

## Appendix Test Data for BT(BDR/EDR) (Conducted Measurement)

Product Name: Bluetooth Speaker

Trade Mark:  XINJI

Test Model: SHARK S1

FCC ID: 2AE8V-SHARKS1

### Environmental Conditions

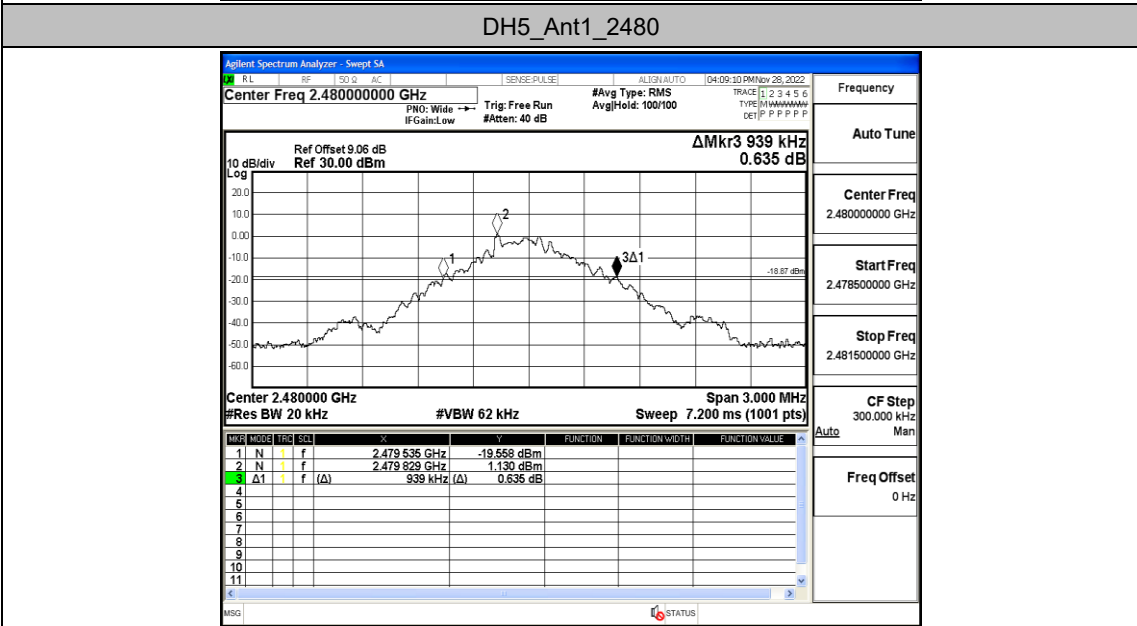
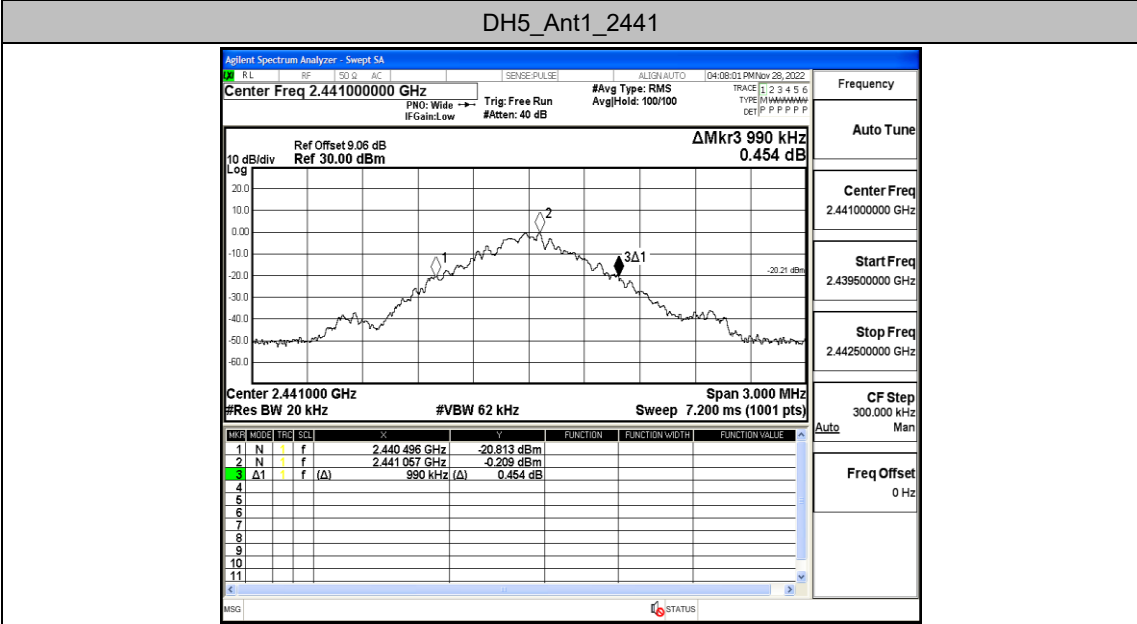
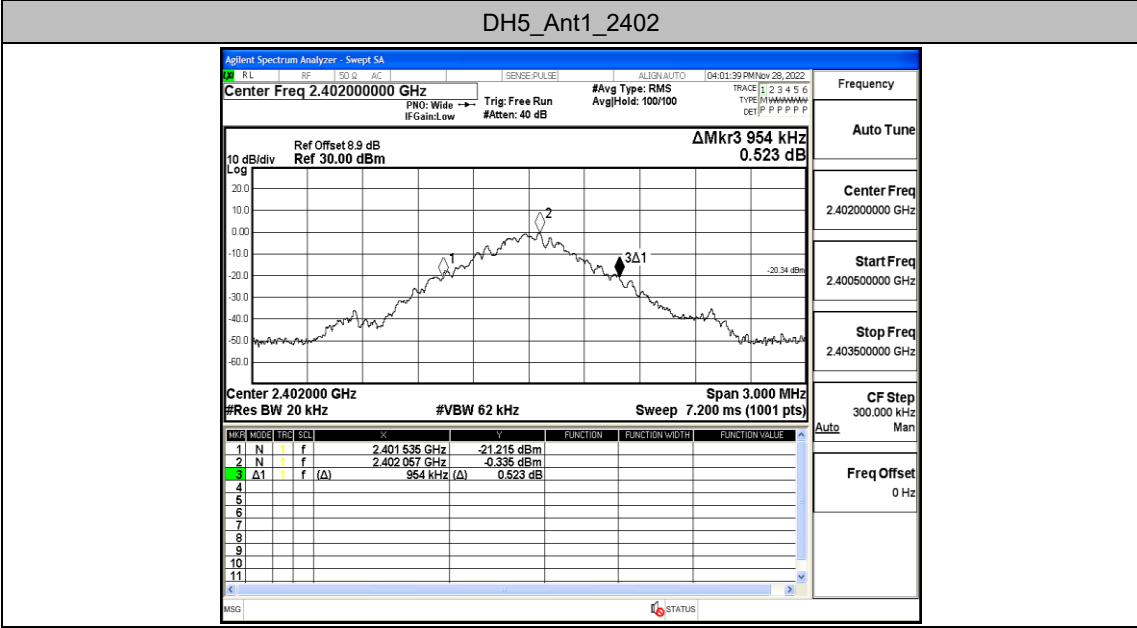
|                    |           |
|--------------------|-----------|
| Temperature:       | 22.8° C   |
| Relative Humidity: | 56%       |
| ATM Pressure:      | 100.0 kPa |
| Test Engineer:     | Nancy Li  |
| Supervised by:     | Hugo Chen |

### Appendix A: 20dB Emission Bandwidth

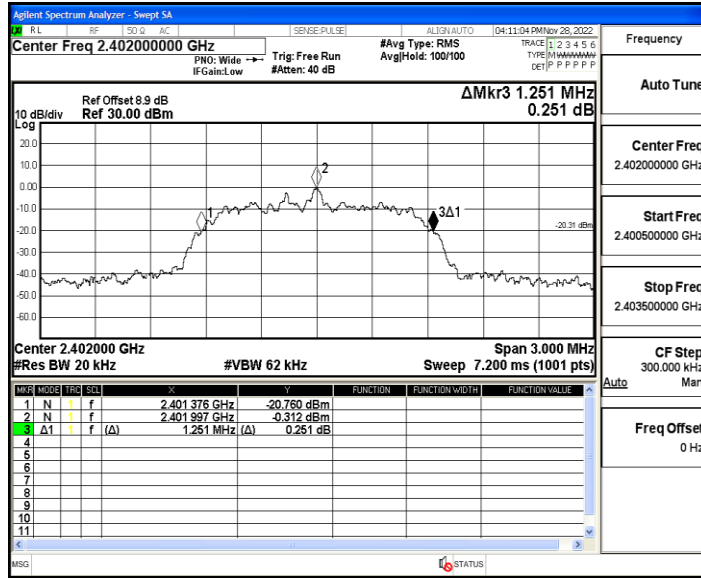
#### Test Result

| TestMode | Antenna | Channel | 20db EBW[MHz] | FL[MHz]  | FH[MHz]  | Limit[MHz] | Verdict |
|----------|---------|---------|---------------|----------|----------|------------|---------|
| DH5      | Ant1    | 2402    | 0.954         | 2401.535 | 2402.489 | ---        | ---     |
|          |         | 2441    | 0.990         | 2440.496 | 2441.486 | ---        | ---     |
|          |         | 2480    | 0.939         | 2479.535 | 2480.474 | ---        | ---     |
| 2DH5     | Ant1    | 2402    | 1.251         | 2401.376 | 2402.627 | ---        | ---     |
|          |         | 2441    | 1.308         | 2440.340 | 2441.648 | ---        | ---     |
|          |         | 2480    | 1.344         | 2479.328 | 2480.672 | ---        | ---     |
| 3DH5     | Ant1    | 2402    | 1.248         | 2401.361 | 2402.609 | ---        | ---     |
|          |         | 2441    | 1.269         | 2440.349 | 2441.618 | ---        | ---     |
|          |         | 2480    | 1.248         | 2479.361 | 2480.609 | ---        | ---     |

