

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

**FCC ID** : 2BAQY-HE6WIFI

**Company** : HIFIMAN KUNSHAN TECHNOLOGY GROUP CO., LTD.

**EUT** : WiFi streaming tablet diaphragm headphones

**Model Number** : HE6 WiFi

**Report No.** : CTA26090201802

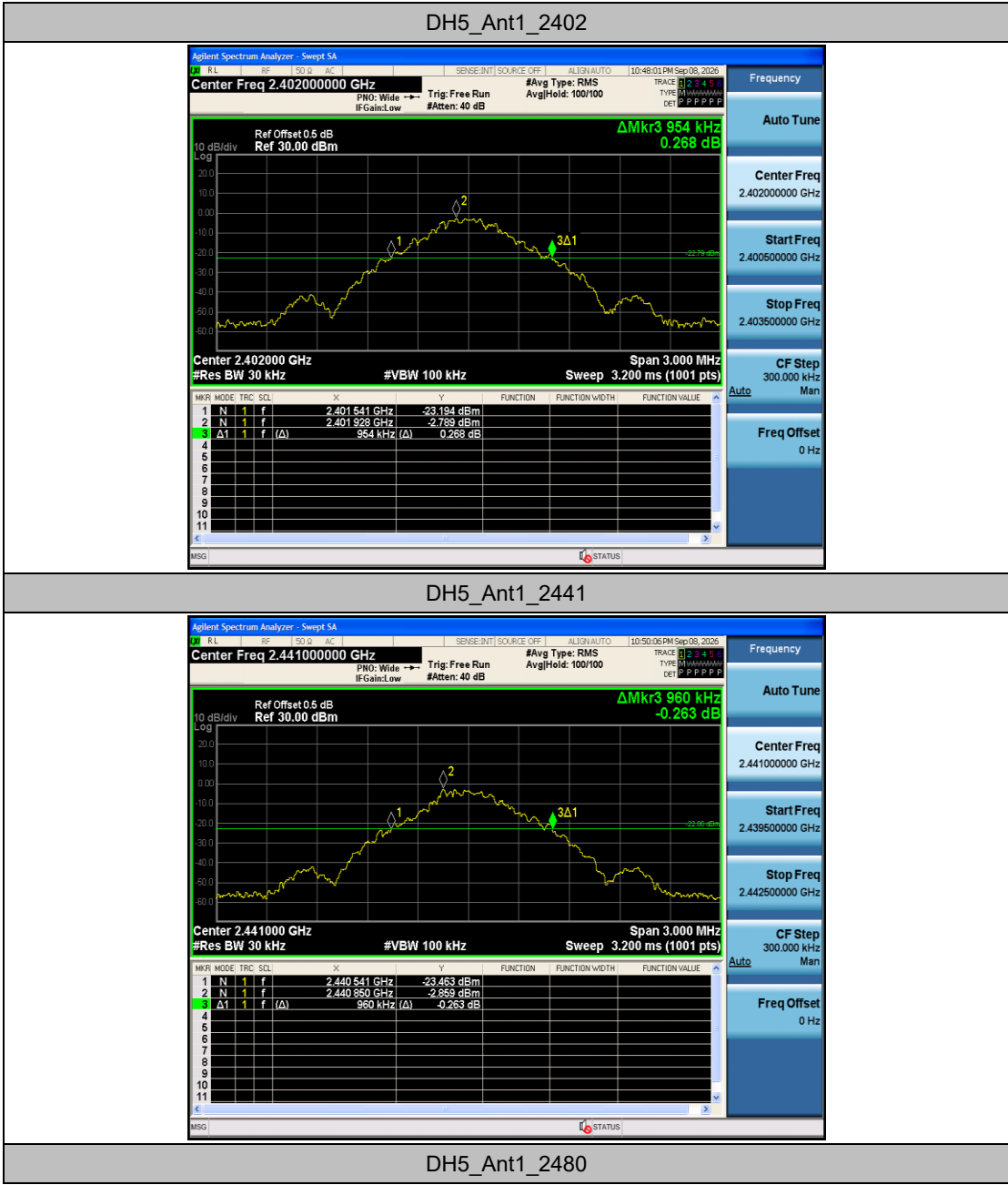
**Reviewed By** : Eric Wang

## 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            | 2401.541 | 2402.495 | ---        | ---     |
|          |         | 2441      | 0.960            | 2440.541 | 2441.501 | ---        | ---     |
|          |         | 2480      | 0.957            | 2479.544 | 2480.501 | ---        | ---     |
| 2DH5     | Ant1    | 2402      | 1.281            | 2401.376 | 2402.657 | ---        | ---     |
|          |         | 2441      | 1.329            | 2440.343 | 2441.672 | ---        | ---     |
|          |         | 2480      | 1.287            | 2479.376 | 2480.663 | ---        | ---     |
| 3DH5     | Ant1    | 2402      | 1.305            | 2401.364 | 2402.669 | ---        | ---     |
|          |         | 2441      | 1.308            | 2440.361 | 2441.669 | ---        | ---     |
|          |         | 2480      | 1.308            | 2479.367 | 2480.675 | ---        | ---     |

Test Graphs





2DH5\_Ant1\_2402



2DH5\_Ant1\_2441



## 2DH5\_Ant1\_2480



## 3DH5\_Ant1\_2402



## 3DH5\_Ant1\_2441



3DH5\_Ant1\_2480

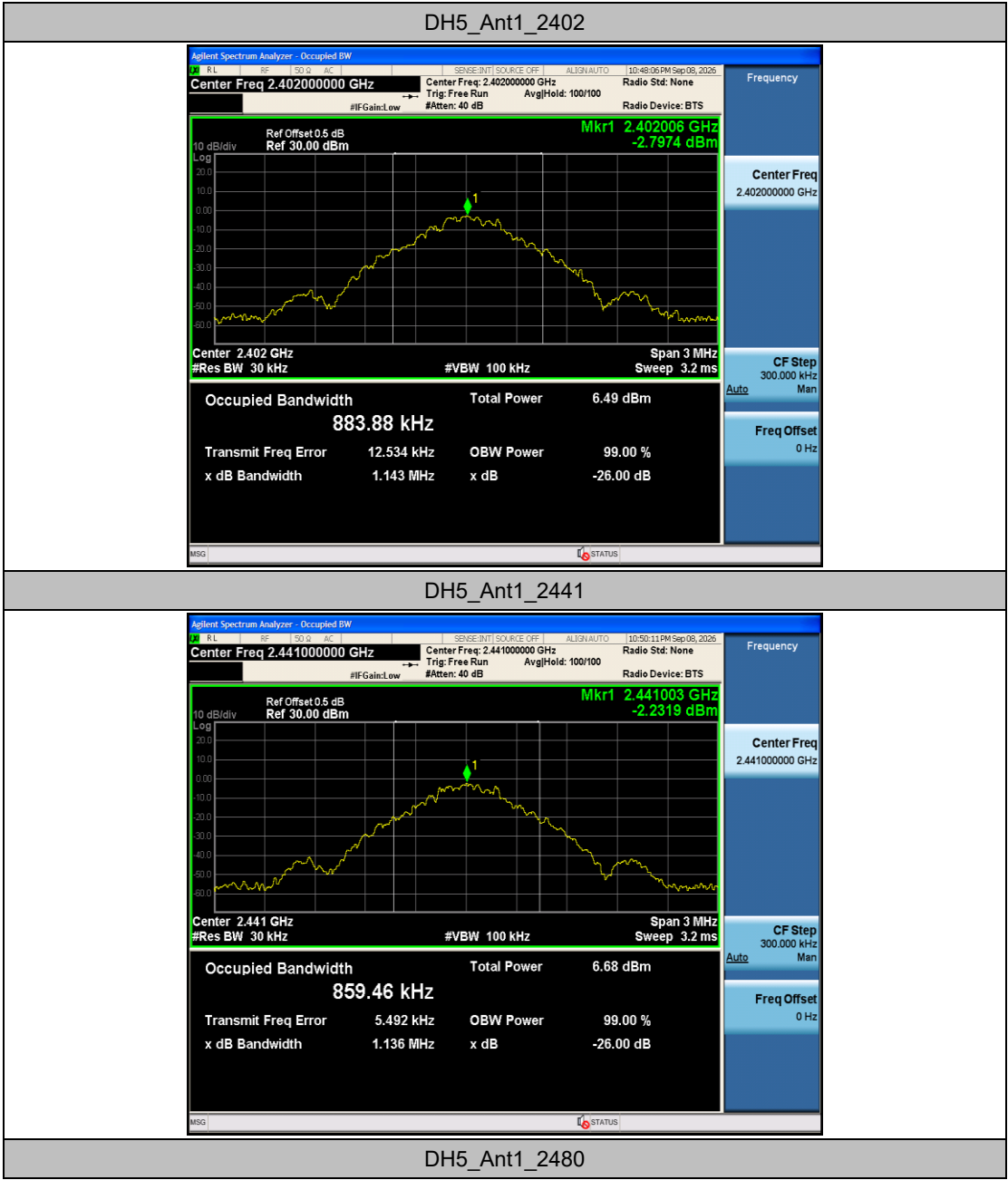


## Appendix B: Occupied Channel Bandwidth

### Test Result

| TestMode | Antenna | Freq(MHz) | OCB [MHz] | FL[MHz]   | FH[MHz]   | Limit[MHz] | Verdict |
|----------|---------|-----------|-----------|-----------|-----------|------------|---------|
| DH5      | Ant1    | 2402      | 0.88388   | 2401.5706 | 2402.4545 | ---        | ---     |
|          |         | 2441      | 0.85946   | 2440.5758 | 2441.4352 | ---        | ---     |
|          |         | 2480      | 0.86369   | 2479.5792 | 2480.4429 | ---        | ---     |
| 2DH5     | Ant1    | 2402      | 1.1868    | 2401.4138 | 2402.6006 | ---        | ---     |
|          |         | 2441      | 1.1822    | 2440.4170 | 2441.5992 | ---        | ---     |
|          |         | 2480      | 1.1842    | 2479.4221 | 2480.6063 | ---        | ---     |
| 3DH5     | Ant1    | 2402      | 1.2004    | 2401.4080 | 2402.6084 | ---        | ---     |
|          |         | 2441      | 1.1786    | 2440.4214 | 2441.6000 | ---        | ---     |
|          |         | 2480      | 1.1783    | 2479.4264 | 2480.6047 | ---        | ---     |

