# Appendix Test Data

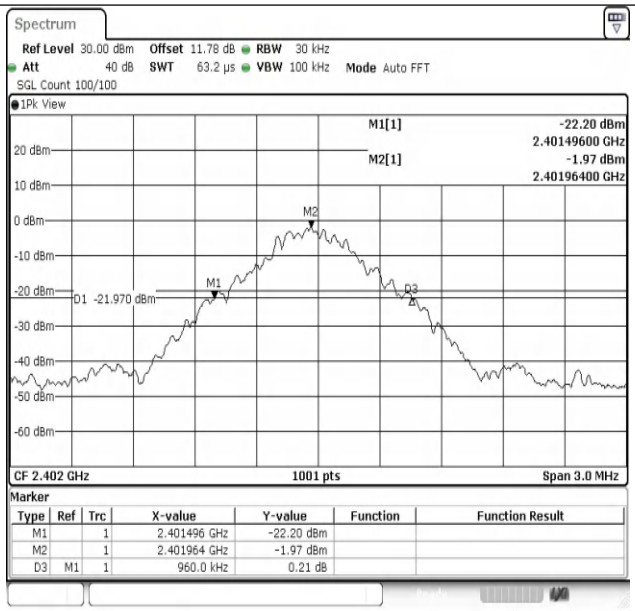
| | | | |
|---|---|---|---|
| Report No.: | 1819C40110312501 | Test Sample No.: | 1-2-2 |
| Start Test Date: | 2024.12.25 | Finish Test Date: | 2025.1.3 |
| Test Engineer: | Joker Huang | Auditor: | Justin Feng |
| Temperature: | 23.3℃ | Relative Humidity: | 56% |
| Pressure: | 101kPa | | |

## Appendix A: 20dB Bandwidth

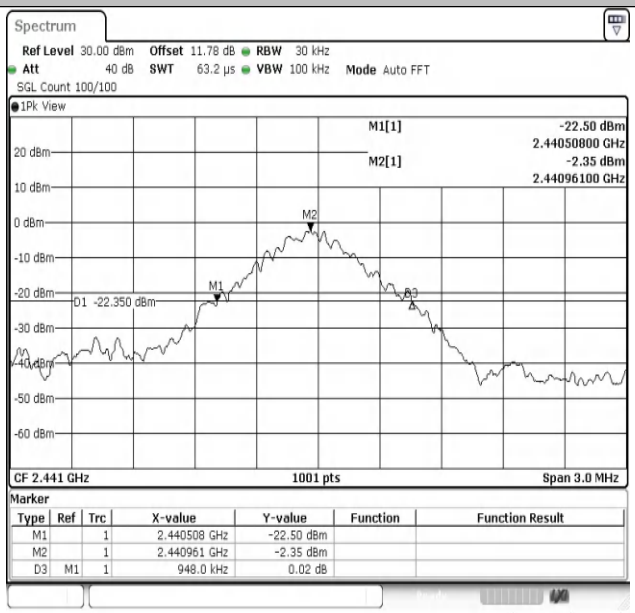
### Test Result

| Test Mode | Antenna | Frequency [MHz] | 20db EBW[MHz] | FL[MHz] | FH[MHz] | Limit[MHz] | Verdict |
|---|---|---|---|---|---|---|---|
| DH5 | Ant1 | 2402 | 0.96 | 2401.50 | 2402.46 | --- | --- |
| DH5 | Ant1 | 2441 | 0.95 | 2440.51 | 2441.46 | --- | --- |
| DH5 | Ant1 | 2480 | 1.00 | 2479.46 | 2480.46 | --- | --- |
| 2DH5 | Ant1 | 2402 | 1.31 | 2401.31 | 2402.62 | --- | --- |
| 2DH5 | Ant1 | 2441 | 1.32 | 2440.31 | 2441.63 | --- | --- |
| 2DH5 | Ant1 | 2480 | 1.36 | 2479.29 | 2480.65 | --- | --- |
| 3DH5 | Ant1 | 2402 | 1.28 | 2401.32 | 2402.61 | --- | --- |
| 3DH5 | Ant1 | 2441 | 1.30 | 2440.33 | 2441.63 | --- | --- |
| 3DH5 | Ant1 | 2480 | 1.31 | 2479.32 | 2480.63 | --- | --- |