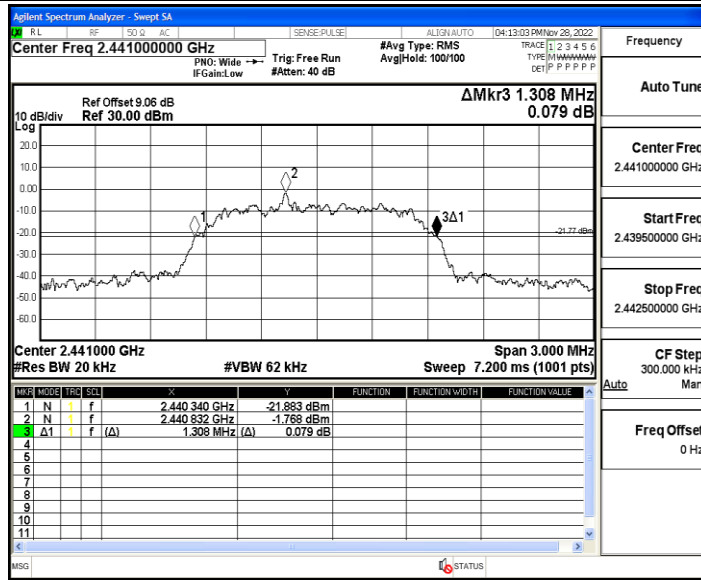
Test Graphs



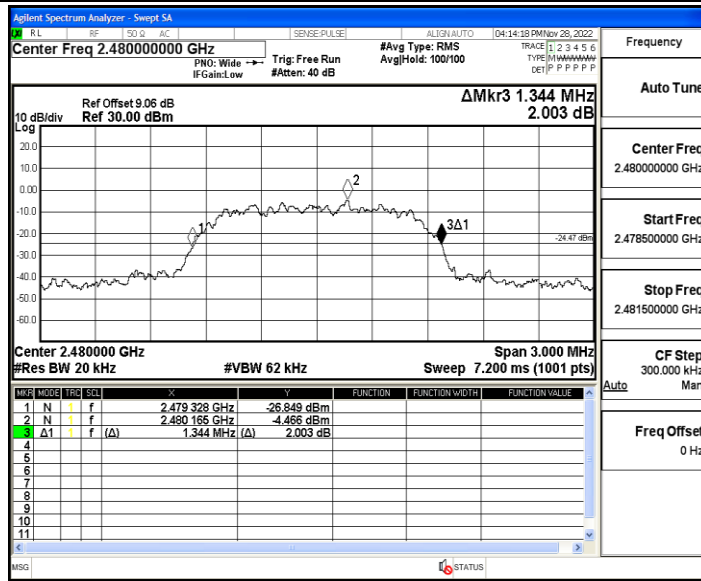
**2DH5\_Ant1\_2402**



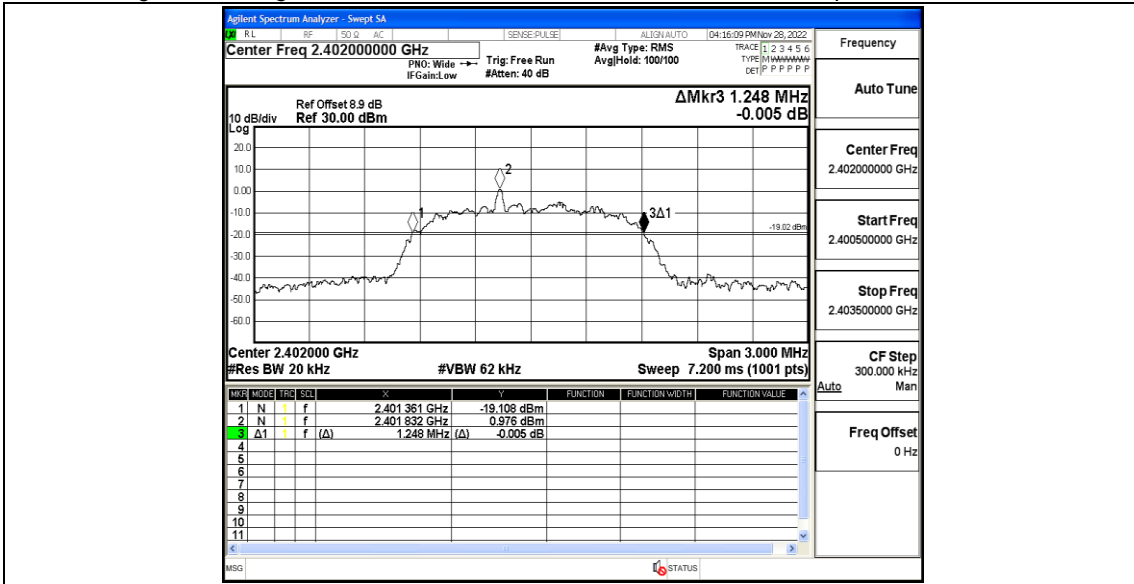
2DH5\_Ant1\_2441



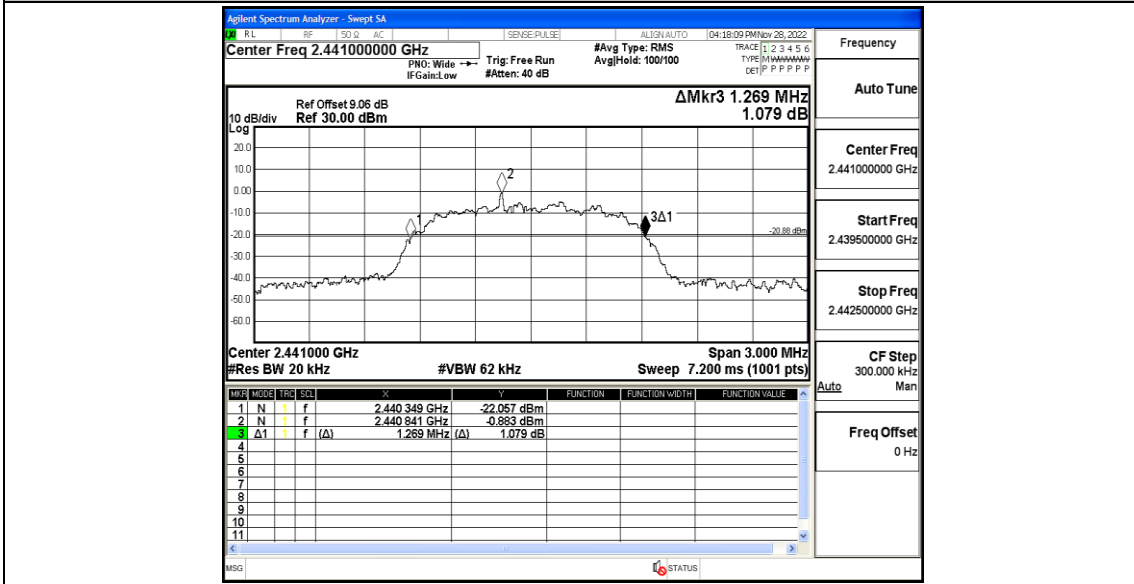
2DH5\_Ant1\_2480



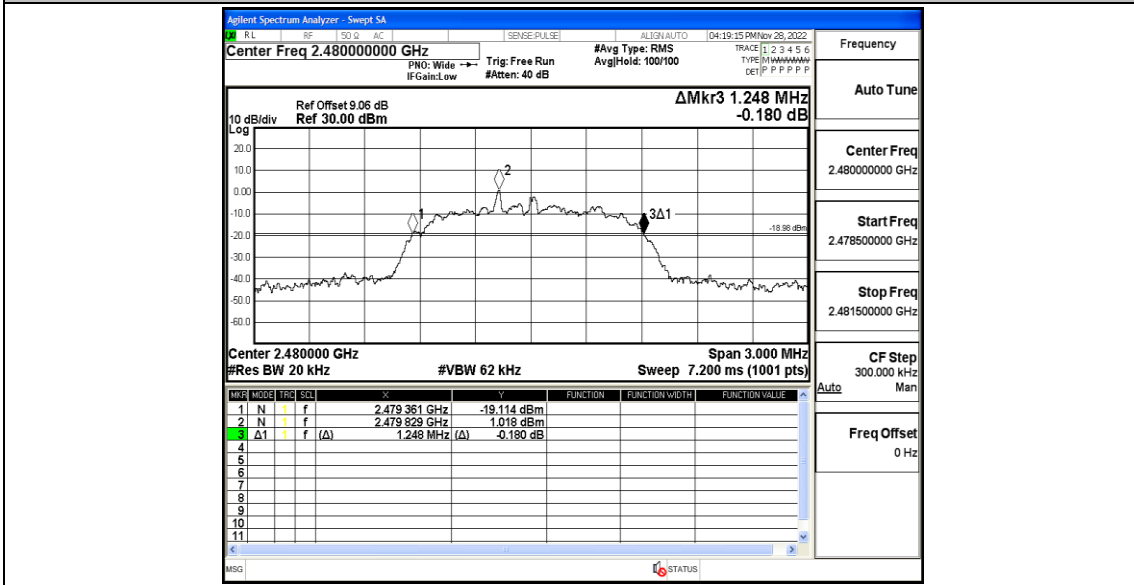
3DH5\_Ant1\_2402



3DH5\_Ant1\_2441



3DH5\_Ant1\_2480

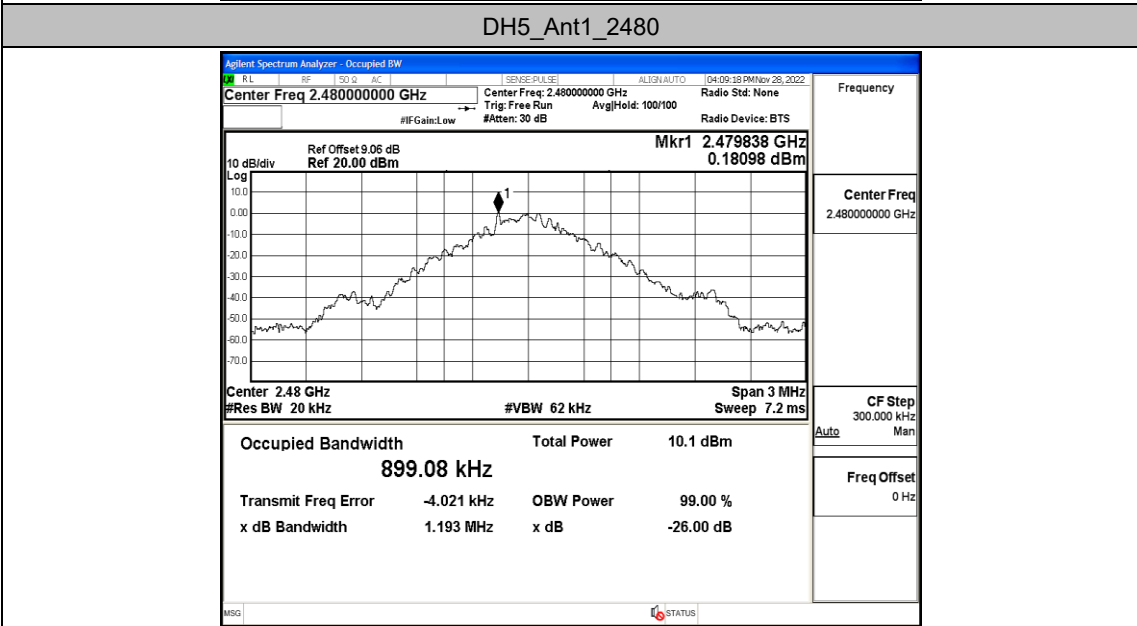
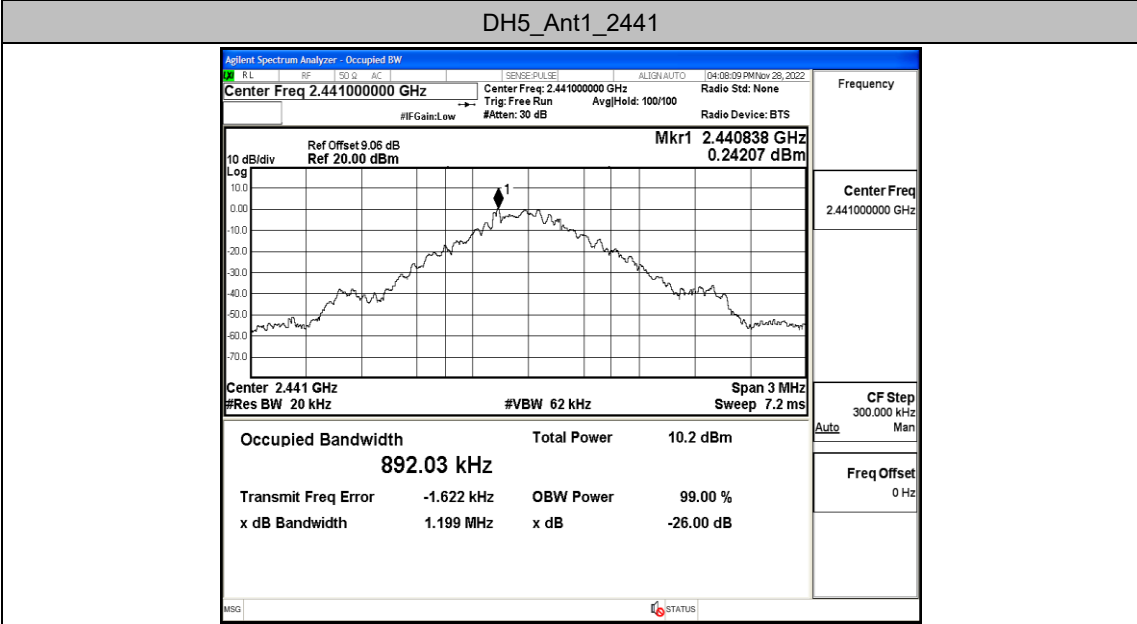
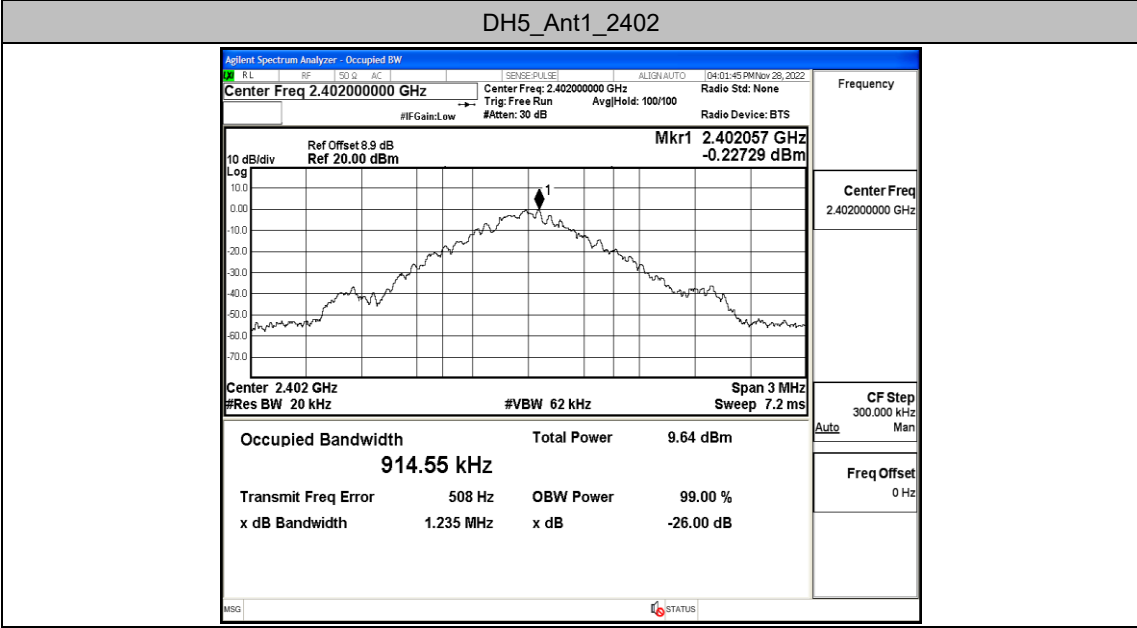


## Appendix B: Occupied Channel Bandwidth

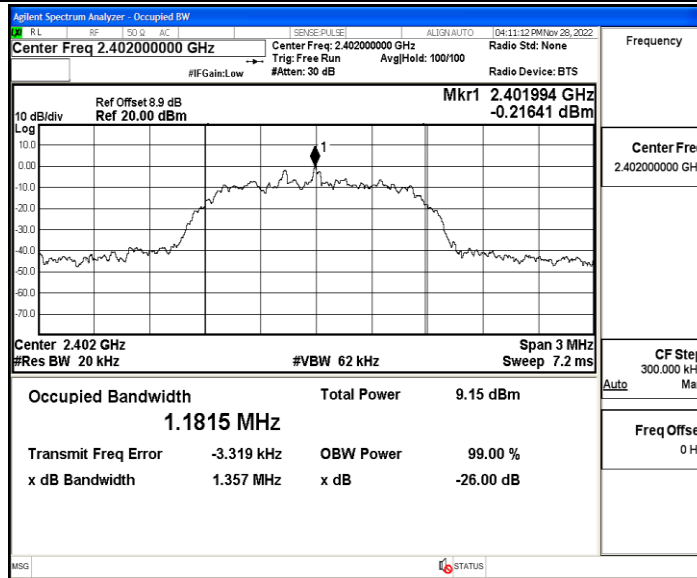
### Test Result

| TestMode | Antenna | Channel | OCB [MHz] | FL[MHz]   | FH[MHz]   | Limit[MHz] | Verdict |
|----------|---------|---------|-----------|-----------|-----------|------------|---------|
| DH5      | Ant1    | 2402    | 0.91455   | 2401.5432 | 2402.4578 | ---        | ---     |
|          |         | 2441    | 0.89203   | 2440.5524 | 2441.4444 | ---        | ---     |
|          |         | 2480    | 0.89908   | 2479.5464 | 2480.4455 | ---        | ---     |
| 2DH5     | Ant1    | 2402    | 1.1815    | 2401.4059 | 2402.5874 | ---        | ---     |
|          |         | 2441    | 1.1767    | 2440.4071 | 2441.5838 | ---        | ---     |
|          |         | 2480    | 1.1809    | 2479.4054 | 2480.5863 | ---        | ---     |
| 3DH5     | Ant1    | 2402    | 1.1896    | 2401.3963 | 2402.5859 | ---        | ---     |
|          |         | 2441    | 1.1879    | 2440.3975 | 2441.5854 | ---        | ---     |
|          |         | 2480    | 1.1738    | 2479.4074 | 2480.5812 | ---        | ---     |

