

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

**FCC ID** : 2AW5N-P16

**Company** : Shenzhen Guye Technology Co., Ltd.

**EUT** : Karaoke machine

**Model Number** : P16

**Report No.** : CTA26060401401

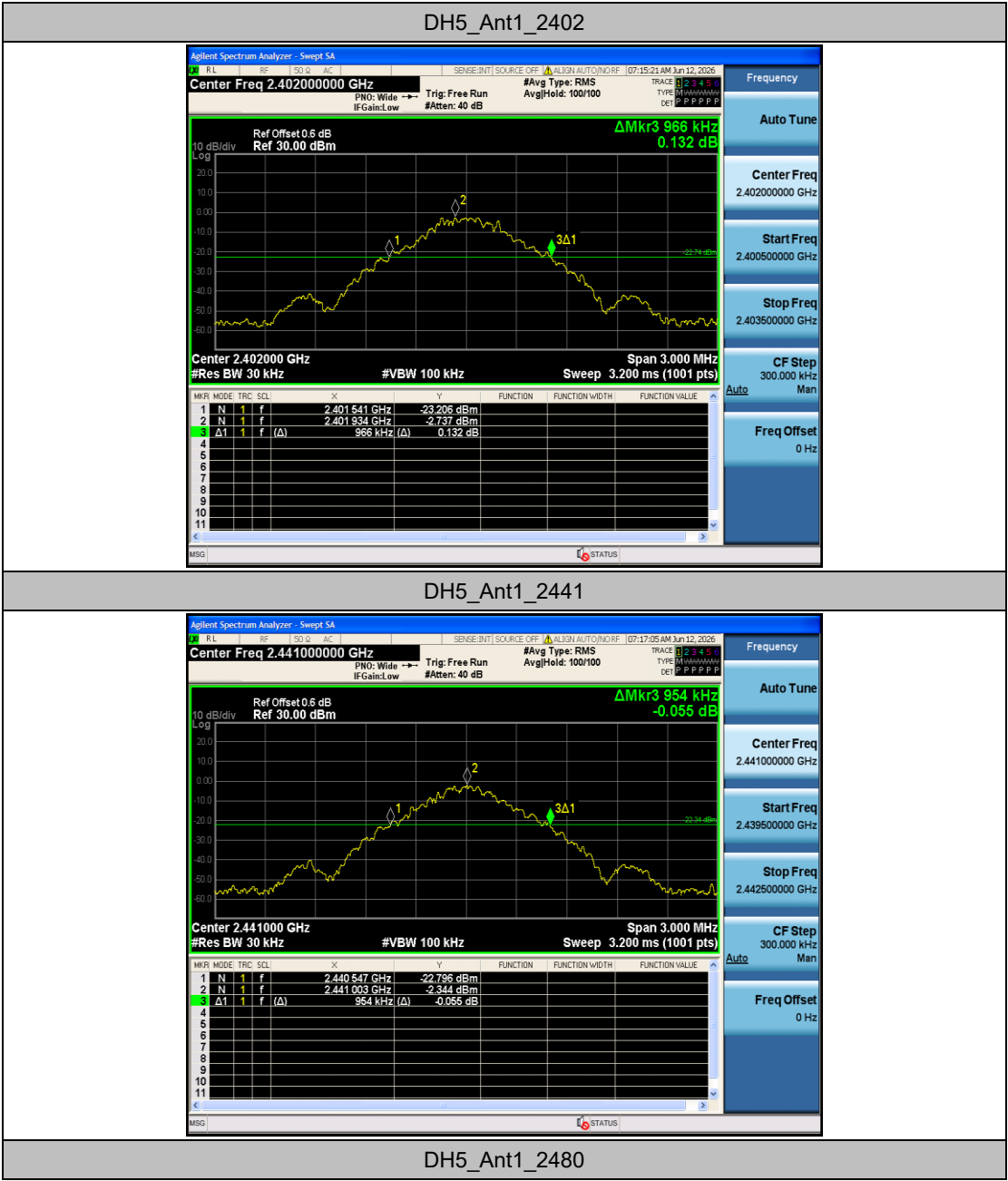
**Reviewed By** : Eric Wang

## 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      | 0.966            | 2401.541 | 2402.507 | ---        | ---     |
|          |         | 2441      | 0.954            | 2440.547 | 2441.501 | ---        | ---     |
|          |         | 2480      | 0.951            | 2479.544 | 2480.495 | ---        | ---     |
| 2DH5     | Ant1    | 2402      | 1.284            | 2401.379 | 2402.663 | ---        | ---     |
|          |         | 2441      | 1.317            | 2440.349 | 2441.666 | ---        | ---     |
|          |         | 2480      | 1.338            | 2479.337 | 2480.675 | ---        | ---     |

Test Graphs





2DH5\_Ant1\_2402



2DH5\_Ant1\_2441



# 2DH5\_Ant1\_2480

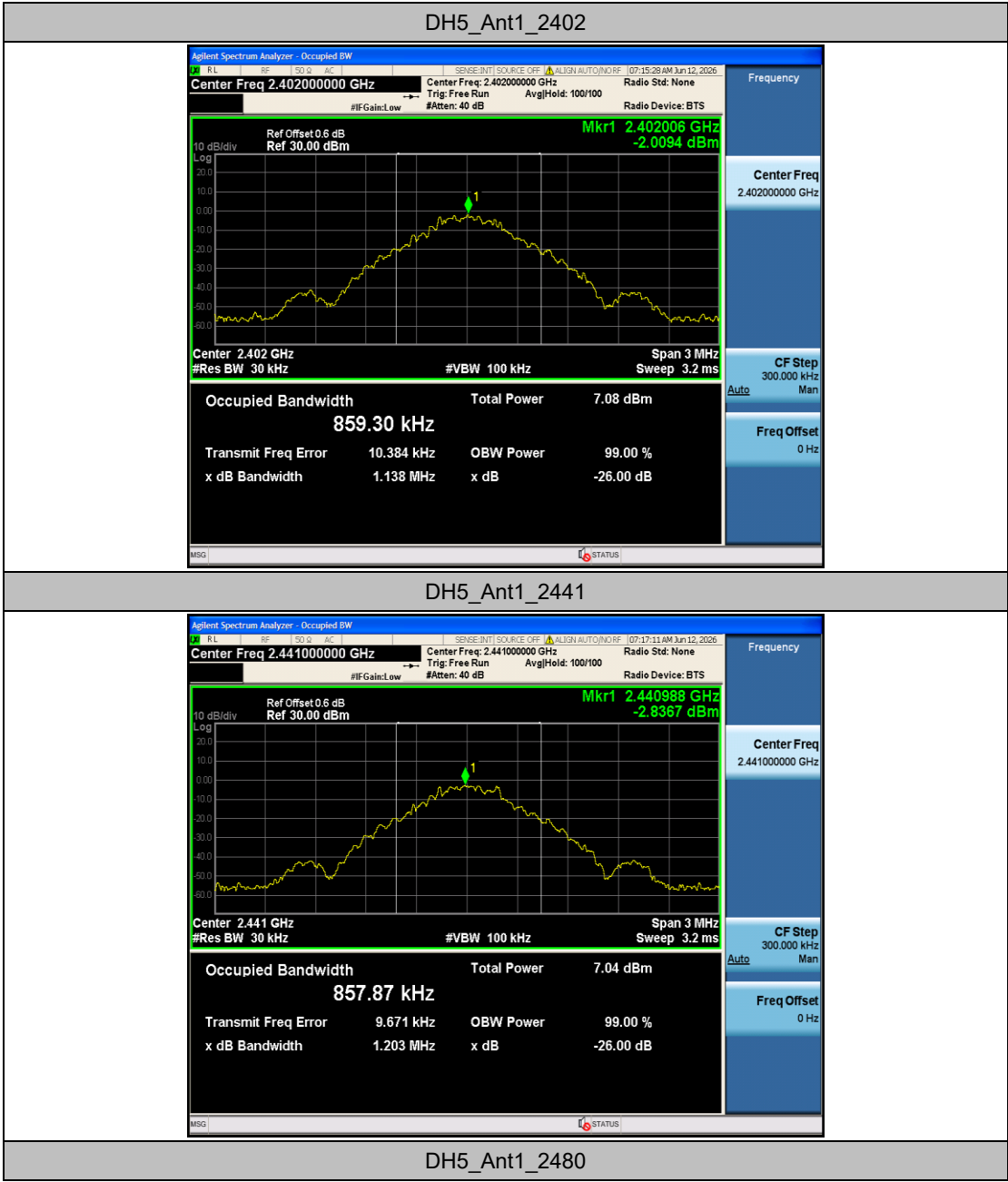


## Appendix B: Occupied Channel Bandwidth

### Test Result

| TestMode | Antenna | Freq(MHz) | OCB [MHz] | FL[MHz]   | FH[MHz]   | Limit[MHz] | Verdict |
|----------|---------|-----------|-----------|-----------|-----------|------------|---------|
| DH5      | Ant1    | 2402      | 0.85930   | 2401.5807 | 2402.4400 | ---        | ---     |
|          |         | 2441      | 0.85787   | 2440.5807 | 2441.4386 | ---        | ---     |
|          |         | 2480      | 0.85976   | 2479.5803 | 2480.4401 | ---        | ---     |
| 2DH5     | Ant1    | 2402      | 1.1871    | 2401.4165 | 2402.6036 | ---        | ---     |
|          |         | 2441      | 1.1973    | 2440.4132 | 2441.6105 | ---        | ---     |
|          |         | 2480      | 1.1940    | 2479.4157 | 2480.6097 | ---        | ---     |

