

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

**Company:** : Zhuhai Kuwee Technology Co., LTD.

**EUT** : MIDI Controller Pad

**Model Number** : JP-1

**FCC ID** : 2A6PB-JP-1

**Report No.** : CTA25092501201

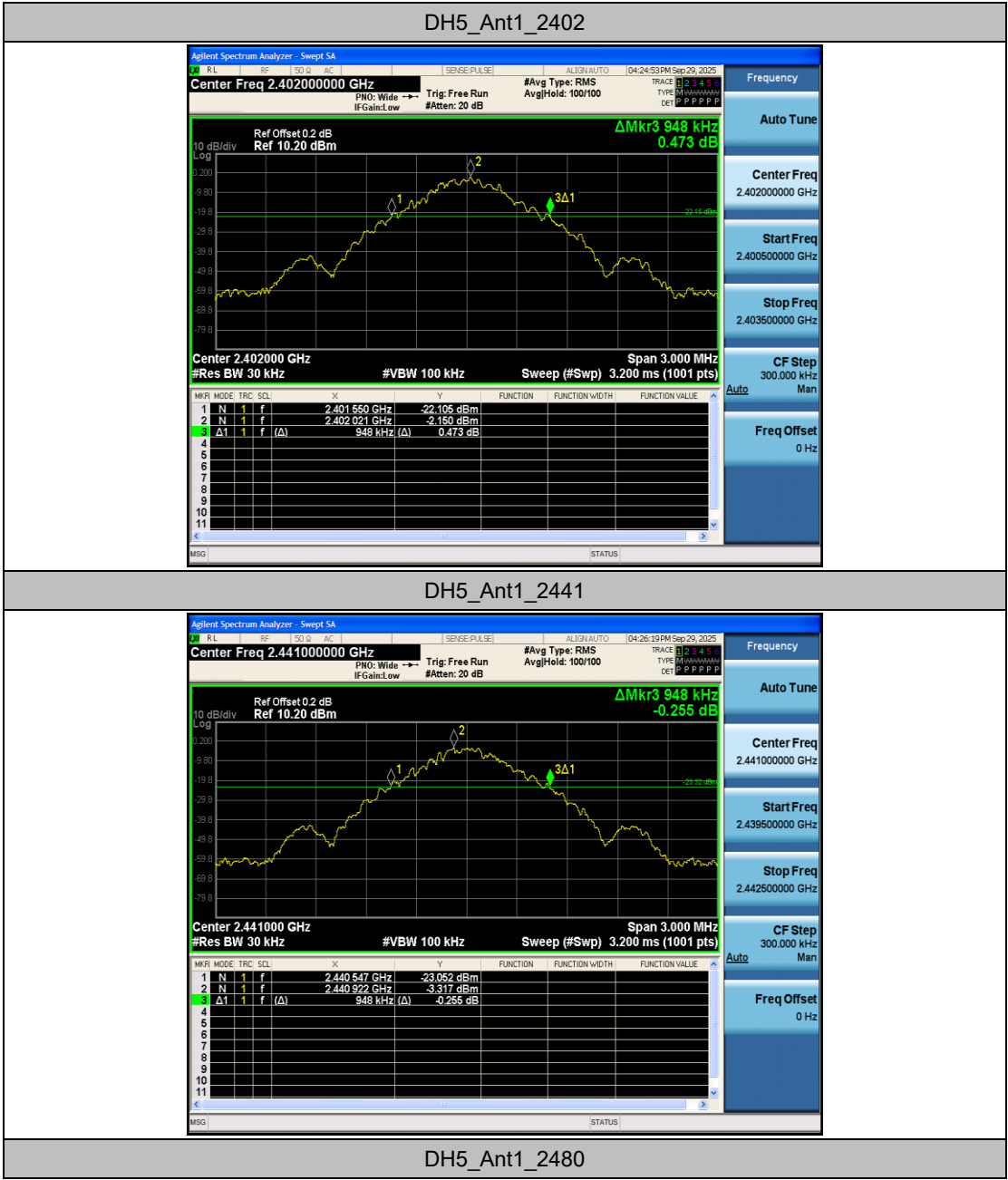
**Reviewed By** : Eric Wang

## 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      | 0.948            | 2401.550 | 2402.498 | ---        | ---     |
|          |         | 2441      | 0.948            | 2440.547 | 2441.495 | ---        | ---     |
|          |         | 2480      | 0.951            | 2479.547 | 2480.498 | ---        | ---     |
| 2DH5     | Ant1    | 2402      | 1.341            | 2401.337 | 2402.678 | ---        | ---     |
|          |         | 2441      | 1.326            | 2440.349 | 2441.675 | ---        | ---     |
|          |         | 2480      | 1.320            | 2479.349 | 2480.669 | ---        | ---     |

Test Graphs





2DH5\_Ant1\_2402



2DH5\_Ant1\_2441



# 2DH5\_Ant1\_2480

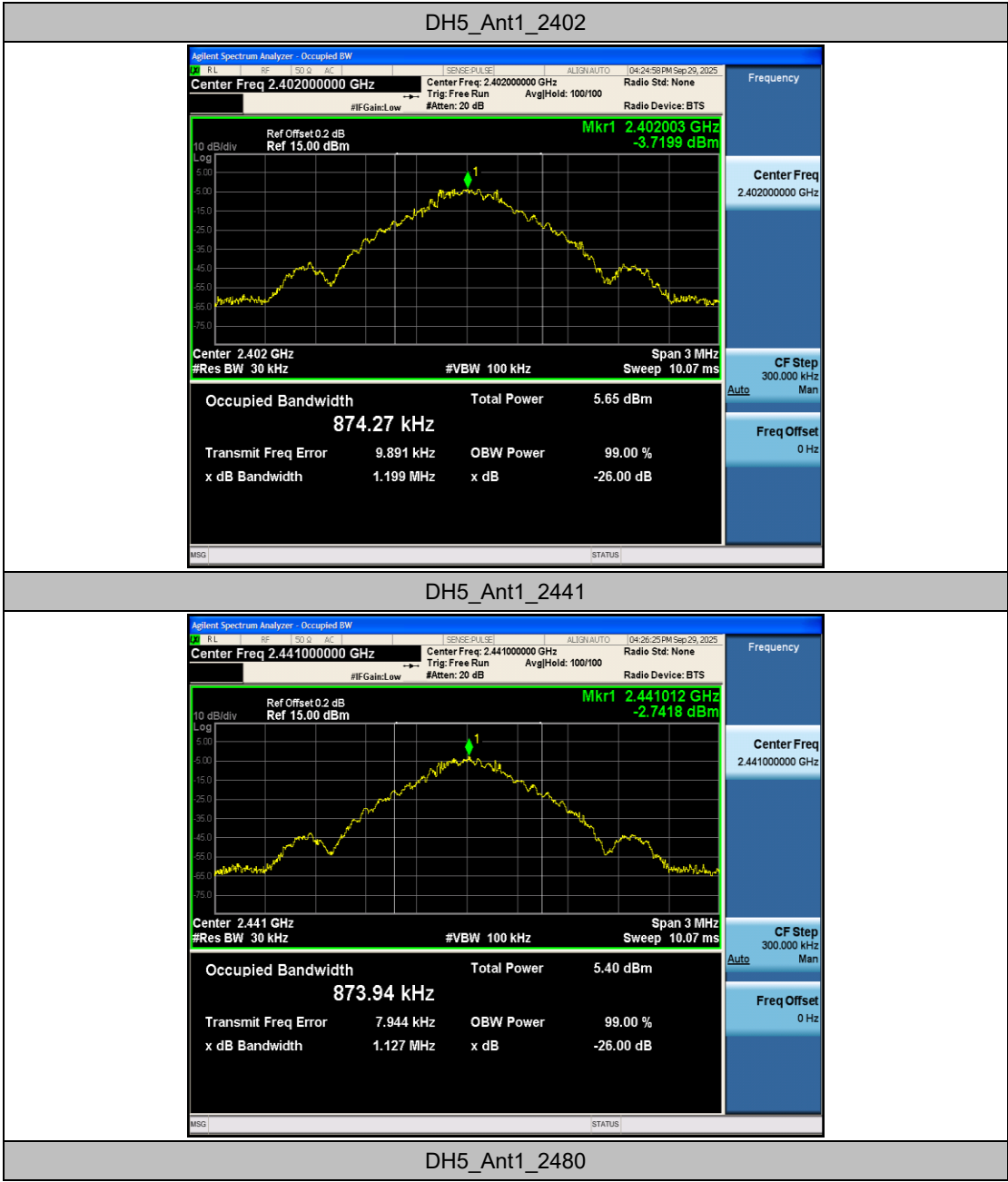


## Appendix B: Occupied Channel Bandwidth

### Test Result

| TestMode | Antenna | Freq(MHz) | OCB [MHz] | FL[MHz]   | FH[MHz]   | Limit[MHz] | Verdict |
|----------|---------|-----------|-----------|-----------|-----------|------------|---------|
| DH5      | Ant1    | 2402      | 0.87427   | 2401.5728 | 2402.4470 | ---        | ---     |
|          |         | 2441      | 0.87394   | 2440.5710 | 2441.4449 | ---        | ---     |
|          |         | 2480      | 0.87058   | 2479.5743 | 2480.4449 | ---        | ---     |
| 2DH5     | Ant1    | 2402      | 1.1833    | 2401.4176 | 2402.6009 | ---        | ---     |
|          |         | 2441      | 1.1855    | 2440.4175 | 2441.6030 | ---        | ---     |
|          |         | 2480      | 1.1912    | 2479.4156 | 2480.6068 | ---        | ---     |