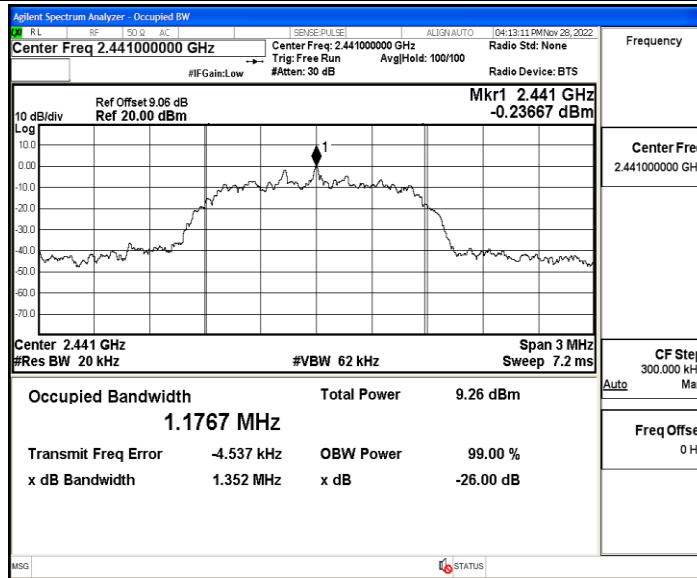
### Test Graphs



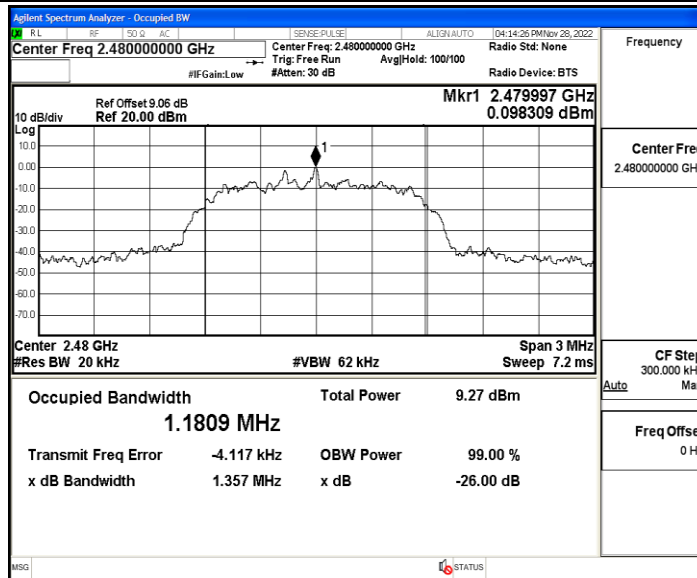
**2DH5\_Ant1\_2402**



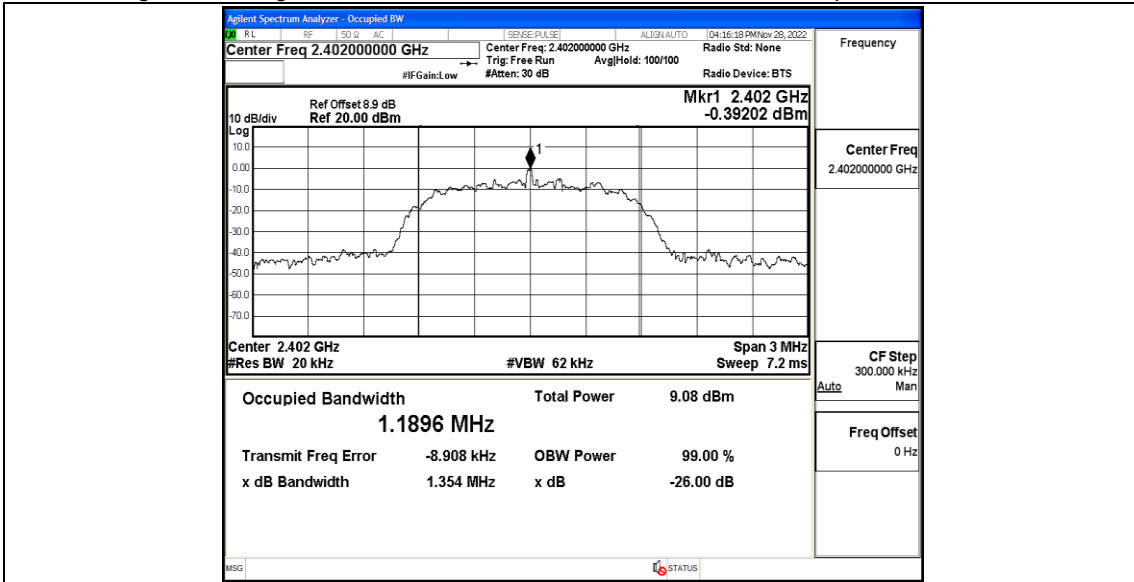
2DH5\_Ant1\_2441



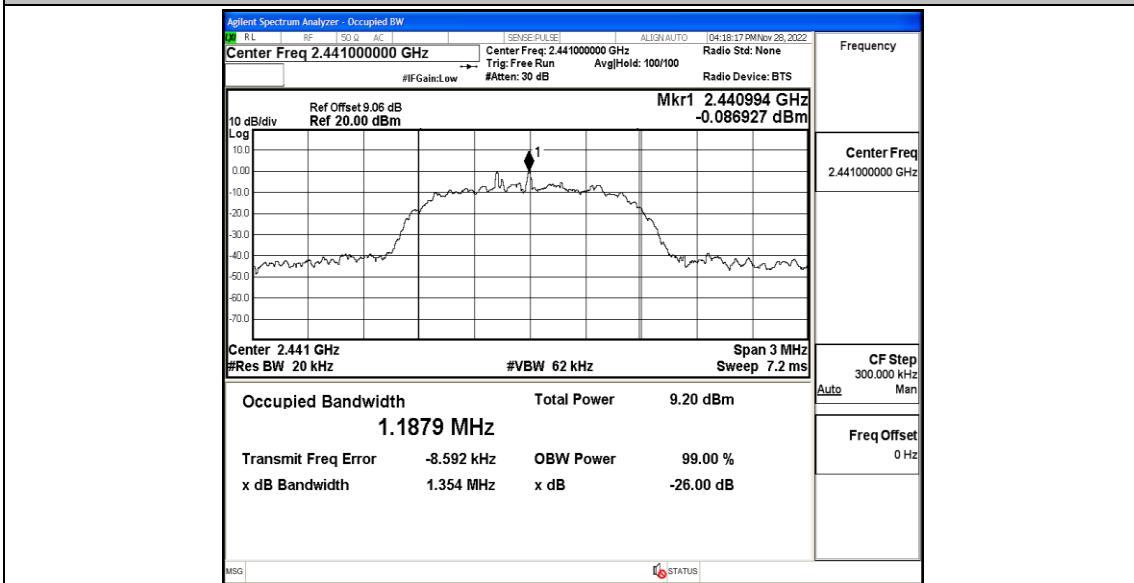
2DH5\_Ant1\_2480



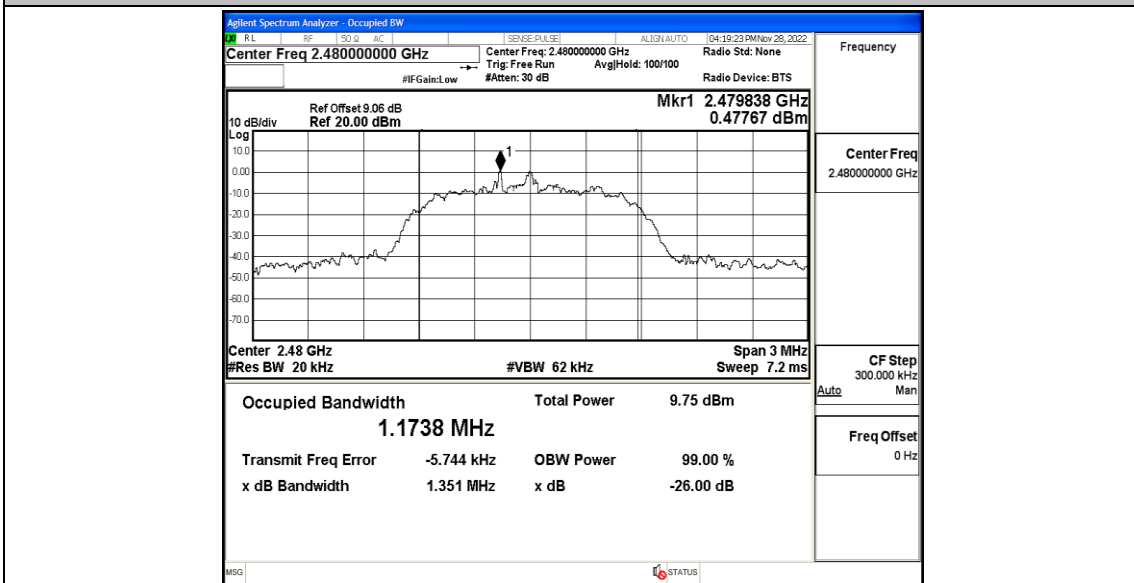
3DH5\_Ant1\_2402



3DH5\_Ant1\_2441



3DH5\_Ant1\_2480



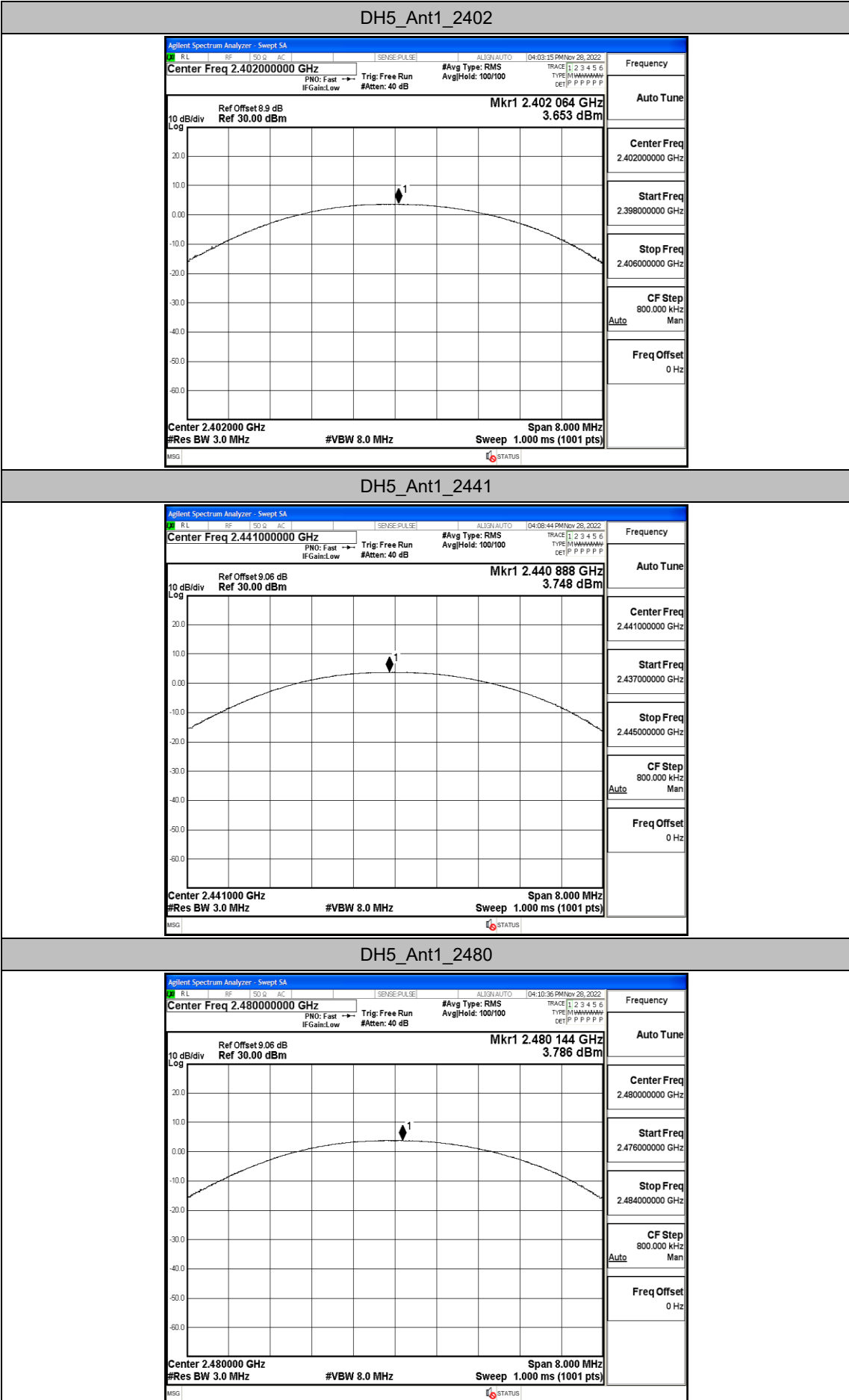


## Appendix C: Maximum Peak conducted output power

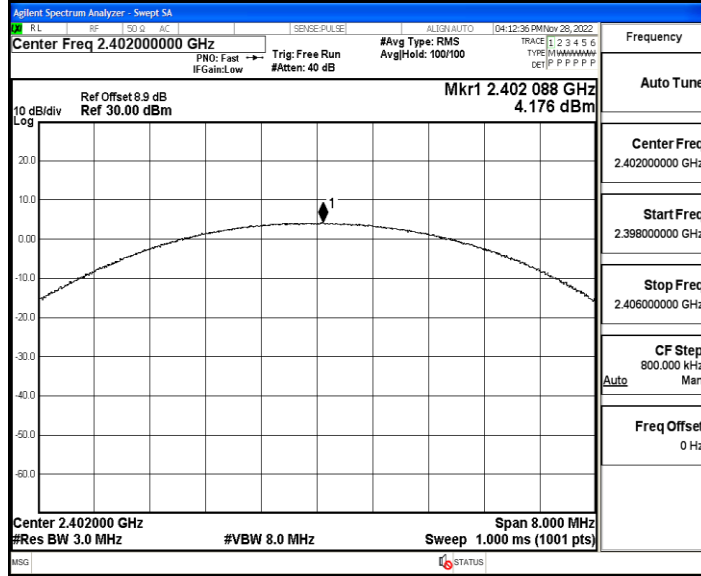
### Test Result

| TestMode | Antenna | Channel | Result[dBm] | Limit[dBm] | Verdict |
|----------|---------|---------|-------------|------------|---------|
| DH5      | Ant1    | 2402    | 3.65        | ≤30        | PASS    |
|          |         | 2441    | 3.75        | ≤30        | PASS    |
|          |         | 2480    | 3.79        | ≤30        | PASS    |
| 2DH5     | Ant1    | 2402    | 4.18        | ≤20.97     | PASS    |
|          |         | 2441    | 4.23        | ≤20.97     | PASS    |
|          |         | 2480    | 4.29        | ≤20.97     | PASS    |
| 3DH5     | Ant1    | 2402    | 4.49        | ≤20.97     | PASS    |
|          |         | 2441    | 4.67        | ≤20.97     | PASS    |
|          |         | 2480    | 4.71        | ≤20.97     | PASS    |

