

Appendix A

RF Test Data for BT(BDR/EDR) (Conducted Measurement)

Product Name: Computer Speaker

Trade Mark: N/A

Test Model: SK600

FCC ID: 2A2QG-NV-SK600

Environmental Conditions

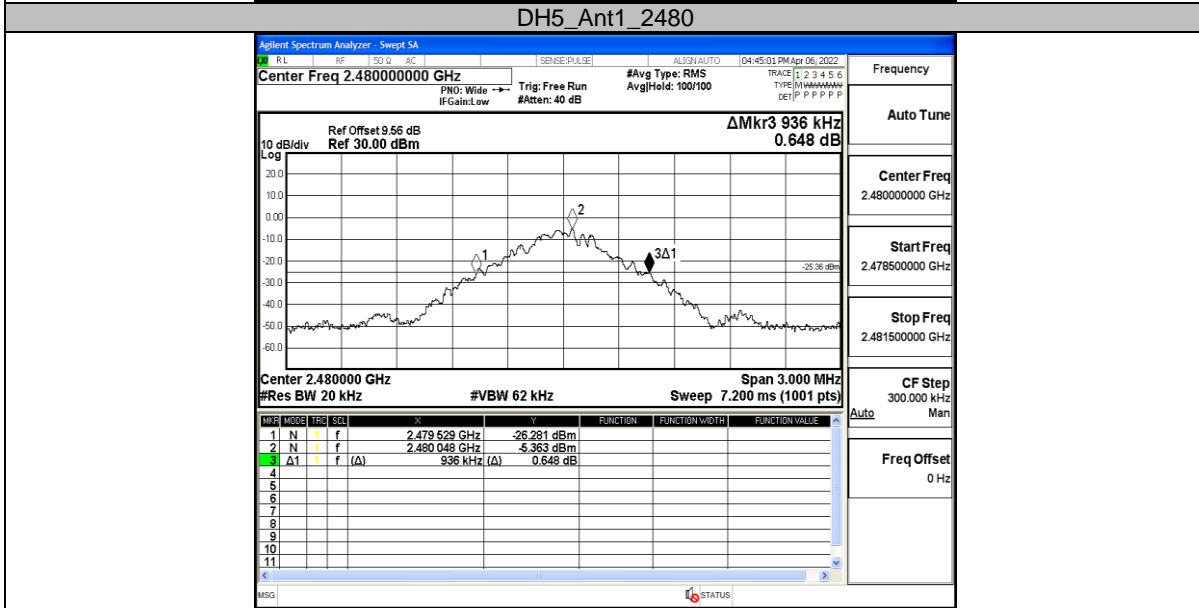
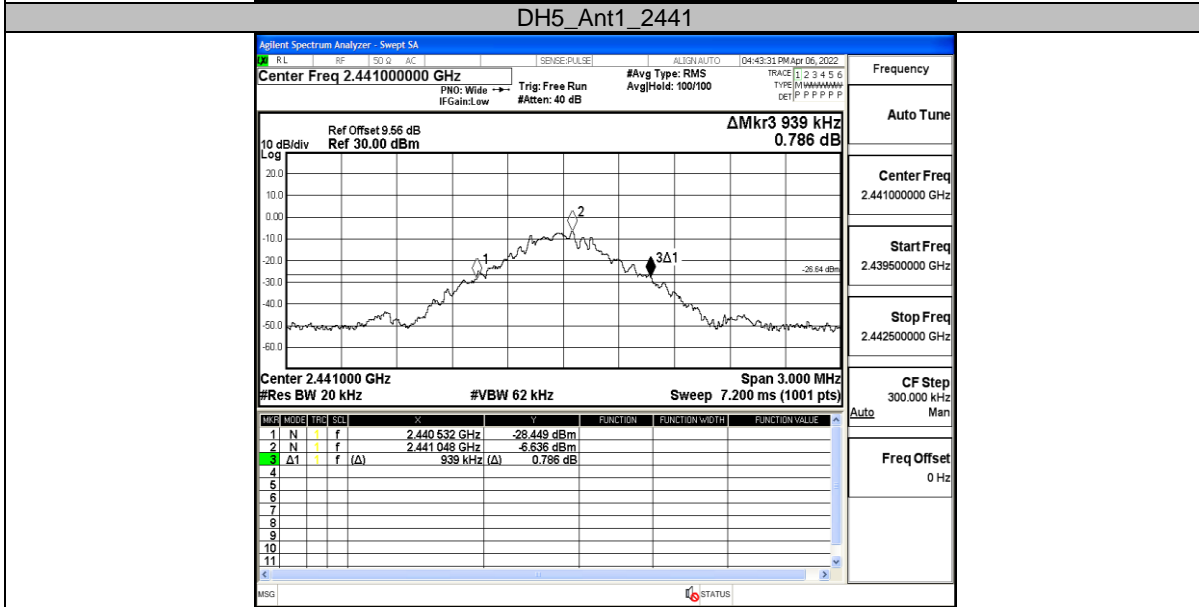
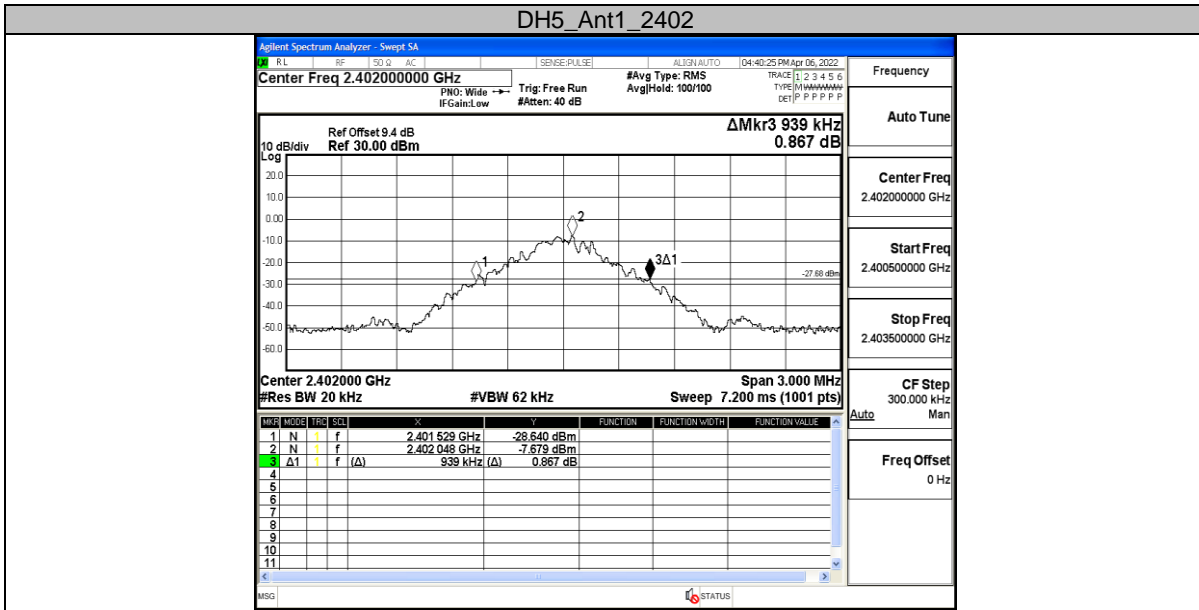
| | |
|--------------------|-----------|
| Temperature: | 22.8° C |
| Relative Humidity: | 56% |
| ATM Pressure: | 100.0 kPa |
| Test Engineer: | Anna Hu |
| Supervised by: | Hugo Chen |

Appendix A: 20dB Emission Bandwidth

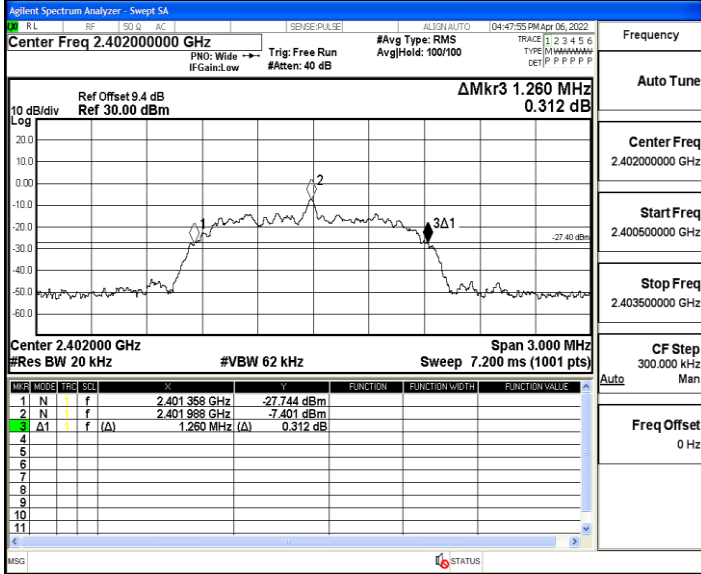
Test Result

| TestMode | Antenna | Channel | 20db EBW[MHz] | FL[MHz] | FH[MHz] | Limit[MHz] | Verdict |
|----------|---------|---------|---------------|----------|----------|------------|---------|
| DH5 | Ant1 | 2402 | 0.939 | 2401.529 | 2402.468 | --- | --- |
| | | 2441 | 0.939 | 2440.532 | 2441.471 | --- | --- |
| | | 2480 | 0.936 | 2479.529 | 2480.465 | --- | --- |
| 2DH5 | Ant1 | 2402 | 1.260 | 2401.358 | 2402.618 | --- | --- |
| | | 2441 | 1.317 | 2440.328 | 2441.645 | --- | --- |
| | | 2480 | 1.353 | 2479.316 | 2480.669 | --- | --- |

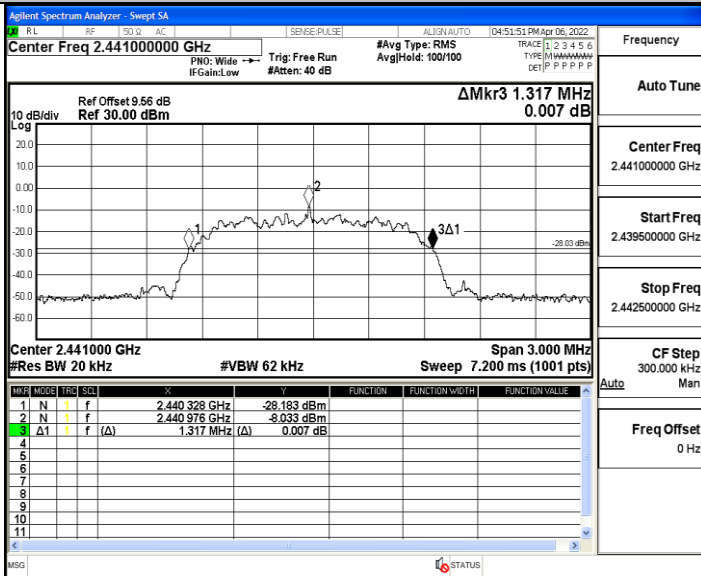
Test Graphs



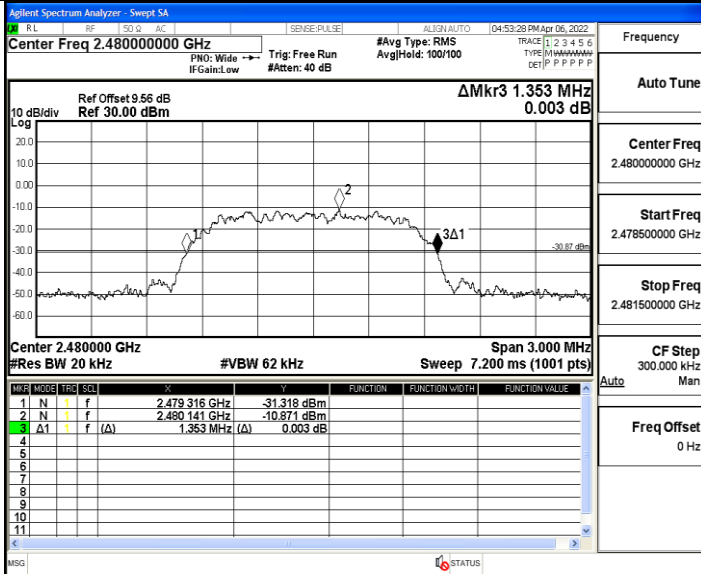
2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480

