

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

Product Name: Bluetooth headset

Trade Mark: ART+SOUND

Test Model: ASWH14BLG

FCC ID: 2BHI2-ASWH14BLG

Environmental Conditions

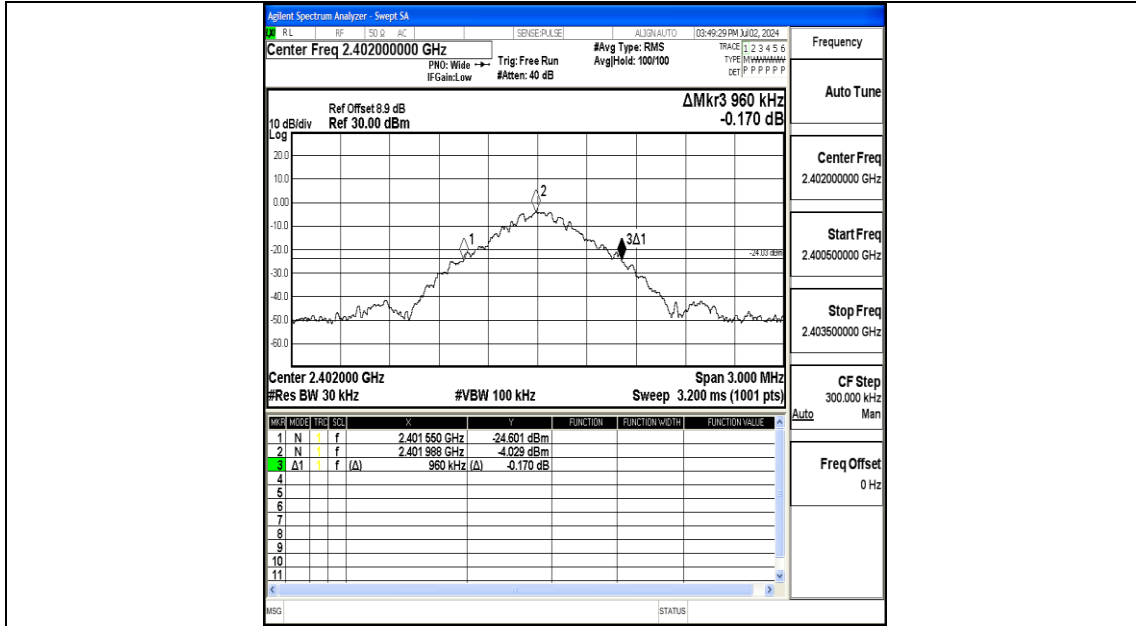
| | |
|--------------------|-----------|
| Temperature: | 23.8℃ |
| Relative Humidity: | 58% |
| ATM Pressure: | 100.0 kPa |
| Test Engineer: | Allen Lai |
| Supervised by: | Hugo Chen |
| NOTE | N/A |

Appendix A: 20dB Emission Bandwidth

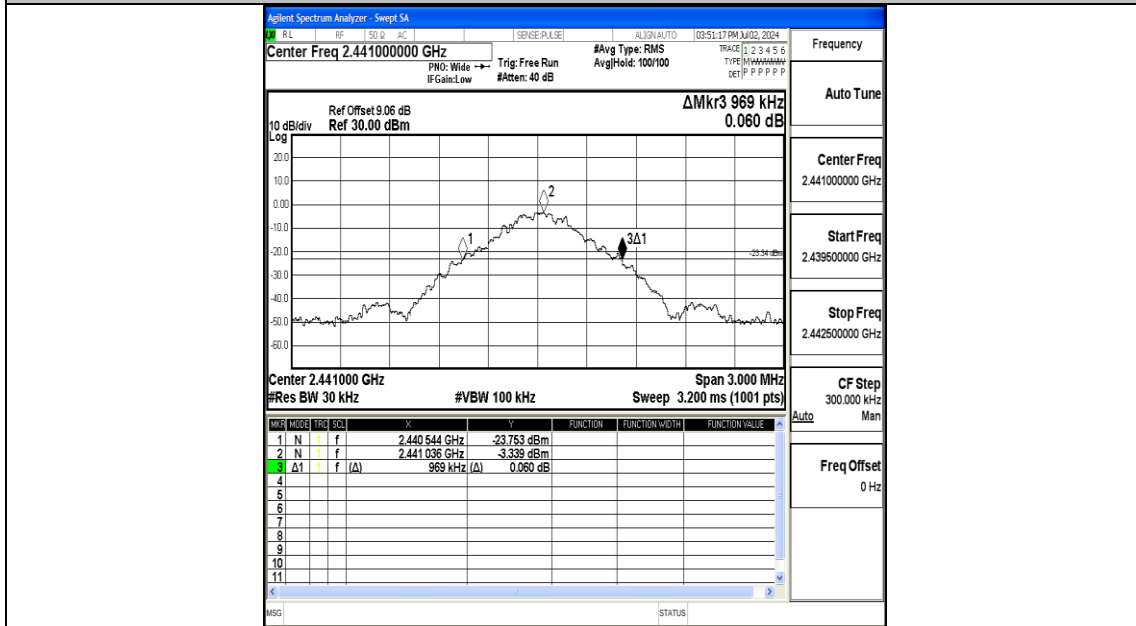
Test Result

| TestMode | Antenna | Frequency[MHz] | 20db EBW[MHz] | FL[MHz] | FH[MHz] | Limit[MHz] | Verdict |
|----------|---------|----------------|------------------|----------|----------|------------|---------|
| DH5 | Ant1 | 2402 | 0.960 | 2401.550 | 2402.510 | --- | --- |
| DH5 | Ant1 | 2441 | 0.969 | 2440.544 | 2441.513 | --- | --- |
| DH5 | Ant1 | 2480 | 0.972 | 2479.541 | 2480.513 | --- | --- |
| 2DH5 | Ant1 | 2402 | 1.317 | 2401.355 | 2402.672 | --- | --- |
| 2DH5 | Ant1 | 2441 | 1.314 | 2440.355 | 2441.669 | --- | --- |
| 2DH5 | Ant1 | 2480 | 1.284 | 2479.382 | 2480.666 | --- | --- |

