



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

Product Name: Bluetooth Headphones

Trade Mark: SENTRY

Test Model: BT700

FCC ID: 2ACP4CBT700

### Environmental Conditions

|                    |           |
|--------------------|-----------|
| Temperature:       | 23.5°C    |
| Relative Humidity: | 58%       |
| ATM Pressure:      | 100.0 kPa |
| Test Engineer:     | Allen Lai |
| Supervised by:     | Max Zhang |
| NOTE               | N/A       |

## Appendix A: 20dB Emission Bandwidth

### Test Result

| Test Mode | Antenna | Frequency [MHz] | 20db EBW [MHz] | FL [MHz] | FH [MHz] | Limit [MHz] | Verdict |
|-----------|---------|-----------------|----------------|----------|----------|-------------|---------|
| DH5       | Ant1    | 2402            | 0.999          | 2401.511 | 2402.510 | ---         | ---     |
| DH5       | Ant1    | 2441            | 0.999          | 2440.514 | 2441.513 | ---         | ---     |
| DH5       | Ant1    | 2480            | 0.966          | 2479.538 | 2480.504 | ---         | ---     |
| 2DH5      | Ant1    | 2402            | 1.335          | 2401.349 | 2402.684 | ---         | ---     |
| 2DH5      | Ant1    | 2441            | 1.344          | 2440.346 | 2441.690 | ---         | ---     |
| 2DH5      | Ant1    | 2480            | 1.323          | 2479.358 | 2480.681 | ---         | ---     |
| 3DH5      | Ant1    | 2402            | 1.308          | 2401.364 | 2402.672 | ---         | ---     |
| 3DH5      | Ant1    | 2441            | 1.293          | 2440.367 | 2441.660 | ---         | ---     |
| 3DH5      | Ant1    | 2480            | 1.296          | 2479.370 | 2480.666 | ---         | ---     |

Note: offset(dB) = cable loss(dB) + attenuator factor(dB)





## Test Graphs





DH5-Ant1-2480



2DH5-Ant1-2402





2DH5-Ant1-2441



2DH5-Ant1-2480





3DH5-Ant1-2402



3DH5-Ant1-2441







## Appendix B: Occupied Channel Bandwidth

### Test Result

| Test Mode | Antenna | Frequency<br>[MHz] | OCB<br>[MHz] | FL<br>[MHz] | FH<br>[MHz] | Limit<br>[MHz] | Verdict |
|-----------|---------|--------------------|--------------|-------------|-------------|----------------|---------|
| DH5       | Ant1    | 2402               | 0.87015      | 2401.5816   | 2402.4517   | ---            | ---     |
| DH5       | Ant1    | 2441               | 0.87622      | 2440.5773   | 2441.4535   | ---            | ---     |
| DH5       | Ant1    | 2480               | 0.88102      | 2479.5749   | 2480.4559   | ---            | ---     |
| 2DH5      | Ant1    | 2402               | 1.1844       | 2401.4256   | 2402.6100   | ---            | ---     |
| 2DH5      | Ant1    | 2441               | 1.2044       | 2440.4205   | 2441.6249   | ---            | ---     |
| 2DH5      | Ant1    | 2480               | 1.1885       | 2479.4270   | 2480.6155   | ---            | ---     |
| 3DH5      | Ant1    | 2402               | 1.2011       | 2401.4222   | 2402.6233   | ---            | ---     |
| 3DH5      | Ant1    | 2441               | 1.2067       | 2440.4113   | 2441.6180   | ---            | ---     |
| 3DH5      | Ant1    | 2480               | 1.2009       | 2479.4169   | 2480.6178   | ---            | ---     |

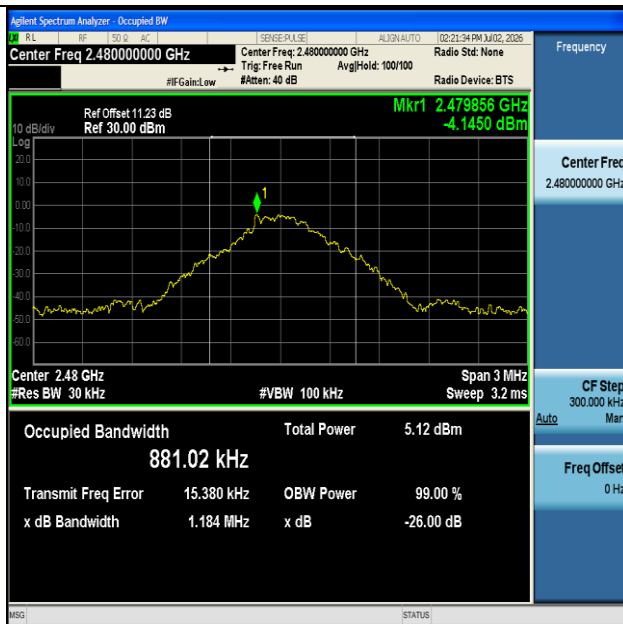
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)



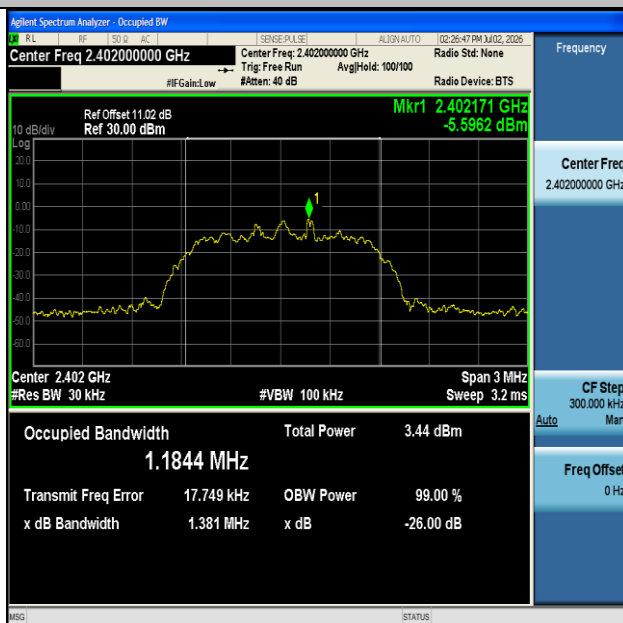


## Test Graphs



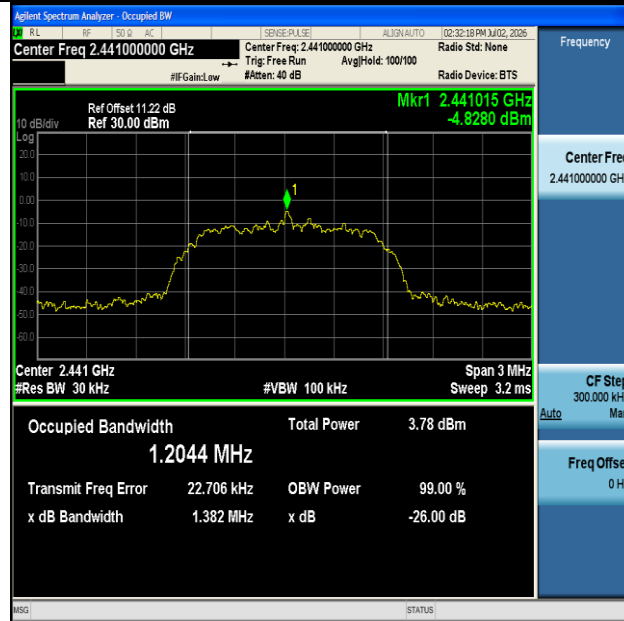


DH5-Ant1-2480



2DH5-Ant1-2402



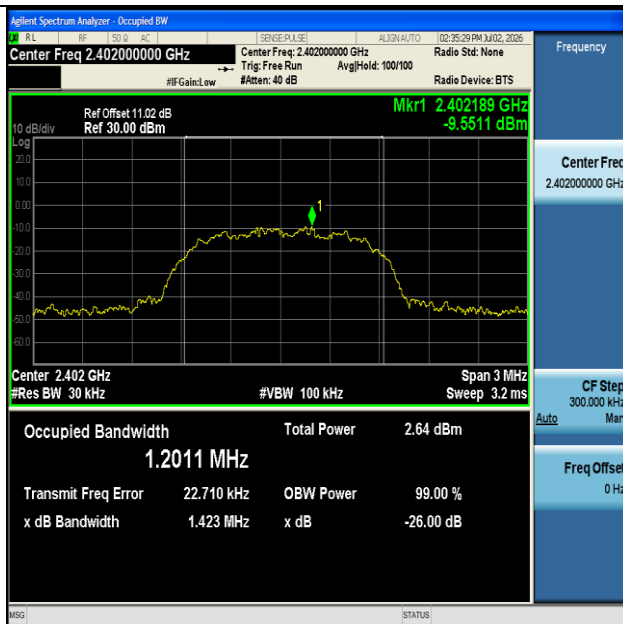


2DH5-Ant1-2441

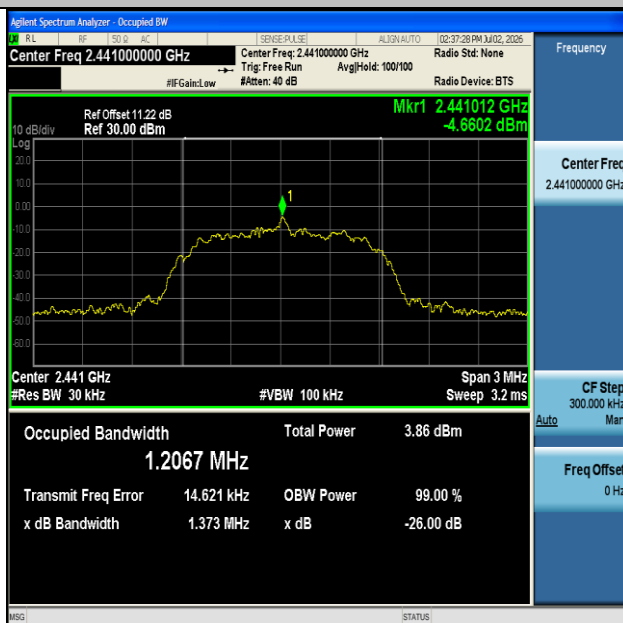


2DH5-Ant1-2480



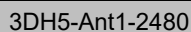


3DH5-Ant1-2402



3DH5-Ant1-2441







## Appendix C: Maximum peak conducted output power

### Test Result

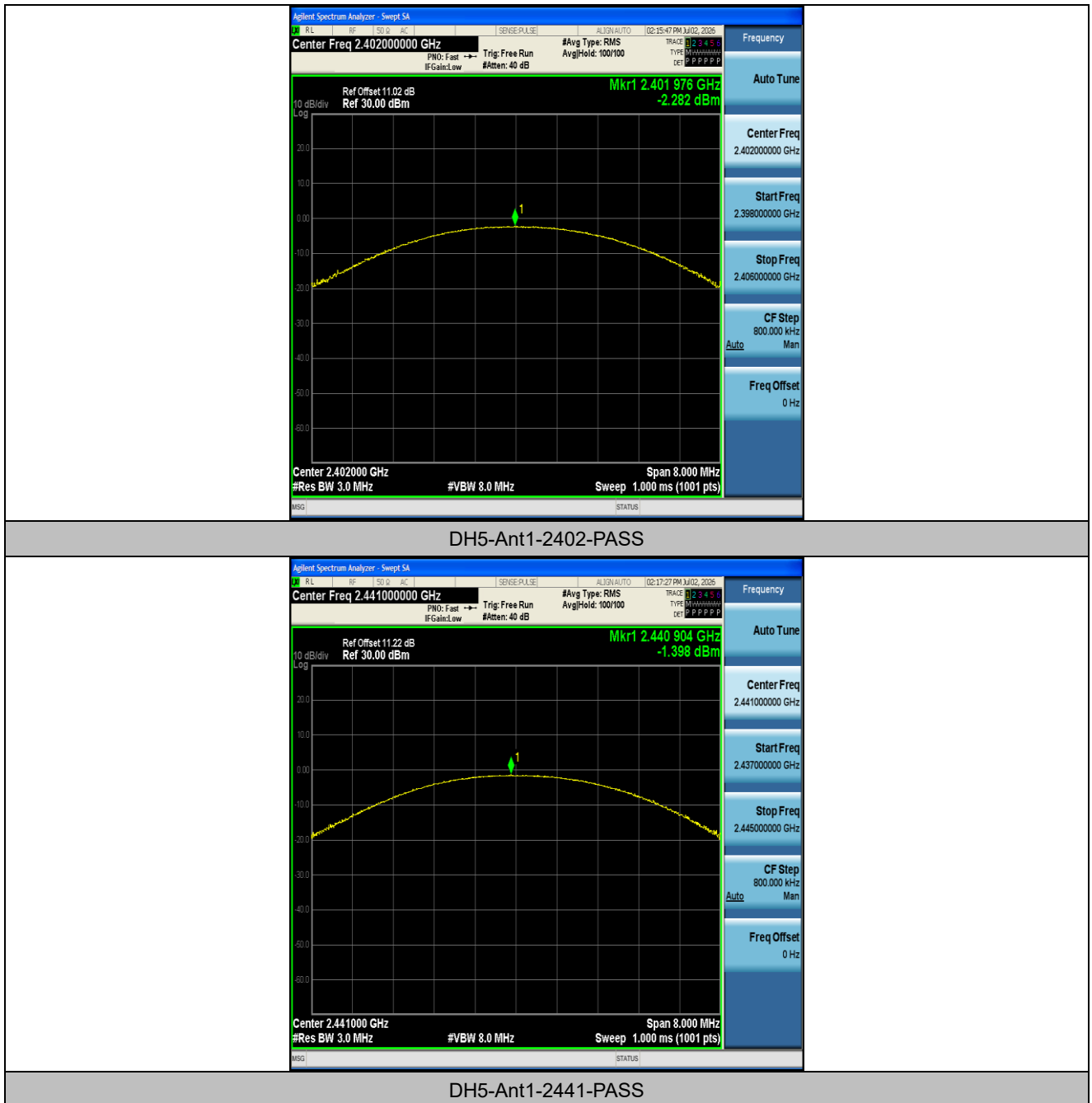
| Test Mode | Antenna | Frequency [MHz] | Conducted Peak Power [dBm] | Conducted Limit [dBm] | Verdict |
|-----------|---------|-----------------|----------------------------|-----------------------|---------|
| DH5       | Ant1    | 2402            | -2.28                      | ≤20.97                | PASS    |
| DH5       | Ant1    | 2441            | -1.40                      | ≤20.97                | PASS    |
| DH5       | Ant1    | 2480            | -1.25                      | ≤20.97                | PASS    |
| 2DH5      | Ant1    | 2402            | -1.58                      | ≤20.97                | PASS    |
| 2DH5      | Ant1    | 2441            | -0.88                      | ≤20.97                | PASS    |
| 2DH5      | Ant1    | 2480            | -0.48                      | ≤20.97                | PASS    |
| 3DH5      | Ant1    | 2402            | -1.18                      | ≤20.97                | PASS    |
| 3DH5      | Ant1    | 2441            | -0.52                      | ≤20.97                | PASS    |
| 3DH5      | Ant1    | 2480            | -0.01                      | ≤20.97                | PASS    |

