

## **FCC Appendix RF Test Data**

**FCC ID : 2BGA5-DS-310**

**Company: : Foshan Dashi Technology Co., Ltd.**

**EUT : Eye Massager**

**Model Number : DS-310**

**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            | 2401.547 | 2402.501 | ---        | ---     |
|          |         | 2441      | 0.942            | 2440.553 | 2441.495 | ---        | ---     |
|          |         | 2480      | 0.957            | 2479.547 | 2480.504 | ---        | ---     |
| 2DH5     | Ant1    | 2402      | 1.317            | 2401.349 | 2402.666 | ---        | ---     |
|          |         | 2441      | 1.287            | 2440.379 | 2441.666 | ---        | ---     |
|          |         | 2480      | 1.275            | 2479.385 | 2480.660 | ---        | ---     |

# Test Graphs

DH5\_Ant1\_2402



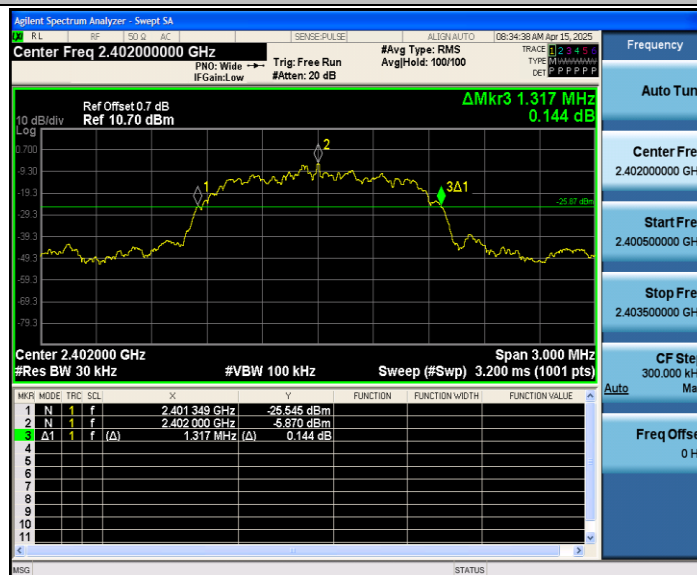
DH5\_Ant1\_2441



DH5\_Ant1\_2480



2DH5\_Ant1\_2402



2DH5\_Ant1\_2441



# 2DH5\_Ant1\_2480

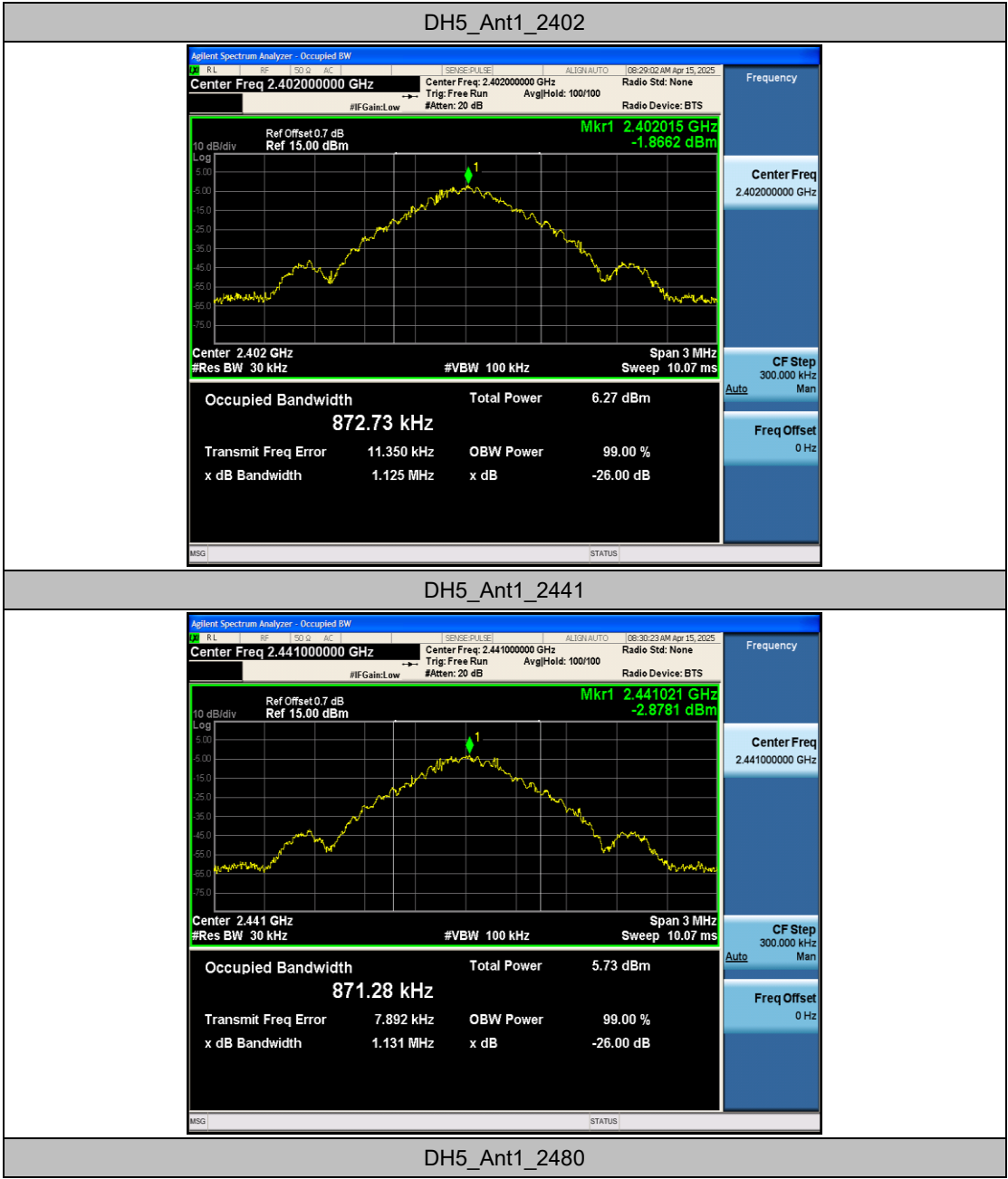


## Appendix B: Occupied Channel Bandwidth

### Test Result

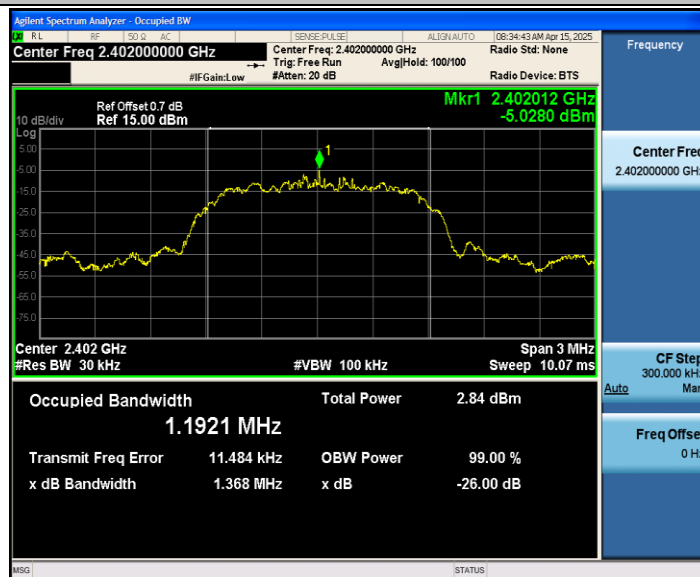
| TestMode | Antenna | Freq(MHz) | OCB [MHz] | FL[MHz]   | FH[MHz]   | Limit[MHz] | Verdict |
|----------|---------|-----------|-----------|-----------|-----------|------------|---------|
| DH5      | Ant1    | 2402      | 0.87273   | 2401.5750 | 2402.4477 | ---        | ---     |
|          |         | 2441      | 0.87128   | 2440.5723 | 2441.4435 | ---        | ---     |
|          |         | 2480      | 0.86566   | 2479.5757 | 2480.4414 | ---        | ---     |
| 2DH5     | Ant1    | 2402      | 1.1921    | 2401.4154 | 2402.6075 | ---        | ---     |
|          |         | 2441      | 1.1856    | 2440.4180 | 2441.6036 | ---        | ---     |
|          |         | 2480      | 1.1865    | 2479.4167 | 2480.6032 | ---        | ---     |

