

## **FCC Appendix RF Test Data for BT**

**FCC ID** : 2BWHK-YK03

**Company** : Shenzhen Meisenkai Electronics Co., Ltd.

**EUT** : White Noise Machine

**Model Number** : YK03

**Report No.** : CTA26051400901

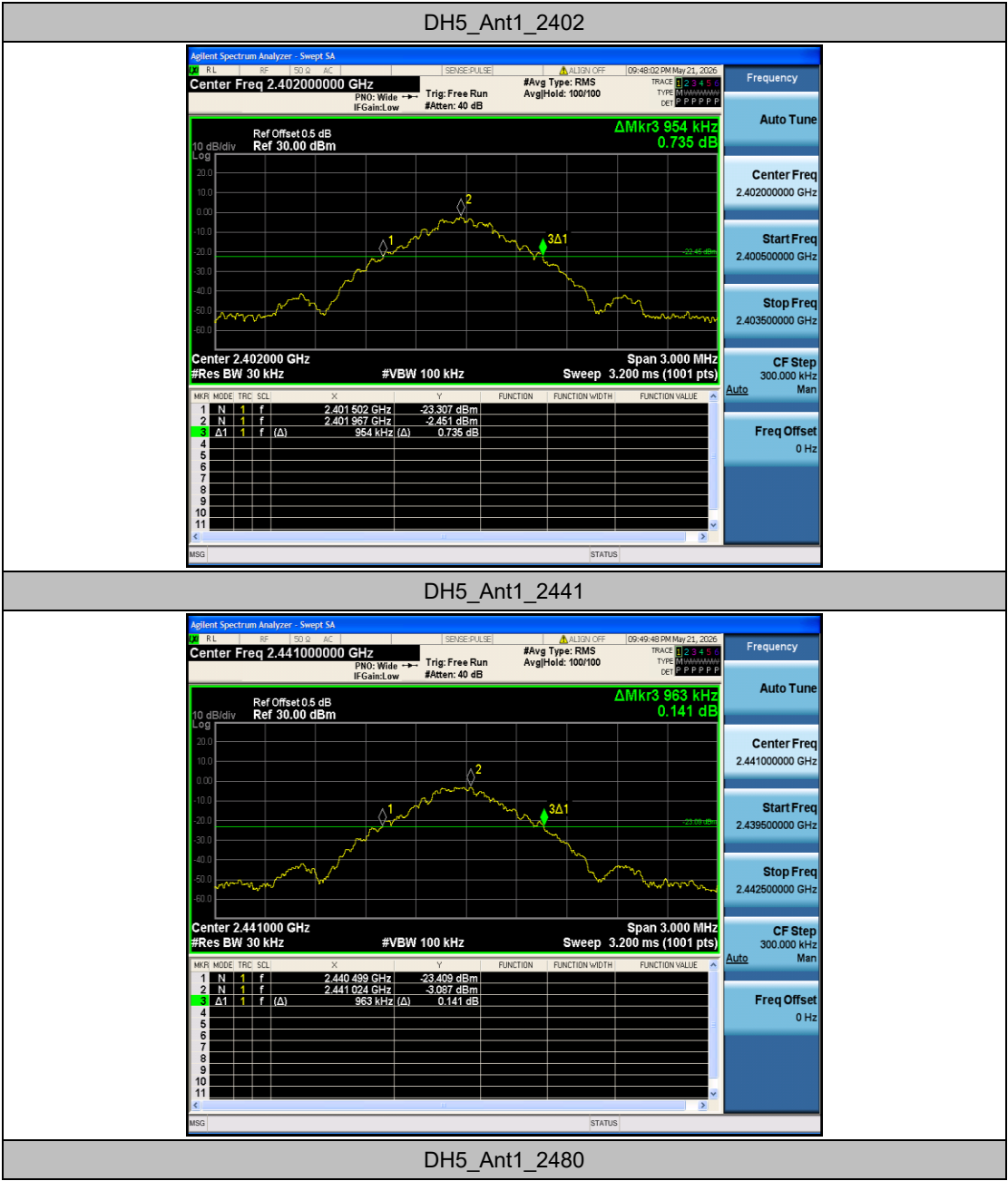
**Reviewed By** : Eric Wang

## Appendix A: 20dB Emission Bandwidth

### Test Result

| TestMode | Antenna | Freq(MHz) | 20dB<br>EBW[MHz] | FL[MHz]  | FH[MHz]  | Limit[MHz] | Verdict |
|----------|---------|-----------|------------------|----------|----------|------------|---------|
| DH5      | Ant1    | 2402      | 0.954            | 2401.502 | 2402.456 | ---        | ---     |
|          |         | 2441      | 0.963            | 2440.499 | 2441.462 | ---        | ---     |
|          |         | 2480      | 0.969            | 2479.496 | 2480.465 | ---        | ---     |
| 2DH5     | Ant1    | 2402      | 1.317            | 2401.310 | 2402.627 | ---        | ---     |
|          |         | 2441      | 1.323            | 2440.304 | 2441.627 | ---        | ---     |
|          |         | 2480      | 1.323            | 2479.304 | 2480.627 | ---        | ---     |

Test Graphs





2DH5\_Ant1\_2402



2DH5\_Ant1\_2441



# 2DH5\_Ant1\_2480



## Appendix B: Occupied Channel Bandwidth

### Test Result

| TestMode | Antenna | Freq(MHz) | OCB [MHz] | FL[MHz]   | FH[MHz]   | Limit[MHz] | Verdict |
|----------|---------|-----------|-----------|-----------|-----------|------------|---------|
| DH5      | Ant1    | 2402      | 0.86369   | 2401.5369 | 2402.4006 | ---        | ---     |
|          |         | 2441      | 0.85734   | 2440.5370 | 2441.3943 | ---        | ---     |
|          |         | 2480      | 0.87128   | 2479.5356 | 2480.4069 | ---        | ---     |
| 2DH5     | Ant1    | 2402      | 1.1682    | 2401.3825 | 2402.5507 | ---        | ---     |
|          |         | 2441      | 1.1824    | 2440.3760 | 2441.5584 | ---        | ---     |
|          |         | 2480      | 1.1749    | 2479.3799 | 2480.5548 | ---        | ---     |