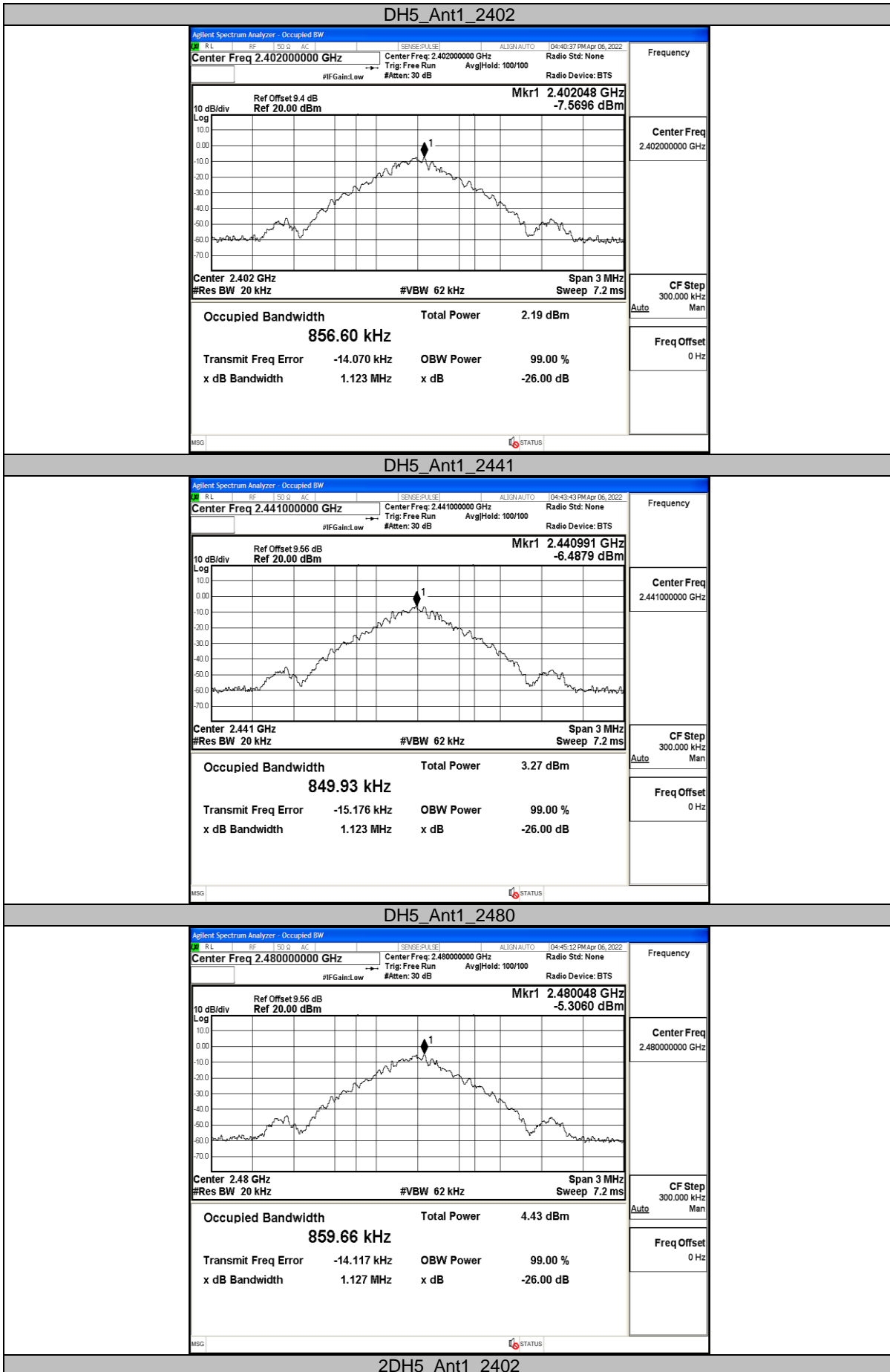


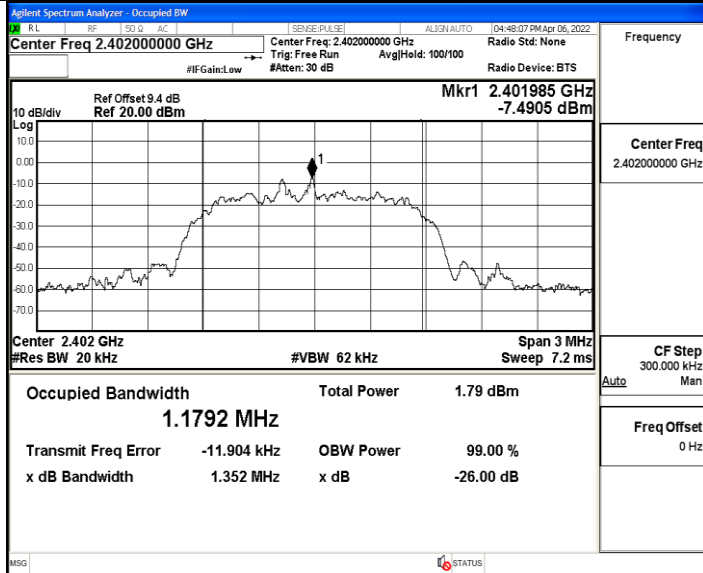
Appendix B: Occupied Channel Bandwidth

Test Result

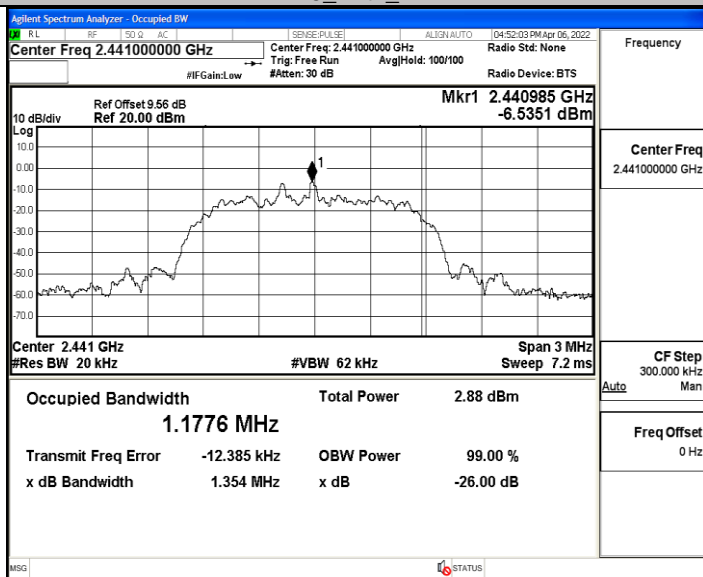
| TestMode | Antenna | Channel | OCB [MHz] | FL[MHz] | FH[MHz] | Limit[MHz] | Verdict |
|----------|---------|---------|-----------|----------|----------|------------|---------|
| DH5 | Ant1 | 2402 | 0.85660 | 2401.558 | 2402.414 | --- | --- |
| | | 2441 | 0.84993 | 2440.560 | 2441.410 | --- | --- |
| | | 2480 | 0.85966 | 2479.556 | 2480.416 | --- | --- |
| 2DH5 | Ant1 | 2402 | 1.1792 | 2401.399 | 2402.578 | --- | --- |
| | | 2441 | 1.1776 | 2440.399 | 2441.576 | --- | --- |
| | | 2480 | 1.1863 | 2479.394 | 2480.581 | --- | --- |

Test Graphs

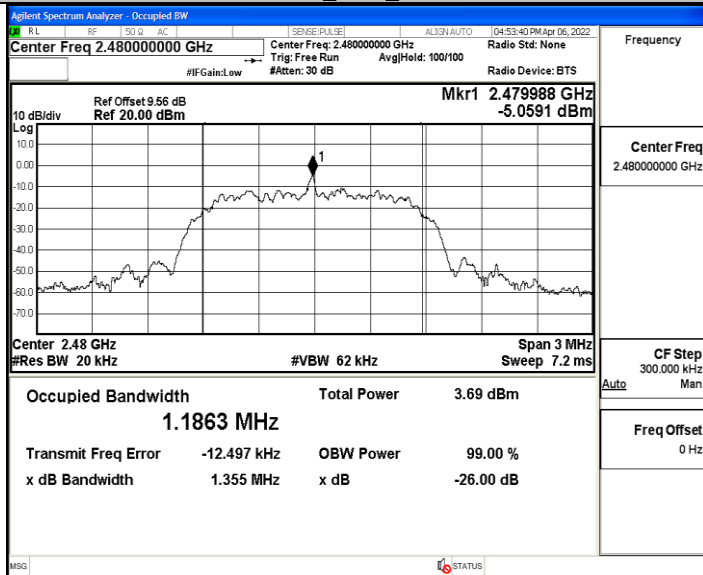




2DH5_Ant1_2441



2DH5_Ant1_2480

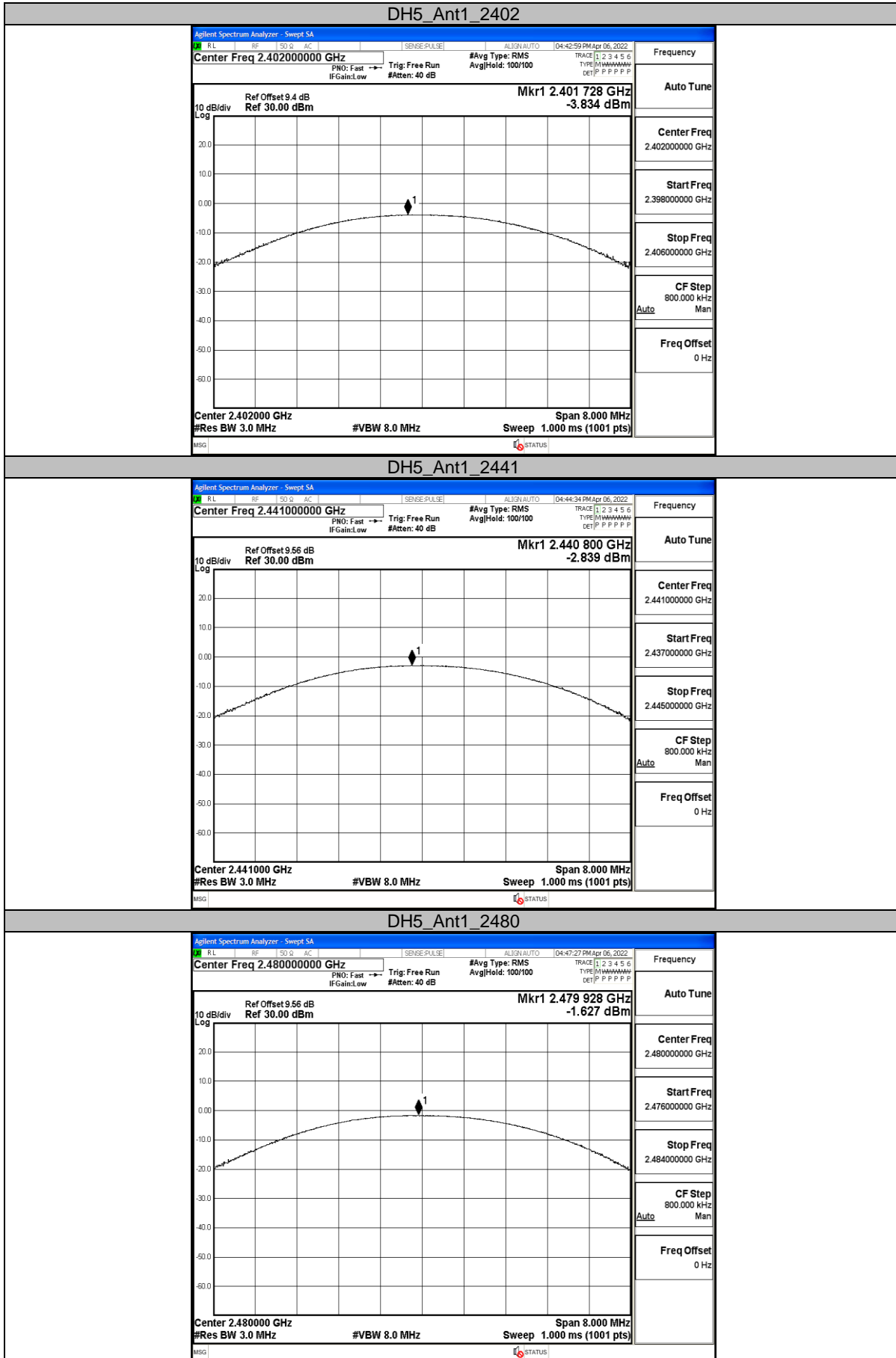


Appendix C: Maximum conducted output power

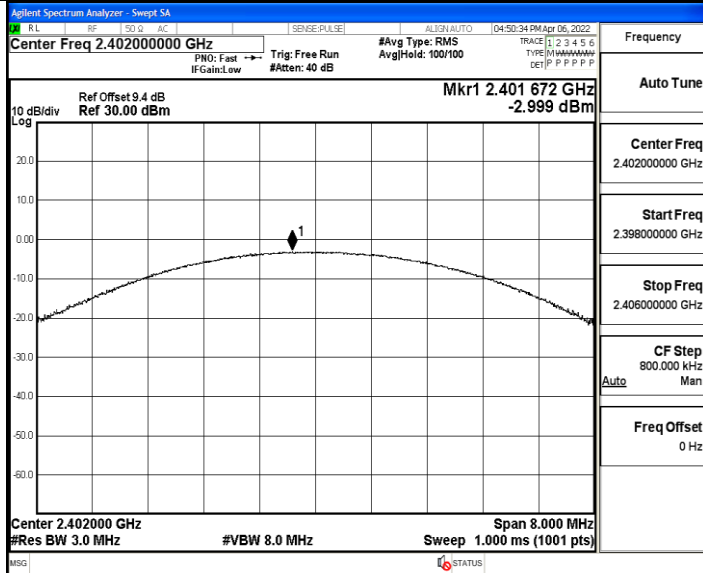
Test Result

| TestMode | Antenna | Channel | Result[dBm] | Limit[dBm] | Verdict |
|----------|---------|---------|-------------|------------|---------|
| DH5 | Ant1 | 2402 | -3.83 | ≤30 | PASS |
| | | 2441 | -2.84 | ≤30 | PASS |
| | | 2480 | -1.63 | ≤30 | PASS |
| 2DH5 | Ant1 | 2402 | -3.00 | ≤20.97 | PASS |
| | | 2441 | -2.13 | ≤20.97 | PASS |
| | | 2480 | -0.83 | ≤20.97 | PASS |

