



## Appendix A

### RF Test Data for BT (Conducted Measurement)

**Product Name:** Speaker box

**Test Model:** PWRPA2

#### Environmental Conditions

|                    |           |
|--------------------|-----------|
| Temperature:       | 23.5° C   |
| Relative Humidity: | 52.2%     |
| ATM Pressure:      | 100.0 kPa |
| Test Engineer:     | Bill Zhu  |
| Supervised by:     | Li Huan   |



## A.1 20dB Emission Bandwidth

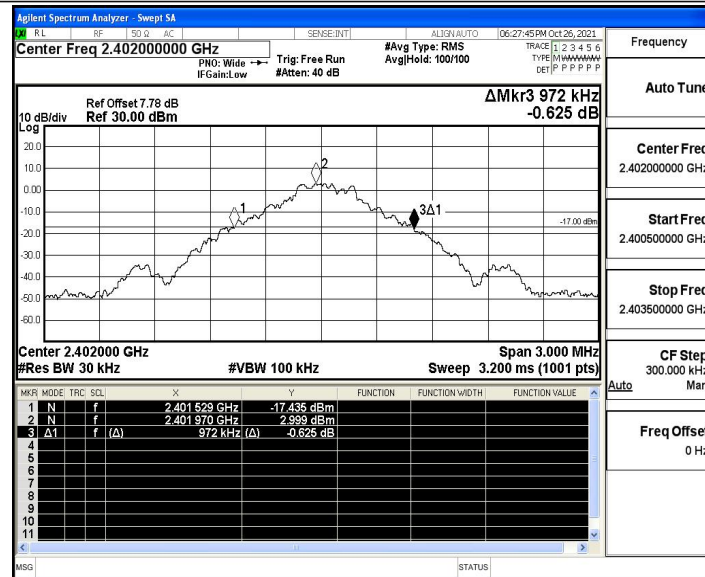
### Test Result

| TestMode | Antenna | Channel | 20db<br>EBW[MHz] | FL[MHz]  | FH[MHz]  | Limit[MHz] | Verdict |
|----------|---------|---------|------------------|----------|----------|------------|---------|
| DH5      | Ant1    | 2402    | 0.972            | 2401.529 | 2402.501 | ---        | PASS    |
|          |         | 2441    | 1.017            | 2440.466 | 2441.483 | ---        | PASS    |
|          |         | 2480    | 0.963            | 2479.535 | 2480.498 | ---        | PASS    |
| 2DH5     | Ant1    | 2402    | 1.293            | 2401.361 | 2402.654 | ---        | PASS    |
|          |         | 2441    | 1.290            | 2440.361 | 2441.651 | ---        | PASS    |
|          |         | 2480    | 1.296            | 2479.358 | 2480.654 | ---        | PASS    |
| 3DH5     | Ant1    | 2402    | 1.344            | 2401.325 | 2402.669 | ---        | PASS    |
|          |         | 2441    | 1.311            | 2440.343 | 2441.654 | ---        | PASS    |
|          |         | 2480    | 1.302            | 2479.346 | 2480.648 | ---        | PASS    |