Test Graphs

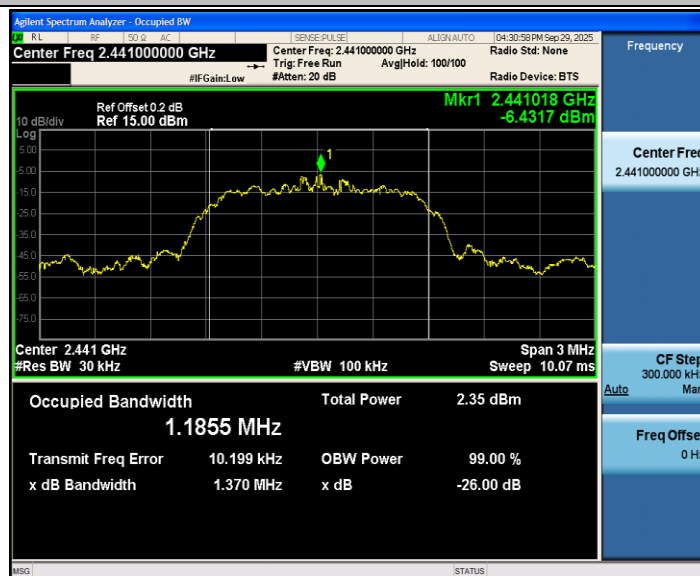




2DH5\_Ant1\_2402



2DH5\_Ant1\_2441



# 2DH5\_Ant1\_2480



## Appendix C: Maximum conducted output power

### Test Result Peak

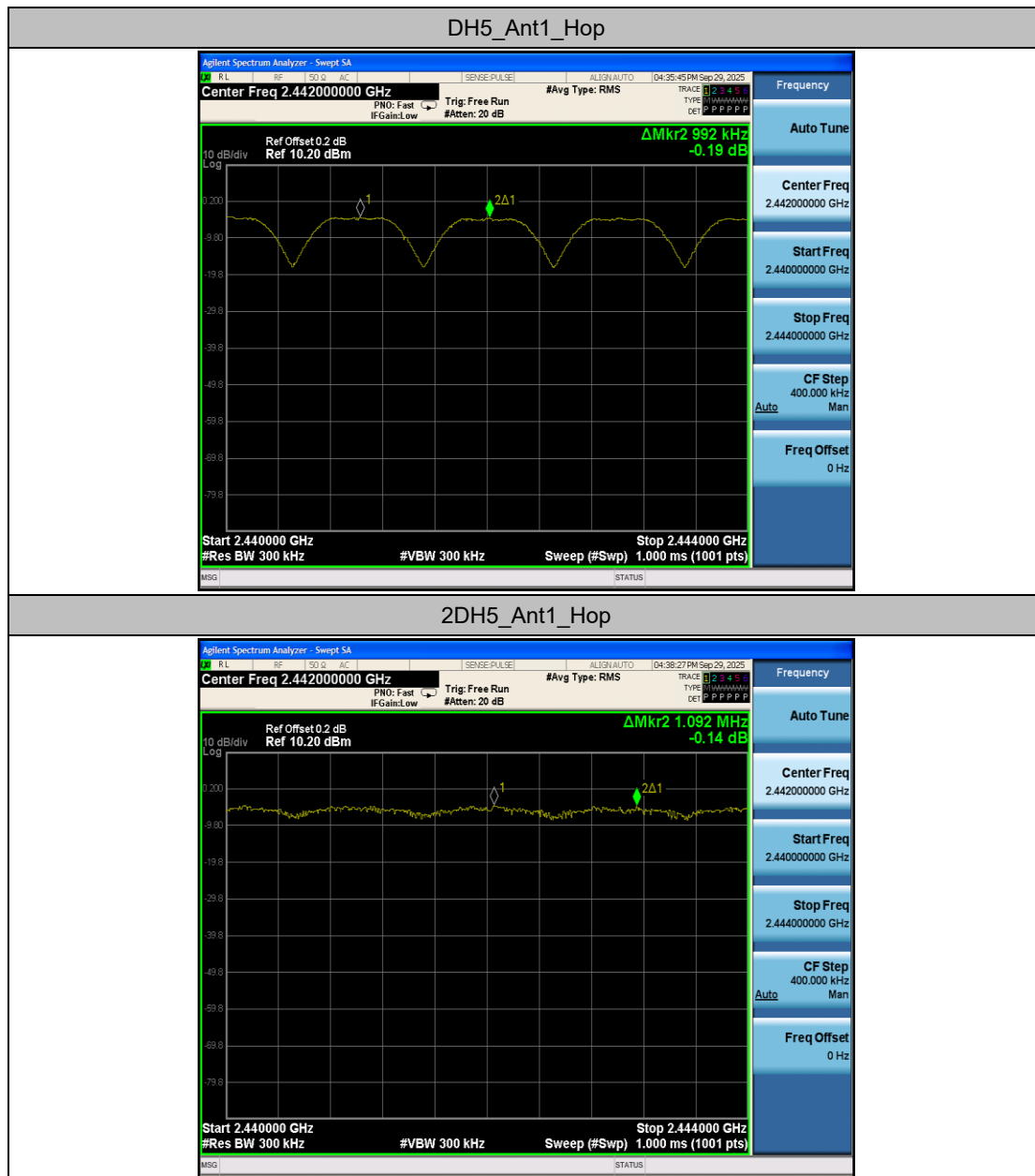
| Test Mode | Antenna | Freq(MHz) | Conducted Peak Power[dBm] | Conducted Limit[dBm] | Verdict |
|-----------|---------|-----------|---------------------------|----------------------|---------|
| DH5       | Ant1    | 2402      | -0.29                     | ≤20.97               | PASS    |
|           |         | 2441      | -0.50                     | ≤20.97               | PASS    |
|           |         | 2480      | -0.57                     | ≤20.97               | PASS    |
| 2DH5      | Ant1    | 2402      | -1.12                     | ≤20.97               | PASS    |
|           |         | 2441      | -1.26                     | ≤20.97               | PASS    |
|           |         | 2480      | -1.35                     | ≤20.97               | PASS    |

## Appendix D: Carrier frequency separation

### Test Result

| TestMode | Antenna | Freq(MHz) | Result[MHz] | Limit[MHz]   | Verdict |
|----------|---------|-----------|-------------|--------------|---------|
| DH5      | Ant1    | Hop       | 0.992       | $\geq 0.951$ | PASS    |
| 2DH5     | Ant1    | Hop       | 1.092       | $\geq 0.894$ | PASS    |

