

## Appendix for Bluetooth BR/EDR

Test Report No.:CTL2207053063-WF03

## Appendix A: 20dB Emission Bandwidth

## Test Result

| TestMode | Antenna | Channel | 20db EBW[MHz] | FL[MHz]  | FH[MHz]  | Limit[MHz] | Verdict |
|----------|---------|---------|---------------|----------|----------|------------|---------|
| DH5      | Ant1    | 2402    | 0.960         | 2401.514 | 2402.474 | ---        | PASS    |
|          | Ant2    | 2402    | 0.957         | 2401.517 | 2402.474 | ---        | PASS    |
|          | Ant1    | 2441    | 0.960         | 2440.514 | 2441.474 | ---        | PASS    |
|          | Ant2    | 2441    | 0.957         | 2440.517 | 2441.474 | ---        | PASS    |
|          | Ant1    | 2480    | 0.960         | 2479.514 | 2480.474 | ---        | PASS    |
|          | Ant2    | 2480    | 0.960         | 2479.514 | 2480.474 | ---        | PASS    |
| 2DH5     | Ant1    | 2402    | 1.332         | 2401.313 | 2402.645 | ---        | PASS    |
|          | Ant2    | 2402    | 1.329         | 2401.316 | 2402.645 | ---        | PASS    |
|          | Ant1    | 2441    | 1.332         | 2440.313 | 2441.645 | ---        | PASS    |
|          | Ant2    | 2441    | 1.332         | 2440.313 | 2441.645 | ---        | PASS    |
|          | Ant1    | 2480    | 1.332         | 2479.313 | 2480.645 | ---        | PASS    |
|          | Ant2    | 2480    | 1.332         | 2479.313 | 2480.645 | ---        | PASS    |
| 3DH5     | Ant1    | 2402    | 1.299         | 2401.334 | 2402.633 | ---        | PASS    |
|          | Ant2    | 2402    | 1.299         | 2401.334 | 2402.633 | ---        | PASS    |
|          | Ant1    | 2441    | 1.299         | 2440.334 | 2441.633 | ---        | PASS    |
|          | Ant2    | 2441    | 1.299         | 2440.334 | 2441.633 | ---        | PASS    |
|          | Ant1    | 2480    | 1.299         | 2479.334 | 2480.633 | ---        | PASS    |
|          | Ant2    | 2480    | 1.302         | 2479.334 | 2480.636 | ---        | PASS    |

## Test Graphs



DH5\_Ant1\_2402



DH5\_Ant2\_2402



DH5\_Ant1\_2441



DH5\_Ant2\_2441



DH5\_Ant1\_2480



DH5\_Ant2\_2480



2DH5\_Ant1\_2402



2DH5\_Ant2\_2402



2DH5\_Ant1\_2441



2DH5\_Ant2\_2441



2DH5\_Ant1\_2480



2DH5\_Ant2\_2480





3DH5\_Ant1\_2402



3DH5\_Ant2\_2402



3DH5\_Ant1\_2441



3DH5\_Ant2\_2441



3DH5\_Ant1\_2480



3DH5\_Ant2\_2480

## Appendix B: Maximum conducted output power

### Test Result

| TestMode | Antenna | Channel | Result[dBm] | Limit[dBm] | Verdict |
|----------|---------|---------|-------------|------------|---------|
| DH5      | Ant1    | 2402    | 4.56        | ≤30        | PASS    |
|          | Ant2    | 2402    | 4.43        | ≤30        | PASS    |
|          | Ant1    | 2441    | 4.32        | ≤30        | PASS    |
|          | Ant2    | 2441    | 4.17        | ≤30        | PASS    |
|          | Ant1    | 2480    | 3.9         | ≤30        | PASS    |
|          | Ant2    | 2480    | 3.73        | ≤30        | PASS    |
| 2DH5     | Ant1    | 2402    | 4.92        | ≤20.97     | PASS    |
|          | Ant2    | 2402    | 4.85        | ≤30        | PASS    |
|          | Ant1    | 2441    | 4.85        | ≤20.97     | PASS    |
|          | Ant2    | 2441    | 4.83        | ≤30        | PASS    |
|          | Ant1    | 2480    | 4.62        | ≤20.97     | PASS    |
|          | Ant2    | 2480    | 4.68        | ≤30        | PASS    |
| 3DH5     | Ant1    | 2402    | 5.25        | ≤20.97     | PASS    |
|          | Ant2    | 2402    | 5.16        | ≤30        | PASS    |
|          | Ant1    | 2441    | 5.19        | ≤20.97     | PASS    |
|          | Ant2    | 2441    | 5.15        | ≤30        | PASS    |
|          | Ant1    | 2480    | 4.95        | ≤20.97     | PASS    |
|          | Ant2    | 2480    | 4.99        | ≤30        | PASS    |



## Test Graphs



DH5\_Ant1\_2402



DH5\_Ant2\_2402



DH5\_Ant1\_2441



DH5\_Ant2\_2441



DH5\_Ant1\_2480



DH5\_Ant2\_2480



2DH5\_Ant1\_2402



2DH5\_Ant2\_2402



2DH5\_Ant1\_2441



2DH5\_Ant2\_2441



2DH5\_Ant1\_2480



2DH5\_Ant2\_2480



3DH5\_Ant1\_2402



3DH5\_Ant2\_2402



3DH5\_Ant1\_2441



3DH5\_Ant2\_2441



3DH5\_Ant1\_2480



3DH5\_Ant2\_2480



## Appendix C: Carrier frequency separation

### Test Result

| TestMode | Antenna | Channel | Result[dBm] | Limit[dBm]   | Verdict |
|----------|---------|---------|-------------|--------------|---------|
| DH5      | Ant1    | Hop     | 0.998       | $\geq 0.960$ | PASS    |
|          | Ant2    | Hop     | 1           | $\geq 0.960$ | PASS    |
| 2DH5     | Ant1    | Hop     | 1.004       | $\geq 0.888$ | PASS    |
|          | Ant2    | Hop     | 1.002       | $\geq 0.888$ | PASS    |
| 3DH5     | Ant1    | Hop     | 1.002       | $\geq 0.868$ | PASS    |
|          | Ant2    | Hop     | 1           | $\geq 0.868$ | PASS    |

