

## **FCC Appendix RF Test Data**

**FCC ID : 2BECA-EP-0168**

**Company: : Guangdong Jingge New Energy Technology Co.,Ltd**

**EUT : Solar power system**

**Model Number : EP-0168**

**Report No. : CTA25050601001**

**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      | 0.879            | 2401.553 | 2402.432 | ---        | ---     |
|          |         | 2441      | 0.960            | 2440.544 | 2441.504 | ---        | ---     |
|          |         | 2480      | 0.945            | 2479.550 | 2480.495 | ---        | ---     |
| 2DH5     | Ant1    | 2402      | 1.269            | 2401.391 | 2402.660 | ---        | ---     |
|          |         | 2441      | 1.320            | 2440.349 | 2441.669 | ---        | ---     |
|          |         | 2480      | 1.278            | 2479.382 | 2480.660 | ---        | ---     |

## Test Graphs

DH5\_Ant1\_2402



DH5\_Ant1\_2441



DH5\_Ant1\_2480



2DH5\_Ant1\_2402



2DH5\_Ant1\_2441



# 2DH5\_Ant1\_2480

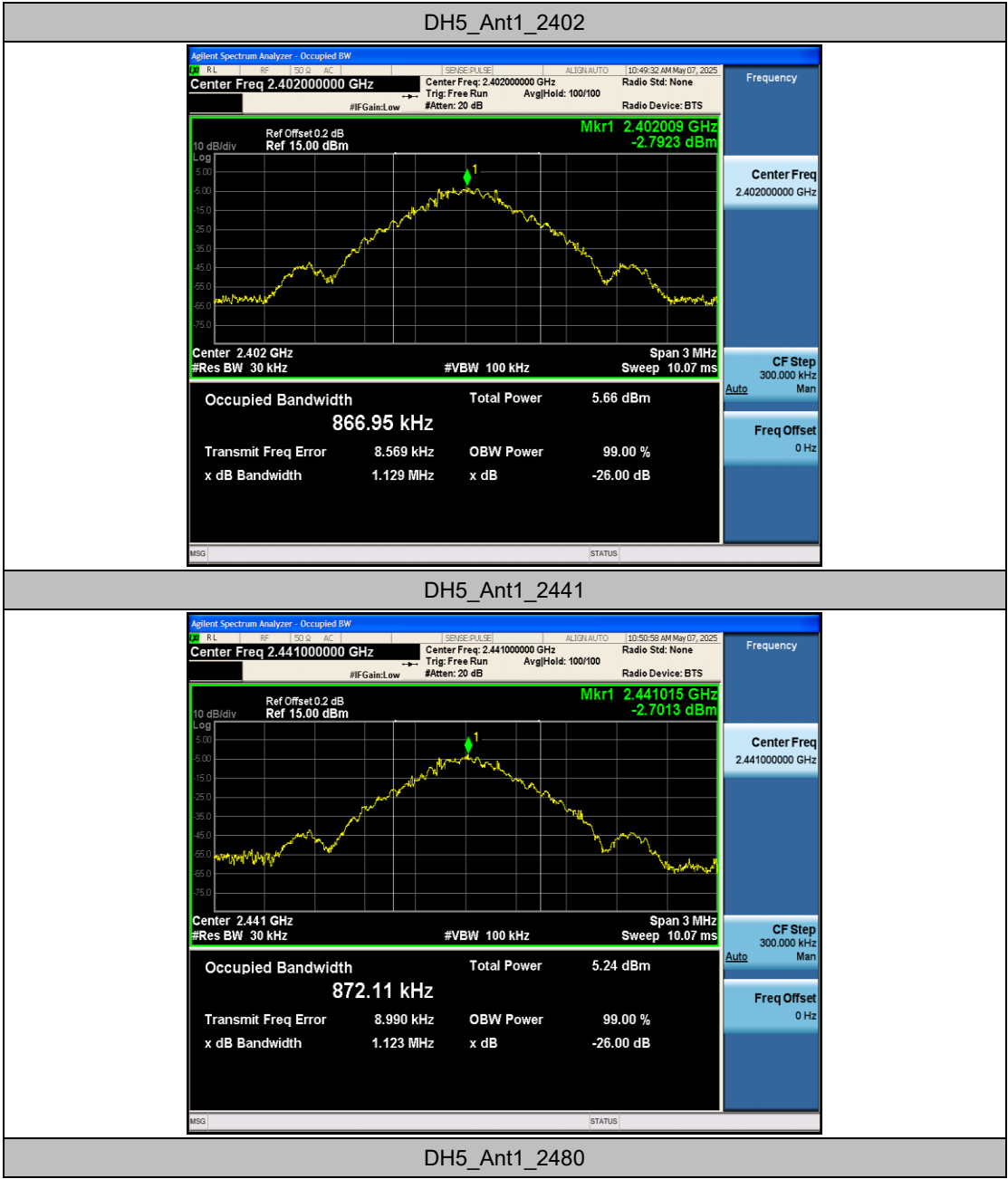


## Appendix B: Occupied Channel Bandwidth

### Test Result

| TestMode | Antenna | Freq(MHz) | OCB [MHz] | FL[MHz]   | FH[MHz]   | Limit[MHz] | Verdict |
|----------|---------|-----------|-----------|-----------|-----------|------------|---------|
| DH5      | Ant1    | 2402      | 0.86695   | 2401.5751 | 2402.4420 | ---        | ---     |
|          |         | 2441      | 0.87211   | 2440.5729 | 2441.4450 | ---        | ---     |
|          |         | 2480      | 0.87276   | 2479.5733 | 2480.4460 | ---        | ---     |
| 2DH5     | Ant1    | 2402      | 1.1901    | 2401.4157 | 2402.6058 | ---        | ---     |
|          |         | 2441      | 1.1874    | 2440.4171 | 2441.6045 | ---        | ---     |
|          |         | 2480      | 1.1892    | 2479.4171 | 2480.6063 | ---        | ---     |

Test Graphs

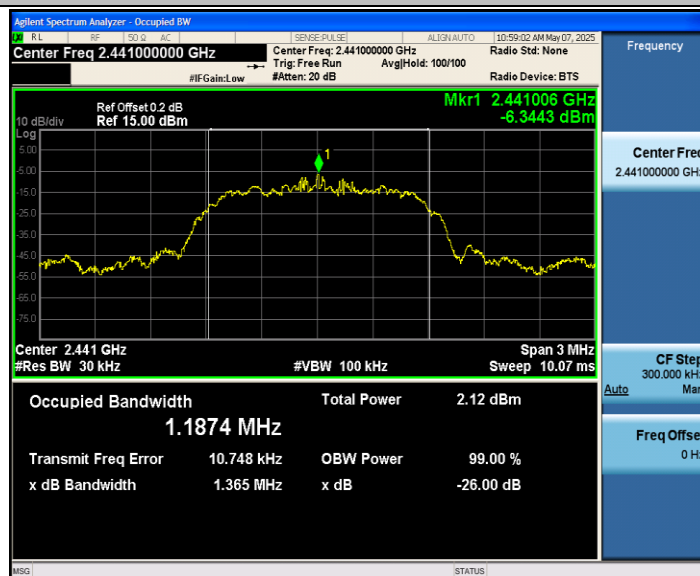




2DH5\_Ant1\_2402

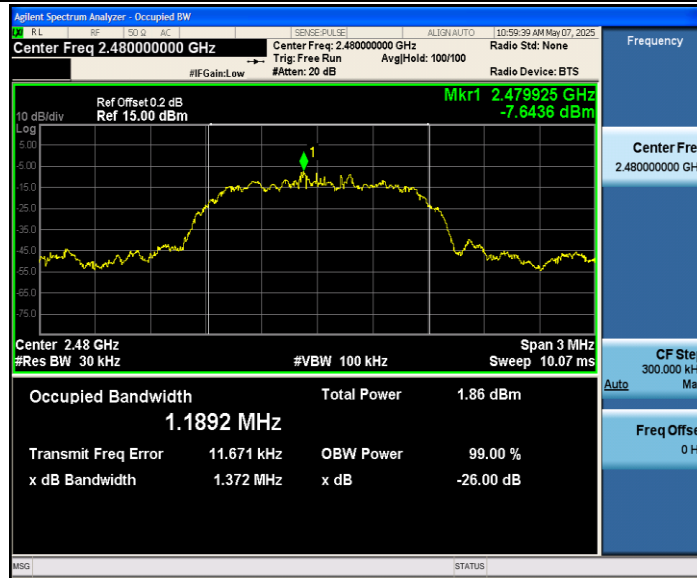


2DH5\_Ant1\_2441





# 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      | -0.32                     | ≤20.97               | PASS    |
|           |         | 2441      | -0.53                     | ≤20.97               | PASS    |
|           |         | 2480      | -0.68                     | ≤20.97               | PASS    |
| 2DH5      | Ant1    | 2402      | -1.18                     | ≤20.97               | PASS    |
|           |         | 2441      | -1.42                     | ≤20.97               | PASS    |
|           |         | 2480      | -1.47                     | ≤20.97               | PASS    |

## Appendix D: Carrier frequency separation

### Test Result

| TestMode | Antenna | Freq(MHz) | Result[MHz] | Limit[MHz]   | Verdict |
|----------|---------|-----------|-------------|--------------|---------|
| DH5      | Ant1    | Hop       | 1.032       | $\geq 0.960$ | PASS    |
| 2DH5     | Ant1    | Hop       | 0.924       | $\geq 0.880$ | PASS    |

