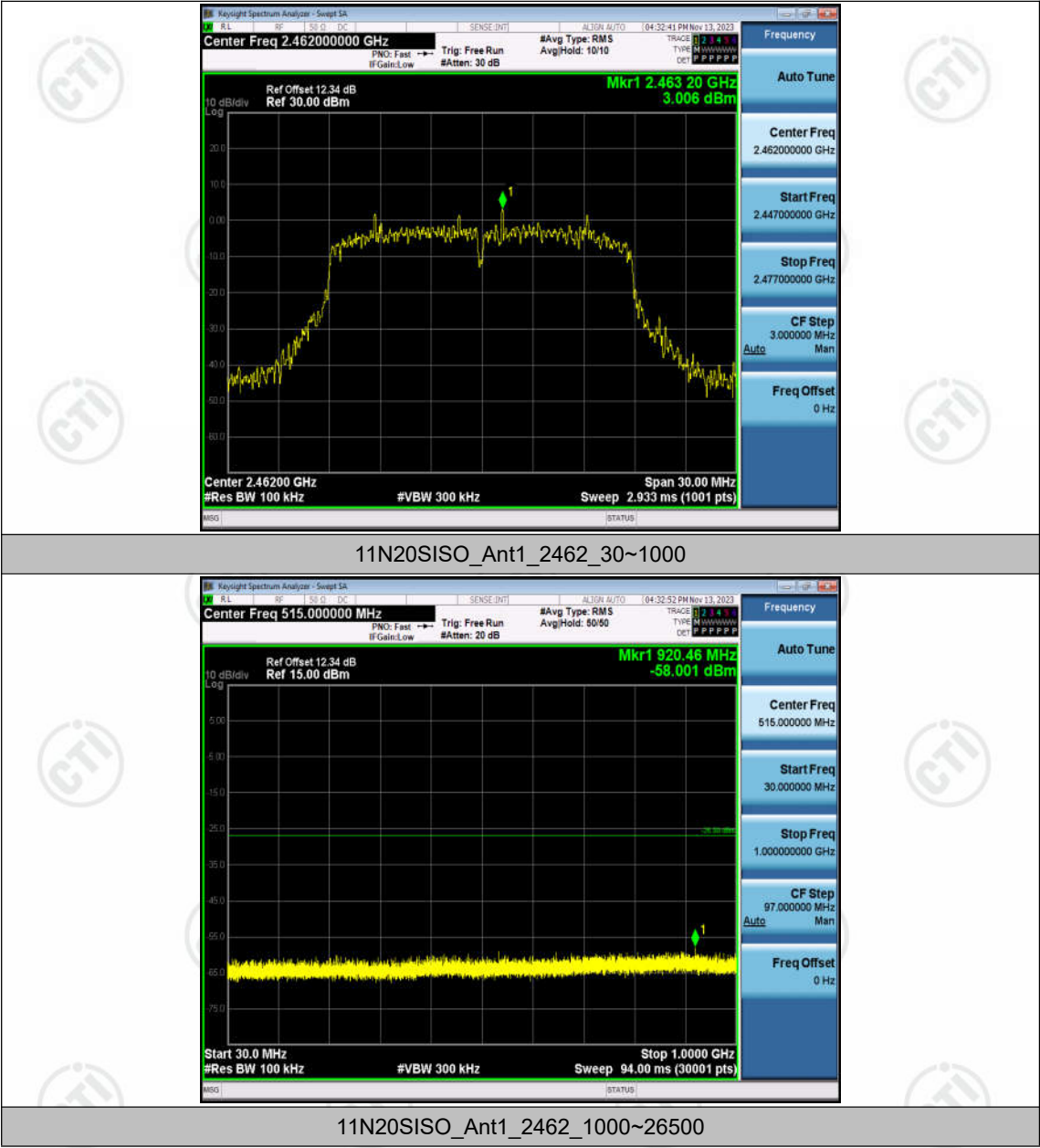


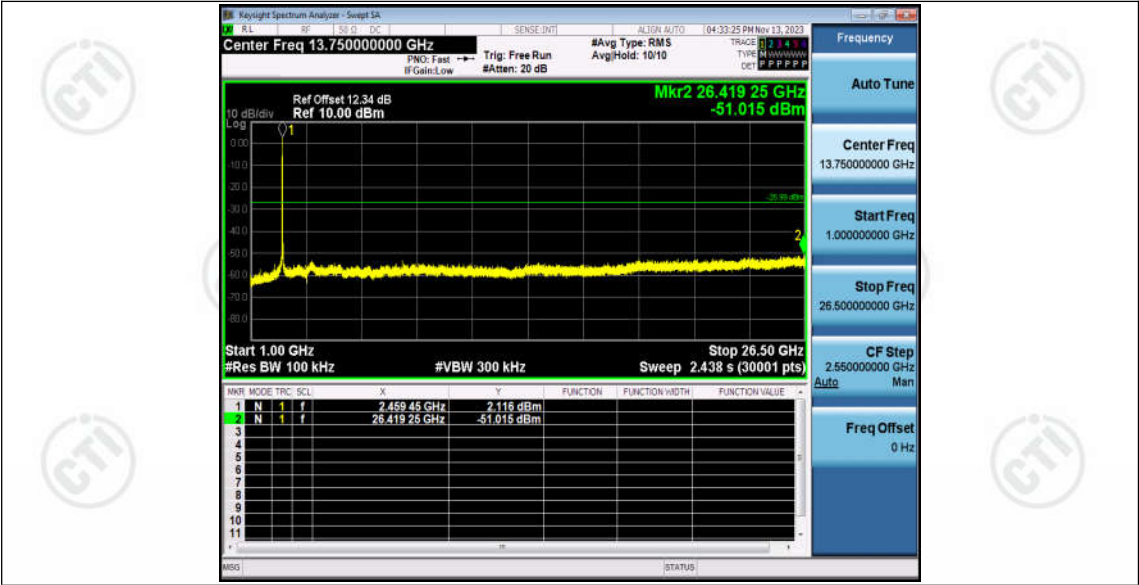










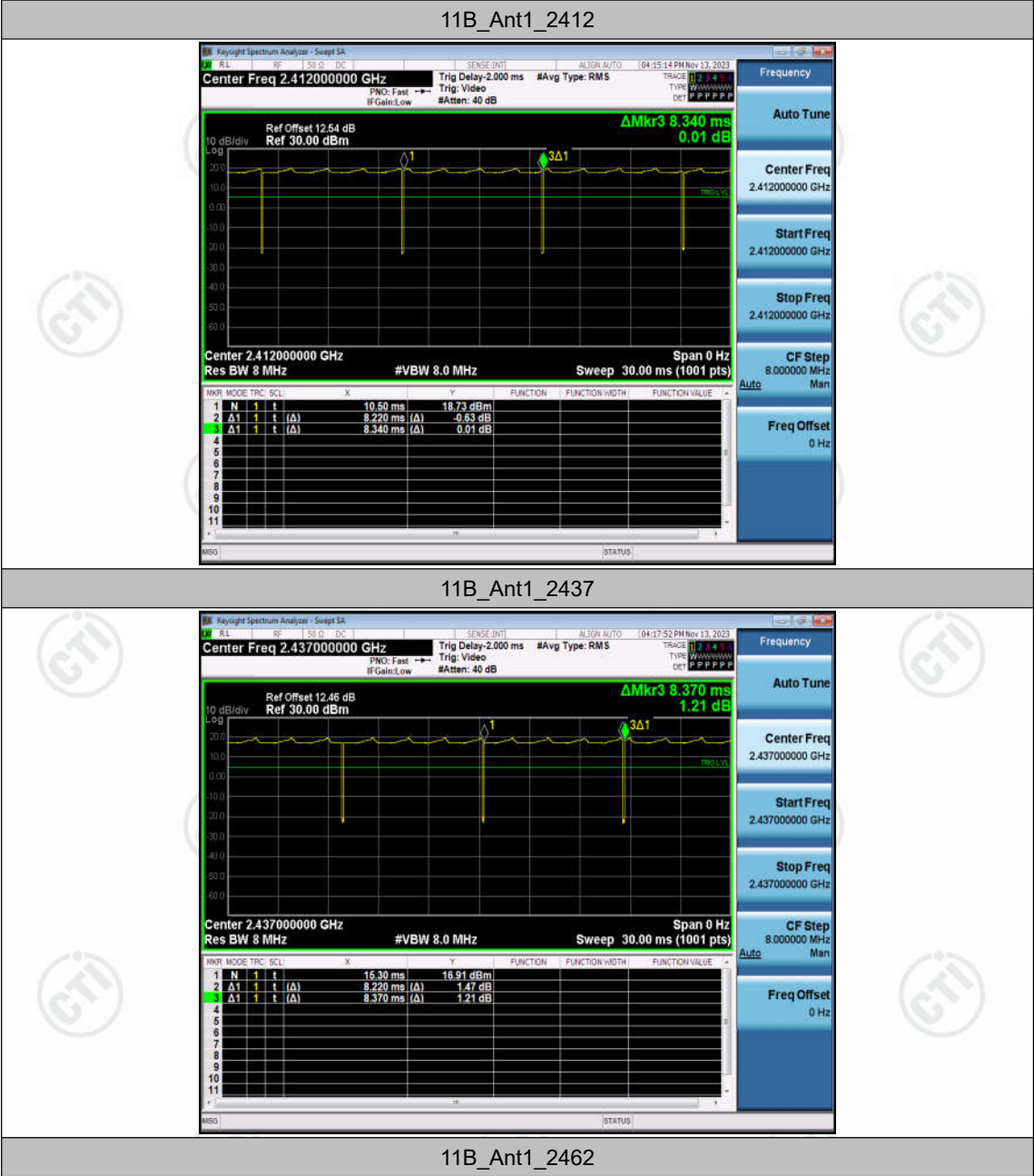


Appendix G: Duty Cycle

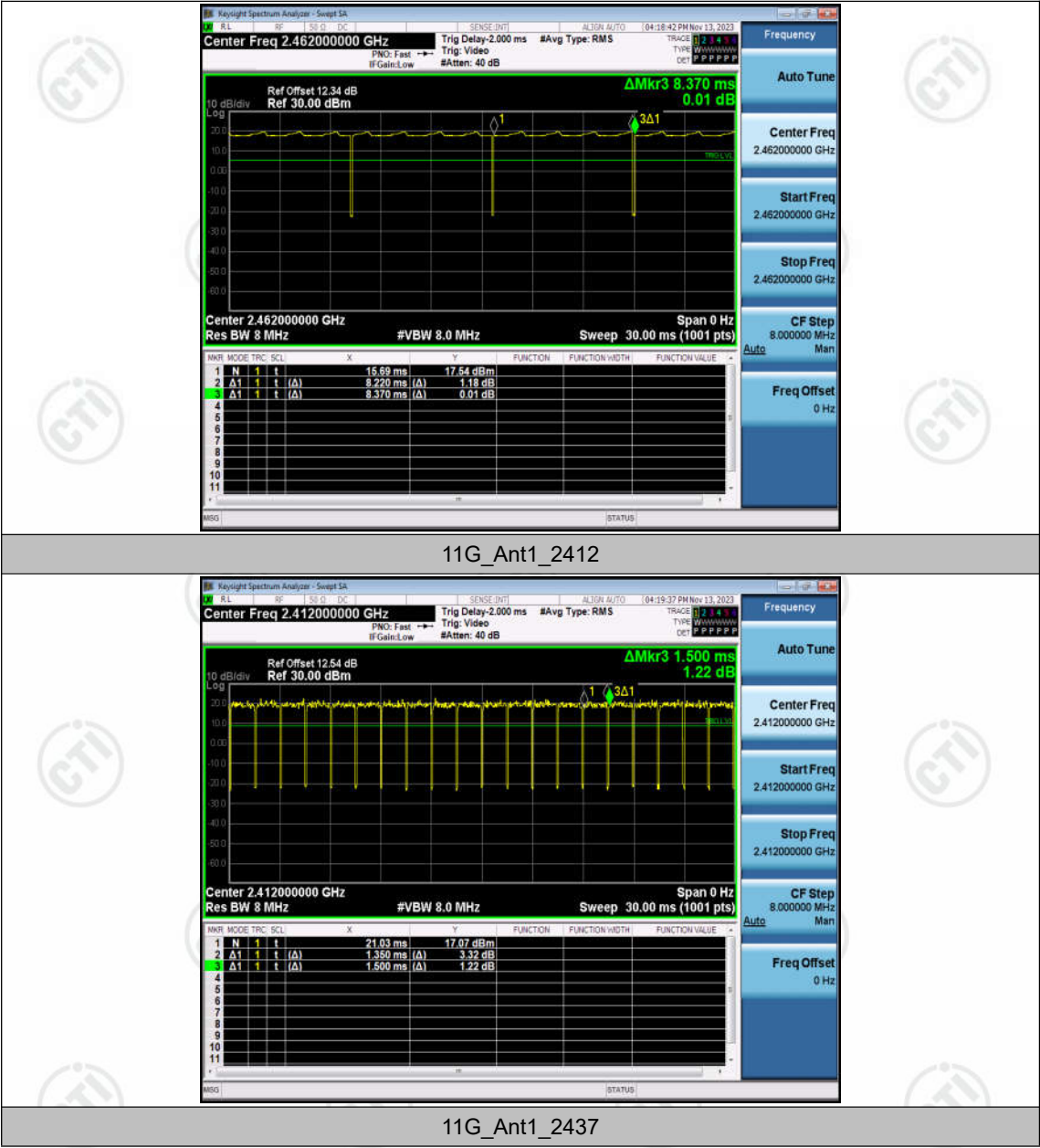
Test Result

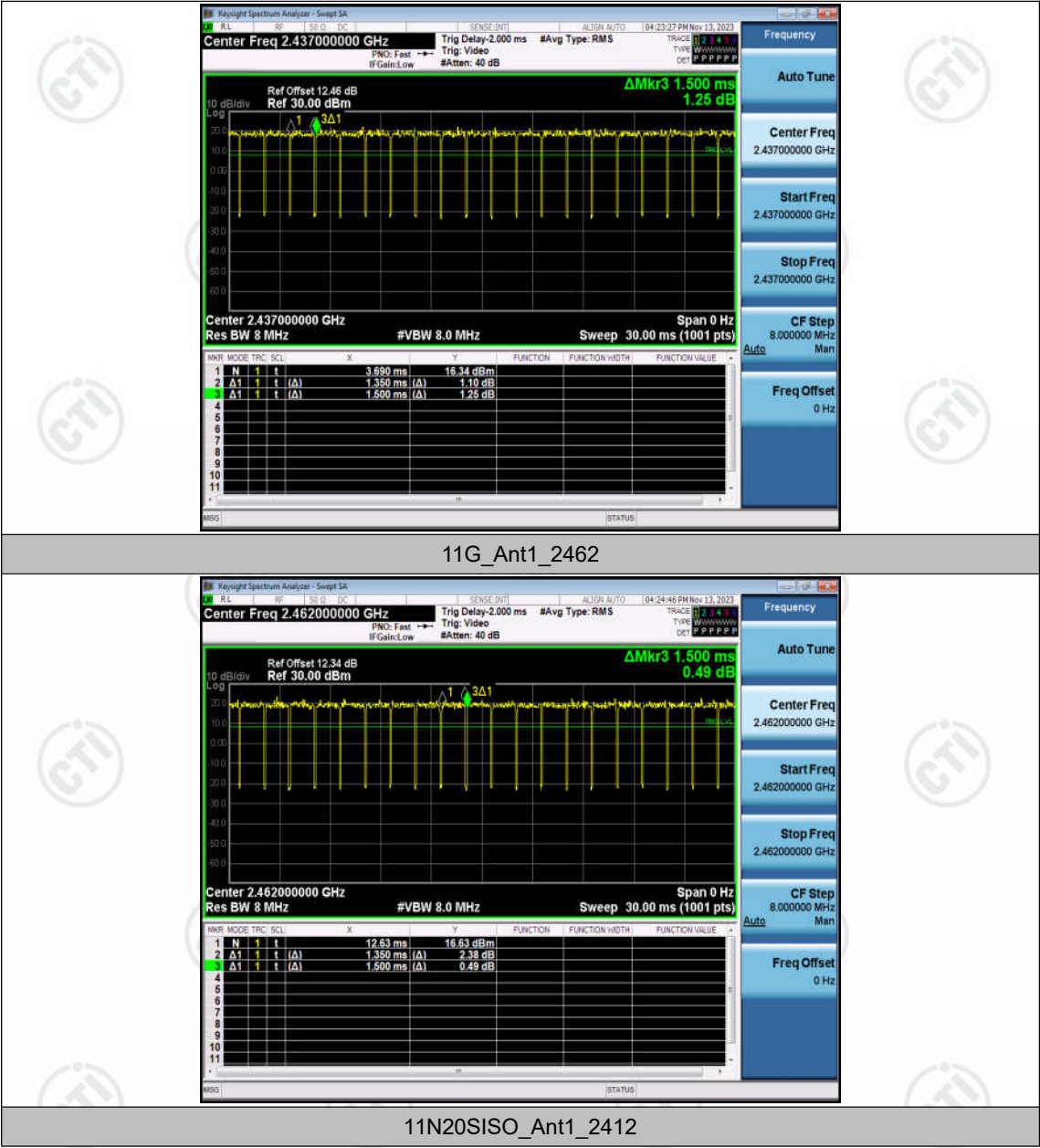
| TestMode      | Antenna | Frequency[MHz] | Transmission<br>Duration<br>[ms] | Transmission<br>Period [ms] | Duty Cycle<br>[%] | Factor |
|---------------|---------|----------------|----------------------------------|-----------------------------|-------------------|--------|
| 11B           | Ant1    | 2412           | 8.22                             | 8.34                        | 98.56             | 0.06   |
|               |         | 2437           | 8.22                             | 8.37                        | 98.21             | 0.08   |
|               |         | 2462           | 8.22                             | 8.37                        | 98.21             | 0.08   |
| 11G           | Ant1    | 2412           | 1.35                             | 1.50                        | 90.00             | 0.46   |
|               |         | 2437           | 1.35                             | 1.50                        | 90.00             | 0.46   |
|               |         | 2462           | 1.35                             | 1.50                        | 90.00             | 0.46   |
| 11N20SIS<br>O | Ant1    | 2412           | 1.26                             | 1.41                        | 89.36             | 0.49   |
|               |         | 2437           | 1.26                             | 1.41                        | 89.36             | 0.49   |
|               |         | 2462           | 1.26                             | 1.41                        | 89.36             | 0.49   |

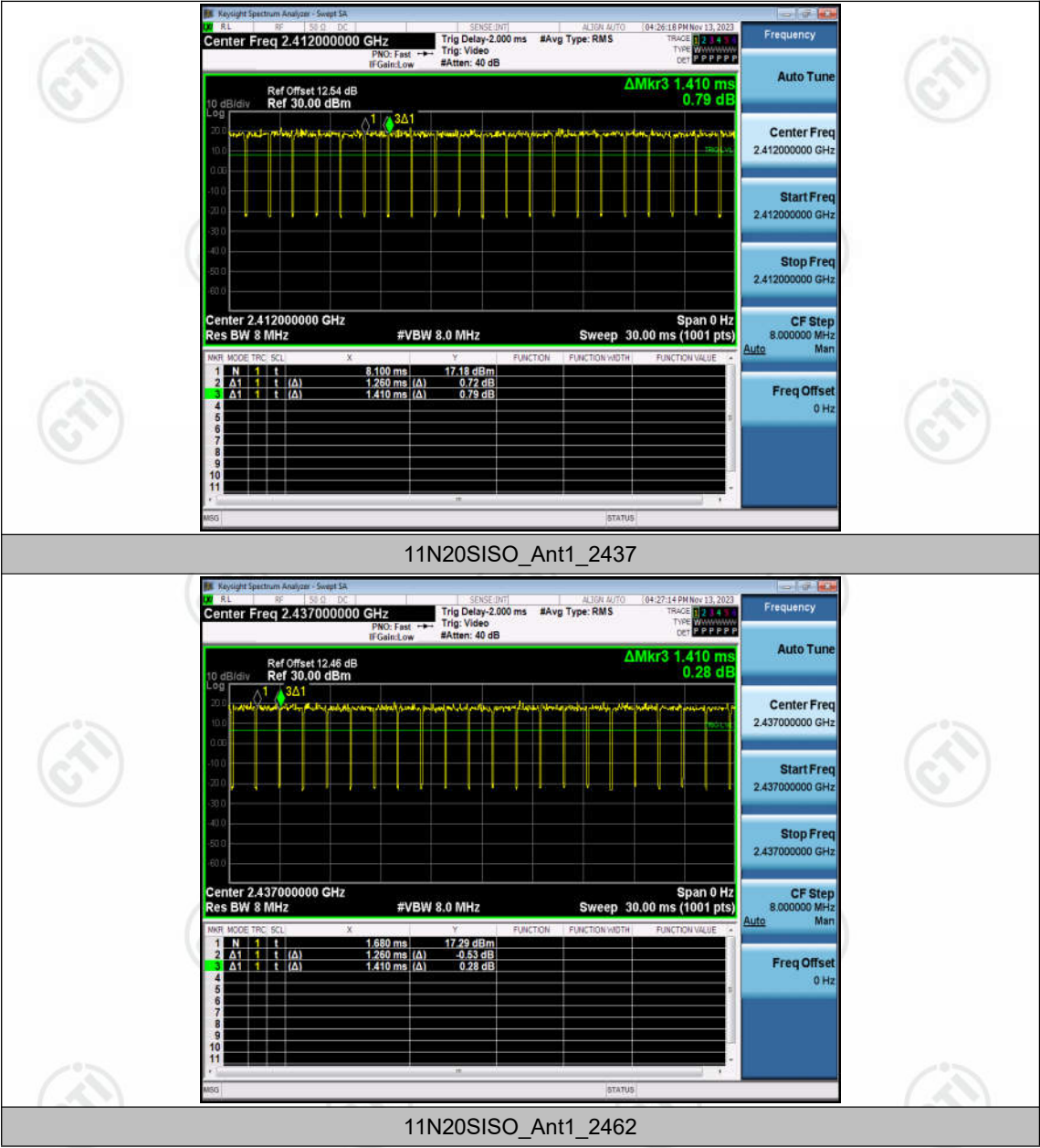
Test Graphs

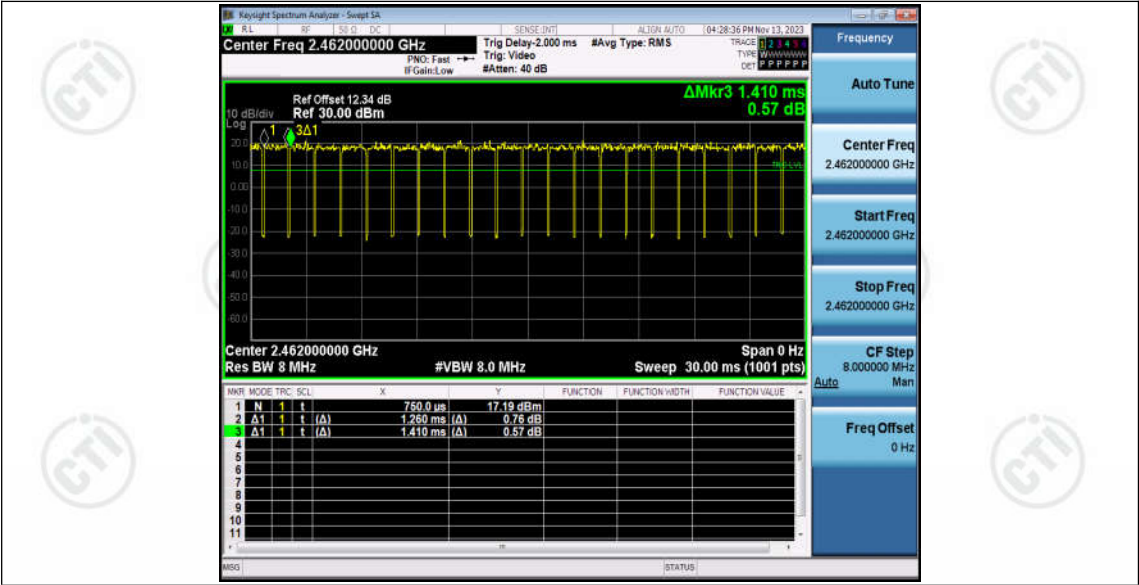












\*\*\* End of Report \*\*\*