## Test Graphs

DH5\_Ant1\_2402



DH5\_Ant1\_2441



DH5\_Ant1\_2480



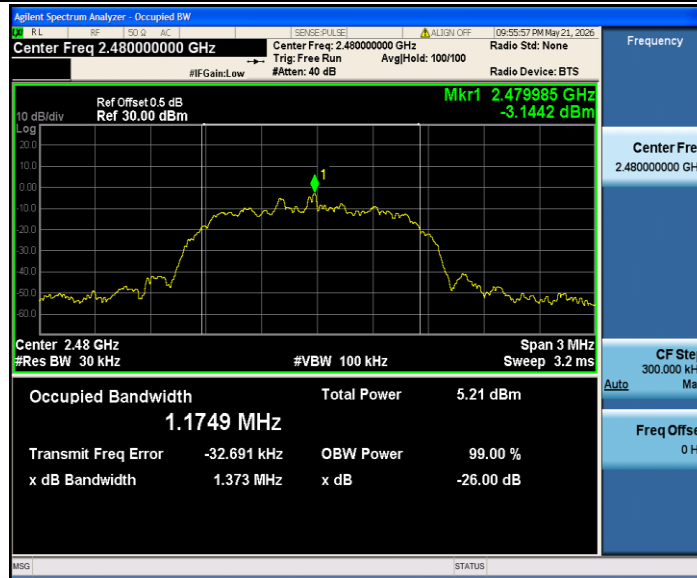
2DH5\_Ant1\_2402



2DH5\_Ant1\_2441



# 2DH5\_Ant1\_2480



## Appendix C: Maximum conducted output power

### Test Result Peak

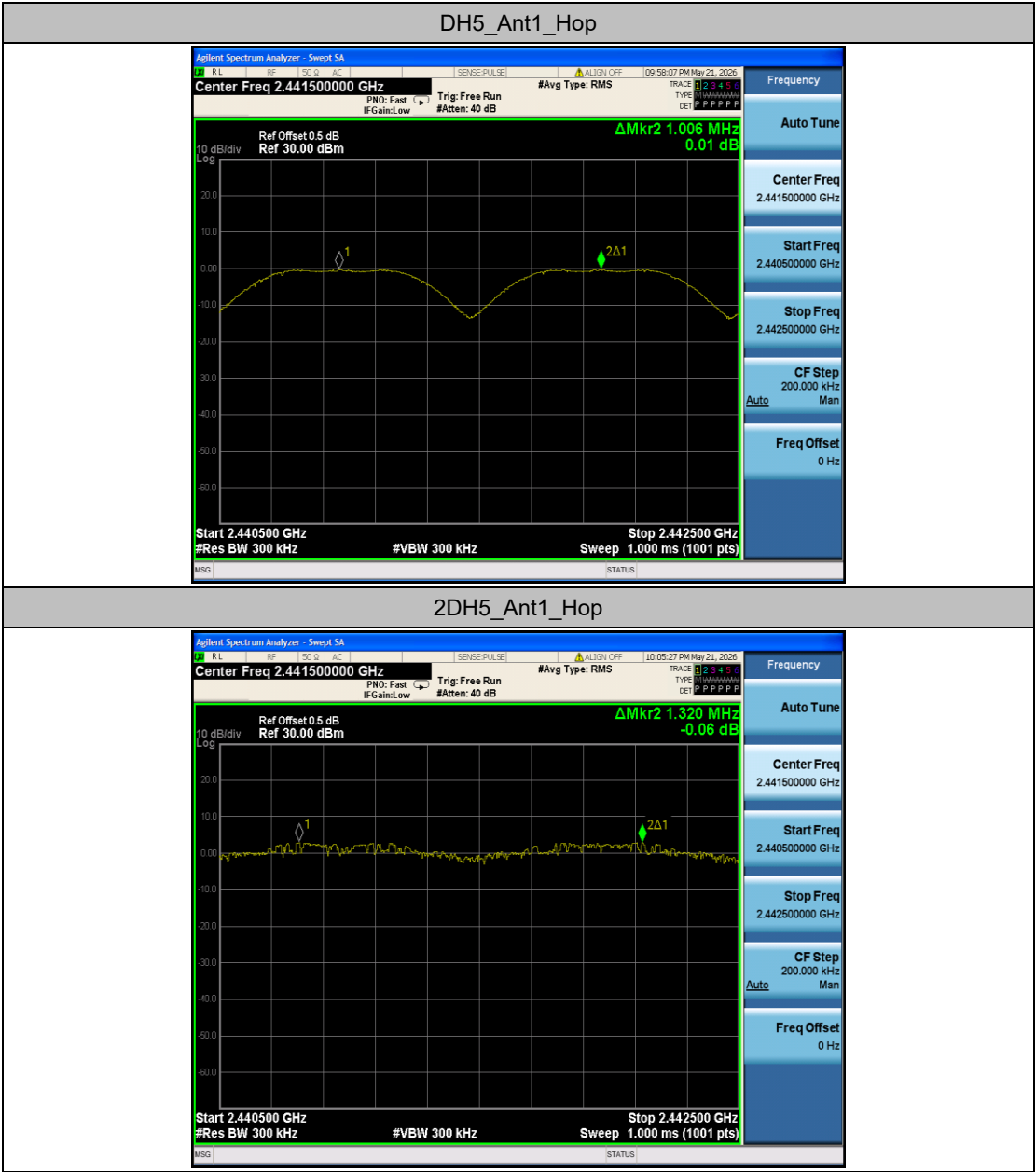
| Test Mode | Antenna | Freq(MHz) | Conducted Peak Power[dBm] | Conducted Limit[dBm] | Verdict |
|-----------|---------|-----------|---------------------------|----------------------|---------|
| DH5       | Ant1    | 2402      | 0.20                      | ≤20.97               | PASS    |
|           |         | 2441      | -0.02                     | ≤20.97               | PASS    |
|           |         | 2480      | -0.57                     | ≤20.97               | PASS    |
| 2DH5      | Ant1    | 2402      | 0.94                      | ≤20.97               | PASS    |
|           |         | 2441      | 0.73                      | ≤20.97               | PASS    |
|           |         | 2480      | 0.22                      | ≤20.97               | PASS    |

## Appendix D: Carrier frequency separation

### Test Result

| TestMode | Antenna | Freq(MHz) | Result[MHz] | Limit[MHz]   | Verdict |
|----------|---------|-----------|-------------|--------------|---------|
| DH5      | Ant1    | Hop       | 1.006       | $\geq 0.969$ | PASS    |
| 2DH5     | Ant1    | Hop       | 1.32        | $\geq 0.882$ | PASS    |

Test Graphs

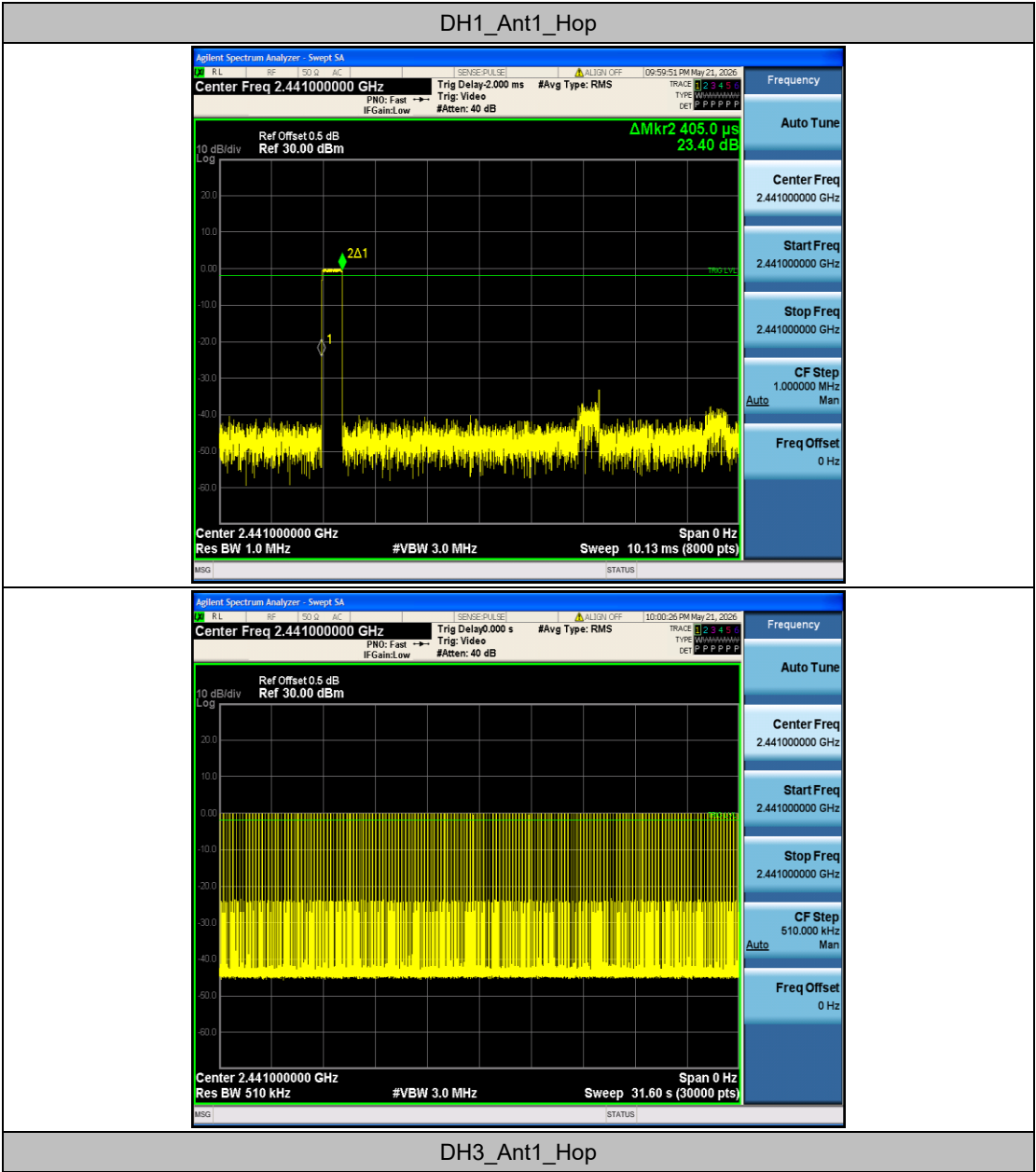


## Appendix E: Time of occupancy

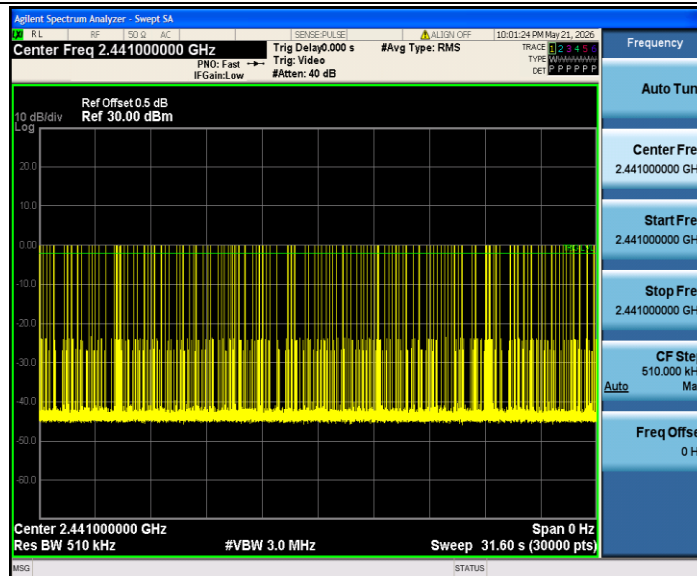
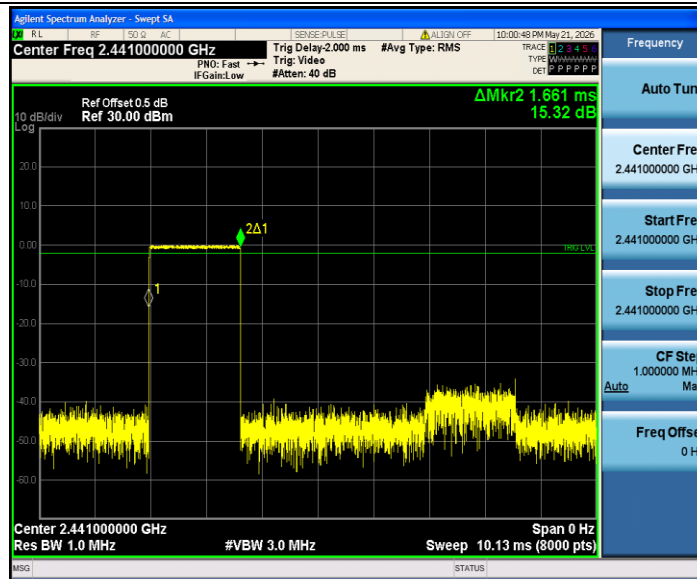
### Test Result