Test Graphs





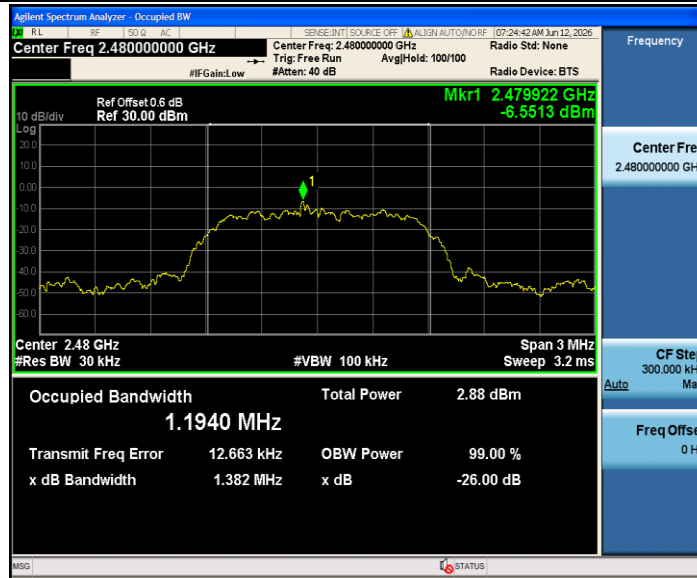
2DH5\_Ant1\_2402



2DH5\_Ant1\_2441



# 2DH5\_Ant1\_2480



## Appendix C: Maximum conducted output power

### Test Result Peak

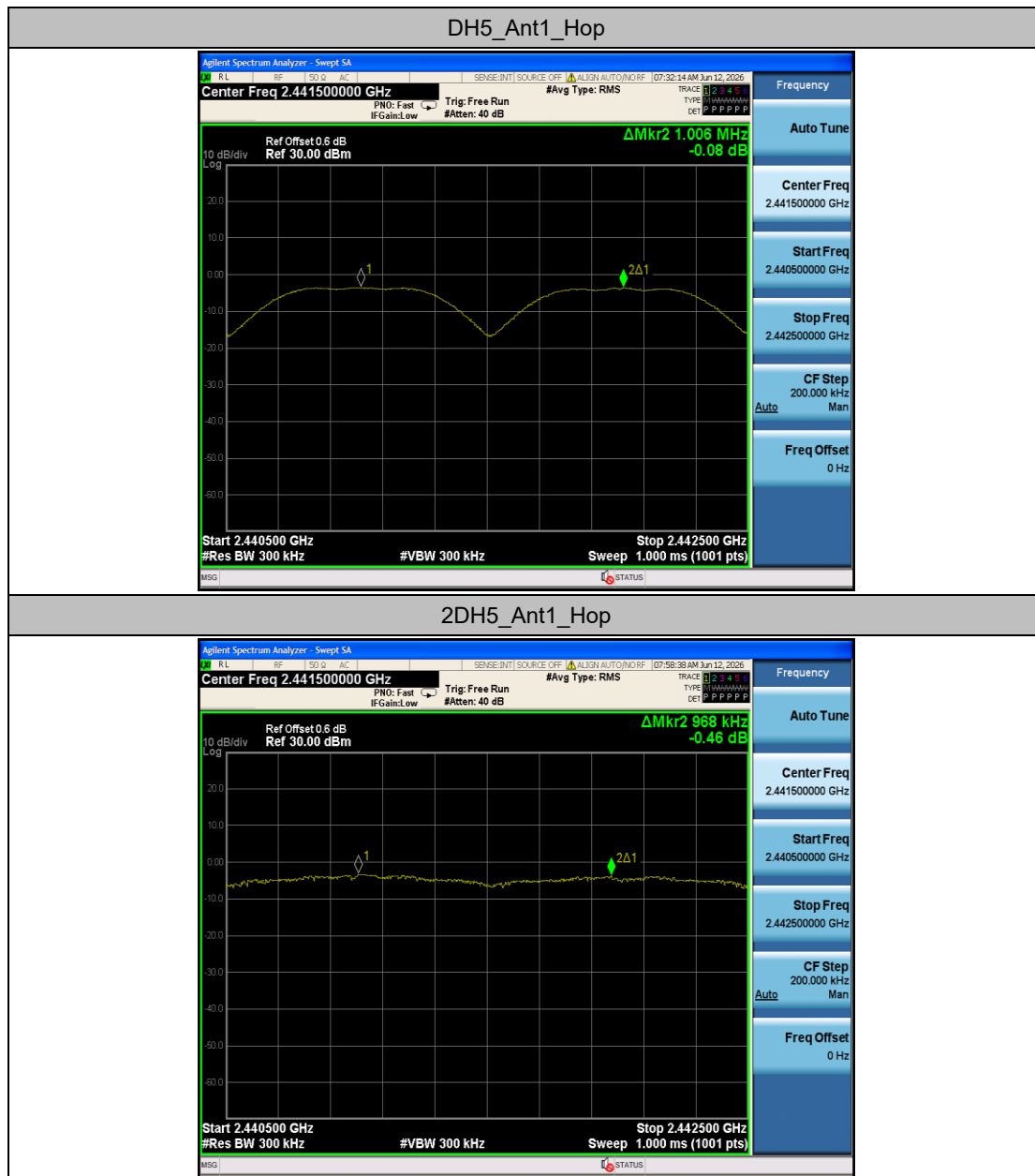
| Test Mode | Antenna | Freq(MHz) | Conducted Peak Power[dBm] | Conducted Limit[dBm] | Verdict |
|-----------|---------|-----------|---------------------------|----------------------|---------|
| DH5       | Ant1    | 2402      | 0.34                      | ≤20.97               | PASS    |
|           |         | 2441      | 0.27                      | ≤20.97               | PASS    |
|           |         | 2480      | 0.03                      | ≤20.97               | PASS    |
| 2DH5      | Ant1    | 2402      | -0.57                     | ≤20.97               | PASS    |
|           |         | 2441      | -0.60                     | ≤20.97               | PASS    |
|           |         | 2480      | -0.84                     | ≤20.97               | PASS    |

## Appendix D: Carrier frequency separation

### Test Result

| TestMode | Antenna | Freq(MHz) | Result[MHz] | Limit[MHz]   | Verdict |
|----------|---------|-----------|-------------|--------------|---------|
| DH5      | Ant1    | Hop       | 1.006       | $\geq 0.966$ | PASS    |
| 2DH5     | Ant1    | Hop       | 0.968       | $\geq 0.892$ | PASS    |