## Test Graphs



DH5\_Ant1\_Hop



DH5\_Ant2\_Hop



2DH5\_Ant1\_Hop



2DH5\_Ant2\_Hop



3DH5\_Ant1\_Hop



3DH5\_Ant2\_Hop

## Appendix D: Time of occupancy

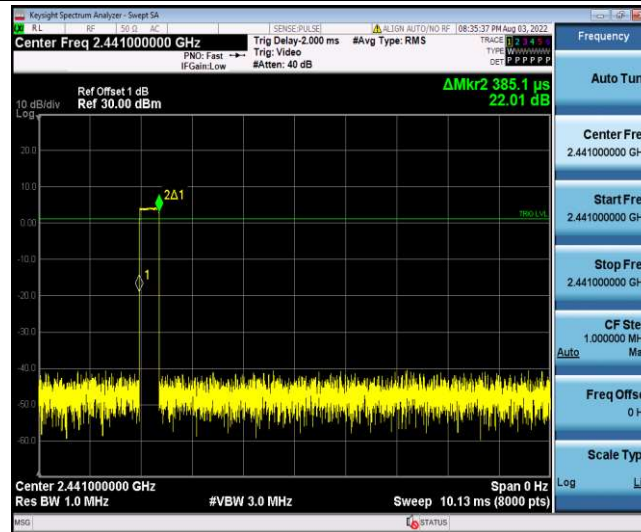
### Test Result

| TestMode | Antenna | Channel | BurstWidth<br>[ms] | TotalHops<br>[Num] | Result[s] | Limit[s] | Verdict |
|----------|---------|---------|--------------------|--------------------|-----------|----------|---------|
| DH1      | Ant1    | Hop     | 0.39               | 320                | 0.123     | ≤0.4     | PASS    |
|          | Ant2    | Hop     | 0.38               | 310                | 0.119     | ≤0.4     | PASS    |
| DH3      | Ant1    | Hop     | 1.64               | 150                | 0.246     | ≤0.4     | PASS    |
|          | Ant2    | Hop     | 1.64               | 160                | 0.262     | ≤0.4     | PASS    |
| DH5      | Ant1    | Hop     | 2.89               | 130                | 0.376     | ≤0.4     | PASS    |
|          | Ant2    | Hop     | 2.89               | 130                | 0.376     | ≤0.4     | PASS    |
| 2DH1     | Ant1    | Hop     | 0.39               | 300                | 0.116     | ≤0.4     | PASS    |
|          | Ant2    | Hop     | 0.39               | 310                | 0.12      | ≤0.4     | PASS    |
| 2DH3     | Ant1    | Hop     | 1.64               | 170                | 0.279     | ≤0.4     | PASS    |
|          | Ant2    | Hop     | 1.64               | 150                | 0.246     | ≤0.4     | PASS    |
| 2DH5     | Ant1    | Hop     | 2.89               | 120                | 0.346     | ≤0.4     | PASS    |
|          | Ant2    | Hop     | 2.89               | 80                 | 0.231     | ≤0.4     | PASS    |
| 3DH1     | Ant1    | Hop     | 0.39               | 320                | 0.123     | ≤0.4     | PASS    |
|          | Ant2    | Hop     | 0.39               | 320                | 0.124     | ≤0.4     | PASS    |
| 3DH3     | Ant1    | Hop     | 1.64               | 150                | 0.245     | ≤0.4     | PASS    |
|          | Ant2    | Hop     | 1.64               | 160                | 0.262     | ≤0.4     | PASS    |
| 3DH5     | Ant1    | Hop     | 2.89               | 90                 | 0.26      | ≤0.4     | PASS    |
|          | Ant2    | Hop     | 2.88               | 90                 | 0.259     | ≤0.4     | PASS    |

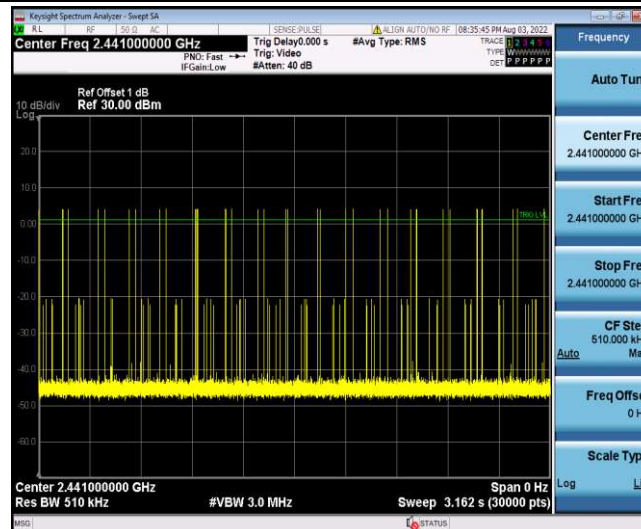
Note: (1) Dwell time=Pulse time (ms) × Total Pulse number s