## Test Graphs

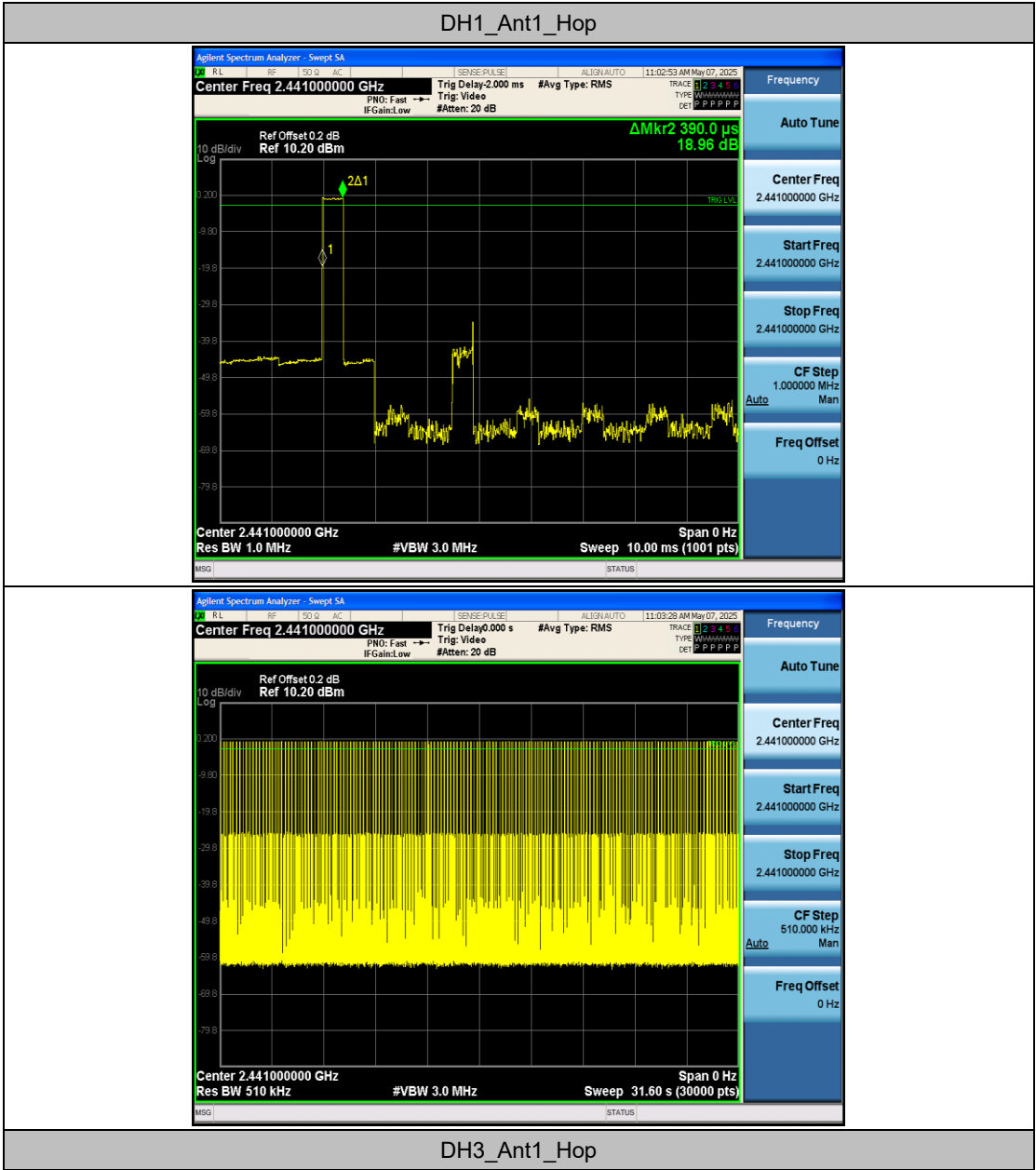


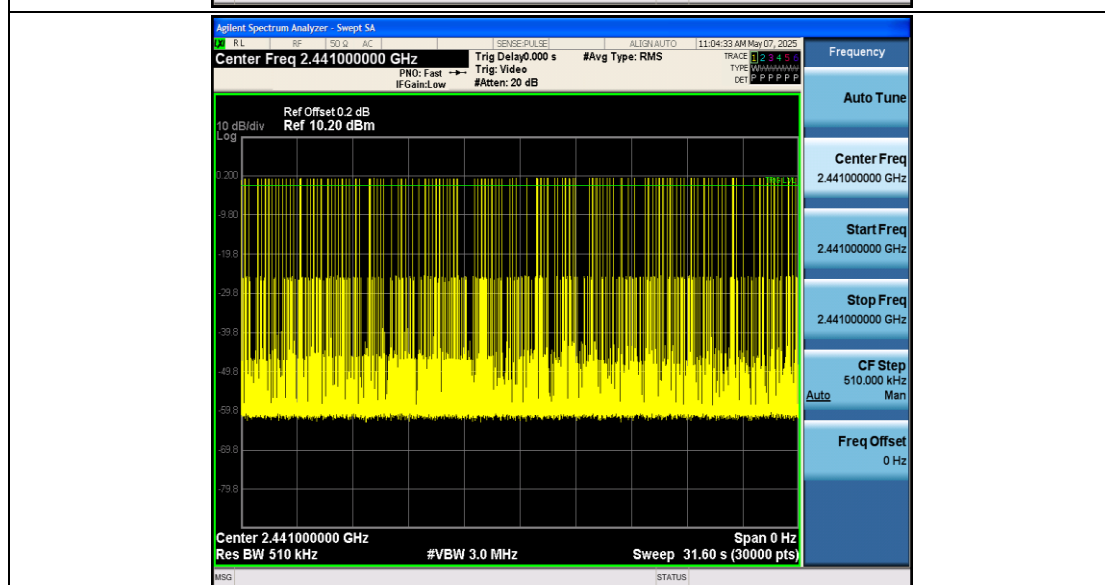
## Appendix E: Time of occupancy

### Test Result

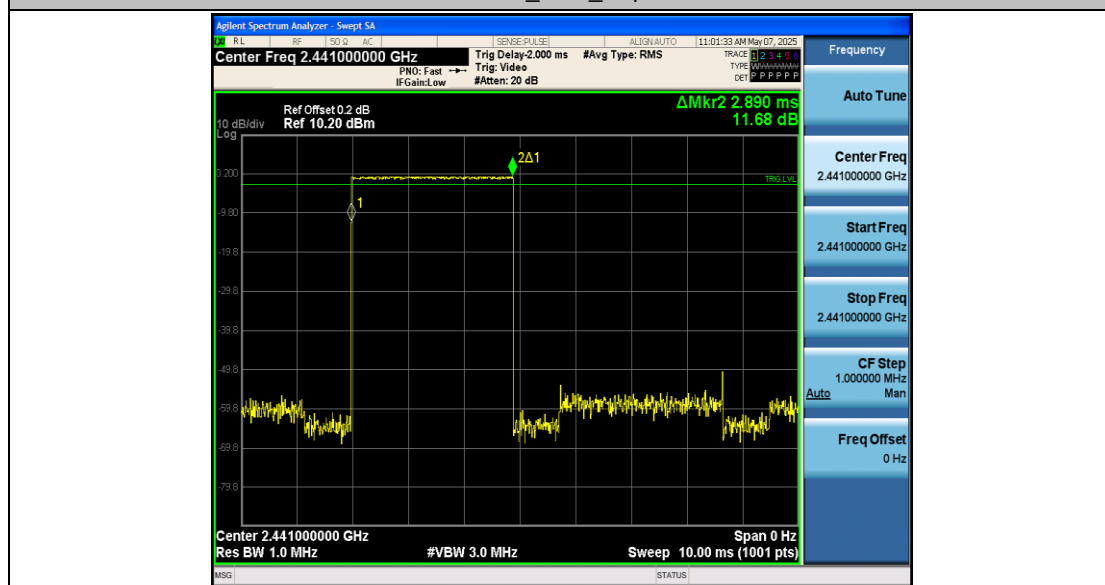
| TestMode | Antenna | Freq(MHz) | BurstWidth<br>[ms] | TotalHops<br>[Num] | Result[s] | Limit[s] | Verdict |
|----------|---------|-----------|--------------------|--------------------|-----------|----------|---------|
| DH1      | Ant1    | Hop       | 0.390              | 313                | 0.122     | ≤0.4     | PASS    |
| DH3      | Ant1    | Hop       | 1.650              | 155                | 0.256     | ≤0.4     | PASS    |
| DH5      | Ant1    | Hop       | 2.890              | 93                 | 0.269     | ≤0.4     | PASS    |
| 2DH1     | Ant1    | Hop       | 0.400              | 318                | 0.127     | ≤0.4     | PASS    |
| 2DH3     | Ant1    | Hop       | 1.650              | 161                | 0.266     | ≤0.4     | PASS    |
| 2DH5     | Ant1    | Hop       | 2.900              | 108                | 0.313     | ≤0.4     | PASS    |

