



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

Product Name: Wireless Headphone

Trade Mark: iHome

Test Model: HM-AU-BO-111

FCC ID: 2AHN6-AUBO111

### 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<br>[MHz] | 20db EBW<br>[MHz] | FL<br>[MHz] | FH<br>[MHz] | Limit<br>[MHz] | Verdict |
|-----------|---------|--------------------|-------------------|-------------|-------------|----------------|---------|
| DH5       | Ant1    | 2402               | 1.026             | 2401.559    | 2402.585    | ---            | ---     |
| DH5       | Ant1    | 2441               | 0.957             | 2440.616    | 2441.573    | ---            | ---     |
| DH5       | Ant1    | 2480               | 0.960             | 2479.625    | 2480.585    | ---            | ---     |
| 2DH5      | Ant1    | 2402               | 1.305             | 2401.439    | 2402.744    | ---            | ---     |
| 2DH5      | Ant1    | 2441               | 1.293             | 2440.454    | 2441.747    | ---            | ---     |
| 2DH5      | Ant1    | 2480               | 1.311             | 2479.439    | 2480.750    | ---            | ---     |

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





## Test Graphs





DH5-Ant1-2480



2DH5-Ant1-2402





2DH5-Ant1-2441



2DH5-Ant1-2480





## 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               | 0.91195      | 2401.6431   | 2402.5551   | ---            | ---     |
| DH5       | Ant1    | 2441               | 0.90744      | 2440.6387   | 2441.5461   | ---            | ---     |
| DH5       | Ant1    | 2480               | 0.89972      | 2479.6475   | 2480.5472   | ---            | ---     |
| 2DH5      | Ant1    | 2402               | 1.2038       | 2401.4914   | 2402.6952   | ---            | ---     |
| 2DH5      | Ant1    | 2441               | 1.2057       | 2440.4916   | 2441.6973   | ---            | ---     |
| 2DH5      | Ant1    | 2480               | 1.2087       | 2479.4942   | 2480.7029   | ---            | ---     |

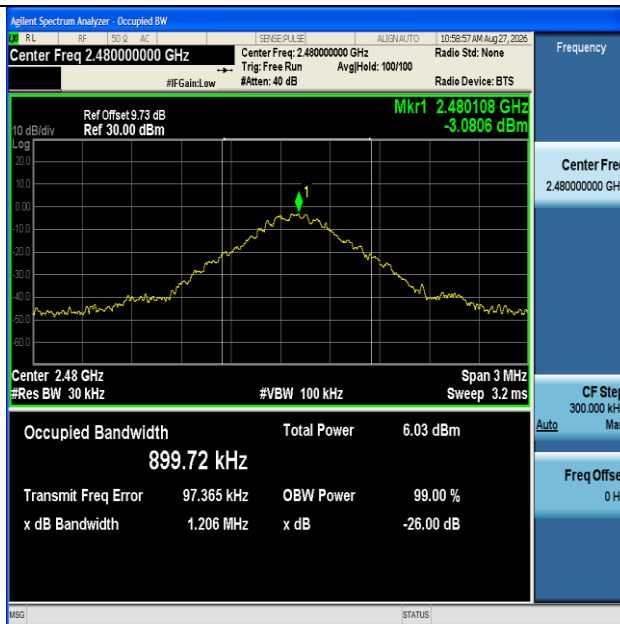
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)



