

## Appendix: Bluetooth Classic

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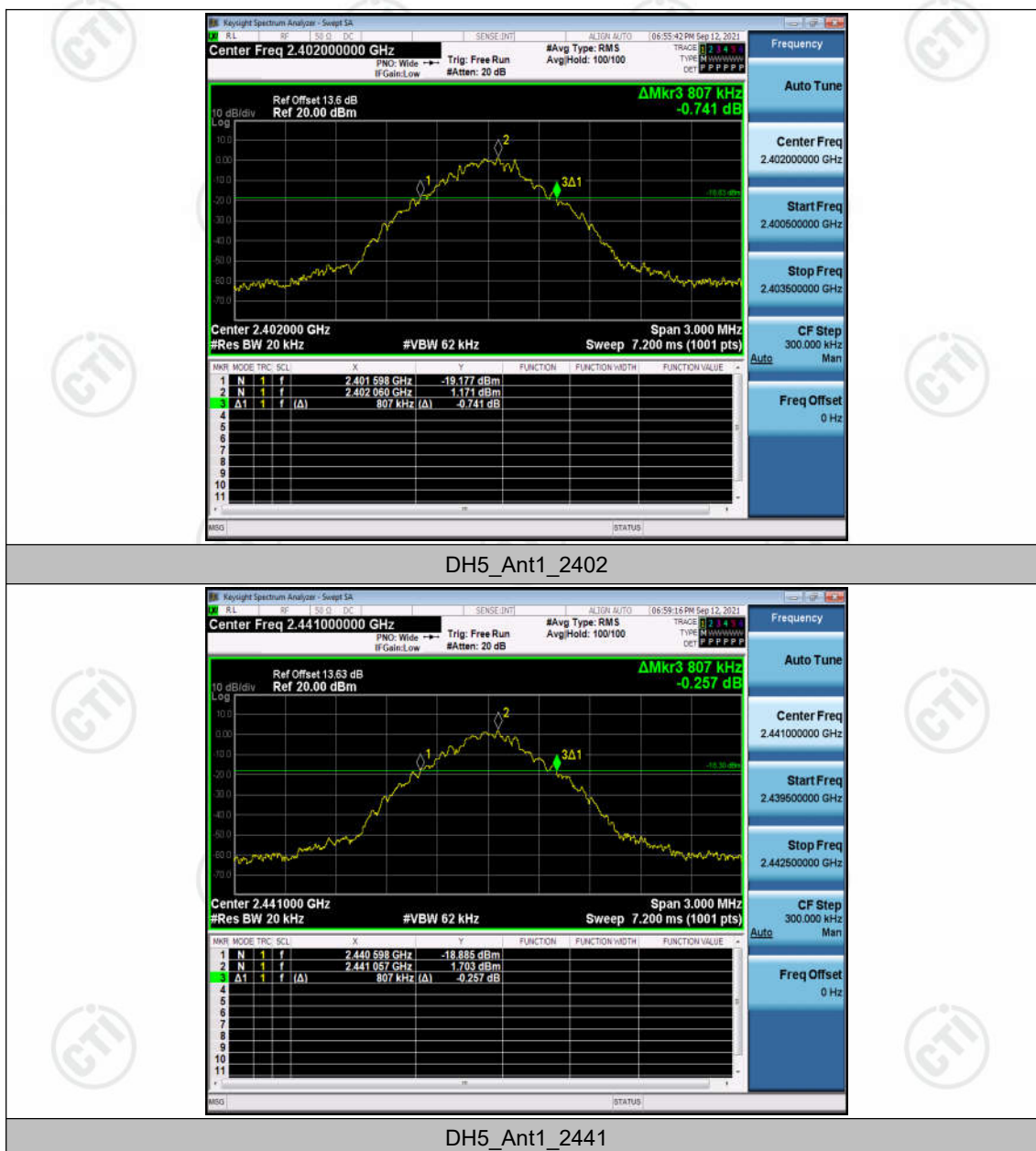
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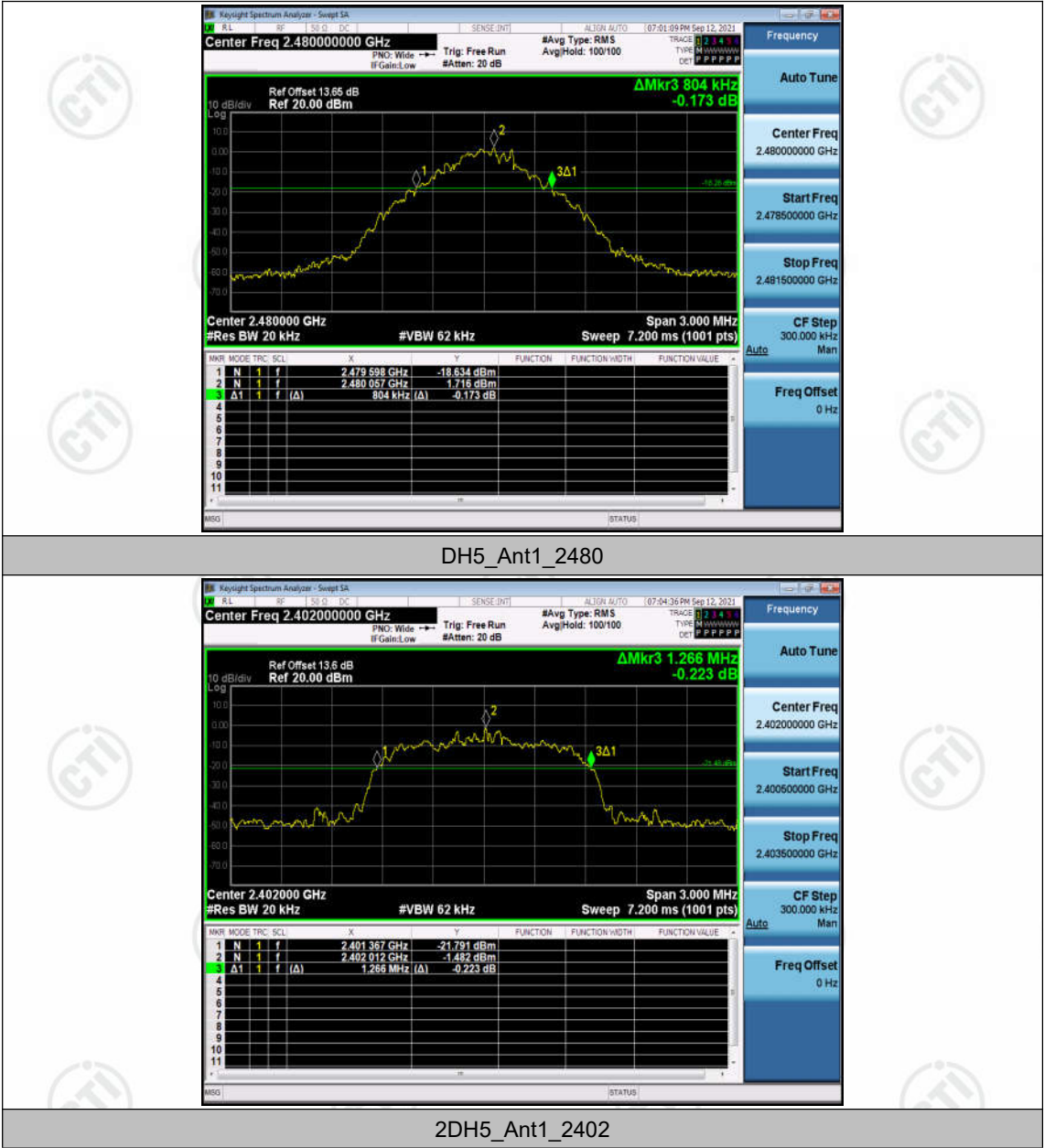
## Appendix A: 20dB Emission Bandwidth

### Test Result

| Test Mode | Antenna | Channel | 20db EBW[MHz] | FL[MHz]  | FH[MHz]  | Limit[MHz] | Verdict |
|-----------|---------|---------|---------------|----------|----------|------------|---------|
| DH5       | Ant1    | 2402    | 0.807         | 2401.598 | 2402.405 | ---        | PASS    |
|           |         | 2441    | 0.807         | 2440.598 | 2441.405 | ---        | PASS    |
|           |         | 2480    | 0.804         | 2479.598 | 2480.402 | ---        | PASS    |
| 2DH5      | Ant1    | 2402    | 1.266         | 2401.367 | 2402.633 | ---        | PASS    |
|           |         | 2441    | 1.263         | 2440.370 | 2441.633 | ---        | PASS    |
|           |         | 2480    | 1.269         | 2479.367 | 2480.636 | ---        | PASS    |
| 3DH5      | Ant1    | 2402    | 1.284         | 2401.349 | 2402.633 | ---        | PASS    |
|           |         | 2441    | 1.260         | 2440.358 | 2441.618 | ---        | PASS    |
|           |         | 2480    | 1.251         | 2479.364 | 2480.615 | ---        | PASS    |

## Test Graphs



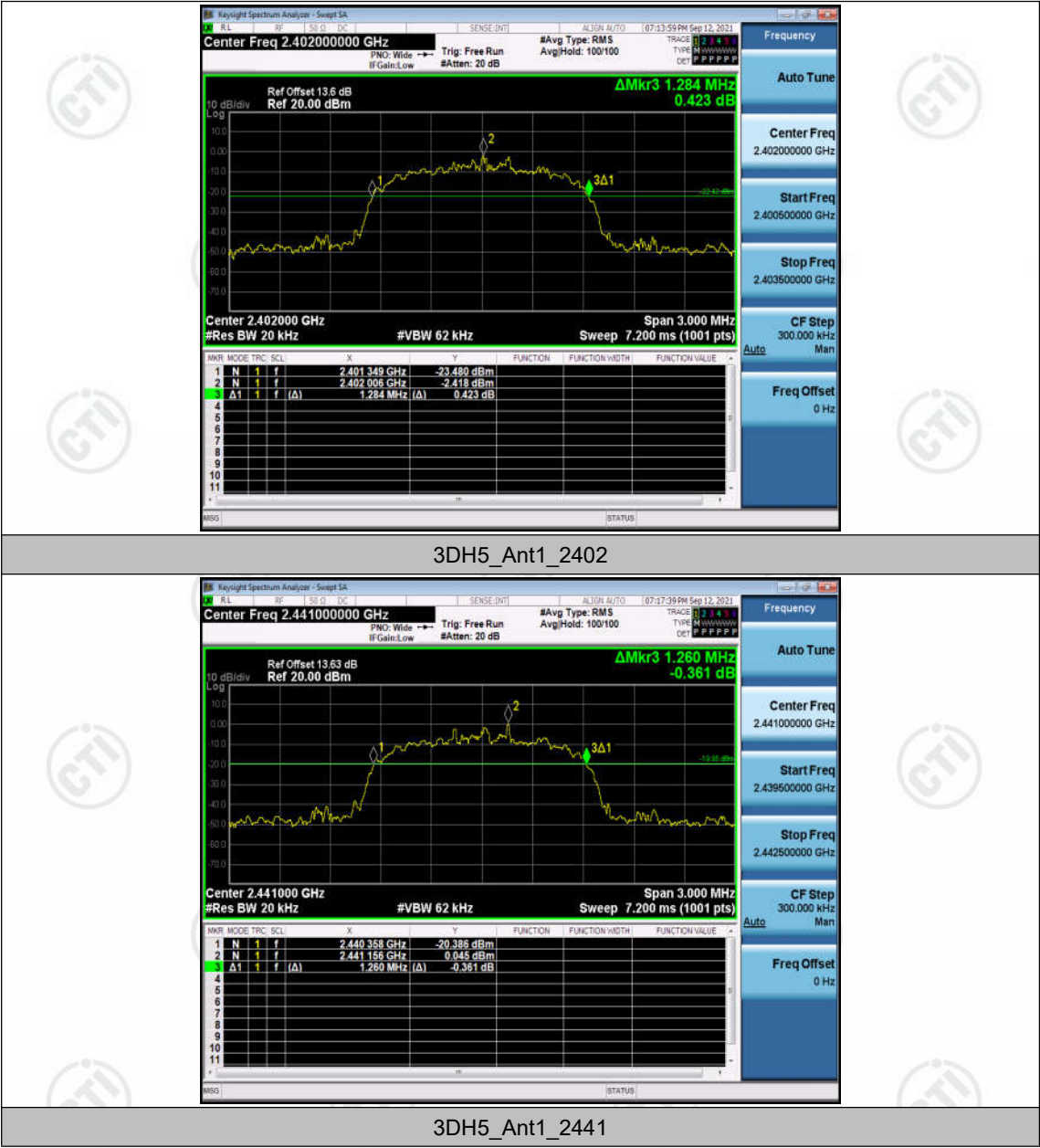




2DHS\_Ant1\_2441



2DHS\_Ant1\_2480



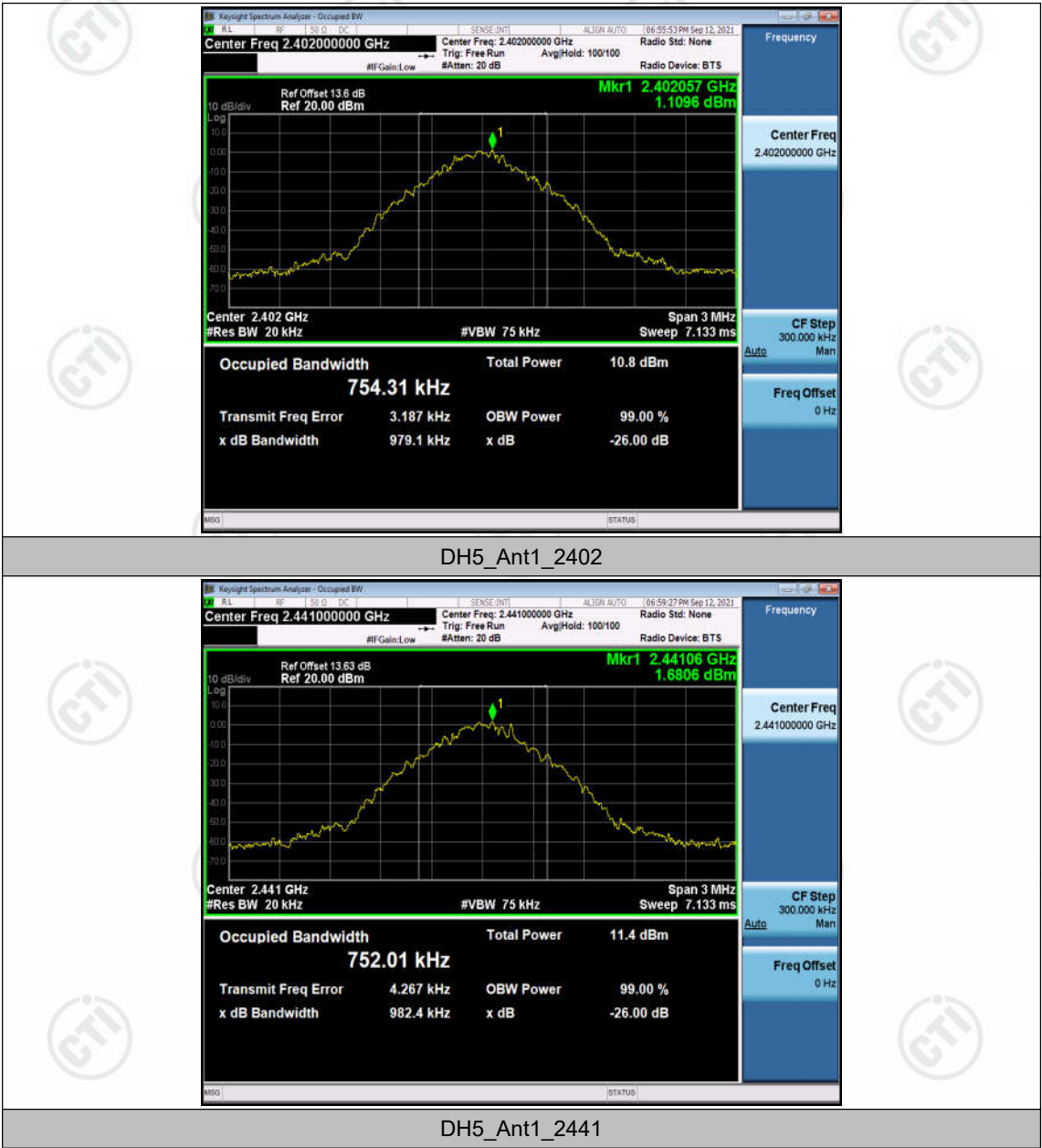


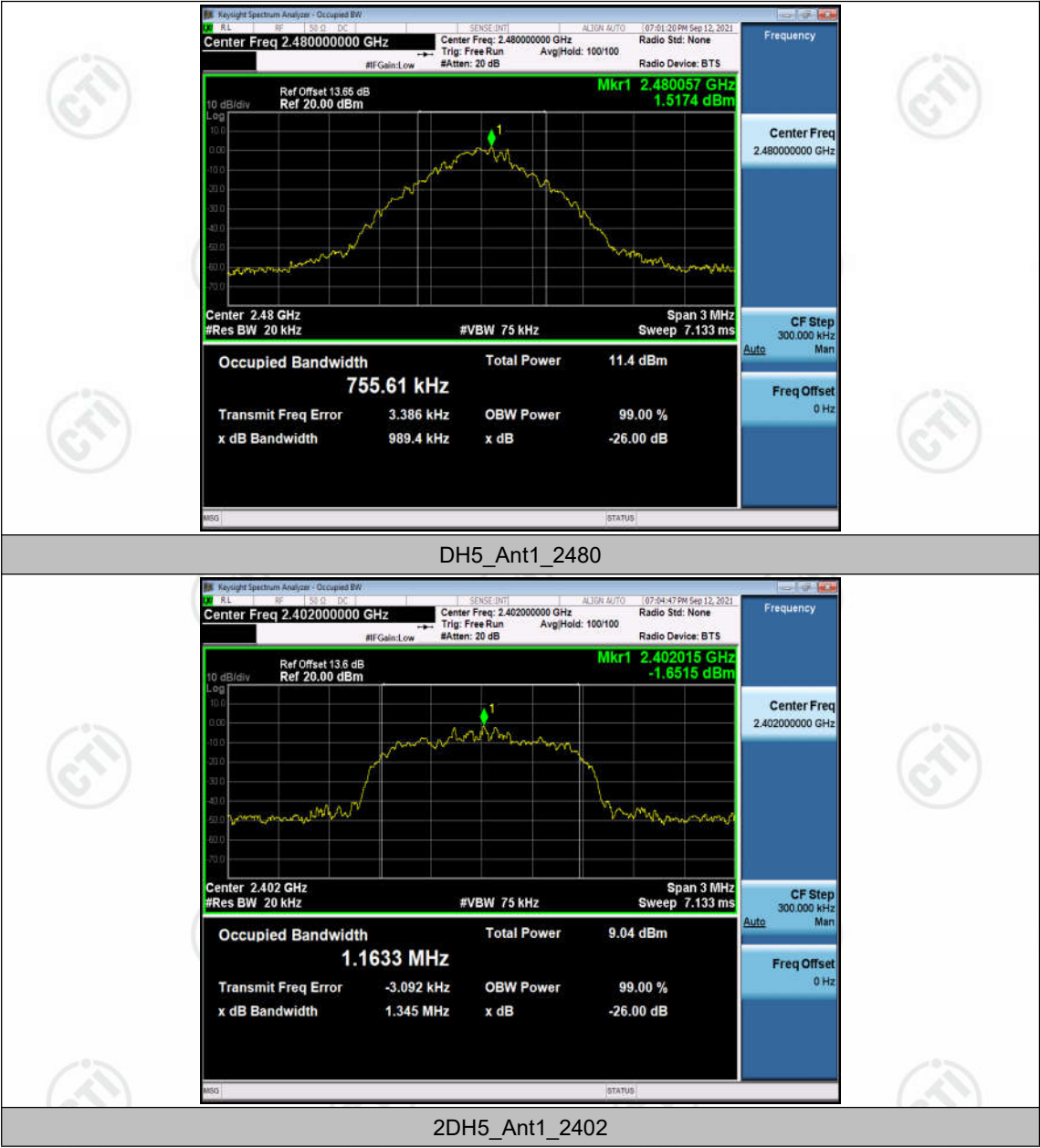
## Appendix B: Occupied Channel Bandwidth

