

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

**FCC ID** : 2AJU8-RGROTATE

**Company** : Shenzhen Yangliming Electronic Technology Co., Ltd.

**EUT** : Handheld Game Console

**Model Number** : RG Rotate

**Report No.** : CTA26060901301

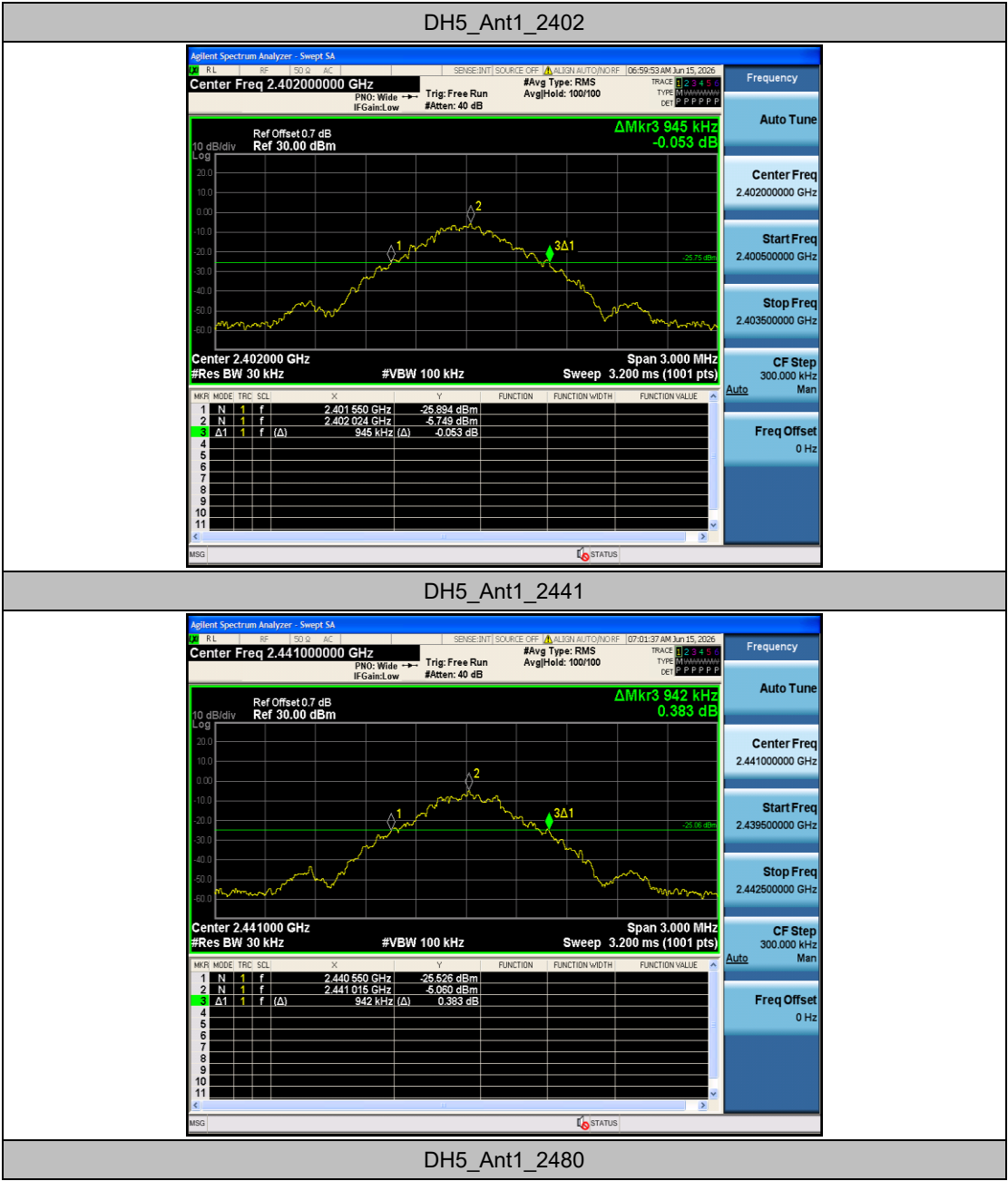
**Reviewed By** : Eric Wang

## 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      | 0.945            | 2401.550 | 2402.495 | ---        | ---     |
|          |         | 2441      | 0.942            | 2440.550 | 2441.492 | ---        | ---     |
|          |         | 2480      | 0.939            | 2479.550 | 2480.489 | ---        | ---     |
| 2DH5     | Ant1    | 2402      | 1.329            | 2401.343 | 2402.672 | ---        | ---     |
|          |         | 2441      | 1.281            | 2440.379 | 2441.660 | ---        | ---     |
|          |         | 2480      | 1.287            | 2479.376 | 2480.663 | ---        | ---     |
| 3DH5     | Ant1    | 2402      | 1.323            | 2401.352 | 2402.675 | ---        | ---     |
|          |         | 2441      | 1.287            | 2440.364 | 2441.651 | ---        | ---     |
|          |         | 2480      | 1.305            | 2479.358 | 2480.663 | ---        | ---     |

Test Graphs





2DH5\_Ant1\_2402



2DH5\_Ant1\_2441



# 2DH5\_Ant1\_2480



# 3DH5\_Ant1\_2402



# 3DH5\_Ant1\_2441



3DH5\_Ant1\_2480

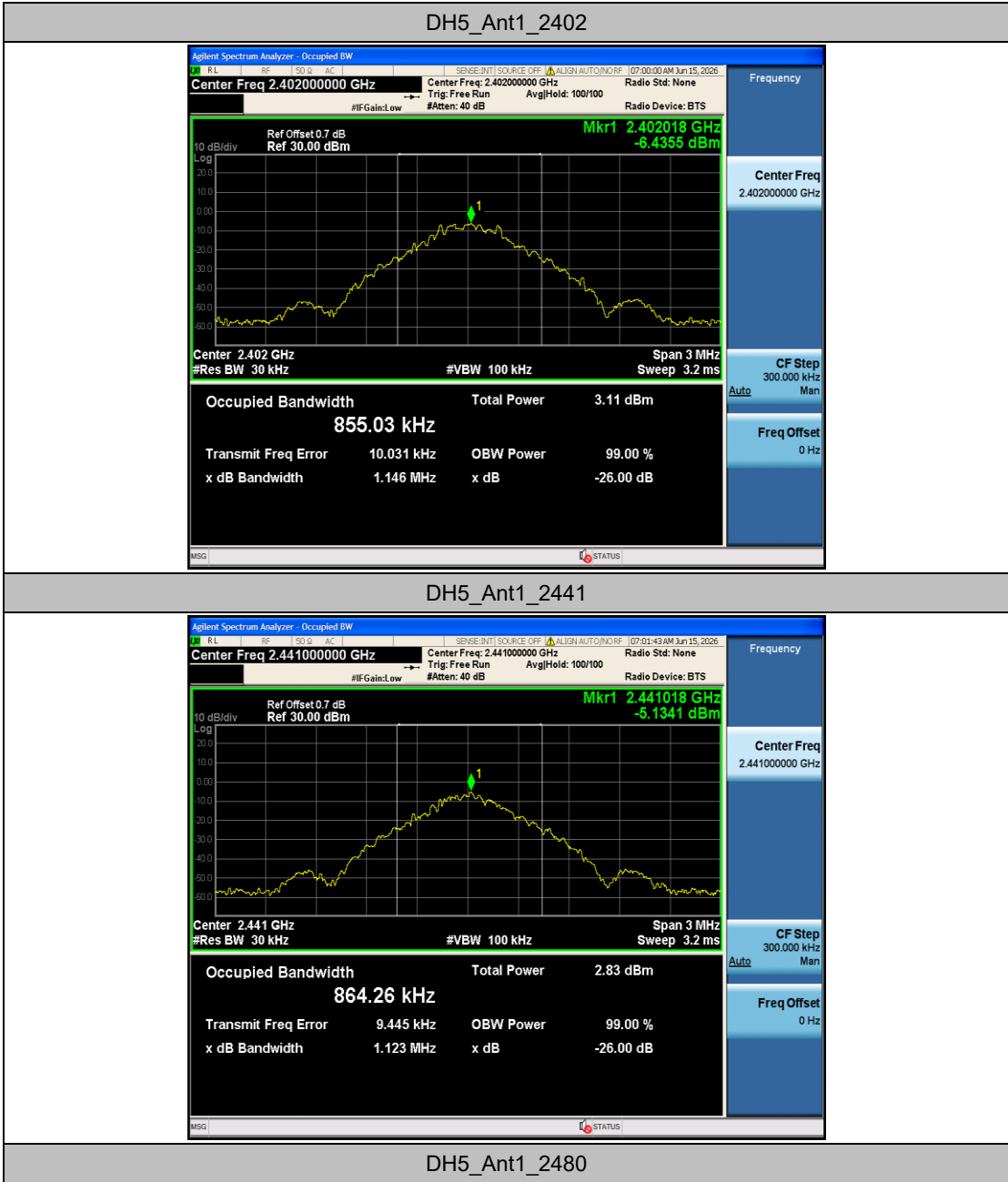


## Appendix B: Occupied Channel Bandwidth

### Test Result

| TestMode | Antenna | Freq(MHz) | OCB [MHz] | FL[MHz]   | FH[MHz]   | Limit[MHz] | Verdict |
|----------|---------|-----------|-----------|-----------|-----------|------------|---------|
| DH5      | Ant1    | 2402      | 0.85503   | 2401.5825 | 2402.4375 | ---        | ---     |
|          |         | 2441      | 0.86426   | 2440.5773 | 2441.4416 | ---        | ---     |
|          |         | 2480      | 0.84870   | 2479.5836 | 2480.4323 | ---        | ---     |
| 2DH5     | Ant1    | 2402      | 1.1765    | 2401.4194 | 2402.5959 | ---        | ---     |
|          |         | 2441      | 1.1854    | 2440.4166 | 2441.6020 | ---        | ---     |
|          |         | 2480      | 1.1938    | 2479.4131 | 2480.6069 | ---        | ---     |
| 3DH5     | Ant1    | 2402      | 1.1842    | 2401.4190 | 2402.6032 | ---        | ---     |
|          |         | 2441      | 1.1862    | 2440.4210 | 2441.6072 | ---        | ---     |
|          |         | 2480      | 1.1898    | 2479.4171 | 2480.6069 | ---        | ---     |