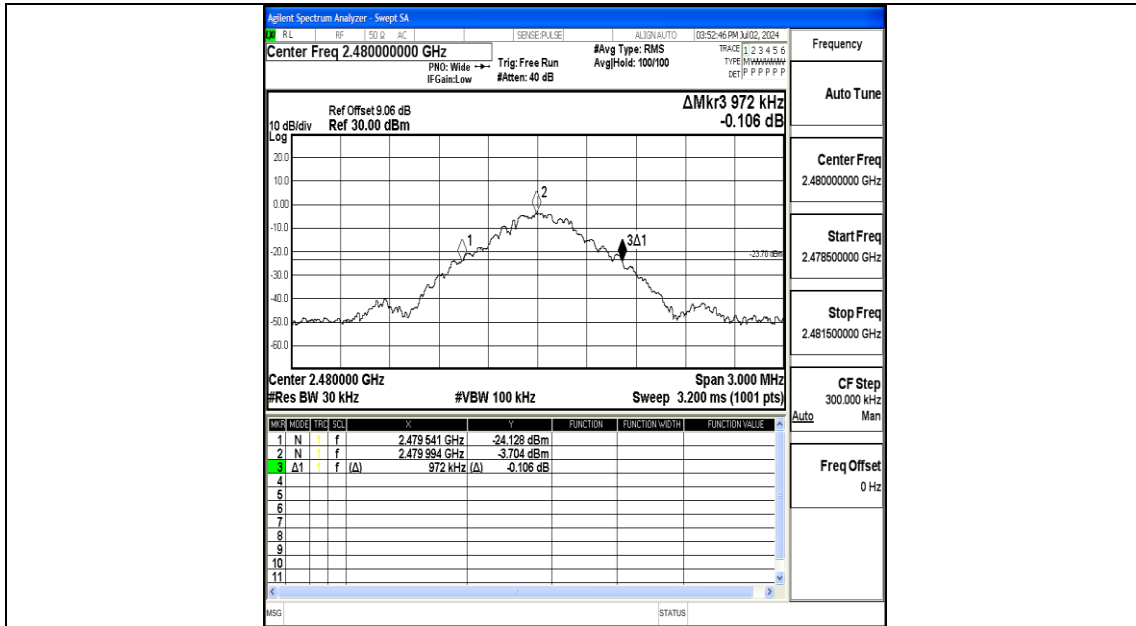
Test Graphs



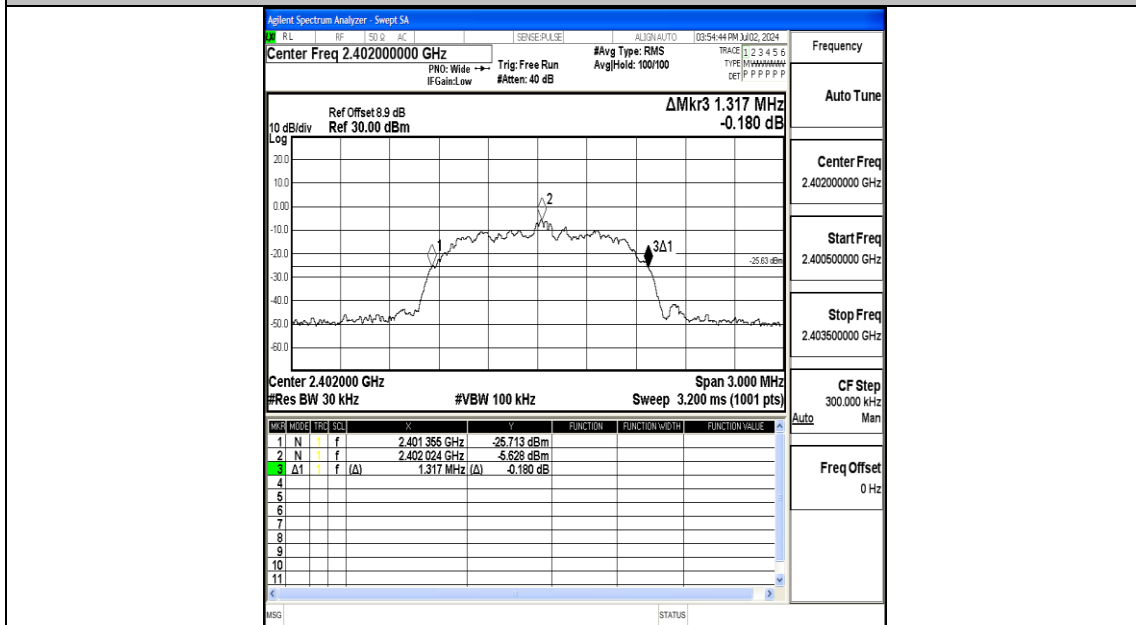
DH5-Ant1-2402



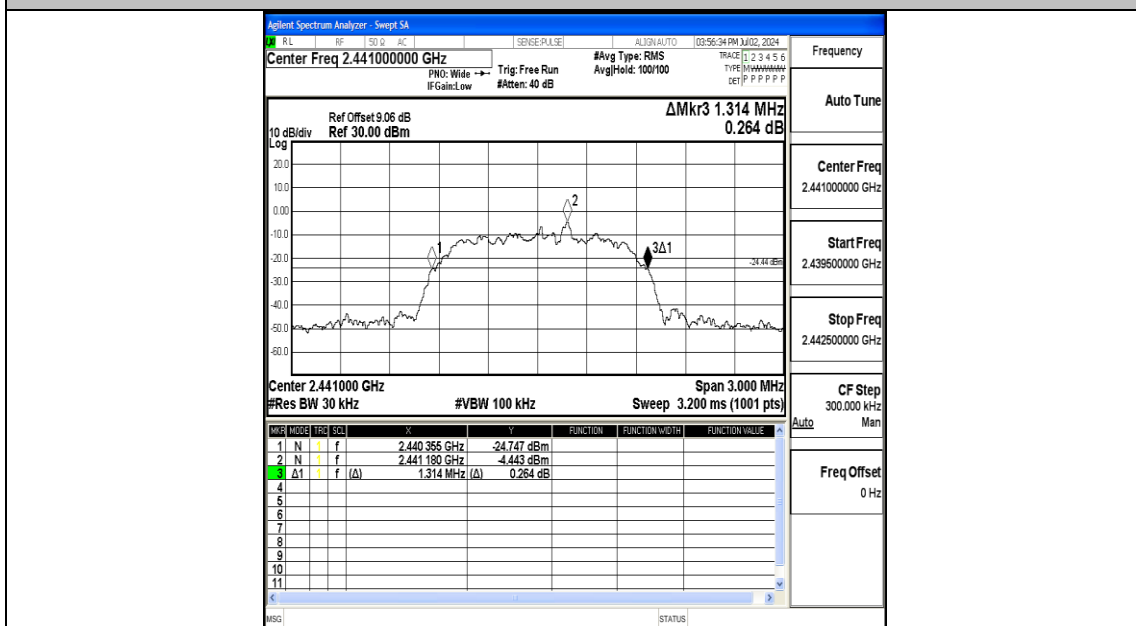
DH5-Ant1-2441



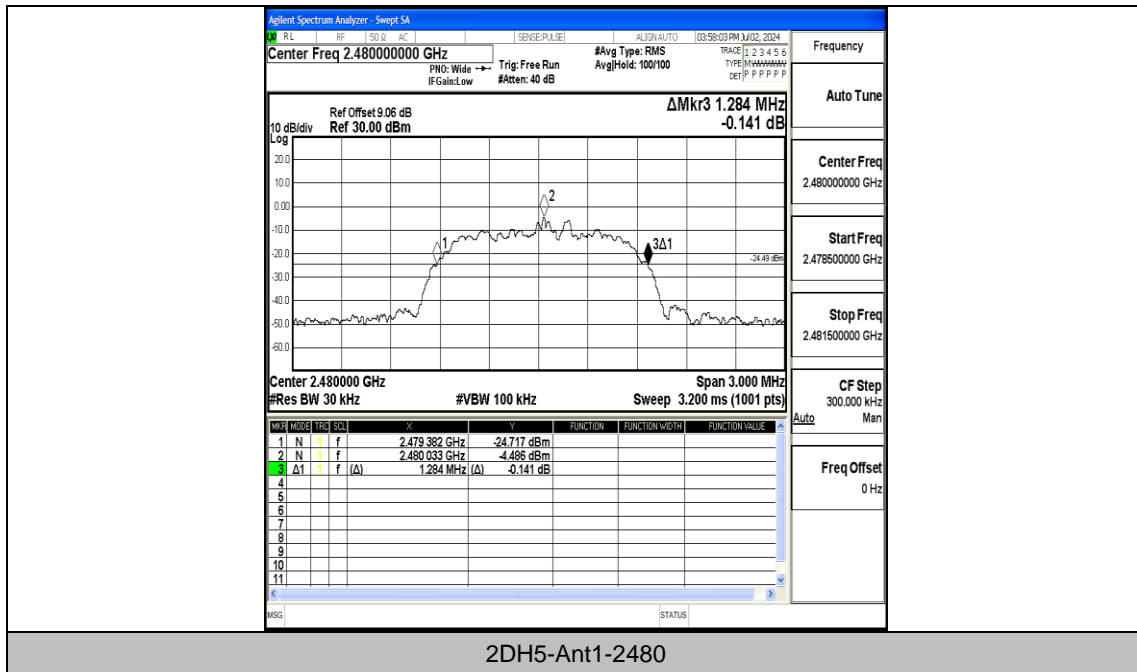
DH5-Ant1-2480



2DH5-Ant1-2402



2DH5-Ant1-2441

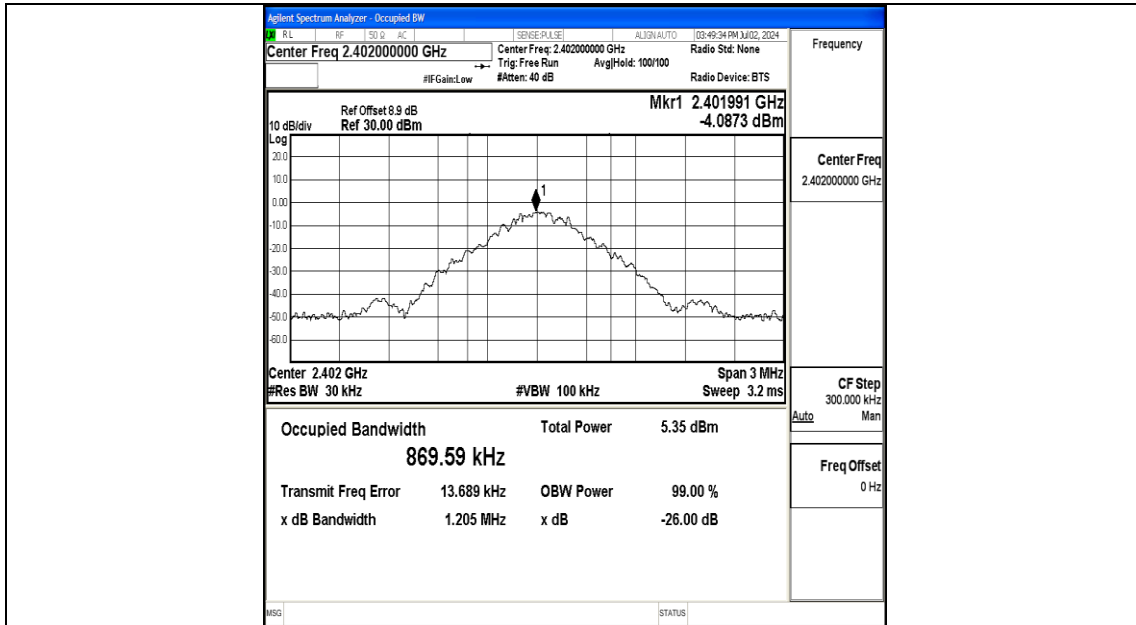


Appendix B: Occupied Channel Bandwidth

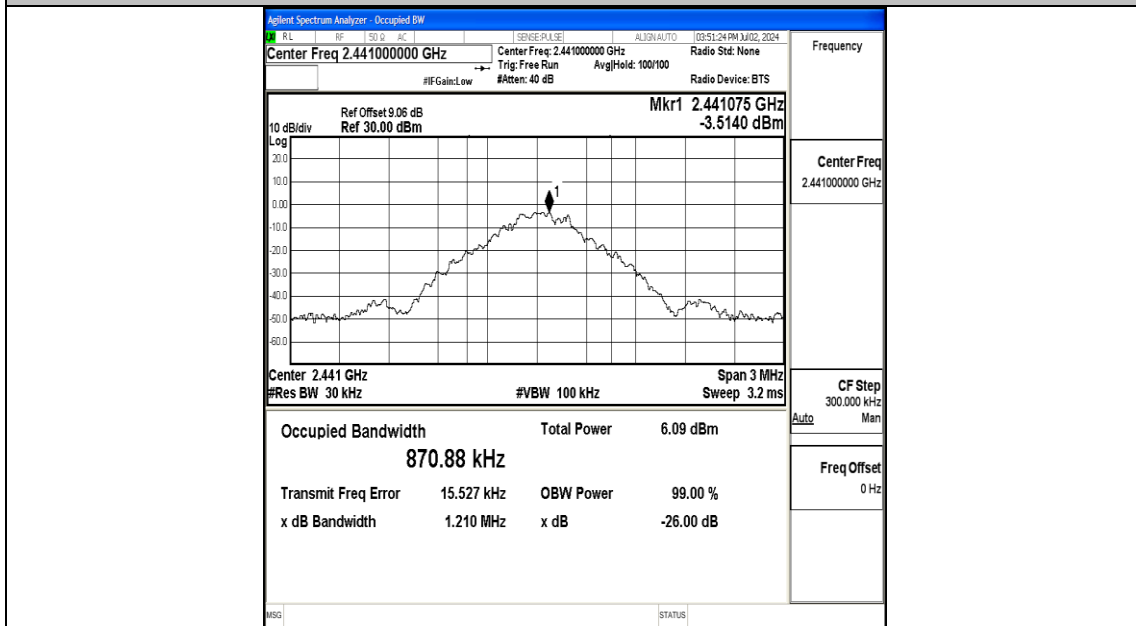
Test Result

| TestMode | Antenna | Frequency[MHz] | OCB [MHz] | FL[MHz] | FH[MHz] | Limit[MHz] | Verdict |
|----------|---------|----------------|-----------|-----------|-----------|------------|---------|
| DH5 | Ant1 | 2402 | 0.86959 | 2401.5789 | 2402.4485 | --- | --- |
| DH5 | Ant1 | 2441 | 0.87088 | 2440.5801 | 2441.4510 | --- | --- |
| DH5 | Ant1 | 2480 | 0.87749 | 2479.5770 | 2480.4545 | --- | --- |
| 2DH5 | Ant1 | 2402 | 1.1691 | 2401.4313 | 2402.6004 | --- | --- |
| 2DH5 | Ant1 | 2441 | 1.1713 | 2440.4300 | 2441.6013 | --- | --- |
| 2DH5 | Ant1 | 2480 | 1.1750 | 2479.4266 | 2480.6016 | --- | --- |

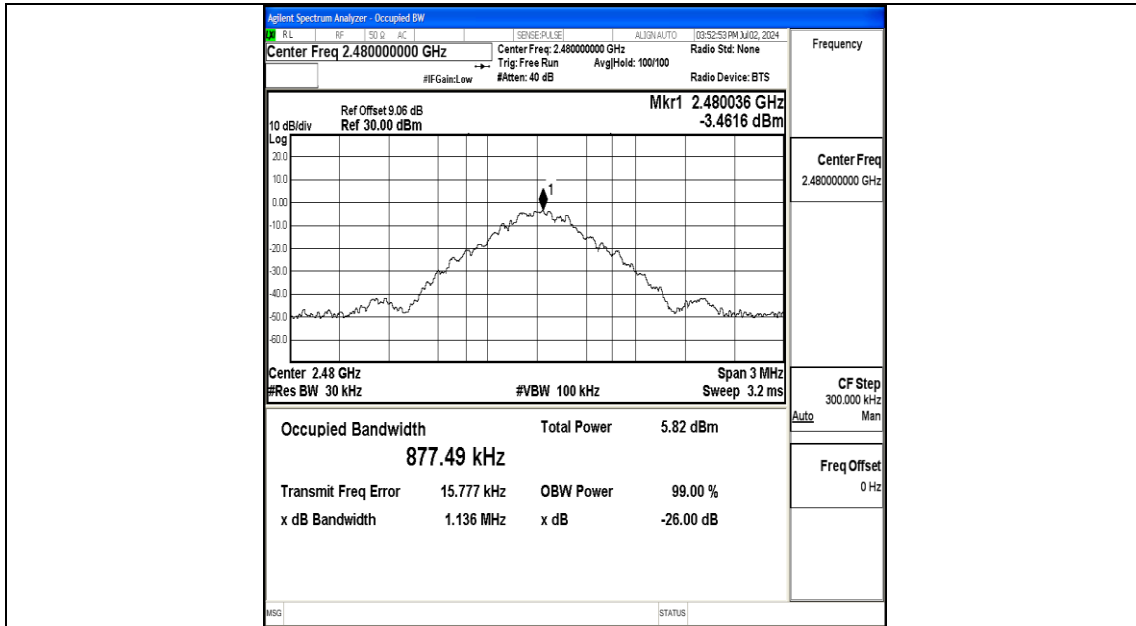
Test Graphs



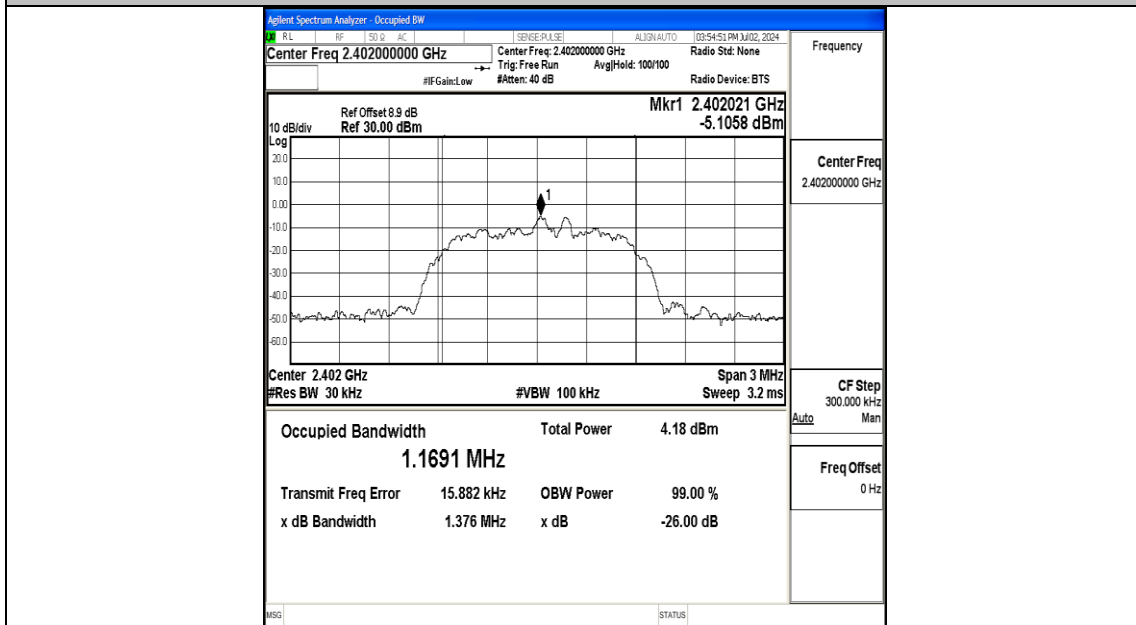
DH5-Ant1-2402



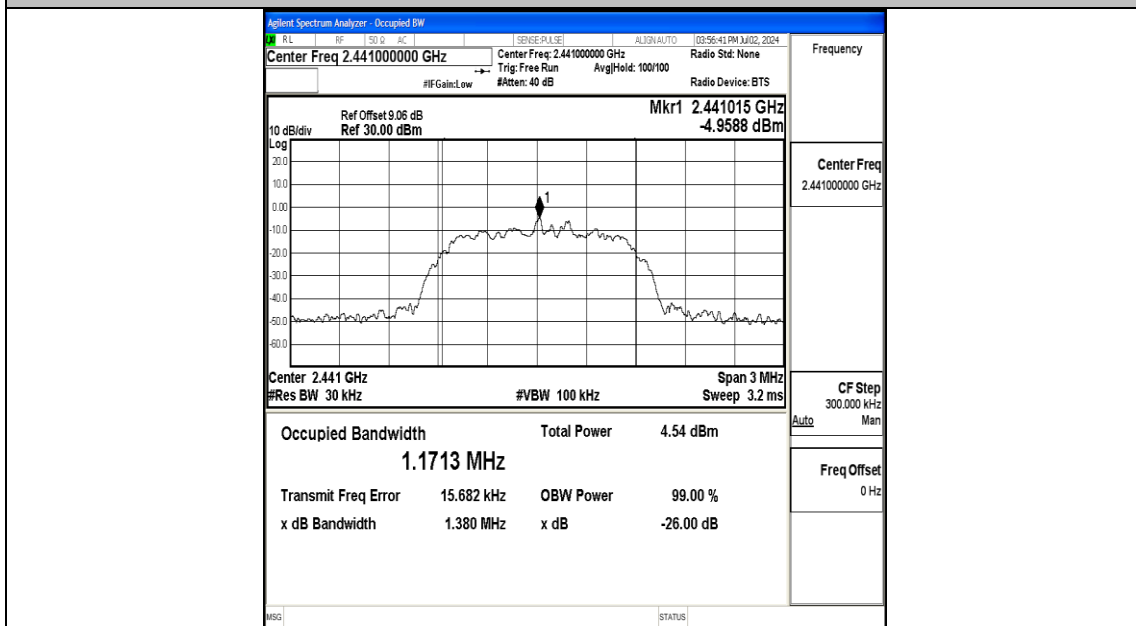
DH5-Ant1-2441



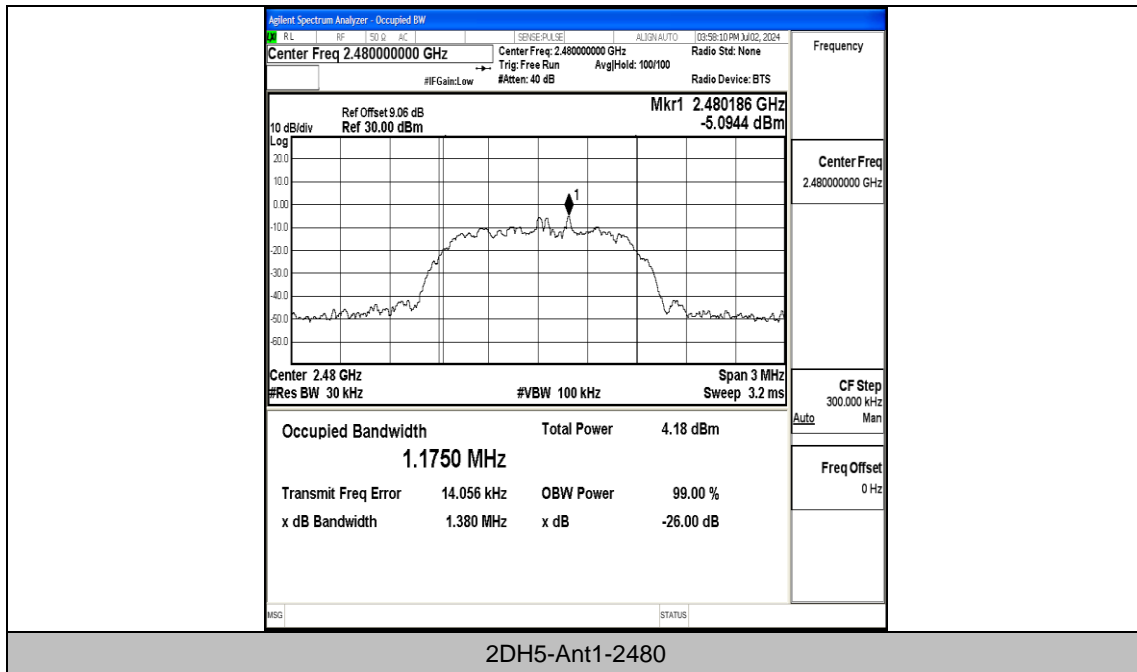
DH5-Ant1-2480



2DH5-Ant1-2402



2DH5-Ant1-2441



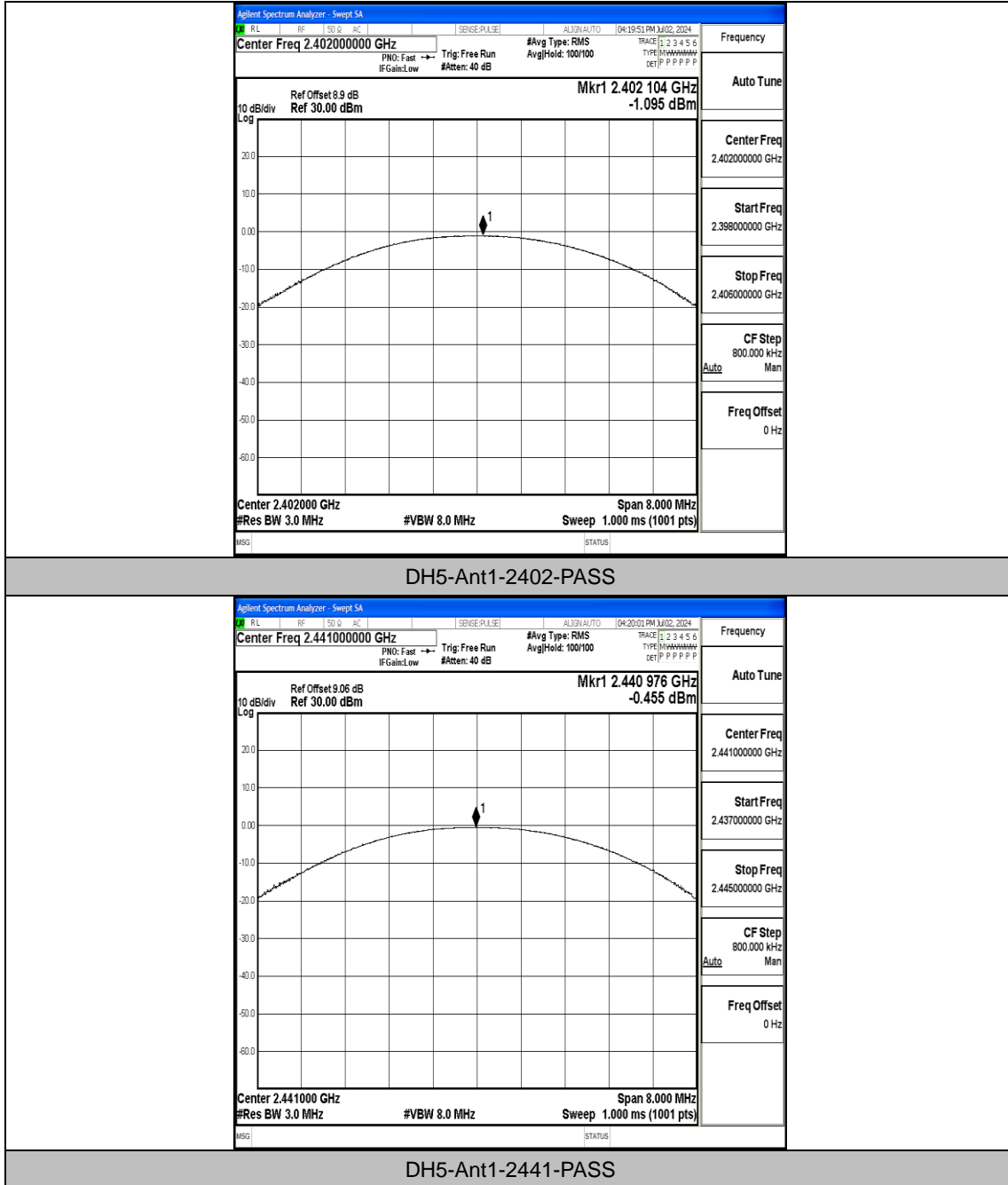
2DH5-Ant1-2480

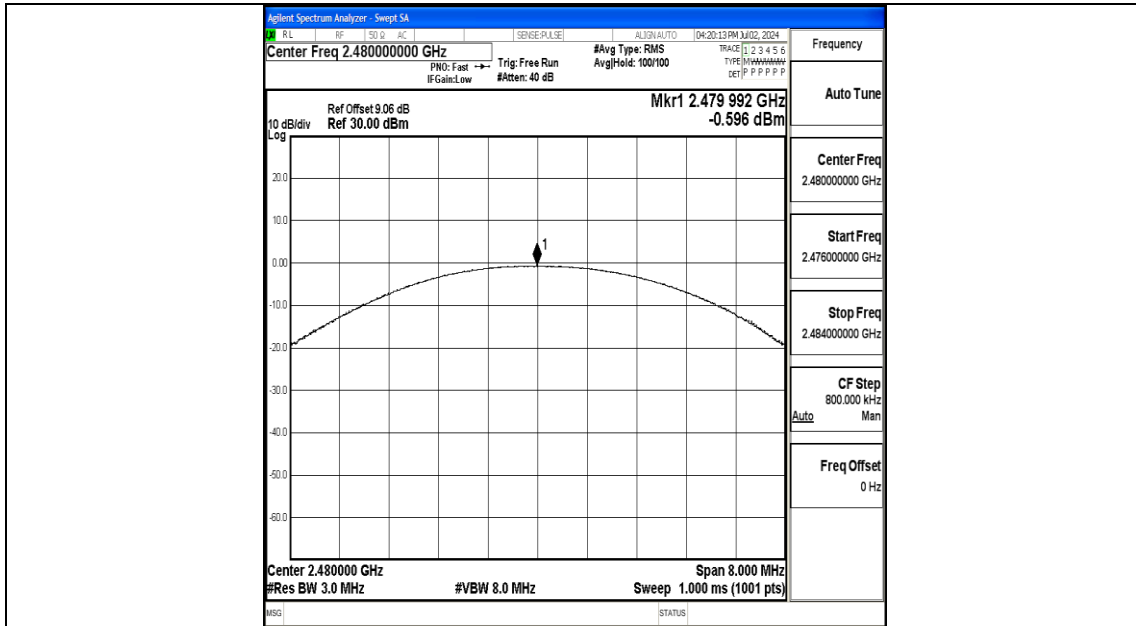
Appendix C: Maximum peak conducted output power