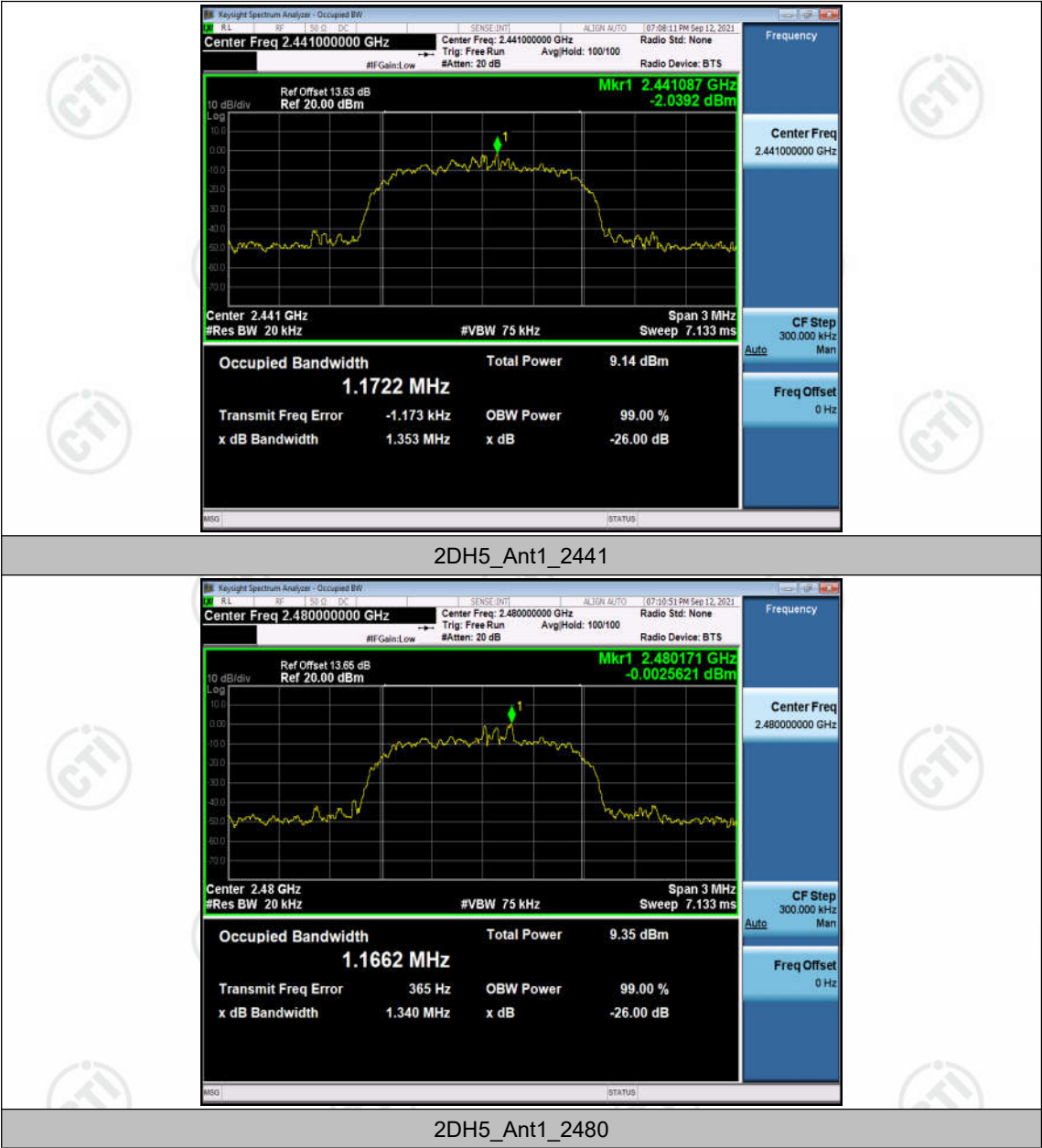
### Test Result

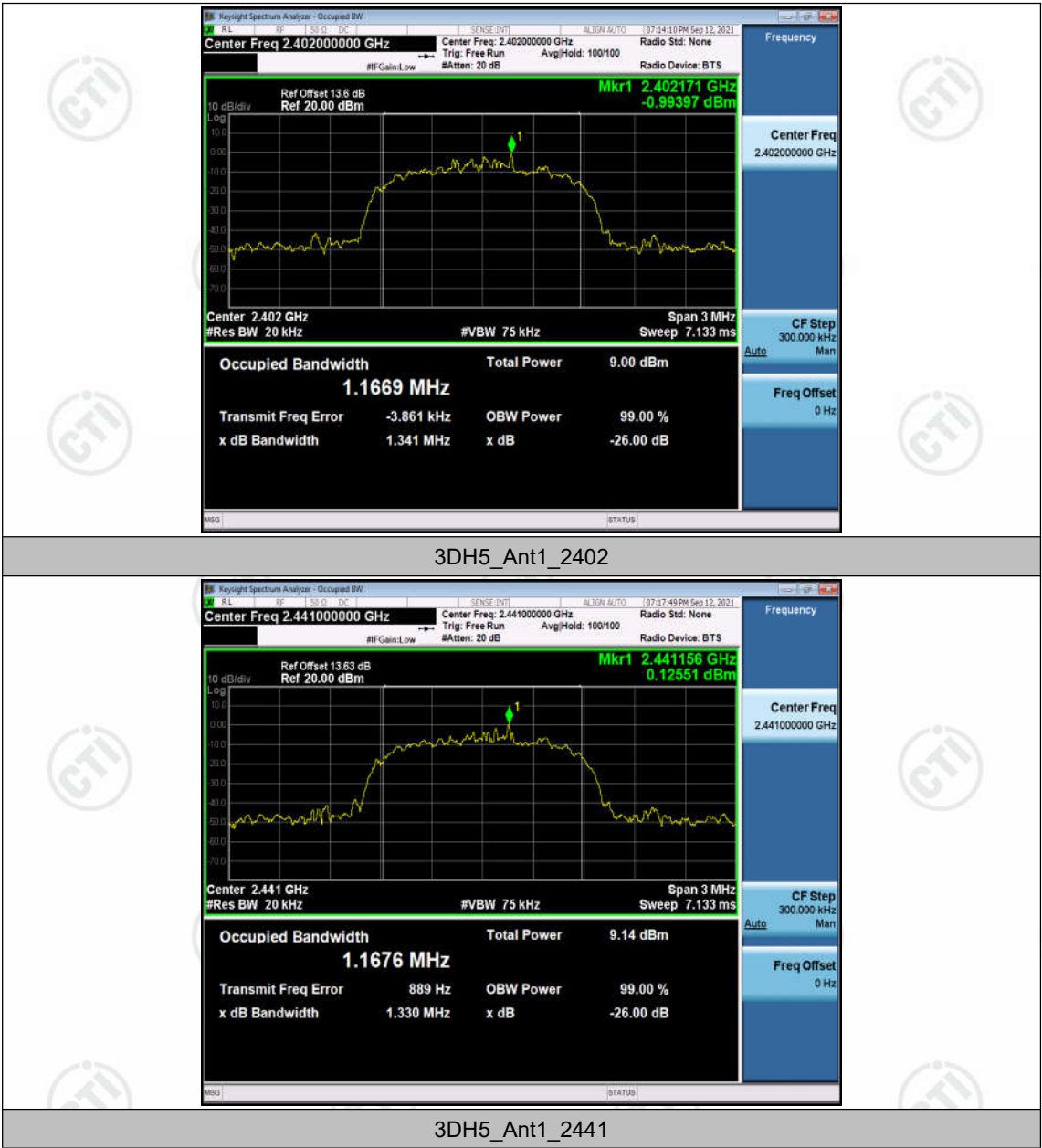
| Test Mode | Antenna | Channel | OCB [MHz] | FL[MHz]  | FH[MHz]  | Limit[MHz] | Verdict |
|-----------|---------|---------|-----------|----------|----------|------------|---------|
| DH5       | Ant1    | 2402    | 0.75431   | 2401.626 | 2402.380 | ---        | PASS    |
|           |         | 2441    | 0.75201   | 2440.628 | 2441.380 | ---        | PASS    |
|           |         | 2480    | 0.75561   | 2479.626 | 2480.381 | ---        | PASS    |
| 2DH5      | Ant1    | 2402    | 1.1633    | 2401.415 | 2402.579 | ---        | PASS    |
|           |         | 2441    | 1.1722    | 2440.413 | 2441.585 | ---        | PASS    |
|           |         | 2480    | 1.1662    | 2479.417 | 2480.583 | ---        | PASS    |
| 3DH5      | Ant1    | 2402    | 1.1669    | 2401.413 | 2402.580 | ---        | PASS    |
|           |         | 2441    | 1.1676    | 2440.417 | 2441.585 | ---        | PASS    |
|           |         | 2480    | 1.1786    | 2479.404 | 2480.583 | ---        | PASS    |

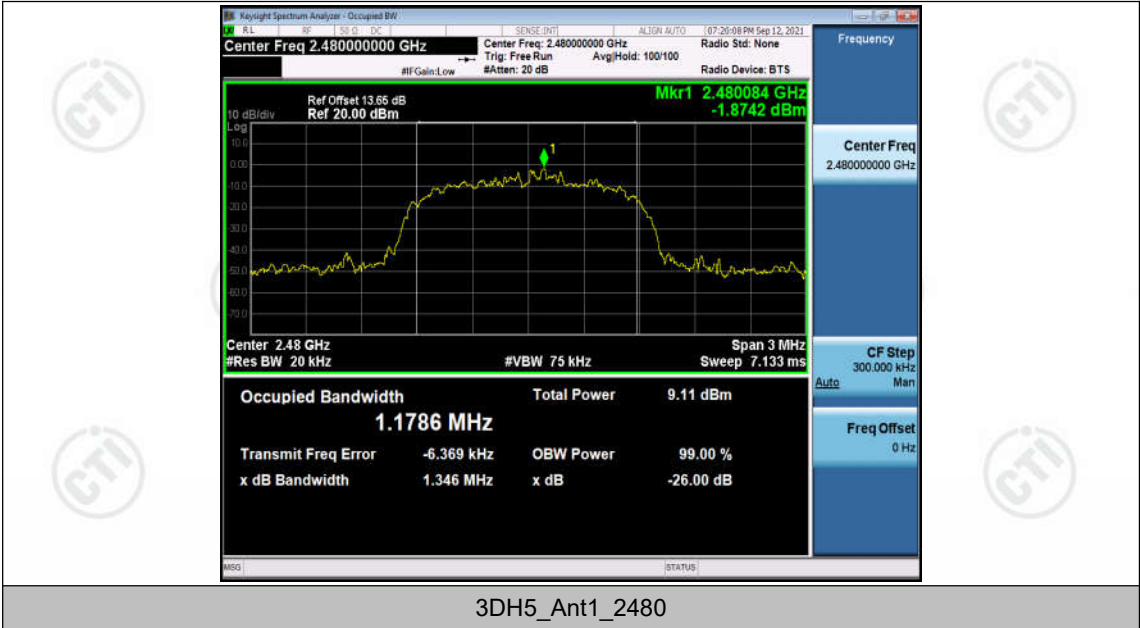
Test Graphs









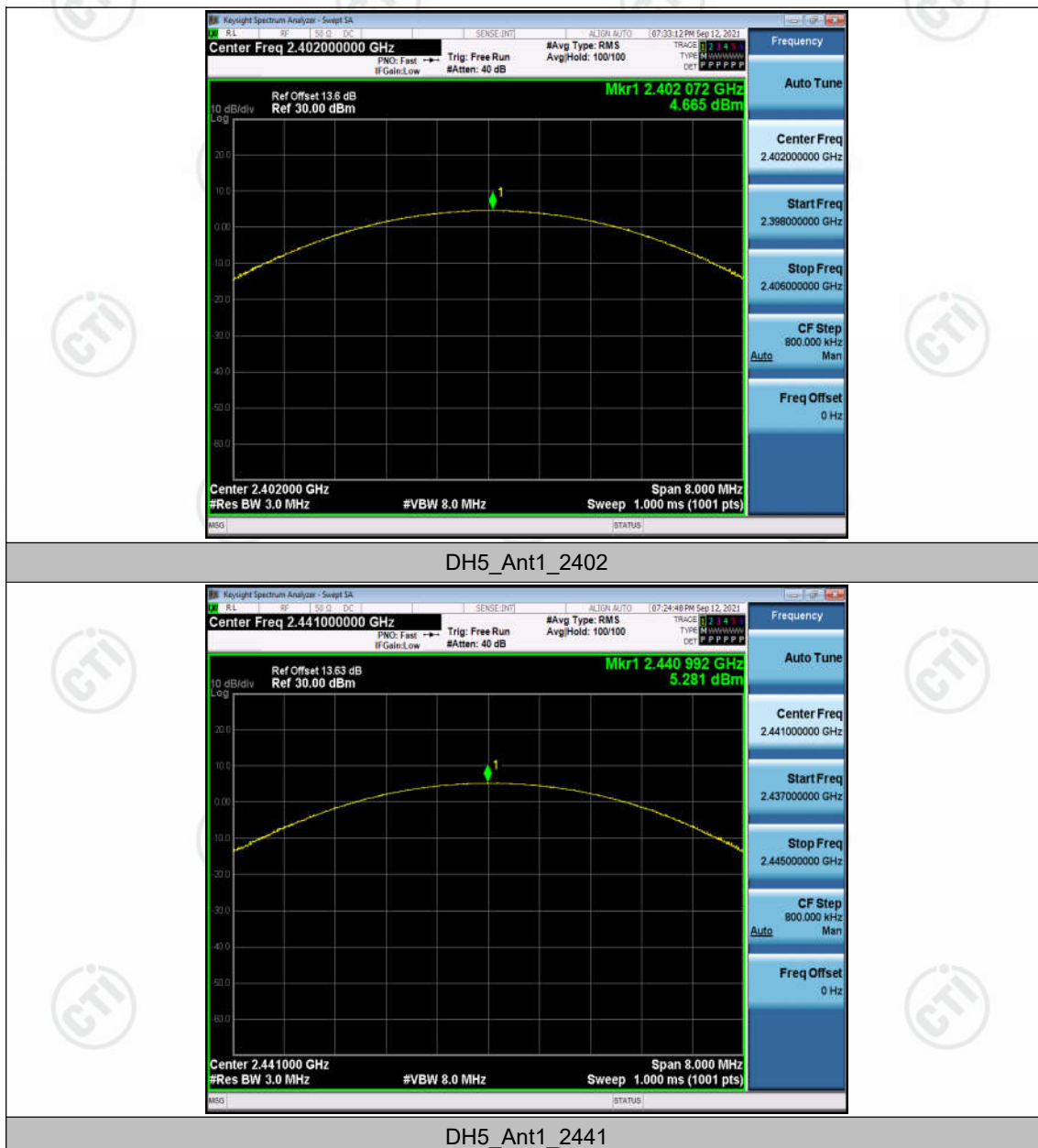


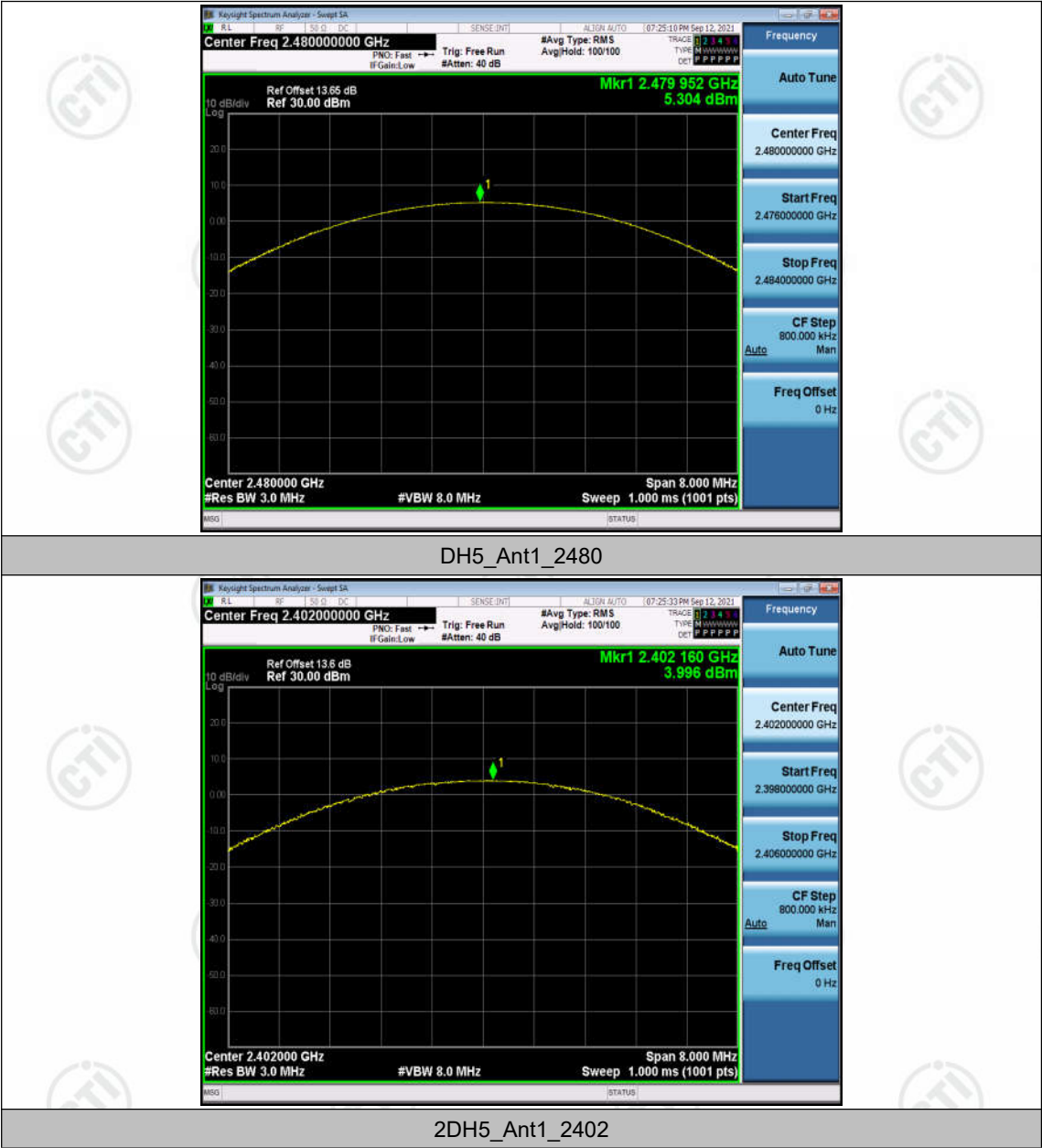
## Appendix C: Maximum conducted output power

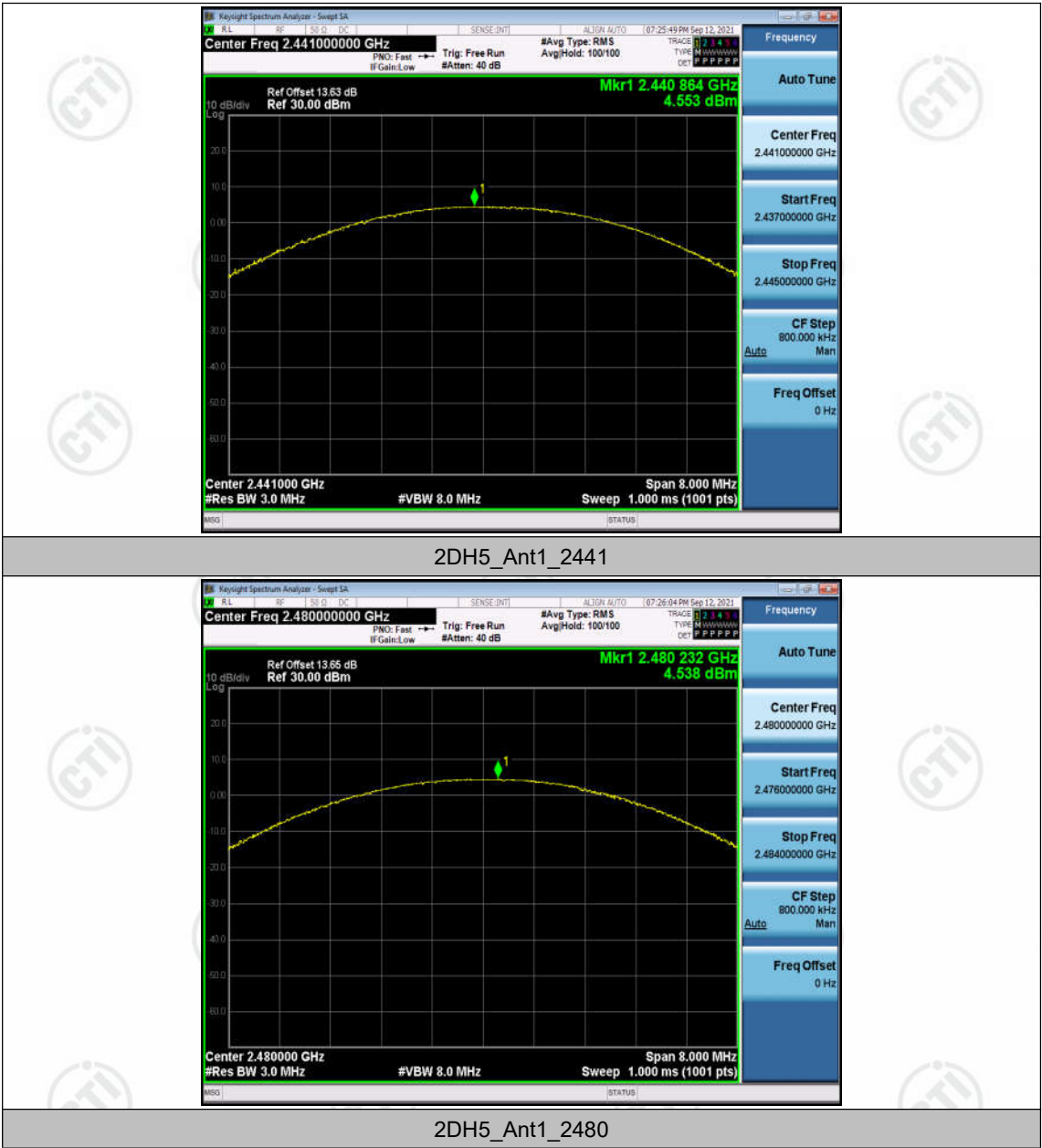
### Test Result

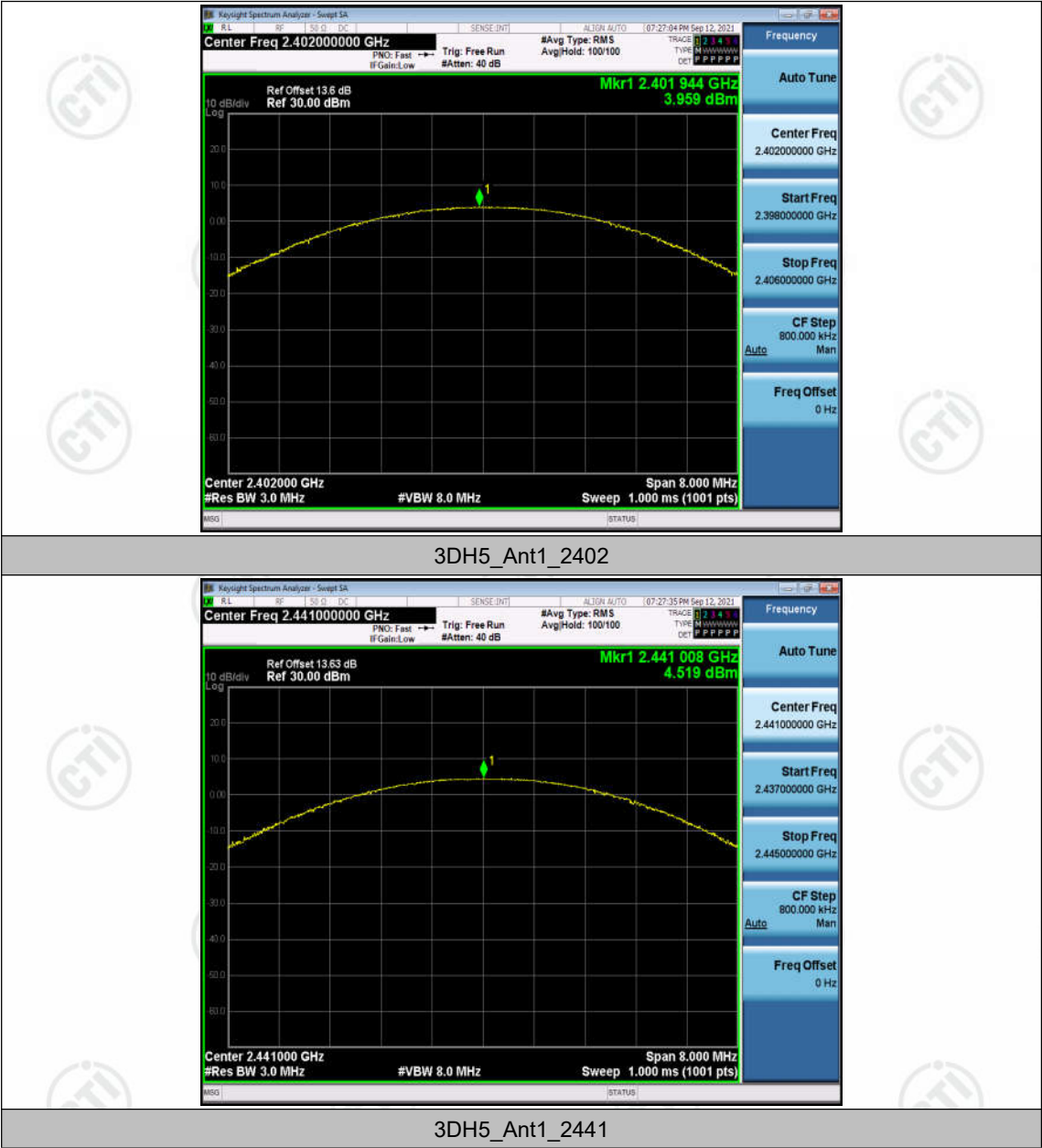
| Test Mode | Antenna | Channel | Result[dBm] | Limit[dBm] | Verdict |
|-----------|---------|---------|-------------|------------|---------|
| DH5       | Ant1    | 2402    | 4.67        | <=20.97    | PASS    |
|           |         | 2441    | 5.28        | <=20.97    | PASS    |
|           |         | 2480    | 5.3         | <=20.97    | PASS    |
| 2DH5      | Ant1    | 2402    | 4           | <=20.97    | PASS    |
|           |         | 2441    | 4.55        | <=20.97    | PASS    |
|           |         | 2480    | 4.54        | <=20.97    | PASS    |
| 3DH5      | Ant1    | 2402    | 3.96        | <=20.97    | PASS    |
|           |         | 2441    | 4.52        | <=20.97    | PASS    |
|           |         | 2480    | 4.53        | <=20.97    | PASS    |