Test Graphs





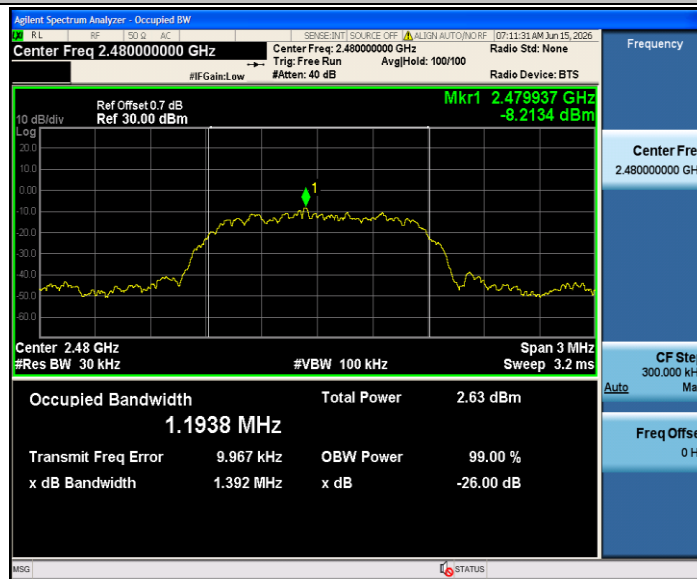
2DH5\_Ant1\_2402



2DH5\_Ant1\_2441



### 2DH5\_Ant1\_2480



### 3DH5\_Ant1\_2402



### 3DH5\_Ant1\_2441



3DH5\_Ant1\_2480



## Appendix C: Maximum conducted output power

### Test Result Peak

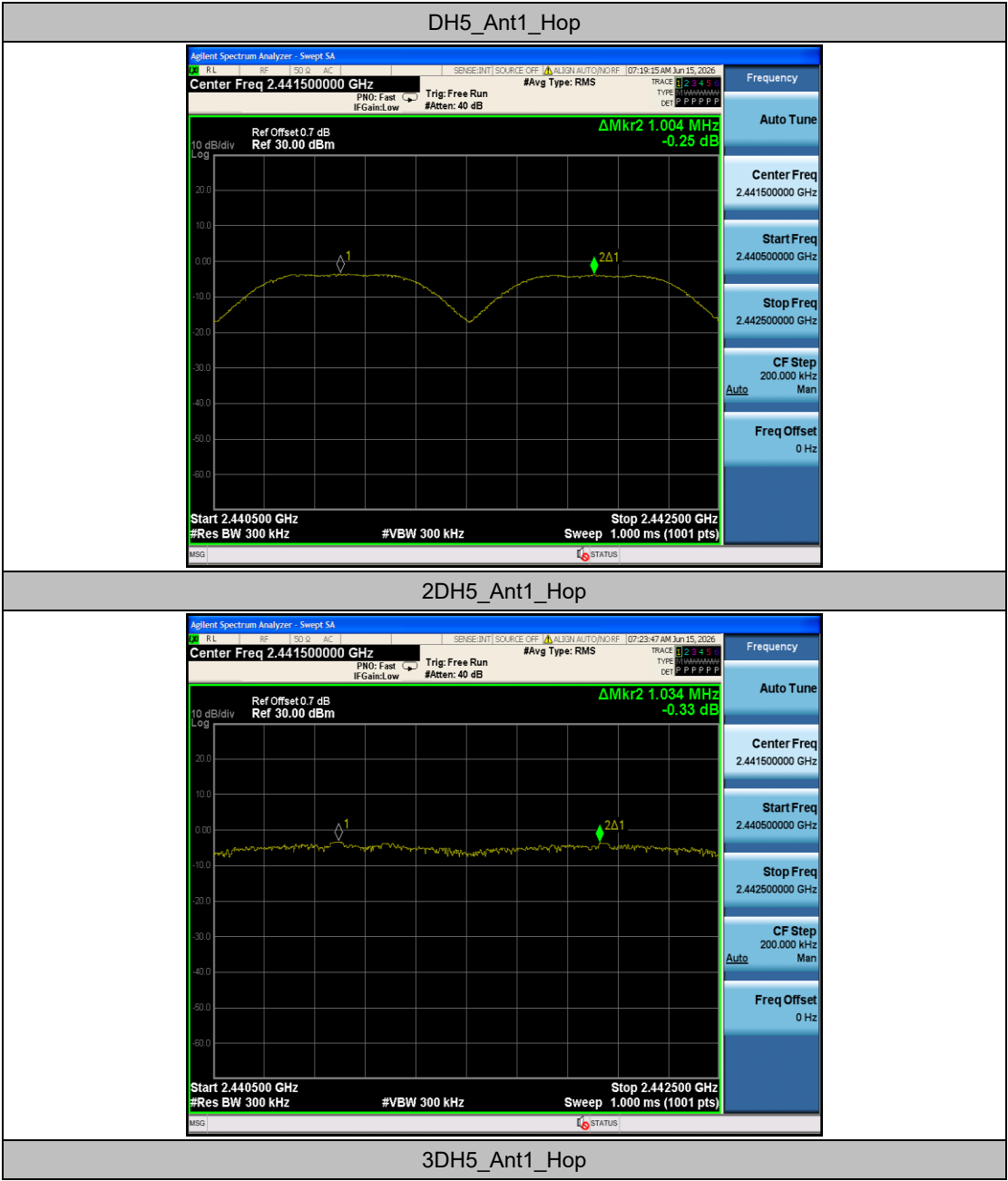
| Test Mode | Antenna | Freq(MHz) | Conducted Peak Power[dBm] | Conducted Limit[dBm] | Verdict |
|-----------|---------|-----------|---------------------------|----------------------|---------|
| DH5       | Ant1    | 2402      | -3.51                     | ≤20.97               | PASS    |
|           |         | 2441      | -3.52                     | ≤20.97               | PASS    |
|           |         | 2480      | -3.78                     | ≤20.97               | PASS    |
| 2DH5      | Ant1    | 2402      | -0.86                     | ≤20.97               | PASS    |
|           |         | 2441      | -0.62                     | ≤20.97               | PASS    |
|           |         | 2480      | -0.83                     | ≤20.97               | PASS    |
| 3DH5      | Ant1    | 2402      | -0.20                     | ≤20.97               | PASS    |
|           |         | 2441      | -0.26                     | ≤20.97               | PASS    |
|           |         | 2480      | -0.51                     | ≤20.97               | PASS    |

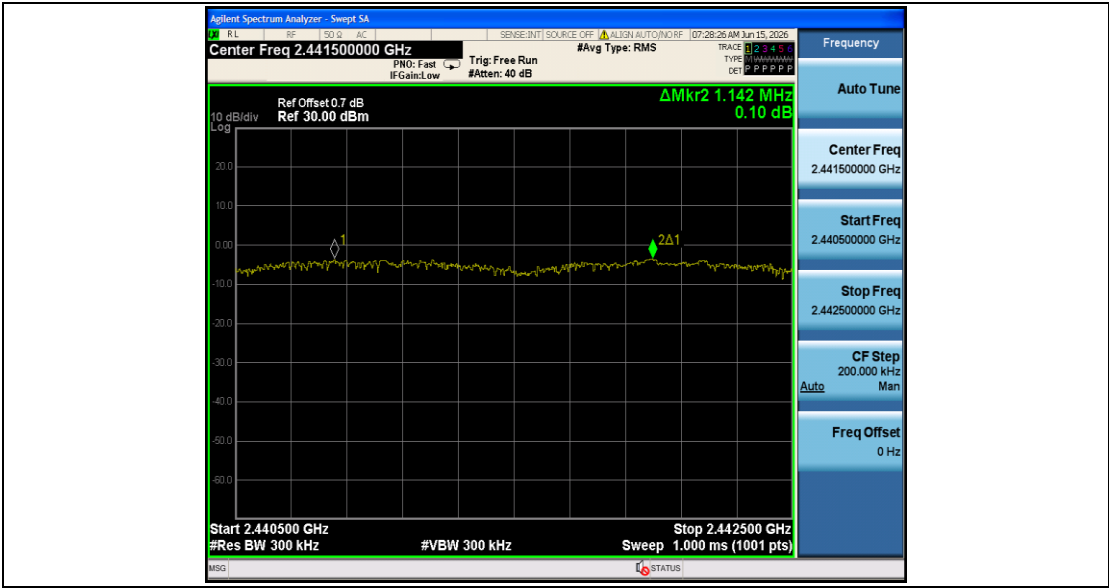
## Appendix D: Carrier frequency separation

### Test Result

| TestMode | Antenna | Freq(MHz) | Result[MHz] | Limit[MHz]   | Verdict |
|----------|---------|-----------|-------------|--------------|---------|
| DH5      | Ant1    | Hop       | 1.004       | $\geq 0.945$ | PASS    |
| 2DH5     | Ant1    | Hop       | 1.034       | $\geq 0.886$ | PASS    |
| 3DH5     | Ant1    | Hop       | 1.142       | $\geq 0.882$ | PASS    |