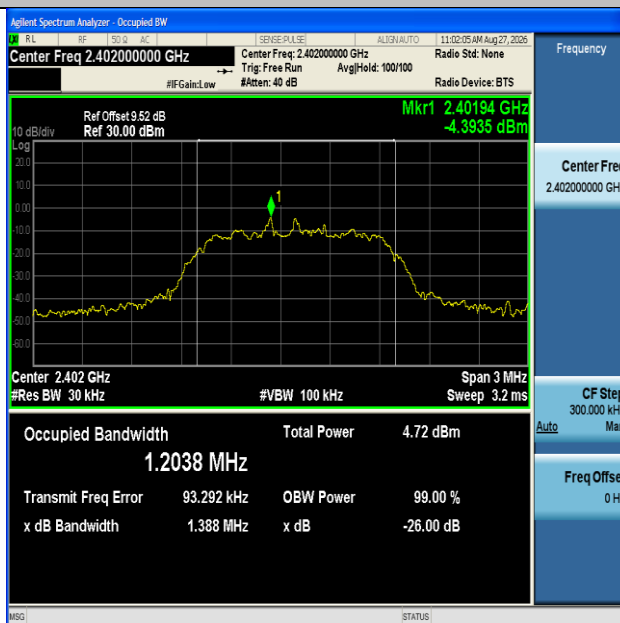


## Test Graphs



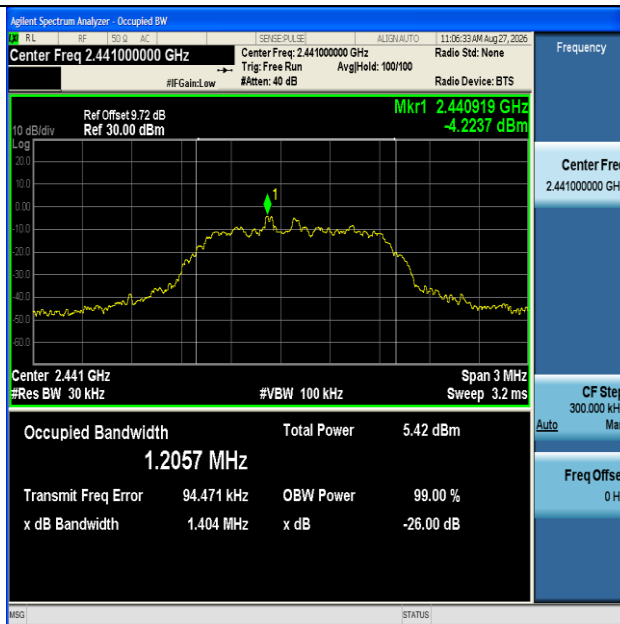


DH5-Ant1-2480

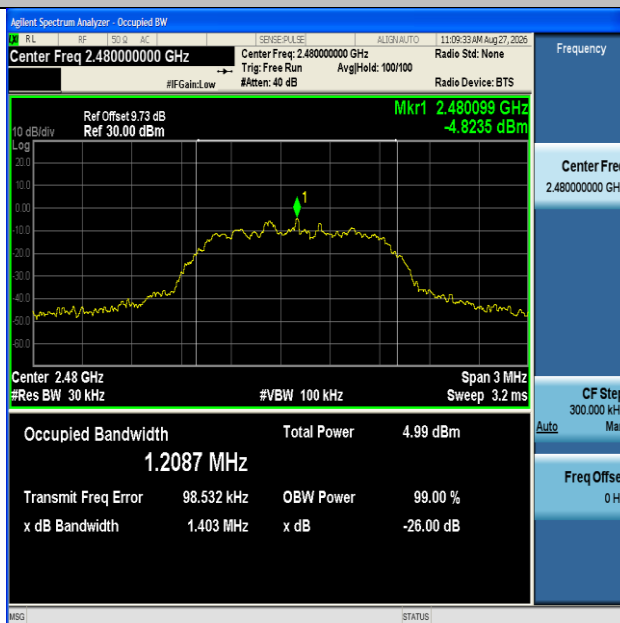


2DH5-Ant1-2402





2DH5-Ant1-2441



2DH5-Ant1-2480





## Appendix C: Maximum peak conducted output power

### Test Result

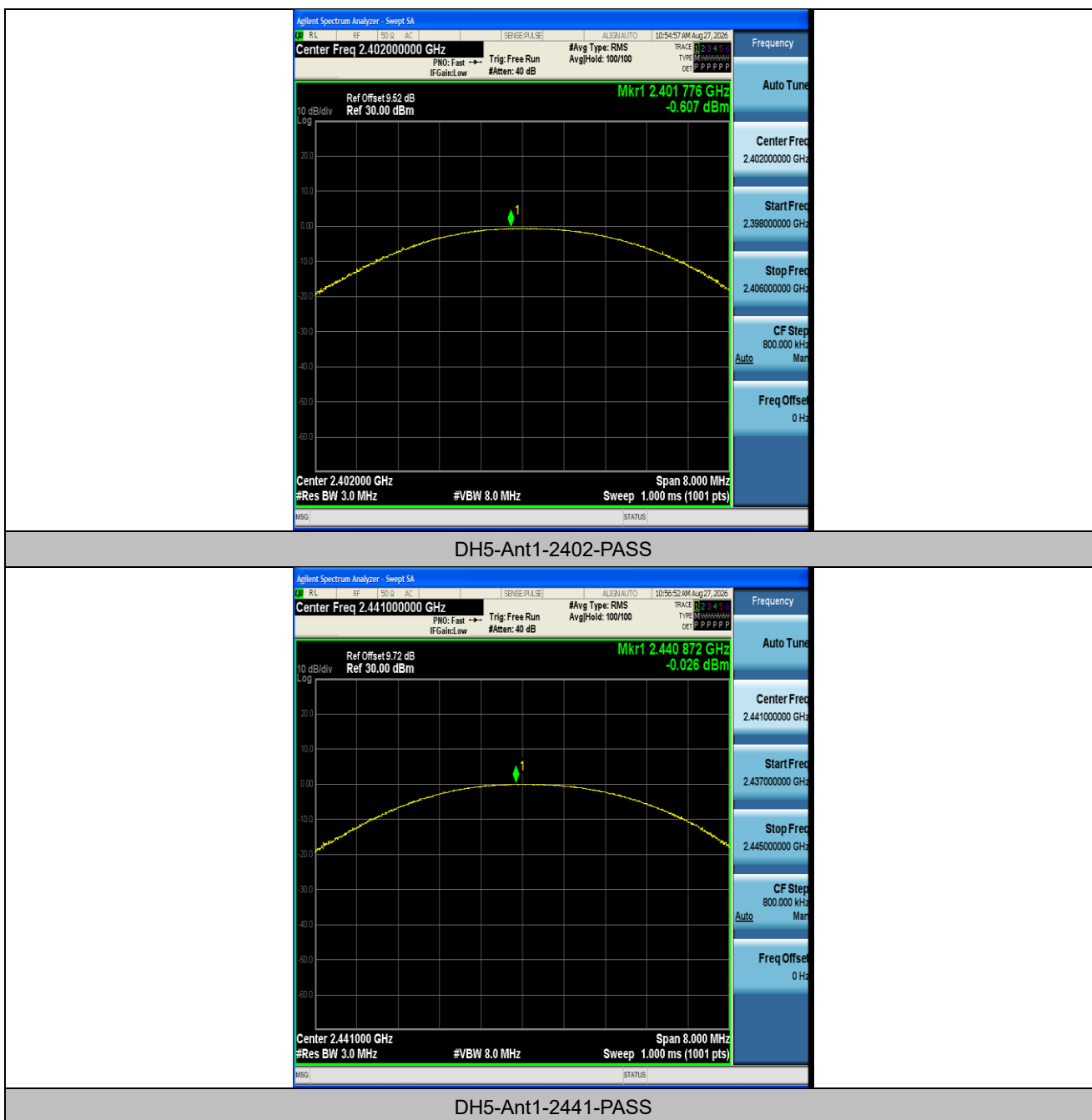
| Test Mode | Antenna | Frequency [MHz] | Conducted Peak Power [dBm] | Conducted Limit [dBm] | Verdict |
|-----------|---------|-----------------|----------------------------|-----------------------|---------|
| DH5       | Ant1    | 2402            | -0.61                      | ≤20.97                | PASS    |
| DH5       | Ant1    | 2441            | -0.03                      | ≤20.97                | PASS    |
| DH5       | Ant1    | 2480            | -0.29                      | ≤20.97                | PASS    |
| 2DH5      | Ant1    | 2402            | -0.05                      | ≤20.97                | PASS    |
| 2DH5      | Ant1    | 2441            | 0.76                       | ≤20.97                | PASS    |
| 2DH5      | Ant1    | 2480            | 0.44                       | ≤20.97                | PASS    |

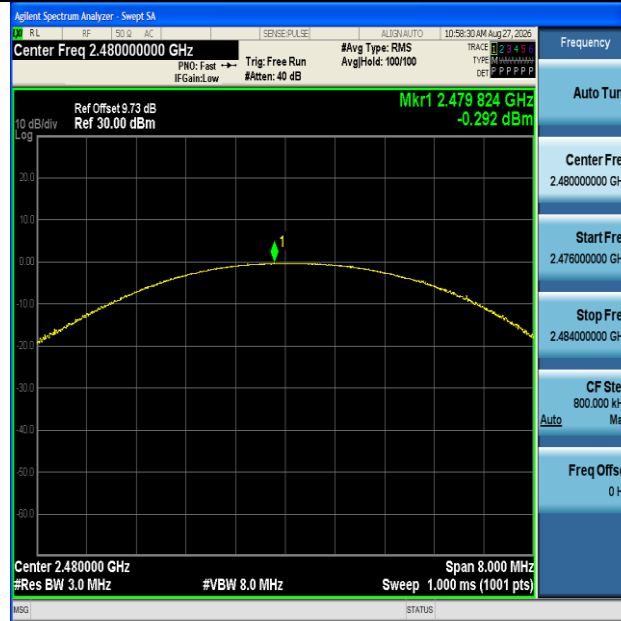
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)



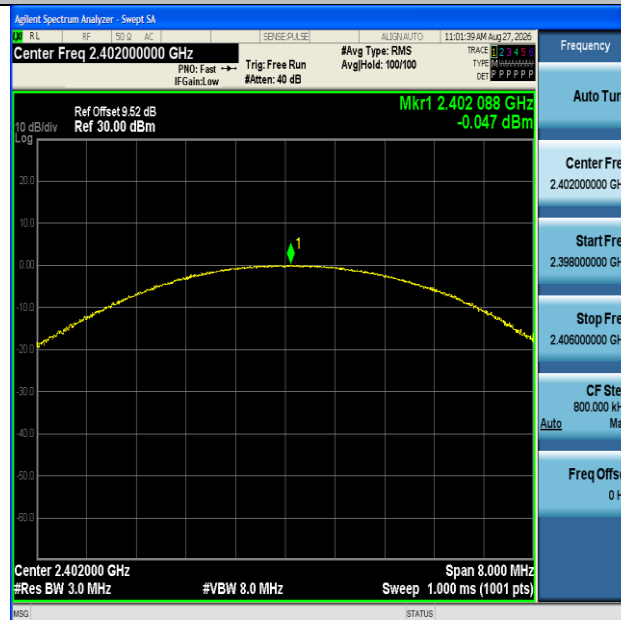


## Test Graphs



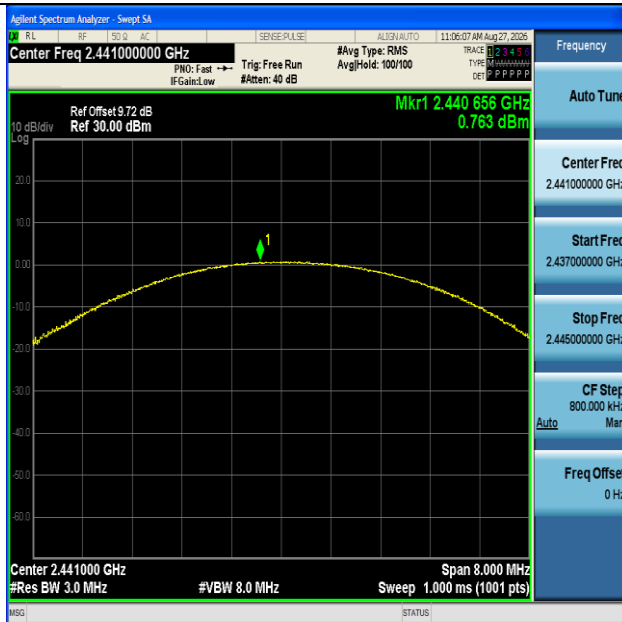


DH5-Ant1-2480-PASS

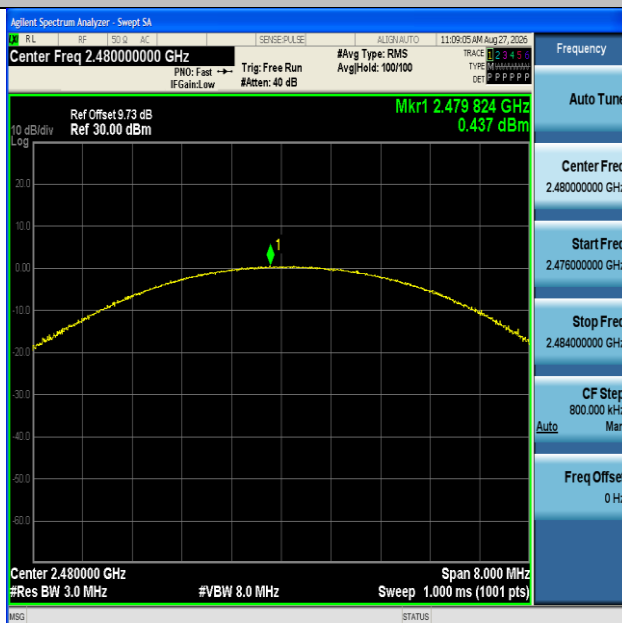


2DH5-Ant1-2402-PASS





2DH5-Ant1-2441-PASS



2DH5-Ant1-2480-PASS





## Appendix D: Carrier frequency separation

### Test Result

| Test Mode | Antenna | Frequency<br>[MHz] | Result<br>[MHz] | Limit<br>[MHz] | Verdict |
|-----------|---------|--------------------|-----------------|----------------|---------|
| DH5       | Ant1    | Hop                | 1.008           | $\geq 0.684$   | PASS    |
| 2DH5      | Ant1    | Hop                | 1.006           | $\geq 0.874$   | PASS    |