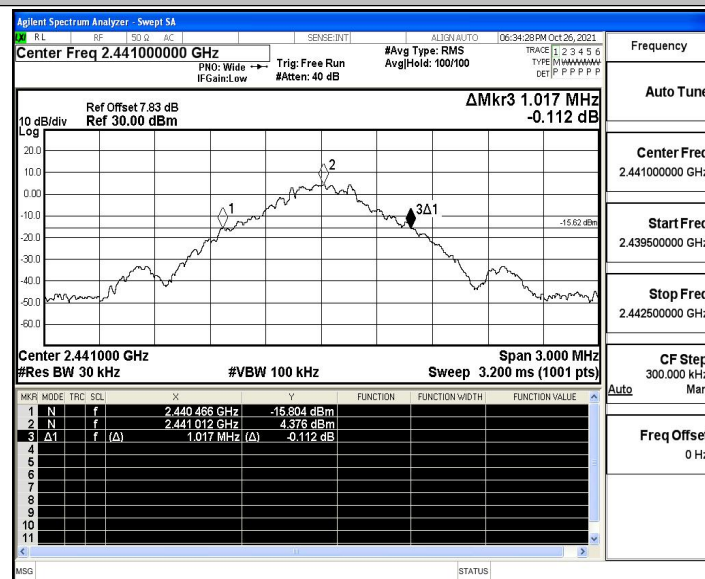


## Test Graphs

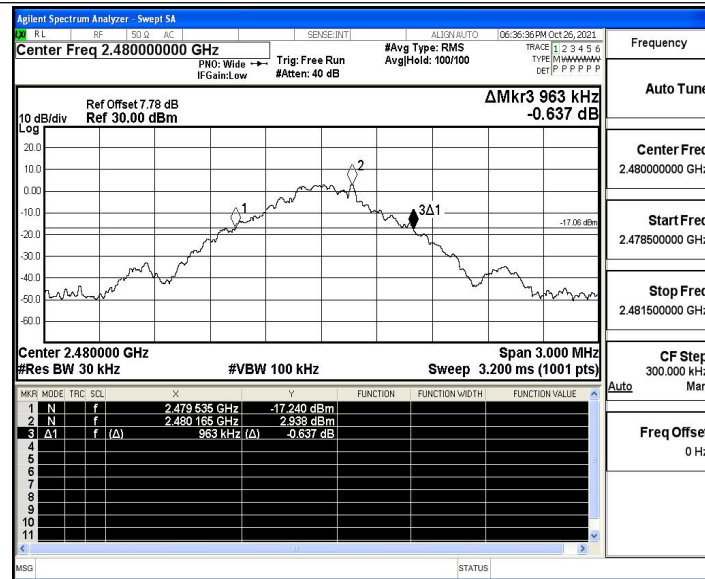
DH5\_Ant1\_2402



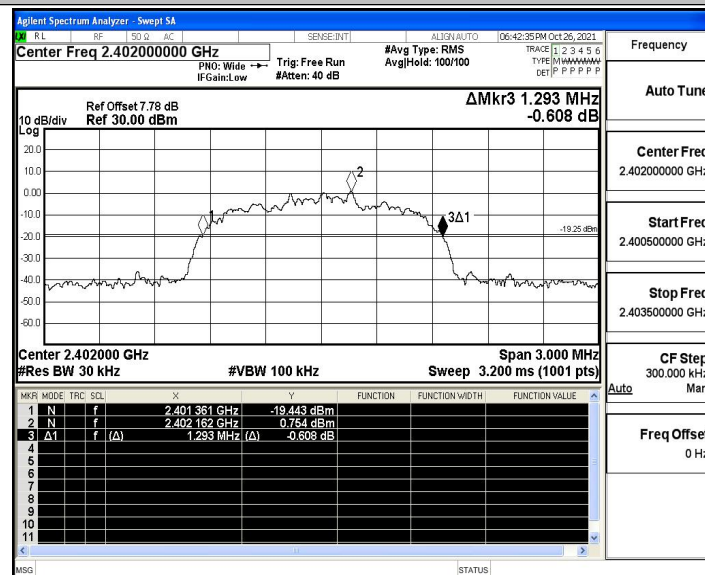
DH5\_Ant1\_2441



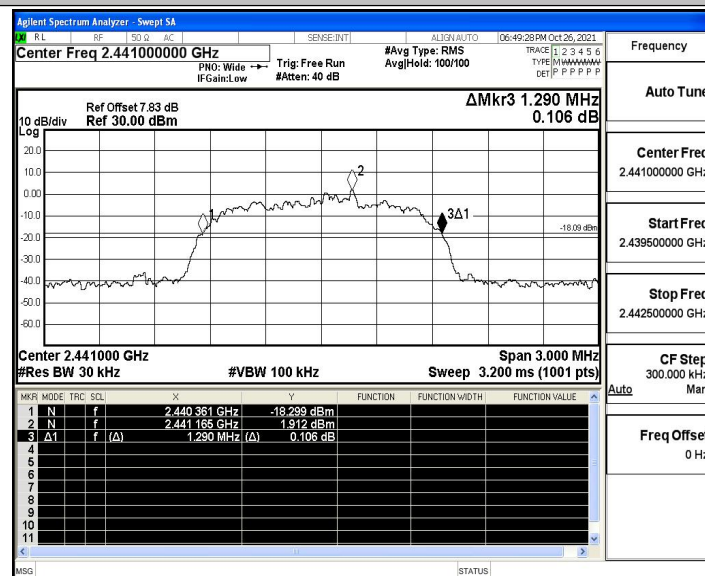
DH5\_Ant1\_2480



2DH5\_Ant1\_2402

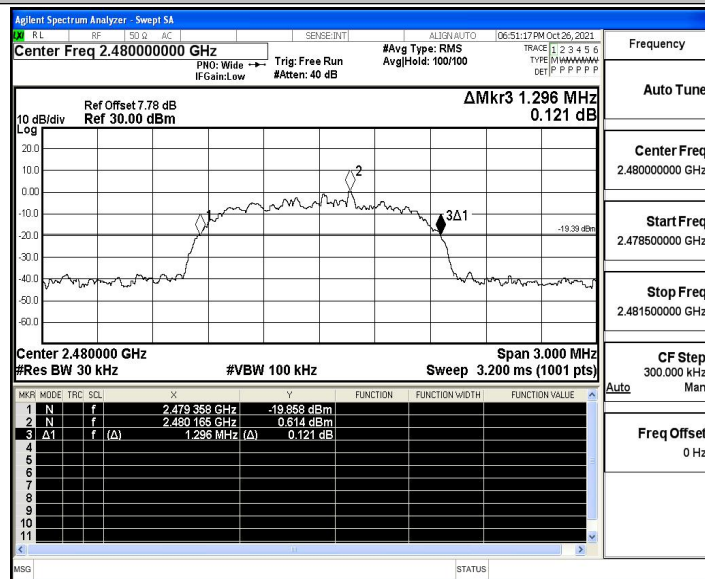


2DH5\_Ant1\_2441

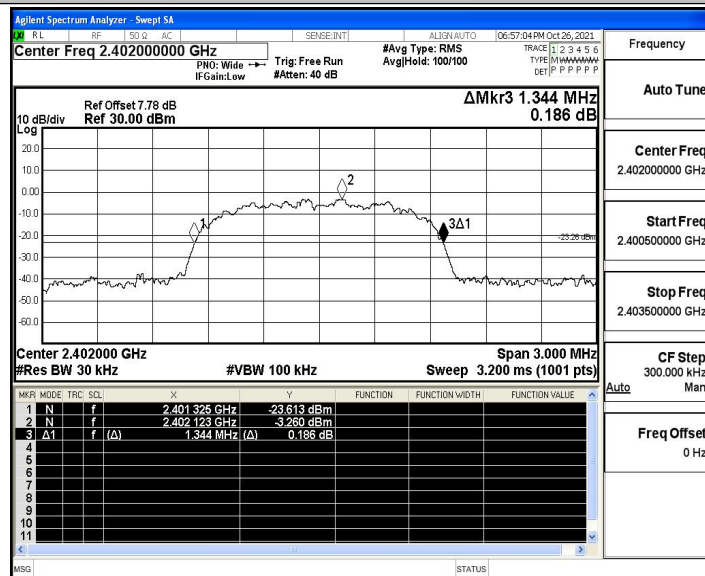




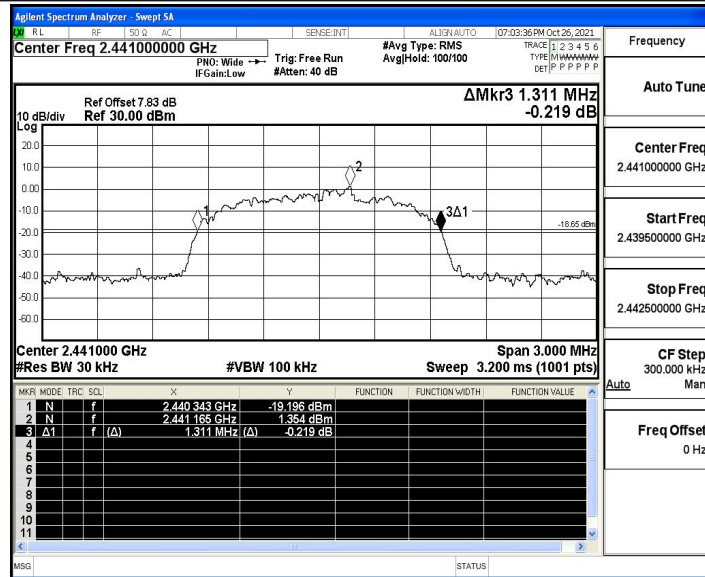
### 2DH5\_Ant1\_2480



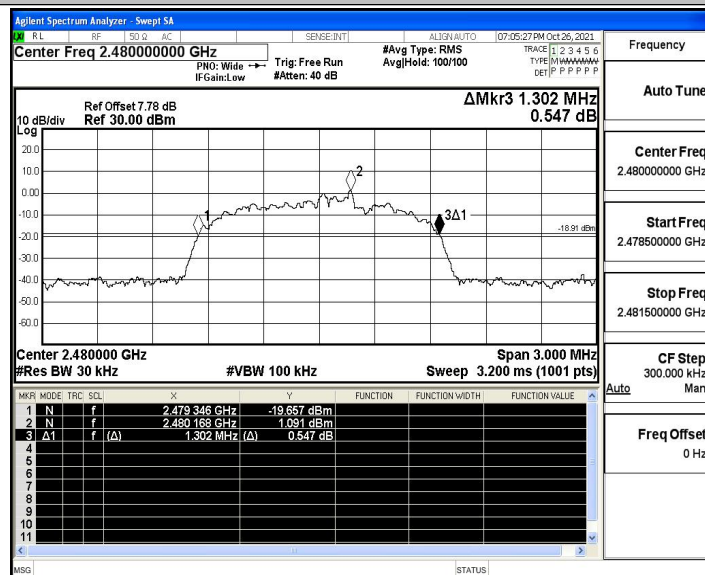
### 3DH5\_Ant1\_2402



### 3DH5\_Ant1\_2441



3DH5\_Ant1\_2480





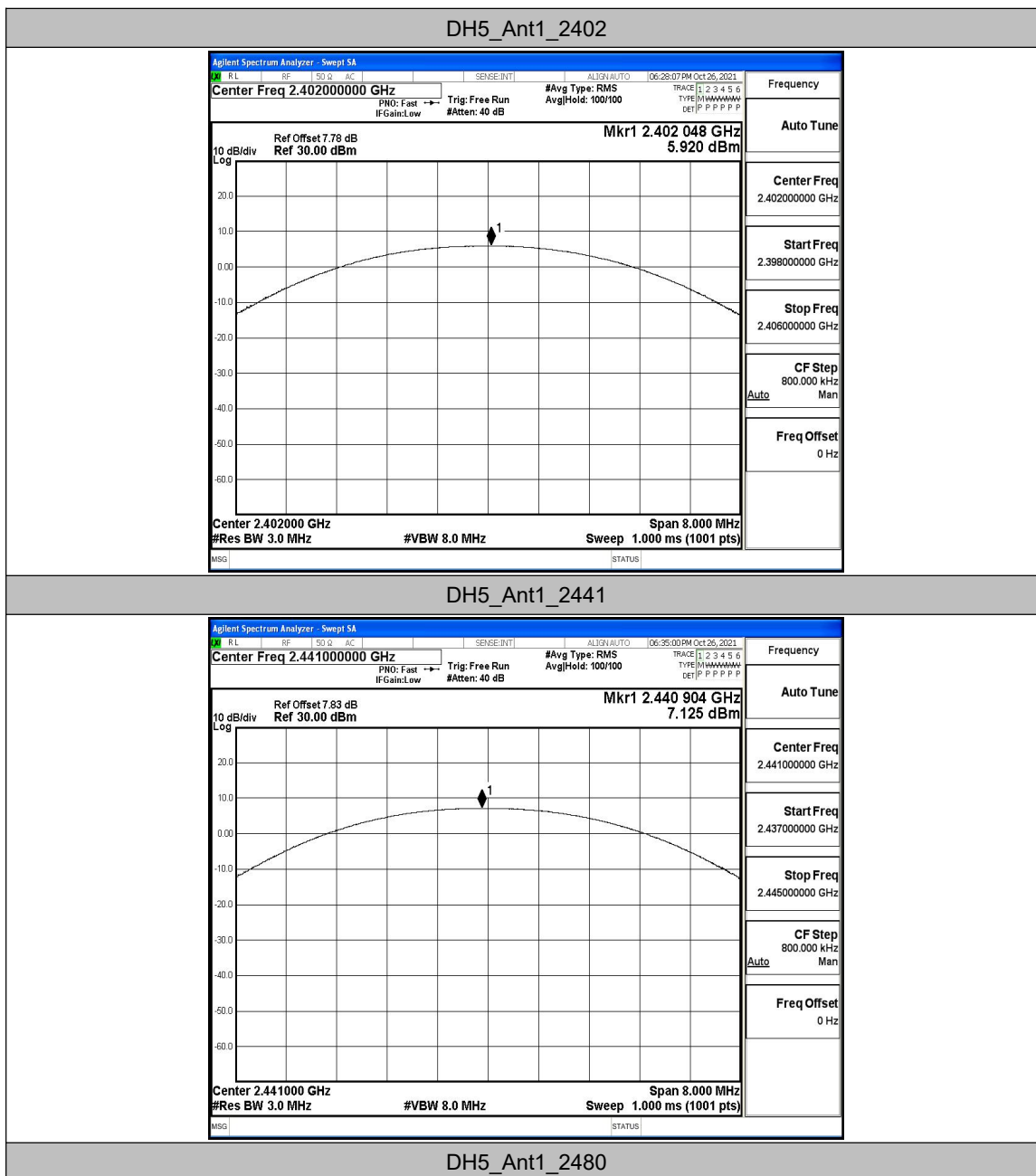
## A.2 Maximum conducted output power

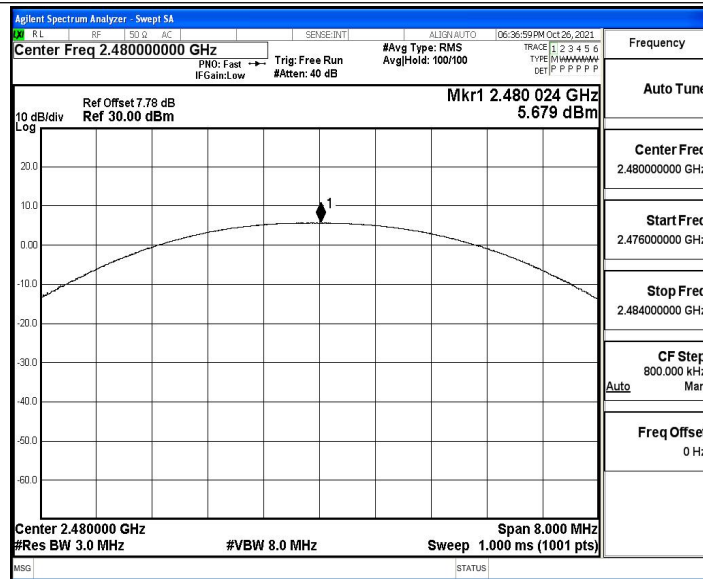
### Test Result

| TestMode | Antenna | Channel | Result[dBm] | Limit[dBm] | Verdict |
|----------|---------|---------|-------------|------------|---------|
| DH5      | Ant1    | 2402    | 5.92        | ≤20.97     | PASS    |
|          |         | 2441    | 7.13        | ≤20.97     | PASS    |
|          |         | 2480    | 5.68        | ≤20.97     | PASS    |
| 2DH5     | Ant1    | 2402    | 5.05        | ≤20.97     | PASS    |
|          |         | 2441    | 6.23        | ≤20.97     | PASS    |
|          |         | 2480    | 4.83        | ≤20.97     | PASS    |
| 3DH5     | Ant1    | 2402    | 5.15        | ≤20.97     | PASS    |
|          |         | 2441    | 6.35        | ≤20.97     | PASS    |
|          |         | 2480    | 4.98        | ≤20.97     | PASS    |