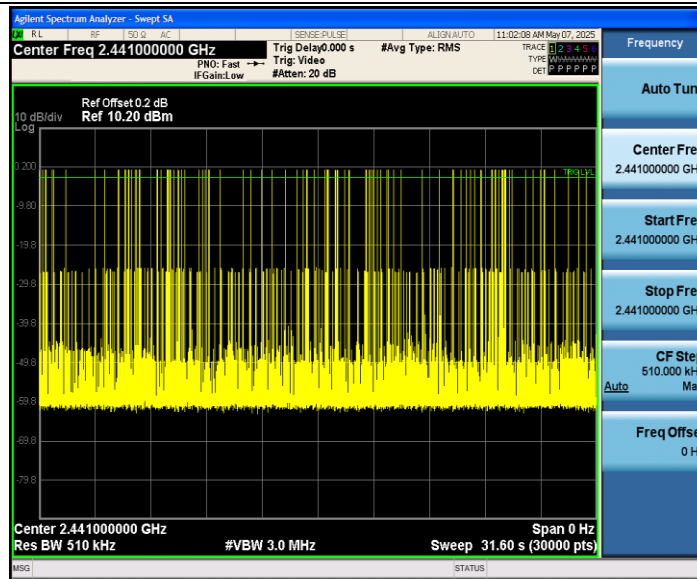
Test Graphs



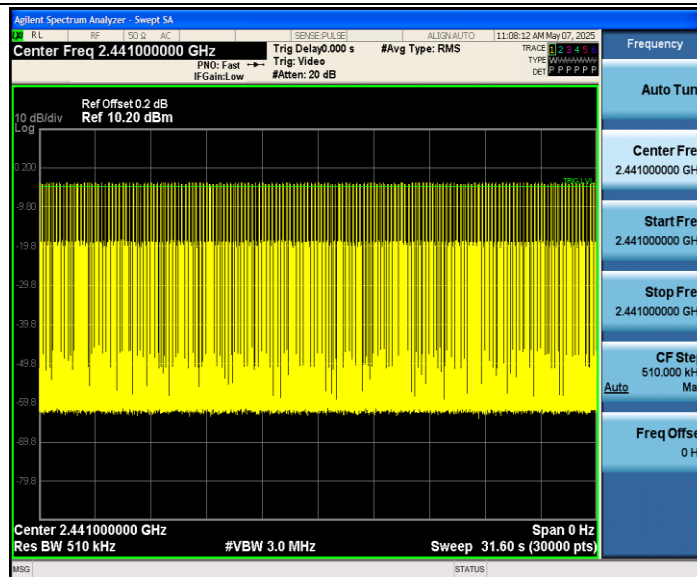
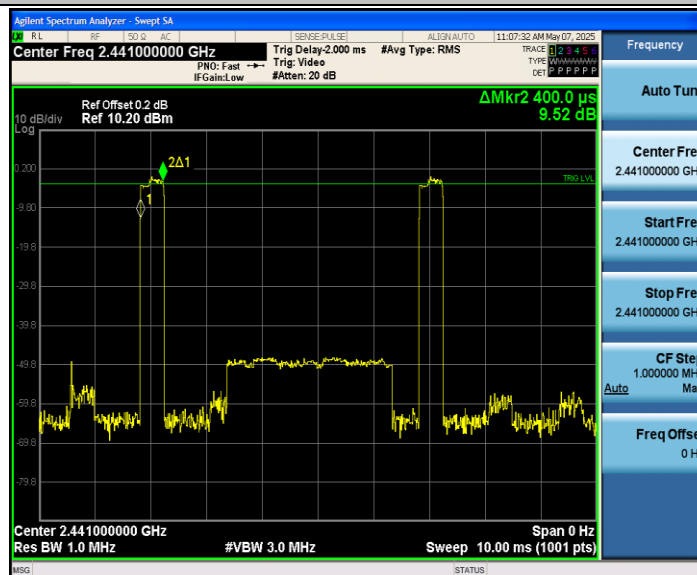


DH5\_Ant1\_Hop



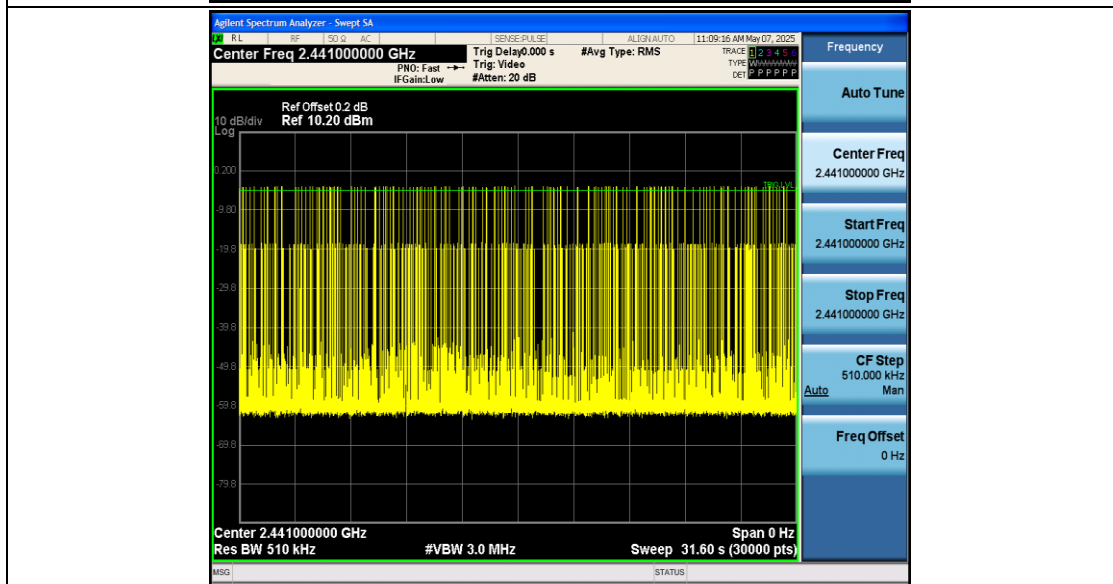
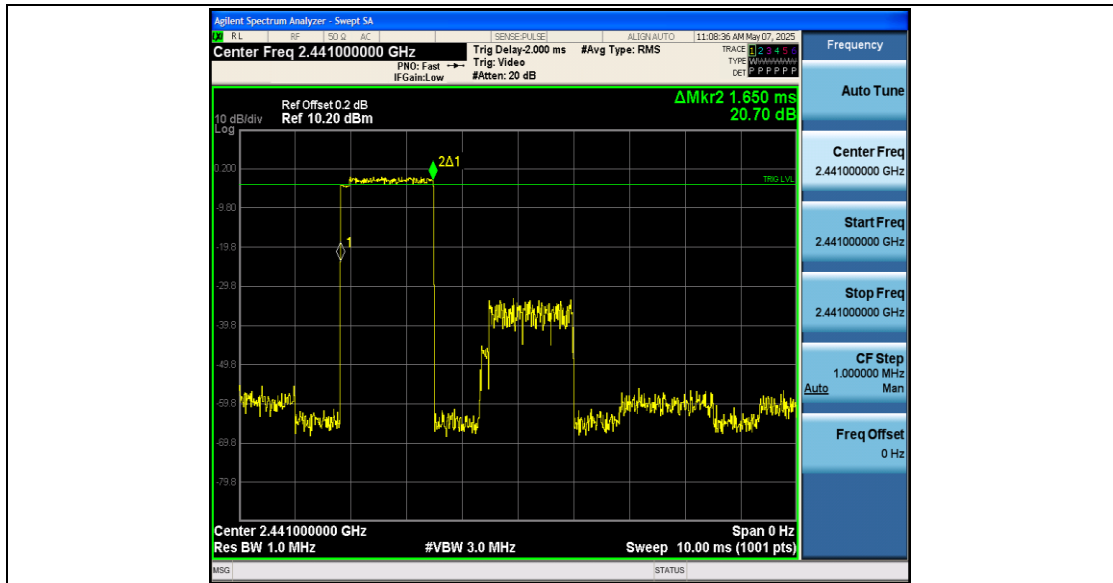