## Test Graphs

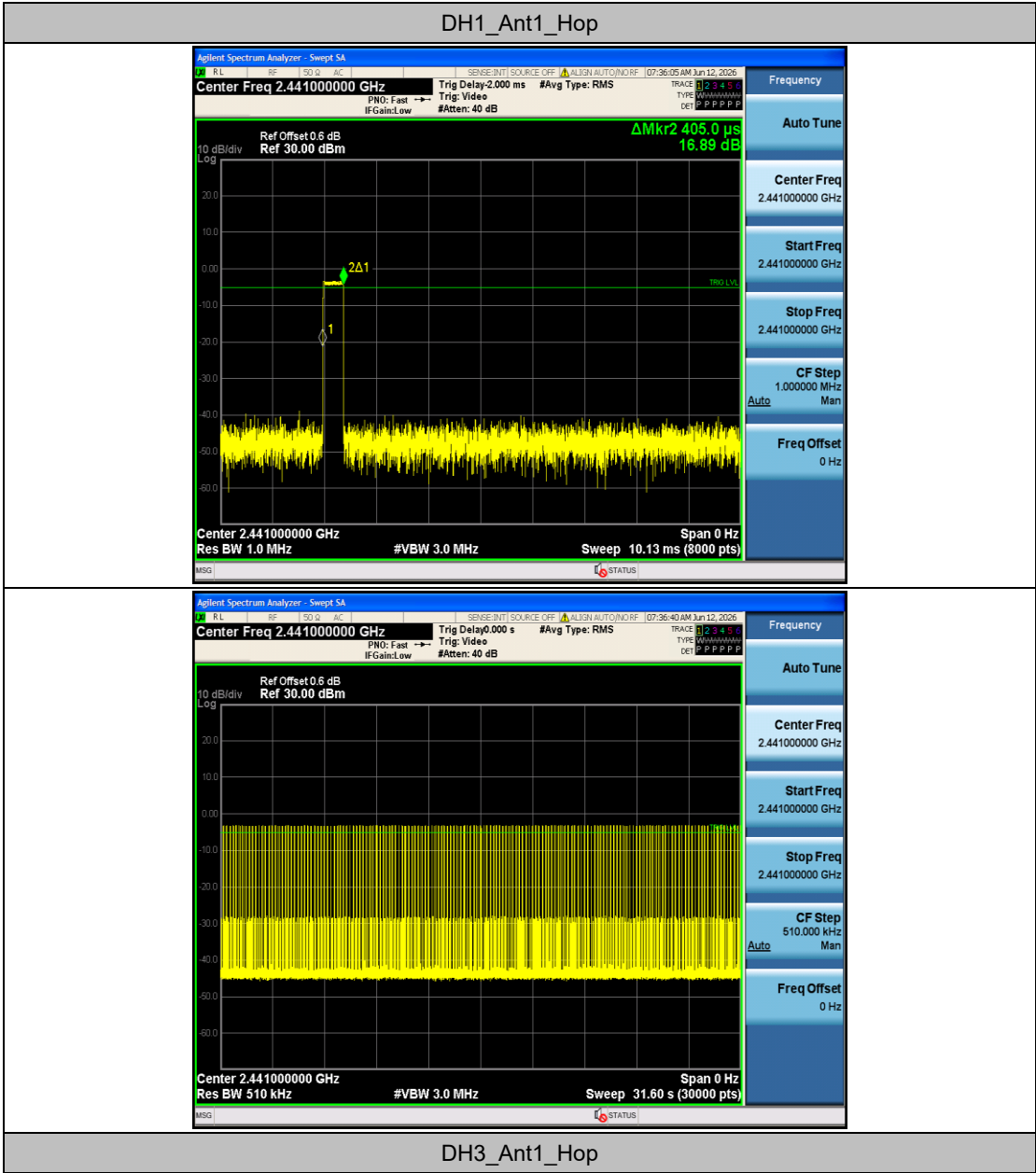


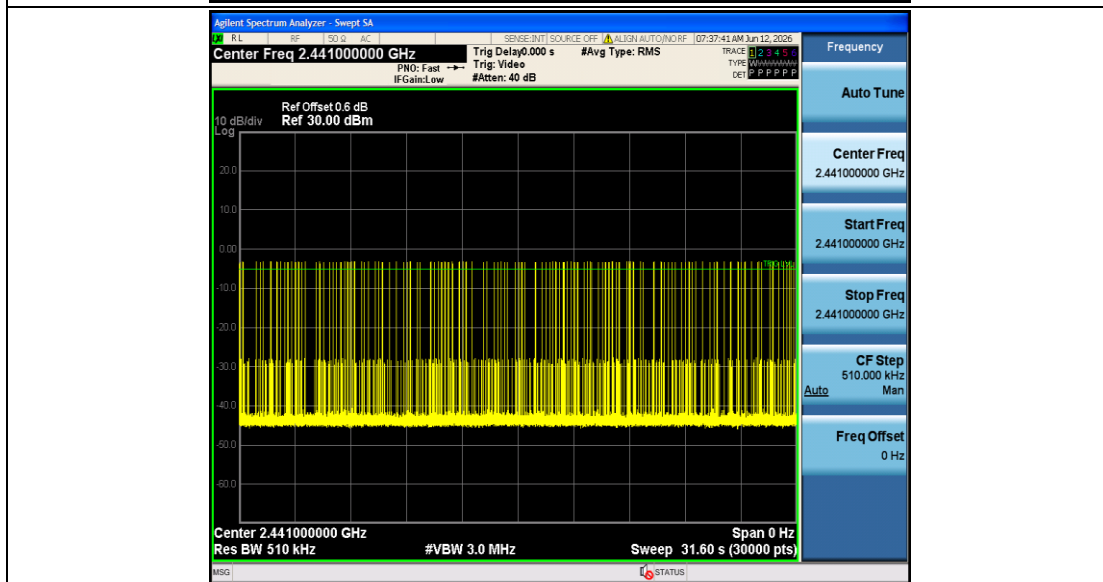
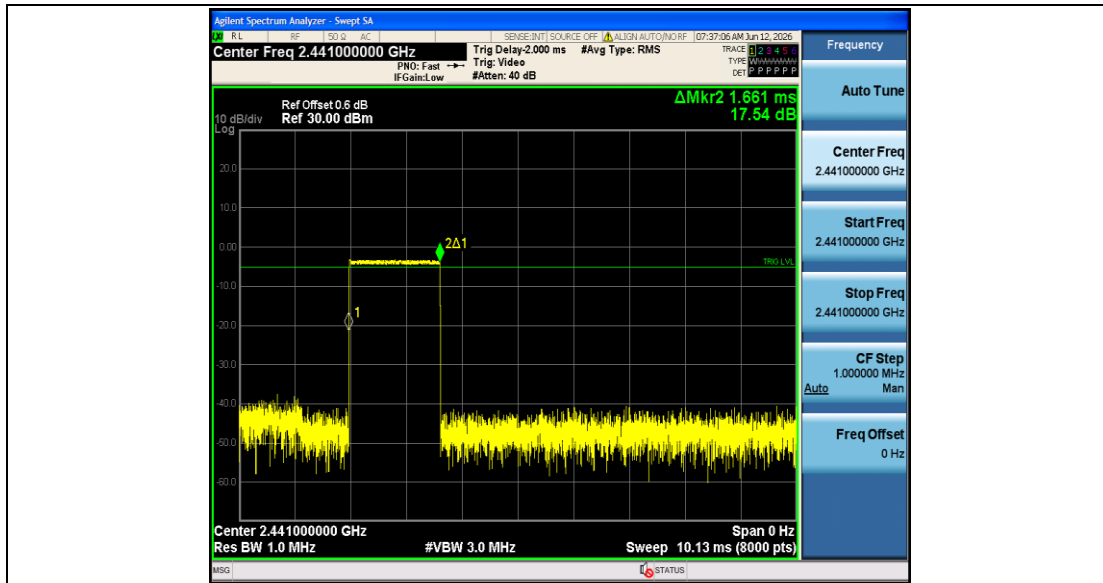
## Appendix E: Time of occupancy

### Test Result

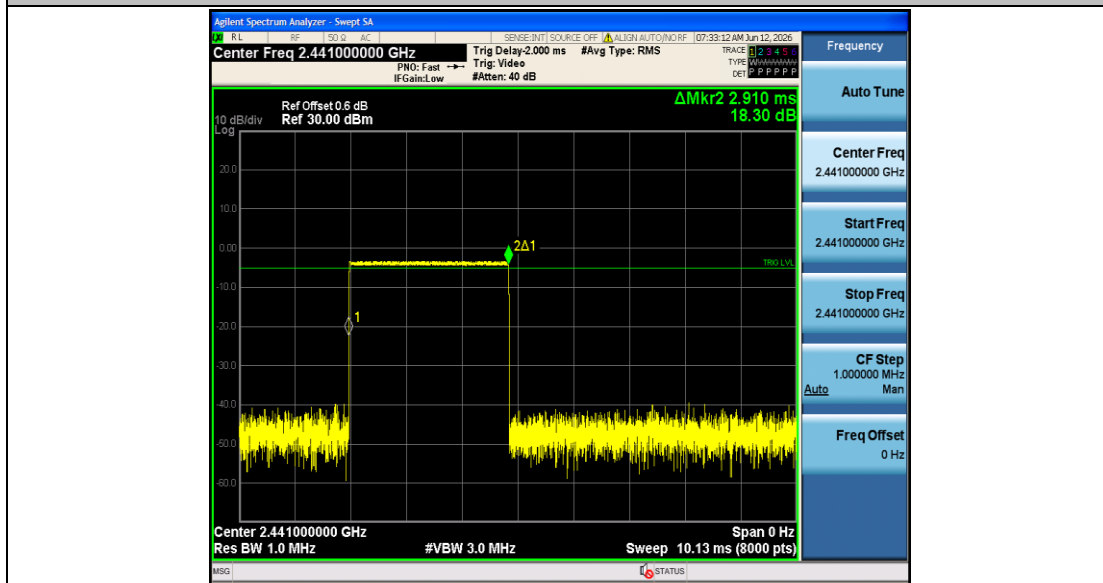
| TestMode | Antenna | Freq(MHz) | BurstWidth<br>[ms] | TotalHops<br>[Num] | Result[s] | Limit[s] | Verdict |
|----------|---------|-----------|--------------------|--------------------|-----------|----------|---------|
| DH1      | Ant1    | Hop       | 0.405              | 319                | 0.129     | ≤0.4     | PASS    |
| DH3      | Ant1    | Hop       | 1.661              | 154                | 0.256     | ≤0.4     | PASS    |
| DH5      | Ant1    | Hop       | 2.910              | 121                | 0.352     | ≤0.4     | PASS    |
| 2DH1     | Ant1    | Hop       | 0.415              | 320                | 0.133     | ≤0.4     | PASS    |
| 2DH3     | Ant1    | Hop       | 1.667              | 159                | 0.265     | ≤0.4     | PASS    |
| 2DH5     | Ant1    | Hop       | 2.915              | 98                 | 0.286     | ≤0.4     | PASS    |