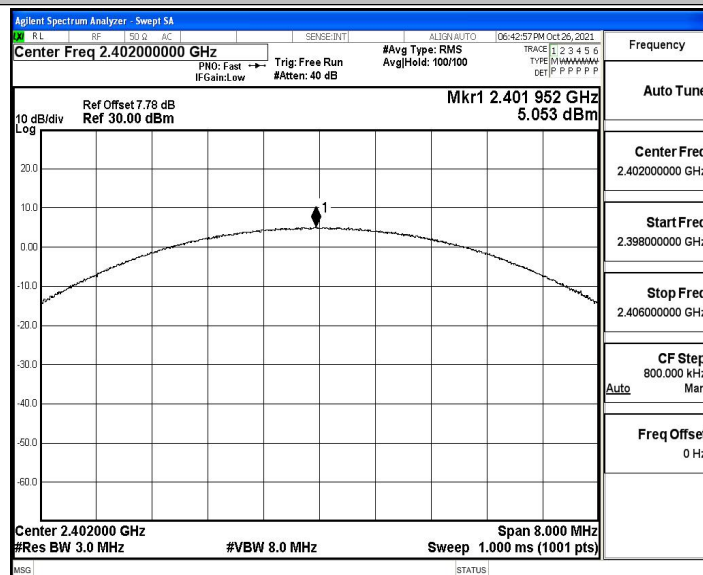


## Test Graphs

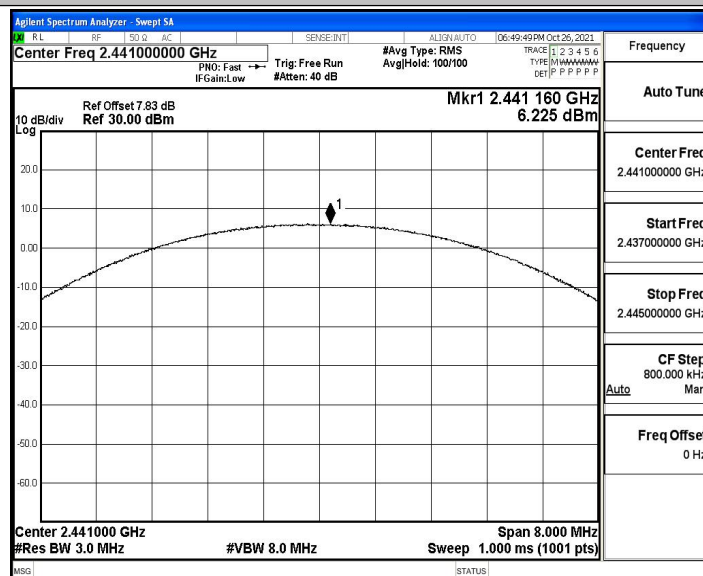




2DH5\_Ant1\_2402

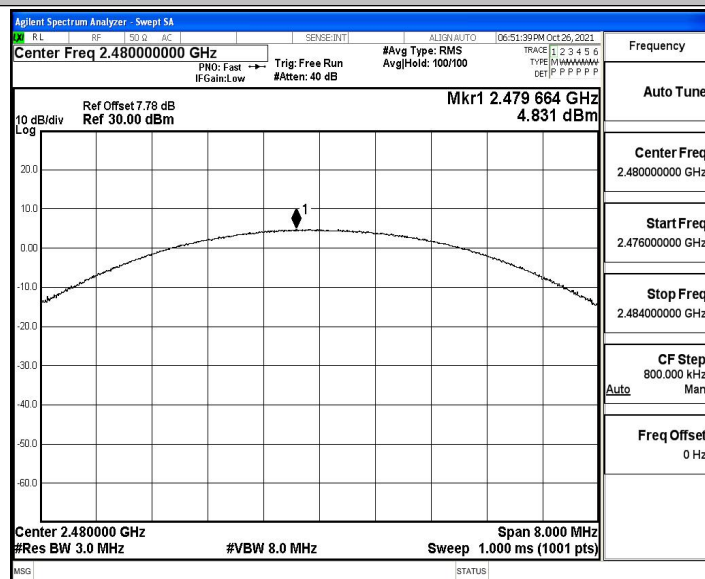


2DH5\_Ant1\_2441

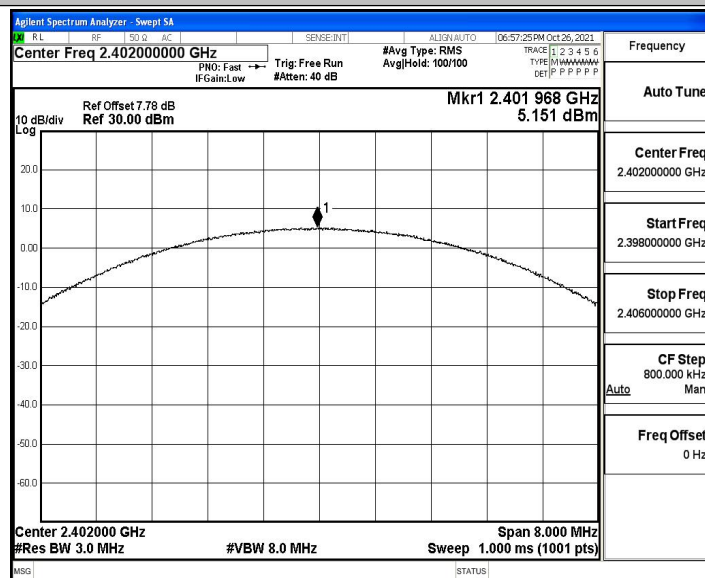




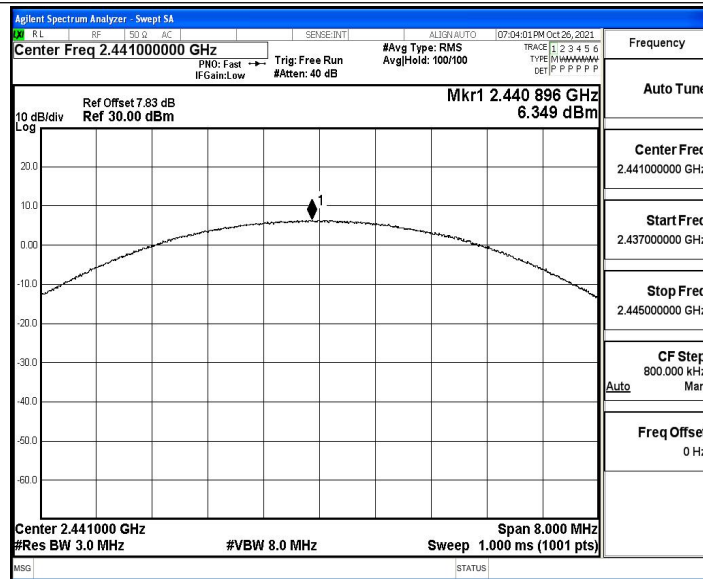
### 2DH5\_Ant1\_2480



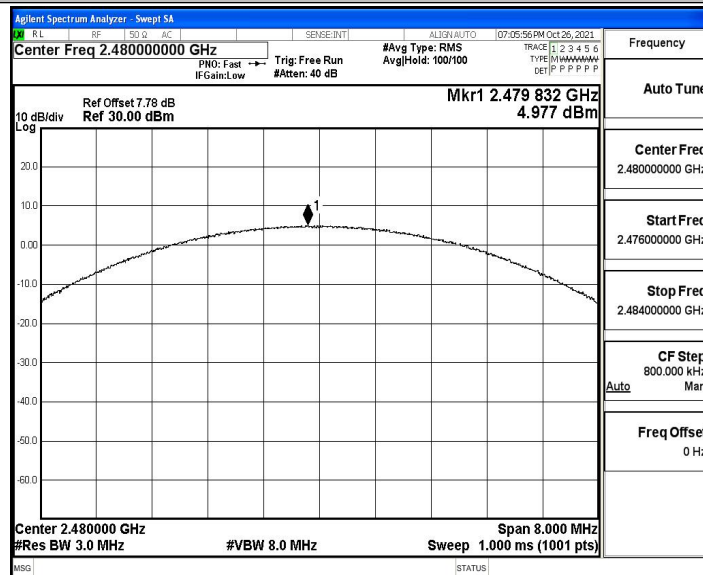
### 3DH5\_Ant1\_2402



### 3DH5\_Ant1\_2441



3DH5\_Ant1\_2480



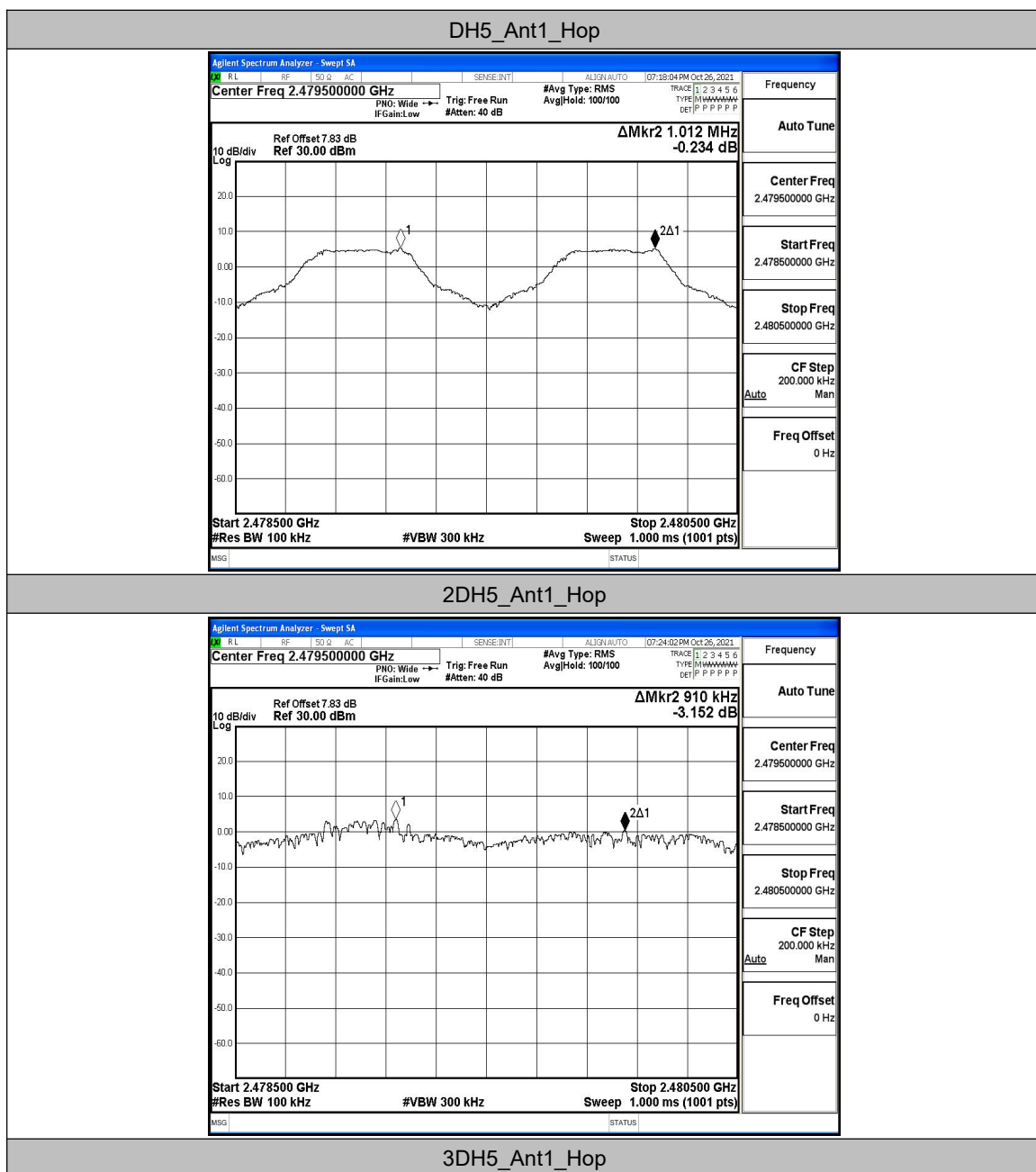