## Test Graphs

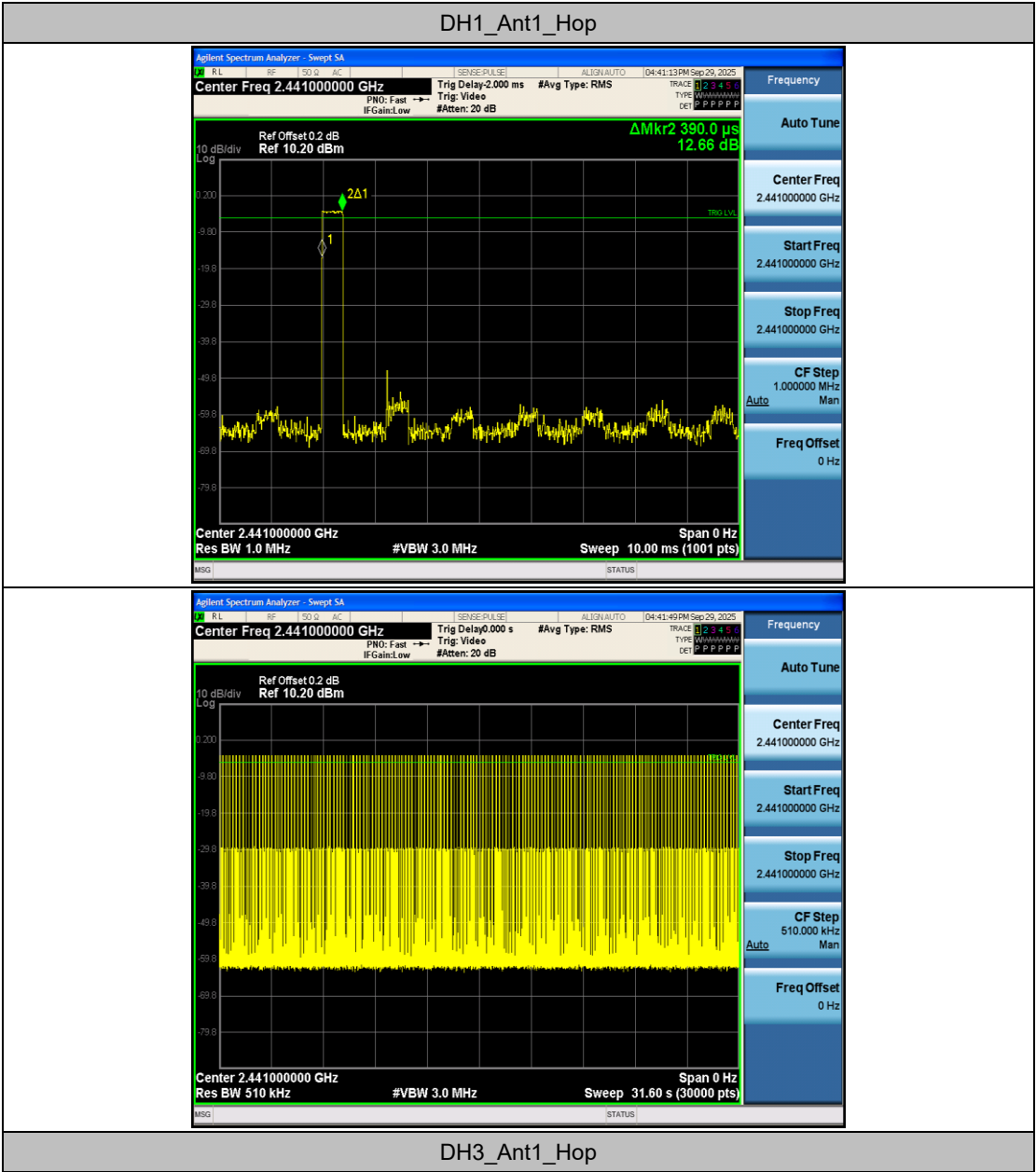


## Appendix E: Time of occupancy

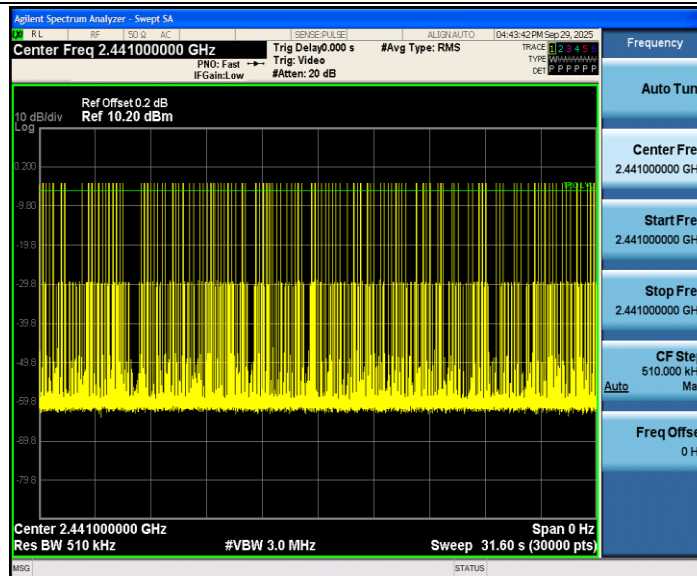
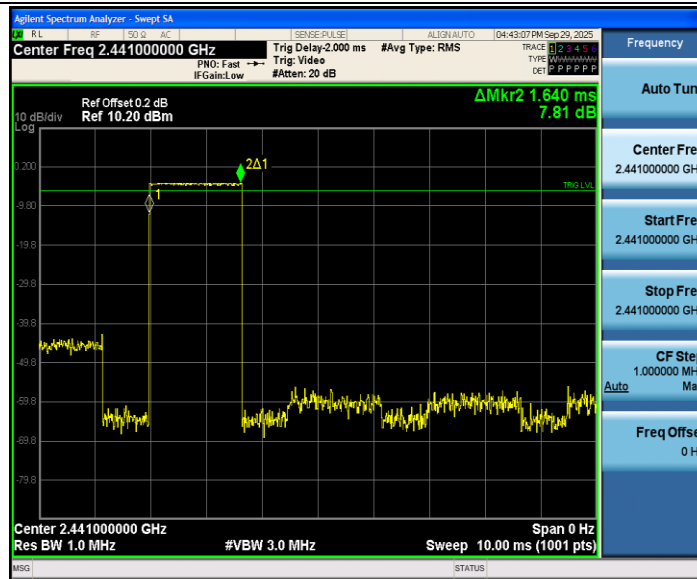
### Test Result

| TestMode | Antenna | Freq(MHz) | BurstWidth<br>[ms] | TotalHops<br>[Num] | Result[s] | Limit[s] | Verdict |
|----------|---------|-----------|--------------------|--------------------|-----------|----------|---------|
| DH1      | Ant1    | Hop       | 0.390              | 318                | 0.124     | ≤0.4     | PASS    |
| DH3      | Ant1    | Hop       | 1.640              | 159                | 0.261     | ≤0.4     | PASS    |
| DH5      | Ant1    | Hop       | 2.890              | 111                | 0.321     | ≤0.4     | PASS    |
| 2DH1     | Ant1    | Hop       | 0.390              | 312                | 0.122     | ≤0.4     | PASS    |
| 2DH3     | Ant1    | Hop       | 1.640              | 164                | 0.269     | ≤0.4     | PASS    |
| 2DH5     | Ant1    | Hop       | 2.900              | 109                | 0.316     | ≤0.4     | PASS    |

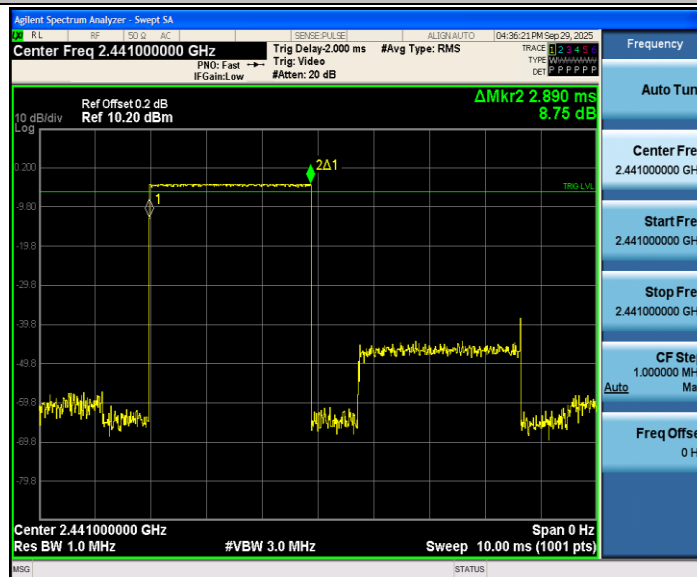
Test Graphs

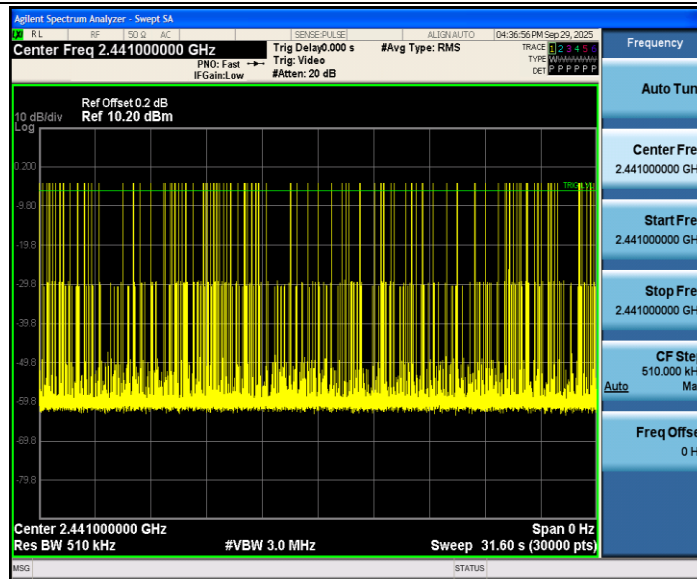


DH3\_Ant1\_Hop

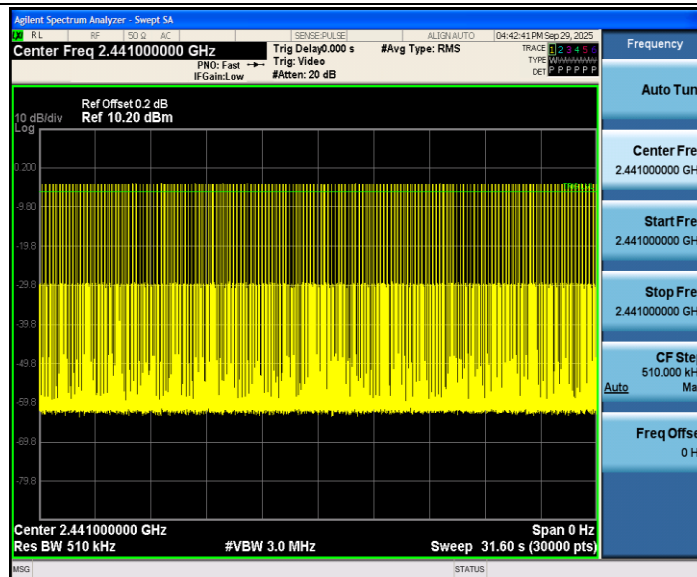
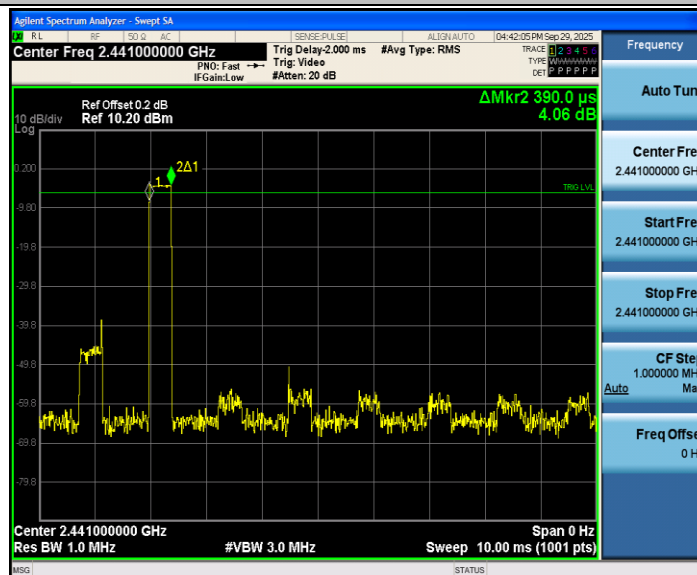