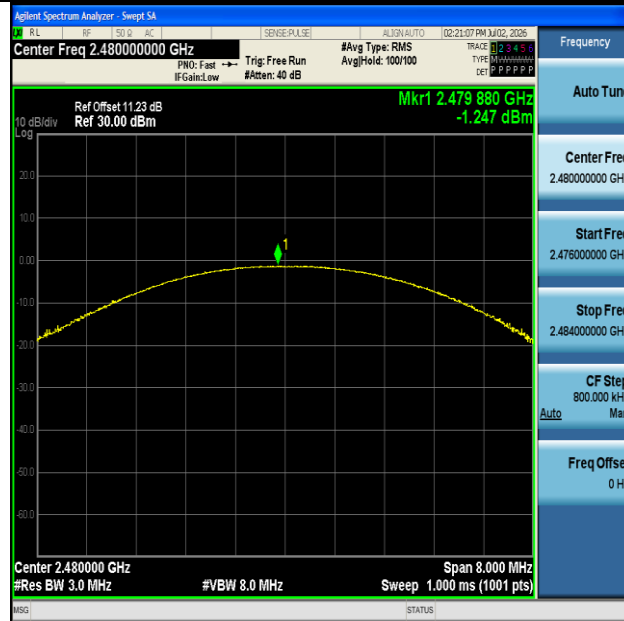
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)



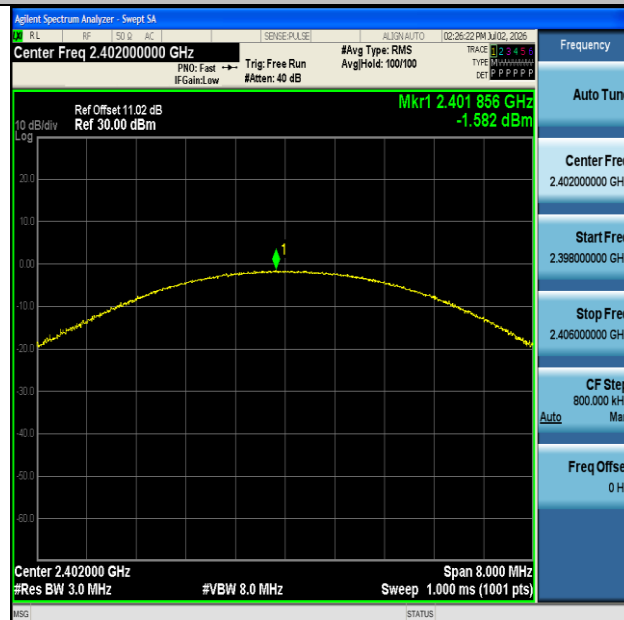


## Test Graphs



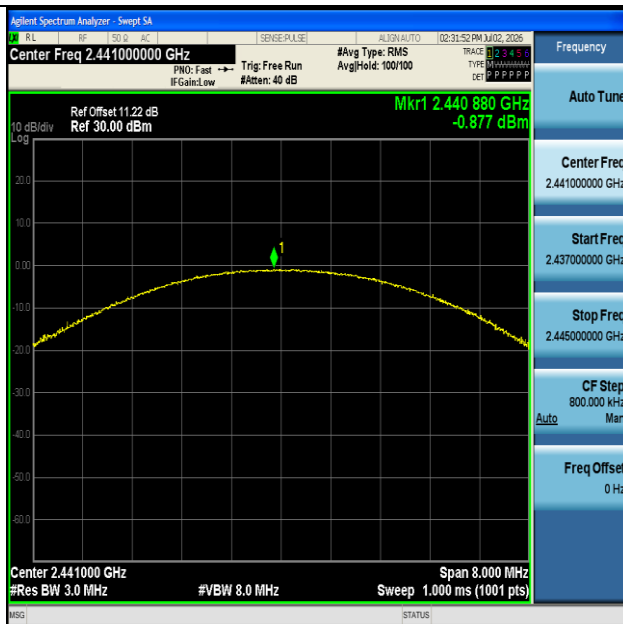


DH5-Ant1-2480-PASS

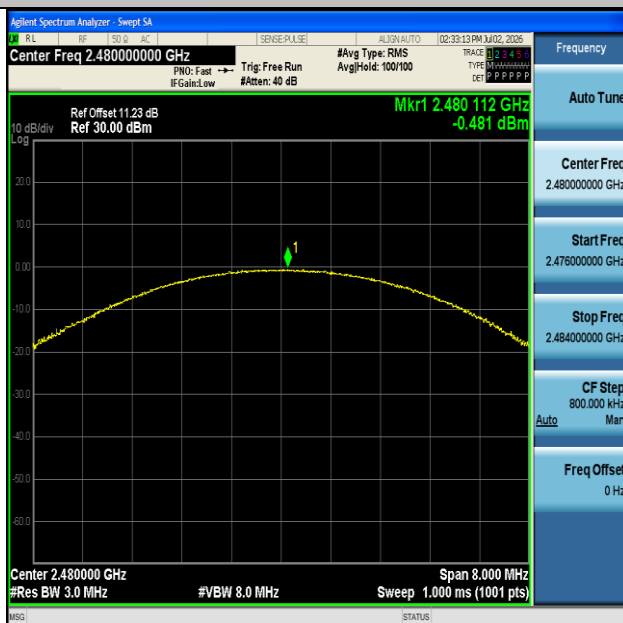


2DH5-Ant1-2402-PASS



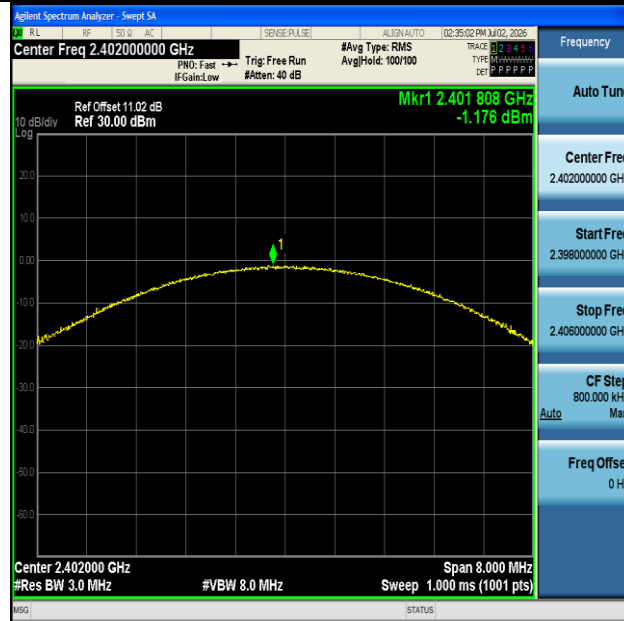


2DH5-Ant1-2441-PASS

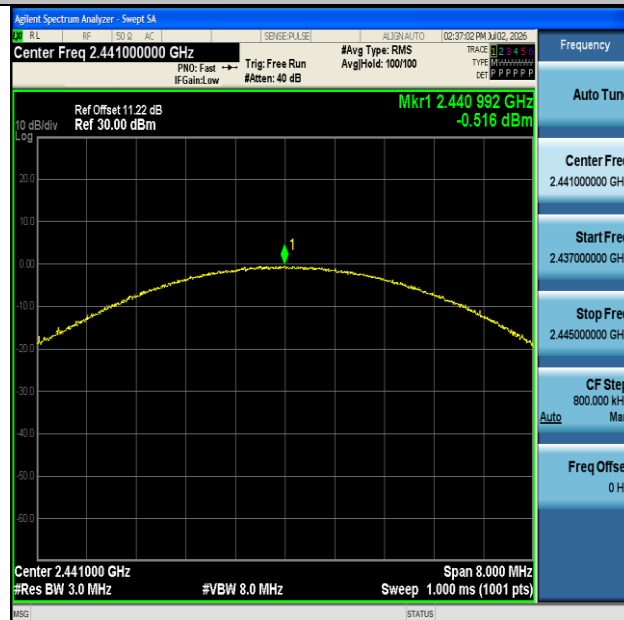


2DH5-Ant1-2480-PASS



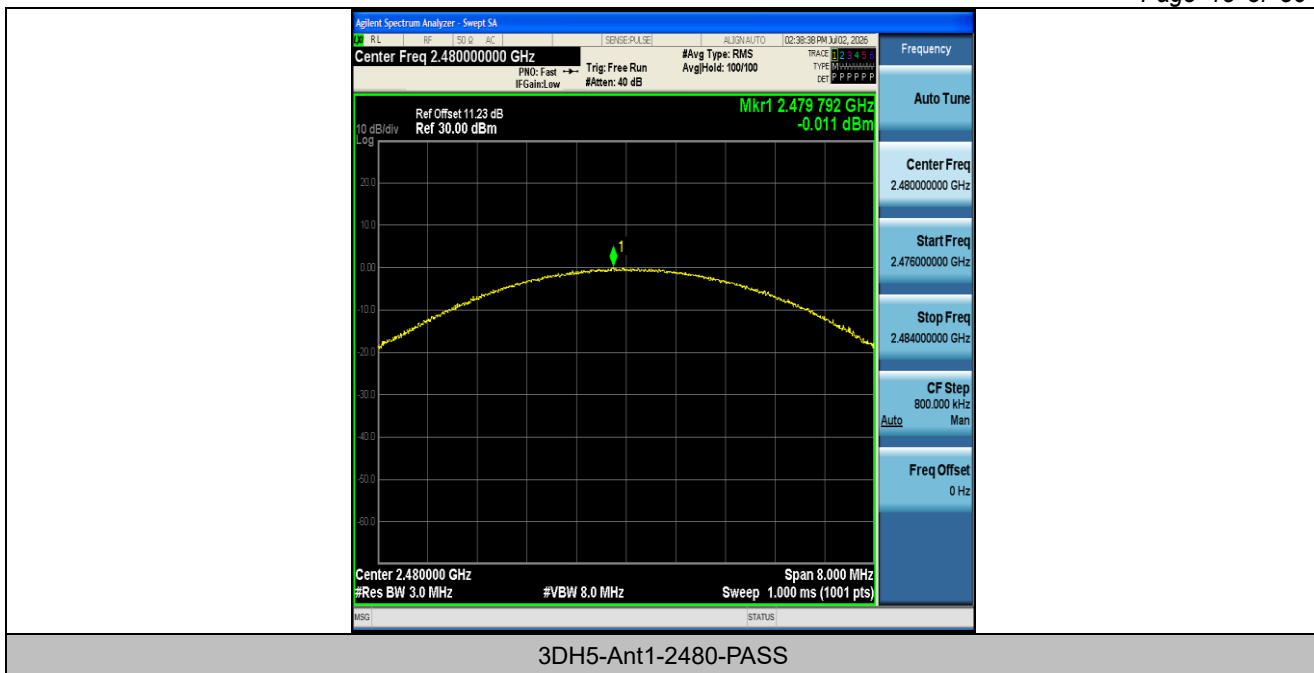


3DH5-Ant1-2402-PASS



3DH5-Ant1-2441-PASS







## Appendix D: Carrier frequency separation

### Test Result

| Test Mode | Antenna | Frequency<br>[MHz] | Result<br>[MHz] | Limit<br>[MHz] | Verdict |
|-----------|---------|--------------------|-----------------|----------------|---------|
| DH5       | Ant1    | Hop                | 0.982           | $\geq 0.666$   | PASS    |
| 2DH5      | Ant1    | Hop                | 1.328           | $\geq 0.896$   | PASS    |
| 3DH5      | Ant1    | Hop                | 0.98            | $\geq 0.872$   | PASS    |

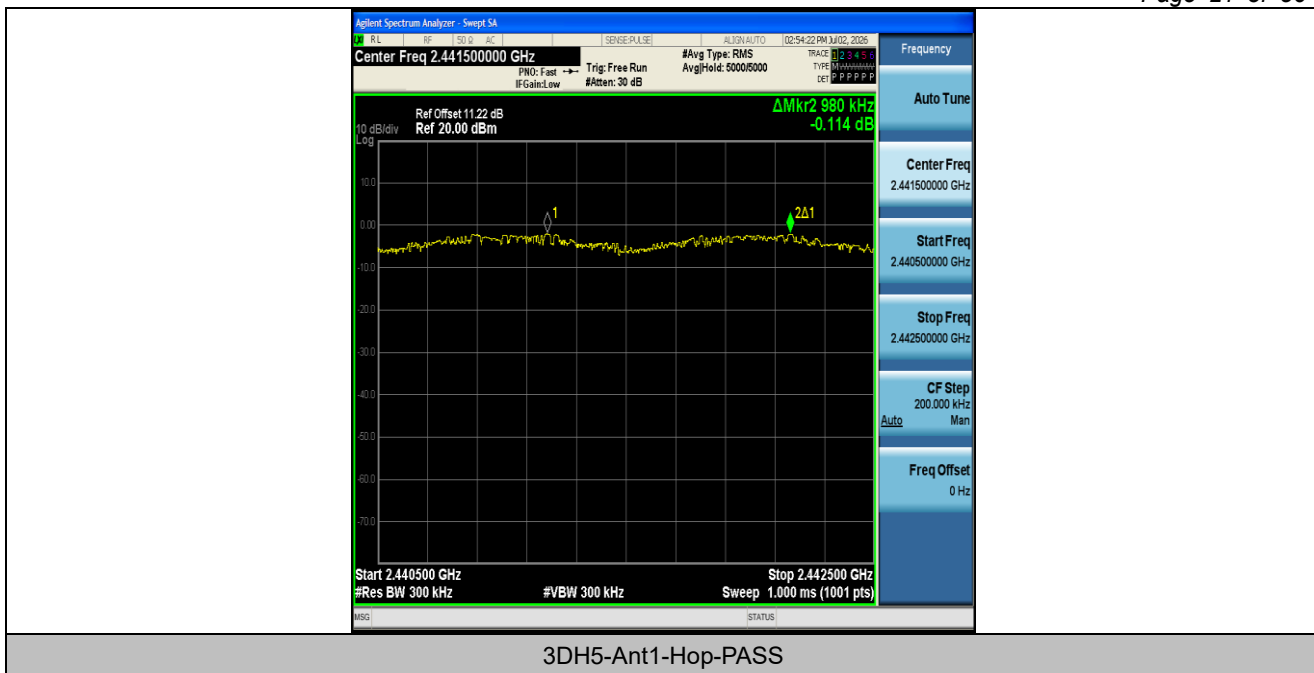
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)