| TestMode | Antenna | Freq(MHz) | BurstWidth<br>[ms] | TotalHops<br>[Num] | Result[s] | Limit[s] | Verdict |
|----------|---------|-----------|--------------------|--------------------|-----------|----------|---------|
| DH1      | Ant1    | Hop       | 0.405              | 317                | 0.128     | ≤0.4     | PASS    |
| DH3      | Ant1    | Hop       | 1.661              | 163                | 0.271     | ≤0.4     | PASS    |
| DH5      | Ant1    | Hop       | 2.910              | 110                | 0.32      | ≤0.4     | PASS    |
| 2DH1     | Ant1    | Hop       | 0.415              | 318                | 0.132     | ≤0.4     | PASS    |
| 2DH3     | Ant1    | Hop       | 1.667              | 161                | 0.268     | ≤0.4     | PASS    |
| 2DH5     | Ant1    | Hop       | 2.915              | 100                | 0.292     | ≤0.4     | PASS    |

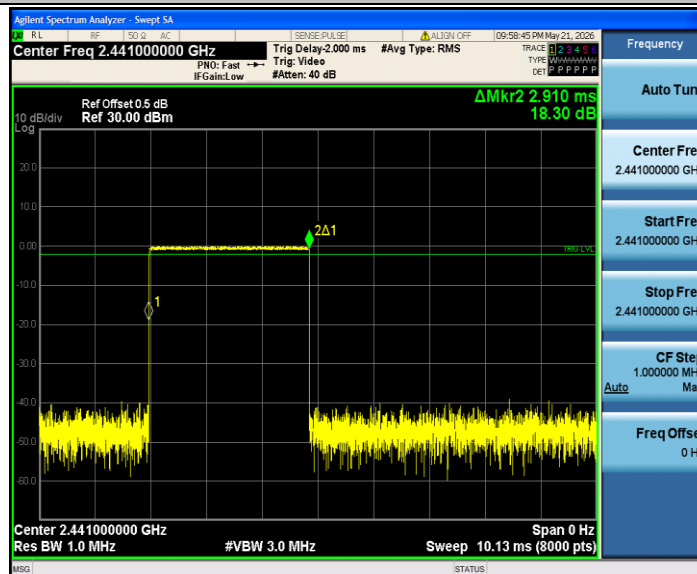
Test Graphs

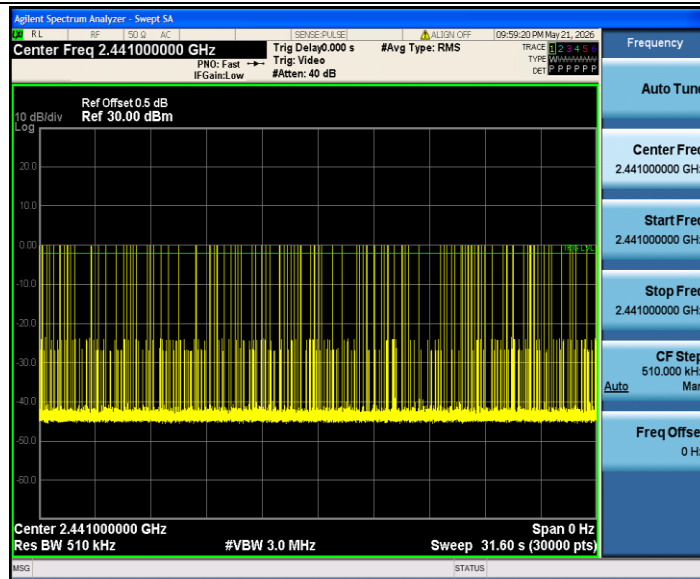


DH3\_Ant1\_Hop

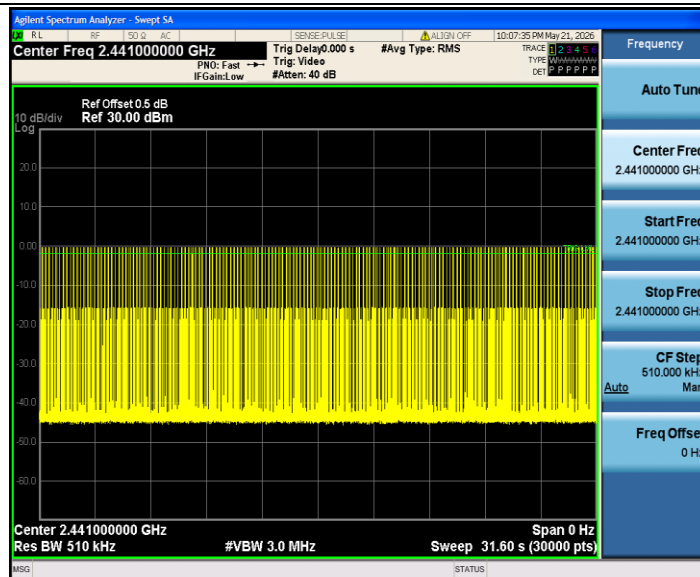
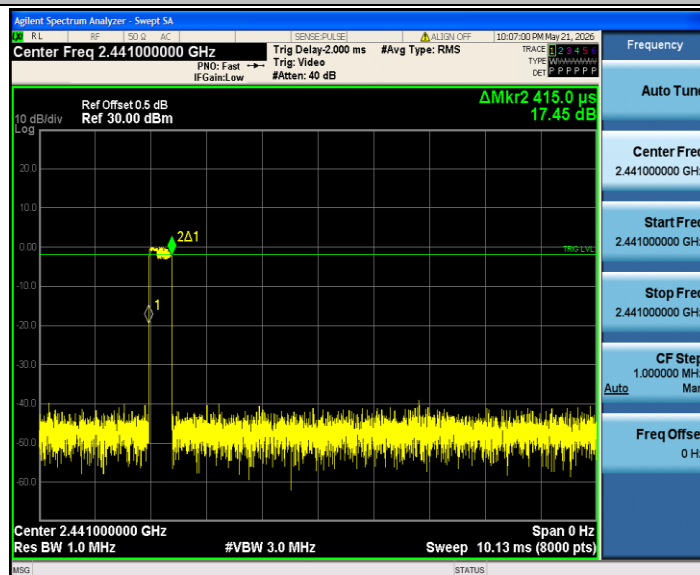