2DH1\_Ant1\_Hop

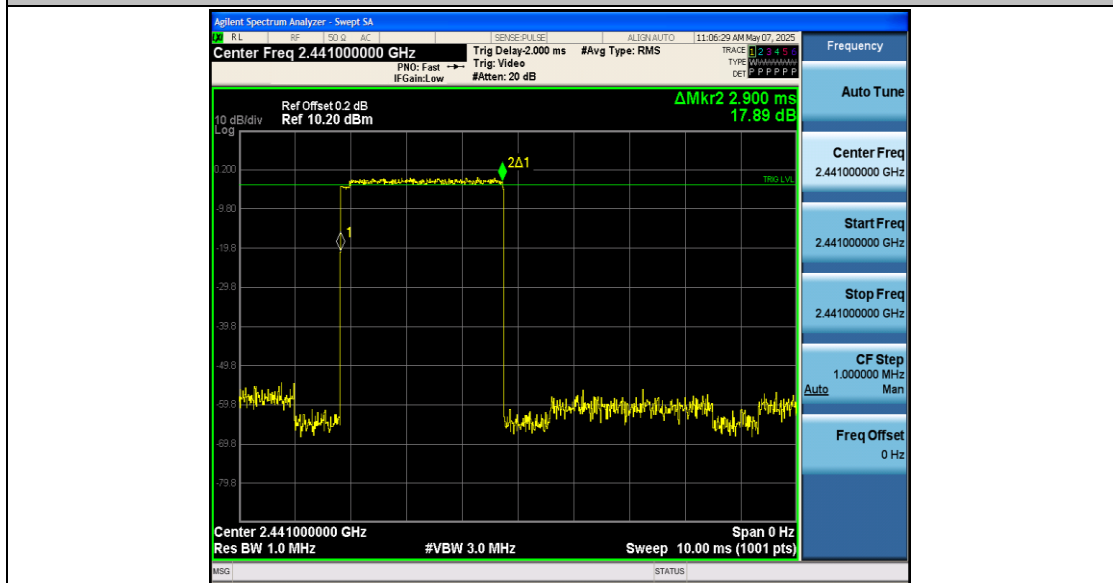


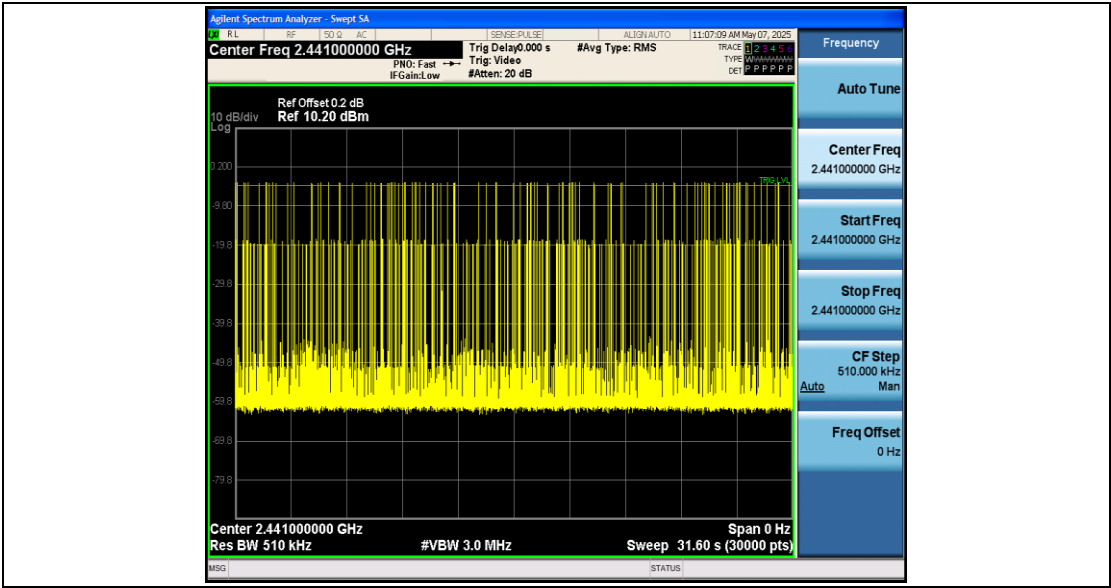
2DH3\_Ant1\_Hop





2DH5\_Ant1\_Hop



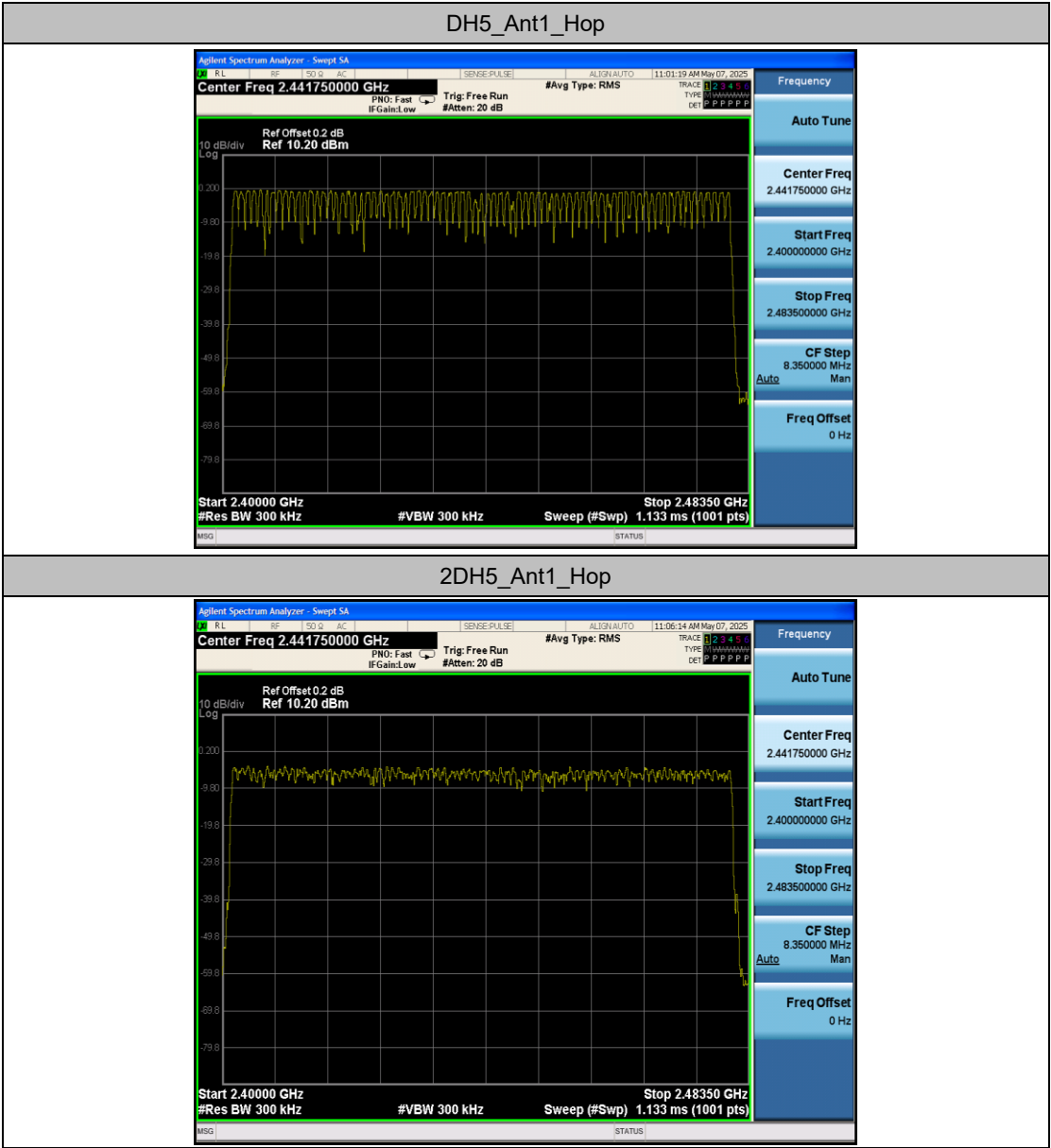


## Appendix F: Number of hopping channels

### 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

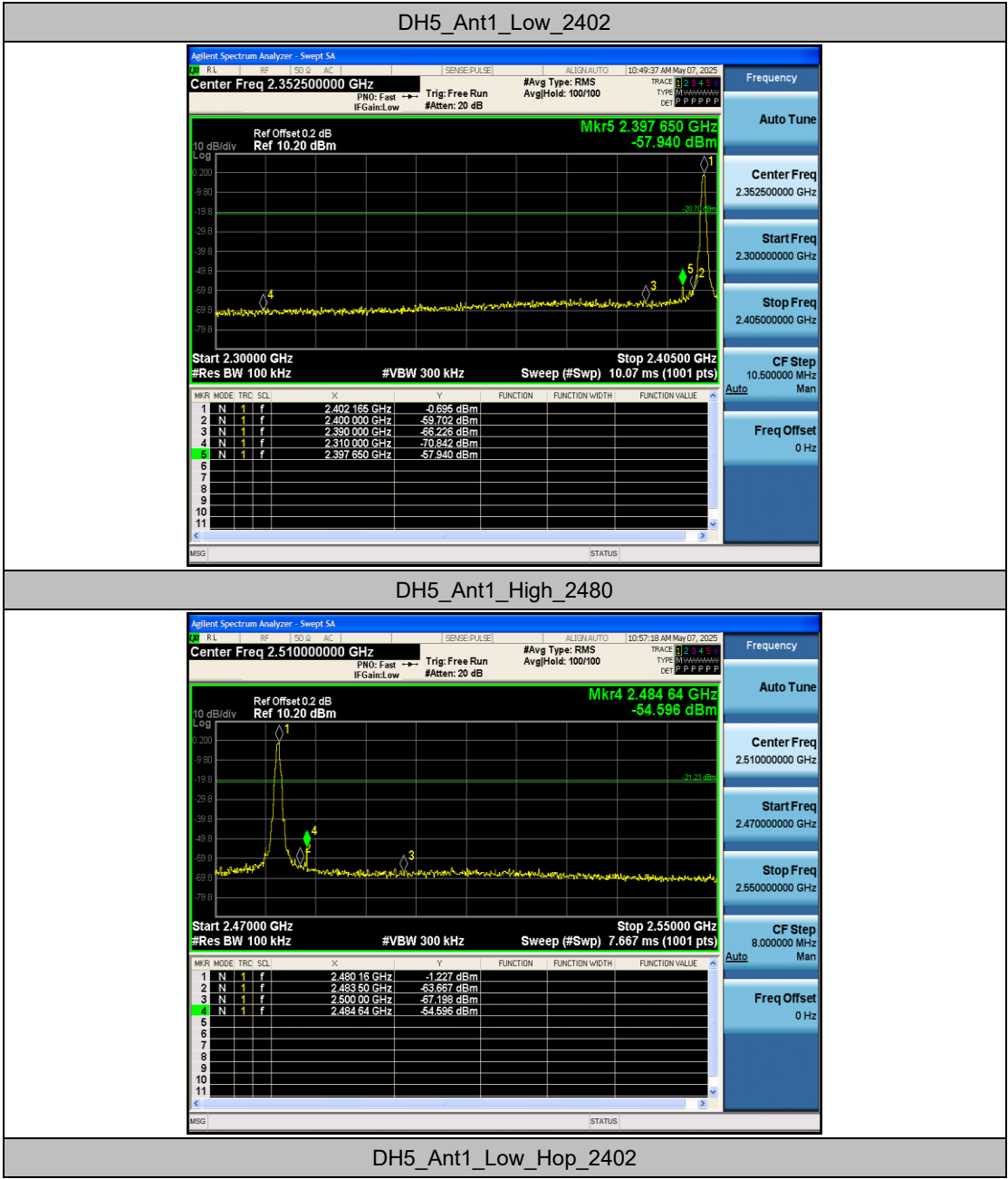


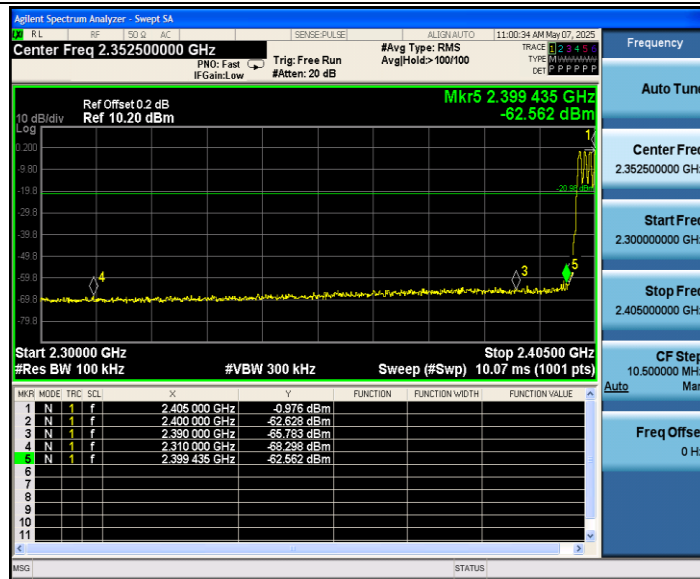
## Appendix G: Band edge measurements

### Test Result

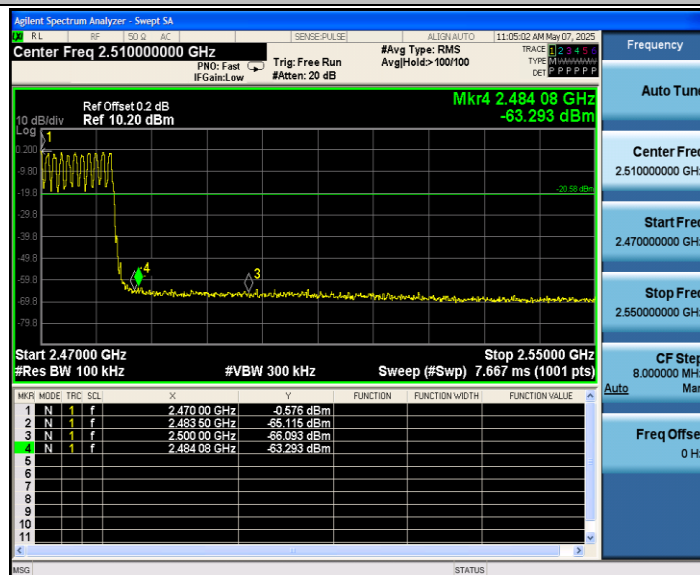
| TestMode | Antenna | ChName | Freq(MHz) | RefLevel<br>[dBm] | Result<br>[dBm] | Limit<br>[dBm] | Verdict |
|----------|---------|--------|-----------|-------------------|-----------------|----------------|---------|
| DH5      | Ant1    | Low    | 2402      | -0.70             | -57.94          | ≤-20.7         | PASS    |
|          |         | High   | 2480      | -1.23             | -54.6           | ≤-21.23        | PASS    |
|          |         | Low    | Hop_2402  | -0.98             | -62.56          | ≤-20.98        | PASS    |
|          |         | High   | Hop_2480  | -0.58             | -63.29          | ≤-20.58        | PASS    |
| 2DH5     | Ant1    | Low    | 2402      | -3.96             | -61.16          | ≤-23.96        | PASS    |
|          |         | High   | 2480      | -6.33             | -60.3           | ≤-26.33        | PASS    |
|          |         | Low    | Hop_2402  | -5.73             | -63.89          | ≤-25.73        | PASS    |
|          |         | High   | Hop_2480  | -5.85             | -64.65          | ≤-25.85        | PASS    |