Test Graphs



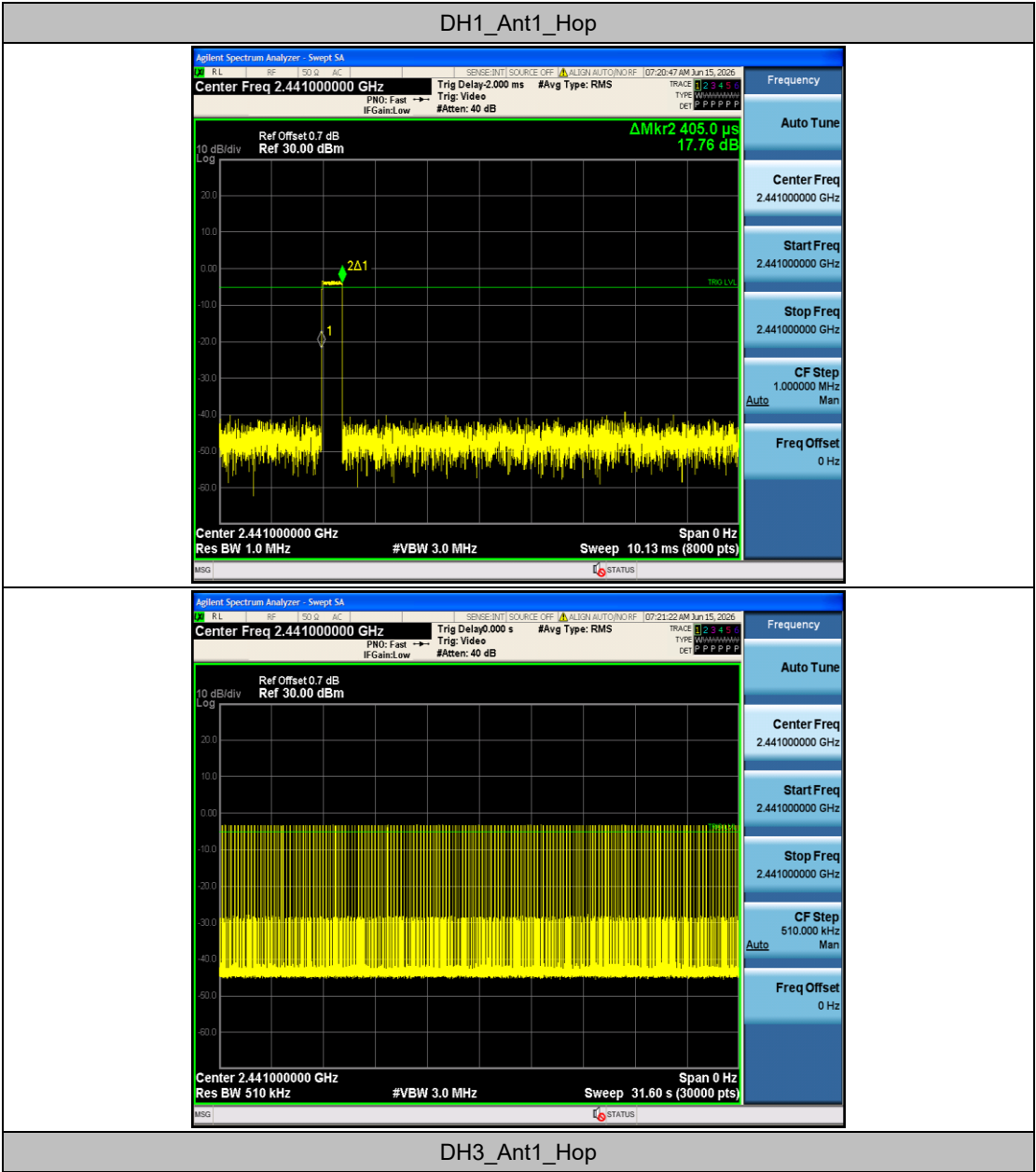


## Appendix E: Time of occupancy

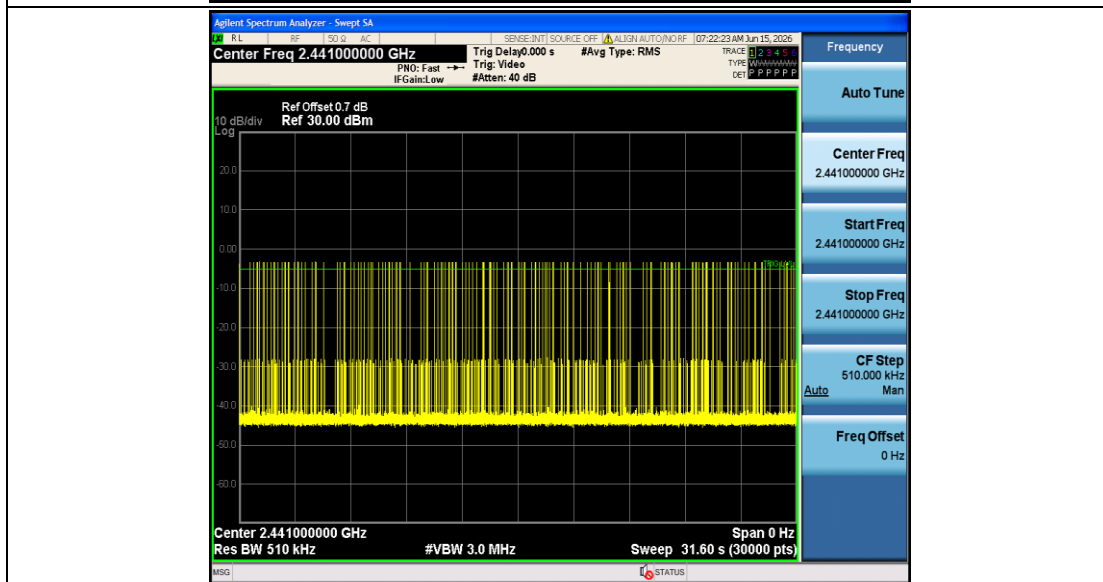
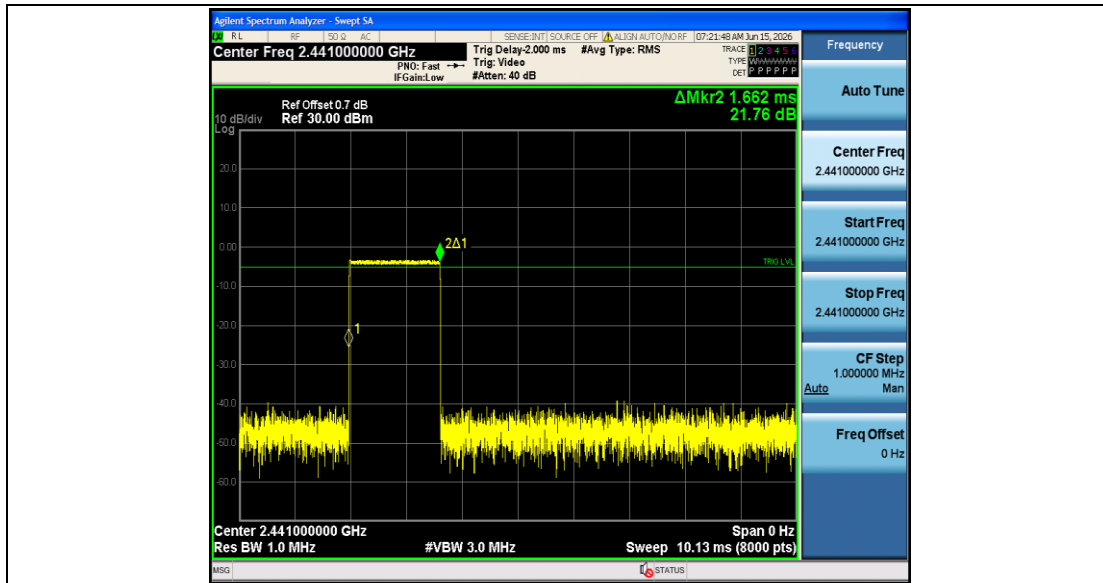
### Test Result

| TestMode | Antenna | Freq(MHz) | BurstWidth<br>[ms] | TotalHops<br>[Num] | Result[s] | Limit[s] | Verdict |
|----------|---------|-----------|--------------------|--------------------|-----------|----------|---------|
| DH1      | Ant1    | Hop       | 0.405              | 319                | 0.129     | ≤0.4     | PASS    |
| DH3      | Ant1    | Hop       | 1.662              | 159                | 0.264     | ≤0.4     | PASS    |
| DH5      | Ant1    | Hop       | 2.910              | 109                | 0.317     | ≤0.4     | PASS    |
| 2DH1     | Ant1    | Hop       | 0.415              | 318                | 0.132     | ≤0.4     | PASS    |
| 2DH3     | Ant1    | Hop       | 1.667              | 159                | 0.265     | ≤0.4     | PASS    |
| 2DH5     | Ant1    | Hop       | 2.916              | 118                | 0.344     | ≤0.4     | PASS    |
| 3DH1     | Ant1    | Hop       | 0.415              | 319                | 0.132     | ≤0.4     | PASS    |
| 3DH3     | Ant1    | Hop       | 1.666              | 153                | 0.255     | ≤0.4     | PASS    |
| 3DH5     | Ant1    | Hop       | 2.916              | 110                | 0.321     | ≤0.4     | PASS    |

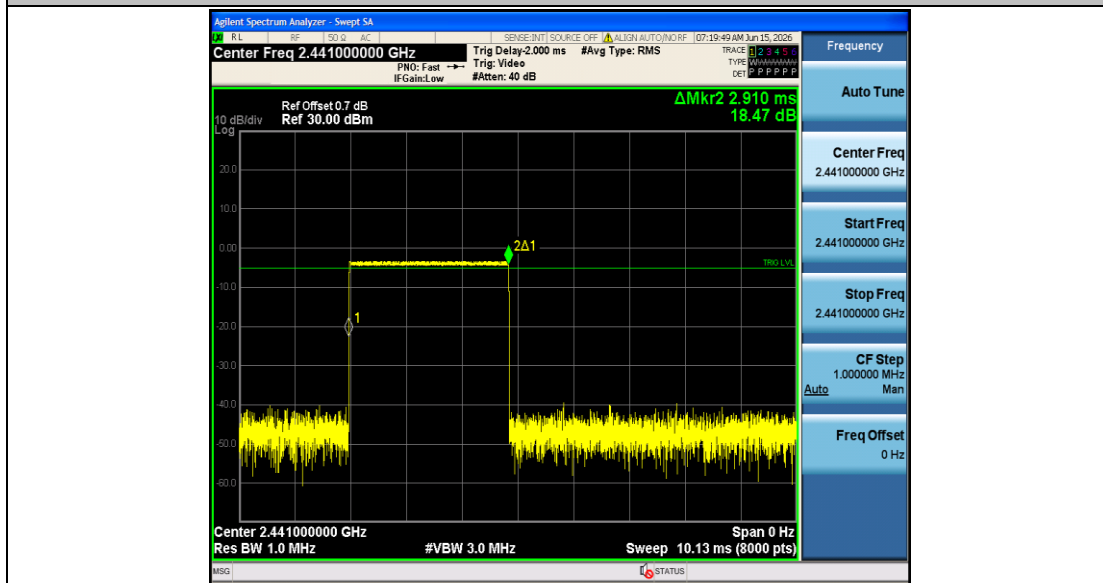
Test Graphs

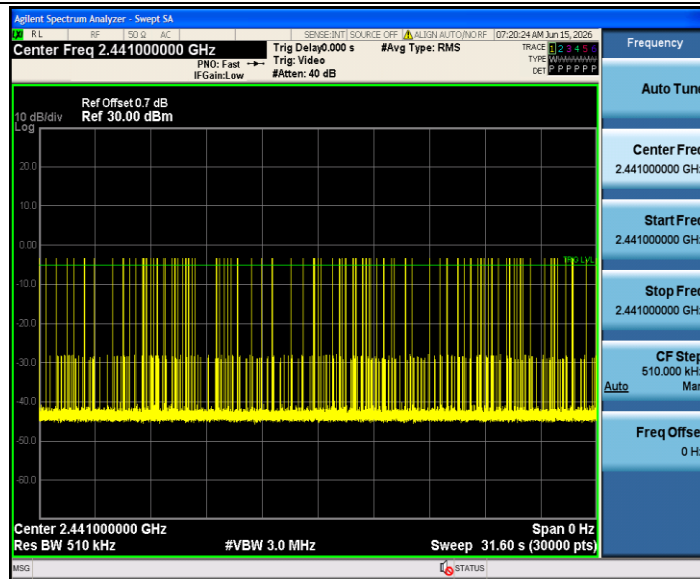


DH3\_Ant1\_Hop

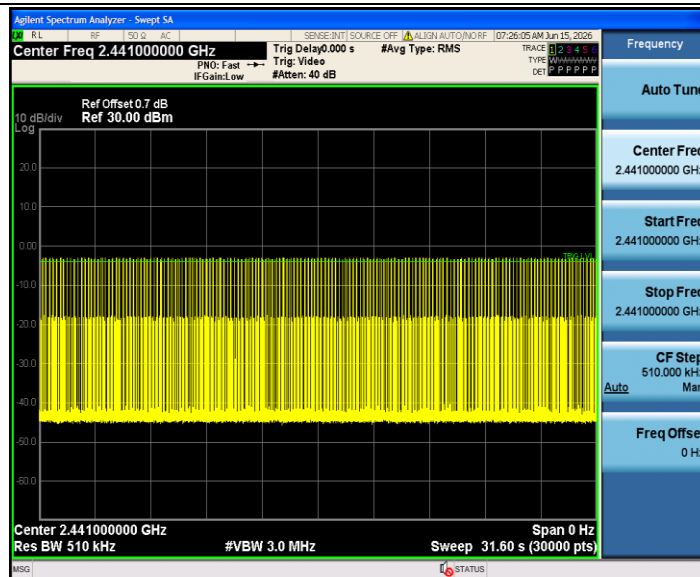
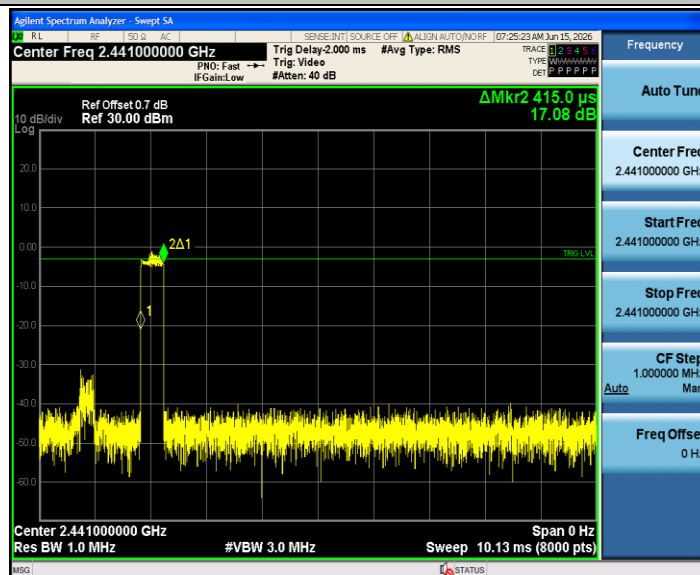


