



## Appendix A

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

Product Name: Flex S2

Test Model: MF-BHD03

#### Environmental Conditions

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

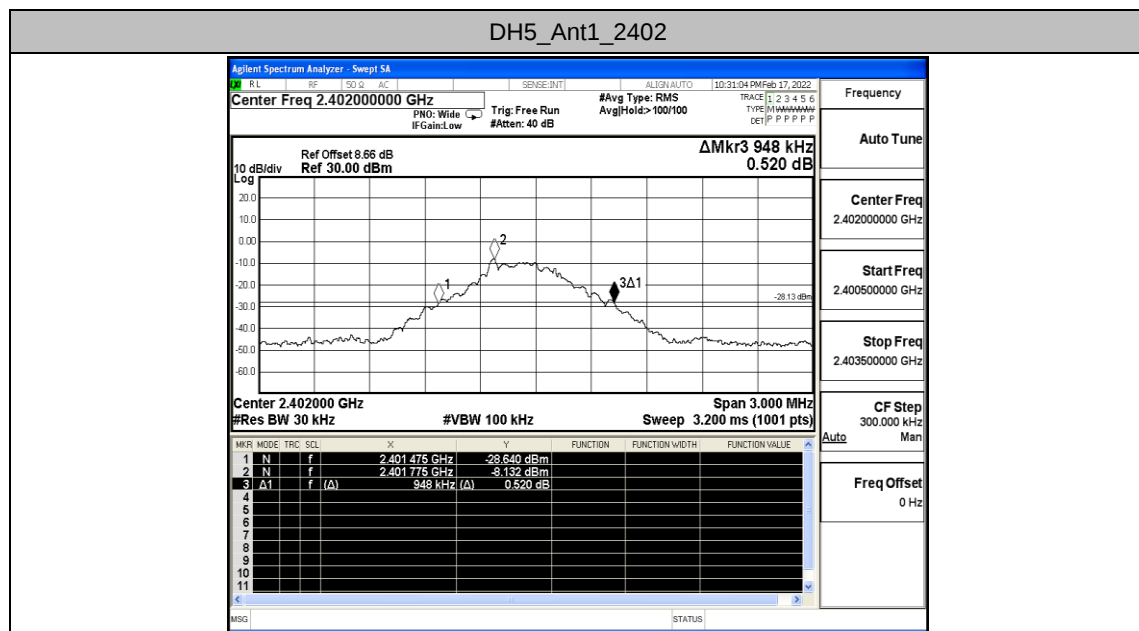


## A.1 20dB Emission Bandwidth

### Test Result

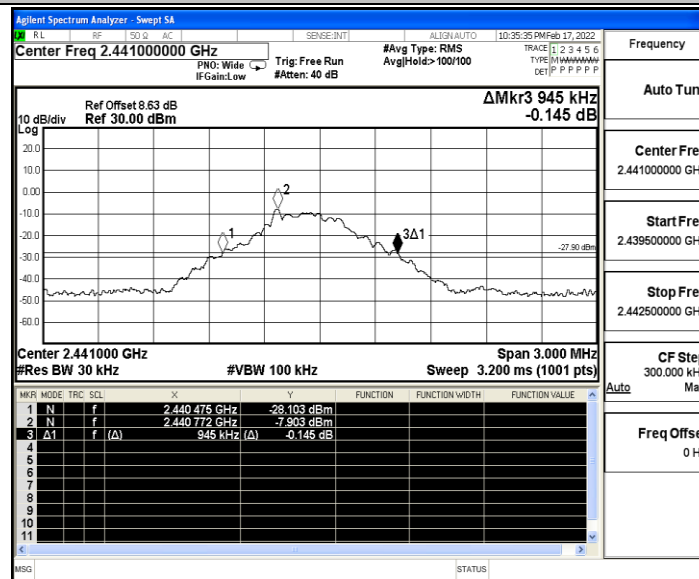
| TestMode | Antenna | Channel | 20db<br>EBW[MHz] | FL[MHz]  | FH[MHz]  | Limit[MHz] | Verdict |
|----------|---------|---------|------------------|----------|----------|------------|---------|
| DH5      | Ant1    | 2402    | 0.948            | 2401.475 | 2402.423 | ---        | ---     |
|          |         | 2441    | 0.945            | 2440.475 | 2441.420 | ---        | ---     |
|          |         | 2480    | 0.948            | 2479.472 | 2480.420 | ---        | ---     |
| 2DH5     | Ant1    | 2402    | 1.275            | 2401.304 | 2402.579 | ---        | ---     |
|          |         | 2441    | 1.323            | 2440.271 | 2441.594 | ---        | ---     |
|          |         | 2480    | 1.329            | 2479.268 | 2480.597 | ---        | ---     |
| 3DH5     | Ant1    | 2402    | 1.251            | 2401.304 | 2402.555 | ---        | ---     |
|          |         | 2441    | 1.248            | 2440.304 | 2441.552 | ---        | ---     |
|          |         | 2480    | 1.251            | 2479.301 | 2480.552 | ---        | ---     |