Test Graphs





2DH5\_Ant1\_2402



2DH5\_Ant1\_2441



### 2DH5\_Ant1\_2480



### 3DH5\_Ant1\_2402



### 3DH5\_Ant1\_2441



3DH5\_Ant1\_2480



## Appendix C: Maximum conducted output power

### Test Result Peak

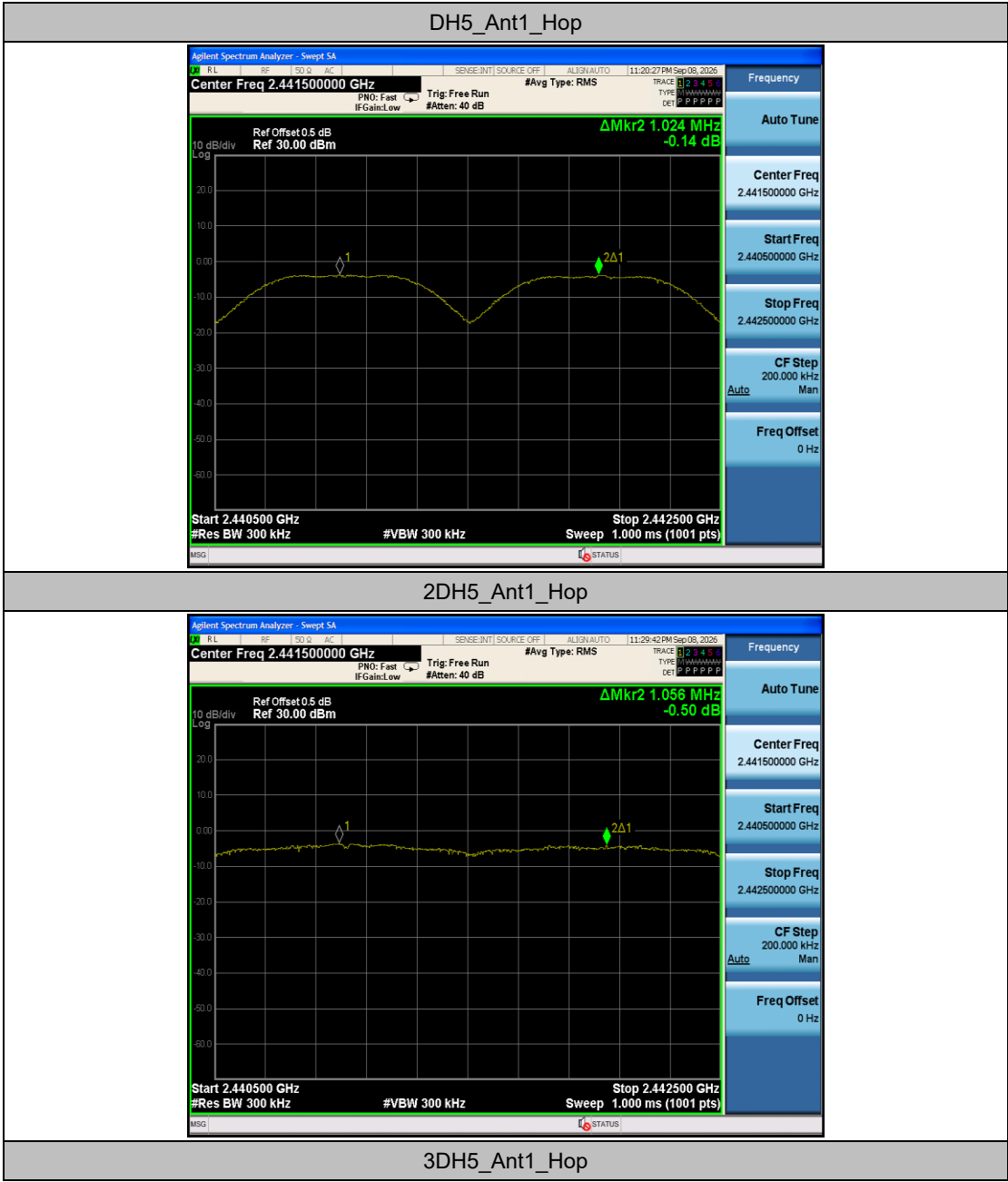
| Test Mode | Antenna | Freq(MHz) | Conducted Peak Power[dBm] | Conducted Limit[dBm] | Verdict |
|-----------|---------|-----------|---------------------------|----------------------|---------|
| DH5       | Ant1    | 2402      | 0.11                      | ≤20.97               | PASS    |
|           |         | 2441      | 0.01                      | ≤20.97               | PASS    |
|           |         | 2480      | -0.23                     | ≤20.97               | PASS    |
| 2DH5      | Ant1    | 2402      | -0.78                     | ≤20.97               | PASS    |
|           |         | 2441      | -0.82                     | ≤20.97               | PASS    |
|           |         | 2480      | -1.10                     | ≤20.97               | PASS    |
| 3DH5      | Ant1    | 2402      | -0.32                     | ≤20.97               | PASS    |
|           |         | 2441      | -0.47                     | ≤20.97               | PASS    |
|           |         | 2480      | -0.71                     | ≤20.97               | PASS    |

## Appendix D: Carrier frequency separation

### Test Result

| TestMode | Antenna | Freq(MHz) | Result[MHz] | Limit[MHz]   | Verdict |
|----------|---------|-----------|-------------|--------------|---------|
| DH5      | Ant1    | Hop       | 1.024       | $\geq 0.960$ | PASS    |
| 2DH5     | Ant1    | Hop       | 1.056       | $\geq 0.886$ | PASS    |
| 3DH5     | Ant1    | Hop       | 0.976       | $\geq 0.872$ | PASS    |

Test Graphs



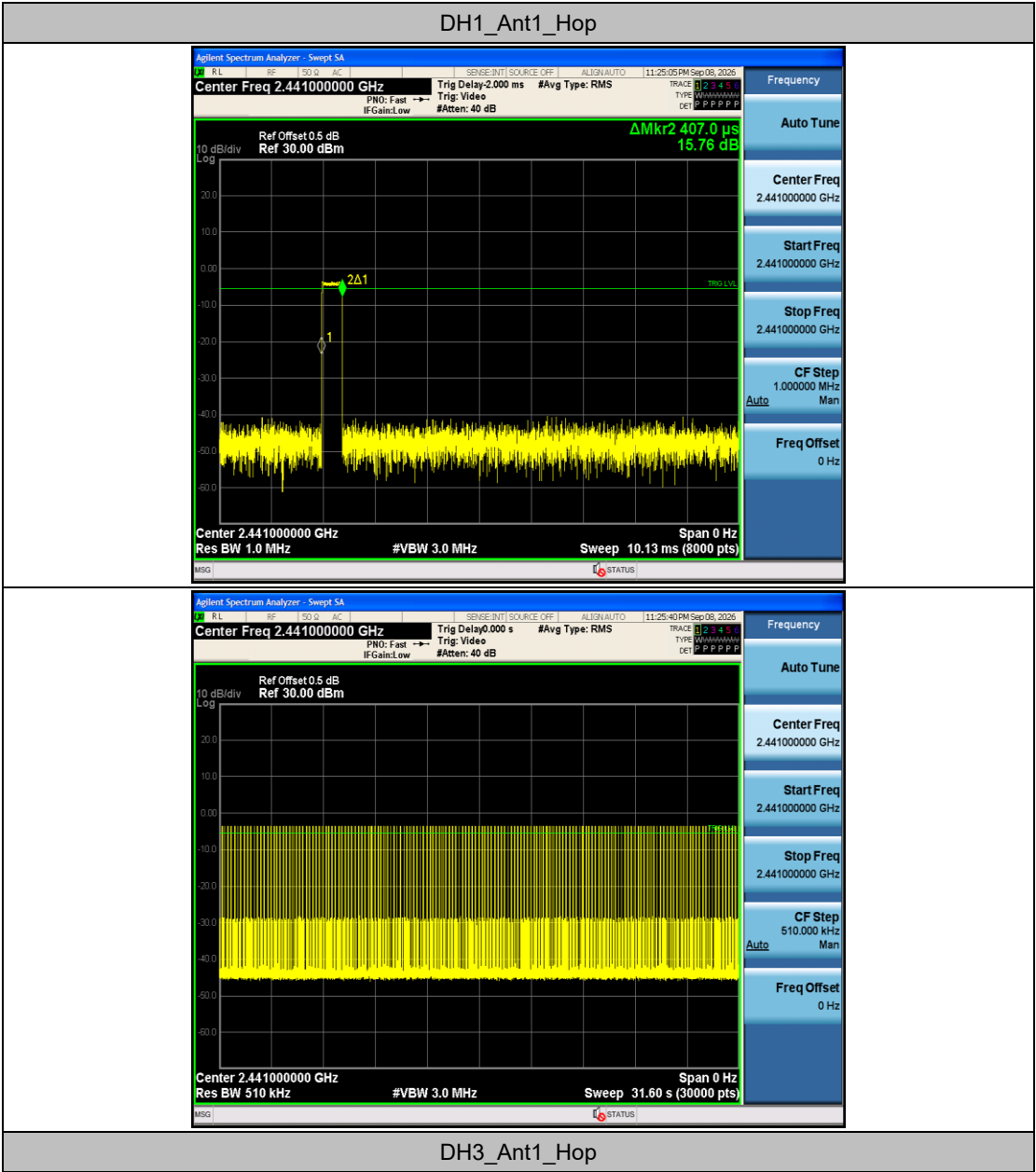


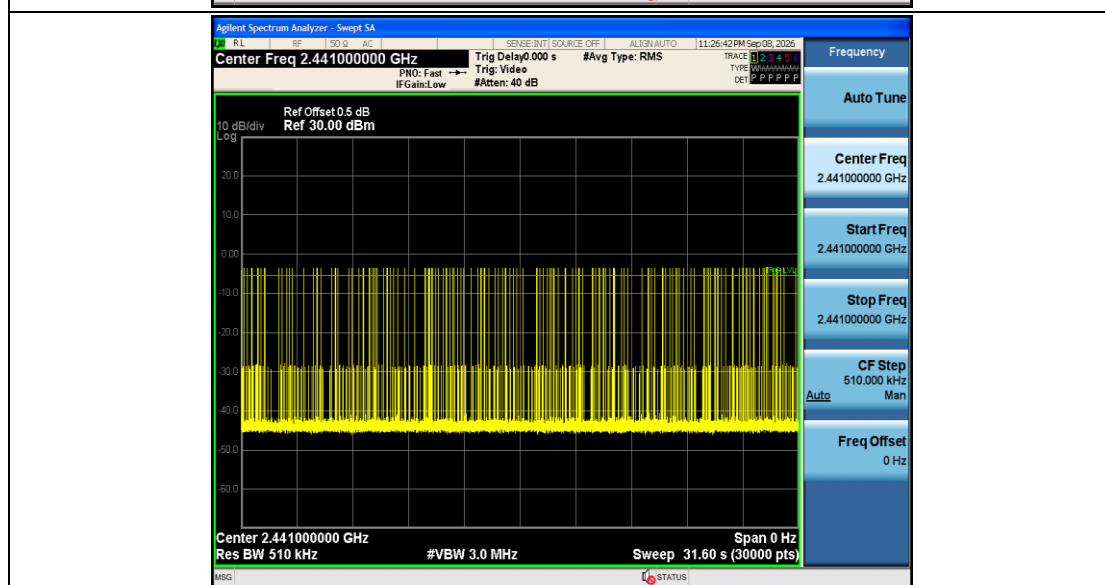
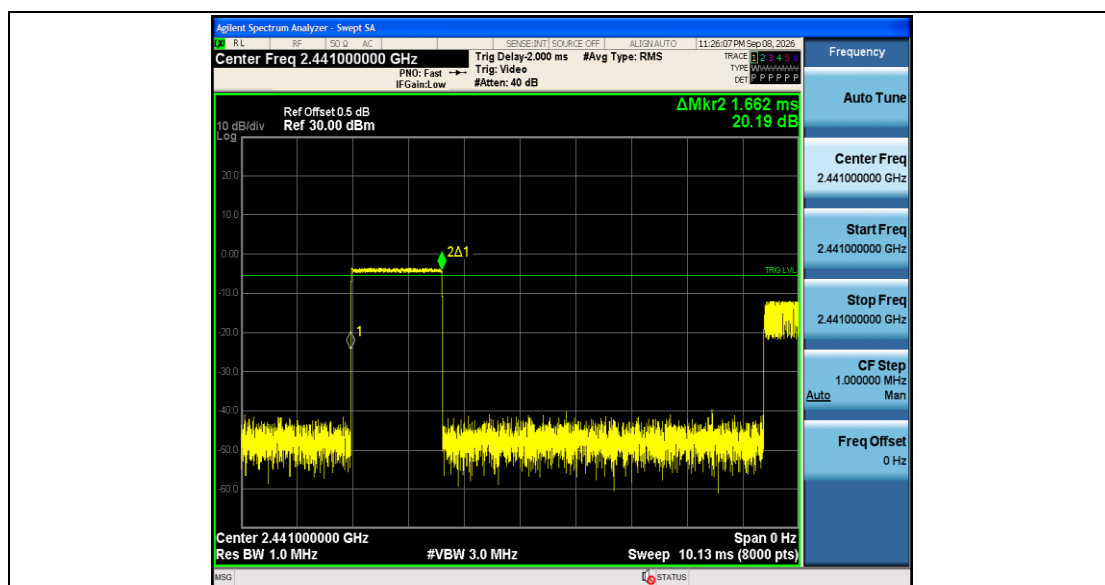
## Appendix E: Time of occupancy