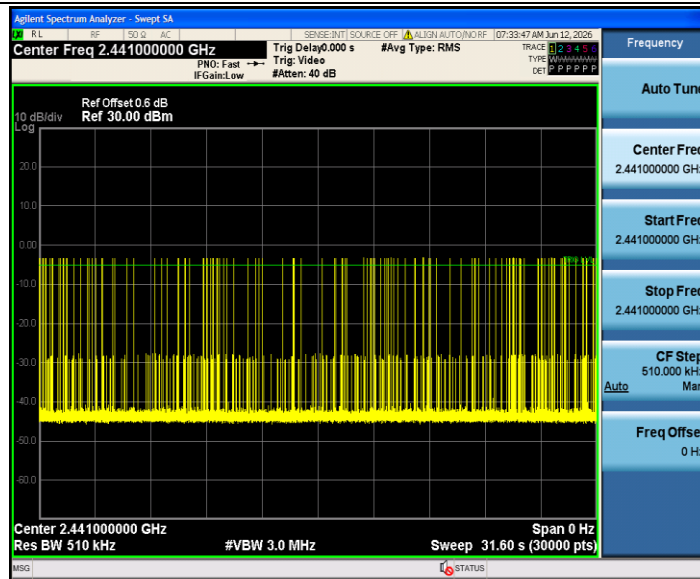
Test Graphs



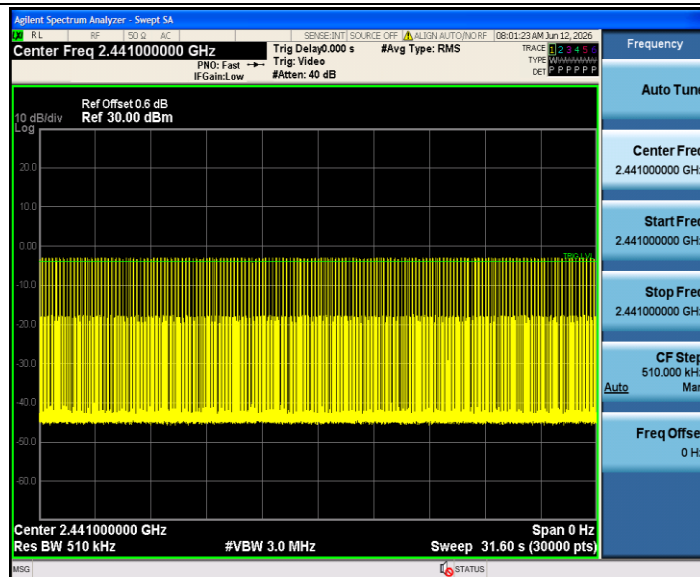
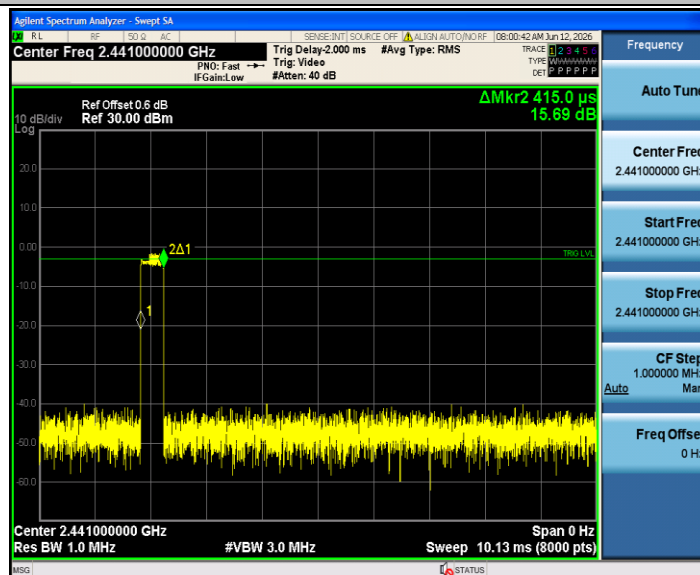


DH5\_Ant1\_Hop

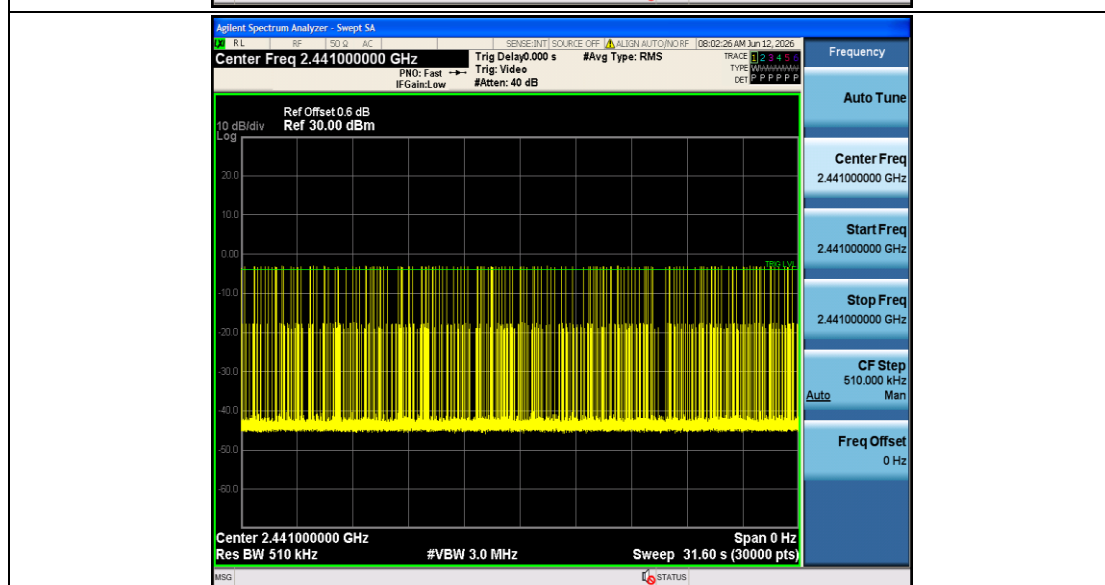
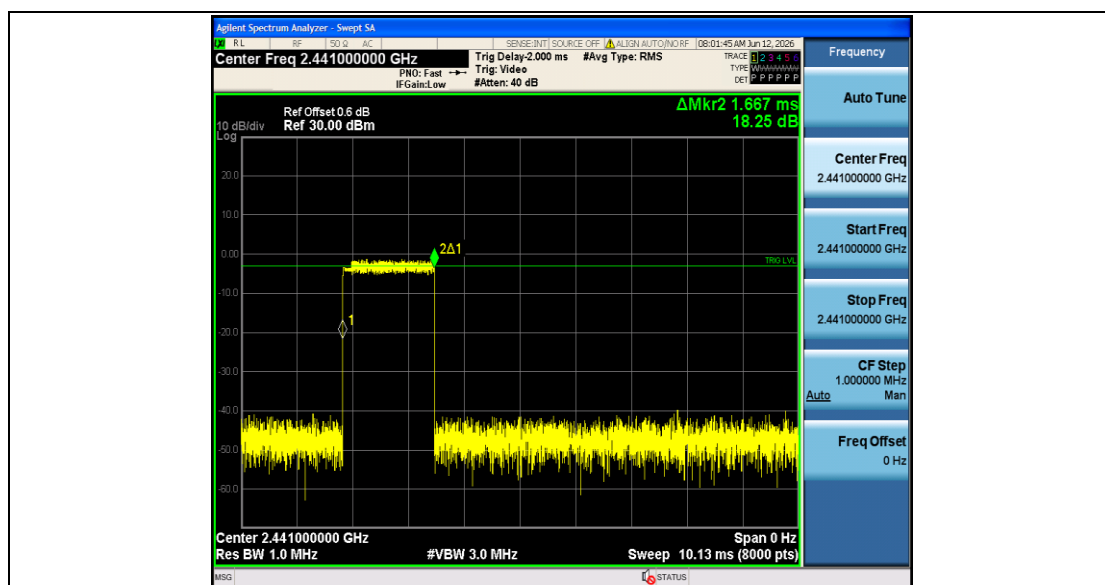