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





## Test Graphs





## Appendix E: Time of occupancy

### Test Result

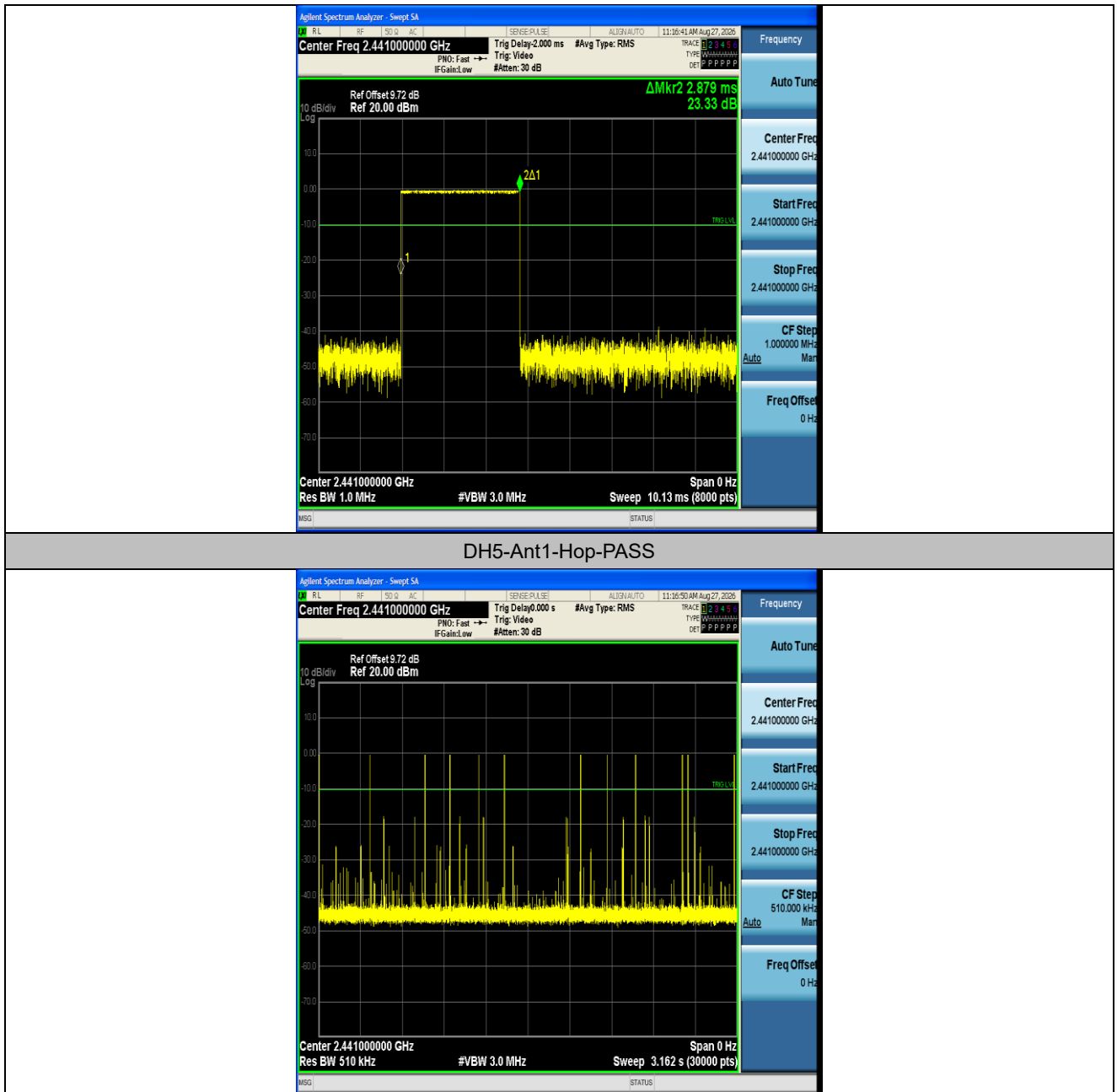
| Test Mode | Antenna | Frequency<br>[MHz] | Burst Width<br>[ms] | TotalHops<br>[Num] | Result<br>[s] | Limit<br>[s] | Verdict |
|-----------|---------|--------------------|---------------------|--------------------|---------------|--------------|---------|
| DH5       | Ant1    | Hop                | 2.879               | 120                | 0.345         | ≤0.4         | PASS    |
| 2DH5      | Ant1    | Hop                | 2.885               | 90                 | 0.26          | ≤0.4         | PASS    |

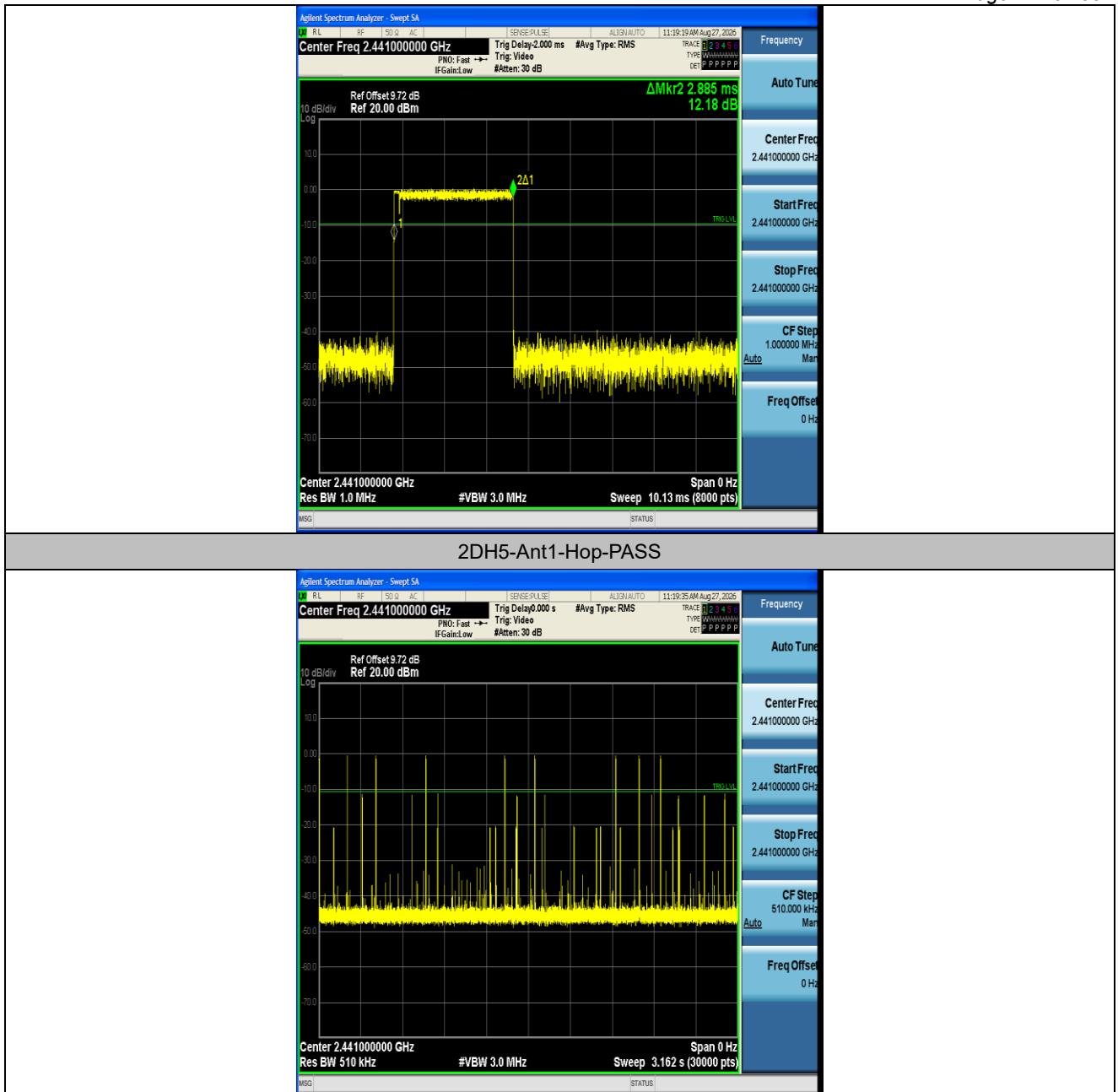
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)