(2) Total Pulse number= Pulse number in 3.16 s × 10

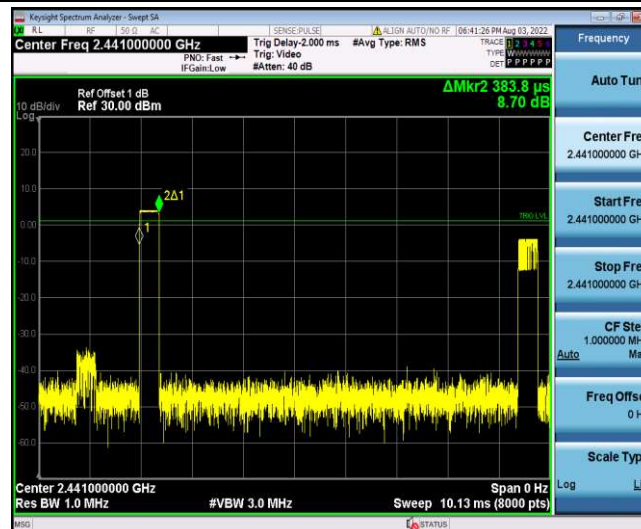
## Test Graphs



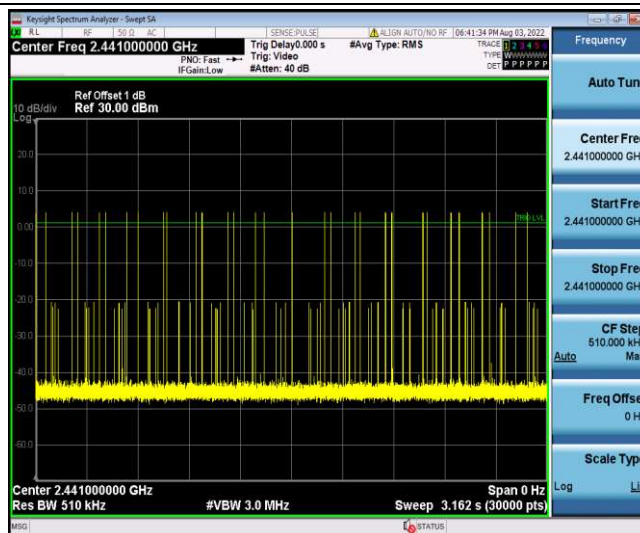
DH1\_Ant1\_Hop



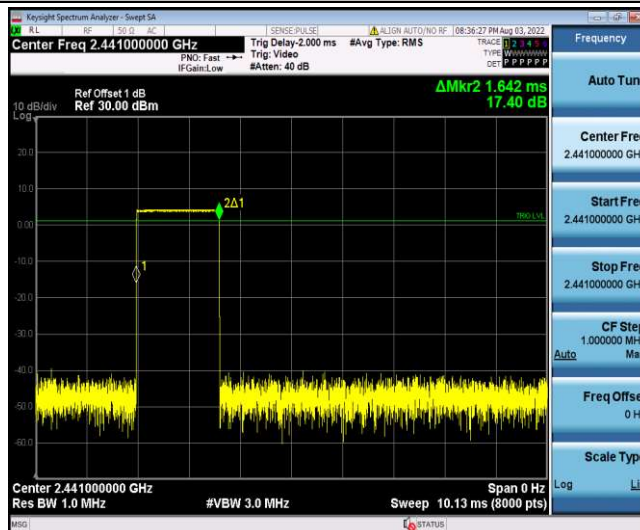
DH1\_Ant1\_Hop



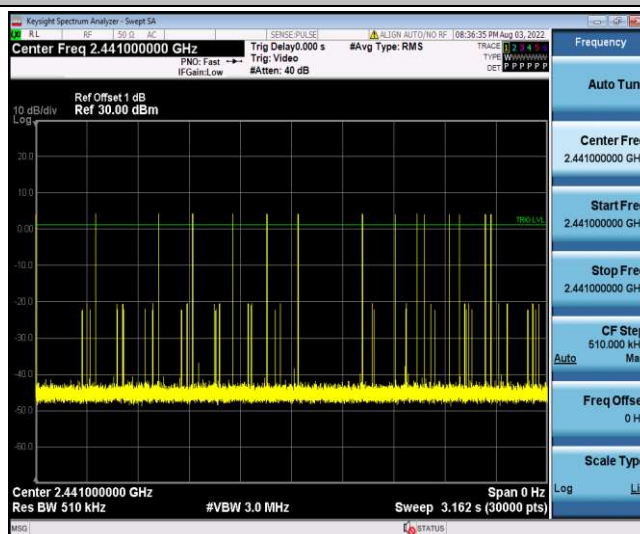
DH1\_Ant2\_Hop



DH1\_Ant2\_Hop

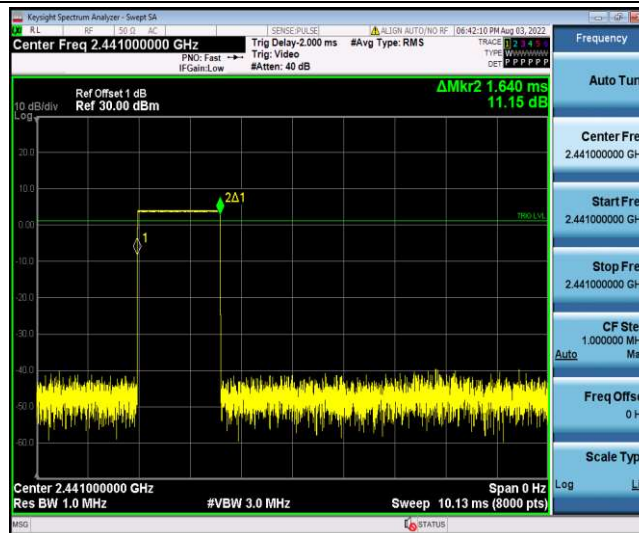


DH3\_Ant1\_Hop

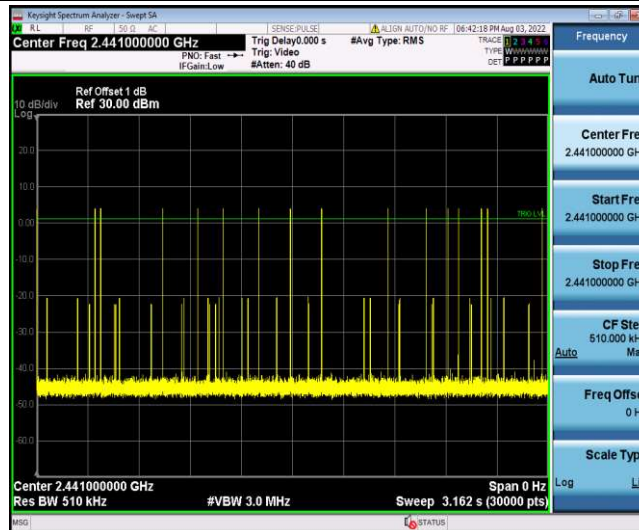


DH3\_Ant1\_Hop

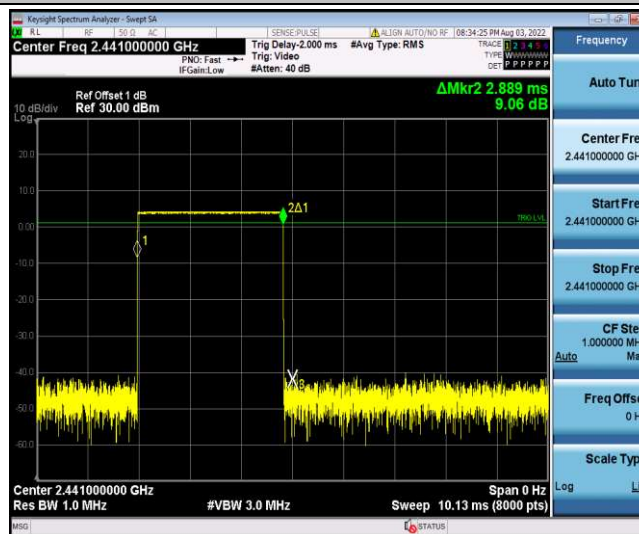