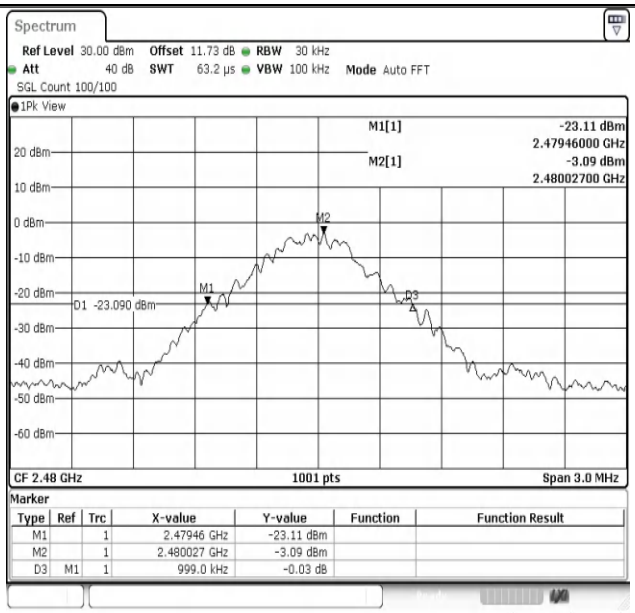
## Test Graphs



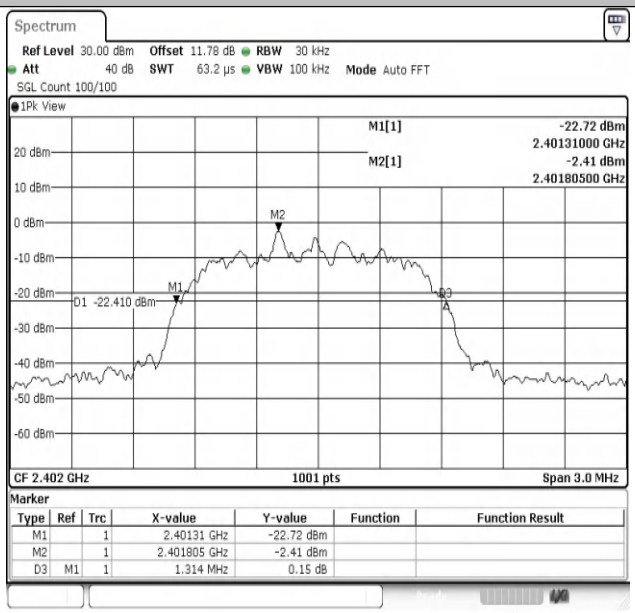

DH5-Ant1-2402



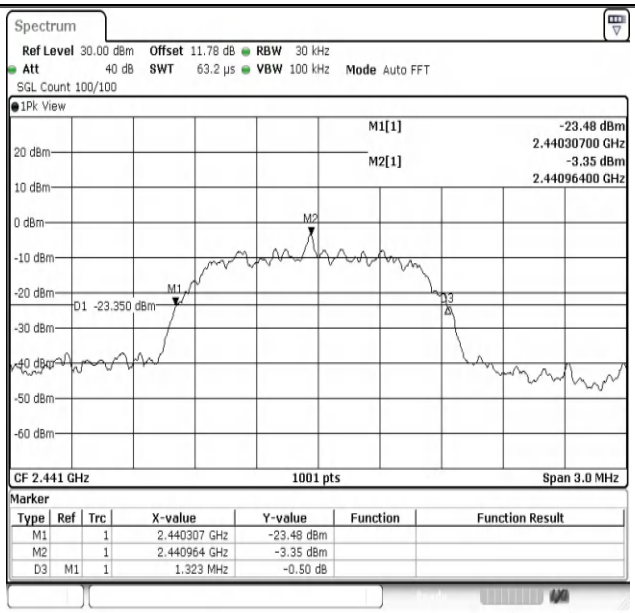

DH5-Ant1-2441



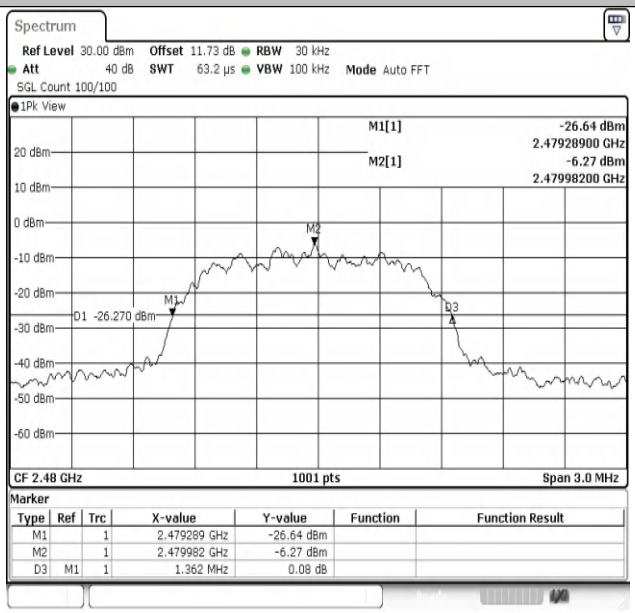

DH5-Ant1-2480



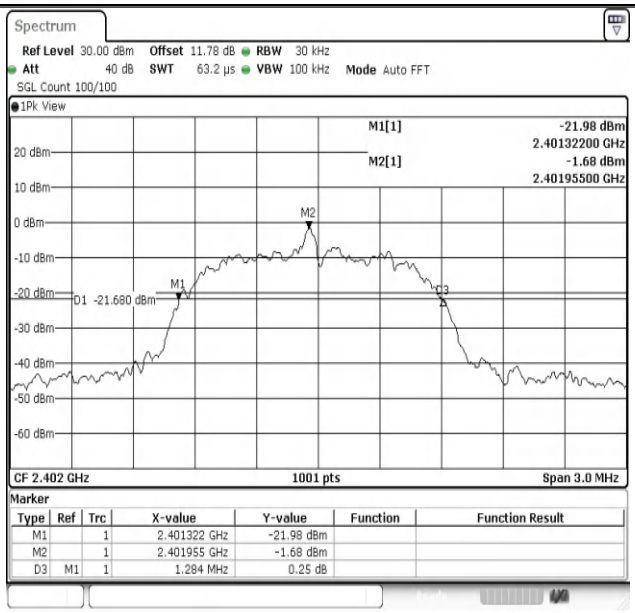

2DH5-Ant1-2402



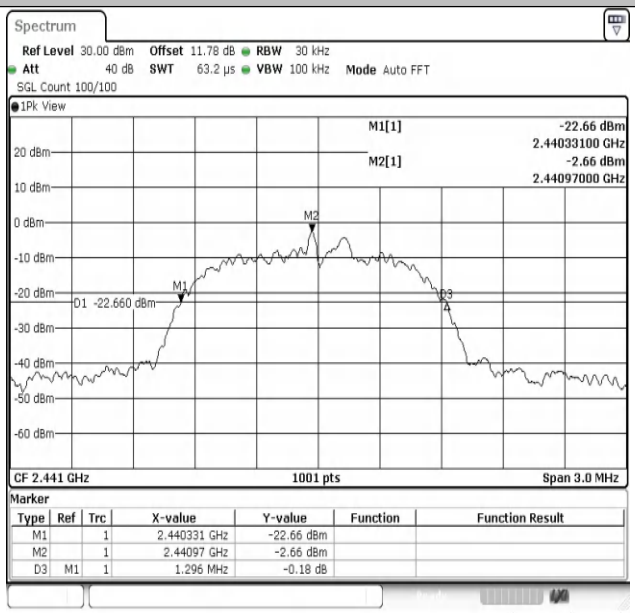

2DH5-Ant1-2441



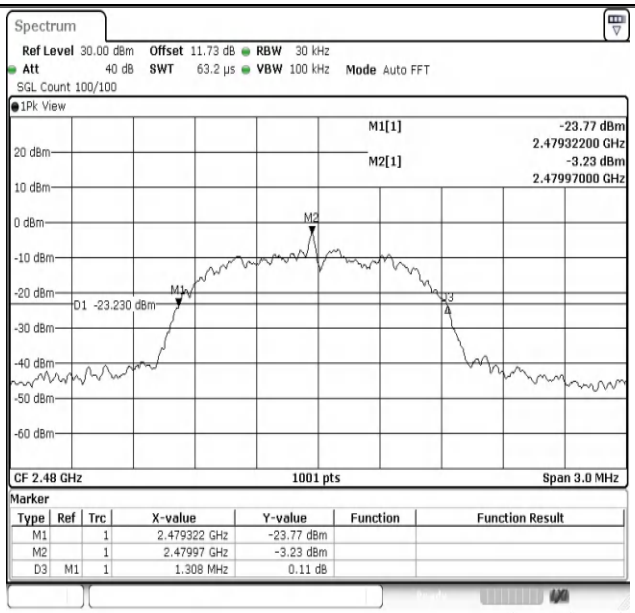

2DH5-Ant1-2480




3DH5-Ant1-2402




3DH5-Ant1-2441



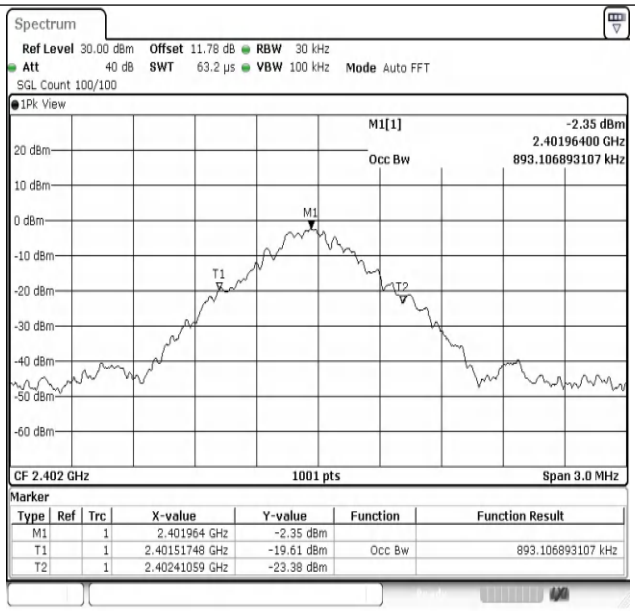

3DH5-Ant1-2480

# Appendix B: 99% Occupied Bandwidth

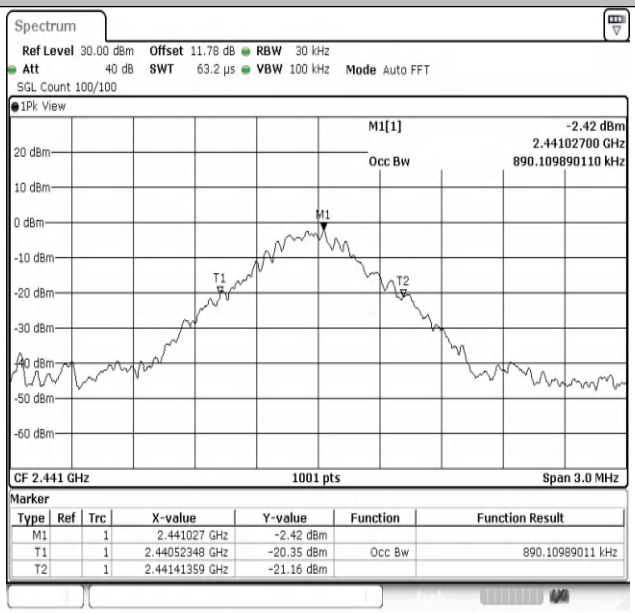
## Test Result

| Test Mode | Antenna | Frequency [MHz] | OCB [MHz] | FL[MHz] | FH[MHz] | Limit[MHz] | Verdict |
|---|---|---|---|---|---|---|---|
| DH5 | Ant1 | 2402 | 0.893 | 2401.5175 | 2402.4106 | --- | --- |
| DH5 | Ant1 | 2441 | 0.89 | 2440.5235 | 2441.4136 | --- | --- |
| DH5 | Ant1 | 2480 | 0.893 | 2479.5175 | 2480.4106 | --- | --- |
| 2DH5 | Ant1 | 2402 | 1.211 | 2401.3676 | 2402.5784 | --- | --- |
| 2DH5 | Ant1 | 2441 | 1.202 | 2440.3706 | 2441.5724 | --- | --- |
| 2DH5 | Ant1 | 2480 | 1.196 | 2479.3736 | 2480.5694 | --- | --- |
| 3DH5 | Ant1 | 2402 | 1.196 | 2401.3676 | 2402.5634 | --- | --- |
| 3DH5 | Ant1 | 2441 | 1.205 | 2440.3646 | 2441.5694 | --- | --- |
| 3DH5 | Ant1 | 2480 | 1.202 | 2479.3676 | 2480.5694 | --- | --- |

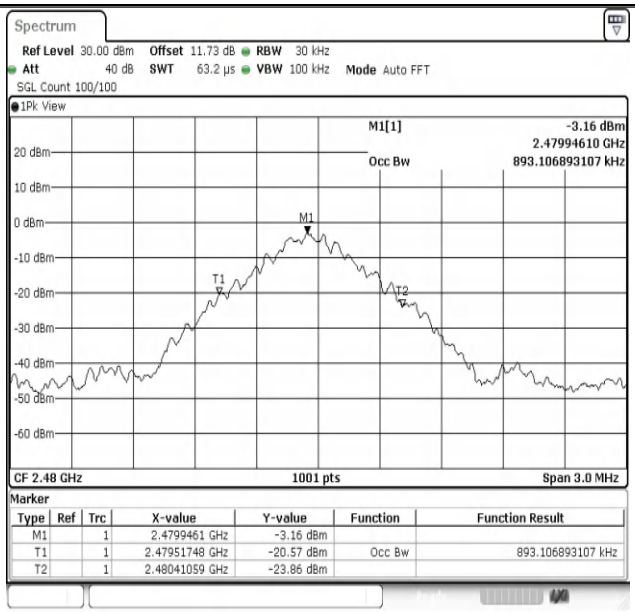
## Test Graphs



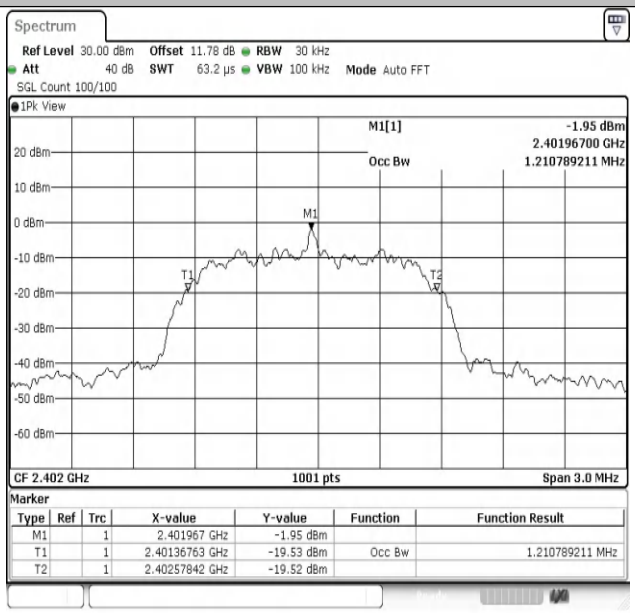

DH5-Ant1-2402



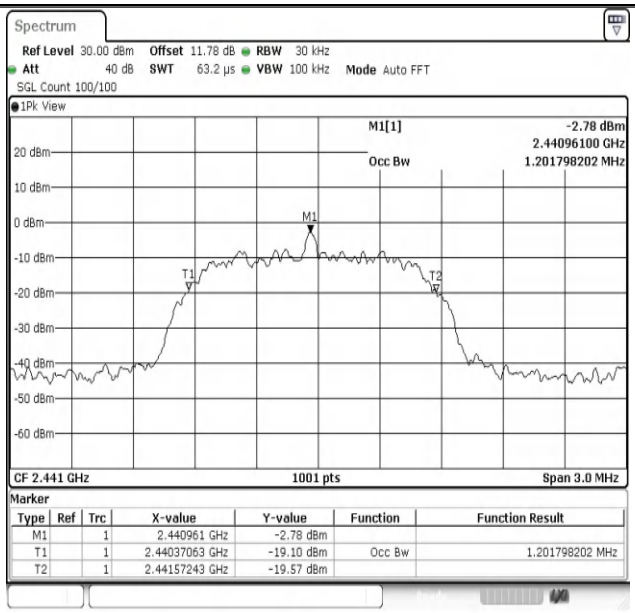

DH5-Ant1-2441



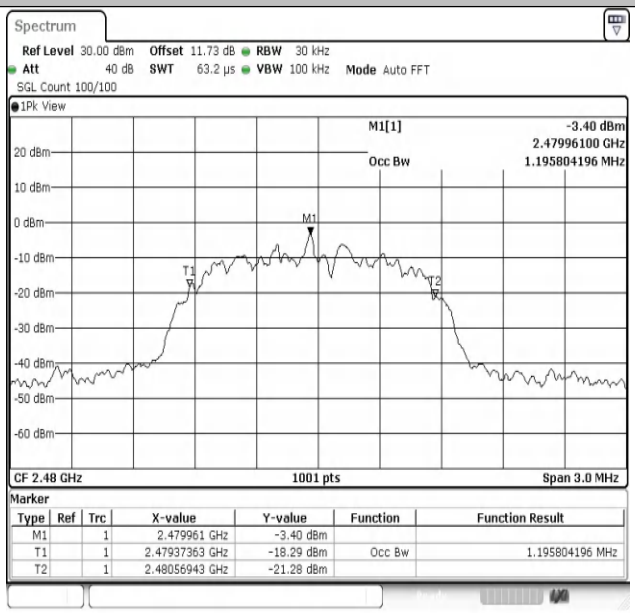

DH5-Ant1-2480



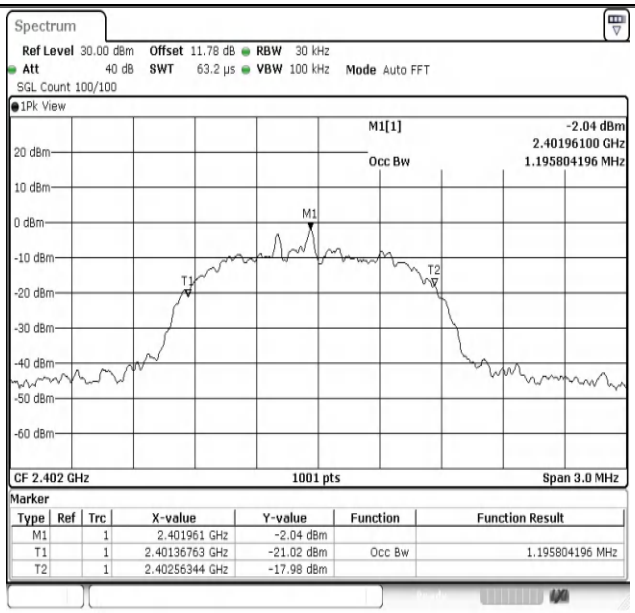

2DH5-Ant1-2402



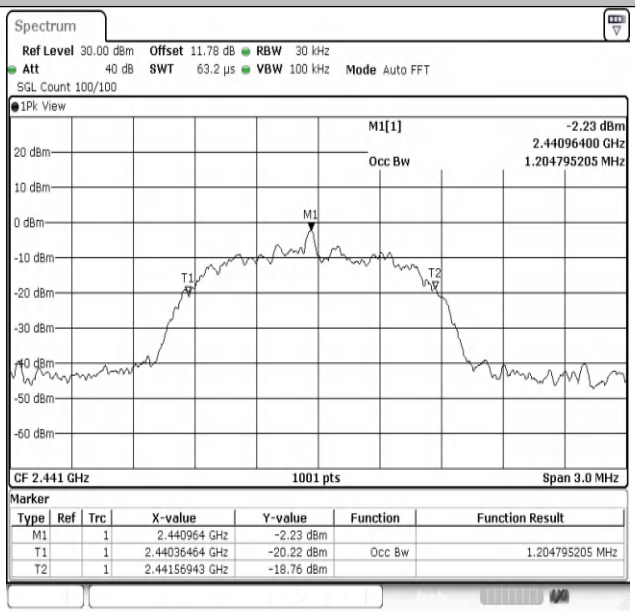

2DH5-Ant1-2441



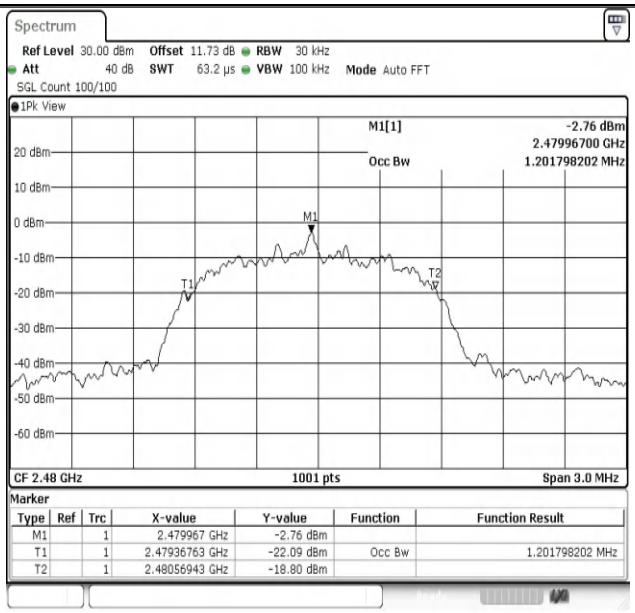

2DH5-Ant1-2480




3DH5-Ant1-2402




3DH5-Ant1-2441




3DH5-Ant1-2480

# Appendix C: Maximum Conducted Output Power

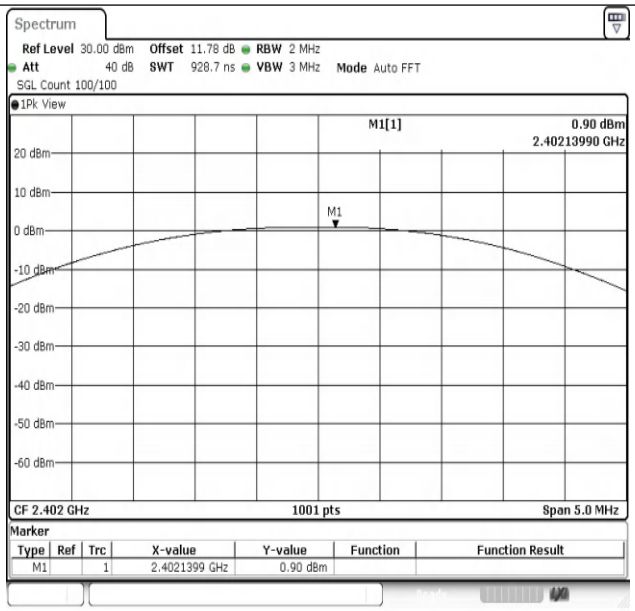
## Test Result Peak (Left earphone )

| Test Mode | Antenna | Frequency[MHz] | Conducted Peak Power[dBm] | Conducted Limit[dBm] | Verdict |
|---|---|---|---|---|---|
| DH5 | Ant1 | 2402 | 0.90 | ≤20.97 | PASS |
| DH5 | Ant1 | 2441 | 0.73 | ≤20.97 | PASS |
| DH5 | Ant1 | 2480 | 0.05 | ≤20.97 | PASS |
| 2DH5 | Ant1 | 2402 | 1.35 | ≤20.97 | PASS |
| 2DH5 | Ant1 | 2441 | **1.38** | ≤20.97 | PASS |
| 2DH5 | Ant1 | 2480 | 0.43 | ≤20.97 | PASS |
| 3DH5 | Ant1 | 2402 | 1.37 | ≤20.97 | PASS |
| 3DH5 | Ant1 | 2441 | 0.98 | ≤20.97 | PASS |
| 3DH5 | Ant1 | 2480 | 0.85 | ≤20.97 | PASS |