DH5\_Ant1\_Hop

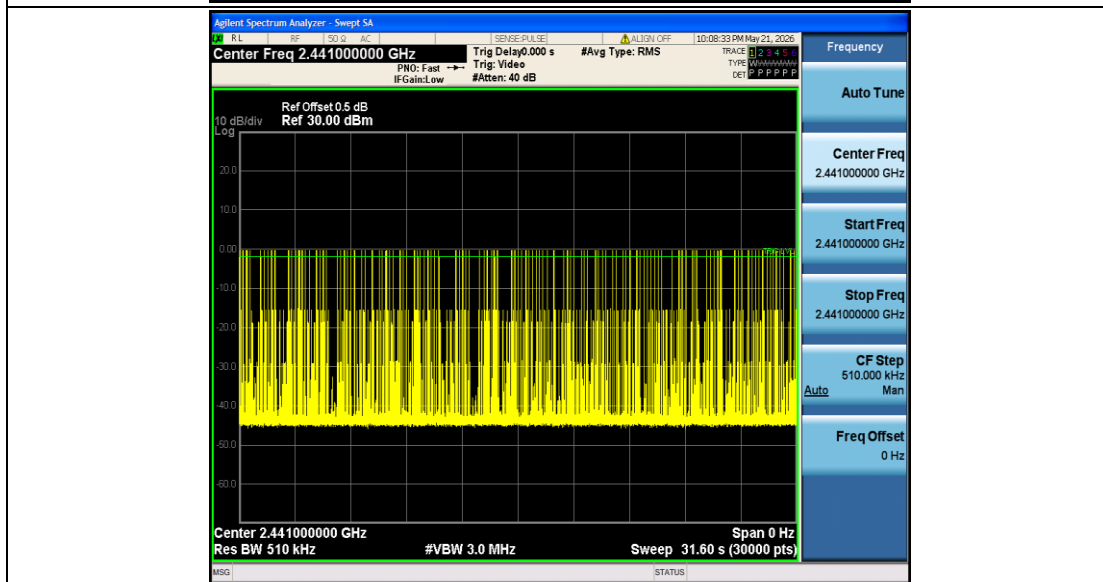
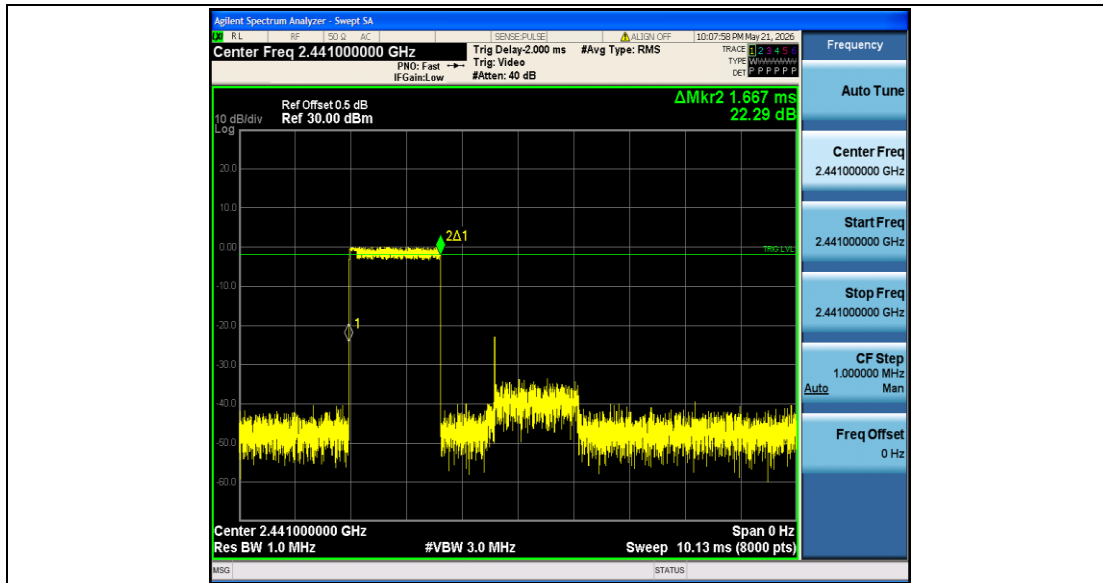