Test Graphs

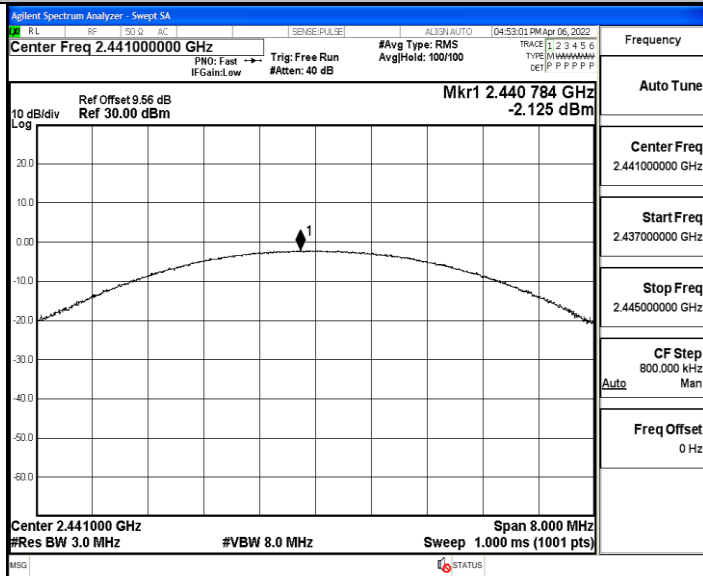


2DH5_Ant1_2402



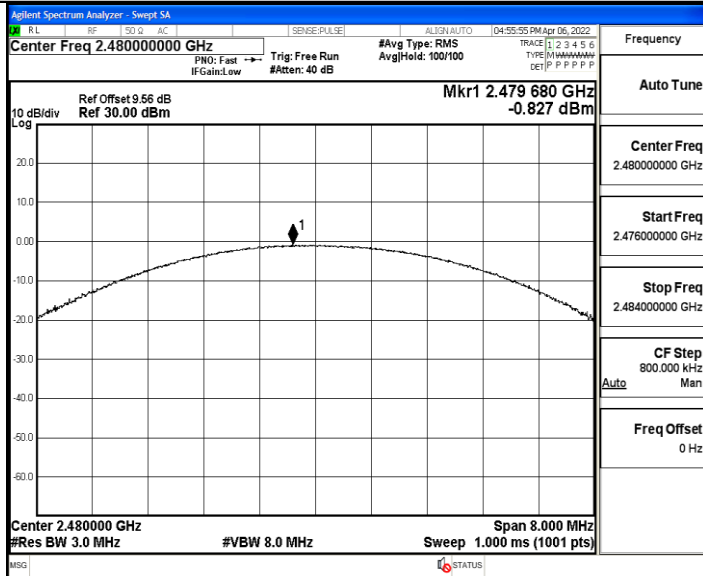
| |
|------------------------------------|
| Frequency |
| Auto Tune |
| Center Freq 2.402000000 GHz |
| Start Freq 2.398000000 GHz |
| Stop Freq 2.406000000 GHz |
| CF Step 800.000 KHz Auto Man |
| Freq Offset 0 Hz |

2DH5_Ant1_2441



| |
|------------------------------------|
| Frequency |
| Auto Tune |
| Center Freq 2.441000000 GHz |
| Start Freq 2.437000000 GHz |
| Stop Freq 2.445000000 GHz |
| CF Step 800.000 KHz Auto Man |
| Freq Offset 0 Hz |

2DH5_Ant1_2480



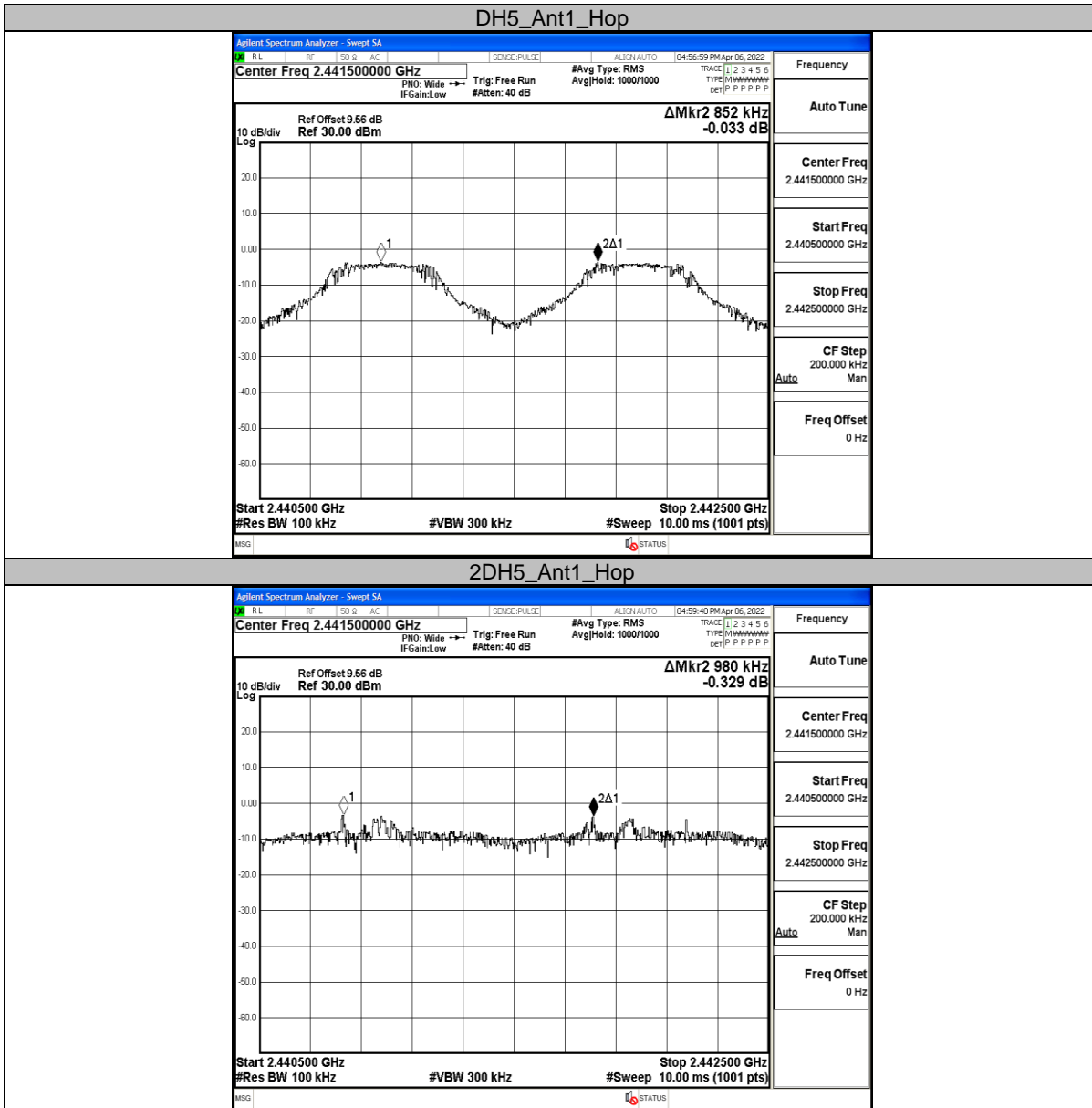
| |
|------------------------------------|
| Frequency |
| Auto Tune |
| Center Freq 2.480000000 GHz |
| Start Freq 2.476000000 GHz |
| Stop Freq 2.484000000 GHz |
| CF Step 800.000 KHz Auto Man |
| Freq Offset 0 Hz |

Appendix D: Carrier frequency separation

Test Result

| TestMode | Antenna | Channel | Result[MHz] | Limit[MHz] | Verdict |
|----------|---------|---------|-------------|--------------|---------|
| DH5 | Ant1 | Hop | 0.852 | ≥ 0.626 | PASS |
| 2DH5 | Ant1 | Hop | 0.98 | ≥ 0.902 | PASS |

Test Graphs

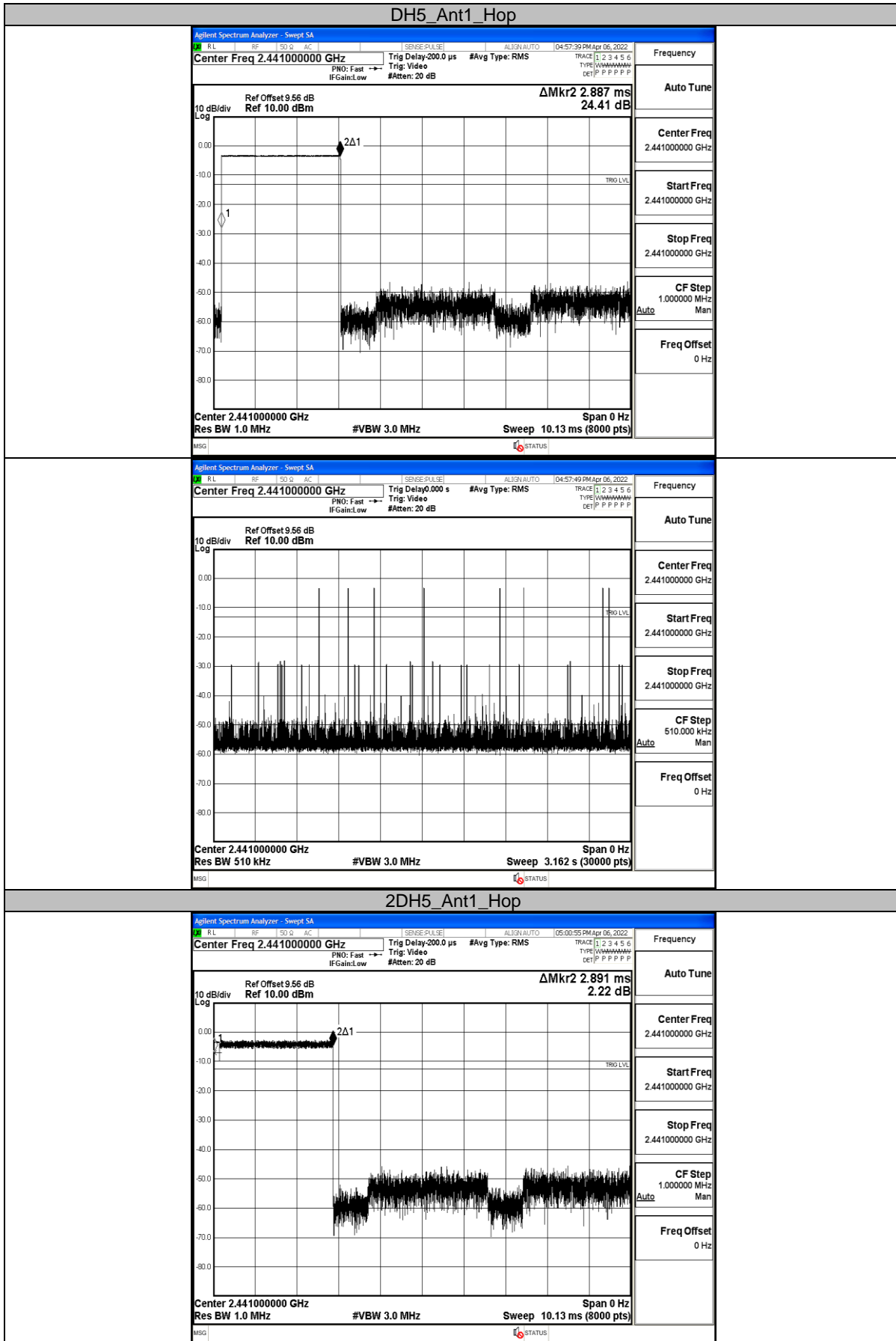


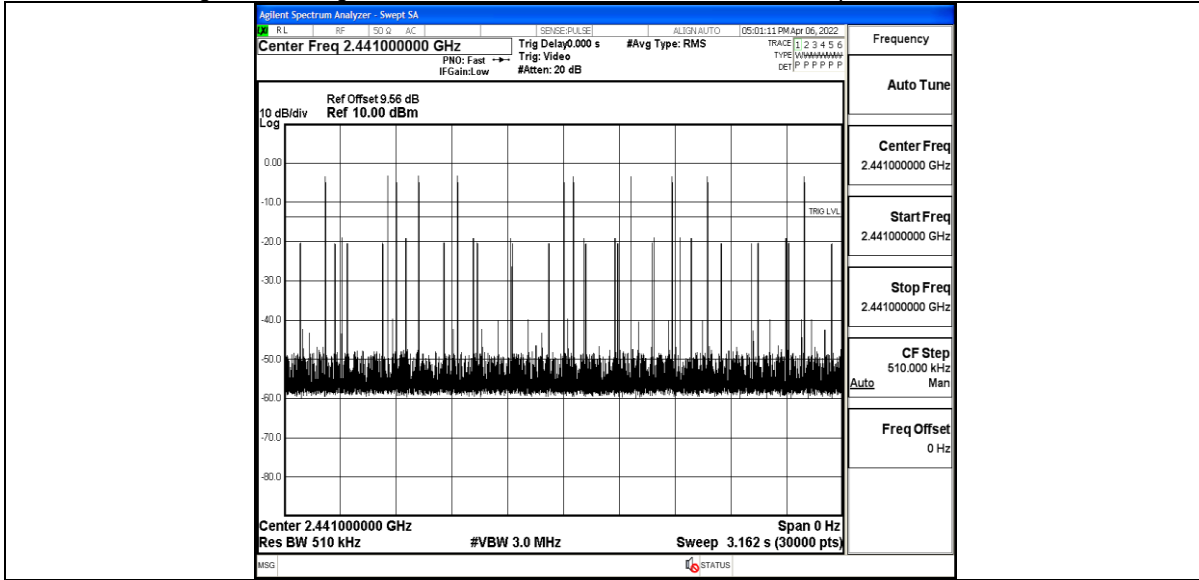
Appendix E: Time of occupancy

Test Result

| TestMode | Antenna | Channel | BurstWidth [ms] | TotalHops [Num] | Result[s] | Limit[s] | Verdict |
|----------|---------|---------|-----------------|-----------------|-----------|----------|---------|
| DH5 | Ant1 | Hop | 2.89 | 90 | 0.26 | ≤0.4 | PASS |
| 2DH5 | Ant1 | Hop | 2.89 | 120 | 0.347 | ≤0.4 | PASS |