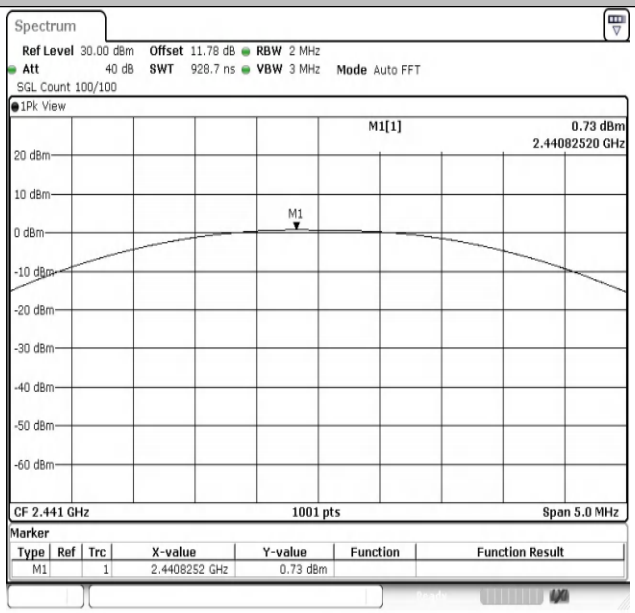
## Test Result Peak (Right earphone)

| Test Mode | Antenna | Frequency[MHz] | Conducted Peak Power[dBm] | Conducted Limit[dBm] | Verdict |
|---|---|---|---|---|---|
| DH5 | Ant1 | 2402 | 0.79 | ≤20.97 | PASS |
| DH5 | Ant1 | 2441 | 1.11 | ≤20.97 | PASS |
| DH5 | Ant1 | 2480 | **1.88** | ≤20.97 | PASS |
| 2DH5 | Ant1 | 2402 | 0.51 | ≤20.97 | PASS |
| 2DH5 | Ant1 | 2441 | 0.95 | ≤20.97 | PASS |
| 2DH5 | Ant1 | 2480 | 1.70 | ≤20.97 | PASS |
| 3DH5 | Ant1 | 2402 | 0.20 | ≤20.97 | PASS |
| 3DH5 | Ant1 | 2441 | 0.88 | ≤20.97 | PASS |
| 3DH5 | Ant1 | 2480 | 1.65 | ≤20.97 | PASS |

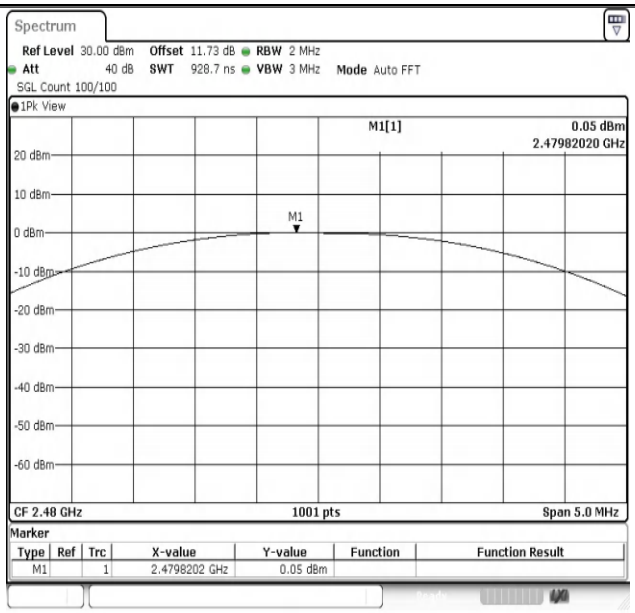
## Test Graphs (Left earphone )



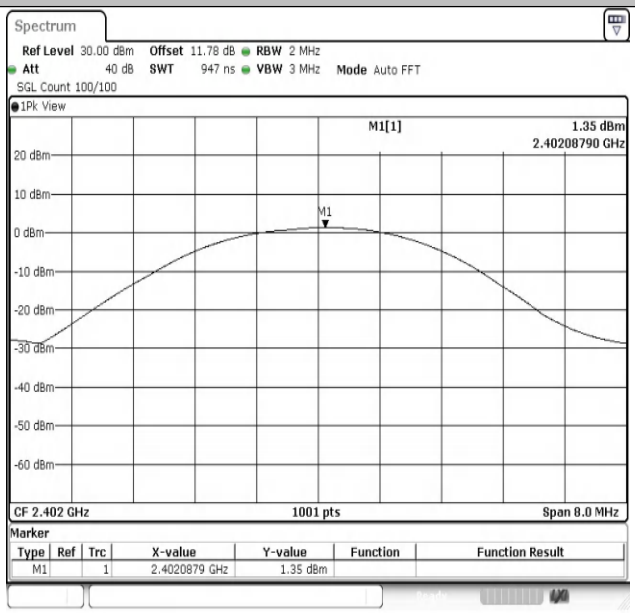

DH5-Ant1-2402-PASS



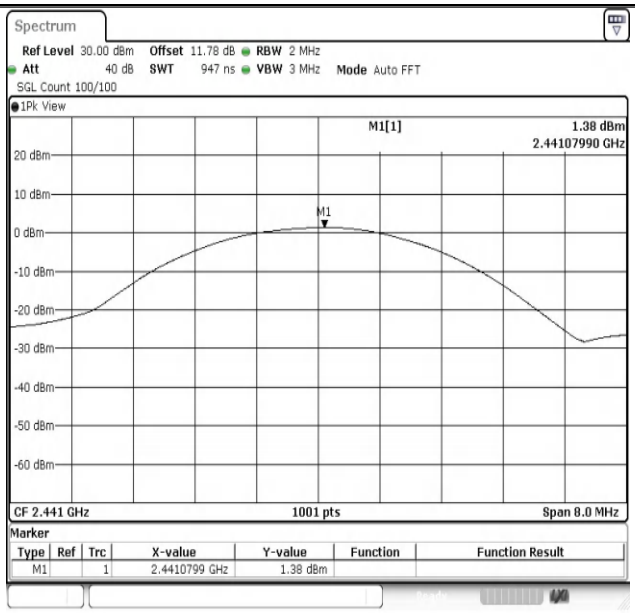

DH5-Ant1-2441-PASS



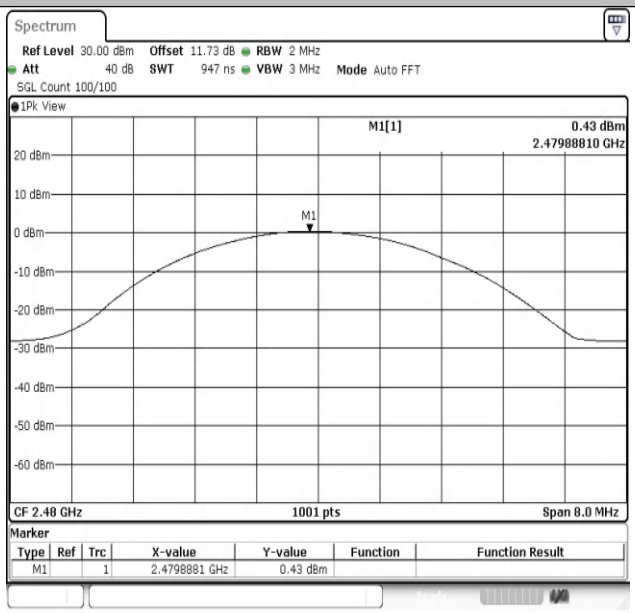

DH5-Ant1-2480-PASS



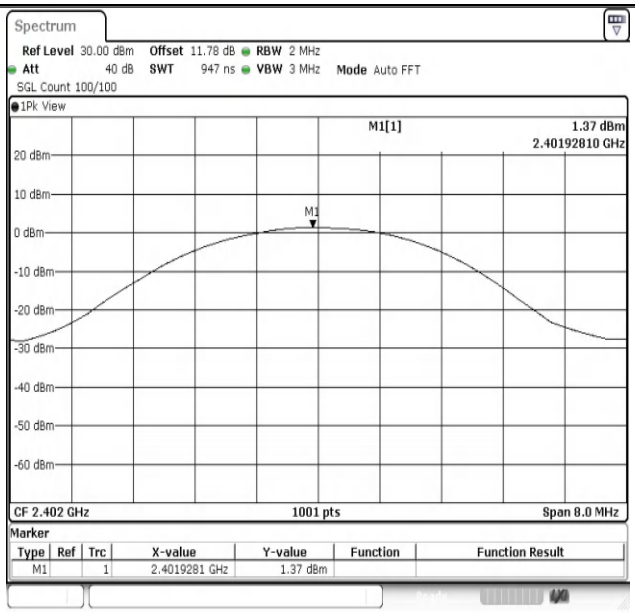

2DH5-Ant1-2402-PASS



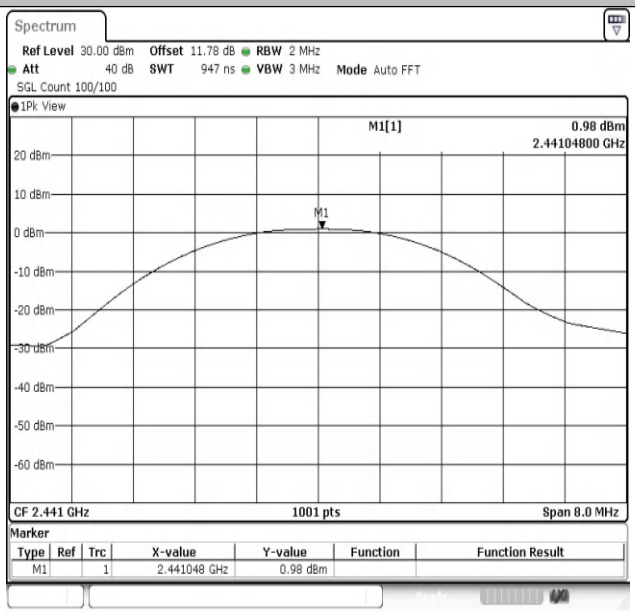

2DH5-Ant1-2441-PASS



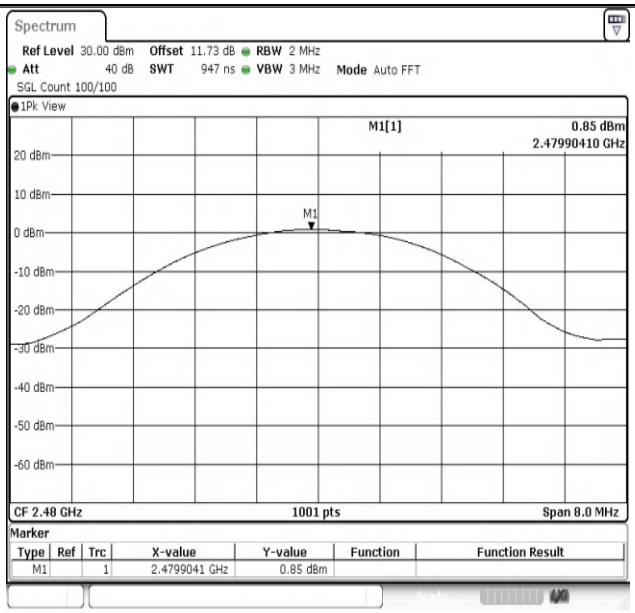

2DH5-Ant1-2480-PASS




3DH5-Ant1-2402-PASS

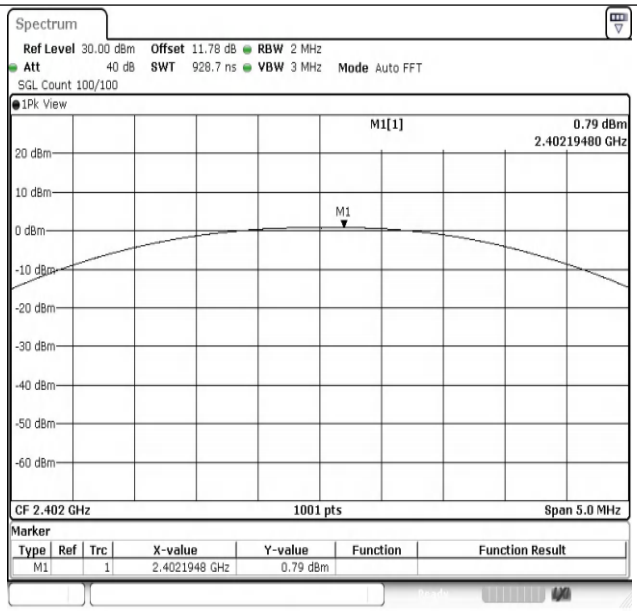



3DH5-Ant1-2441-PASS

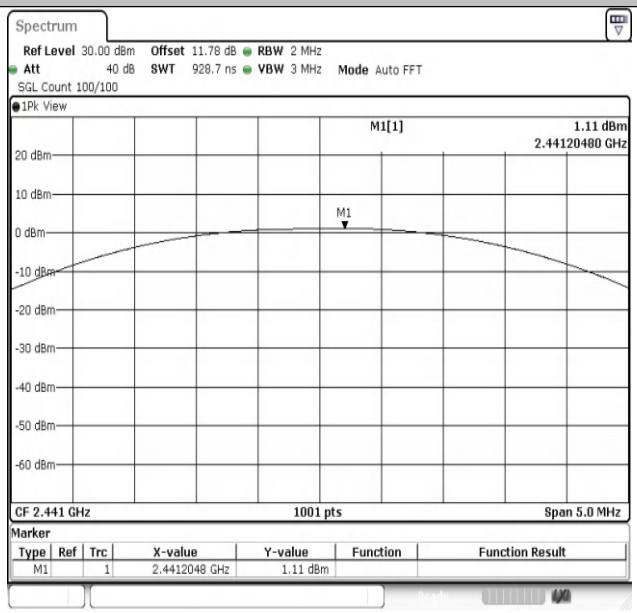



3DH5-Ant1-2480-PASS

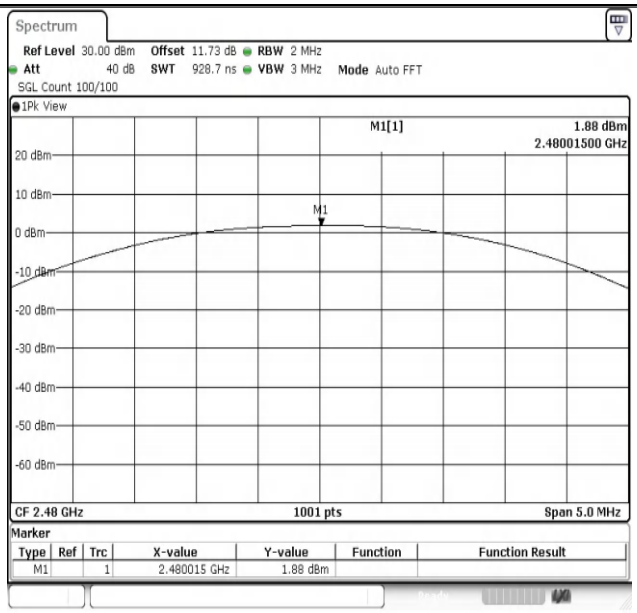
## Test Graphs (Right earphone)