DH5\_Ant1\_Hop

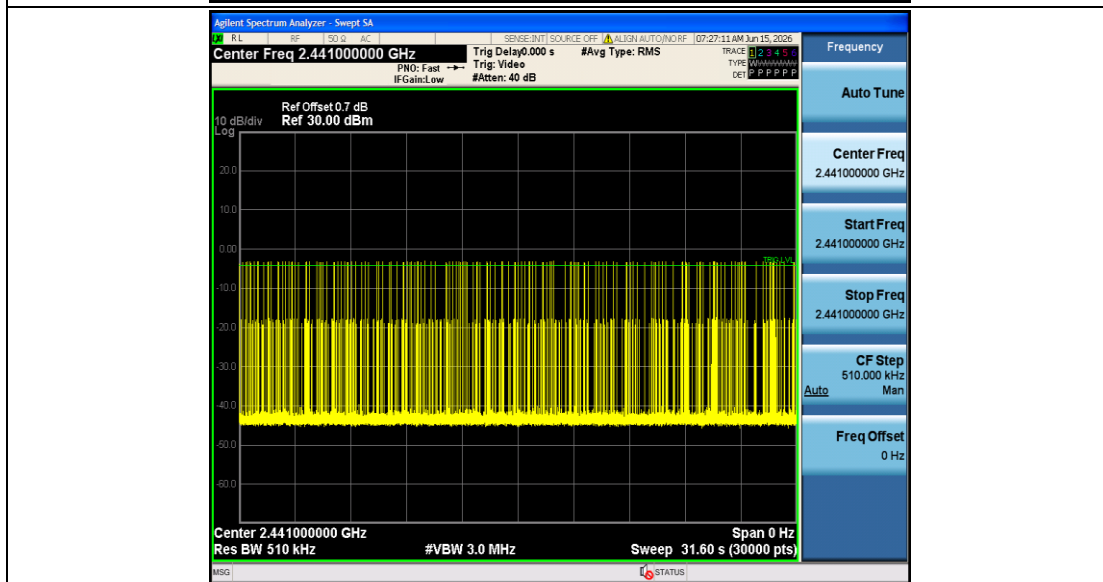
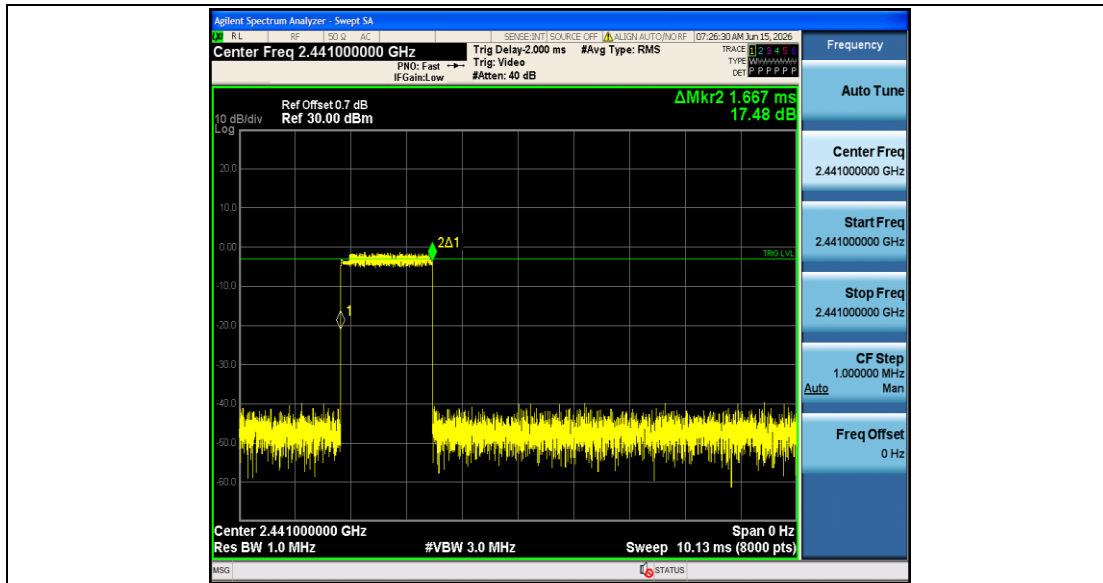




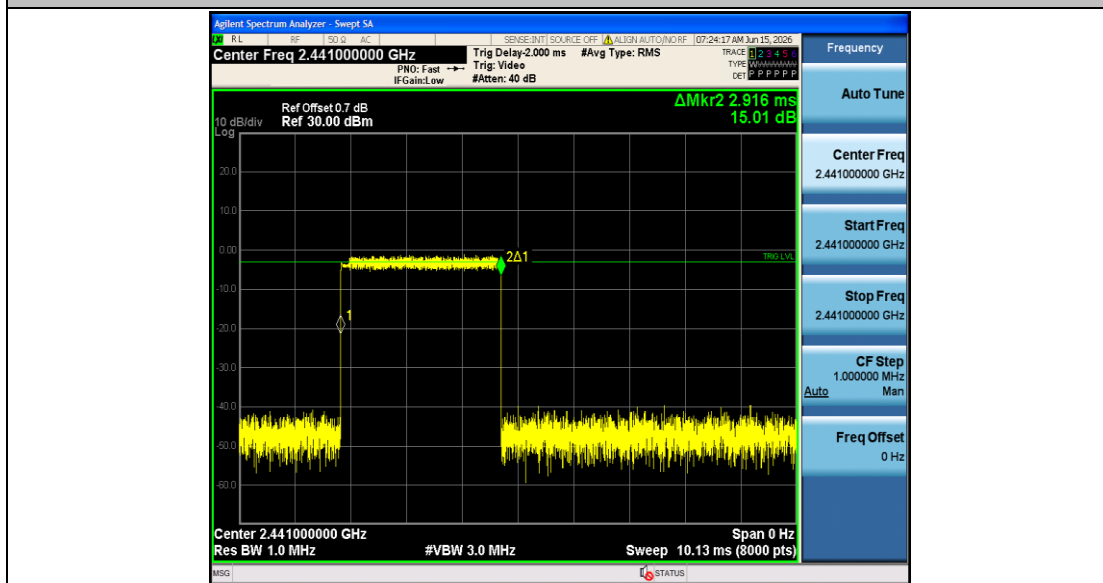
2DH1\_Ant1\_Hop

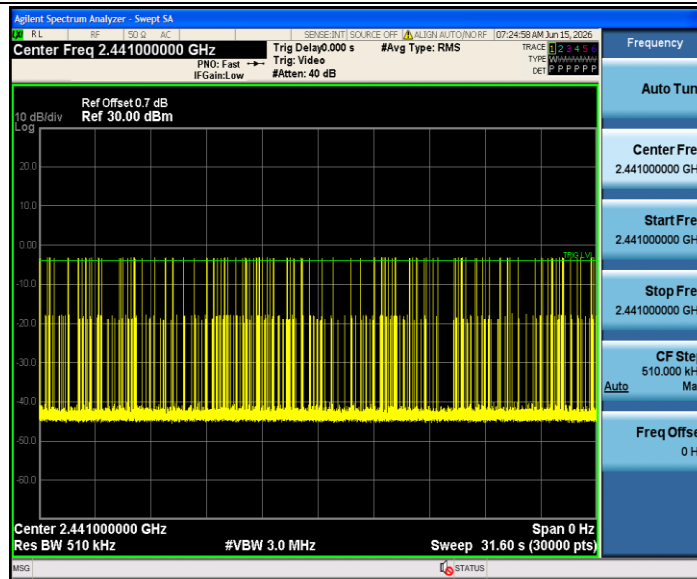


2DH3\_Ant1\_Hop

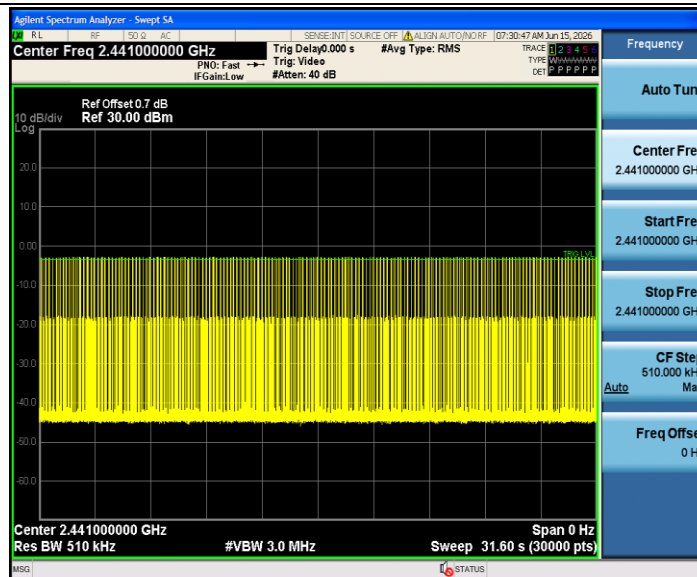
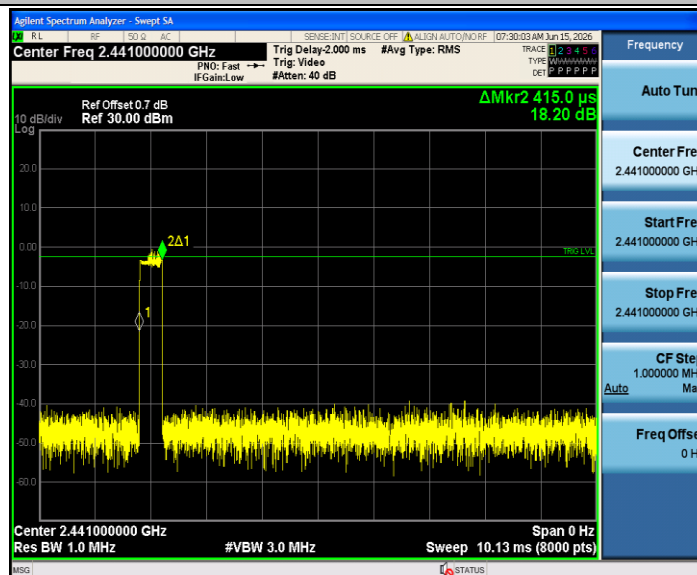