### Test Result

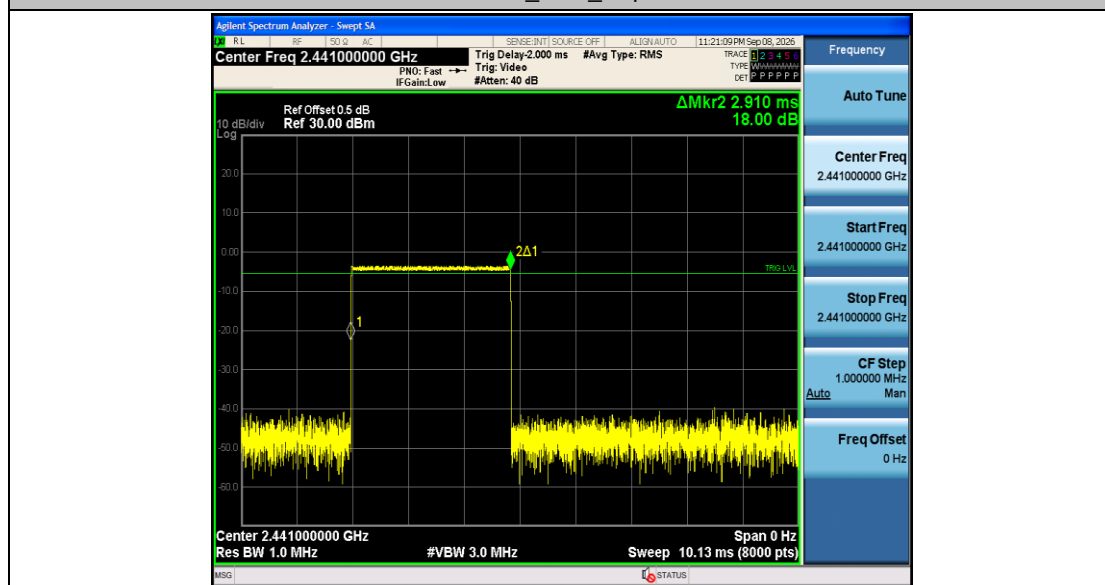
| TestMode | Antenna | Freq(MHz) | BurstWidth<br>[ms] | TotalHops<br>[Num] | Result[s] | Limit[s] | Verdict |
|----------|---------|-----------|--------------------|--------------------|-----------|----------|---------|
| DH1      | Ant1    | Hop       | 0.407              | 319                | 0.13      | ≤0.4     | PASS    |
| DH3      | Ant1    | Hop       | 1.662              | 152                | 0.253     | ≤0.4     | PASS    |
| DH5      | Ant1    | Hop       | 2.910              | 106                | 0.308     | ≤0.4     | PASS    |
| 2DH1     | Ant1    | Hop       | 0.417              | 319                | 0.133     | ≤0.4     | PASS    |
| 2DH3     | Ant1    | Hop       | 1.667              | 158                | 0.263     | ≤0.4     | PASS    |
| 2DH5     | Ant1    | Hop       | 2.915              | 105                | 0.306     | ≤0.4     | PASS    |
| 3DH1     | Ant1    | Hop       | 0.415              | 320                | 0.133     | ≤0.4     | PASS    |
| 3DH3     | Ant1    | Hop       | 1.666              | 160                | 0.267     | ≤0.4     | PASS    |
| 3DH5     | Ant1    | Hop       | 2.916              | 106                | 0.309     | ≤0.4     | PASS    |

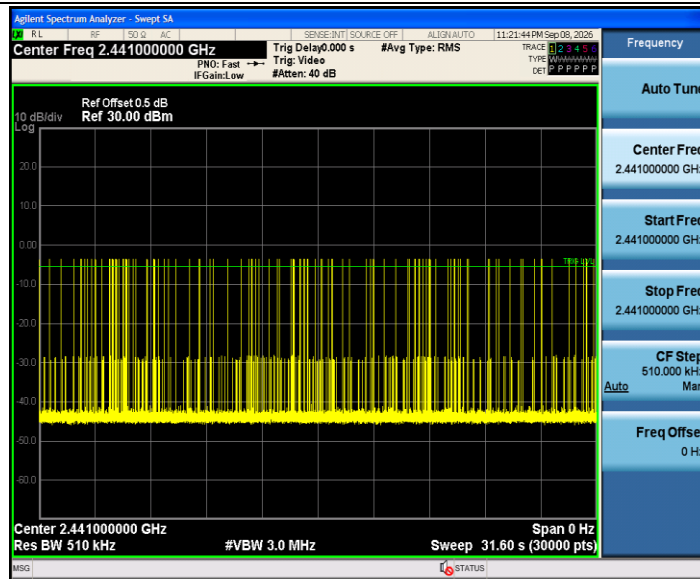
Test Graphs



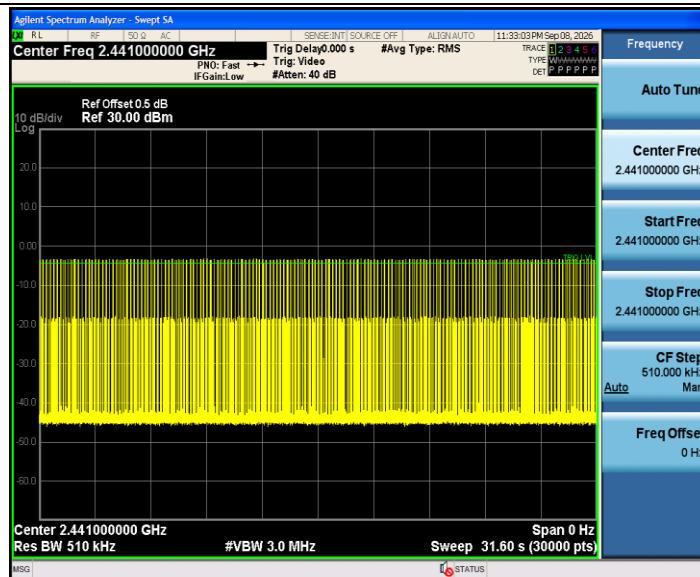
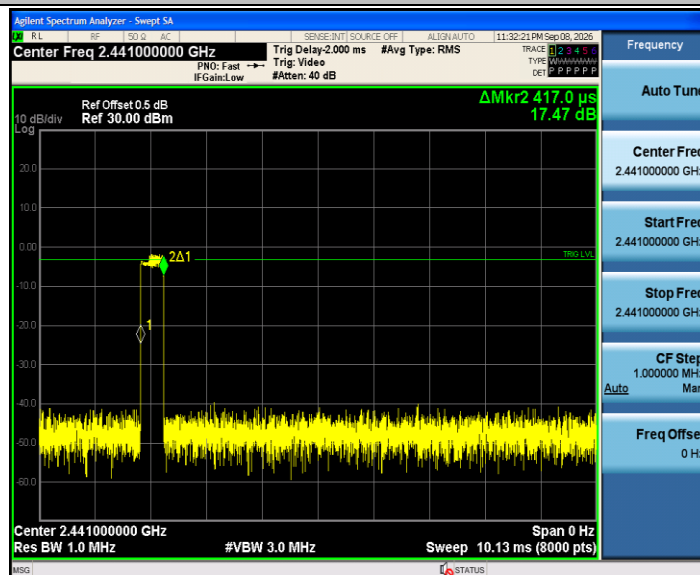


DH5\_Ant1\_Hop

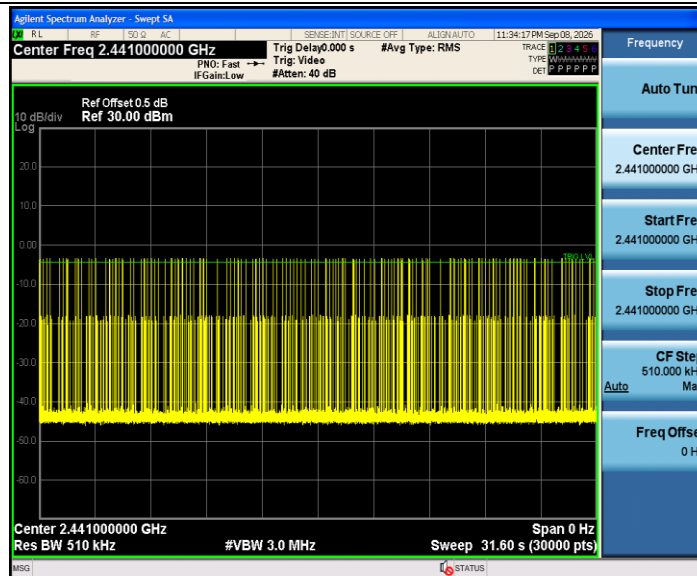
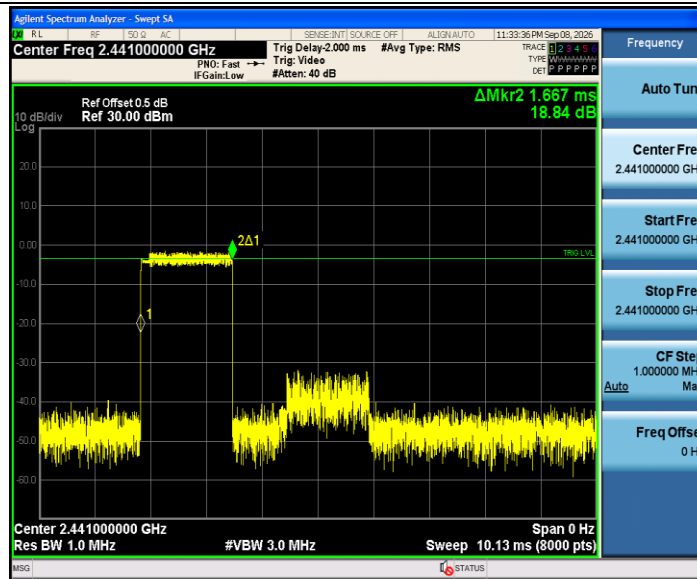