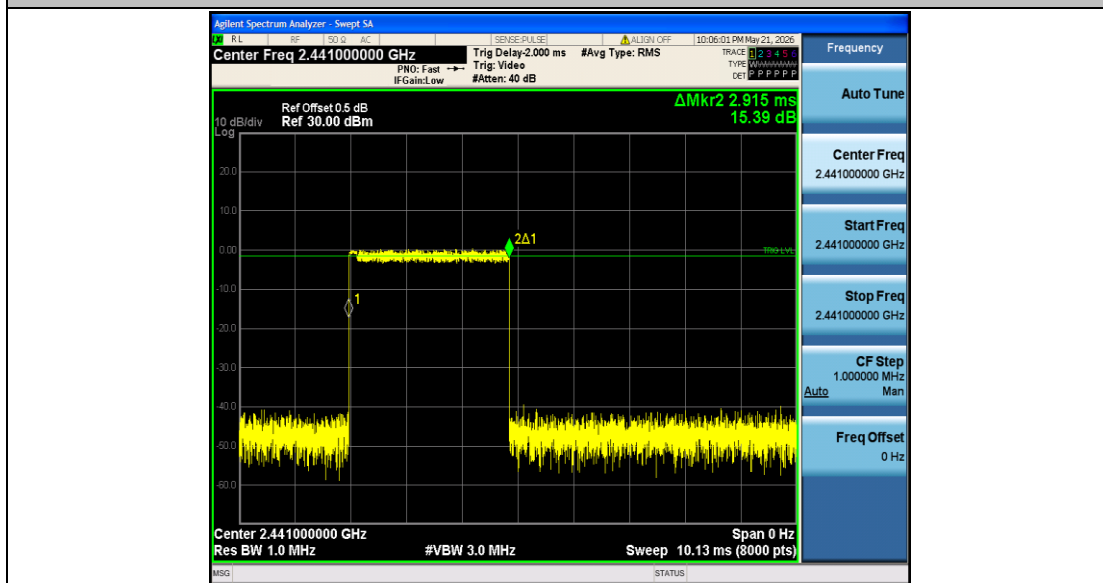
2DH1\_Ant1\_Hop

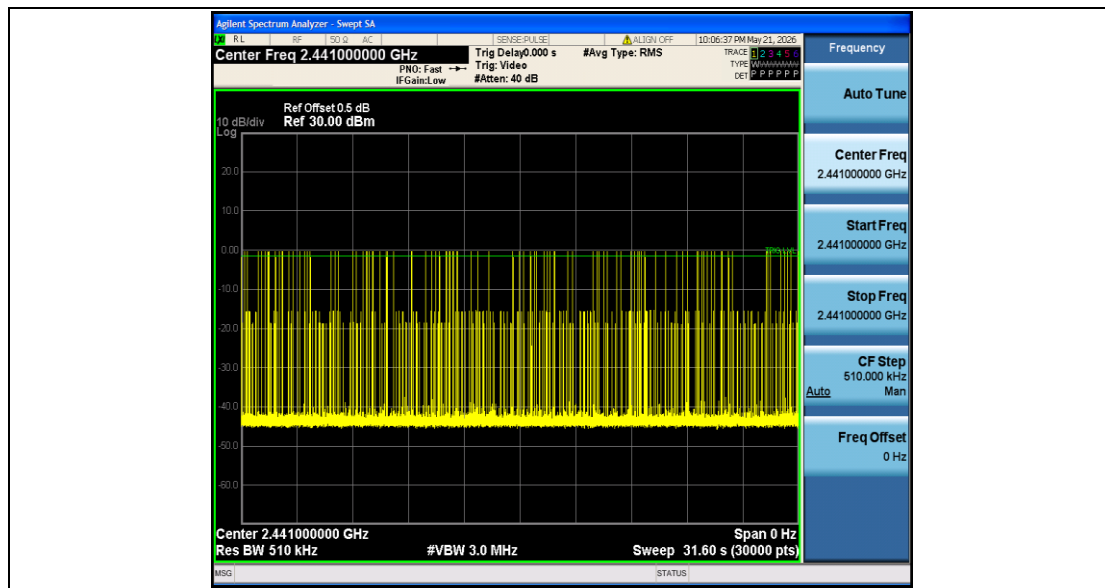


2DH3\_Ant1\_Hop



2DH5\_Ant1\_Hop



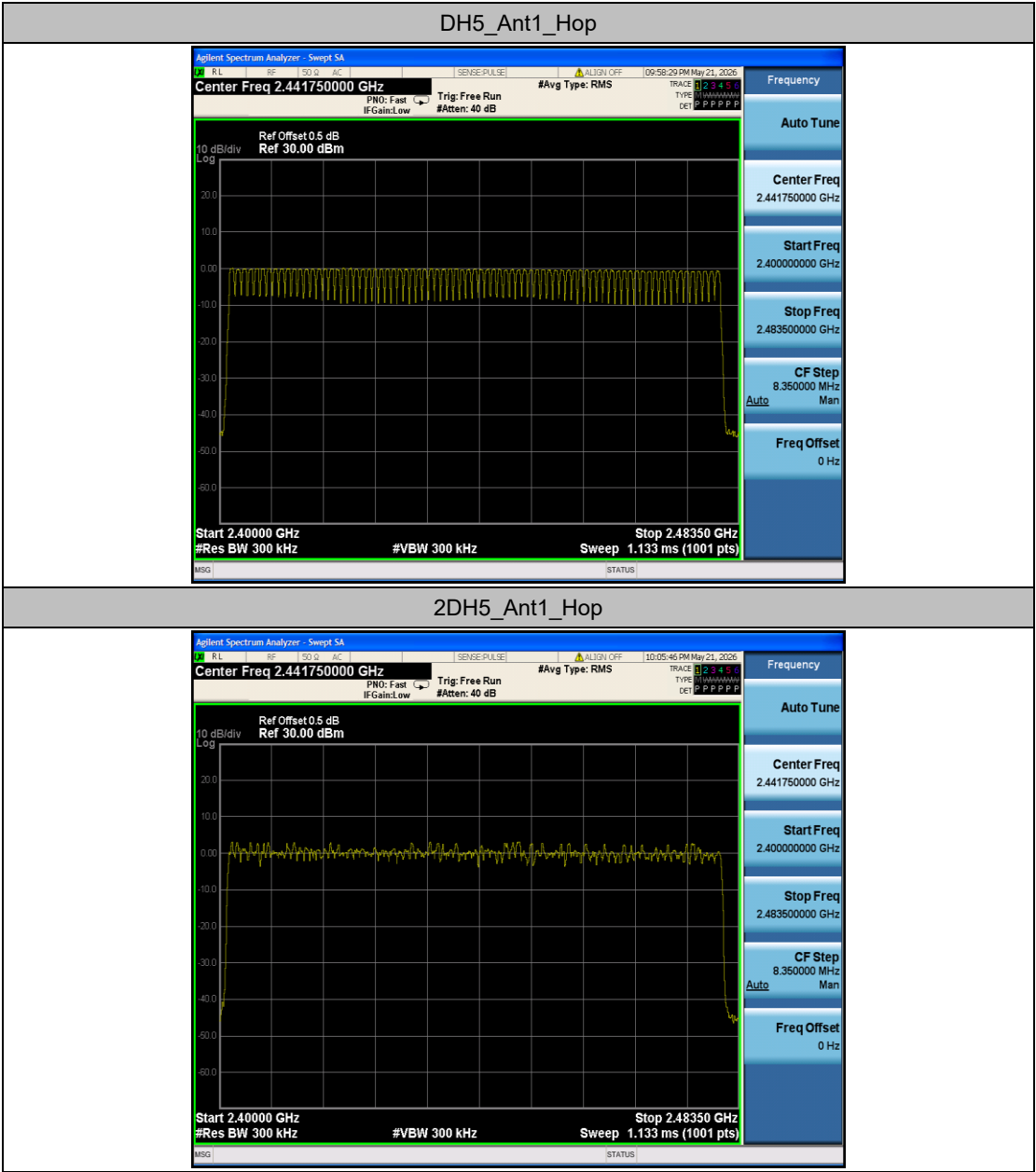


## Appendix F: Number of hopping channels

### Test Result

| TestMode | Antenna | Freq(MHz) | Result[Num] | Limit[Num] | Verdict |
|----------|---------|-----------|-------------|------------|---------|
| DH5      | Ant1    | Hop       | 79          | ≥15        | PASS    |
| 2DH5     | Ant1    | Hop       | 79          | ≥15        | PASS    |

Test Graphs

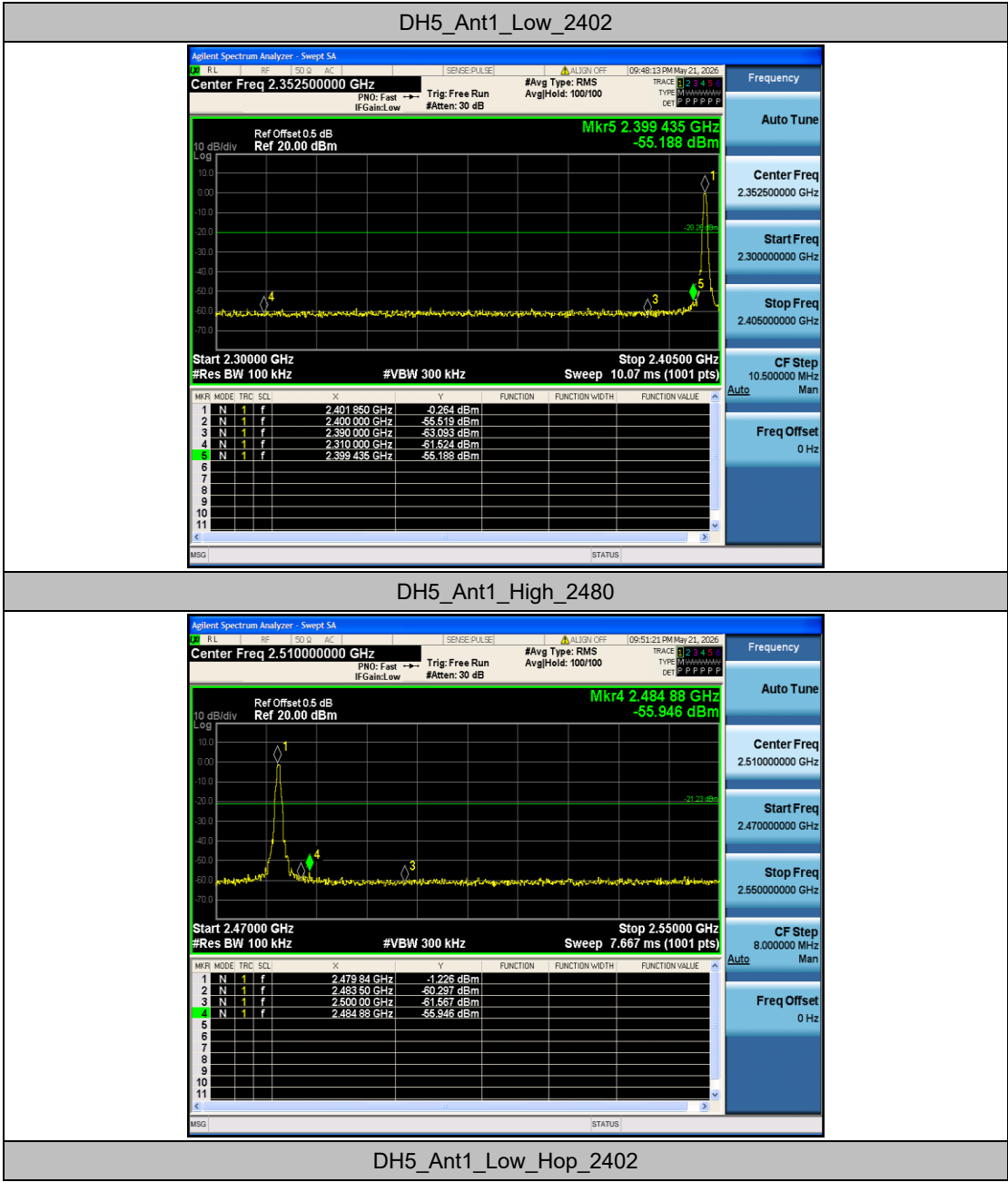


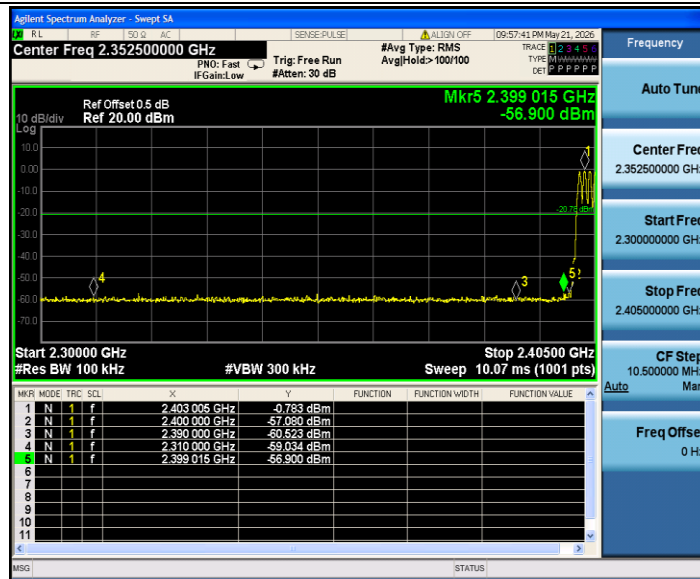
## Appendix G: Band edge measurements

### Test Result

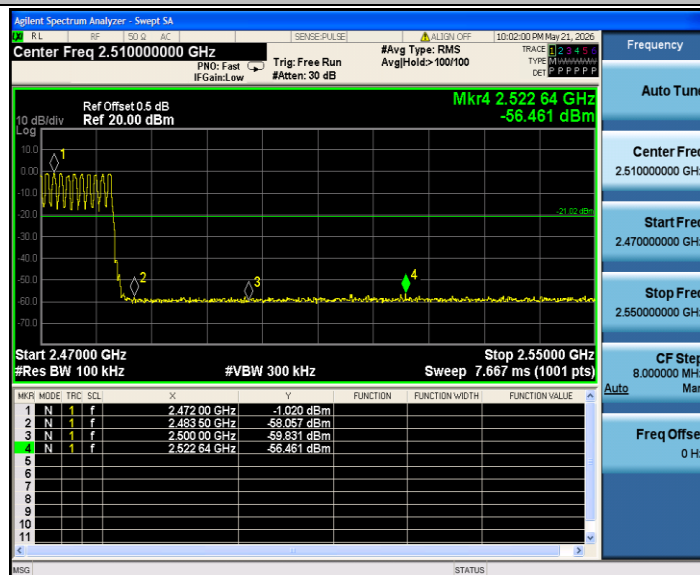
| TestMode | Antenna | ChName | Freq(MHz) | RefLevel<br>[dBm] | Result<br>[dBm] | Limit<br>[dBm] | Verdict |
|----------|---------|--------|-----------|-------------------|-----------------|----------------|---------|
| DH5      | Ant1    | Low    | 2402      | -0.26             | -55.19          | ≤-20.26        | PASS    |
|          |         | High   | 2480      | -1.23             | -55.95          | ≤-21.23        | PASS    |
|          |         | Low    | Hop_2402  | -0.78             | -56.9           | ≤-20.78        | PASS    |
|          |         | High   | Hop_2480  | -1.02             | -56.46          | ≤-21.02        | PASS    |
| 2DH5     | Ant1    | Low    | 2402      | -0.44             | -56.83          | ≤-20.44        | PASS    |
|          |         | High   | 2480      | -0.96             | -57.17          | ≤-20.96        | PASS    |
|          |         | Low    | Hop_2402  | -3.76             | -57.76          | ≤-23.76        | PASS    |
|          |         | High   | Hop_2480  | -0.96             | -57.1           | ≤-20.96        | PASS    |