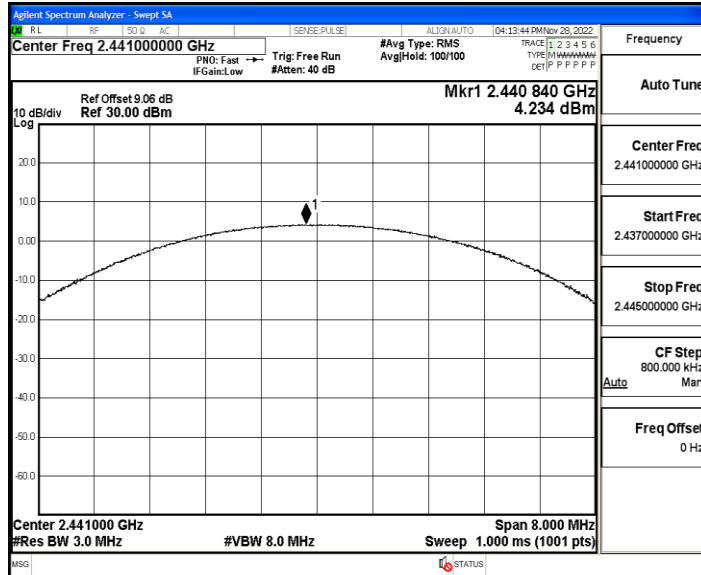
### Test Graphs



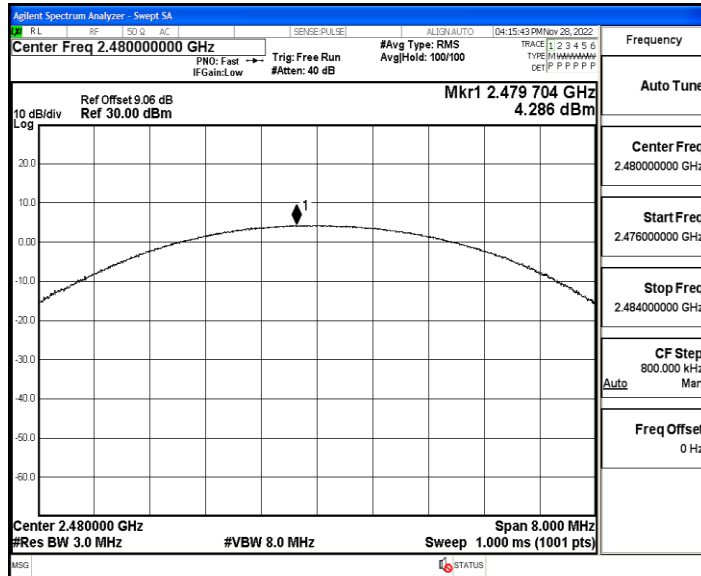
2DH5\_Ant1\_2402



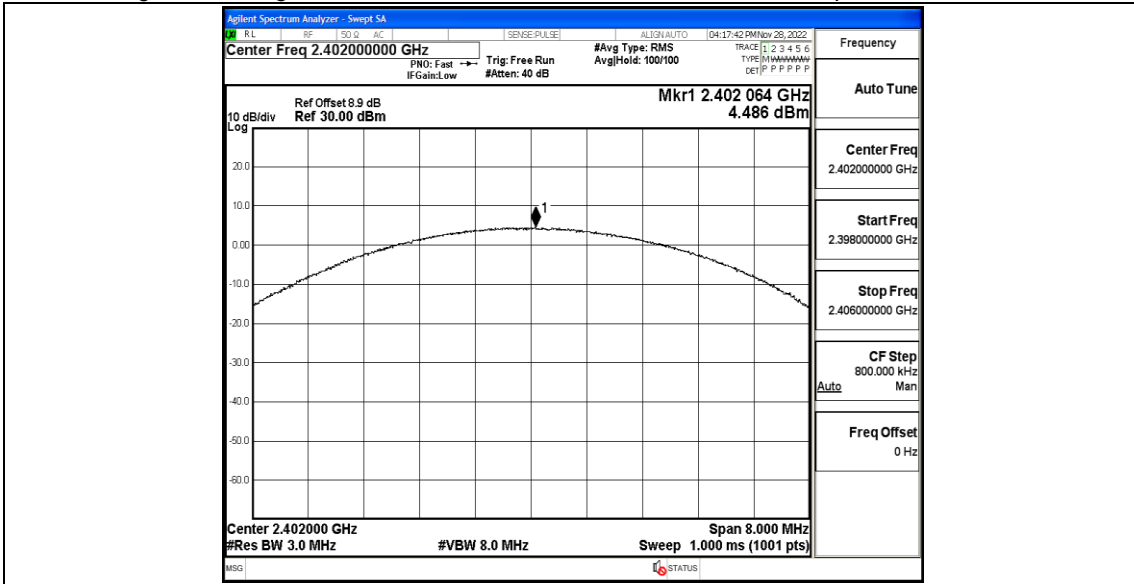
2DH5\_Ant1\_2441



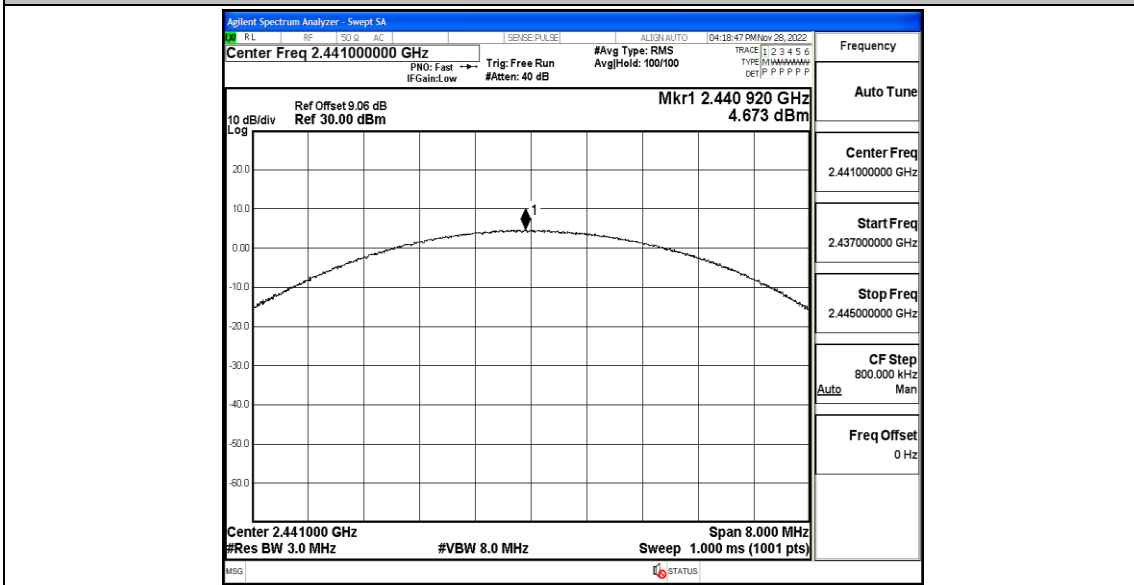
2DH5\_Ant1\_2480



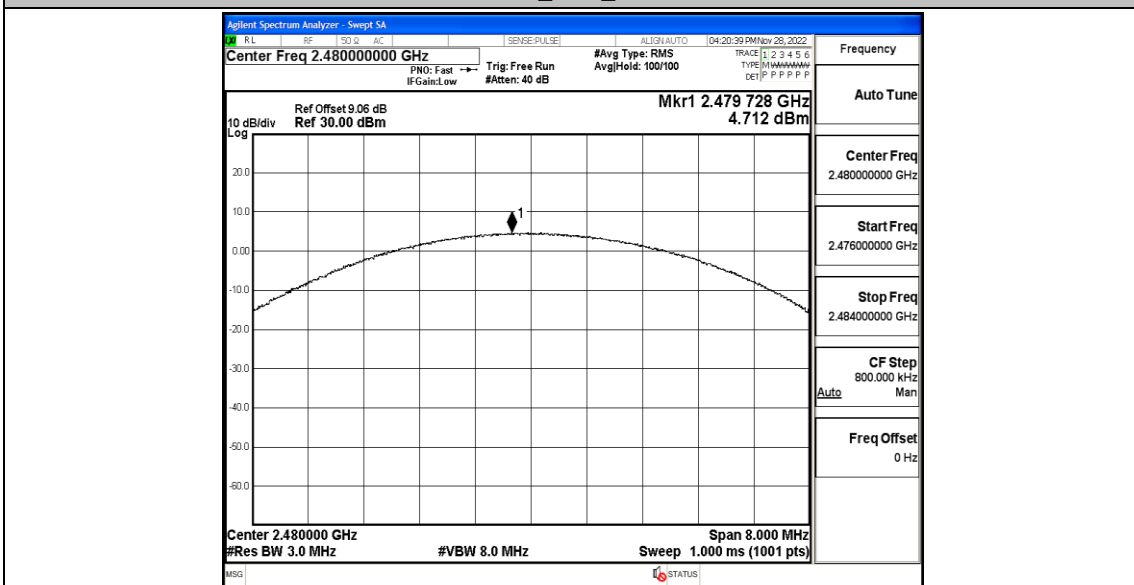
3DH5\_Ant1\_2402



3DH5\_Ant1\_2441



3DH5\_Ant1\_2480

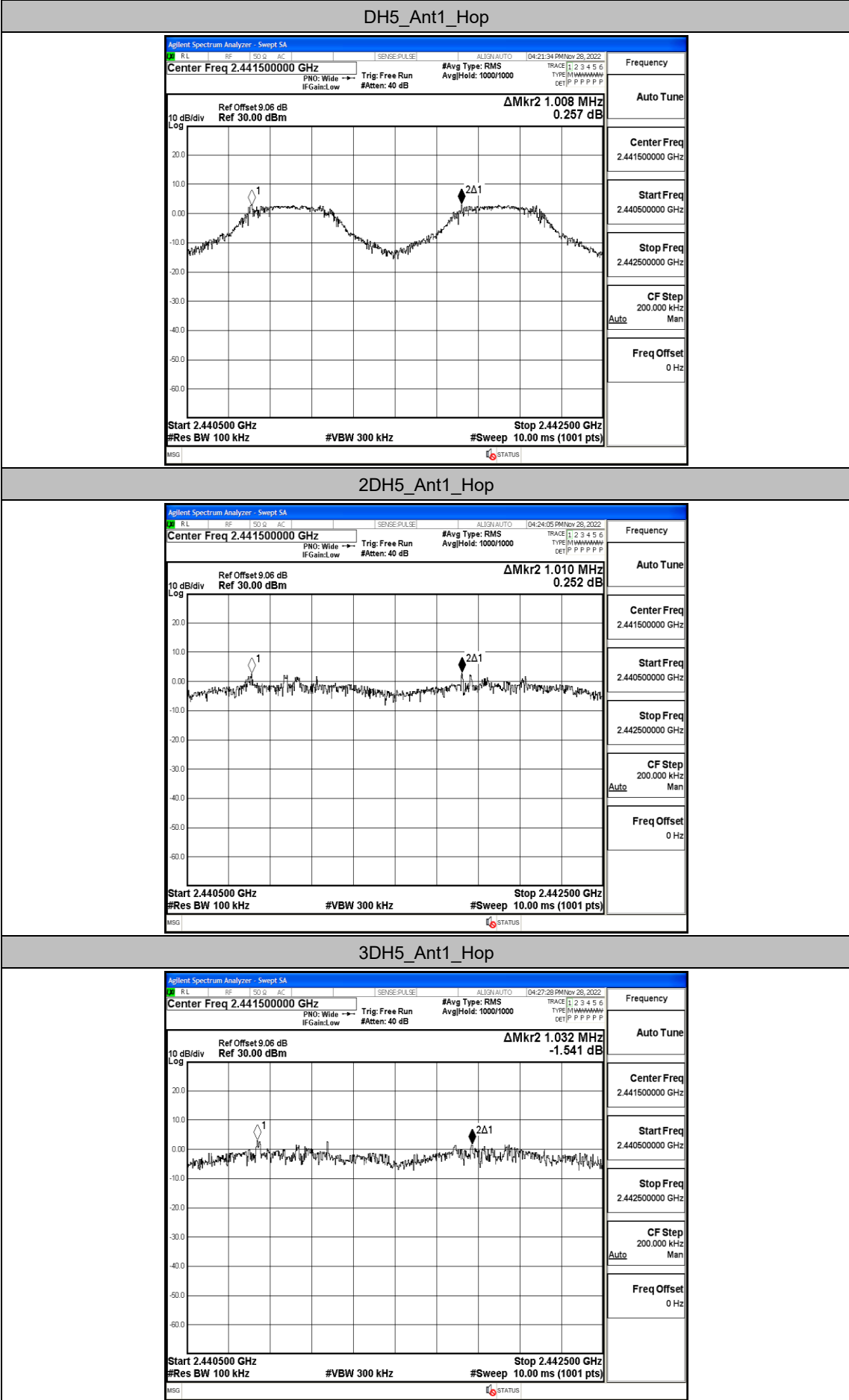


## Appendix D: Carrier frequency separation

### Test Result

| TestMode | Antenna | Channel | Result[MHz] | Limit[MHz]   | Verdict |
|----------|---------|---------|-------------|--------------|---------|
| DH5      | Ant1    | Hop     | 1.008       | $\geq 0.990$ | PASS    |
| 2DH5     | Ant1    | Hop     | 1.01        | $\geq 0.896$ | PASS    |
| 3DH5     | Ant1    | Hop     | 1.032       | $\geq 0.846$ | PASS    |