Test Graphs



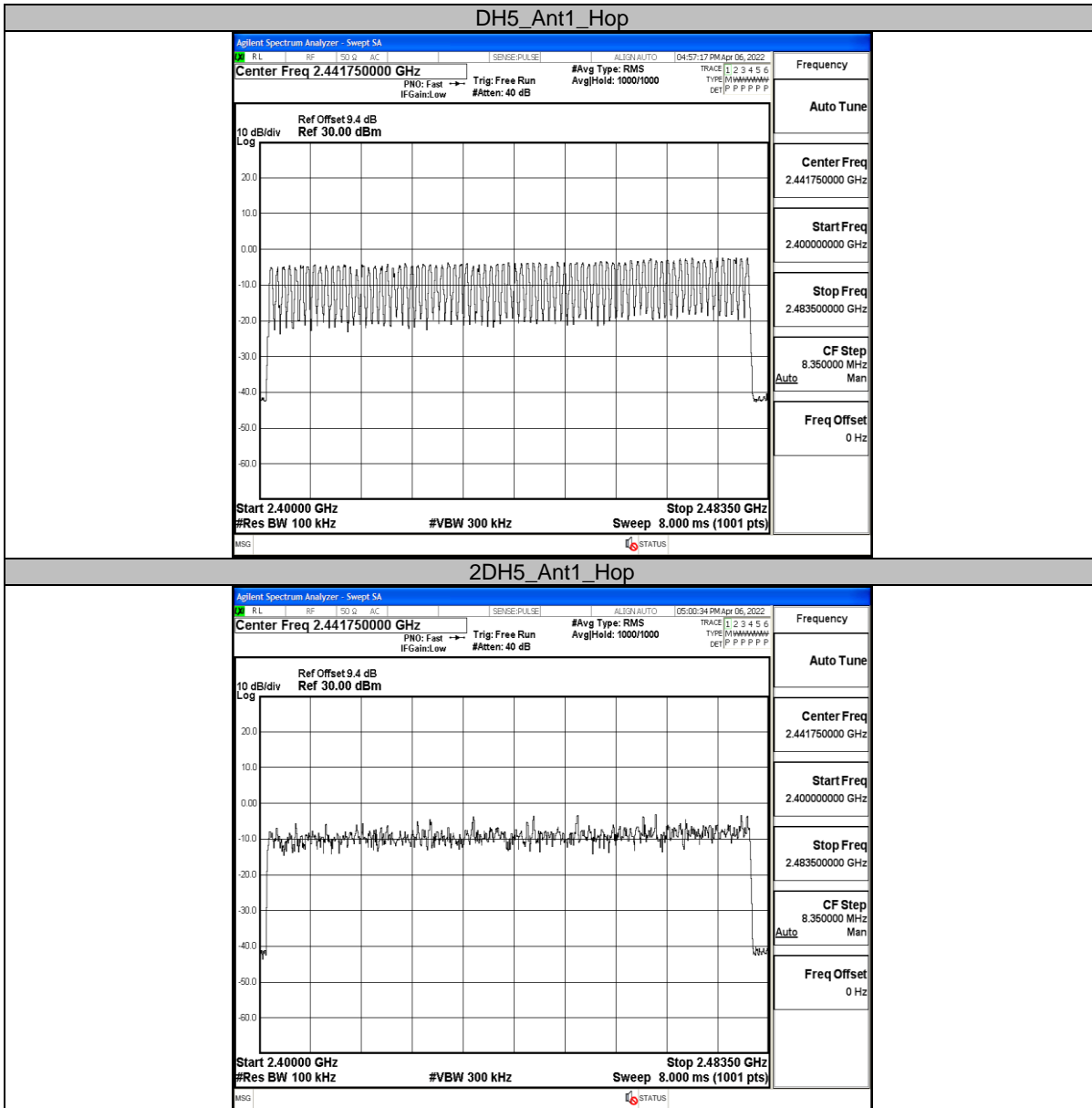


Appendix F: Number of hopping channels

Test Result

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

Test Graphs



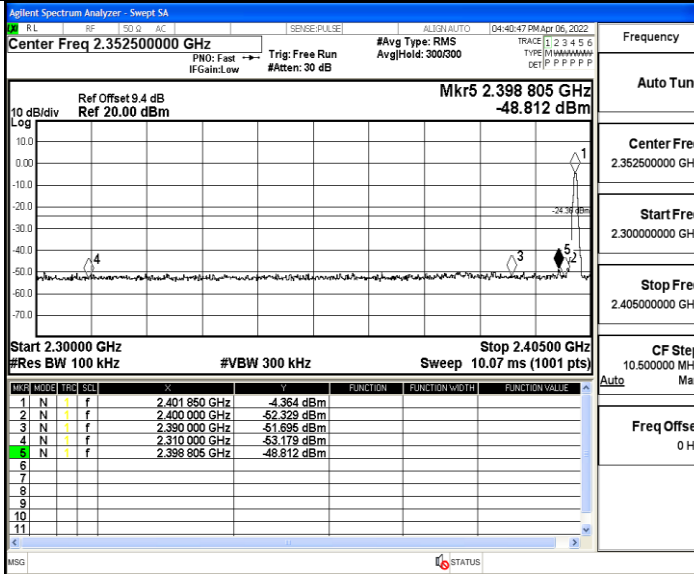
Appendix G: Band edge measurements

Test Result

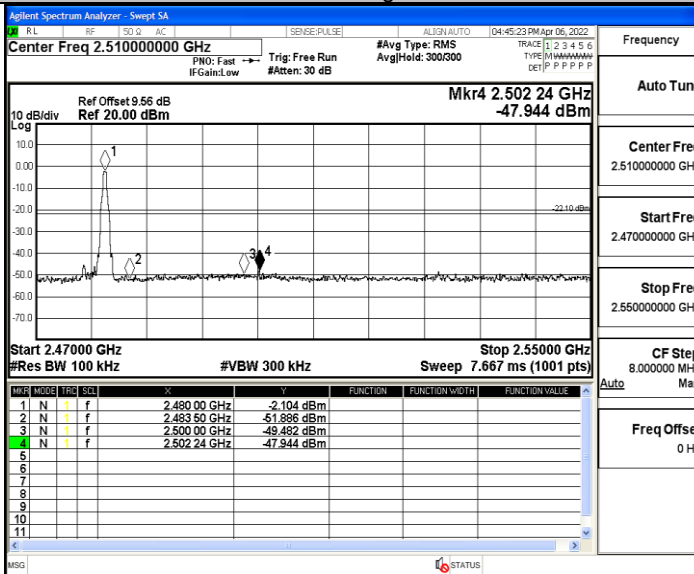
| TestMode | Antenna | ChName | Channel | RefLevel [dBm] | Result [dBm] | Limit [dBm] | Verdict |
|----------|---------|--------|----------|----------------|--------------|-------------|---------|
| DH5 | Ant1 | Low | 2402 | -4.36 | -48.81 | ≤-24.36 | PASS |
| | | High | 2480 | -2.10 | -47.94 | ≤-22.1 | PASS |
| | | Low | Hop_2402 | -5.51 | -50.44 | ≤-25.51 | PASS |
| | | High | Hop_2480 | -2.31 | -49.23 | ≤-22.31 | PASS |
| 2DH5 | Ant1 | Low | 2402 | -4.64 | -49.33 | ≤-24.64 | PASS |
| | | High | 2480 | -2.15 | -48.48 | ≤-22.15 | PASS |
| | | Low | Hop_2402 | -4.48 | -49.84 | ≤-24.48 | PASS |
| | | High | Hop_2480 | -2.46 | -49.17 | ≤-22.46 | PASS |