Test Graphs

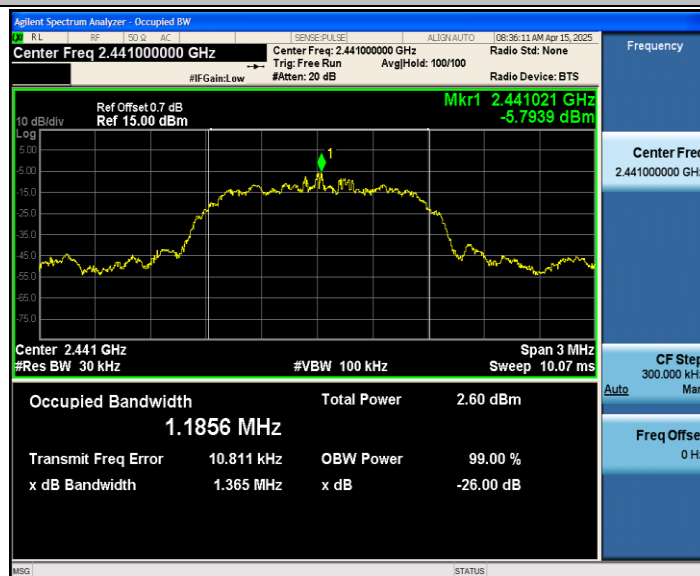




2DH5\_Ant1\_2402

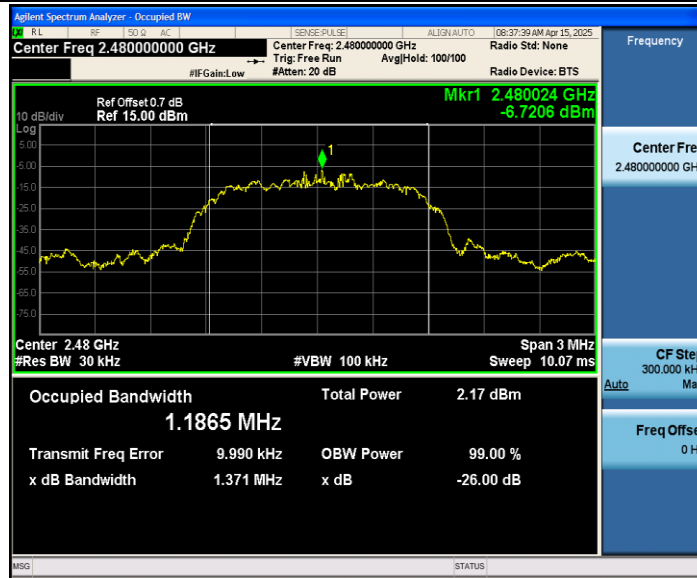


2DH5\_Ant1\_2441





# 2DH5\_Ant1\_2480



## Appendix C: Maximum conducted output power

### Test Result Peak

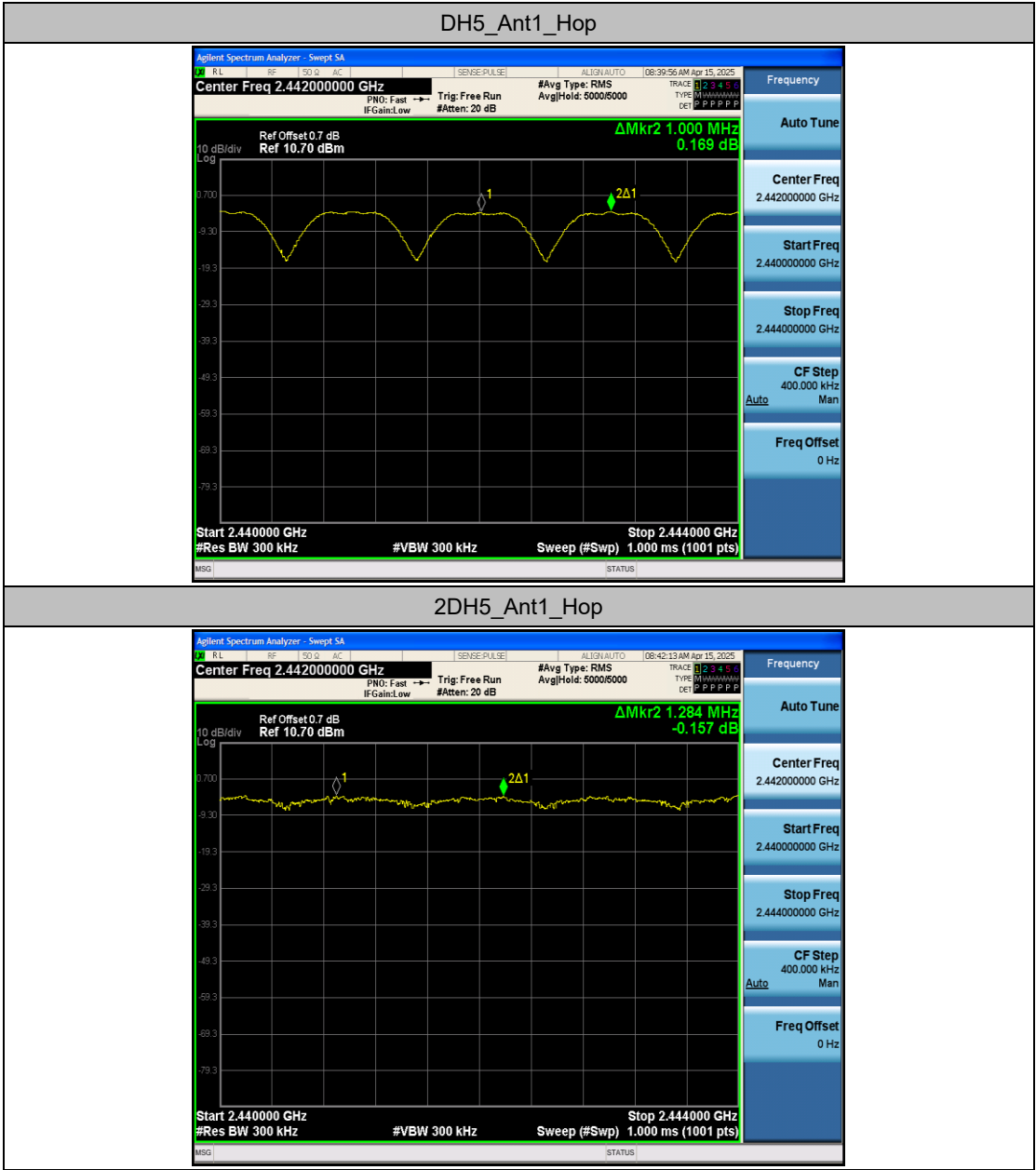
| Test Mode | Antenna | Freq(MHz) | Conducted Peak Power[dBm] | Conducted Limit[dBm] | Verdict |
|-----------|---------|-----------|---------------------------|----------------------|---------|
| DH5       | Ant1    | 2402      | 0.33                      | ≤20.97               | PASS    |
|           |         | 2441      | -0.19                     | ≤20.97               | PASS    |
|           |         | 2480      | -0.46                     | ≤20.97               | PASS    |
| 2DH5      | Ant1    | 2402      | -0.47                     | ≤20.97               | PASS    |
|           |         | 2441      | -0.98                     | ≤20.97               | PASS    |
|           |         | 2480      | -1.23                     | ≤20.97               | PASS    |

## Appendix D: Carrier frequency separation

### Test Result

| TestMode | Antenna | Freq(MHz) | Result[MHz] | Limit[MHz]   | Verdict |
|----------|---------|-----------|-------------|--------------|---------|
| DH5      | Ant1    | Hop       | 1           | $\geq 0.957$ | PASS    |
| 2DH5     | Ant1    | Hop       | 1.284       | $\geq 0.878$ | PASS    |