2DH5\_Ant1\_Hop

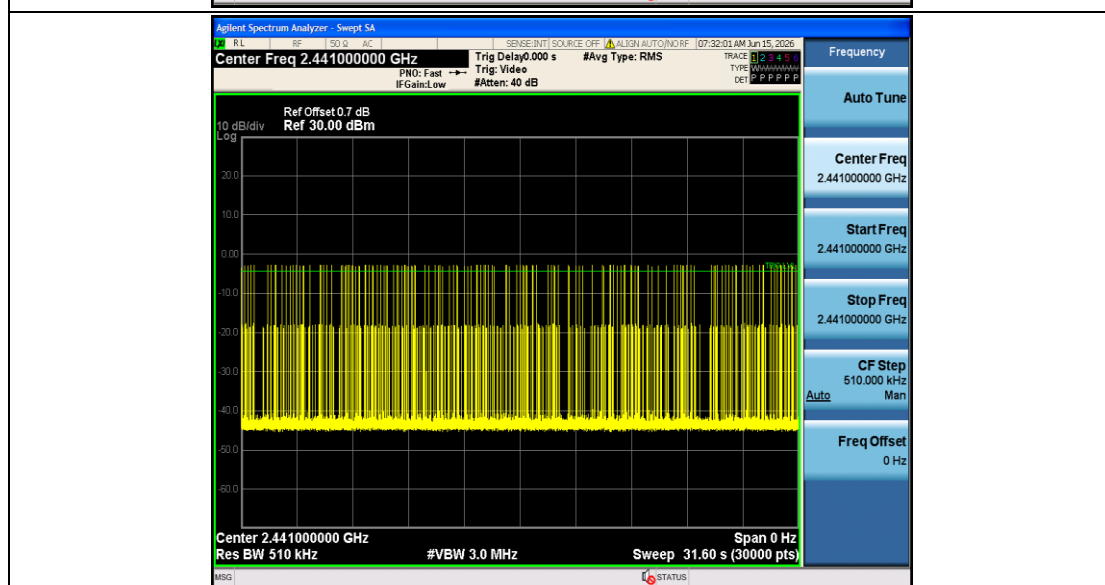
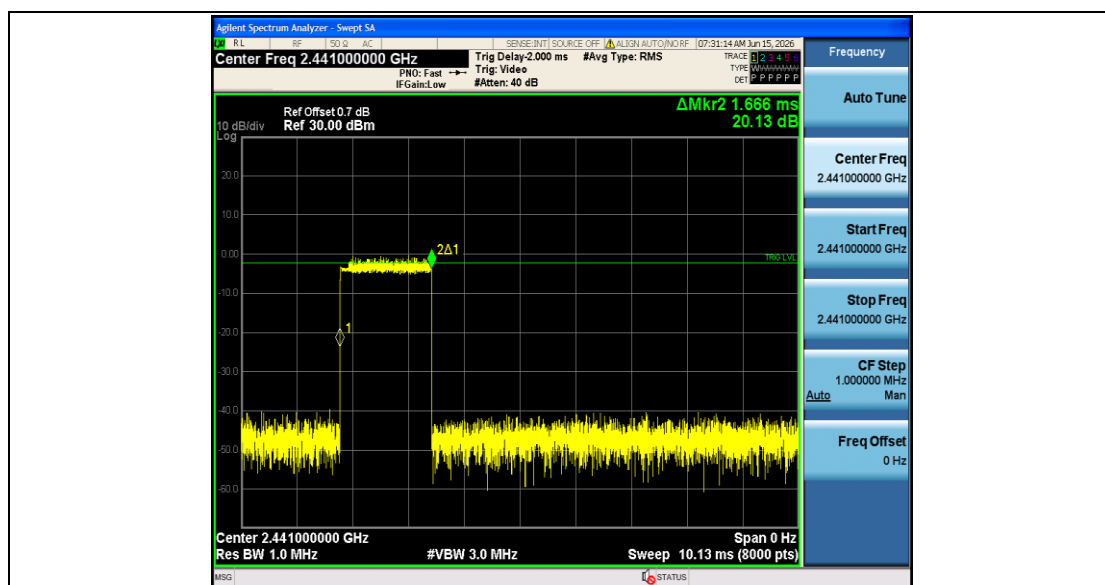