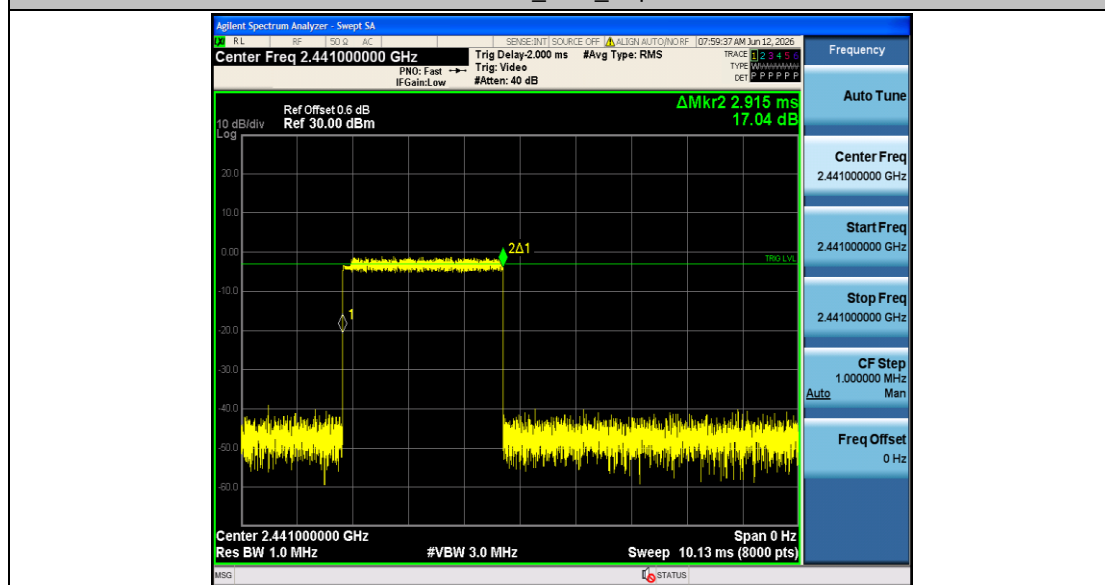
2DH1\_Ant1\_Hop

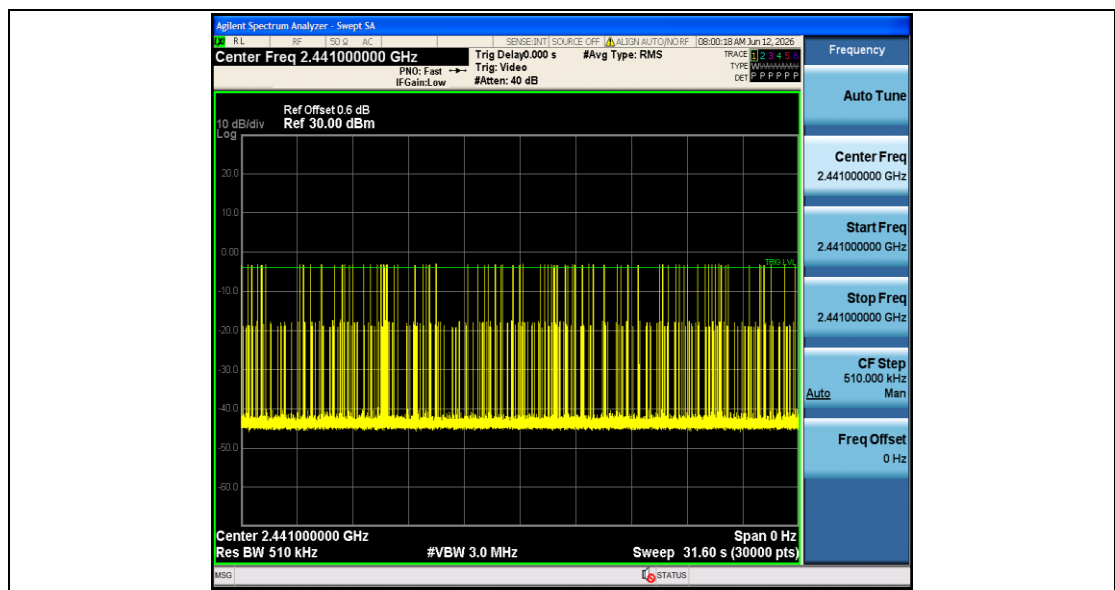


2DH3\_Ant1\_Hop



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

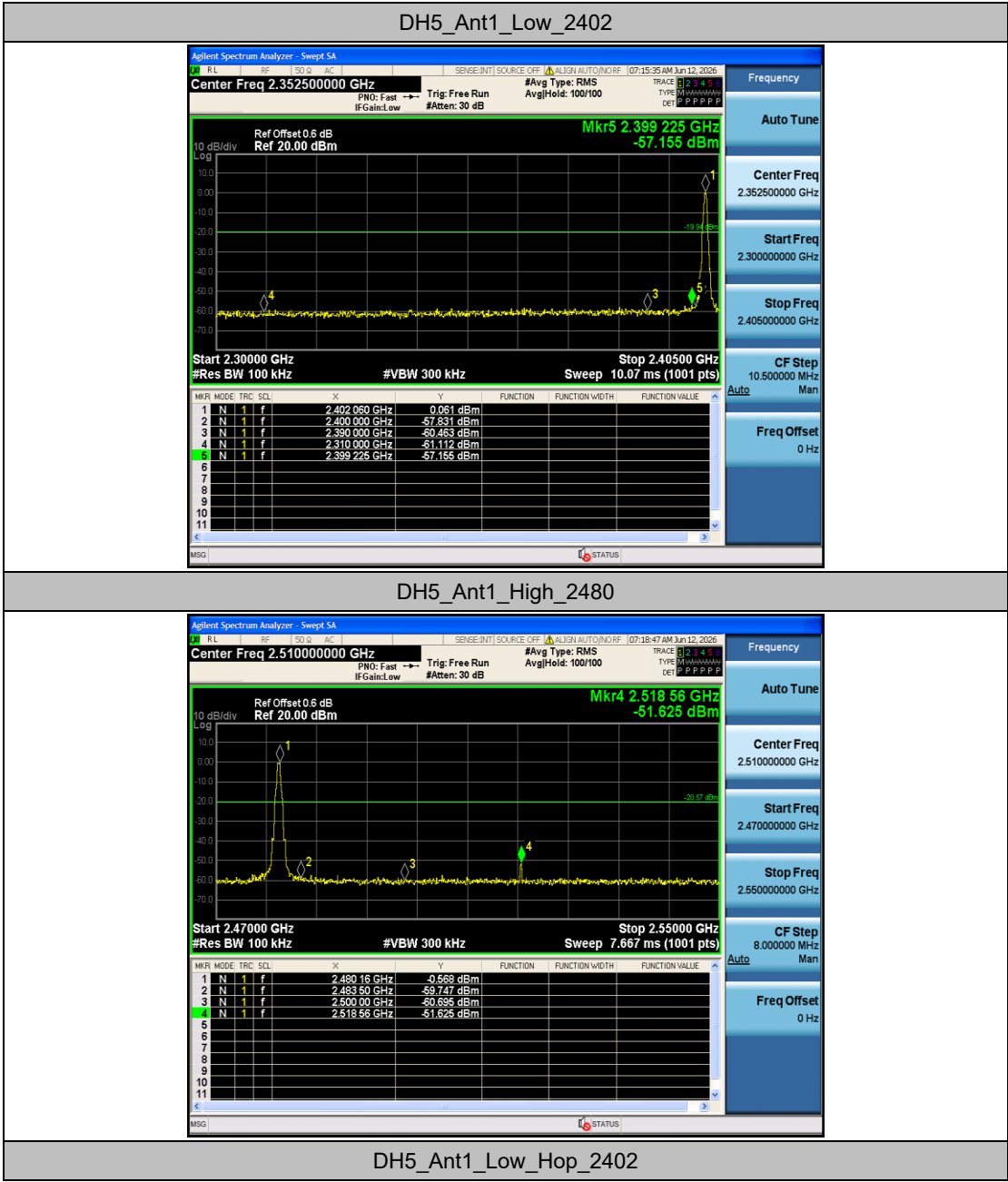


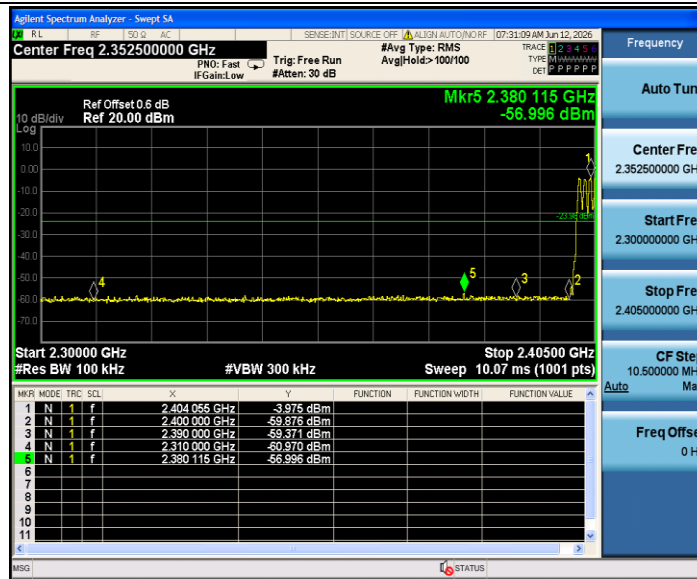
## Appendix G: Band edge measurements

### Test Result

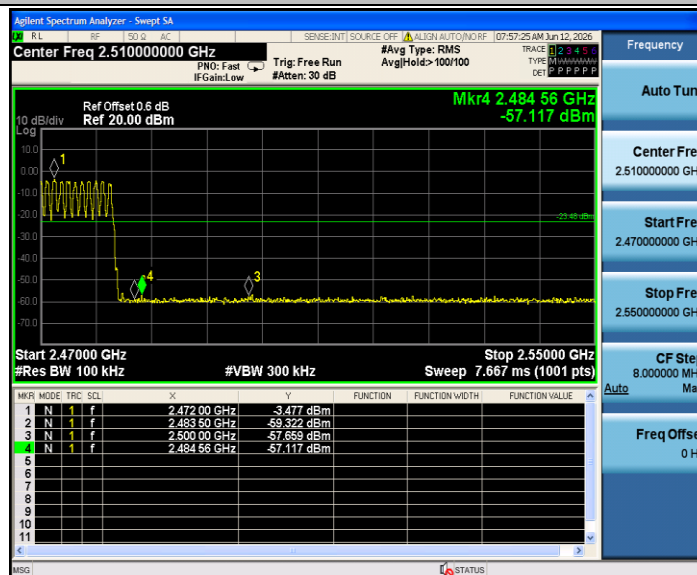
| TestMode | Antenna | ChName | Freq(MHz) | RefLevel<br>[dBm] | Result<br>[dBm] | Limit<br>[dBm] | Verdict |
|----------|---------|--------|-----------|-------------------|-----------------|----------------|---------|
| DH5      | Ant1    | Low    | 2402      | 0.06              | -57.16          | ≤-19.94        | PASS    |
|          |         | High   | 2480      | -0.57             | -51.63          | ≤-20.57        | PASS    |
|          |         | Low    | Hop_2402  | -3.98             | -57             | ≤-23.98        | PASS    |
|          |         | High   | Hop_2480  | -3.48             | -57.12          | ≤-23.48        | PASS    |
| 2DH5     | Ant1    | Low    | 2402      | -5.82             | -57.14          | ≤-25.82        | PASS    |
|          |         | High   | 2480      | -3.78             | -57.42          | ≤-23.78        | PASS    |
|          |         | Low    | Hop_2402  | -6.15             | -57.53          | ≤-26.15        | PASS    |
|          |         | High   | Hop_2480  | -4.50             | -57.78          | ≤-24.5         | PASS    |