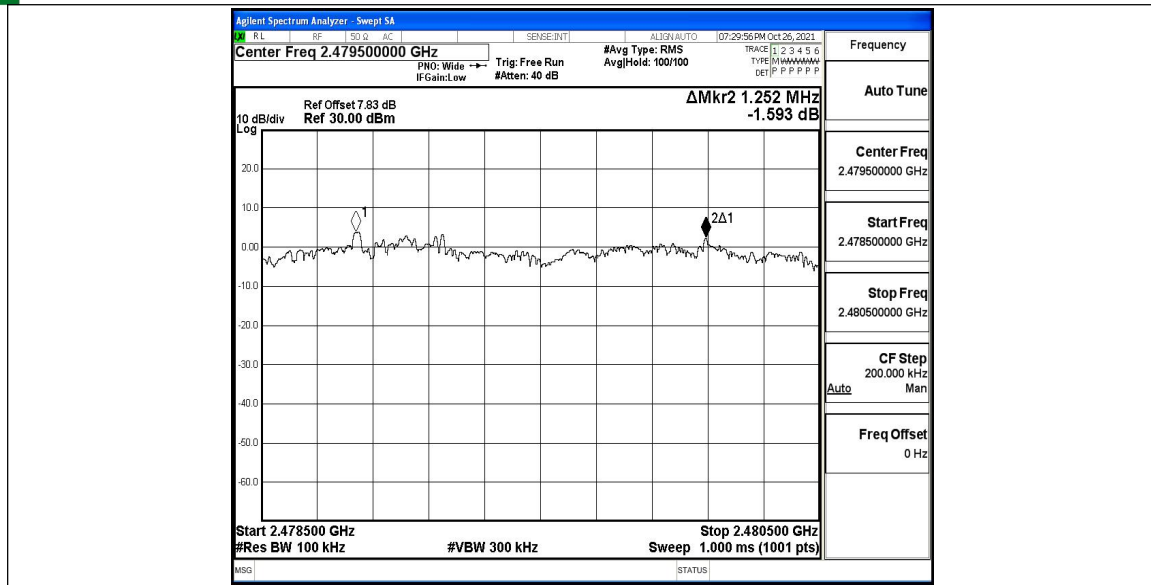
## A.3 Carrier frequency separation

### Test Result

| TestMode | Antenna | Channel | Result[MHz] | Limit[MHz]   | Verdict |
|----------|---------|---------|-------------|--------------|---------|
| DH5      | Ant1    | Hop     | 1.012       | $\geq 0.678$ | PASS    |
| 2DH5     | Ant1    | Hop     | 0.91        | $\geq 0.864$ | PASS    |
| 3DH5     | Ant1    | Hop     | 1.252       | $\geq 0.896$ | PASS    |