# Test Graphs

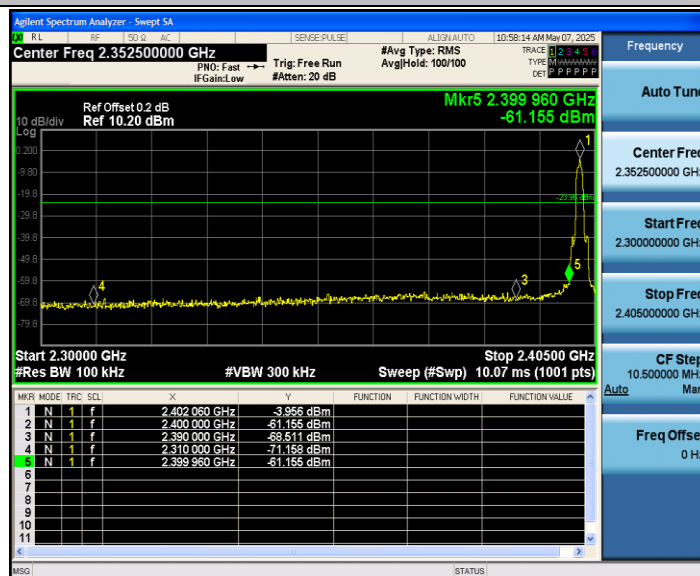




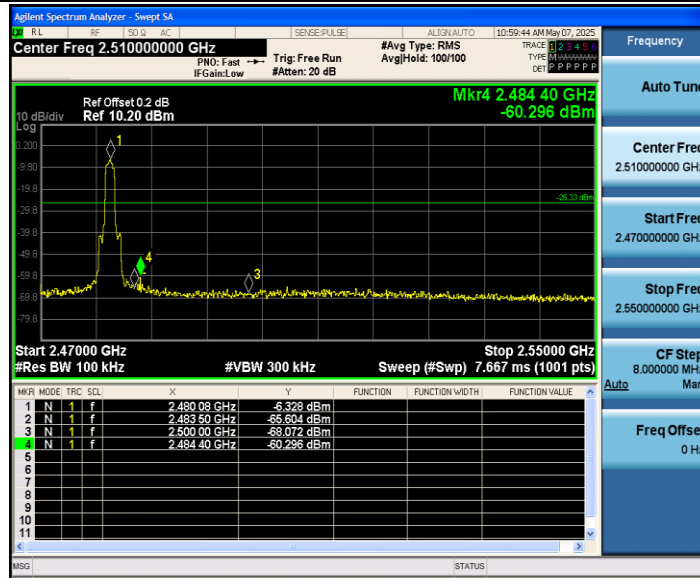
DH5\_Ant1\_High\_Hop\_2480



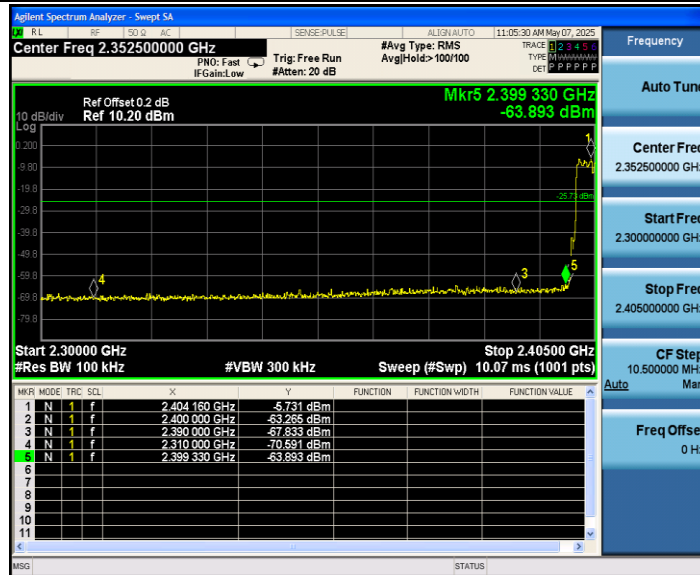
2DH5\_Ant1\_Low\_2402



## 2DH5\_Ant1\_High\_2480

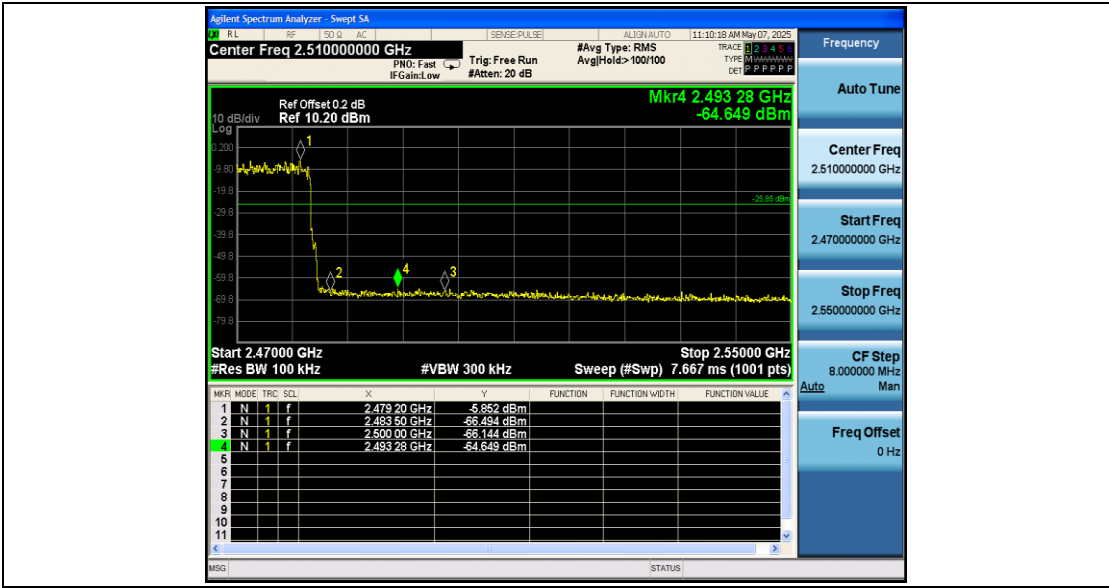


## 2DH5\_Ant1\_Low\_Hop\_2402



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





## Appendix H: Conducted Spurious Emission

### Test Result

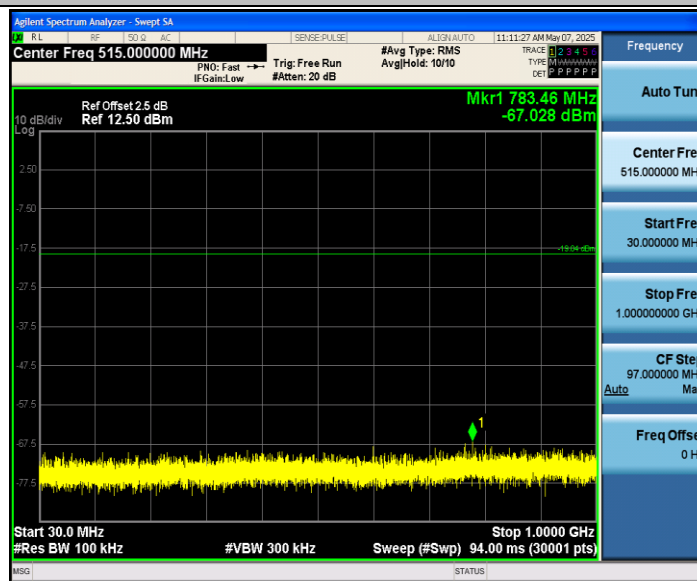
| TestMode | Antenna | Freq(MHz) | FreqRange [MHz] | RefLevel [dBm] | Result [dBm] | Limit [dBm] | Verdict |
|----------|---------|-----------|-----------------|----------------|--------------|-------------|---------|
| DH5      | Ant1    | 2402      | Reference       | 0.96           | 0.96         | ---         | PASS    |
|          |         |           | 30~1000         | 0.96           | -67.03       | ≤-19.04     | PASS    |
|          |         |           | 1000~26500      | 0.96           | -42.8        | ≤-19.04     | PASS    |
|          |         | 2441      | Reference       | 0.79           | 0.79         | ---         | PASS    |
|          |         |           | 30~1000         | 0.79           | -67.57       | ≤-19.21     | PASS    |
|          |         |           | 1000~26500      | 0.79           | -44.6        | ≤-19.21     | PASS    |
|          |         | 2480      | Reference       | 0.34           | 0.34         | ---         | PASS    |
|          |         |           | 30~1000         | 0.34           | -67.58       | ≤-19.66     | PASS    |
|          |         |           | 1000~26500      | 0.34           | -41.79       | ≤-19.66     | PASS    |
| 2DH5     | Ant1    | 2402      | Reference       | -3.34          | -3.34        | ---         | PASS    |
|          |         |           | 30~1000         | -3.34          | -67.44       | ≤-23.34     | PASS    |
|          |         |           | 1000~26500      | -3.34          | -46.54       | ≤-23.34     | PASS    |
|          |         | 2441      | Reference       | -5.11          | -5.11        | ---         | PASS    |
|          |         |           | 30~1000         | -5.11          | -67.09       | ≤-25.11     | PASS    |
|          |         |           | 1000~26500      | -5.11          | -49.77       | ≤-25.11     | PASS    |
|          |         | 2480      | Reference       | -5.46          | -5.46        | ---         | PASS    |
|          |         |           | 30~1000         | -5.46          | -67.31       | ≤-25.46     | PASS    |
|          |         |           | 1000~26500      | -5.46          | -51.51       | ≤-25.46     | PASS    |