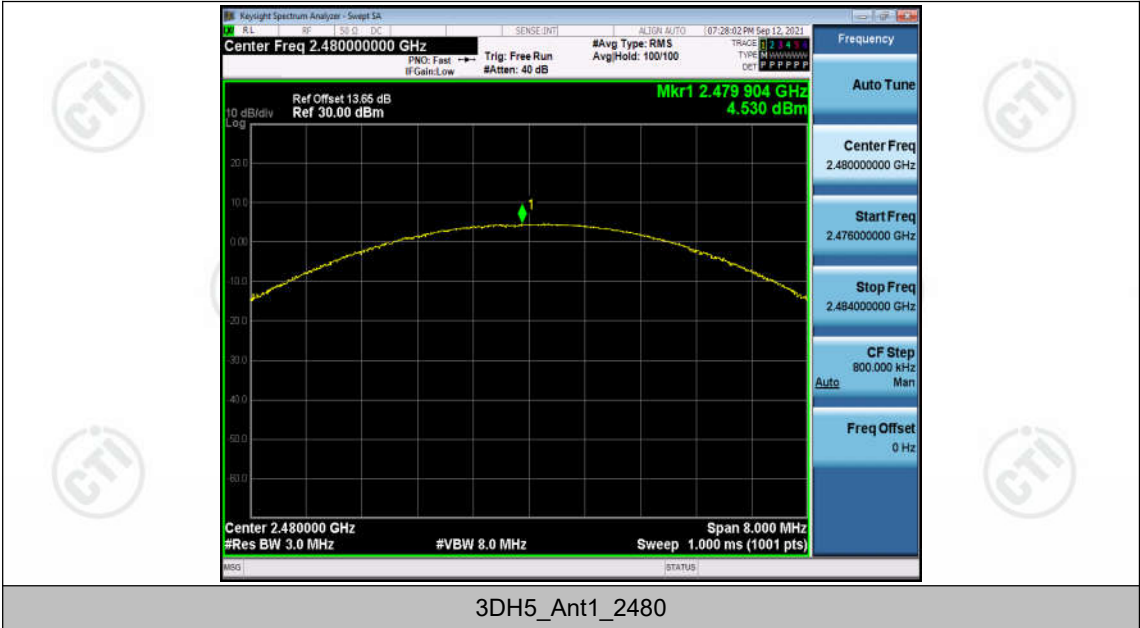
## Test Graphs







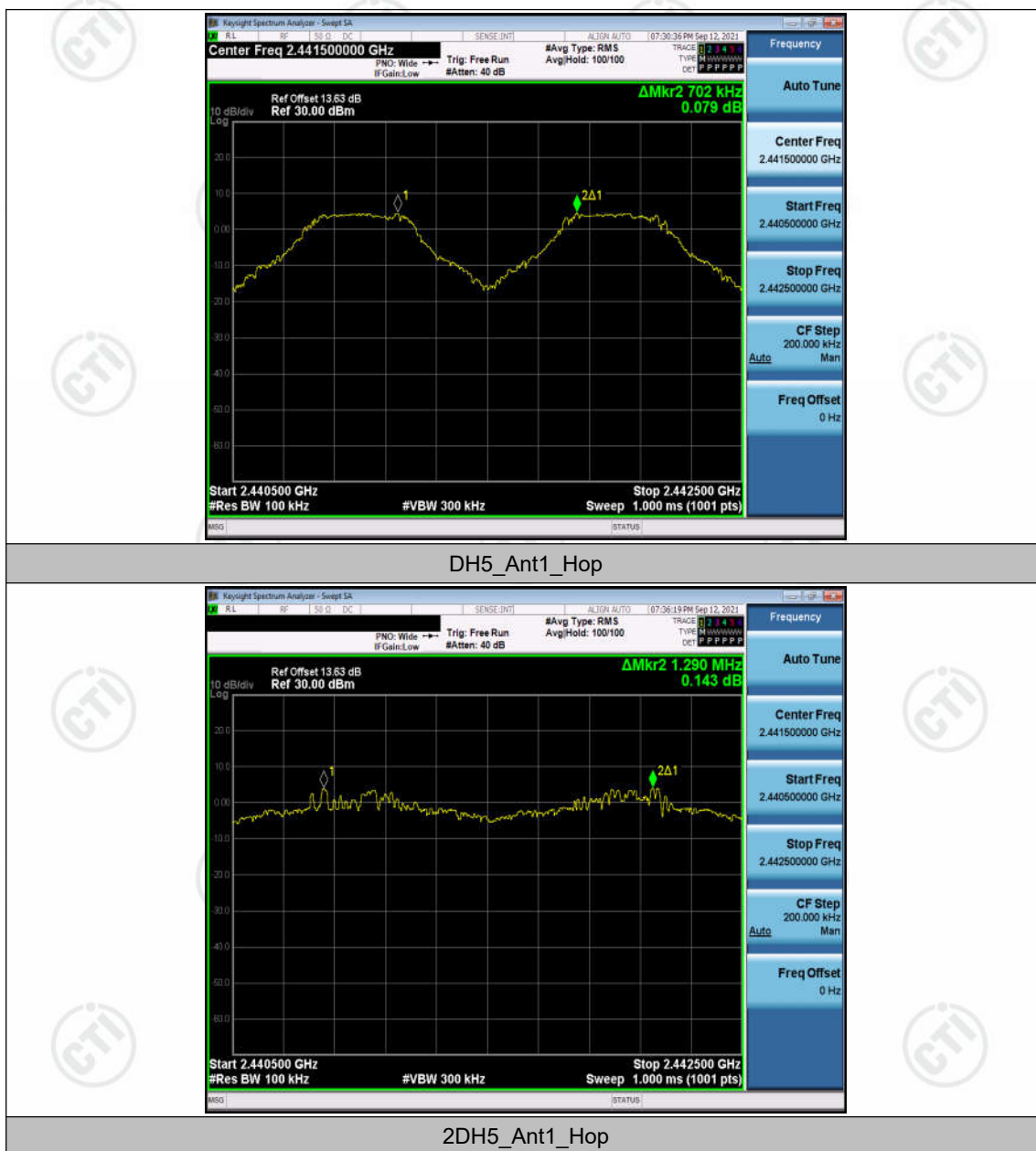


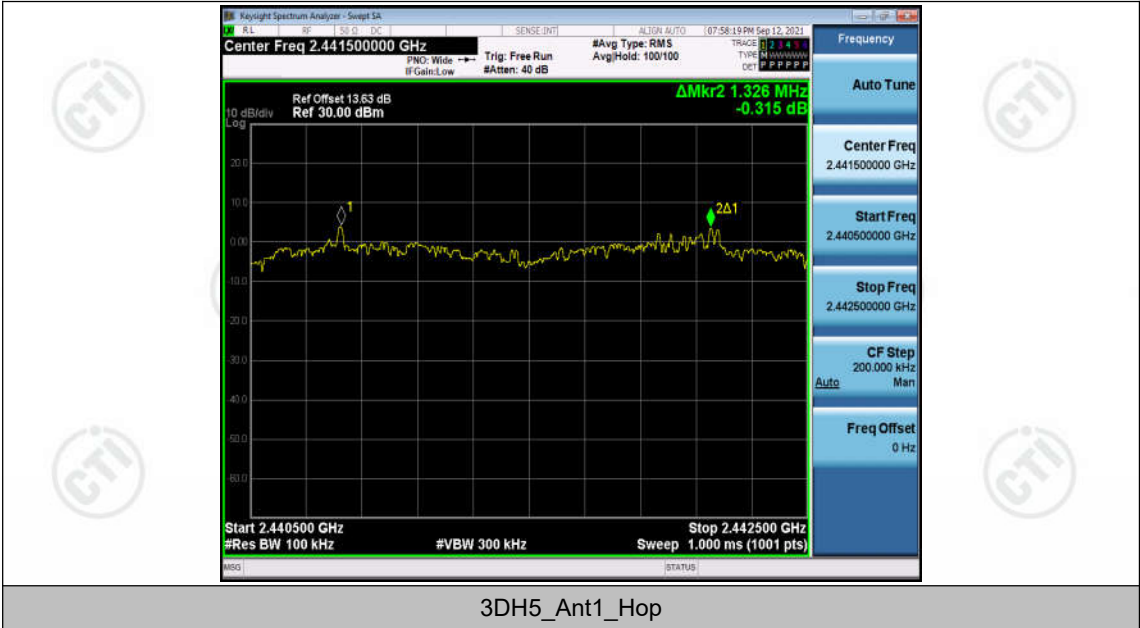


**Appendix D: Carrier frequency separation****Test Result**

| Test Mode | Antenna | Channel | Result[MHz] | Limit[MHz]   | Verdict |
|-----------|---------|---------|-------------|--------------|---------|
| DH5       | Ant1    | Hop     | 0.702       | $\geq 0.538$ | PASS    |
| 2DH5      | Ant1    | Hop     | 1.29        | $\geq 0.846$ | PASS    |
| 3DH5      | Ant1    | Hop     | 1.326       | $\geq 0.856$ | PASS    |