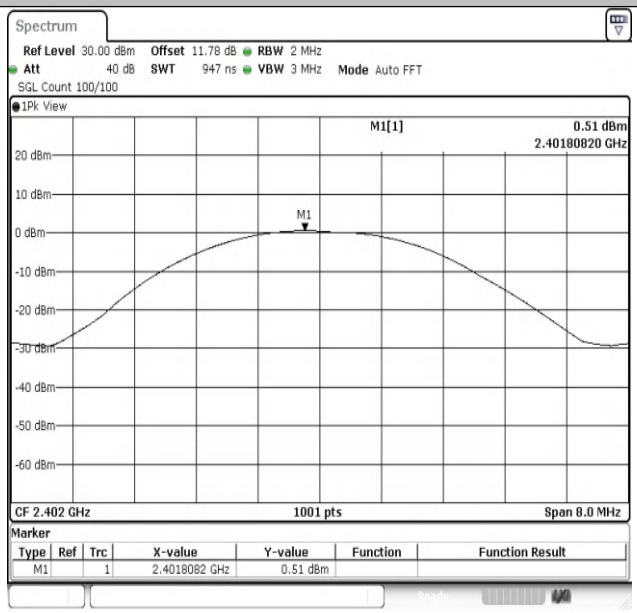

DH5-Ant1-2402-PASS



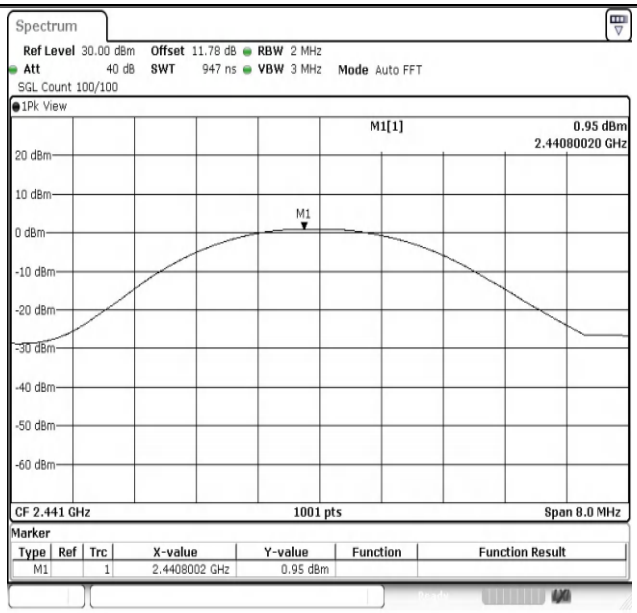

DH5-Ant1-2441-PASS



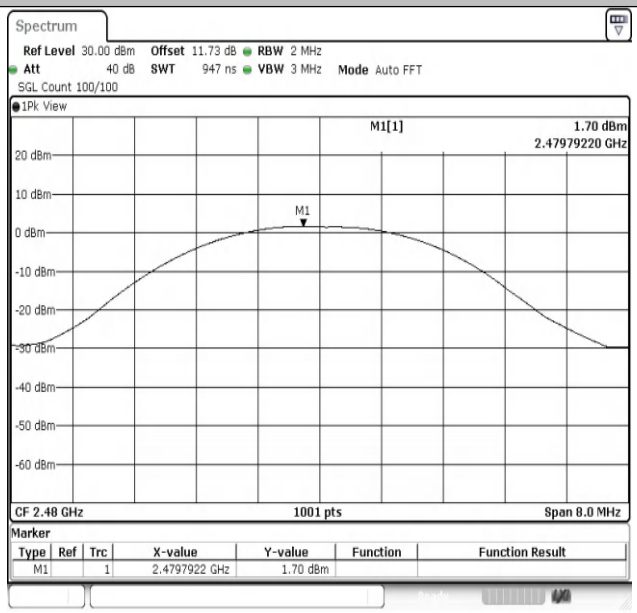

DH5-Ant1-2480-PASS



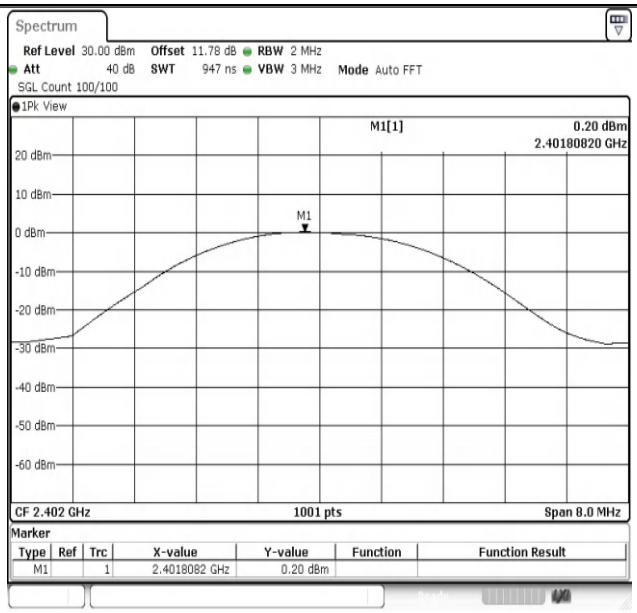

2DH5-Ant1-2402-PASS



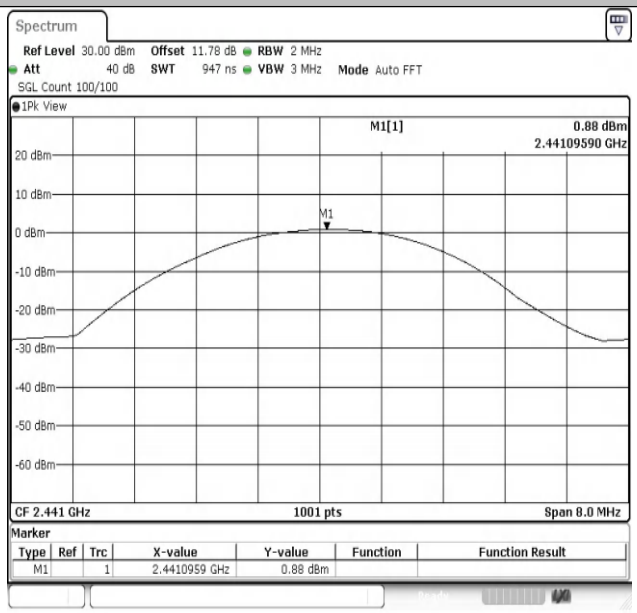

2DH5-Ant1-2441-PASS



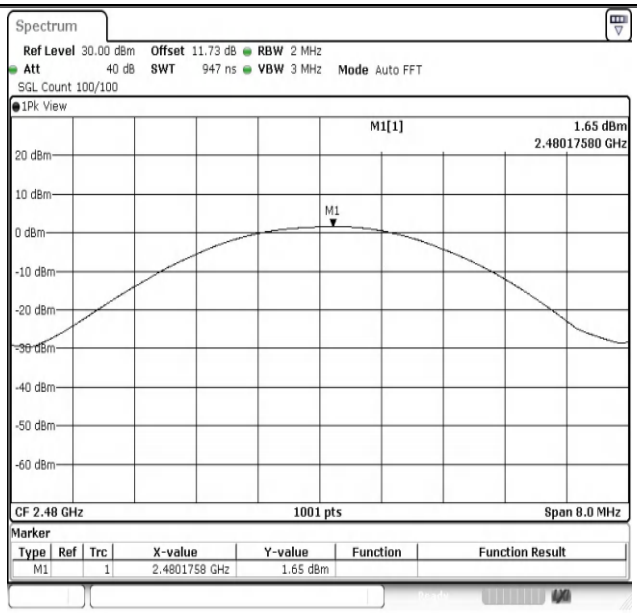

2DH5-Ant1-2480-PASS




3DH5-Ant1-2402-PASS




3DH5-Ant1-2441-PASS



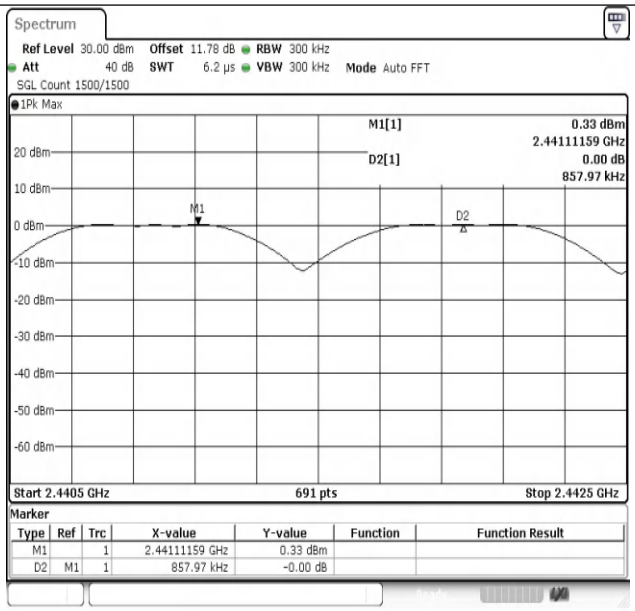

3DH5-Ant1-2480-PASS

# Appendix D: Carrier frequency separation

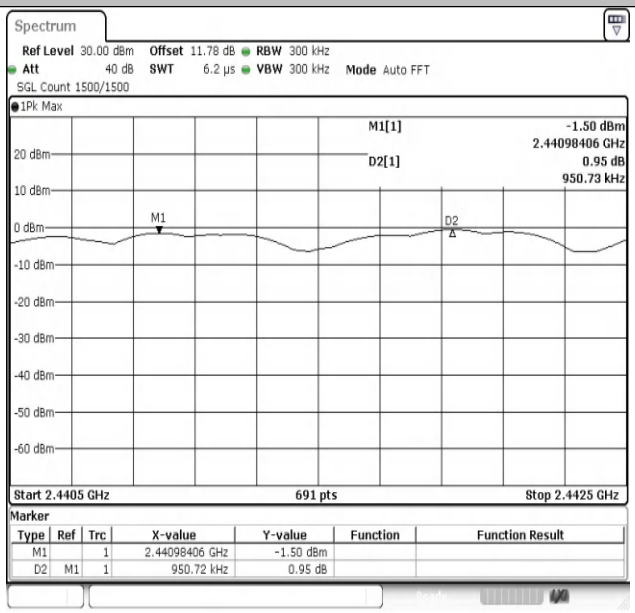
## Test Result

| Test Mode | Antenna | Frequency [MHz] | Result [MHz] | Limit[MHz] | Verdict |
|---|---|---|---|---|---|
| DH5 | Ant1 | Hop | 0.858 | ≥0.667 | PASS |
| 2DH5 | Ant1 | Hop | 0.951 | ≥0.907 | PASS |
| 3DH5 | Ant1 | Hop | 0.878 | ≥0.873 | PASS |