Test Graphs

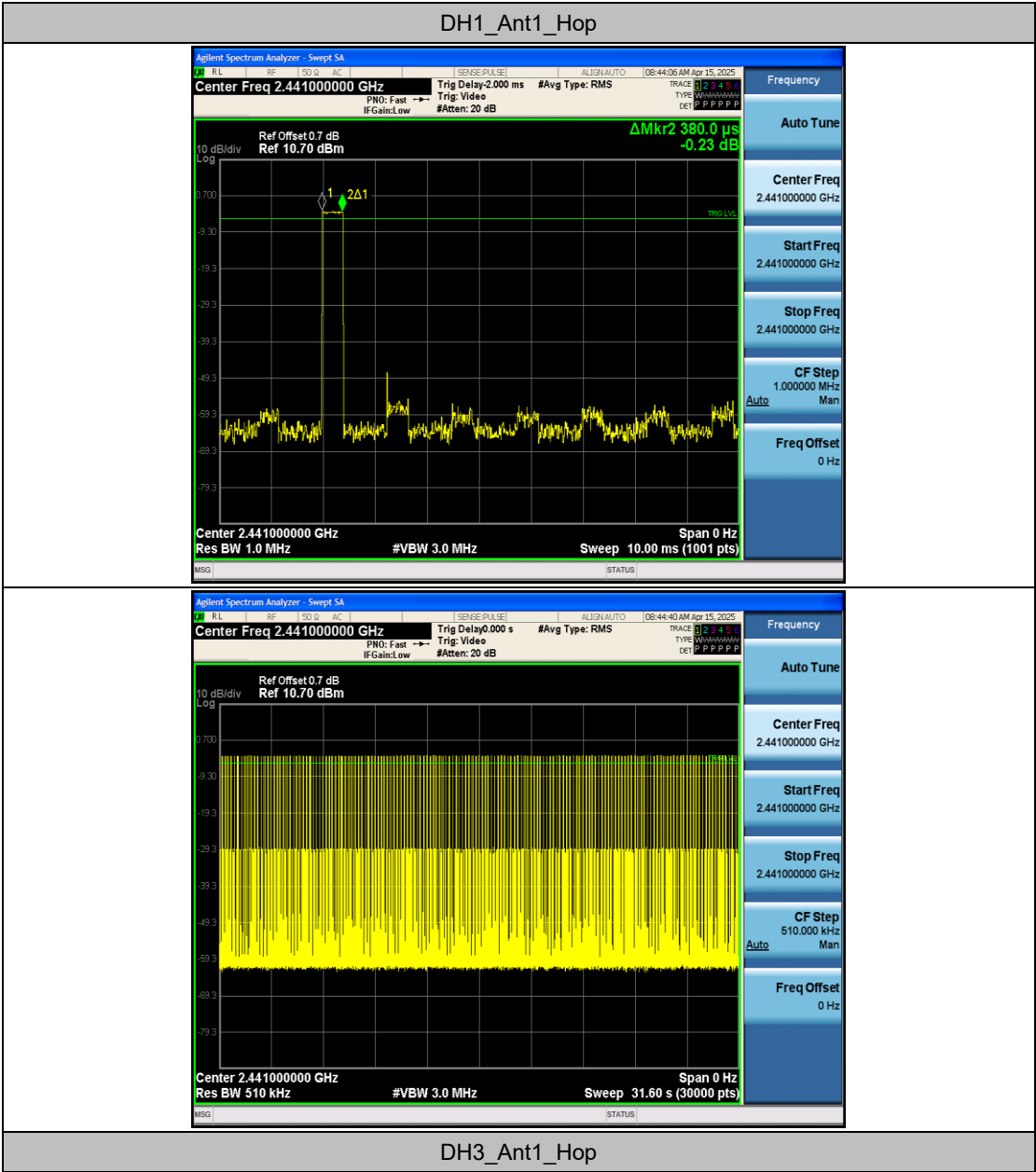


## Appendix E: Time of occupancy

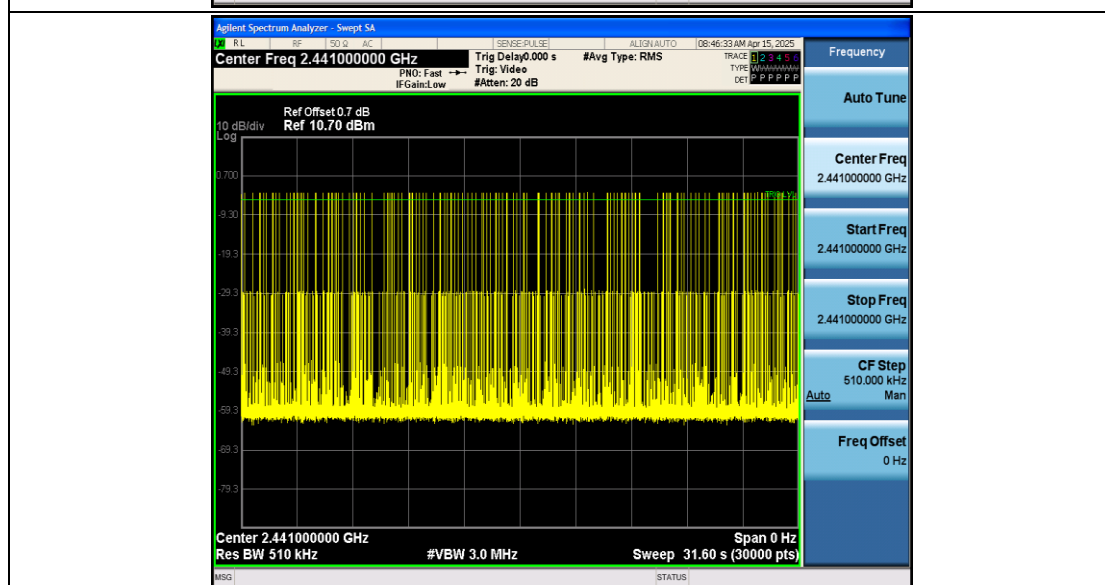
### Test Result

| TestMode | Antenna | Freq(MHz) | BurstWidth<br>[ms] | TotalHops<br>[Num] | Result[s] | Limit[s] | Verdict |
|----------|---------|-----------|--------------------|--------------------|-----------|----------|---------|
| DH1      | Ant1    | Hop       | 0.380              | 315                | 0.12      | ≤0.4     | PASS    |
| DH3      | Ant1    | Hop       | 1.640              | 154                | 0.253     | ≤0.4     | PASS    |
| DH5      | Ant1    | Hop       | 2.890              | 112                | 0.324     | ≤0.4     | PASS    |
| 2DH1     | Ant1    | Hop       | 0.390              | 312                | 0.122     | ≤0.4     | PASS    |
| 2DH3     | Ant1    | Hop       | 1.650              | 150                | 0.248     | ≤0.4     | PASS    |
| 2DH5     | Ant1    | Hop       | 2.900              | 104                | 0.302     | ≤0.4     | PASS    |

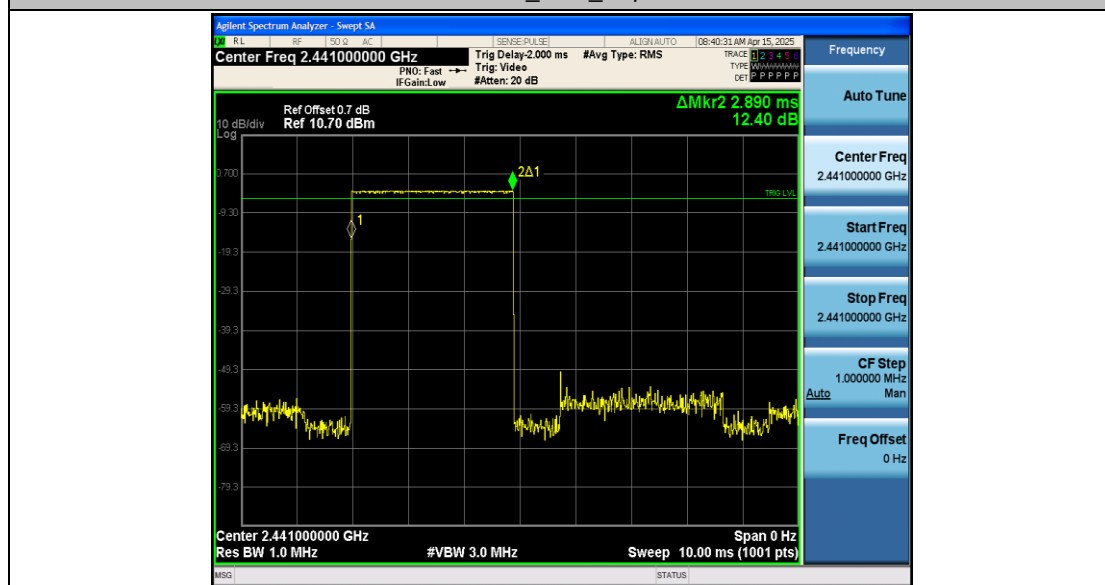
Test Graphs

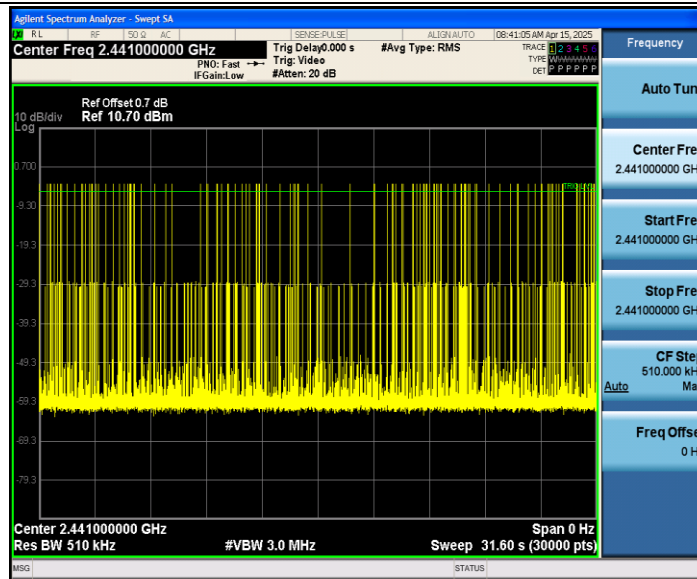


DH3\_Ant1\_Hop

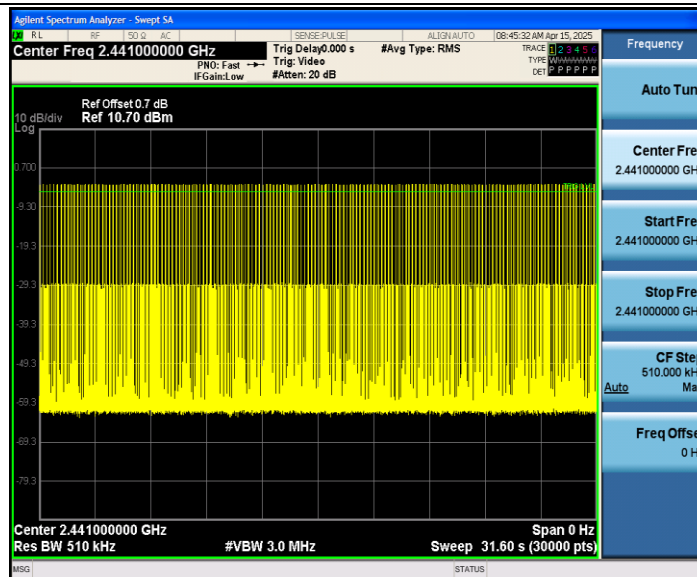
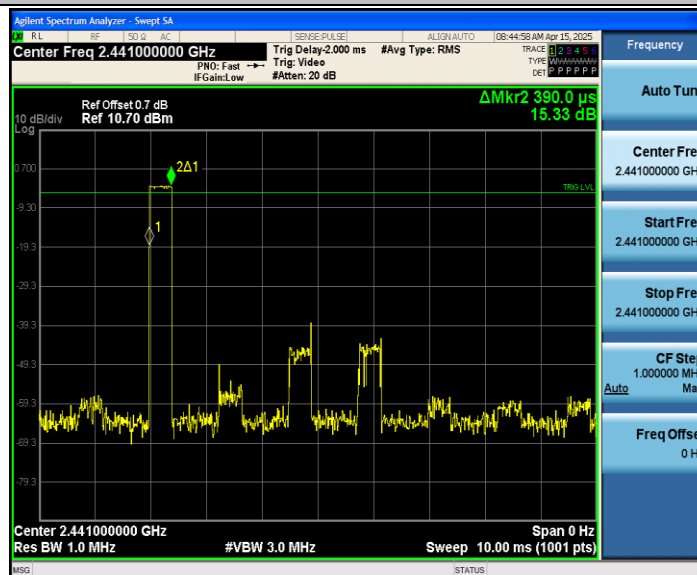