### Test Graphs

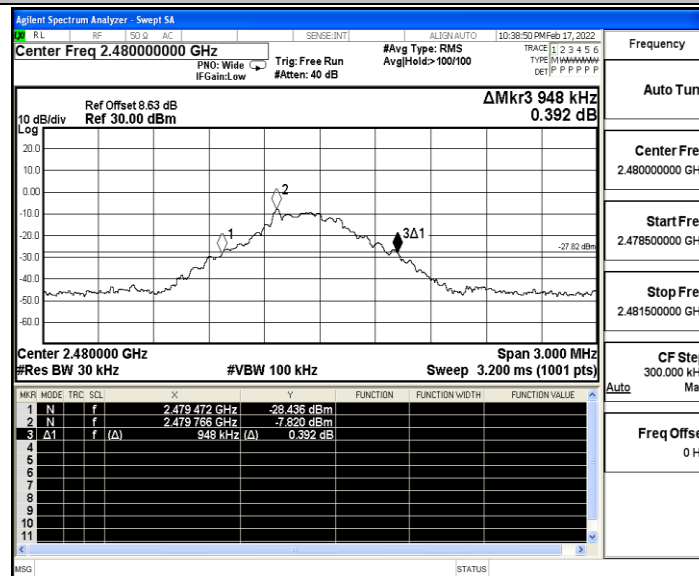




## DH5\_Ant1\_2441

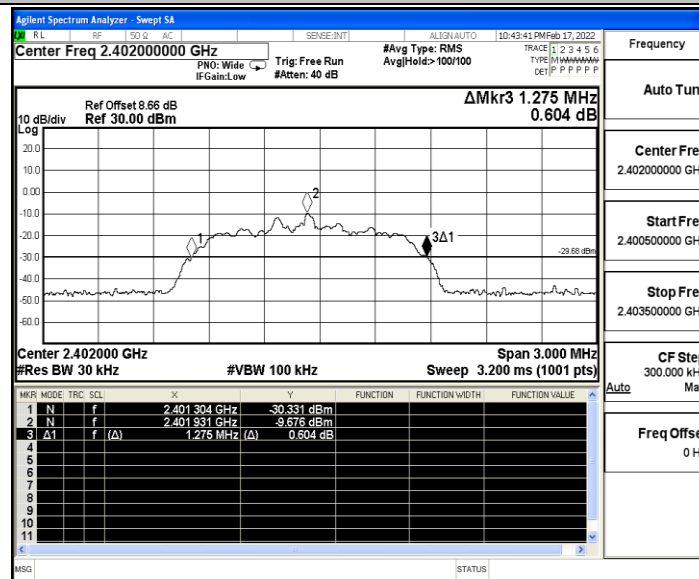


## DH5\_Ant1\_2480

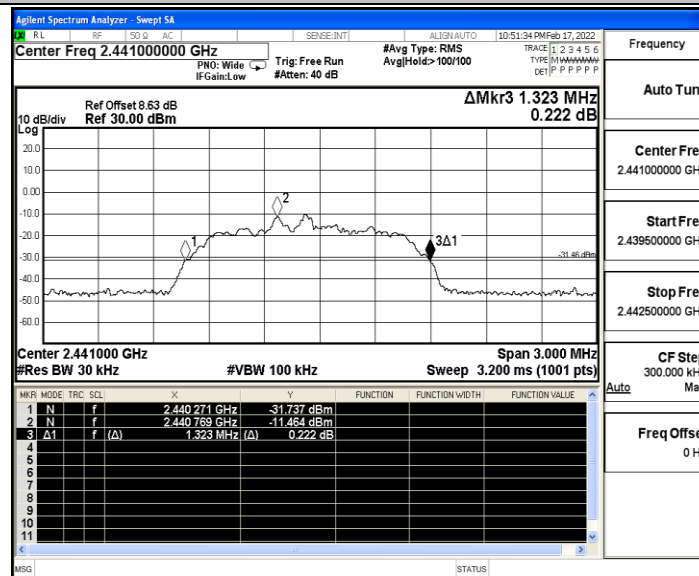




## 2DH5\_Ant1\_2402

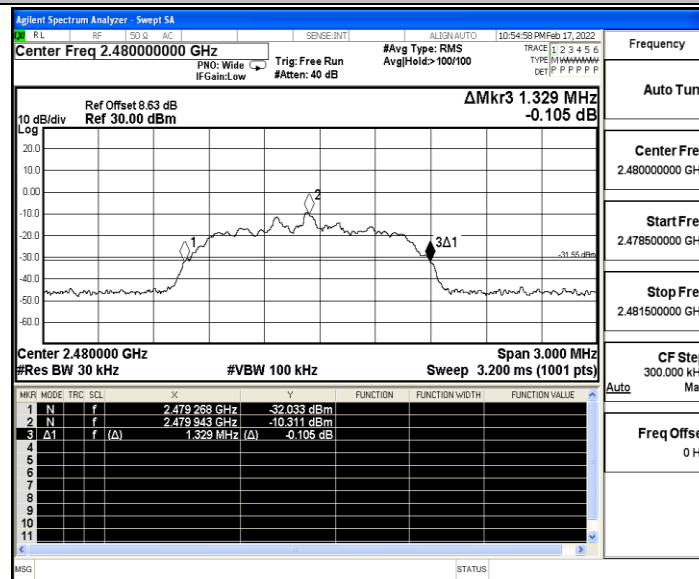


## 2DH5\_Ant1\_2441

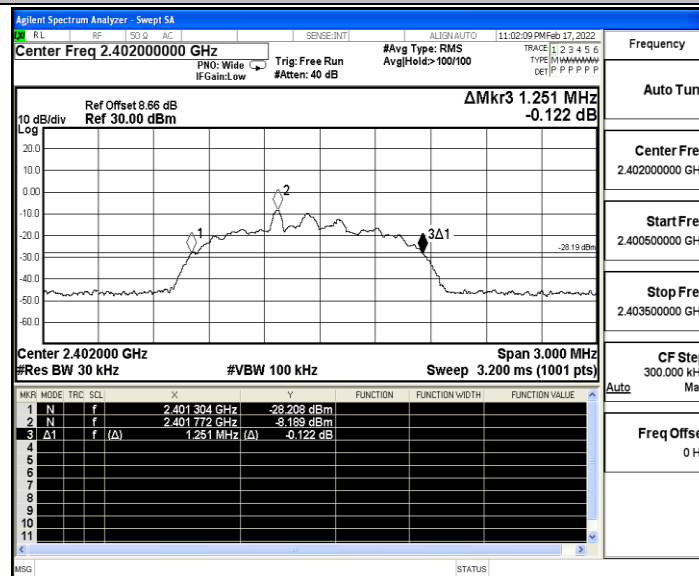




## 2DH5\_Ant1\_2480

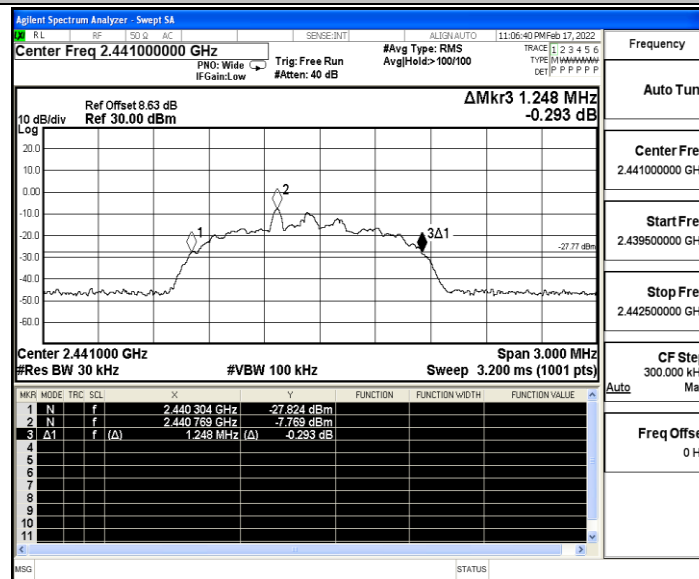


## 3DH5\_Ant1\_2402

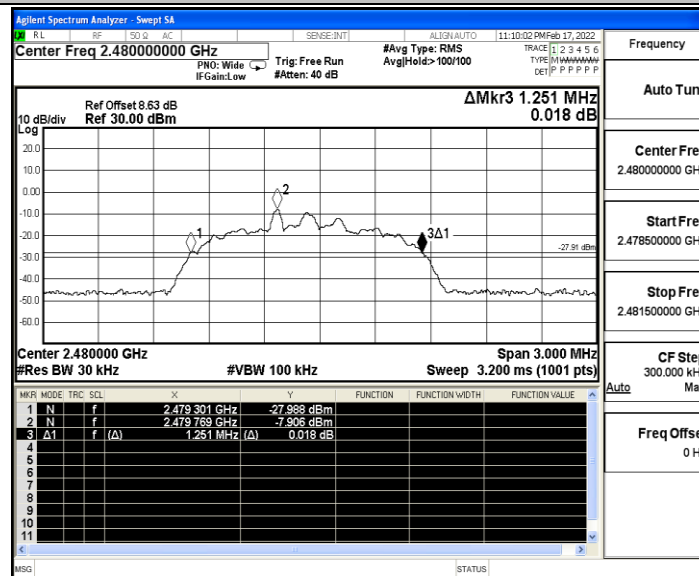


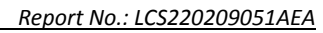


## 3DH5\_Ant1\_2441



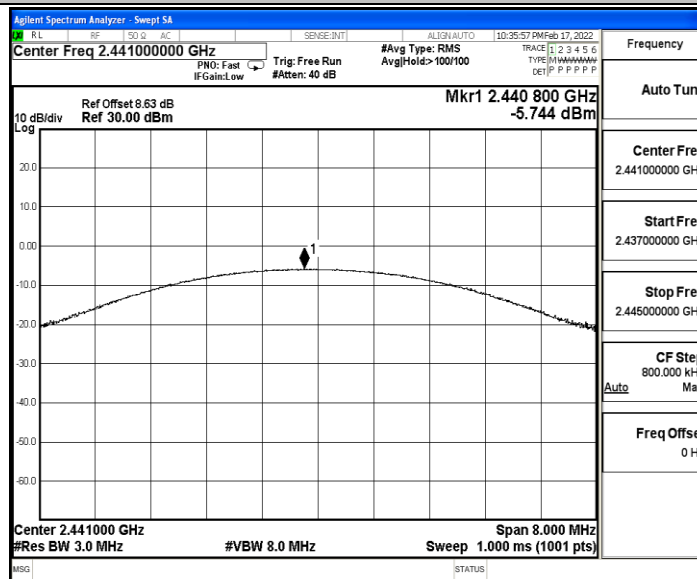
## 3DH5\_Ant1\_2480



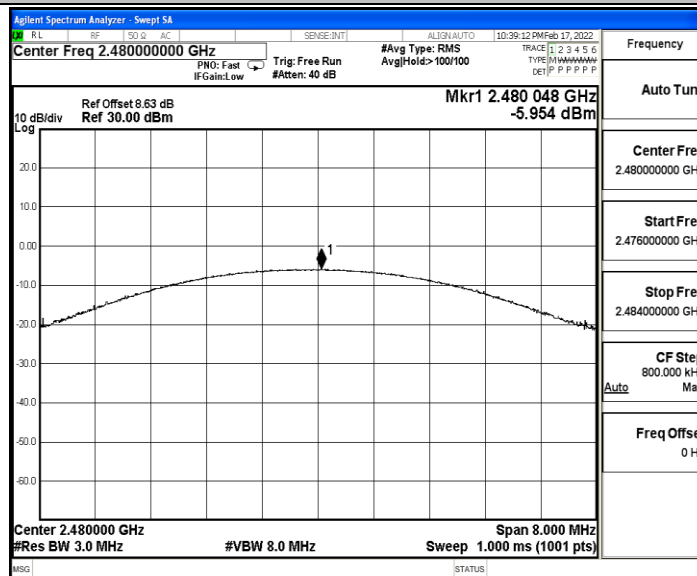




## DH5\_Ant1\_2441

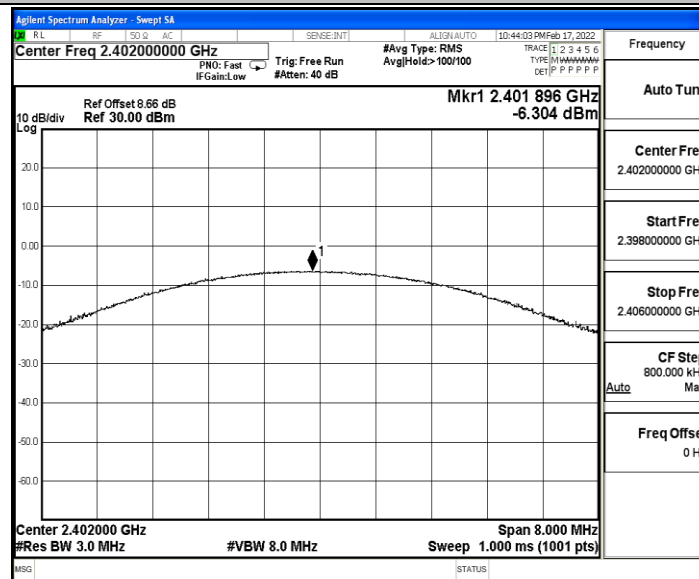


## DH5\_Ant1\_2480

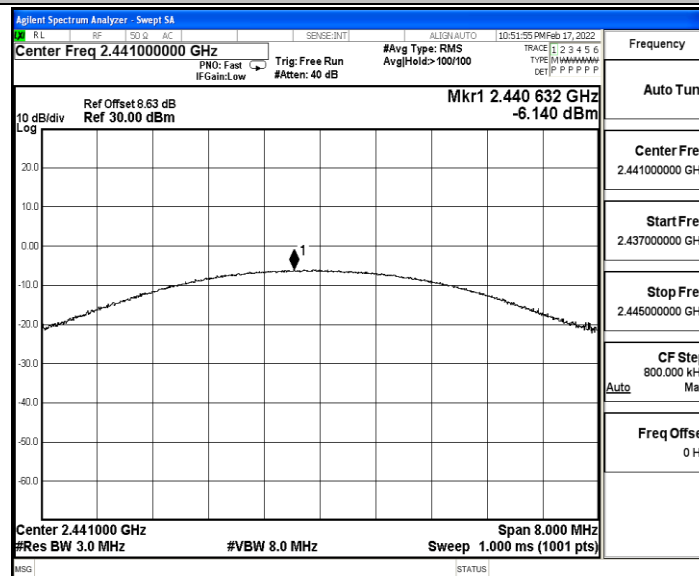




## 2DH5\_Ant1\_2402

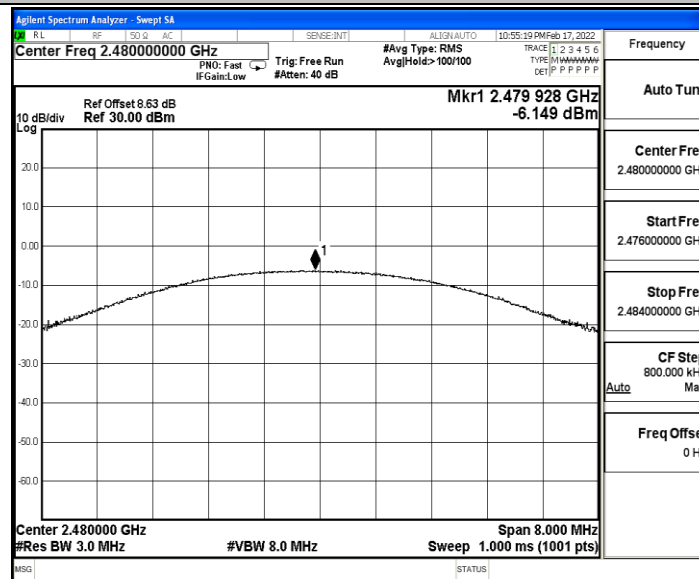


## 2DH5\_Ant1\_2441

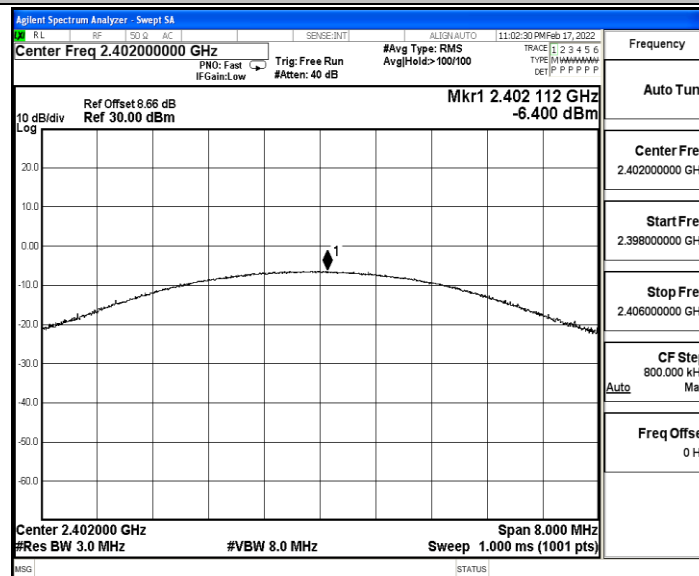




## 2DH5\_Ant1\_2480

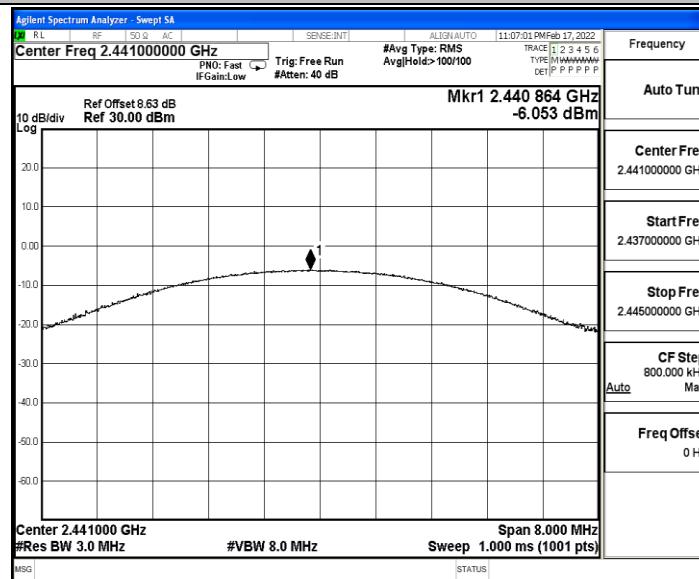


## 3DH5\_Ant1\_2402

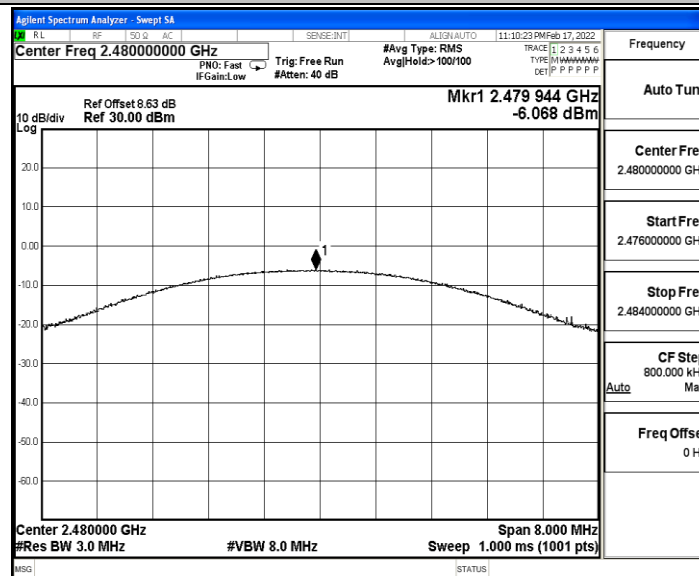




## 3DH5\_Ant1\_2441



## 3DH5\_Ant1\_2480



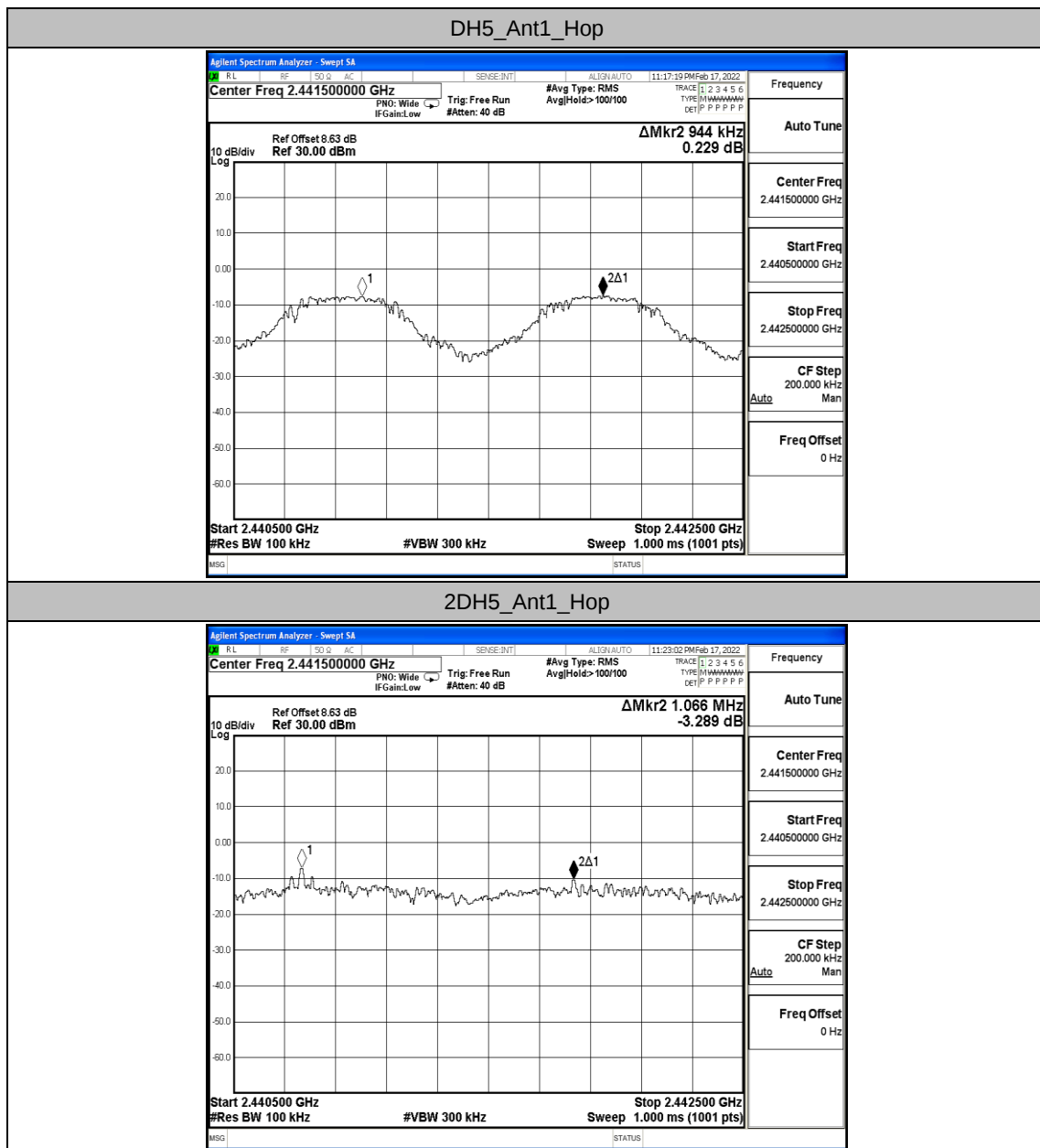


## A.3 Carrier frequency separation

### Test Result

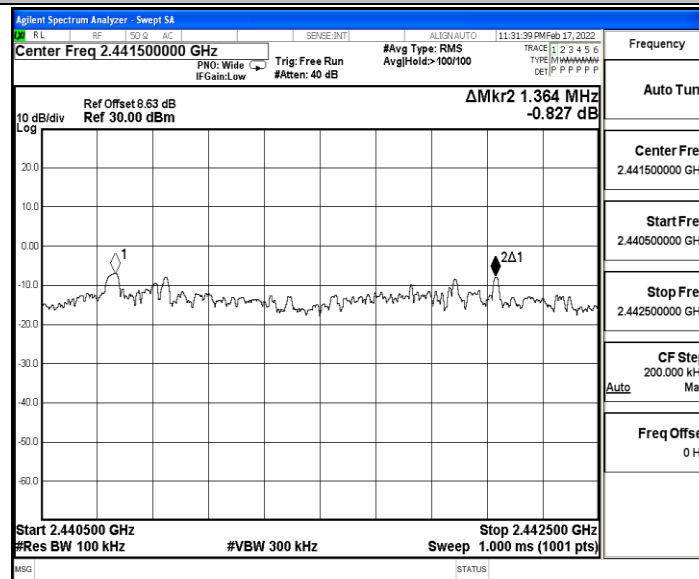
| TestMode | Antenna | Channel | Result[MHz] | Limit[MHz]   | Verdict |
|----------|---------|---------|-------------|--------------|---------|
| DH5      | Ant1    | Hop     | 0.944       | $\geq 0.632$ | PASS    |
| 2DH5     | Ant1    | Hop     | 1.066       | $\geq 0.886$ | PASS    |
| 3DH5     | Ant1    | Hop     | 1.364       | $\geq 0.834$ | PASS    |