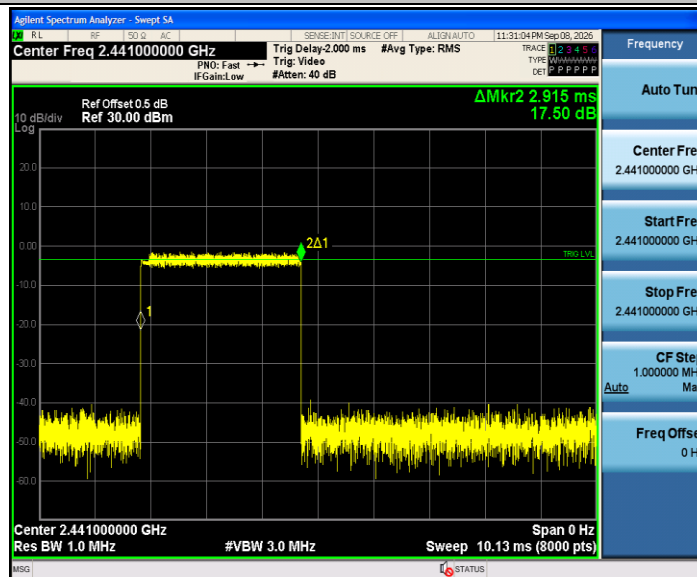
2DH1\_Ant1\_Hop

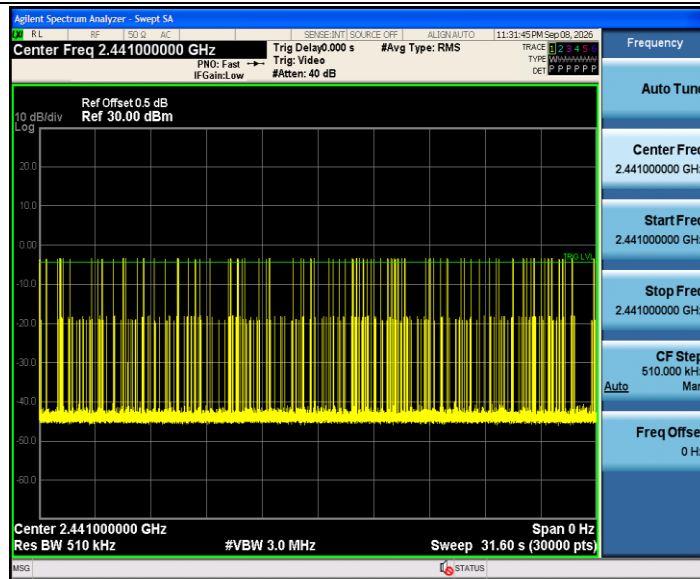


2DH3\_Ant1\_Hop

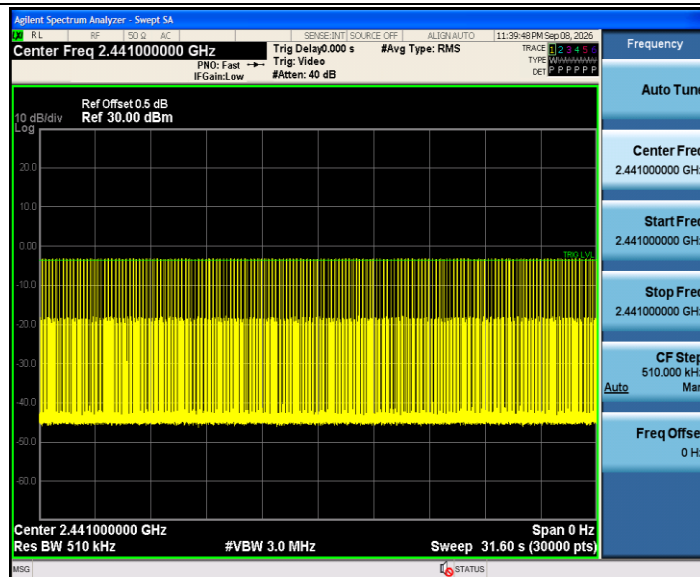
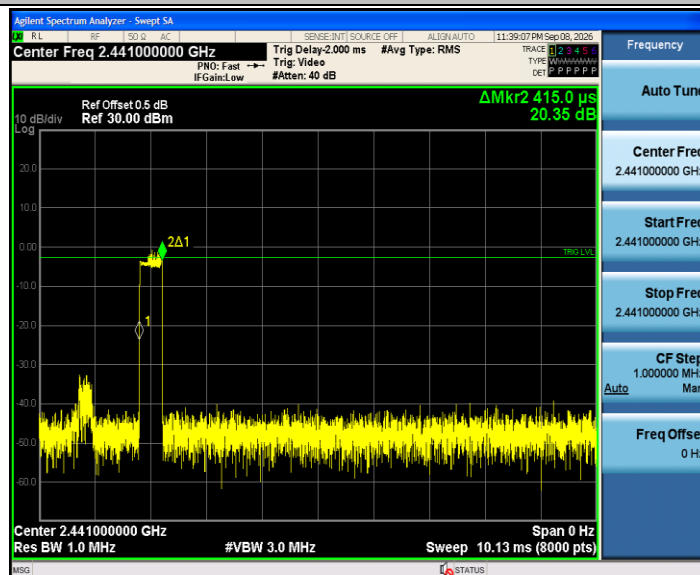


2DH5\_Ant1\_Hop

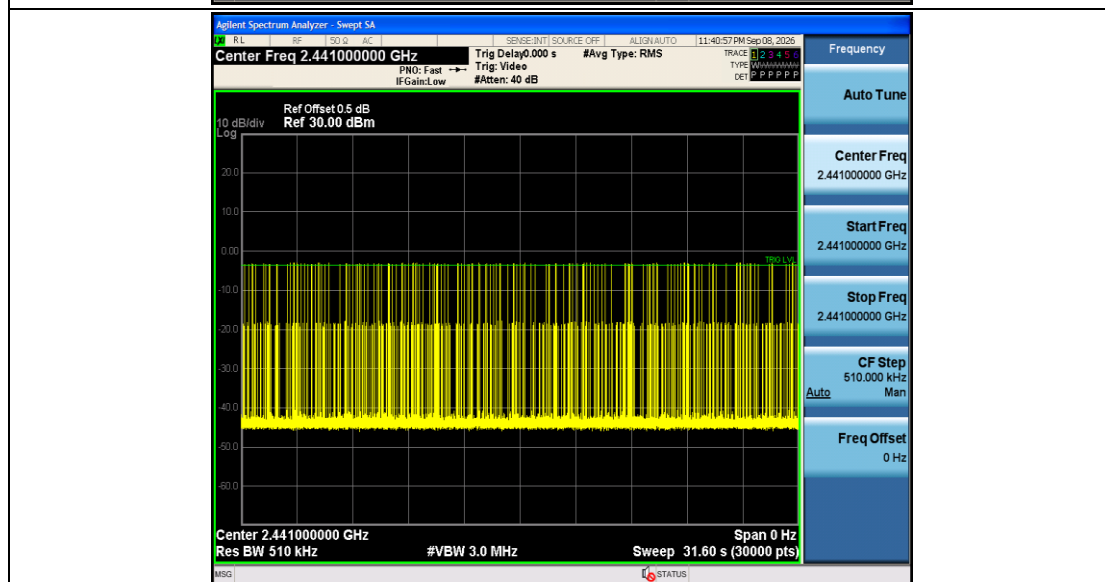
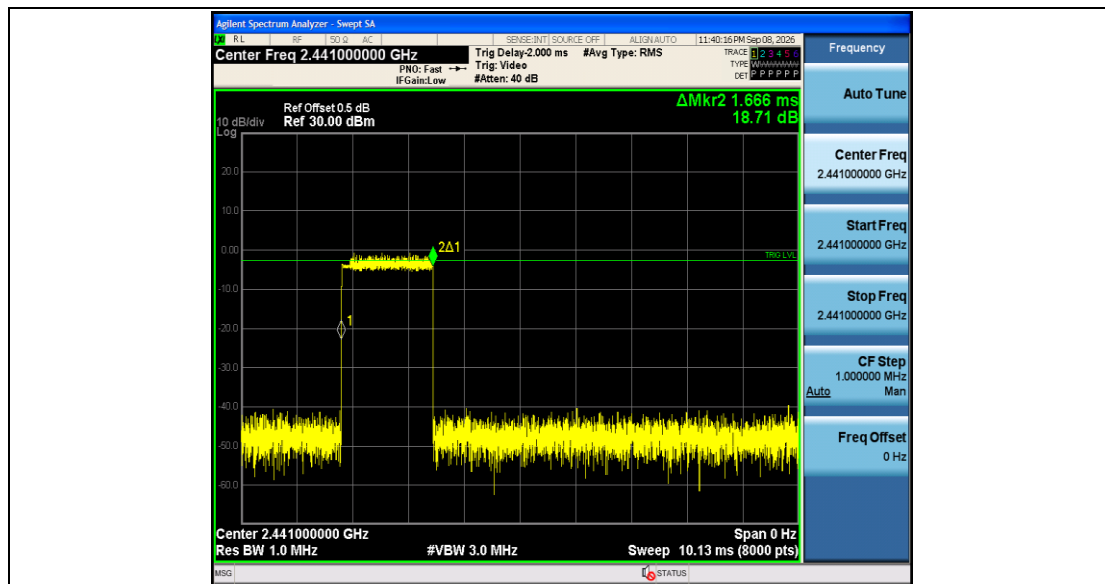




