

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

**FCC ID** : 2AZVL-S400-MAIN

**Company** : Shenzhen Saiyinwei Electronic Co.,Ltd

**EUT** : Sofa sound system

**Model Number** : S400-main

**Report No.** : CTA26030400601

**Reviewed By** : Eric Wang

## Appendix A: 20dB Emission Bandwidth

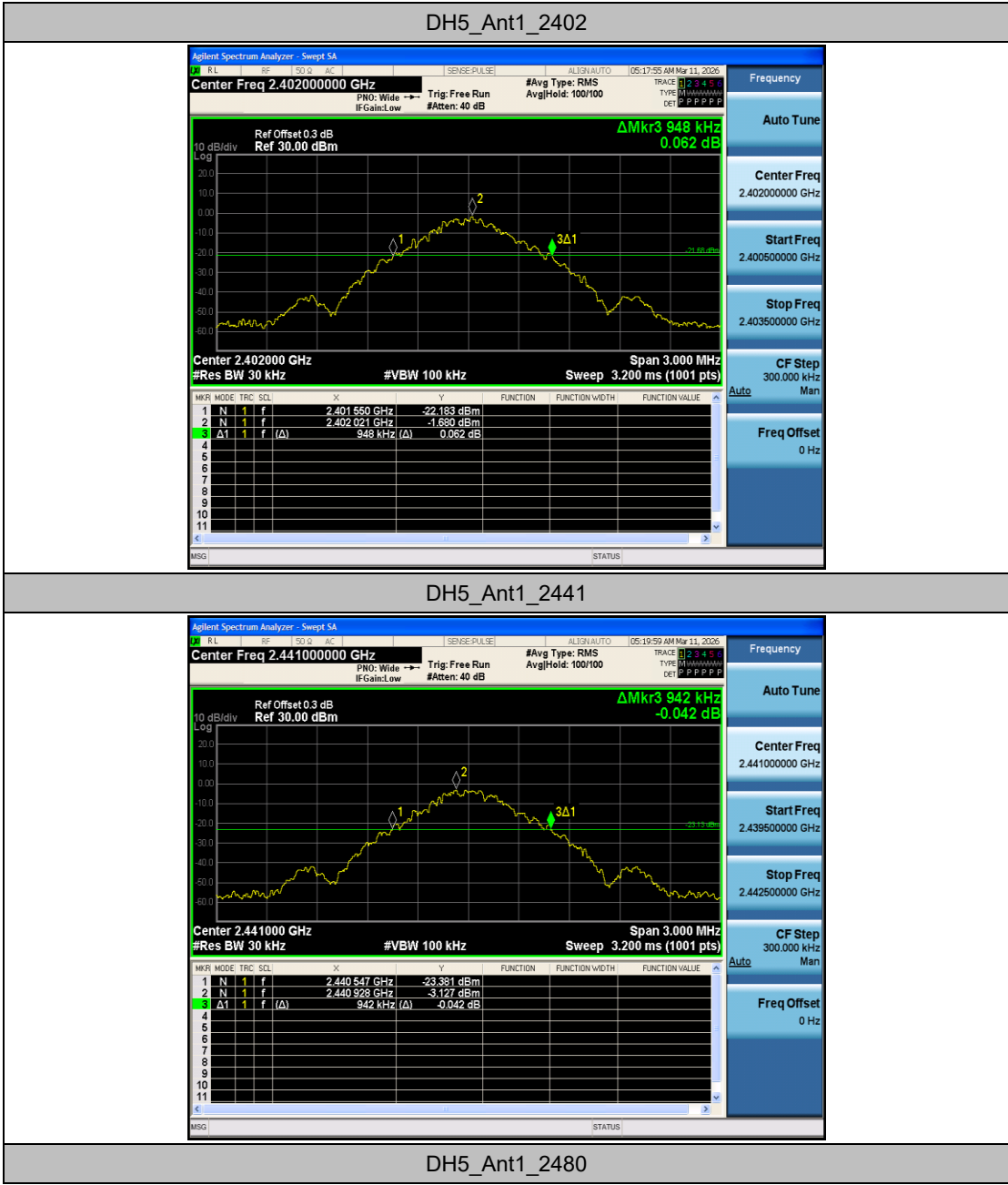
### Test Result

| 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      | 0.942            | 2440.547 | 2441.489 | ---        | ---     |
|          |         | 2480      | 0.957            | 2479.541 | 2480.498 | ---        | ---     |
| 2DH5     | Ant1    | 2402      | 1.308            | 2401.358 | 2402.666 | ---        | ---     |
|          |         | 2441      | 1.317            | 2440.352 | 2441.669 | ---        | ---     |
|          |         | 2480      | 1.287            | 2479.379 | 2480.666 | ---        | ---     |

## Test Result

| TestMode | Antenna | Freq(MHz) | OCB [MHz] | FL[MHz]   | FH[MHz]   | Limit[MHz] | Verdict |
|----------|---------|-----------|-----------|-----------|-----------|------------|---------|
| DH5      | Ant1    | 2402      | 0.86565   | 2401.5788 | 2402.4445 | ---        | ---     |
|          |         | 2441      | 0.86855   | 2440.5737 | 2441.4423 | ---        | ---     |
|          |         | 2480      | 0.86405   | 2479.5807 | 2480.4448 | ---        | ---     |
| 2DH5     | Ant1    | 2402      | 1.1958    | 2401.4119 | 2402.6077 | ---        | ---     |
|          |         | 2441      | 1.1855    | 2440.4179 | 2441.6034 | ---        | ---     |
|          |         | 2480      | 1.1982    | 2479.4129 | 2480.6111 | ---        | ---     |

Test Graphs





2DH5\_Ant1\_2402



2DH5\_Ant1\_2441

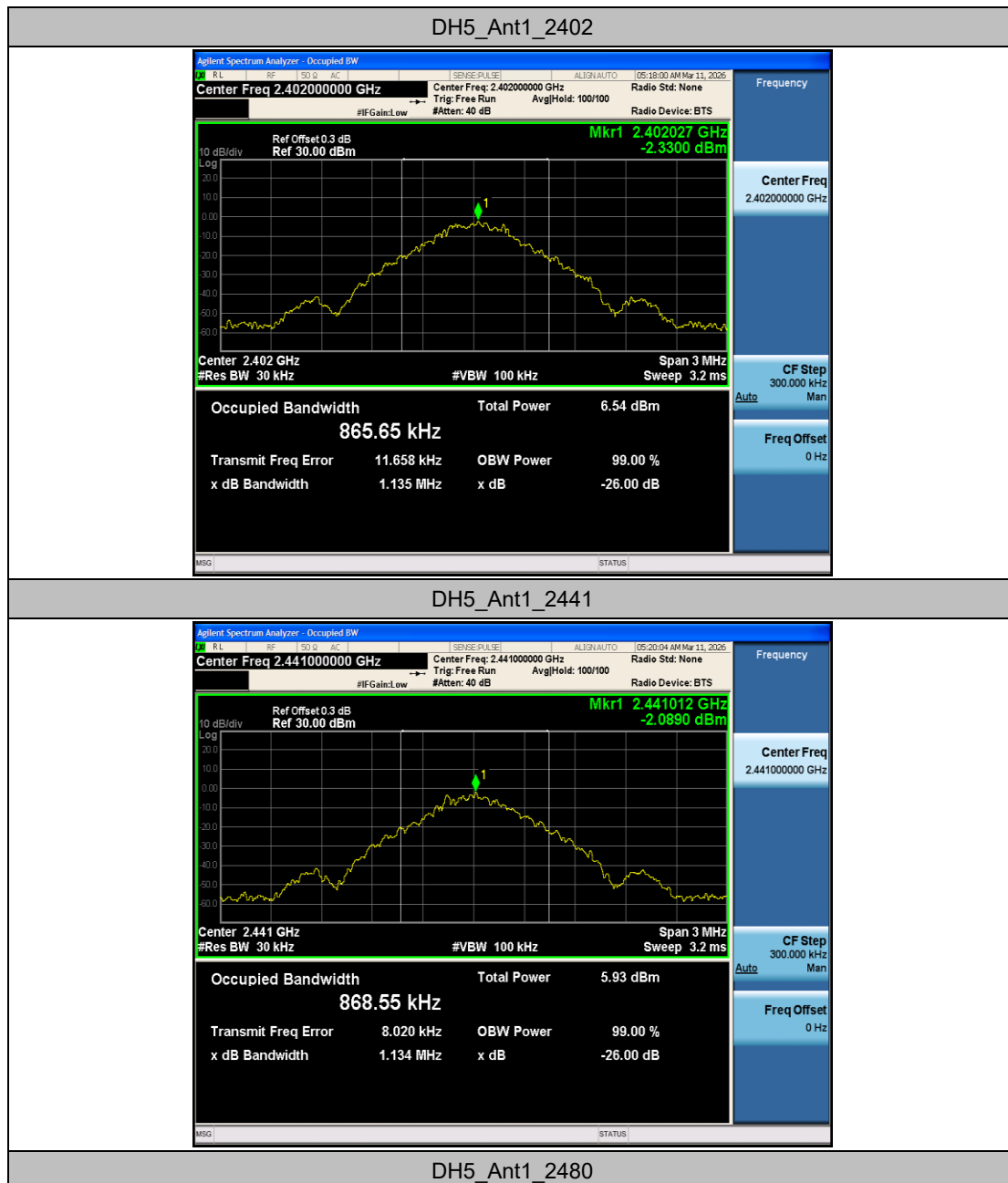


# 2DH5\_Ant1\_2480



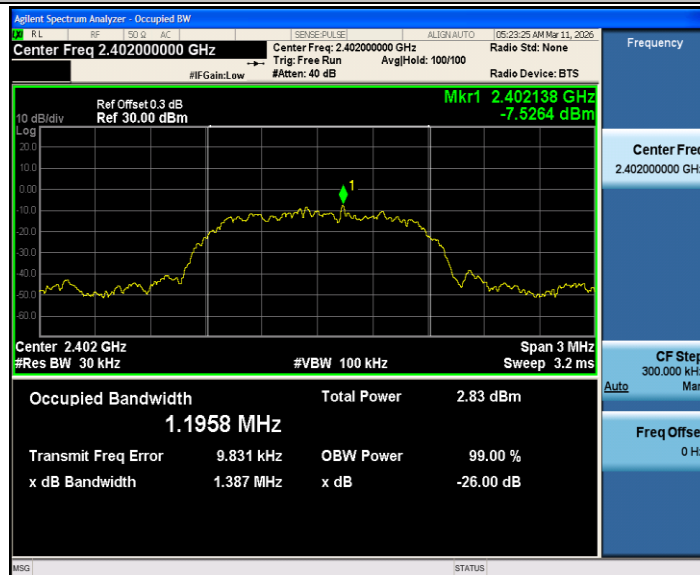
## Appendix B: Occupied Channel Bandwidth