### Test Graphs

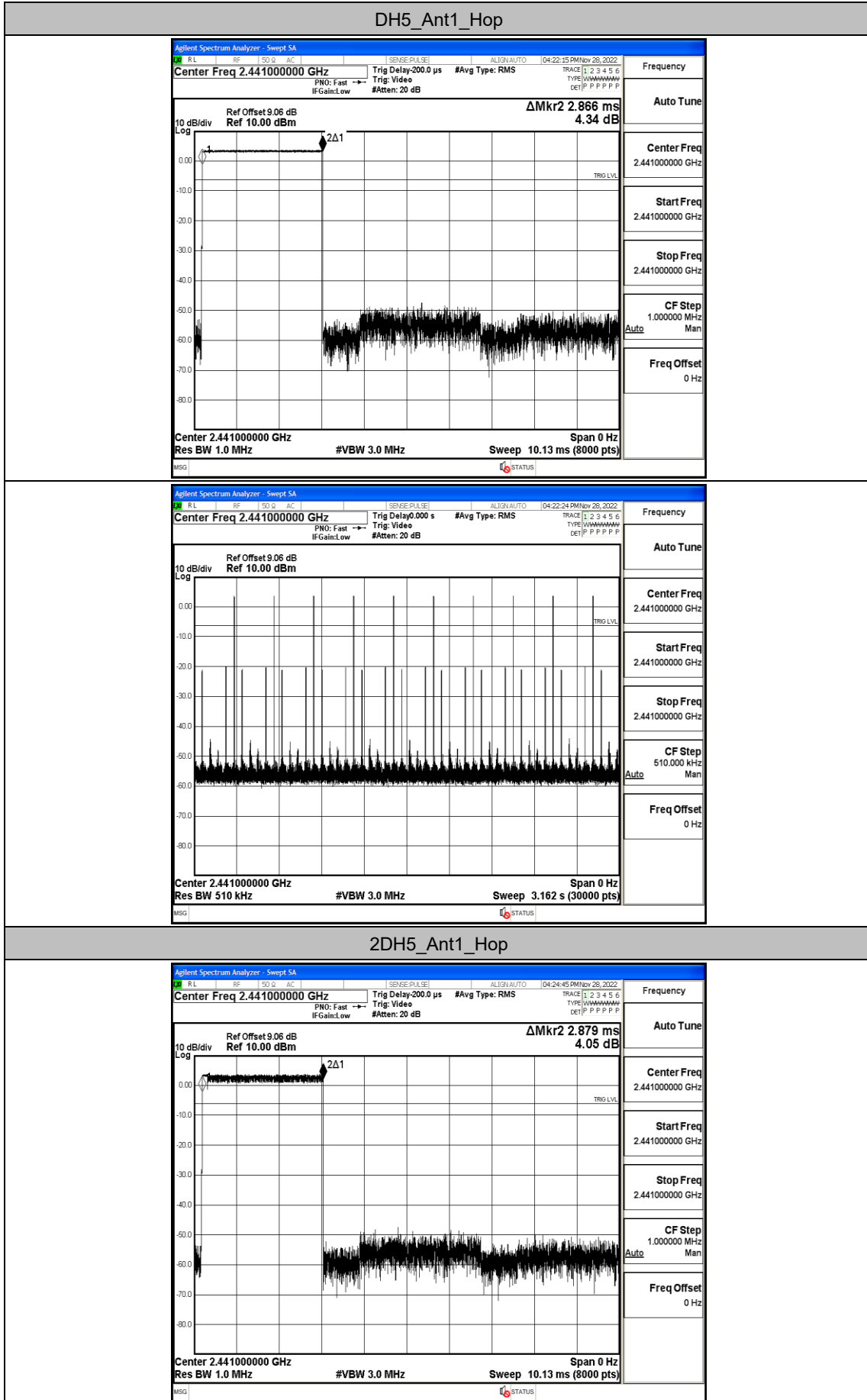


## Appendix E: Time of occupancy

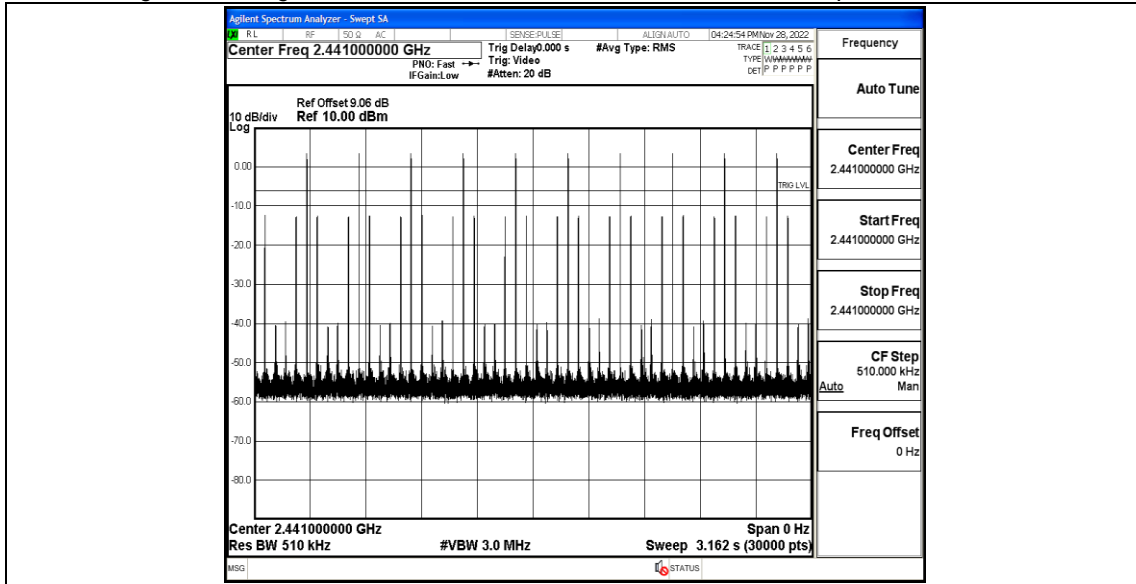
### Test Result

| TestMode | Antenna | Channel | BurstWidth<br>[ms] | TotalHops<br>[Num] | Result[s] | Limit[s] | Verdict |
|----------|---------|---------|--------------------|--------------------|-----------|----------|---------|
| DH5      | Ant1    | Hop     | 2.866              | 110                | 0.315     | ≤0.4     | PASS    |
| 2DH5     | Ant1    | Hop     | 2.879              | 110                | 0.317     | ≤0.4     | PASS    |
| 3DH5     | Ant1    | Hop     | 2.882              | 110                | 0.317     | ≤0.4     | PASS    |

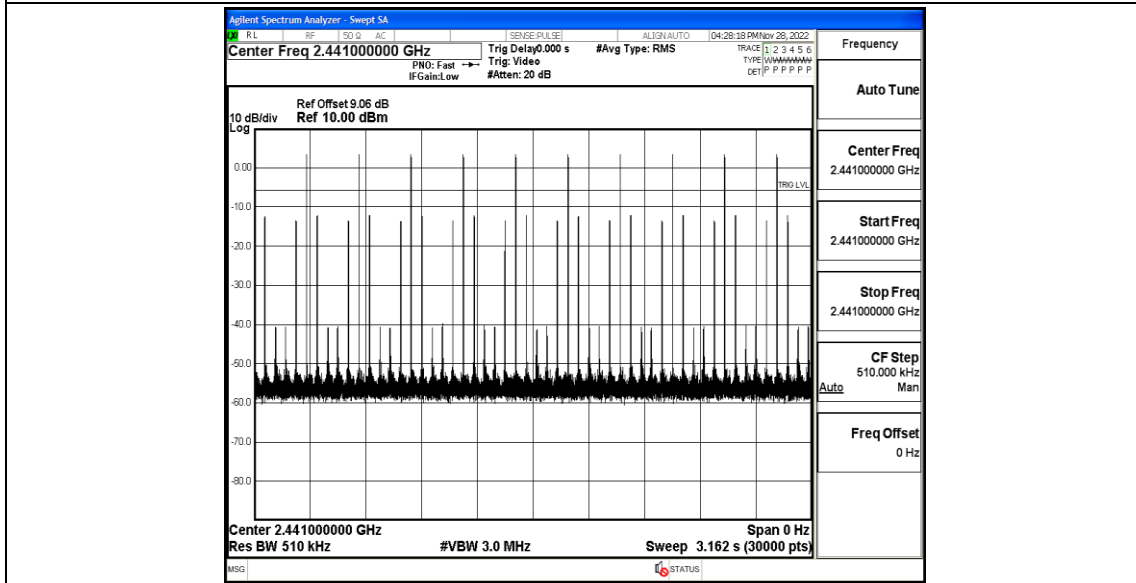
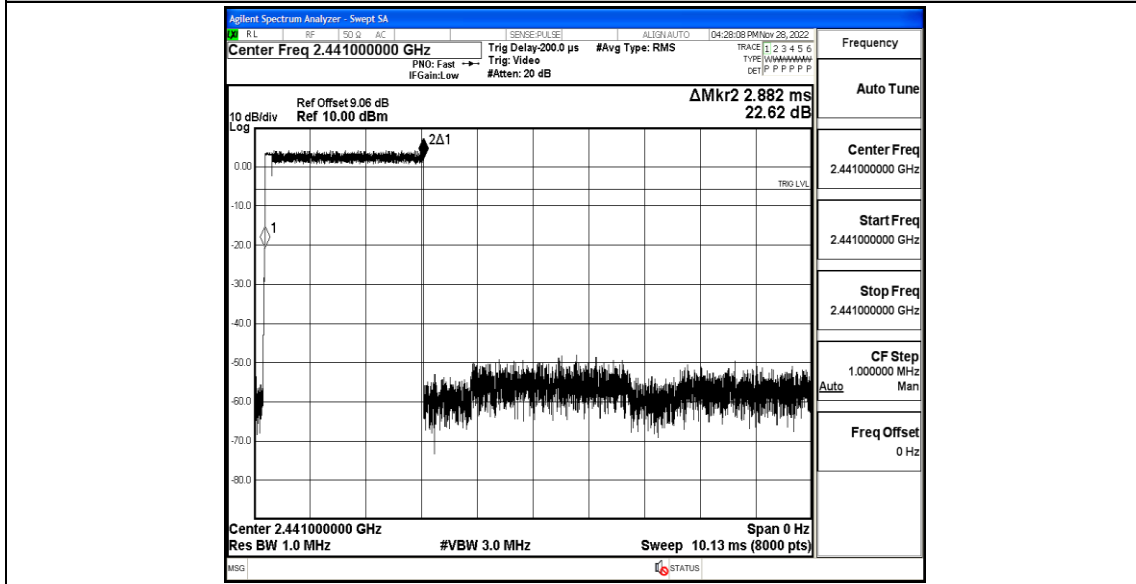
### Test Graphs







3DH5\_Ant1\_Hop

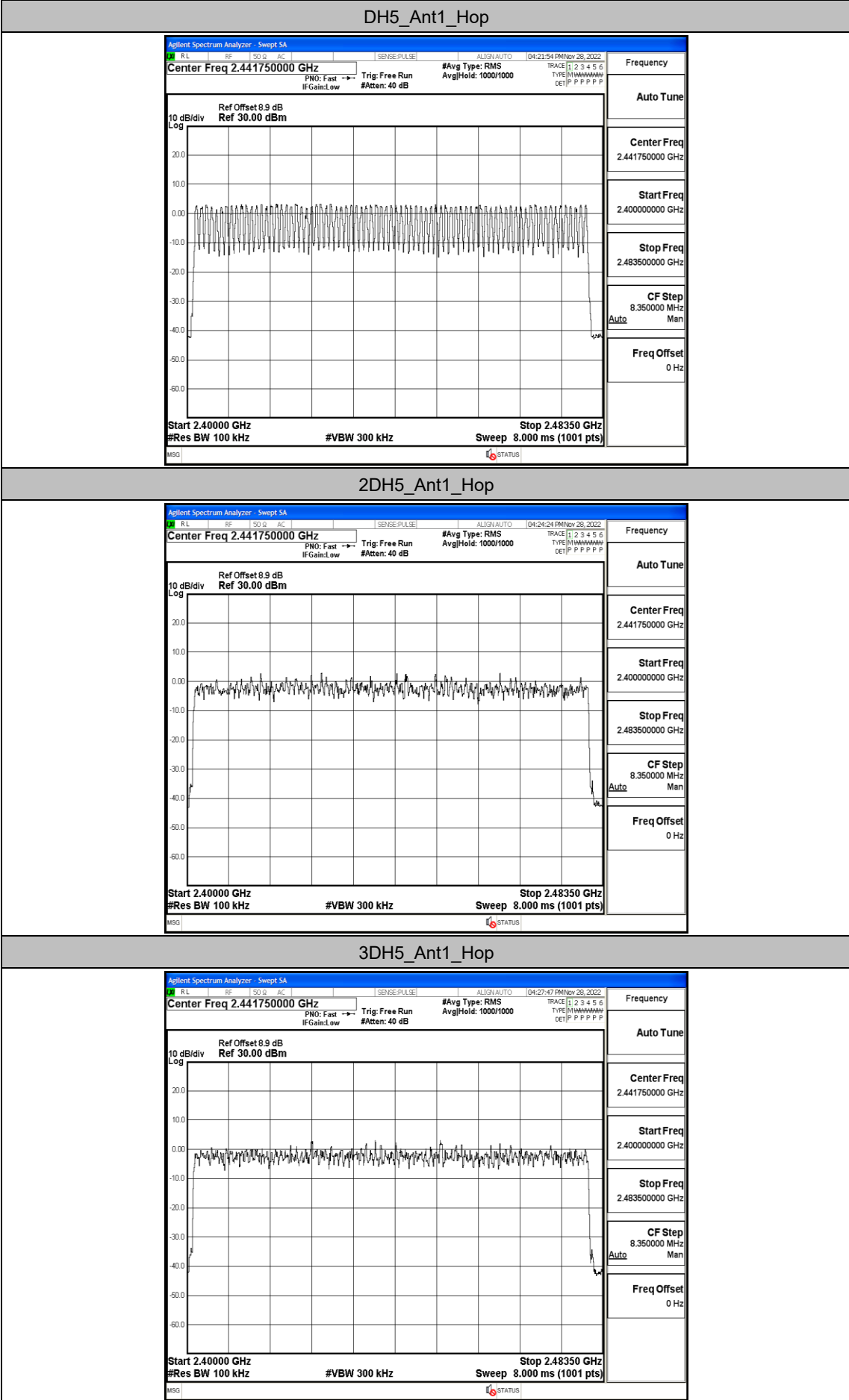


## Appendix F: Number of hopping channels

### Test Result

| TestMode | Antenna | Channel | 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