DH5\_Ant1\_Hop



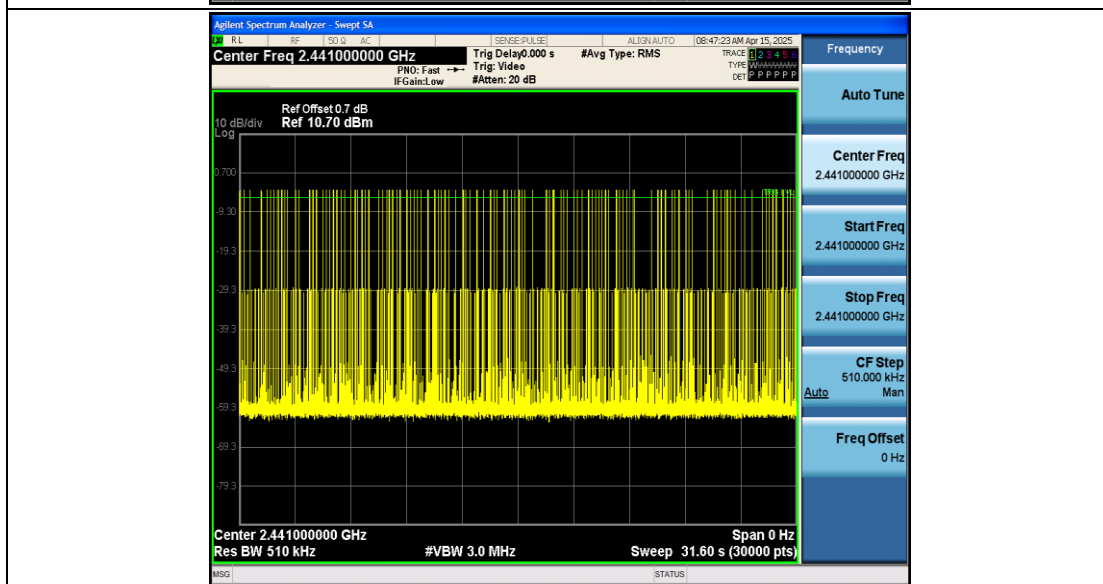


2DH1\_Ant1\_Hop



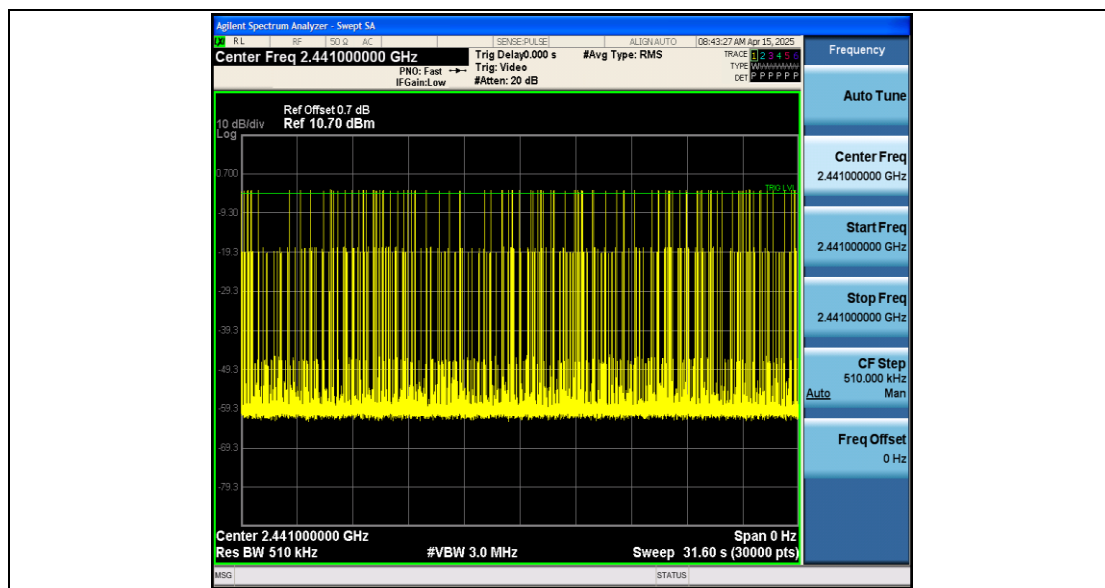
2DH3\_Ant1\_Hop





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

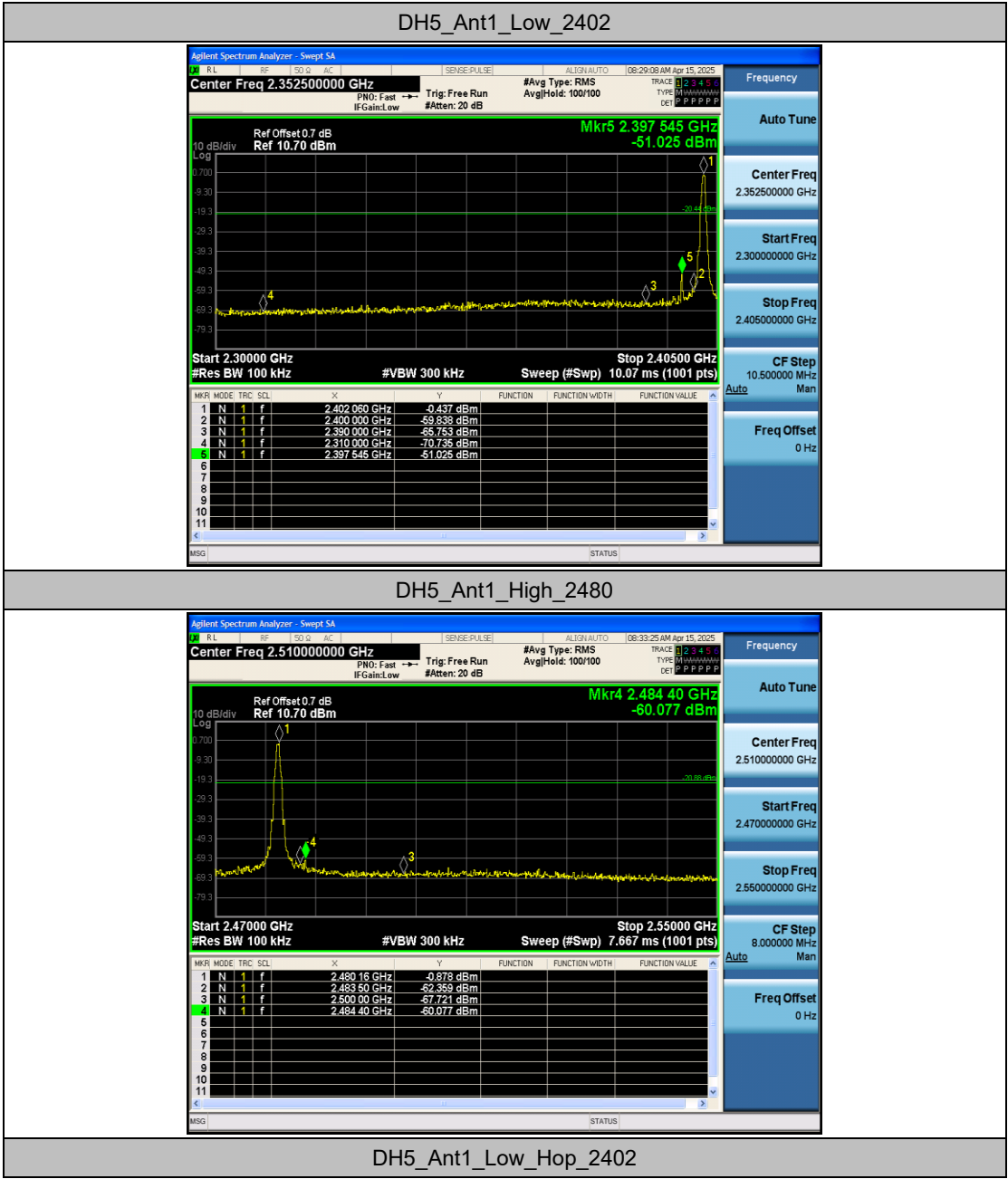


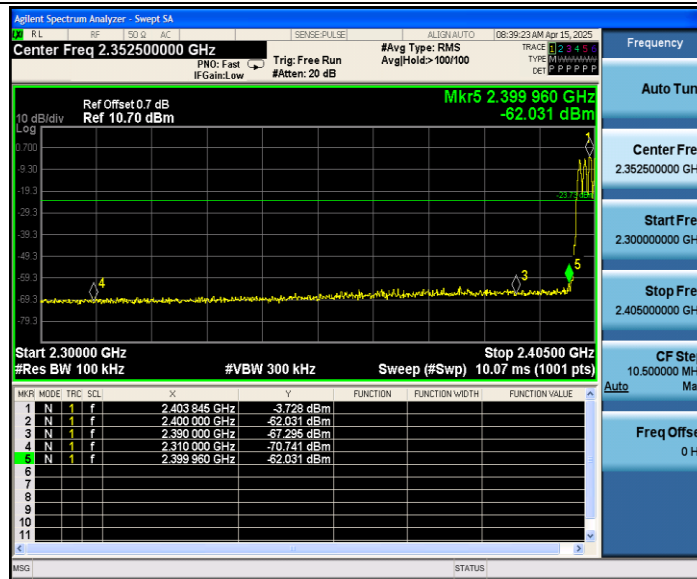
## Appendix G: Band edge measurements

### Test Result

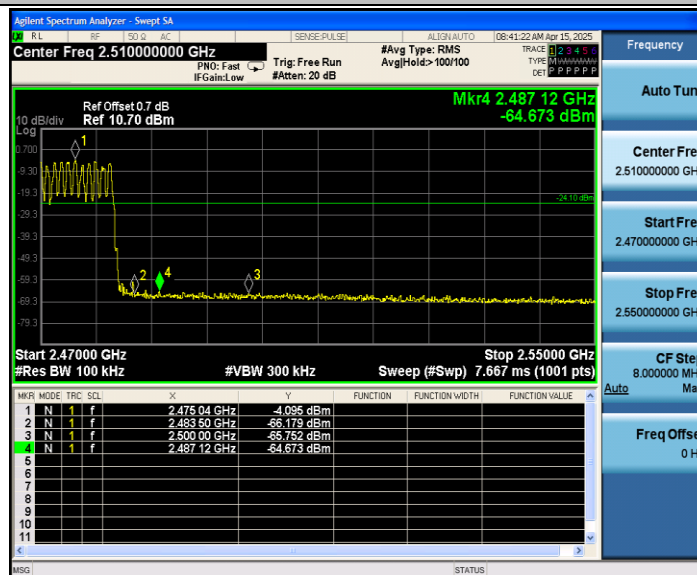
| TestMode | Antenna | ChName | Freq(MHz) | RefLevel [dBm] | Result [dBm] | Limit [dBm] | Verdict |
|----------|---------|--------|-----------|----------------|--------------|-------------|---------|
| DH5      | Ant1    | Low    | 2402      | -0.44          | -51.03       | ≤-20.44     | PASS    |
|          |         | High   | 2480      | -0.88          | -60.08       | ≤-20.88     | PASS    |
|          |         | Low    | Hop_2402  | -3.73          | -62.03       | ≤-23.73     | PASS    |
|          |         | High   | Hop_2480  | -4.10          | -64.67       | ≤-24.1      | PASS    |
| 2DH5     | Ant1    | Low    | 2402      | -4.38          | -59.76       | ≤-24.38     | PASS    |
|          |         | High   | 2480      | -4.02          | -63.28       | ≤-24.02     | PASS    |
|          |         | Low    | Hop_2402  | -5.29          | -61.47       | ≤-25.29     | PASS    |
|          |         | High   | Hop_2480  | -4.10          | -64.56       | ≤-24.1      | PASS    |