### Test Graphs

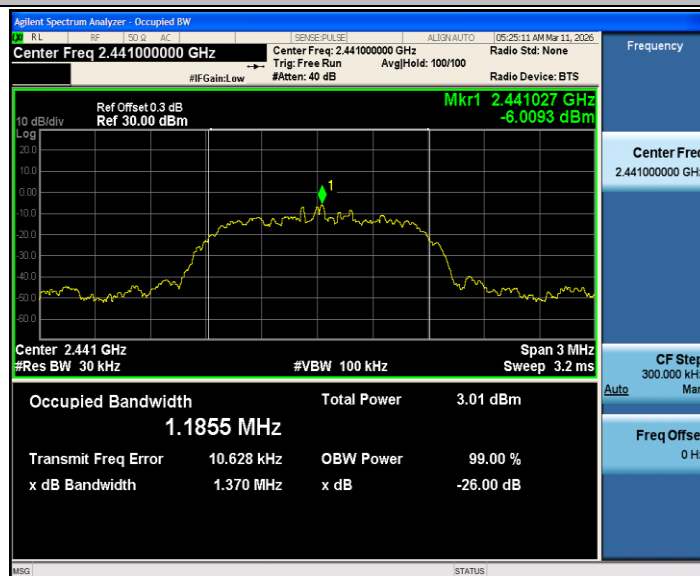




2DH5\_Ant1\_2402



2DH5\_Ant1\_2441



## 2DH5\_Ant1\_2480



## Appendix C: Maximum conducted output power

### Test Result Peak

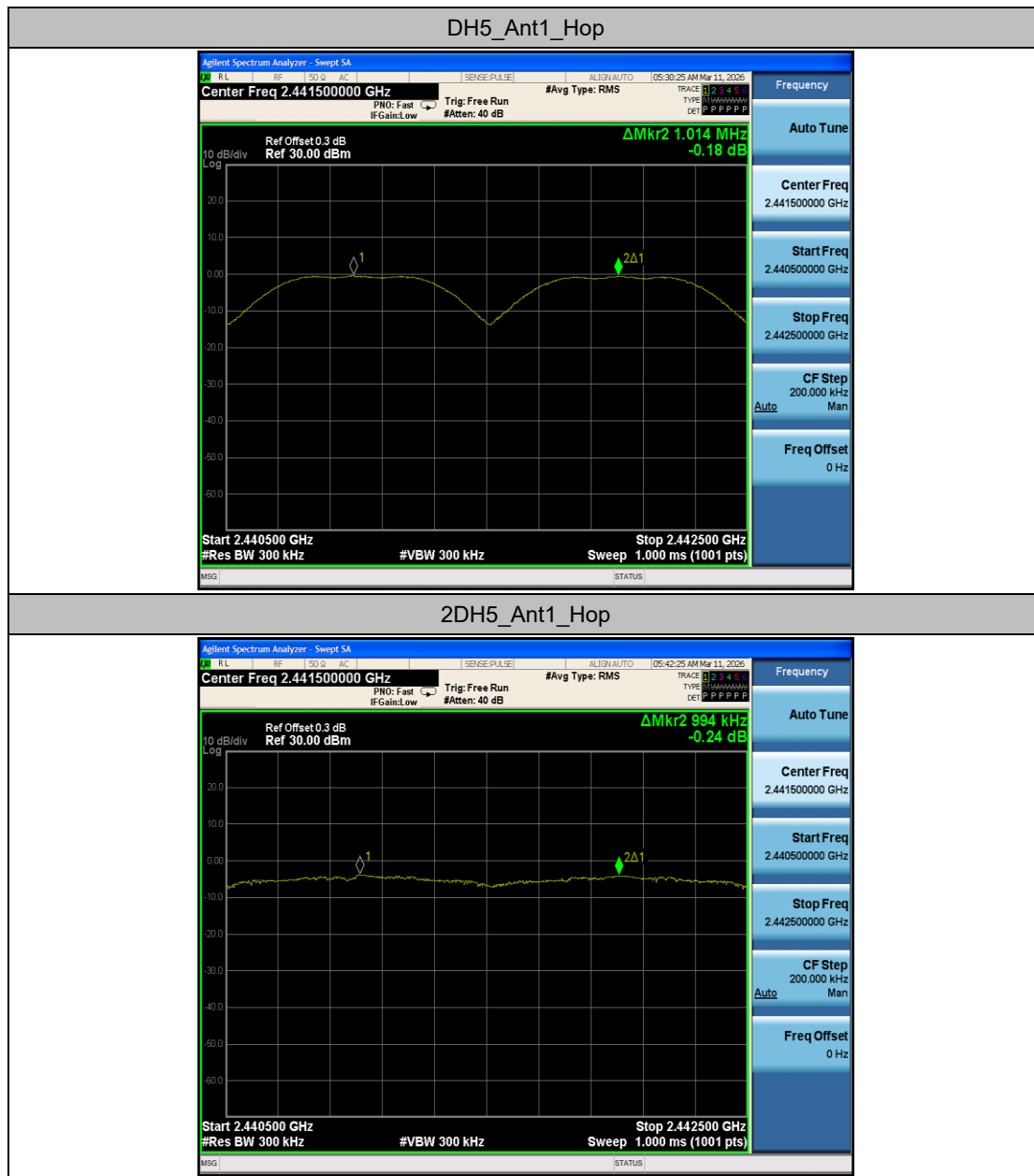
| Test Mode | Antenna | Freq(MHz) | Conducted Peak Power[dBm] | Conducted Limit[dBm] | Verdict |
|-----------|---------|-----------|---------------------------|----------------------|---------|
| DH5       | Ant1    | 2402      | 0.10                      | ≤20.97               | PASS    |
|           |         | 2441      | -0.29                     | ≤20.97               | PASS    |
|           |         | 2480      | -0.40                     | ≤20.97               | PASS    |
| 2DH5      | Ant1    | 2402      | -0.80                     | ≤20.97               | PASS    |
|           |         | 2441      | -1.19                     | ≤20.97               | PASS    |
|           |         | 2480      | -1.22                     | ≤20.97               | PASS    |

## Appendix D: Carrier frequency separation

### Test Result

| TestMode | Antenna | Freq(MHz) | Result[MHz] | Limit[MHz]   | Verdict |
|----------|---------|-----------|-------------|--------------|---------|
| DH5      | Ant1    | Hop       | 1.014       | $\geq 0.957$ | PASS    |
| 2DH5     | Ant1    | Hop       | 0.994       | $\geq 0.878$ | PASS    |