## Test Graphs







## Appendix F: Number of hopping channels

### Test Result

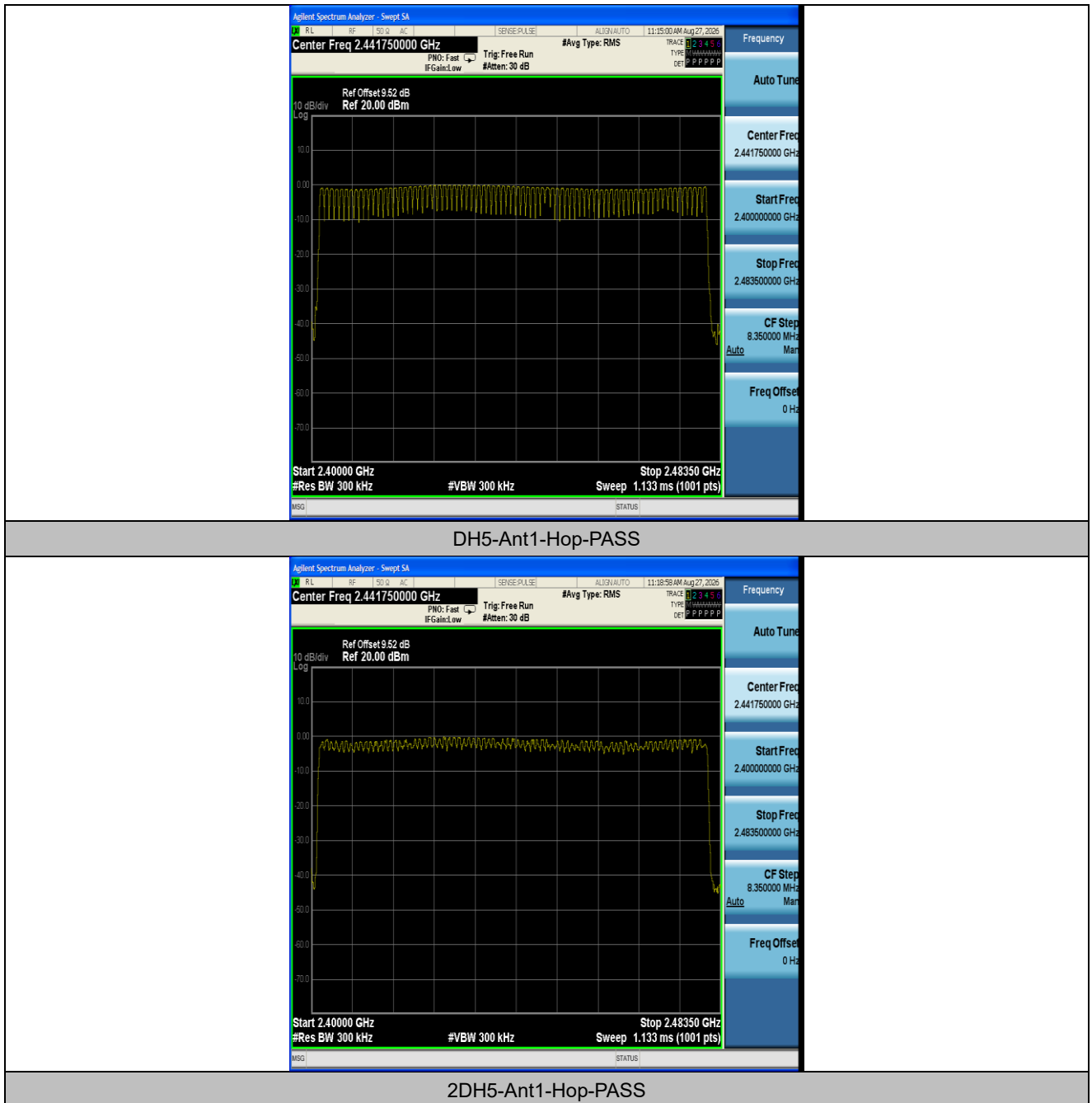
| Test Mode | Antenna | Frequency<br>[MHz] | Result<br>[Num] | Limit<br>[Num] | Verdict |
|-----------|---------|--------------------|-----------------|----------------|---------|
| DH5       | Ant1    | Hop                | 79              | ≥15            | PASS    |
| 2DH5      | Ant1    | Hop   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

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





## Test Graphs





## Appendix G: Band edge measurements

### Test Result

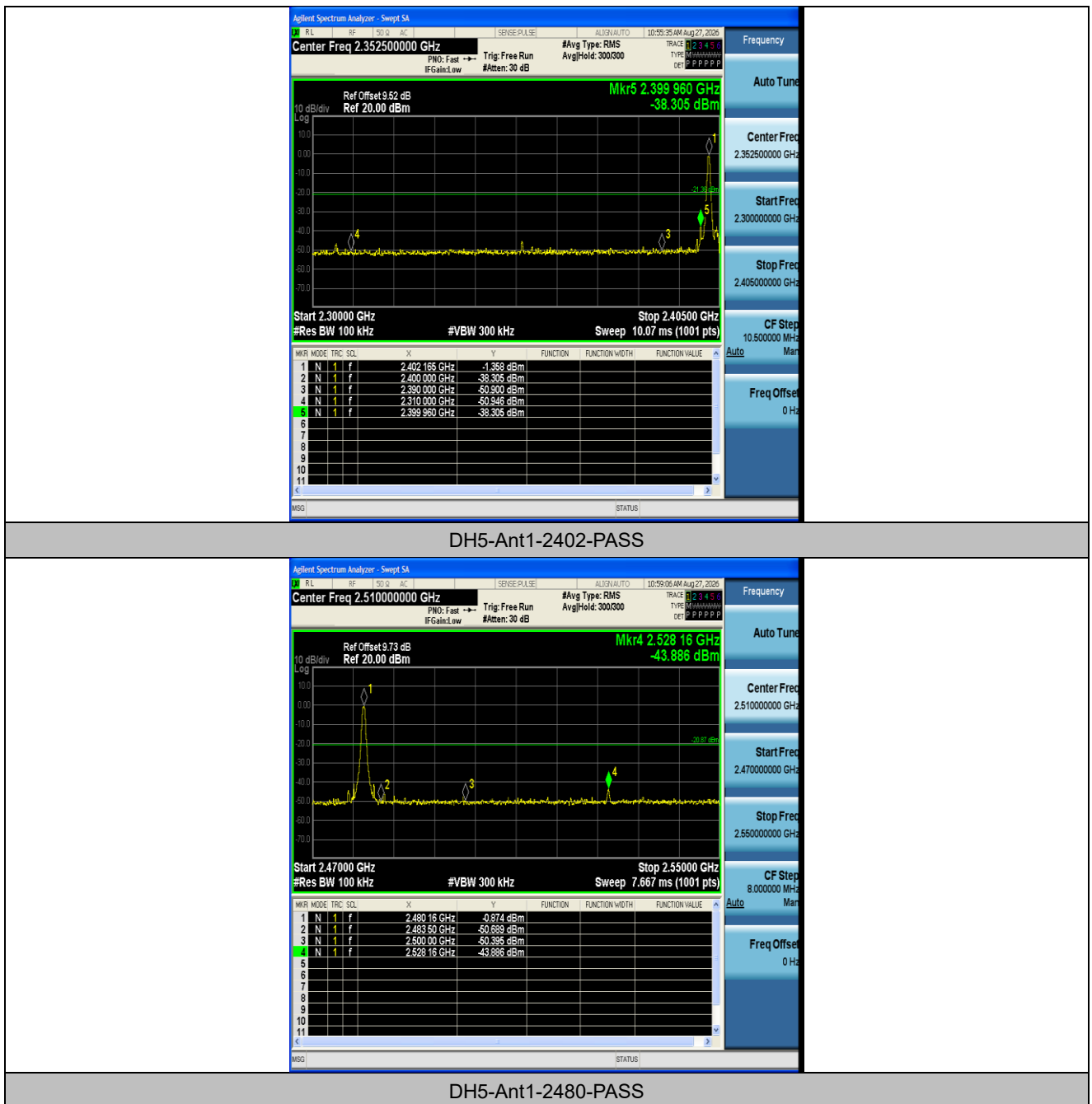
| Test Mode | Antenna | Ch.Name | Frequency [MHz] | RefLevel [dBm] | Result [dBm] | Limit [dBm]   | Verdict |
|-----------|---------|---------|-----------------|----------------|--------------|---------------|---------|
| DH5       | Ant1    | Low     | 2402            | -1.36          | -38.31       | $\leq -21.36$ | PASS    |
| DH5       | Ant1    | High    | 2480            | -0.87          | -43.89       | $\leq -20.87$ | PASS    |
| DH5       | Ant1    | Low     | Hop_2402        | -2.25          | -43.76       | $\leq -22.25$ | PASS    |
| DH5       | Ant1    | High    | Hop_2480        | -1.41          | -44.23       | $\leq -21.41$ | PASS    |
| 2DH5      | Ant1    | Low     | 2402            | -1.87          | -39.73       | $\leq -21.87$ | PASS    |
| 2DH5      | Ant1    | High    | 2480            | -0.88          | -37.44       | $\leq -20.88$ | PASS    |
| 2DH5      | Ant1    | Low     | Hop_2402        | -4.09          | -41.3        | $\leq -24.09$ | PASS    |
| 2DH5      | Ant1    | High    | Hop_2480        | -2.02          | -40.93       | $\leq -22.02$ | PASS    |

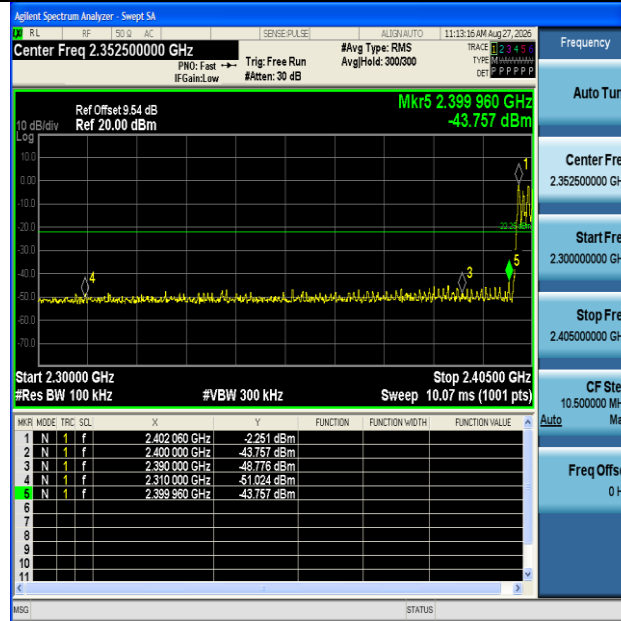
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)