## Test Graphs

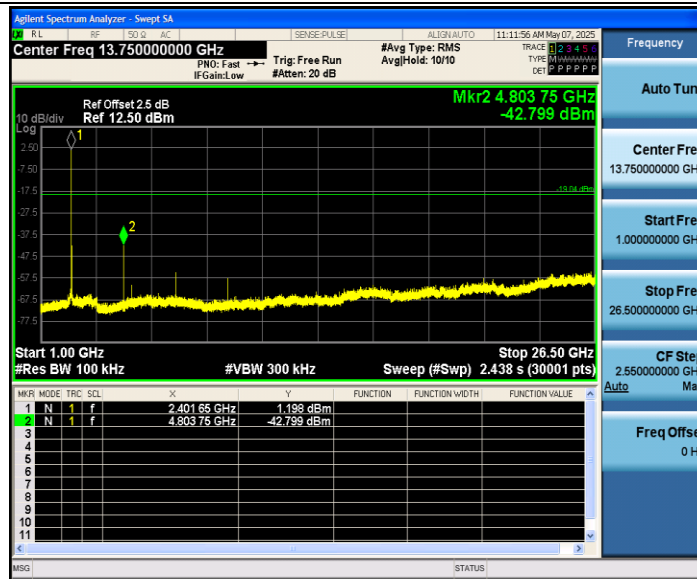
DH5\_Ant1\_2402\_0~Reference



DH5\_Ant1\_2402\_30~1000



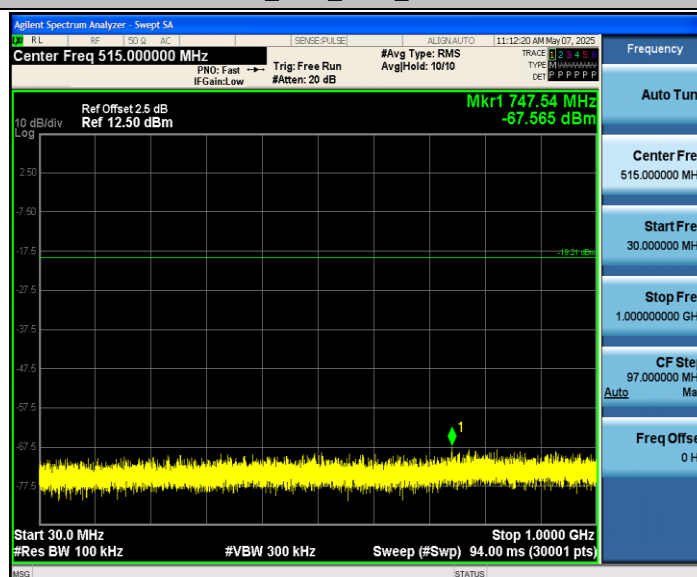
DH5\_Ant1\_2402\_1000~26500



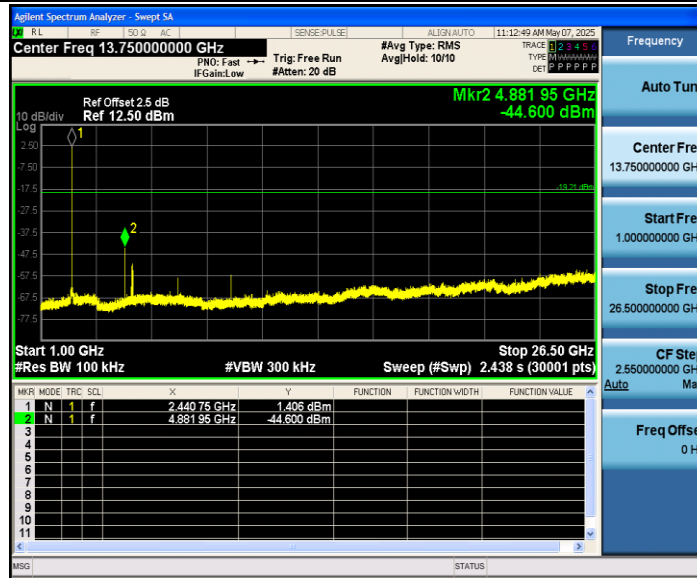
DH5\_Ant1\_2441\_0~Reference



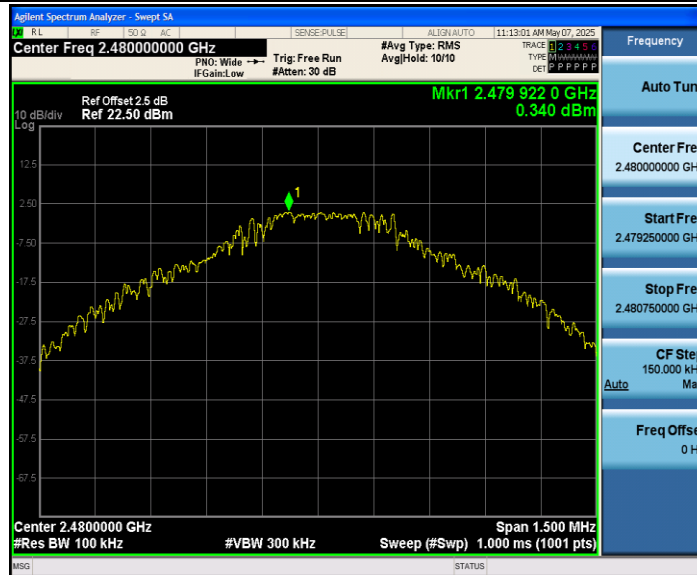
DH5\_Ant1\_2441\_30~1000



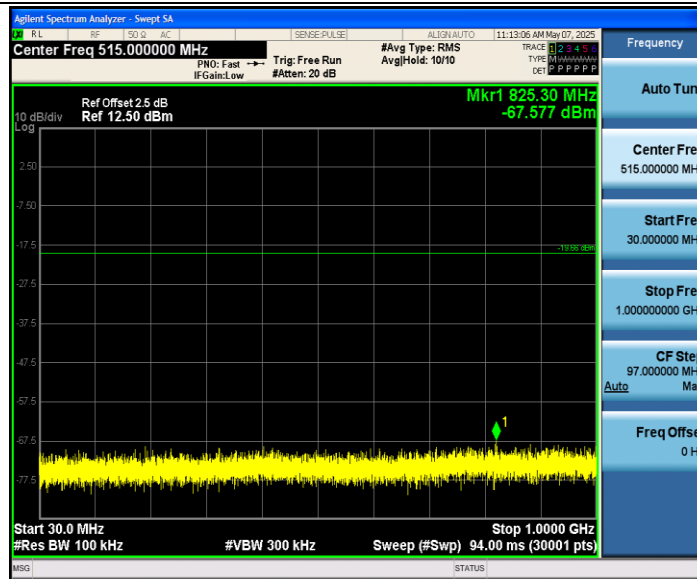
# DH5\_Ant1\_2441\_1000~26500



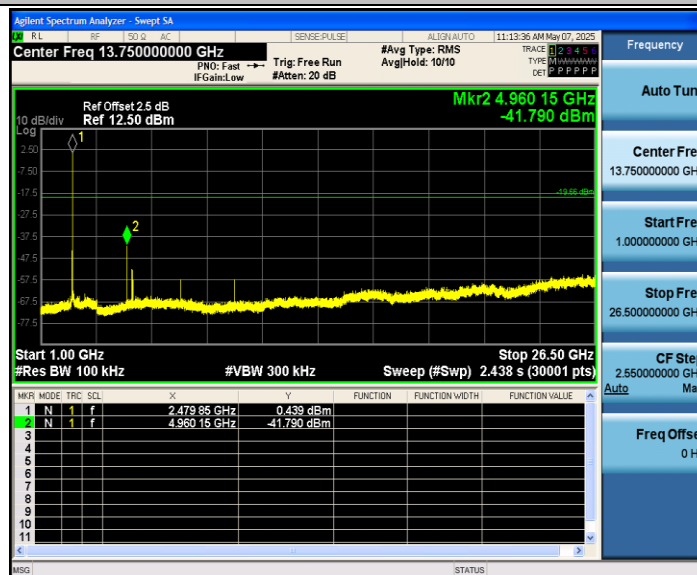
# DH5\_Ant1\_2480\_0~Reference



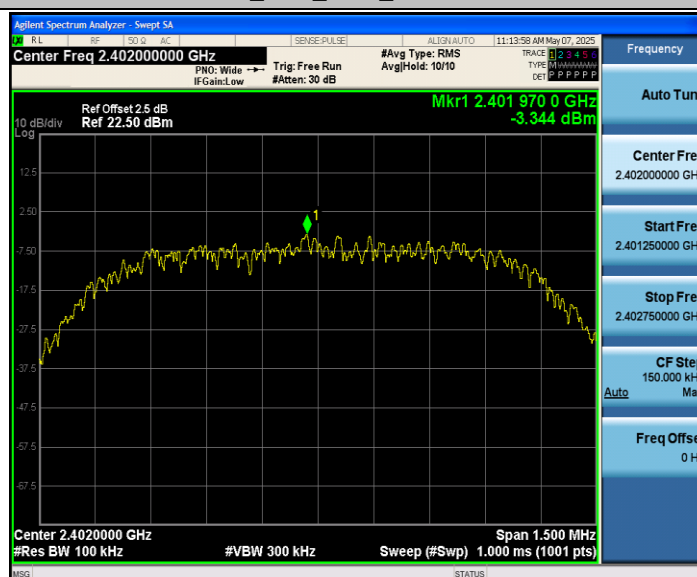
# DH5\_Ant1\_2480\_30~1000



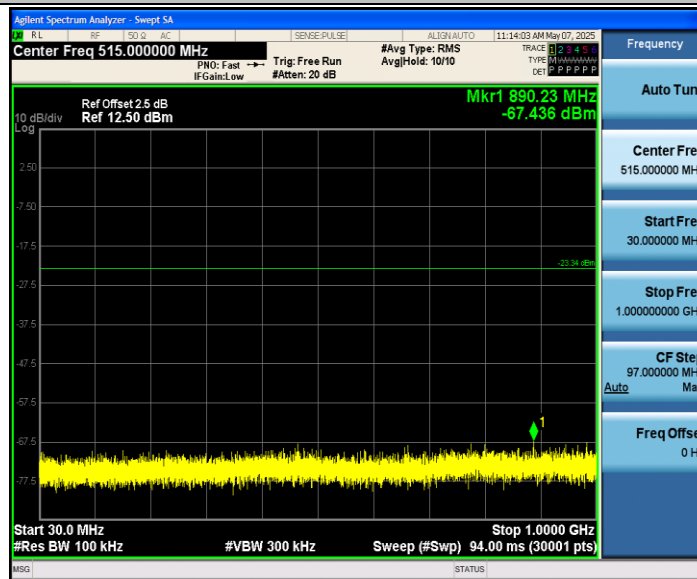