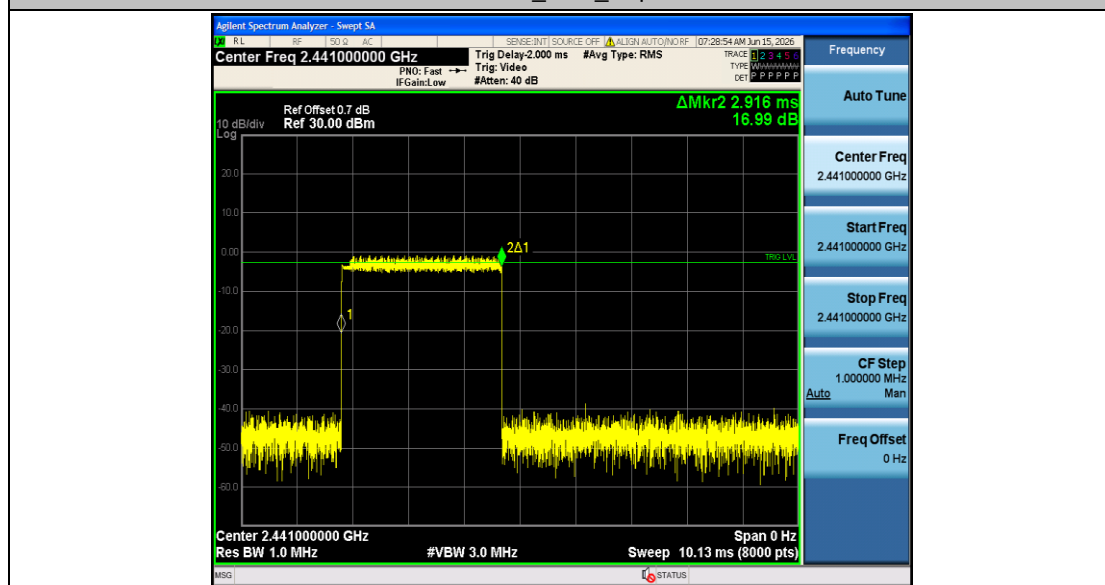
3DH1\_Ant1\_Hop

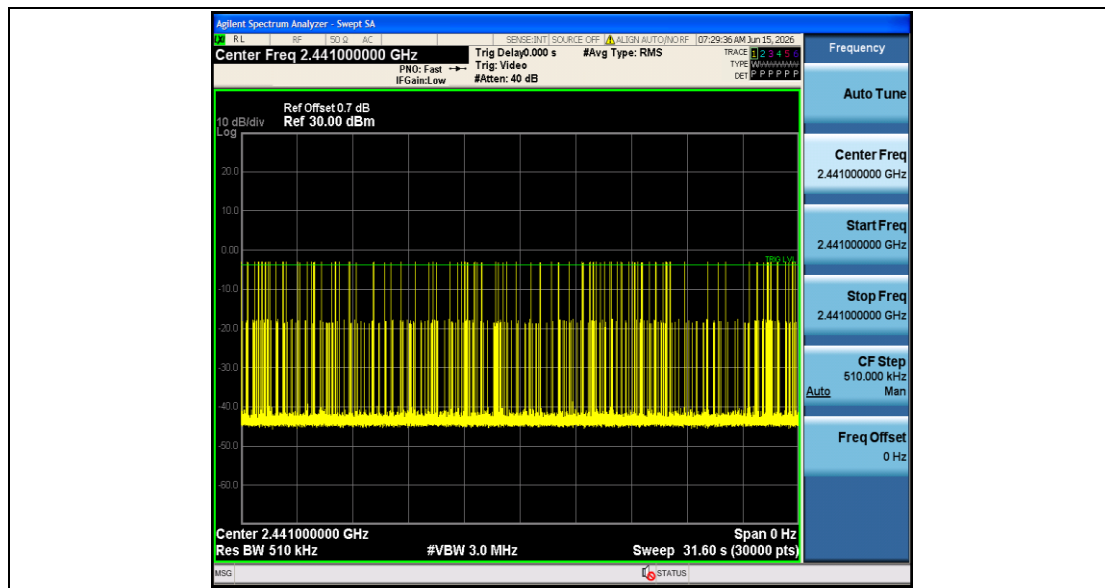


3DH3\_Ant1\_Hop



3DH5\_Ant1\_Hop



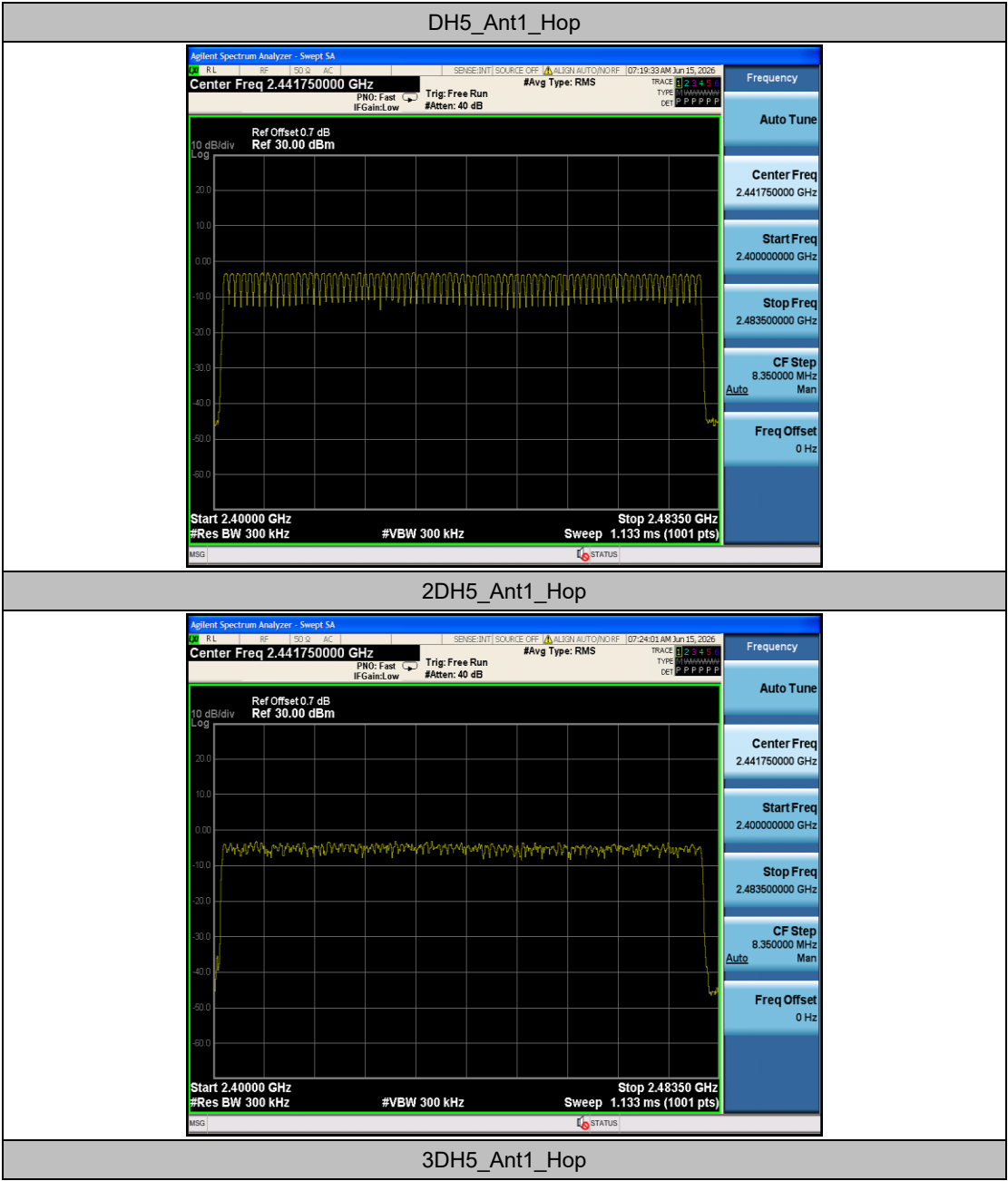


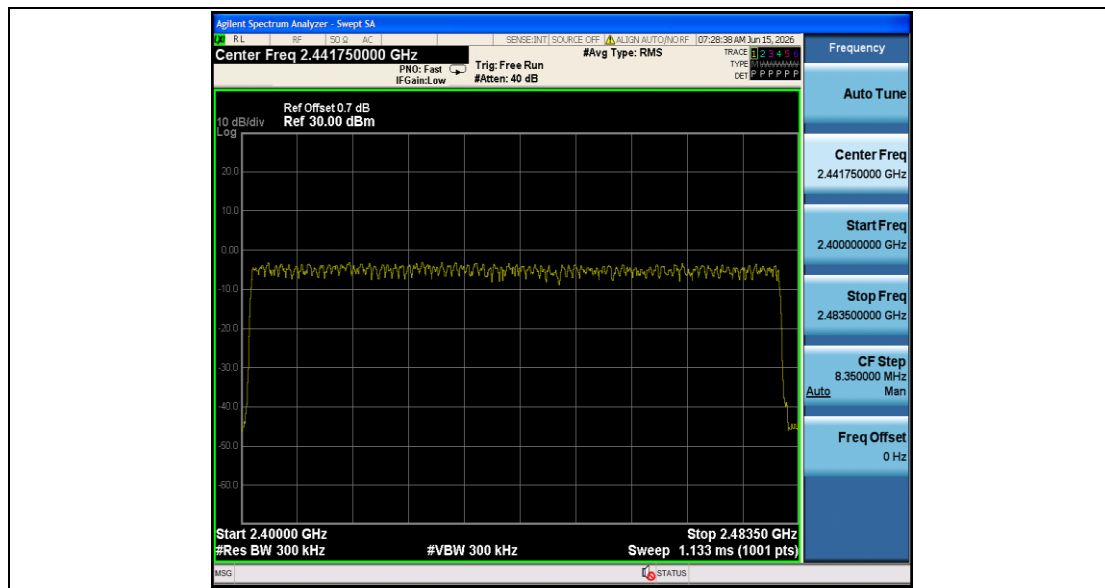
## Appendix F: Number of hopping channels

### 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



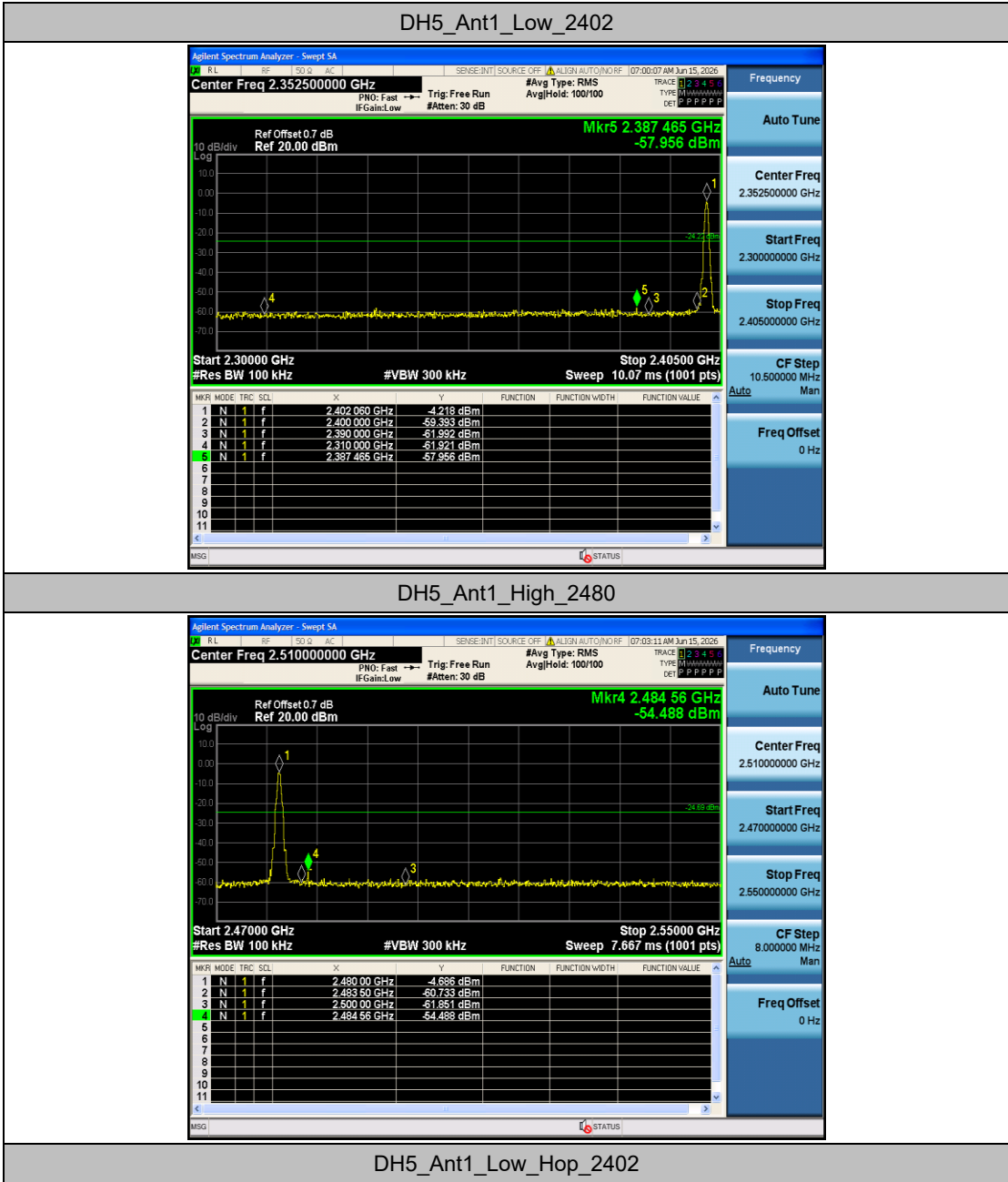


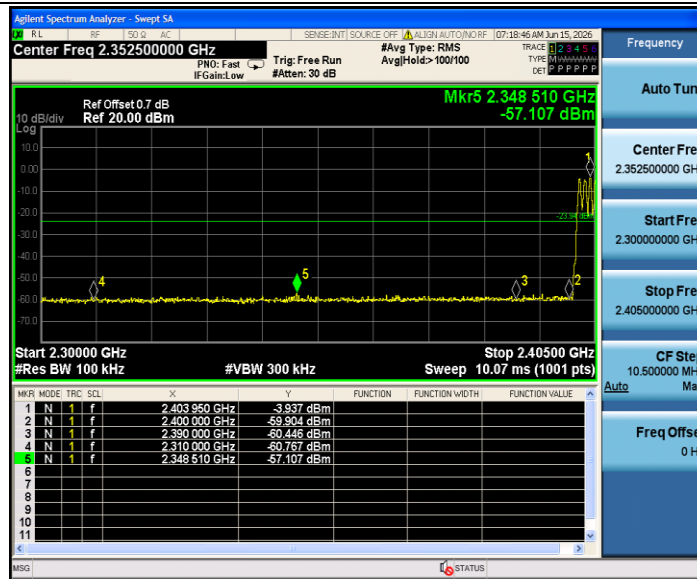
## Appendix G: Band edge measurements

### Test Result

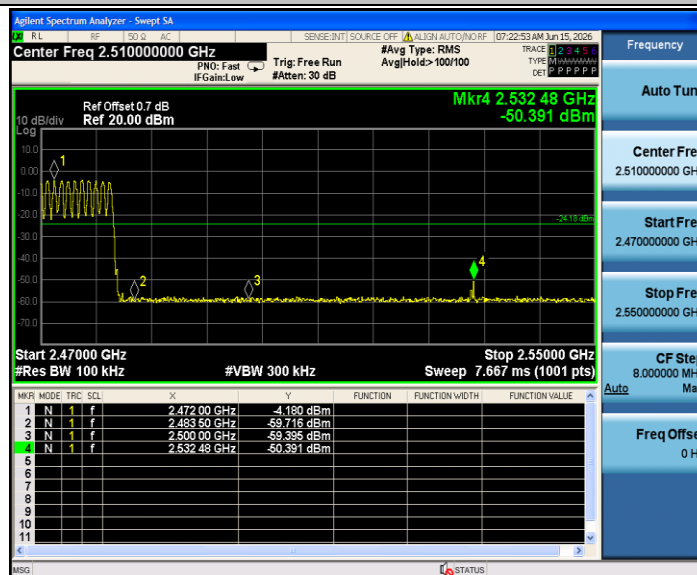
| TestMode | Antenna | ChName | Freq(MHz) | RefLevel [dBm] | Result [dBm] | Limit [dBm] | Verdict |
|----------|---------|--------|-----------|----------------|--------------|-------------|---------|
| DH5      | Ant1    | Low    | 2402      | -4.22          | -57.96       | ≤-24.22     | PASS    |
|          |         | High   | 2480      | -4.69          | -54.49       | ≤-24.69     | PASS    |
|          |         | Low    | Hop_2402  | -3.94          | -57.11       | ≤-23.94     | PASS    |
|          |         | High   | Hop_2480  | -4.18          | -50.39       | ≤-24.18     | PASS    |
| 2DH5     | Ant1    | Low    | 2402      | -4.12          | -54.13       | ≤-24.12     | PASS    |
|          |         | High   | 2480      | -4.77          | -57.36       | ≤-24.77     | PASS    |
|          |         | Low    | Hop_2402  | -8.44          | -57.6        | ≤-28.44     | PASS    |
|          |         | High   | Hop_2480  | -6.14          | -57.27       | ≤-26.14     | PASS    |
| 3DH5     | Ant1    | Low    | 2402      | -4.06          | -57.05       | ≤-24.06     | PASS    |
|          |         | High   | 2480      | -4.12          | -57.25       | ≤-24.12     | PASS    |
|          |         | Low    | Hop_2402  | -5.46          | -56.81       | ≤-25.46     | PASS    |
|          |         | High   | Hop_2480  | -4.14          | -53.1        | ≤-24.14     | PASS    |