## Test Graphs



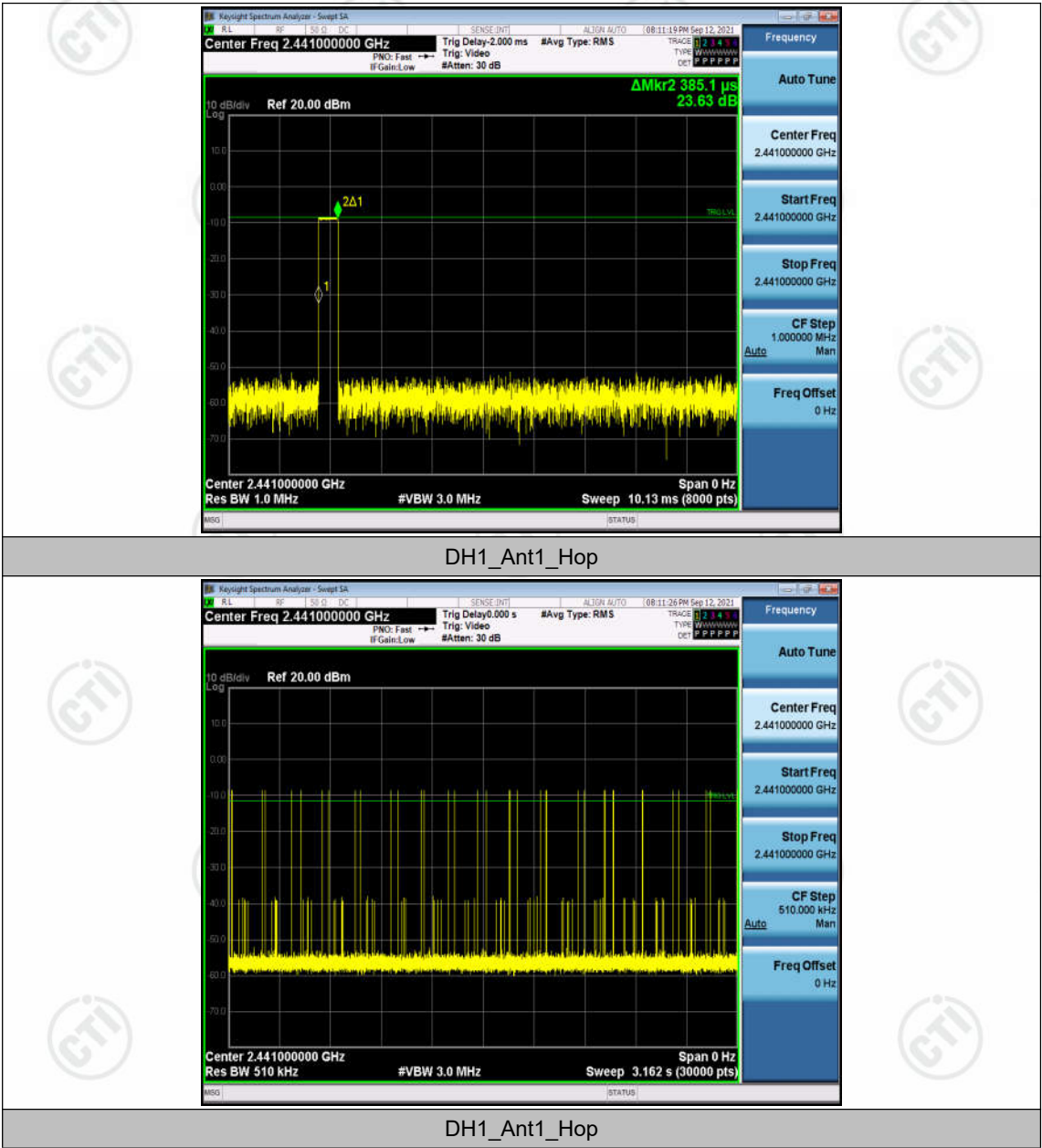


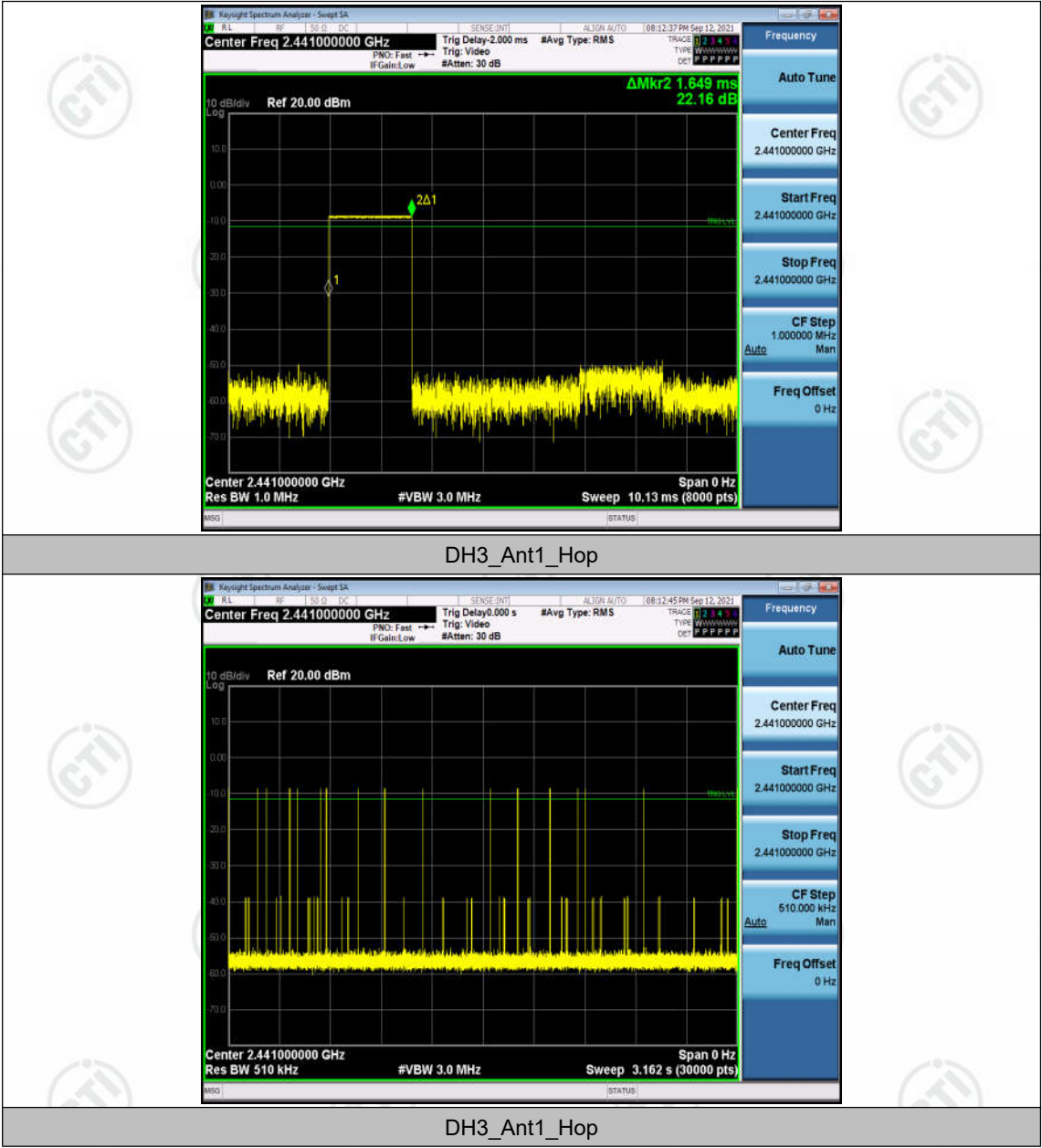
## Appendix E: Time of occupancy

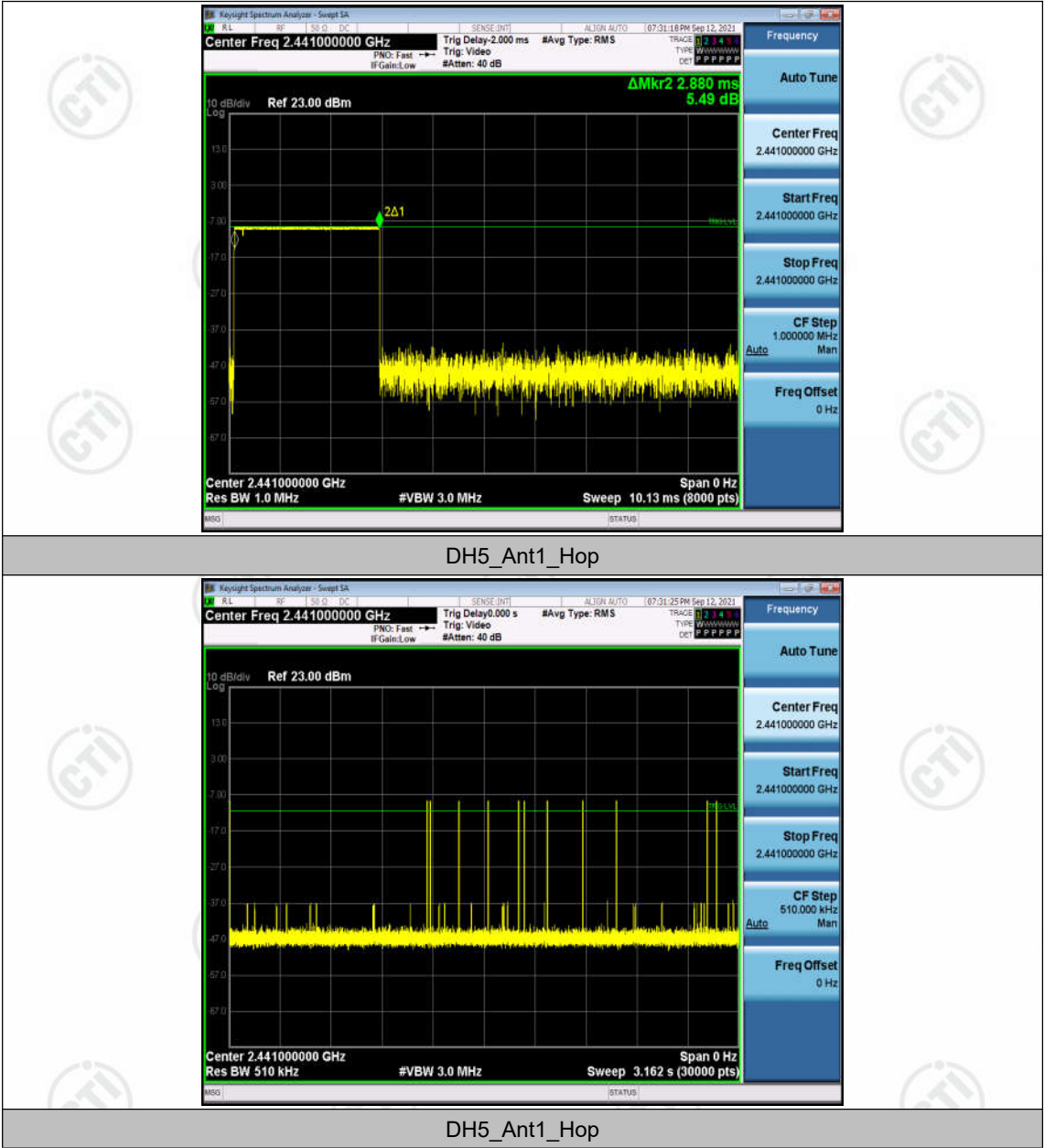
### Test Result

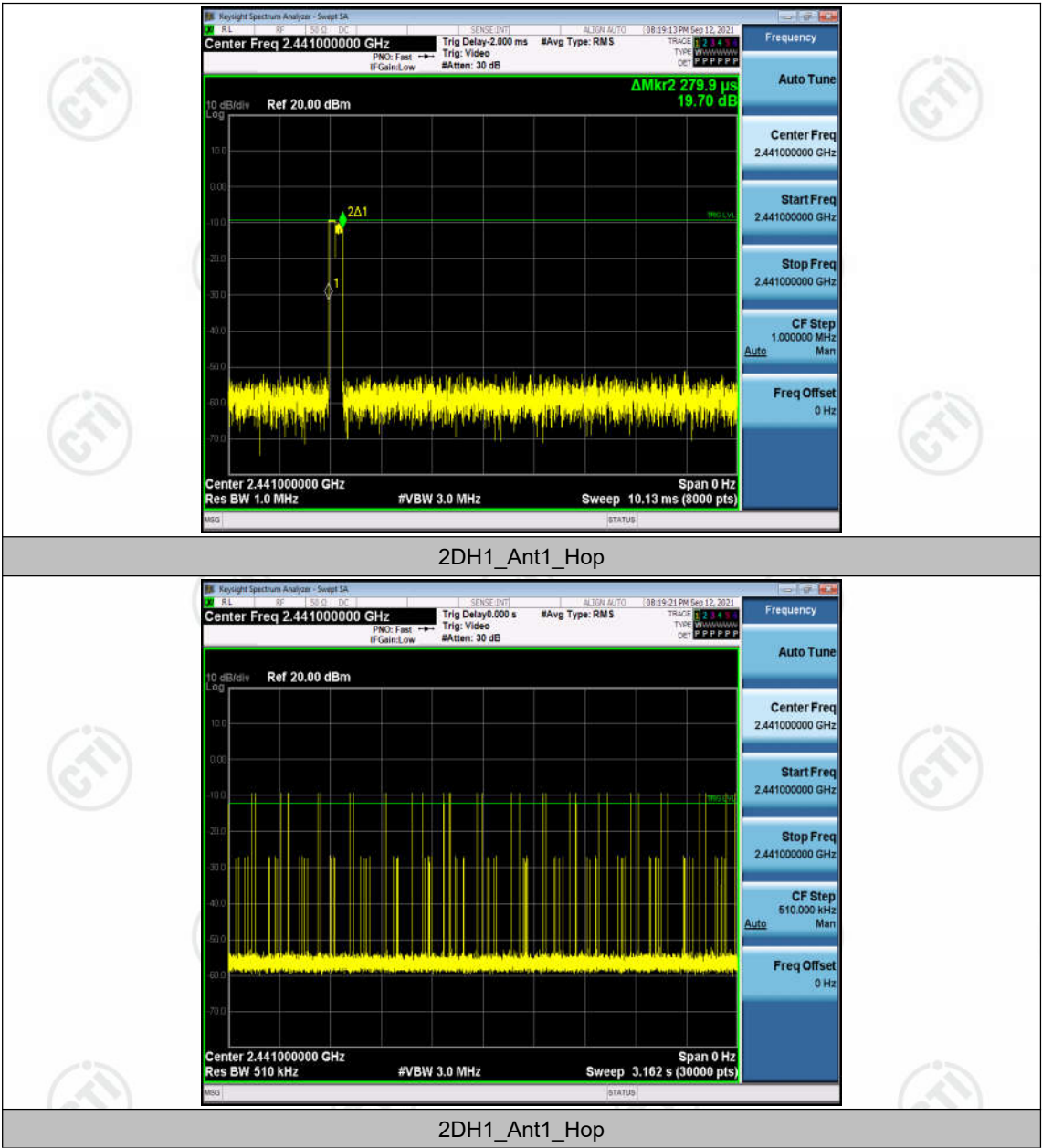
| Test Mode | Antenna | Channel | Burst Width<br>[ms] | Total Hops<br>[Num] | Result[s] | Limit[s]   | Verdict |
|-----------|---------|---------|---------------------|---------------------|-----------|------------|---------|
| DH1       | Ant1    | Hop     | 0.39                | 330                 | 0.127     | $\leq 0.4$ | PASS    |
| DH3       | Ant1    | Hop     | 1.65                | 170                 | 0.28      | $\leq 0.4$ | PASS    |
| DH5       | Ant1    | Hop     | 2.88                | 120                 | 0.346     | $\leq 0.4$ | PASS    |
| 2DH1      | Ant1    | Hop     | 0.28                | 330                 | 0.092     | $\leq 0.4$ | PASS    |
| 2DH3      | Ant1    | Hop     | 0.91                | 160                 | 0.145     | $\leq 0.4$ | PASS    |
| 2DH5      | Ant1    | Hop     | 2.88                | 100                 | 0.288     | $\leq 0.4$ | PASS    |
| 3DH1      | Ant1    | Hop     | 0.24                | 320                 | 0.076     | $\leq 0.4$ | PASS    |
| 3DH3      | Ant1    | Hop     | 0.66                | 170                 | 0.112     | $\leq 0.4$ | PASS    |
| 3DH5      | Ant1    | Hop     | 2.89                | 90                  | 0.26      | $\leq 0.4$ | PASS    |