### Test Graphs





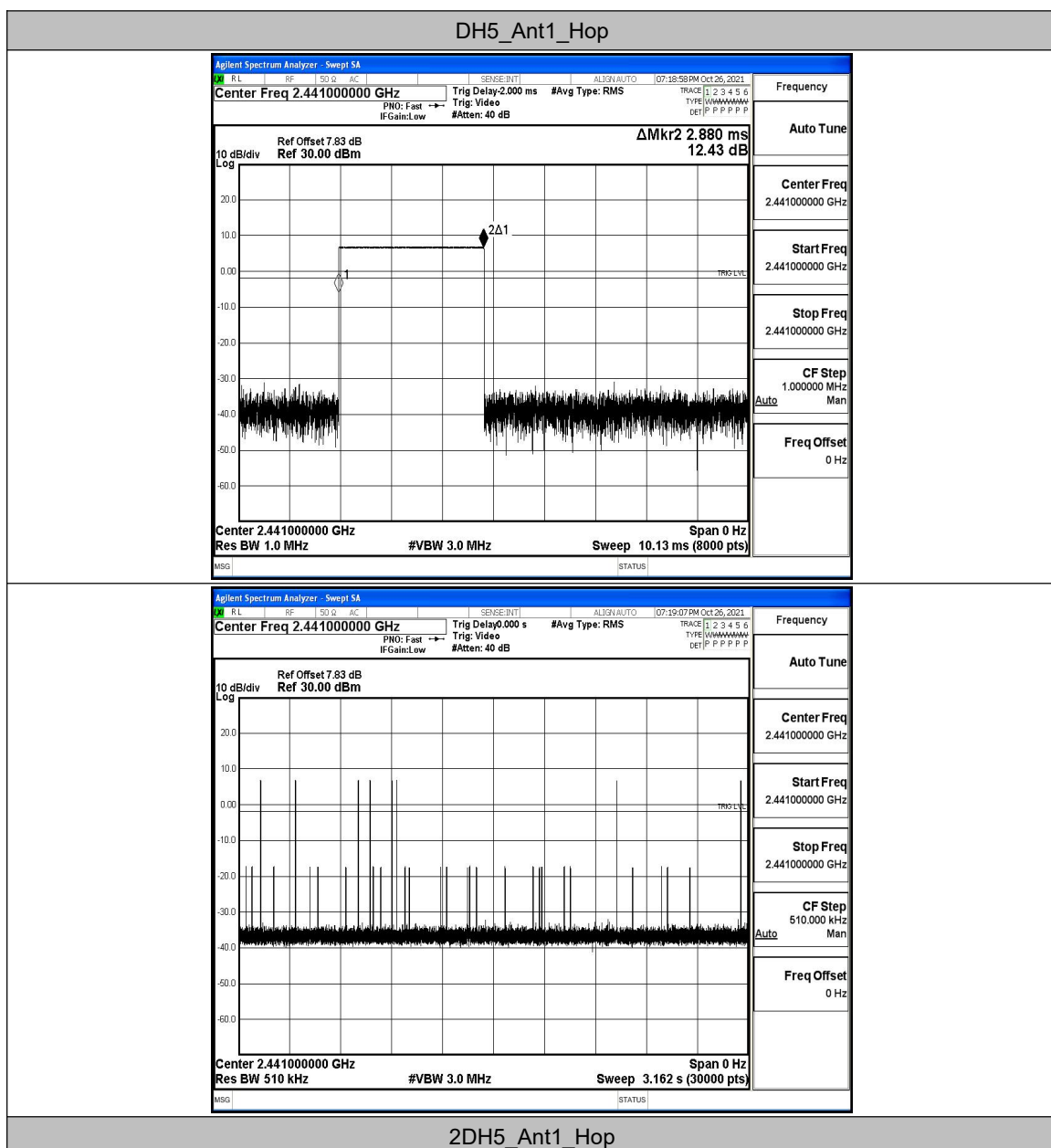


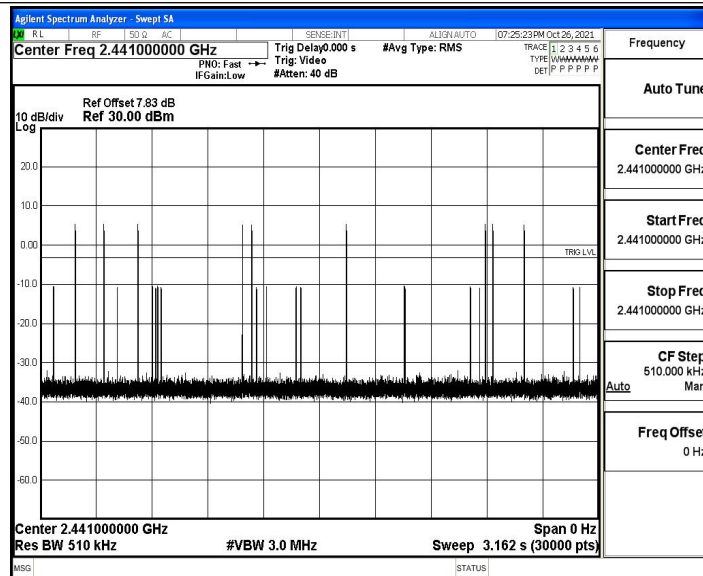
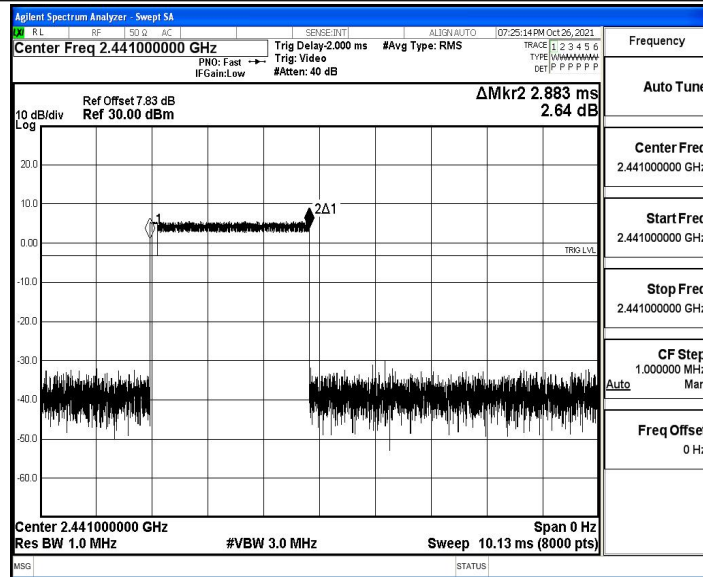
## A.4 Time of occupancy

### Test Result

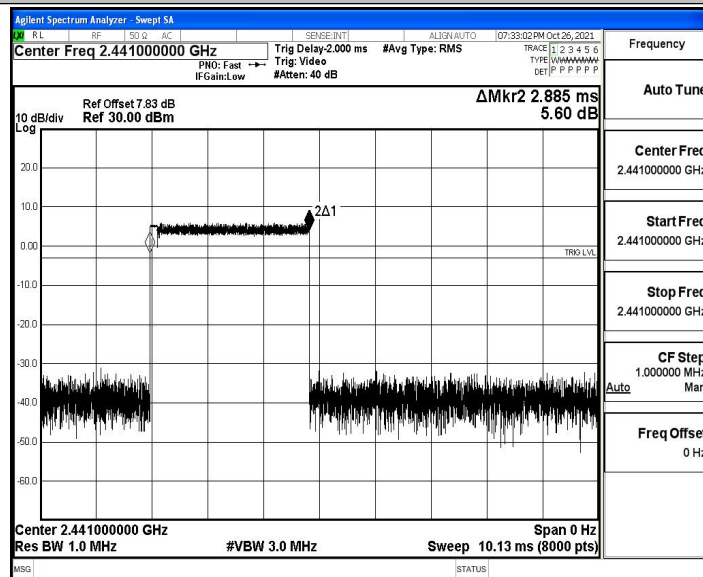
| TestMode | Antenna | Channel | BurstWidth<br>[ms] | TotalHops<br>[Num] | Result[s] | Limit[s] | Verdict |
|----------|---------|---------|--------------------|--------------------|-----------|----------|---------|
| DH5      | Ant1    | Hop     | 2.88               | 100                | 0.288     | ≤0.4     | PASS    |
| 2DH5     | Ant1    | Hop     | 2.88               | 100                | 0.288     | ≤0.4     | PASS    |
| 3DH5     | Ant1    | Hop     | 2.89               | 100                | 0.289     | ≤0.4     | PASS    |