## Test Graphs







## Appendix E: Time of occupancy

### Test Result

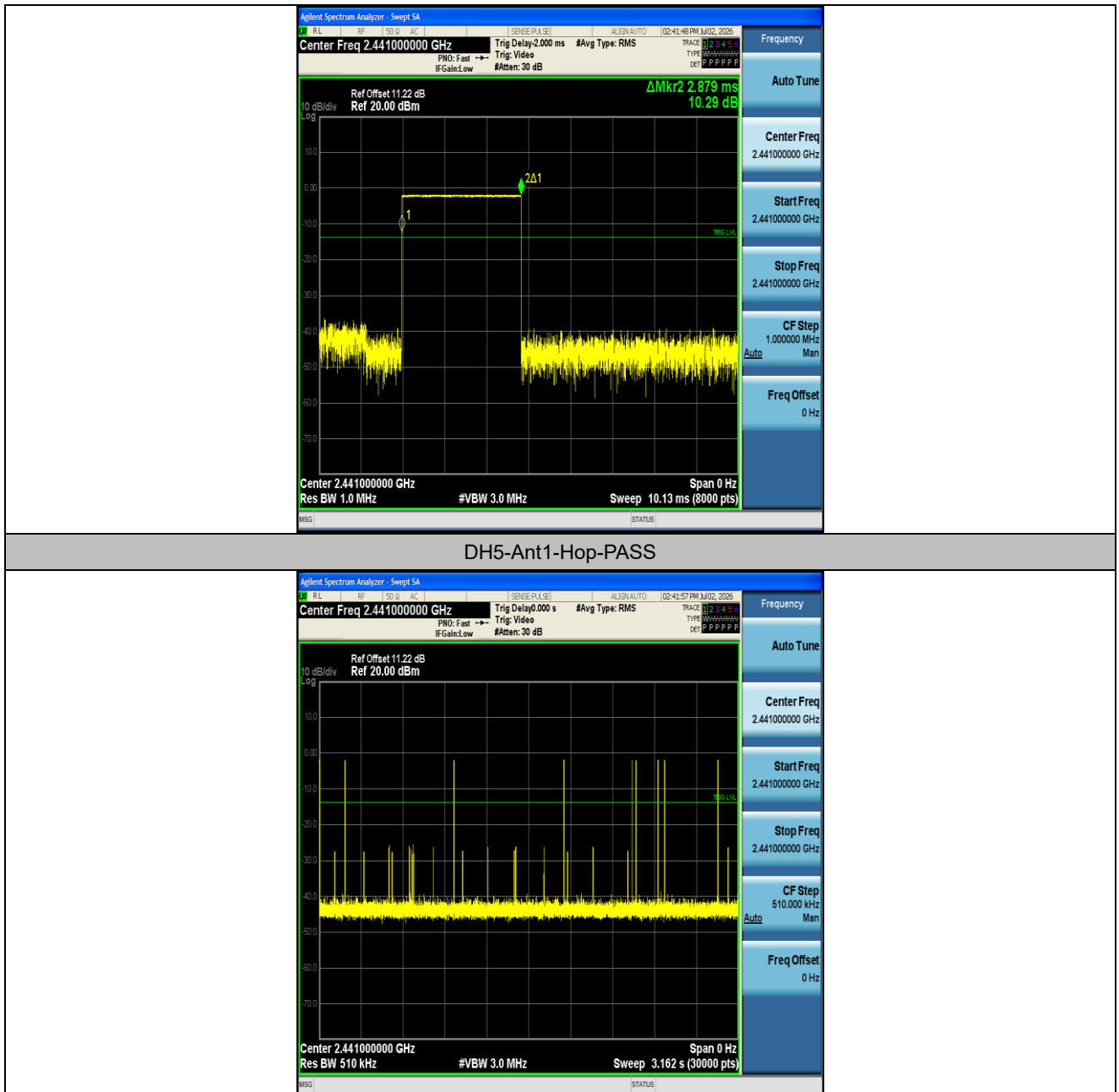
| Test Mode | Antenna | Frequency<br>[MHz] | Burst Width<br>[ms] | TotalHops<br>[Num] | Result<br>[s] | Limit<br>[s] | Verdict |
|-----------|---------|--------------------|---------------------|--------------------|---------------|--------------|---------|
| DH5       | Ant1    | Hop                | 2.879               | 90                 | 0.259         | ≤0.4         | PASS    |
| 2DH5      | Ant1    | Hop                | 2.884               | 80                 | 0.231         | ≤0.4         | PASS    |
| 3DH5      | Ant1    | Hop                | 2.887               | 110                | 0.318         | ≤0.4         | PASS    |

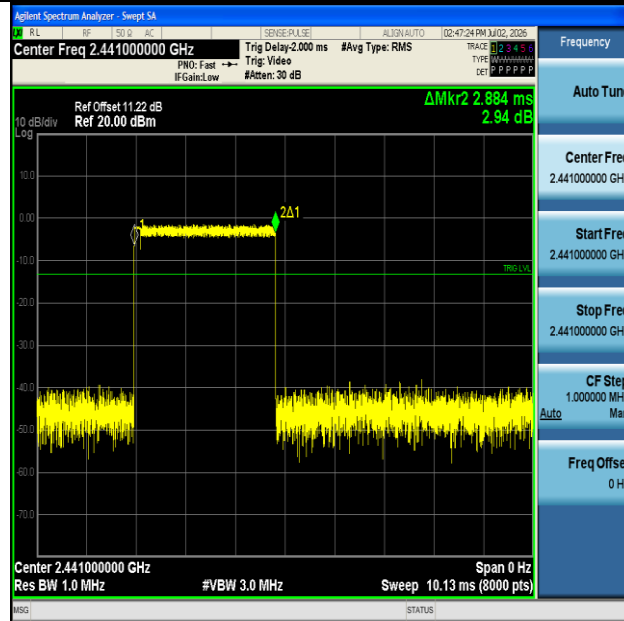
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)



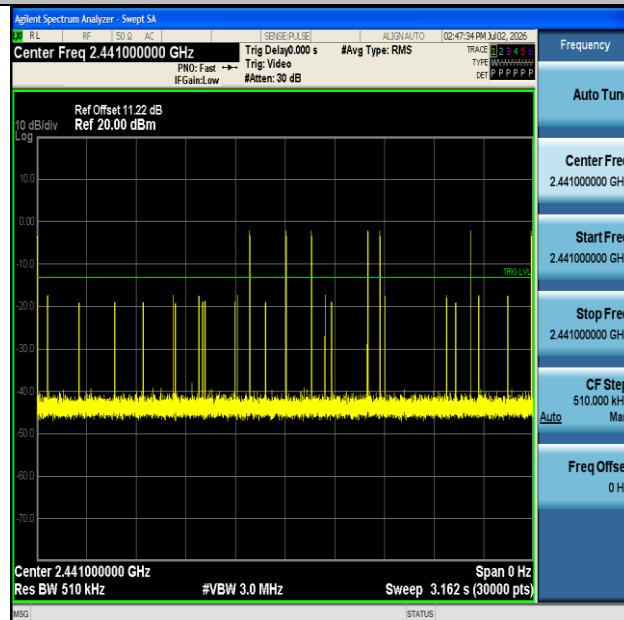


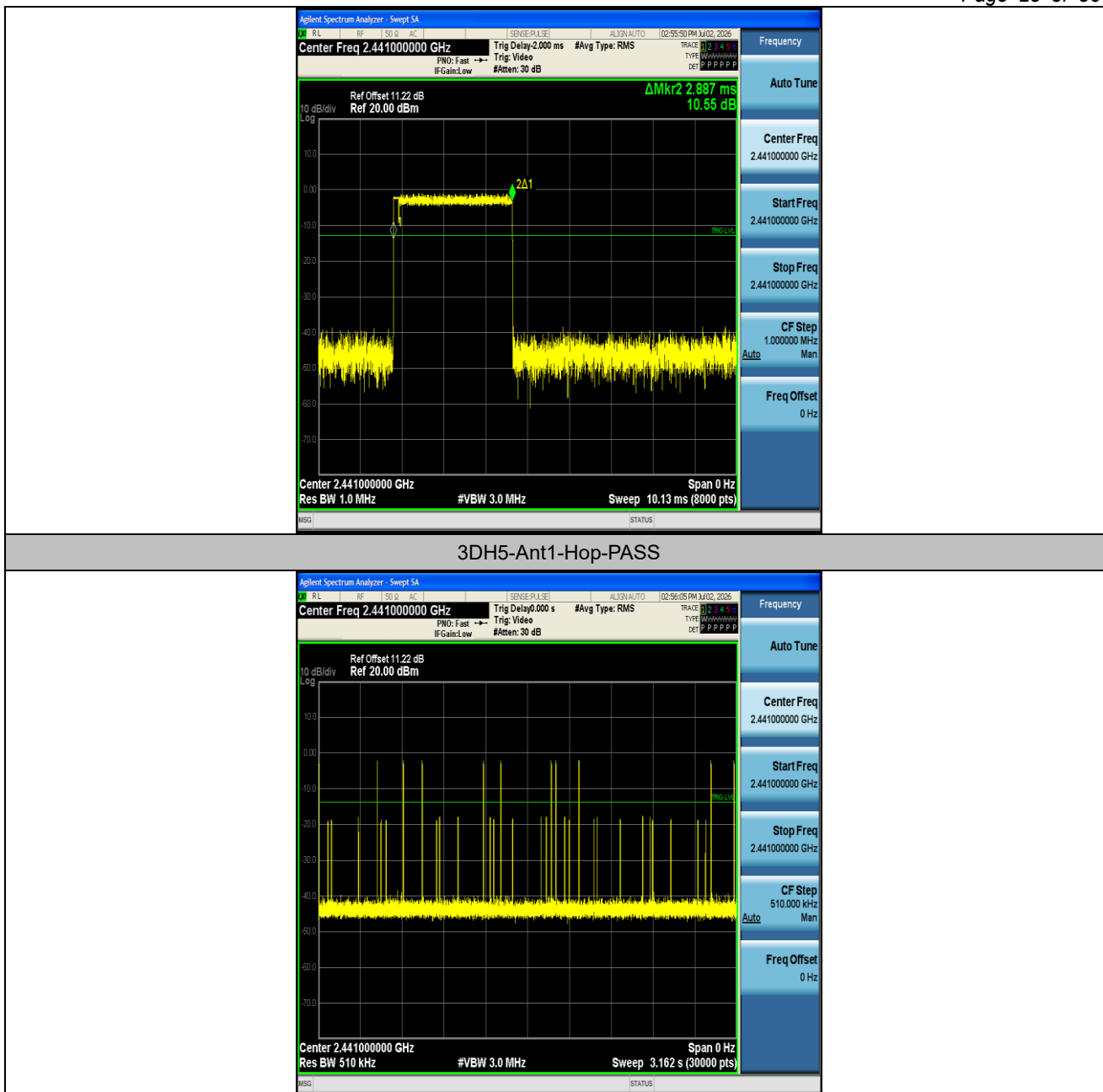
## Test Graphs





### 2DH5-Ant1-Hop-PASS







## Appendix F: Number of hopping channels

### Test Result

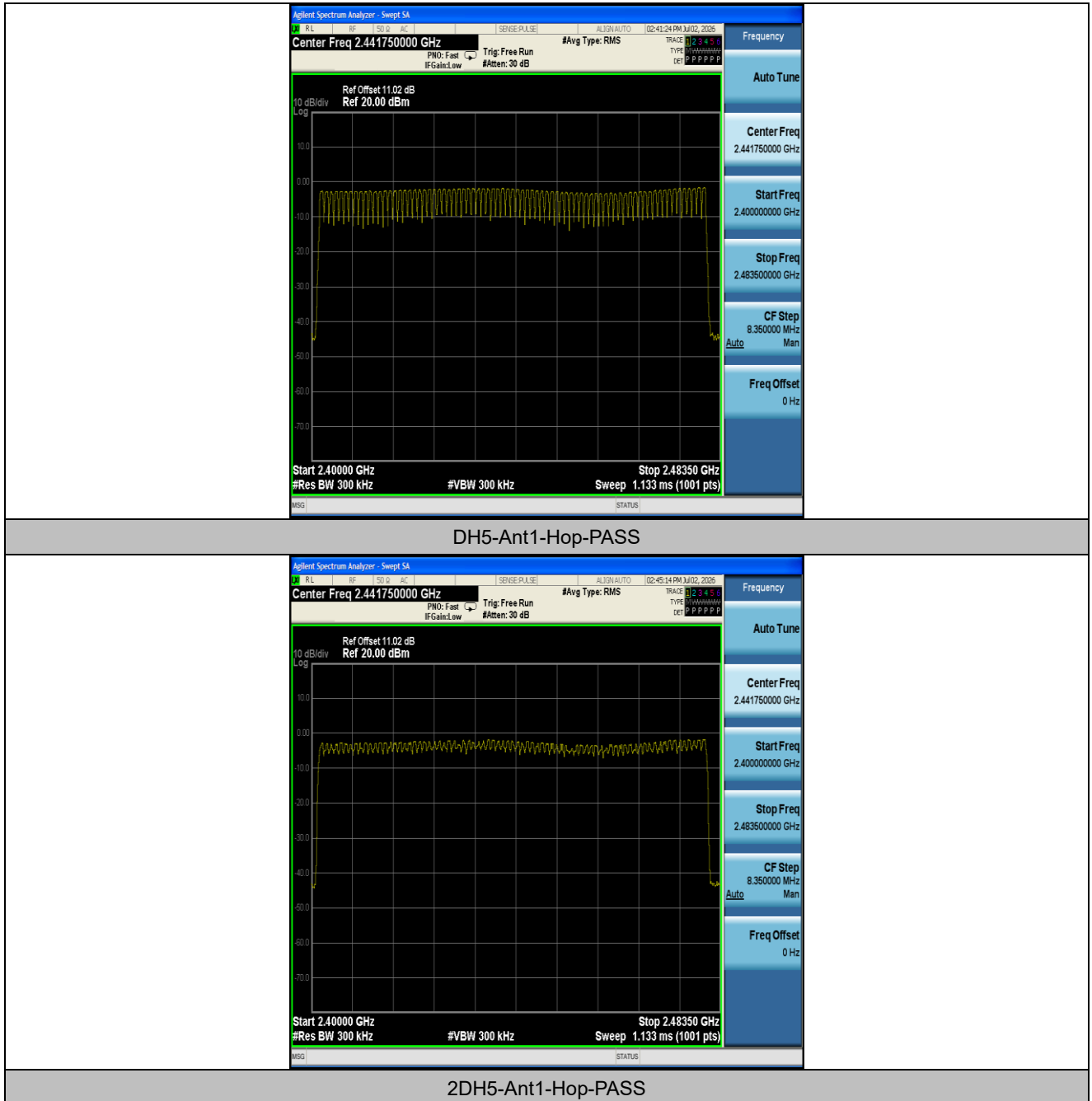
| Test Mode | Antenna | Frequency<br>[MHz] | Result<br>[Num] | Limit<br>[Num] | Verdict |
|-----------|---------|--------------------|-----------------|----------------|---------|
| DH5       | Ant1    | Hop                | 79              | ≥15            | PASS    |
| 2DH5      | Ant1    | Hop                | 79              | ≥15            | PASS    |
| 3DH5      | Ant1    | Hop                | 79              | ≥15            | PASS    |