# Test Graphs

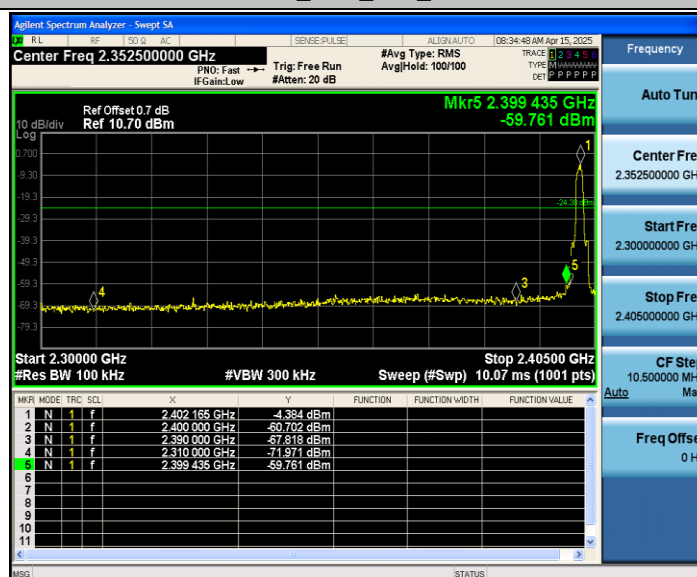




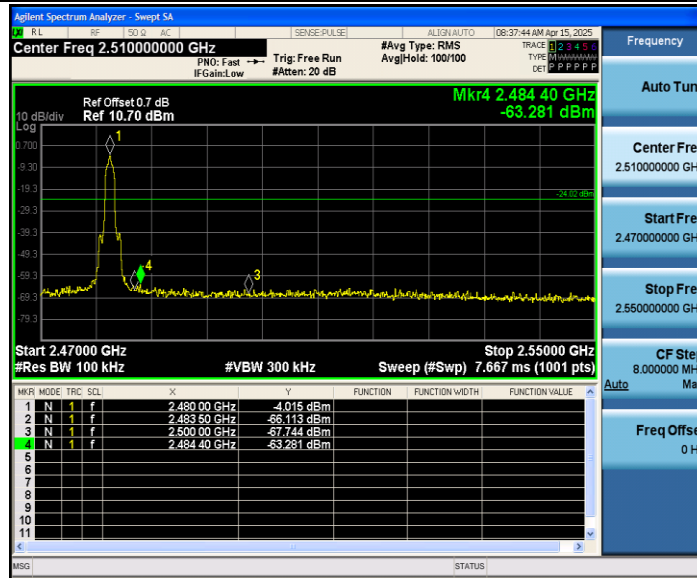
DH5\_Ant1\_High\_Hop\_2480



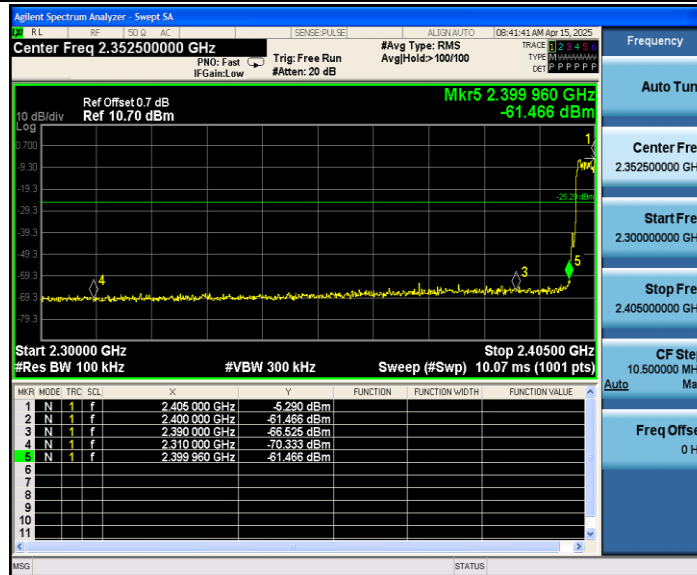
2DH5\_Ant1\_Low\_2402



# 2DH5\_Ant1\_High\_2480

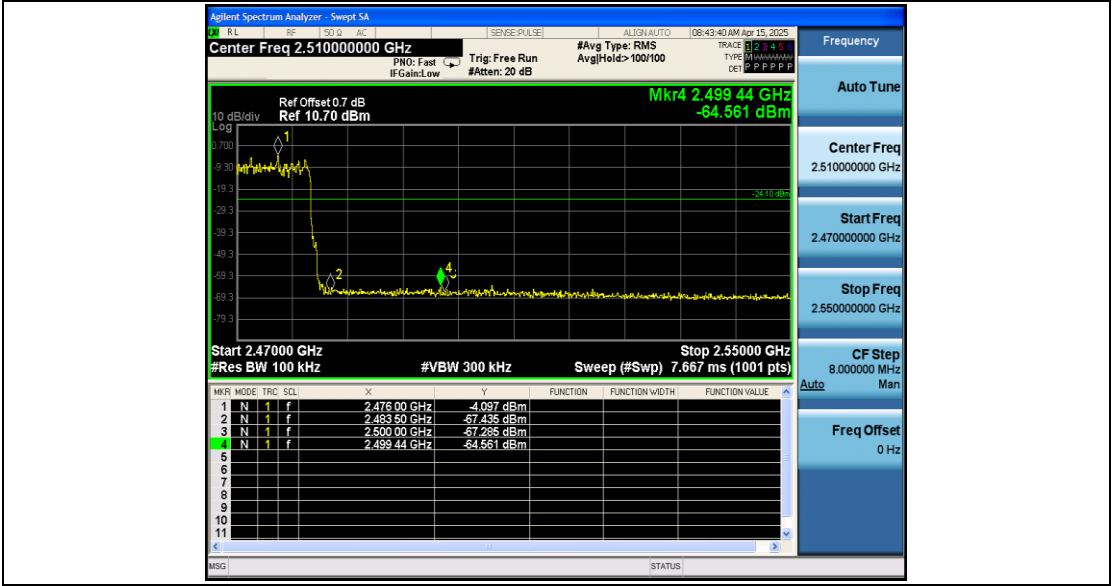


# 2DH5\_Ant1\_Low\_Hop\_2402



# 2DH5\_Ant1\_High\_Hop\_2480



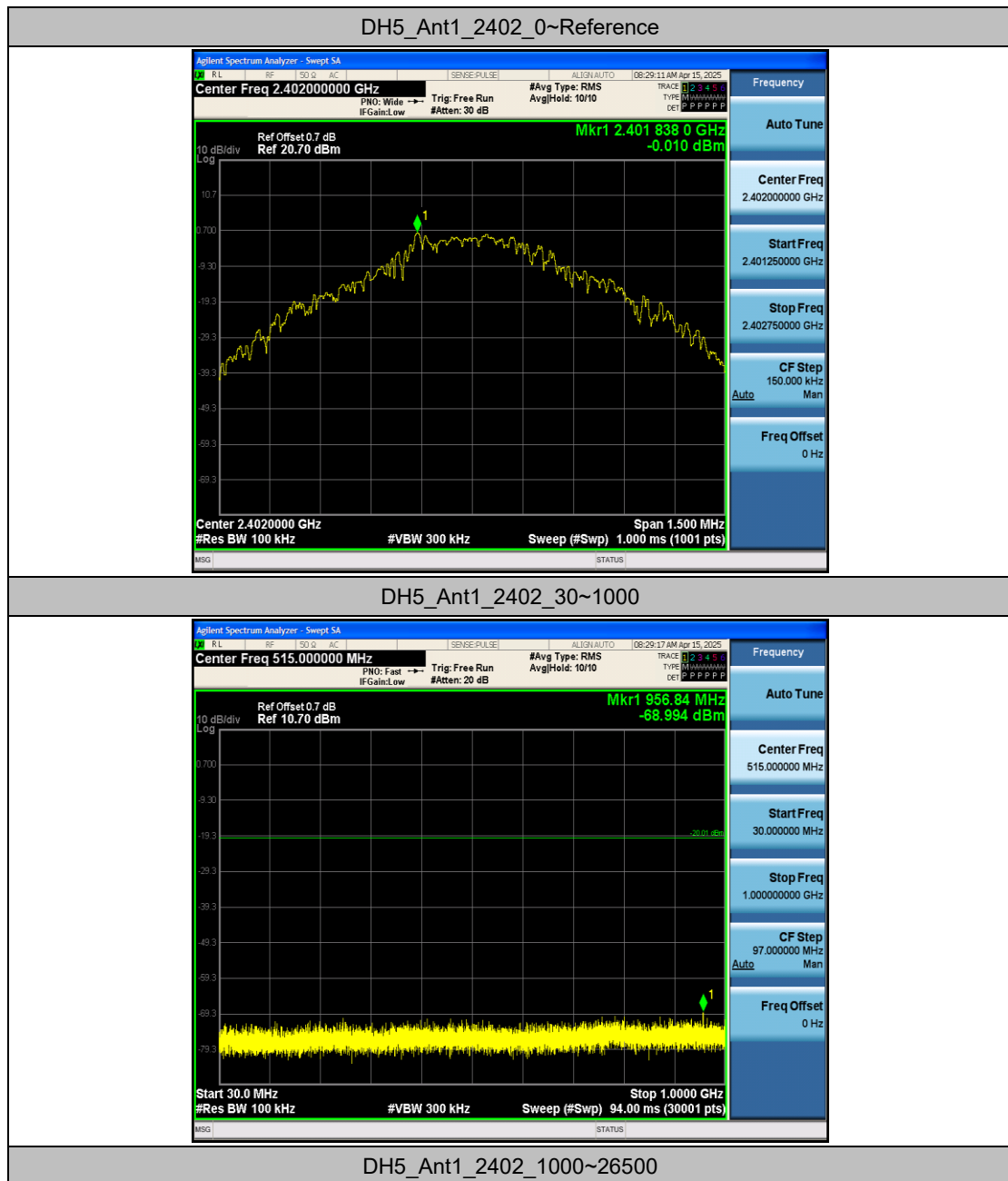


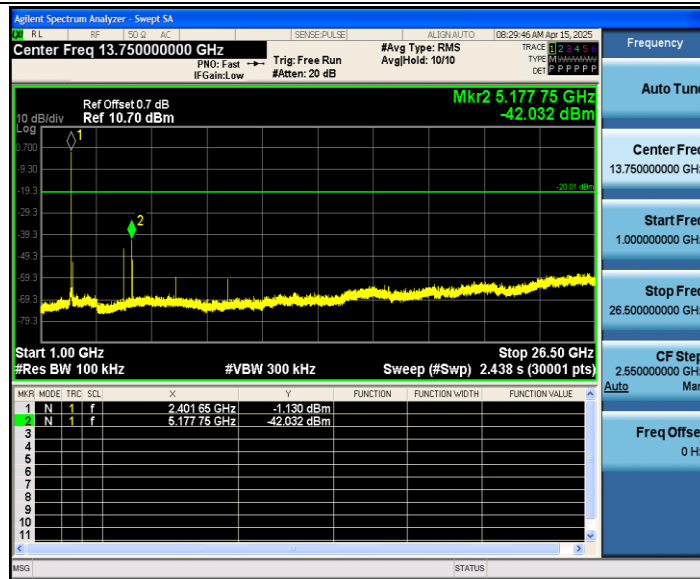
## Appendix H: Conducted Spurious Emission

### Test Result

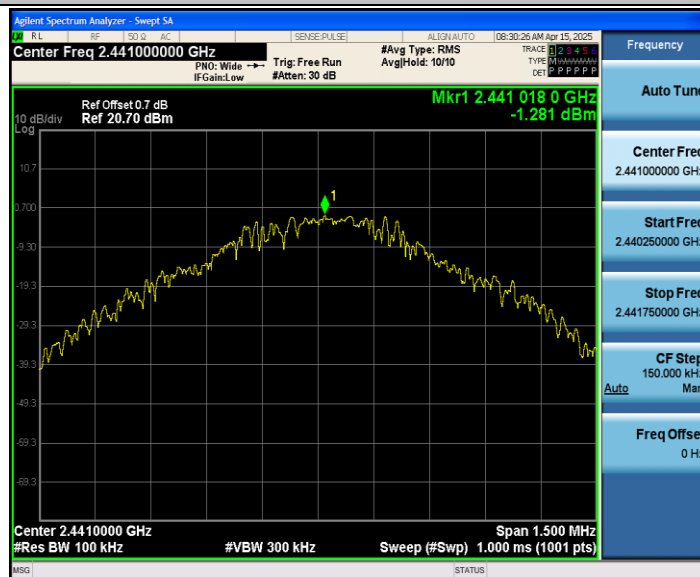
| TestMode | Antenna | Freq(MHz) | FreqRange<br>[MHz] | RefLevel<br>[dBm] | Result<br>[dBm] | Limit<br>[dBm] | Verdict |
|----------|---------|-----------|--------------------|-------------------|-----------------|----------------|---------|
| DH5      | Ant1    | 2402      | Reference          | -0.01             | -0.01           | ---            | PASS    |
|          |         |           | 30~1000            | -0.01             | -68.99          | ≤-20.01        | PASS    |
|          |         |           | 1000~26500         | -0.01             | -42.03          | ≤-20.01        | PASS    |
|          |         | 2441      | Reference          | -1.28             | -1.28           | ---            | PASS    |
|          |         |           | 30~1000            | -1.28             | -69.83          | ≤-21.28        | PASS    |
|          |         |           | 1000~26500         | -1.28             | -45.87          | ≤-21.28        | PASS    |
|          |         | 2480      | Reference          | -1.60             | -1.60           | ---            | PASS    |
|          |         |           | 30~1000            | -1.60             | -70.19          | ≤-21.6         | PASS    |
|          |         |           | 1000~26500         | -1.60             | -45.74          | ≤-21.6         | PASS    |
| 2DH5     | Ant1    | 2402      | Reference          | -4.28             | -4.28           | ---            | PASS    |
|          |         |           | 30~1000            | -4.28             | -69.25          | ≤-24.28        | PASS    |
|          |         |           | 1000~26500         | -4.28             | -52.82          | ≤-24.28        | PASS    |
|          |         | 2441      | Reference          | -4.44             | -4.44           | ---            | PASS    |
|          |         |           | 30~1000            | -4.44             | -63.13          | ≤-24.44        | PASS    |
|          |         |           | 1000~26500         | -4.44             | -51.68          | ≤-24.44        | PASS    |
|          |         | 2480      | Reference          | -5.67             | -5.67           | ---            | PASS    |
|          |         |           | 30~1000            | -5.67             | -68.85          | ≤-25.67        | PASS    |
|          |         |           | 1000~26500         | -5.67             | -51.3           | ≤-25.67        | PASS    |