# Test Graphs

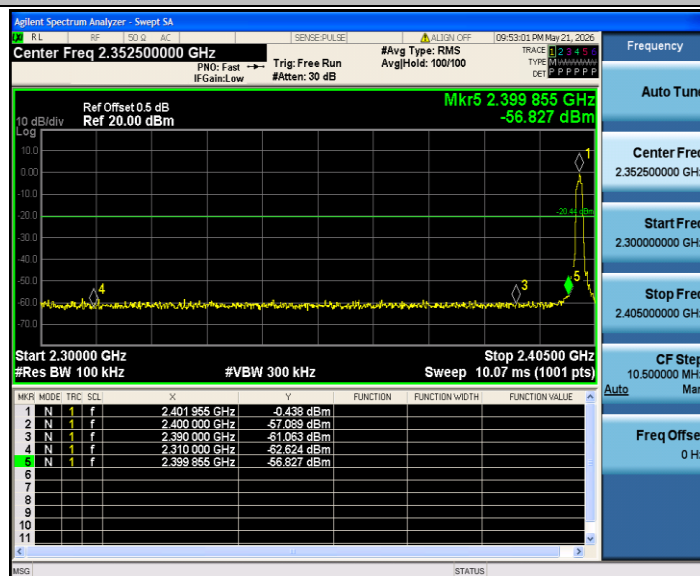




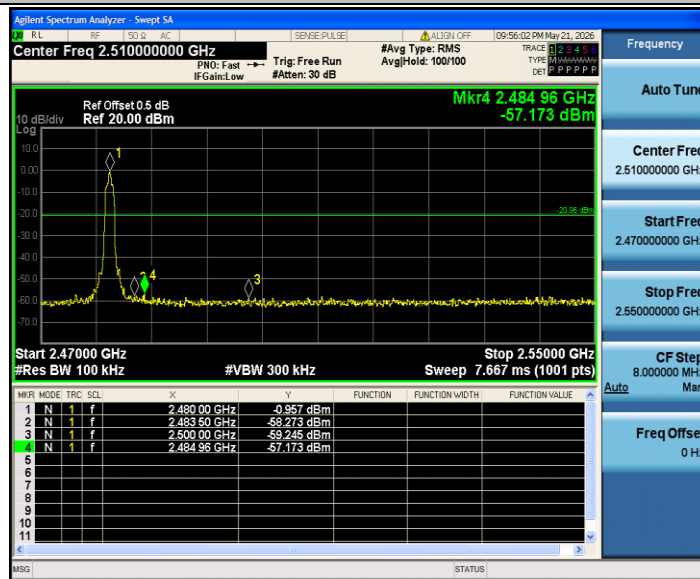
DH5\_Ant1\_High\_Hop\_2480



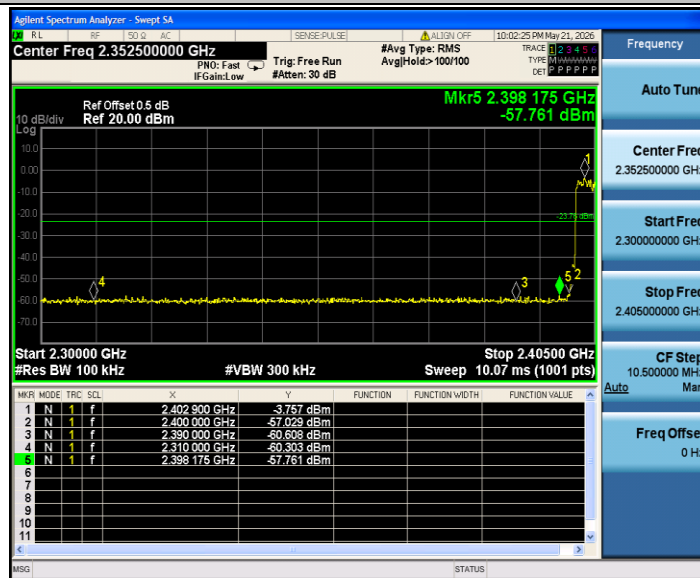
2DH5\_Ant1\_Low\_2402



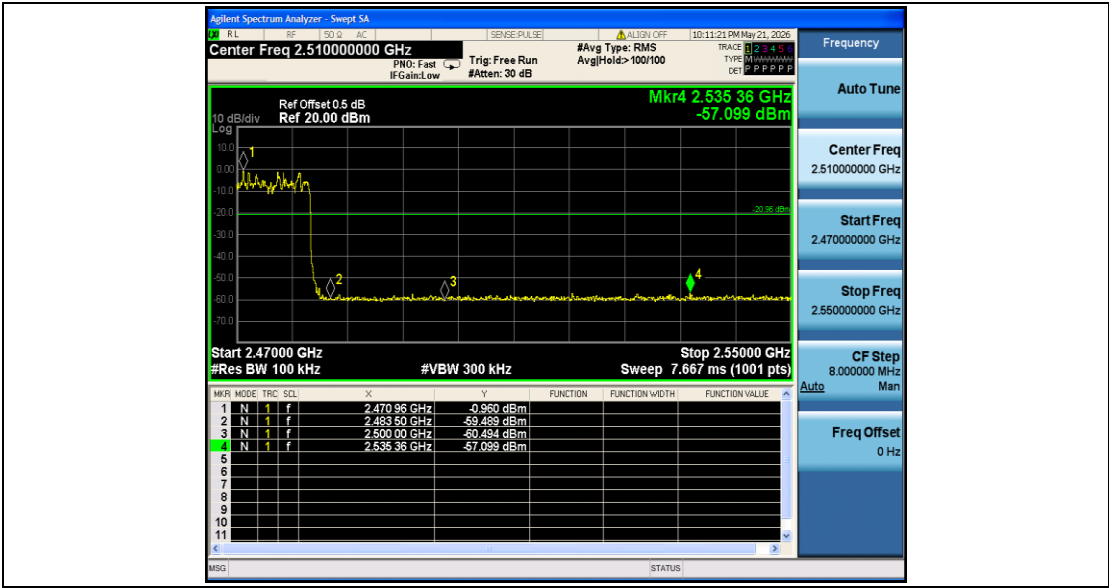
## 2DH5\_Ant1\_High\_2480



## 2DH5\_Ant1\_Low\_Hop\_2402



## 2DH5\_Ant1\_High\_Hop\_2480



## Appendix H: Conducted Spurious Emission

### Test Result

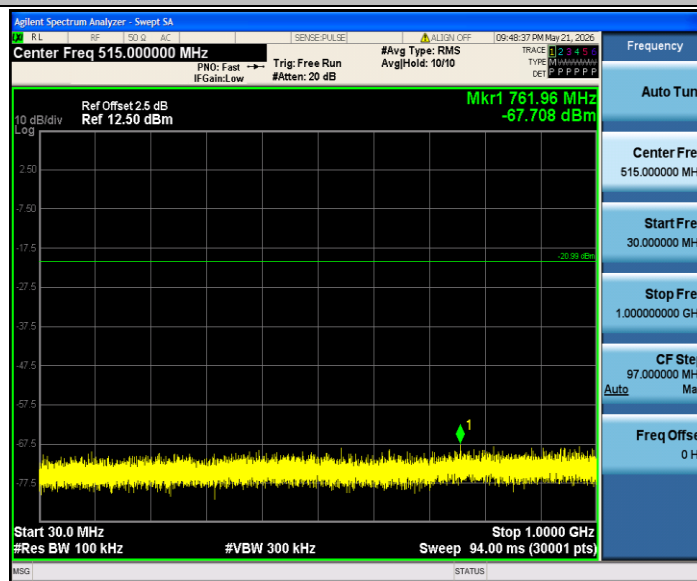
| TestMode | Antenna | Freq(MHz) | FreqRange [MHz] | RefLevel [dBm] | Result [dBm] | Limit [dBm] | Verdict |
|----------|---------|-----------|-----------------|----------------|--------------|-------------|---------|
| DH5      | Ant1    | 2402      | Reference       | -0.99          | -0.99        | ---         | PASS    |
|          |         |           | 30~1000         | -0.99          | -67.71       | ≤-20.99     | PASS    |
|          |         |           | 1000~26500      | -0.99          | -30.09       | ≤-20.99     | PASS    |
|          |         | 2441      | Reference       | -1.20          | -1.20        | ---         | PASS    |
|          |         |           | 30~1000         | -1.20          | -68.22       | ≤-21.2      | PASS    |
|          |         |           | 1000~26500      | -1.20          | -30.49       | ≤-21.2      | PASS    |
|          |         | 2480      | Reference       | -1.15          | -1.15        | ---         | PASS    |
|          |         |           | 30~1000         | -1.15          | -67.35       | ≤-21.15     | PASS    |
|          |         |           | 1000~26500      | -1.15          | -29.05       | ≤-21.15     | PASS    |
| 2DH5     | Ant1    | 2402      | Reference       | -2.38          | -2.38        | ---         | PASS    |
|          |         |           | 30~1000         | -2.38          | -68.29       | ≤-22.38     | PASS    |
|          |         |           | 1000~26500      | -2.38          | -30.23       | ≤-22.38     | PASS    |
|          |         | 2441      | Reference       | -4.12          | -4.12        | ---         | PASS    |
|          |         |           | 30~1000         | -4.12          | -67.82       | ≤-24.12     | PASS    |
|          |         |           | 1000~26500      | -4.12          | -29.67       | ≤-24.12     | PASS    |
|          |         | 2480      | Reference       | -5.60          | -5.60        | ---         | PASS    |
|          |         |           | 30~1000         | -5.60          | -66.85       | ≤-25.6      | PASS    |
|          |         |           | 1000~26500      | -5.60          | -30.31       | ≤-25.6      | PASS    |