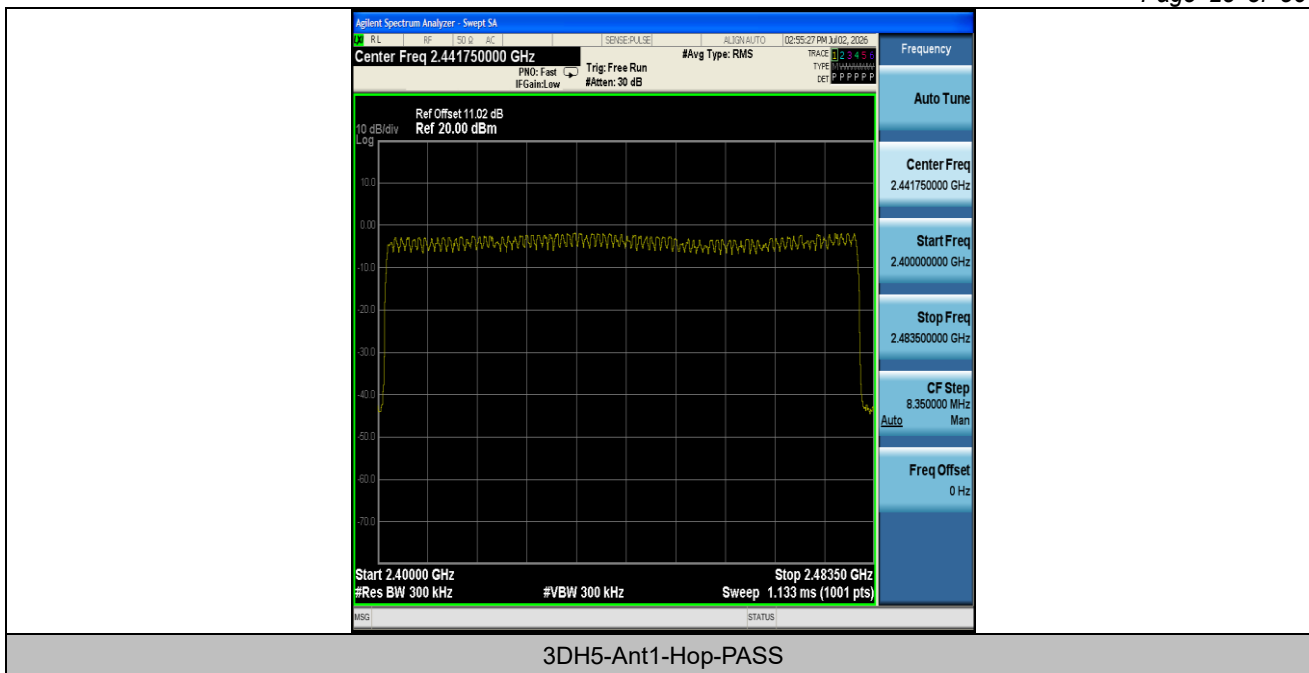
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)





## Test Graphs







## Appendix G: Band edge measurements

### Test Result

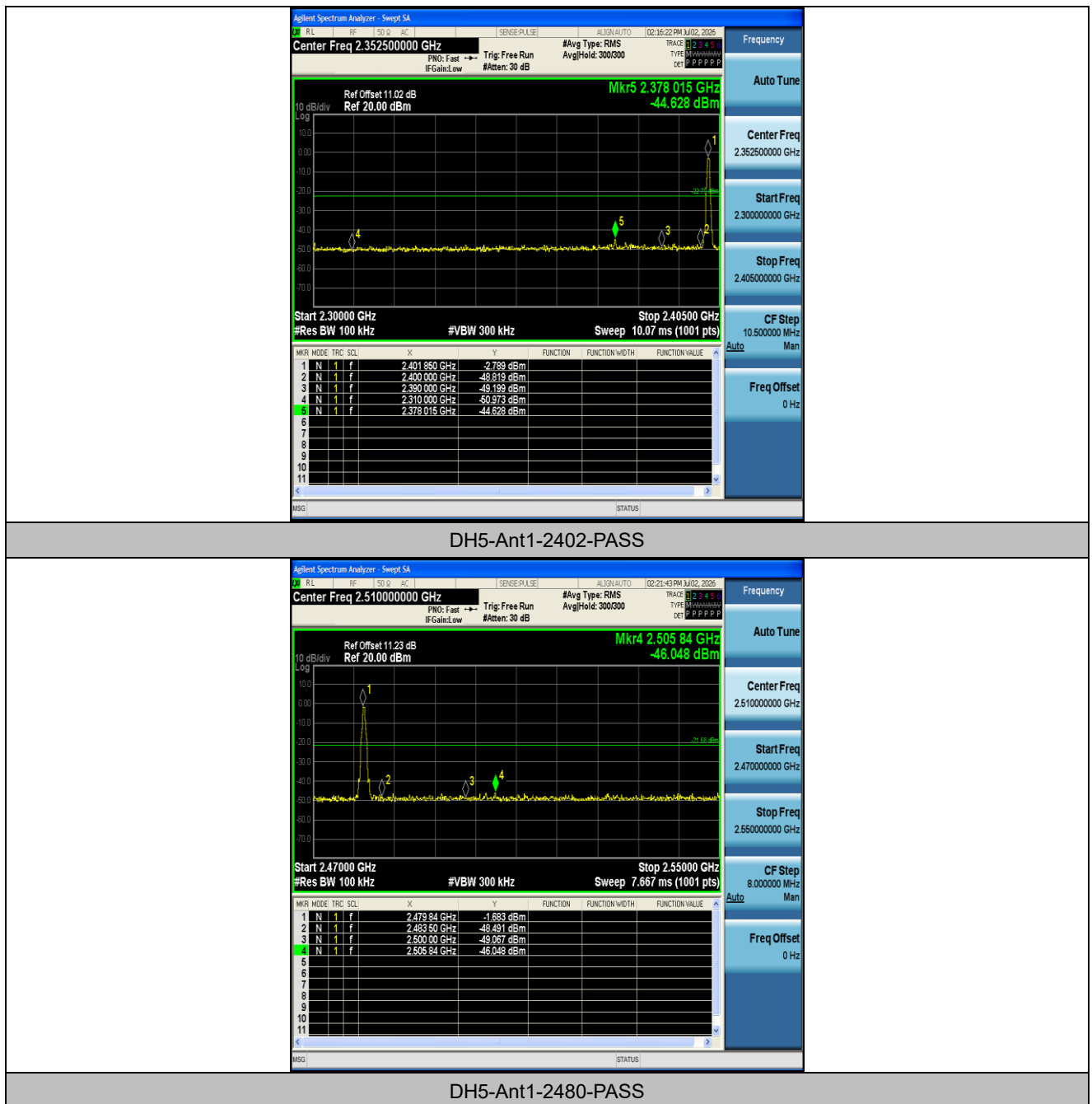
| Test Mode | Antenna | Ch.Name | Frequency [MHz] | RefLevel [dBm] | Result [dBm] | Limit [dBm]   | Verdict |
|-----------|---------|---------|-----------------|----------------|--------------|---------------|---------|
| DH5       | Ant1    | Low     | 2402            | -2.79          | -44.63       | $\leq -22.79$ | PASS    |
| DH5       | Ant1    | High    | 2480            | -1.68          | -46.05       | $\leq -21.68$ | PASS    |
| DH5       | Ant1    | Low     | Hop_2402        | -3.35          | -45.28       | $\leq -23.35$ | PASS    |
| DH5       | Ant1    | High    | Hop_2480        | -1.94          | -46.14       | $\leq -21.94$ | PASS    |
| 2DH5      | Ant1    | Low     | 2402            | -2.85          | -45.5        | $\leq -22.85$ | PASS    |
| 2DH5      | Ant1    | High    | 2480            | -2.05          | -46.67       | $\leq -22.05$ | PASS    |
| 2DH5      | Ant1    | Low     | Hop_2402        | -5.03          | -45.53       | $\leq -25.03$ | PASS    |
| 2DH5      | Ant1    | High    | Hop_2480        | -4.91          | -45.9        | $\leq -24.91$ | PASS    |
| 3DH5      | Ant1    | Low     | 2402            | -2.89          | -46.68       | $\leq -22.89$ | PASS    |
| 3DH5      | Ant1    | High    | 2480            | -3.55          | -45.87       | $\leq -23.55$ | PASS    |
| 3DH5      | Ant1    | Low     | Hop_2402        | -6.71          | -46.87       | $\leq -26.71$ | PASS    |
| 3DH5      | Ant1    | High    | Hop_2480        | -2.99          | -45.69       | $\leq -22.99$ | PASS    |

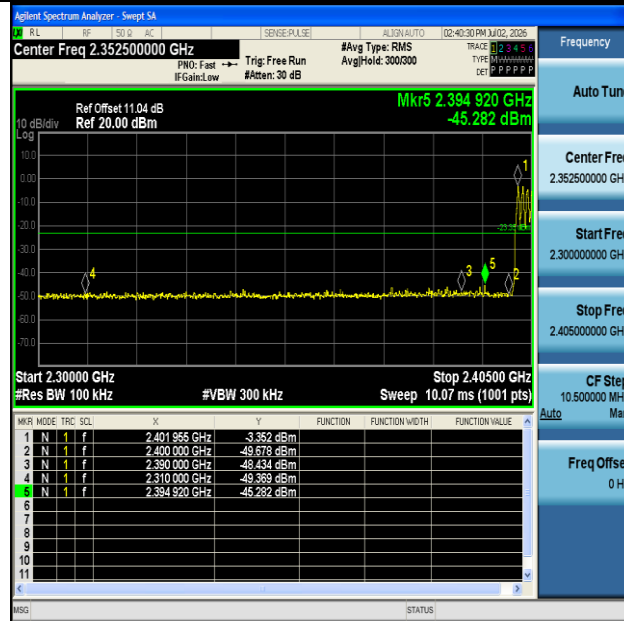
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)