### Test Graphs





## 3DH5\_Ant1\_Hop



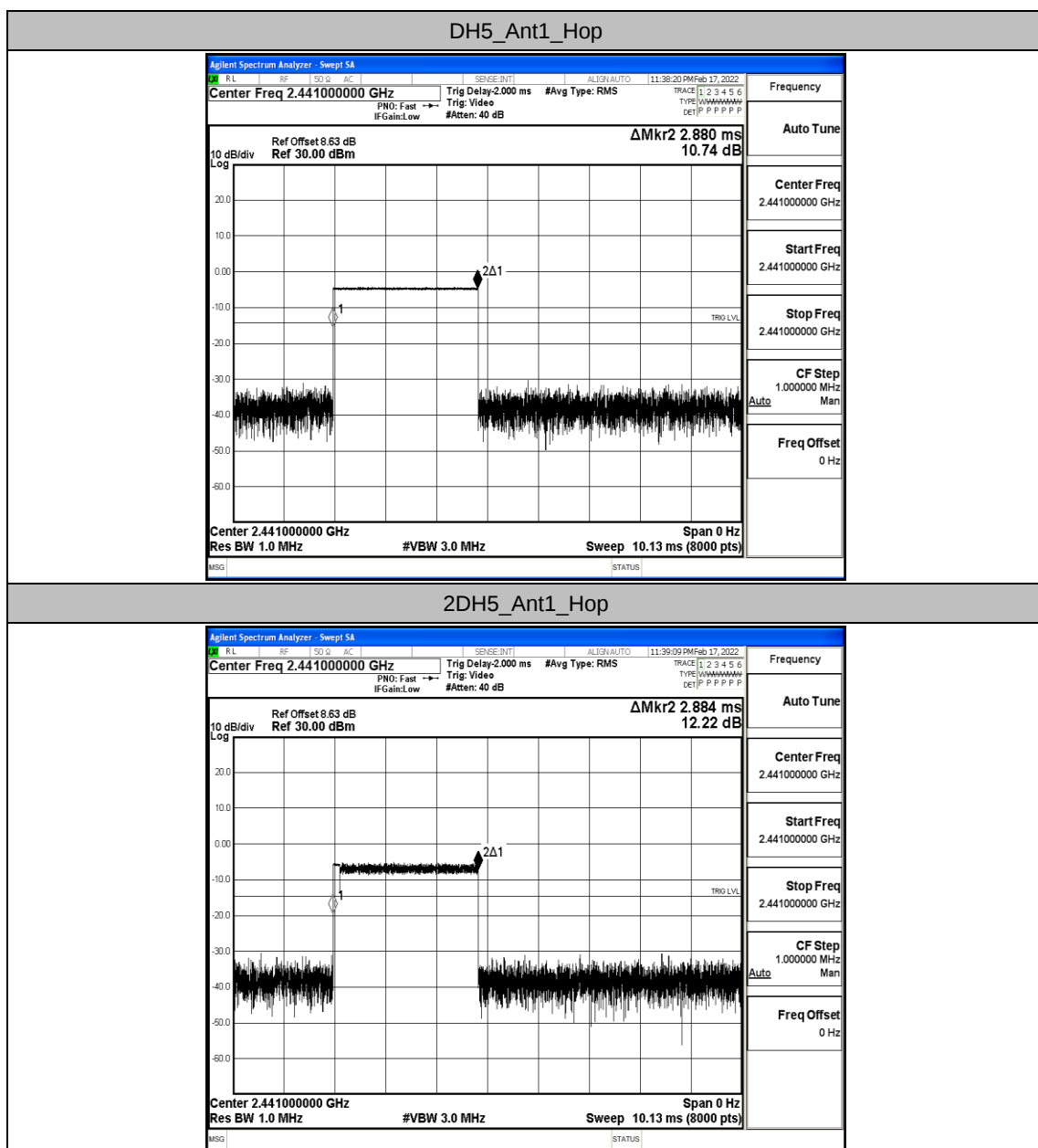


## A.4 Time of occupancy

### Test Result

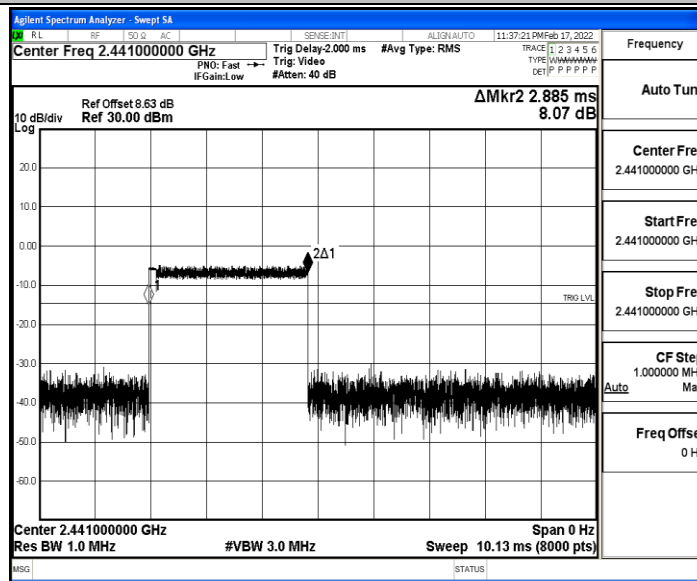
| TestMode | Antenna | Channel | BurstWidth<br>[ms] | TotalHops<br>[Num] | Result[s] | Limit[s] | Verdict |
|----------|---------|---------|--------------------|--------------------|-----------|----------|---------|
| DH5      | Ant1    | Hop     | 2.88               | 106.67             | 0.307     | ≤0.4     | PASS    |
| 2DH5     | Ant1    | Hop     | 2.88               | 106.67             | 0.308     | ≤0.4     | PASS    |
| 3DH5     | Ant1    | Hop     | 2.89               | 106.67             | 0.308     | ≤0.4     | PASS    |

### Test Graphs





## 3DH5\_Ant1\_Hop



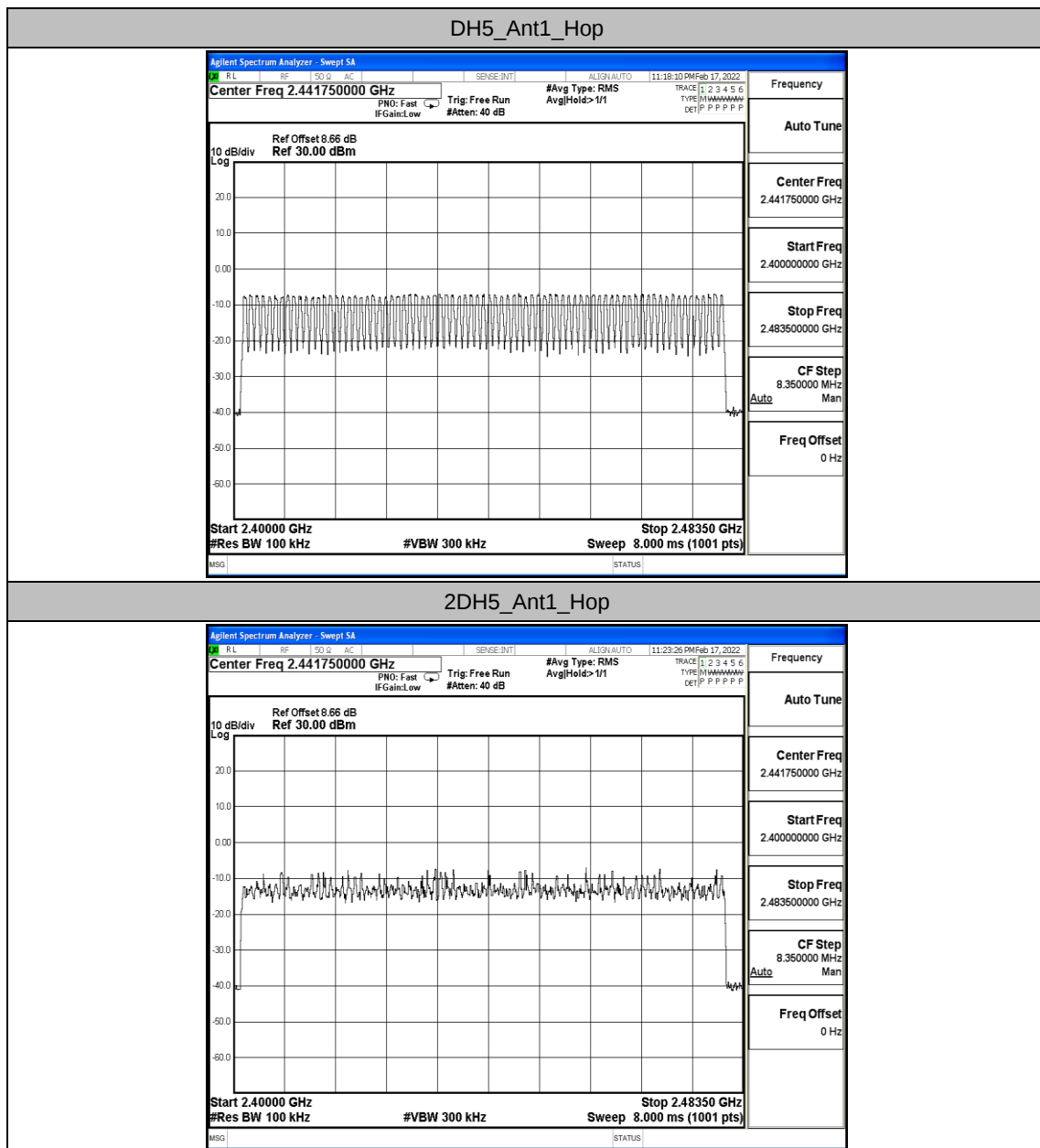


## A.5 Number of hopping channels

### Test Result

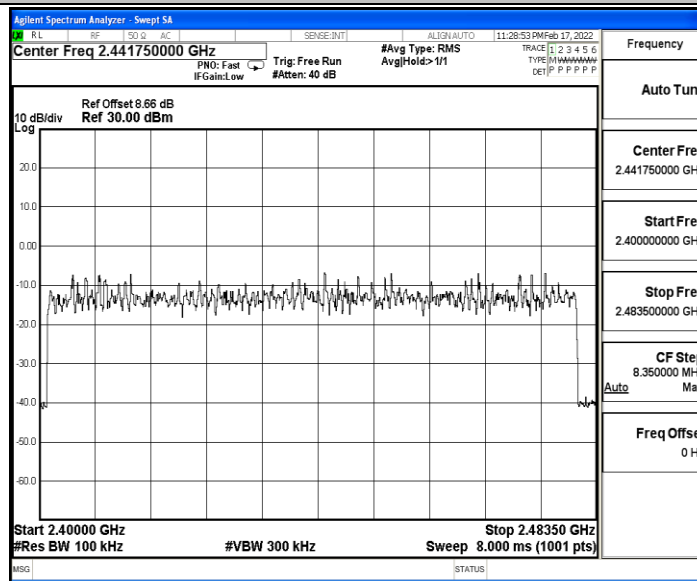
| TestMode | Antenna | Channel | Result[Num] | Limit[Num] | Verdict |
|----------|---------|---------|-------------|------------|---------|
| DH5      | Ant1    | Hop     | 79          | ≥15        | PASS    |
| 2DH5     | Ant1    | Hop     | 79          | ≥15        | PASS    |
| 3DH5     | Ant1    | Hop     | 79          | ≥15        | PASS    |

### Test Graphs





## 3DH5\_Ant1\_Hop



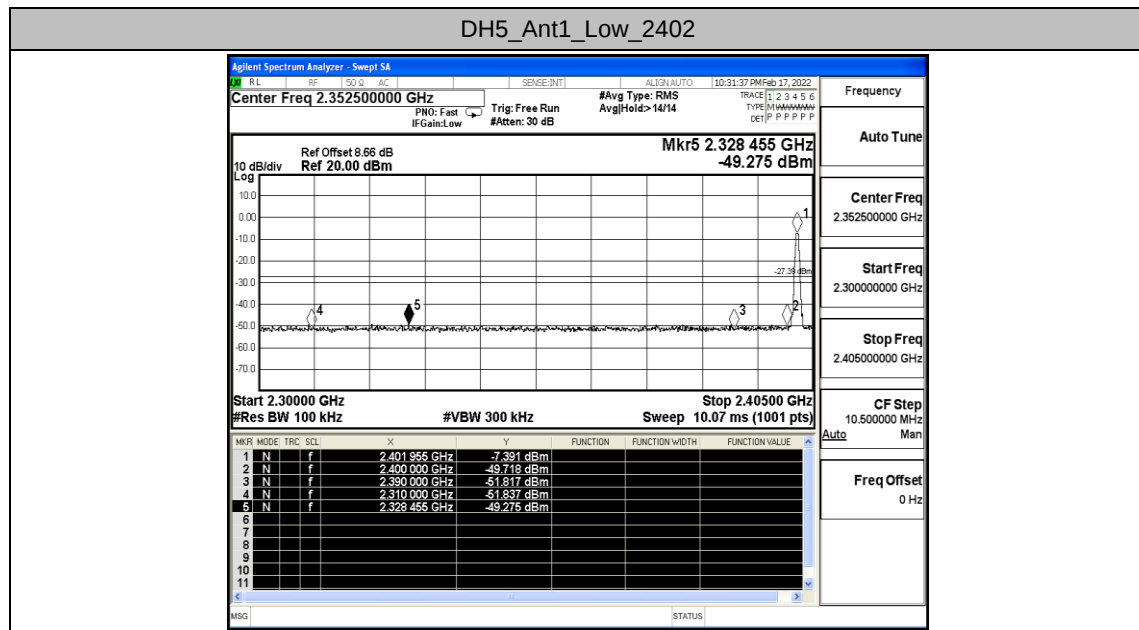


## A.6 Band edge measurements

### Test Result

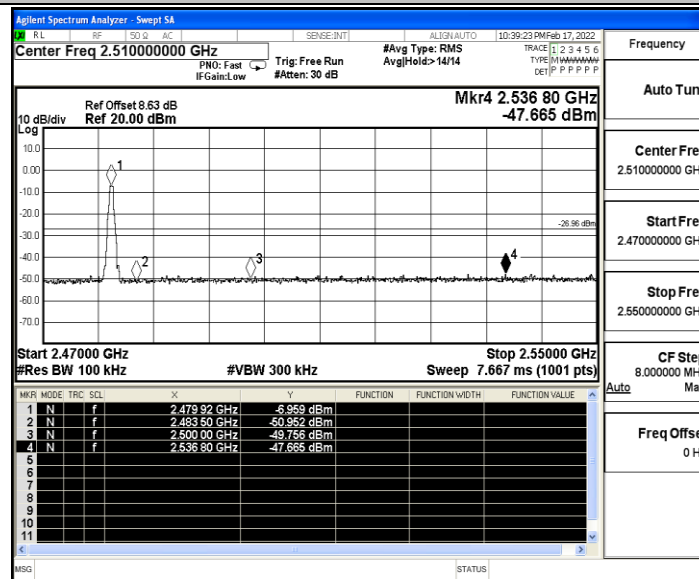
| TestMode | Antenna | ChName | Channel  | RefLevel<br>[dBm] | Result<br>[dBm] | Limit<br>[dBm] | Verdict |
|----------|---------|--------|----------|-------------------|-----------------|----------------|---------|
| DH5      | Ant1    | Low    | 2402     | -7.39             | -49.28          | ≤-27.39        | PASS    |
|          |         | High   | 2480     | -6.96             | -47.67          | ≤-26.96        | PASS    |
|          |         | Low    | Hop_2402 | -7.89             | -49.41          | ≤-27.89        | PASS    |
|          |         | High   | Hop_2480 | -7.36             | -47.6           | ≤-27.36        | PASS    |
| 2DH5     | Ant1    | Low    | 2402     | -11.37            | -49.22          | ≤-31.37        | PASS    |
|          |         | High   | 2480     | -7.43             | -47.62          | ≤-27.43        | PASS    |
|          |         | Low    | Hop_2402 | -12.39            | -49.13          | ≤-32.39        | PASS    |
|          |         | High   | Hop_2480 | -9.73             | -47.14          | ≤-29.73        | PASS    |
| 3DH5     | Ant1    | Low    | 2402     | -7.52             | -49.24          | ≤-27.52        | PASS    |
|          |         | High   | 2480     | -8.53             | -47.82          | ≤-28.53        | PASS    |
|          |         | Low    | Hop_2402 | -8.32             | -48.84          | ≤-28.32        | PASS    |
|          |         | High   | Hop_2480 | -8.79             | -47.93          | ≤-28.79        | PASS    |