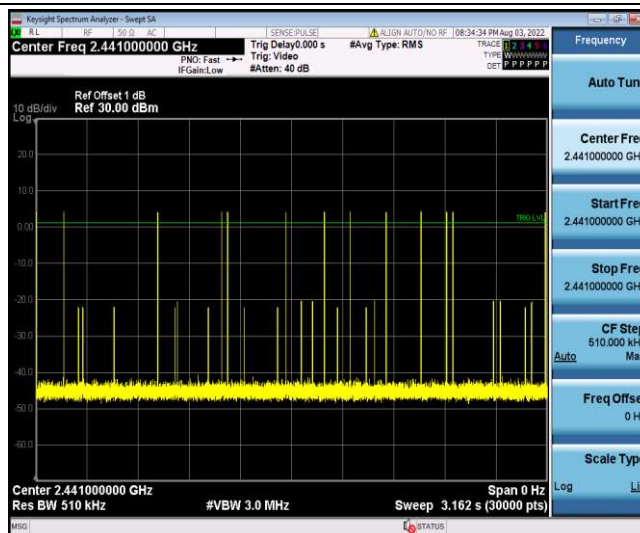
DH3\_Ant2\_Hop



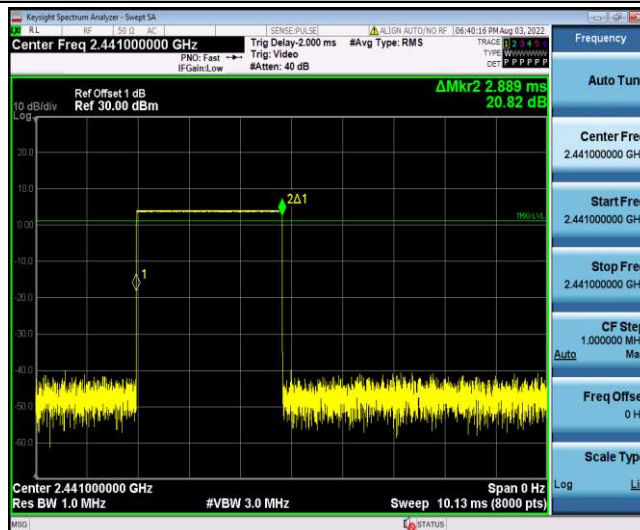
DH3\_Ant2\_Hop



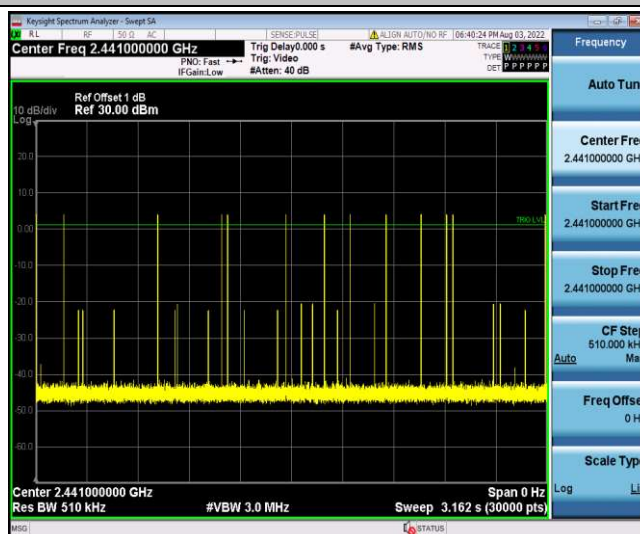
DH5\_Ant1\_Hop



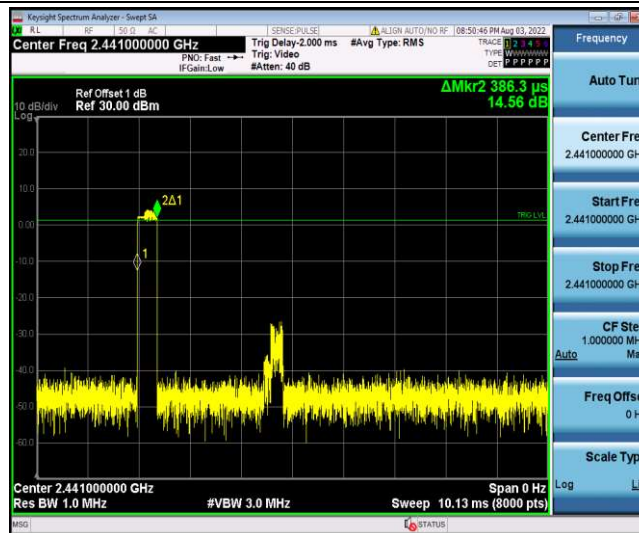
DH5\_Ant1\_Hop



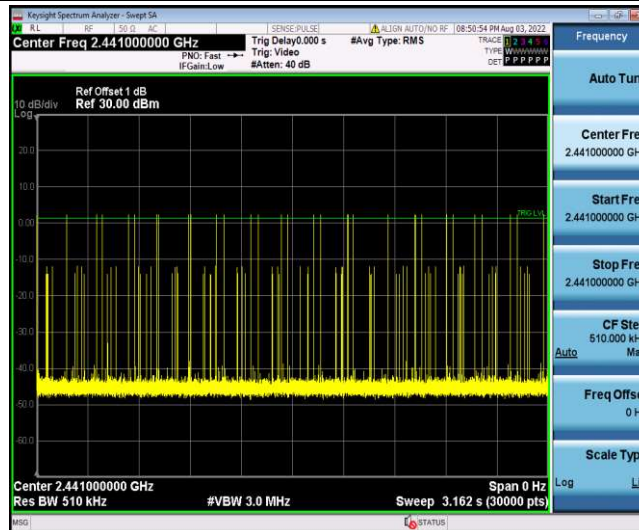
DH5\_Ant2\_Hop



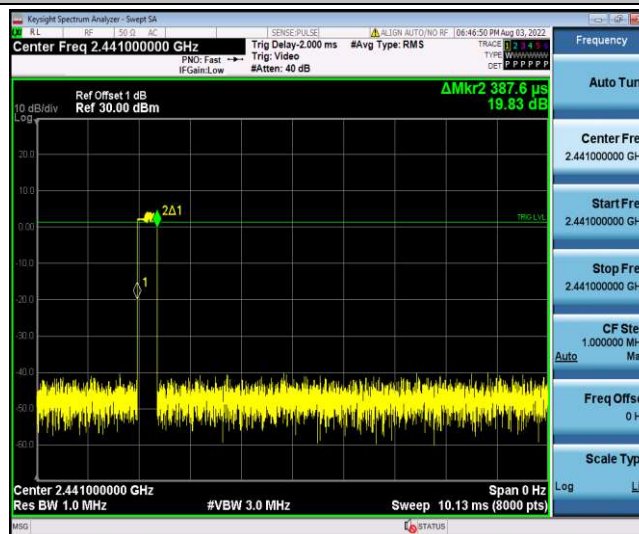
DH5\_Ant2\_Hop



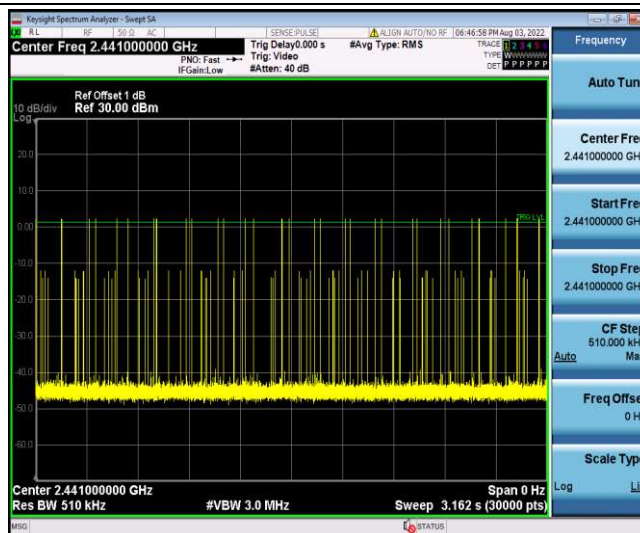
2DH1\_Ant1\_Hop



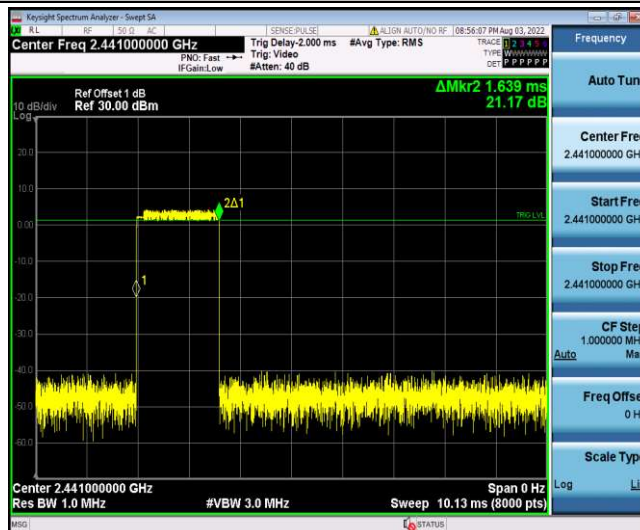