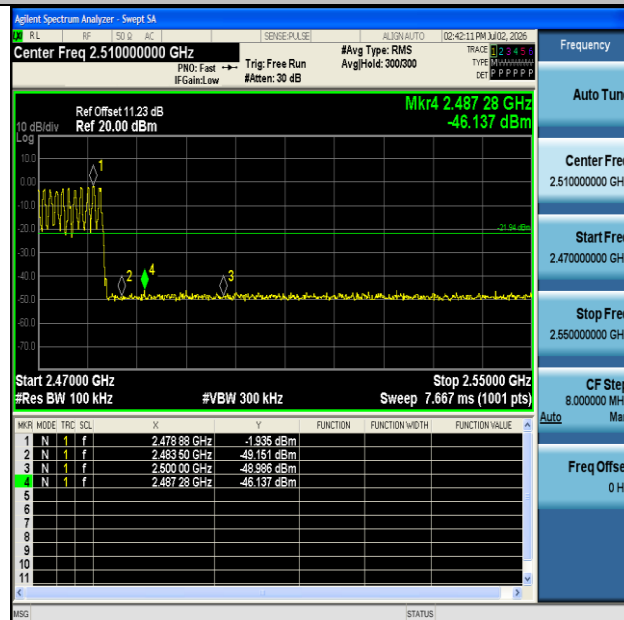


## Test Graphs



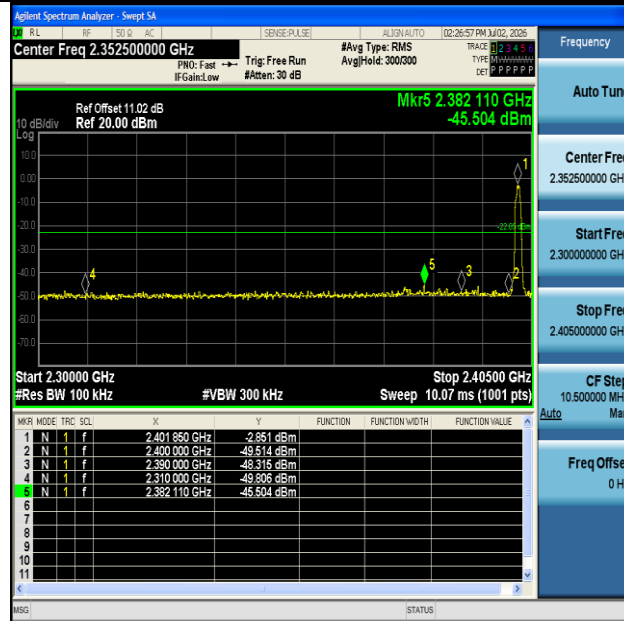


DH5-Ant1-Hop\_2402-PASS

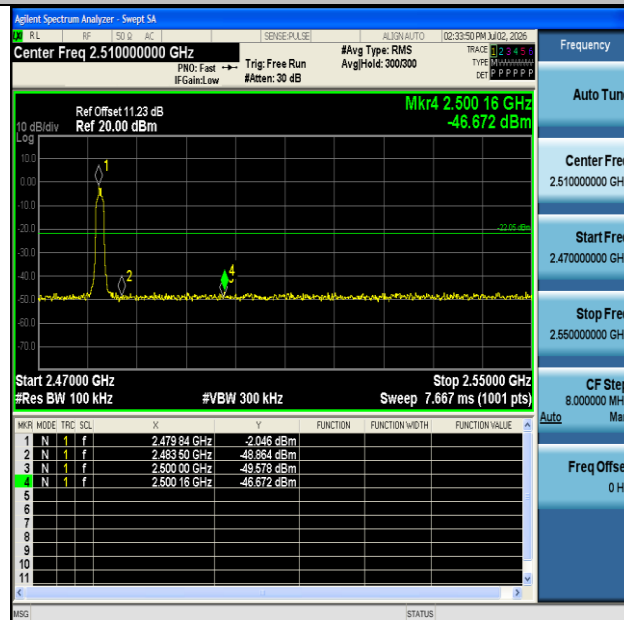


DH5-Ant1-Hop\_2480-PASS



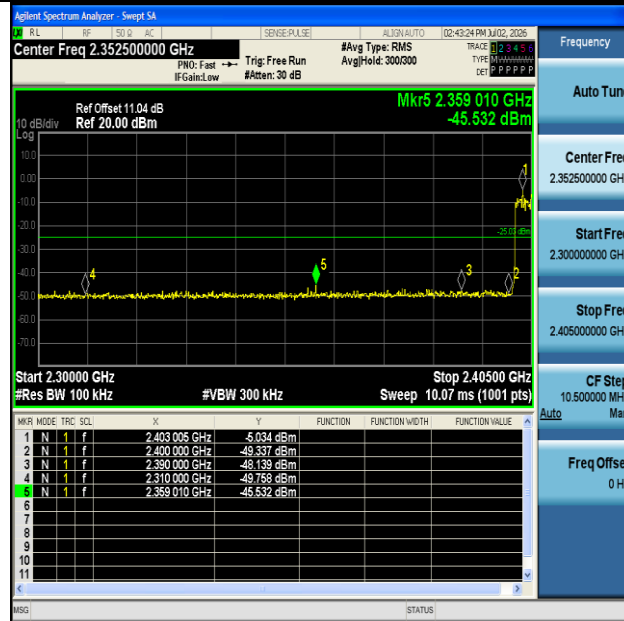


2DH5-Ant1-2402-PASS

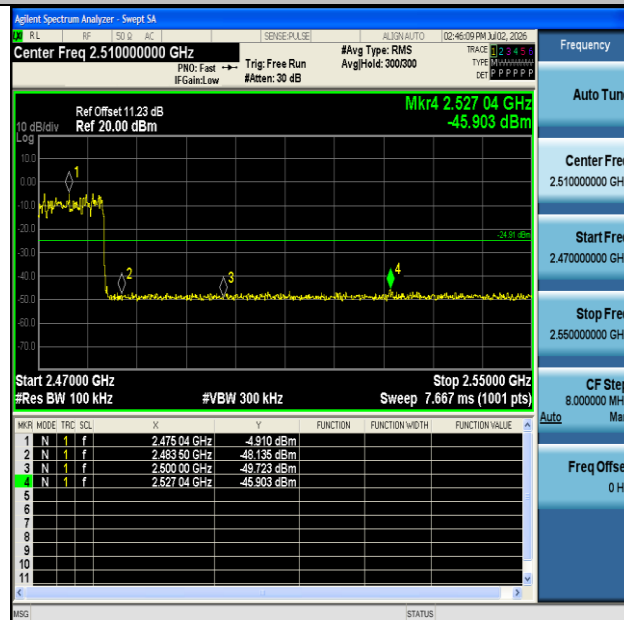


2DH5-Ant1-2480-PASS



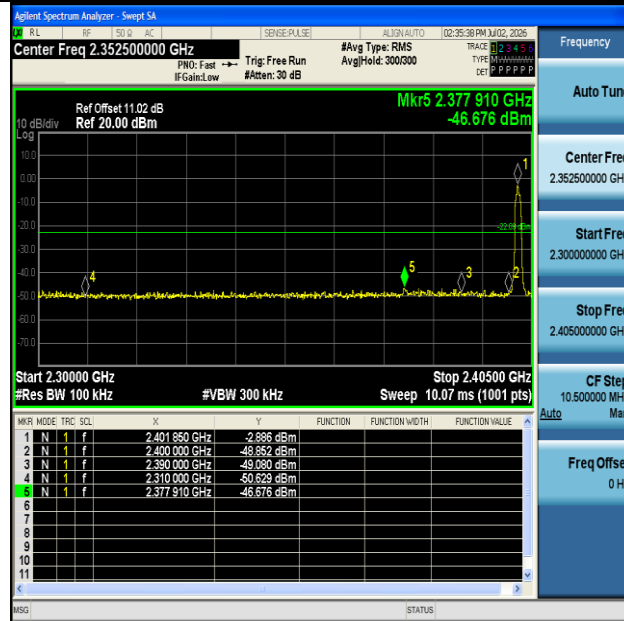


2DH5-Ant1-Hop\_2402-PASS

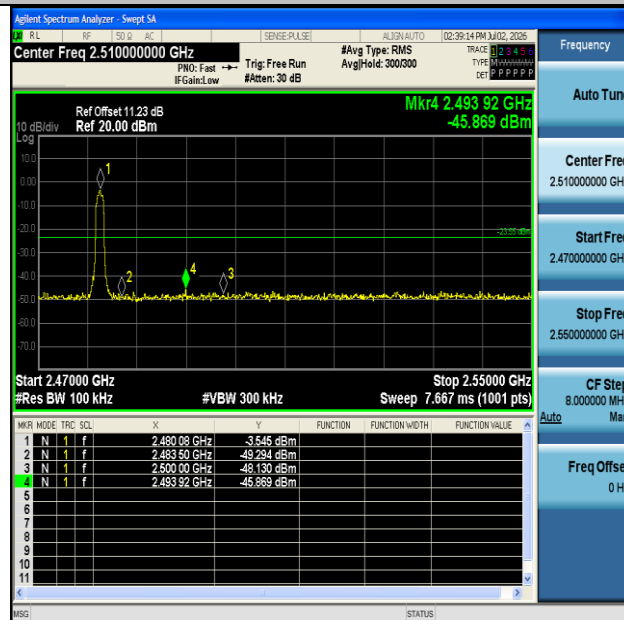


2DH5-Ant1-Hop\_2480-PASS



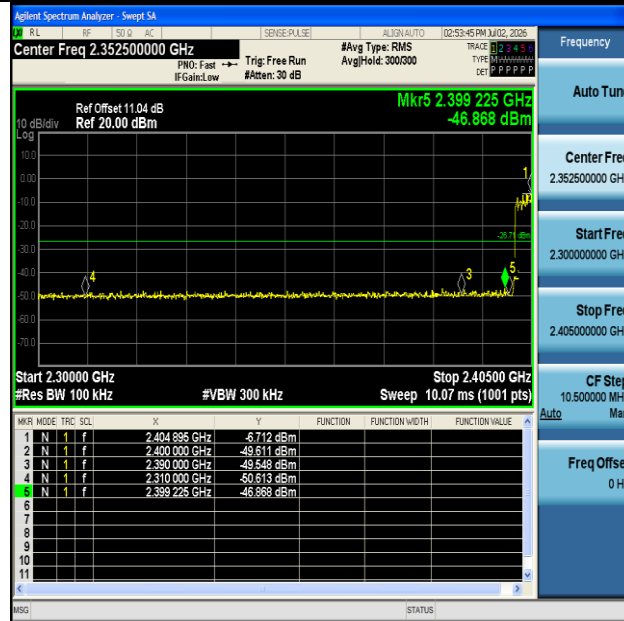


3DH5-Ant1-2402-PASS

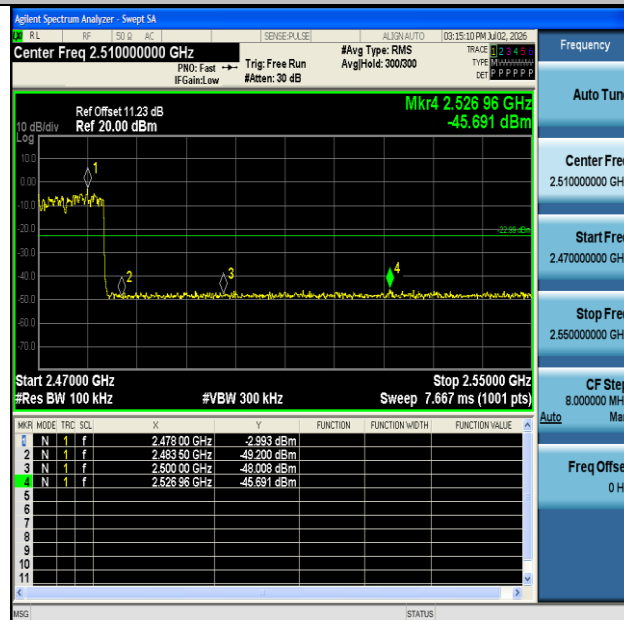


3DH5-Ant1-2480-PASS





3DH5-Ant1-Hop\_2402-PASS



3DH5-Ant1-Hop\_2480-PASS





## Appendix H: Conducted Spurious Emission

### Test Result

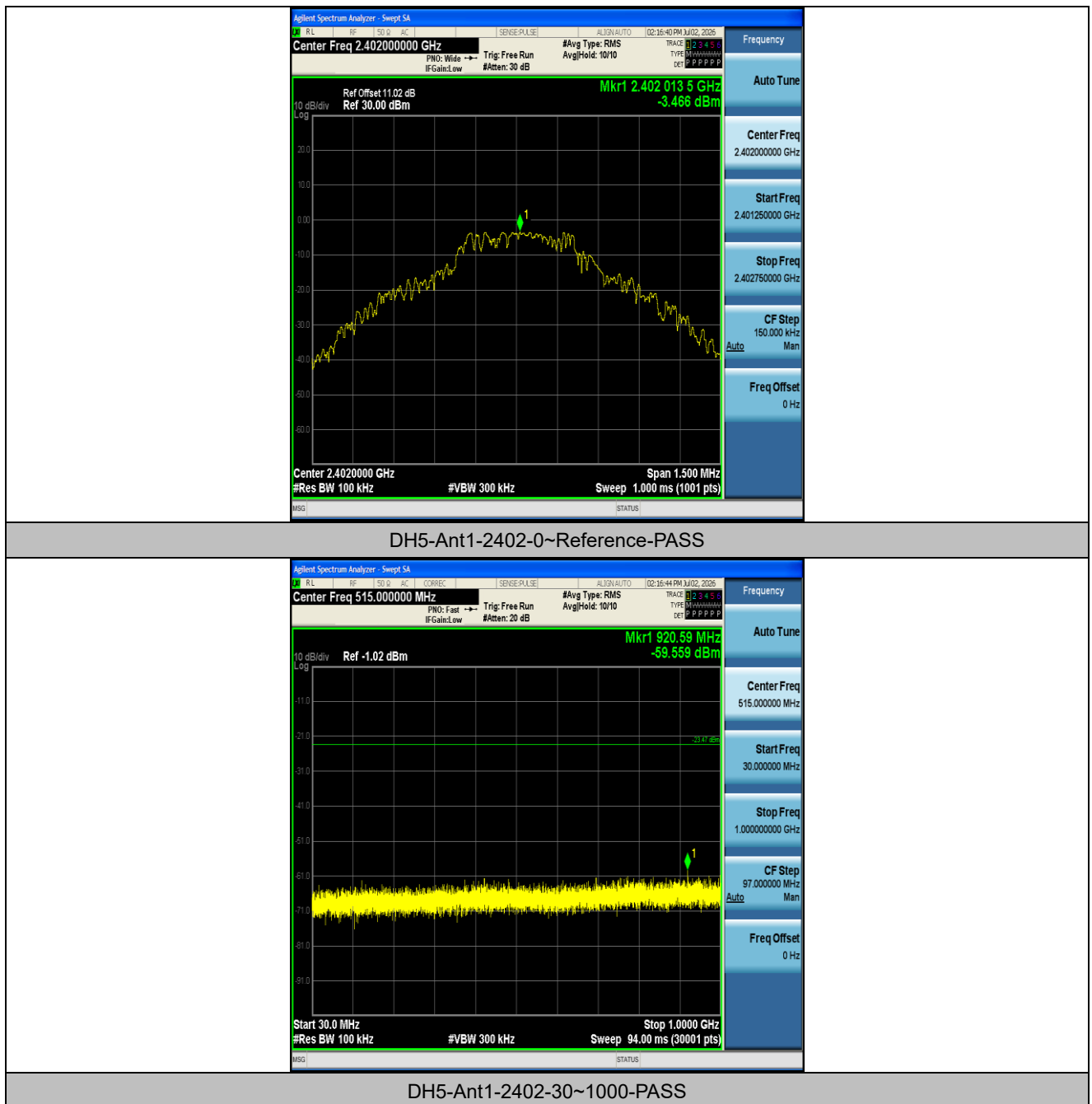
| Test Mode | Antenna | Frequency [MHz] | Freq. Range [MHz] | Ref. Level [dBm] | Result [dBm] | Limit [dBm]   | Verdict |
|-----------|---------|-----------------|-------------------|------------------|--------------|---------------|---------|
| DH5       | Ant1    | 2402            | 0~Reference       | -3.47            | -3.47        | ---           | PASS    |
| DH5       | Ant1    | 2402            | 30~1000           | -3.47            | -59.56       | $\leq -23.47$ | PASS    |
| DH5       | Ant1    | 2402            | 1000~26500        | -3.47            | -35.25       | $\leq -23.47$ | PASS    |
| DH5       | Ant1    | 2441            | 0~Reference       | -2.67            | -2.67        | ---           | PASS    |
| DH5       | Ant1    | 2441            | 30~1000           | -2.67            | -61.35       | $\leq -22.67$ | PASS    |
| DH5       | Ant1    | 2441            | 1000~26500        | -2.67            | -34.89       | $\leq -22.67$ | PASS    |
| DH5       | Ant1    | 2480            | 0~Reference       | -2.17            | -2.17        | ---           | PASS    |
| DH5       | Ant1    | 2480            | 30~1000           | -2.17            | -60.5        | $\leq -22.17$ | PASS    |
| DH5       | Ant1    | 2480            | 1000~26500        | -2.17            | -35.38       | $\leq -22.17$ | PASS    |
| 2DH5      | Ant1    | 2402            | 0~Reference       | -2.98            | -2.98        | ---           | PASS    |
| 2DH5      | Ant1    | 2402            | 30~1000           | -2.98            | -59.67       | $\leq -22.98$ | PASS    |
| 2DH5      | Ant1    | 2402            | 1000~26500        | -2.98            | -35.19       | $\leq -22.98$ | PASS    |
| 2DH5      | Ant1    | 2441            | 0~Reference       | -2.17            | -2.17        | ---           | PASS    |
| 2DH5      | Ant1    | 2441            | 30~1000           | -2.17            | -59.88       | $\leq -22.17$ | PASS    |
| 2DH5      | Ant1    | 2441            | 1000~26500        | -2.17            | -35.39       | $\leq -22.17$ | PASS    |
| 2DH5      | Ant1    | 2480            | 0~Reference       | -1.87            | -1.87        | ---           | PASS    |
| 2DH5      | Ant1    | 2480            | 30~1000           | -1.87            | -60.76       | $\leq -21.87$ | PASS    |
| 2DH5      | Ant1    | 2480            | 1000~26500        | -1.87            | -35.12       | $\leq -21.87$ | PASS    |
| 3DH5      | Ant1    | 2402            | 0~Reference       | -3.36            | -3.36        | ---           | PASS    |
| 3DH5      | Ant1    | 2402            | 30~1000           | -3.36            | -60.06       | $\leq -23.36$ | PASS    |
| 3DH5      | Ant1    | 2402            | 1000~26500        | -3.36            | -35.94       | $\leq -23.36$ | PASS    |
| 3DH5      | Ant1    | 2441            | 0~Reference       | -5.73            | -5.73        | ---           | PASS    |
| 3DH5      | Ant1    | 2441            | 30~1000           | -5.73            | -60.85       | $\leq -25.73$ | PASS    |
| 3DH5      | Ant1    | 2441            | 1000~26500        | -5.73            | -34.64       | $\leq -25.73$ | PASS    |
| 3DH5      | Ant1    | 2480            | 0~Reference       | -2.65            | -2.65        | ---           | PASS    |
| 3DH5      | Ant1    | 2480            | 30~1000           | -2.65            | -60.73       | $\leq -22.65$ | PASS    |
| 3DH5      | Ant1    | 2480            | 1000~26500        | -2.65            | -35.48       | $\leq -22.65$ | PASS    |