DH5\_Ant1\_Hop

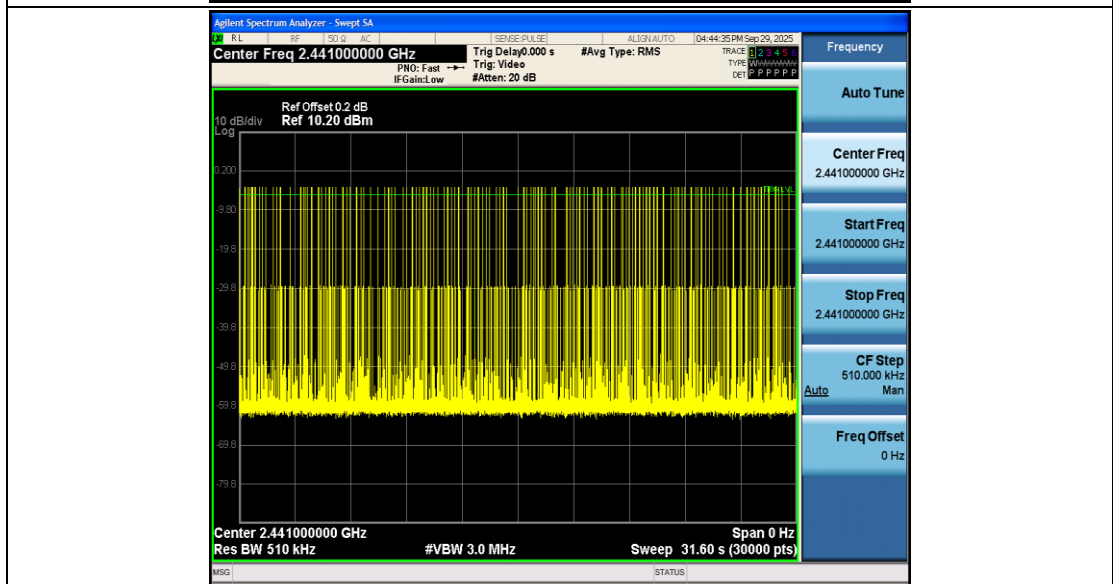
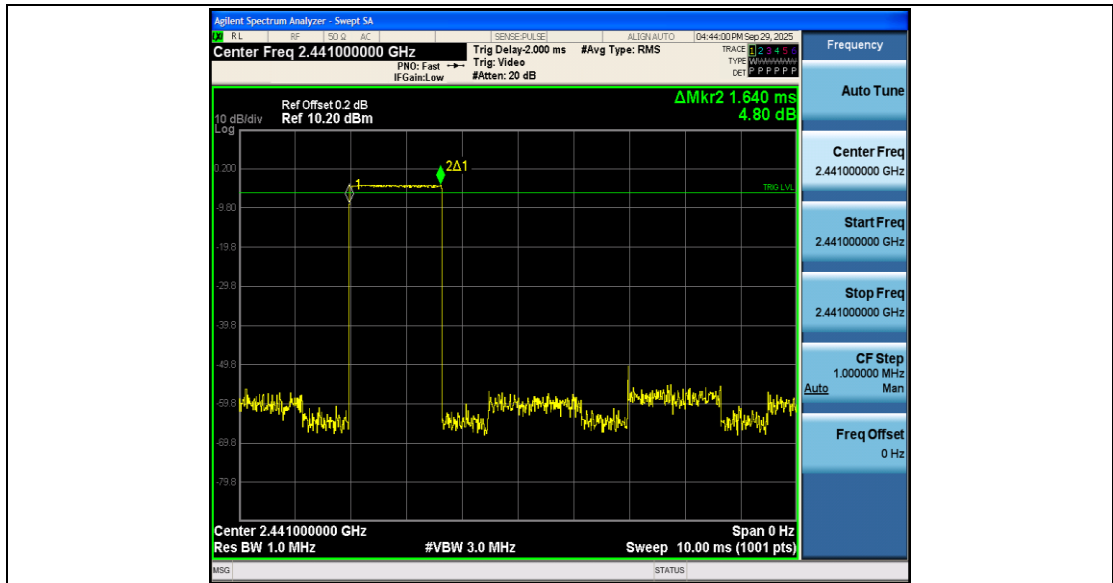