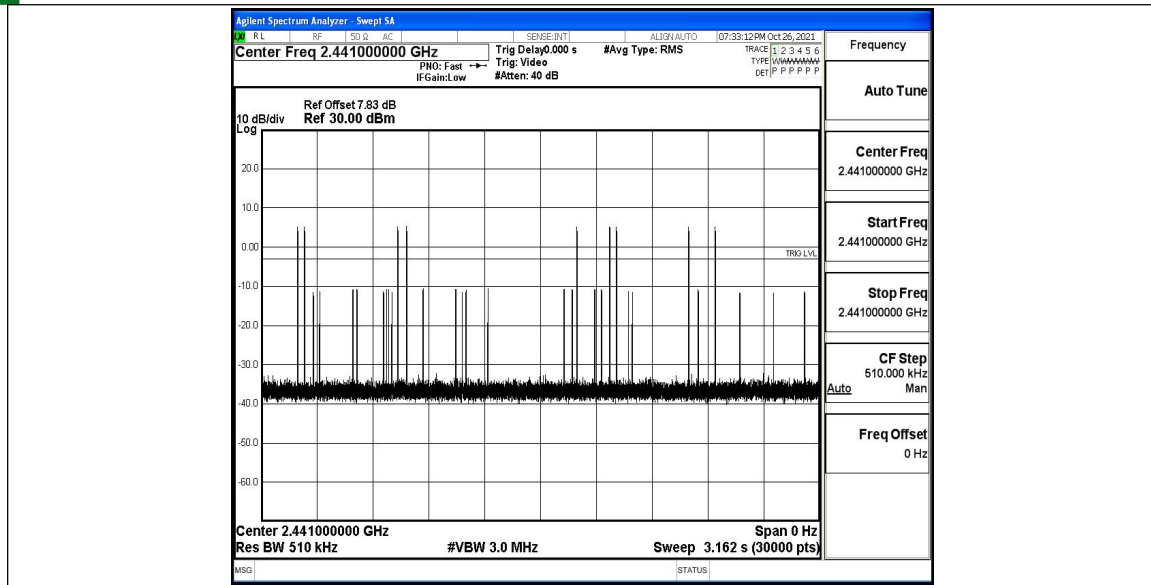
### Test Graphs





3DH5\_Ant1\_Hop





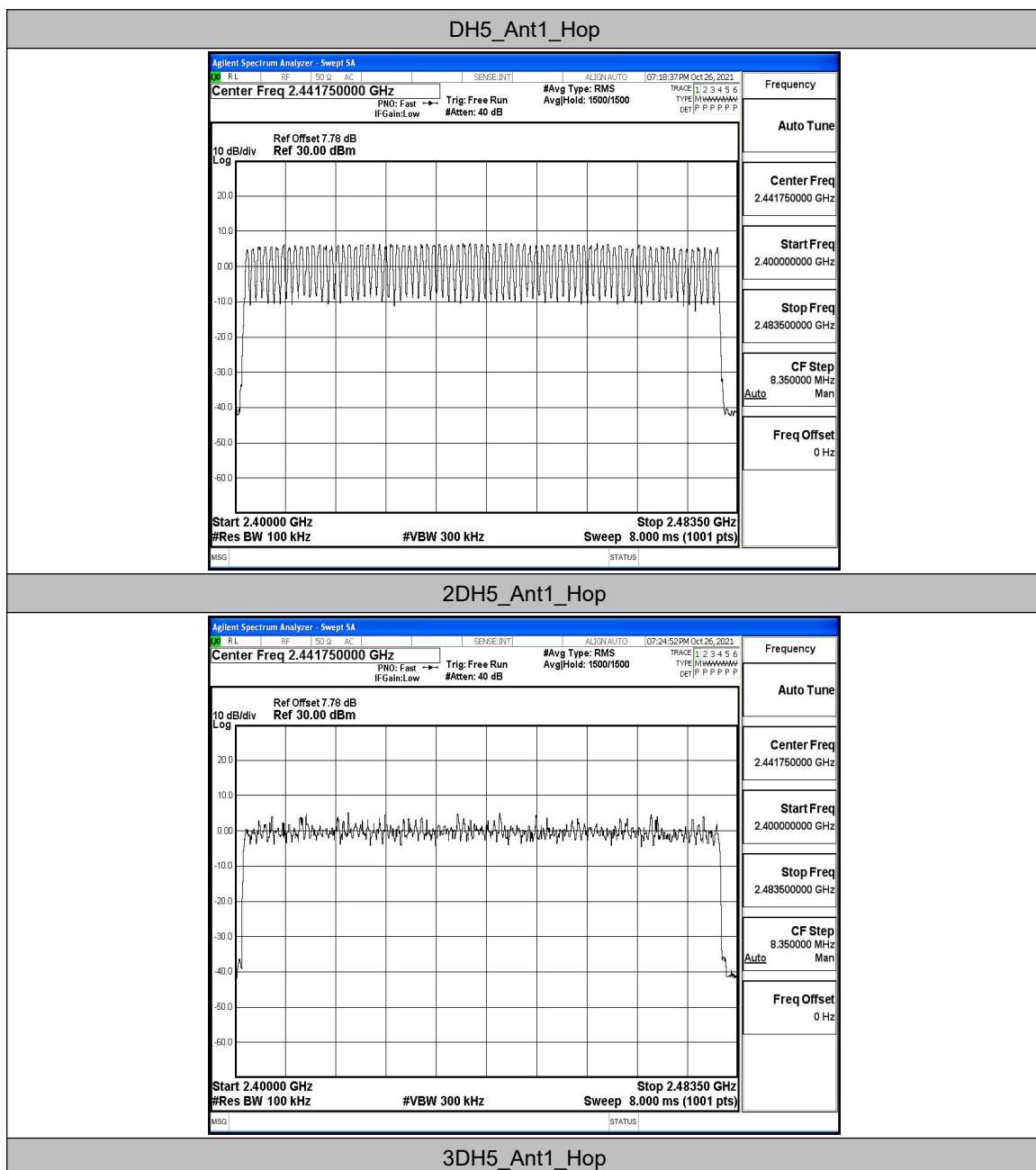


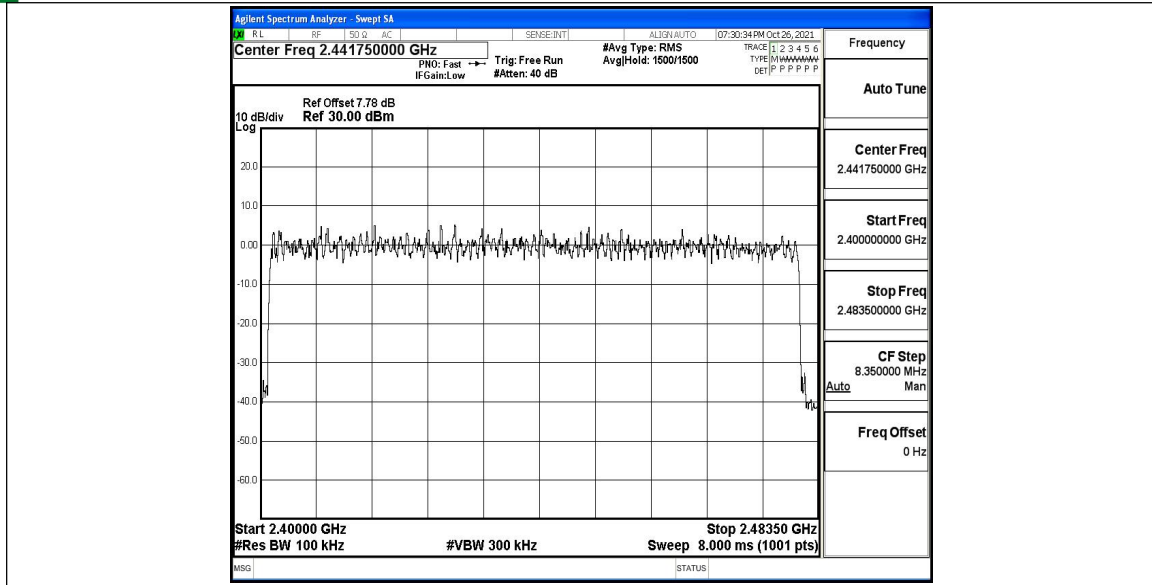
## A.5 Number of hopping channels

### 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







## A.6 Band edge measurements

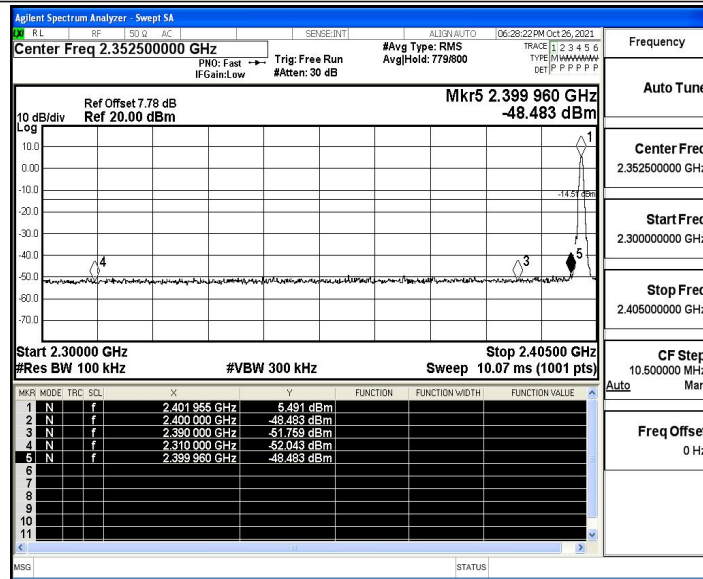
### Test Result

| TestMode | Antenna | ChName | Channel  | RefLevel<br>[dBm] | Result<br>[dBm] | Limit<br>[dBm] | Verdict |
|----------|---------|--------|----------|-------------------|-----------------|----------------|---------|
| DH5      | Ant1    | Low    | 2402     | 5.49              | -48.48          | $\leq -14.51$  | PASS    |
|          |         | High   | 2480     | 5.52              | -40.82          | $\leq -14.48$  | PASS    |
|          |         | Low    | Hop_2402 | 5.32              | -49.88          | $\leq -14.68$  | PASS    |
|          |         | High   | Hop_2480 | 5.50              | -40.24          | $\leq -14.5$   | PASS    |
| 2DH5     | Ant1    | Low    | 2402     | 4.04              | -48.78          | $\leq -15.96$  | PASS    |