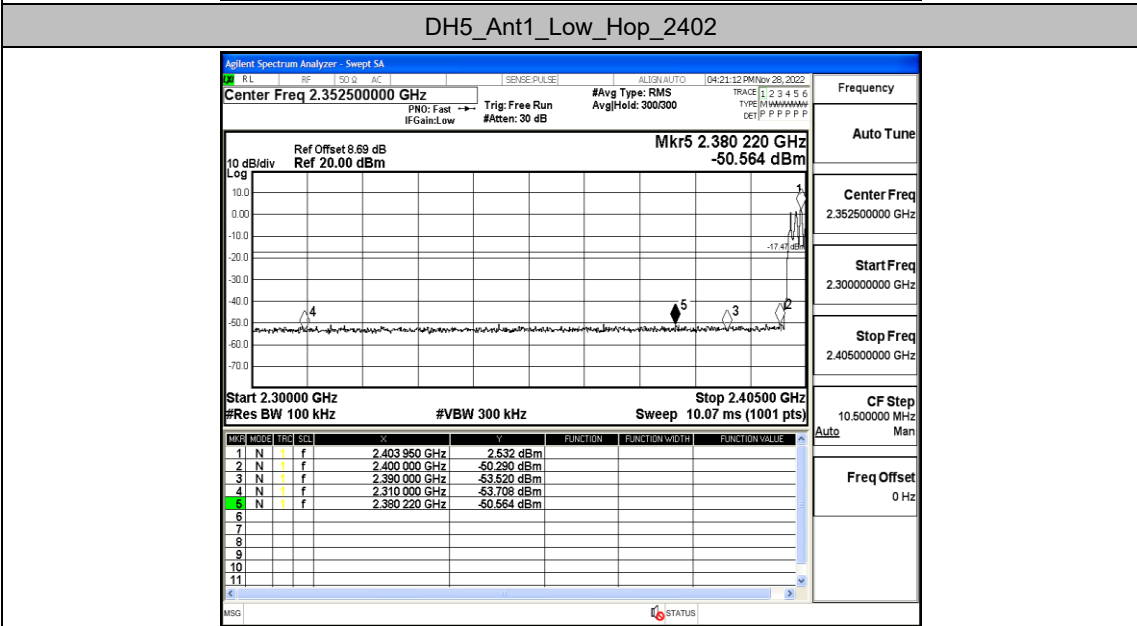
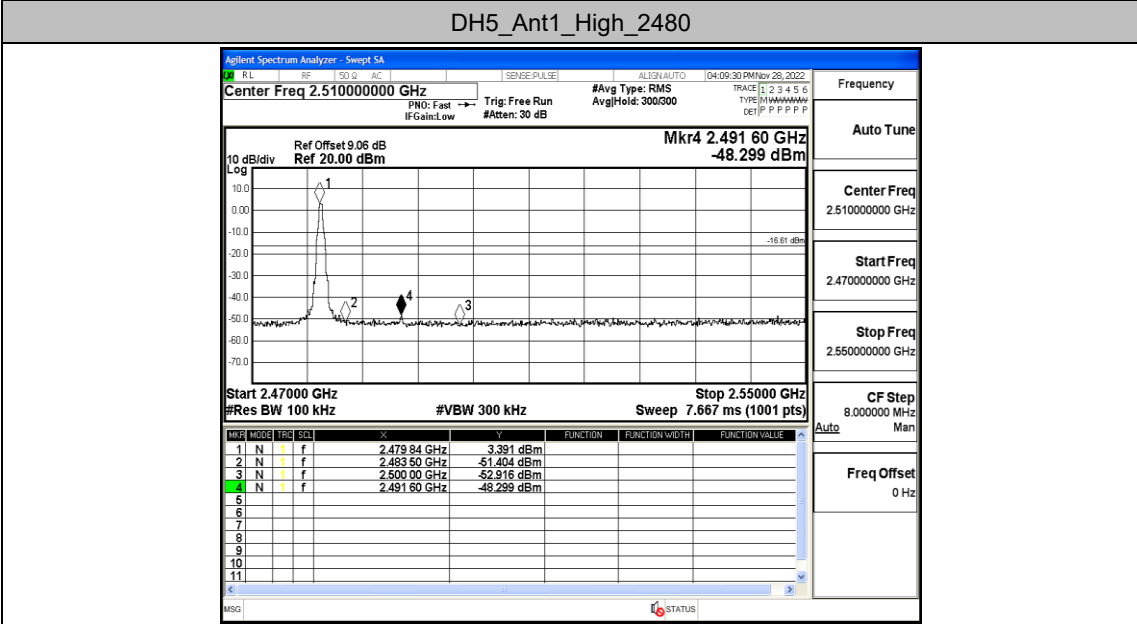
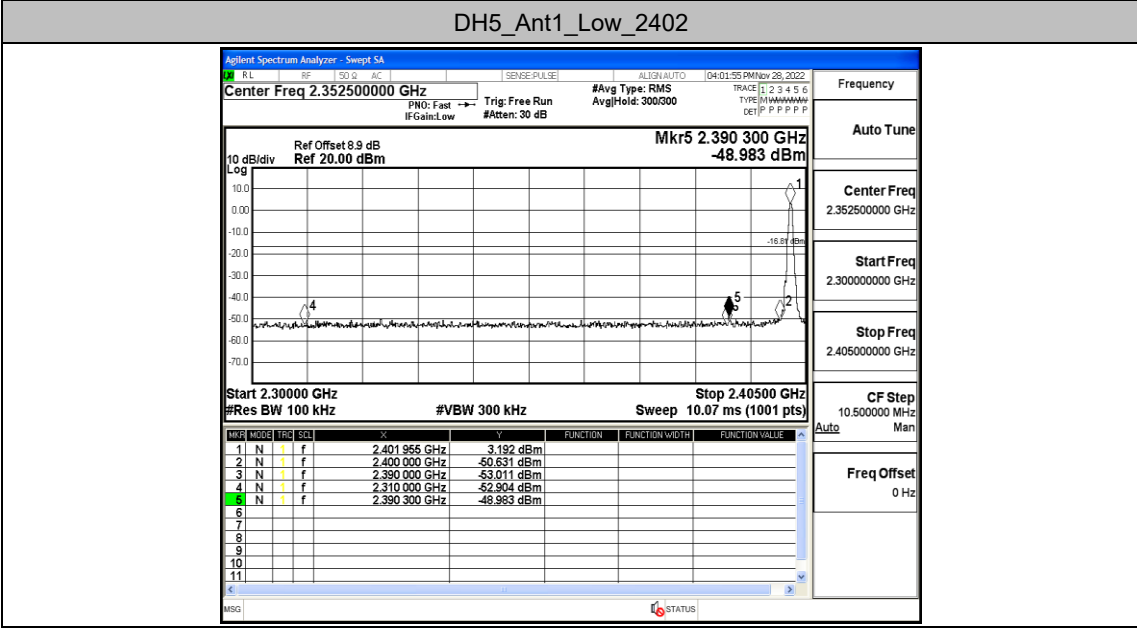


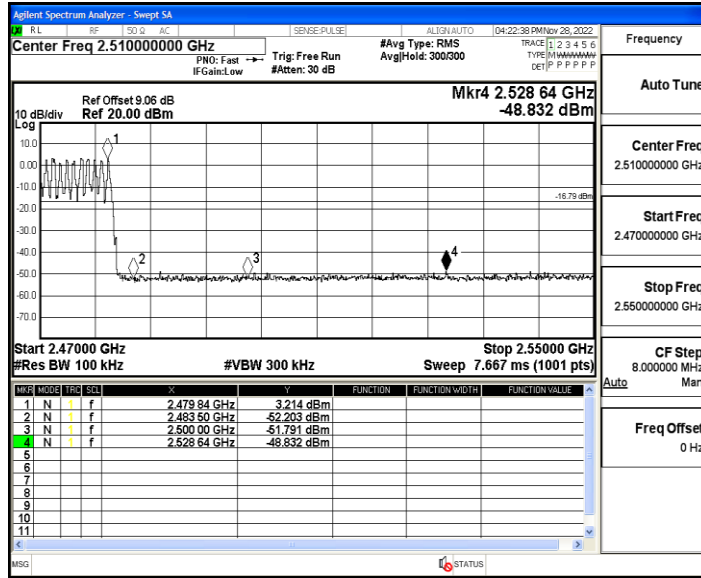
## Appendix G: Band edge measurements

### Test Result

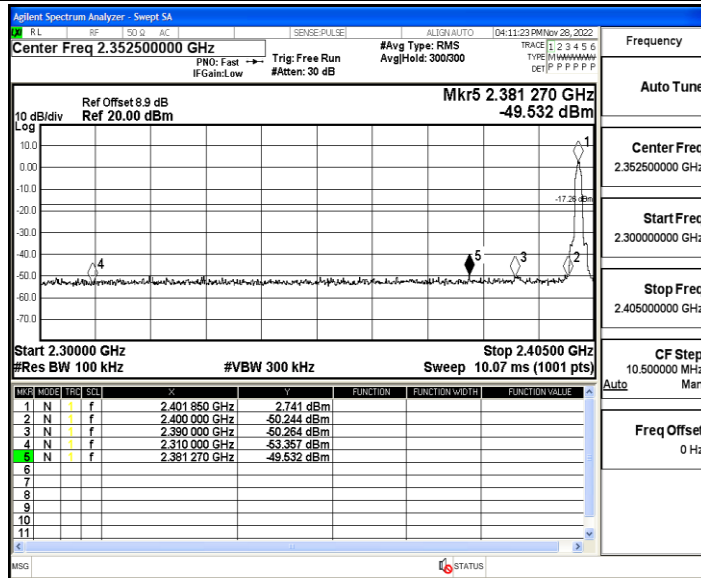
| TestMode | Antenna | ChName | Channel  | RefLevel [dBm] | Result [dBm] | Limit [dBm] | Verdict |
|----------|---------|--------|----------|----------------|--------------|-------------|---------|
| DH5      | Ant1    | Low    | 2402     | 3.19           | -48.98       | ≤-16.81     | PASS    |
|          |         | High   | 2480     | 3.39           | -48.3        | ≤-16.61     | PASS    |
|          |         | Low    | Hop_2402 | 2.53           | -50.56       | ≤-17.47     | PASS    |
|          |         | High   | Hop_2480 | 3.21           | -48.83       | ≤-16.79     | PASS    |
| 2DH5     | Ant1    | Low    | 2402     | 2.74           | -49.53       | ≤-17.26     | PASS    |
|          |         | High   | 2480     | 3.38           | -49.43       | ≤-16.62     | PASS    |
|          |         | Low    | Hop_2402 | 2.10           | -50.74       | ≤-17.9      | PASS    |
|          |         | High   | Hop_2480 | 0.21           | -49.38       | ≤-19.79     | PASS    |
| 3DH5     | Ant1    | Low    | 2402     | 3.19           | -49.13       | ≤-16.81     | PASS    |
|          |         | High   | 2480     | 3.44           | -49.43       | ≤-16.57     | PASS    |
|          |         | Low    | Hop_2402 | -0.37          | -50.86       | ≤-20.37     | PASS    |
|          |         | High   | Hop_2480 | 0.22           | -48.58       | ≤-19.78     | PASS    |

Test Graphs

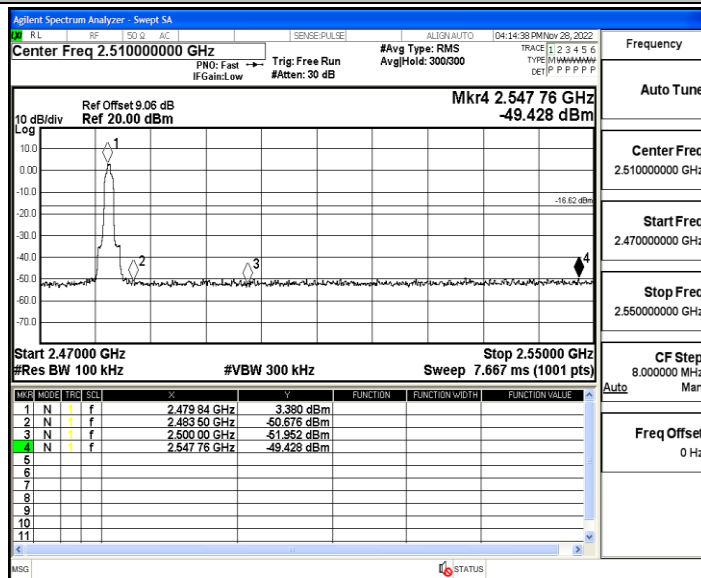




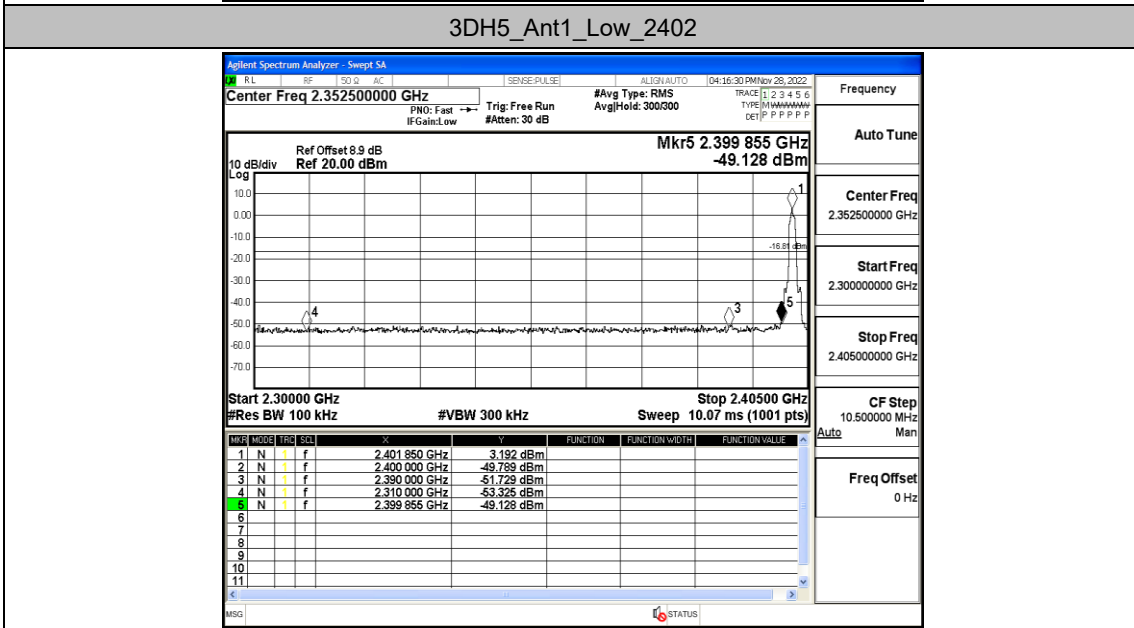
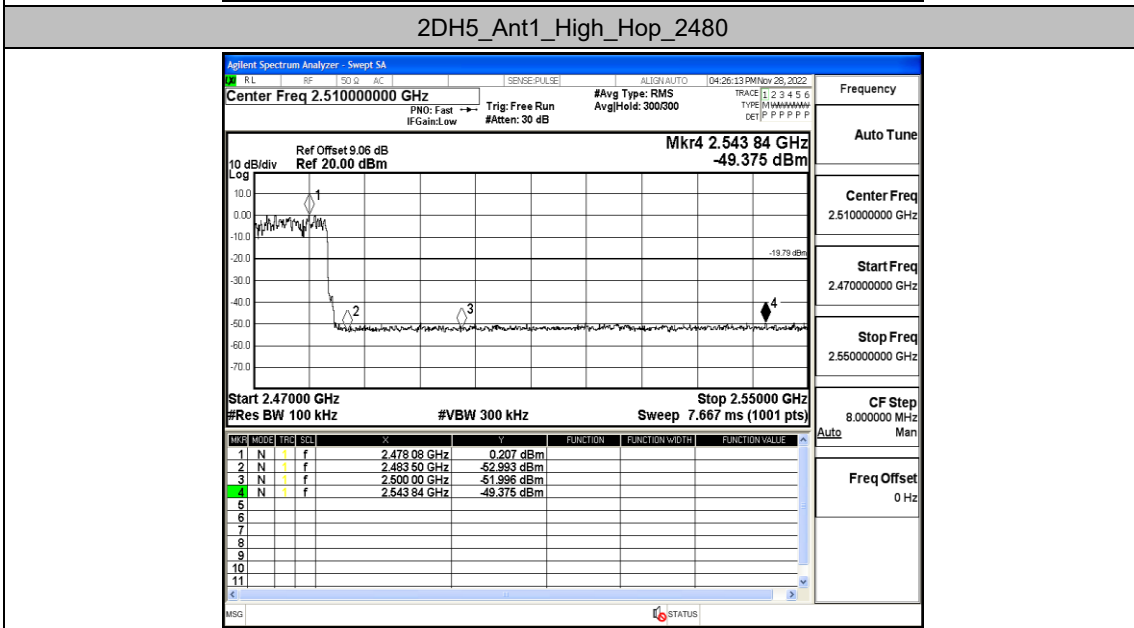
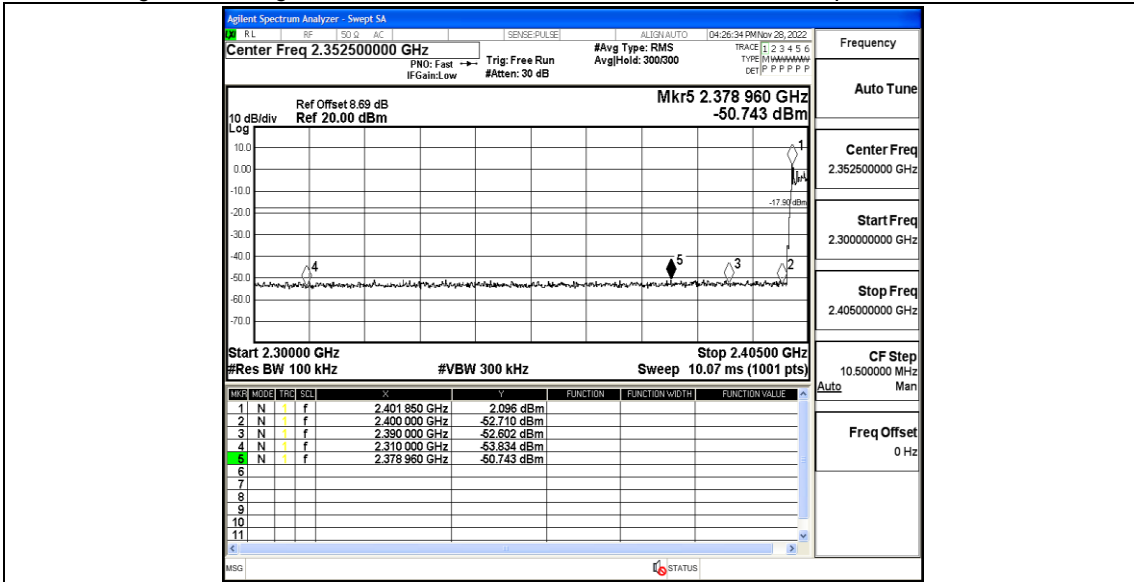
2DH5\_Ant1\_Low\_2402