## Test Graphs

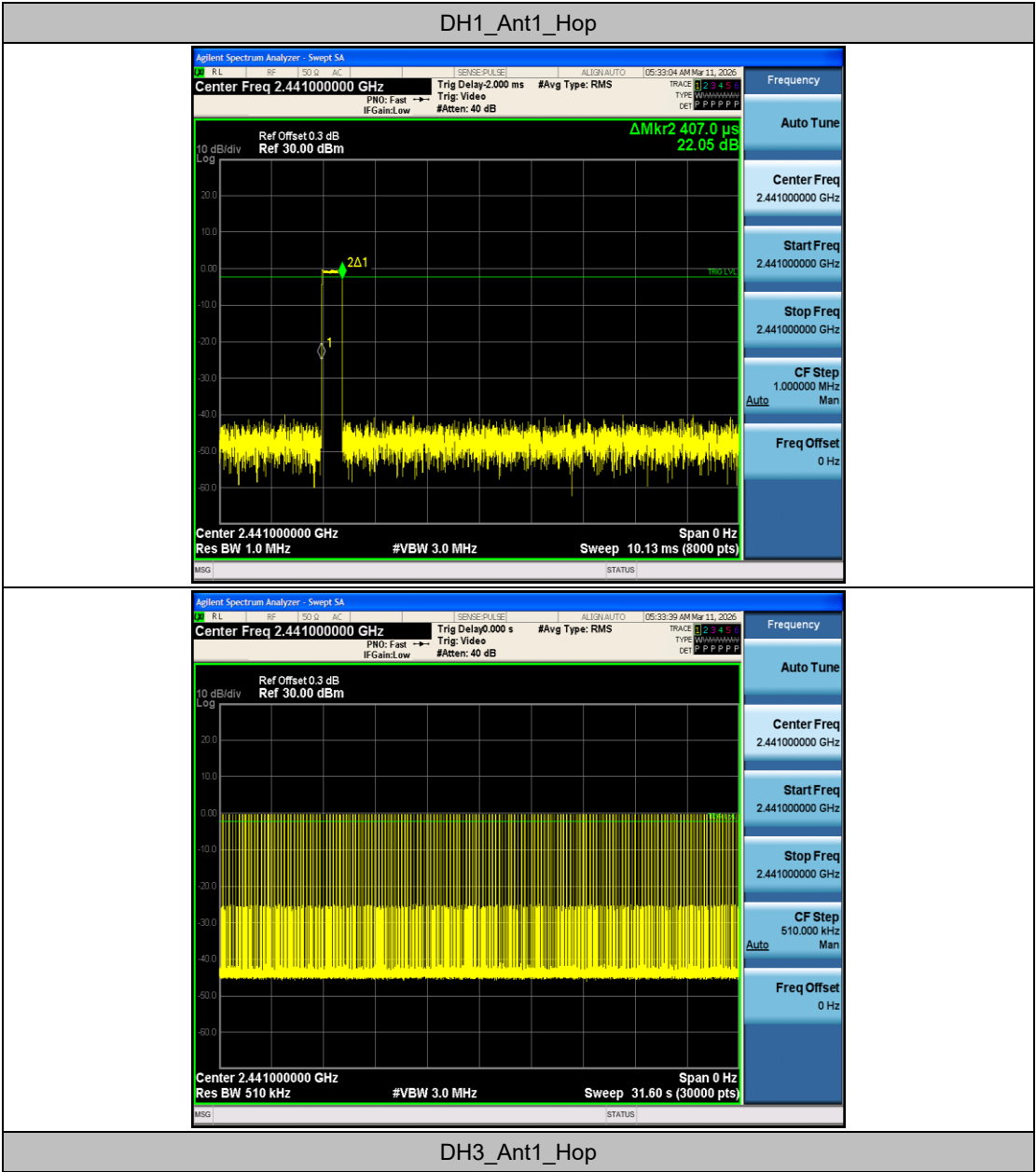


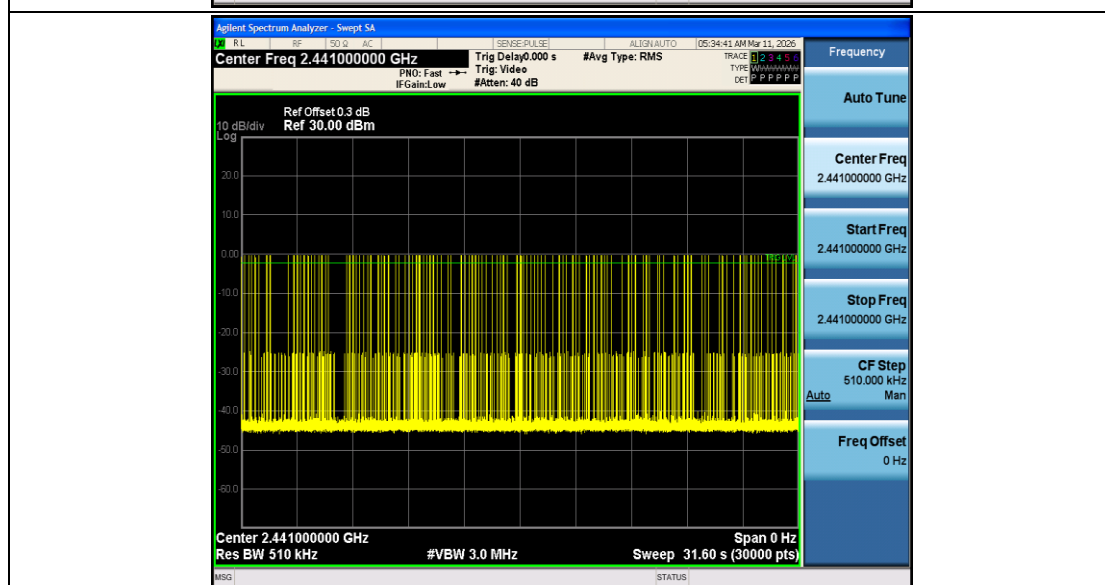
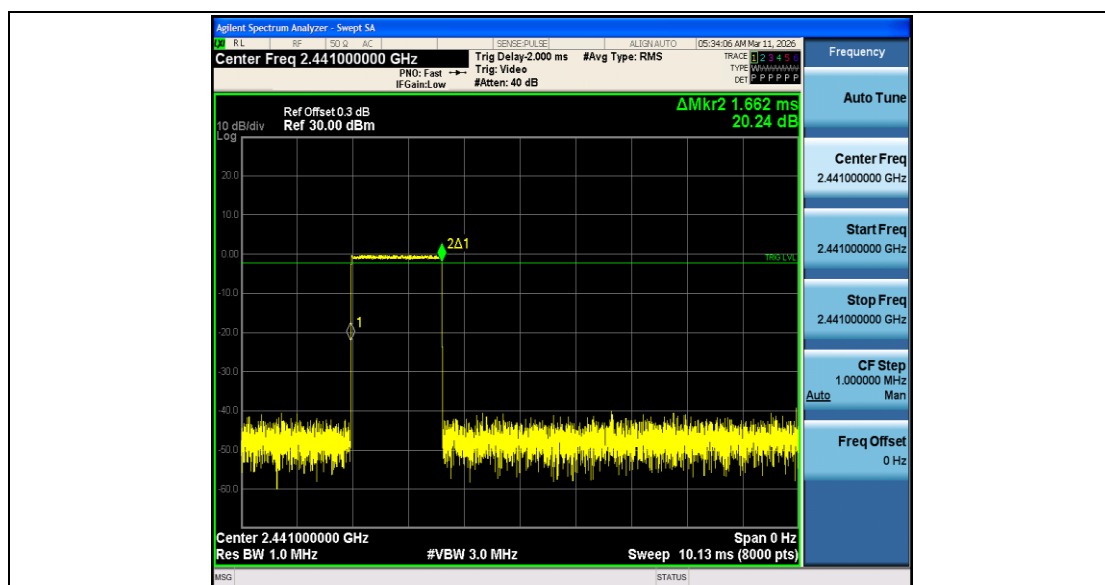
## Appendix E: Time of occupancy

### Test Result

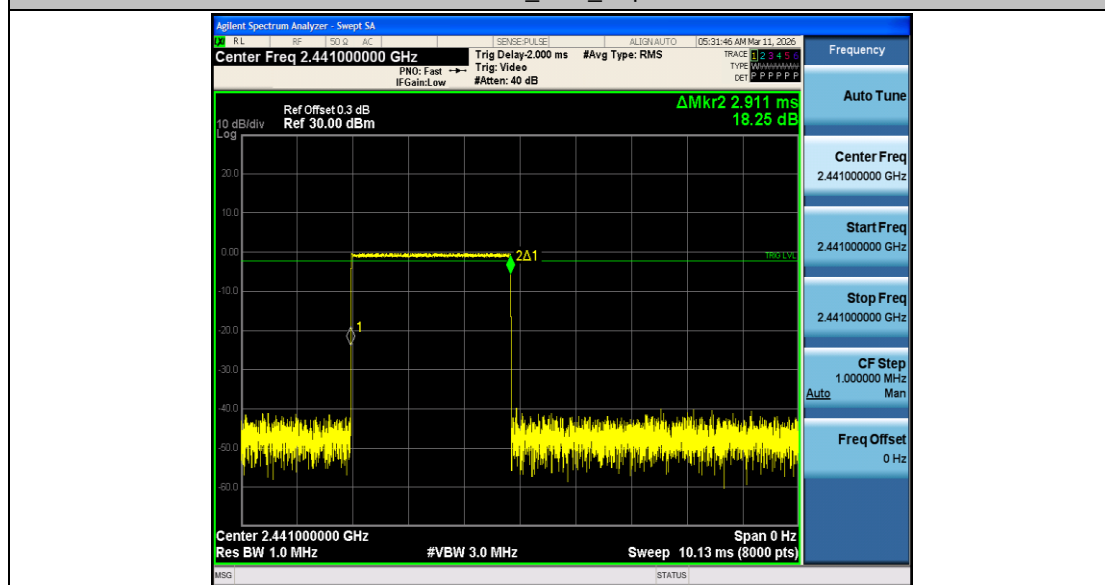
| TestMode | Antenna | Freq(MHz) | BurstWidth<br>[ms] | TotalHops<br>[Num] | Result[s] | Limit[s] | Verdict |
|----------|---------|-----------|--------------------|--------------------|-----------|----------|---------|
| DH1      | Ant1    | Hop       | 0.407              | 311                | 0.127     | ≤0.4     | PASS    |
| DH3      | Ant1    | Hop       | 1.662              | 159                | 0.264     | ≤0.4     | PASS    |
| DH5      | Ant1    | Hop       | 2.911              | 104                | 0.303     | ≤0.4     | PASS    |
| 2DH1     | Ant1    | Hop       | 0.415              | 317                | 0.132     | ≤0.4     | PASS    |
| 2DH3     | Ant1    | Hop       | 1.668              | 162                | 0.27      | ≤0.4     | PASS    |
| 2DH5     | Ant1    | Hop       | 2.916              | 110                | 0.321     | ≤0.4     | PASS    |

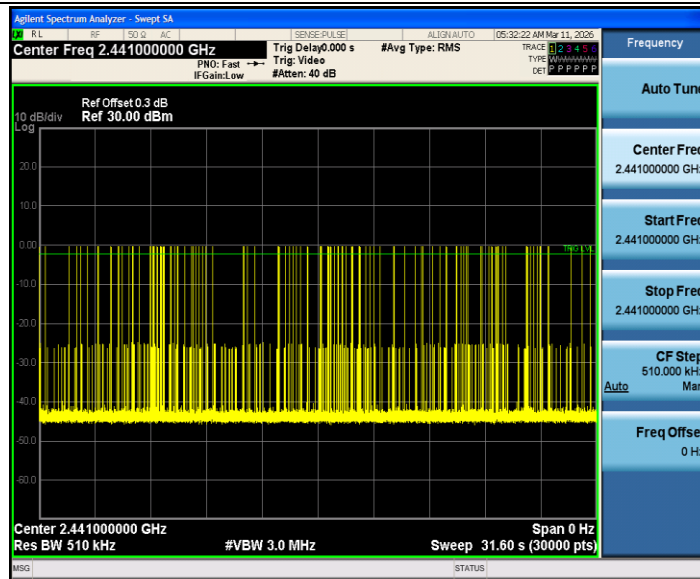
Test Graphs



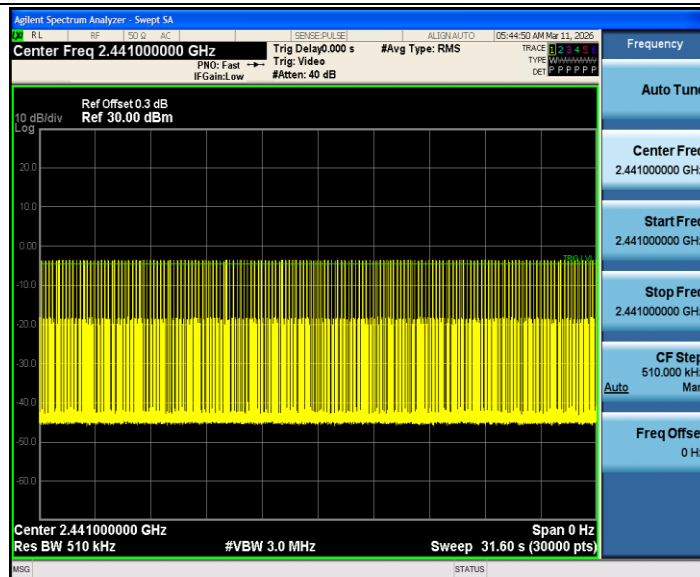
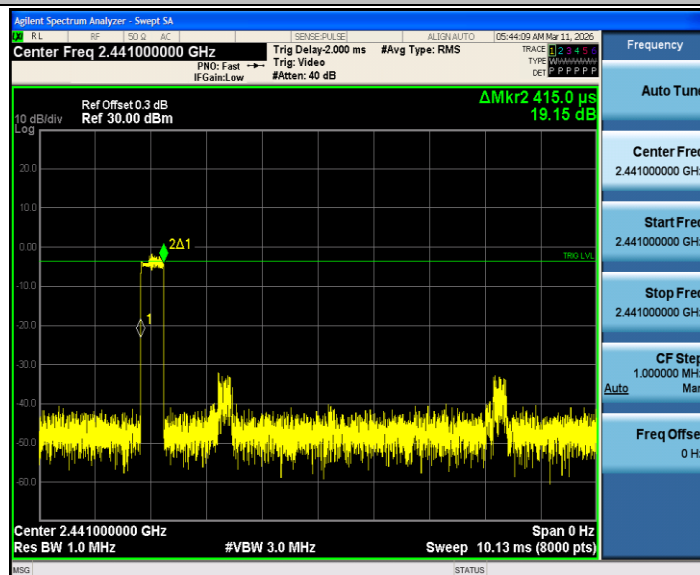