DH5\_Ant1\_2480\_1000~26500



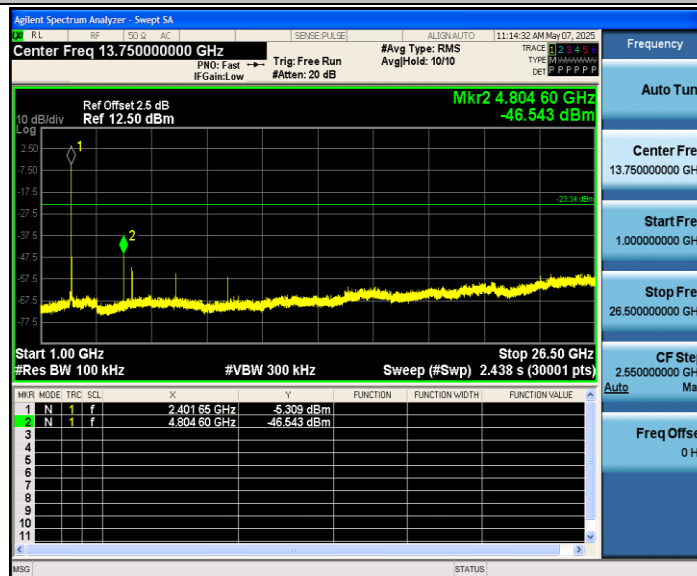
2DH5\_Ant1\_2402\_0~Reference



# 2DH5\_Ant1\_2402\_30~1000



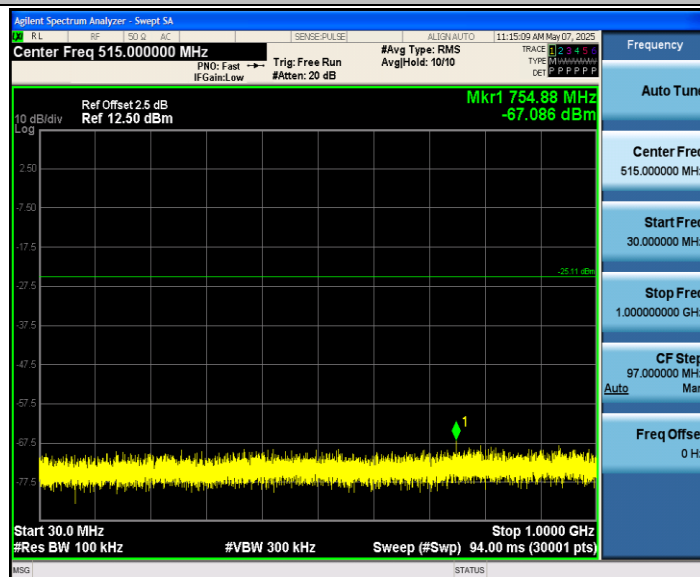
# 2DH5\_Ant1\_2402\_1000~26500



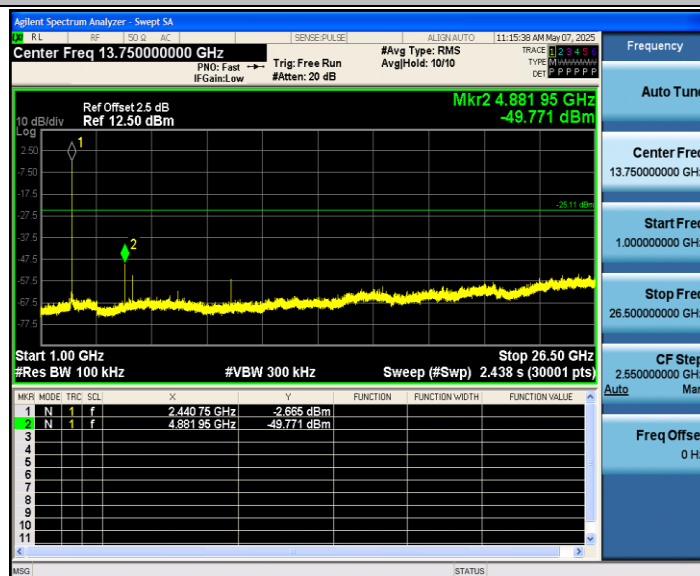
# 2DH5\_Ant1\_2441\_0~Reference



2DH5\_Ant1\_2441\_30~1000

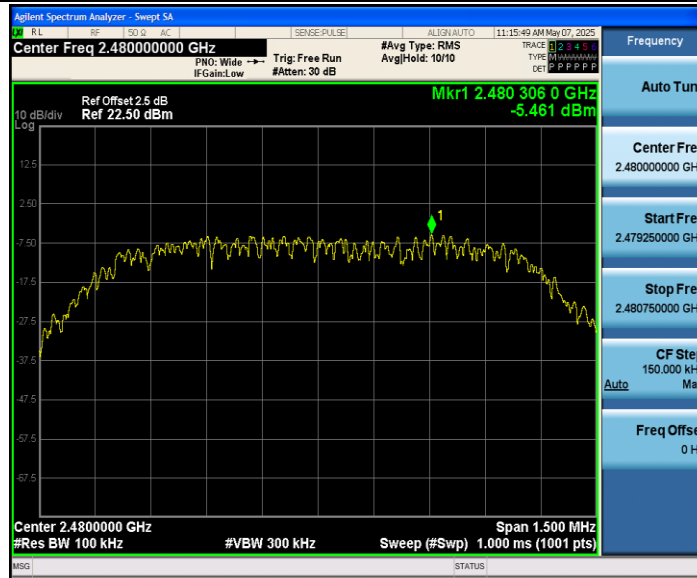


2DH5\_Ant1\_2441\_1000~26500

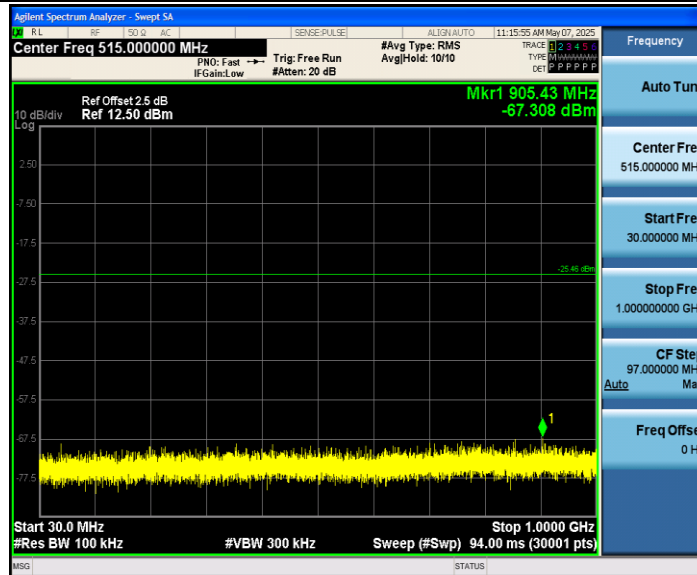




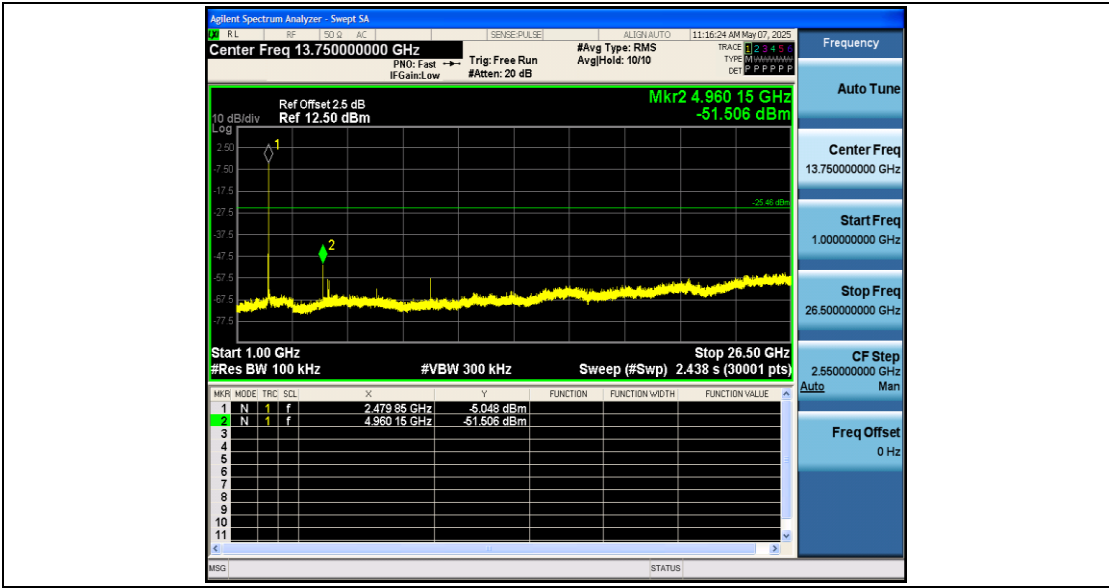
# 2DH5\_Ant1\_2480\_0~Reference



# 2DH5\_Ant1\_2480\_30~1000



# 2DH5\_Ant1\_2480\_1000~26500

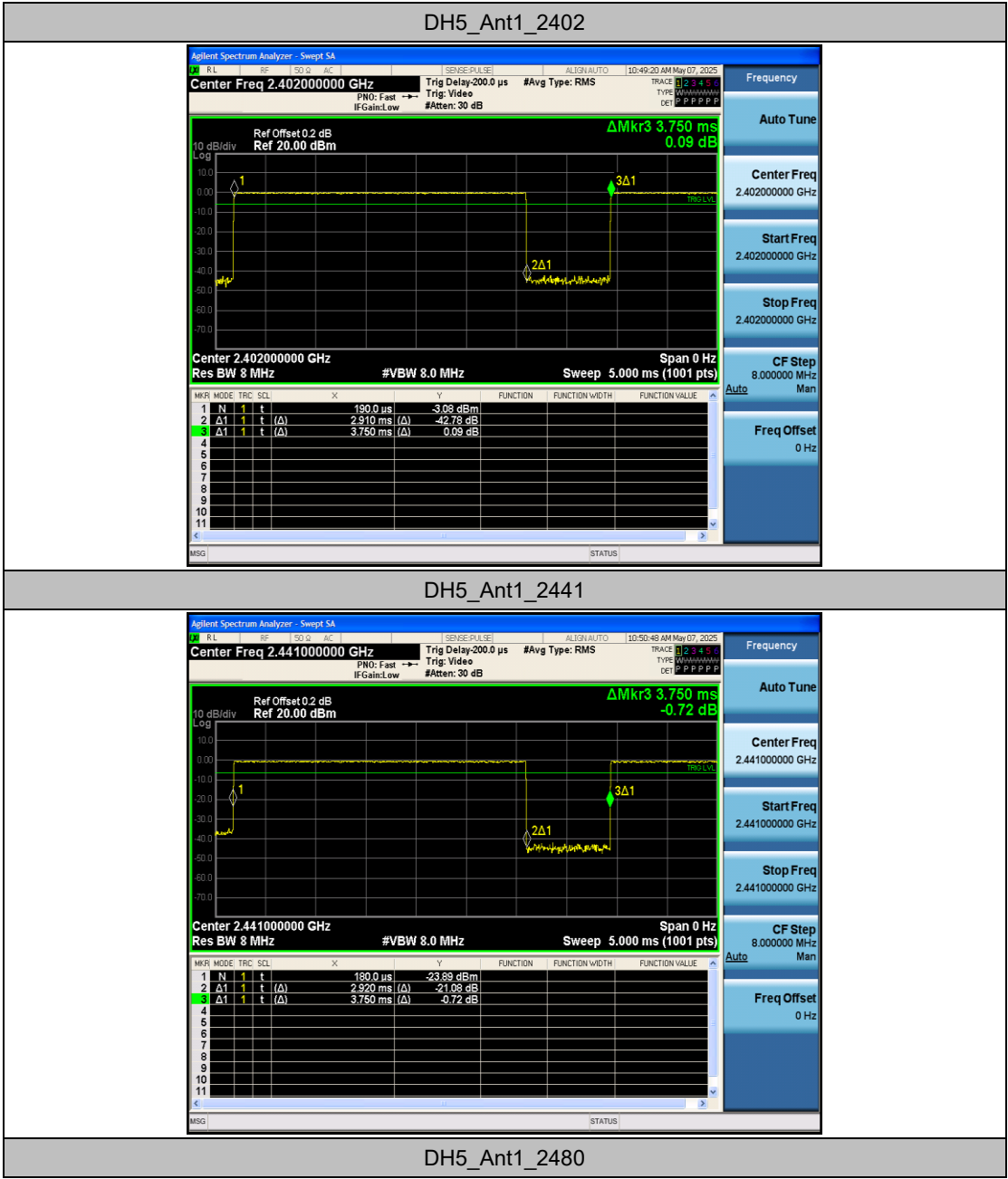