# Test Graphs

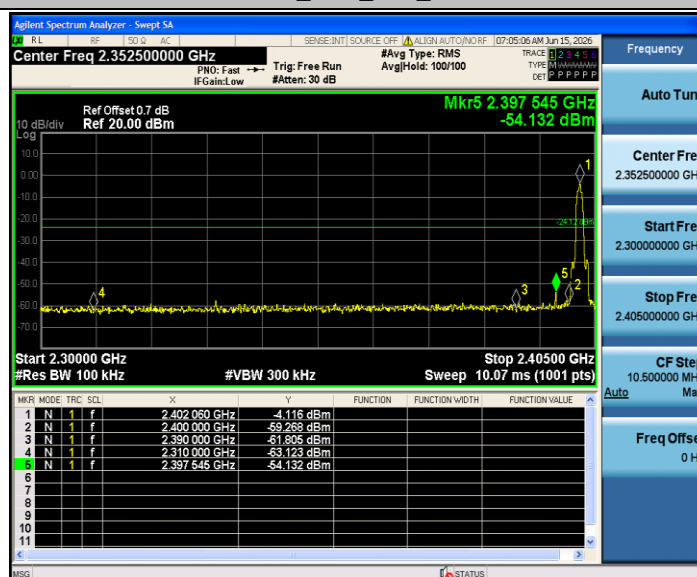




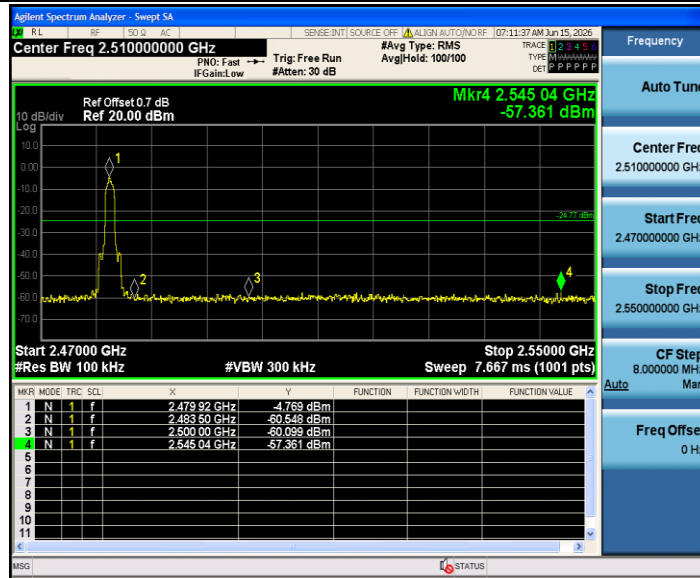
DH5\_Ant1\_High\_Hop\_2480



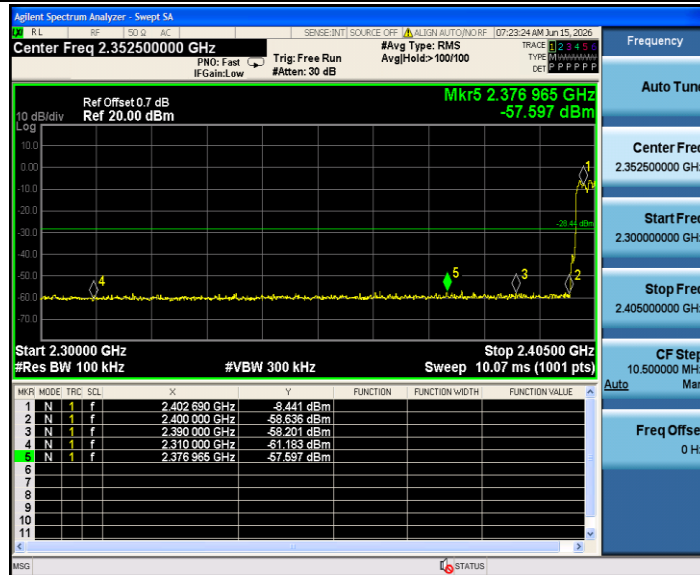
2DH5\_Ant1\_Low\_2402



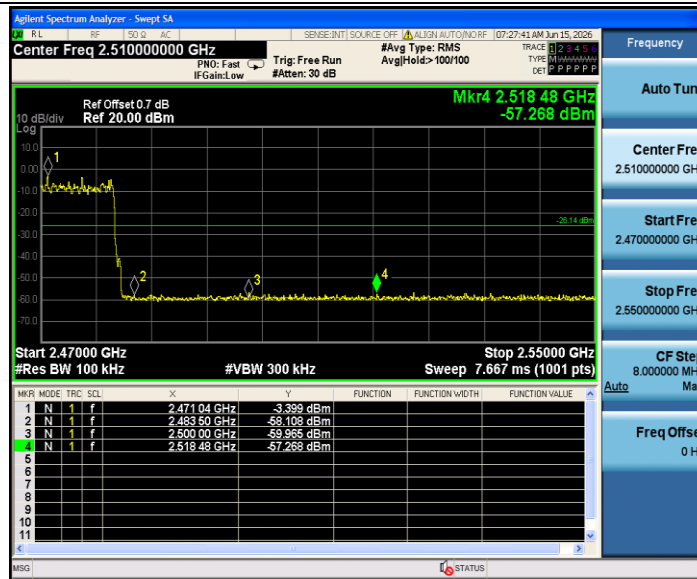
# 2DH5\_Ant1\_High\_2480



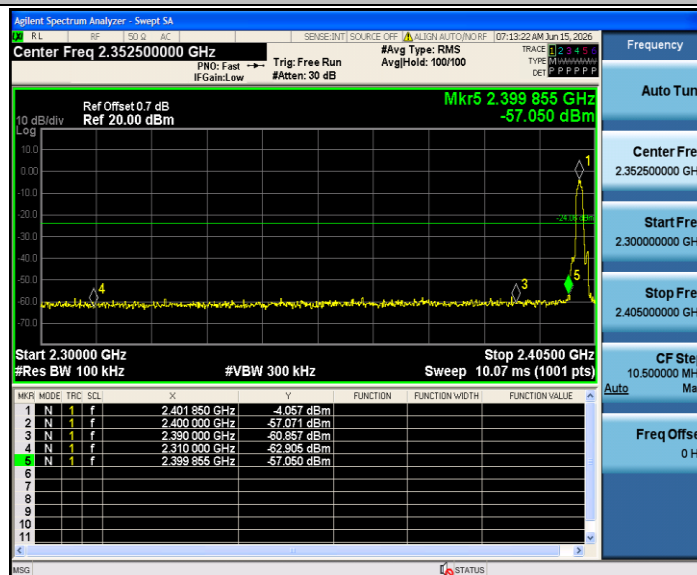
# 2DH5\_Ant1\_Low\_Hop\_2402



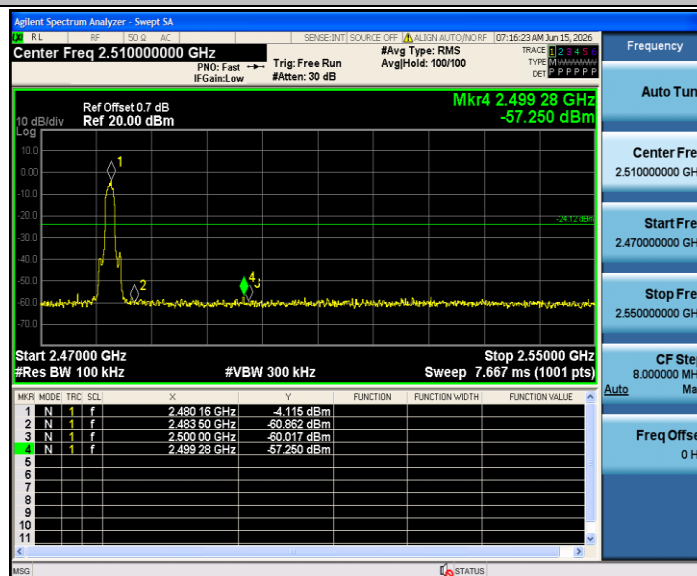
# 2DH5\_Ant1\_High\_Hop\_2480



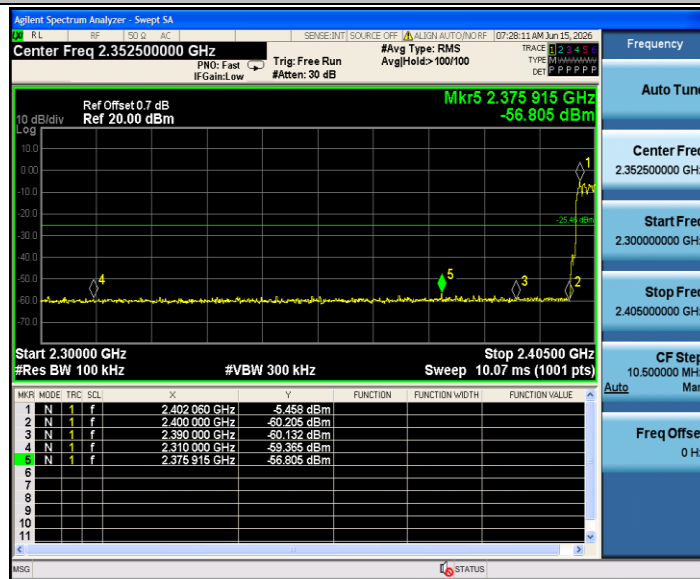
3DH5\_Ant1\_Low\_2402



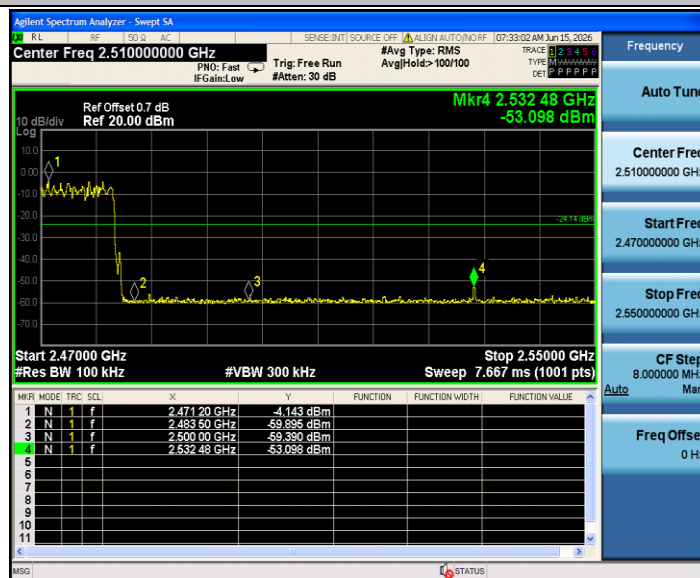
3DH5\_Ant1\_High\_2480



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



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

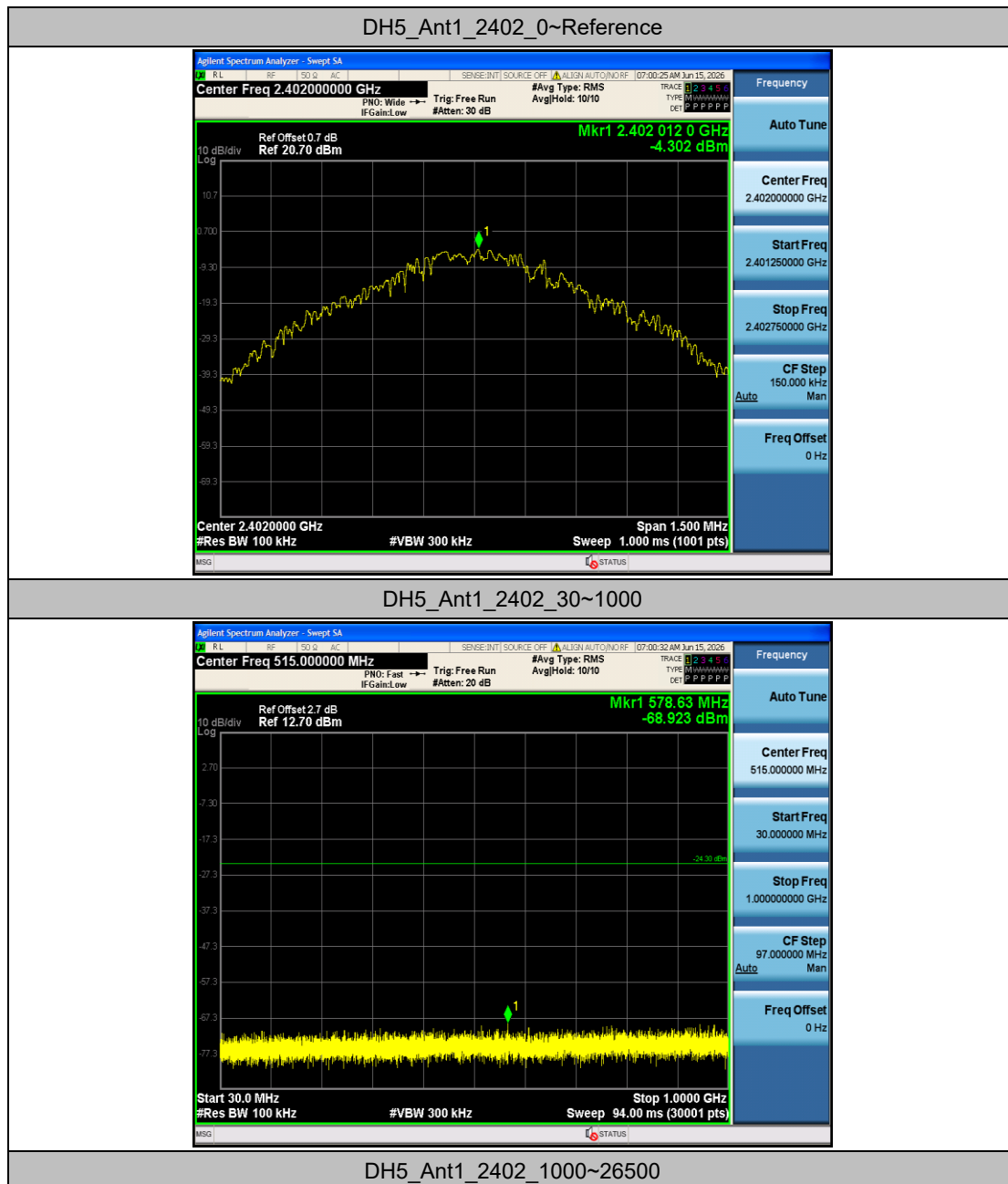


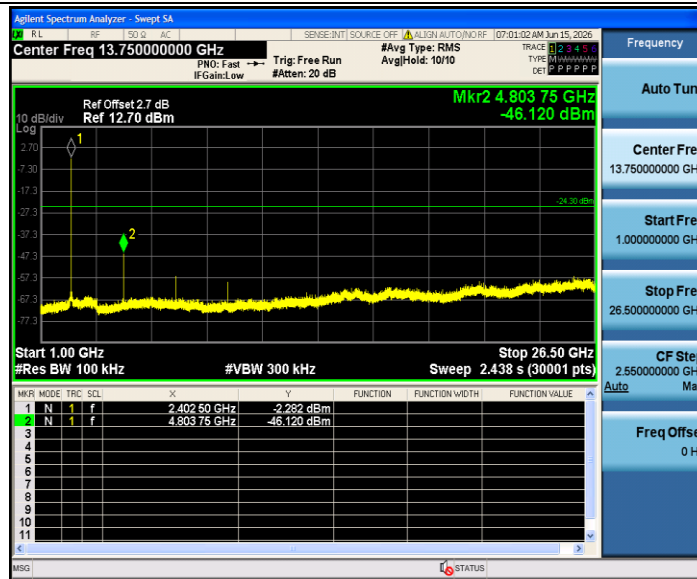
## Appendix H: Conducted Spurious Emission

### Test Result

| TestMode | Antenna | Freq(MHz) | FreqRange [MHz] | RefLevel [dBm] | Result [dBm] | Limit [dBm] | Verdict |
|----------|---------|-----------|-----------------|----------------|--------------|-------------|---------|
| DH5      | Ant1    | 2402      | Reference       | -4.30          | -4.30        | ---         | PASS    |
|          |         |           | 30~1000         | -4.30          | -68.92       | ≤-24.3      | PASS    |
|          |         |           | 1000~26500      | -4.30          | -46.12       | ≤-24.3      | PASS    |
|          |         | 2441      | Reference       | -3.90          | -3.90        | ---         | PASS    |
|          |         |           | 30~1000         | -3.90          | -68.99       | ≤-23.9      | PASS    |
|          |         |           | 1000~26500      | -3.90          | -47.53       | ≤-23.9      | PASS    |
|          |         | 2480      | Reference       | -5.08          | -5.08        | ---         | PASS    |
|          |         |           | 30~1000         | -5.08          | -69.19       | ≤-25.08     | PASS    |
|          |         |           | 1000~26500      | -5.08          | -45.88       | ≤-25.08     | PASS    |
| 2DH5     | Ant1    | 2402      | Reference       | -5.46          | -5.46        | ---         | PASS    |
|          |         |           | 30~1000         | -5.46          | -69.12       | ≤-25.46     | PASS    |