### Test Graphs

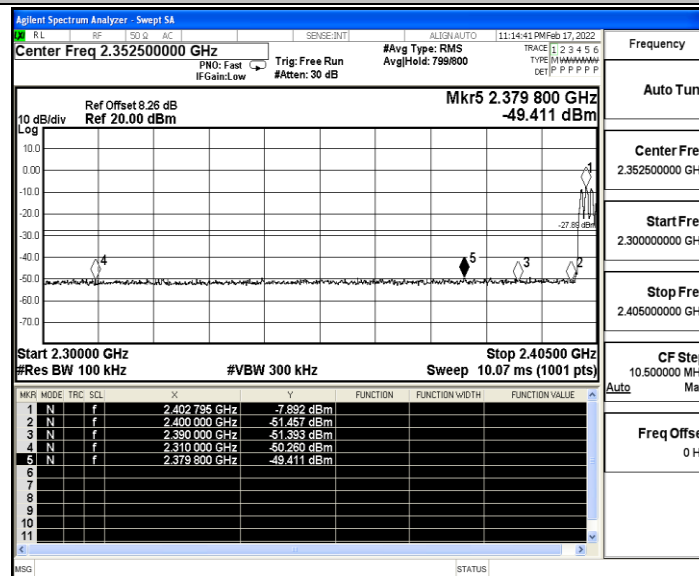




## DH5\_Ant1\_High\_2480

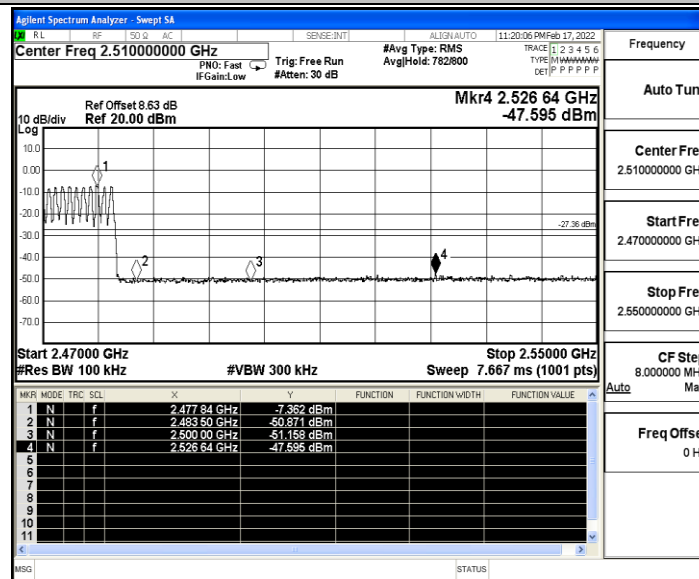


## DH5\_Ant1\_Low\_Hop\_2402

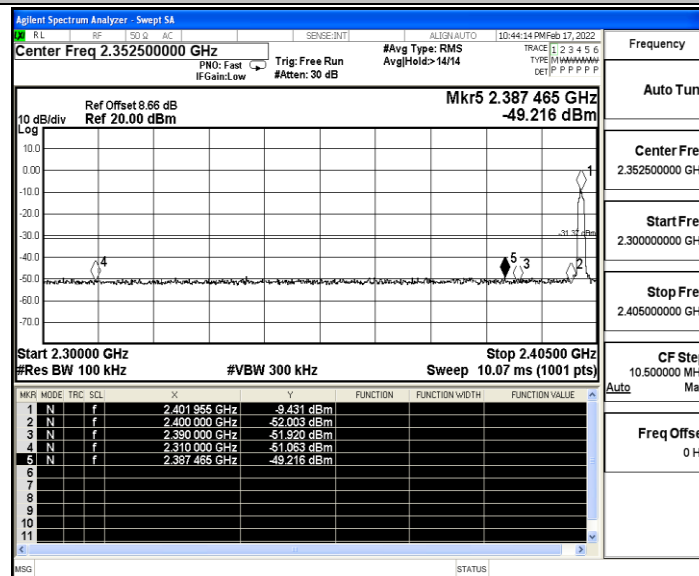




## DH5\_Ant1\_High\_Hop\_2480

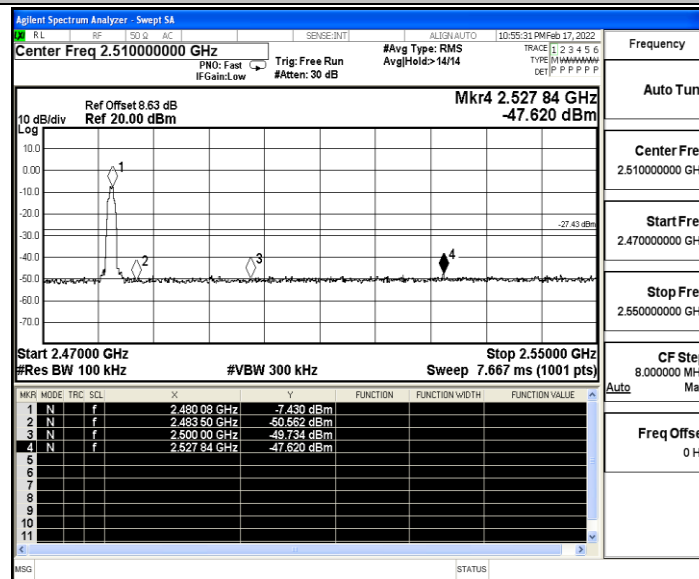


## 2DH5\_Ant1\_Low\_2402

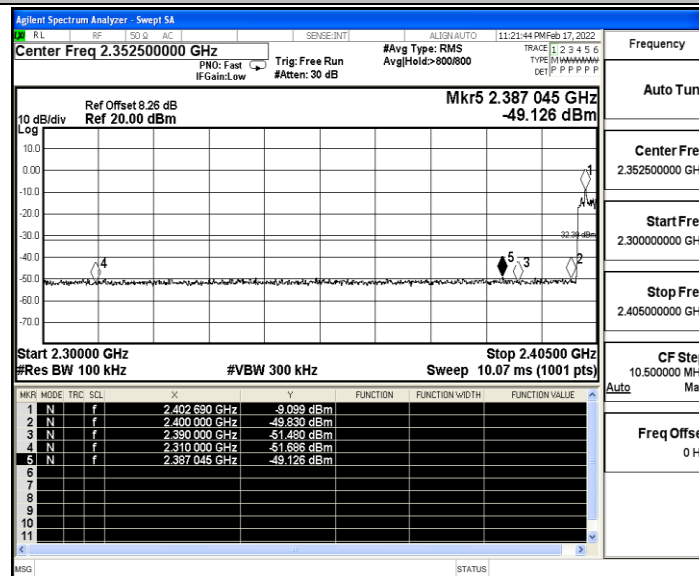




## 2DH5\_Ant1\_High\_2480

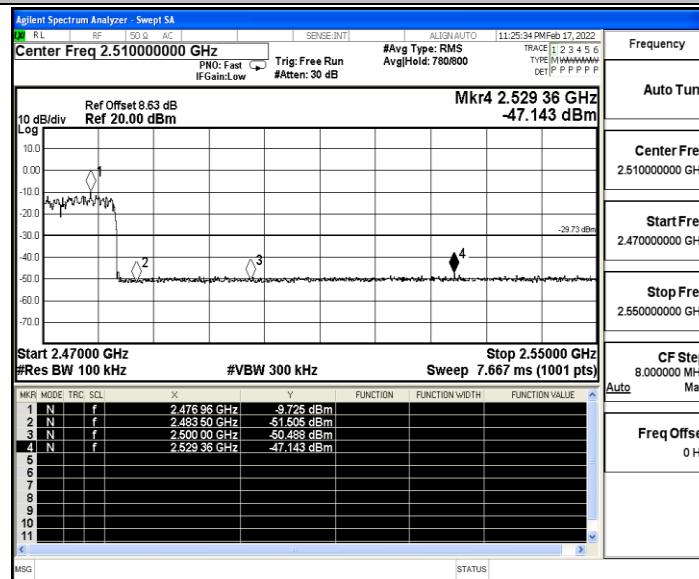


## 2DH5\_Ant1\_Low\_Hop\_2402

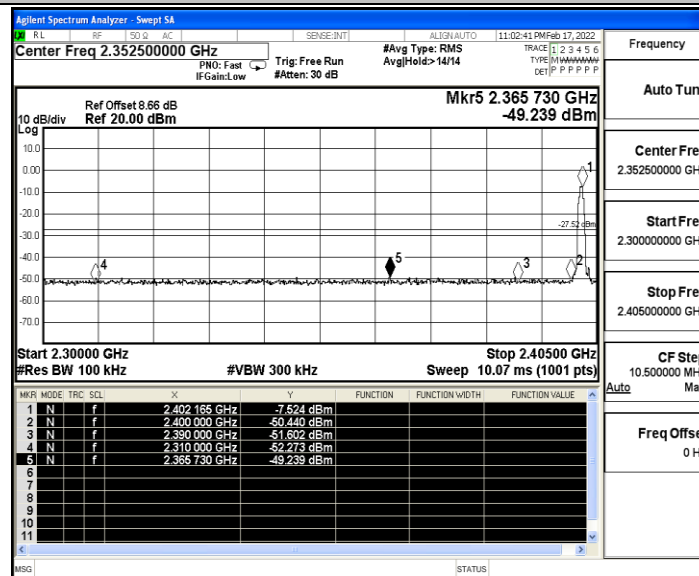




## 2DH5\_Ant1\_High\_Hop\_2480

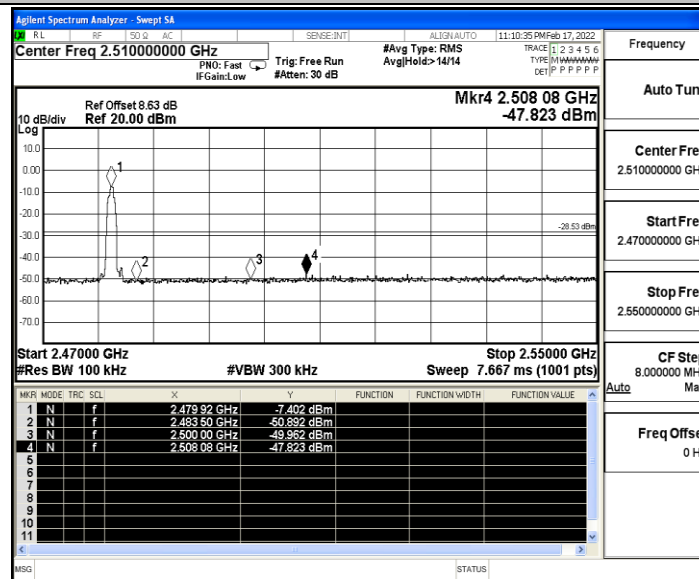


## 3DH5\_Ant1\_Low\_2402

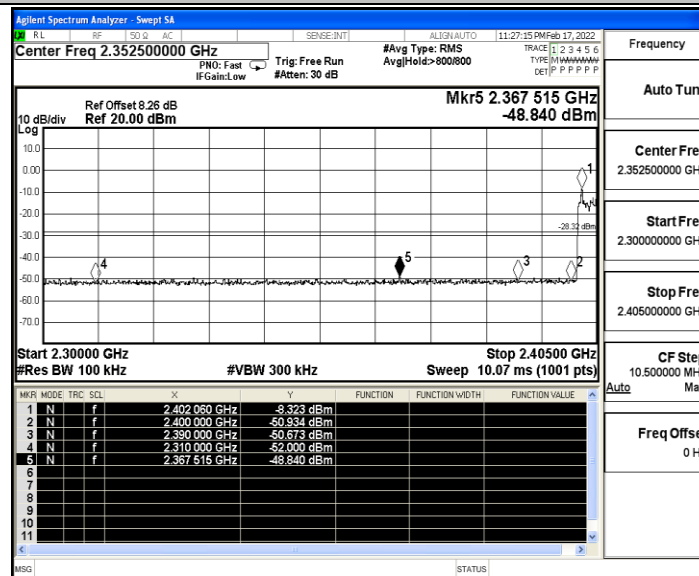




## 3DH5\_Ant1\_High\_2480

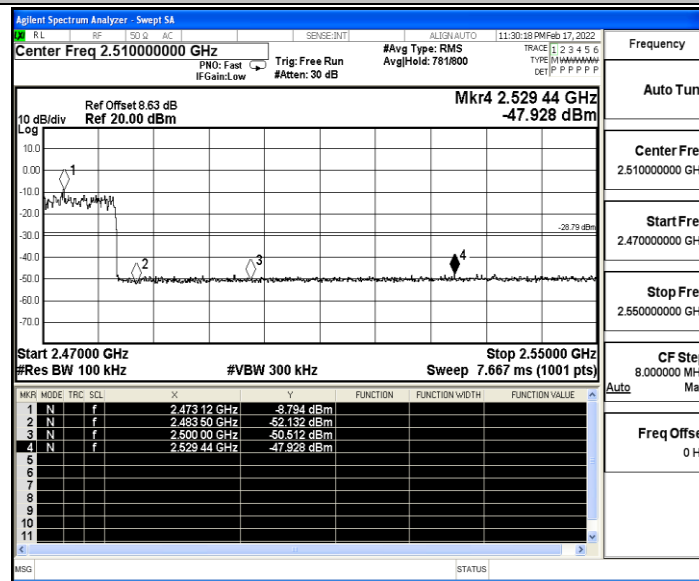


## 3DH5\_Ant1\_Low\_Hop\_2402





## 3DH5\_Ant1\_High\_Hop\_2480





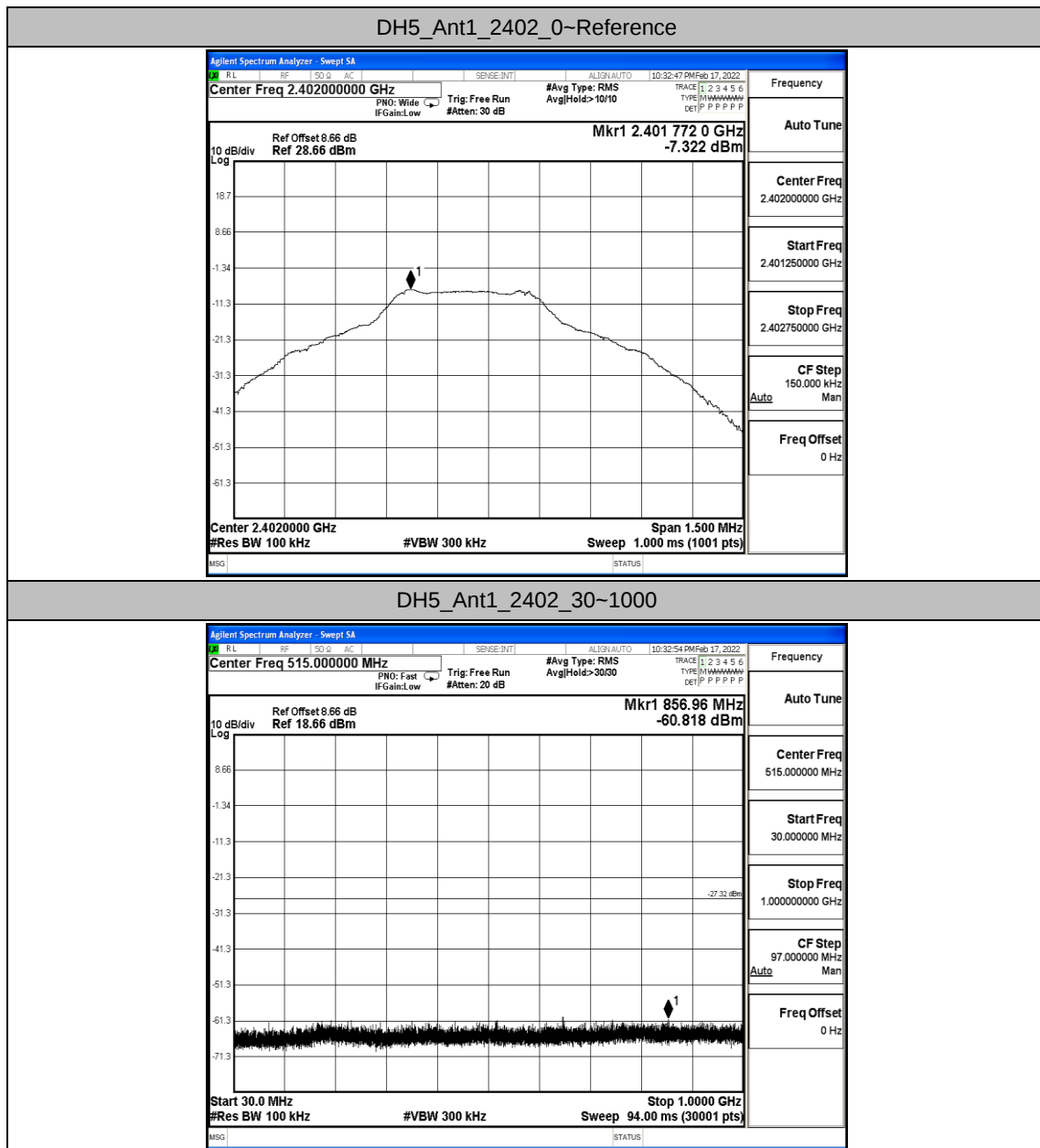
## A.7 Conducted Spurious Emission

### Test Result

| TestMode | Antenna | Channel | FreqRange<br>[MHz] | RefLevel<br>[dBm] | Result<br>[dBm] | Limit<br>[dBm] | Verdict |
|----------|---------|---------|--------------------|-------------------|-----------------|----------------|---------|
| DH5      | Ant1    | 2402    | Reference          | -7.32             | -7.32           | ---            | PASS    |
|          |         |         | 30~1000            | -7.32             | -60.82          | ≤-27.32        | PASS    |
|          |         |         | 1000~26500         | -7.32             | -45.28          | ≤-27.32        | PASS    |
|          |         | 2441    | Reference          | -7.05             | -7.05           | ---            | PASS    |
|          |         |         | 30~1000            | -7.05             | -60.59          | ≤-27.05        | PASS    |
|          |         |         | 1000~26500         | -7.05             | -46.57          | ≤-27.05        | PASS    |
|          |         | 2480    | Reference          | -7.10             | -7.10           | ---            | PASS    |
|          |         |         | 30~1000            | -7.10             | -60.4           | ≤-27.1         | PASS    |
|          |         |         | 1000~26500         | -7.10             | -46.39          | ≤-27.1         | PASS    |
| 2DH5     | Ant1    | 2402    | Reference          | -7.50             | -7.50           | ---            | PASS    |
|          |         |         | 30~1000            | -7.50             | -60.69          | ≤-27.5         | PASS    |
|          |         |         | 1000~26500         | -7.50             | -46.3           | ≤-27.5         | PASS    |
|          |         | 2441    | Reference          | -7.24             | -7.24           | ---            | PASS    |
|          |         |         | 30~1000            | -7.24             | -60.78          | ≤-27.24        | PASS    |
|          |         |         | 1000~26500         | -7.24             | -46.13          | ≤-27.24        | PASS    |
|          |         | 2480    | Reference          | -7.21             | -7.21           | ---            | PASS    |
|          |         |         | 30~1000            | -7.21             | -60.74          | ≤-27.21        | PASS    |
|          |         |         | 1000~26500         | -7.21             | -45.96          | ≤-27.21        | PASS    |
| 3DH5     | Ant1    | 2402    | Reference          | -7.32             | -7.32           | ---            | PASS    |
|          |         |         | 30~1000            | -7.32             | -59.82          | ≤-27.32        | PASS    |
|          |         |         | 1000~26500         | -7.32             | -46.24          | ≤-27.32        | PASS    |
|          |         | 2441    | Reference          | -7.04             | -7.04           | ---            | PASS    |
|          |         |         | 30~1000            | -7.04             | -60.07          | ≤-27.04        | PASS    |
|          |         |         | 1000~26500         | -7.04             | -45.87          | ≤-27.04        | PASS    |
|          |         | 2480    | Reference          | -7.04             | -7.04           | ---            | PASS    |
|          |         |         | 30~1000            | -7.04             | -60.87          | ≤-27.04        | PASS    |
|          |         |         | 1000~26500         | -7.04             | -45.65          | ≤-27.04        | PASS    |