# Test Graphs

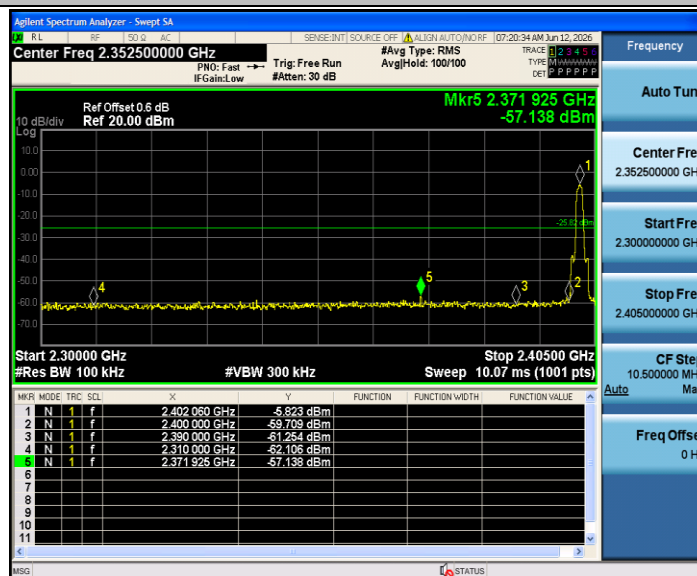




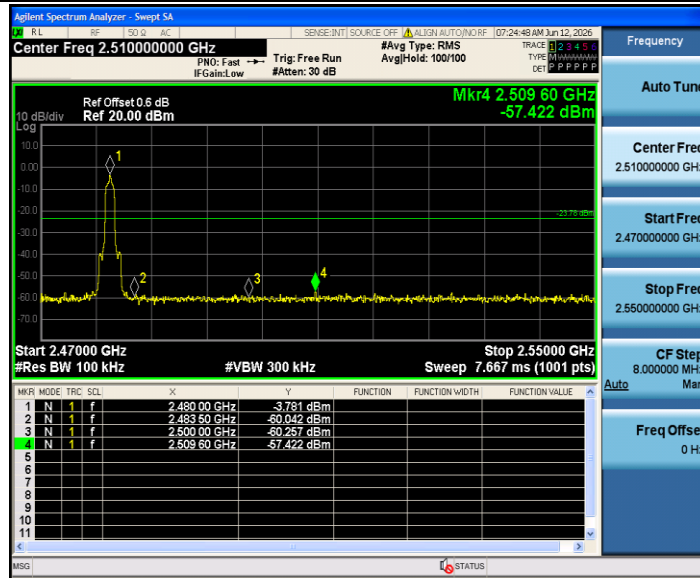
DH5\_Ant1\_High\_Hop\_2480



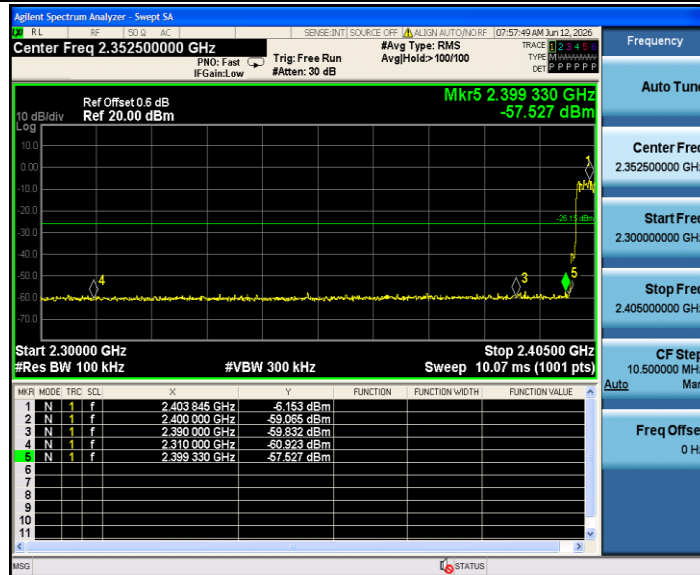
2DH5\_Ant1\_Low\_2402



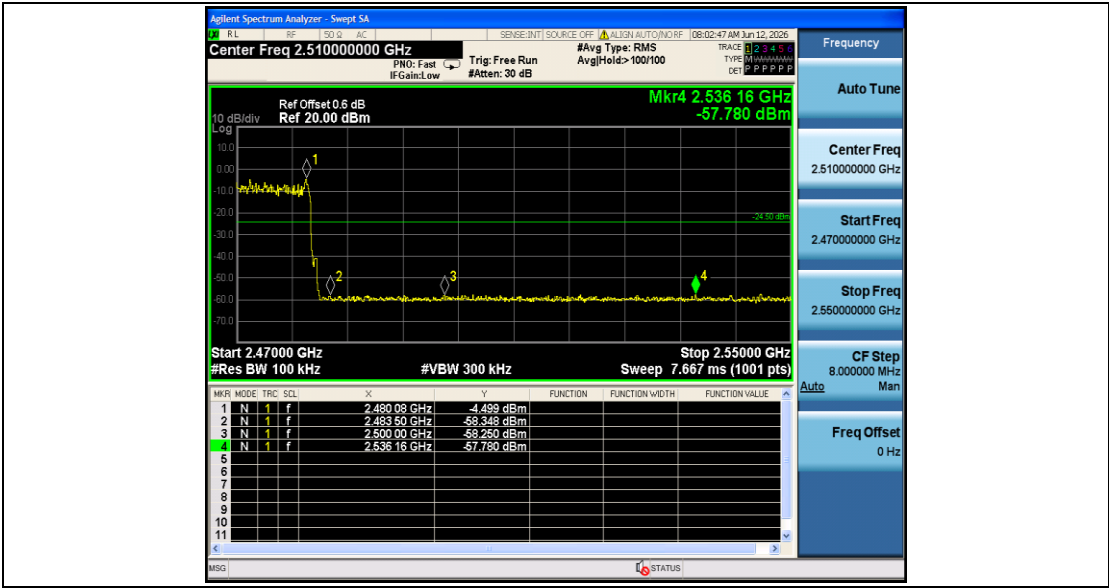
# 2DH5\_Ant1\_High\_2480



# 2DH5\_Ant1\_Low\_Hop\_2402



# 2DH5\_Ant1\_High\_Hop\_2480

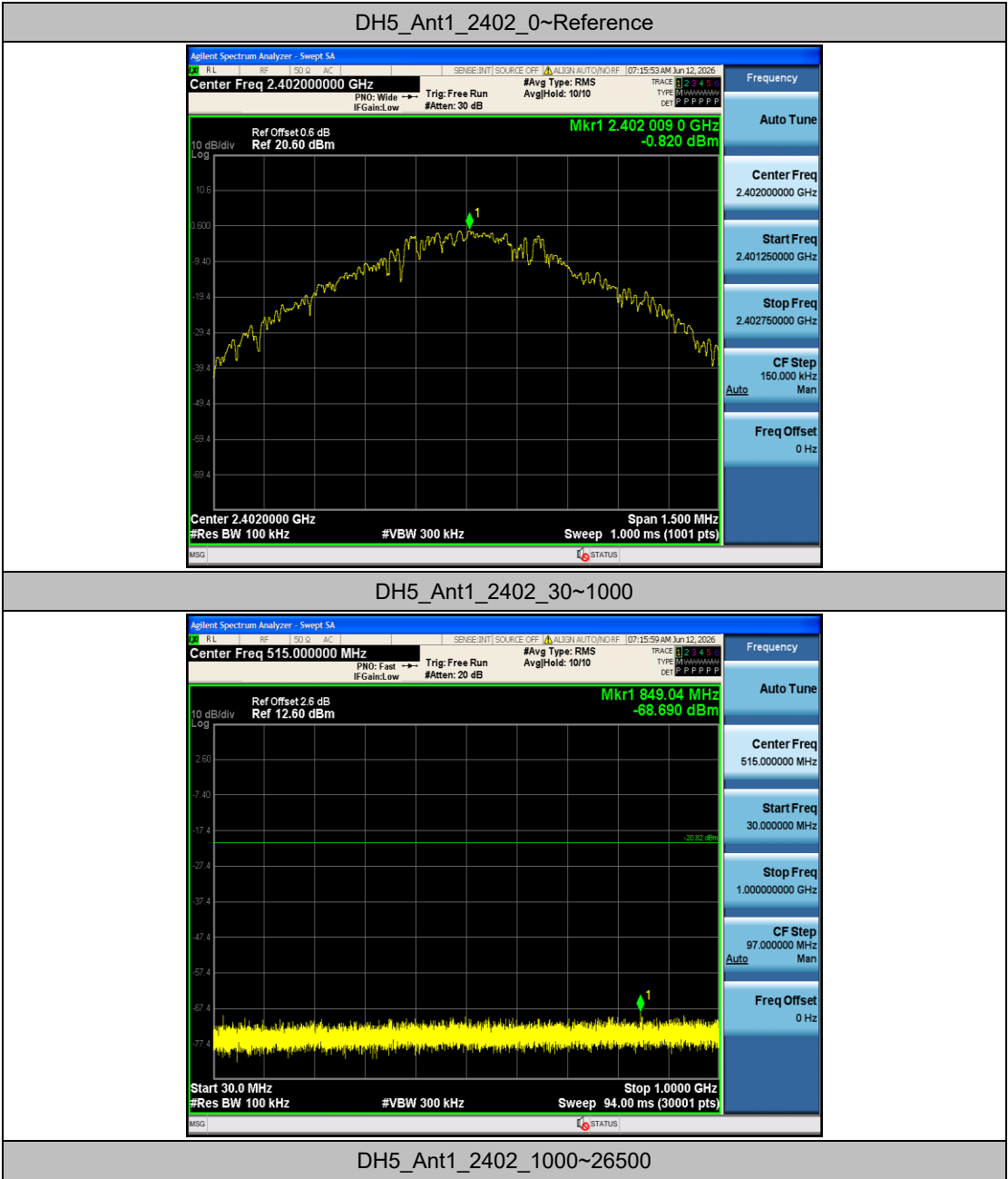


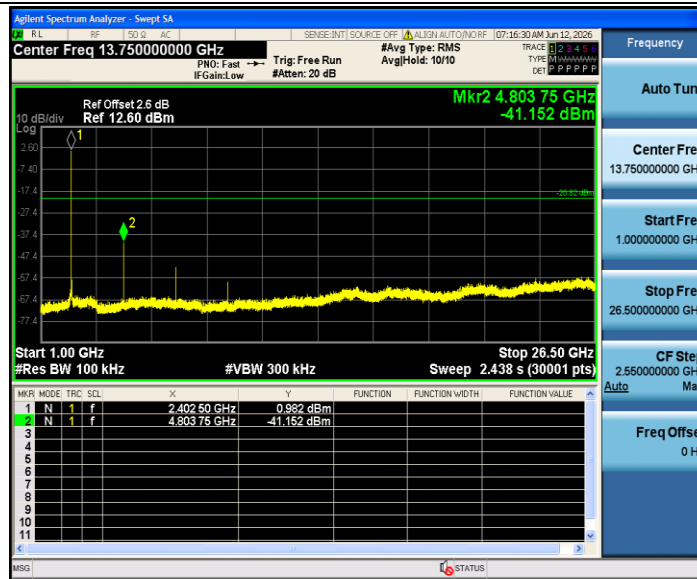
## Appendix H: Conducted Spurious Emission

### Test Result

| TestMode | Antenna | Freq(MHz) | FreqRange [MHz] | RefLevel [dBm] | Result [dBm] | Limit [dBm] | Verdict |
|----------|---------|-----------|-----------------|----------------|--------------|-------------|---------|
| DH5      | Ant1    | 2402      | Reference       | -0.82          | -0.82        | ---         | PASS    |
|          |         |           | 30~1000         | -0.82          | -68.69       | ≤-20.82     | PASS    |
|          |         |           | 1000~26500      | -0.82          | -41.15       | ≤-20.82     | PASS    |
|          |         | 2441      | Reference       | -0.71          | -0.71        | ---         | PASS    |
|          |         |           | 30~1000         | -0.71          | -68.91       | ≤-20.71     | PASS    |
|          |         |           | 1000~26500      | -0.71          | -39.91       | ≤-20.71     | PASS    |
|          |         | 2480      | Reference       | -1.19          | -1.19        | ---         | PASS    |
|          |         |           | 30~1000         | -1.19          | -68.99       | ≤-21.19     | PASS    |
|          |         |           | 1000~26500      | -1.19          | -42.11       | ≤-21.19     | PASS    |
| 2DH5     | Ant1    | 2402      | Reference       | -4.78          | -4.78        | ---         | PASS    |
|          |         |           | 30~1000         | -4.78          | -68.91       | ≤-24.78     | PASS    |
|          |         |           | 1000~26500      | -4.78          | -43.56       | ≤-24.78     | PASS    |
|          |         | 2441      | Reference       | -5.57          | -5.57        | ---         | PASS    |
|          |         |           | 30~1000         | -5.57          | -68.8        | ≤-25.57     | PASS    |
|          |         |           | 1000~26500      | -5.57          | -45.37       | ≤-25.57     | PASS    |
|          |         | 2480      | Reference       | -5.56          | -5.56        | ---         | PASS    |
|          |         |           | 30~1000         | -5.56          | -69.15       | ≤-25.56     | PASS    |
|          |         |           | 1000~26500      | -5.56          | -47.26       | ≤-25.56     | PASS    |