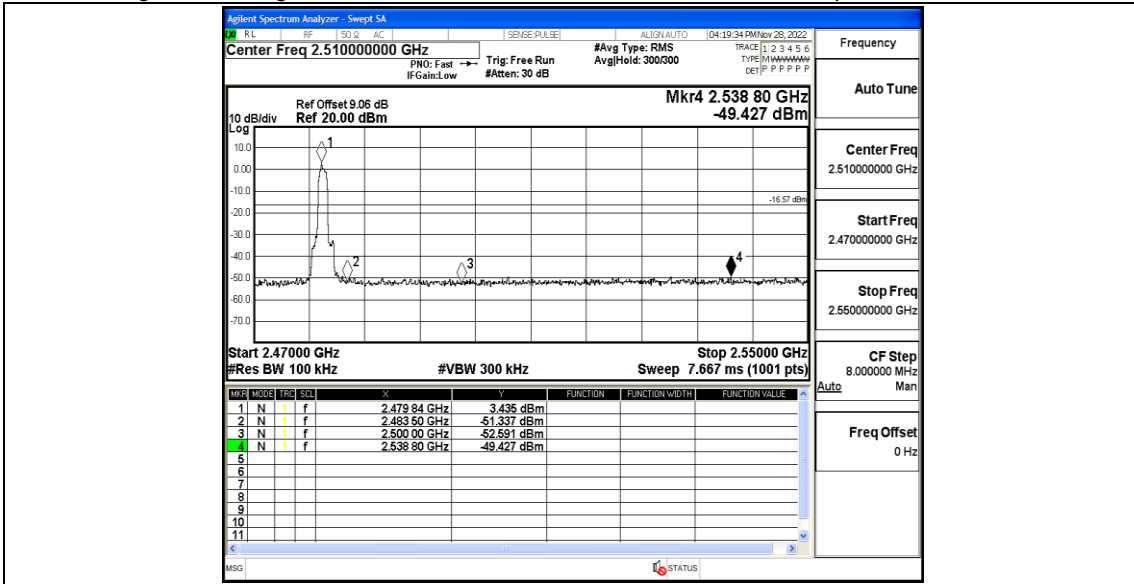


2DH5\_Ant1\_High\_2480

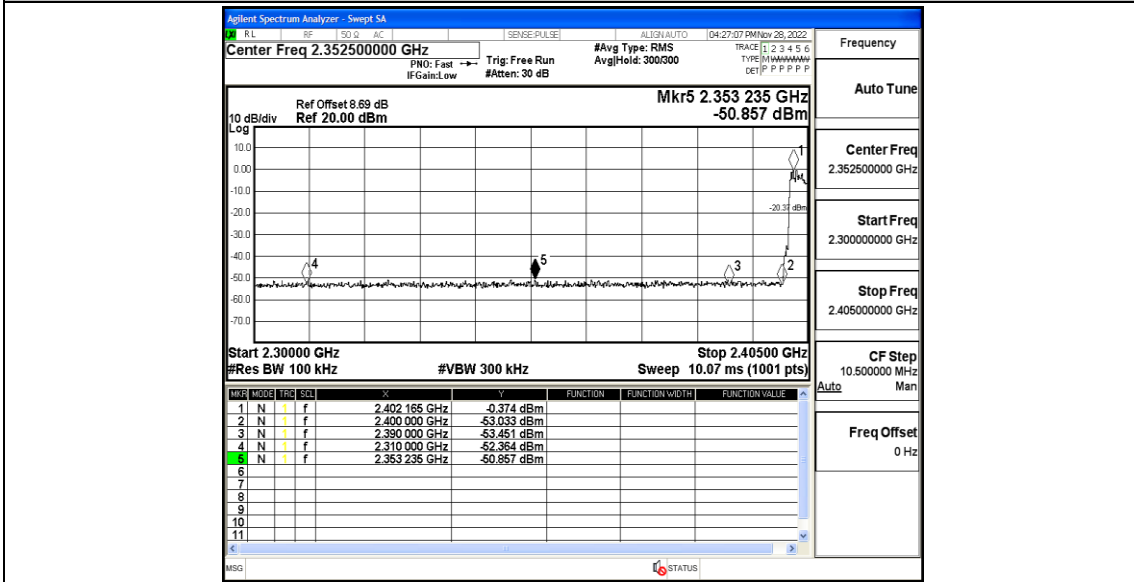


2DH5\_Ant1\_Low\_Hop\_2402

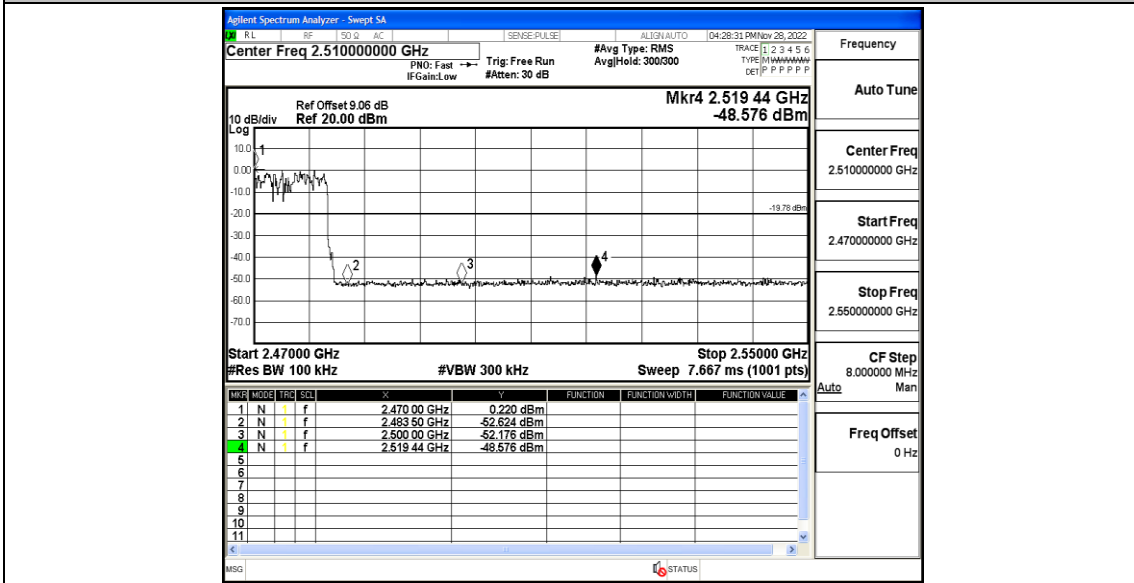




3DH5\_Ant1\_Low\_Hop\_2402



3DH5\_Ant1\_High\_Hop\_2480



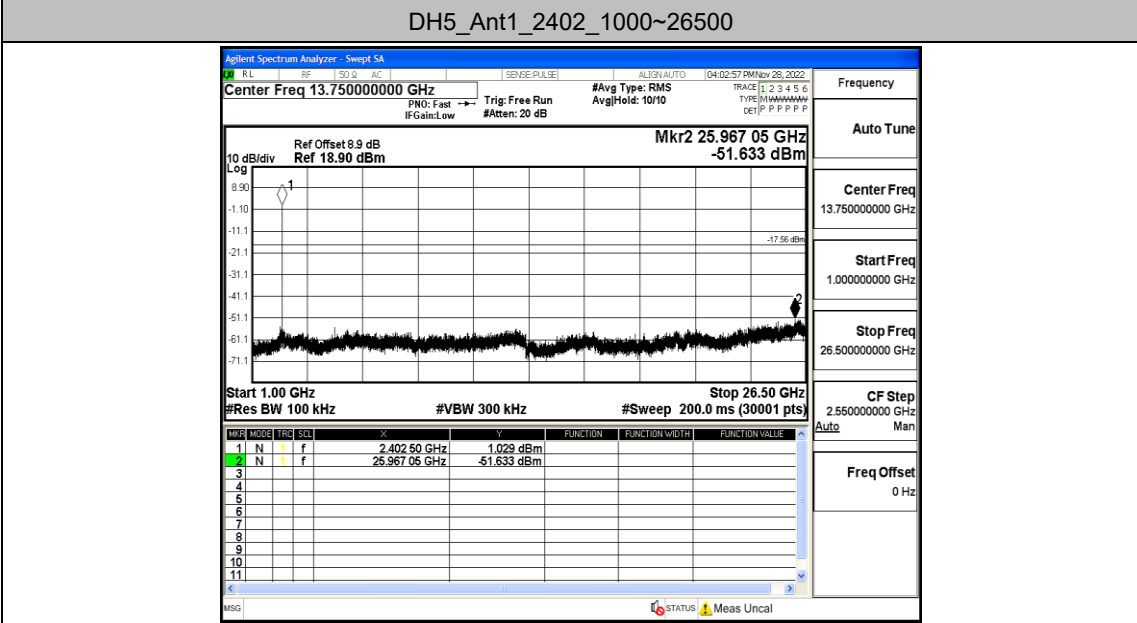
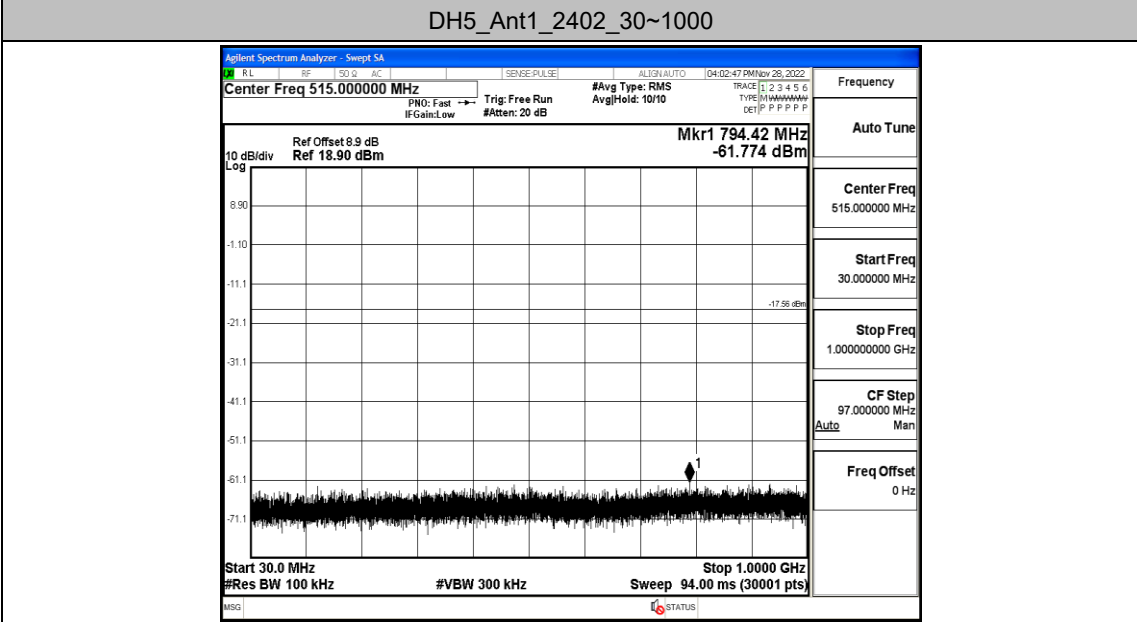
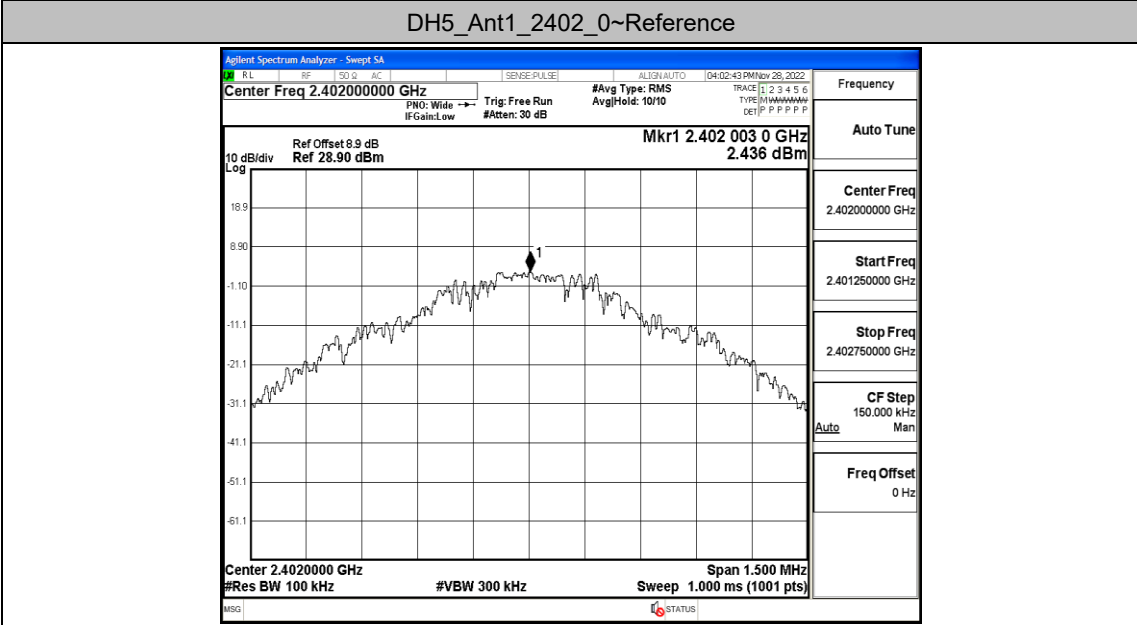