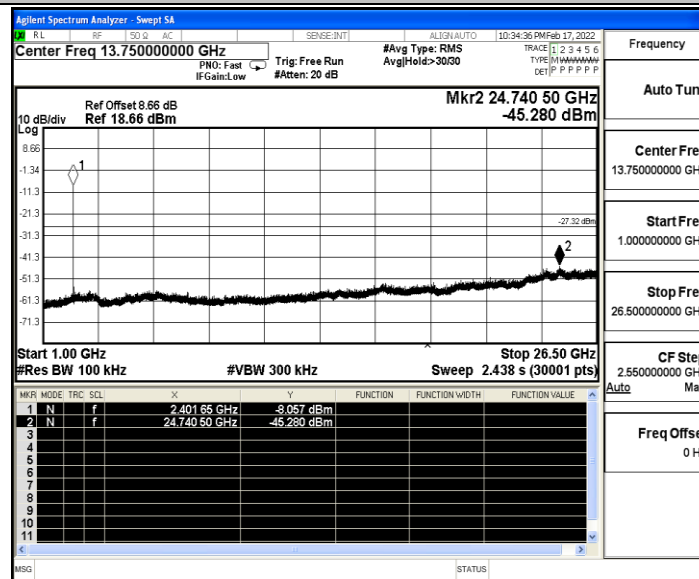


## Test Graphs

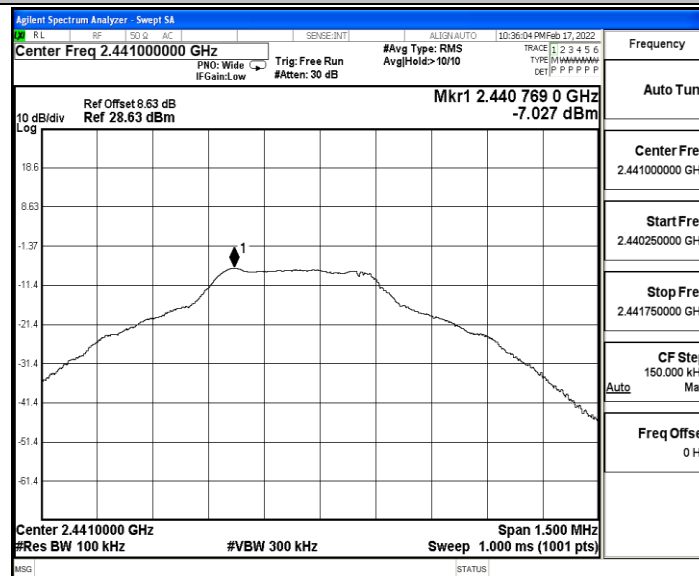




## DH5\_Ant1\_2402\_1000~26500

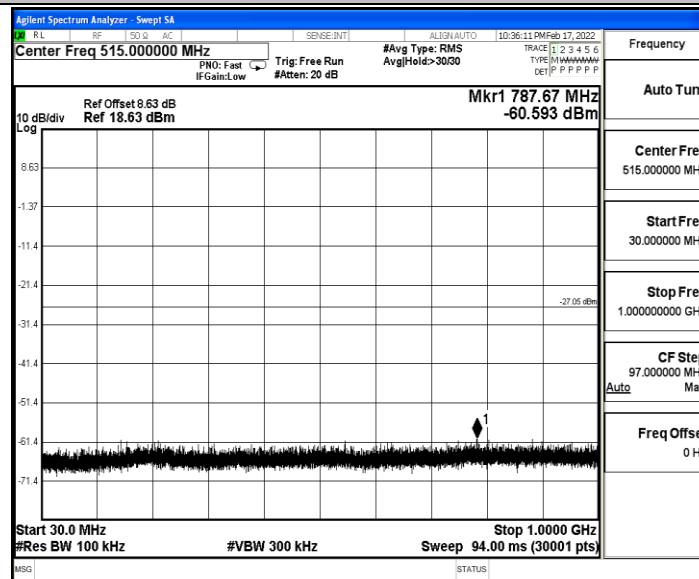


## DH5\_Ant1\_2441\_0~Reference

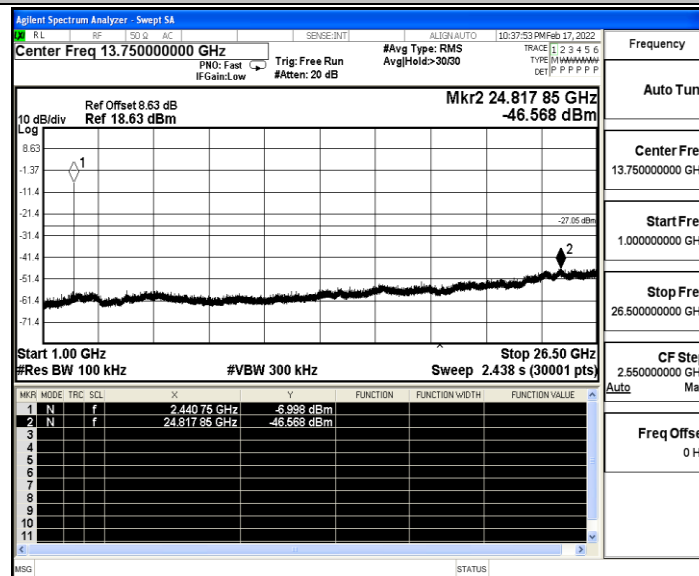




## DH5\_Ant1\_2441\_30~1000

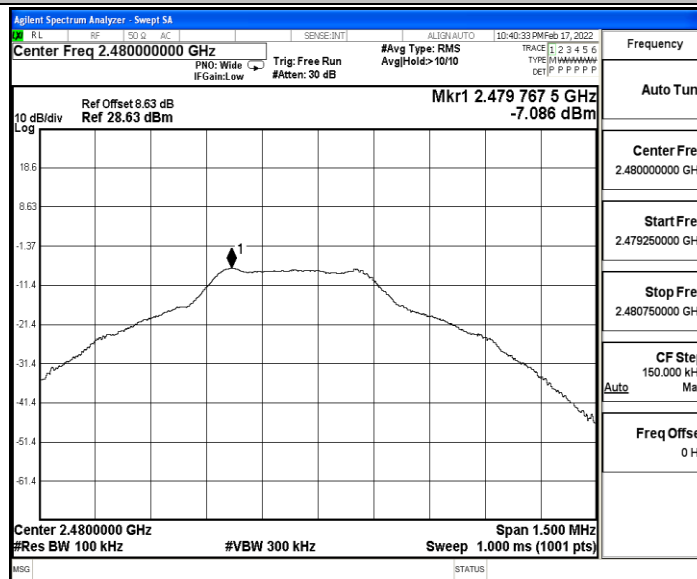


## DH5\_Ant1\_2441\_1000~26500

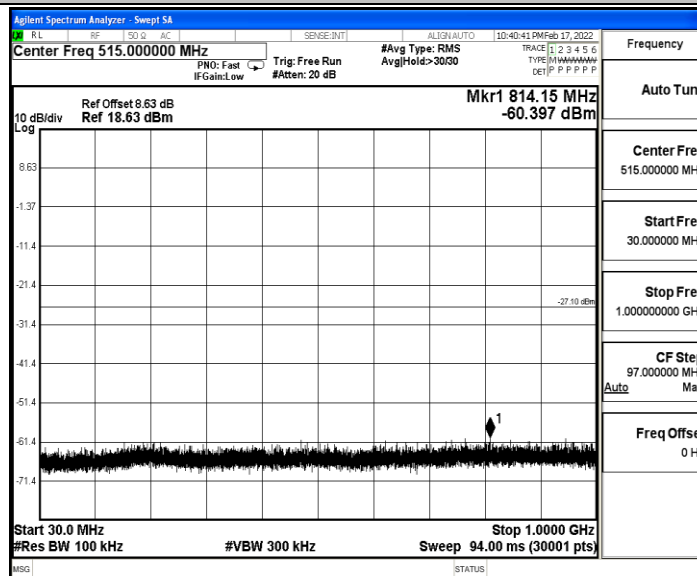




## DH5\_Ant1\_2480\_0-Reference

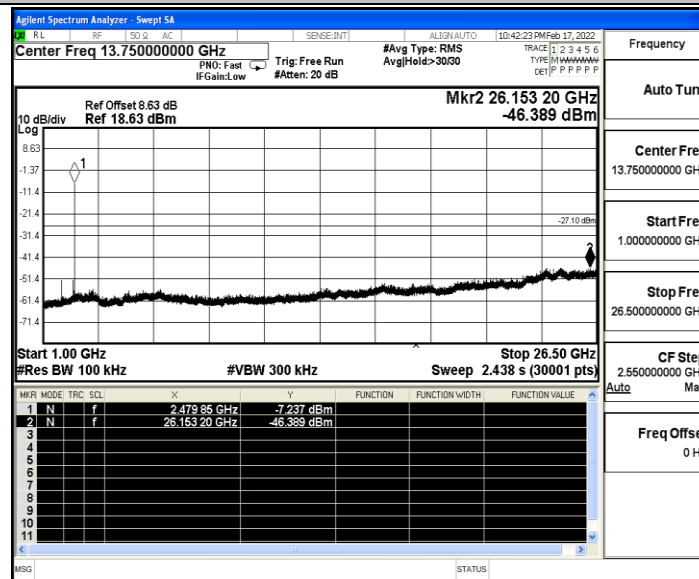


## DH5\_Ant1\_2480\_30-1000

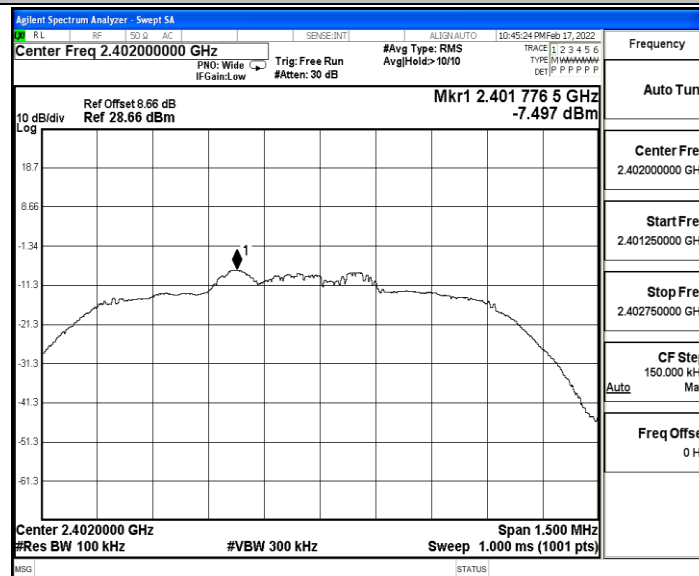




## DH5\_Ant1\_2480\_1000~26500

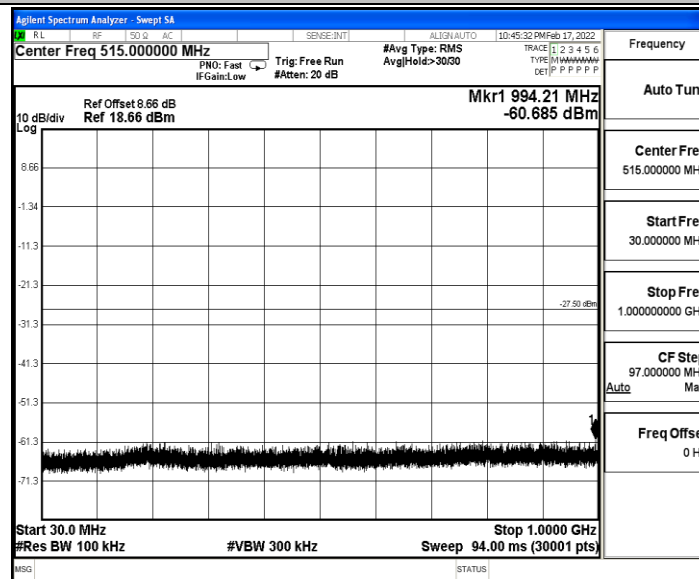


## 2DH5\_Ant1\_2402\_0~Reference

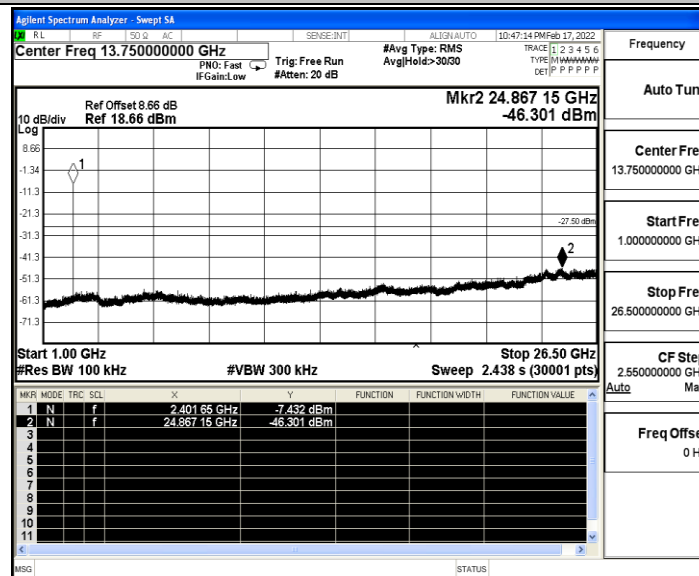




## 2DH5\_Ant1\_2402\_30~1000

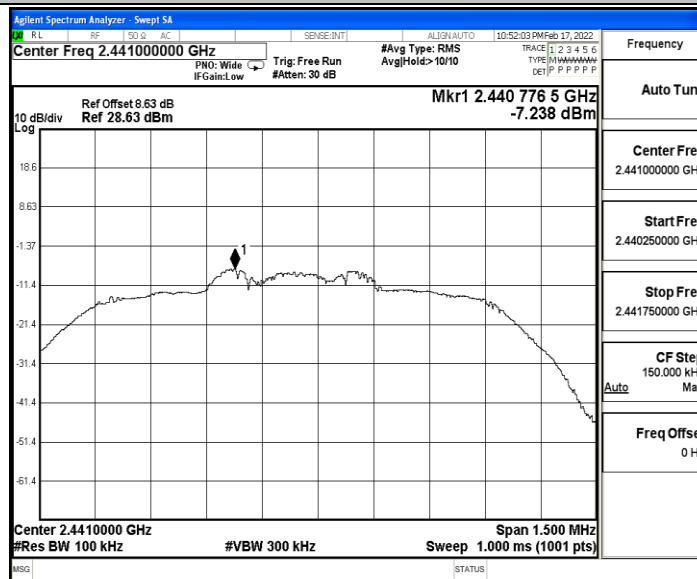


## 2DH5\_Ant1\_2402\_1000~26500

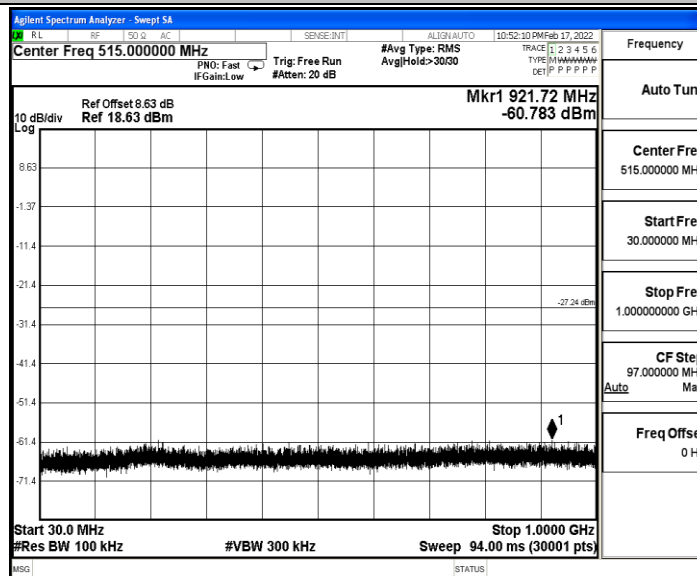




## 2DH5\_Ant1\_2441\_0~Reference

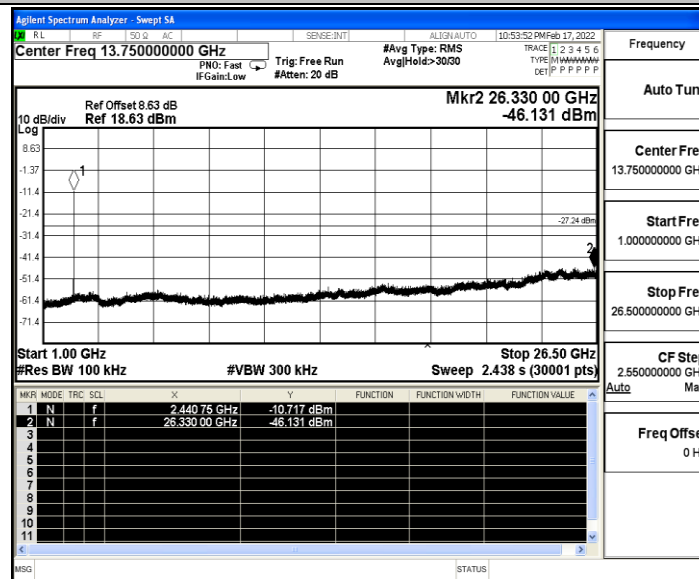


## 2DH5\_Ant1\_2441\_30~1000

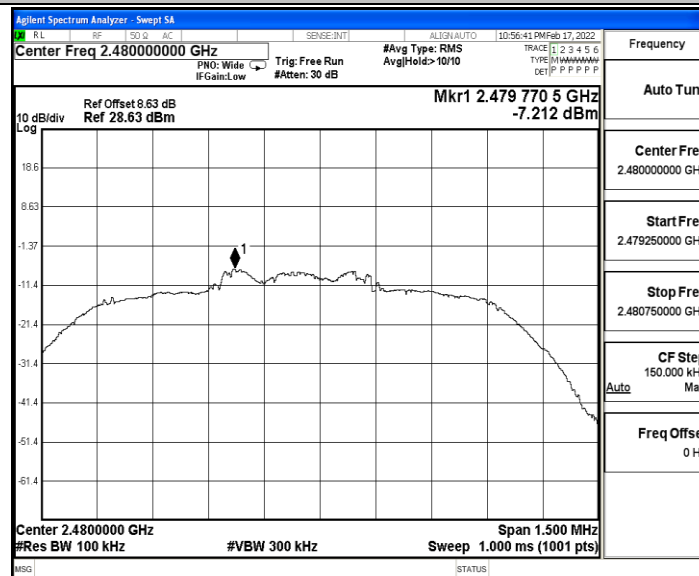




## 2DH5\_Ant1\_2441\_1000~26500

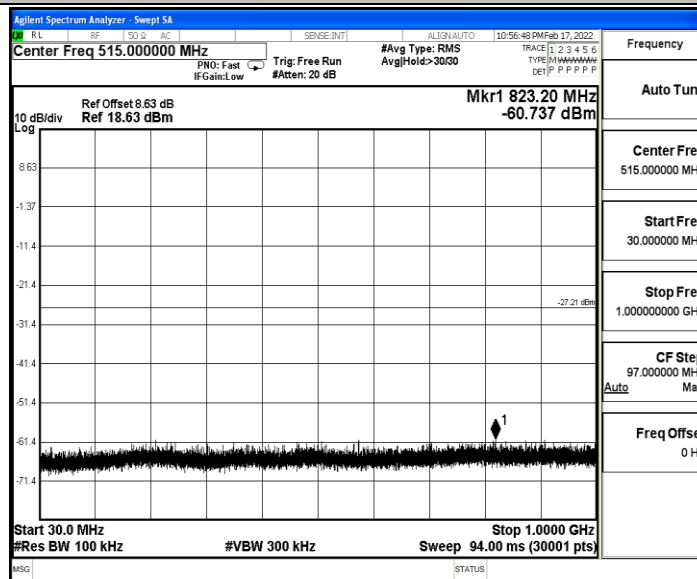


## 2DH5\_Ant1\_2480\_0~Reference

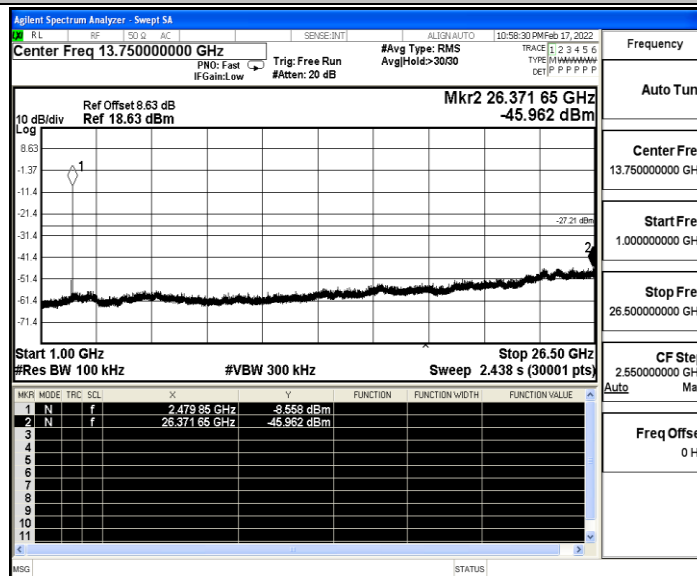




## 2DH5\_Ant1\_2480\_30~1000

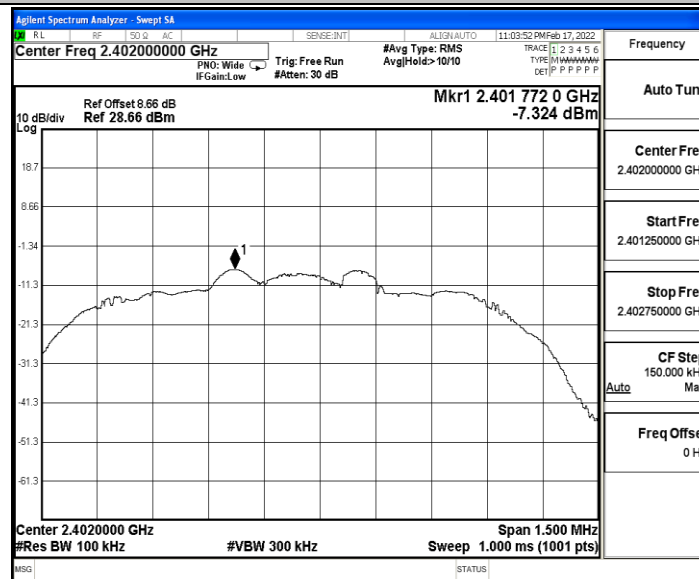


## 2DH5\_Ant1\_2480\_1000~26500

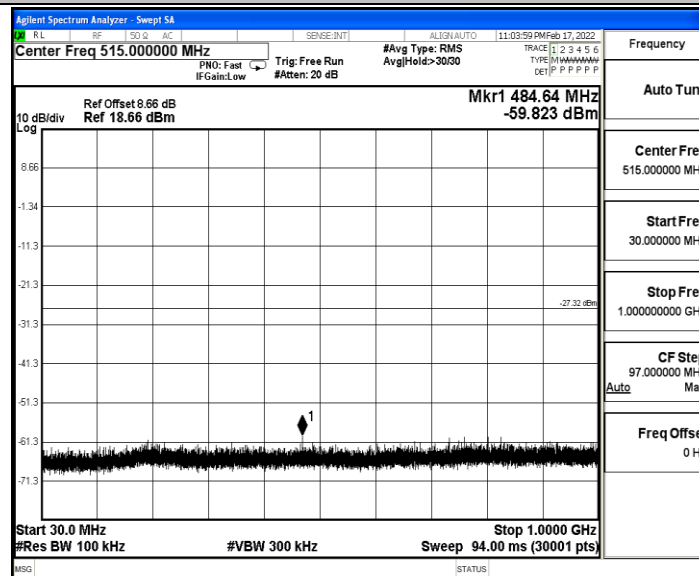




## 3DH5\_Ant1\_2402\_0~Reference

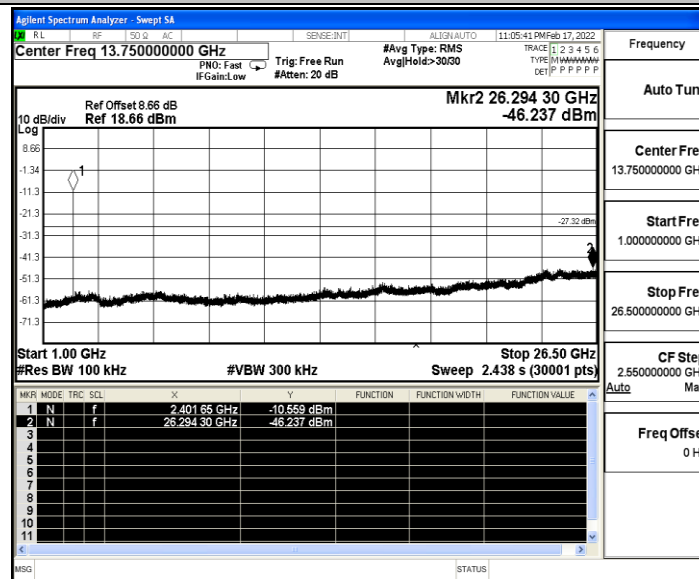


## 3DH5\_Ant1\_2402\_30~1000

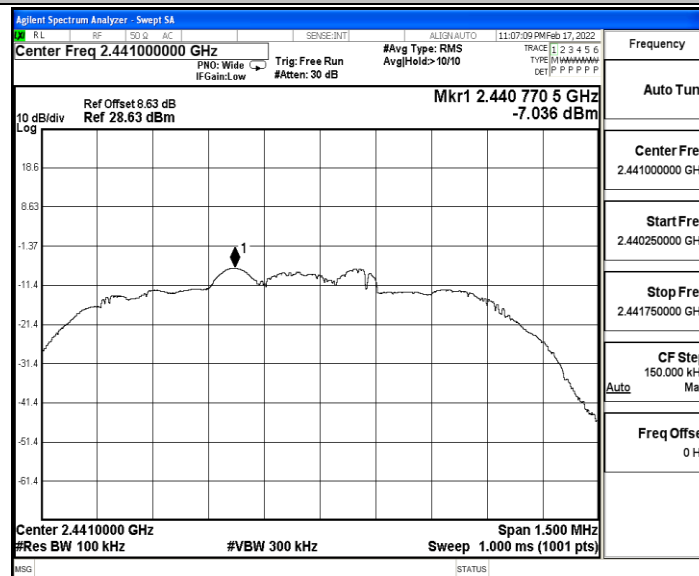




## 3DH5\_Ant1\_2402\_1000~26500

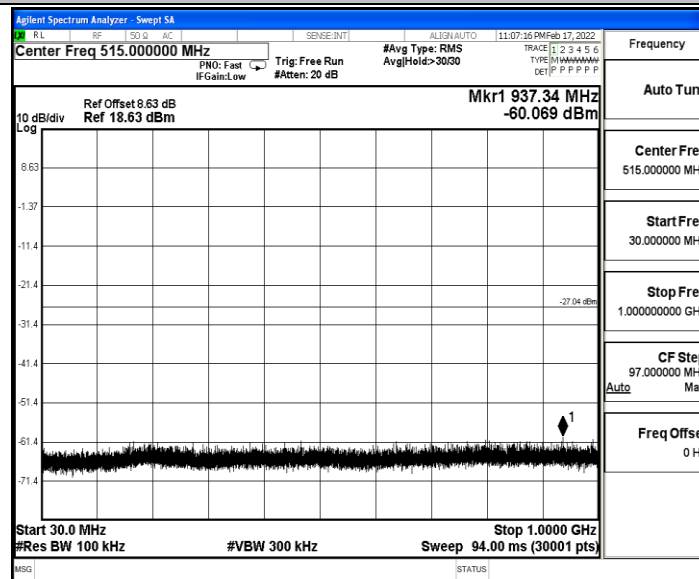


## 3DH5\_Ant1\_2441\_0~Reference

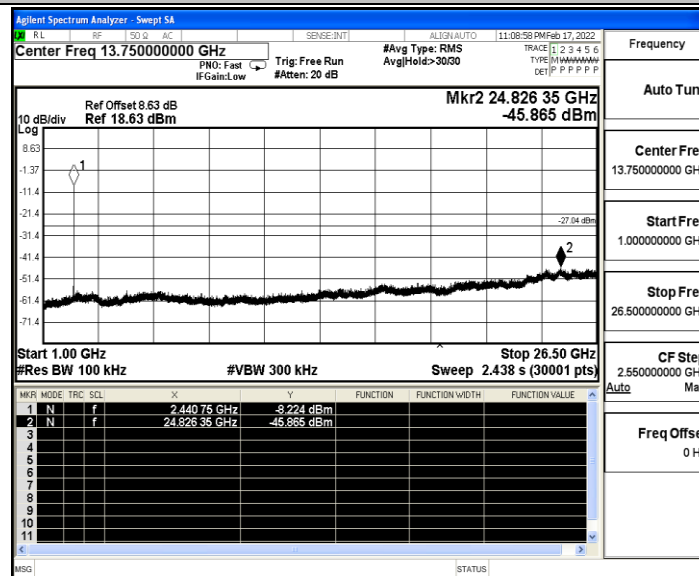




## 3DH5\_Ant1\_2441\_30~1000

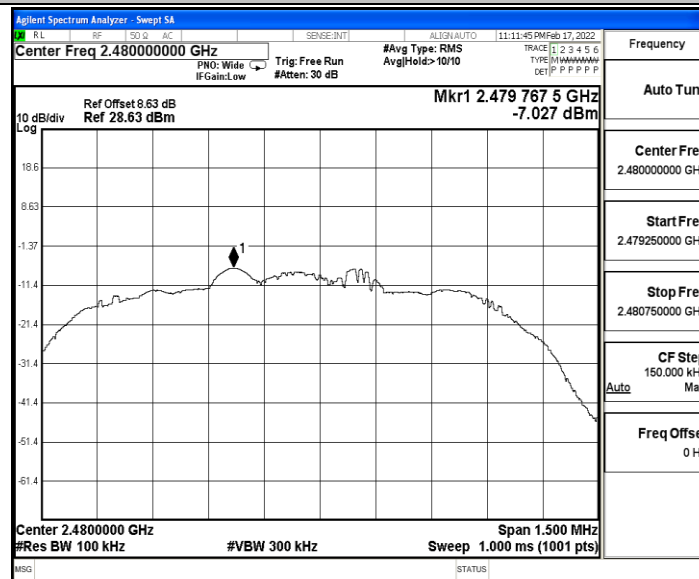


## 3DH5\_Ant1\_2441\_1000~26500

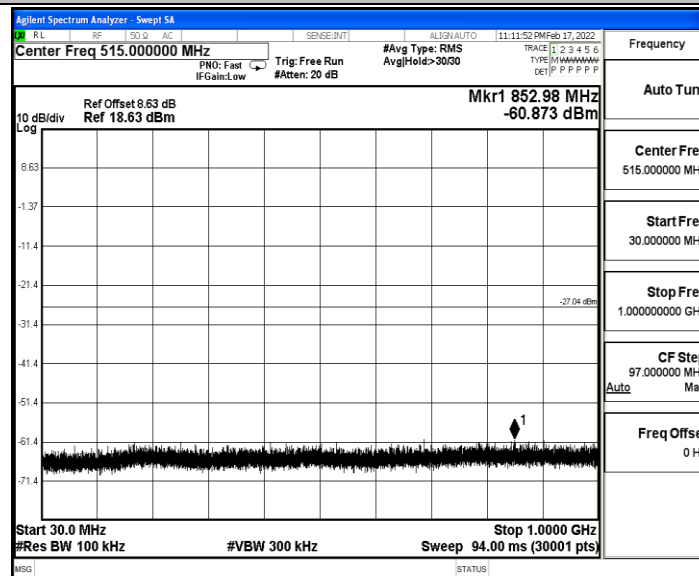




## 3DH5\_Ant1\_2480\_0~Reference

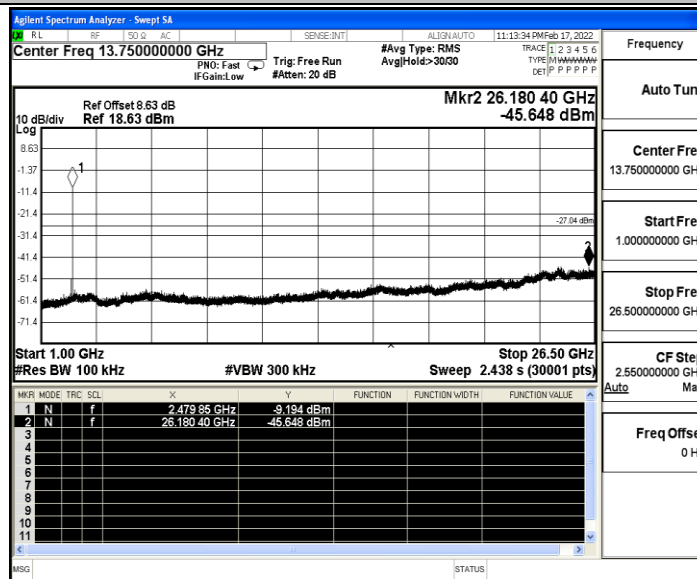


## 3DH5\_Ant1\_2480\_30~1000





## 3DH5\_Ant1\_2480\_1000-26500





## A.8 Emissions in Restricted Bands

### Test Result

| TestMode | Antenna | ChName | Channel      | Detector | Freq.<br>[MHz] | Result<br>[dBm] | Limit<br>[dBm] | Result<br>[dBuV/m] | Limit<br>[dBuV/m] | Verdict |
|----------|---------|--------|--------------|----------|----------------|-----------------|----------------|--------------------|-------------------|---------|
| DH5      | Ant1    | Low    | 2402         | AV       | 2310.000       | -48.3           | ≤-41.20        | 46.90              | ≤54               | PASS    |
|          |         |        |              | AV       | 2383.475       | -47.71          | ≤-41.20        | 47.49              | ≤54               | PASS    |
|          |         |        |              | AV       | 2390.000       | -47.89          | ≤-41.20        | 47.31              | ≤54               | PASS    |
|          |         |        |              | Peak     | 2310.000       | -38.9           | ≤-21.20        | 56.30              | ≤74               | PASS    |
|          |         |        |              | Peak     | 2315.330       | -36.79          | ≤-21.20        | 58.41              | ≤74               | PASS    |
|          |         |        |              | Peak     | 2390.000       | -38.35          | ≤-21.20        | 56.85              | ≤74               | PASS    |