Test Graphs

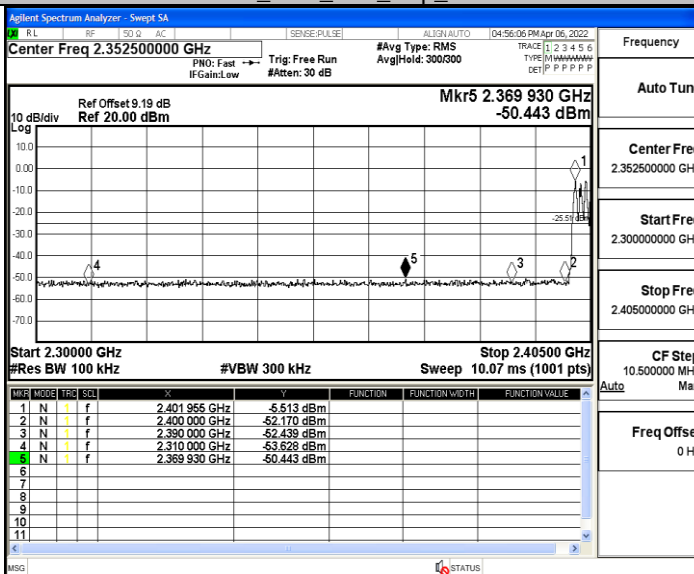
DH5_Ant1_Low_2402



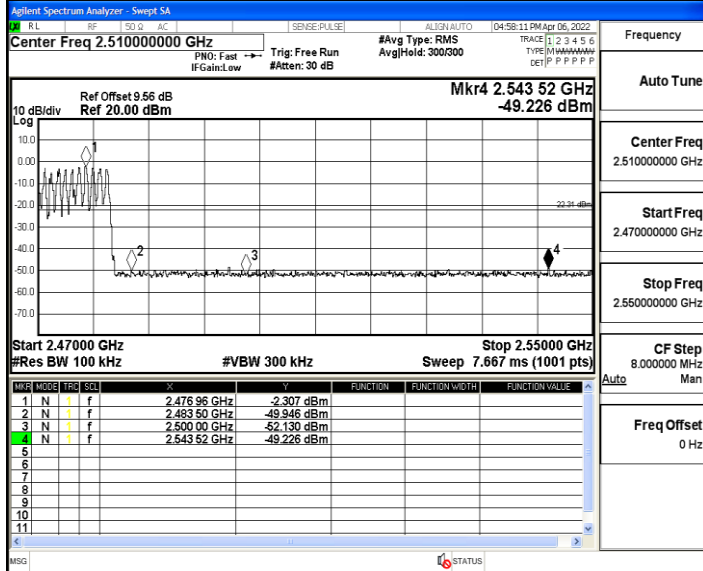
DH5_Ant1_High_2480



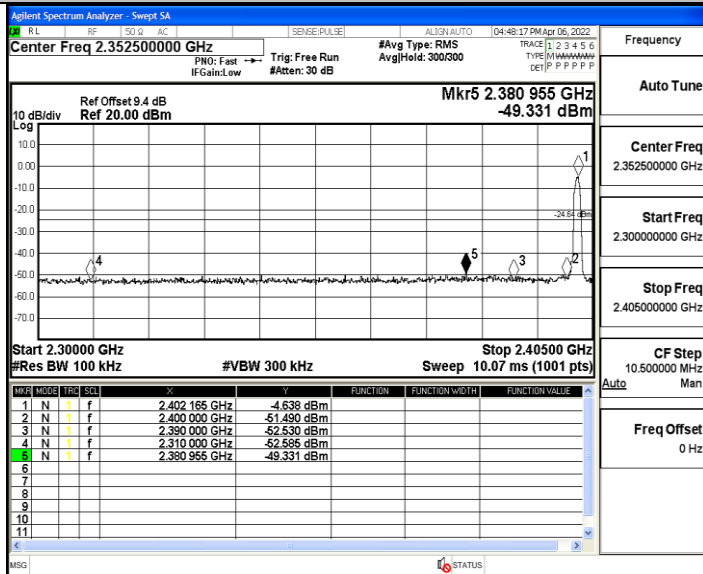
DH5_Ant1_Low_Hop_2402



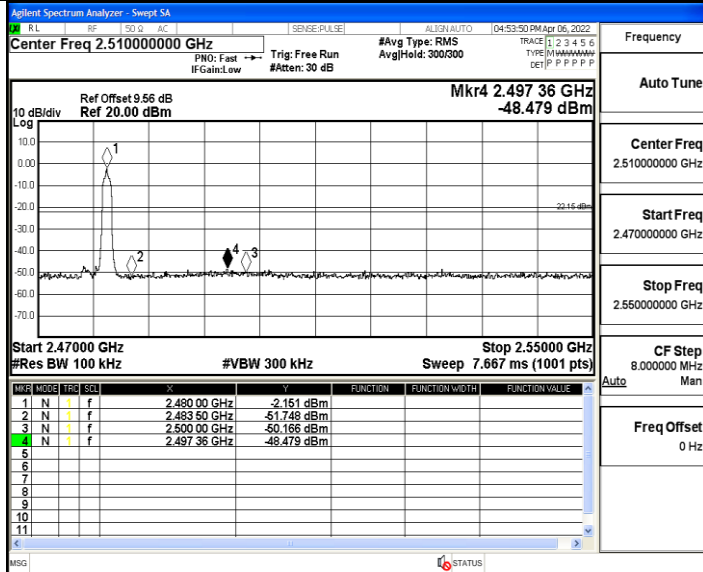
DH5_Ant1_High_Hop_2480



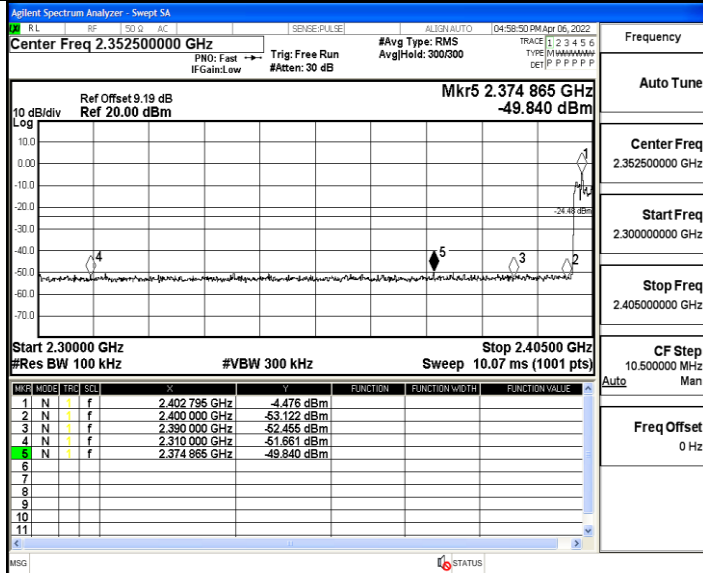
2Dh5_Ant1_Low_2402



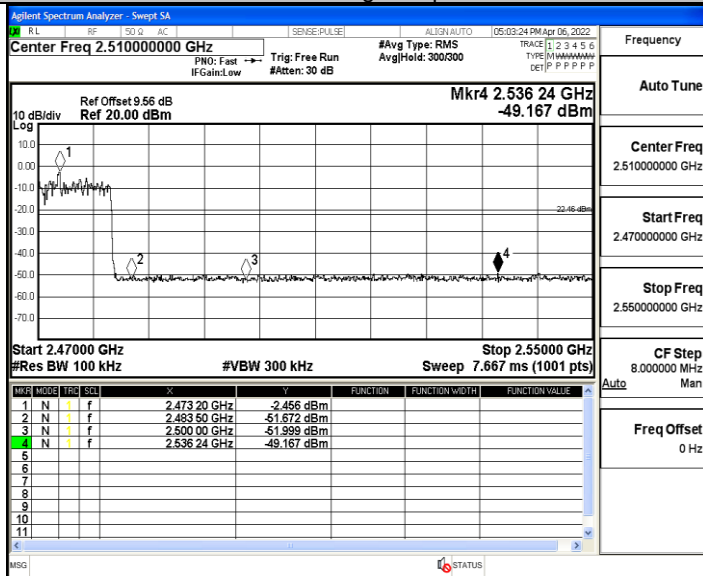
2Dh5_Ant1_High_2480



2Dh5_Ant1_Low_Hop_2402



2DH5_Ant1_High_Hop_2480



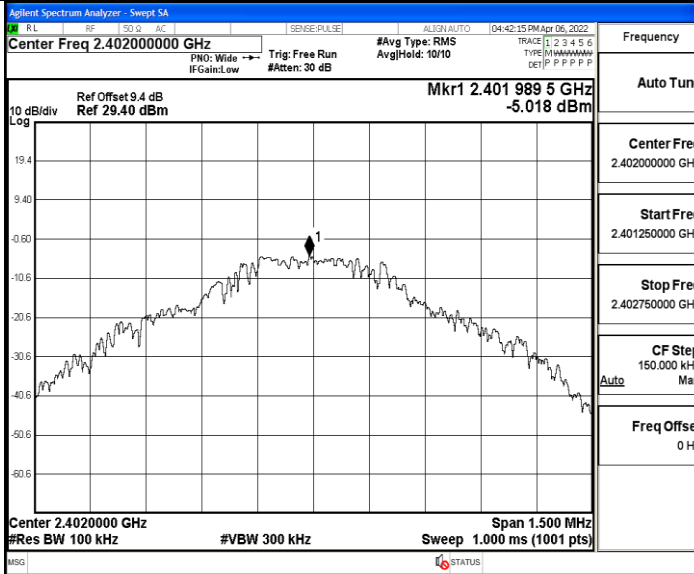
Appendix H: Conducted Spurious Emission

Test Result

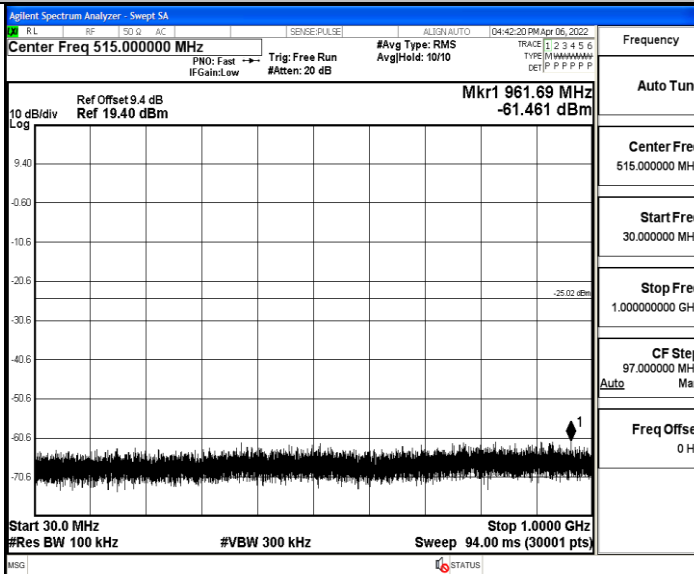
| TestMode | Antenna | Channel | FreqRange [MHz] | RefLevel [dBm] | Result [dBm] | Limit [dBm] | Verdict |
|----------|---------|---------|-----------------|----------------|--------------|-------------|---------|
| DH5 | Ant1 | 2402 | Reference | -5.02 | -5.02 | --- | PASS |
| | | | 30~1000 | -5.02 | -61.46 | ≤-25.02 | PASS |
| | | | 1000~26500 | -5.02 | -48.83 | ≤-25.02 | PASS |
| | | 2441 | Reference | -3.91 | -3.91 | --- | PASS |
| | | | 30~1000 | -3.91 | -60.73 | ≤-23.91 | PASS |
| | | | 1000~26500 | -3.91 | -49.04 | ≤-23.91 | PASS |
| | | 2480 | Reference | -2.76 | -2.76 | --- | PASS |
| | | | 30~1000 | -2.76 | -61.19 | ≤-22.76 | PASS |
| | | | 1000~26500 | -2.76 | -49.16 | ≤-22.76 | PASS |
| 2DH5 | Ant1 | 2402 | Reference | -8.28 | -8.28 | --- | PASS |
| | | | 30~1000 | -8.28 | -60.96 | ≤-28.28 | PASS |
| | | | 1000~26500 | -8.28 | -48.02 | ≤-28.28 | PASS |
| | | 2441 | Reference | -3.50 | -3.50 | --- | PASS |
| | | | 30~1000 | -3.50 | -61.52 | ≤-23.5 | PASS |
| | | | 1000~26500 | -3.50 | -49.68 | ≤-23.5 | PASS |
| | | 2480 | Reference | -4.73 | -4.73 | --- | PASS |
| | | | 30~1000 | -4.73 | -61.05 | ≤-24.73 | PASS |
| | | | 1000~26500 | -4.73 | -49.2 | ≤-24.73 | PASS |

Test Graphs

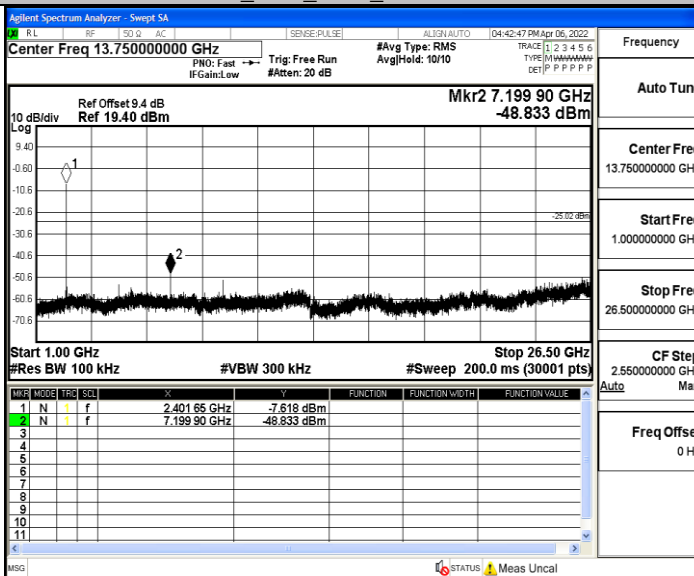
DH5_Ant1_2402_0~Reference



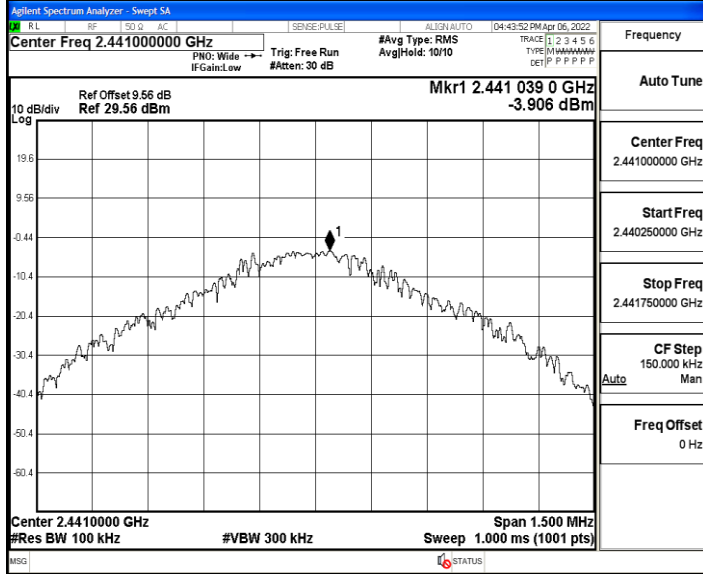
DH5_Ant1_2402_30~1000



DH5_Ant1_2402_1000~26500

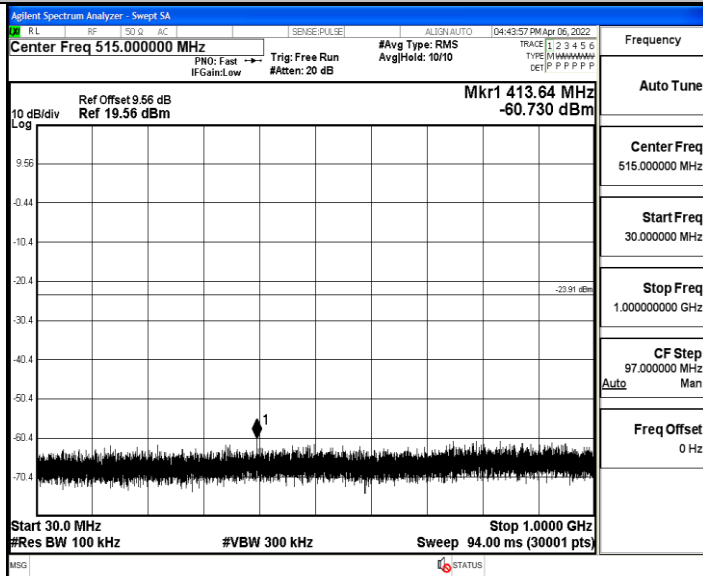


DH5_Ant1_2441_0~Reference



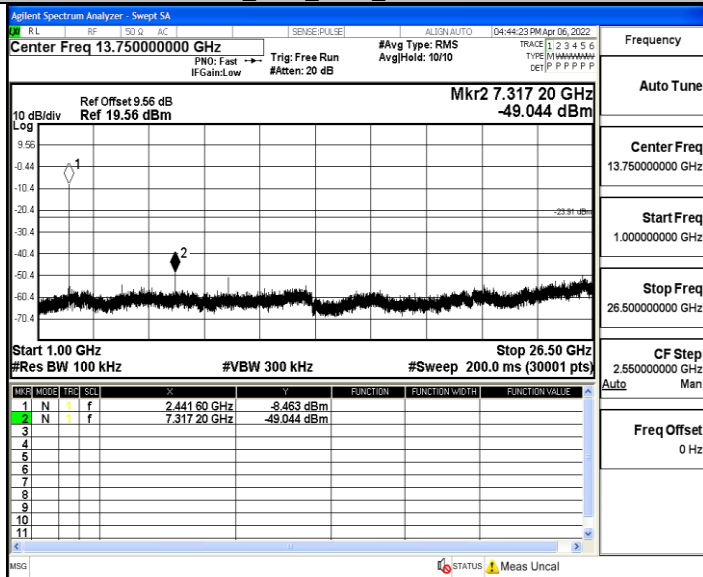
| |
|------------------------------------|
| Frequency |
| Auto Tune |
| Center Freq 2.441000000 GHz |
| Start Freq 2.440250000 GHz |
| Stop Freq 2.441750000 GHz |
| CF Step 150.000 kHz Auto Man |
| Freq Offset 0 Hz |

DH5_Ant1_2441_30~1000



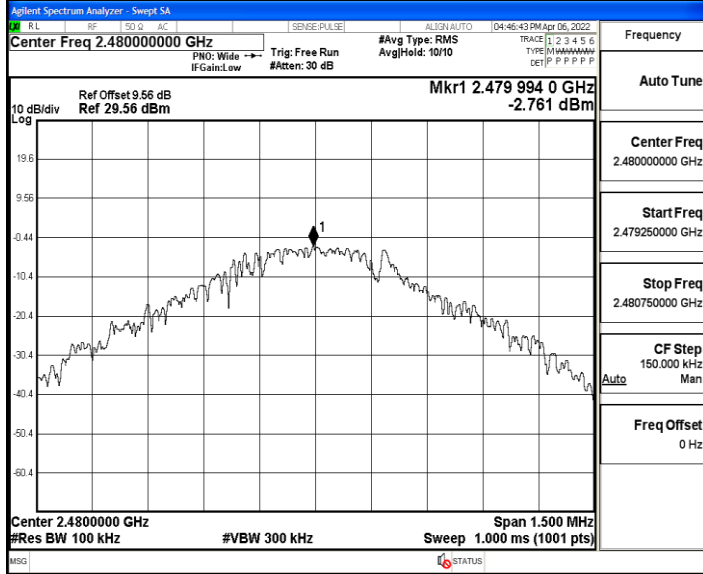
| |
|--------------------------------------|
| Frequency |
| Auto Tune |
| Center Freq 515.000000 MHz |
| Start Freq 30.000000 MHz |
| Stop Freq 1.000000000 GHz |
| CF Step 97.000000 MHz Auto Man |
| Freq Offset 0 Hz |

DH5_Ant1_2441_1000~26500

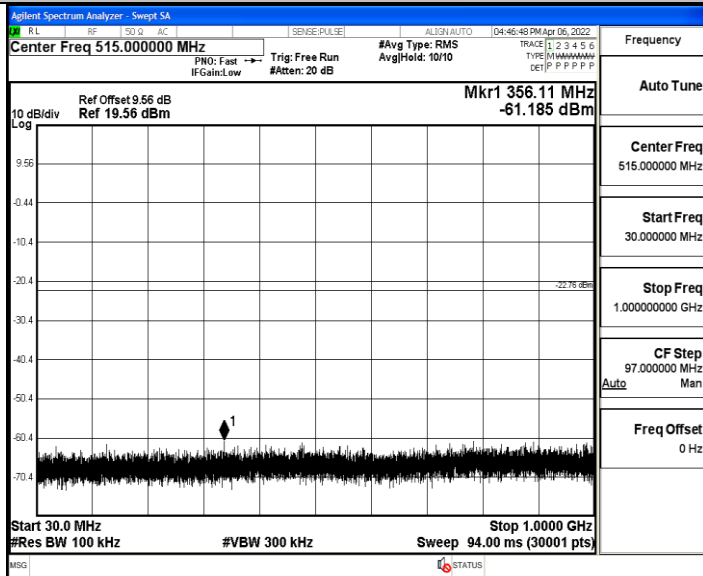


| |
|----------------------------------------|
| Frequency |
| Auto Tune |
| Center Freq 13.750000000 GHz |
| Start Freq 1.000000000 GHz |
| Stop Freq 26.500000000 GHz |
| CF Step 2.550000000 GHz Auto Man |
| Freq Offset 0 Hz |