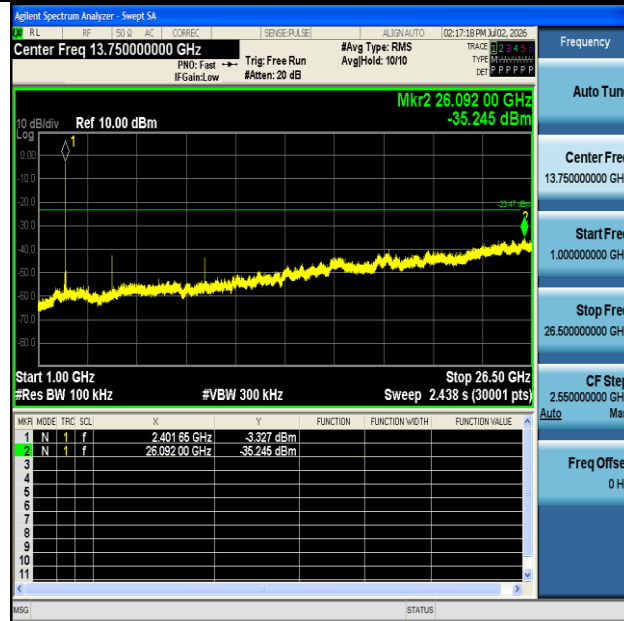
Note: offset(dB) in Reference test plots = cable loss(dB) + attenuator factor(dB); For spurious emissions plots from 30MHz to 26.5GHz, the cable loss and attenuator factors have been set in the 'Input Correction' of the Spectrum Analyzer during the test.