|          |         | High   | 2480     | 3.92              | -45.19          | $\leq -16.08$  | PASS    |
|          |         | Low    | Hop_2402 | 0.36              | -49.07          | $\leq -19.64$  | PASS    |
|          |         | High   | Hop_2480 | 3.90              | -48.29          | $\leq -16.1$   | PASS    |
| 3DH5     | Ant1    | Low    | 2402     | 4.06              | -48.37          | $\leq -15.94$  | PASS    |
|          |         | High   | 2480     | 4.04              | -46.89          | $\leq -15.96$  | PASS    |
|          |         | Low    | Hop_2402 | 1.19              | -49.62          | $\leq -18.81$  | PASS    |
|          |         | High   | Hop_2480 | 4.12              | -45.68          | $\leq -15.88$  | PASS    |

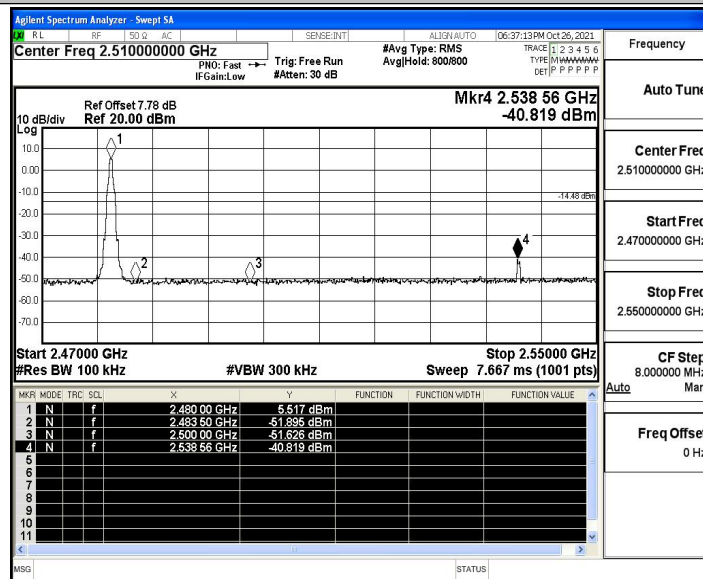


## Test Graphs

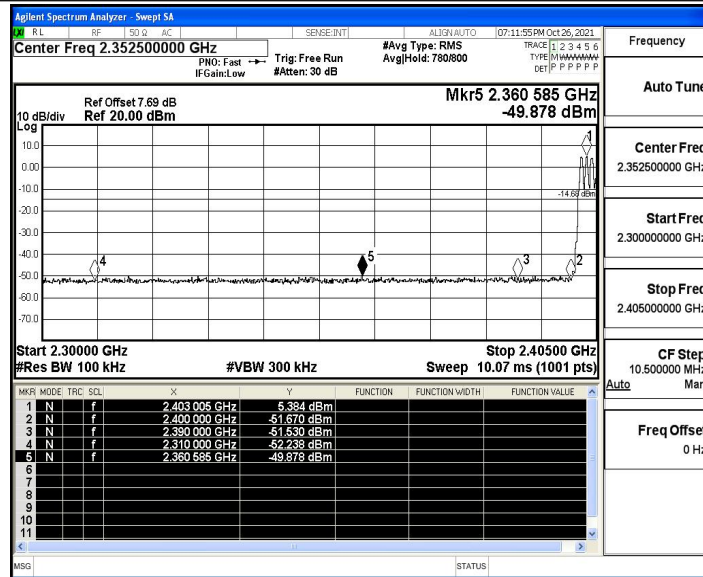
DH5\_Ant1\_Low\_2402



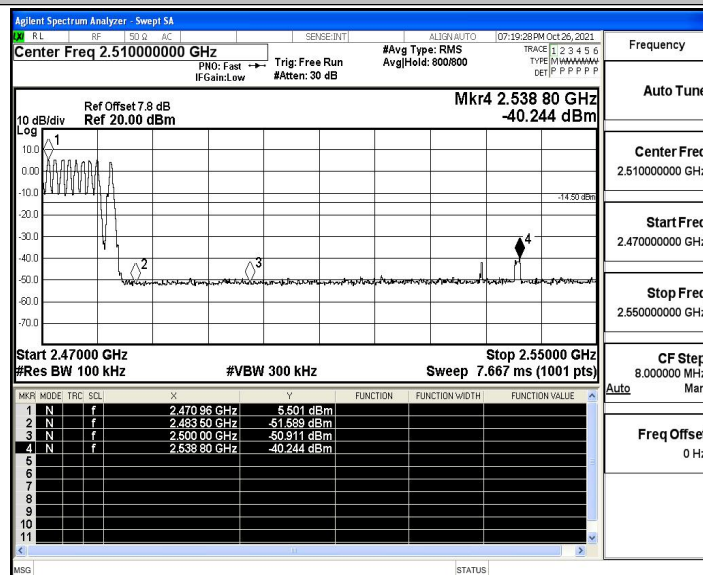
DH5\_Ant1\_High\_2480



DH5\_Ant1\_Low\_Hop\_2402



DH5\_Ant1\_High\_Hop\_2480



2DH5\_Ant1\_Low\_2402