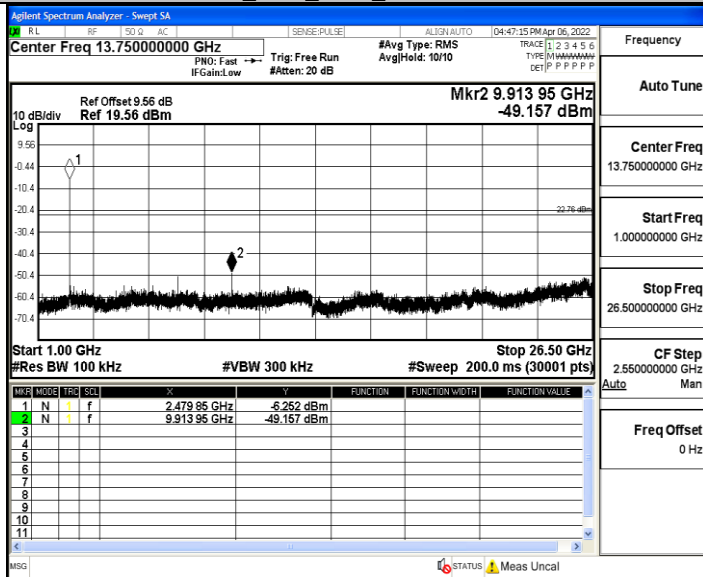
DH5_Ant1_2480_0~Reference



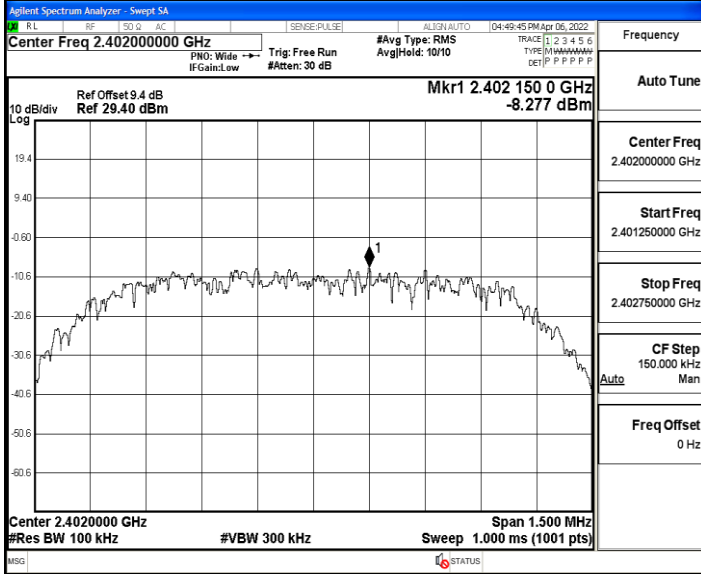
DH5_Ant1_2480_30~1000



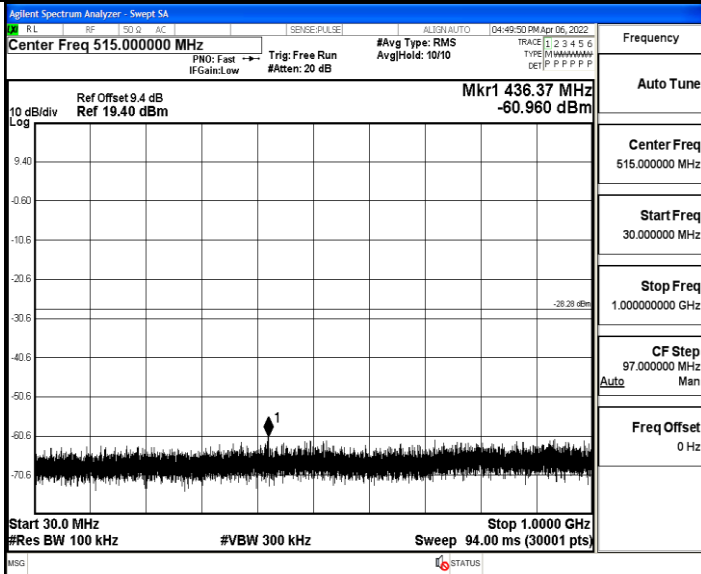
DH5_Ant1_2480_1000~26500



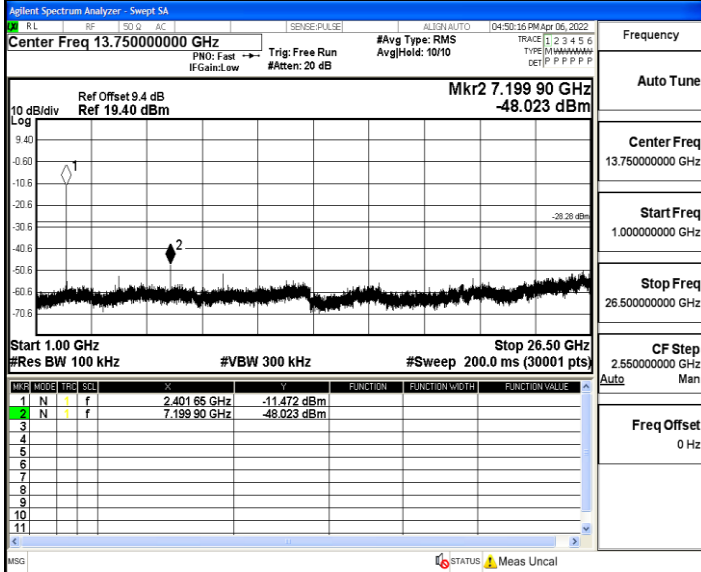
2DH5_Ant1_2402_0~Reference



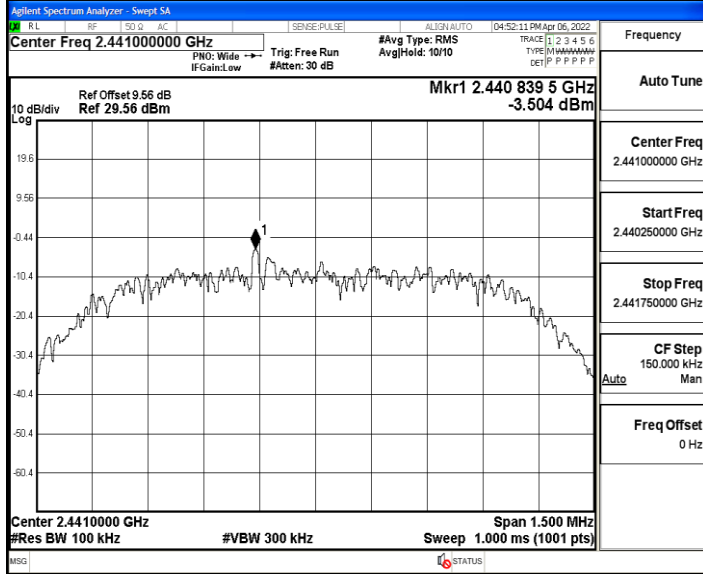
2DH5_Ant1_2402_30~1000



2DH5_Ant1_2402_1000~26500

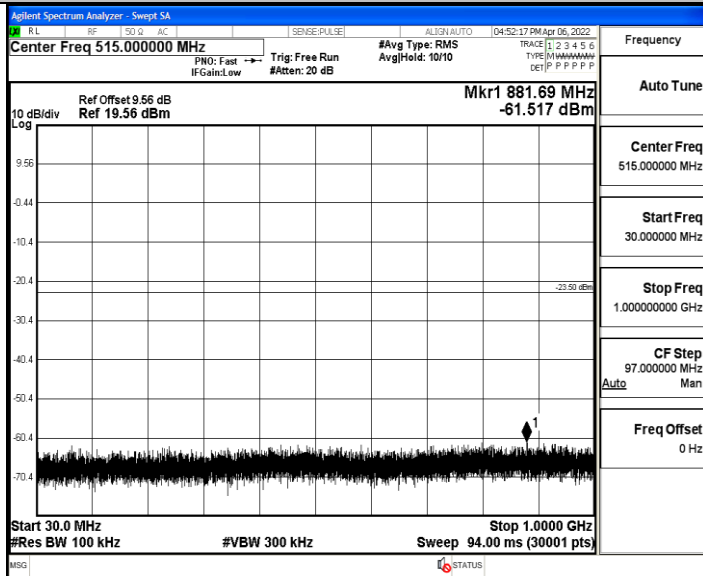


2DH5_Ant1_2441_0~Reference



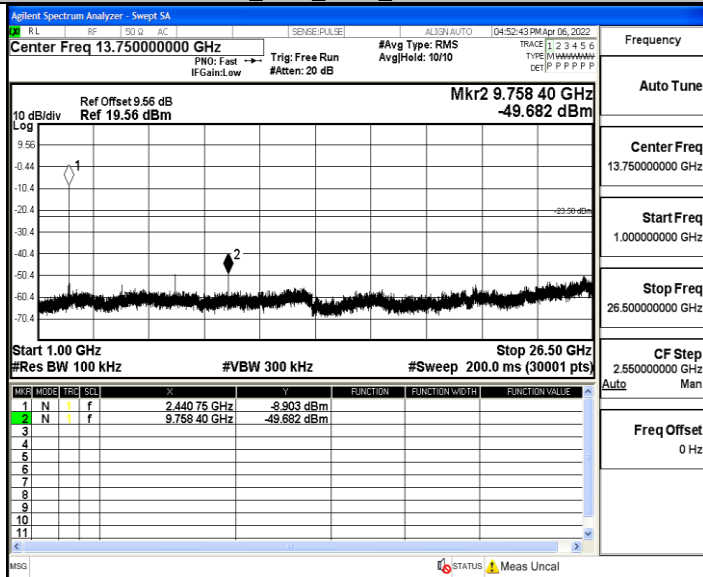
| |
|------------------------------------|
| Frequency |
| Auto Tune |
| Center Freq 2.44100000 GHz |
| Start Freq 2.440250000 GHz |
| Stop Freq 2.441750000 GHz |
| CF Step 150.000 kHz Auto Man |
| Freq Offset 0 Hz |

2DH5_Ant1_2441_30~1000



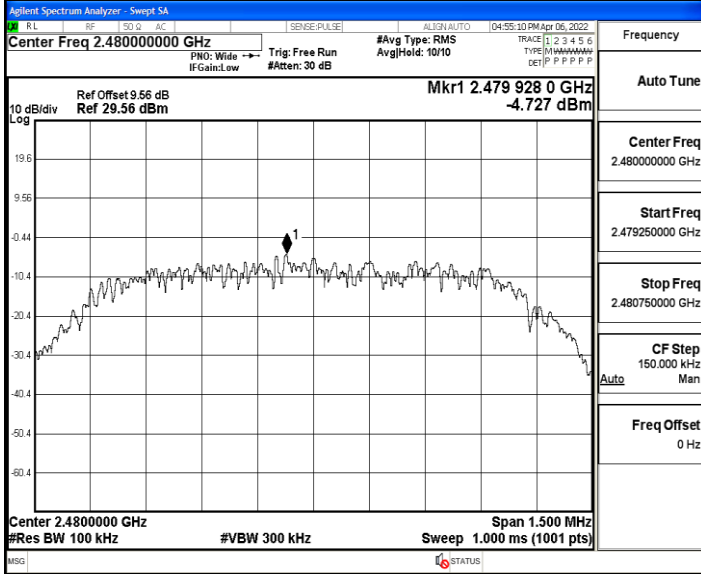
| |
|--------------------------------------|
| Frequency |
| Auto Tune |
| Center Freq 515.000000 MHz |
| Start Freq 30.000000 MHz |
| Stop Freq 1.000000000 GHz |
| CF Step 97.000000 MHz Auto Man |
| Freq Offset 0 Hz |

2DH5_Ant1_2441_1000~26500

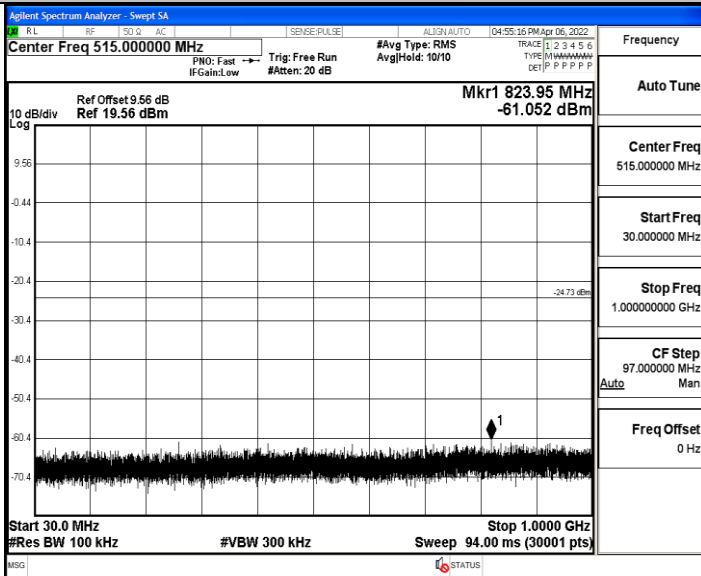


| |
|----------------------------------------|
| Frequency |
| Auto Tune |
| Center Freq 13.75000000 GHz |
| Start Freq 1.000000000 GHz |
| Stop Freq 26.500000000 GHz |
| CF Step 2.550000000 GHz Auto Man |
| Freq Offset 0 Hz |