## Test Graphs

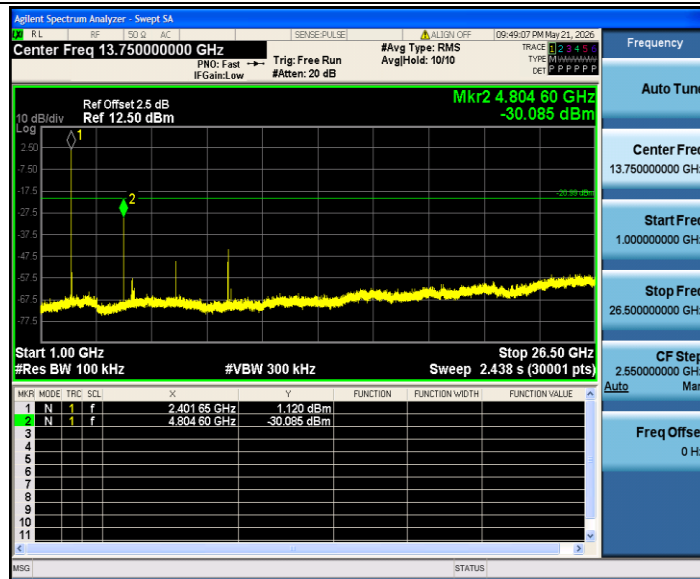
DH5\_Ant1\_2402\_0~Reference



DH5\_Ant1\_2402\_30~1000



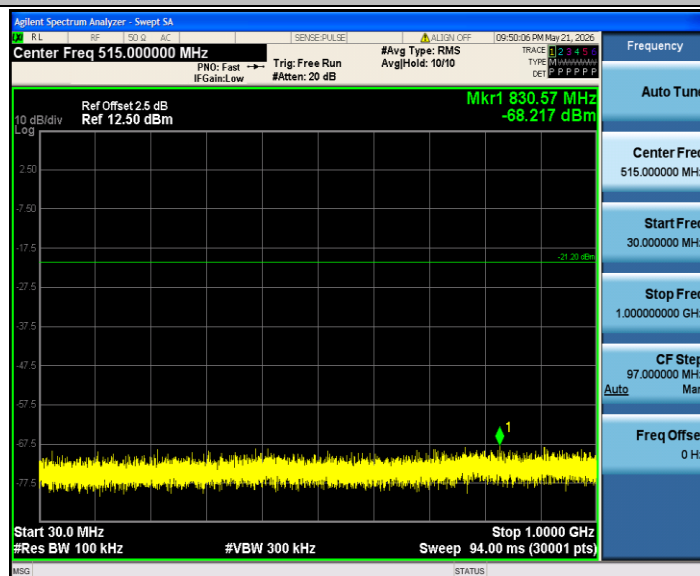
DH5\_Ant1\_2402\_1000~26500



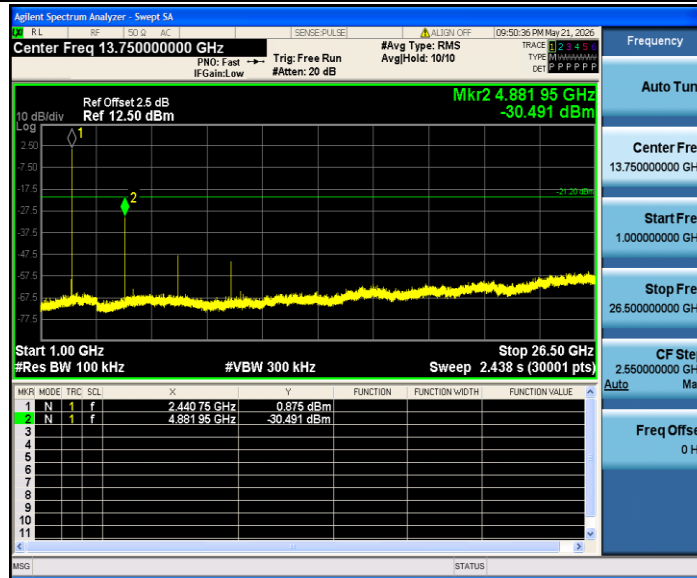
DH5\_Ant1\_2441\_0~Reference



DH5\_Ant1\_2441\_30~1000



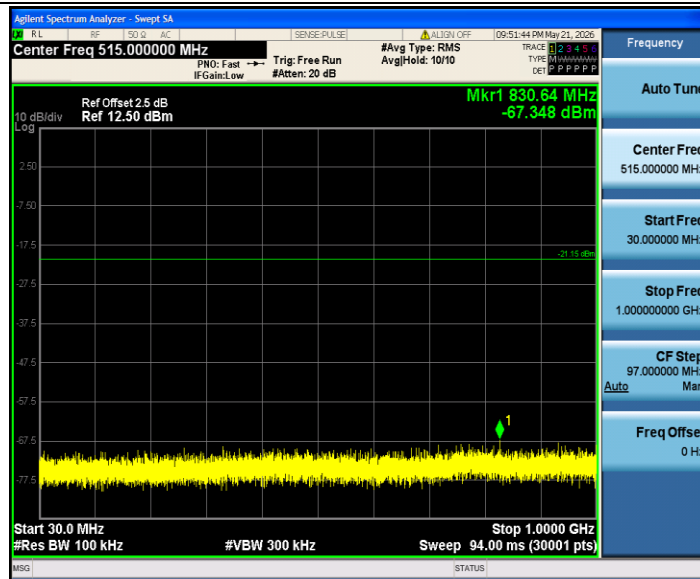
# DH5\_Ant1\_2441\_1000~26500



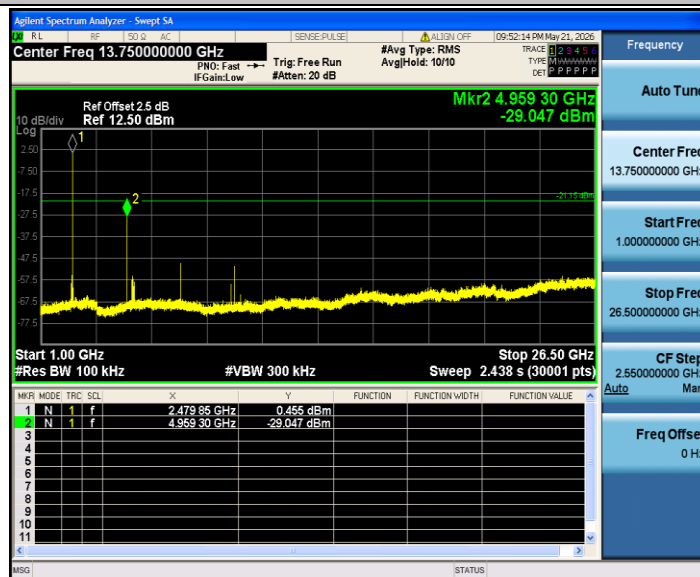
# DH5\_Ant1\_2480\_0~Reference



# DH5\_Ant1\_2480\_30~1000



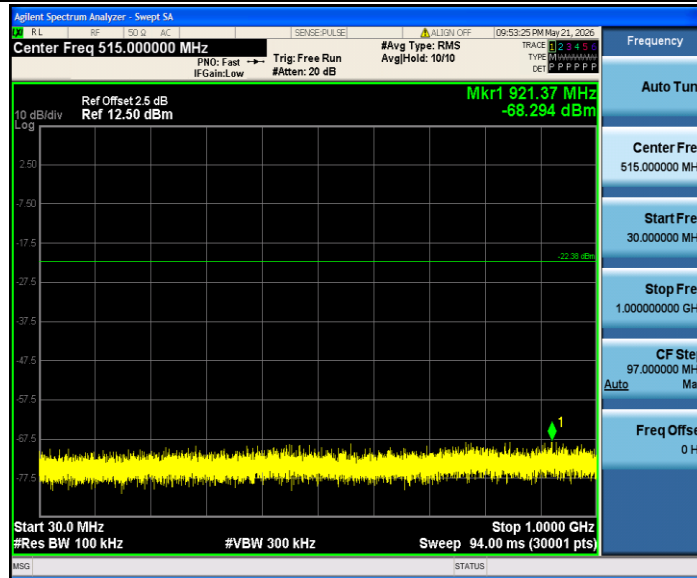
DH5\_Ant1\_2480\_1000~26500



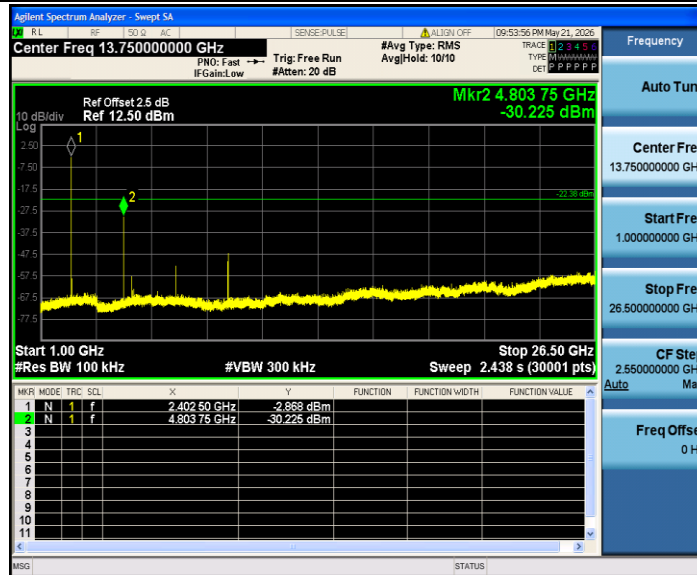
2DH5\_Ant1\_2402\_0~Reference



# 2DH5\_Ant1\_2402\_30~1000



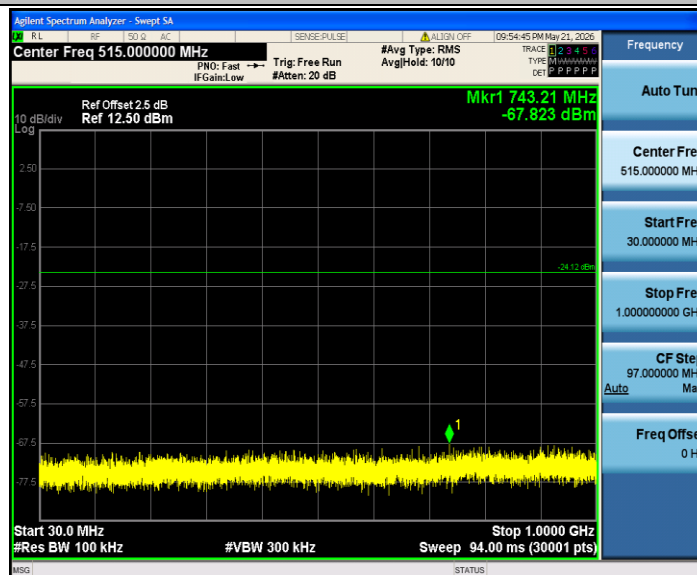
# 2DH5\_Ant1\_2402\_1000~26500



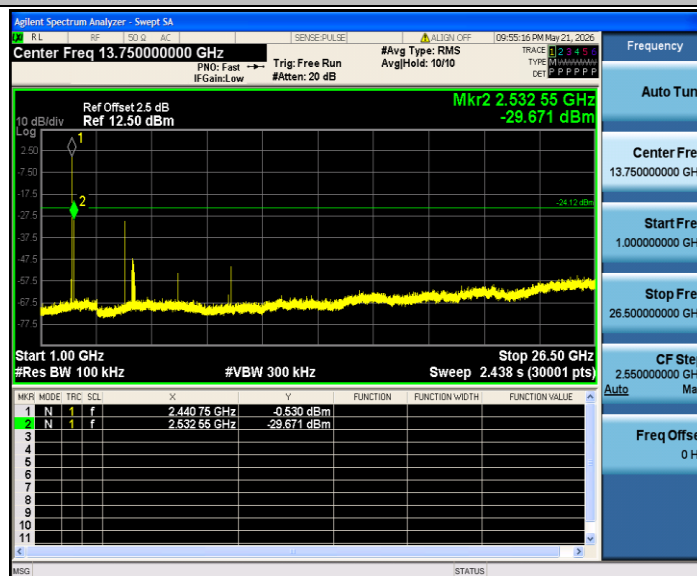
# 2DH5\_Ant1\_2441\_0~Reference



2DH5\_Ant1\_2441\_30~1000



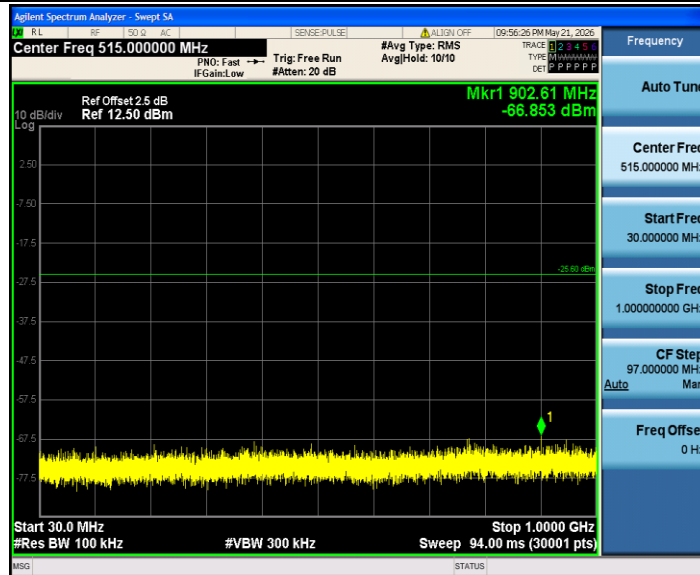
2DH5\_Ant1\_2441\_1000~26500



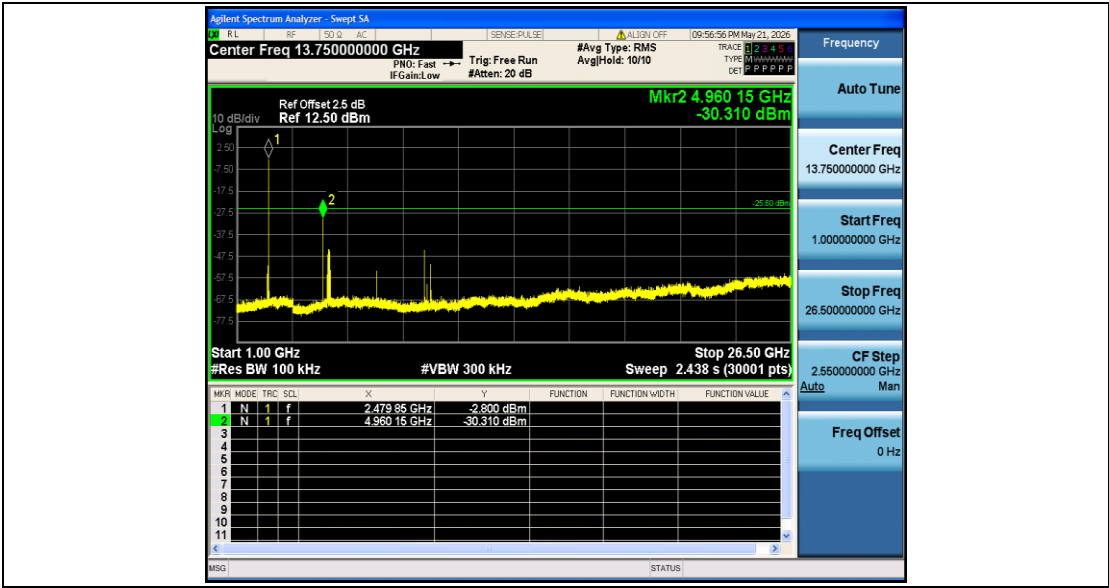
# 2DH5\_Ant1\_2480\_0~Reference



# 2DH5\_Ant1\_2480\_30~1000



# 2DH5\_Ant1\_2480\_1000~26500



## Appendix I: Duty Cycle

### Test Result

| TestMode | Antenna | Freq(MHz) | ON Time<br>[ms] | Period<br>[ms] | DC<br>[%] | xFactor | Limit | Verdict |
|----------|---------|-----------|-----------------|----------------|-----------|---------|-------|---------|
| DH5      | Ant1    | 2402      | 2.91            | 3.74           | 77.81     | 1.09    | ---   | ---     |
|          |         | 2441      | 2.91            | 3.74           | 77.81     | 1.09    | ---   | ---     |
|          |         | 2480      | 2.91            | 3.75           | 77.60     | 1.10    | ---   | ---     |
| 2DH5     | Ant1    | 2402      | 2.92            | 3.75           | 77.87     | 1.09    | ---   | ---     |
|          |         | 2441      | 2.92            | 3.75           | 77.87     | 1.09    | ---   | ---     |
|          |         | 2480      | 2.92            | 3.75           | 77.87     | 1.09    | ---   | ---     |