Test Result

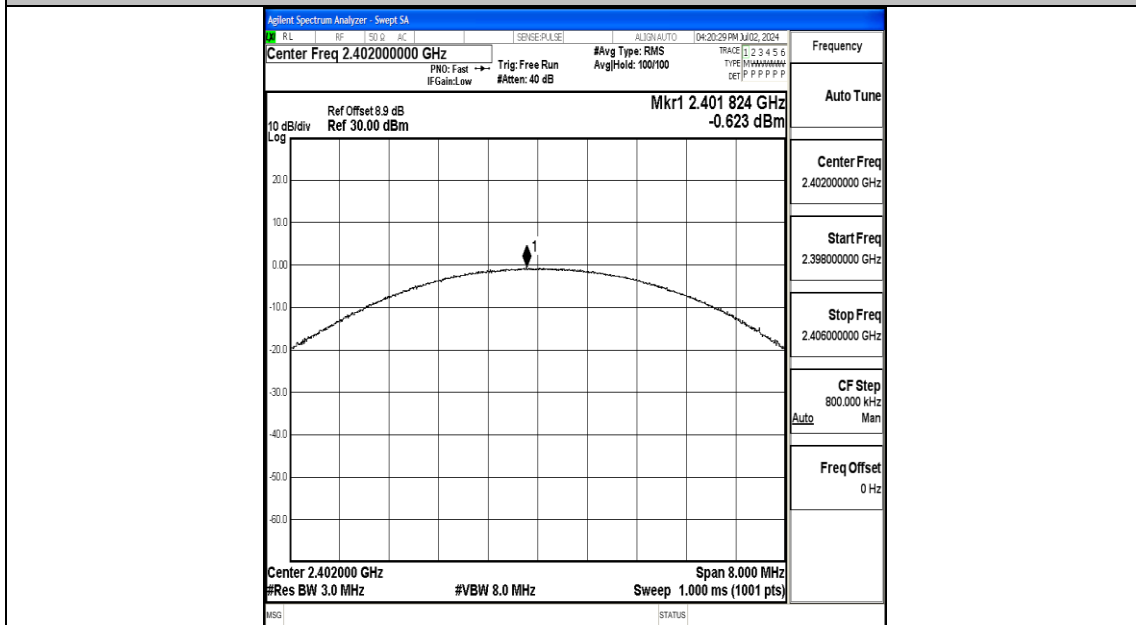
| Test Mode | Antenna | Frequency[MHz] | Conducted Peak Power[dBm] | Conducted Limit[dBm] | Verdict |
|-----------|---------|----------------|---------------------------|----------------------|---------|
| DH5 | Ant1 | 2402 | -1.10 | ≤20.97 | PASS |
| DH5 | Ant1 | 2441 | -0.46 | ≤20.97 | PASS |
| DH5 | Ant1 | 2480 | -0.60 | ≤20.97 | PASS |
| 2DH5 | Ant1 | 2402 | -0.62 | ≤20.97 | PASS |
| 2DH5 | Ant1 | 2441 | -0.05 | ≤20.97 | PASS |
| 2DH5 | Ant1 | 2480 | -0.34 | ≤20.97 | PASS |

Test Graphs

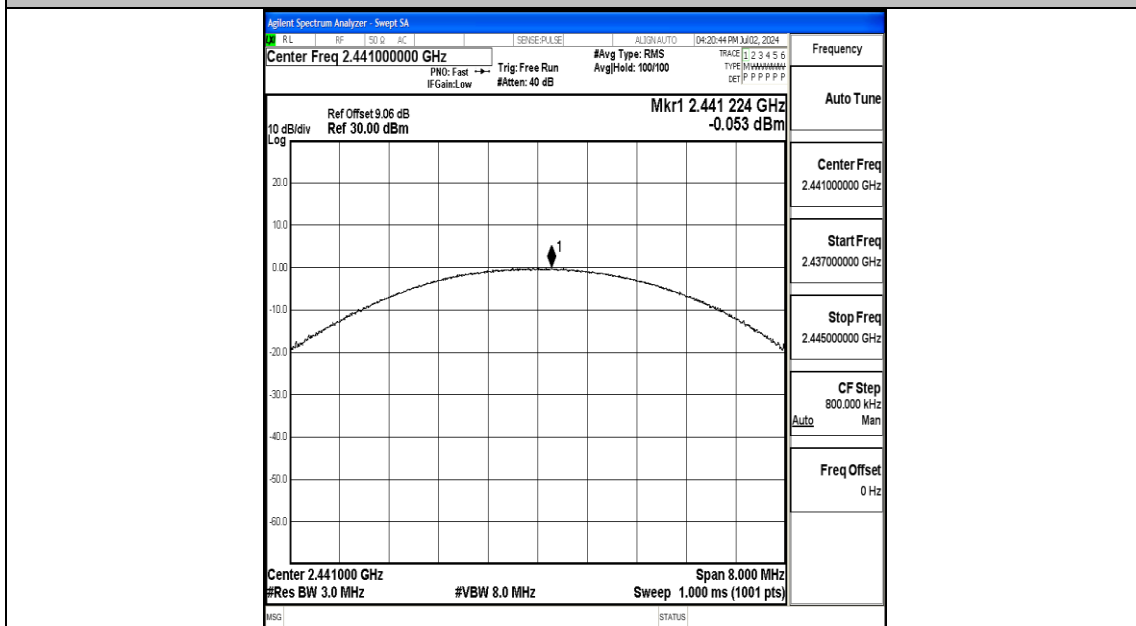




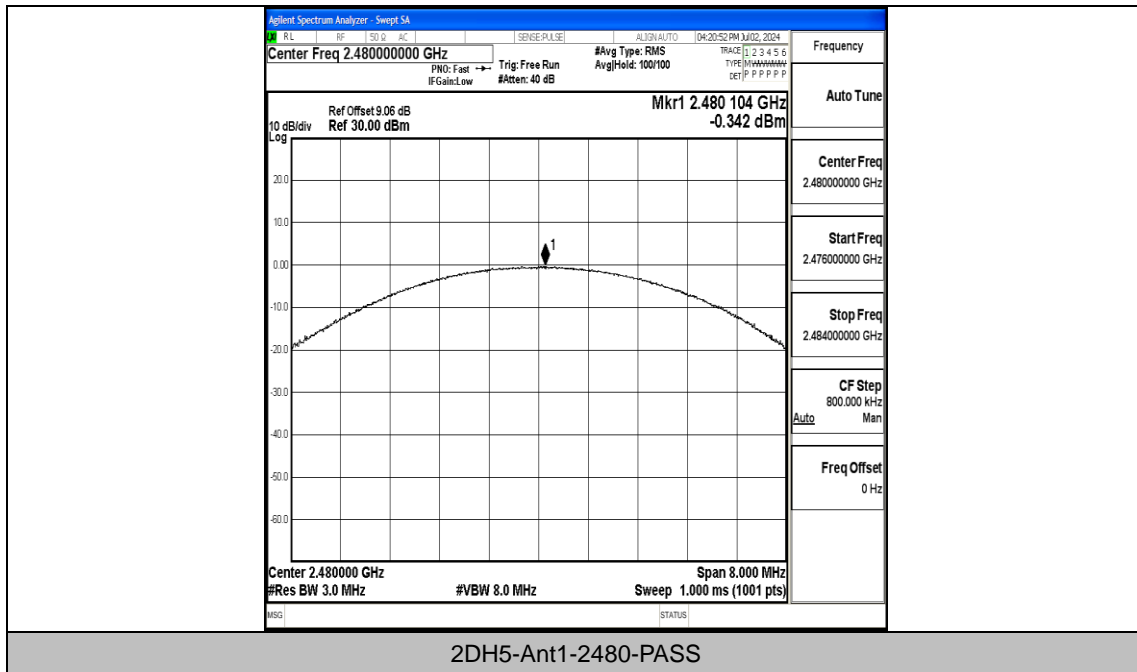
DH5-Ant1-2480-PASS



2DH5-Ant1-2402-PASS



2DH5-Ant1-2441-PASS

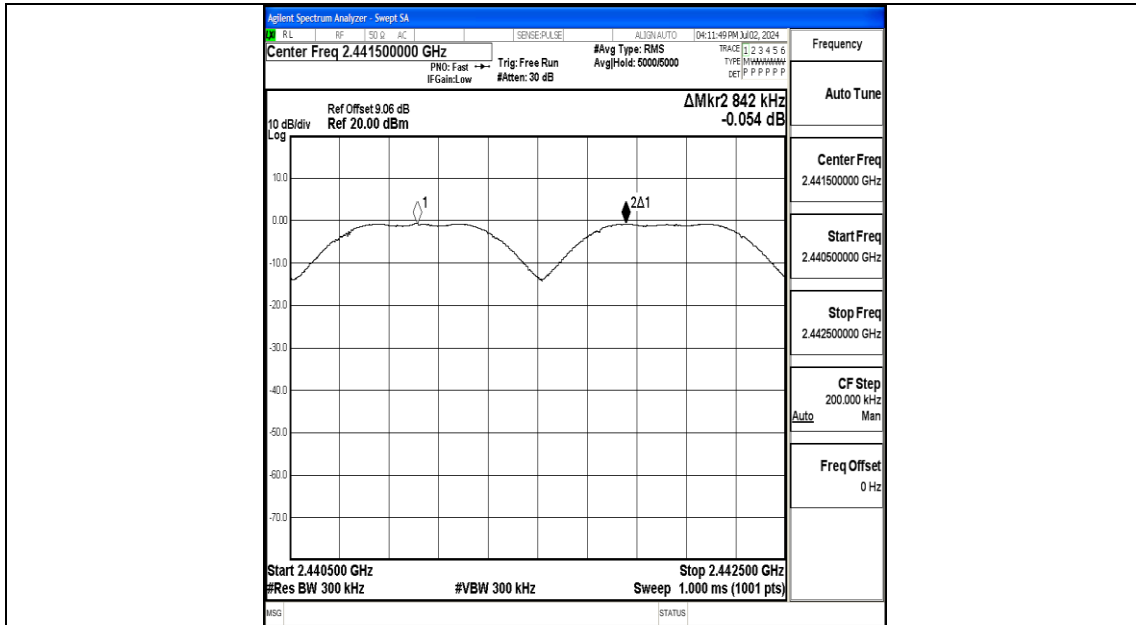


Appendix D: Carrier frequency separation

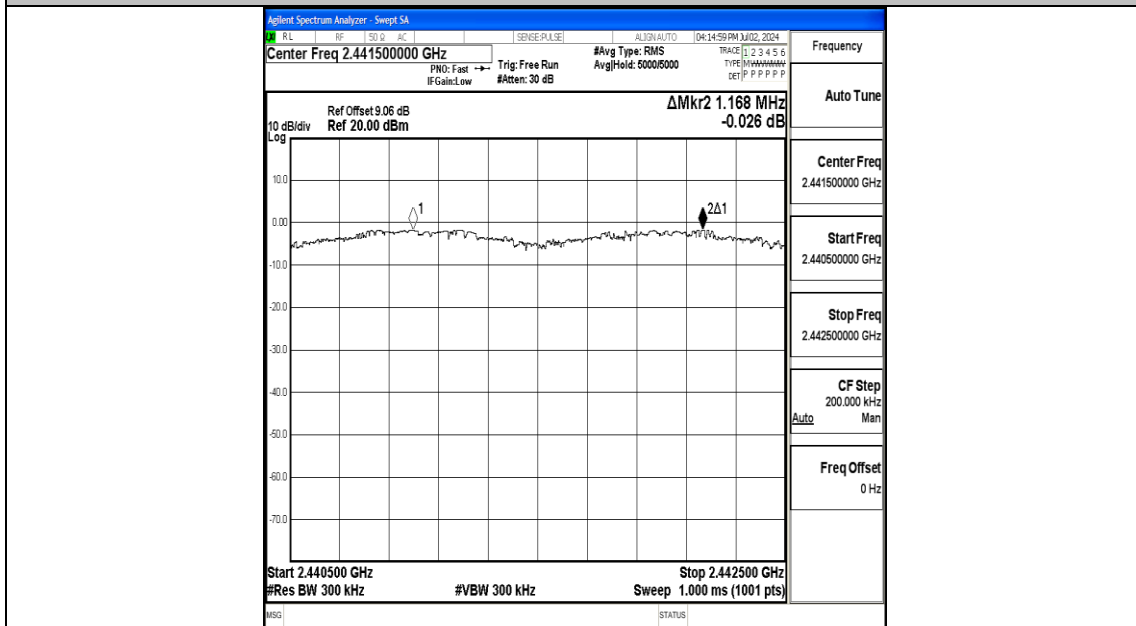
Test Result

| TestMode | Antenna | Frequency[MHz] | Result[MHz] | Limit[MHz] | Verdict |
|----------|---------|----------------|-------------|--------------|---------|
| DH5 | Ant1 | Hop | 0.842 | ≥ 0.648 | PASS |
| 2DH5 | Ant1 | Hop | 1.168 | ≥ 0.878 | PASS |