DH5\_Ant1\_Hop

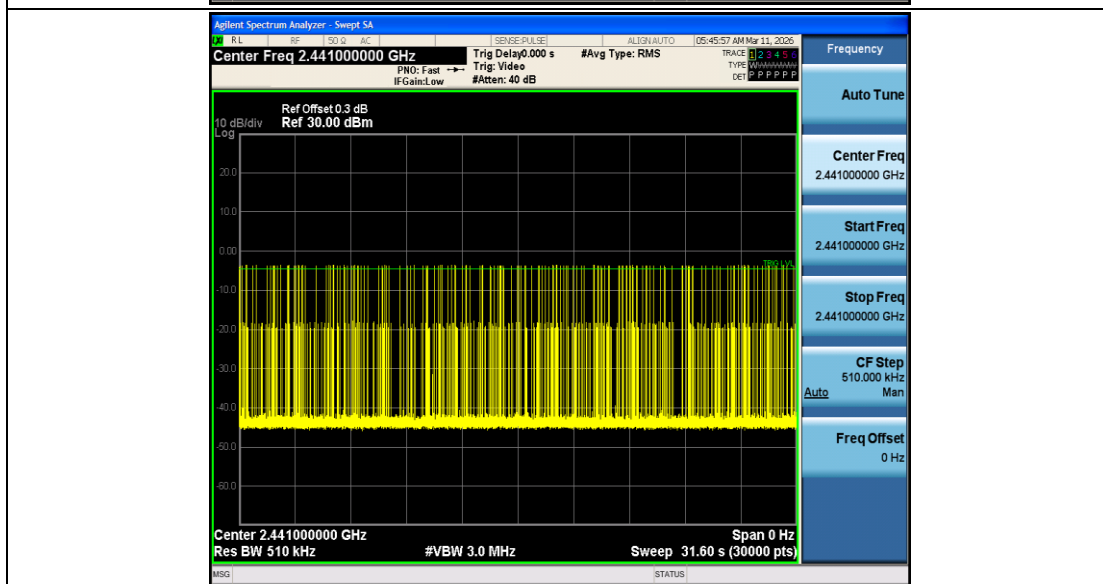
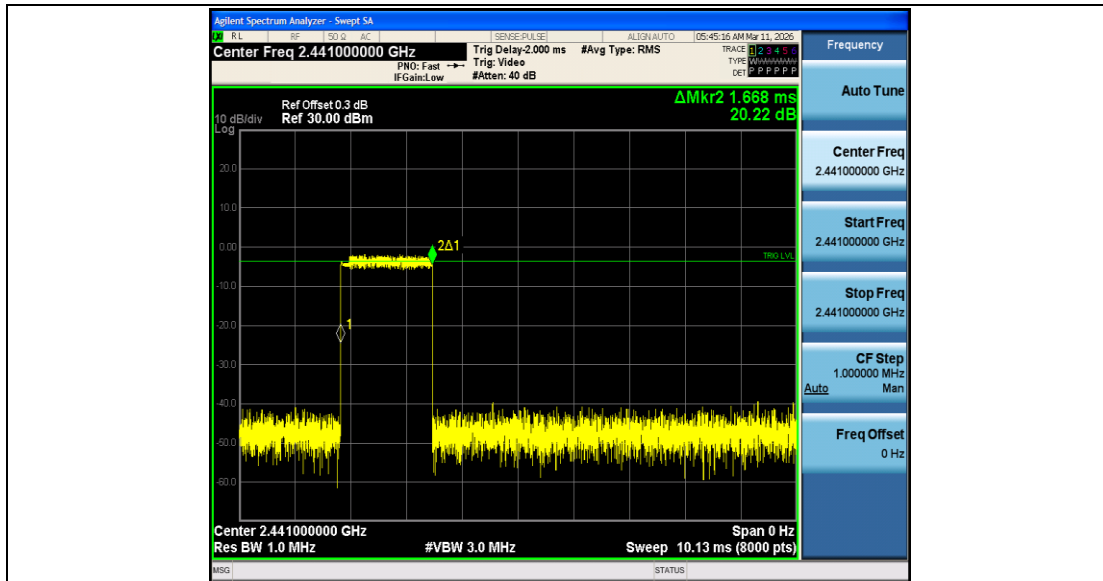