|          |         | High   | 2480         | AV       | 2483.500       | -47.54          | ≤-41.20        | 47.66              | ≤54               | PASS    |
|          |         |        |              | AV       | 2494.080       | -47.24          | ≤-41.20        | 47.96              | ≤54               | PASS    |
|          |         |        |              | AV       | 2500.000       | -47.33          | ≤-41.20        | 47.87              | ≤54               | PASS    |
|          |         |        |              | Peak     | 2483.500       | -38.12          | ≤-21.20        | 57.08              | ≤74               | PASS    |
|          |         |        |              | Peak     | 2491.200       | -36.68          | ≤-21.20        | 58.52              | ≤74               | PASS    |
|          |         |        |              | Peak     | 2500.000       | -38.25          | ≤-21.20        | 56.95              | ≤74               | PASS    |
|          |         | Low    | Hop_24<br>02 | Peak     | 2310.000       | -38.86          | ≤-21.20        | 56.34              | ≤74               | PASS    |
|          |         |        |              | Peak     | 2387.360       | -37.03          | ≤-21.20        | 58.17              | ≤74               | PASS    |
|          |         |        |              | Peak     | 2390.000       | -38.24          | ≤-21.20        | 56.96              | ≤74               | PASS    |
|          |         | High   | Hop_24<br>80 | Peak     | 2483.500       | -38.41          | ≤-21.20        | 56.79              | ≤74               | PASS    |
|          |         |        |              | Peak     | 2484.640       | -36.56          | ≤-21.20        | 58.64              | ≤74               | PASS    |
|          |         |        |              | Peak     | 2500.000       | -38             | ≤-21.20        | 57.20              | ≤74               | PASS    |
| 2DH5     | Ant1    | Low    | 2402         | AV       | 2310.000       | -48.28          | ≤-41.20        | 46.92              | ≤54               | PASS    |
|          |         |        |              | AV       | 2389.775       | -47.77          | ≤-41.20        | 47.43              | ≤54               | PASS    |
|          |         |        |              | AV       | 2390.000       | -47.93          | ≤-41.20        | 47.27              | ≤54               | PASS    |
|          |         |        |              | Peak     | 2310.000       | -38.59          | ≤-21.20        | 56.61              | ≤74               | PASS    |
|          |         |        |              | Peak     | 2330.345       | -36.36          | ≤-21.20        | 58.84              | ≤74               | PASS    |
|          |         |        |              | Peak     | 2390.000       | -38.79          | ≤-21.20        | 56.41              | ≤74               | PASS    |
|          |         | High   | 2480         | AV       | 2483.500       | -47.45          | ≤-41.20        | 47.75              | ≤54               | PASS    |
|          |         |        |              | AV       | 2499.520       | -47.19          | ≤-41.20        | 48.01              | ≤54               | PASS    |
|          |         |        |              | AV       | 2500.000       | -47.34          | ≤-41.20        | 47.86              | ≤54               | PASS    |