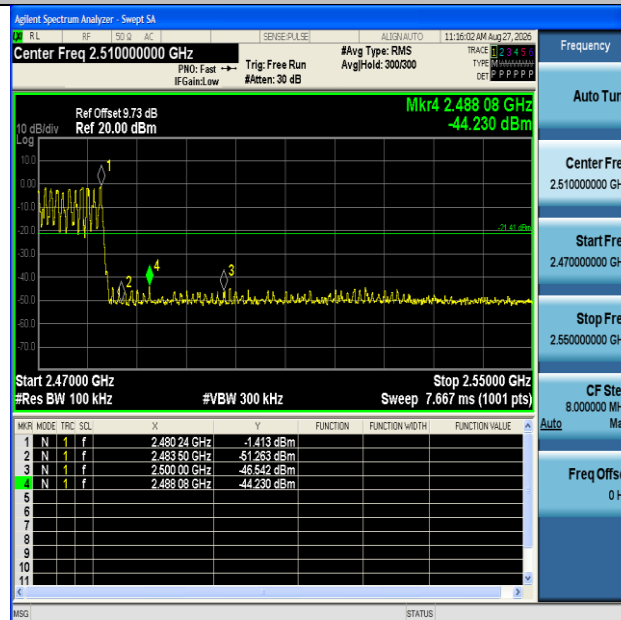


## Test Graphs





DH5-Ant1-Hop\_2402-PASS

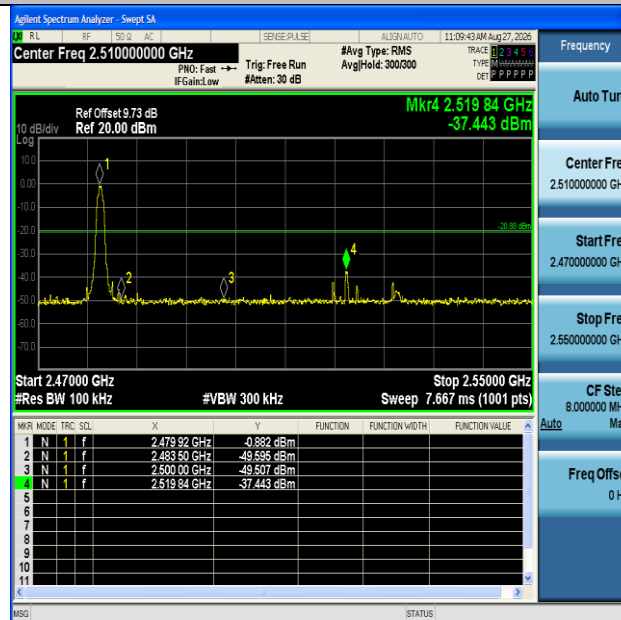


DH5-Ant1-Hop\_2480-PASS



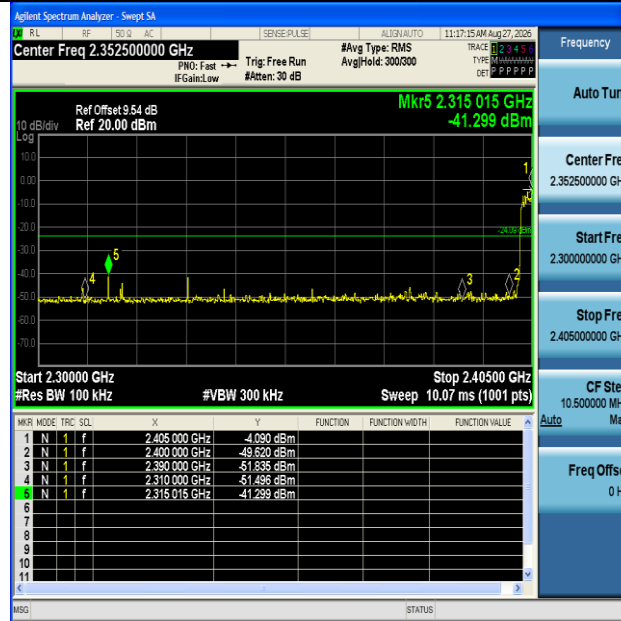


2DH5-Ant1-2402-PASS

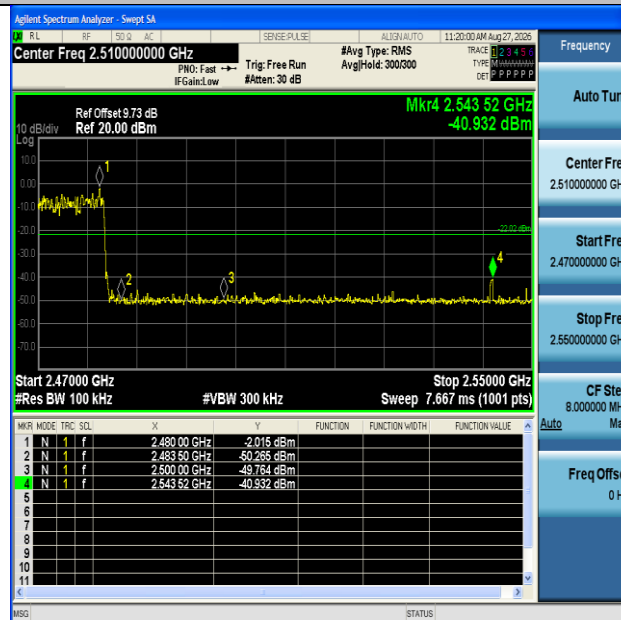


2DH5-Ant1-2480-PASS





2DH5-Ant1-Hop\_2402-PASS



2DH5-Ant1-Hop\_2480-PASS





## Appendix H: Conducted Spurious Emission

### Test Result

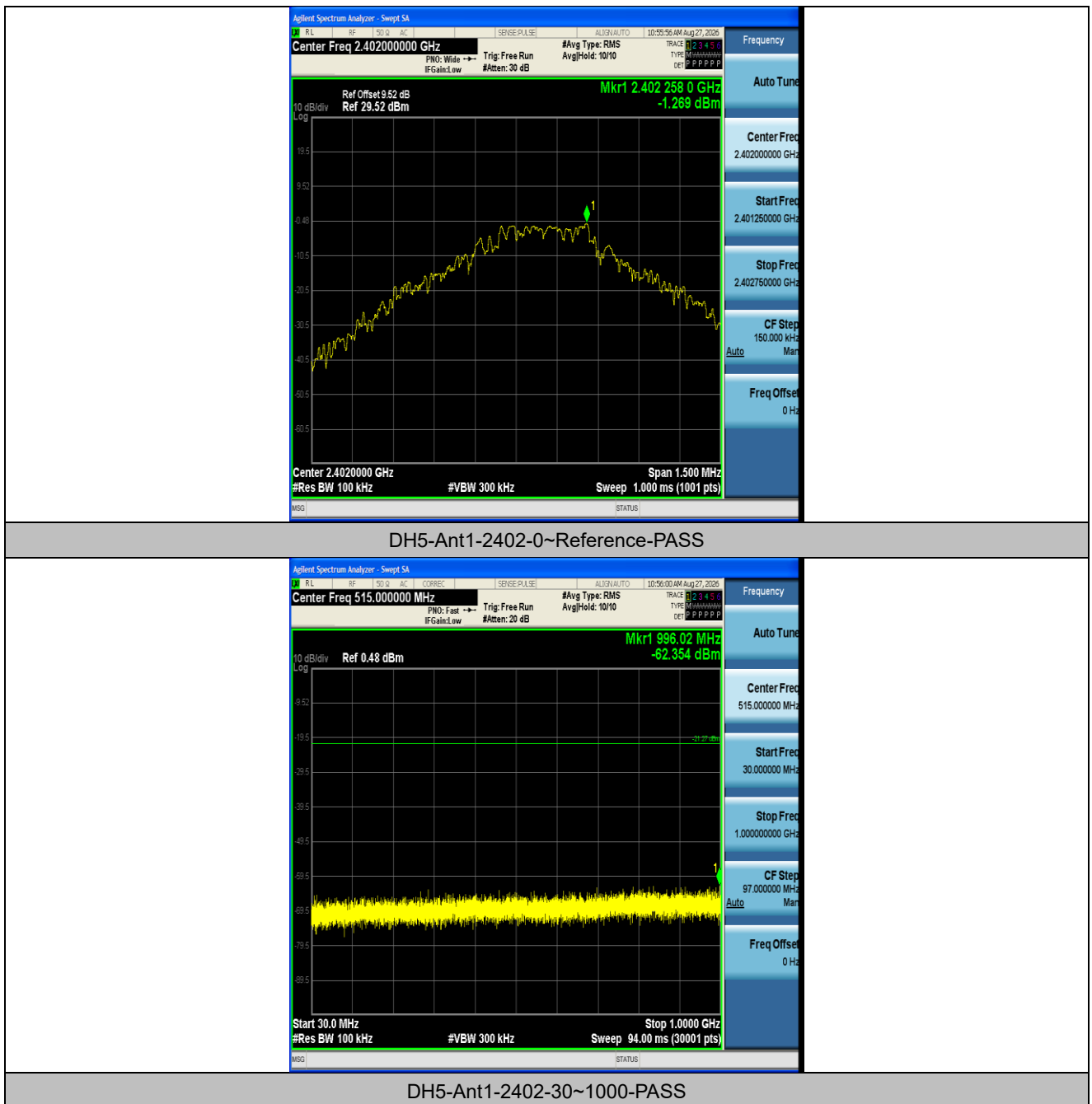
| Test Mode | Antenna | Frequency [MHz] | Freq. Range [MHz] | Ref. Level [dBm] | Result [dBm] | Limit [dBm] | Verdict |
|-----------|---------|-----------------|-------------------|------------------|--------------|-------------|---------|
| DH5       | Ant1    | 2402            | 0~Reference       | -1.27            | -1.27        | ---         | PASS    |
| DH5       | Ant1    | 2402            | 30~1000           | -1.27            | -62.35       | ≤-21.27     | PASS    |
| DH5       | Ant1    | 2402            | 1000~26500        | -1.27            | -31.92       | ≤-21.27     | PASS    |
| DH5       | Ant1    | 2441            | 0~Reference       | -1.18            | -1.18        | ---         | PASS    |
| DH5       | Ant1    | 2441            | 30~1000           | -1.18            | -61.64       | ≤-21.18     | PASS    |
| DH5       | Ant1    | 2441            | 1000~26500        | -1.18            | -36.1        | ≤-21.18     | PASS    |
| DH5       | Ant1    | 2480            | 0~Reference       | -1.65            | -1.65        | ---         | PASS    |
| DH5       | Ant1    | 2480            | 30~1000           | -1.65            | -61.91       | ≤-21.65     | PASS    |
| DH5       | Ant1    | 2480            | 1000~26500        | -1.65            | -35.71       | ≤-21.65     | PASS    |
| 2DH5      | Ant1    | 2402            | 0~Reference       | -1.74            | -1.74        | ---         | PASS    |
| 2DH5      | Ant1    | 2402            | 30~1000           | -1.74            | -62.61       | ≤-21.74     | PASS    |
| 2DH5      | Ant1    | 2402            | 1000~26500        | -1.74            | -36.84       | ≤-21.74     | PASS    |
| 2DH5      | Ant1    | 2441            | 0~Reference       | -1.62            | -1.62        | ---         | PASS    |
| 2DH5      | Ant1    | 2441            | 30~1000           | -1.62            | -61.88       | ≤-21.62     | PASS    |
| 2DH5      | Ant1    | 2441            | 1000~26500        | -1.62            | -36.29       | ≤-21.62     | PASS    |
| 2DH5      | Ant1    | 2480            | 0~Reference       | -4.05            | -4.05        | ---         | PASS    |
| 2DH5      | Ant1    | 2480            | 30~1000           | -4.05            | -59.45       | ≤-24.05     | PASS    |
| 2DH5      | Ant1    | 2480            | 1000~26500        | -4.05            | -37.1        | ≤-24.05     | PASS    |