Test Graphs



DH5-Ant1-Hop-PASS



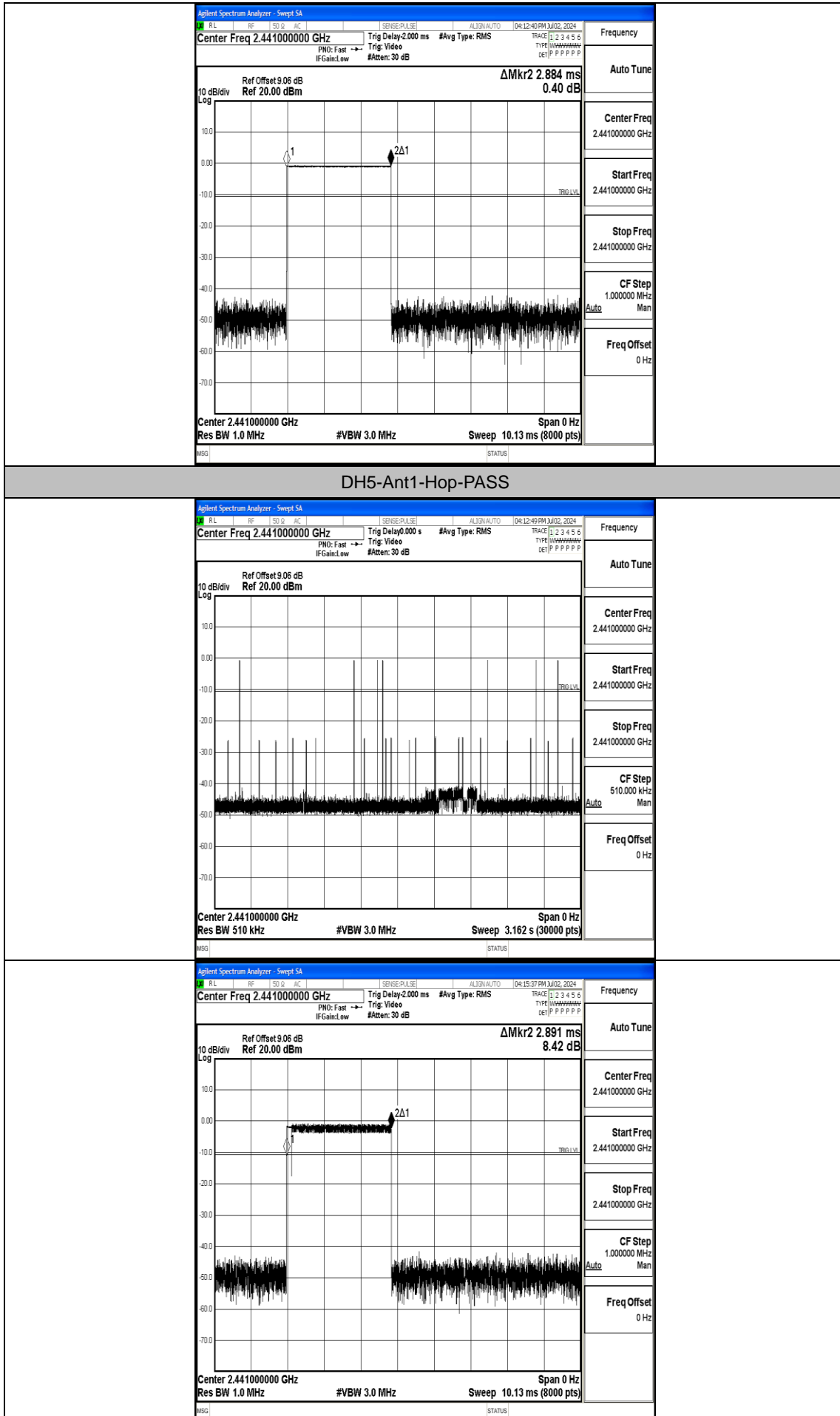
2DH5-Ant1-Hop-PASS

Appendix E: Time of occupancy

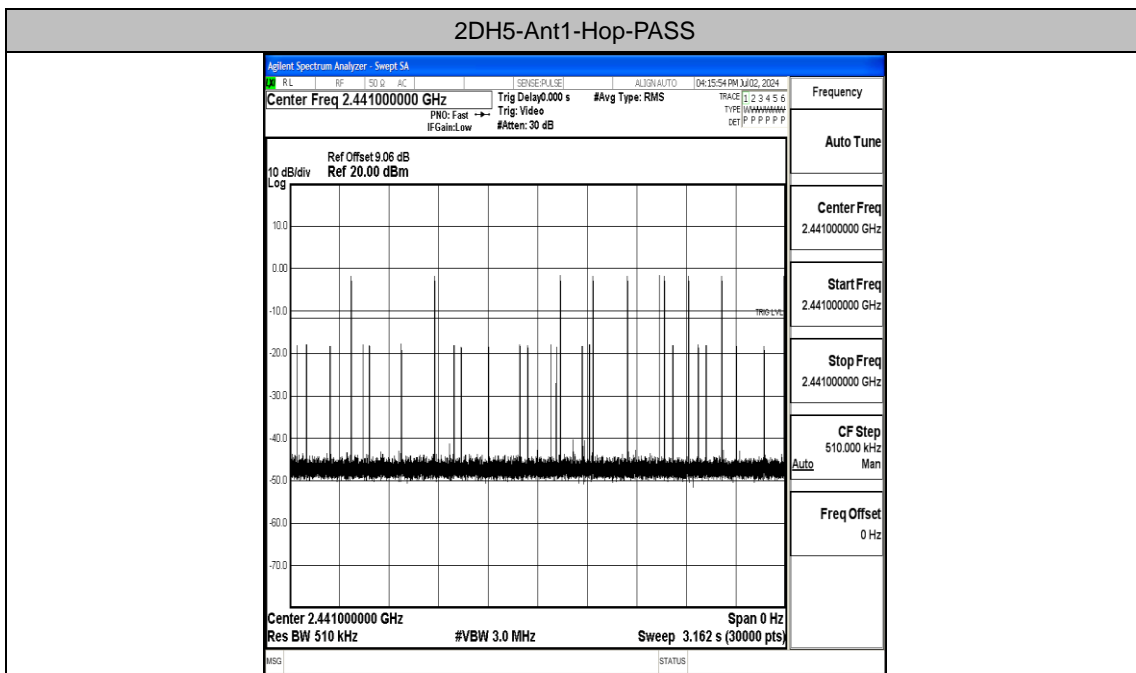
Test Result

| TestMode | Antenna | Frequency[MHz] | BurstWidth [ms] | TotalHops [Num] | Result[s] | Limit[s] | Verdict |
|----------|---------|----------------|--------------------|--------------------|-----------|----------|---------|
| DH5 | Ant1 | Hop | 2.884 | 80 | 0.231 | ≤0.4 | PASS |
| 2DH5 | Ant1 | Hop | 2.891 | 110 | 0.318 | ≤0.4 | PASS |

Test Graphs



DH5-Ant1-Hop-PASS

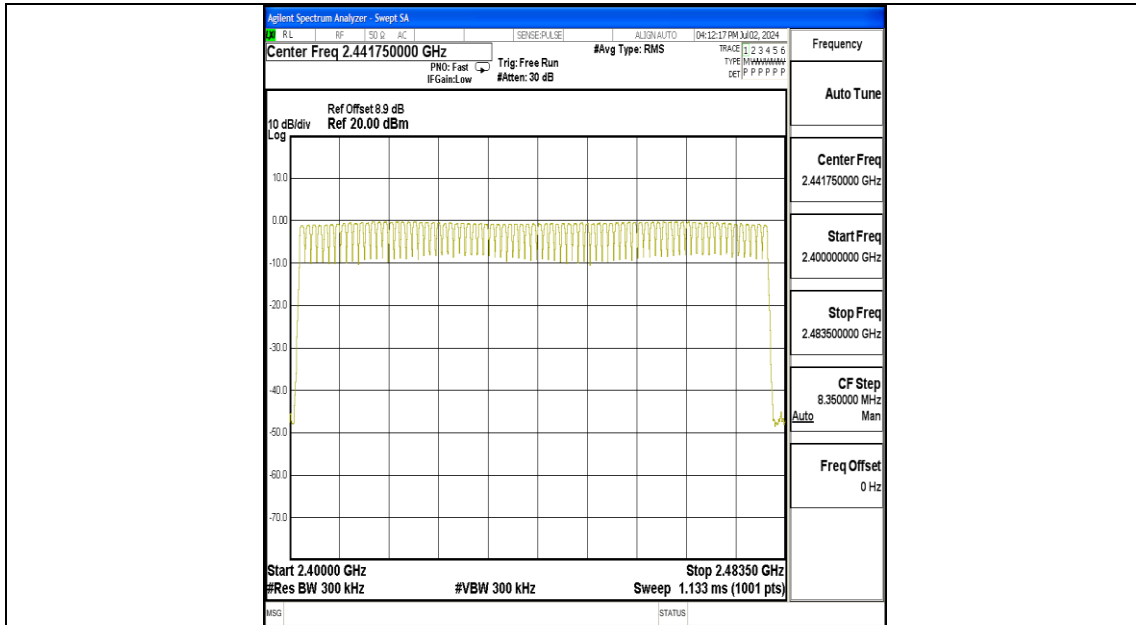


Appendix F: Number of hopping channels

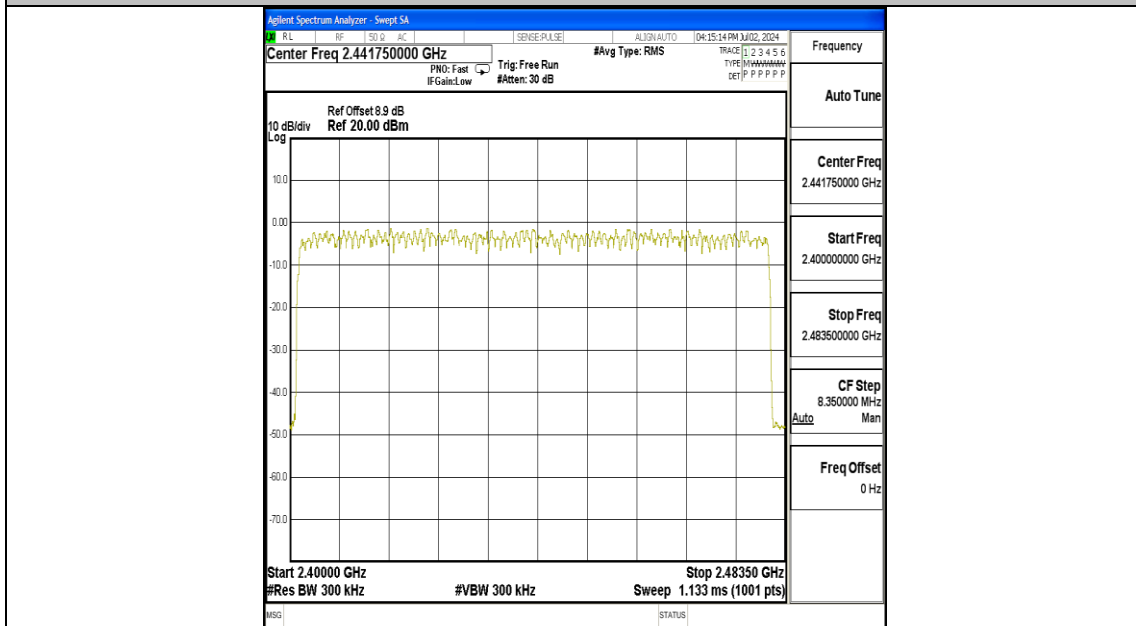
Test Result

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

Test Graphs



DH5-Ant1-Hop-PASS



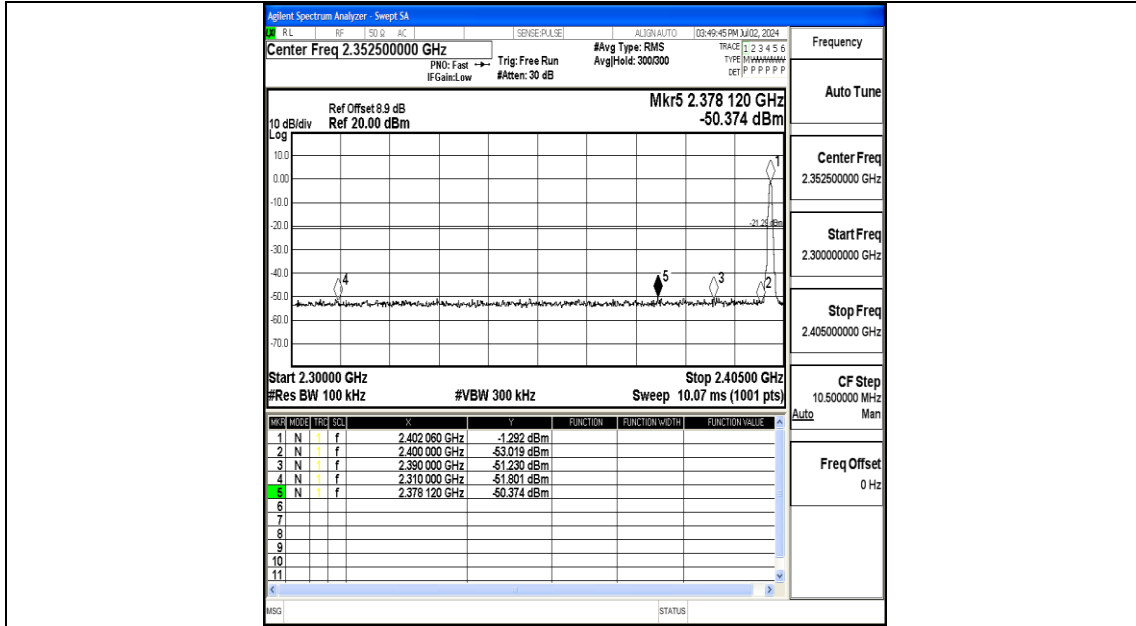
2DH5-Ant1-Hop-PASS

Appendix G: Band edge measurements

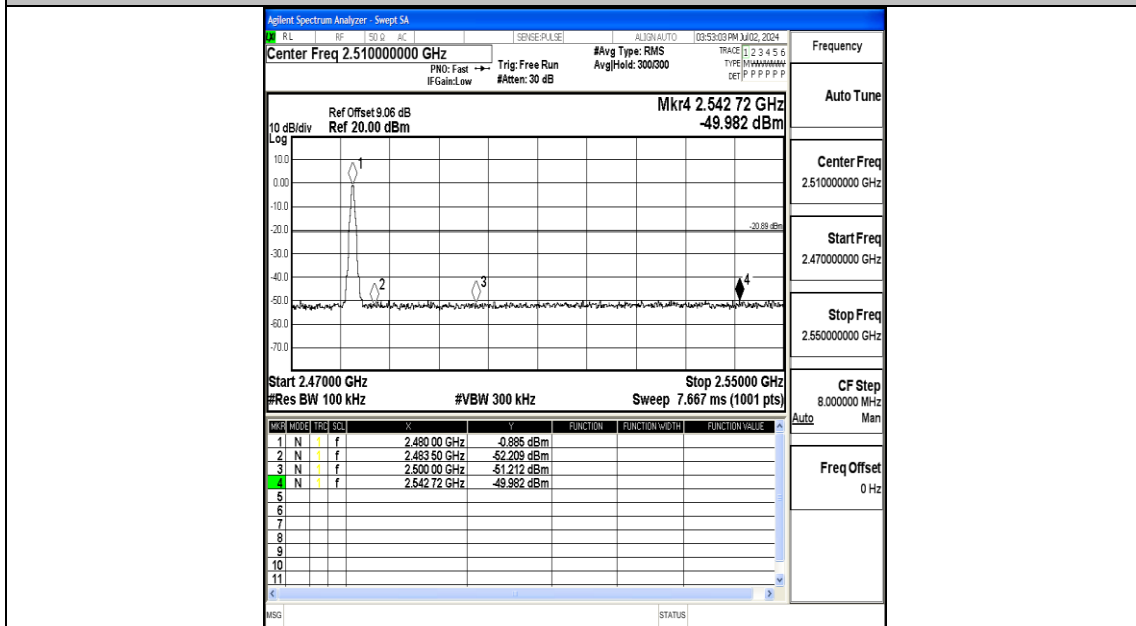
Test Result

| TestMode | Antenna | ChName | Frequency[MHz] | RefLevel [dBm] | Result [dBm] | Limit [dBm] | Verdict |
|----------|---------|--------|----------------|----------------|--------------|-------------|---------|
| DH5 | Ant1 | Low | 2402 | -1.29 | -50.37 | ≤-21.29 | PASS |
| DH5 | Ant1 | High | 2480 | -0.89 | -49.98 | ≤-20.89 | PASS |
| DH5 | Ant1 | Low | Hop_2402 | -1.92 | -50.27 | ≤-21.92 | PASS |
| DH5 | Ant1 | High | Hop_2480 | -1.22 | -49.62 | ≤-21.22 | PASS |
| 2DH5 | Ant1 | Low | 2402 | -2.71 | -50.03 | ≤-22.71 | PASS |
| 2DH5 | Ant1 | High | 2480 | -2.60 | -49.78 | ≤-22.6 | PASS |
| 2DH5 | Ant1 | Low | Hop_2402 | -6.45 | -50.41 | ≤-26.45 | PASS |
| 2DH5 | Ant1 | High | Hop_2480 | -4.62 | -49.48 | ≤-24.62 | PASS |