Test Graphs

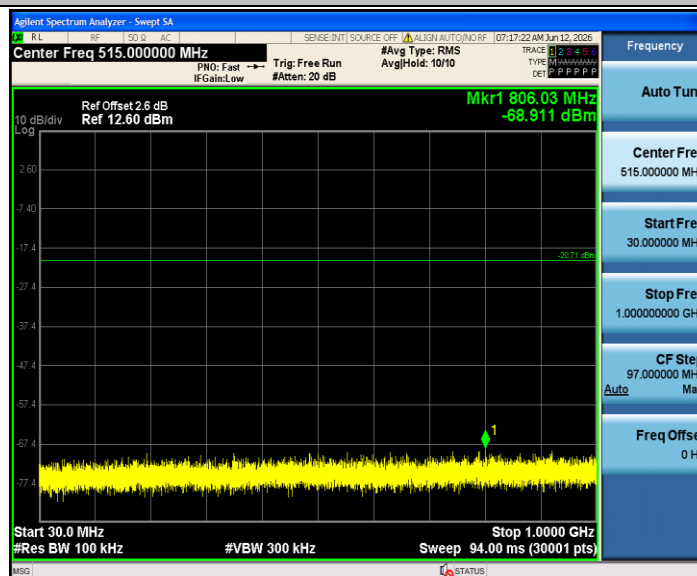




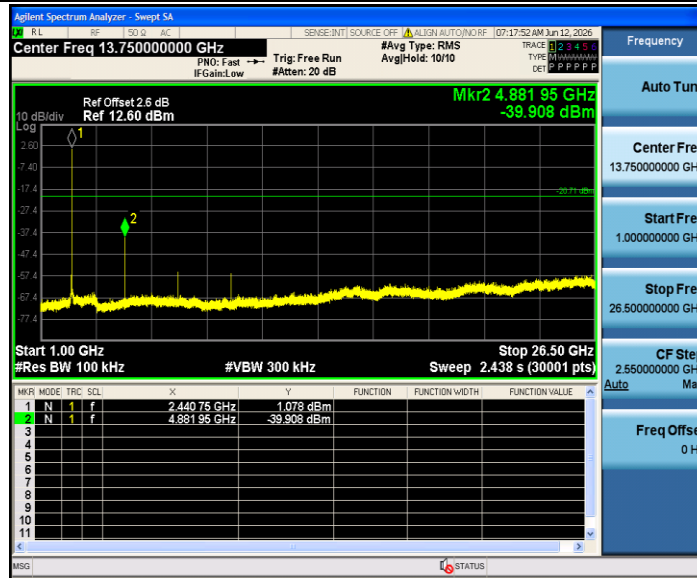
DH5\_Ant1\_2441\_0~Reference



DH5\_Ant1\_2441\_30~1000



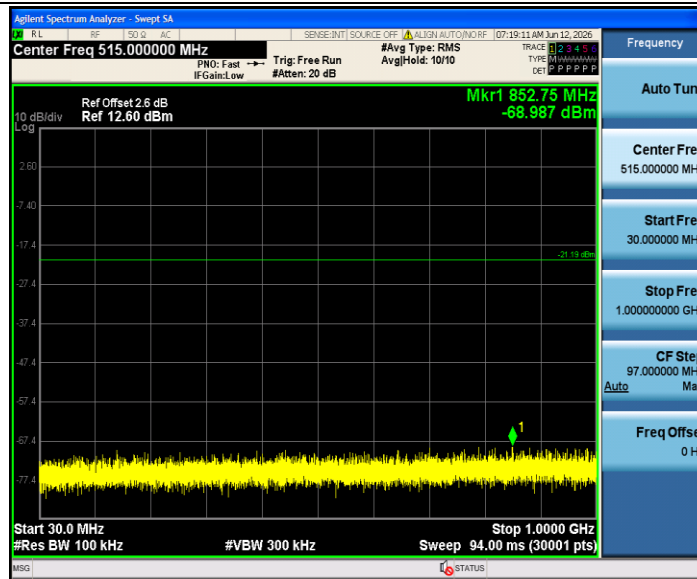
# DH5\_Ant1\_2441\_1000~26500



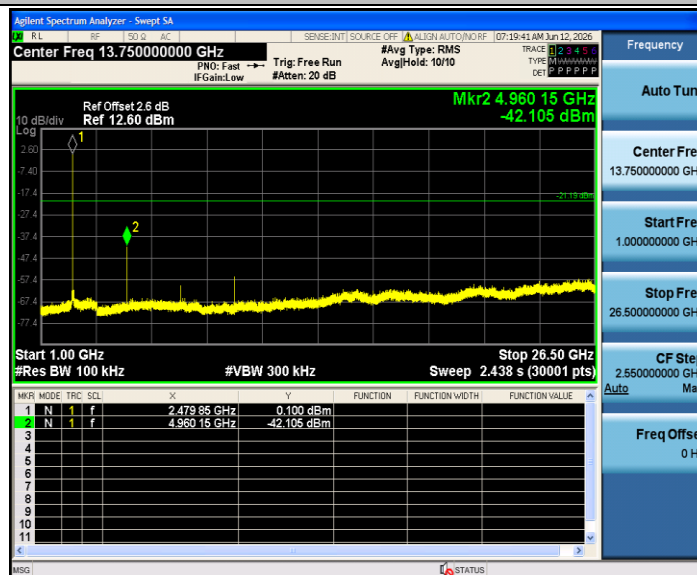
# DH5\_Ant1\_2480\_0~Reference



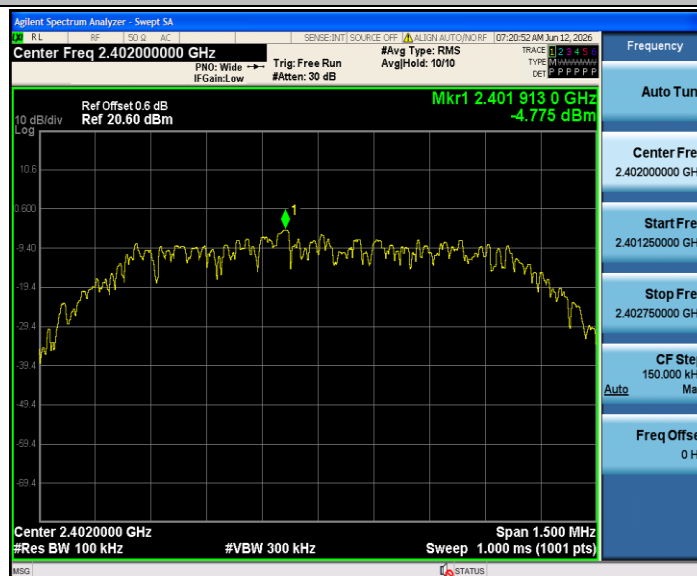
# DH5\_Ant1\_2480\_30~1000



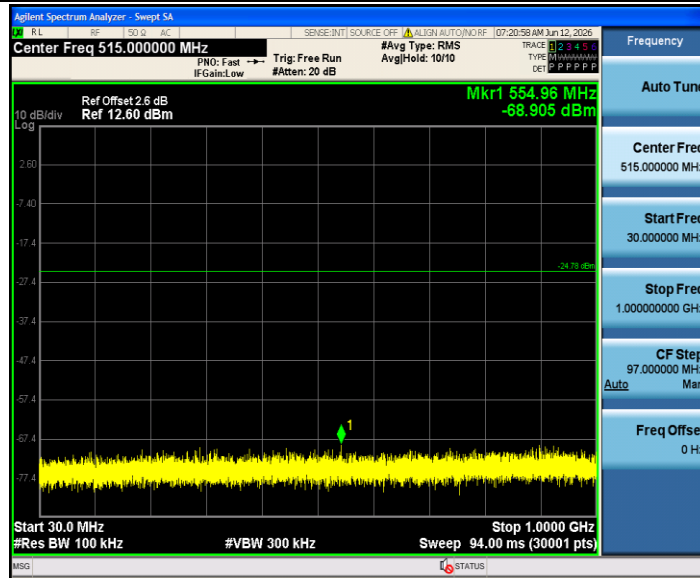
DH5\_Ant1\_2480\_1000~26500