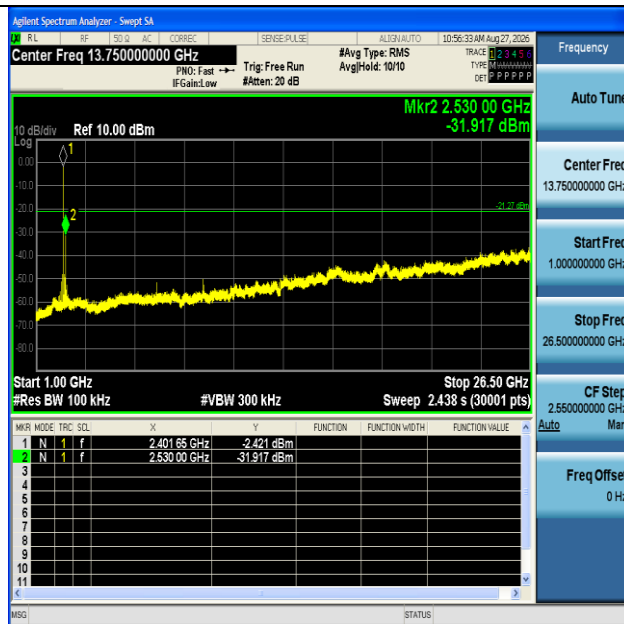
Note: offset(dB) in Reference test plots = cable loss(dB) + attenuator factor(dB); For spurious emissions plots from 30MHz to 26.5GHz, the cable loss and attenuator factors have been set in the 'Input Correction' of the Spectrum Analyzer during the test.