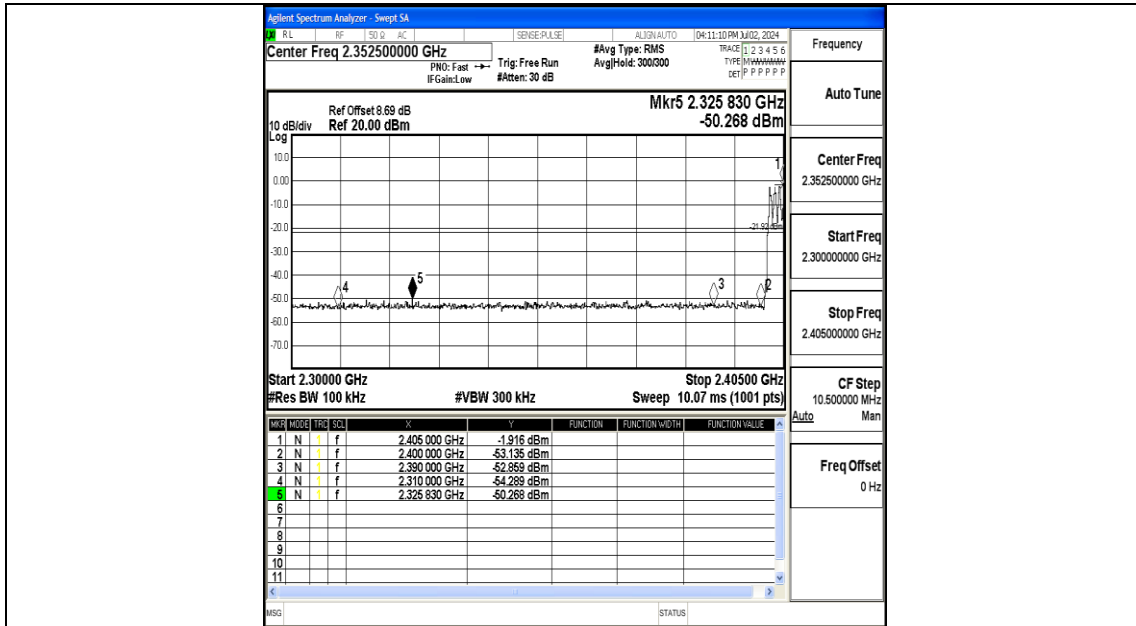
Test Graphs



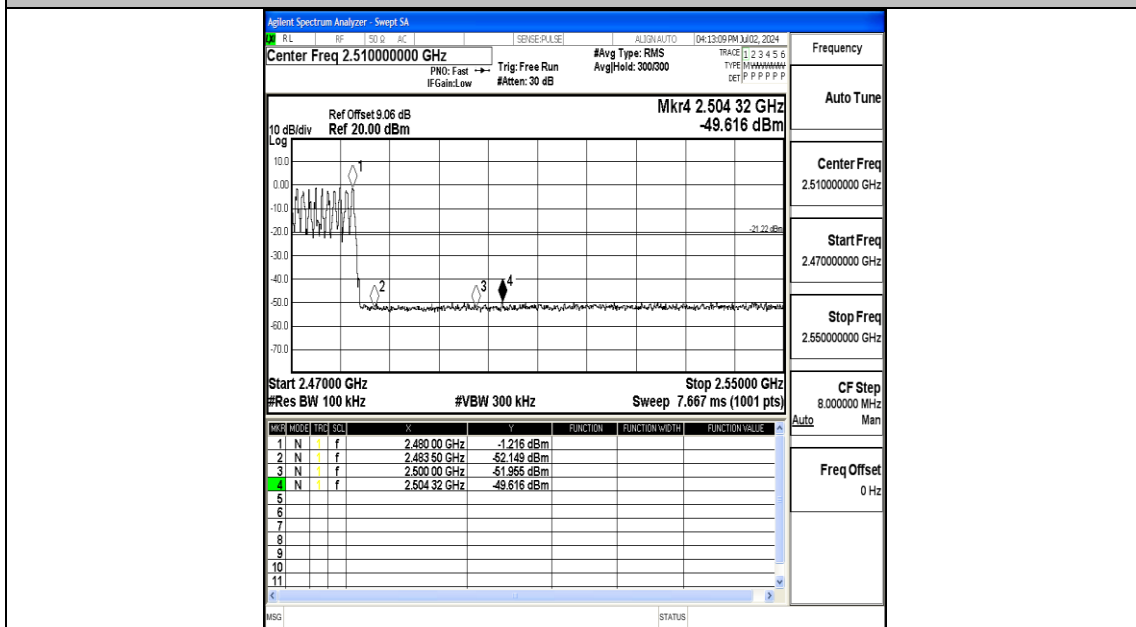
DH5-Ant1-2402-PASS



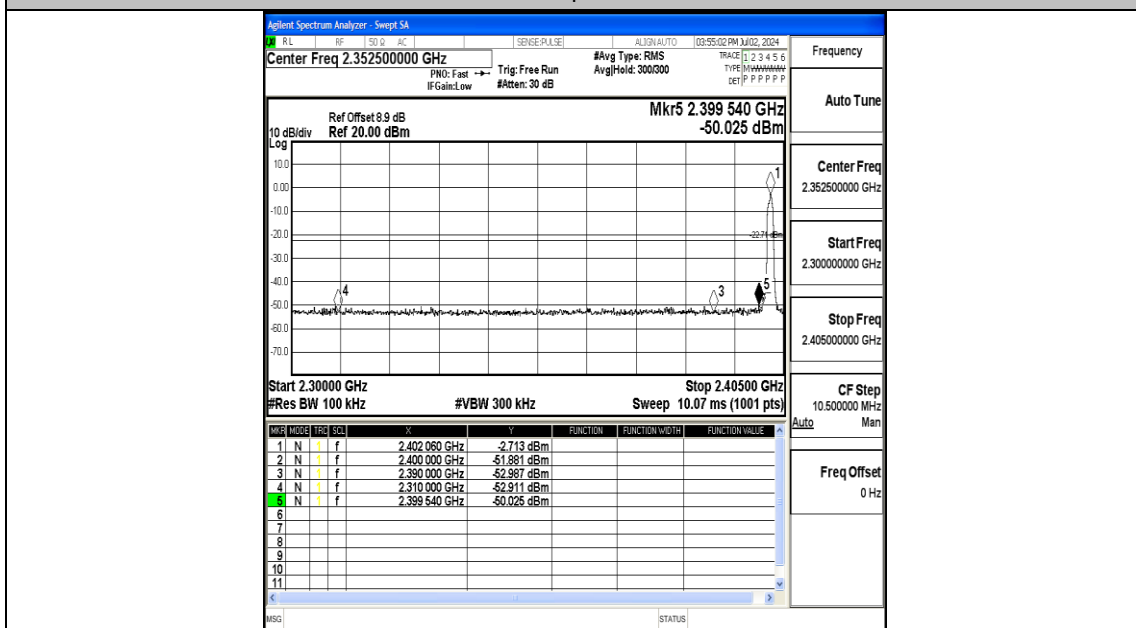
DH5-Ant1-2480-PASS



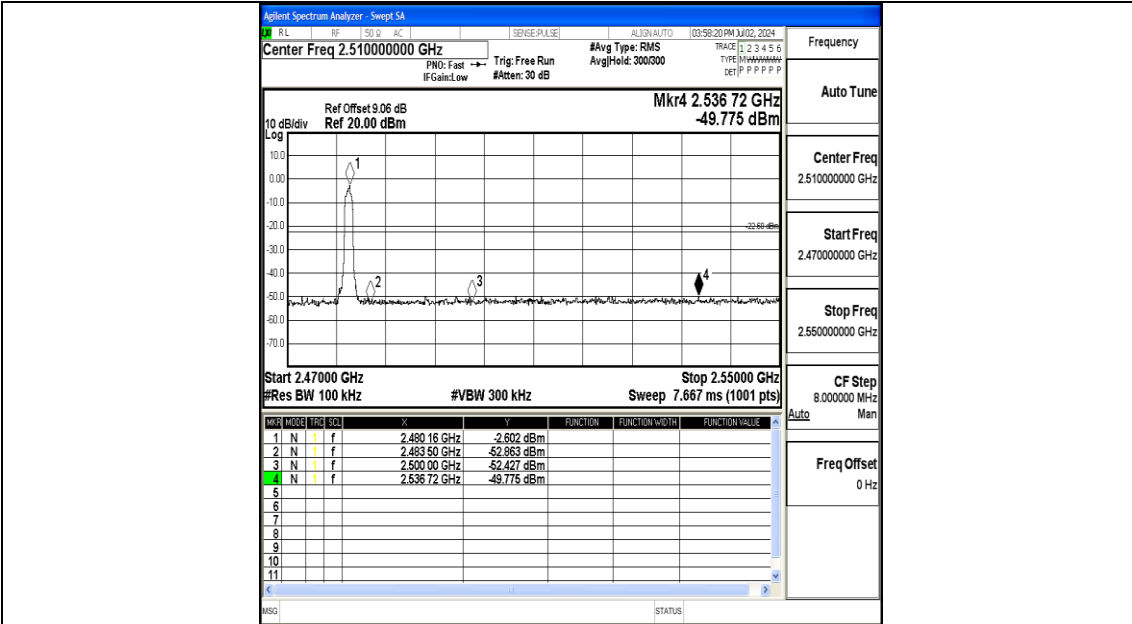
DH5-Ant1-Hop_2402-PASS



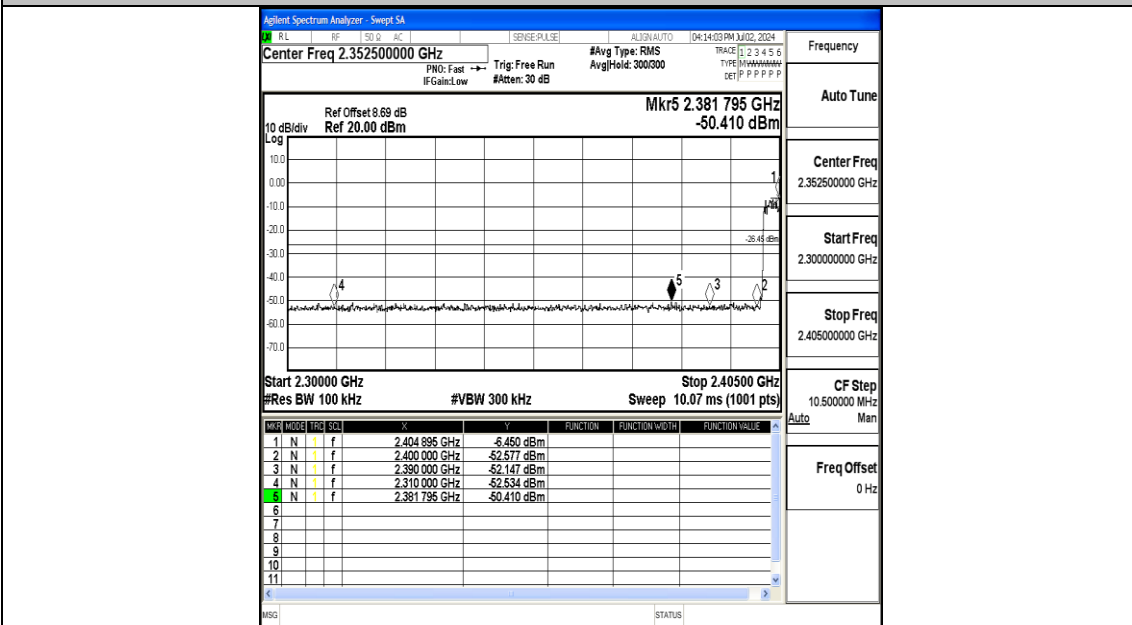
DH5-Ant1-Hop_2480-PASS



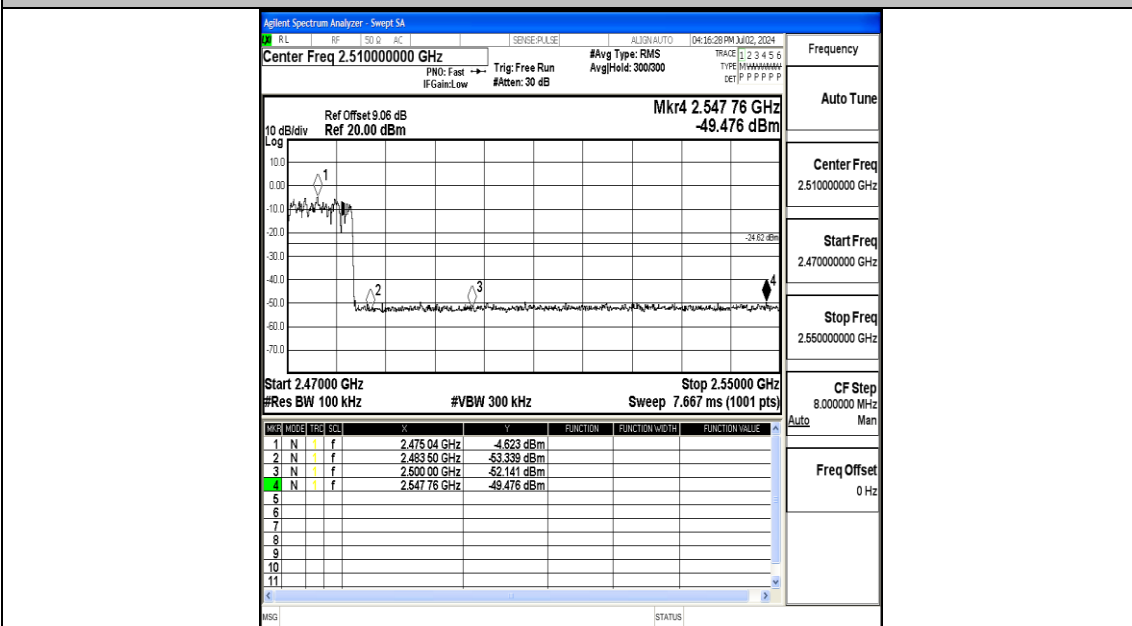
2DH5-Ant1-2402-PASS



2DH5-Ant1-2480-PASS



2DH5-Ant1-Hop_2402-PASS



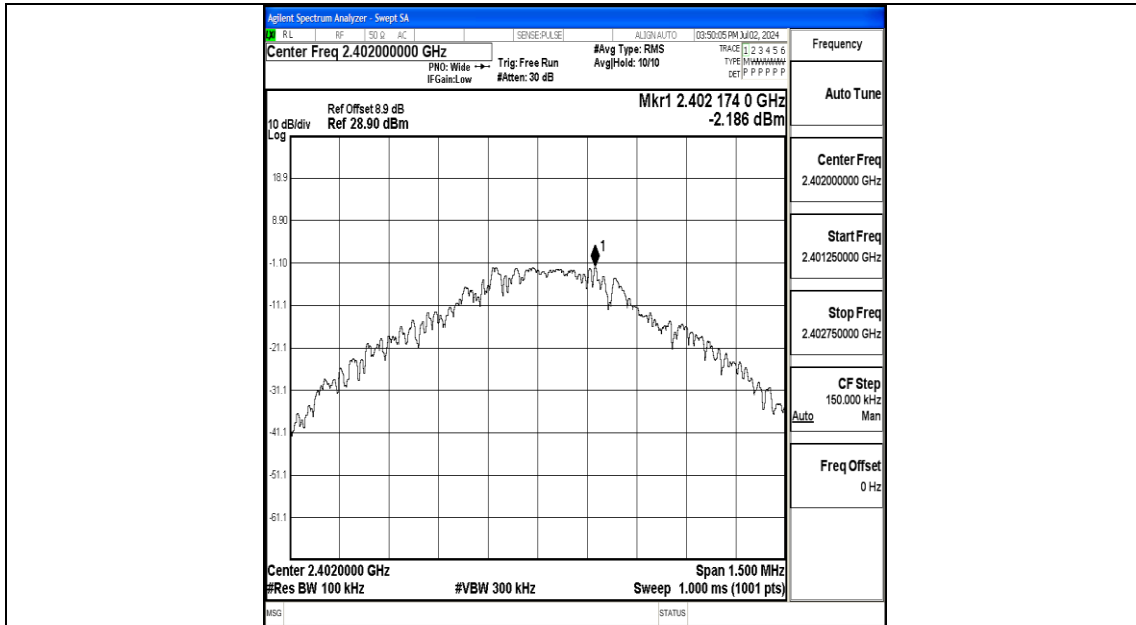
2DH5-Ant1-Hop_2480-PASS

Appendix H: Conducted Spurious Emission

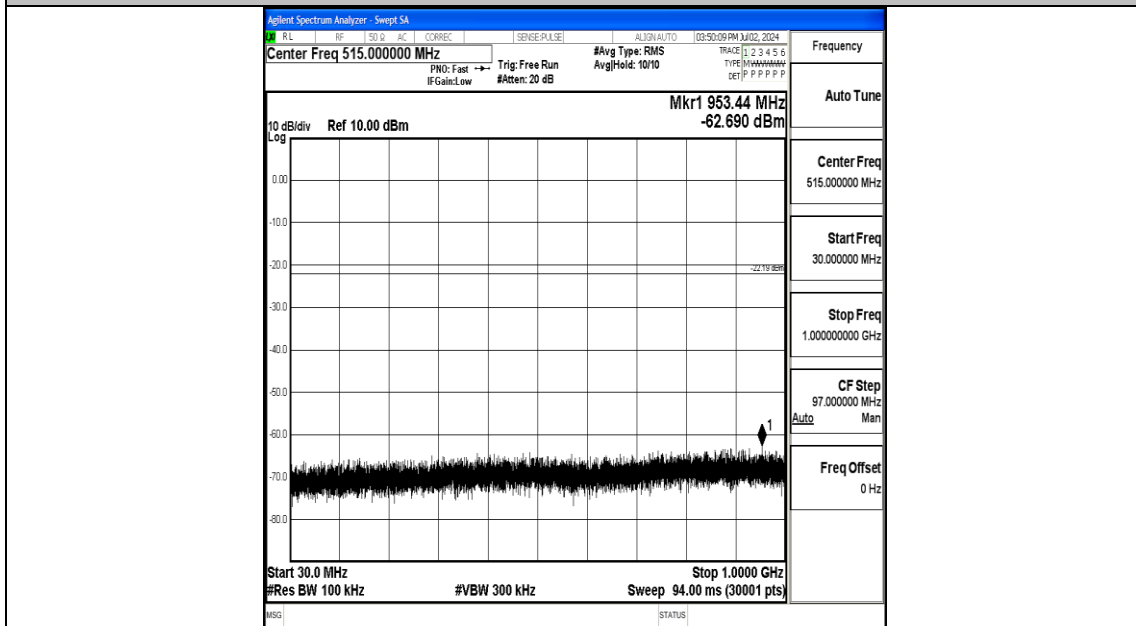
Test Result

| TestMode | Antenna | Frequency[MHz] | FreqRange [MHz] | RefLevel [dBm] | Result [dBm] | Limit [dBm] | Verdict |
|----------|---------|----------------|-----------------|----------------|--------------|-------------|---------|
| DH5 | Ant1 | 2402 | 0~Reference | -2.19 | -2.19 | --- | PASS |
| DH5 | Ant1 | 2402 | 30~1000 | -2.19 | -62.69 | ≤-22.19 | PASS |
| DH5 | Ant1 | 2402 | 1000~26500 | -2.19 | -50.14 | ≤-22.19 | PASS |
| DH5 | Ant1 | 2441 | 0~Reference | -1.57 | -1.57 | --- | PASS |
| DH5 | Ant1 | 2441 | 30~1000 | -1.57 | -62.36 | ≤-21.57 | PASS |
| DH5 | Ant1 | 2441 | 1000~26500 | -1.57 | -49.93 | ≤-21.57 | PASS |
| DH5 | Ant1 | 2480 | 0~Reference | -1.18 | -1.18 | --- | PASS |
| DH5 | Ant1 | 2480 | 30~1000 | -1.18 | -62.18 | ≤-21.18 | PASS |
| DH5 | Ant1 | 2480 | 1000~26500 | -1.18 | -50.48 | ≤-21.18 | PASS |
| 2DH5 | Ant1 | 2402 | 0~Reference | -6.02 | -6.02 | --- | PASS |
| 2DH5 | Ant1 | 2402 | 30~1000 | -6.02 | -63.14 | ≤-26.02 | PASS |
| 2DH5 | Ant1 | 2402 | 1000~26500 | -6.02 | -48.91 | ≤-26.02 | PASS |
| 2DH5 | Ant1 | 2441 | 0~Reference | -1.91 | -1.91 | --- | PASS |
| 2DH5 | Ant1 | 2441 | 30~1000 | -1.91 | -62.52 | ≤-21.91 | PASS |
| 2DH5 | Ant1 | 2441 | 1000~26500 | -1.91 | -51.04 | ≤-21.91 | PASS |
| 2DH5 | Ant1 | 2480 | 0~Reference | -3.96 | -3.96 | --- | PASS |
| 2DH5 | Ant1 | 2480 | 30~1000 | -3.96 | -61.81 | ≤-23.96 | PASS |
| 2DH5 | Ant1 | 2480 | 1000~26500 | -3.96 | -49.46 | ≤-23.96 | PASS |