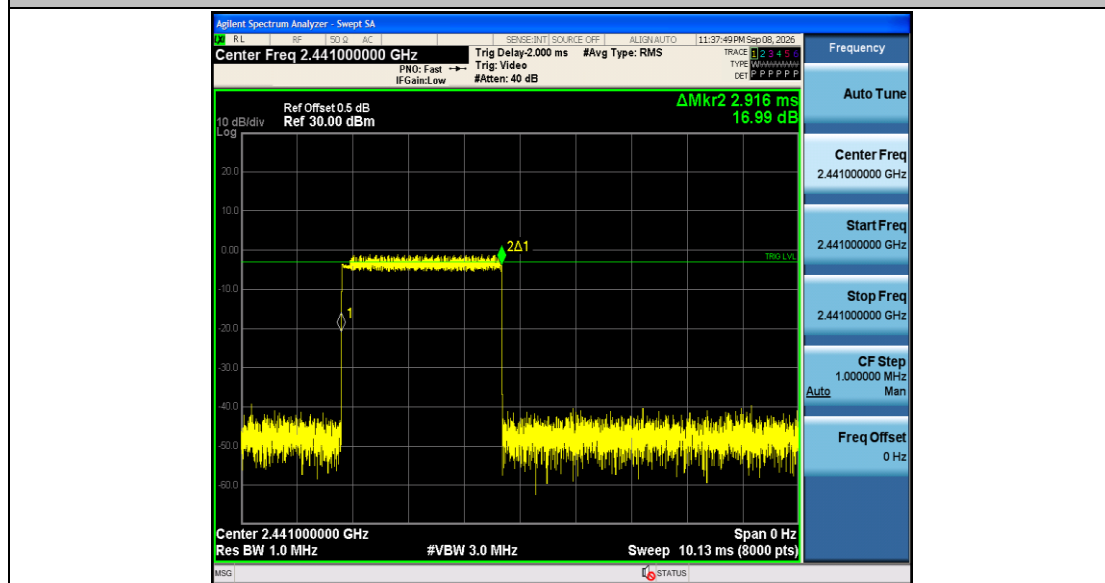
3DH1\_Ant1\_Hop

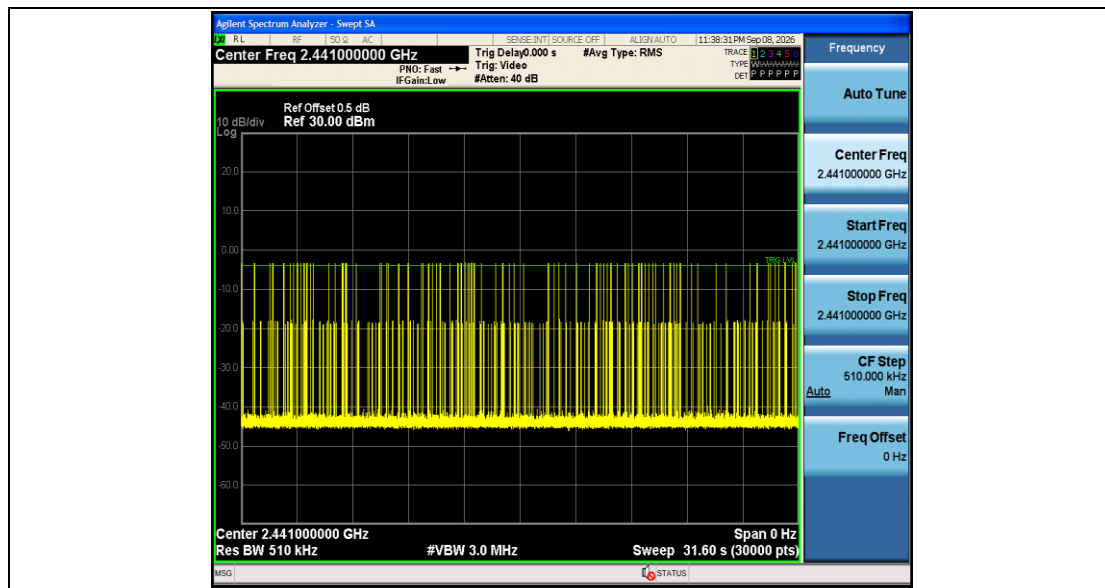


3DH3\_Ant1\_Hop



3DH5\_Ant1\_Hop



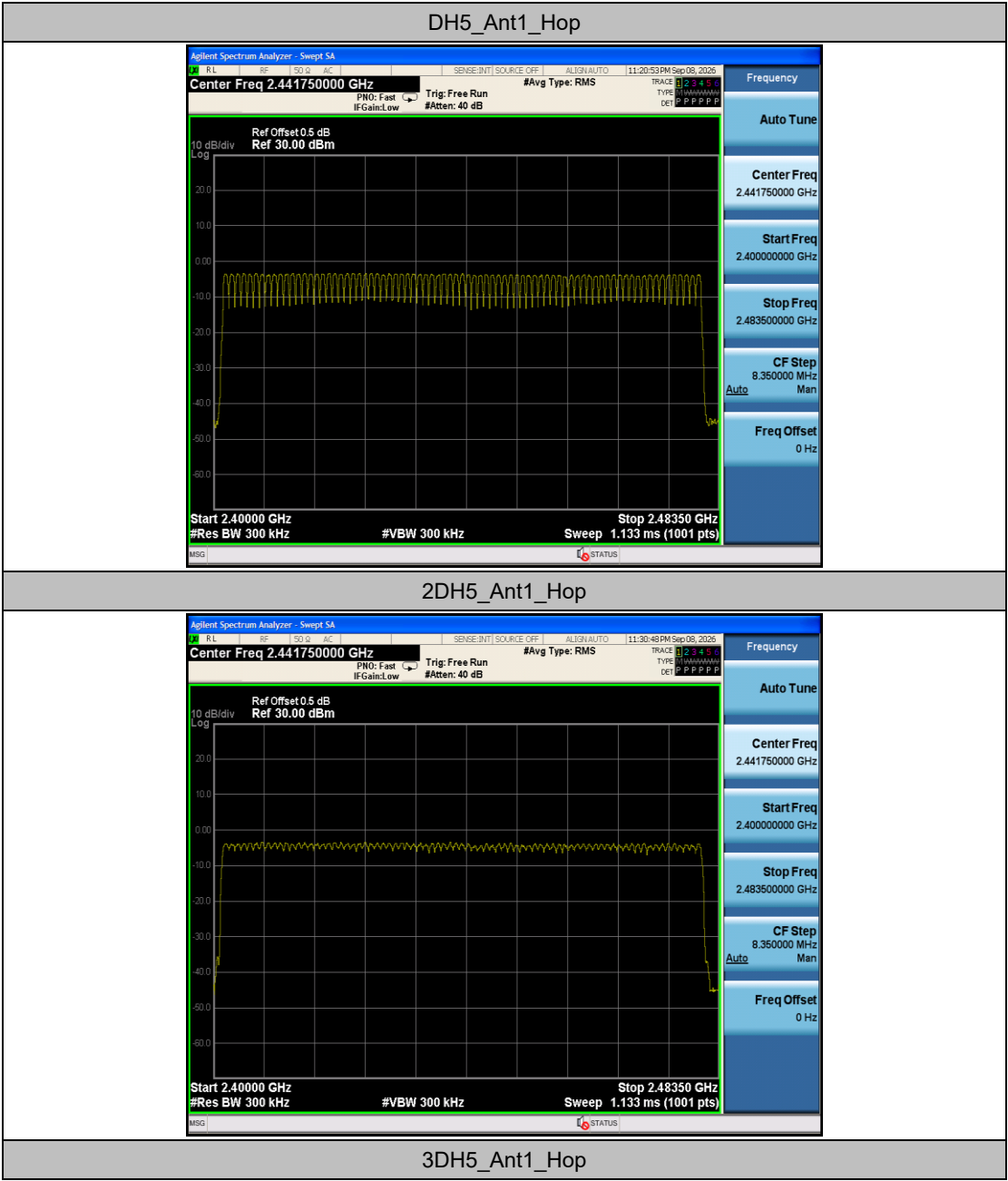


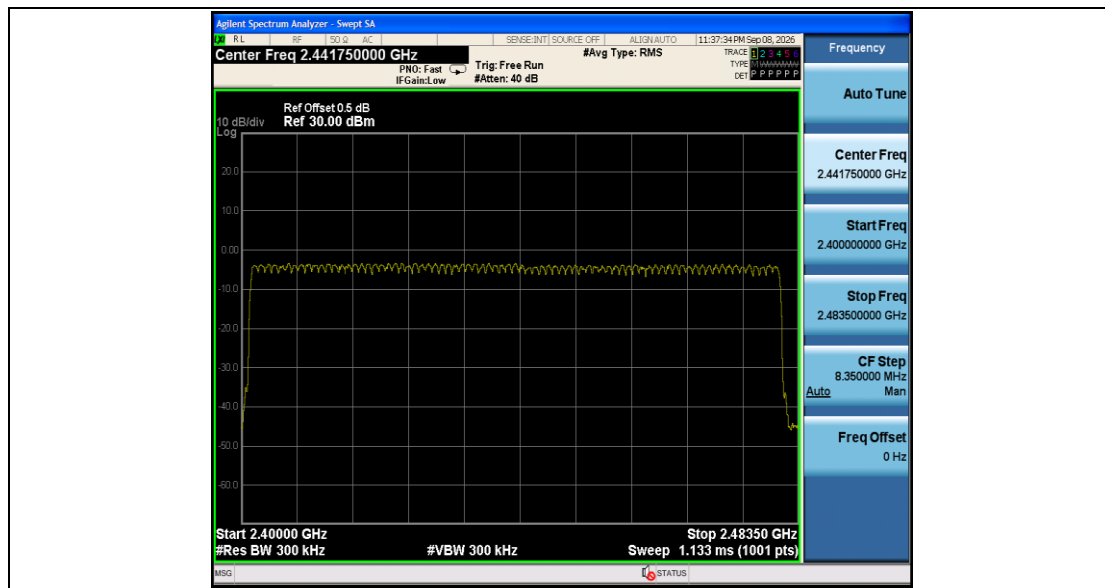
## Appendix F: Number of hopping channels

### Test Result

| TestMode | Antenna | Freq(MHz) | Result[Num] | Limit[Num] | Verdict |
|----------|---------|-----------|-------------|------------|---------|
| DH5      | Ant1    | Hop       | 79          | ≥15        | PASS    |
| 2DH5     | Ant1    | Hop       | 79          | ≥15        | PASS    |
| 3DH5     | Ant1    | Hop       | 79          | ≥15        | PASS    |