2DH1\_Ant1\_Hop



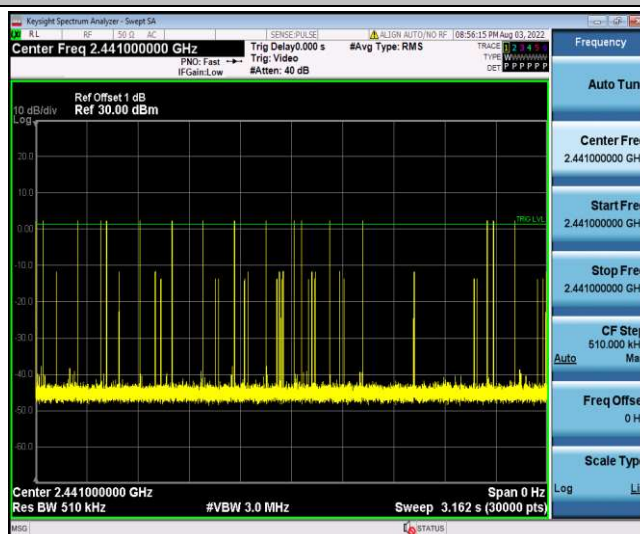
2DH1\_Ant2\_Hop



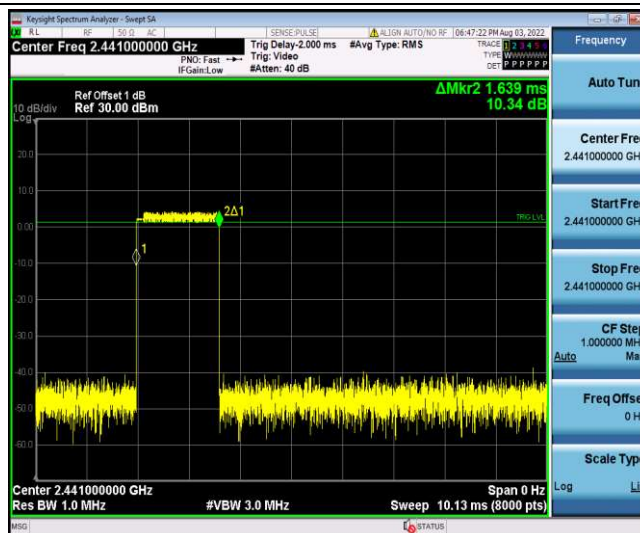
2DH1\_Ant2\_Hop



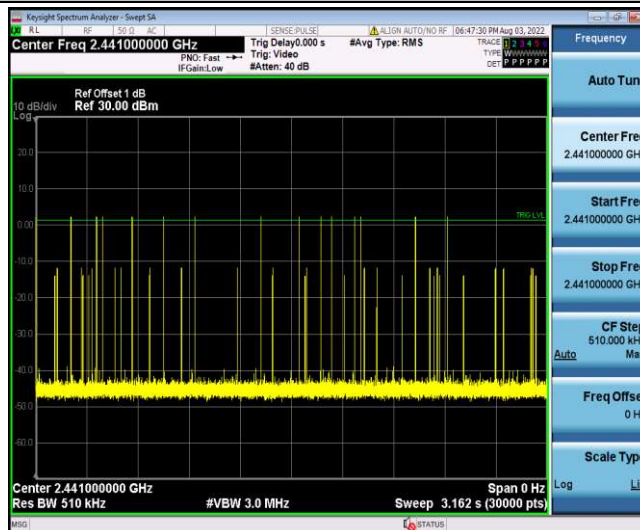
2DH3\_Ant1\_Hop



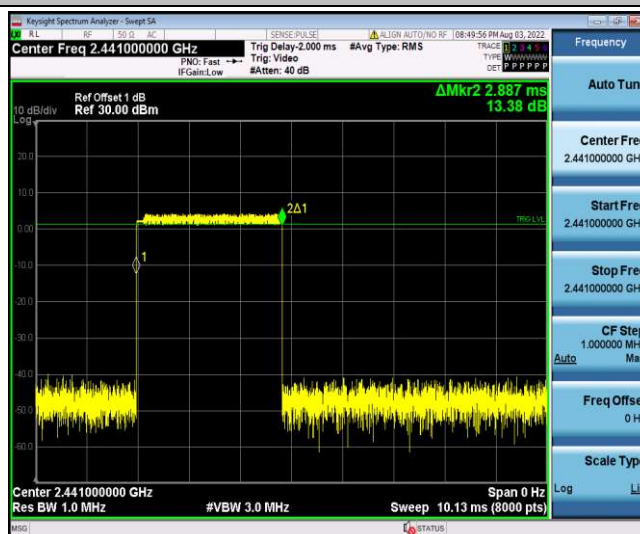
2DH3\_Ant1\_Hop



2DH3\_Ant2\_Hop

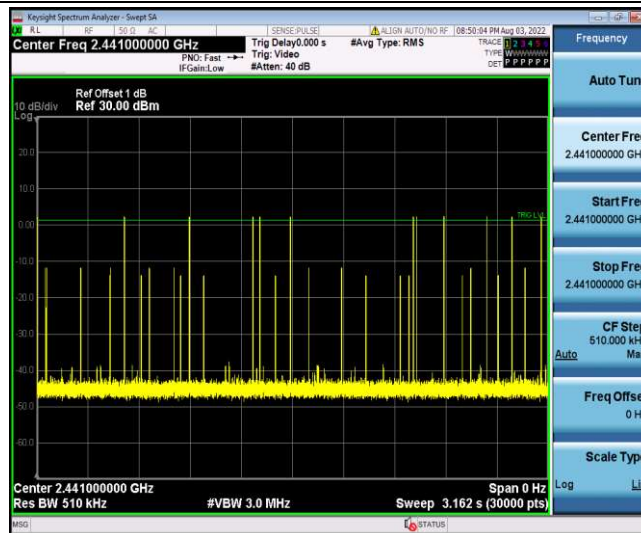


2DH3\_Ant2\_Hop

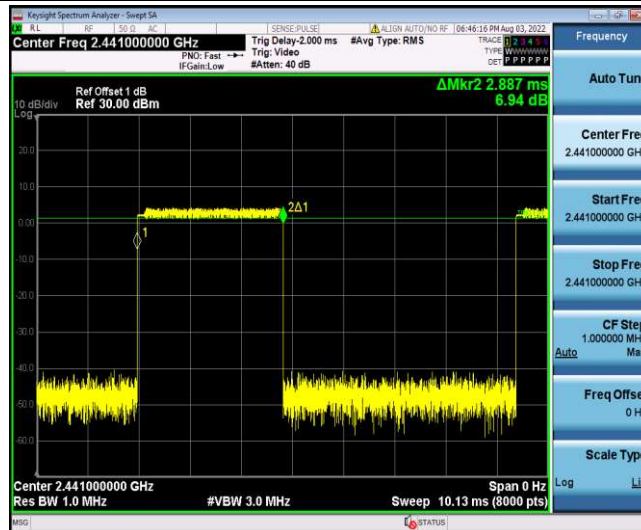


2DH5\_Ant1\_Hop

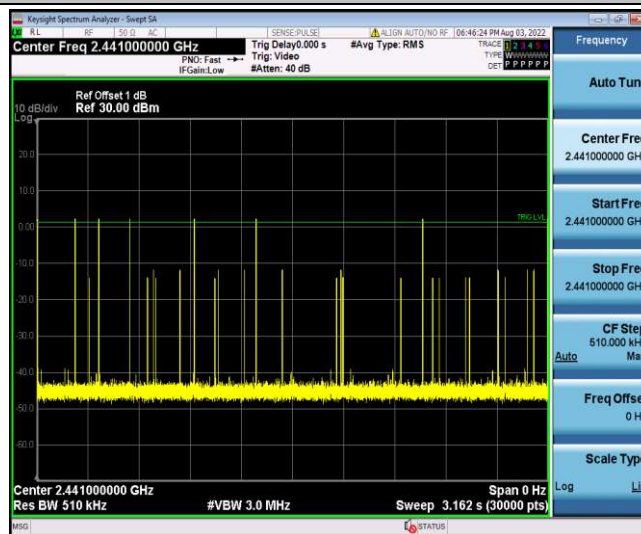




2DH5\_Ant1\_Hop