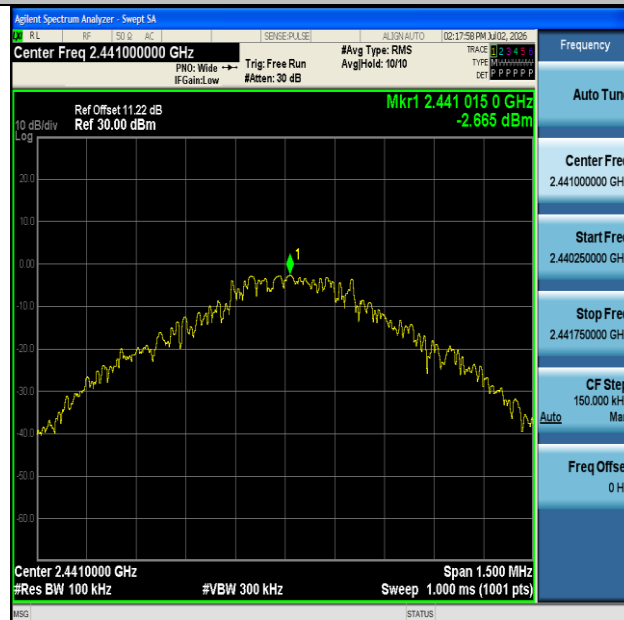


## Test Graphs



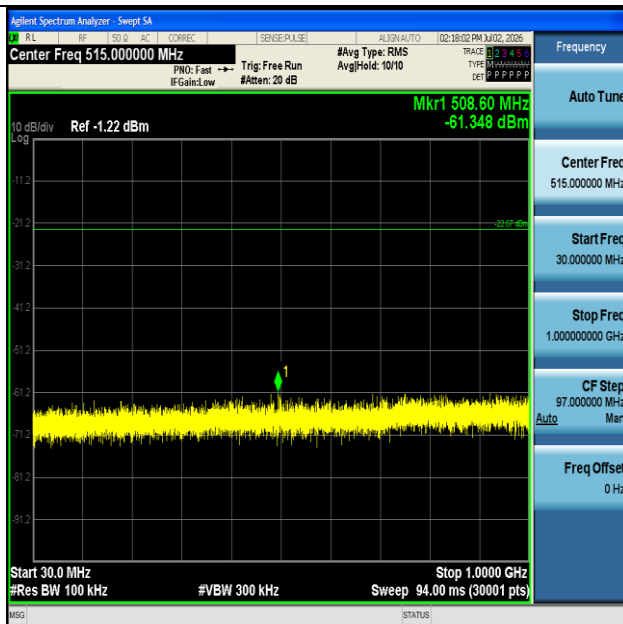


DH5-Ant1-2402-1000~26500-PASS

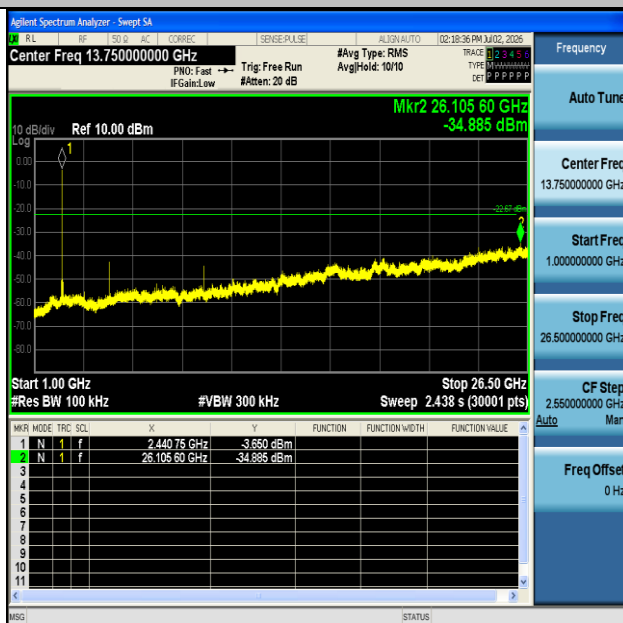


DH5-Ant1-2441-0~Reference-PASS



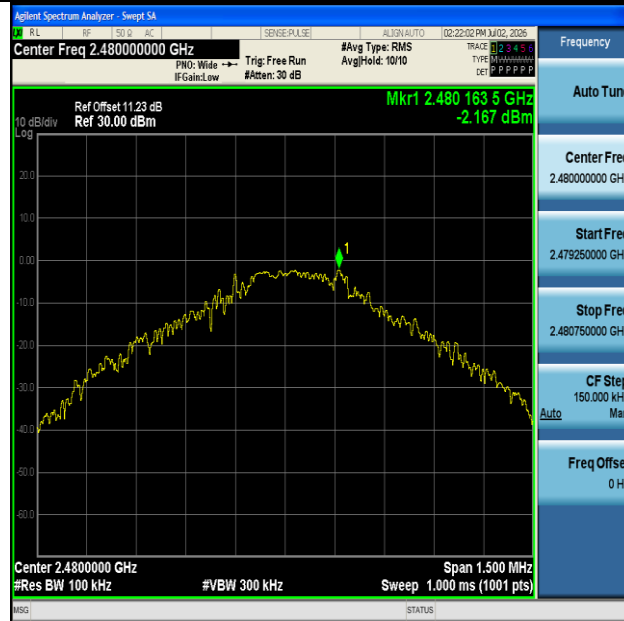


DH5-Ant1-2441-30~1000-PASS

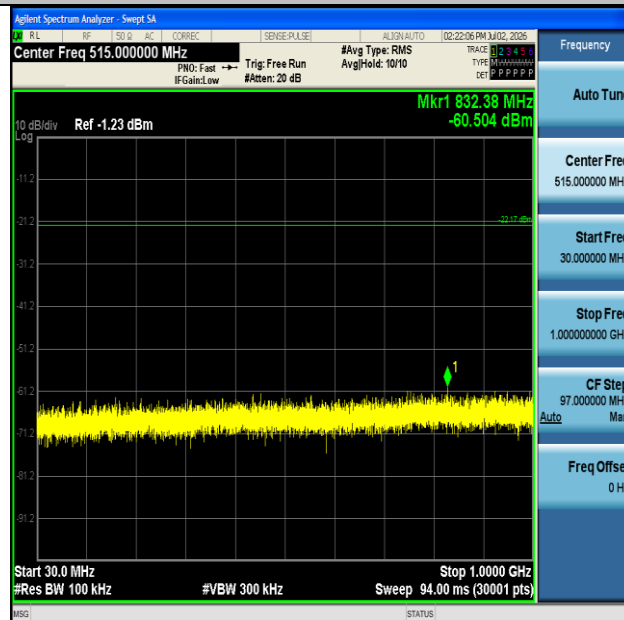


DH5-Ant1-2441-1000~26500-PASS



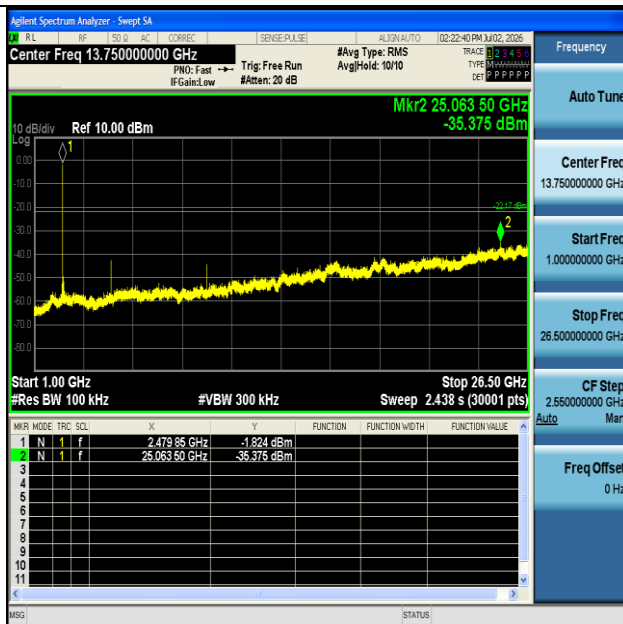


DH5-Ant1-2480-0~Reference-PASS

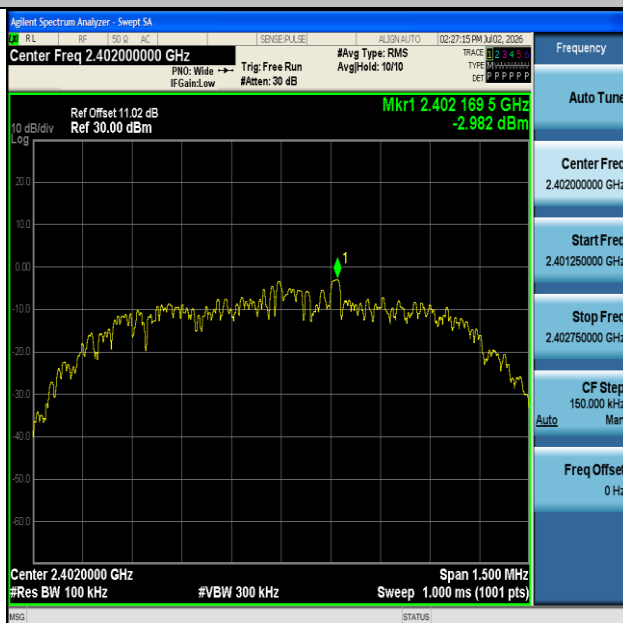


DH5-Ant1-2480-30~1000-PASS



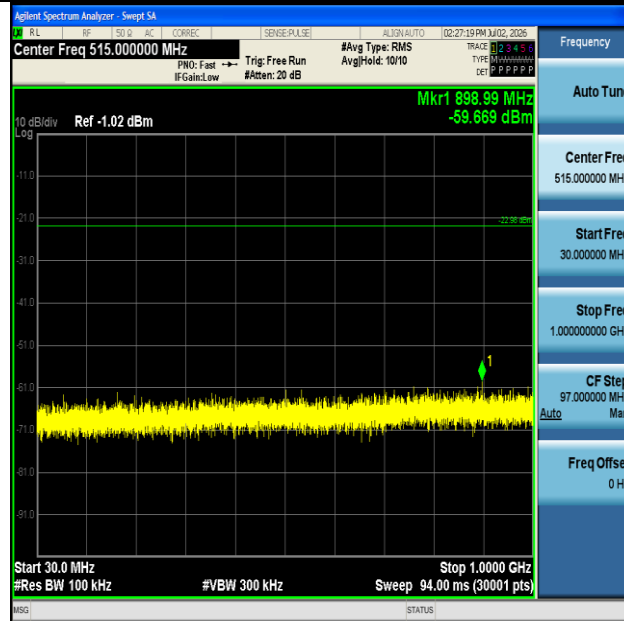


DH5-Ant1-2480-1000~26500-PASS



2DH5-Ant1-2402-0~Reference-PASS





2DH5-Ant1-2402-30~1000-PASS

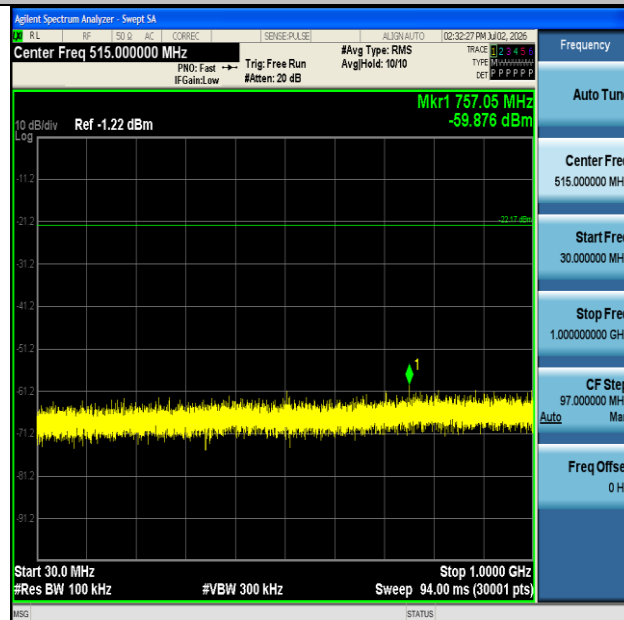


2DH5-Ant1-2402-1000~26500-PASS



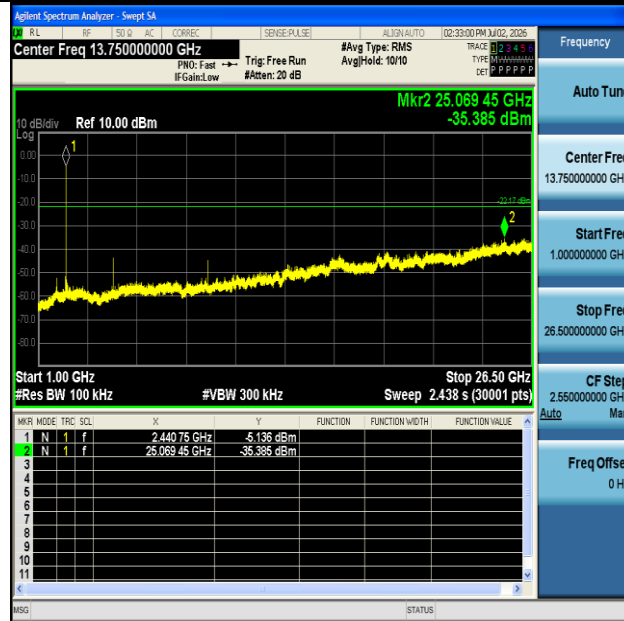


2DH5-Ant1-2441-0~Reference-PASS

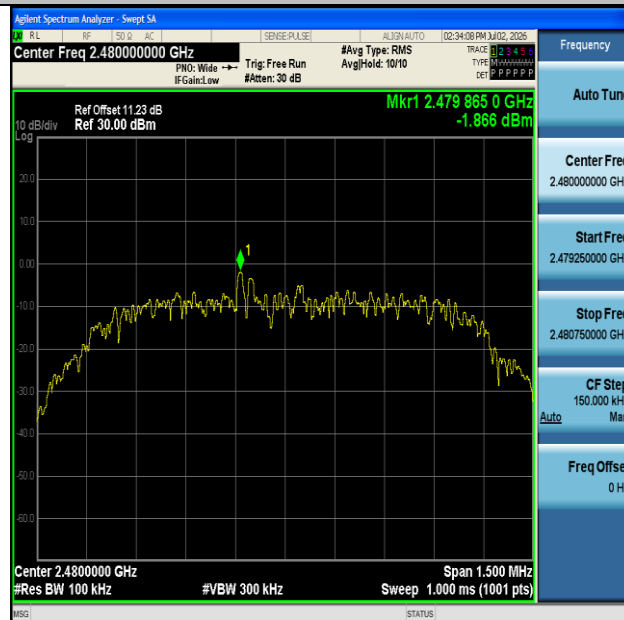


2DH5-Ant1-2441-30~1000-PASS



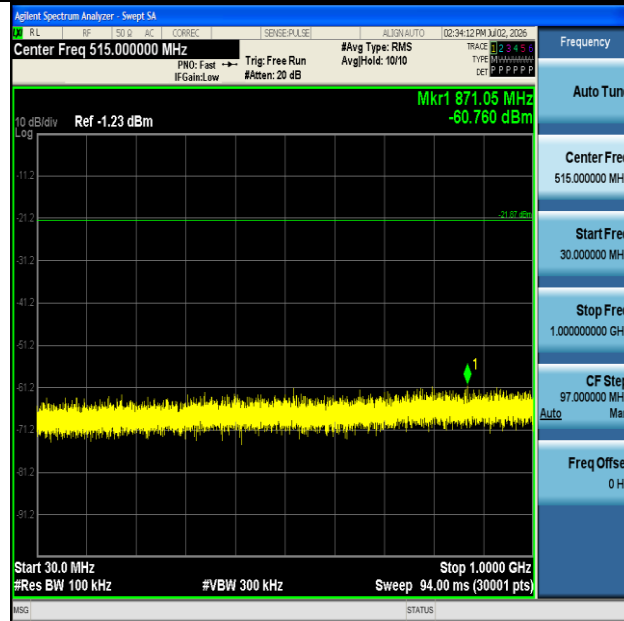


2DH5-Ant1-2441-1000~26500-PASS

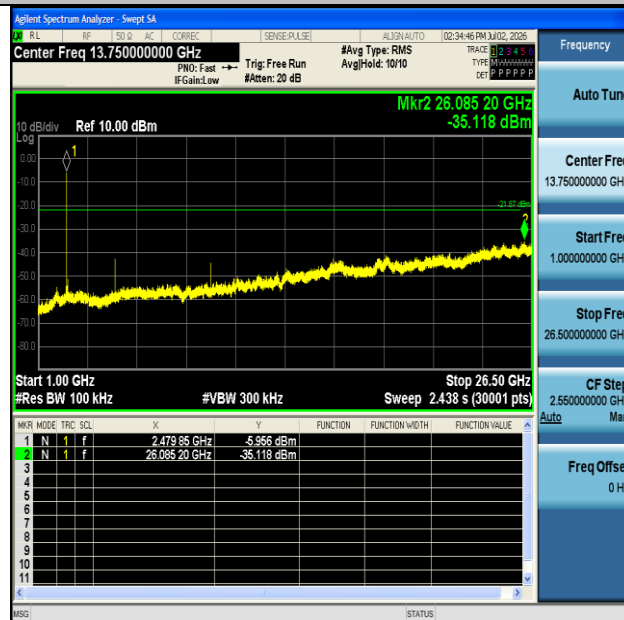


2DH5-Ant1-2480-0~Reference-PASS



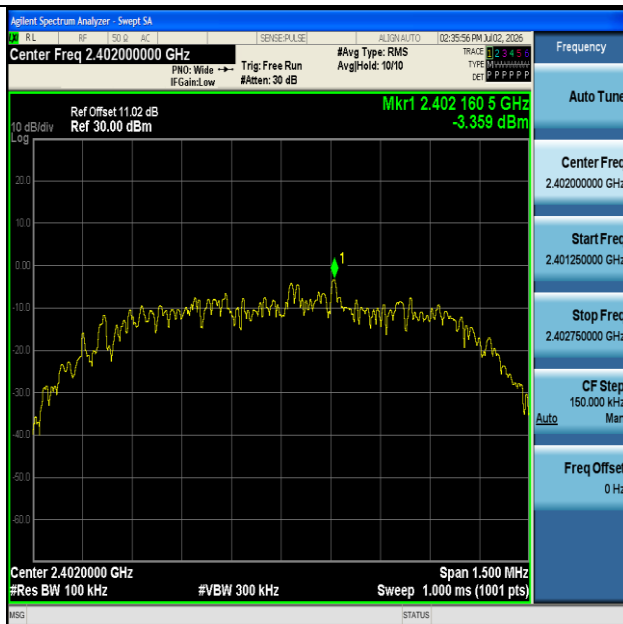


2DH5-Ant1-2480-30~1000-PASS

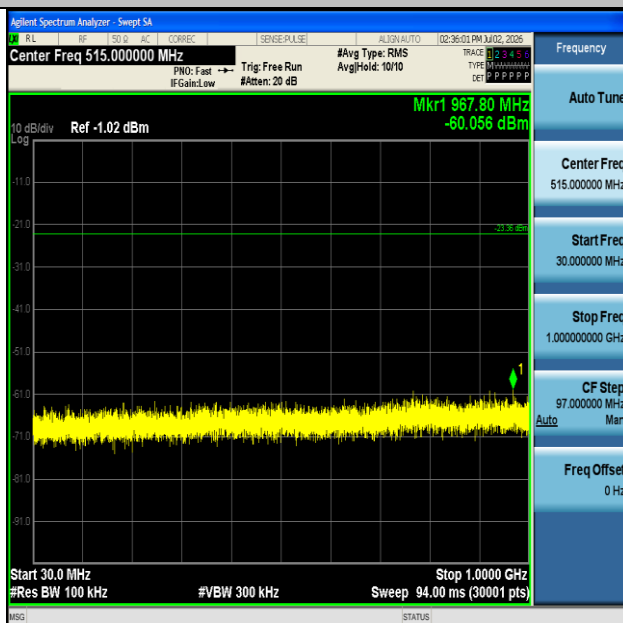


2DH5-Ant1-2480-1000~26500-PASS



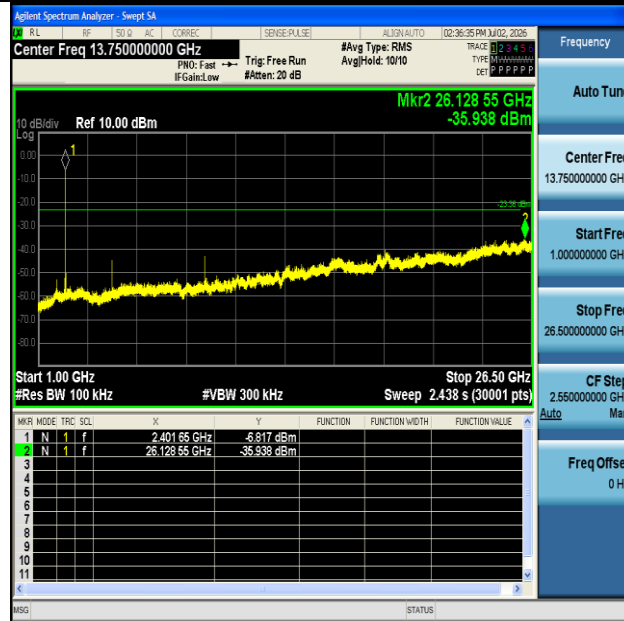


3DH5-Ant1-2402-0~Reference-PASS

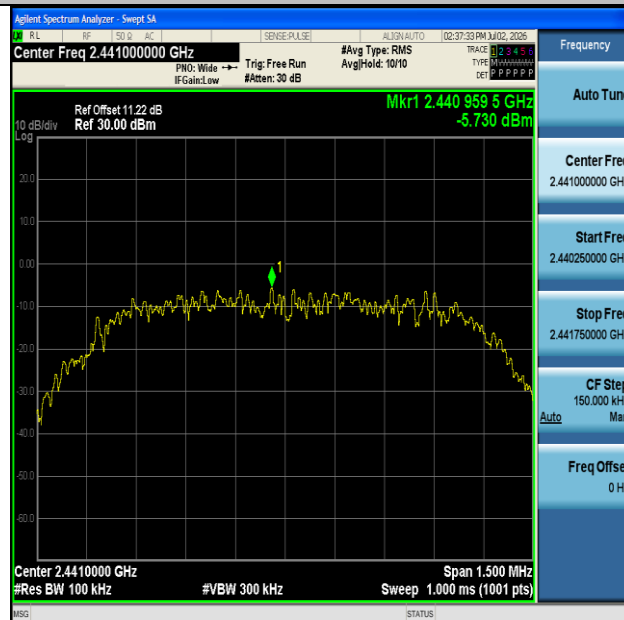


3DH5-Ant1-2402-30~1000-PASS



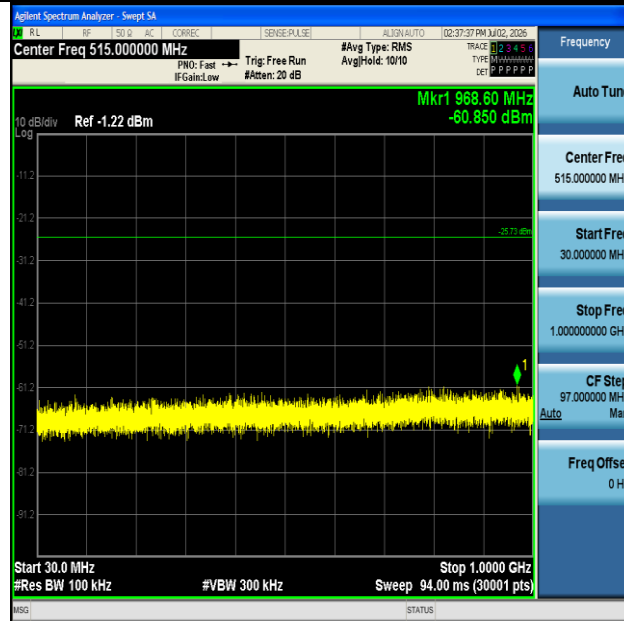


3DH5-Ant1-2402-1000~26500-PASS

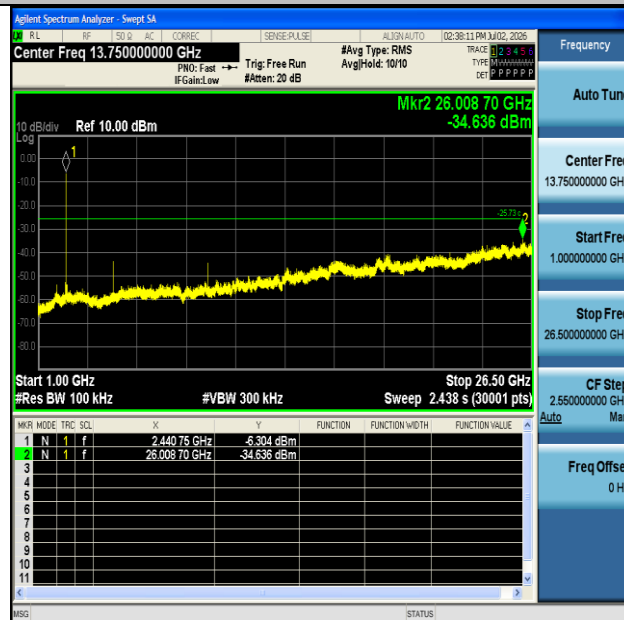


3DH5-Ant1-2441-0~Reference-PASS





3DH5-Ant1-2441-30~1000-PASS

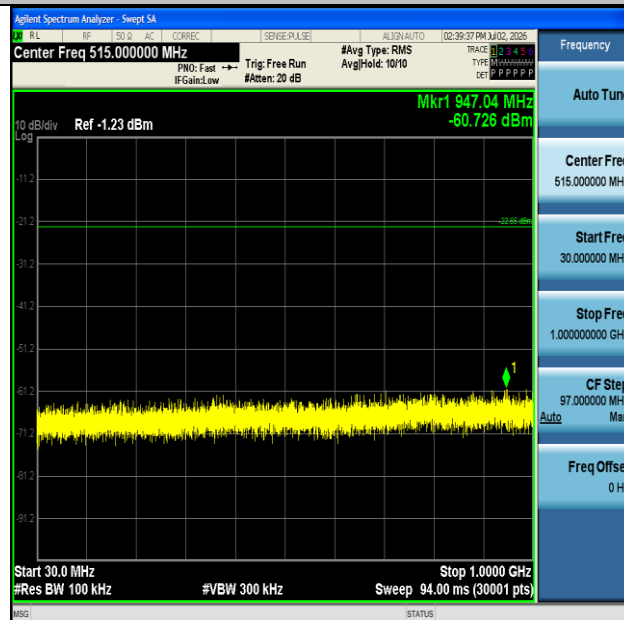


3DH5-Ant1-2441-1000~26500-PASS



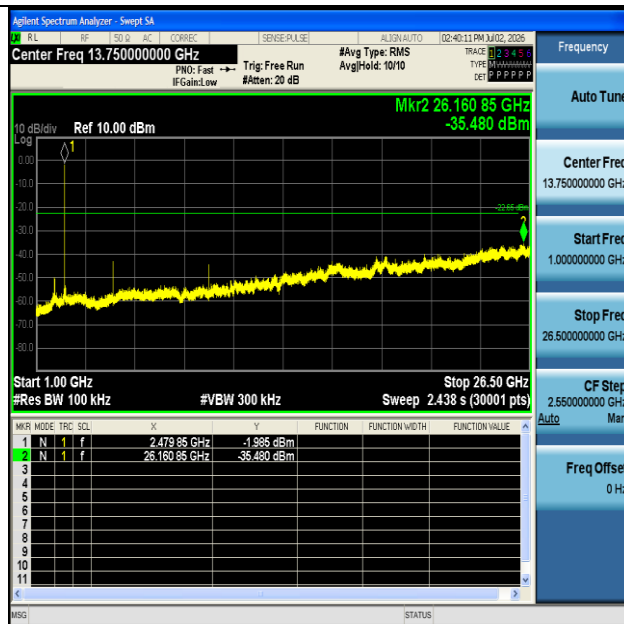


3DH5-Ant1-2480-0~Reference-PASS



3DH5-Ant1-2480-30~1000-PASS





3DH5-Ant1-2480-1000~26500-PASS





## Appendix I: Duty Cycle

### Test Result

| Test Mode | Antenna | Frequency<br>[MHz] | ON Time<br>[ms] | Period<br>[ms] | Duty Cycle<br>[%] | Duty Cycle<br>Factor<br>[dB] |