|          |         |           | 1000~26500      | -5.46          | -48.97       | ≤-25.46     | PASS    |
|          |         | 2441      | Reference       | -4.16          | -4.16        | ---         | PASS    |
|          |         |           | 30~1000         | -4.16          | -49.56       | ≤-24.16     | PASS    |
|          |         |           | 1000~26500      | -4.16          | -44.29       | ≤-24.16     | PASS    |
|          |         | 2480      | Reference       | -6.62          | -6.62        | ---         | PASS    |
|          |         |           | 30~1000         | -6.62          | -68.9        | ≤-26.62     | PASS    |
|          |         |           | 1000~26500      | -6.62          | -46.42       | ≤-26.62     | PASS    |
| 3DH5     | Ant1    | 2402      | Reference       | -6.34          | -6.34        | ---         | PASS    |
|          |         |           | 30~1000         | -6.34          | -67.88       | ≤-26.34     | PASS    |
|          |         |           | 1000~26500      | -6.34          | -48.12       | ≤-26.34     | PASS    |
|          |         | 2441      | Reference       | -6.18          | -6.18        | ---         | PASS    |
|          |         |           | 30~1000         | -6.18          | -67.85       | ≤-26.18     | PASS    |
|          |         |           | 1000~26500      | -6.18          | -48.87       | ≤-26.18     | PASS    |
|          |         | 2480      | Reference       | -6.42          | -6.42        | ---         | PASS    |
|          |         |           | 30~1000         | -6.42          | -68.78       | ≤-26.42     | PASS    |
|          |         |           | 1000~26500      | -6.42          | -48.9        | ≤-26.42     | PASS    |

## Test Graphs

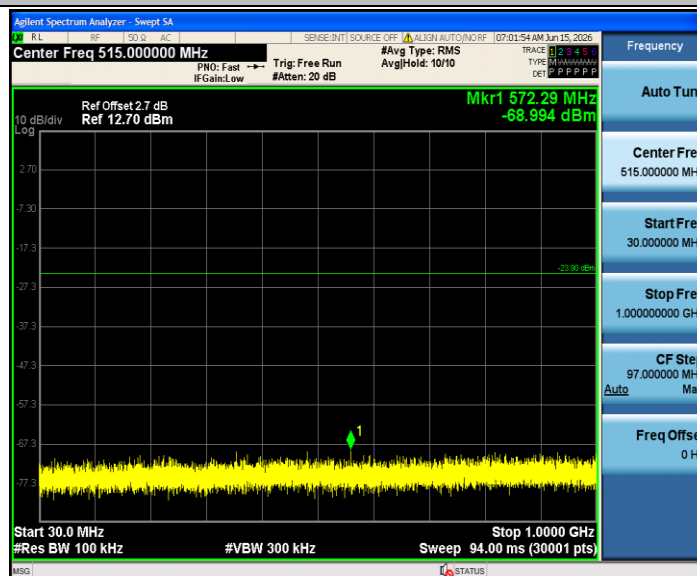




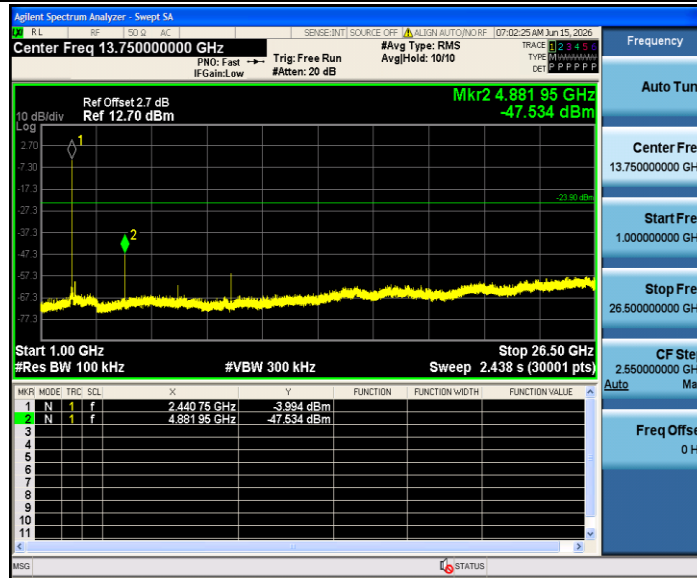
DH5\_Ant1\_2441\_0~Reference



DH5\_Ant1\_2441\_30~1000



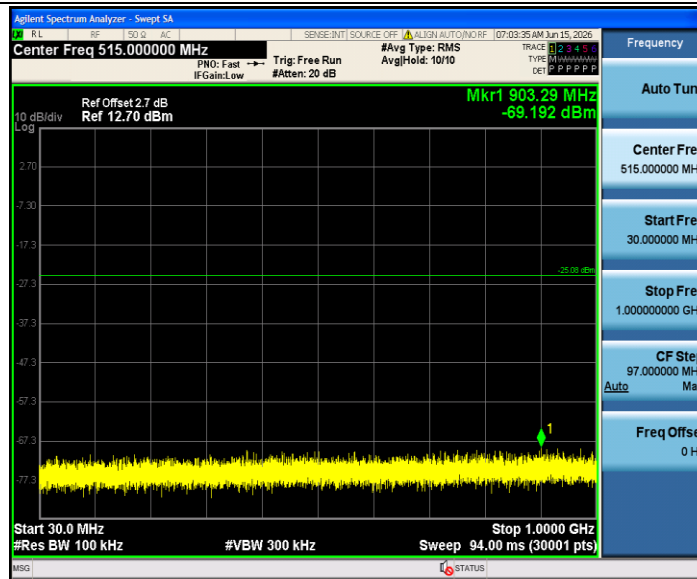
# DH5\_Ant1\_2441\_1000~26500



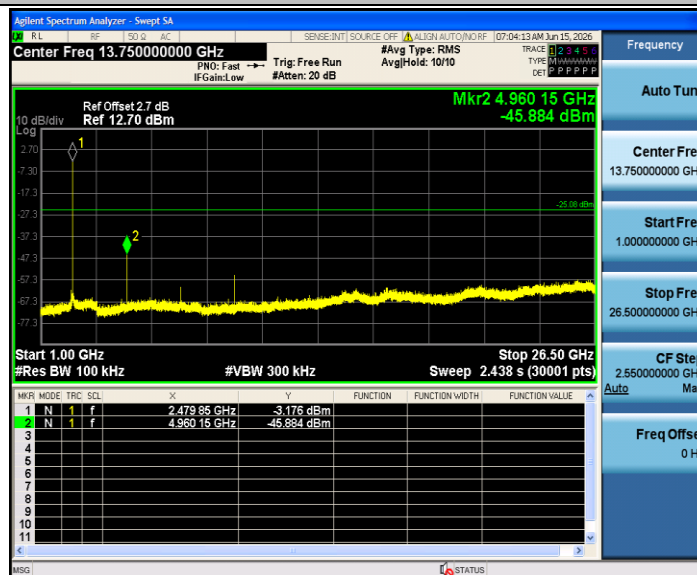
# DH5\_Ant1\_2480\_0~Reference



# DH5\_Ant1\_2480\_30~1000



DH5\_Ant1\_2480\_1000~26500



2DH5\_Ant1\_2402\_0~Reference