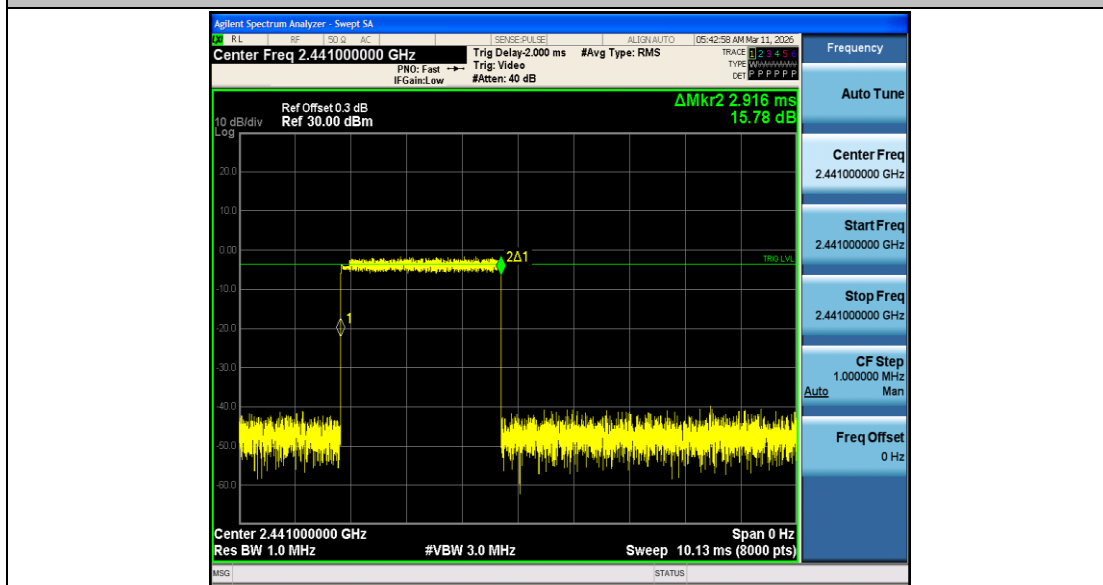
2DH1\_Ant1\_Hop

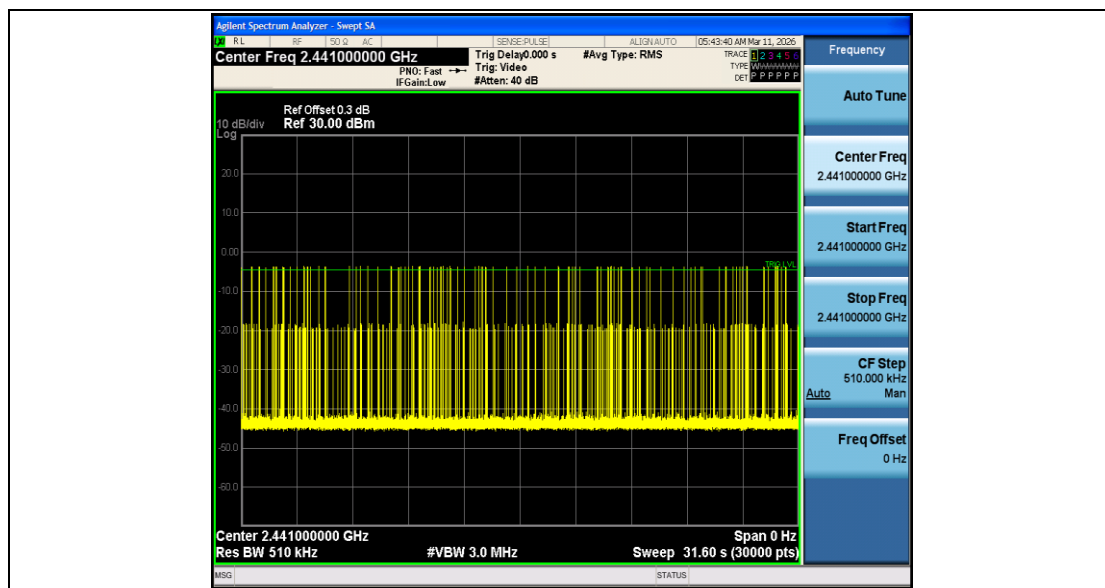


2DH3\_Ant1\_Hop



2DH5\_Ant1\_Hop



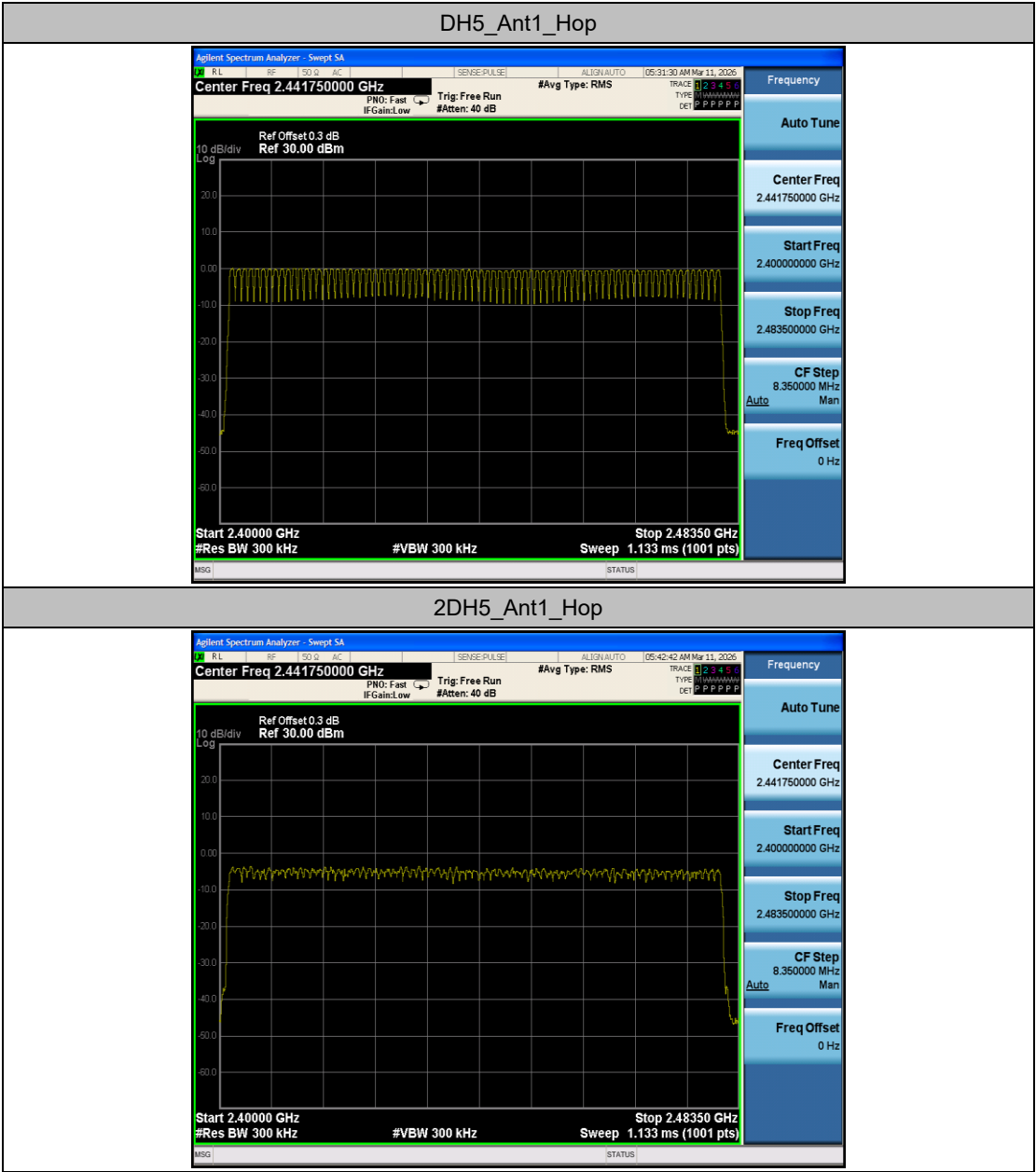


## Appendix F: Number of hopping channels

### 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

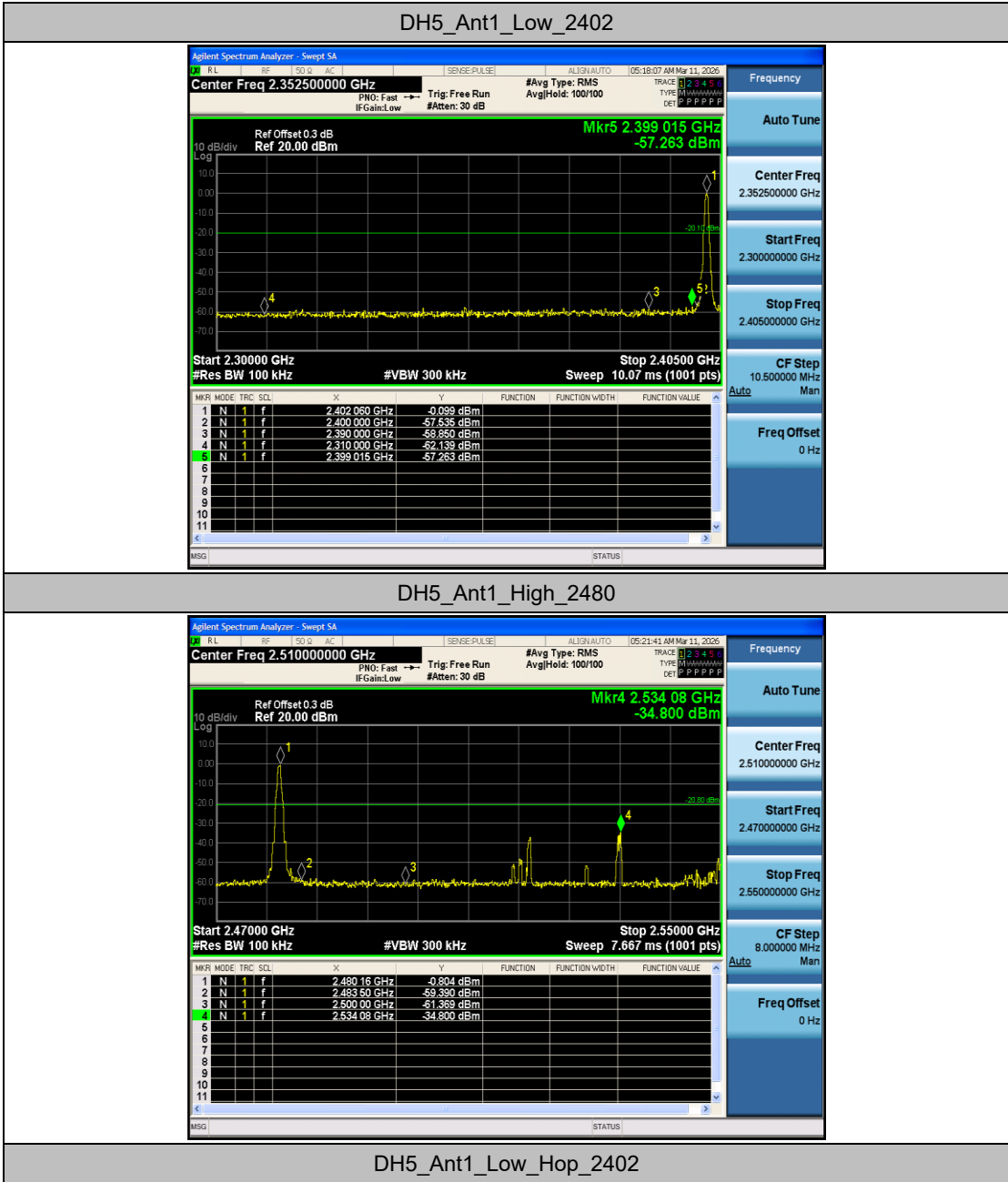


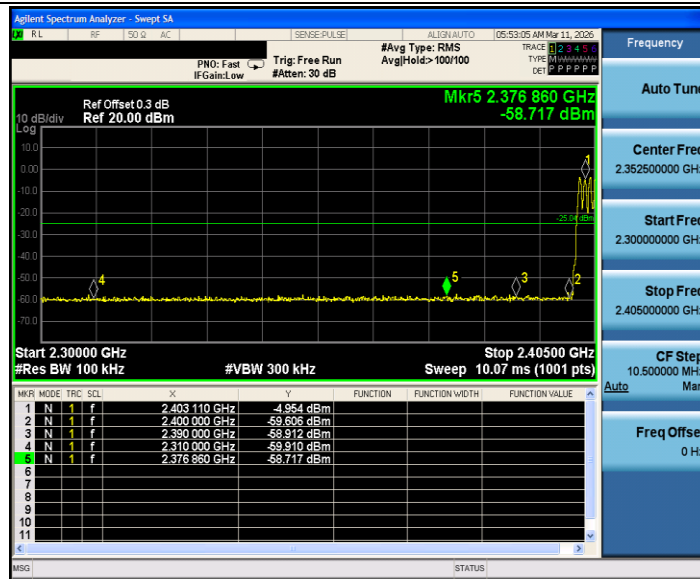
## Appendix G: Band edge measurements

### Test Result

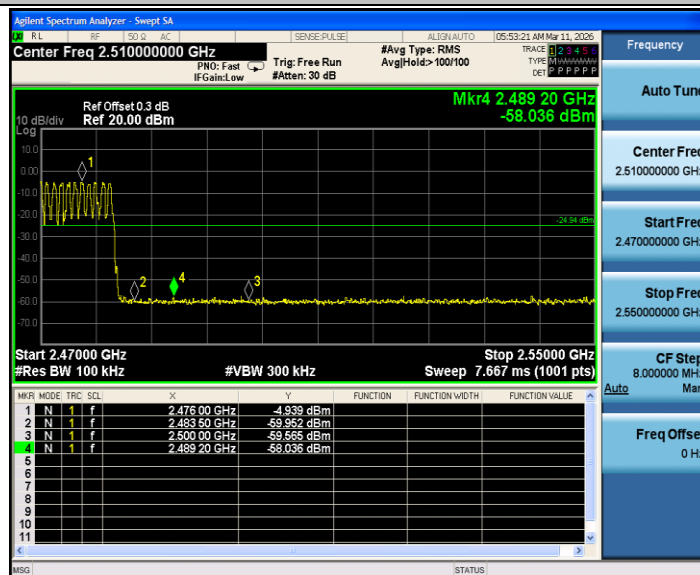
| TestMode | Antenna | ChName | Freq(MHz) | RefLevel<br>[dBm] | Result<br>[dBm] | Limit<br>[dBm] | Verdict |
|----------|---------|--------|-----------|-------------------|-----------------|----------------|---------|
| DH5      | Ant1    | Low    | 2402      | -0.10             | -57.26          | $\leq -20.1$   | PASS    |
|          |         | High   | 2480      | -0.80             | -34.8           | $\leq -20.8$   | PASS    |
|          |         | Low    | Hop_2402  | -5.04             | -58.72          | $\leq -25.04$  | PASS    |
|          |         | High   | Hop_2480  | -4.94             | -58.04          | $\leq -24.94$  | PASS    |
| 2DH5     | Ant1    | Low    | 2402      | -4.04             | -57.11          | $\leq -24.04$  | PASS    |
|          |         | High   | 2480      | -4.47             | -57.69          | $\leq -24.47$  | PASS    |
|          |         | Low    | Hop_2402  | -3.64             | -57.6           | $\leq -23.64$  | PASS    |
|          |         | High   | Hop_2480  | -5.22             | -57.28          | $\leq -25.22$  | PASS    |