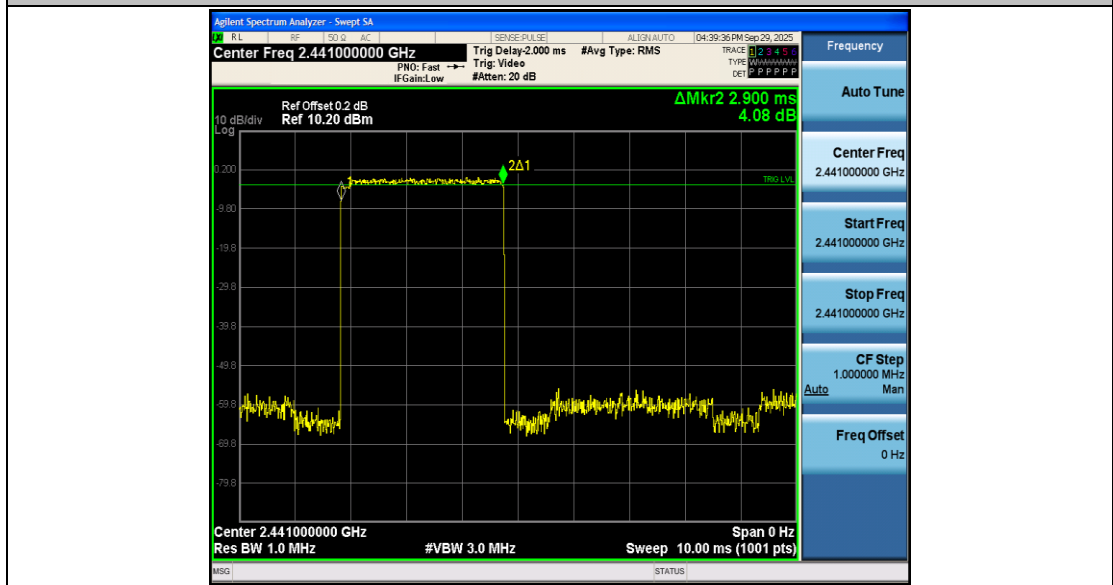
2DH1\_Ant1\_Hop

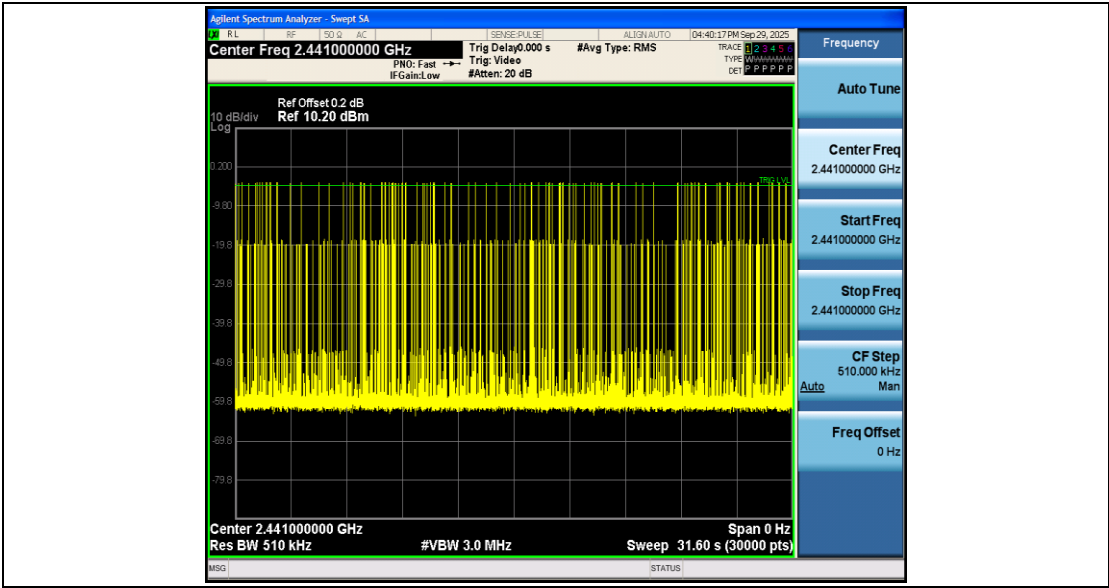


2DH3\_Ant1\_Hop



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

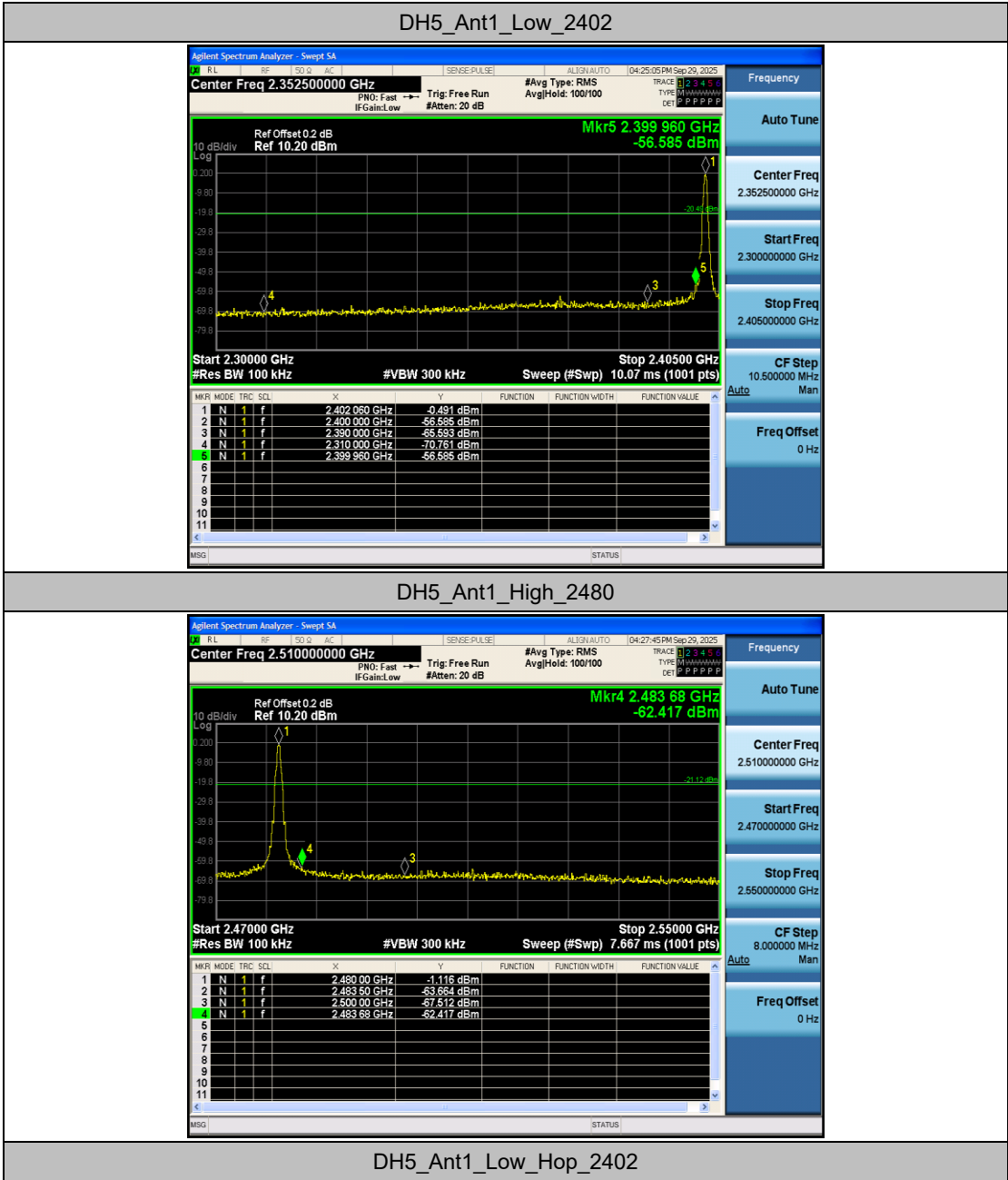


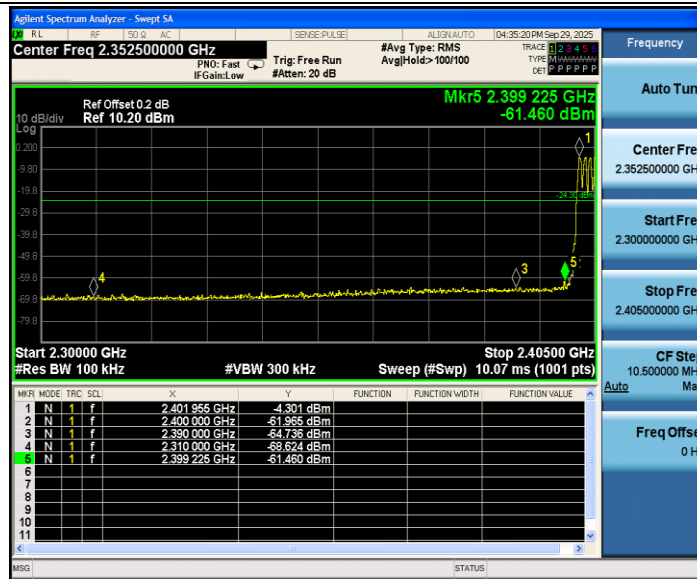
## Appendix G: Band edge measurements

### Test Result

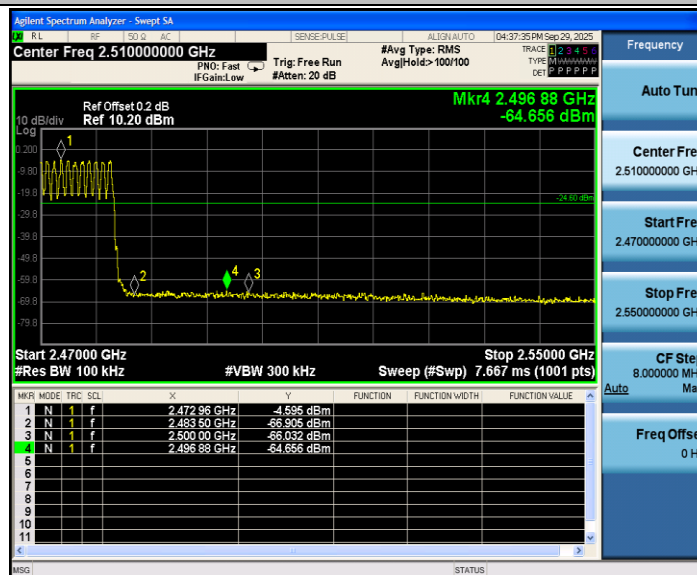
| TestMode | Antenna | ChName | Freq(MHz) | RefLevel<br>[dBm] | Result<br>[dBm] | Limit<br>[dBm] | Verdict |
|----------|---------|--------|-----------|-------------------|-----------------|----------------|---------|
| DH5      | Ant1    | Low    | 2402      | -0.49             | -56.59          | $\leq -20.49$  | PASS    |
|          |         | High   | 2480      | -1.12             | -62.42          | $\leq -21.12$  | PASS    |
|          |         | Low    | Hop_2402  | -4.30             | -61.46          | $\leq -24.3$   | PASS    |
|          |         | High   | Hop_2480  | -4.60             | -64.66          | $\leq -24.6$   | PASS    |
| 2DH5     | Ant1    | Low    | 2402      | -6.01             | -60.29          | $\leq -26.01$  | PASS    |
|          |         | High   | 2480      | -5.30             | -64.1           | $\leq -25.3$   | PASS    |
|          |         | Low    | Hop_2402  | -5.33             | -61.17          | $\leq -25.33$  | PASS    |
|          |         | High   | Hop_2480  | -4.01             | -63.93          | $\leq -24.01$  | PASS    |