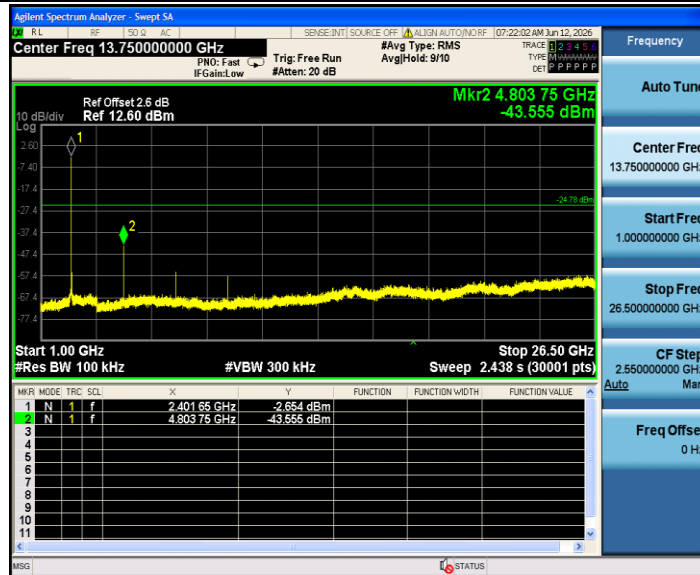
2DH5\_Ant1\_2402\_0~Reference



# 2DH5\_Ant1\_2402\_30~1000



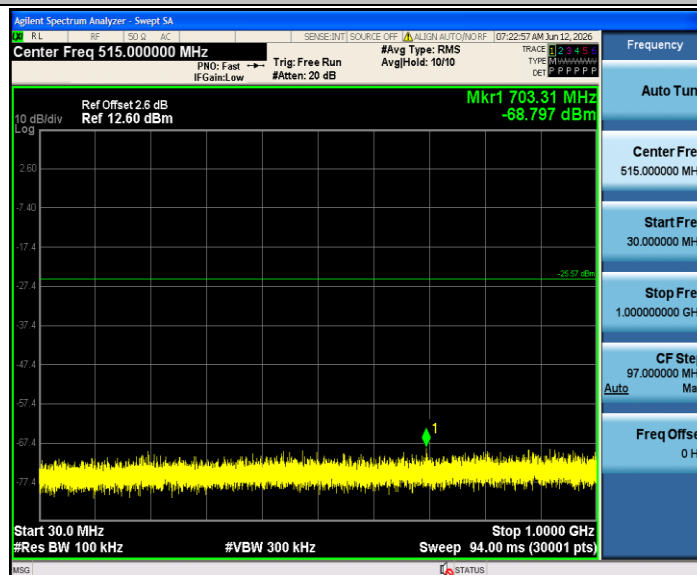
# 2DH5\_Ant1\_2402\_1000~26500



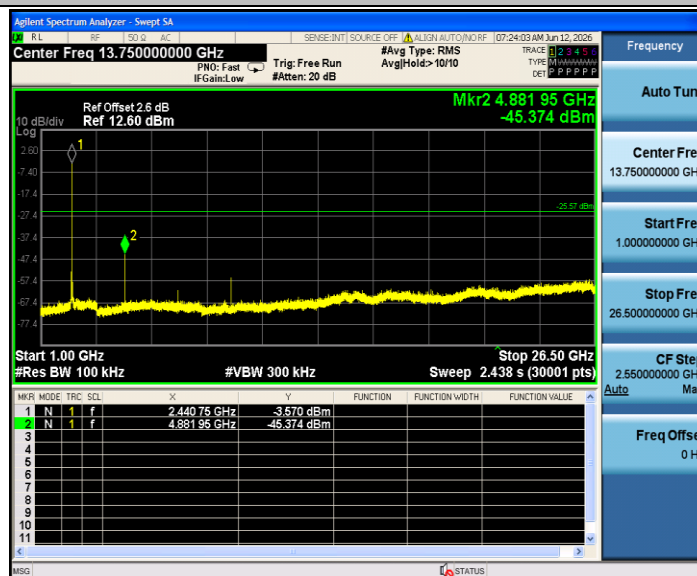
# 2DH5\_Ant1\_2441\_0~Reference



2DH5\_Ant1\_2441\_30~1000



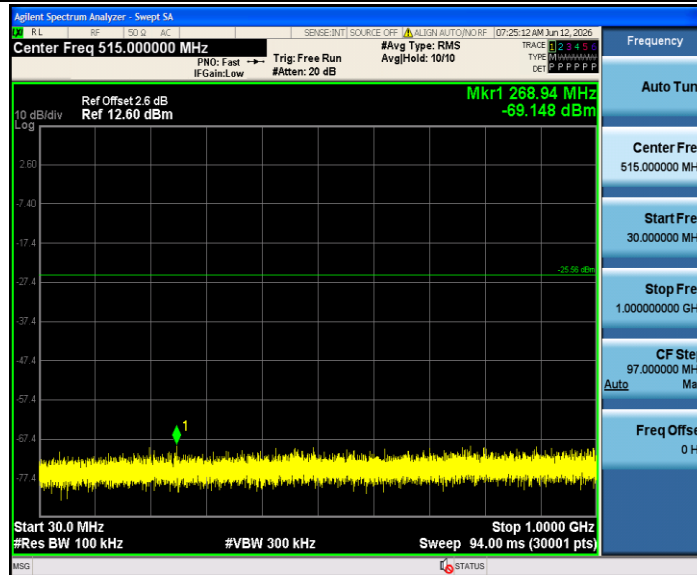
2DH5\_Ant1\_2441\_1000~26500



# 2DH5\_Ant1\_2480\_0~Reference



# 2DH5\_Ant1\_2480\_30~1000



# 2DH5\_Ant1\_2480\_1000~26500