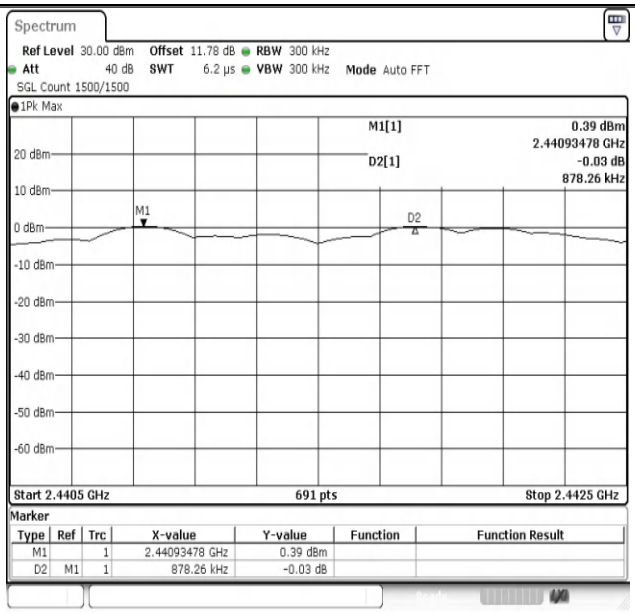
## Test Graphs




DH5-Ant1-Hop-PASS




2DH5-Ant1-Hop-PASS



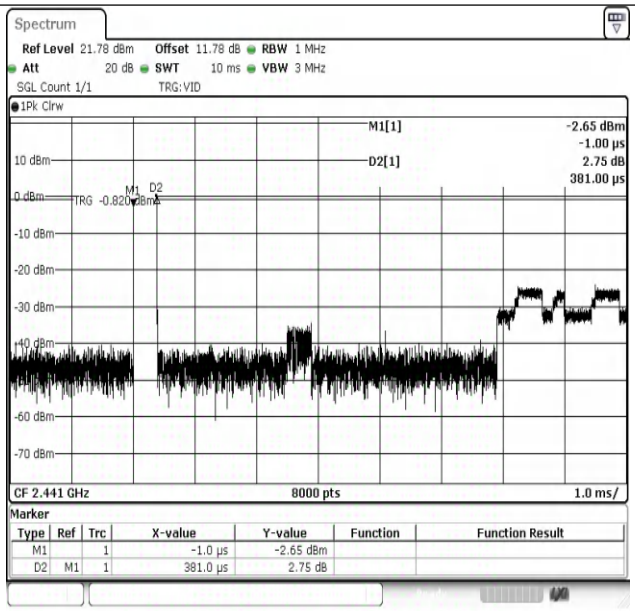

3DH5-Ant1-Hop-PASS

# Appendix E: Dwell Time

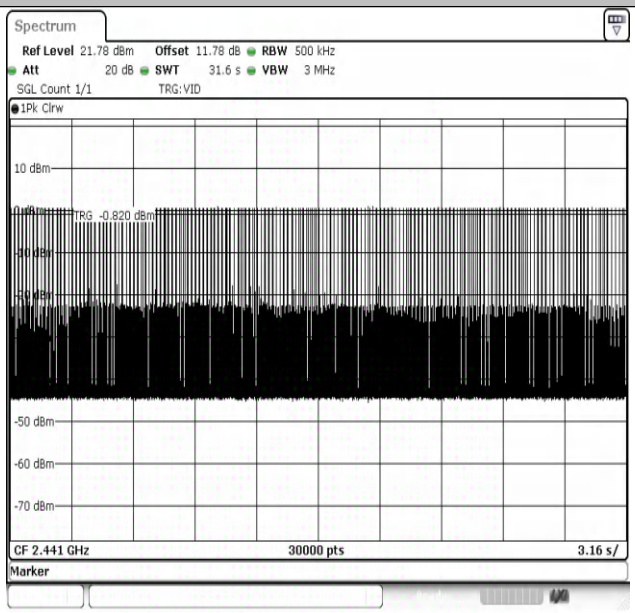
## Test Result

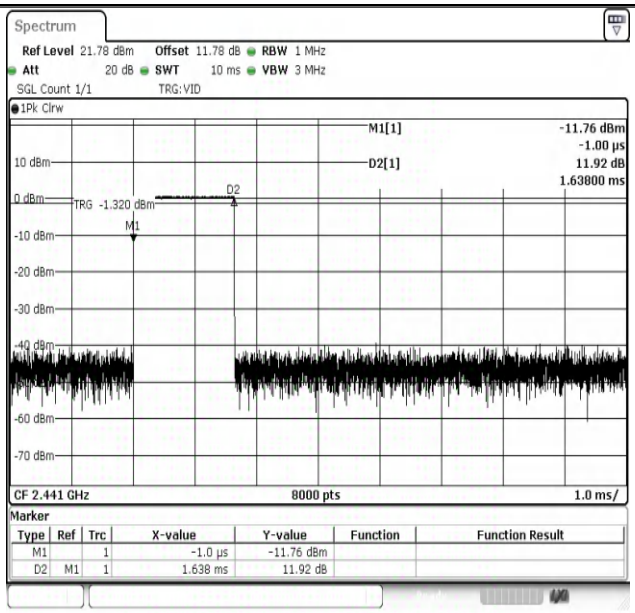
| Test Mode | Antenna | Frequency [MHz] | Burst Width [ms] | Total Hops [Num] | Result [s] | Limit [s] | Verdict |
|---|---|---|---|---|---|---|---|
| DH1 | Ant1 | Hop | 0.381 | 319 | 0.122 | ≤0.4 | PASS |
| DH3 | Ant1 | Hop | 1.638 | 158 | 0.259 | ≤0.4 | PASS |
| DH5 | Ant1 | Hop | 2.887 | 113 | 0.326 | ≤0.4 | PASS |
| 2DH1 | Ant1 | Hop | 0.391 | 321 | 0.126 | ≤0.4 | PASS |
| 2DH3 | Ant1 | Hop | 1.643 | 166 | 0.273 | ≤0.4 | PASS |
| 2DH5 | Ant1 | Hop | 2.892 | 103 | 0.298 | ≤0.4 | PASS |
| 3DH1 | Ant1 | Hop | 0.391 | 317 | 0.124 | ≤0.4 | PASS |
| 3DH3 | Ant1 | Hop | 1.641 | 152 | 0.249 | ≤0.4 | PASS |
| 3DH5 | Ant1 | Hop | 2.893 | 112 | 0.324 | ≤0.4 | PASS |