## Test Graphs

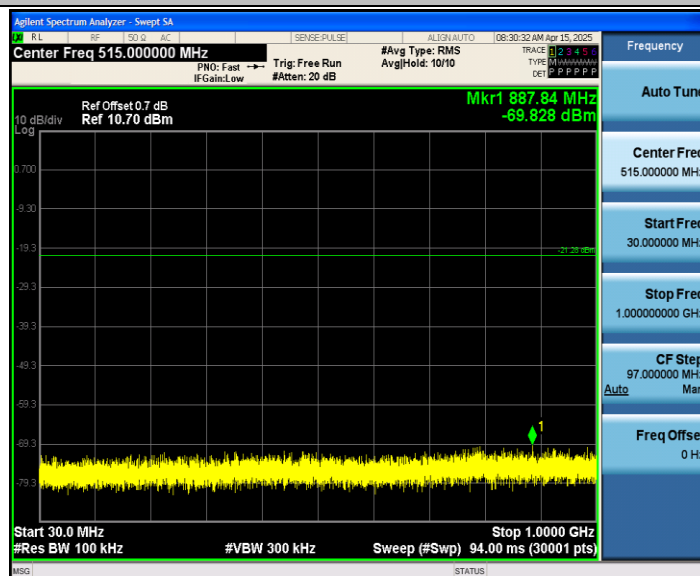




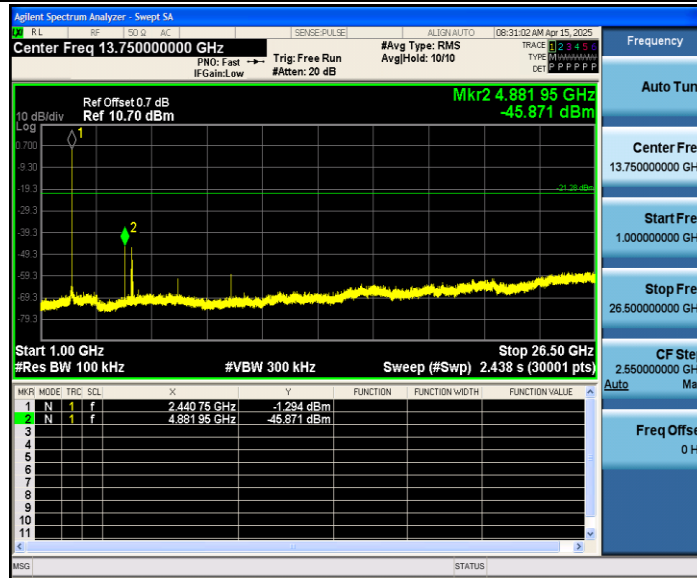
DH5\_Ant1\_2441\_0~Reference



DH5\_Ant1\_2441\_30~1000



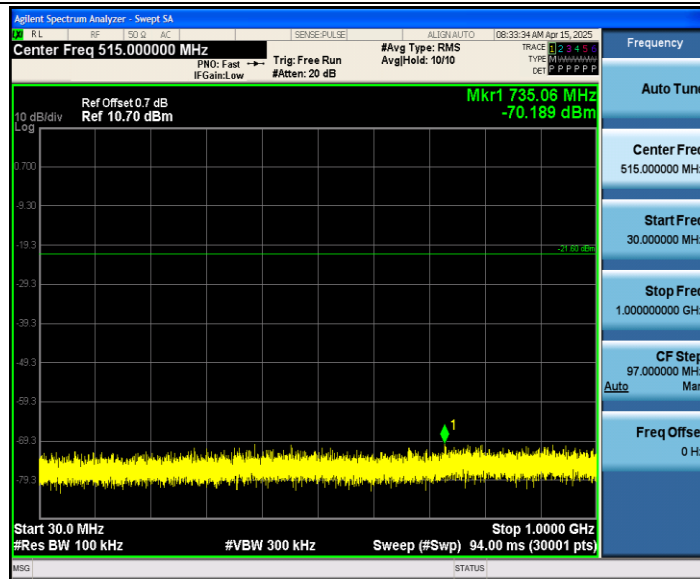
# DH5\_Ant1\_2441\_1000~26500



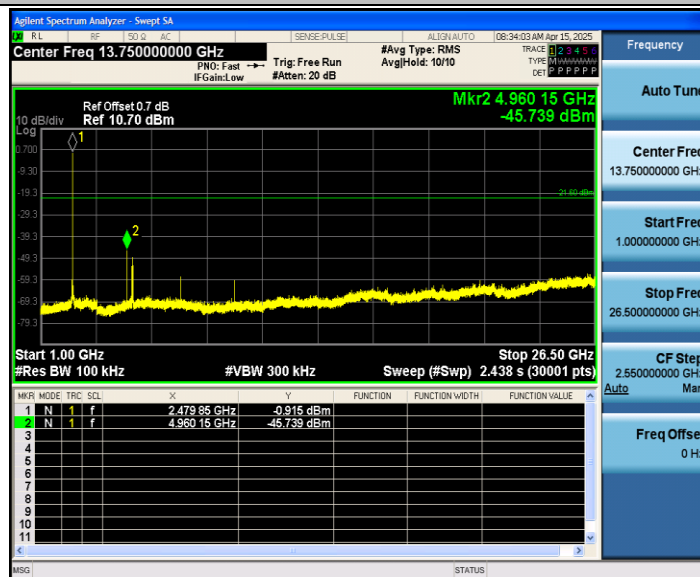
# DH5\_Ant1\_2480\_0~Reference



# DH5\_Ant1\_2480\_30~1000



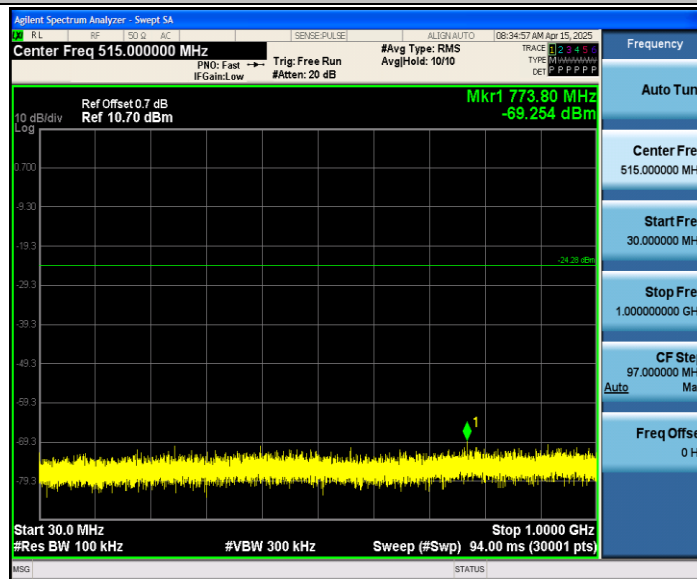
DH5\_Ant1\_2480\_1000~26500



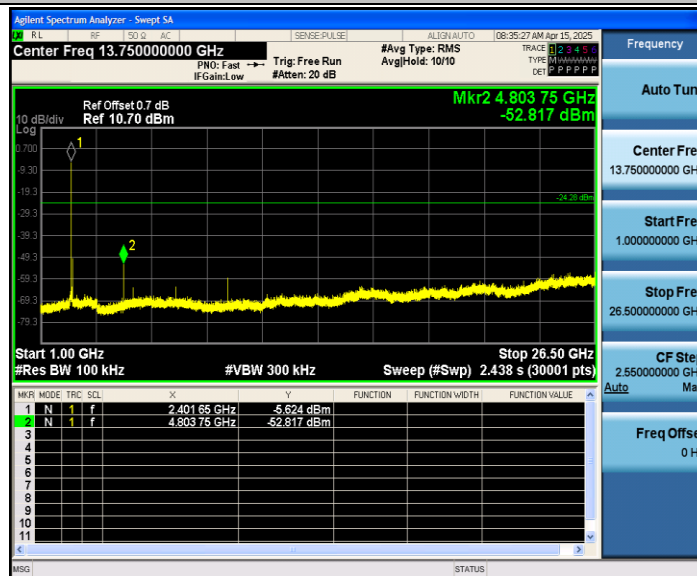
2DH5\_Ant1\_2402\_0~Reference



### 2DH5\_Ant1\_2402\_30~1000



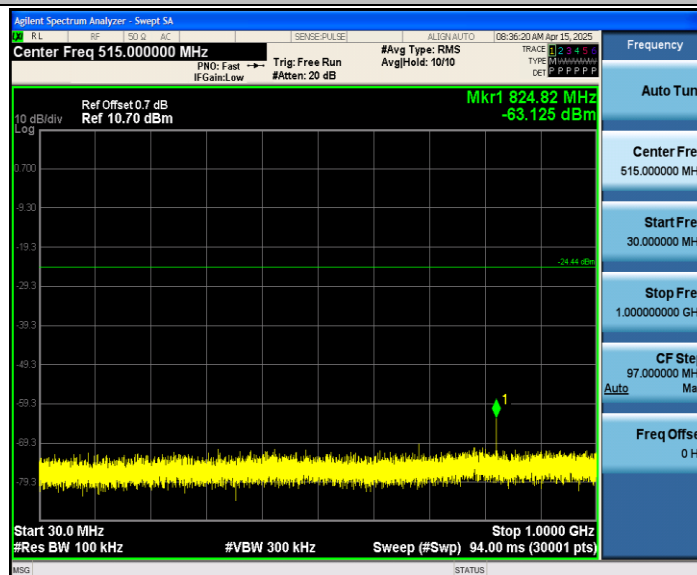
### 2DH5\_Ant1\_2402\_1000~26500



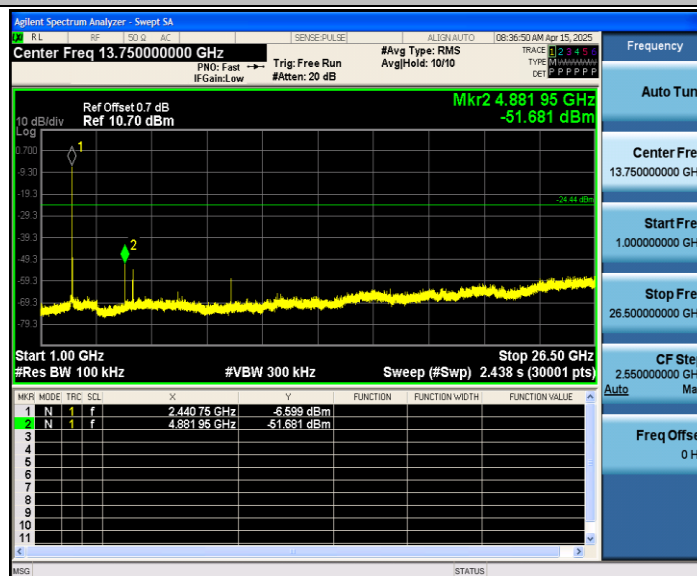
### 2DH5\_Ant1\_2441\_0~Reference



2DH5\_Ant1\_2441\_30~1000

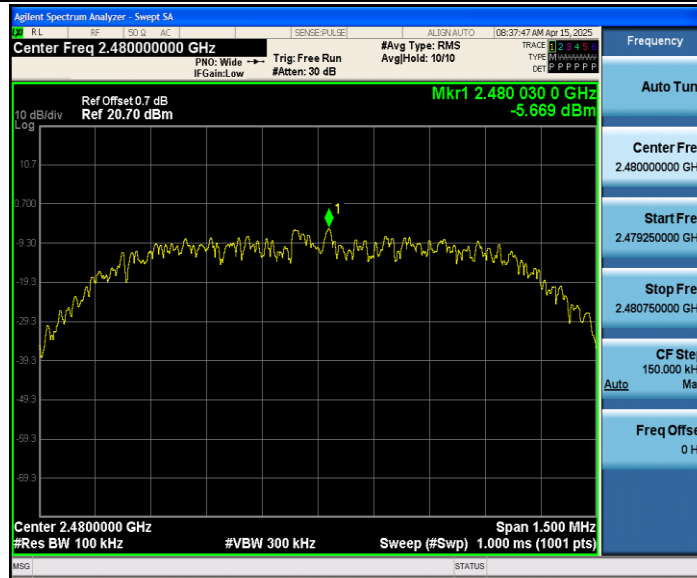


2DH5\_Ant1\_2441\_1000~26500

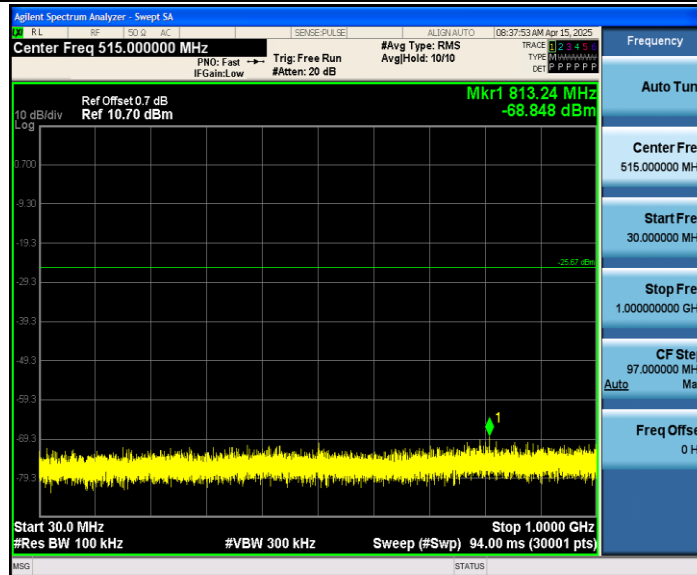