Test Graphs

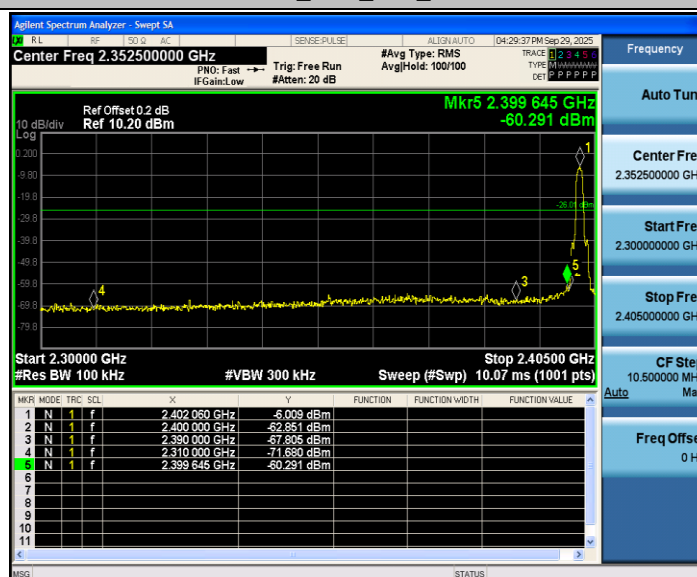




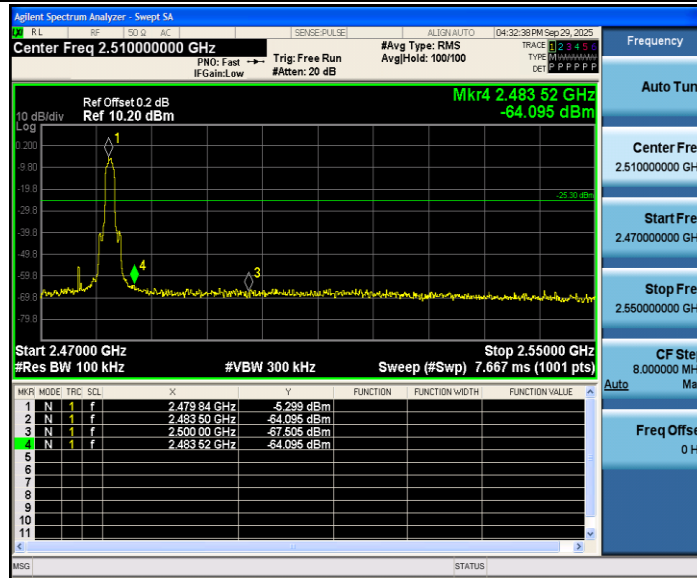
DH5\_Ant1\_High\_Hop\_2480



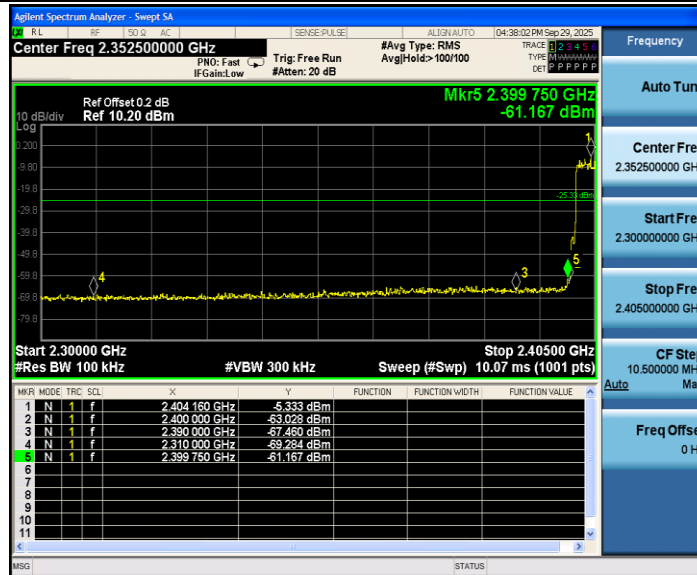
2DH5\_Ant1\_Low\_2402



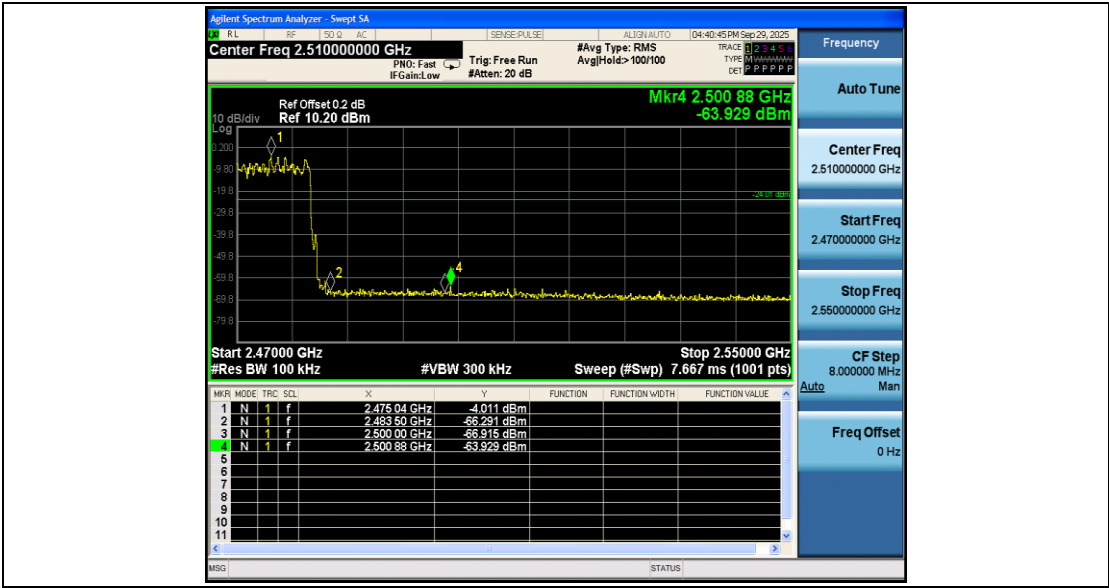
# 2DH5\_Ant1\_High\_2480



# 2DH5\_Ant1\_Low\_Hop\_2402



# 2DH5\_Ant1\_High\_Hop\_2480



## Appendix H: Conducted Spurious Emission

### Test Result

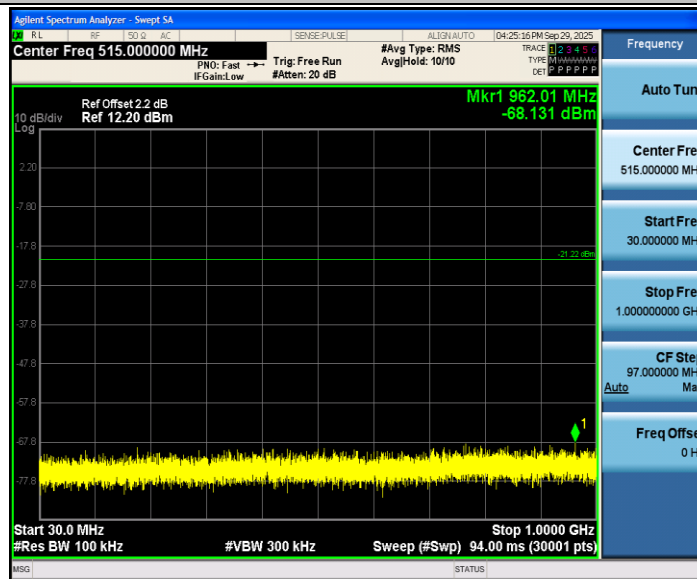
| TestMode | Antenna | Freq(MHz) | FreqRange<br>[MHz] | RefLevel<br>[dBm] | Result<br>[dBm] | Limit<br>[dBm] | Verdict |
|----------|---------|-----------|--------------------|-------------------|-----------------|----------------|---------|
| DH5      | Ant1    | 2402      | Reference          | -1.22             | -1.22           | ---            | PASS    |
|          |         |           | 30~1000            | -1.22             | -68.13          | ≤-21.22        | PASS    |
|          |         |           | 1000~26500         | -1.22             | -44.62          | ≤-21.22        | PASS    |
|          |         | 2441      | Reference          | -1.65             | -1.65           | ---            | PASS    |
|          |         |           | 30~1000            | -1.65             | -68.43          | ≤-21.65        | PASS    |
|          |         |           | 1000~26500         | -1.65             | -42.27          | ≤-21.65        | PASS    |
|          |         | 2480      | Reference          | -1.71             | -1.71           | ---            | PASS    |
|          |         |           | 30~1000            | -1.71             | -67.95          | ≤-21.71        | PASS    |
|          |         |           | 1000~26500         | -1.71             | -45.08          | ≤-21.71        | PASS    |
| 2DH5     | Ant1    | 2402      | Reference          | -5.60             | -5.60           | ---            | PASS    |
|          |         |           | 30~1000            | -5.60             | -67.97          | ≤-25.6         | PASS    |
|          |         |           | 1000~26500         | -5.60             | -49.64          | ≤-25.6         | PASS    |
|          |         | 2441      | Reference          | -5.93             | -5.93           | ---            | PASS    |
|          |         |           | 30~1000            | -5.93             | -68.68          | ≤-25.93        | PASS    |
|          |         |           | 1000~26500         | -5.93             | -50.18          | ≤-25.93        | PASS    |
|          |         | 2480      | Reference          | -5.35             | -5.35           | ---            | PASS    |
|          |         |           | 30~1000            | -5.35             | -68.4           | ≤-25.35        | PASS    |
|          |         |           | 1000~26500         | -5.35             | -50.62          | ≤-25.35        | PASS    |