## Test Graphs

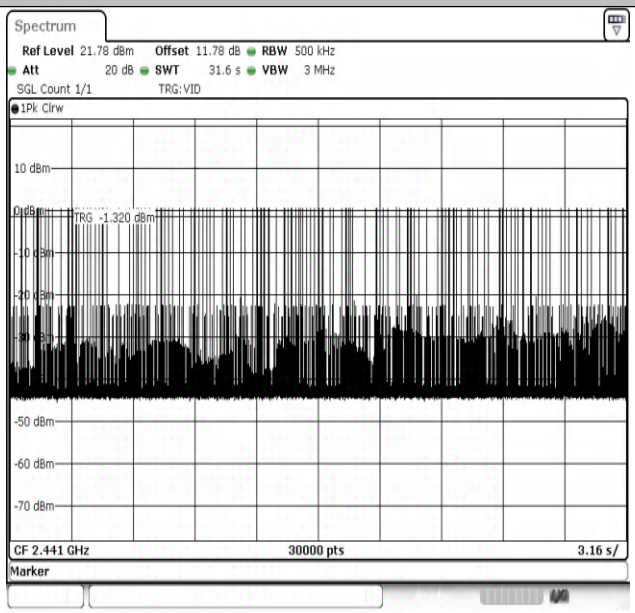


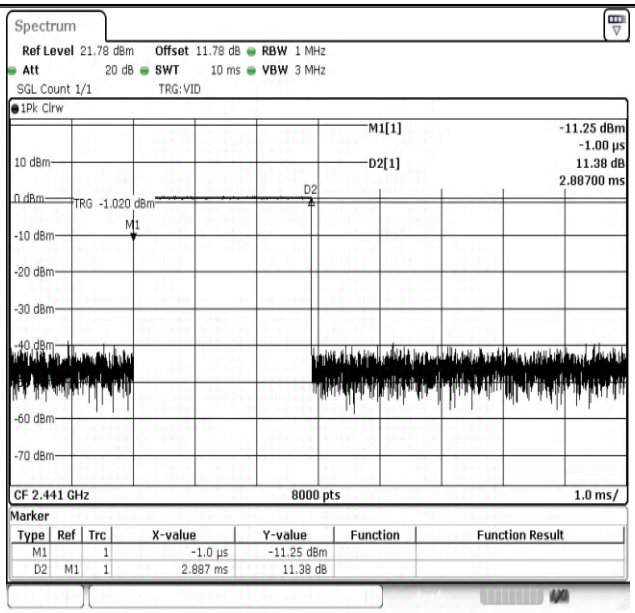

DH1-Ant1-Hop-PASS



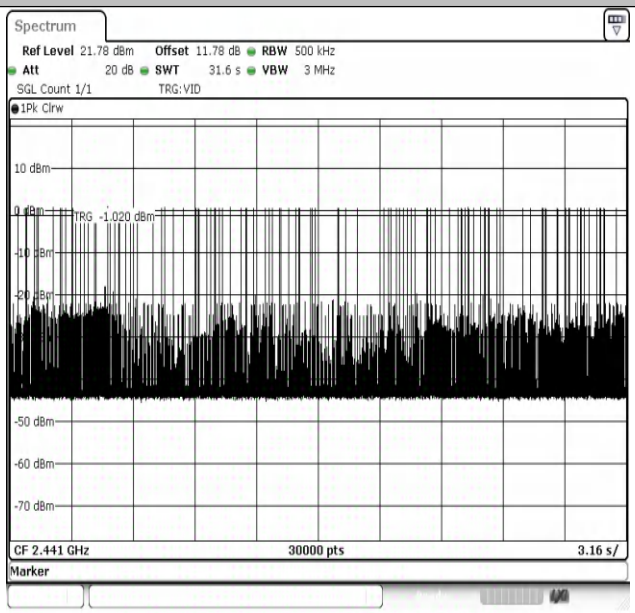


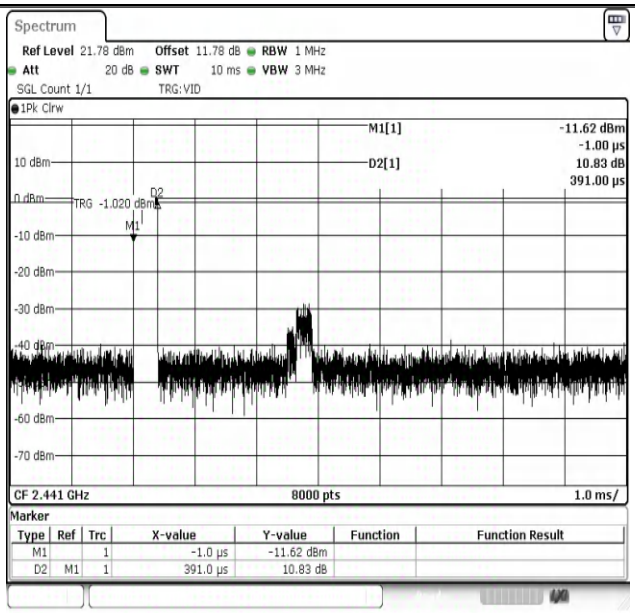

DH3-Ant1-Hop-PASS



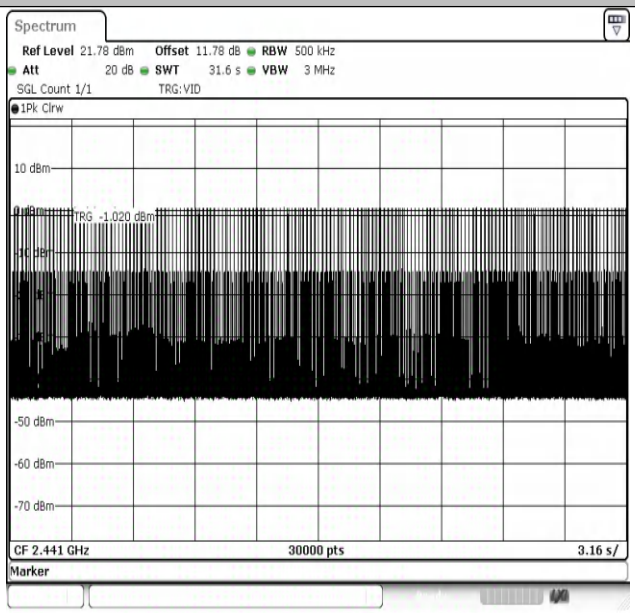


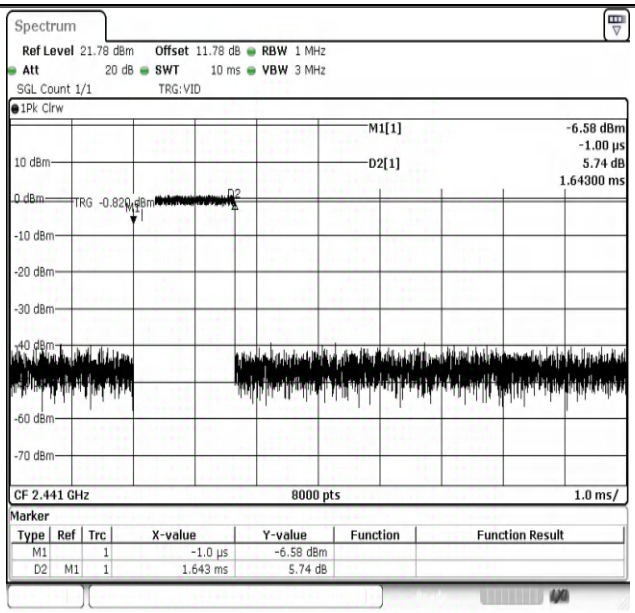

DH5-Ant1-Hop-PASS



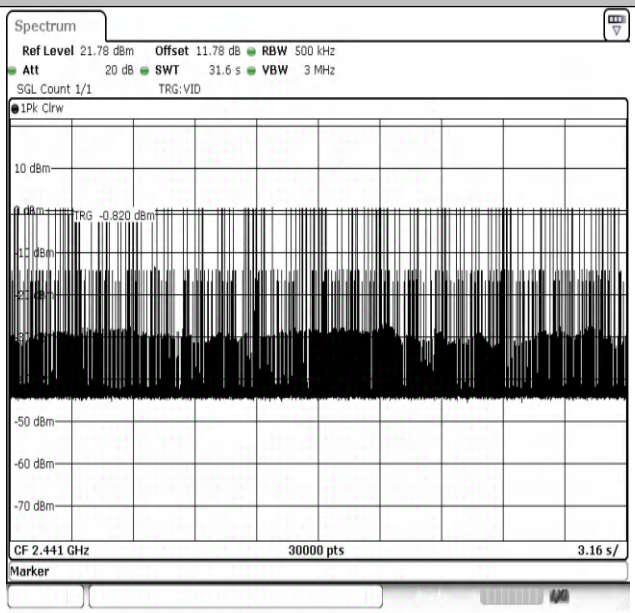


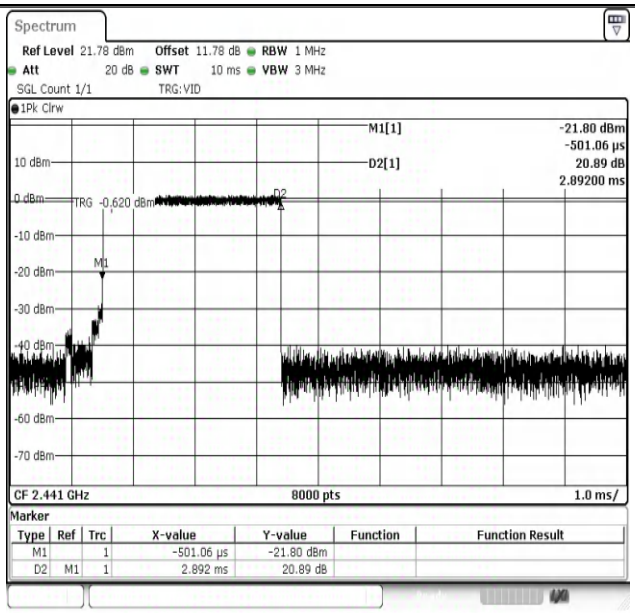

2DH1-Ant1-Hop-PASS



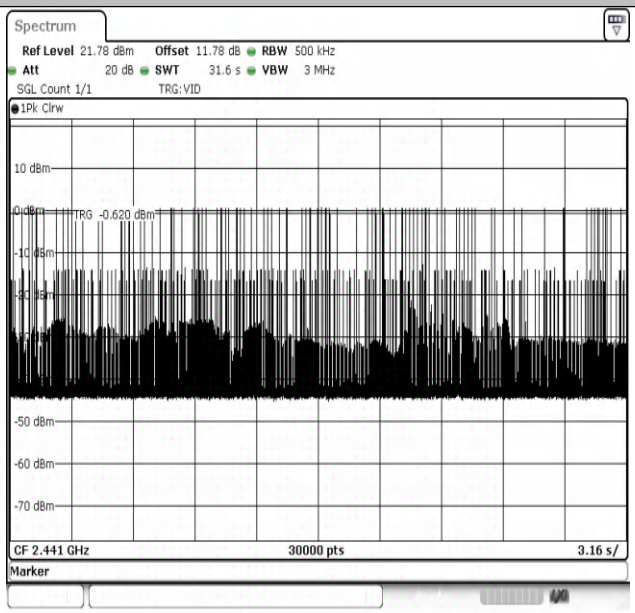


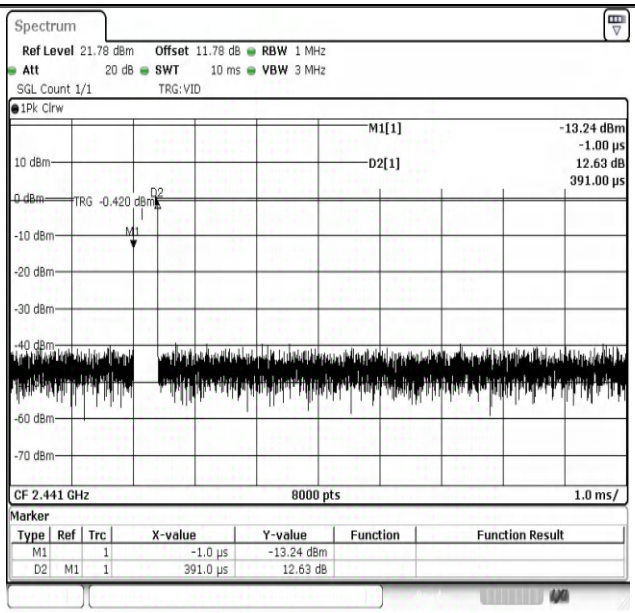

2DH3-Ant1-Hop-PASS



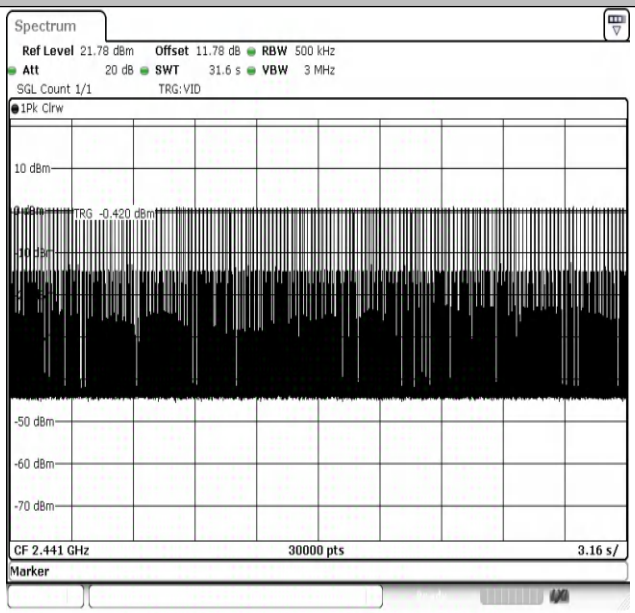


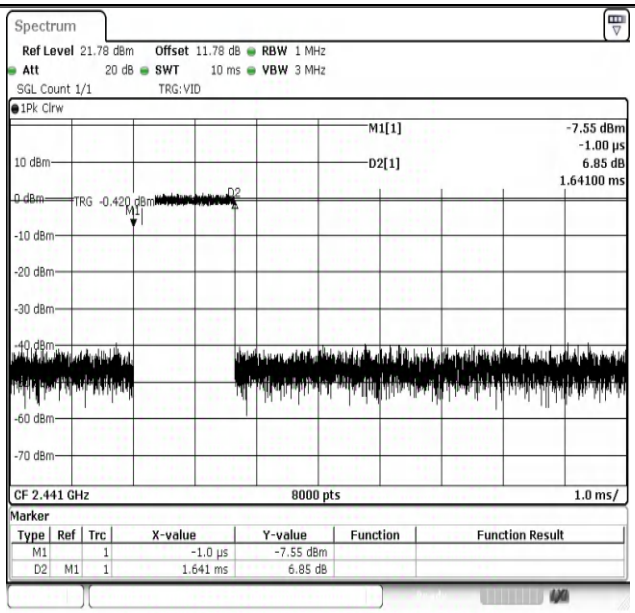

2DH5-Ant1-Hop-PASS



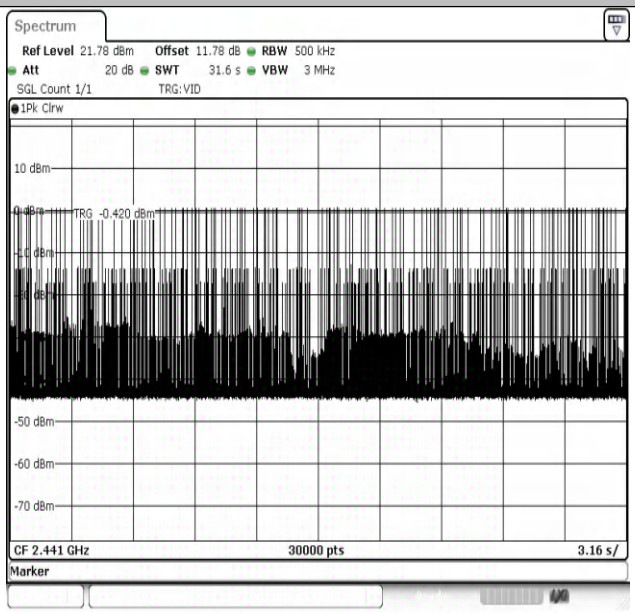


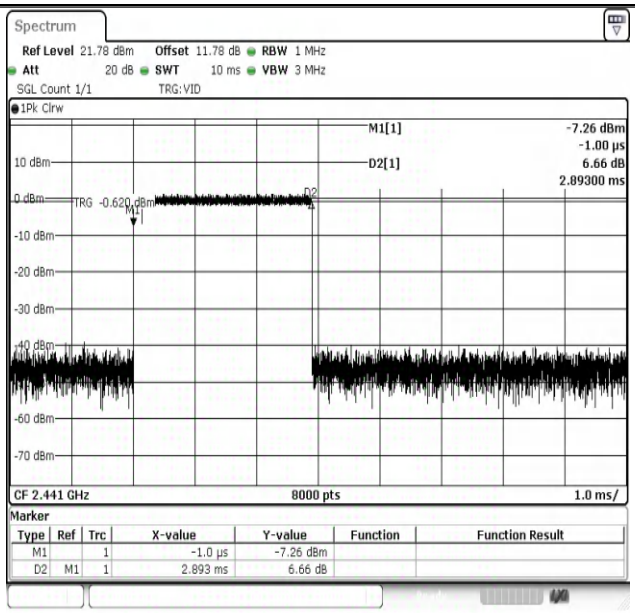

3DH1-Ant1-Hop-PASS



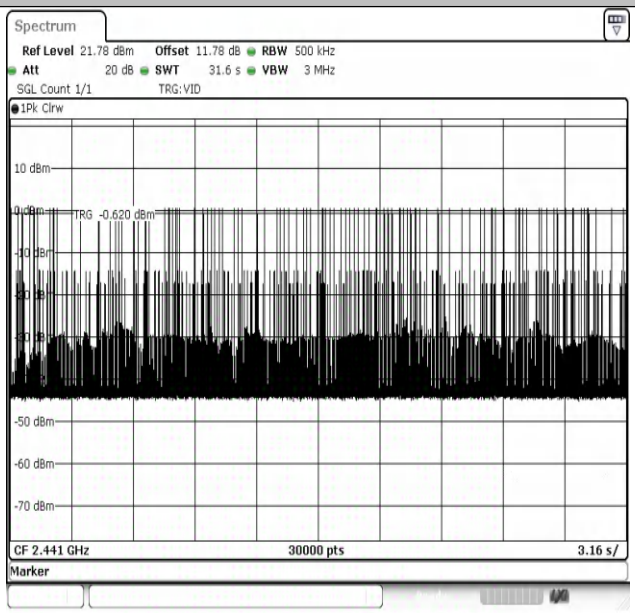



3DH3-Ant1-Hop-PASS






3DH5-Ant1-Hop-PASS

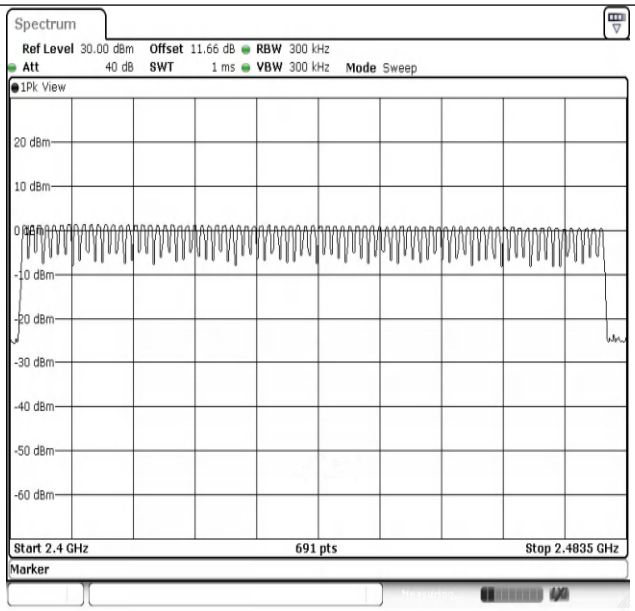


# Appendix F: Number of Hopping Channel

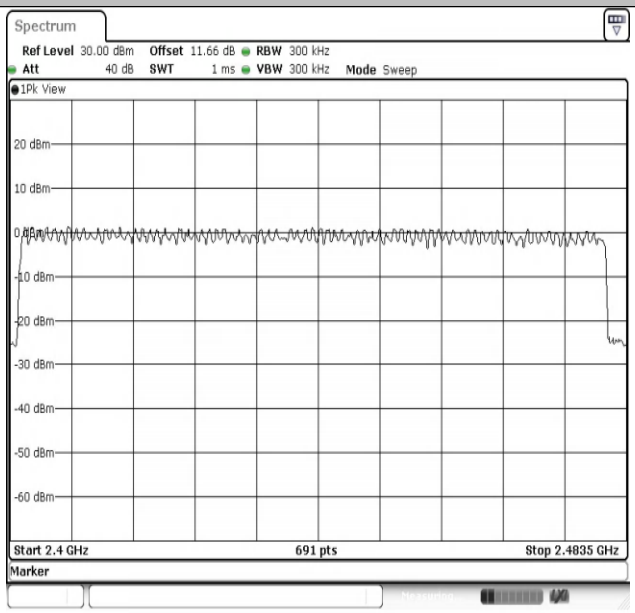
## Test Result

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

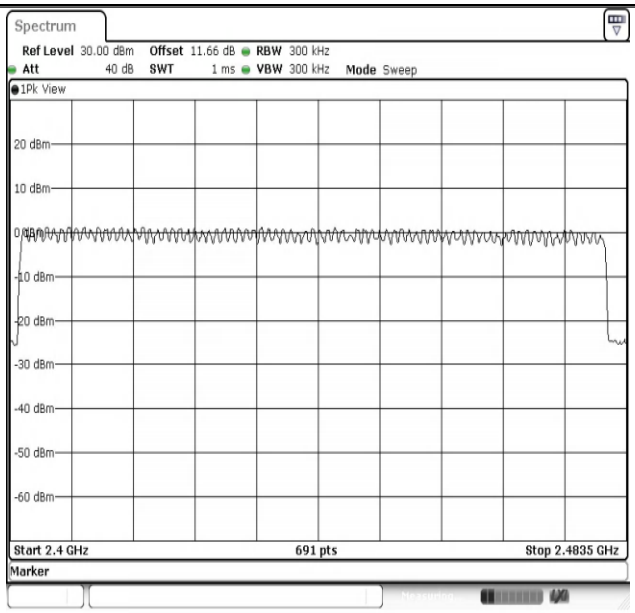
## Test Graphs




DH5-Ant1-Hop-PASS