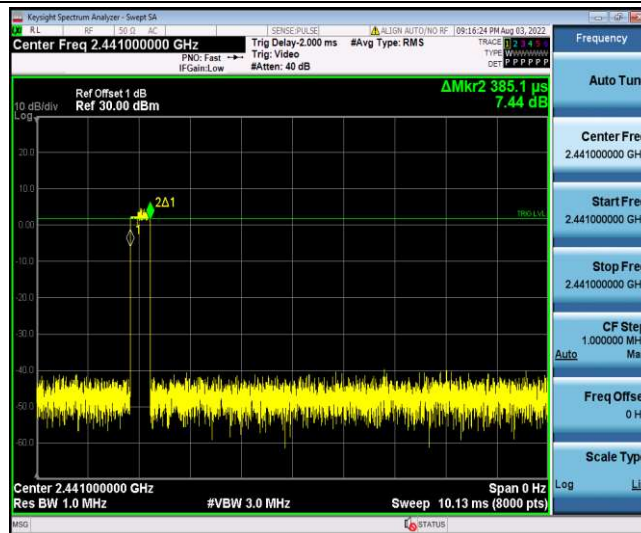


2DH5\_Ant2\_Hop

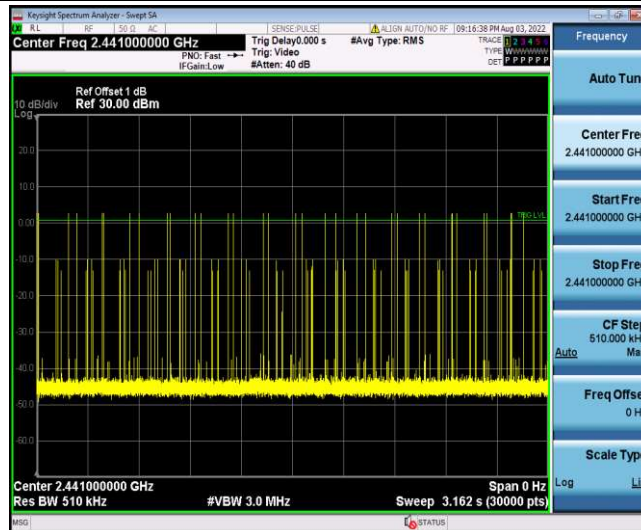


2DH5\_Ant2\_Hop

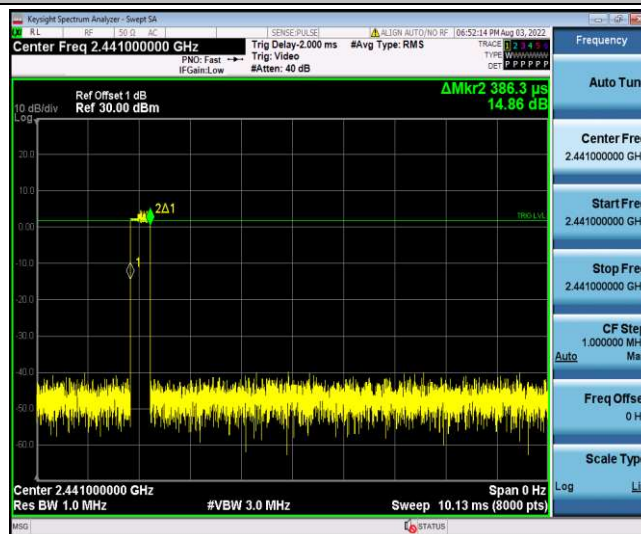




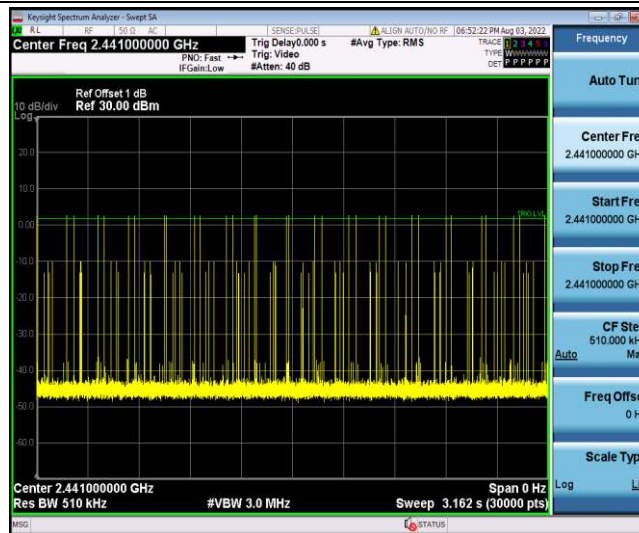
3DH1\_Ant1\_Hop



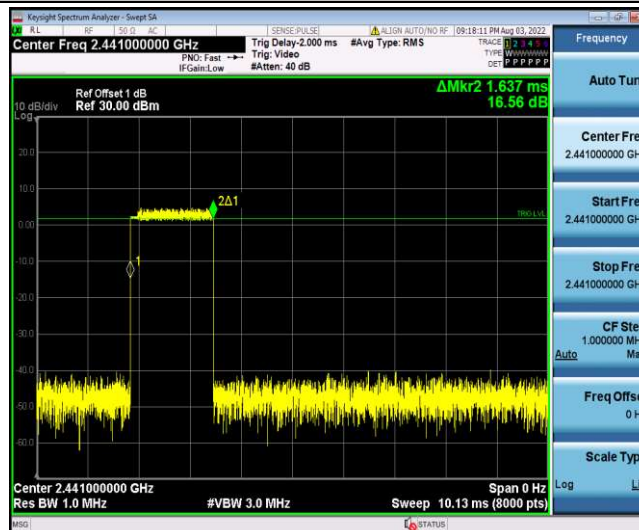
3DH1\_Ant1\_Hop



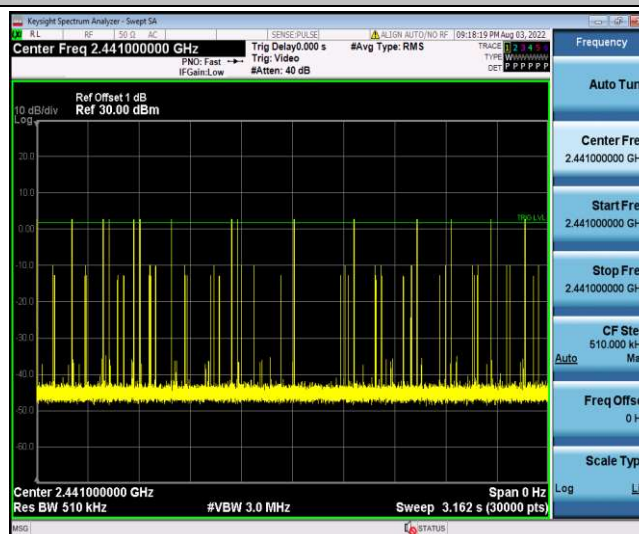
3DH1\_Ant2\_Hop



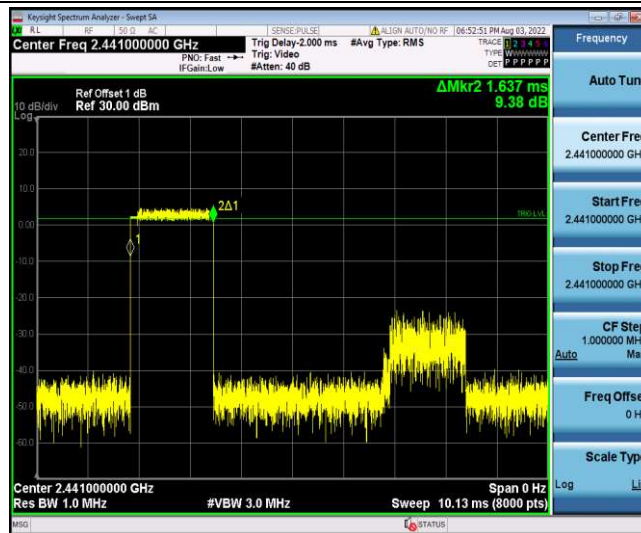
3DH1\_Ant2\_Hop



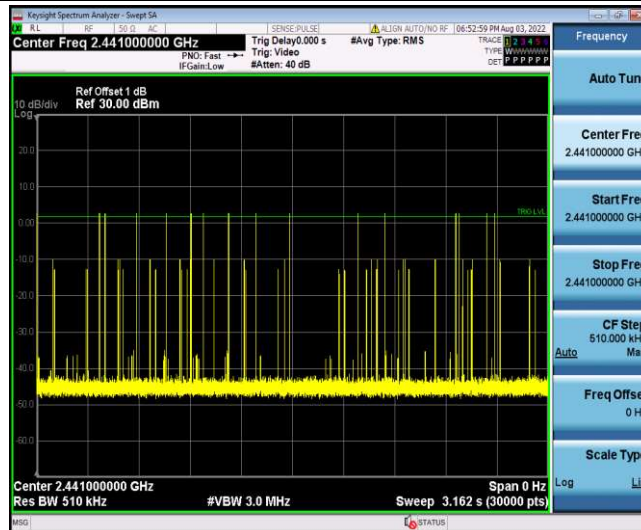
3DH3\_Ant1\_Hop