## Test Graphs

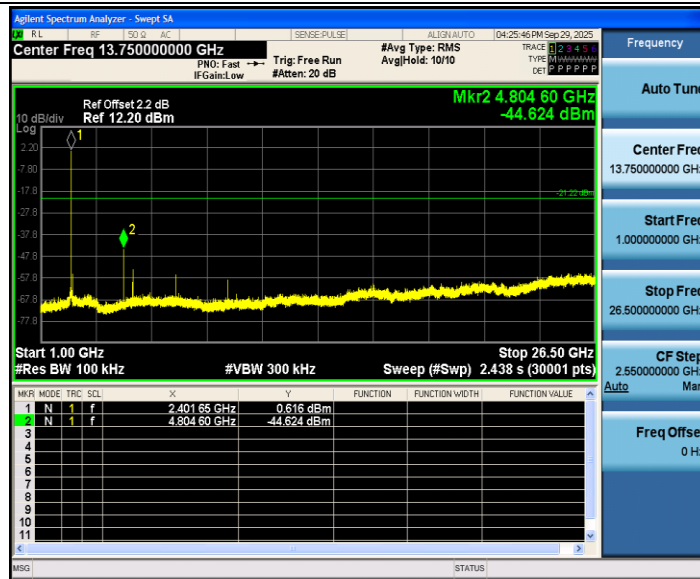
DH5\_Ant1\_2402\_0~Reference



DH5\_Ant1\_2402\_30~1000



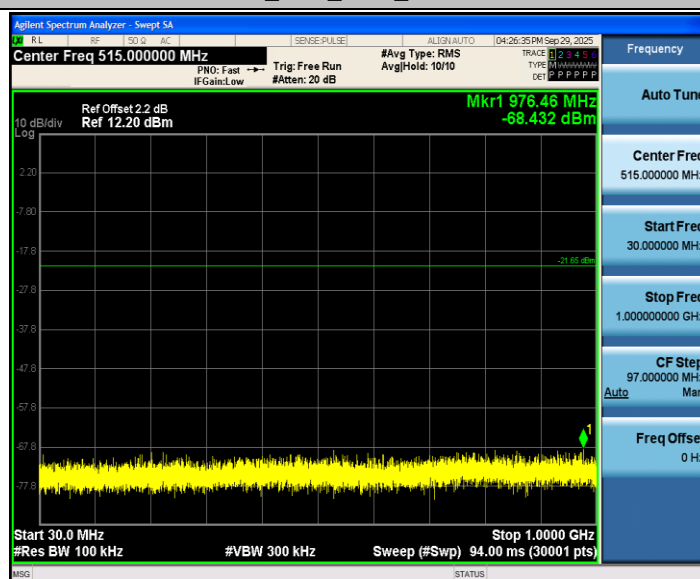
DH5\_Ant1\_2402\_1000~26500



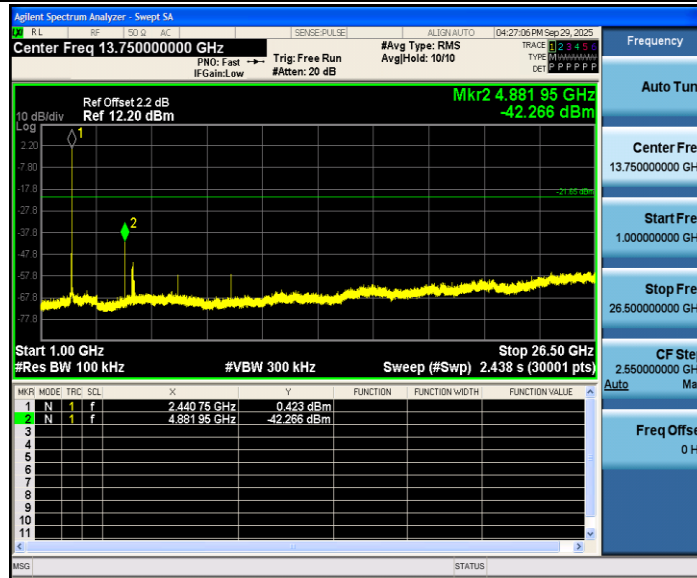
DH5\_Ant1\_2441\_0~Reference



DH5\_Ant1\_2441\_30~1000



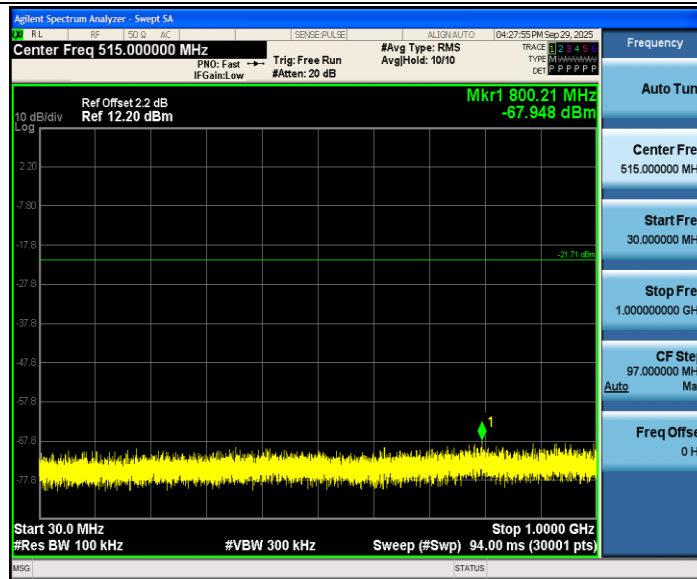
# DH5\_Ant1\_2441\_1000~26500



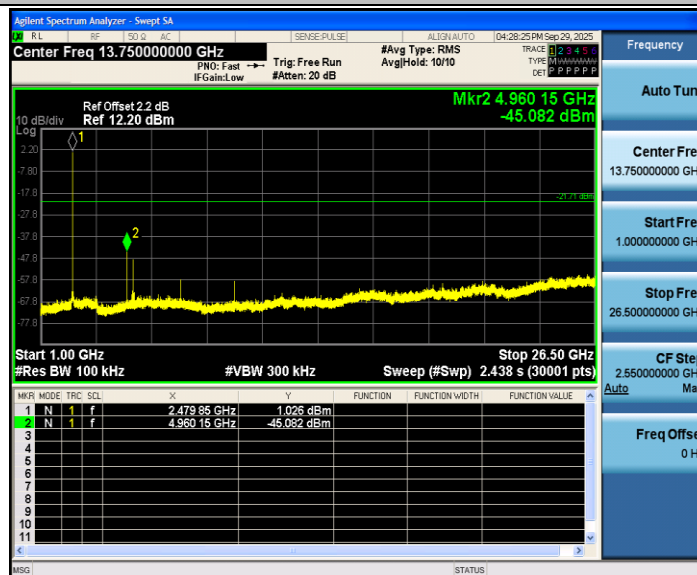
# DH5\_Ant1\_2480\_0~Reference



# DH5\_Ant1\_2480\_30~1000



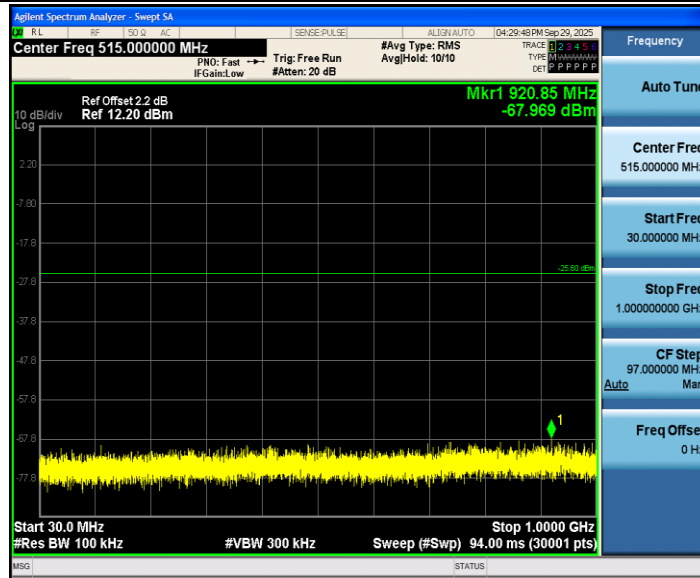
DH5\_Ant1\_2480\_1000~26500



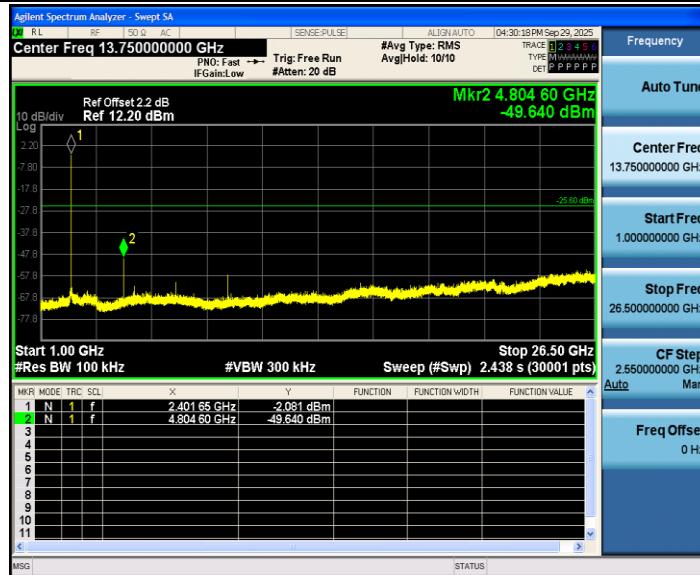
2DH5\_Ant1\_2402\_0~Reference



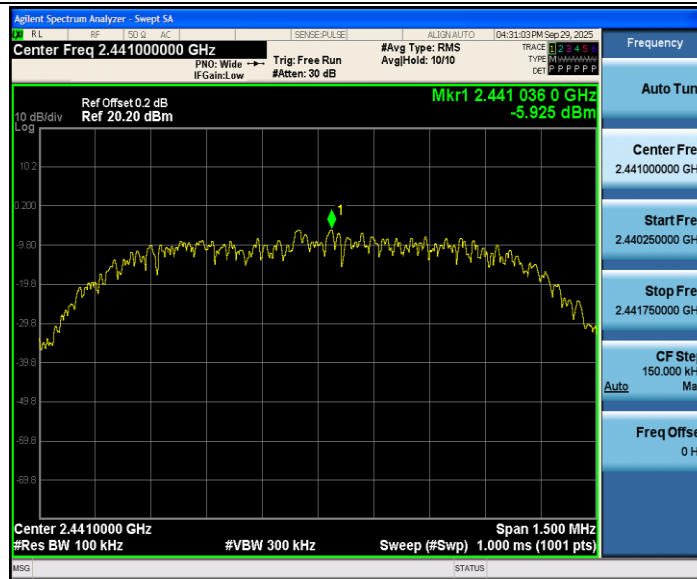
# 2DH5\_Ant1\_2402\_30~1000



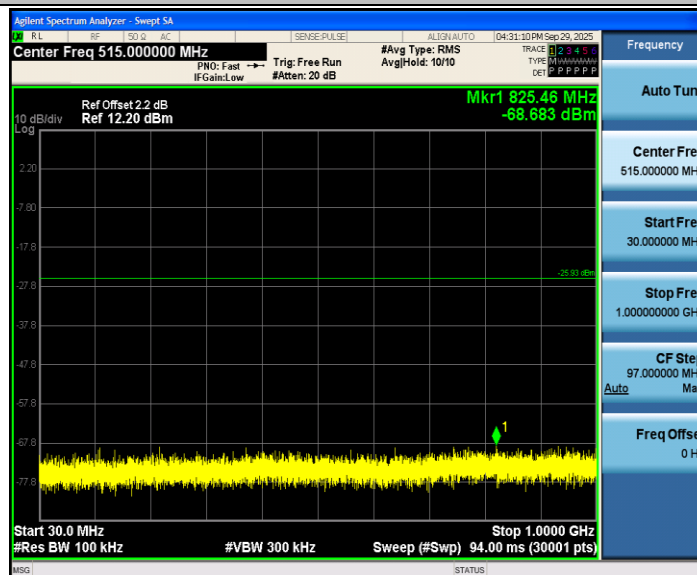
# 2DH5\_Ant1\_2402\_1000~26500



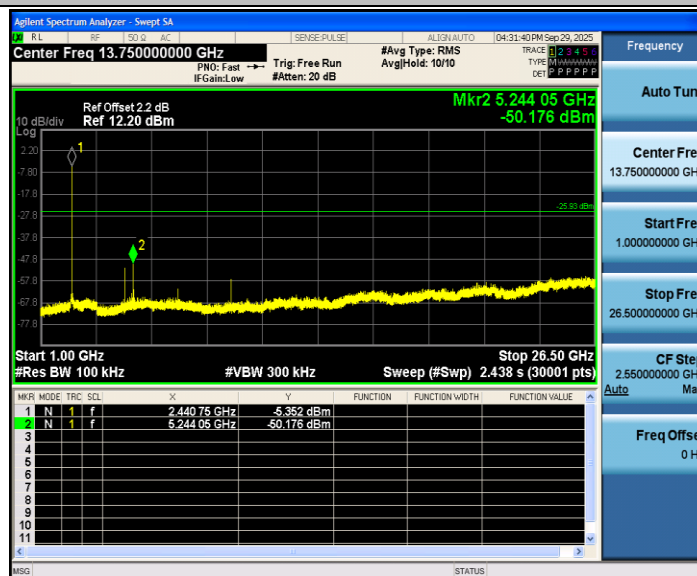
# 2DH5\_Ant1\_2441\_0~Reference



2DH5\_Ant1\_2441\_30~1000