2DH5-Ant1-Hop-PASS



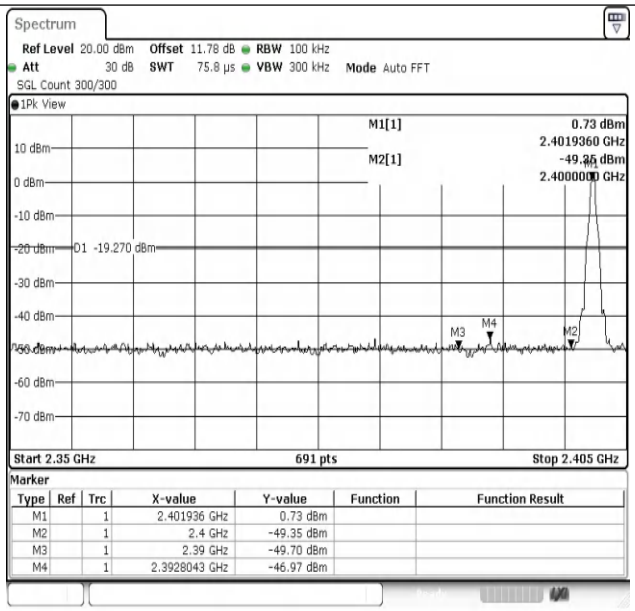

3DH5-Ant1-Hop-PASS

# Appendix G: Conducted Band edge

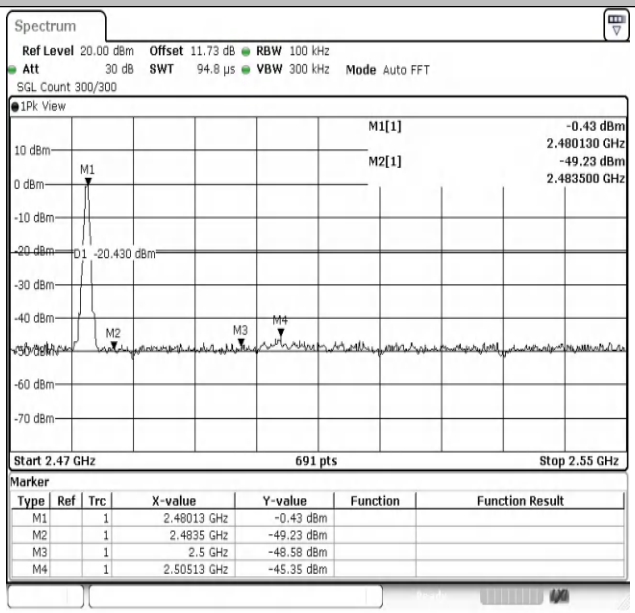
## Test Result

| Test Mode | Antenna | Ch. Name | Frequency [MHz] | Ref. Level [dBm] | Result [dBm] | Limit [dBm] | Verdict |
|---|---|---|---|---|---|---|---|
| DH5 | Ant1 | Low | 2402 | 0.73 | -46.97 | ≤-19.27 | PASS |
| DH5 | Ant1 | High | 2480 | -0.43 | -45.35 | ≤-20.43 | PASS |
| DH5 | Ant1 | Low | Hop_2402 | -0.07 | -47.4 | ≤-20.07 | PASS |
| DH5 | Ant1 | High | Hop_2480 | -0.24 | -45.63 | ≤-20.24 | PASS |
| 2DH5 | Ant1 | Low | 2402 | 0.57 | -47.12 | ≤-19.43 | PASS |
| 2DH5 | Ant1 | High | 2480 | -0.26 | -46.07 | ≤-20.26 | PASS |
| 2DH5 | Ant1 | Low | Hop_2402 | -1.58 | -46.94 | ≤-21.58 | PASS |
| 2DH5 | Ant1 | High | Hop_2480 | -2.13 | -46.08 | ≤-22.13 | PASS |
| 3DH5 | Ant1 | Low | 2402 | 0.43 | -47.77 | ≤-19.57 | PASS |
| 3DH5 | Ant1 | High | 2480 | -1.44 | -45.93 | ≤-21.44 | PASS |
| 3DH5 | Ant1 | Low | Hop_2402 | -4.07 | -46.61 | ≤-24.07 | PASS |
| 3DH5 | Ant1 | High | Hop_2480 | -2.11 | -45.75 | ≤-22.11 | PASS |