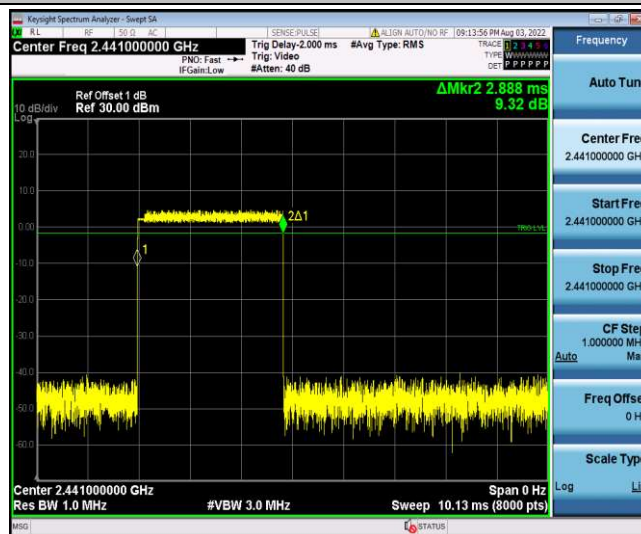
3DH3\_Ant1\_Hop



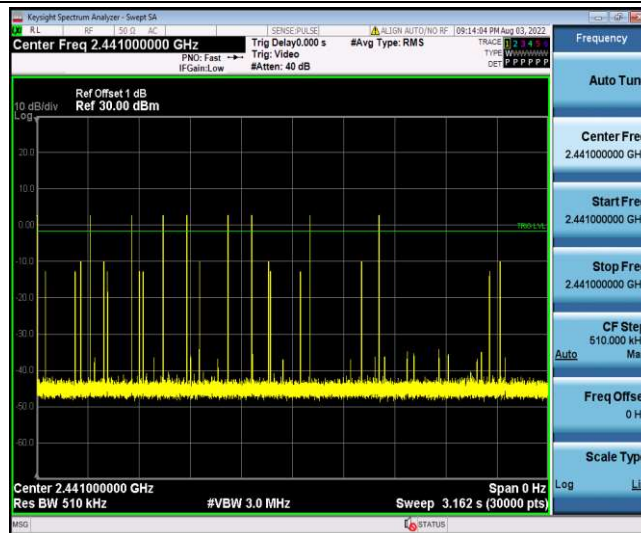
3DH3\_Ant2\_Hop



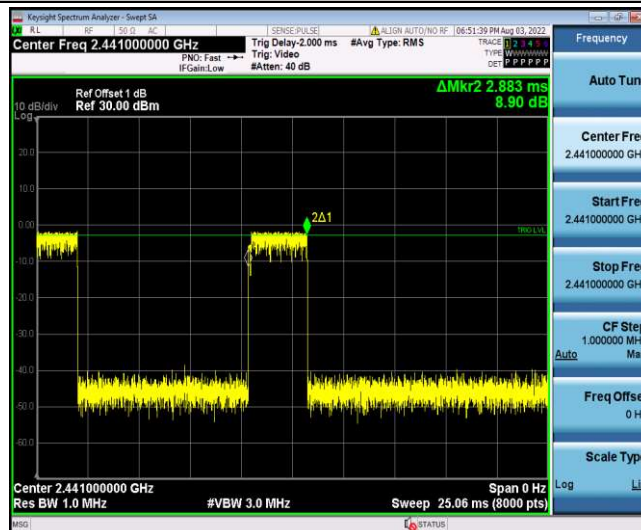
3DH3\_Ant2\_Hop



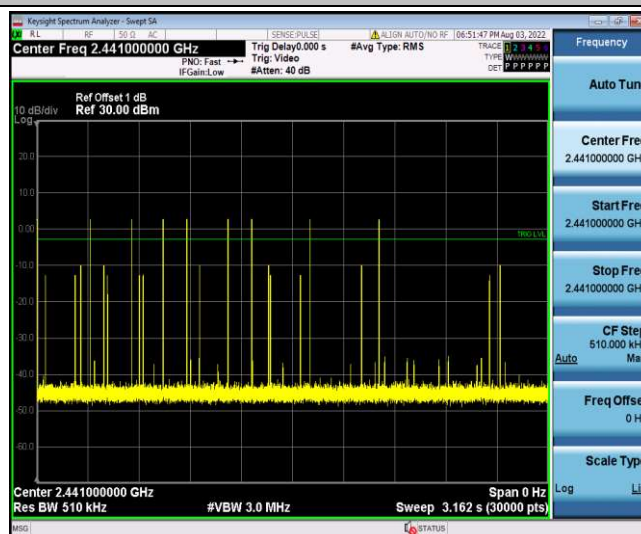
3DH5\_Ant1\_Hop



3DH5\_Ant1\_Hop



3DH5\_Ant2\_Hop



3DH5\_Ant2\_Hop

## Appendix E: Number of hopping channels

### Test Result

| TestMode | Antenna | Channel | Result[Num] | Limit[Num] | Verdict |
|----------|---------|---------|-------------|------------|---------|
| DH5      | Ant1    | Hop     | 79          | $\geq 15$  | PASS    |
|          | Ant2    | Hop     | 79          | $\geq 15$  | PASS    |
| 2DH5     | Ant1    | Hop     | 79          | $\geq 15$  | PASS    |
|          | Ant2    | Hop     | 79          | $\geq 15$  | PASS    |
| 3DH5     | Ant1    | Hop     | 79          | $\geq 15$  | PASS    |
|          | Ant2    | Hop     | 79          | $\geq 15$  | PASS    |