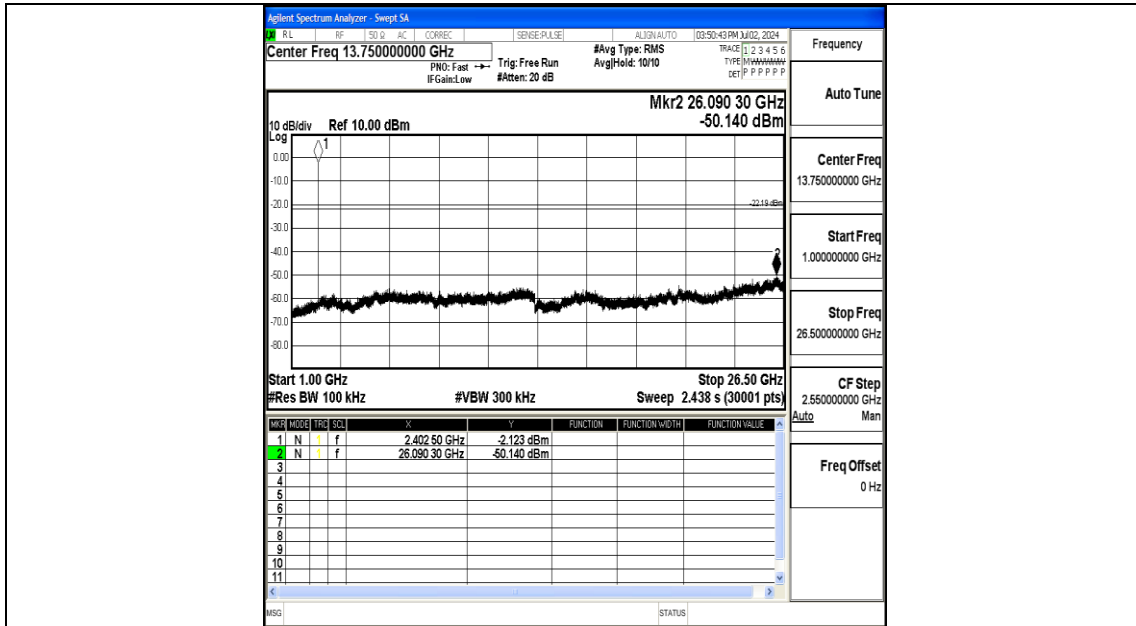
Test Graphs



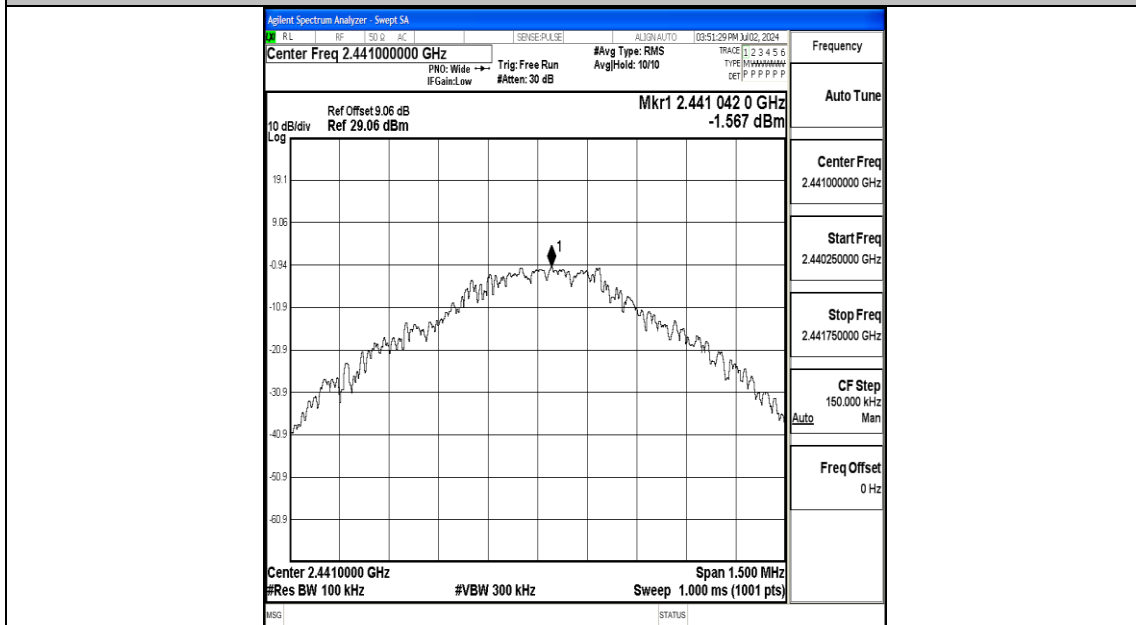
DH5-Ant1-2402-0~Reference-PASS



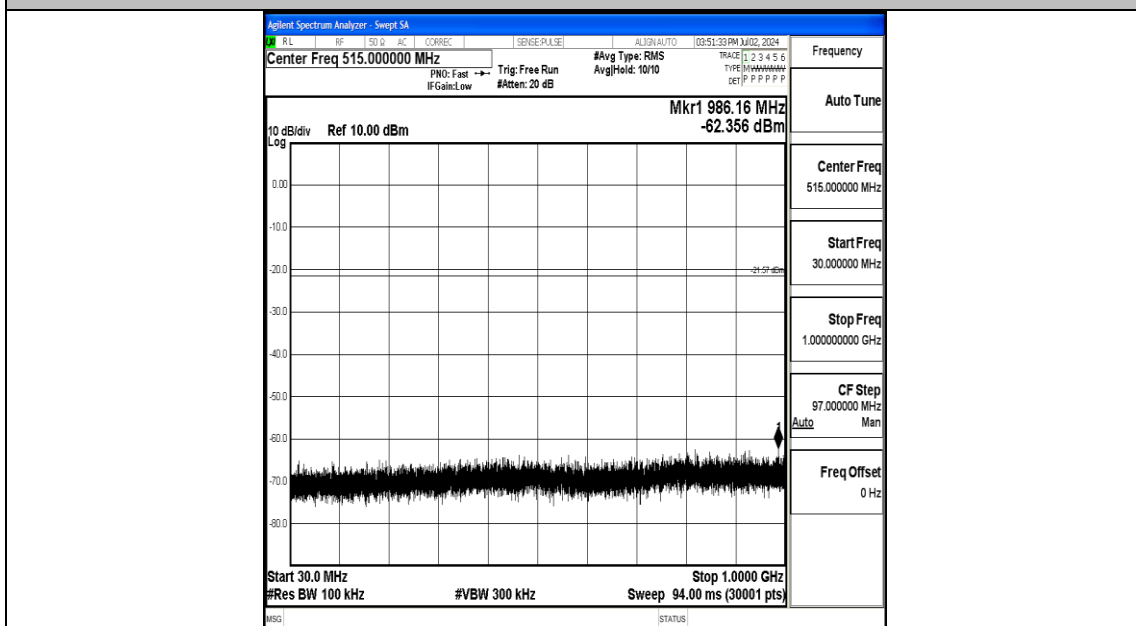
DH5-Ant1-2402-30~1000-PASS



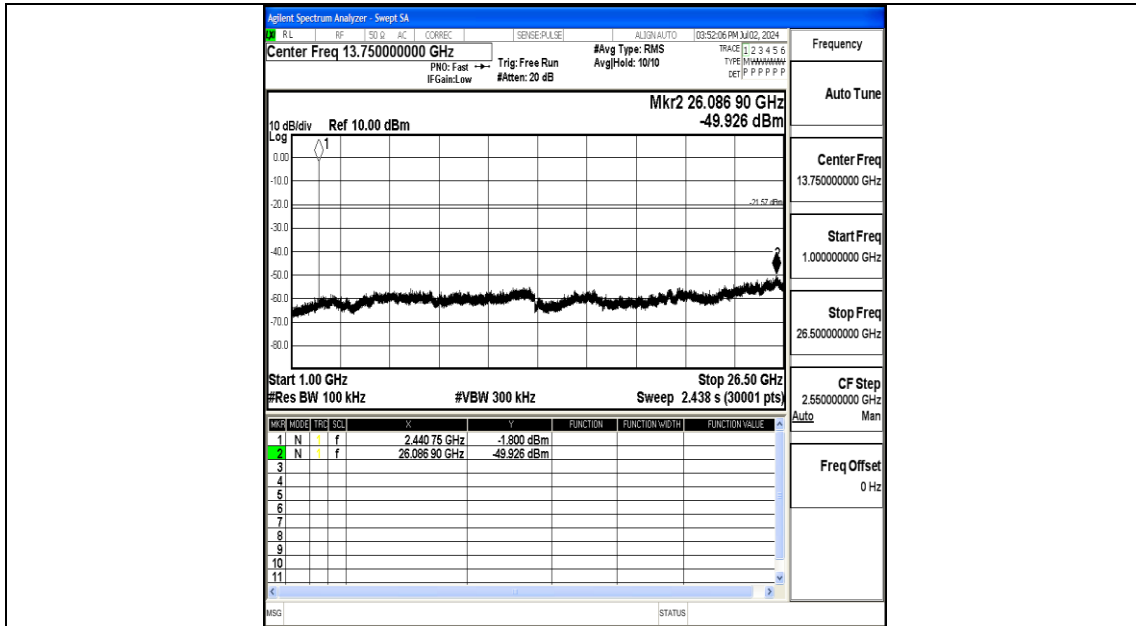
DH5-Ant1-2402-1000~26500-PASS



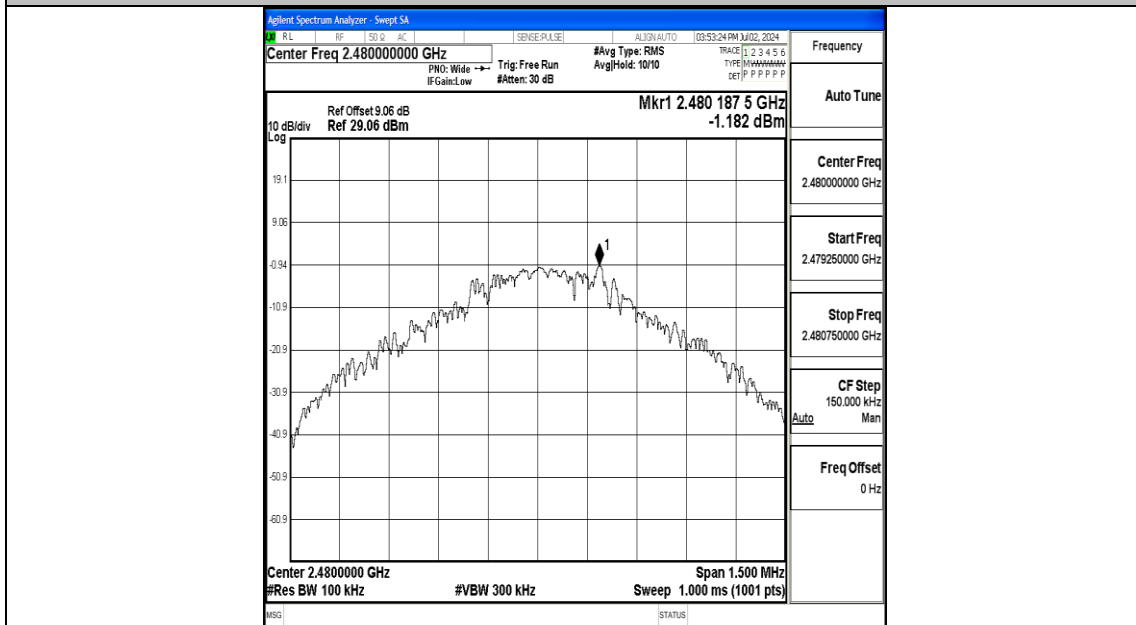
DH5-Ant1-2441-0~Reference-PASS



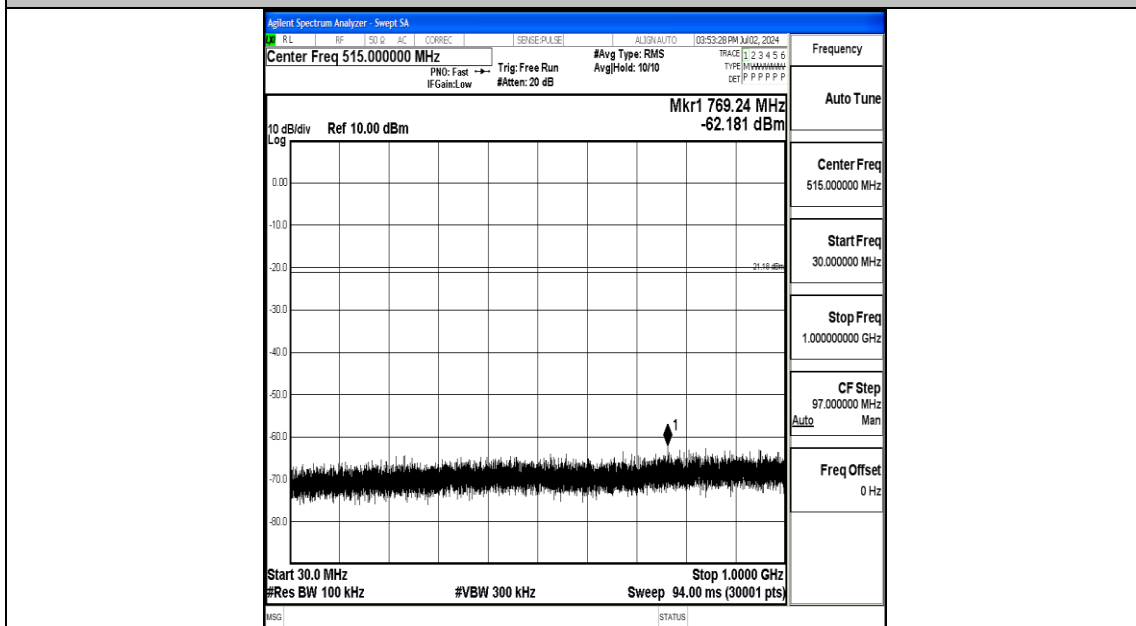
DH5-Ant1-2441-30~1000-PASS



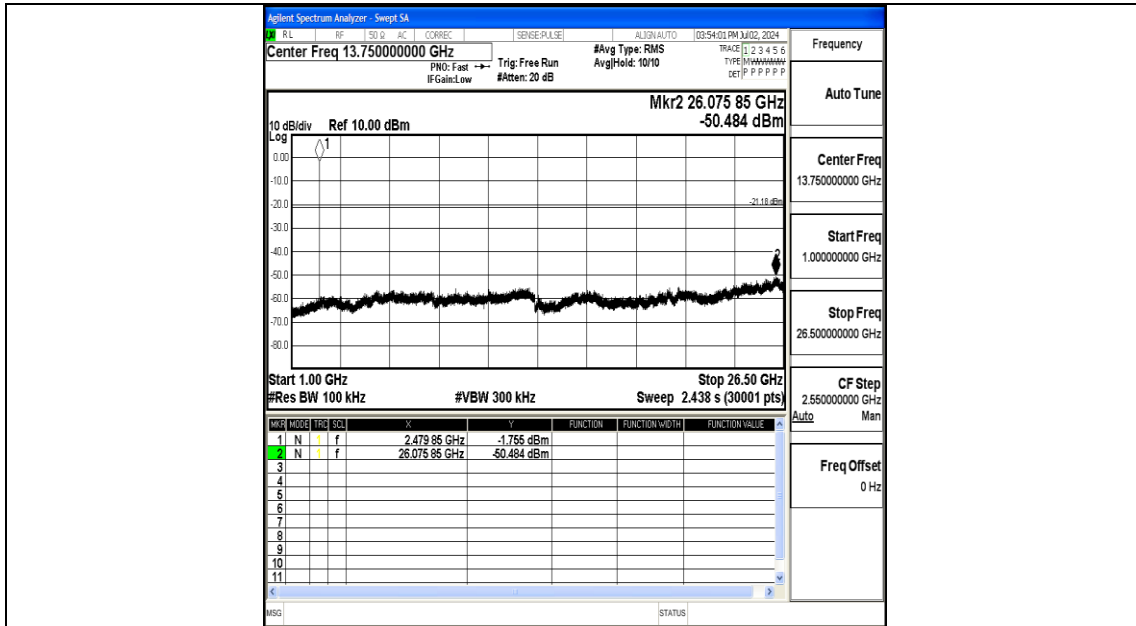
DH5-Ant1-2441-1000~26500-PASS



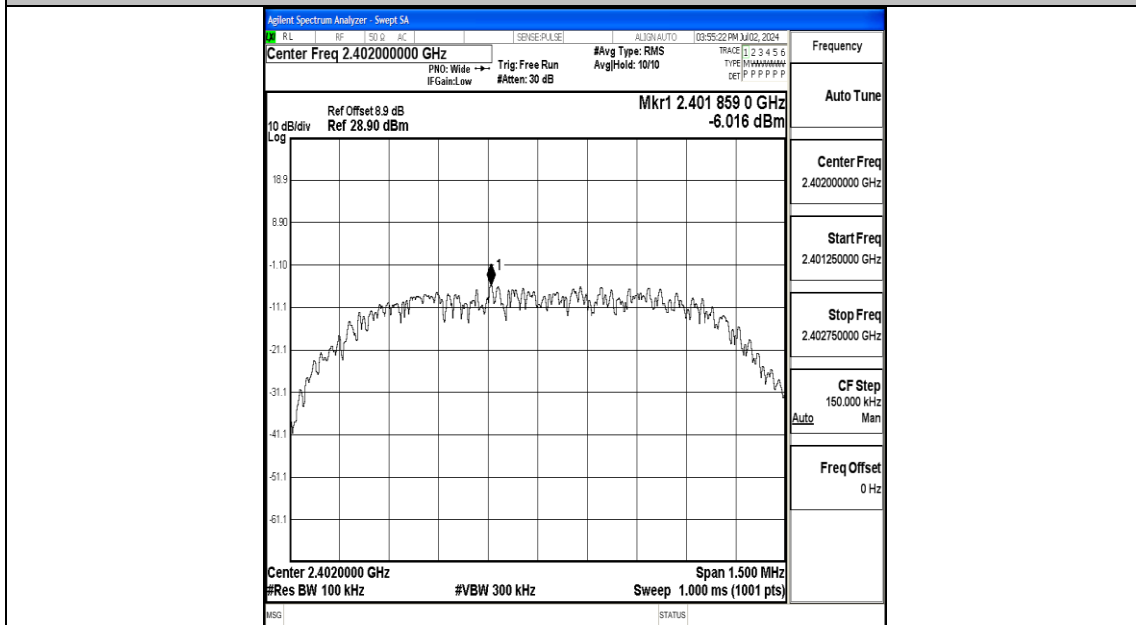
DH5-Ant1-2480-0~Reference-PASS



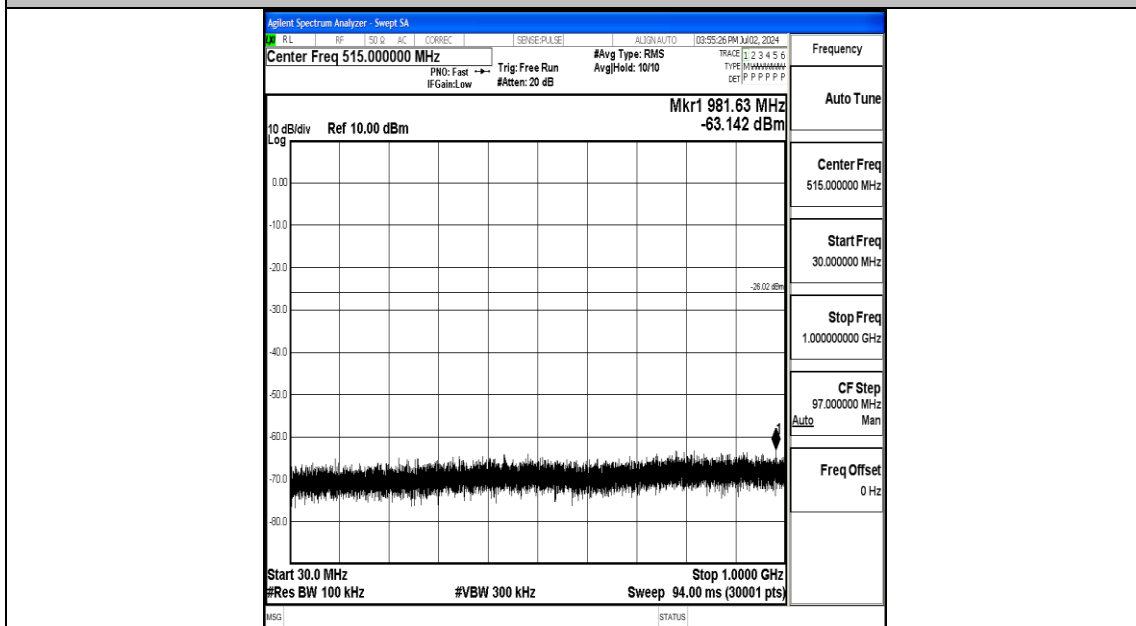
DH5-Ant1-2480-30~1000-PASS



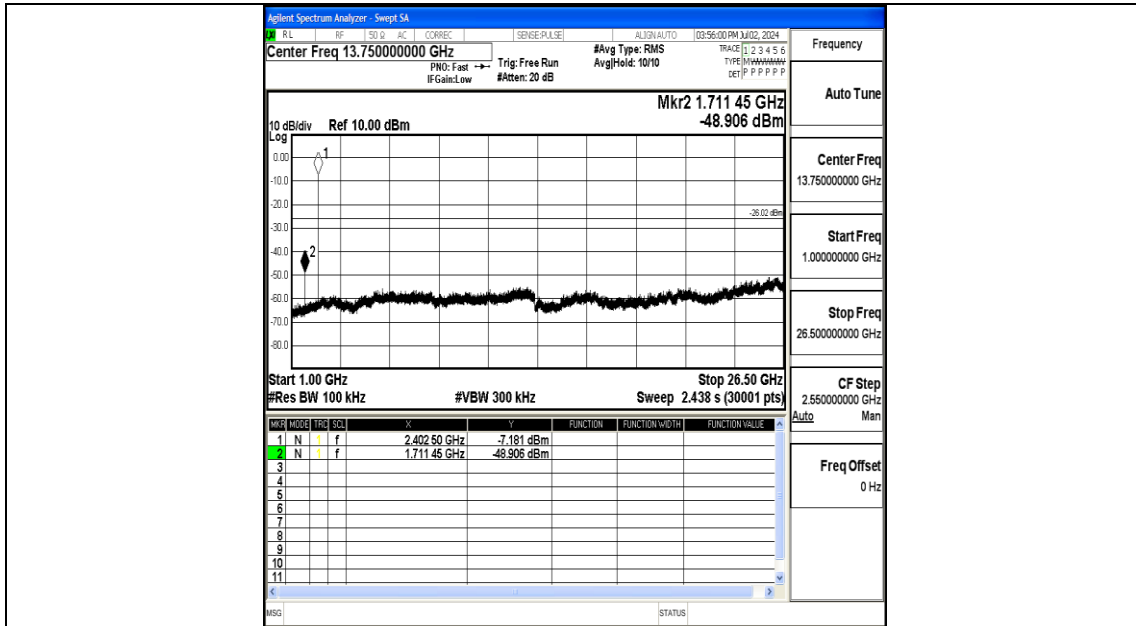
DH5-Ant1-2480-1000~26500-PASS



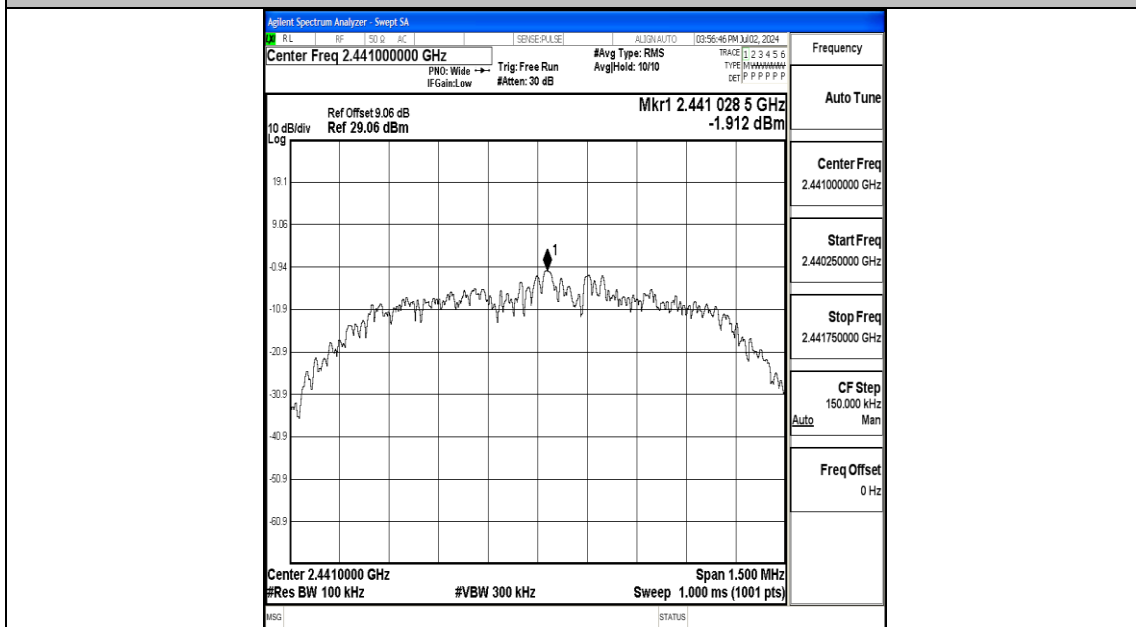