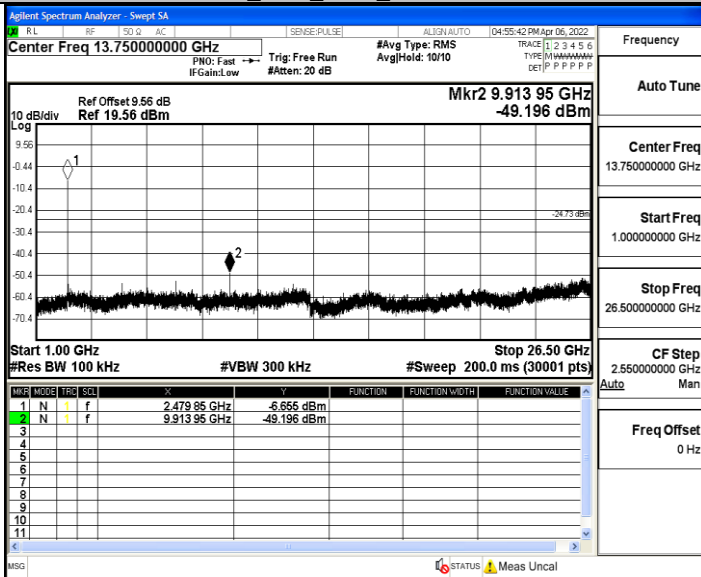
2DH5_Ant1_2480_0~Reference



2DH5_Ant1_2480_30~1000



2DH5_Ant1_2480_1000~26500

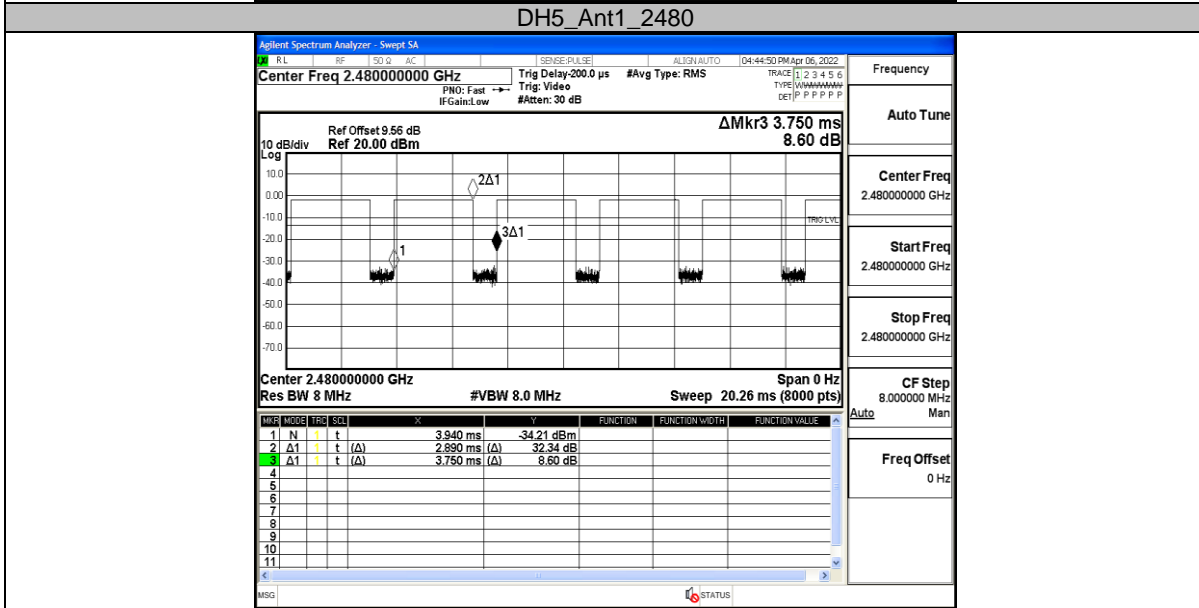
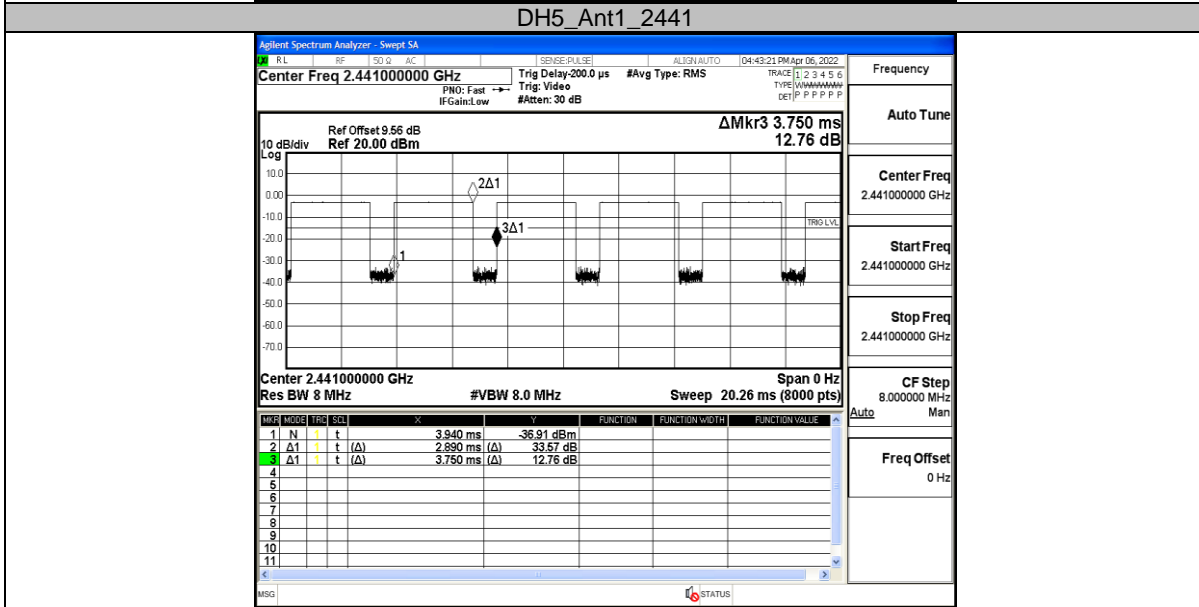
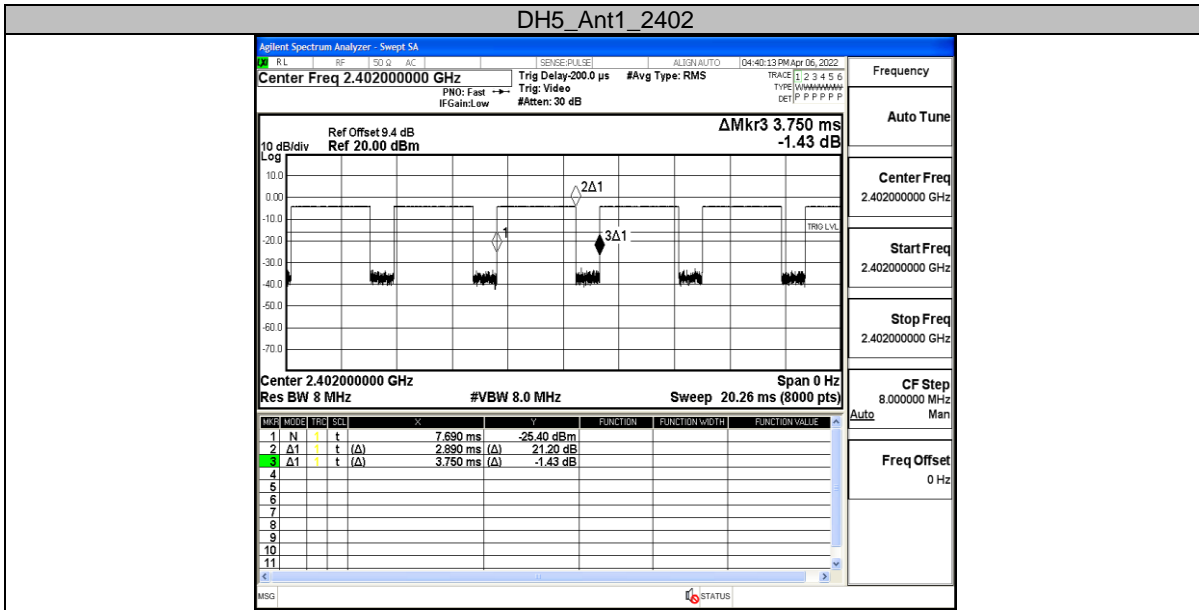


Appendix I: Duty Cycle

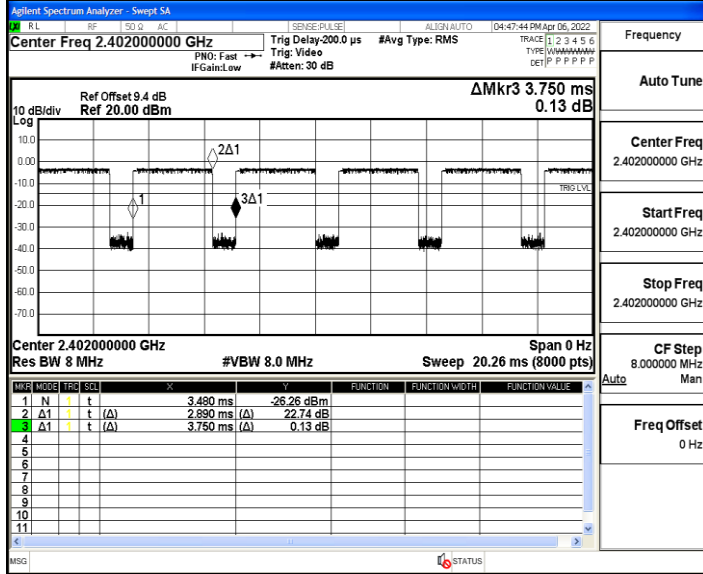
Test Result

| TestMode | Antenna | Channel | Transmission Duration [ms] | Transmission Period [ms] | Duty Cycle [%] | 1/T |
|----------|---------|---------|----------------------------|--------------------------|----------------|------|
| DH5 | Ant1 | 2402 | 2.89 | 3.75 | 77.07 | 0.35 |
| | | 2441 | 2.89 | 3.75 | 77.07 | 0.35 |
| | | 2480 | 2.89 | 3.75 | 77.07 | 0.35 |
| 2DH5 | Ant1 | 2402 | 2.89 | 3.75 | 77.07 | 0.35 |
| | | 2441 | 2.89 | 3.75 | 77.07 | 0.35 |
| | | 2480 | 2.89 | 3.75 | 77.07 | 0.35 |

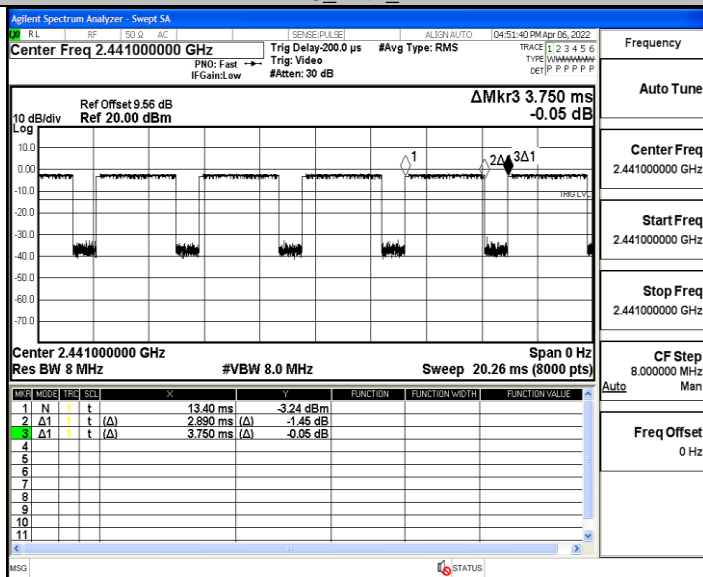
Test Graphs



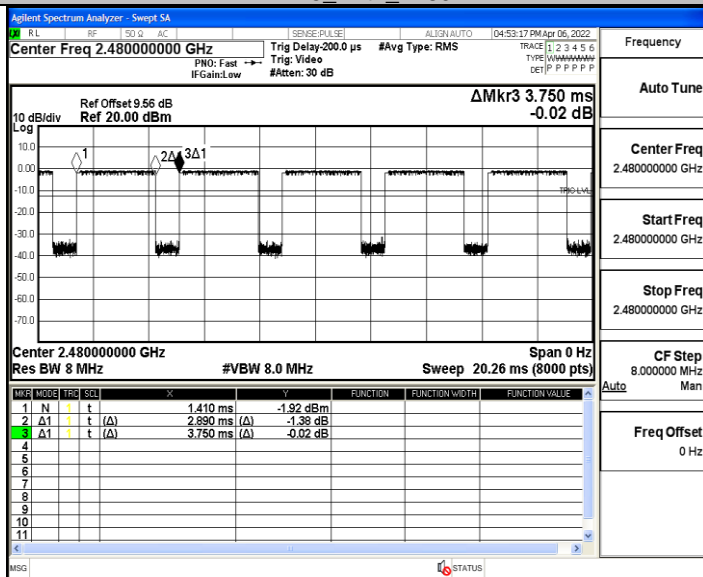
2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480