Test Graphs



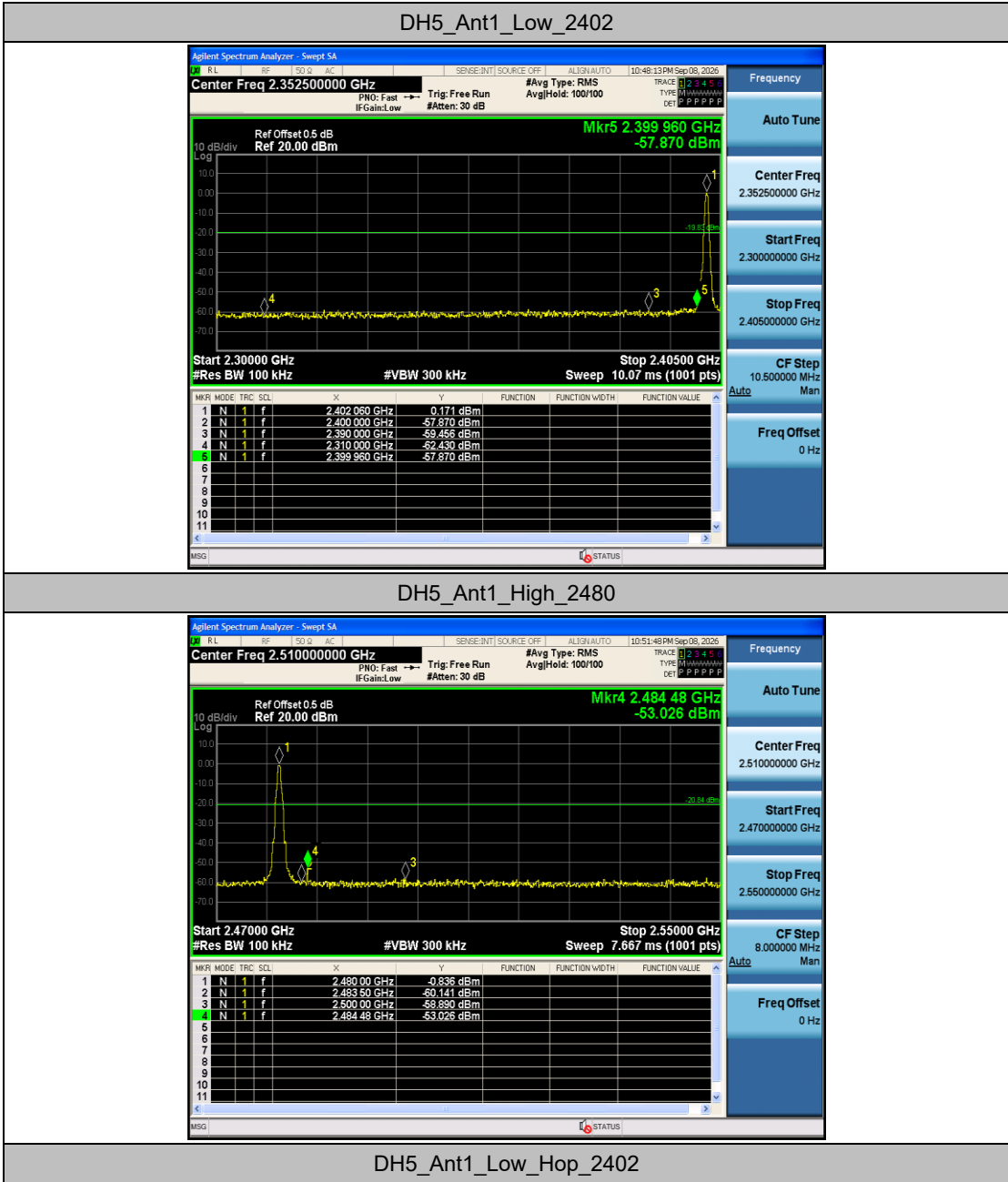


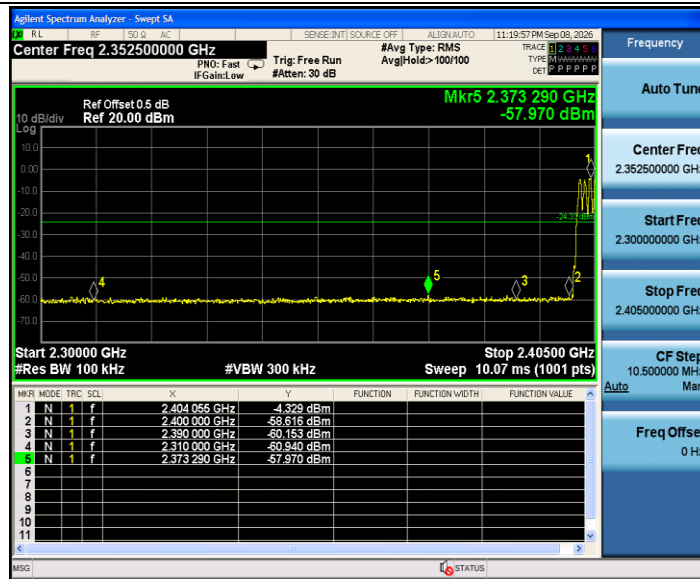
## Appendix G: Band edge measurements

### Test Result

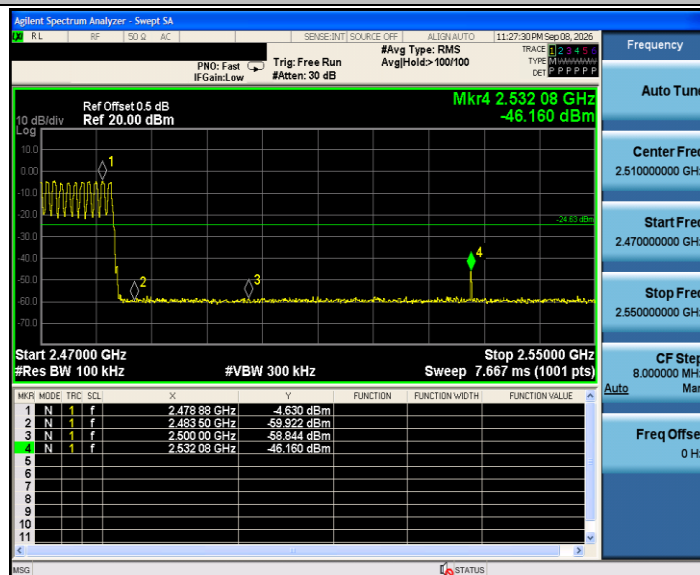
| TestMode | Antenna | ChName | Freq(MHz) | RefLevel [dBm] | Result [dBm] | Limit [dBm]   | Verdict |
|----------|---------|--------|-----------|----------------|--------------|---------------|---------|
| DH5      | Ant1    | Low    | 2402      | 0.17           | -57.87       | $\leq -19.83$ | PASS    |
|          |         | High   | 2480      | -0.84          | -53.03       | $\leq -20.84$ | PASS    |
|          |         | Low    | Hop_2402  | -4.33          | -57.97       | $\leq -24.33$ | PASS    |
|          |         | High   | Hop_2480  | -4.63          | -46.16       | $\leq -24.63$ | PASS    |
| 2DH5     | Ant1    | Low    | 2402      | -4.50          | -58.04       | $\leq -24.5$  | PASS    |
|          |         | High   | 2480      | -5.10          | -56.67       | $\leq -25.1$  | PASS    |
|          |         | Low    | Hop_2402  | -5.60          | -58.09       | $\leq -25.6$  | PASS    |
|          |         | High   | Hop_2480  | -4.80          | -43.69       | $\leq -24.8$  | PASS    |
| 3DH5     | Ant1    | Low    | 2402      | -4.85          | -57.97       | $\leq -24.85$ | PASS    |
|          |         | High   | 2480      | -3.72          | -57.97       | $\leq -23.72$ | PASS    |
|          |         | Low    | Hop_2402  | -3.59          | -58.06       | $\leq -23.59$ | PASS    |
|          |         | High   | Hop_2480  | -5.48          | -47.72       | $\leq -25.48$ | PASS    |