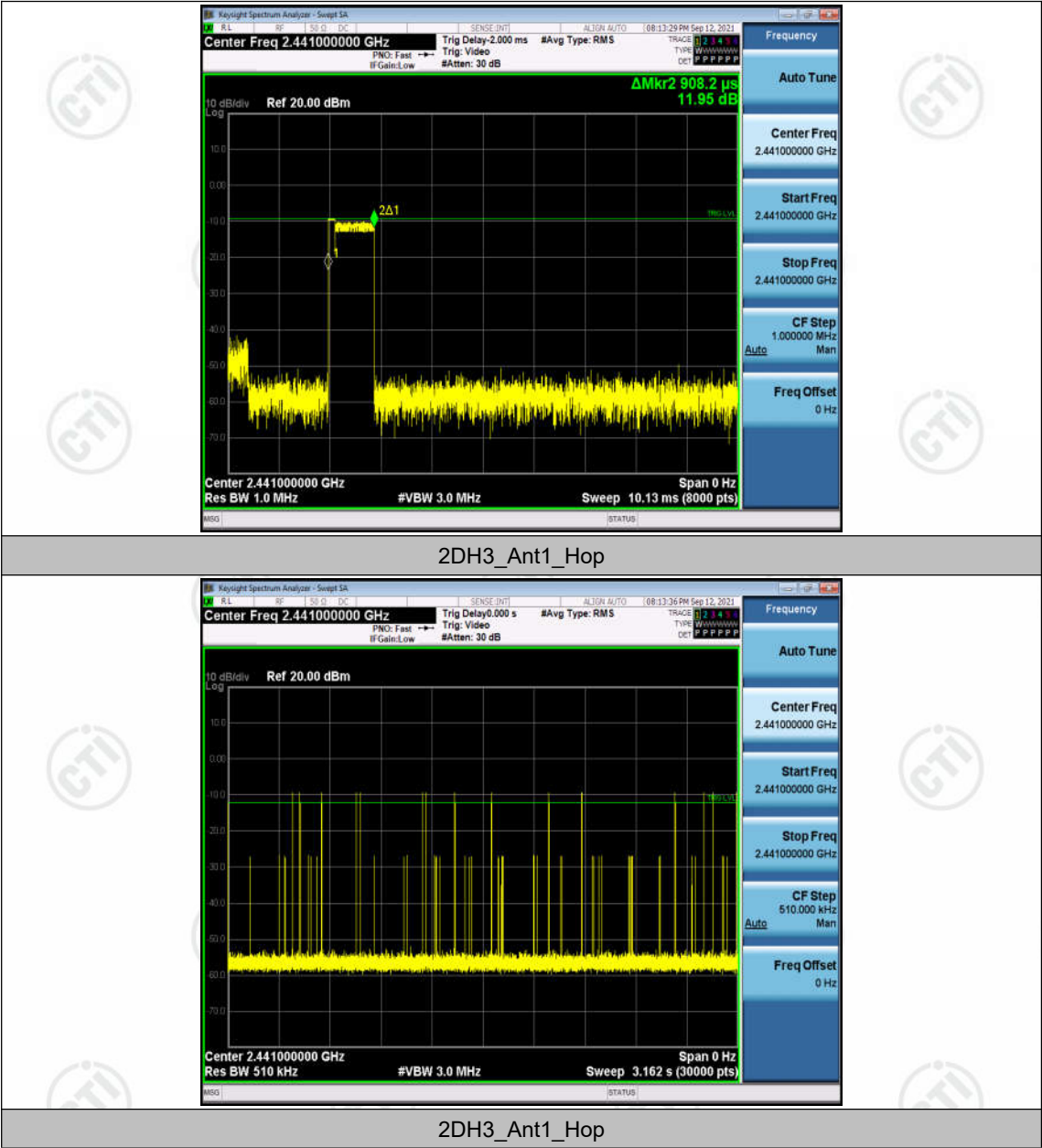
Test Graphs

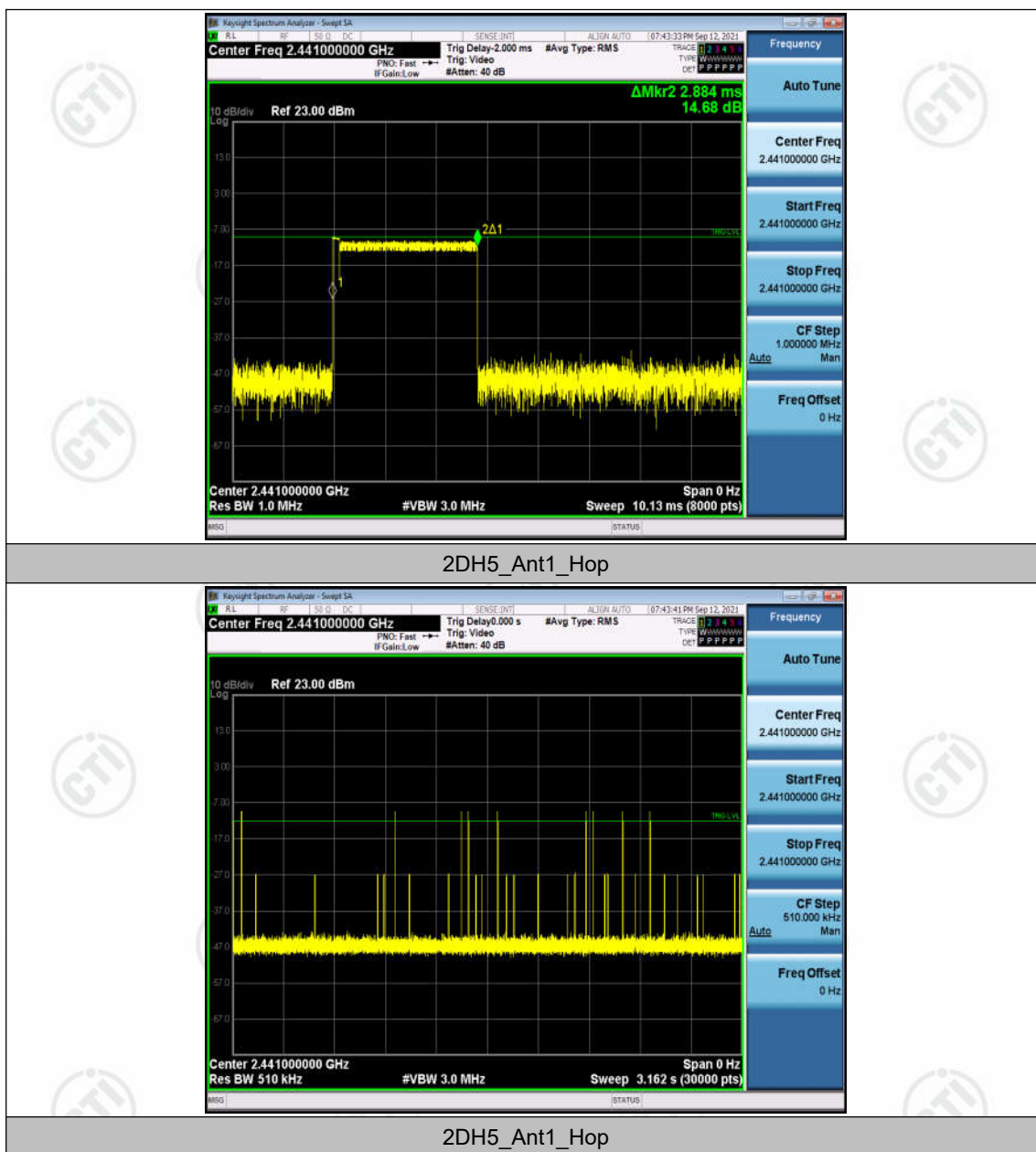


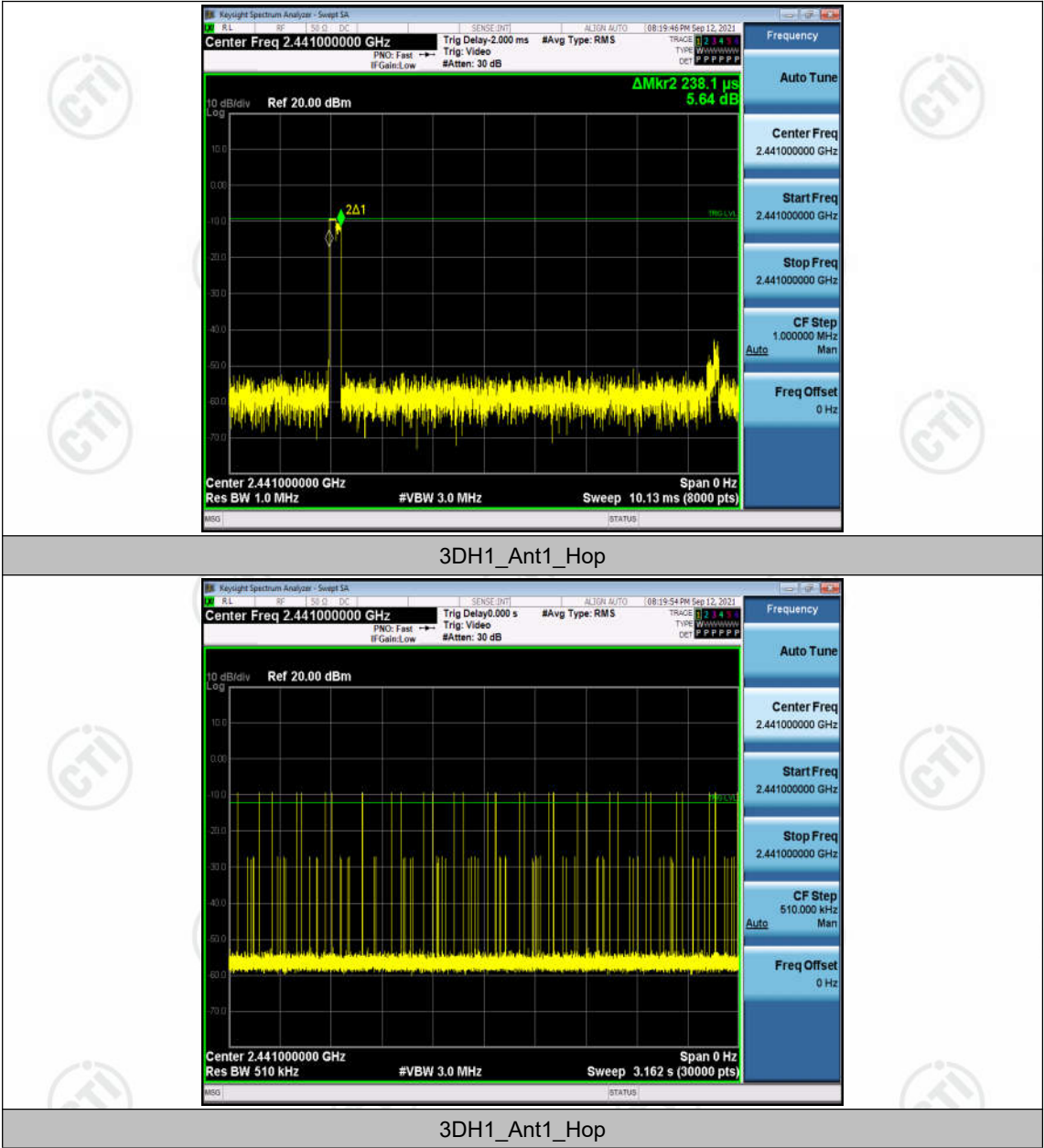


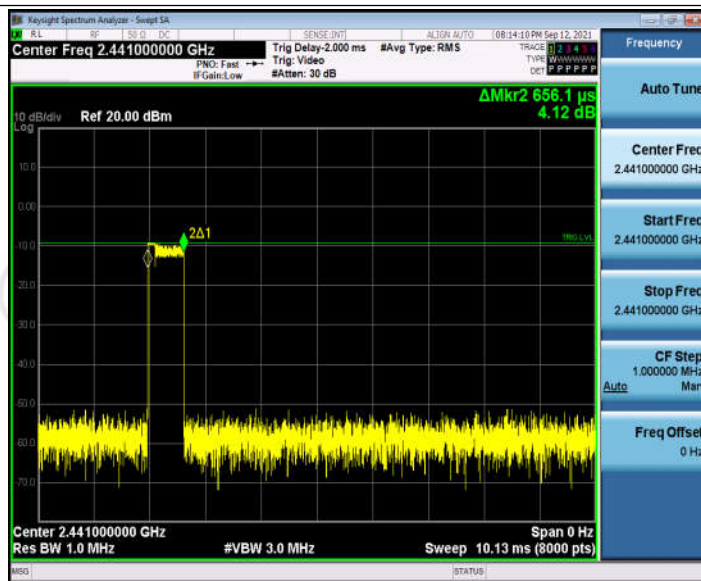




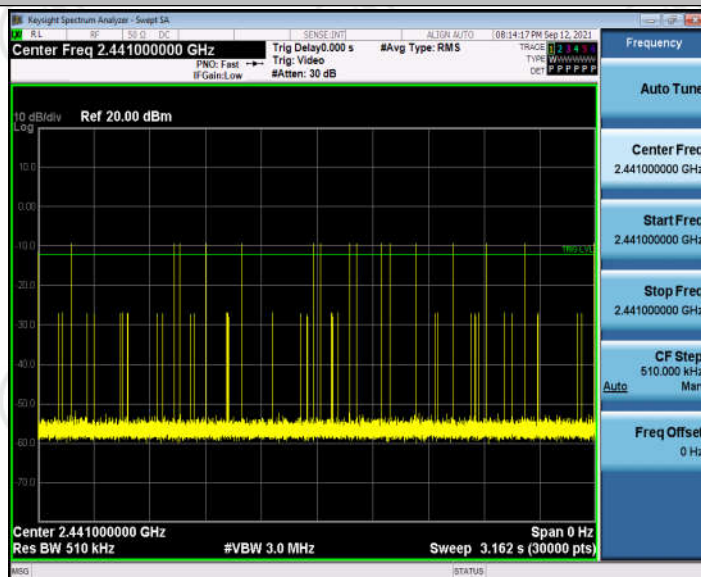




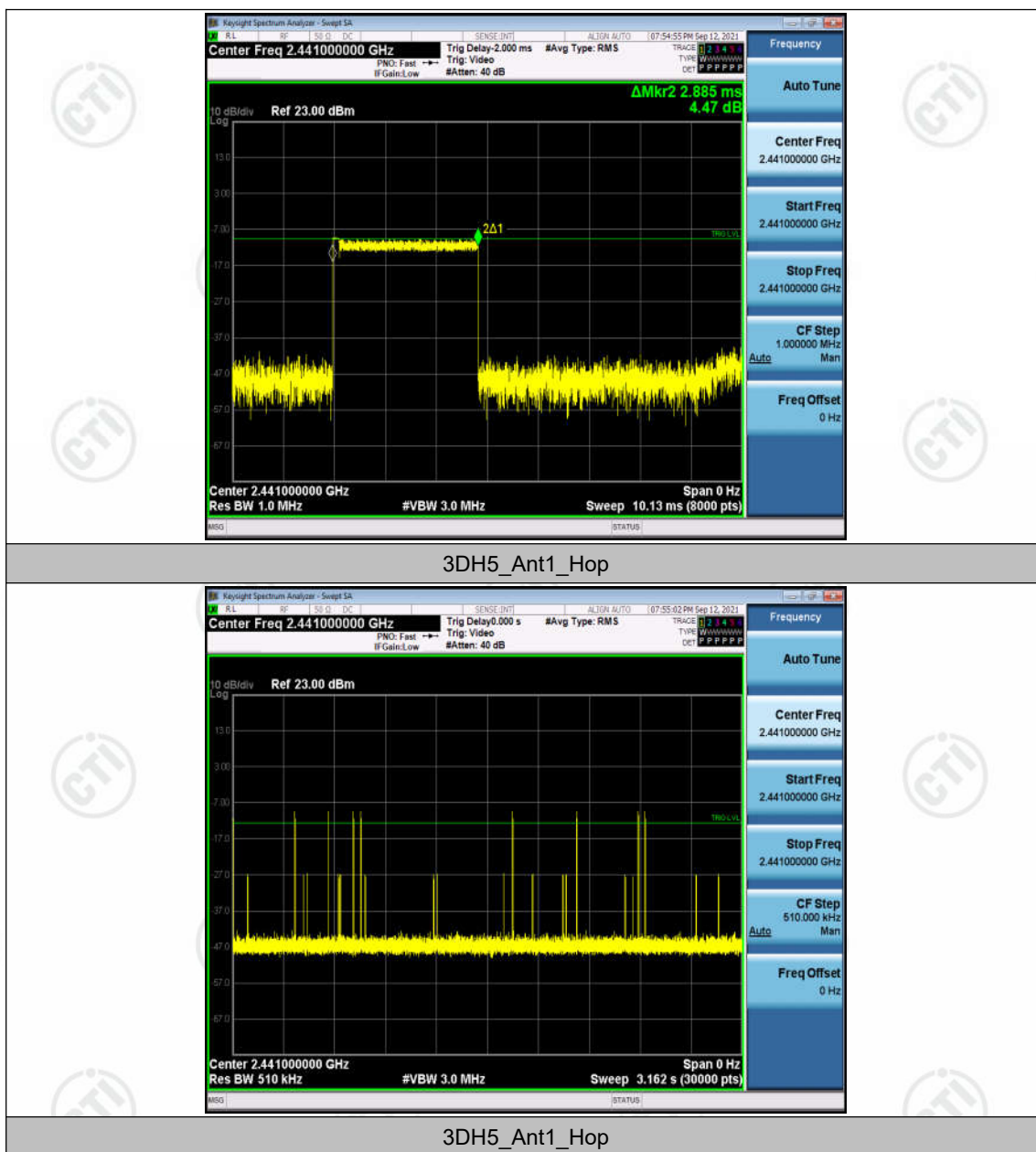




3DH3\_Ant1\_Hop



3DH3\_Ant1\_Hop

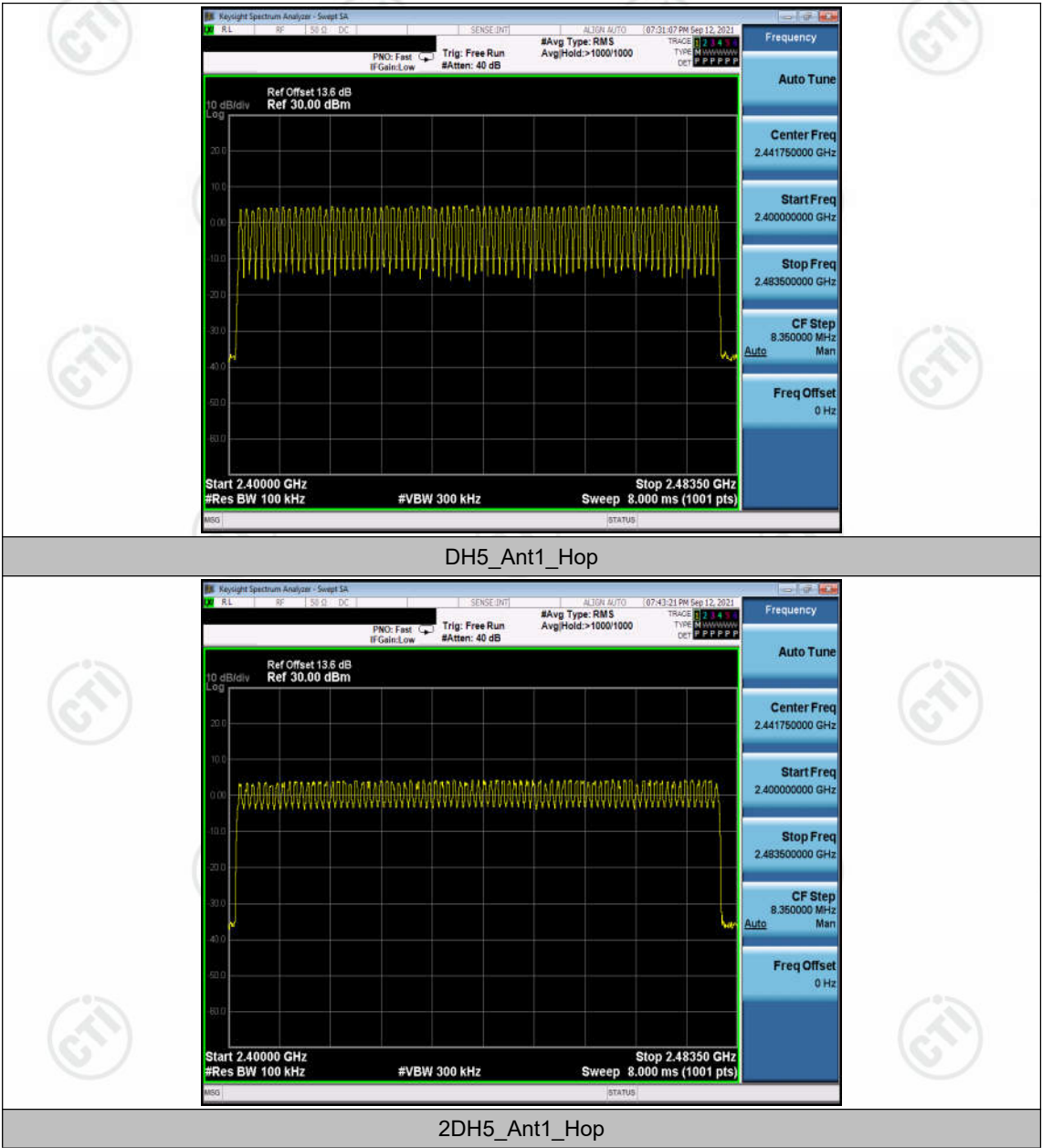


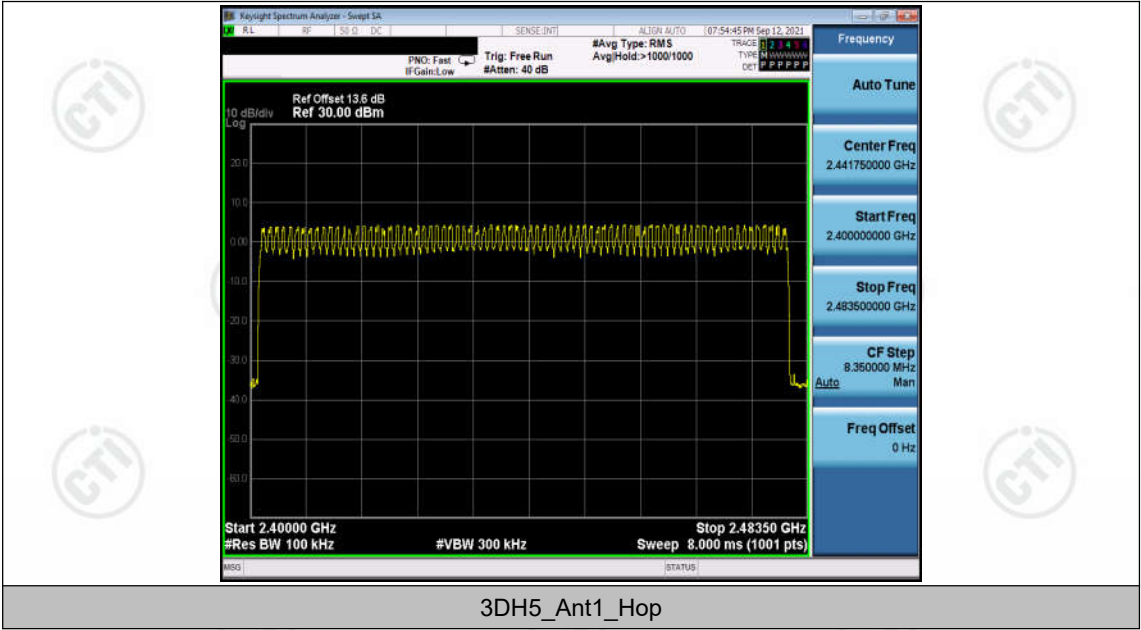
Appendix F: Number of hopping channels

Test Result

| Test Mode | Antenna | Channel | Result[Num] | Limit[Num] | Verdict |
|-----------|---------|---------|-------------|------------|---------|
| DH5       | Ant1    | Hop     | 79          | >=15       | PASS    |
| 2DH5      | Ant1    | Hop     | 79          | >=15       | PASS    |
| 3DH5      | Ant1    | Hop     | 79          | >=15       | PASS    |

Test Graphs



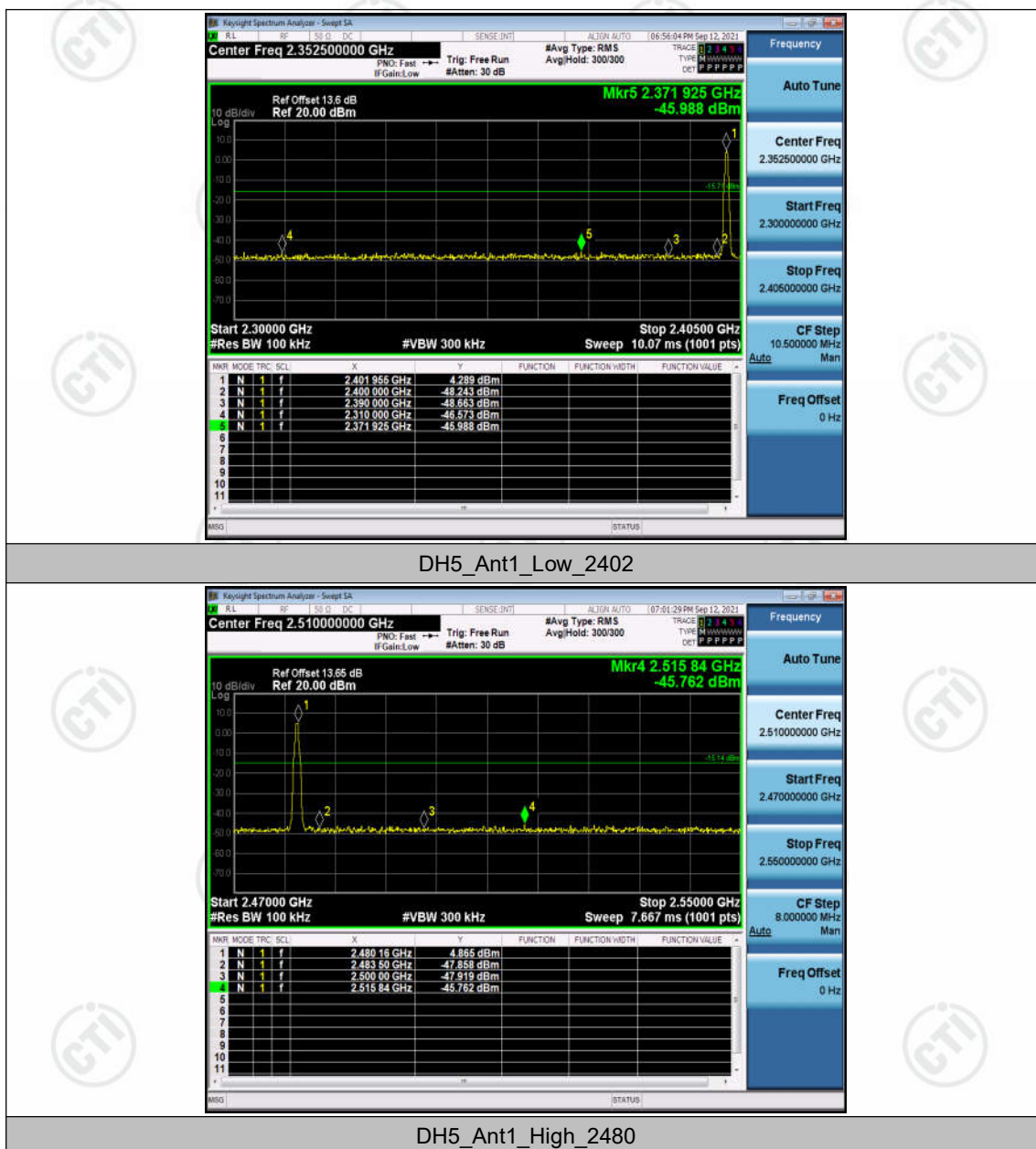


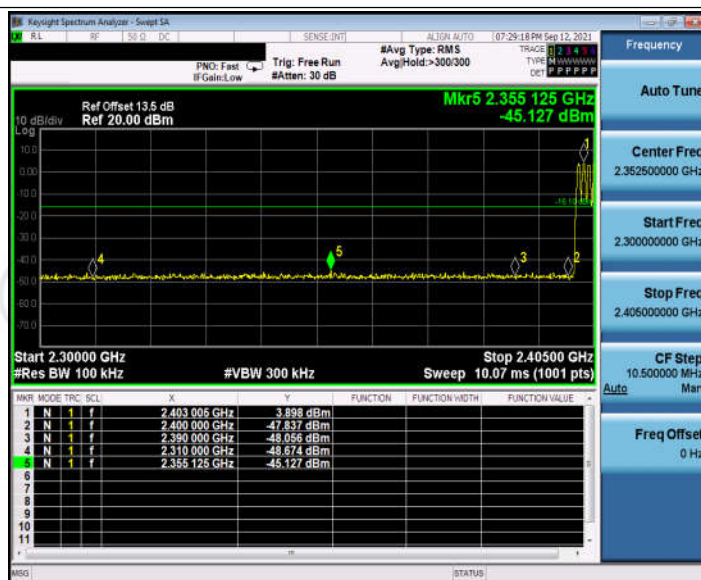
## Appendix G: Band edge measurements

### Test Result

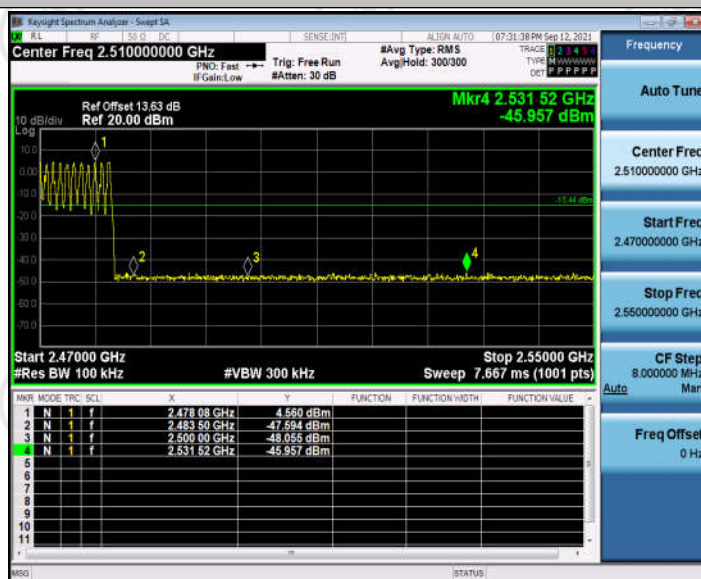
| Test Mode | Antenna | Ch Name | Channel  | Ref Level [dBm] | Result [dBm] | Limit [dBm]   | Verdict |
|-----------|---------|---------|----------|-----------------|--------------|---------------|---------|
| DH5       | Ant1    | Low     | 2402     | 4.29            | -45.99       | $\leq -15.71$ | PASS    |
|           |         | High    | 2480     | 4.87            | -45.76       | $\leq -15.14$ | PASS    |
|           |         | Low     | Hop_2402 | 3.90            | -45.13       | $\leq -16.1$  | PASS    |
|           |         | High    | Hop_2480 | 4.56            | -45.96       | $\leq -15.44$ | PASS    |
| 2DH5      | Ant1    | Low     | 2402     | 3.05            | -45.72       | $\leq -16.95$ | PASS    |
|           |         | High    | 2480     | 4.29            | -45.69       | $\leq -15.72$ | PASS    |
|           |         | Low     | Hop_2402 | 1.07            | -44.86       | $\leq -18.93$ | PASS    |
|           |         | High    | Hop_2480 | 4.33            | -45.43       | $\leq -15.68$ | PASS    |
| 3DH5      | Ant1    | Low     | 2402     | 3.27            | -45.89       | $\leq -16.74$ | PASS    |
|           |         | High    | 2480     | 4.00            | -45.59       | $\leq -16$    | PASS    |
|           |         | Low     | Hop_2402 | 3.60            | -45.15       | $\leq -16.4$  | PASS    |
|           |         | High    | Hop_2480 | 4.36            | -44.71       | $\leq -15.64$ | PASS    |