## Appendix H: Conducted Spurious Emission

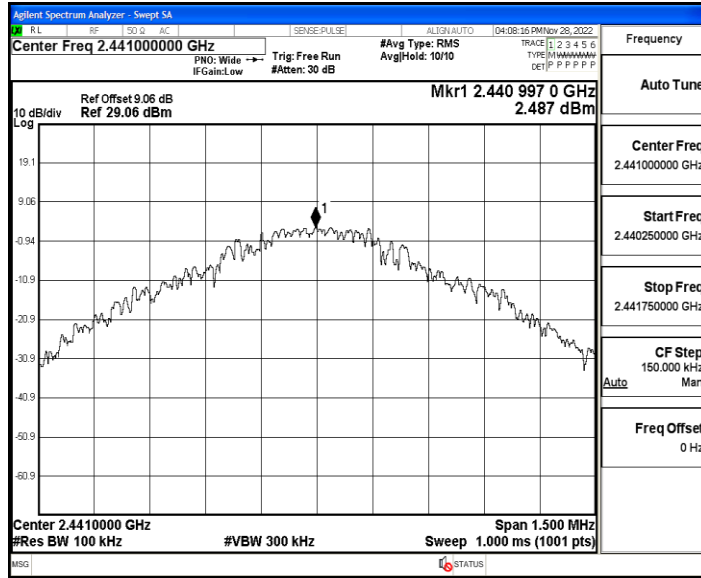
### Test Result

| TestMode | Antenna | Channel | FreqRange [MHz] | RefLevel [dBm] | Result [dBm] | Limit [dBm] | Verdict |
|----------|---------|---------|-----------------|----------------|--------------|-------------|---------|
| DH5      | Ant1    | 2402    | Reference       | 2.44           | 2.44         | ---         | PASS    |
|          |         |         | 30~1000         | 2.44           | -61.77       | ≤-17.56     | PASS    |
|          |         |         | 1000~26500      | 2.44           | -51.63       | ≤-17.56     | PASS    |
|          |         | 2441    | Reference       | 2.49           | 2.49         | ---         | PASS    |
|          |         |         | 30~1000         | 2.49           | -61.51       | ≤-17.51     | PASS    |
|          |         |         | 1000~26500      | 2.49           | -51.8        | ≤-17.51     | PASS    |
|          |         | 2480    | Reference       | 3.00           | 3.00         | ---         | PASS    |
|          |         |         | 30~1000         | 3.00           | -60.79       | ≤-17        | PASS    |
|          |         |         | 1000~26500      | 3.00           | -51.46       | ≤-17        | PASS    |
| 2DH5     | Ant1    | 2402    | Reference       | -0.91          | -0.91        | ---         | PASS    |
|          |         |         | 30~1000         | -0.91          | -61.46       | ≤-20.91     | PASS    |
|          |         |         | 1000~26500      | -0.91          | -51.18       | ≤-20.91     | PASS    |
|          |         | 2441    | Reference       | 2.15           | 2.15         | ---         | PASS    |
|          |         |         | 30~1000         | 2.15           | -61.61       | ≤-17.85     | PASS    |
|          |         |         | 1000~26500      | 2.15           | -49.72       | ≤-17.85     | PASS    |
|          |         | 2480    | Reference       | 3.19           | 3.19         | ---         | PASS    |
|          |         |         | 30~1000         | 3.19           | -61.1        | ≤-16.81     | PASS    |
|          |         |         | 1000~26500      | 3.19           | -50.28       | ≤-16.81     | PASS    |
| 3DH5     | Ant1    | 2402    | Reference       | 1.66           | 1.66         | ---         | PASS    |
|          |         |         | 30~1000         | 1.66           | -61.68       | ≤-18.34     | PASS    |
|          |         |         | 1000~26500      | 1.66           | -50.77       | ≤-18.34     | PASS    |
|          |         | 2441    | Reference       | 0.38           | 0.38         | ---         | PASS    |
|          |         |         | 30~1000         | 0.38           | -61.81       | ≤-19.62     | PASS    |
|          |         |         | 1000~26500      | 0.38           | -51.17       | ≤-19.62     | PASS    |
|          |         | 2480    | Reference       | -0.09          | -0.09        | ---         | PASS    |
|          |         |         | 30~1000         | -0.09          | -61.39       | ≤-20.09     | PASS    |
|          |         |         | 1000~26500      | -0.09          | -51.22       | ≤-20.09     | PASS    |

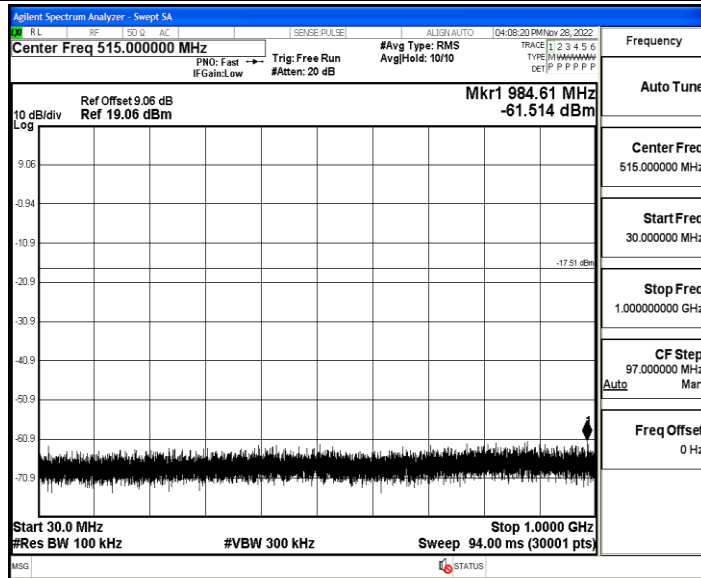
Test Graphs



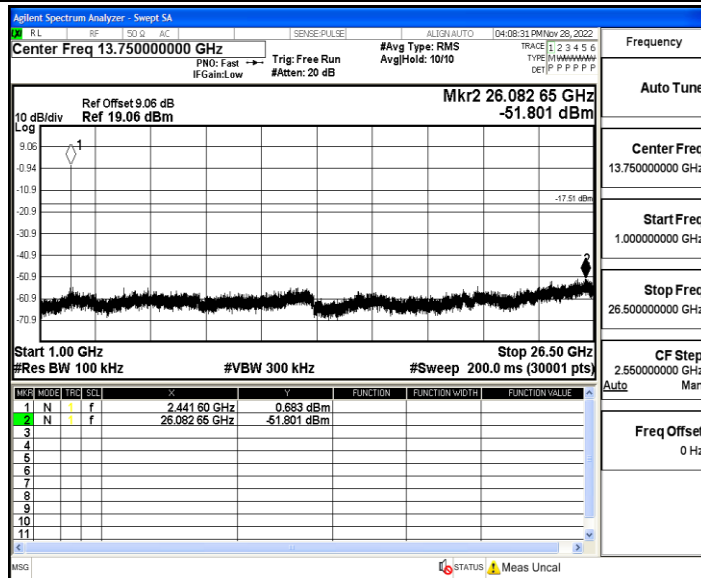
**DH5\_Ant1\_2441\_0~Reference**



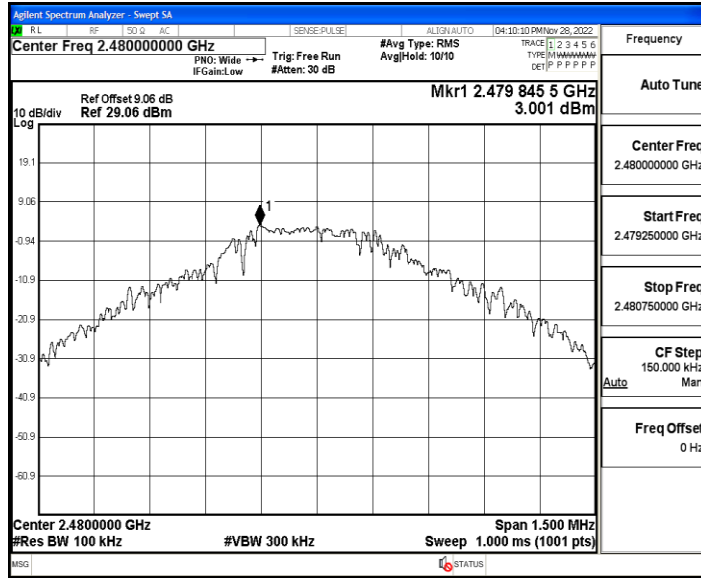
DH5\_Ant1\_2441\_30~1000



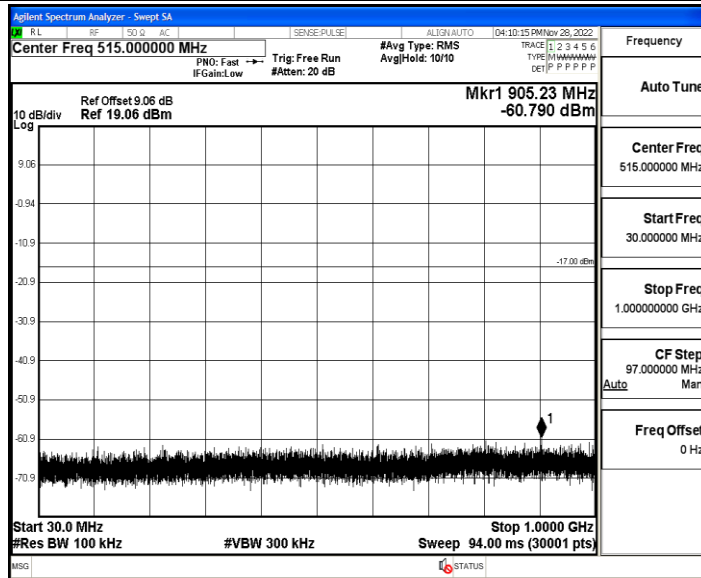
DH5\_Ant1\_2441\_1000~26500



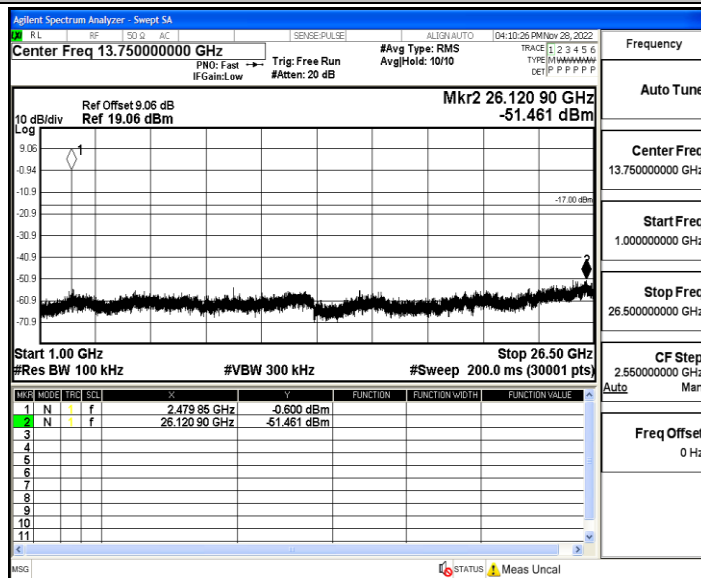
DH5\_Ant1\_2480\_0~Reference



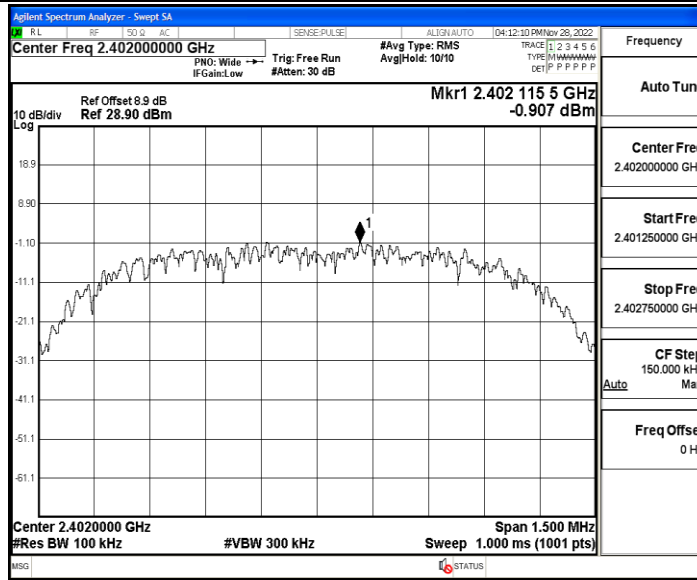
DH5\_Ant1\_2480\_30~1000



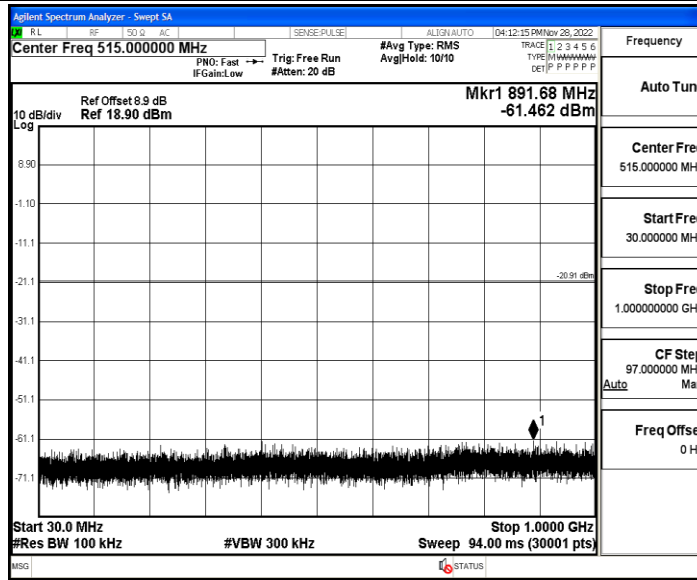
DH5\_Ant1\_2480\_1000~26500



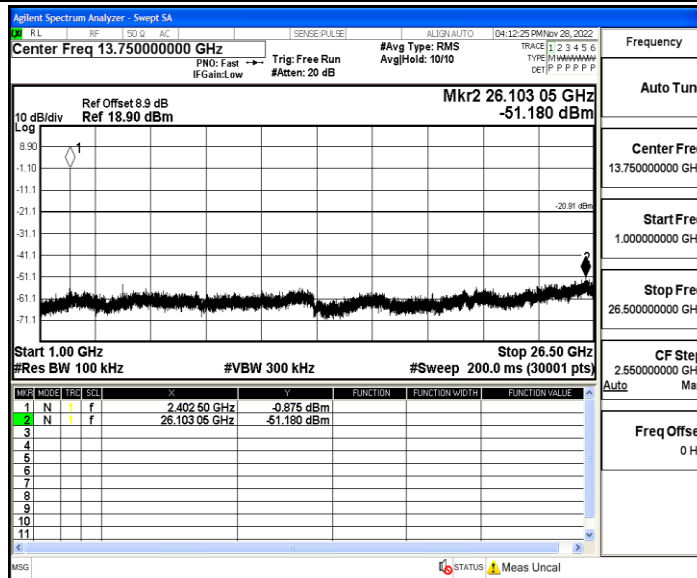
2DH5\_Ant1\_2402\_0~Reference



2DH5\_Ant1\_2402\_30~1000



2DH5\_Ant1\_2402\_1000~26500



2DH5\_Ant1\_2441\_0~Reference