Test Graphs

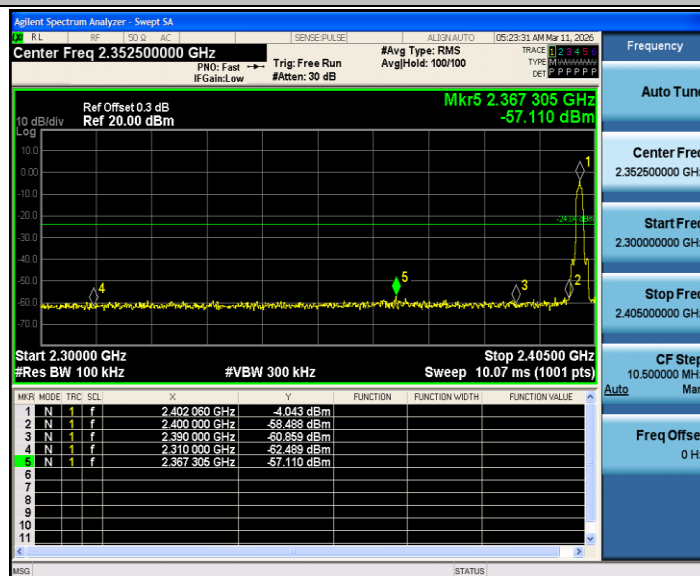




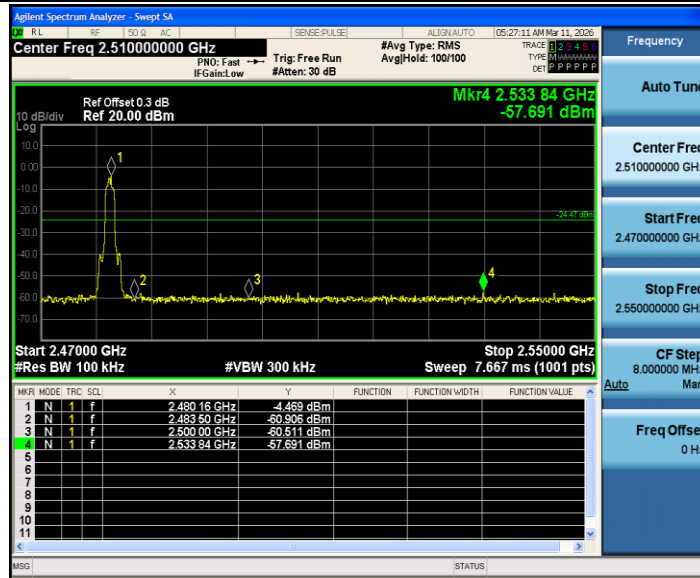
DH5\_Ant1\_High\_Hop\_2480



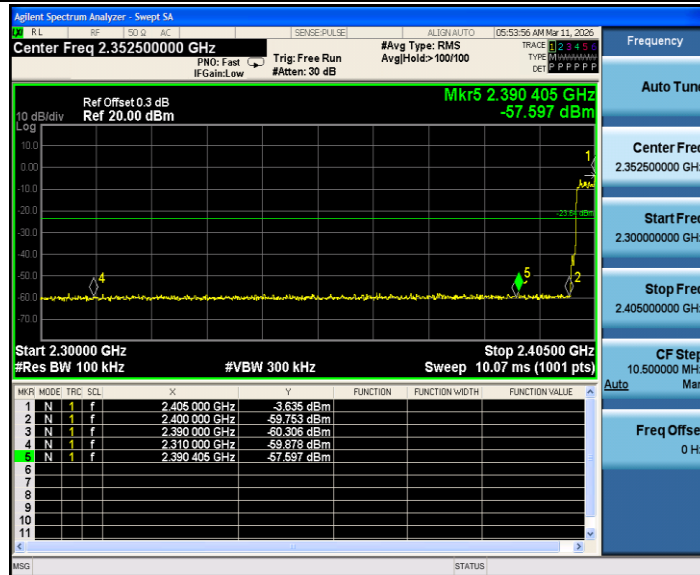
2DH5\_Ant1\_Low\_2402



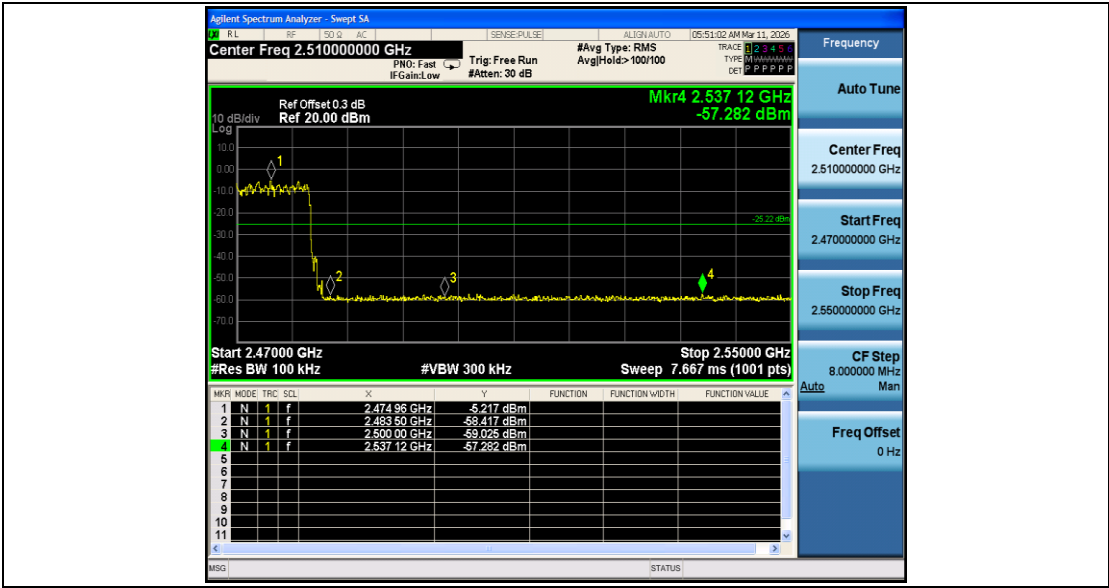
# 2DH5\_Ant1\_High\_2480



# 2DH5\_Ant1\_Low\_Hop\_2402



# 2DH5\_Ant1\_High\_Hop\_2480

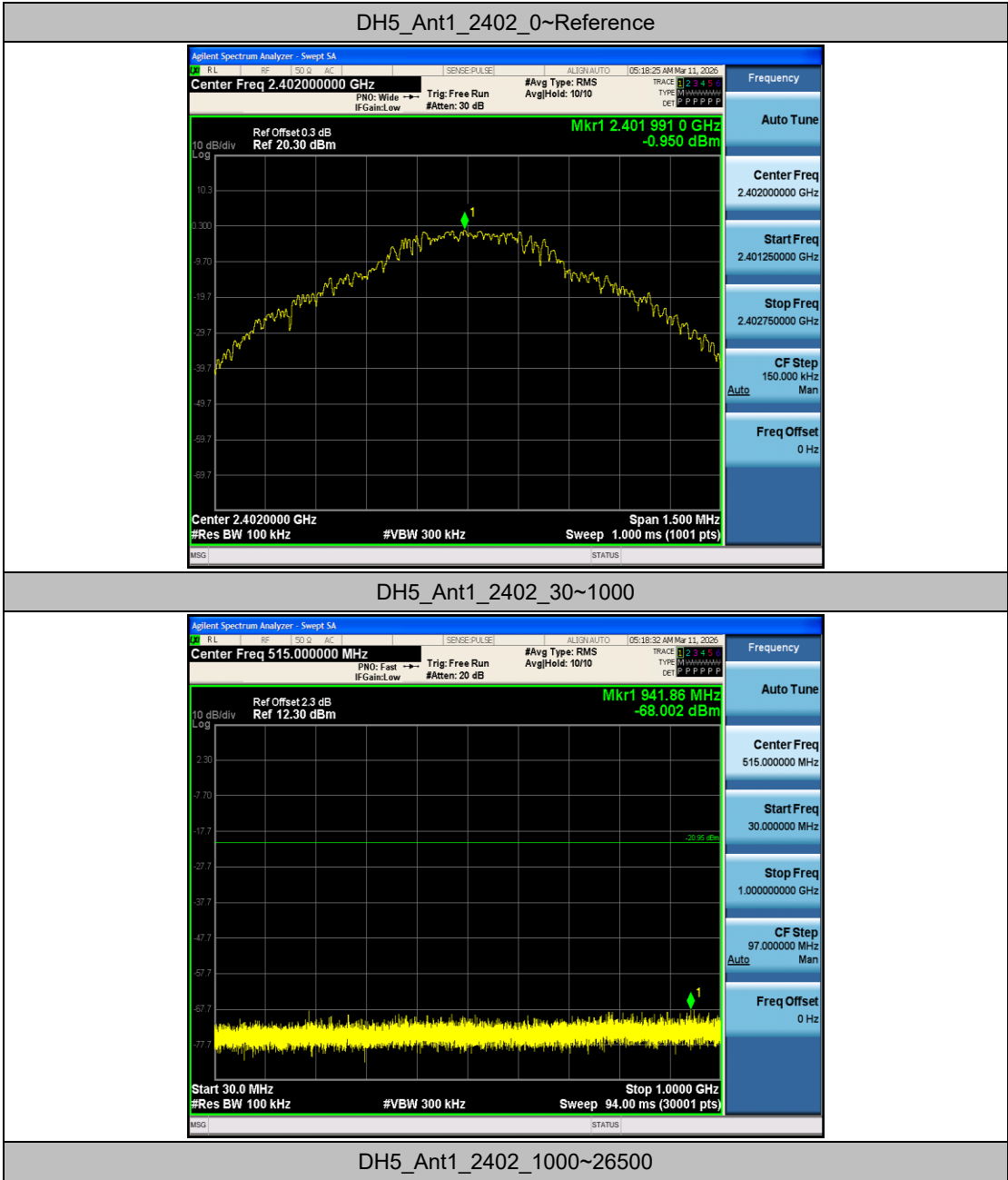


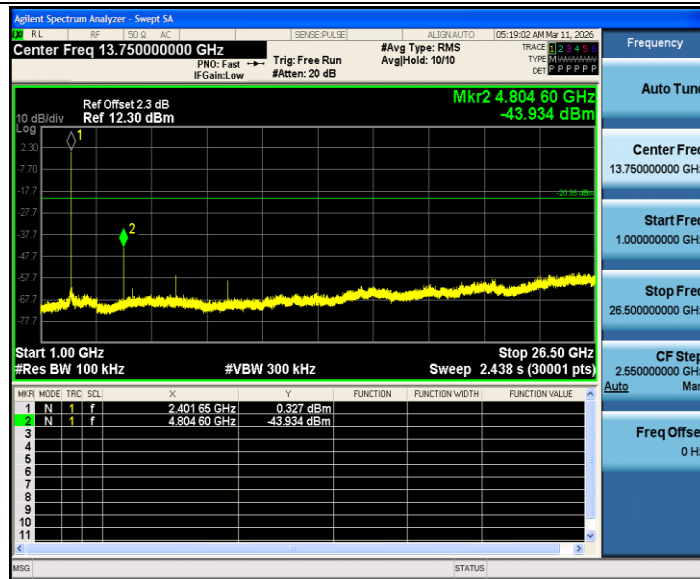
## Appendix H: Conducted Spurious Emission

### Test Result

| TestMode | Antenna | Freq(MHz) | FreqRange [MHz] | RefLevel [dBm] | Result [dBm] | Limit [dBm] | Verdict |
|----------|---------|-----------|-----------------|----------------|--------------|-------------|---------|
| DH5      | Ant1    | 2402      | Reference       | -0.95          | -0.95        | ---         | PASS    |
|          |         |           | 30~1000         | -0.95          | -68          | ≤-20.95     | PASS    |
|          |         |           | 1000~26500      | -0.95          | -43.93       | ≤-20.95     | PASS    |
|          |         | 2441      | Reference       | -0.50          | -0.50        | ---         | PASS    |
|          |         |           | 30~1000         | -0.50          | -68.45       | ≤-20.5      | PASS    |
|          |         |           | 1000~26500      | -0.50          | -43.95       | ≤-20.5      | PASS    |
|          |         | 2480      | Reference       | -1.04          | -1.04        | ---         | PASS    |
|          |         |           | 30~1000         | -1.04          | -66.77       | ≤-21.04     | PASS    |
|          |         |           | 1000~26500      | -1.04          | -43.87       | ≤-21.04     | PASS    |
| 2DH5     | Ant1    | 2402      | Reference       | -4.43          | -4.43        | ---         | PASS    |
|          |         |           | 30~1000         | -4.43          | -67.84       | ≤-24.43     | PASS    |
|          |         |           | 1000~26500      | -4.43          | -50.6        | ≤-24.43     | PASS    |
|          |         | 2441      | Reference       | -6.00          | -6.00        | ---         | PASS    |
|          |         |           | 30~1000         | -6.00          | -68.29       | ≤-26        | PASS    |
|          |         |           | 1000~26500      | -6.00          | -49.73       | ≤-26        | PASS    |
|          |         | 2480      | Reference       | -4.94          | -4.94        | ---         | PASS    |
|          |         |           | 30~1000         | -4.94          | -68.25       | ≤-24.94     | PASS    |
|          |         |           | 1000~26500      | -4.94          | -47.17       | ≤-24.94     | PASS    |