2DH5-Ant1-2402-0~Reference-PASS



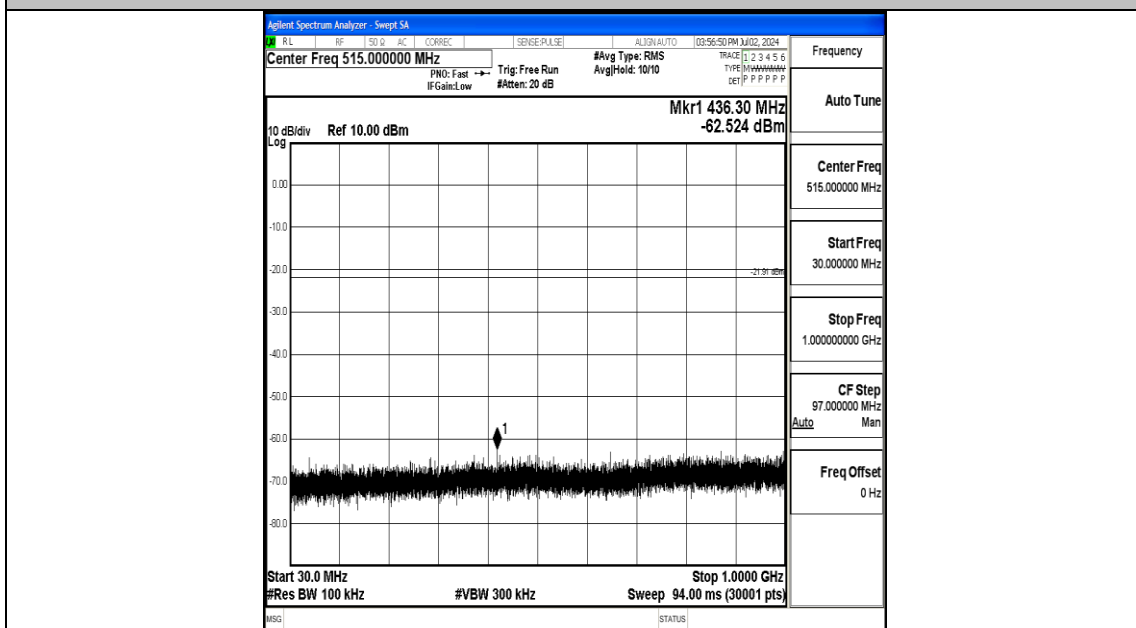
2DH5-Ant1-2402-30~1000-PASS



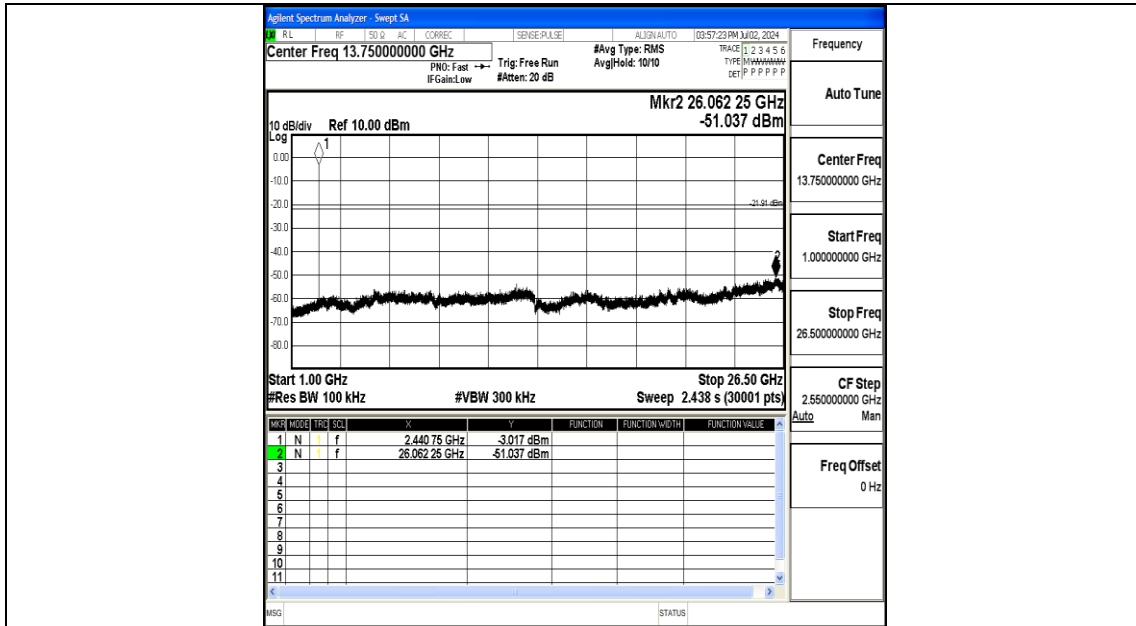
2DH5-Ant1-2402-1000~26500-PASS



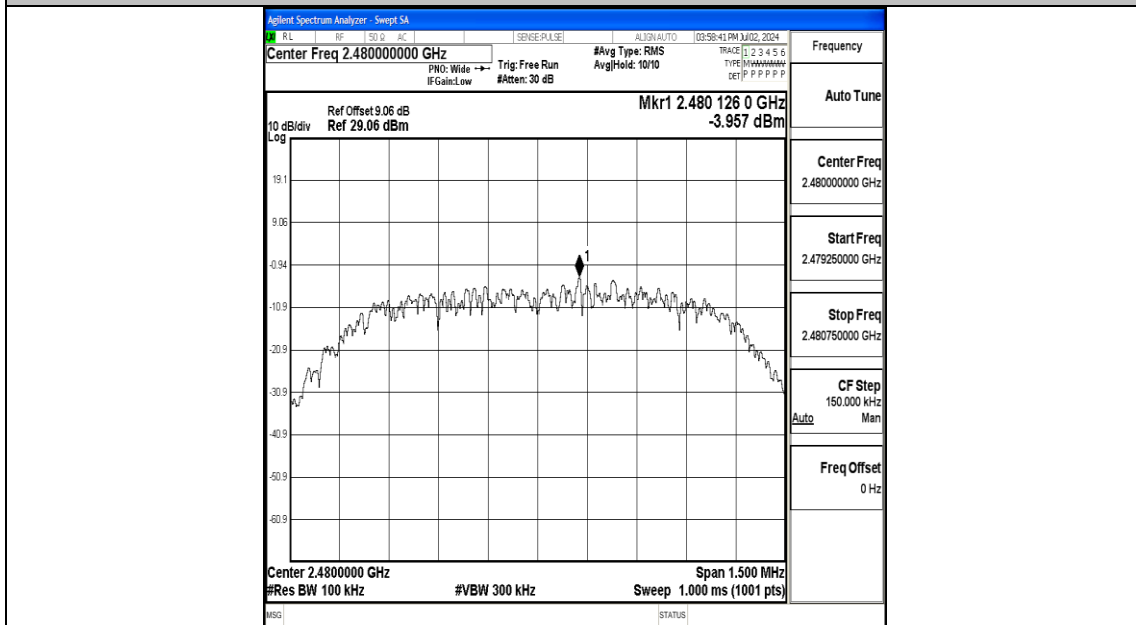
2DH5-Ant1-2441-0~Reference-PASS



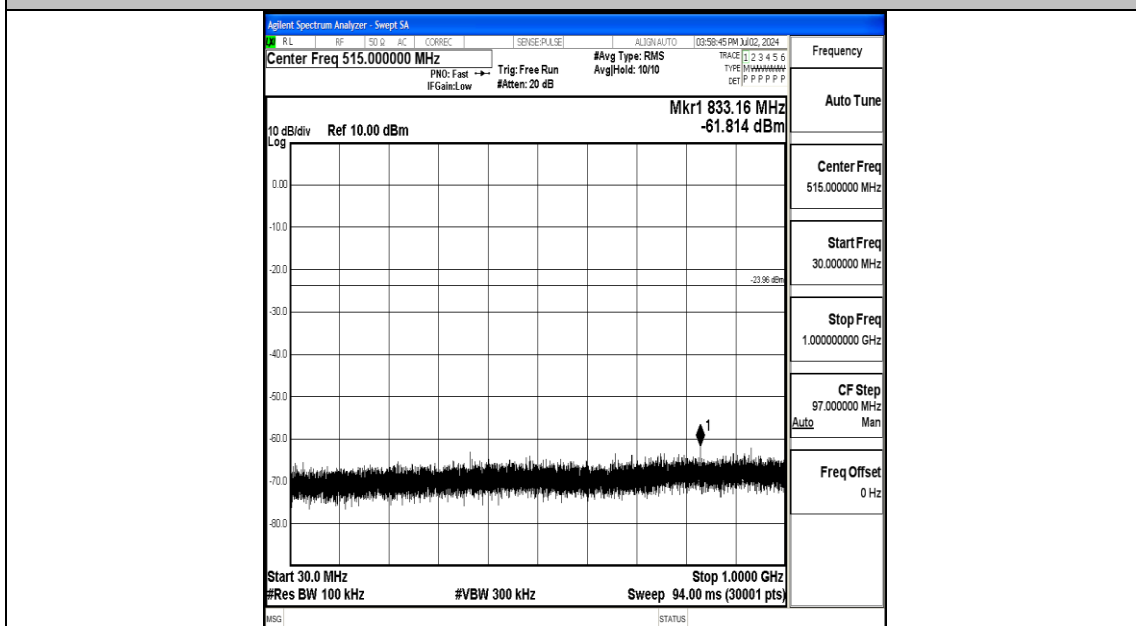
2DH5-Ant1-2441-30~1000-PASS



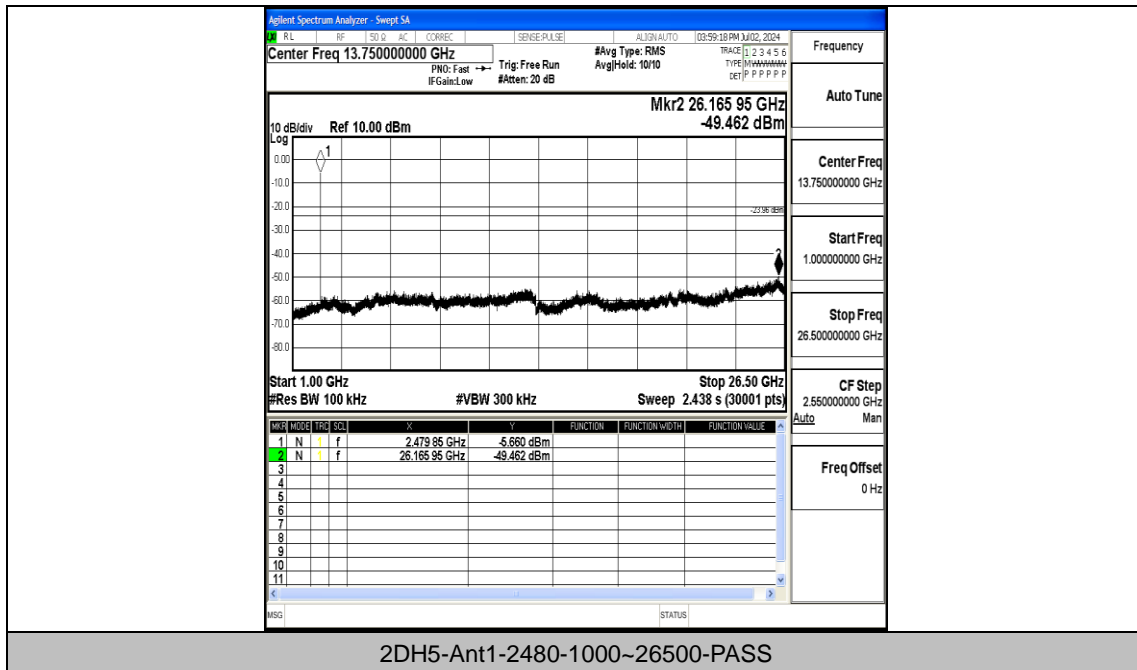
2DH5-Ant1-2441-1000~26500-PASS



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



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

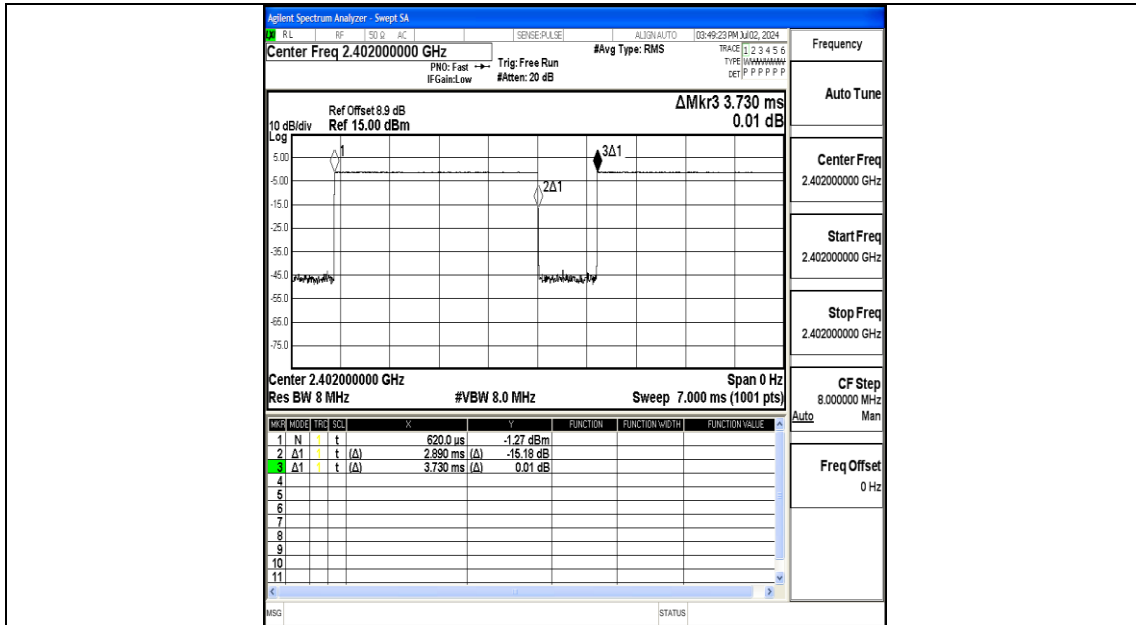


Appendix I: Duty Cycle

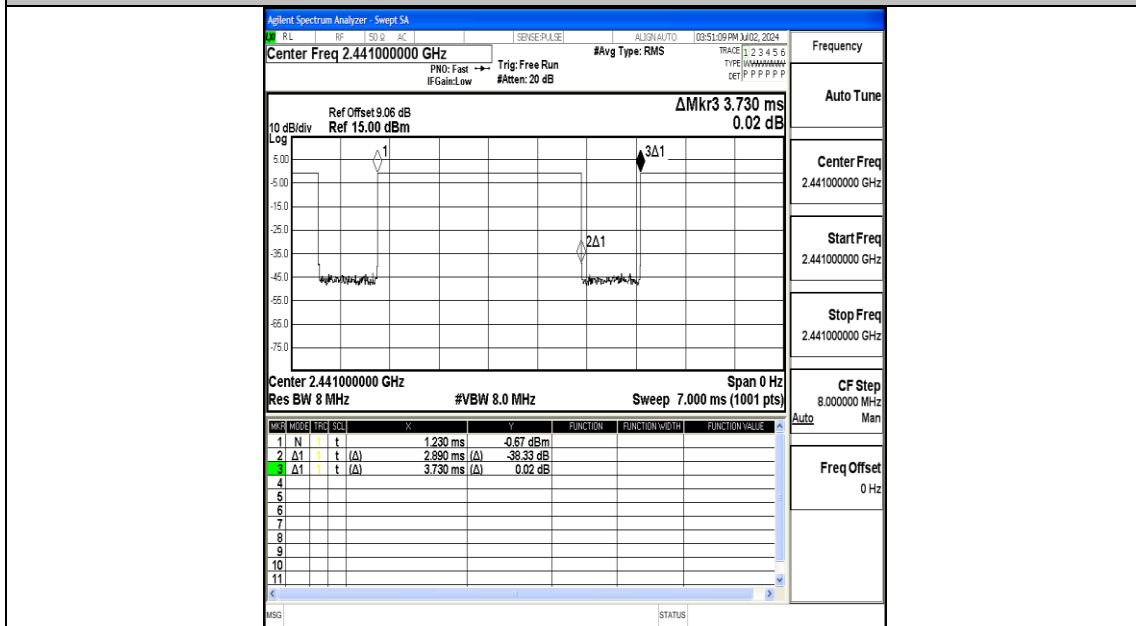
Test Result

| TestMode | Antenna | Frequency[MHz] | ON Time [ms] | Period [ms] | Duty Cycle [%] | Duty Cycle Factor[dB] |