# Test Graphs

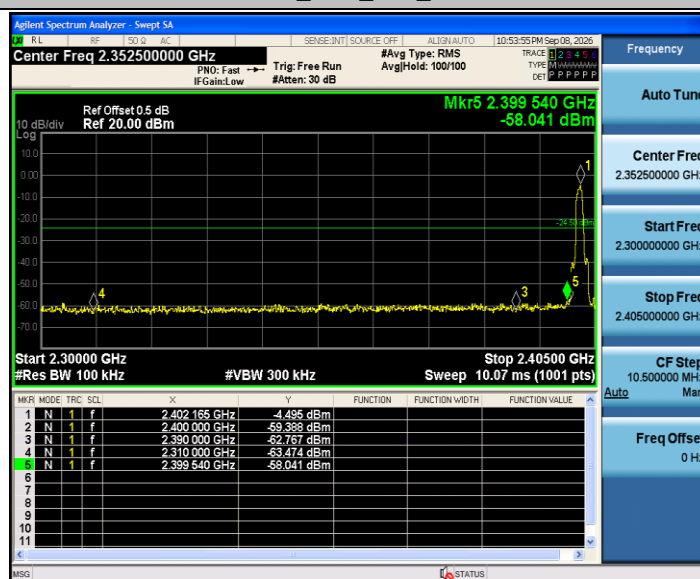




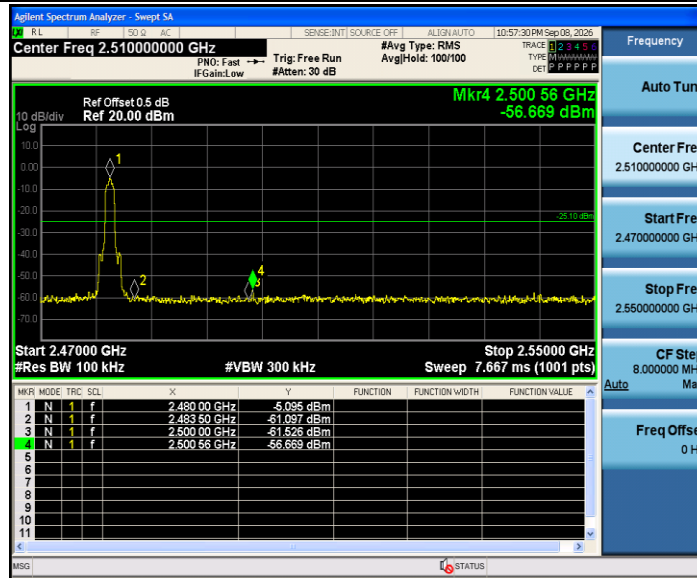
DH5\_Ant1\_High\_Hop\_2480



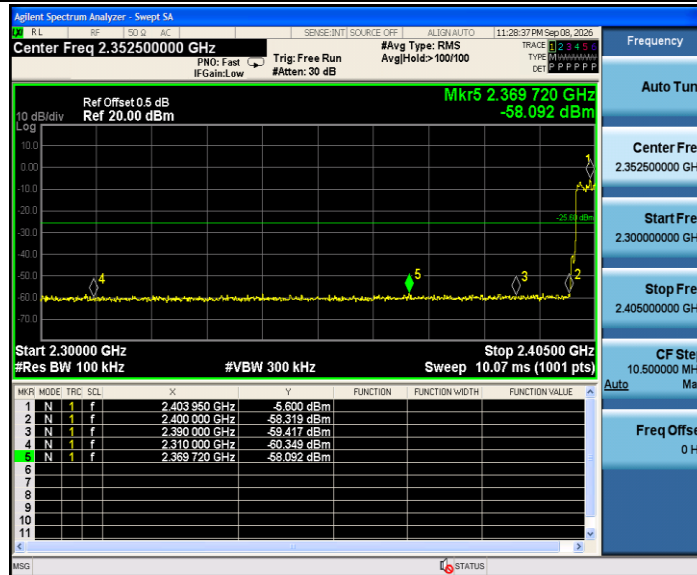
2DH5\_Ant1\_Low\_2402



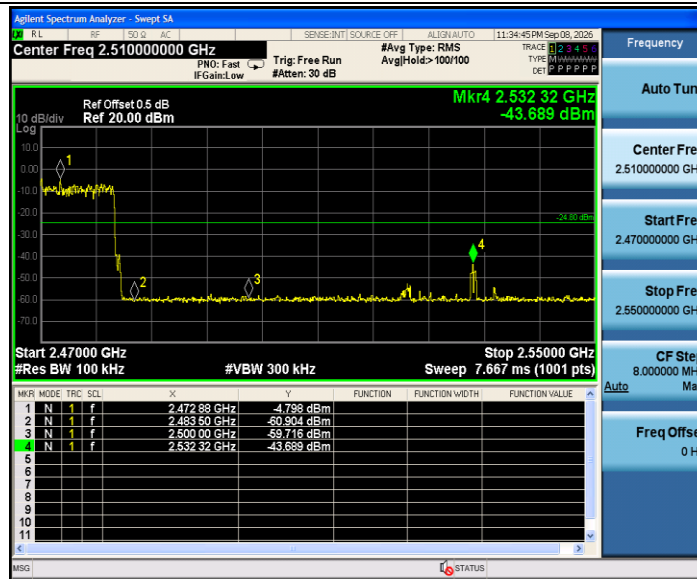
# 2DH5\_Ant1\_High\_2480



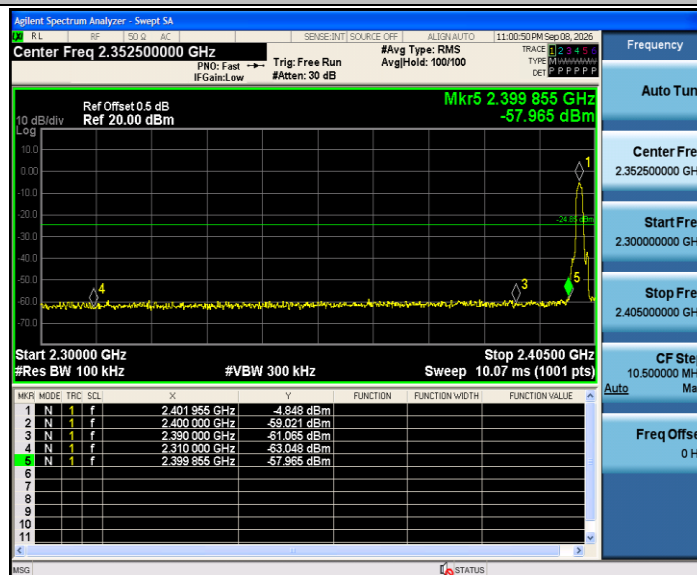
# 2DH5\_Ant1\_Low\_Hop\_2402



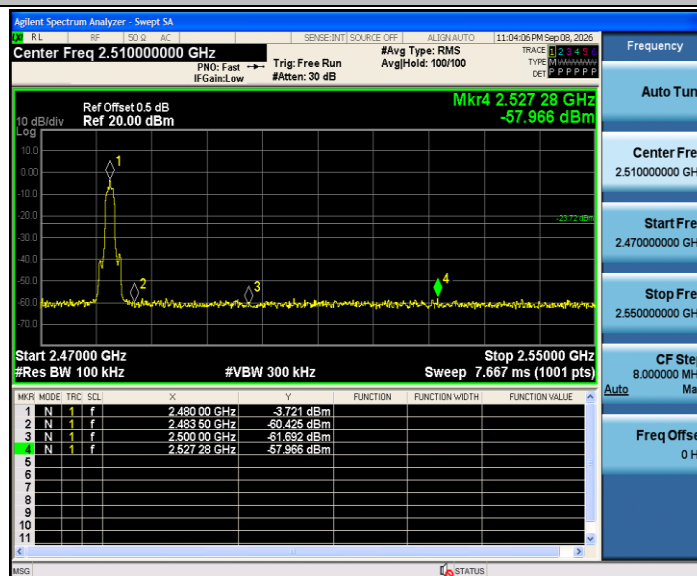
# 2DH5\_Ant1\_High\_Hop\_2480



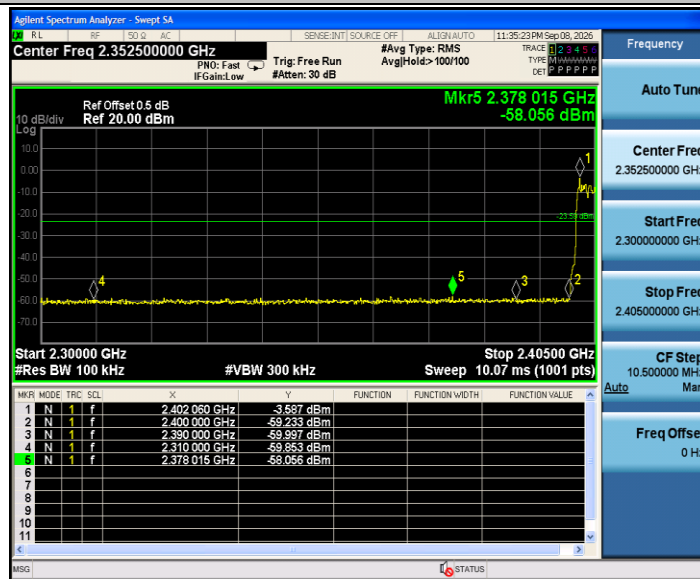
3DH5\_Ant1\_Low\_2402



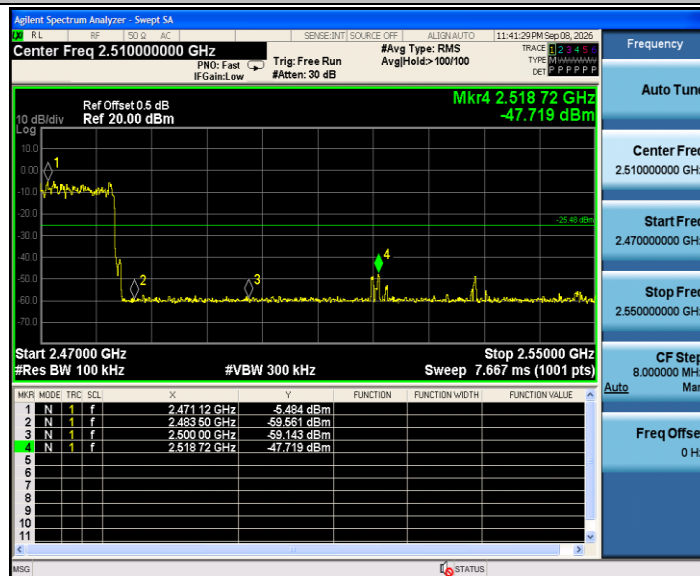
3DH5\_Ant1\_High\_2480



### 3DH5\_Ant1\_Low\_Hop\_2402



### 3DH5\_Ant1\_High\_Hop\_2480

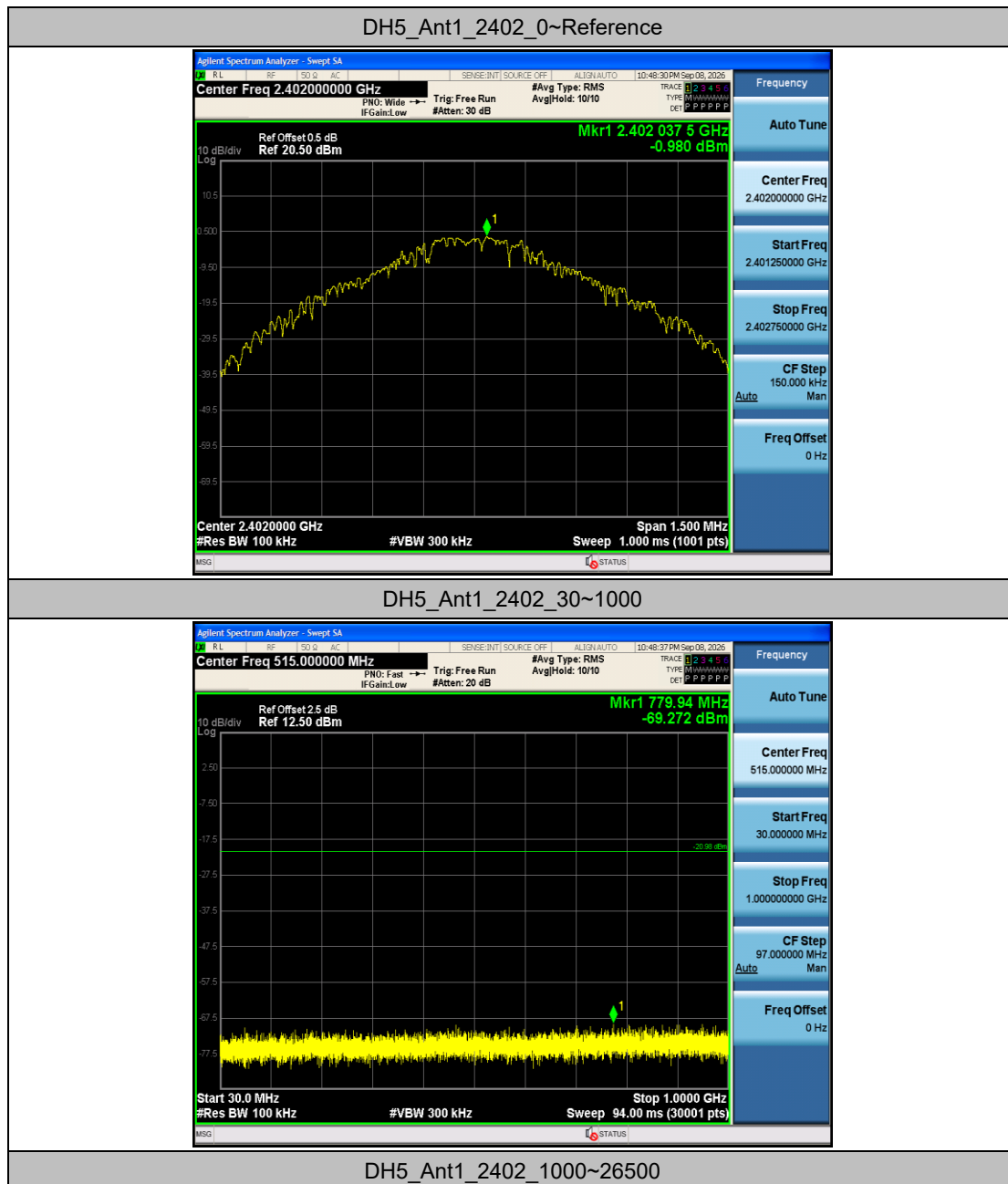


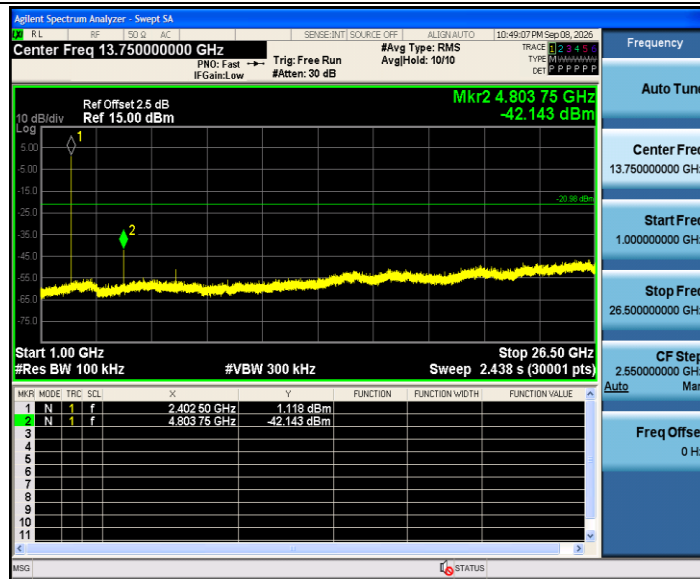
## Appendix H: Conducted Spurious Emission