|          |         |        |              | Peak     | 2483.500       | -37.5           | ≤-21.20        | 57.70              | ≤74               | PASS    |
|          |         |        |              | Peak     | 2491.920       | -36.44          | ≤-21.20        | 58.76              | ≤74               | PASS    |
|          |         |        |              | Peak     | 2500.000       | -37.07          | ≤-21.20        | 58.13              | ≤74               | PASS    |
|          |         | Low    | Hop_24<br>02 | Peak     | 2310.000       | -39.7           | ≤-21.20        | 55.50              | ≤74               | PASS    |
|          |         |        |              | Peak     | 2322.470       | -37.15          | ≤-21.20        | 58.05              | ≤74               | PASS    |
|          |         |        |              | Peak     | 2390.000       | -38.2           | ≤-21.20        | 57.00              | ≤74               | PASS    |
|          |         | High   | Hop_24<br>80 | Peak     | 2483.500       | -38.05          | ≤-21.20        | 57.15              | ≤74               | PASS    |
|          |         |        |              | Peak     | 2492.000       | -36.41          | ≤-21.20        | 58.79              | ≤74               | PASS    |
|          |         |        |              | Peak     | 2500.000       | -37.49          | ≤-21.20        | 57.71              | ≤74               | PASS    |
| 3DH5     | Ant1    | Low    | 2402         | AV       | 2310.000       | -48.26          | ≤-41.20        | 46.94              | ≤54               | PASS    |



|  |  |      |              |      |          |        |         |       |     |      |
|--|--|------|--------------|------|----------|--------|---------|-------|-----|------|
|  |  |      |              | AV   | 2377.175 | -47.7  | ≤-41.20 | 47.50 | ≤54 | PASS |
|  |  |      |              | AV   | 2390.000 | -47.82 | ≤-41.20 | 47.38 | ≤54 | PASS |
|  |  |      |              | Peak | 2310.000 | -39.16 | ≤-21.20 | 56.04 | ≤74 | PASS |
|  |  |      |              | Peak | 2386.100 | -36.43 | ≤-21.20 | 58.77 | ≤74 | PASS |
|  |  |      |              | Peak | 2390.000 | -37.56 | ≤-21.20 | 57.64 | ≤74 | PASS |
|  |  | High | 2480         | AV   | 2483.500 | -47.45 | ≤-41.20 | 47.75 | ≤54 | PASS |
|  |  |      |              | AV   | 2495.760 | -47.14 | ≤-41.20 | 48.06 | ≤54 | PASS |
|  |  |      |              | AV   | 2500.000 | -47.38 | ≤-41.20 | 47.82 | ≤54 | PASS |
|  |  |      |              | Peak | 2483.500 | -37.55 | ≤-21.20 | 57.65 | ≤74 | PASS |
|  |  |      |              | Peak | 2497.680 | -36.02 | ≤-21.20 | 59.18 | ≤74 | PASS |
|  |  |      |              | Peak | 2500.000 | -37.67 | ≤-21.20 | 57.53 | ≤74 | PASS |
|  |  | Low  | Hop_24<br>02 | Peak | 2310.000 | -38.71 | ≤-21.20 | 56.49 | ≤74 | PASS |
|  |  |      |              | Peak | 2330.870 | -36.65 | ≤-21.20 | 58.55 | ≤74 | PASS |
|  |  |      |              | Peak | 2390.000 | -38.08 | ≤-21.20 | 57.12 | ≤74 | PASS |
|  |  | High | Hop_24<br>80 | Peak | 2483.500 | -37.8  | ≤-21.20 | 57.40 | ≤74 | PASS |
|  |  |      |              | Peak | 2498.160 | -36.45 | ≤-21.20 | 58.75 | ≤74 | PASS |
|  |  |      |              | Peak | 2500.000 | -36.99 | ≤-21.20 | 58.21 | ≤74 | PASS |

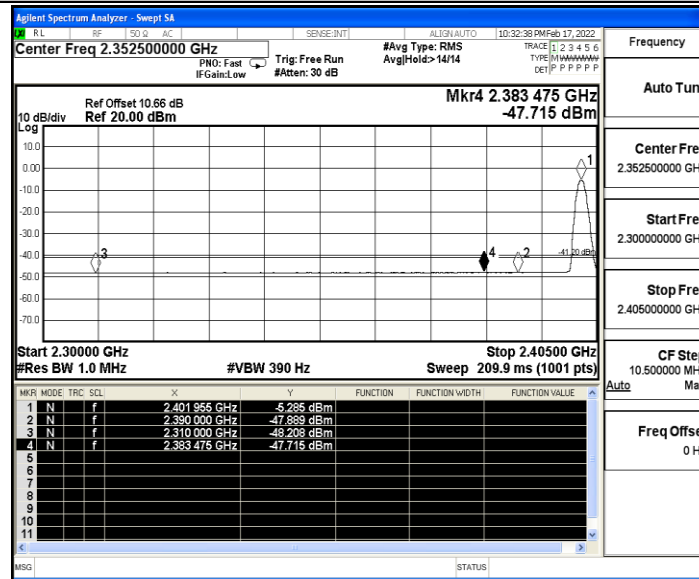
Note:

1. The Antenna Gain is compensated in the graph.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

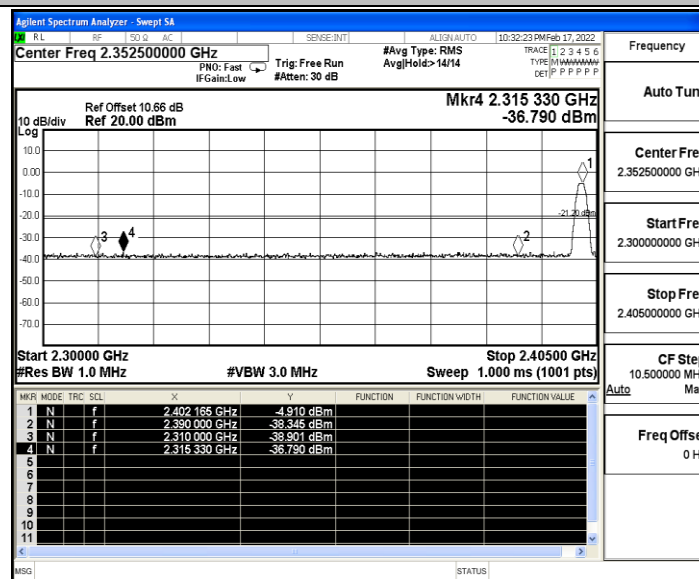


## Test Graphs

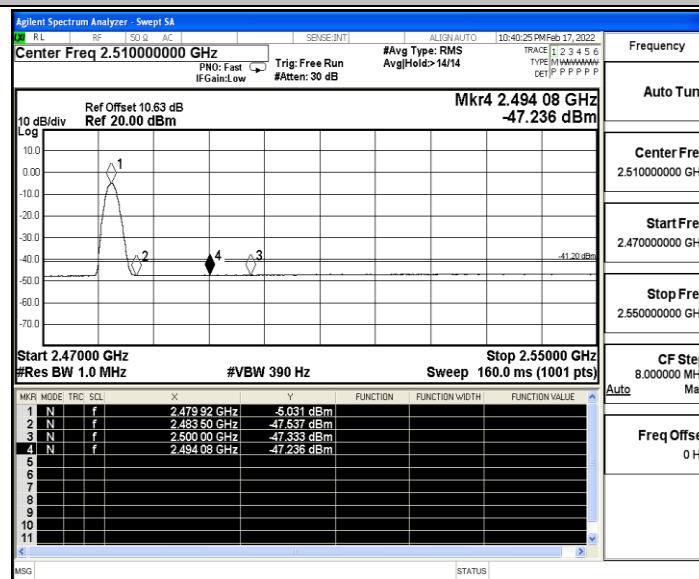
DH5\_Ant1\_Low\_2402\_AV



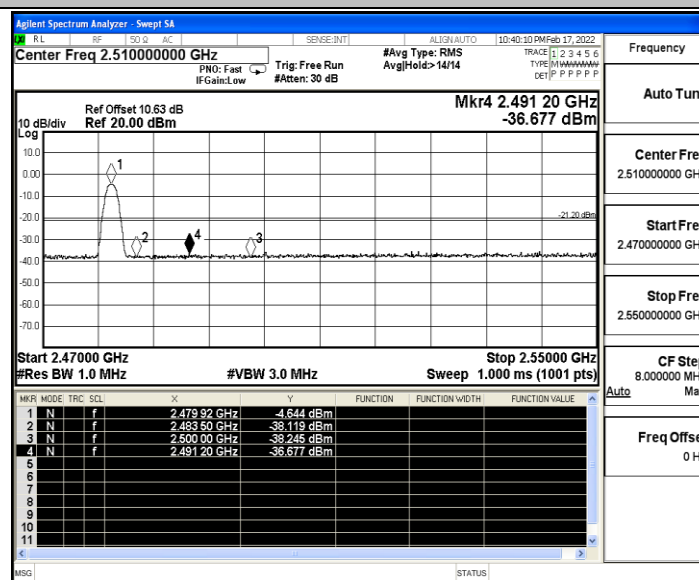
DH5\_Ant1\_Low\_2402\_Peak



## DH5\_Ant1\_High\_2480\_AV

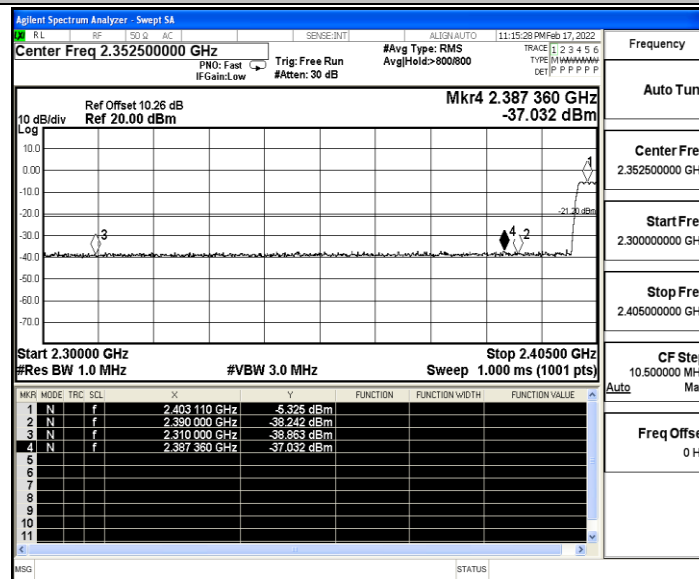


## DH5\_Ant1\_High\_2480\_Peak

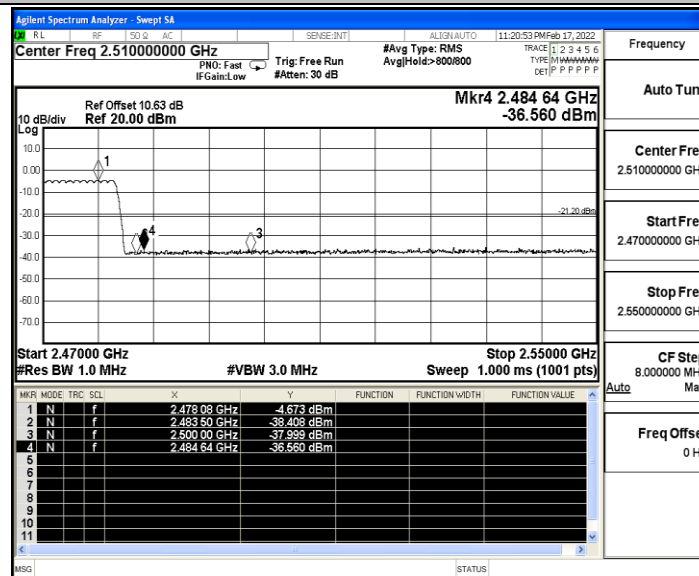




## DH5\_Ant1\_Low\_Hop\_2402\_Peak

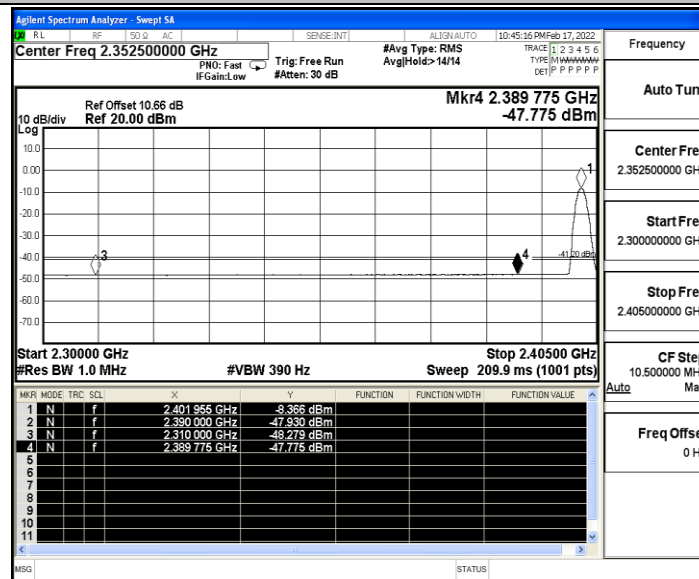


## DH5\_Ant1\_High\_Hop\_2480\_Peak

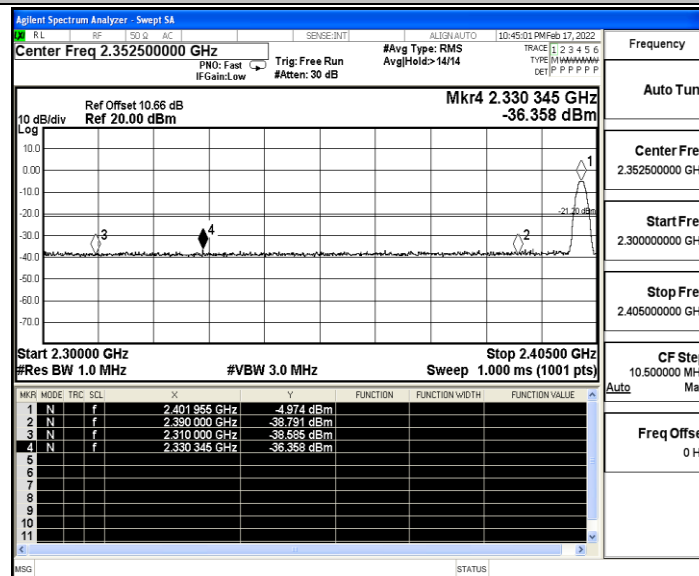




## 2DH5\_Ant1\_Low\_2402\_AV

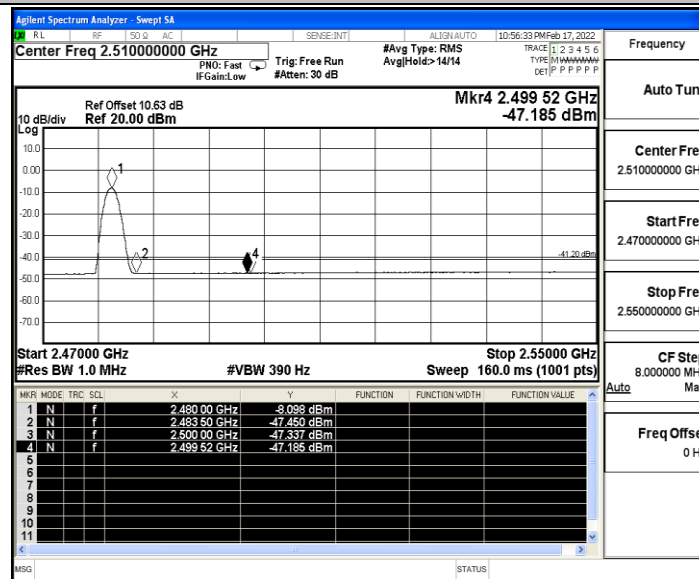


## 2DH5\_Ant1\_Low\_2402\_Peak

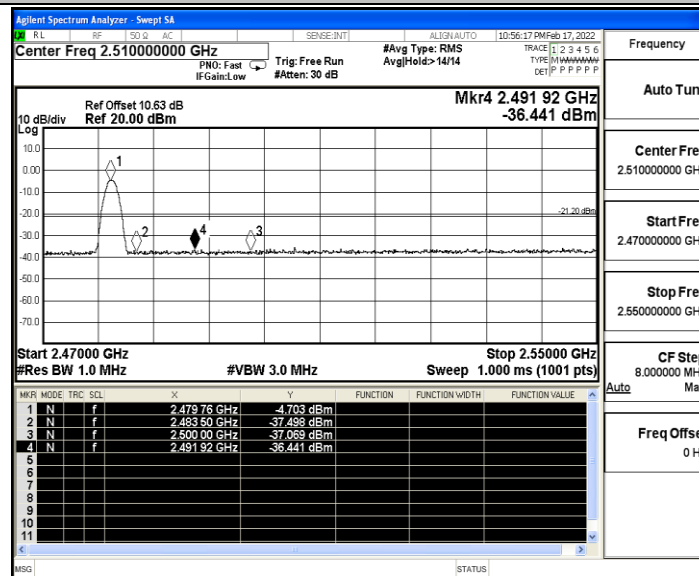




## 2DH5\_Ant1\_High\_2480\_AV

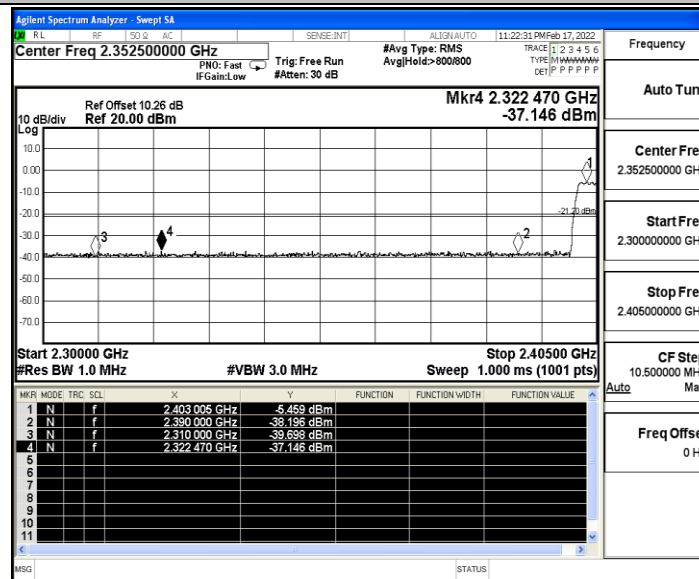


## 2DH5\_Ant1\_High\_2480\_Peak

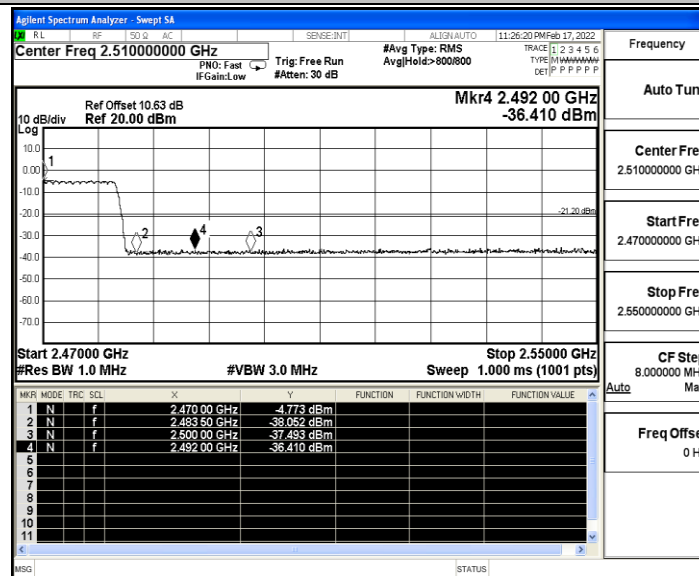




## 2DH5\_Ant1\_Low\_Hop\_2402\_Peak

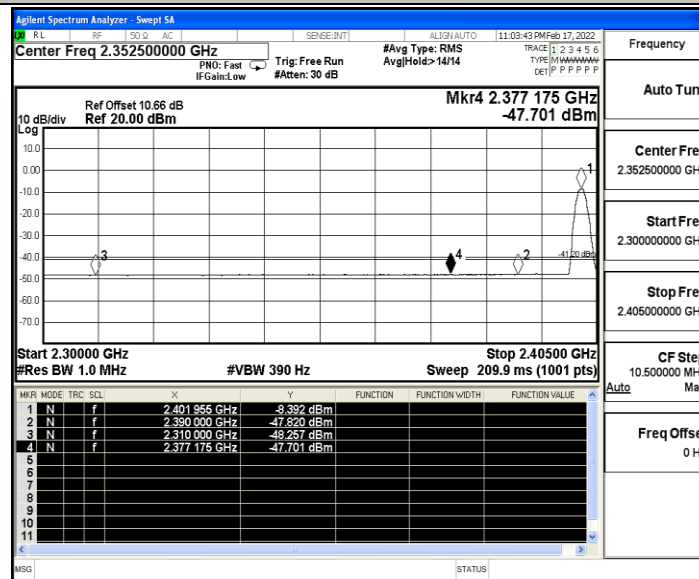


## 2DH5\_Ant1\_High\_Hop\_2480\_Peak

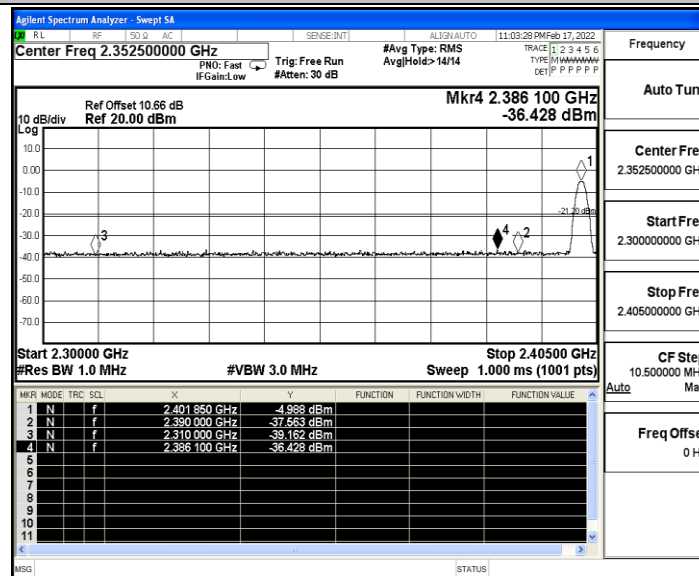




## 3DH5\_Ant1\_Low\_2402\_AV

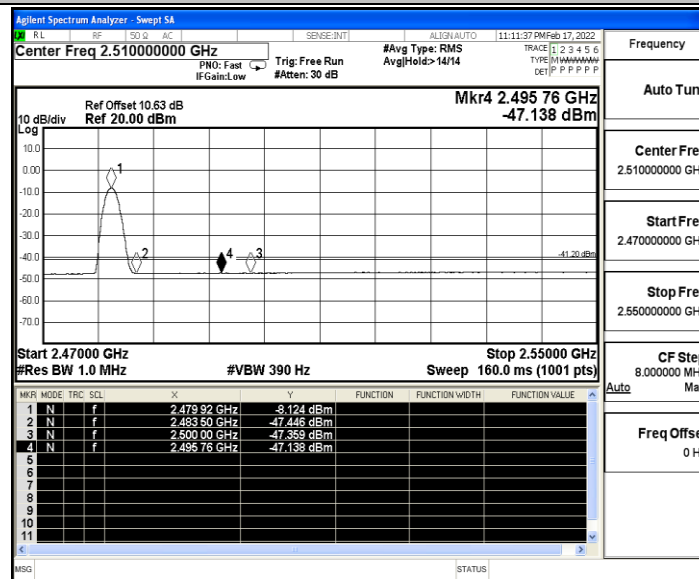


## 3DH5\_Ant1\_Low\_2402\_Peak

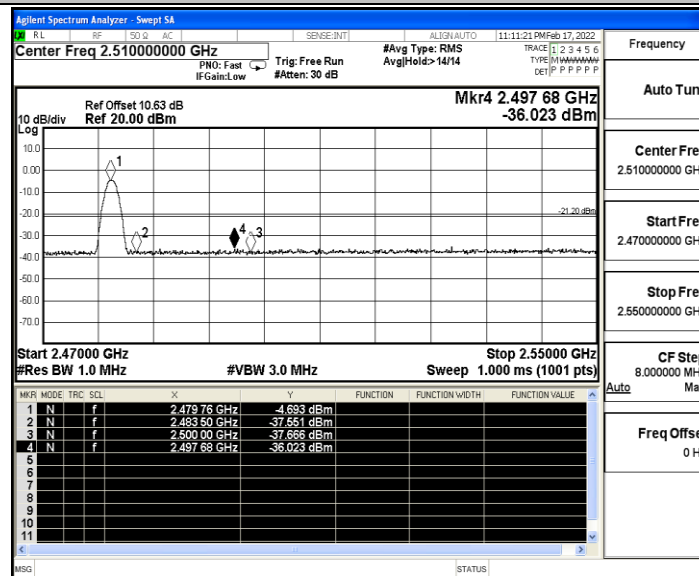




## 3DH5\_Ant1\_High\_2480\_AV

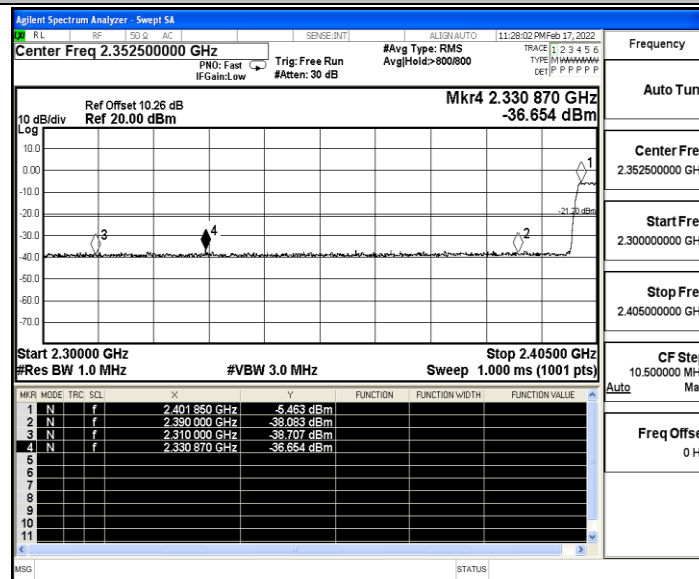


## 3DH5\_Ant1\_High\_2480\_Peak





## 3DH5\_Ant1\_Low\_Hop\_2402\_Peak



## 3DH5\_Ant1\_High\_Hop\_2480\_Peak