|----------|---------|----------------|--------------|-------------|----------------|-----------------------|
| DH5 | Ant1 | 2402 | 2.89 | 3.73 | 77.48 | 1.11 |
| DH5 | Ant1 | 2441 | 2.89 | 3.73 | 77.48 | 1.11 |
| DH5 | Ant1 | 2480 | 2.89 | 3.73 | 77.48 | 1.11 |
| 2DH5 | Ant1 | 2402 | 2.89 | 3.73 | 77.48 | 1.11 |
| 2DH5 | Ant1 | 2441 | 2.89 | 3.73 | 77.48 | 1.11 |
| 2DH5 | Ant1 | 2480 | 2.89 | 3.73 | 77.48 | 1.11 |

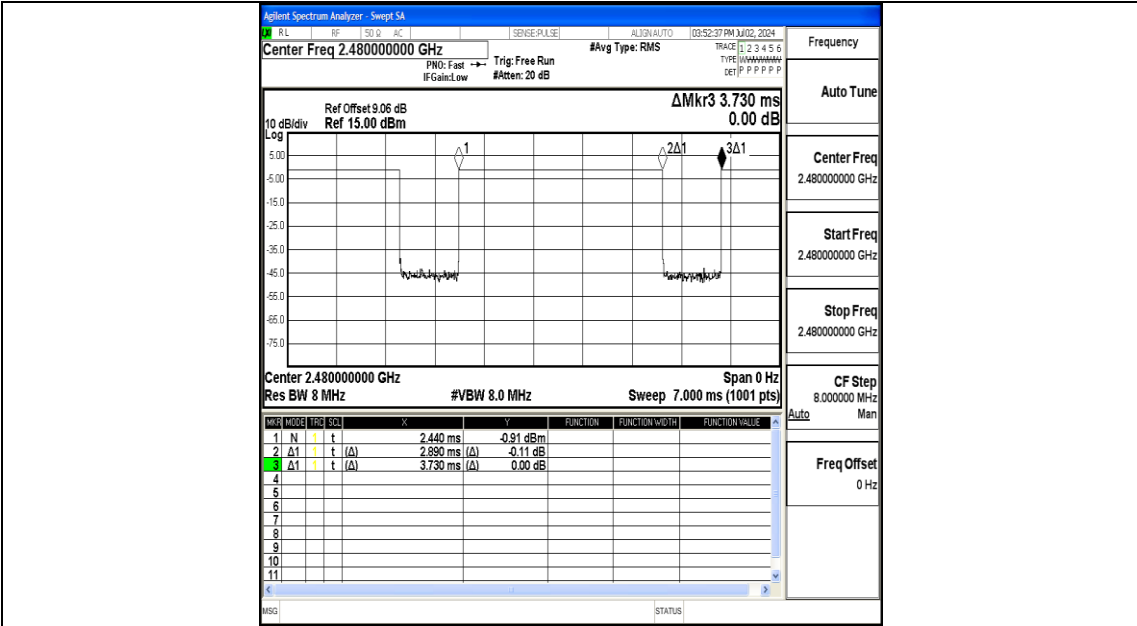
Test Graphs



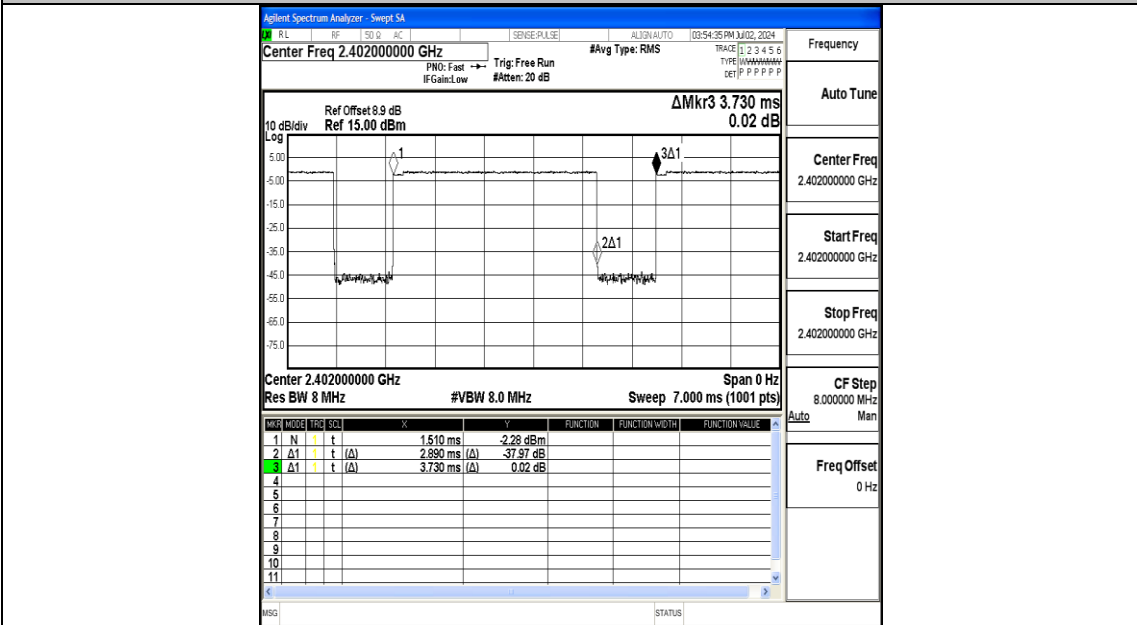
NTNV-DH5-Ant1-2402



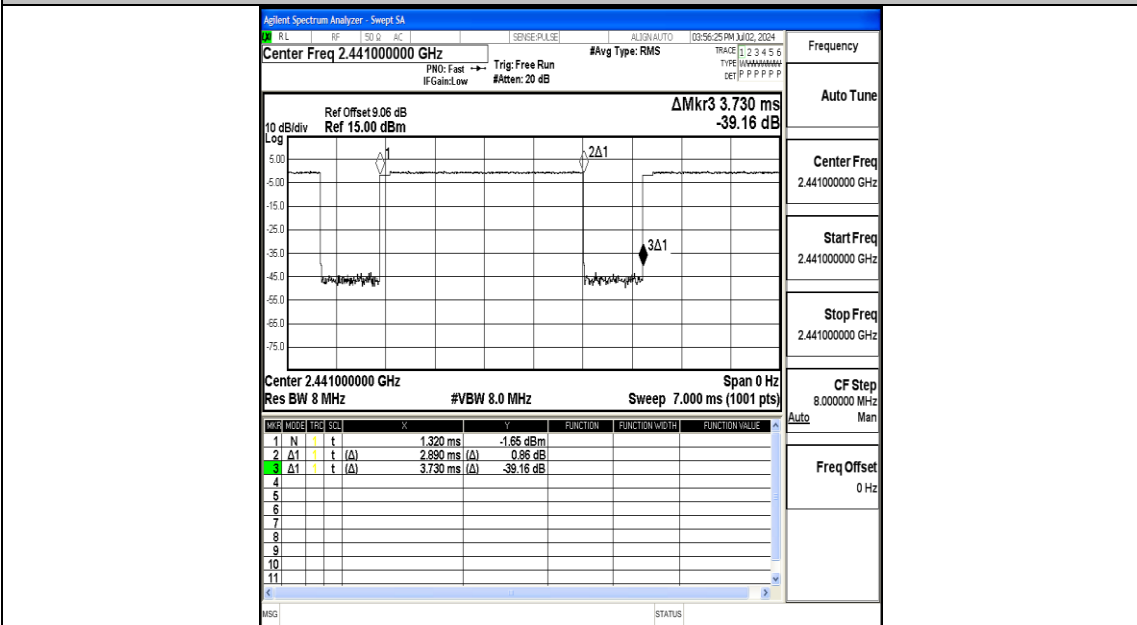
NTNV-DH5-Ant1-2441



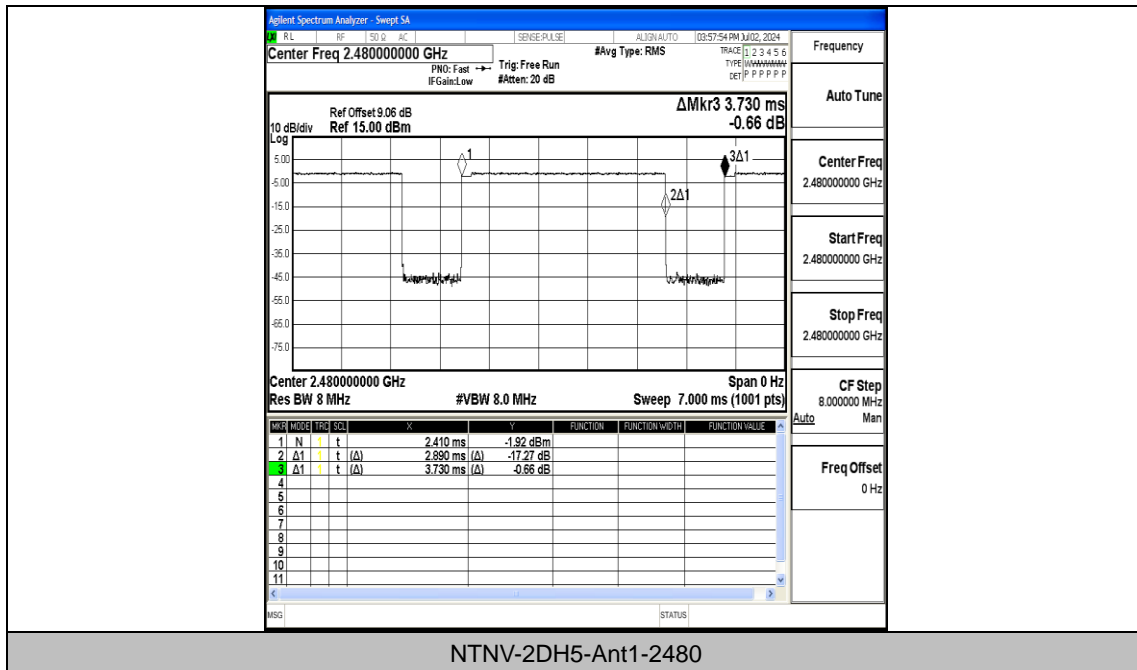
NTNV-DH5-Ant1-2480



NTNV-2DH5-Ant1-2402



NTNV-2DH5-Ant1-2441



NTNV-2DH5-Ant1-2480