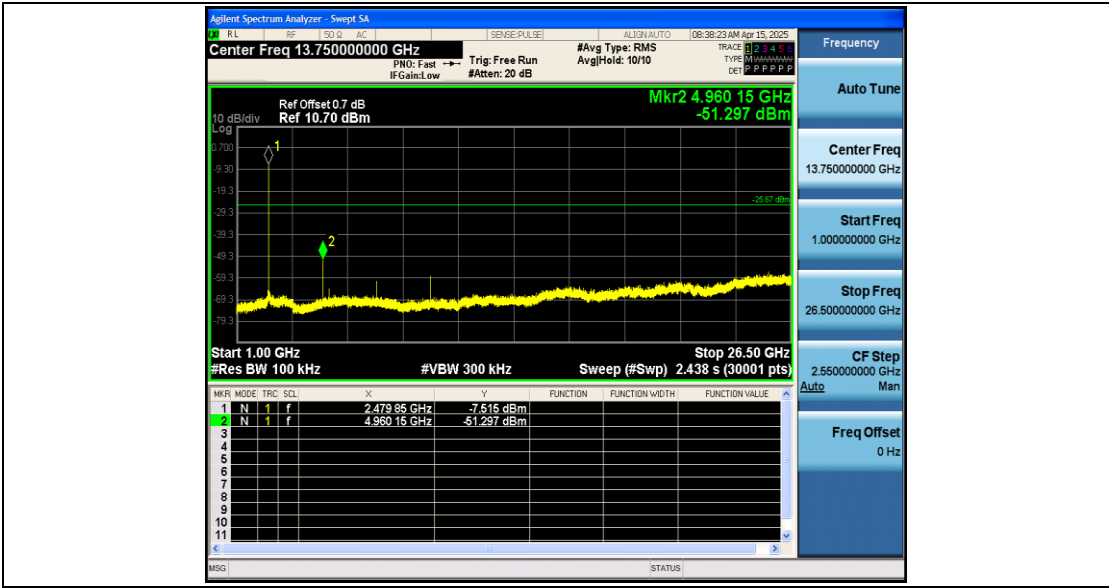
# 2DH5\_Ant1\_2480\_0~Reference



# 2DH5\_Ant1\_2480\_30~1000



# 2DH5\_Ant1\_2480\_1000~26500

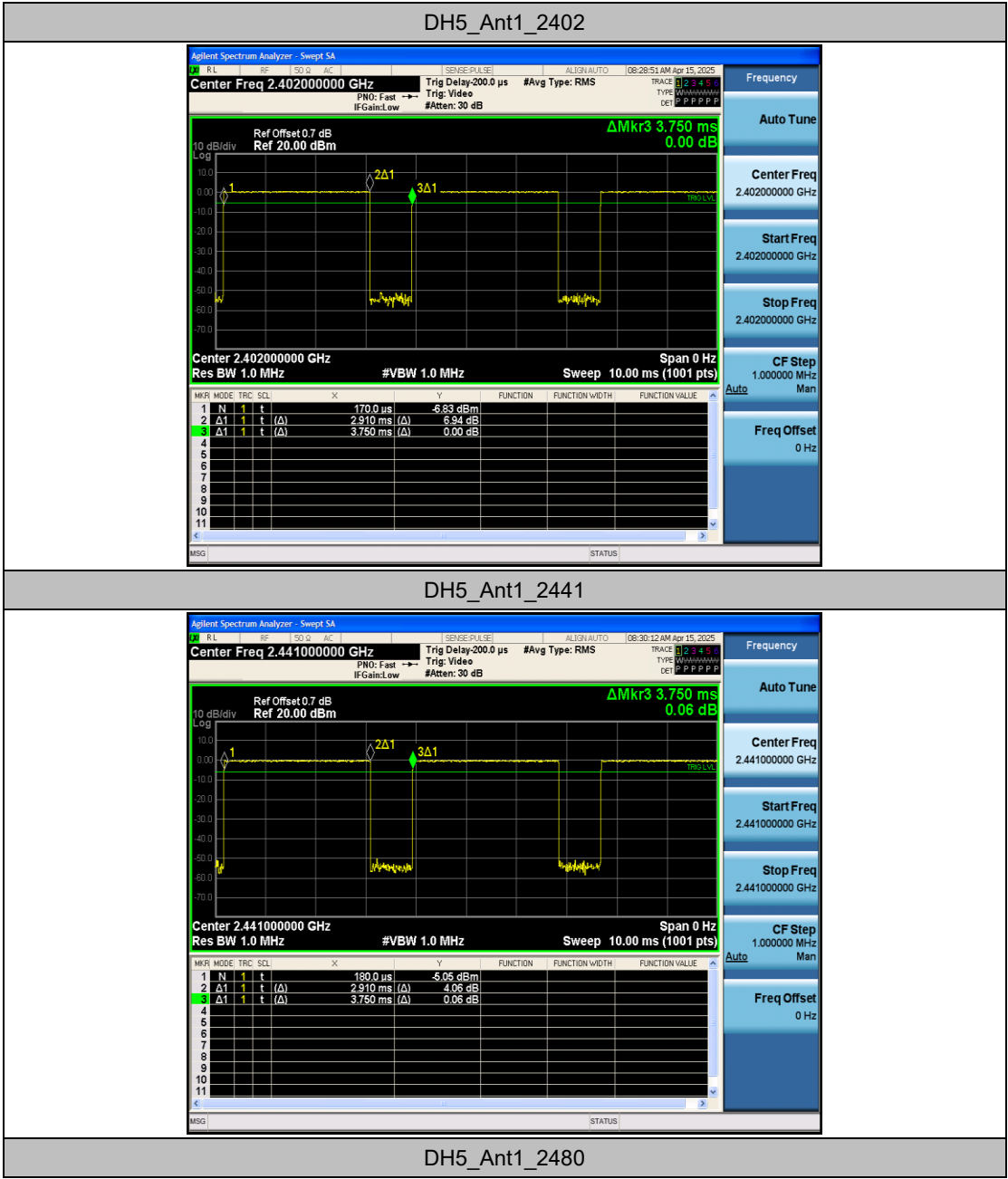


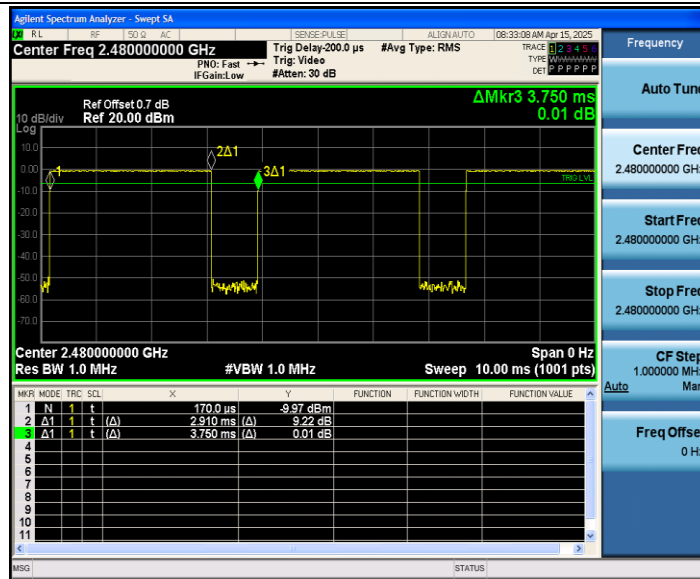
## Appendix I: Duty Cycle

### Test Result

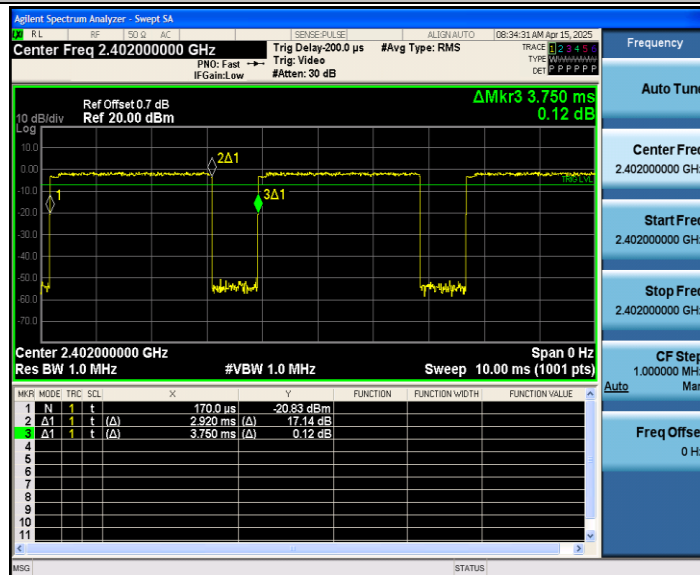
| TestMode | Antenna | Freq(MHz) | ON Time<br>[ms] | Period<br>[ms] | DC<br>[%] | xFactor | Limit | Verdict |
|----------|---------|-----------|-----------------|----------------|-----------|---------|-------|---------|
| DH5      | Ant1    | 2402      | 2.91            | 3.75           | 77.60     |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

Test Graphs

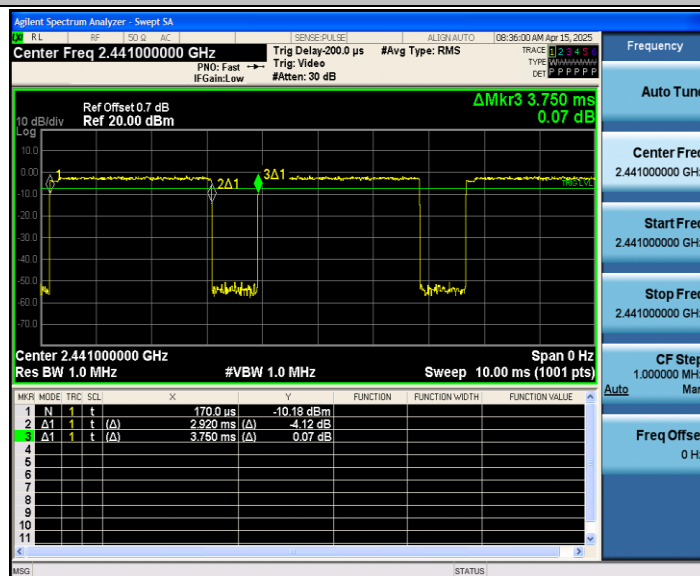




2DH5\_Ant1\_2402



2DH5\_Ant1\_2441



# 2DH5\_Ant1\_2480