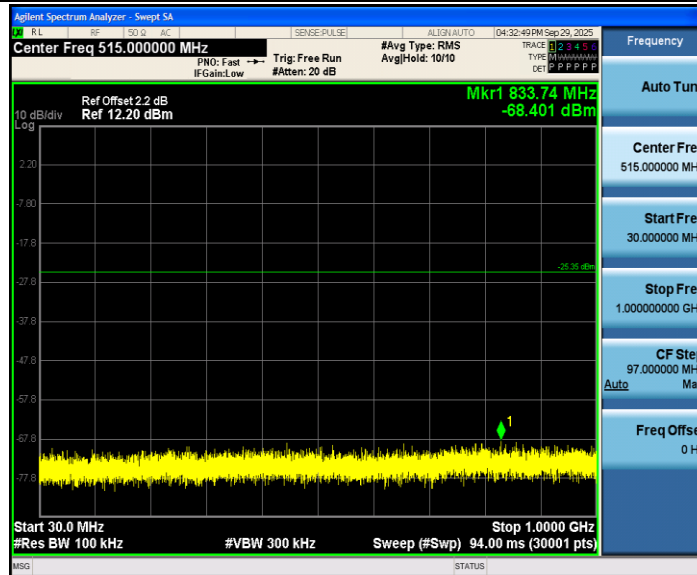
2DH5\_Ant1\_2441\_1000~26500



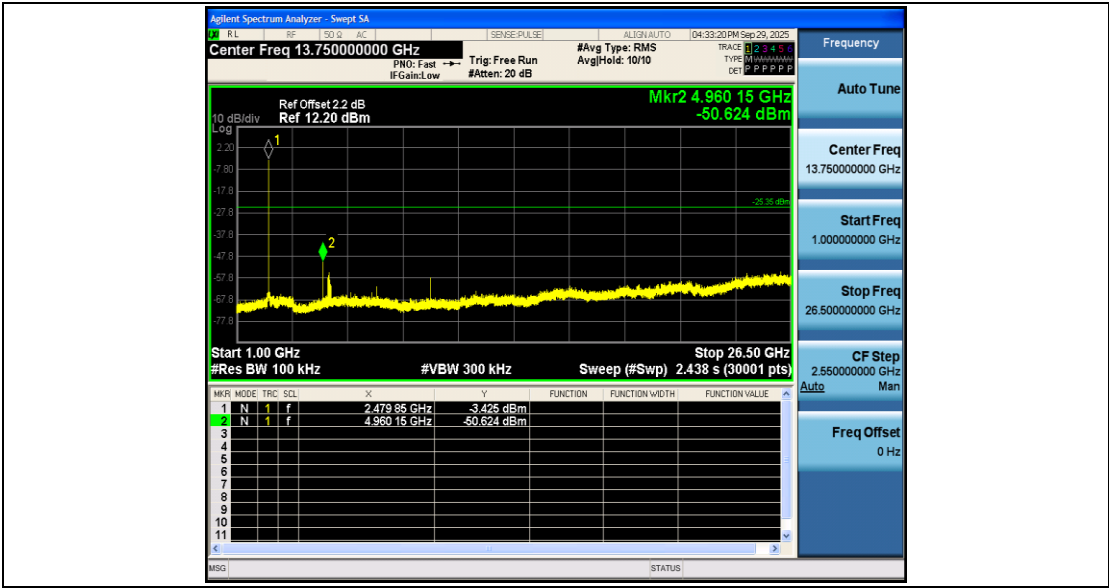
# 2DH5\_Ant1\_2480\_0~Reference



# 2DH5\_Ant1\_2480\_30~1000



# 2DH5\_Ant1\_2480\_1000~26500

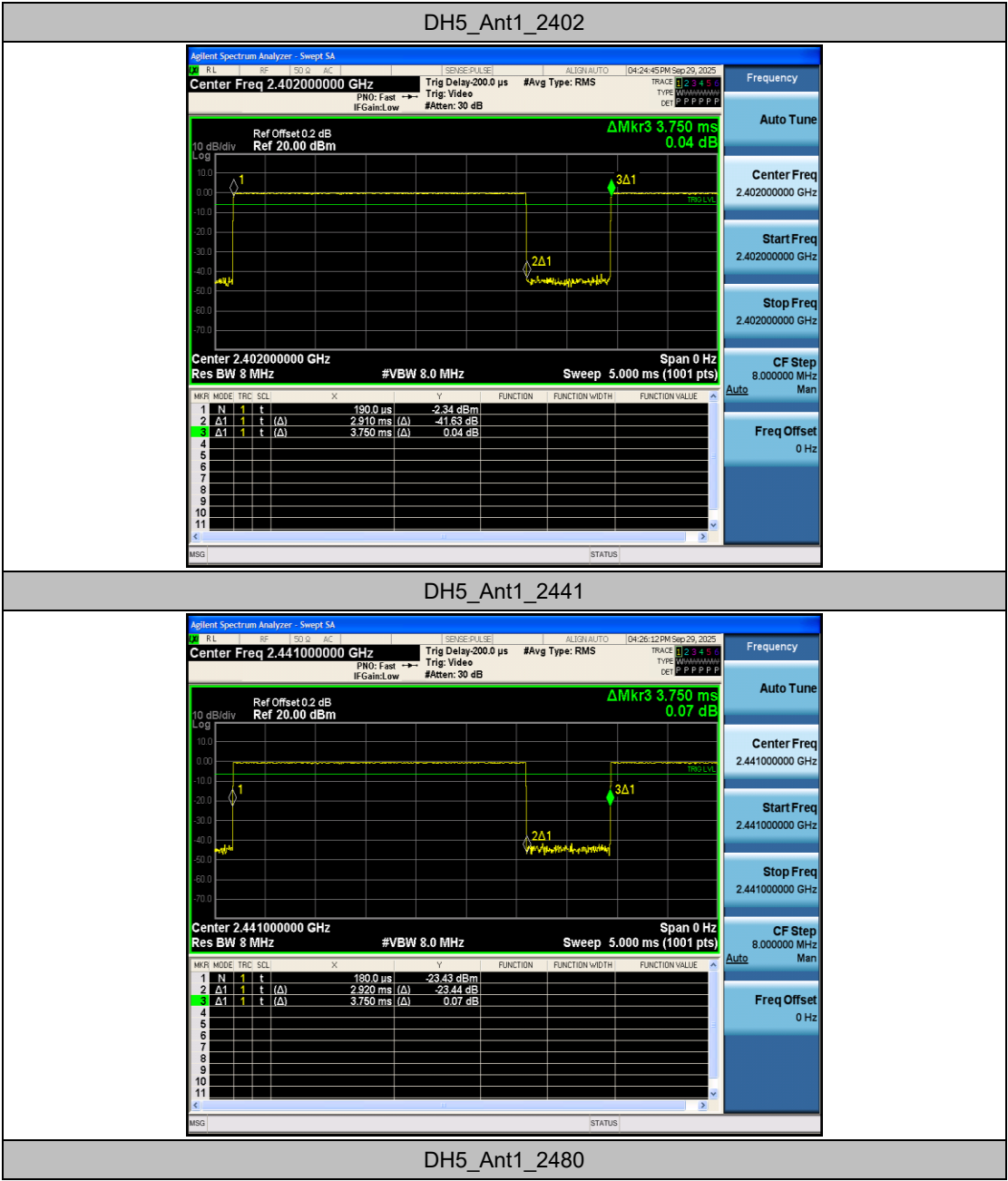


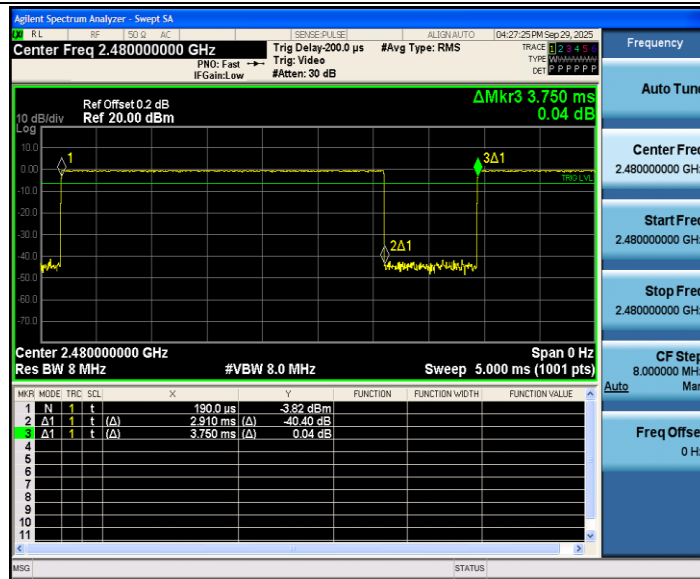
## Appendix I: Duty Cycle

### Test Result

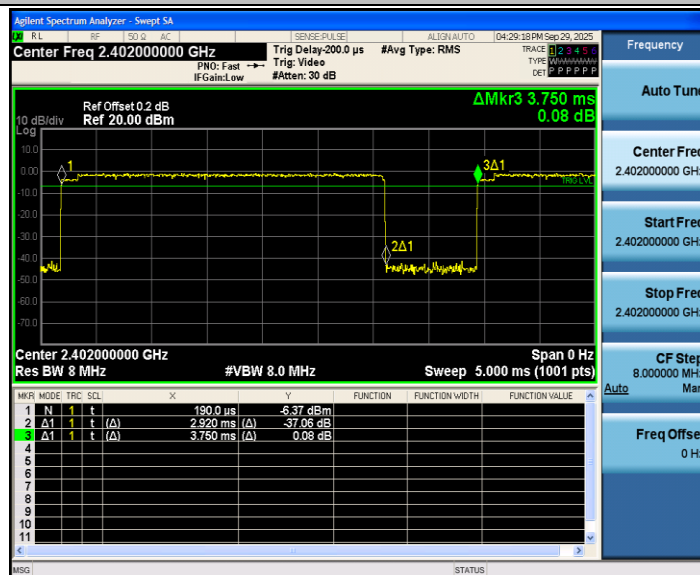
| TestMode | Antenna | Freq(MHz) | ON Time<br>[ms] | Period<br>[ms] | DC<br>[%] | xFactor | Limit | Verdict |
|----------|---------|-----------|-----------------|----------------|-----------|---------|-------|---------|
| DH5      | Ant1    | 2402      | 2.91            | 3.75           | 77.60     |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

Test Graphs

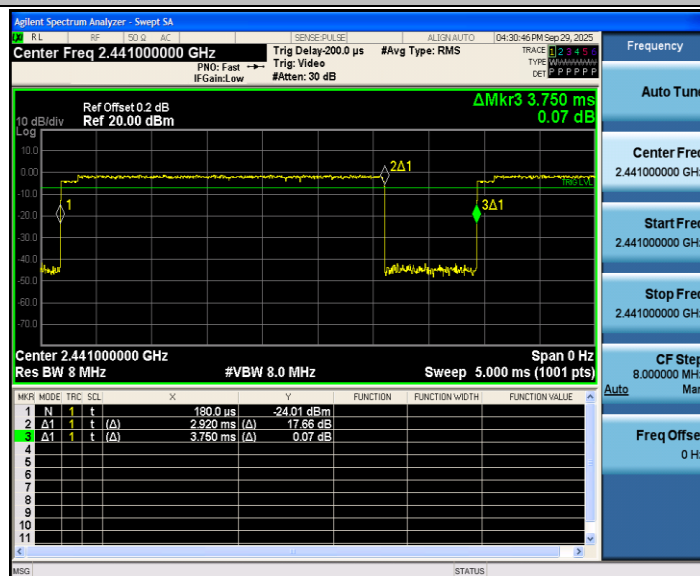




2DH5\_Ant1\_2402



2DH5\_Ant1\_2441



# 2DH5\_Ant1\_2480