## Test Graphs

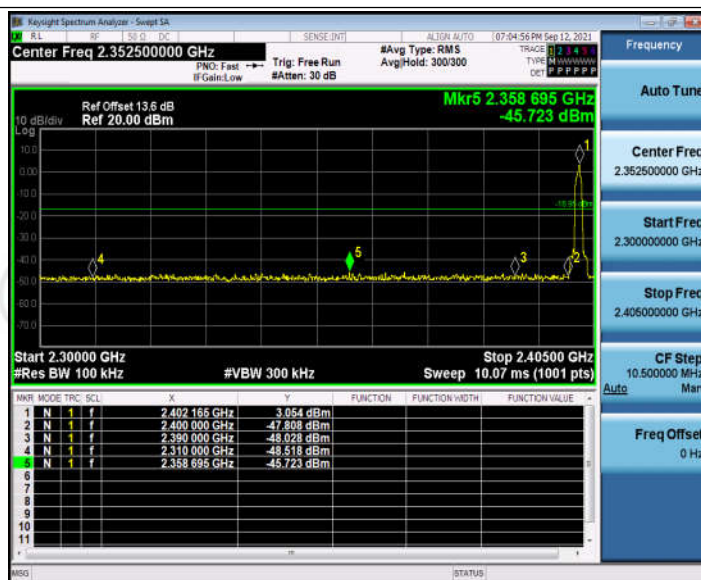




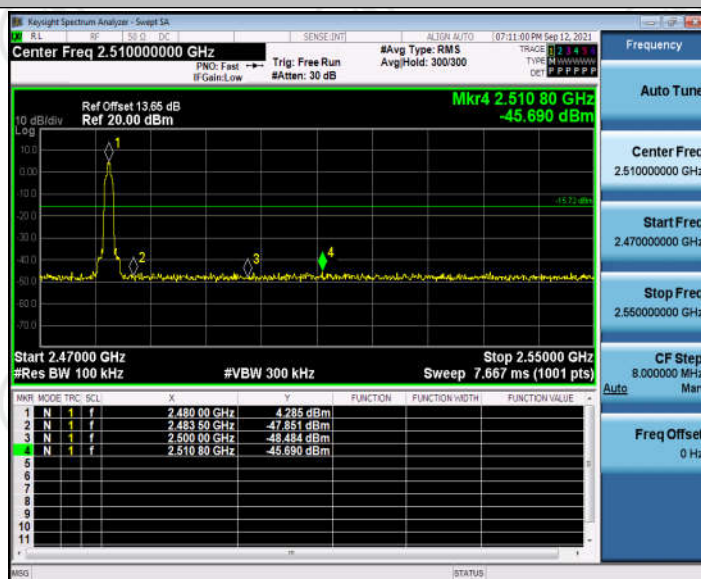
DH5\_Ant1\_Low\_Hop\_2402



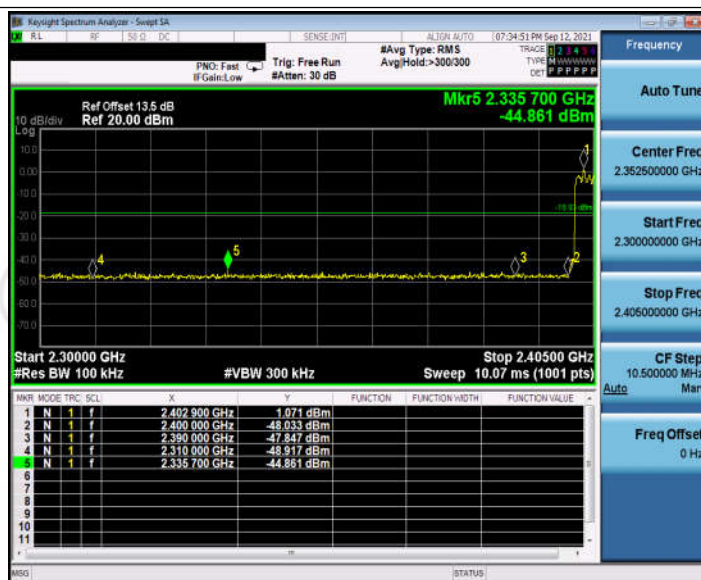
DH5\_Ant1\_High\_Hop\_2480



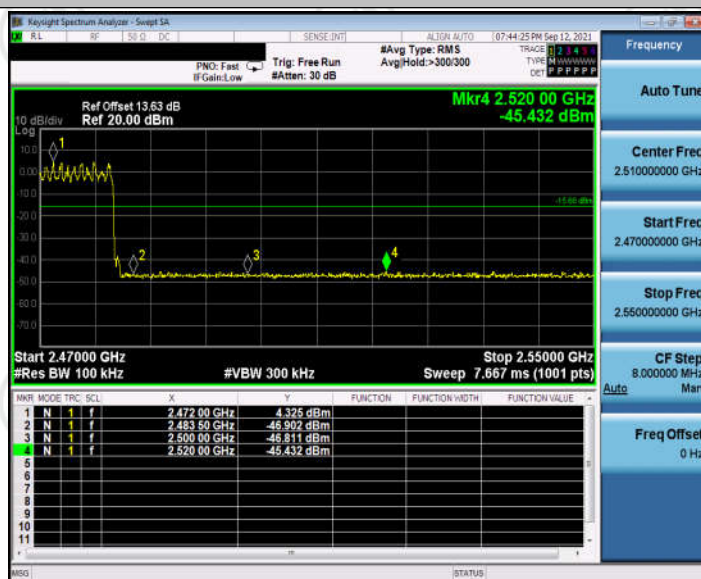
2DH5\_Ant1\_Low\_2402



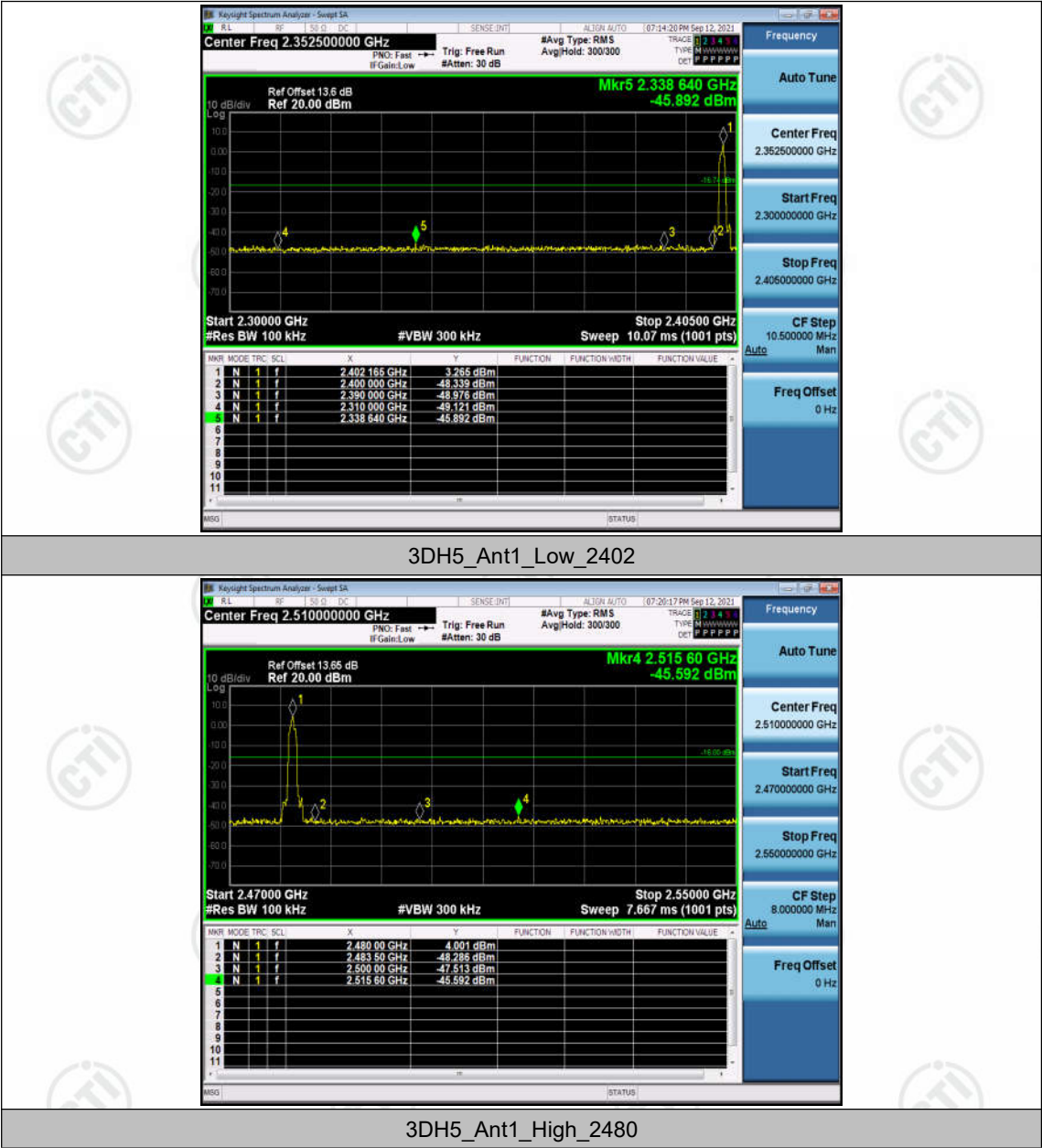
2DH5\_Ant1\_High\_2480

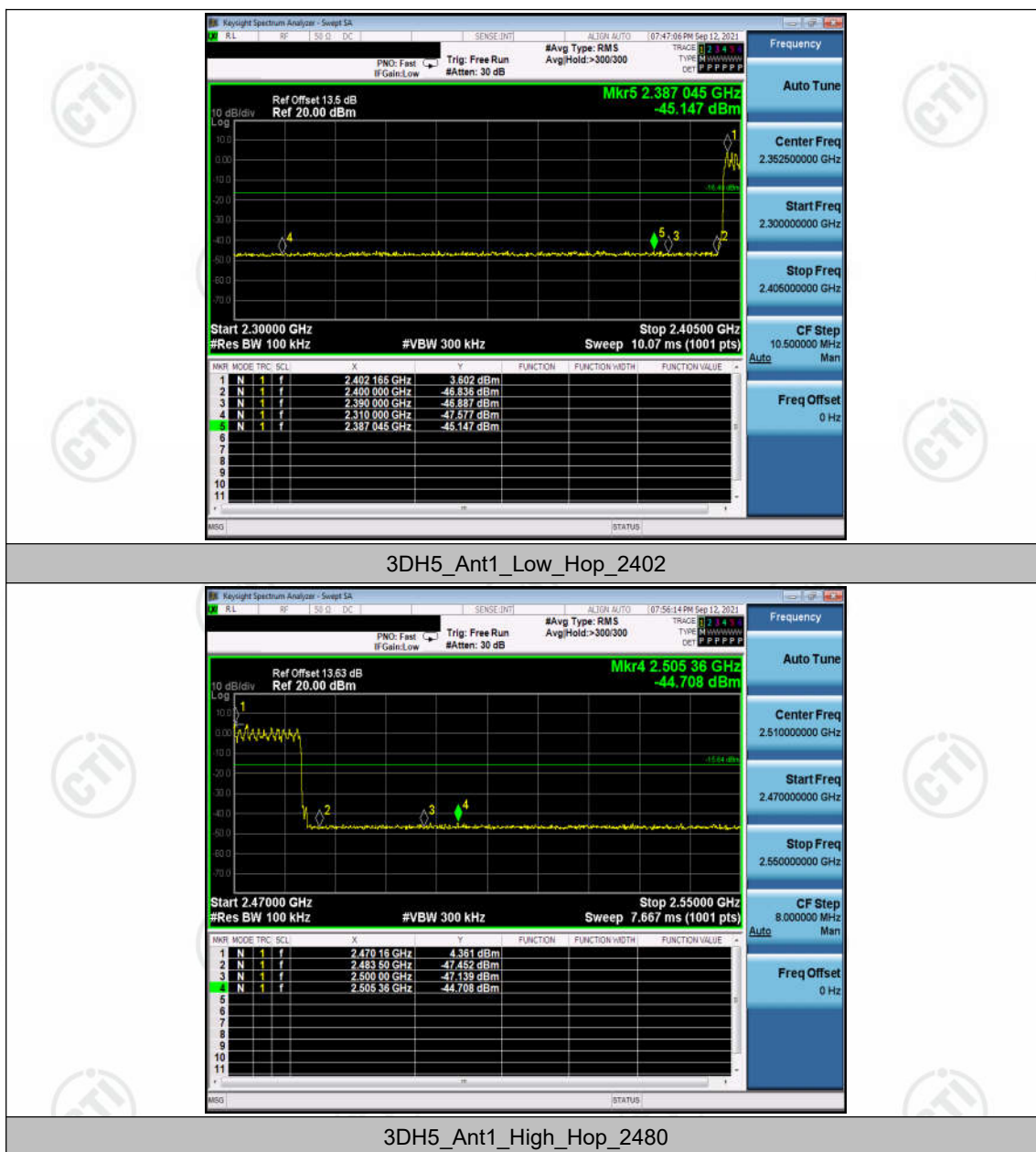


2DH5\_Ant1\_Low\_Hop\_2402



2DH5\_Ant1\_High\_Hop\_2480



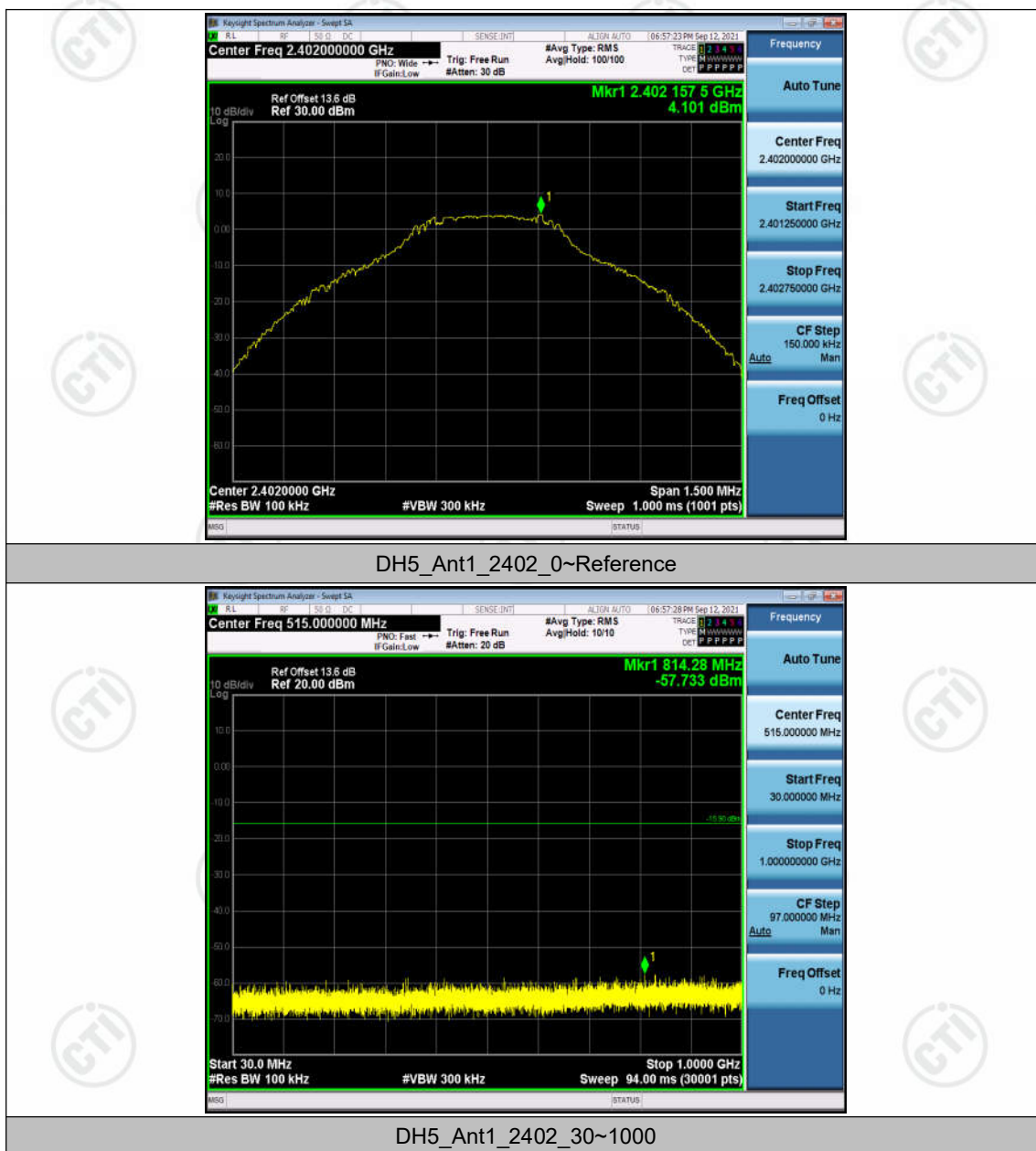


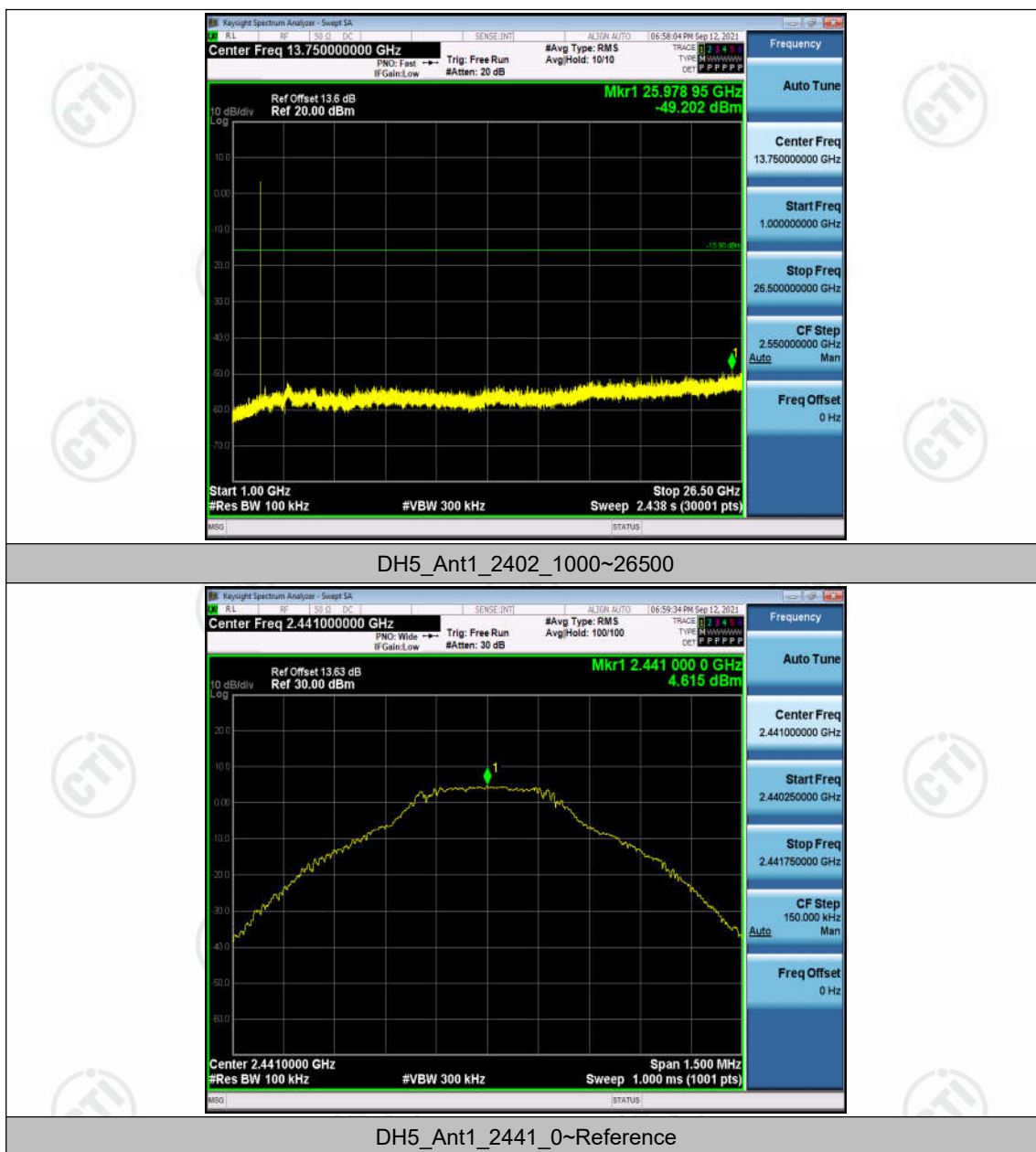
## Appendix H: Conducted Spurious Emission

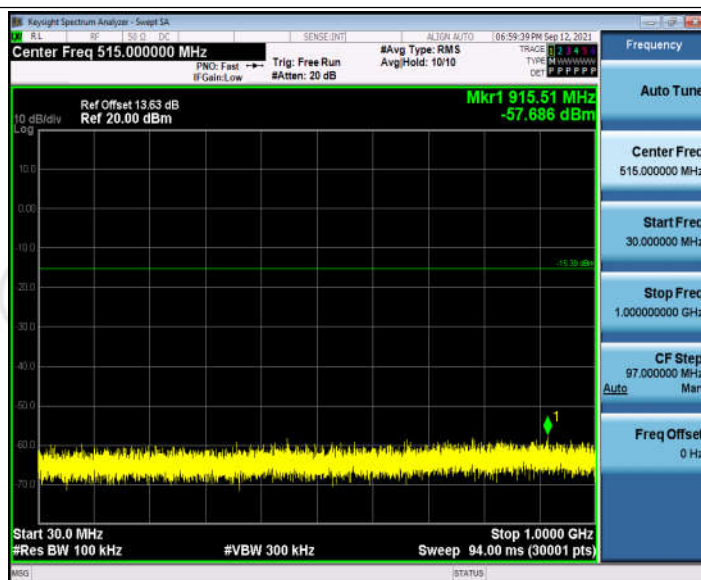
### Test Result

| Test Mode | Antenna | Channel | Freq Range [MHz] | Ref Level [dBm] | Result [dBm] | Limit [dBm] | Verdict |
|-----------|---------|---------|------------------|-----------------|--------------|-------------|---------|
| DH5       | Ant1    | 2402    | Reference        | 4.10            | 4.10         | ---         | PASS    |
|           |         |         | 30~1000          | 30~1000         | -57.733      | <=-15.899   | PASS    |
|           |         |         | 1000~26500       | 1000~26500      | -49.202      | <=-15.899   | PASS    |
|           |         | 2441    | Reference        | 4.62            | 4.62         | ---         | PASS    |
|           |         |         | 30~1000          | 30~1000         | -57.686      | <=-15.385   | PASS    |
|           |         |         | 1000~26500       | 1000~26500      | -49.455      | <=-15.385   | PASS    |
|           |         | 2480    | Reference        | 4.62            | 4.62         | ---         | PASS    |
|           |         |         | 30~1000          | 30~1000         | -57.316      | <=-15.378   | PASS    |
|           |         |         | 1000~26500       | 1000~26500      | -49.413      | <=-15.378   | PASS    |
| 2DH5      | Ant1    | 2402    | Reference        | 3.25            | 3.25         | ---         | PASS    |
|           |         |         | 30~1000          | 30~1000         | -57.73       | <=-16.75    | PASS    |
|           |         |         | 1000~26500       | 1000~26500      | -49.754      | <=-16.75    | PASS    |
|           |         | 2441    | Reference        | 4.11            | 4.11         | ---         | PASS    |
|           |         |         | 30~1000          | 30~1000         | -58.241      | <=-15.891   | PASS    |
|           |         |         | 1000~26500       | 1000~26500      | -49.019      | <=-15.891   | PASS    |
|           |         | 2480    | Reference        | 3.99            | 3.99         | ---         | PASS    |
|           |         |         | 30~1000          | 30~1000         | -57.921      | <=-16.007   | PASS    |
|           |         |         | 1000~26500       | 1000~26500      | -47.954      | <=-16.007   | PASS    |
| 3DH5      | Ant1    | 2402    | Reference        | 3.43            | 3.43         | ---         | PASS    |
|           |         |         | 30~1000          | 30~1000         | -57.887      | <=-16.567   | PASS    |
|           |         |         | 1000~26500       | 1000~26500      | -49.051      | <=-16.567   | PASS    |
|           |         | 2441    | Reference        | 4.22            | 4.22         | ---         | PASS    |
|           |         |         | 30~1000          | 30~1000         | -56.686      | <=-15.776   | PASS    |
|           |         |         | 1000~26500       | 1000~26500      | -49.825      | <=-15.776   | PASS    |
|           |         | 2480    | Reference        | 4.22            | 4.22         | ---         | PASS    |
|           |         |         | 30~1000          | 30~1000         | -57.714      | <=-15.778   | PASS    |
|           |         |         | 1000~26500       | 1000~26500      | -48.963      | <=-15.778   | PASS    |