### Test Result

| TestMode | Antenna | Freq(MHz) | FreqRange [MHz] | RefLevel [dBm] | Result [dBm] | Limit [dBm] | Verdict |
|----------|---------|-----------|-----------------|----------------|--------------|-------------|---------|
| DH5      | Ant1    | 2402      | Reference       | -0.98          | -0.98        | ---         | PASS    |
|          |         |           | 30~1000         | -0.98          | -69.27       | ≤-20.98     | PASS    |
|          |         |           | 1000~26500      | -0.98          | -42.14       | ≤-20.98     | PASS    |
|          |         | 2441      | Reference       | -1.20          | -1.20        | ---         | PASS    |
|          |         |           | 30~1000         | -1.20          | -69.13       | ≤-21.2      | PASS    |
|          |         |           | 1000~26500      | -1.20          | -42.16       | ≤-21.2      | PASS    |
|          |         | 2480      | Reference       | -1.48          | -1.48        | ---         | PASS    |
|          |         |           | 30~1000         | -1.48          | -69.06       | ≤-21.48     | PASS    |
|          |         |           | 1000~26500      | -1.48          | -42.72       | ≤-21.48     | PASS    |
| 2DH5     | Ant1    | 2402      | Reference       | -5.12          | -5.12        | ---         | PASS    |
|          |         |           | 30~1000         | -5.12          | -69.03       | ≤-25.12     | PASS    |
|          |         |           | 1000~26500      | -5.12          | -46.2        | ≤-25.12     | PASS    |
|          |         | 2441      | Reference       | -5.08          | -5.08        | ---         | PASS    |
|          |         |           | 30~1000         | -5.08          | -69.07       | ≤-25.08     | PASS    |
|          |         |           | 1000~26500      | -5.08          | -46.6        | ≤-25.08     | PASS    |
|          |         | 2480      | Reference       | -7.51          | -7.51        | ---         | PASS    |
|          |         |           | 30~1000         | -7.51          | -68.63       | ≤-27.51     | PASS    |
|          |         |           | 1000~26500      | -7.51          | -45.52       | ≤-27.51     | PASS    |
| 3DH5     | Ant1    | 2402      | Reference       | -4.45          | -4.45        | ---         | PASS    |
|          |         |           | 30~1000         | -4.45          | -69.58       | ≤-24.45     | PASS    |
|          |         |           | 1000~26500      | -4.45          | -46.17       | ≤-24.45     | PASS    |
|          |         | 2441      | Reference       | -6.21          | -6.21        | ---         | PASS    |
|          |         |           | 30~1000         | -6.21          | -69.14       | ≤-26.21     | PASS    |
|          |         |           | 1000~26500      | -6.21          | -46.15       | ≤-26.21     | PASS    |
|          |         | 2480      | Reference       | -4.53          | -4.53        | ---         | PASS    |
|          |         |           | 30~1000         | -4.53          | -69.59       | ≤-24.53     | PASS    |
|          |         |           | 1000~26500      | -4.53          | -46.81       | ≤-24.53     | PASS    |

## Test Graphs

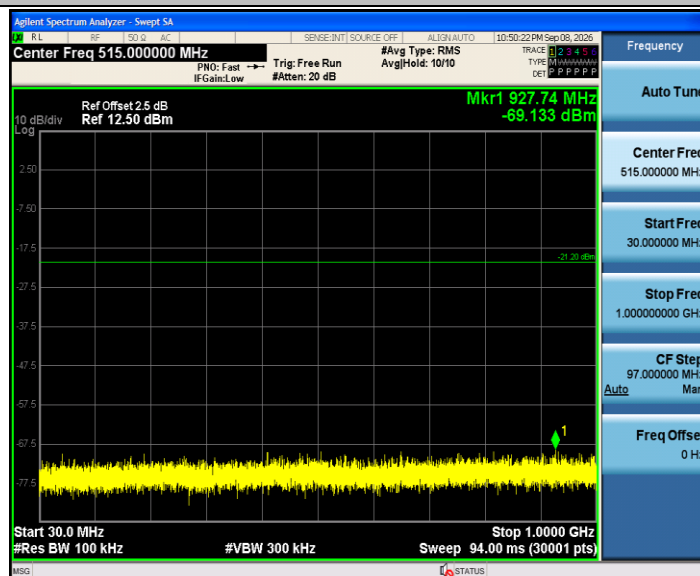




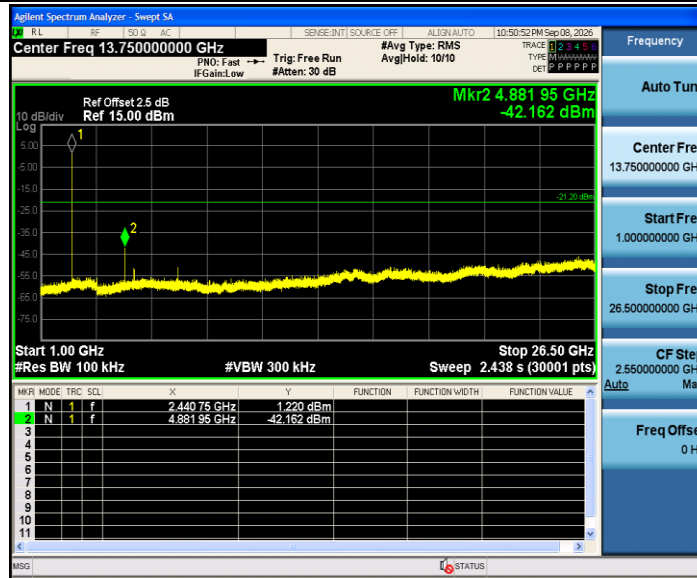
DH5\_Ant1\_2441\_0~Reference



DH5\_Ant1\_2441\_30~1000



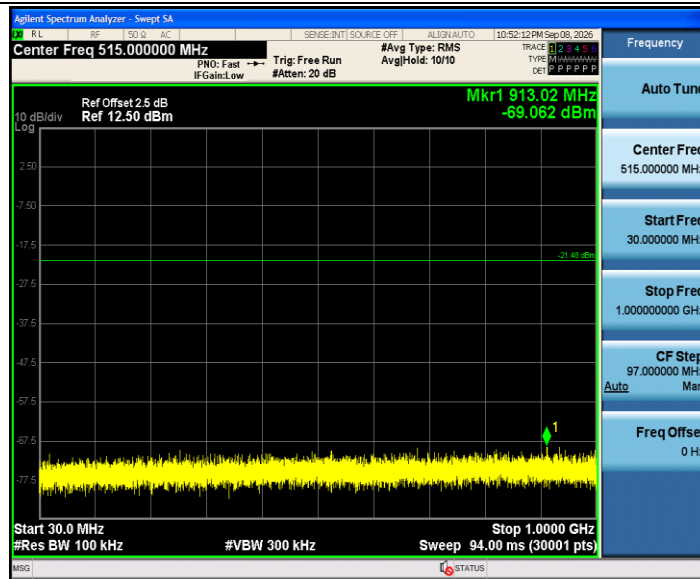
# DH5\_Ant1\_2441\_1000~26500



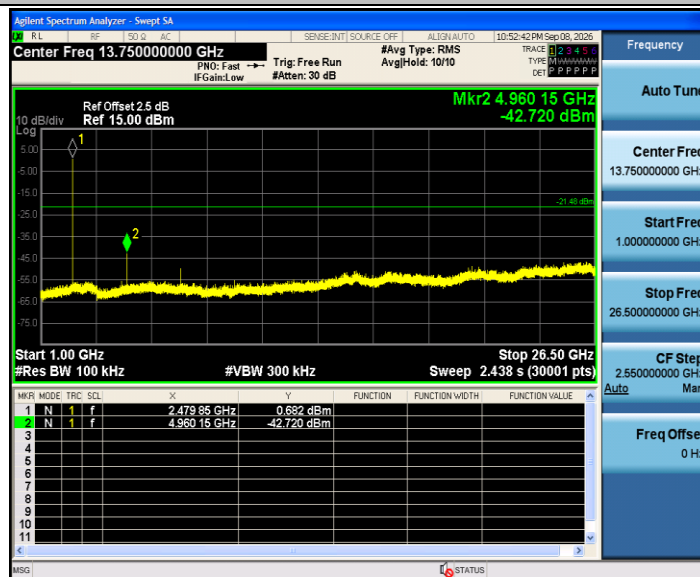
# DH5\_Ant1\_2480\_0~Reference



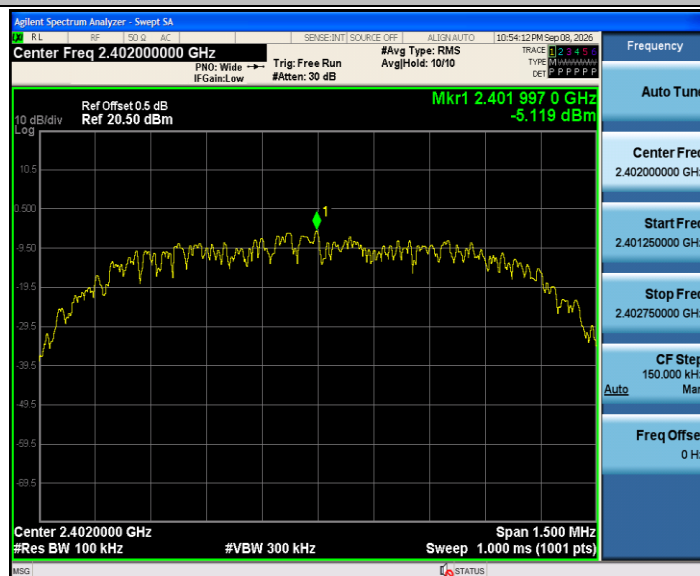
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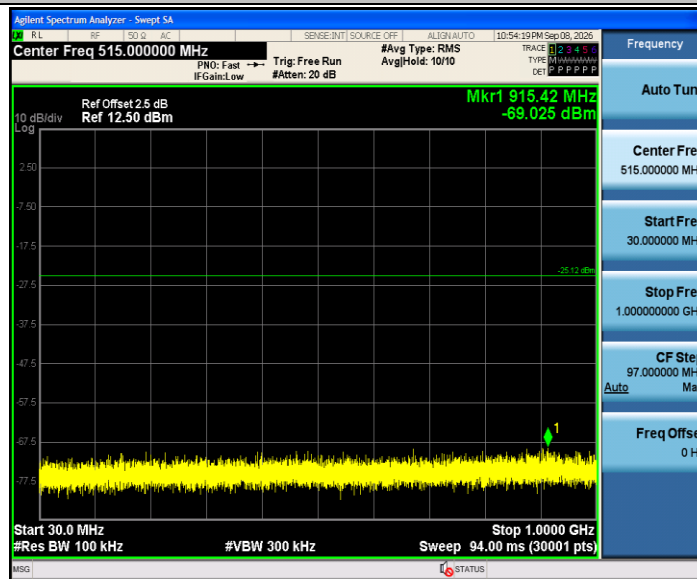
DH5\_Ant1\_2480\_1000~26500



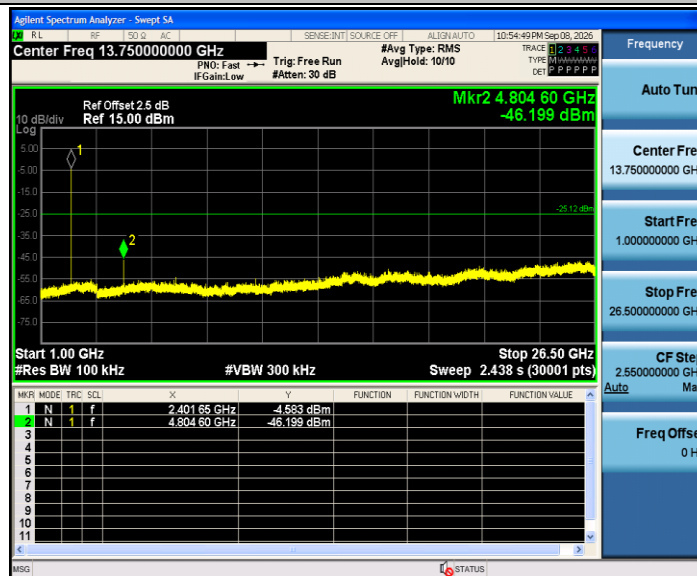
2DH5\_Ant1\_2402\_0~Reference



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



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



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