Appendix J: Emissions in Restricted Bands

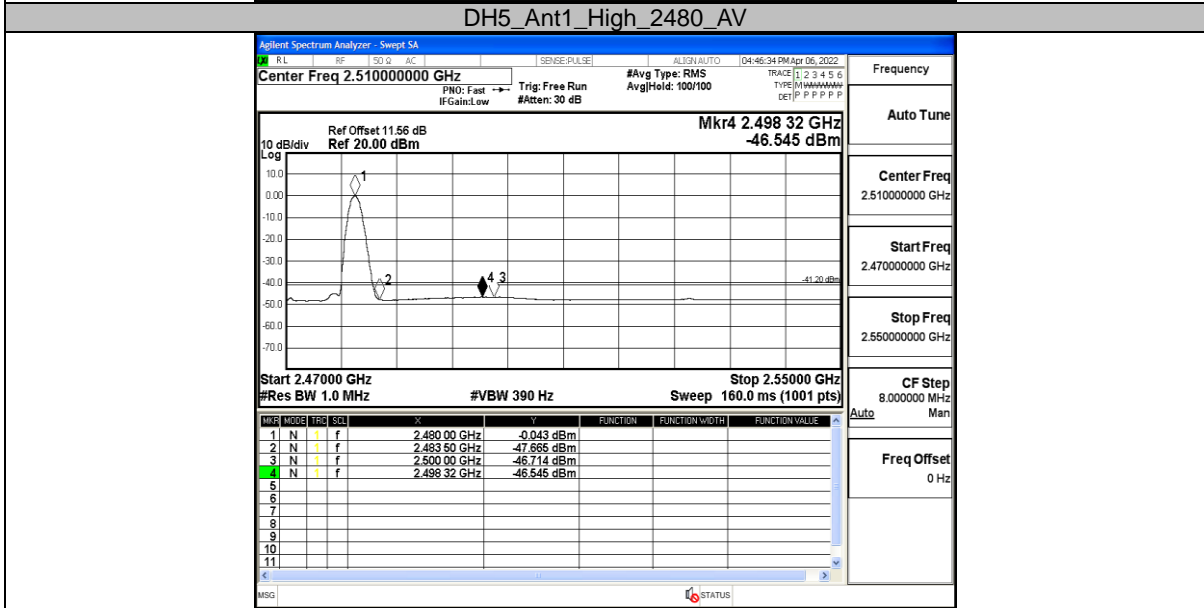
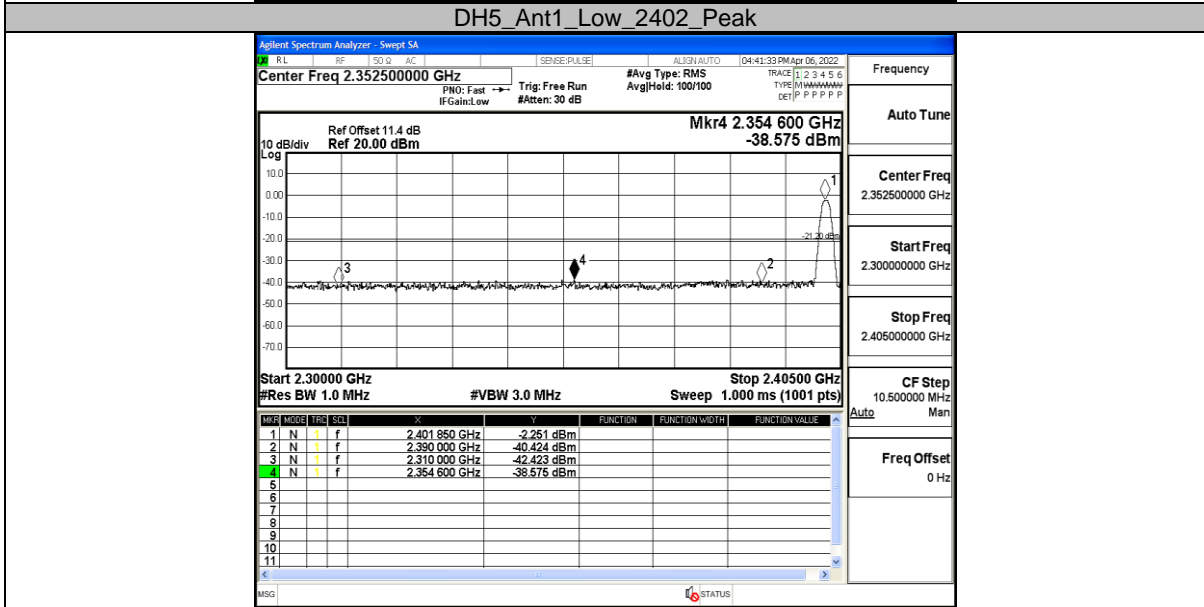
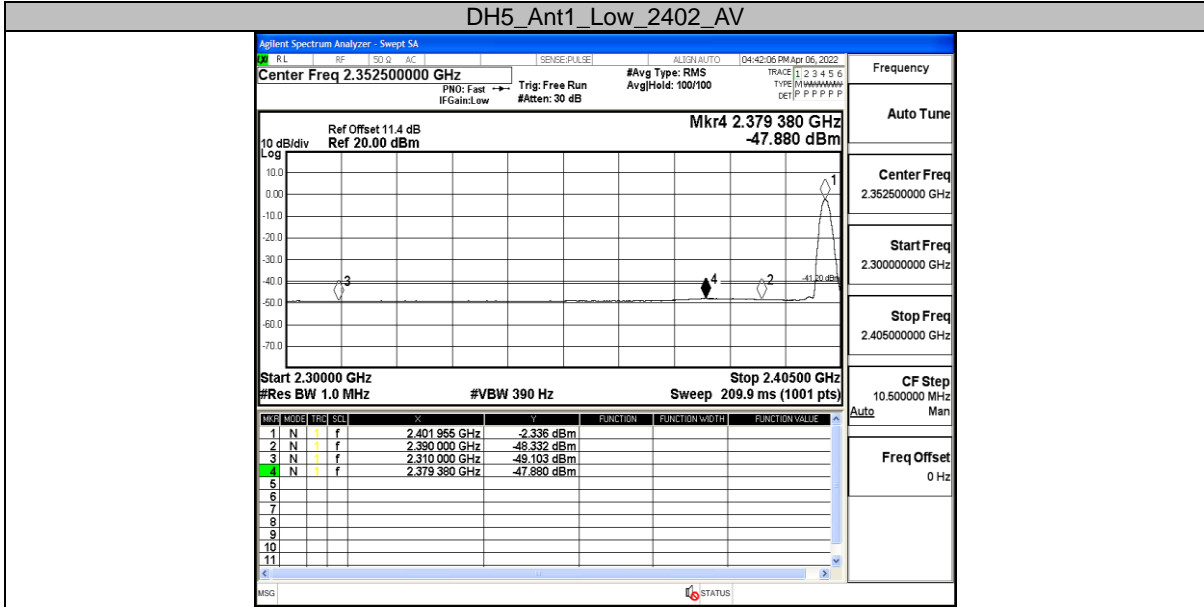
Test Result

| TestMode | Antenna | ChName | Channel | Detector | Freq(MHz) | Result(dBm) | Limit(dBm) | Verdict |
|----------|---------|--------|---------|----------|-----------|-------------|------------|---------|
| DH5 | Ant1 | Low | 2402 | AV | 2310.000 | -49.1 | ≤-41.20 | PASS |
| | | | | AV | 2379.380 | -47.88 | ≤-41.20 | PASS |
| | | | | AV | 2390.000 | -48.33 | ≤-41.20 | PASS |
| | | | | Peak | 2310.000 | -42.42 | ≤-21.20 | PASS |
| | | | | Peak | 2354.600 | -38.57 | ≤-21.20 | PASS |
| | | | | Peak | 2390.000 | -40.42 | ≤-21.20 | PASS |
| | | High | 2480 | AV | 2483.500 | -47.67 | ≤-41.20 | PASS |
| | | | | AV | 2498.320 | -46.54 | ≤-41.20 | PASS |
| | | | | AV | 2500.000 | -46.71 | ≤-41.20 | PASS |
| | | | | Peak | 2483.500 | -41.26 | ≤-21.20 | PASS |
| | | | | Peak | 2497.760 | -37.14 | ≤-21.20 | PASS |
| | | | | Peak | 2500.000 | -38.98 | ≤-21.20 | PASS |
| 2DH5 | Ant1 | Low | 2402 | AV | 2310.000 | -49.11 | ≤-41.20 | PASS |
| | | | | AV | 2379.065 | -47.85 | ≤-41.20 | PASS |
| | | | | AV | 2390.000 | -48.36 | ≤-41.20 | PASS |
| | | | | Peak | 2310.000 | -40.12 | ≤-21.20 | PASS |
| | | | | Peak | 2338.850 | -38.78 | ≤-21.20 | PASS |
| | | | | Peak | 2390.000 | -42.02 | ≤-21.20 | PASS |
| | | High | 2480 | AV | 2483.500 | -47.79 | ≤-41.20 | PASS |
| | | | | AV | 2498.480 | -46.53 | ≤-41.20 | PASS |
| | | | | AV | 2500.000 | -46.64 | ≤-41.20 | PASS |
| | | | | Peak | 2483.500 | -40.14 | ≤-21.20 | PASS |
| | | | | Peak | 2498.160 | -36.38 | ≤-21.20 | PASS |
| | | | | Peak | 2500.000 | -38.35 | ≤-21.20 | PASS |

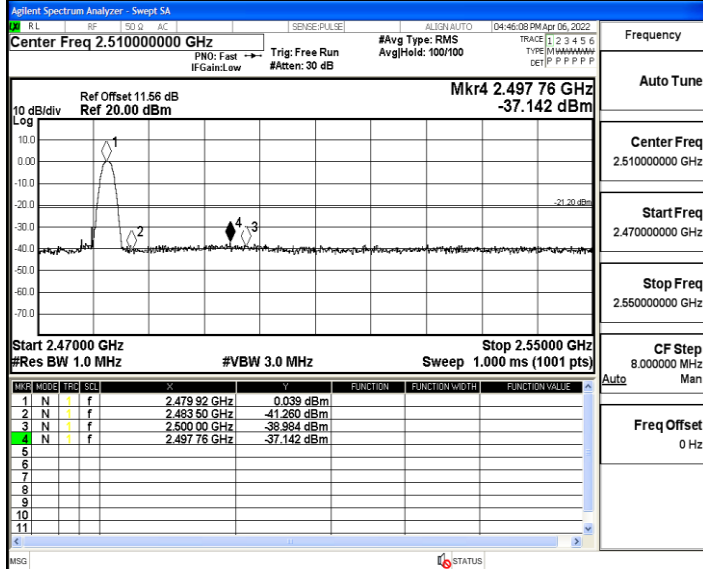
Note:

1. The Antenna Gain is compensated in the graph with 2dBi and Antenna Gain which is Higher.
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

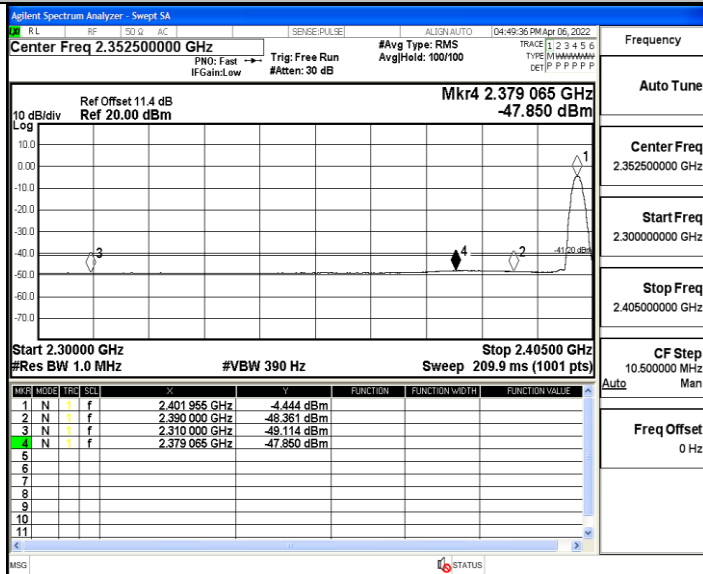


DH5_Ant1_High_2480_Peak



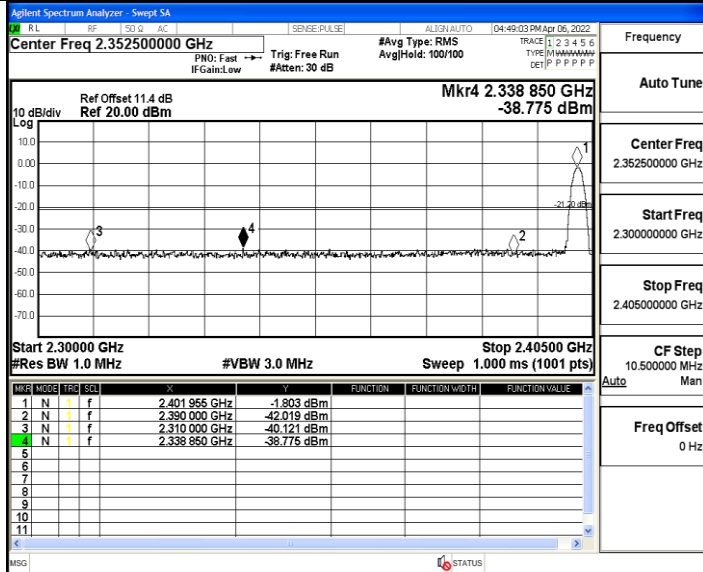
| |
|--------------------------------|
| Frequency |
| Auto Tune |
| Center Freq 2.510000000 GHz |
| Start Freq 2.470000000 GHz |
| Stop Freq 2.550000000 GHz |
| CF Step 8.000000 MHz |
| Auto Man |
| Freq Offset 0 Hz |

2DH5_Ant1_Low_2402_AV



| |
|--------------------------------|
| Frequency |
| Auto Tune |
| Center Freq 2.352500000 GHz |
| Start Freq 2.300000000 GHz |
| Stop Freq 2.405000000 GHz |
| CF Step 10.500000 MHz |
| Auto Man |
| Freq Offset 0 Hz |

2DH5_Ant1_Low_2402_Peak



| |
|--------------------------------|
| Frequency |
| Auto Tune |
| Center Freq 2.352500000 GHz |
| Start Freq 2.300000000 GHz |
| Stop Freq 2.405000000 GHz |
| CF Step 10.500000 MHz |
| Auto Man |
| Freq Offset 0 Hz |

2DH5_Ant1_High_2480_AV