## Test Graphs



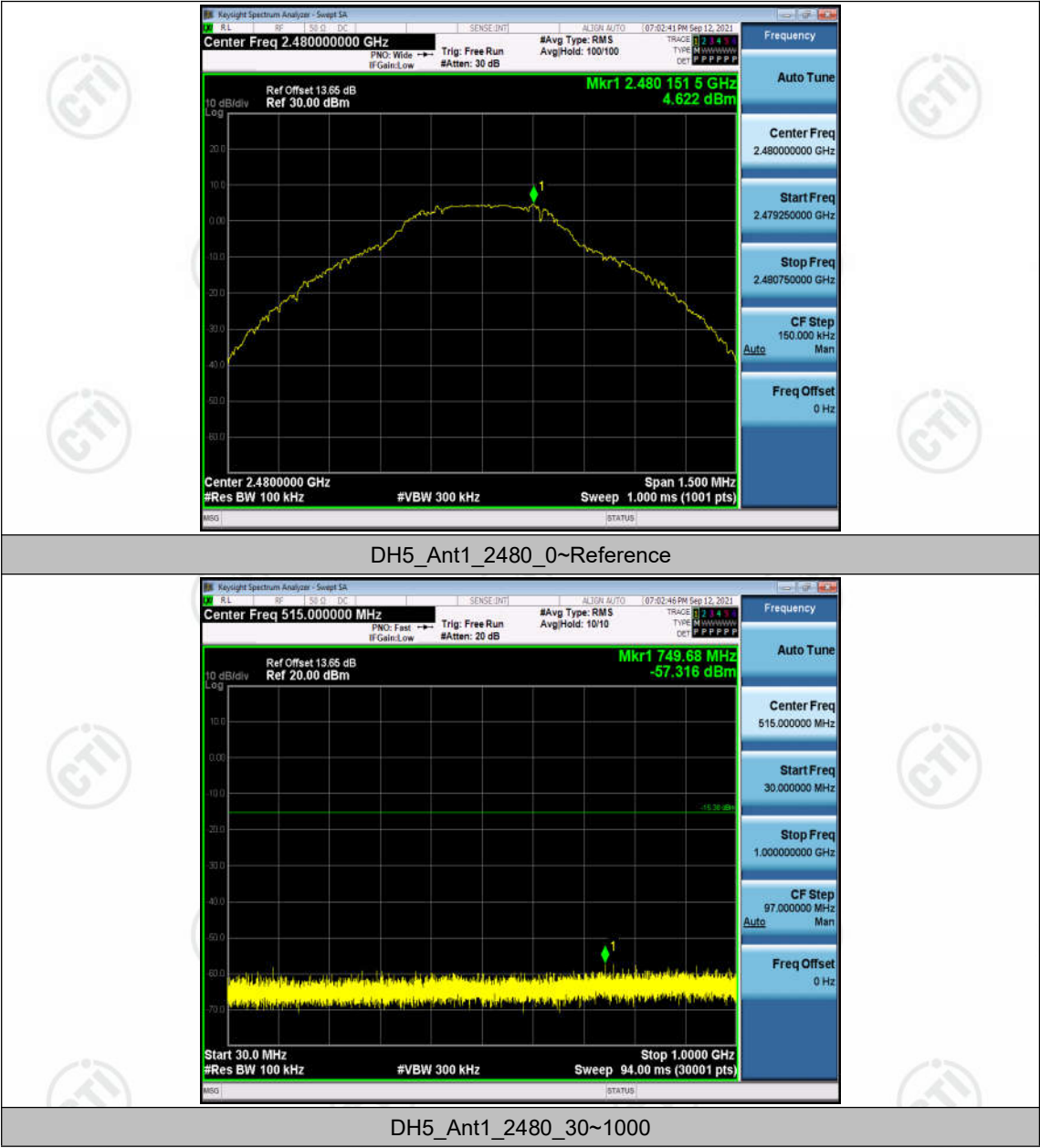


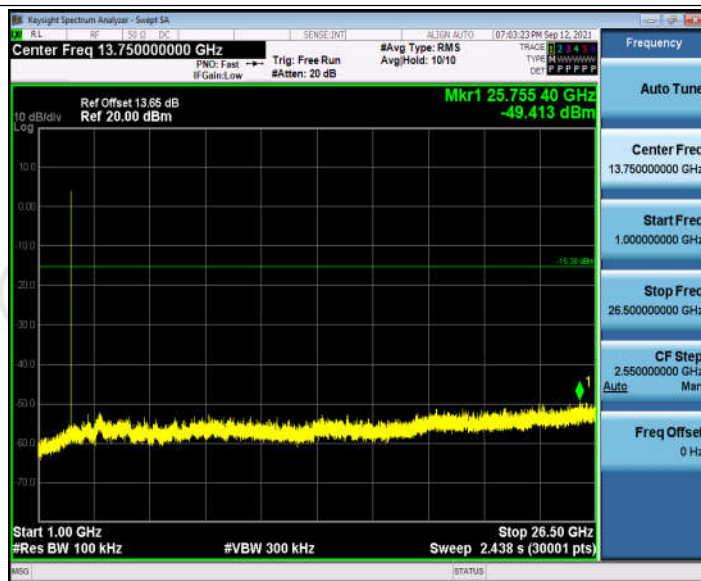


DH5\_Ant1\_2441\_30~1000



DH5\_Ant1\_2441\_1000~26500

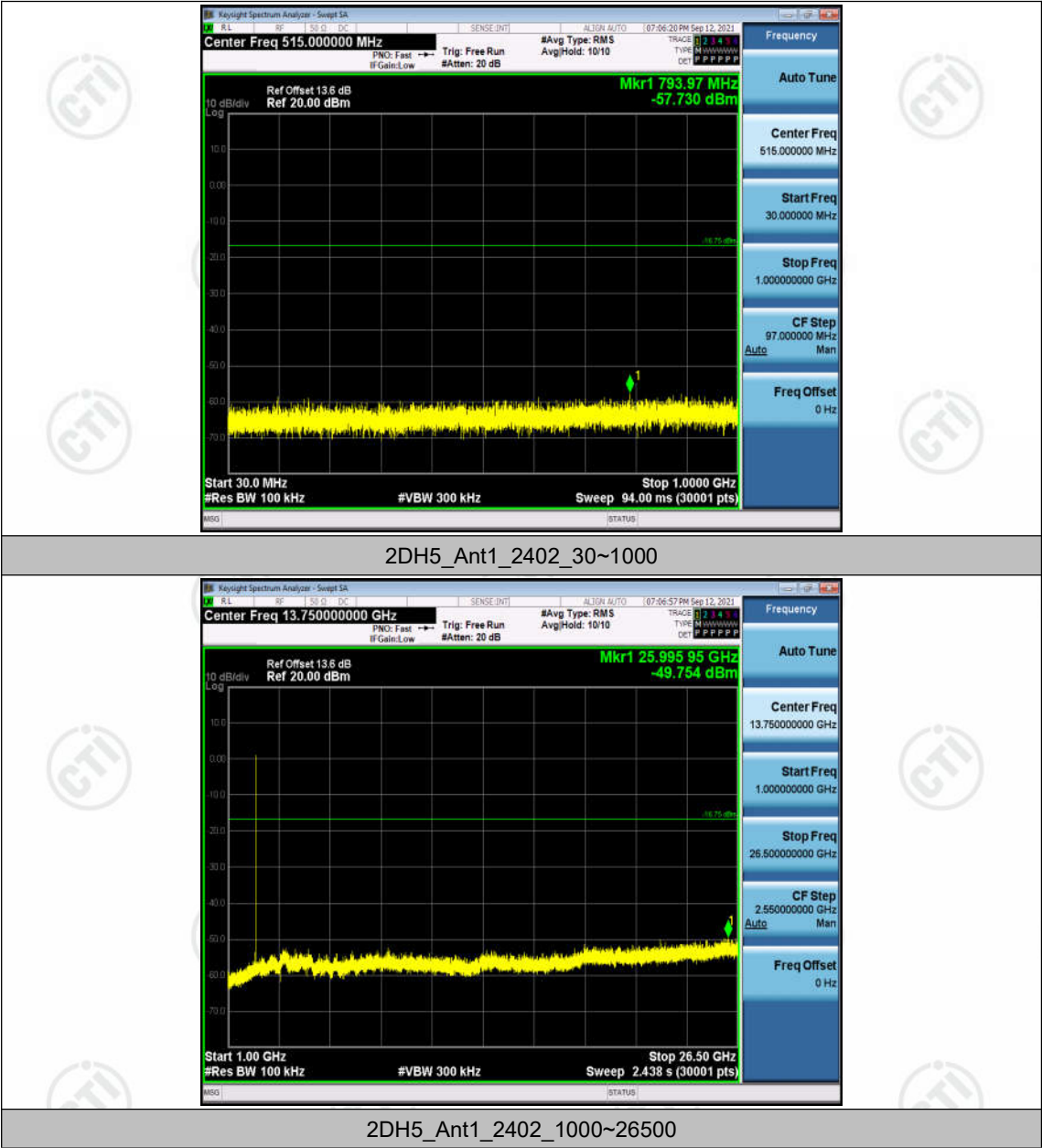


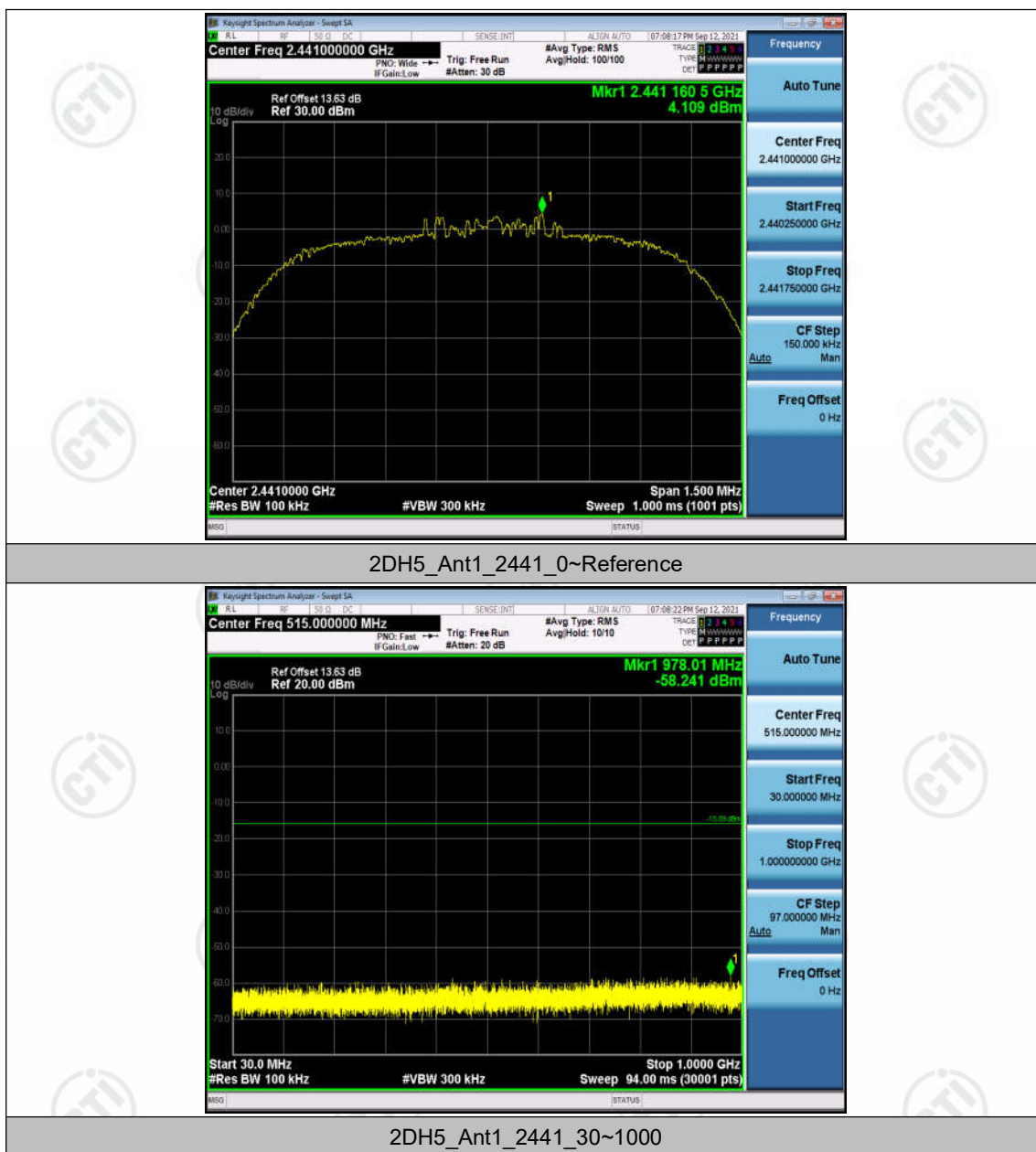


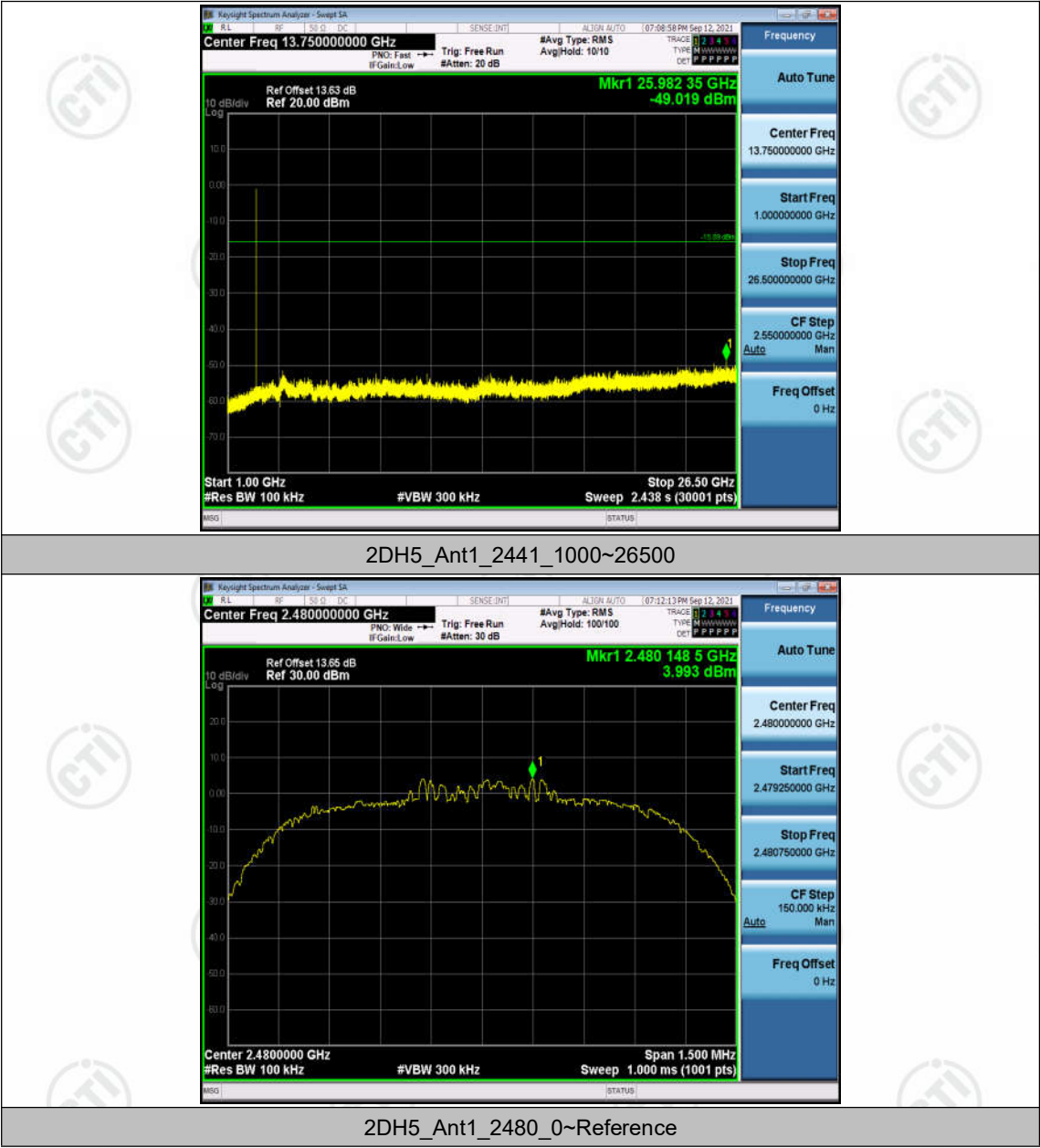
DH5\_Ant1\_2480\_1000~26500

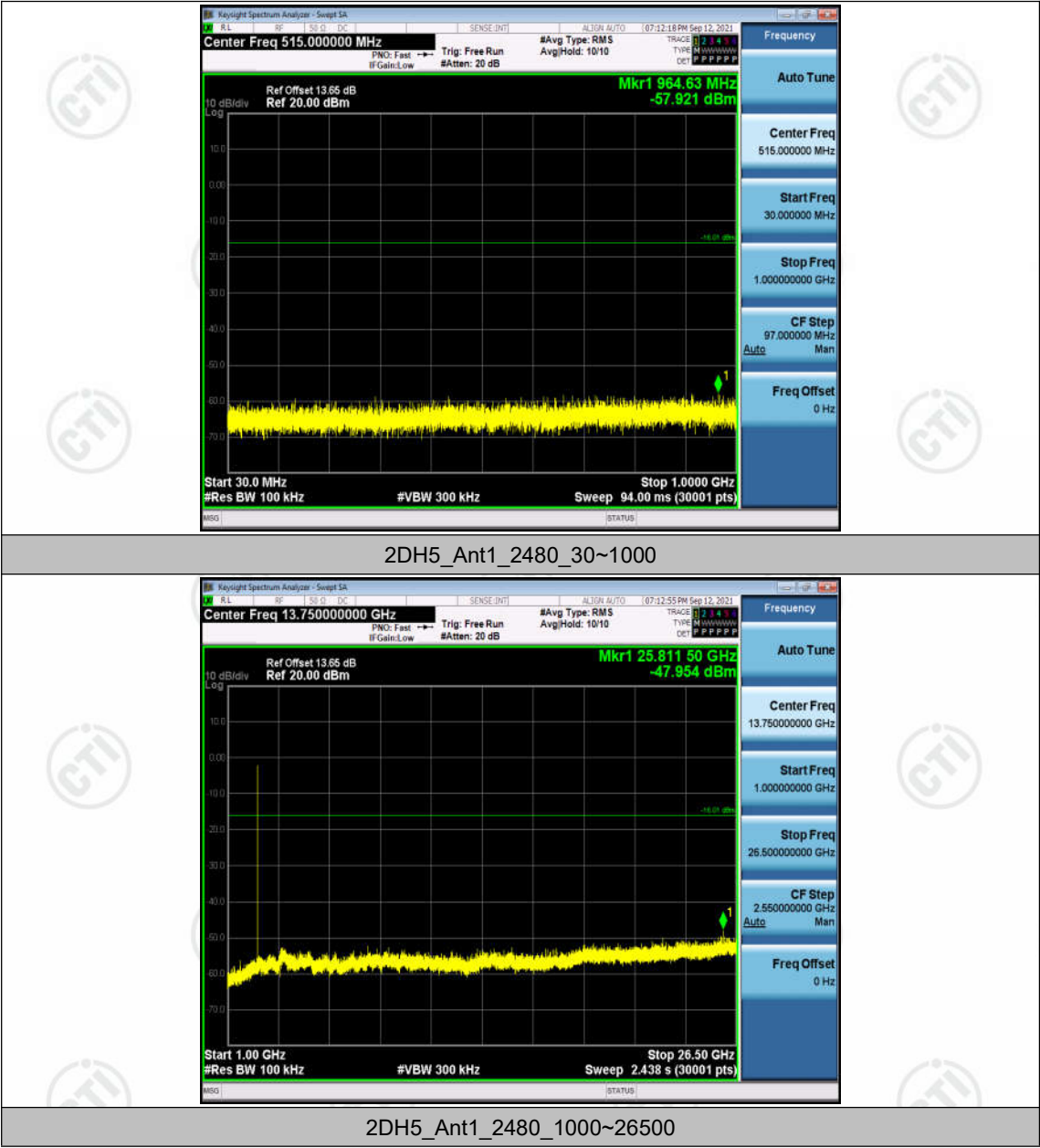


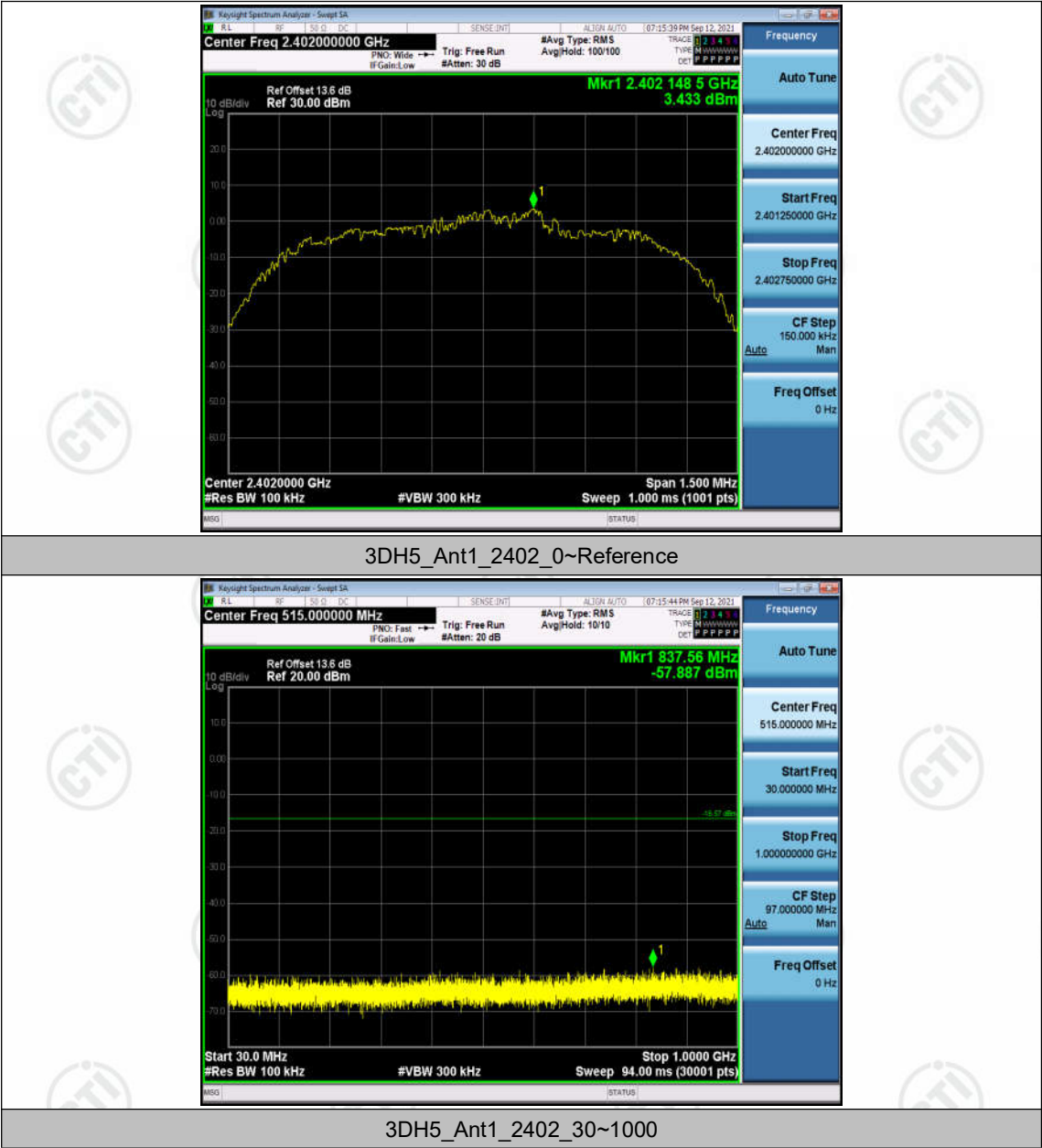
2DH5\_Ant1\_2402\_0~Reference









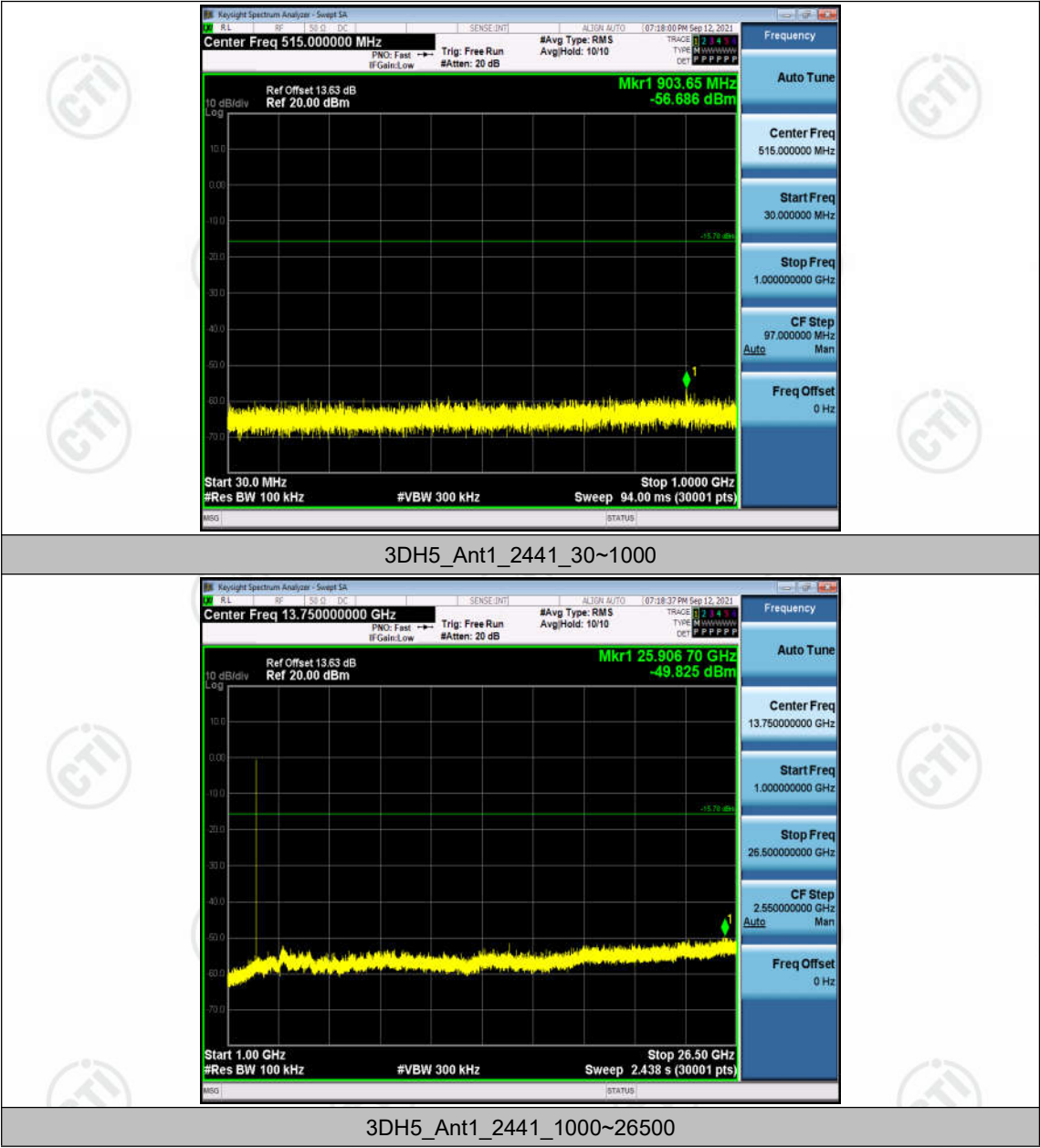


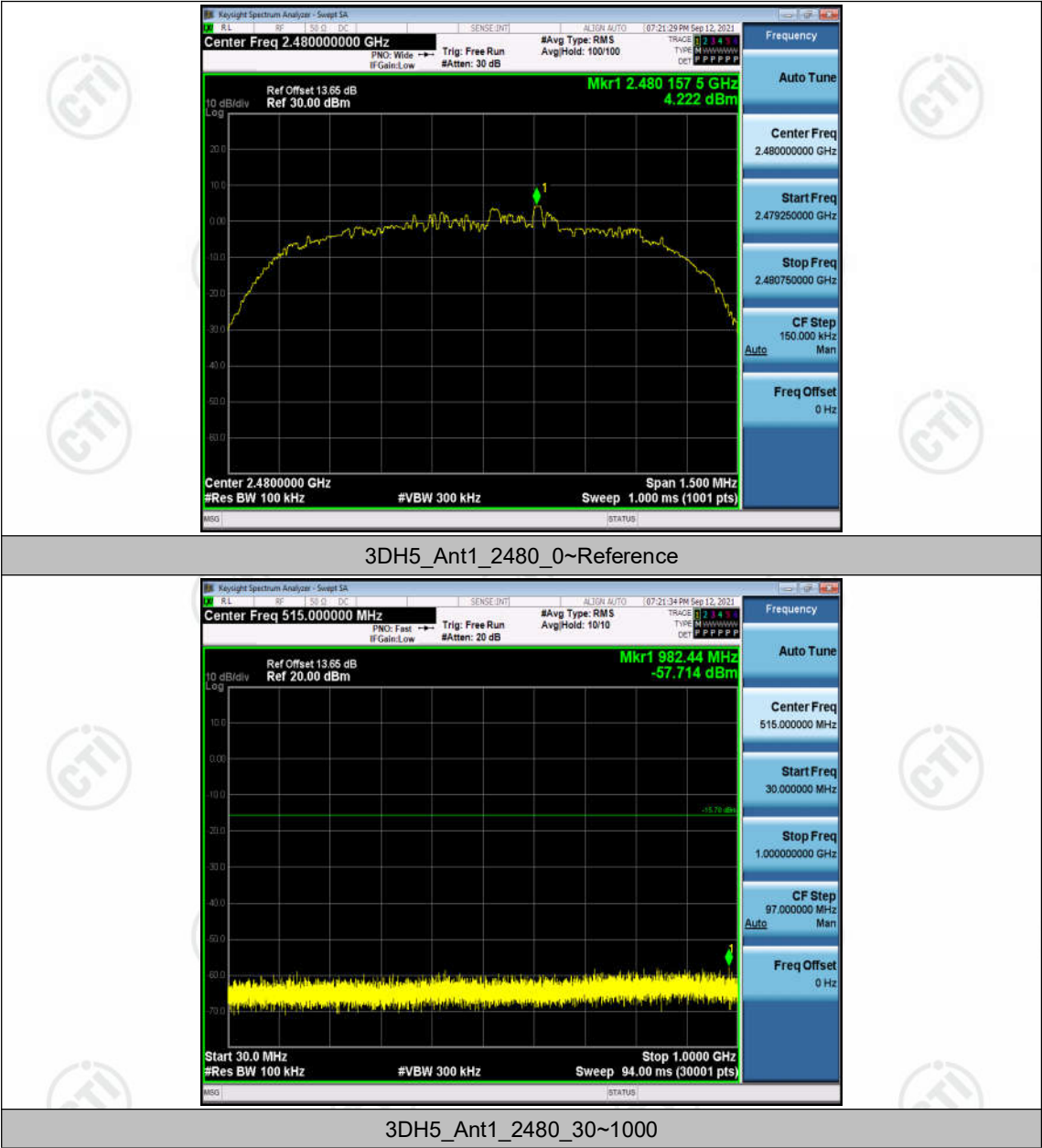


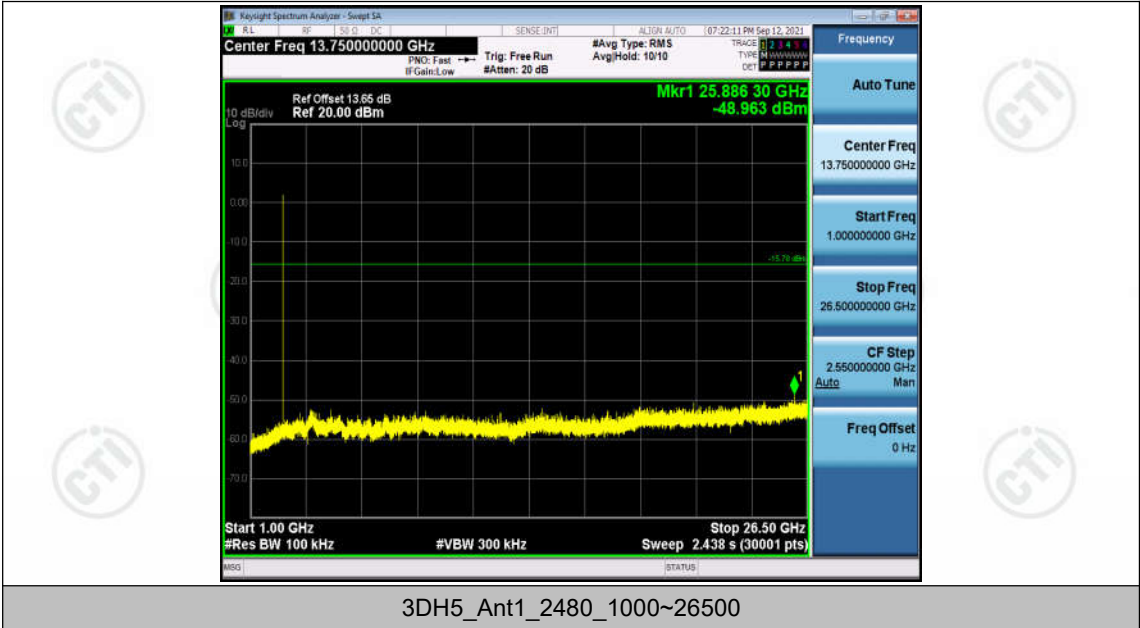
3DH5\_Ant1\_2402\_1000~26500



3DH5\_Ant1\_2441\_0~Reference





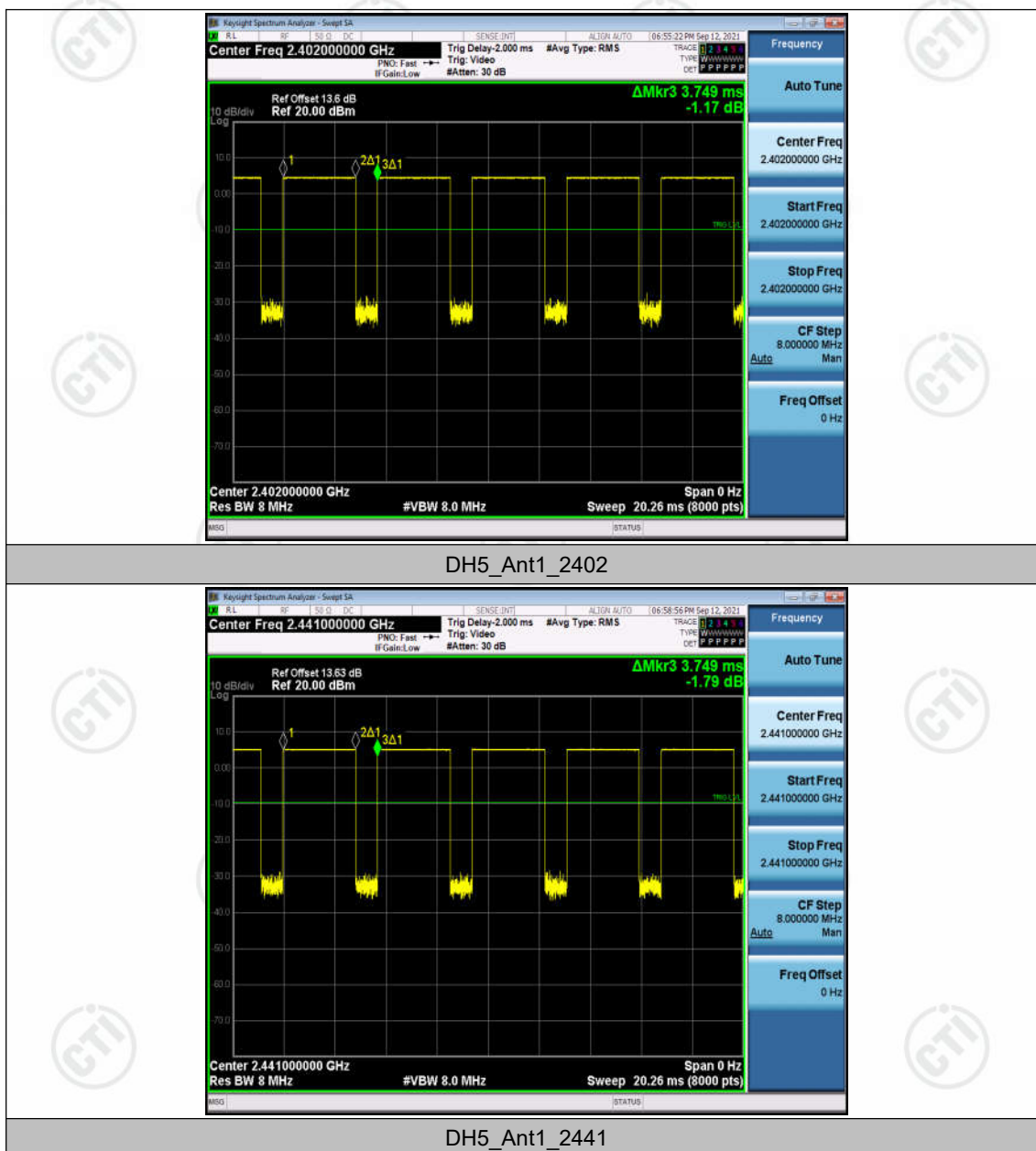


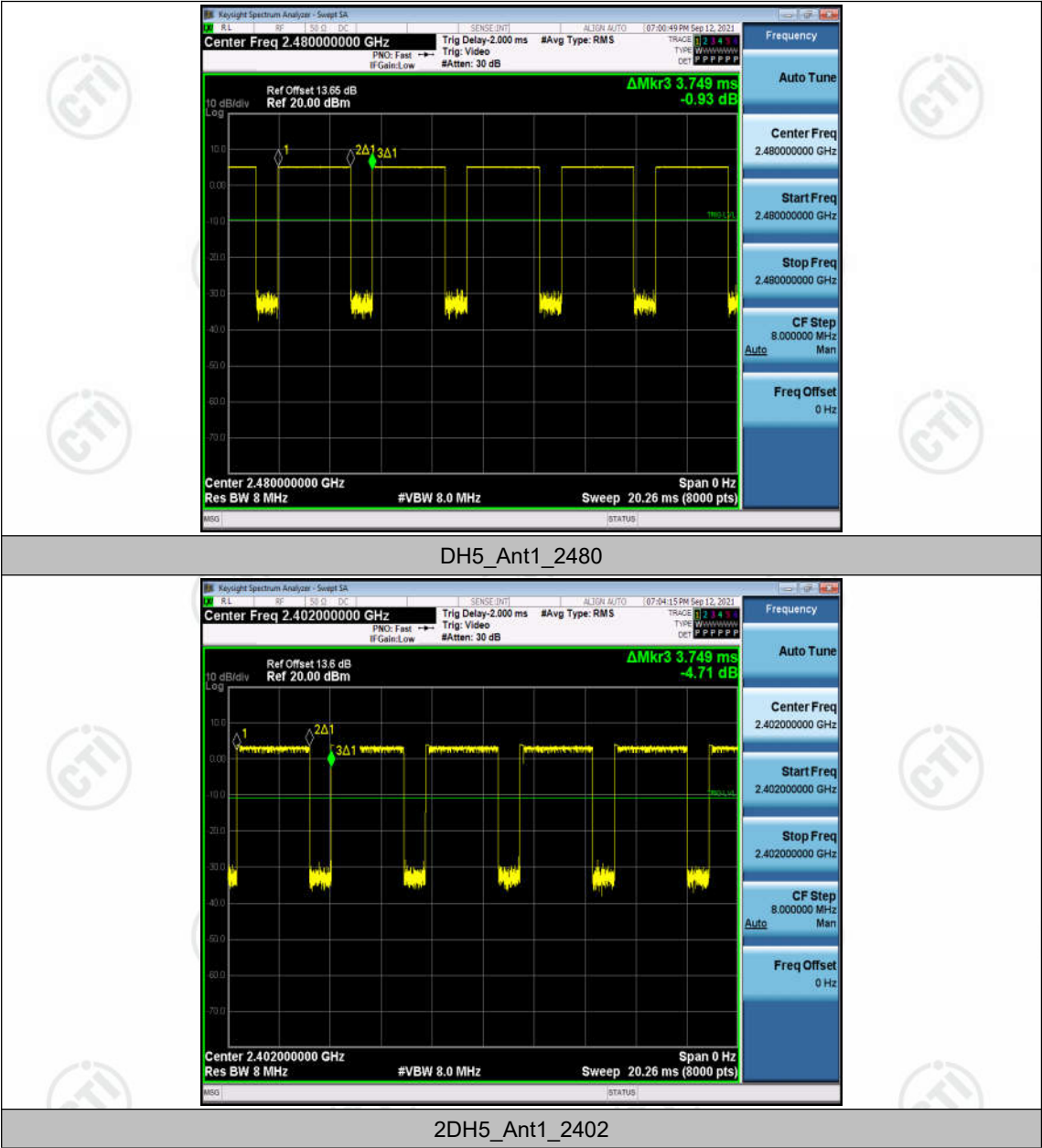
Appendix I: Duty Cycle

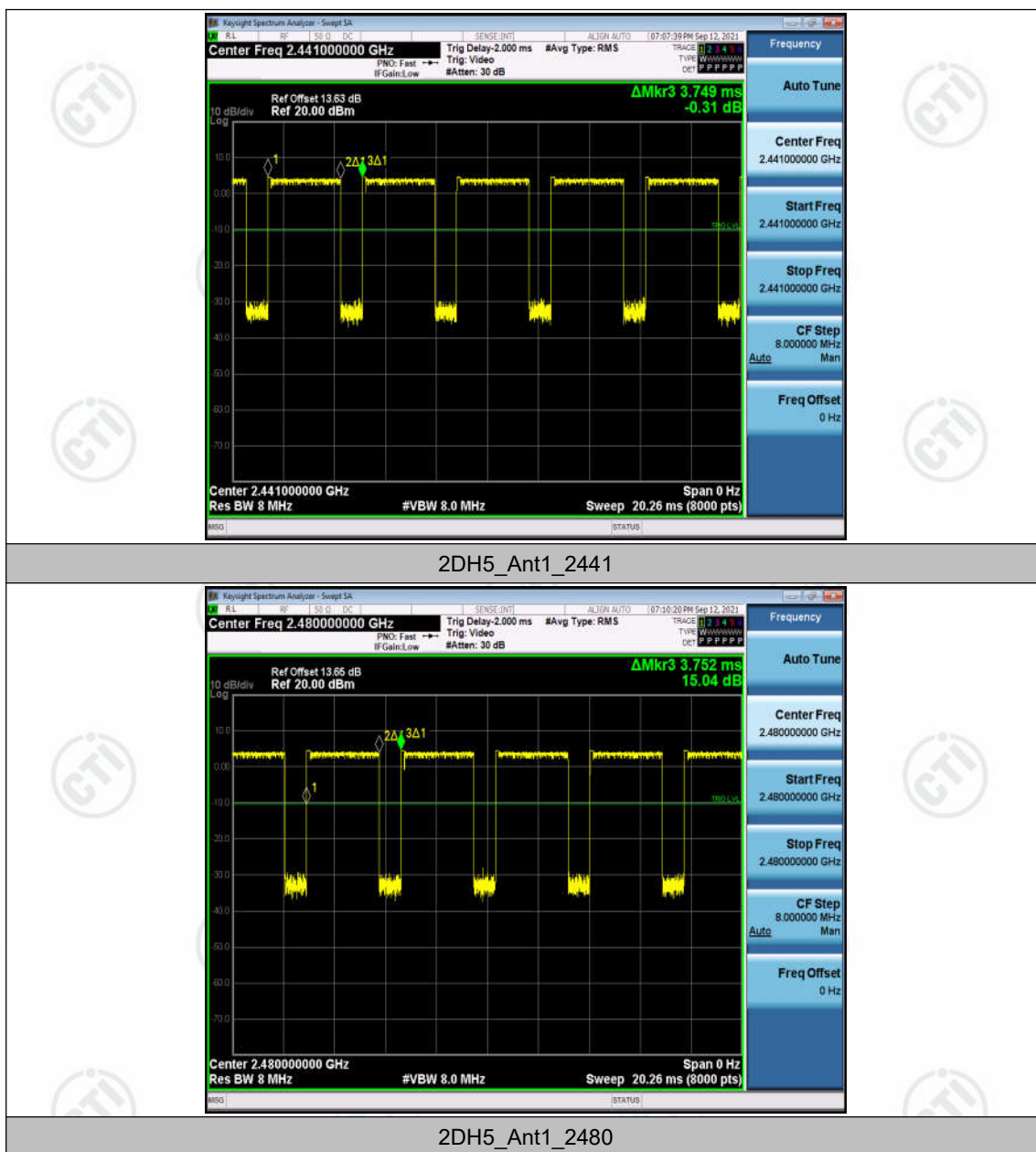
Test Result

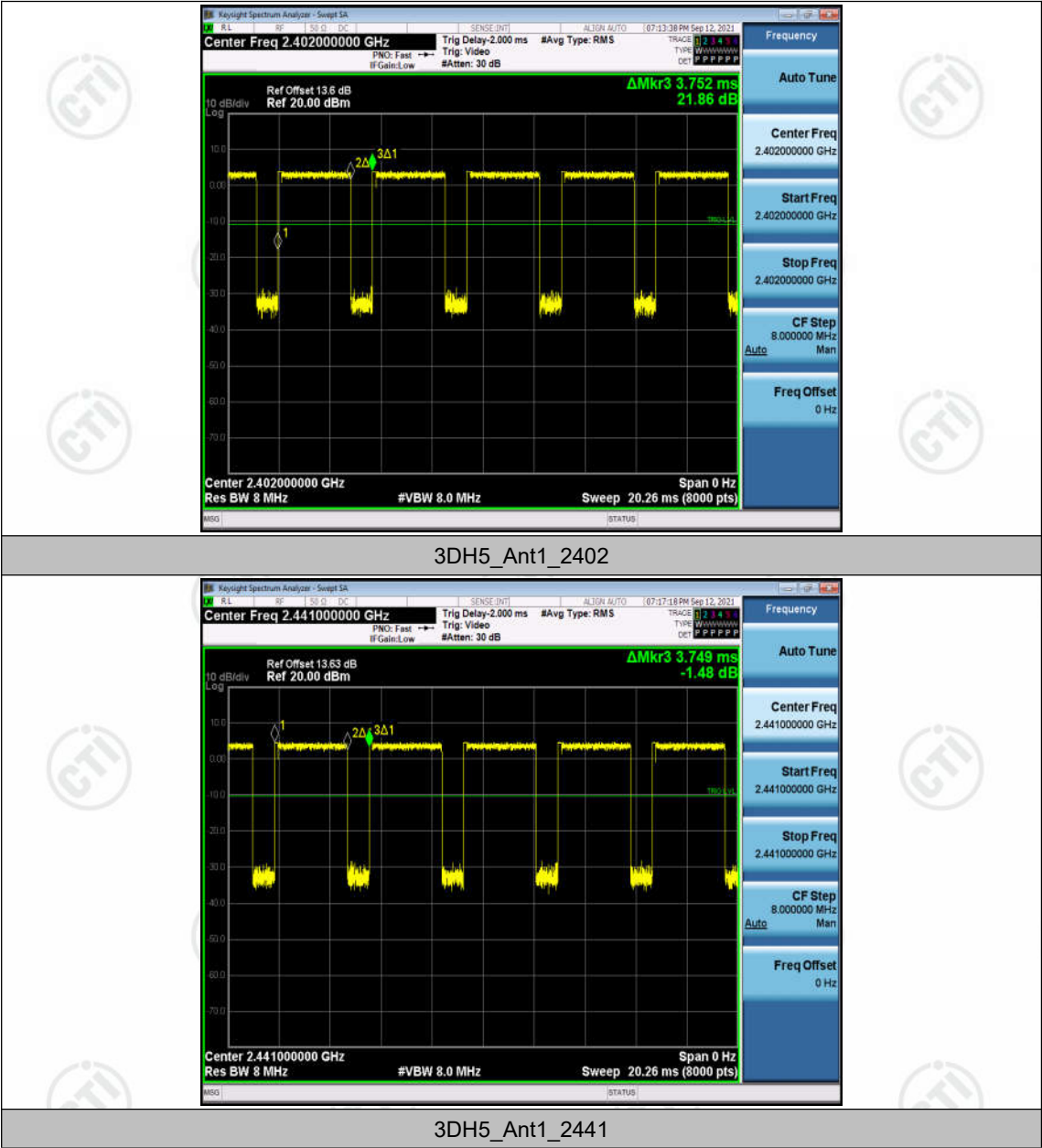
| Test Mode | Antenna | Channel | Transmission Duration [ms] | Transmission Period [ms] | Duty Cycle [%] | Limit | Verdict |
|-----------|---------|---------|----------------------------|--------------------------|----------------|-------|---------|
| DH5       | Ant1    | 2402    | 2.88                       | 3.75                     | 76.76          | ---   | PASS    |
|           |         | 2441    | 2.88                       | 3.75                     | 76.76          | ---   | PASS    |
|           |         | 2480    | 2.88                       | 3.75                     | 76.76          | ---   | PASS    |
| 2DH5      | Ant1    | 2402    | 2.88                       | 3.75                     | 76.82          | ---   | PASS    |
|           |         | 2441    | 2.88                       | 3.75                     | 76.82          | ---   | PASS    |
|           |         | 2480    | 2.88                       | 3.75                     | 76.84          | ---   | PASS    |
| 3DH5      | Ant1    | 2402    | 2.89                       | 3.75                     | 76.91          | ---   | PASS    |
|           |         | 2441    | 2.88                       | 3.75                     | 76.89          | ---   | PASS    |
|           |         | 2480    | 2.88                       | 3.75                     | 76.89          | ---   | PASS    |

## Test Graphs











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