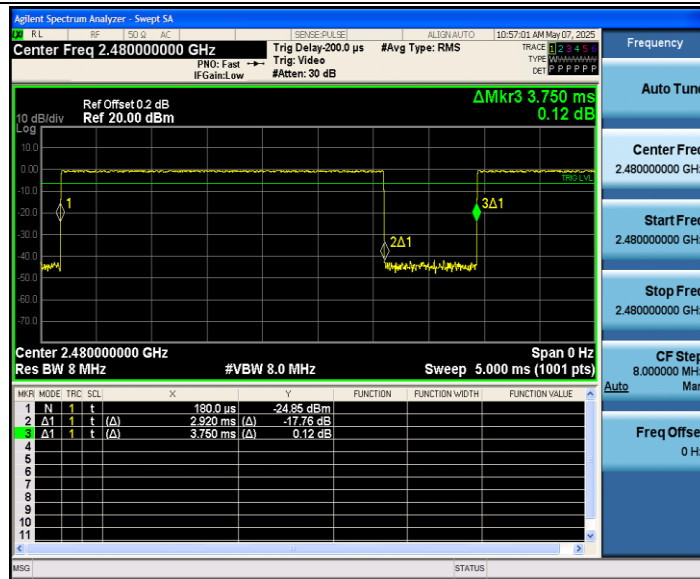
## Appendix I: Duty Cycle

### Test Result

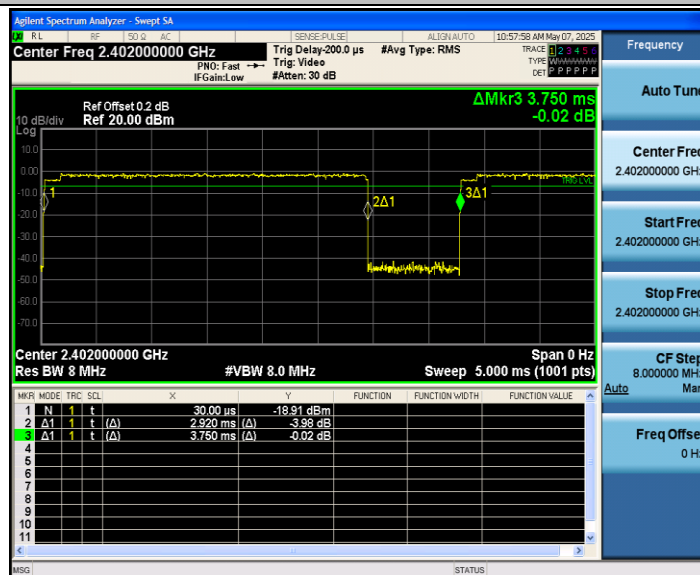
| TestMode | Antenna | Freq(MHz) | ON Time<br>[ms] | Period<br>[ms] | DC<br>[%] | xFactor | Limit | Verdict |
|----------|---------|-----------|-----------------|----------------|-----------|---------|-------|---------|
| DH5      | Ant1    | 2402      | 2.91            | 3.75           | 77.60     |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

# Test Graphs





2DH5\_Ant1\_2402



2DH5\_Ant1\_2441



# 2DH5\_Ant1\_2480