|-----------|---------|--------------------|-----------------|----------------|-------------------|------------------------------|
| DH5       | Ant1    | 2402               | 2.88            | 3.75           | 76.80             | 1.15                         |
| DH5       | Ant1    | 2441               | 2.88            | 3.75           | 76.80             | 1.15                         |
| DH5       | Ant1    | 2480               | 2.88            | 3.75           | 76.80             | 1.15                         |
| 2DH5      | Ant1    | 2402               | 2.88            | 3.74           | 77.01             | 1.13                         |
| 2DH5      | Ant1    | 2441               | 2.88            | 3.75           | 76.80             | 1.15                         |
| 2DH5      | Ant1    | 2480               | 2.89            | 3.75           | 77.07             | 1.13                         |
| 3DH5      | Ant1    | 2402               | 2.89            | 3.75           | 77.07             | 1.13                         |
| 3DH5      | Ant1    | 2441               | 2.89            | 3.75           | 77.07             | 1.13                         |
| 3DH5      | Ant1    | 2480               | 2.88            | 3.75           | 76.80             | 1.15                         |

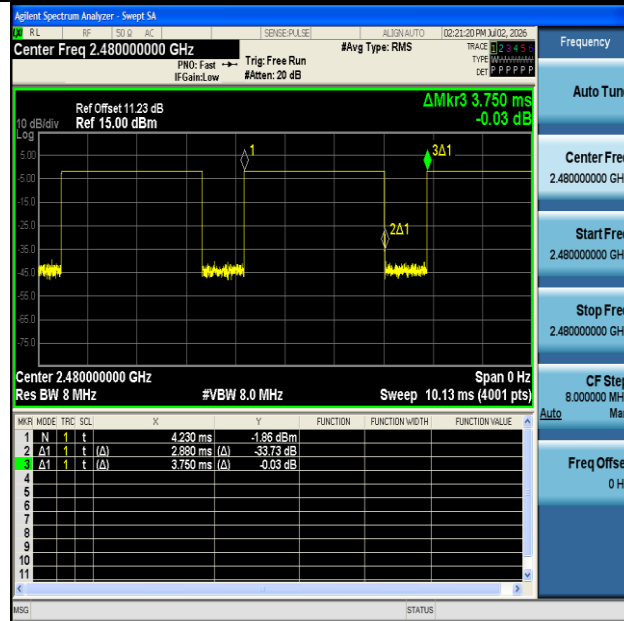
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)



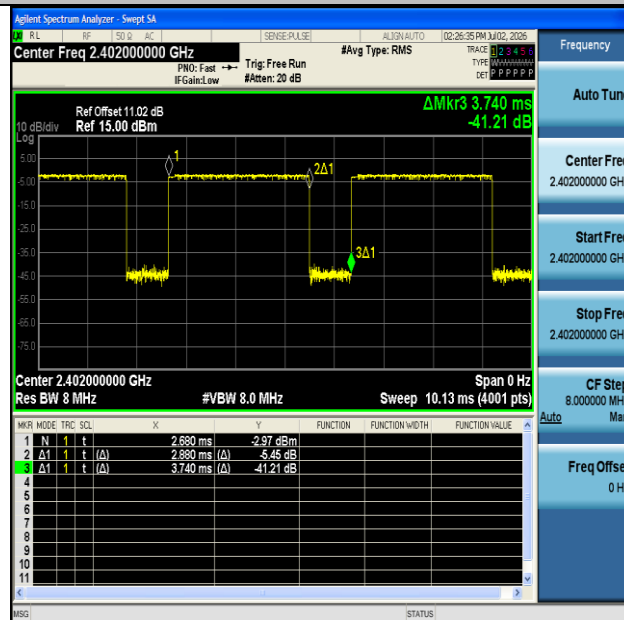


## Test Graphs



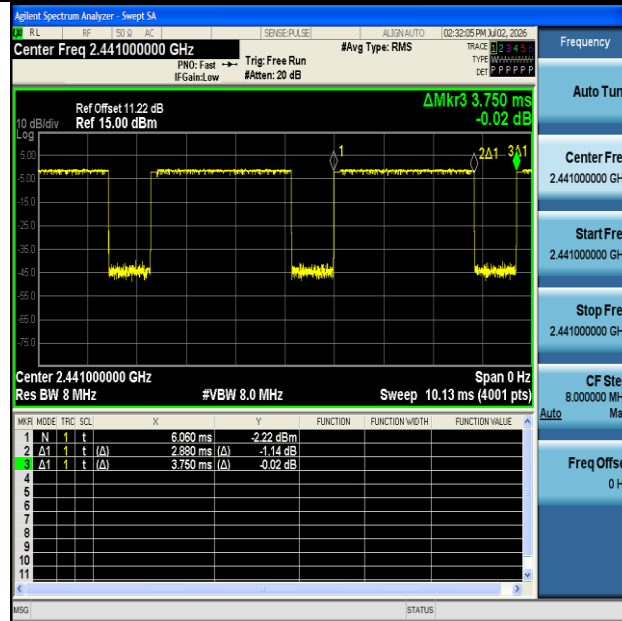


NTNV-DH5-Ant1-2480

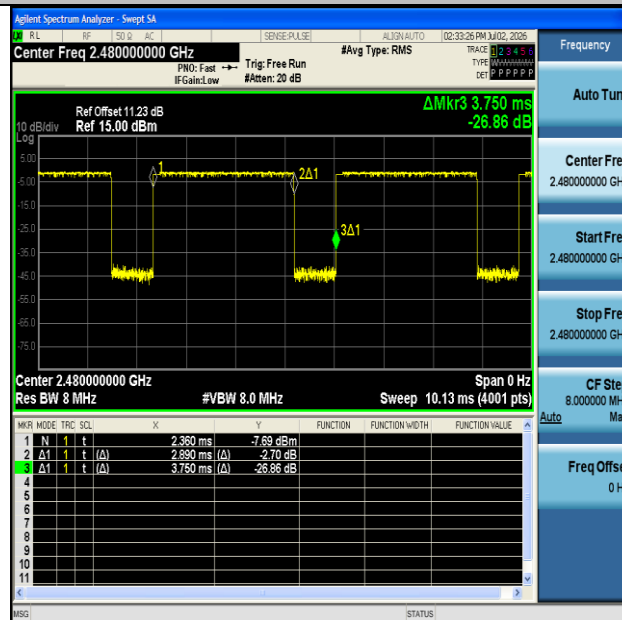


NTNV-2DH5-Ant1-2402



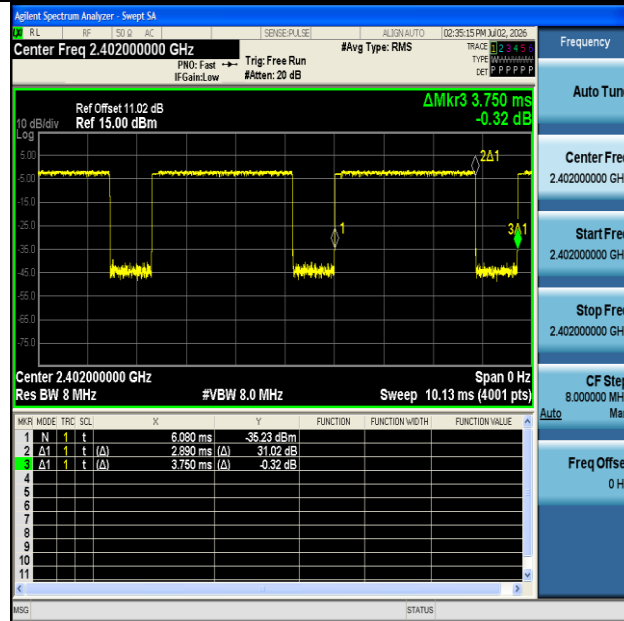


NTNV-2DH5-Ant1-2441

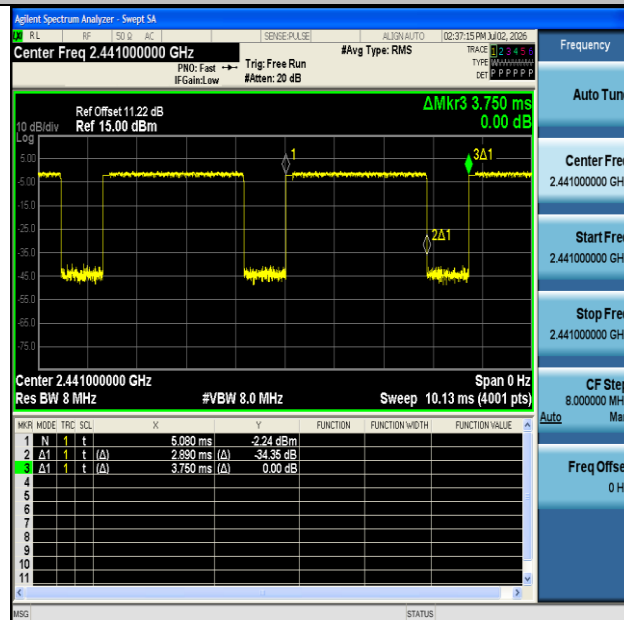


NTNV-2DH5-Ant1-2480





NTNV-3DH5-Ant1-2402



NTNV-3DH5-Ant1-2441