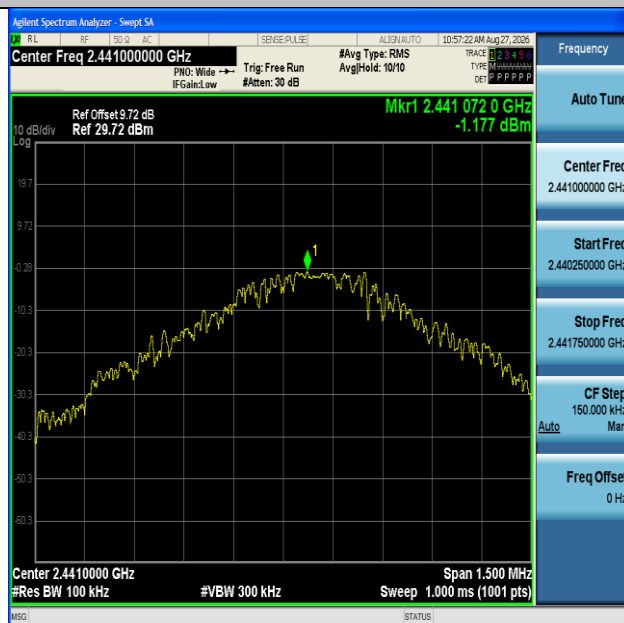


## Test Graphs



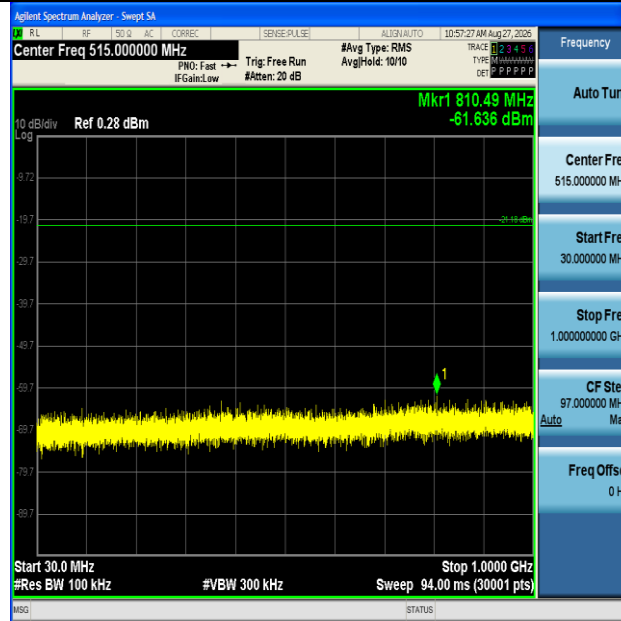


DH5-Ant1-2402-1000~26500-PASS

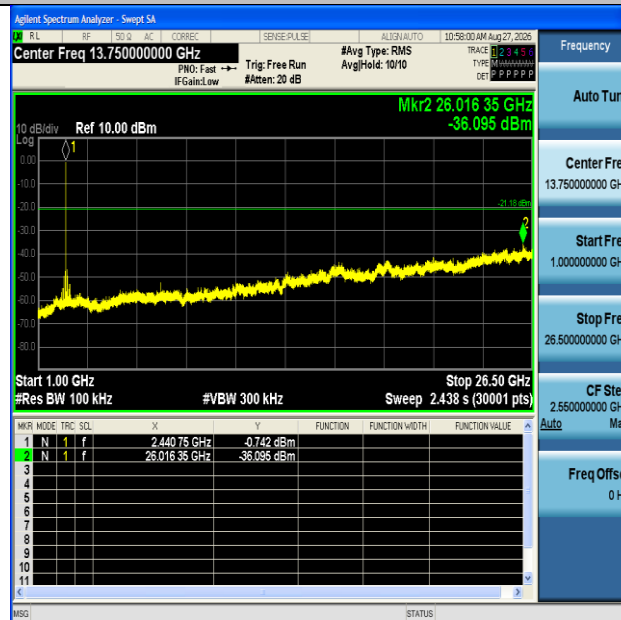


DH5-Ant1-2441-0~Reference-PASS



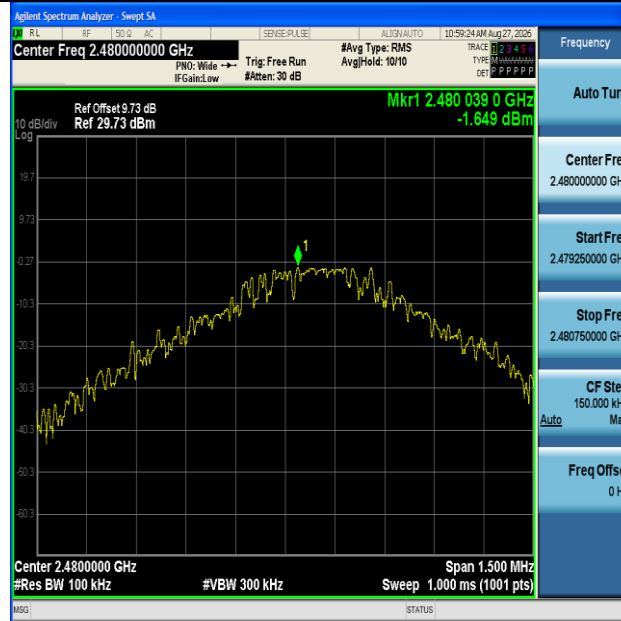


DH5-Ant1-2441-30~1000-PASS

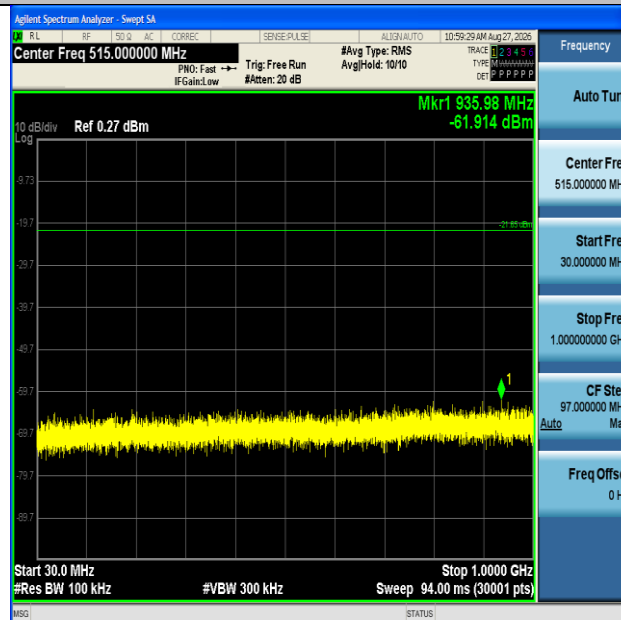


DH5-Ant1-2441-1000~26500-PASS





DH5-Ant1-2480-0~Reference-PASS



DH5-Ant1-2480-30~1000-PASS



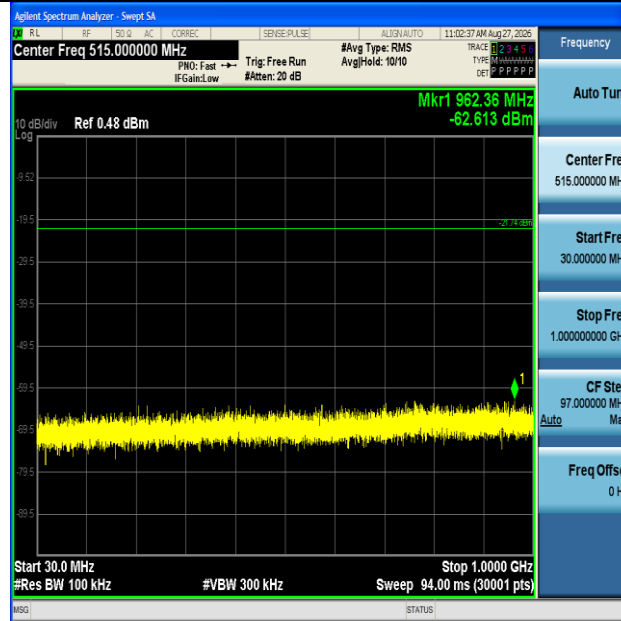


DH5-Ant1-2480-1000~26500-PASS

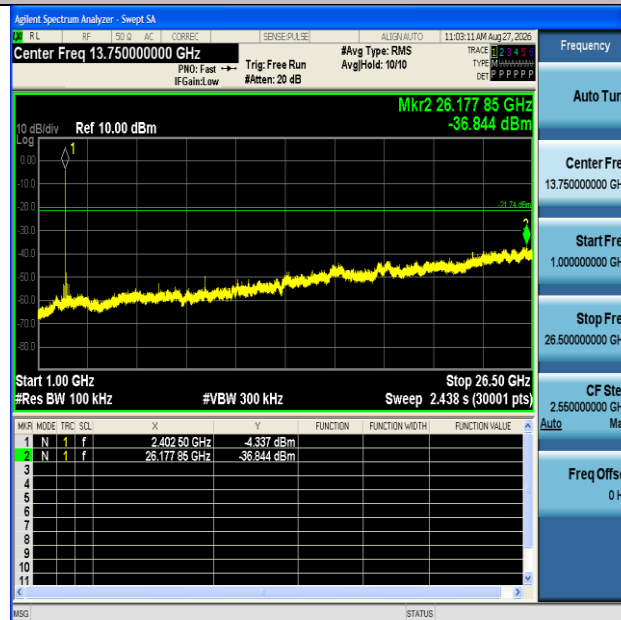


2DH5-Ant1-2402-0~Reference-PASS



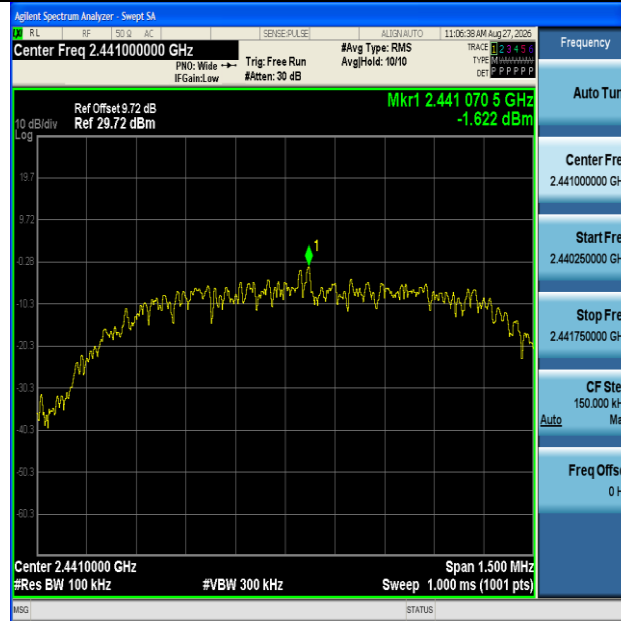


2DH5-Ant1-2402-30~1000-PASS

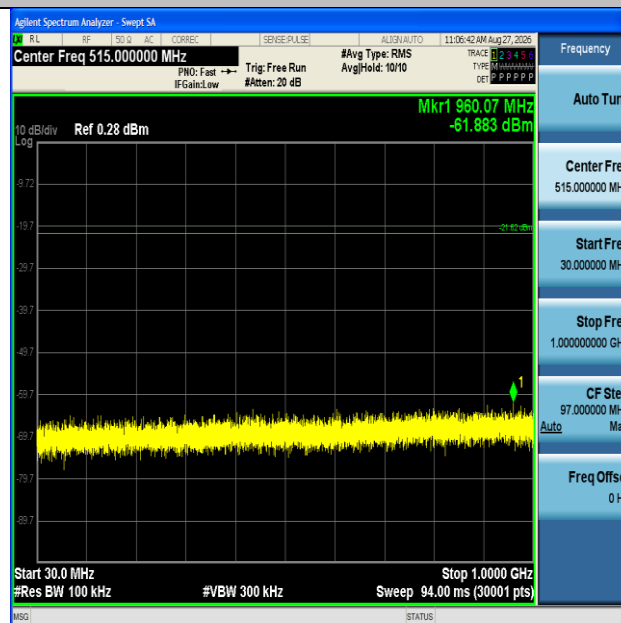


2DH5-Ant1-2402-1000~26500-PASS





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



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



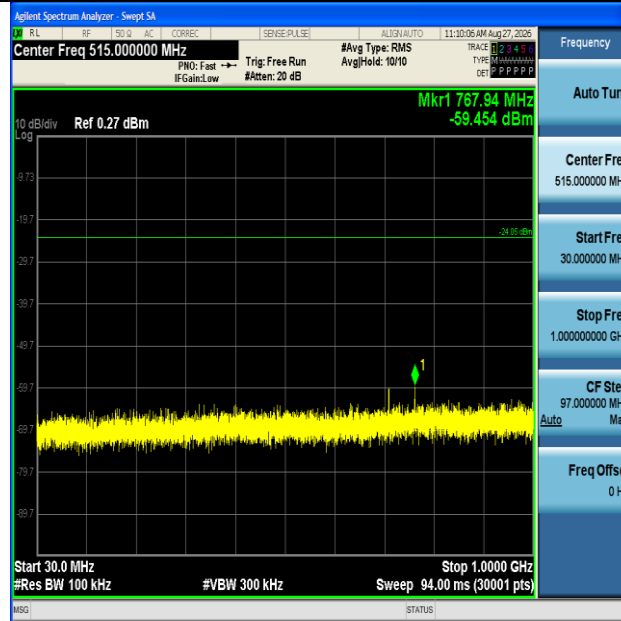


2DH5-Ant1-2441-1000~26500-PASS

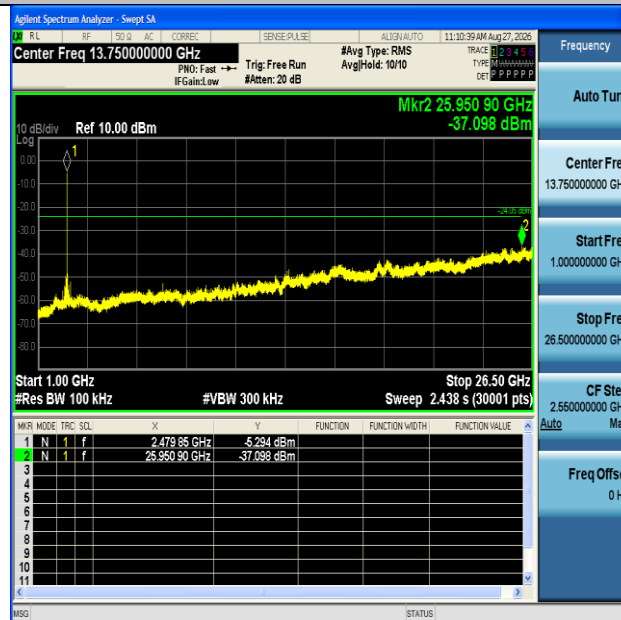


2DH5-Ant1-2480-0~Reference-PASS





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



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