Test Graphs

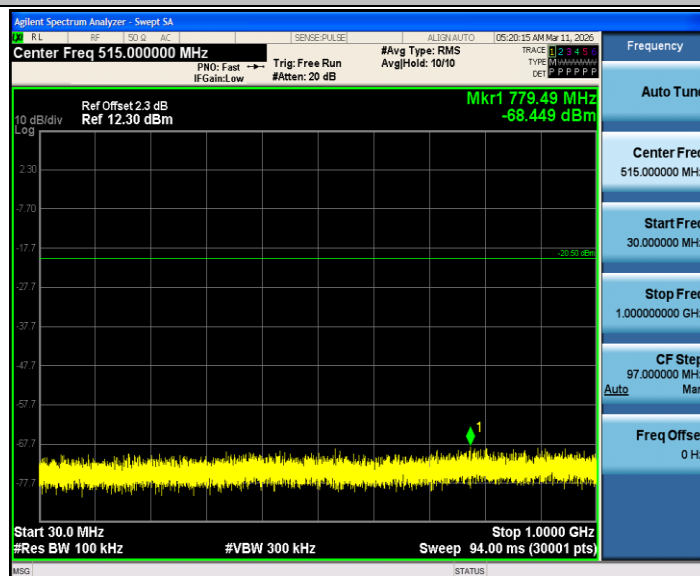




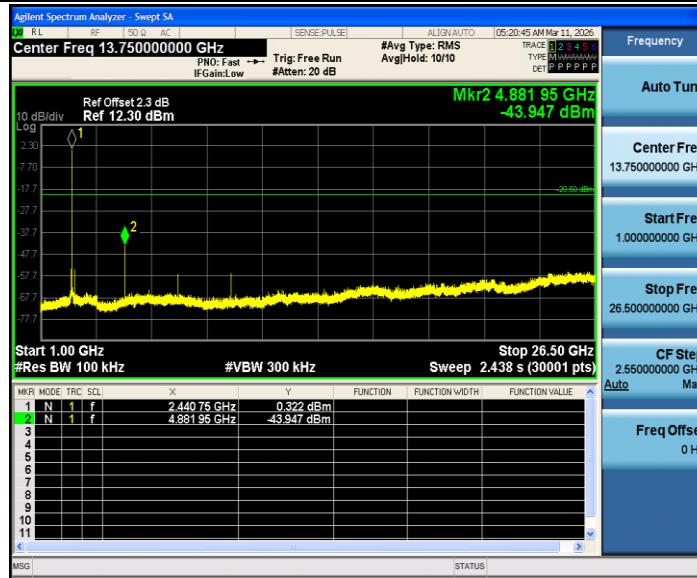
DH5\_Ant1\_2441\_0~Reference



DH5\_Ant1\_2441\_30~1000



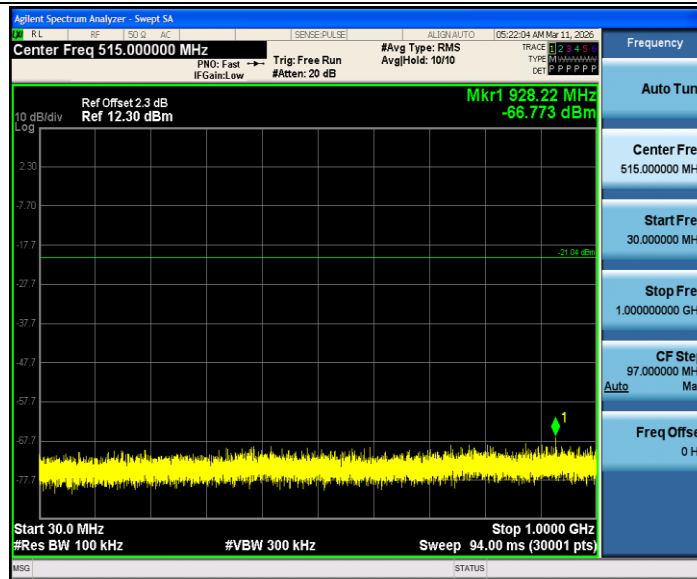
# DH5\_Ant1\_2441\_1000~26500



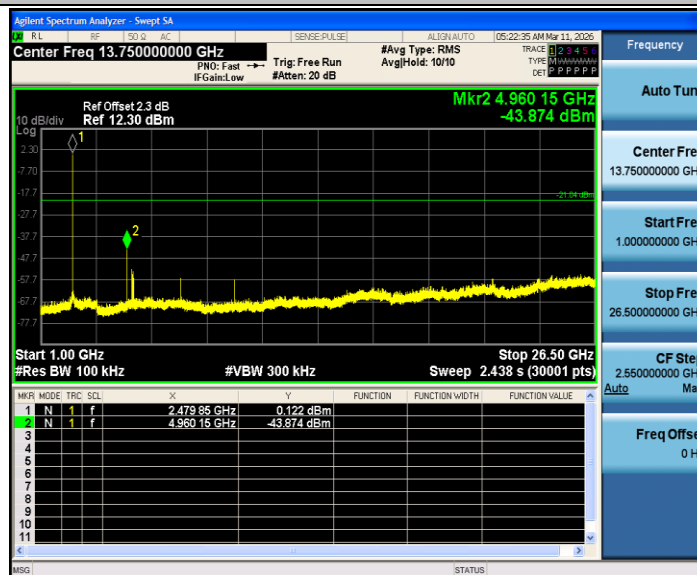
# DH5\_Ant1\_2480\_0~Reference



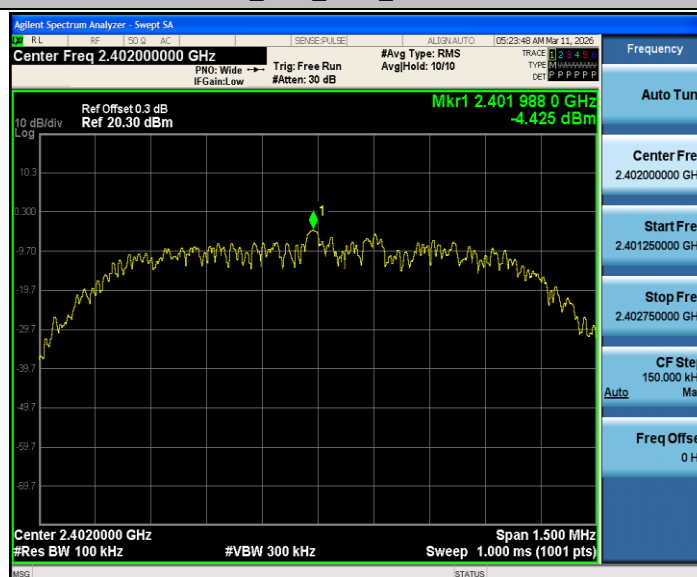
# DH5\_Ant1\_2480\_30~1000



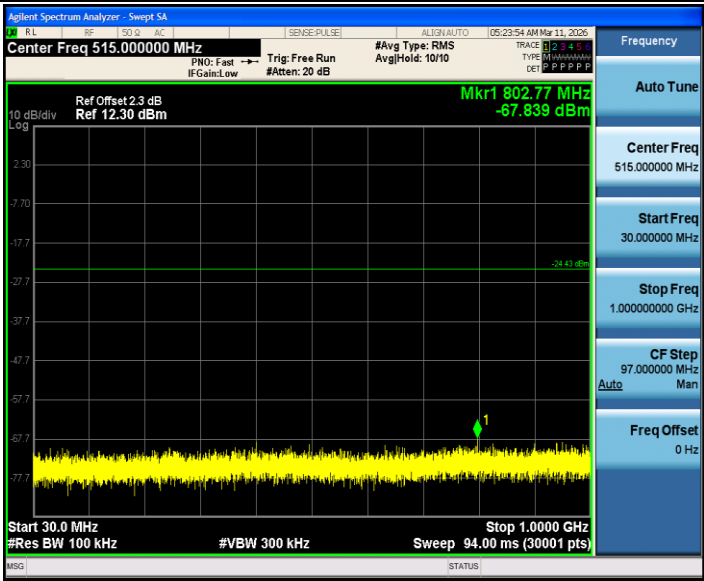
DH5\_Ant1\_2480\_1000~26500



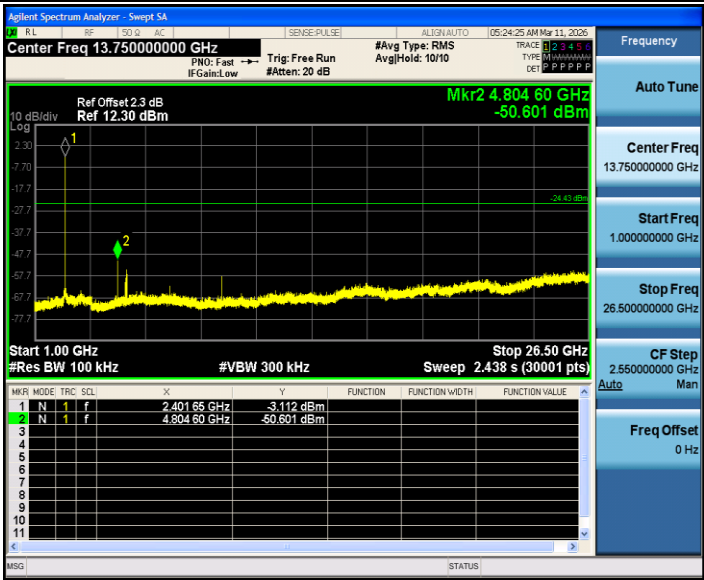
2DH5\_Ant1\_2402\_0~Reference



2DH5\_Ant1\_2402\_30~1000



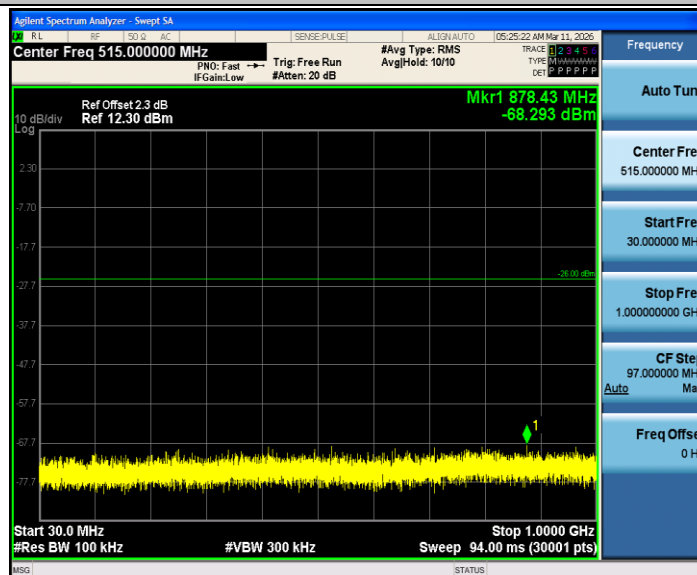
2DH5\_Ant1\_2402\_1000~26500



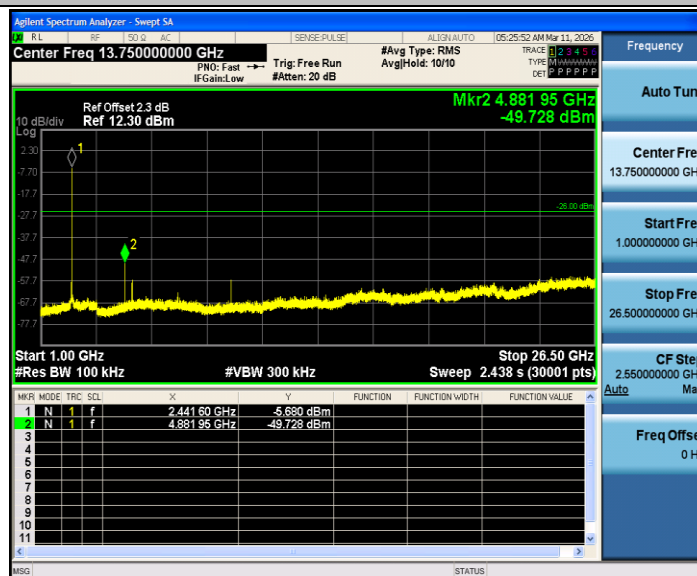