## Appendix I: Duty Cycle

### Test Result

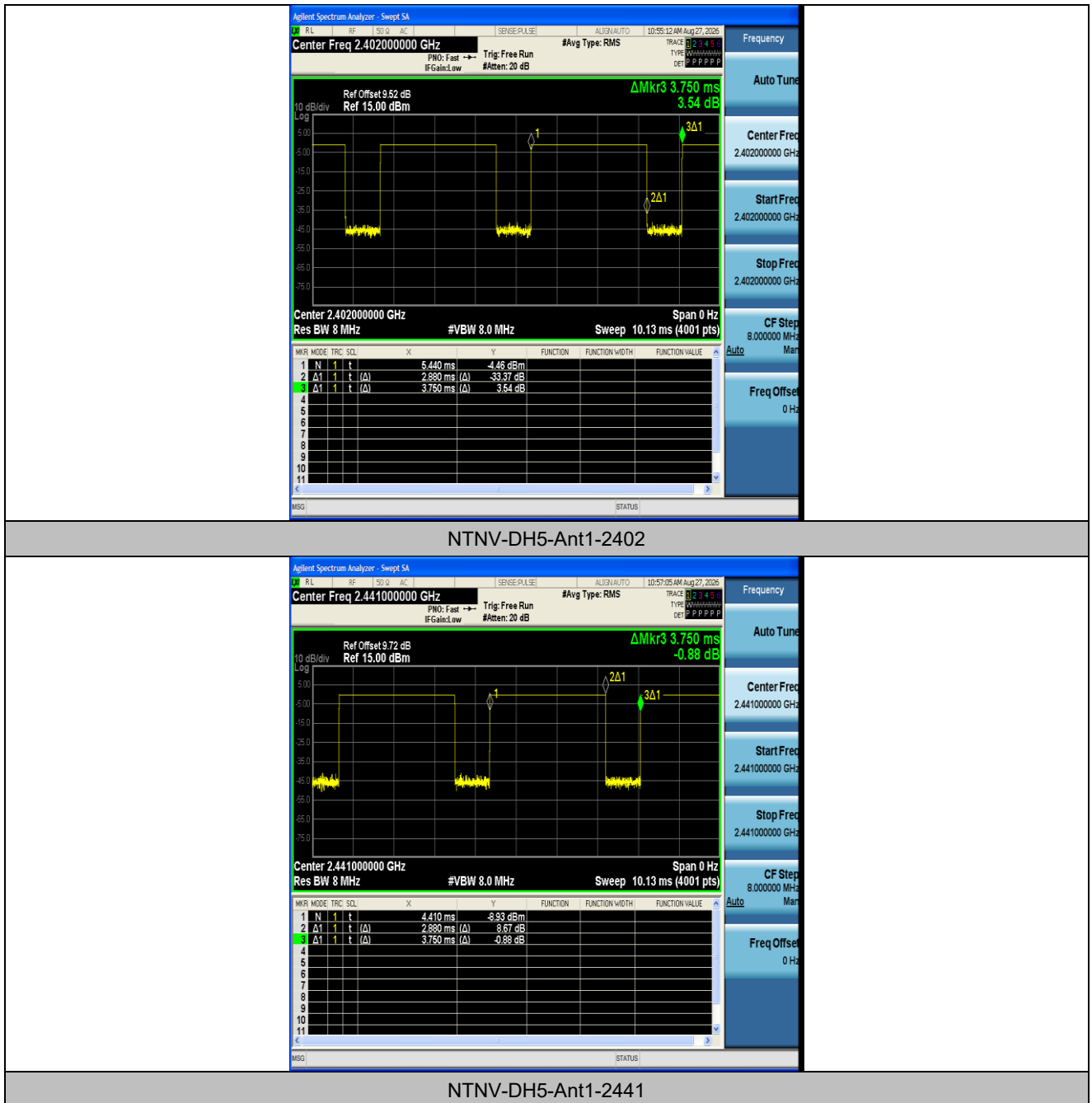
| Test Mode | Antenna | Frequency<br>[MHz] | ON Time<br>[ms] | Period<br>[ms] | Duty Cycle<br>[%] | Duty Cycle<br>Factor<br>[dB] |
|-----------|---------|--------------------|-----------------|----------------|-------------------|------------------------------|
| DH5       | Ant1    | 2402               | 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               | 2.89            | 3.75           | 77.07             | 1.13                         |
| 2DH5      | Ant1    | 2441               | 2.88            | 3.75           | 76.80             | 1.15                         |
| 2DH5      | Ant1    | 2480               | 2.89            | 3.76           | 76.86             | 1.14                         |

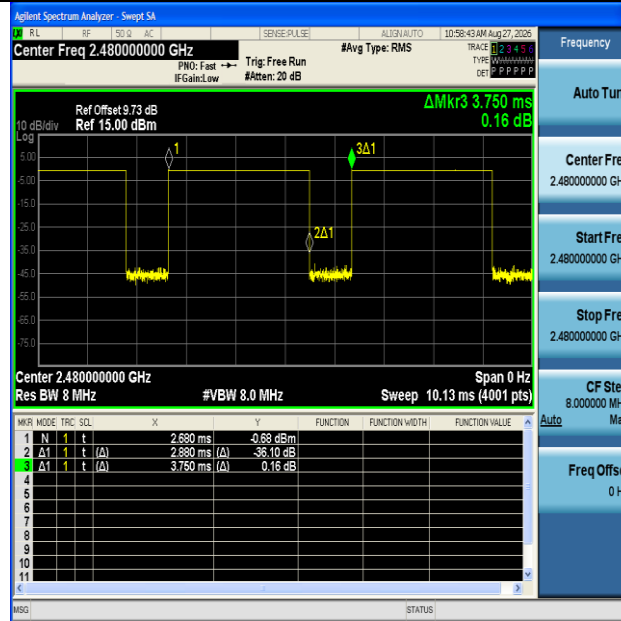
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

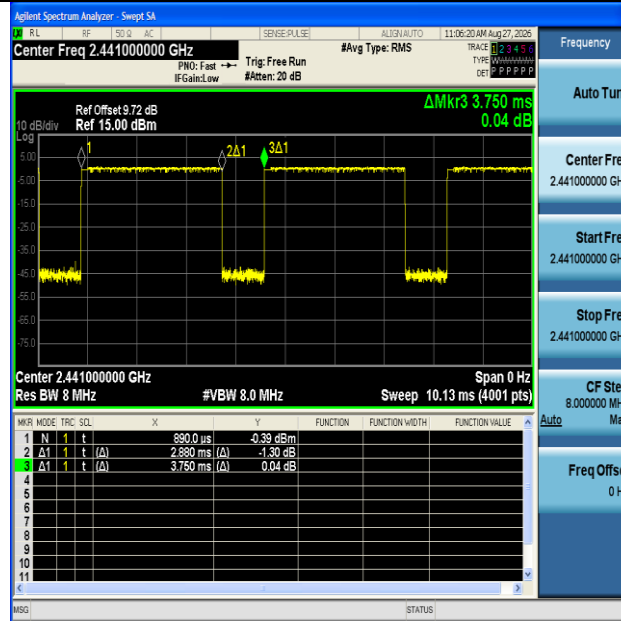




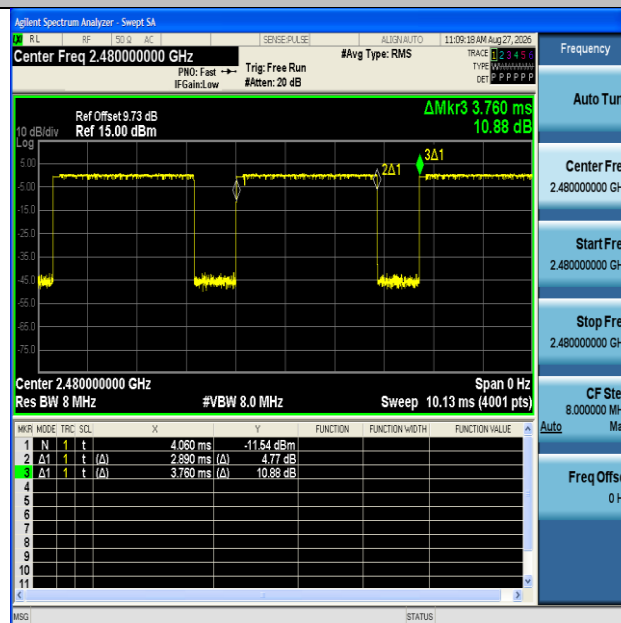
## Test Graphs







NTNV-2DH5-Ant1-2441



NTNV-2DH5-Ant1-2480