2DH5\_Ant1\_2441\_0~Reference



2DH5\_Ant1\_2441\_30~1000



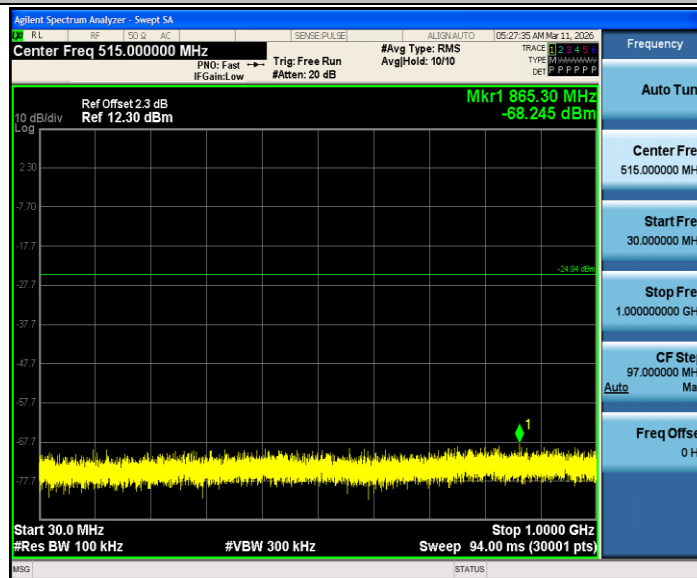
2DH5\_Ant1\_2441\_1000~26500



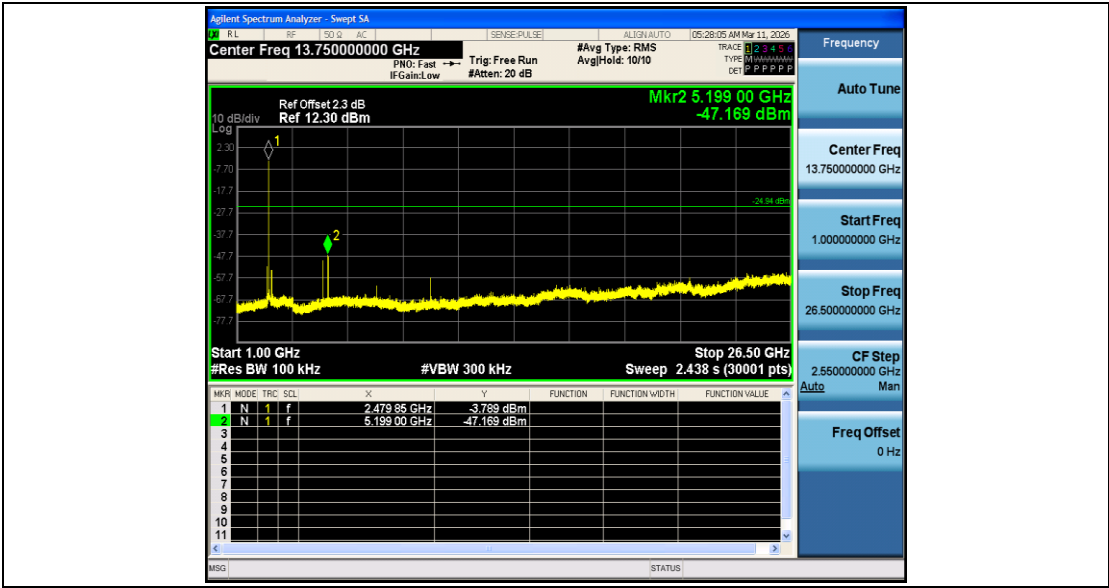
## 2DH5\_Ant1\_2480\_0~Reference



## 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      | 2.92            | 3.76           | 77.66     | 1.10    | ---   | ---     |
| 2DH5     | Ant1    | 2402      | 2.92            | 3.74           | 78.07     | 1.08    | ---   | ---     |
|          |         | 2441      | 2.92            | 3.75           | 77.87     | 1.09    | ---   | ---     |
|          |         | 2480      | 2.92            | 3.75           | 77.87     | 1.09    | ---   | ---     |