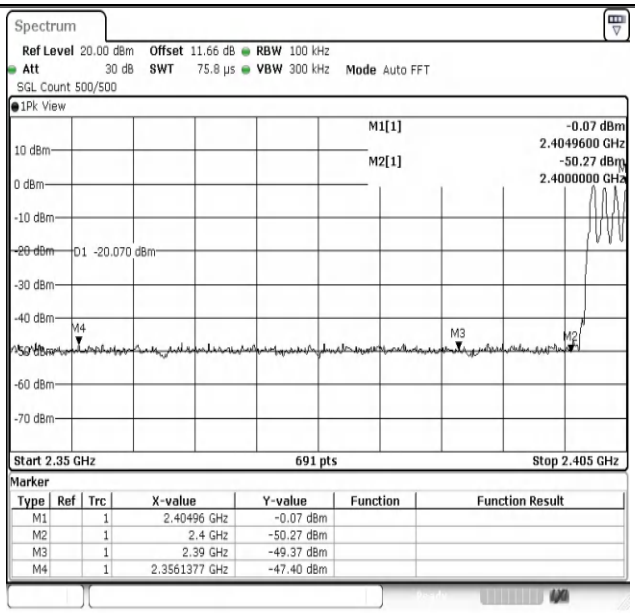
## Test Graphs



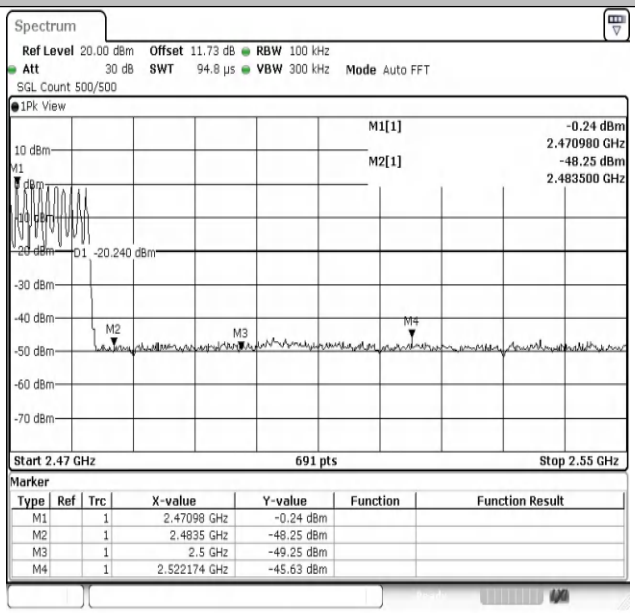

DH5-Ant1-2402-PASS



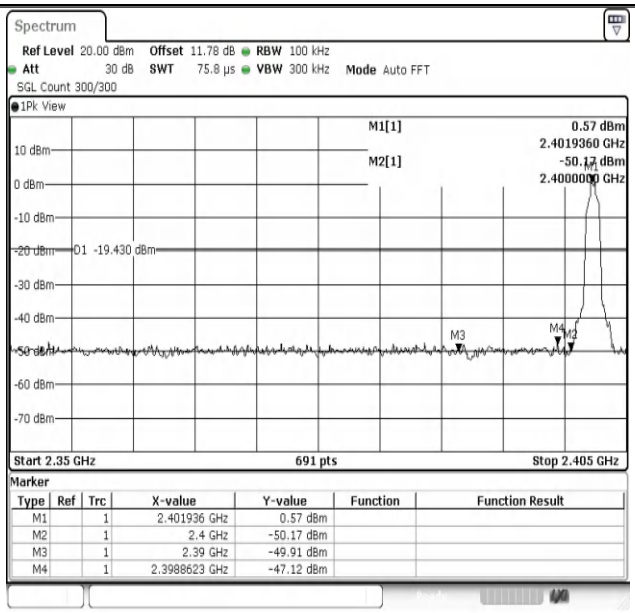

DH5-Ant1-2480-PASS



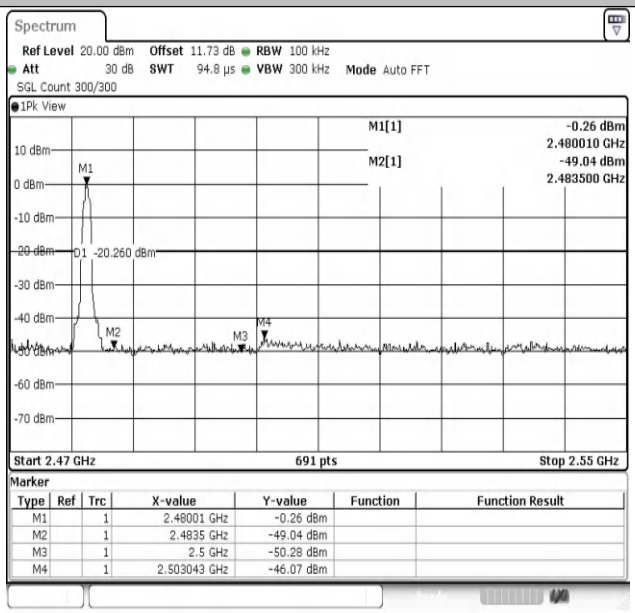

DH5-Ant1-Hop_2402-PASS



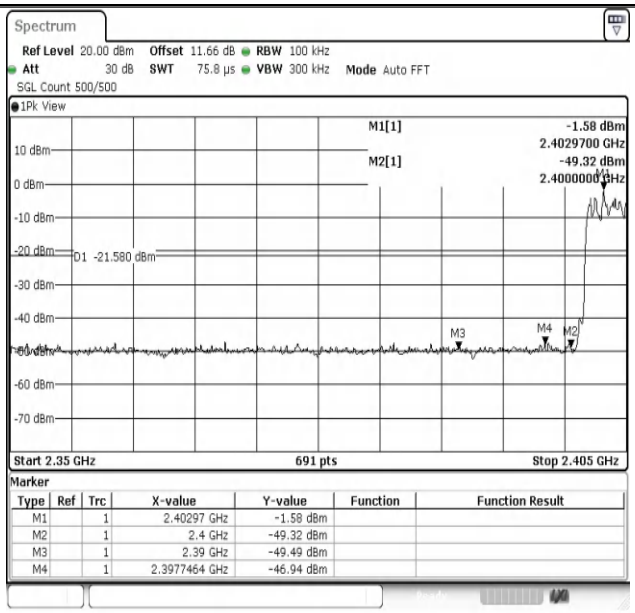

DH5-Ant1-Hop_2480-PASS



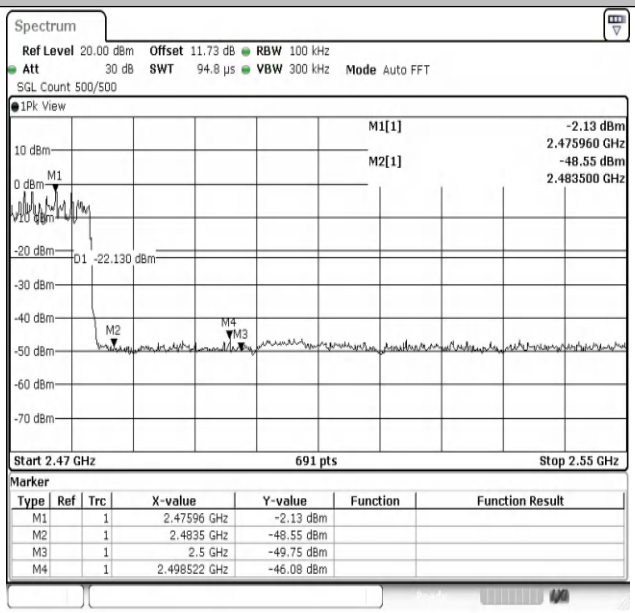

2DH5-Ant1-2402-PASS



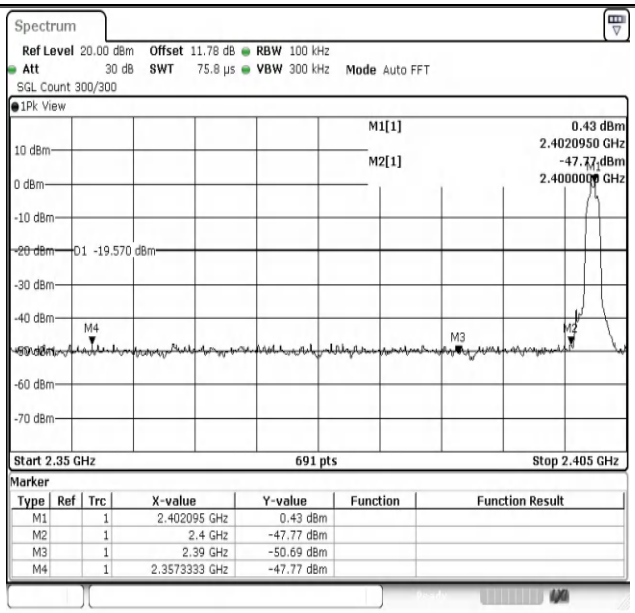

2DH5-Ant1-2480-PASS



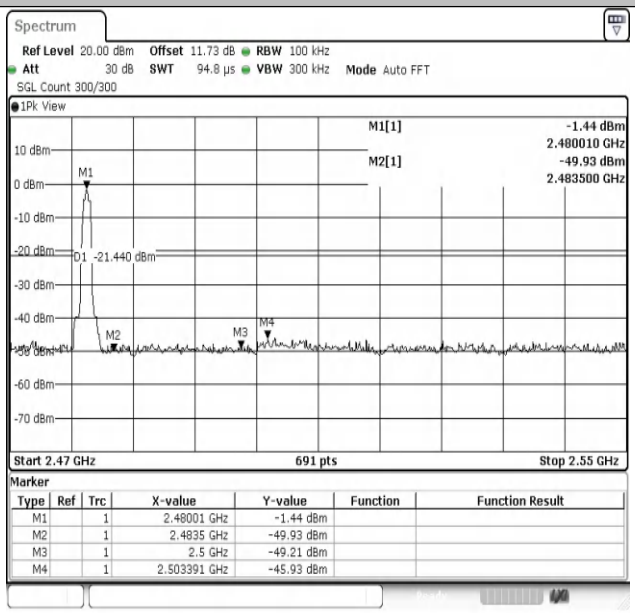

2DH5-Ant1-Hop_2402-PASS



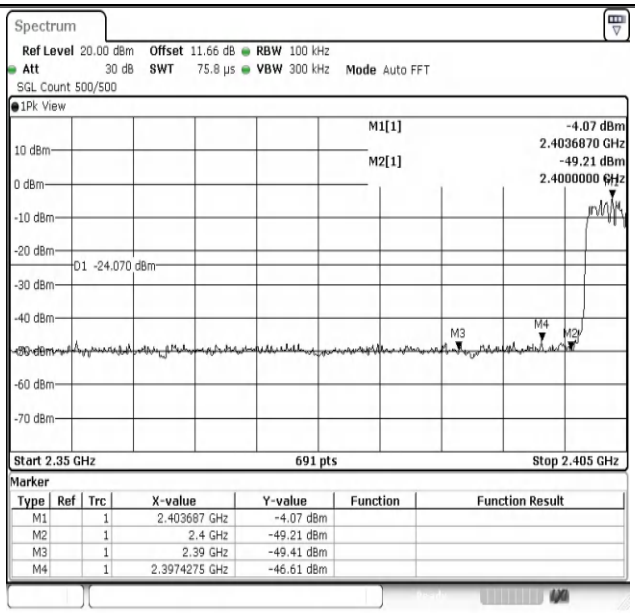

2DH5-Ant1-Hop_2480-PASS



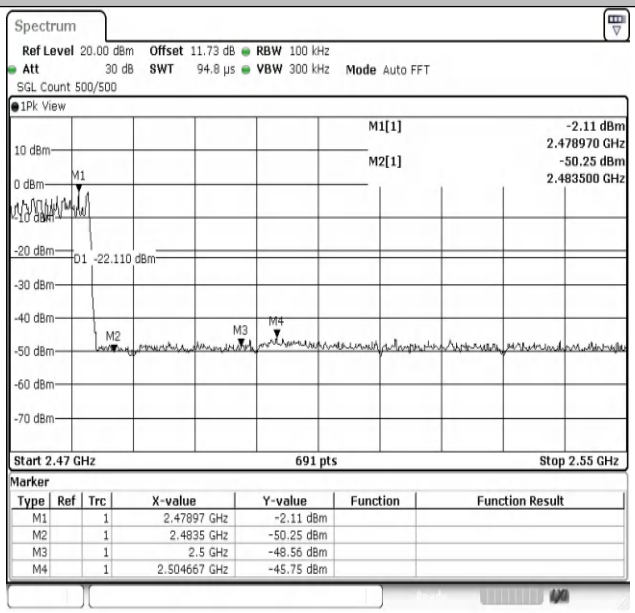

3DH5-Ant1-2402-PASS




3DH5-Ant1-2480-PASS




3DH5-Ant1-Hop_2402-PASS



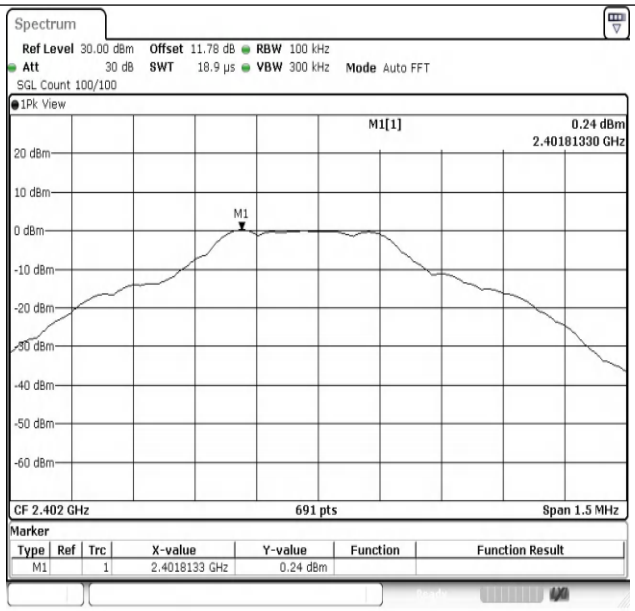

3DH5-Ant1-Hop_2480-PASS

# Appendix H: Conducted Spurious Emission

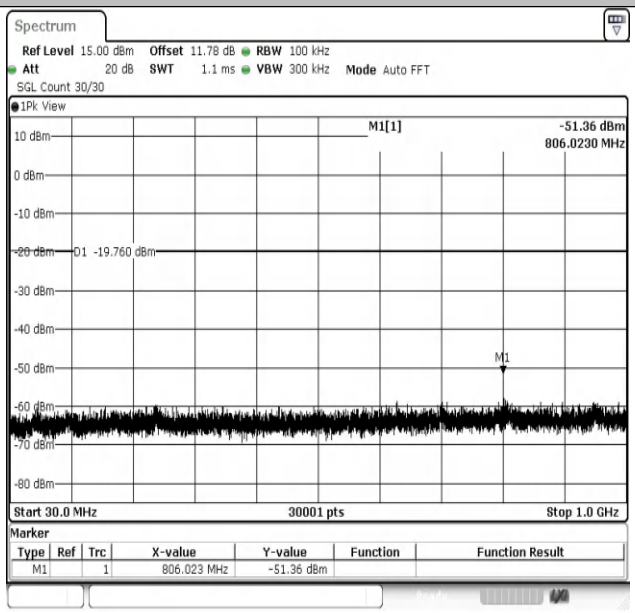
## Test Result

| Test Mode | Antenna | Frequency[MHz] | Freq. Range [MHz] | Ref. Level [dBm] | Result [dBm] | Limit [dBm] | Verdict |
|---|---|---|---|---|---|---|---|
| DH5 | Ant1 | 2402 | 0~Reference | 0.24 | 0.24 | --- | PASS |
| DH5 | Ant1 | 2402 | 30~1000 | 0.24 | -51.36 | ≤-19.76 | PASS |
| DH5 | Ant1 | 2402 | 1000~26500 | 0.24 | -43.96 | ≤-19.76 | PASS |
| DH5 | Ant1 | 2441 | 0~Reference | 0.28 | 0.28 | --- | PASS |
| DH5 | Ant1 | 2441 | 30~1000 | 0.28 | -53.67 | ≤-19.72 | PASS |
| DH5 | Ant1 | 2441 | 1000~26500 | 0.28 | -39.35 | ≤-19.72 | PASS |
| DH5 | Ant1 | 2480 | 0~Reference | -0.32 | -0.32 | --- | PASS |
| DH5 | Ant1 | 2480 | 30~1000 | -0.32 | -54.07 | ≤-20.32 | PASS |
| DH5 | Ant1 | 2480 | 1000~26500 | -0.32 | -41.36 | ≤-20.32 | PASS |
| 2DH5 | Ant1 | 2402 | 0~Reference | -1.80 | -1.80 | --- | PASS |
| 2DH5 | Ant1 | 2402 | 30~1000 | -1.80 | -58.25 | ≤-21.8 | PASS |
| 2DH5 | Ant1 | 2402 | 1000~26500 | -1.80 | -42.69 | ≤-21.8 | PASS |
| 2DH5 | Ant1 | 2441 | 0~Reference | -2.43 | -2.43 | --- | PASS |
| 2DH5 | Ant1 | 2441 | 30~1000 | -2.43 | -58.41 | ≤-22.43 | PASS |
| 2DH5 | Ant1 | 2441 | 1000~26500 | -2.43 | -42.98 | ≤-22.43 | PASS |
| 2DH5 | Ant1 | 2480 | 0~Reference | -0.37 | -0.37 | --- | PASS |
| 2DH5 | Ant1 | 2480 | 30~1000 | -0.37 | -58.25 | ≤-20.37 | PASS |
| 2DH5 | Ant1 | 2480 | 1000~26500 | -0.37 | -42.86 | ≤-20.37 | PASS |
| 3DH5 | Ant1 | 2402 | 0~Reference | -0.15 | -0.15 | --- | PASS |
| 3DH5 | Ant1 | 2402 | 30~1000 | -0.15 | -58.13 | ≤-20.15 | PASS |
| 3DH5 | Ant1 | 2402 | 1000~26500 | -0.15 | -42.85 | ≤-20.15 | PASS |
| 3DH5 | Ant1 | 2441 | 0~Reference | 0.19 | 0.19 | --- | PASS |
| 3DH5 | Ant1 | 2441 | 30~1000 | 0.19 | -57.88 | ≤-19.81 | PASS |
| 3DH5 | Ant1 | 2441 | 1000~26500 | 0.19 | -43.21 | ≤-19.81 | PASS |
| 3DH5 | Ant1 | 2480 | 0~Reference | -0.46 | -0.46 | --- | PASS |
| 3DH5 | Ant1 | 2480 | 30~1000 | -0.46 | -58.44 | ≤-20.46 | PASS |
| 3DH5 | Ant1 | 2480 | 1000~26500 | -0.46 | -42.17 | ≤-20.46 | PASS |

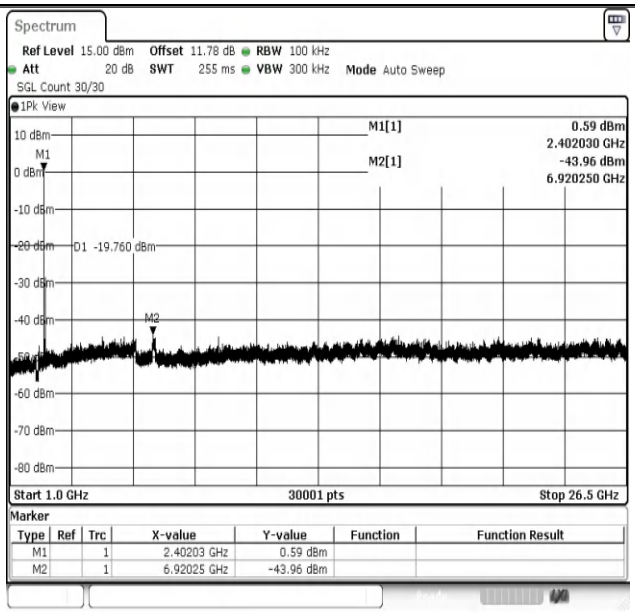
## Test Graphs



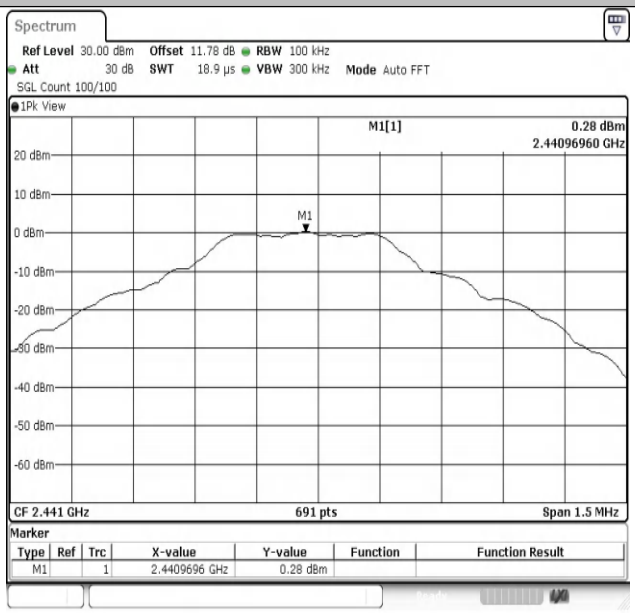

DH5-Ant1-2402-0~Reference-PASS



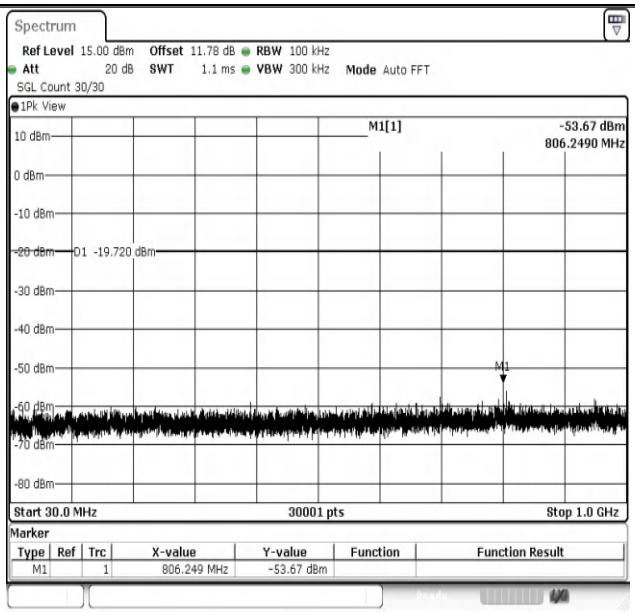

DH5-Ant1-2402-30~1000-PASS



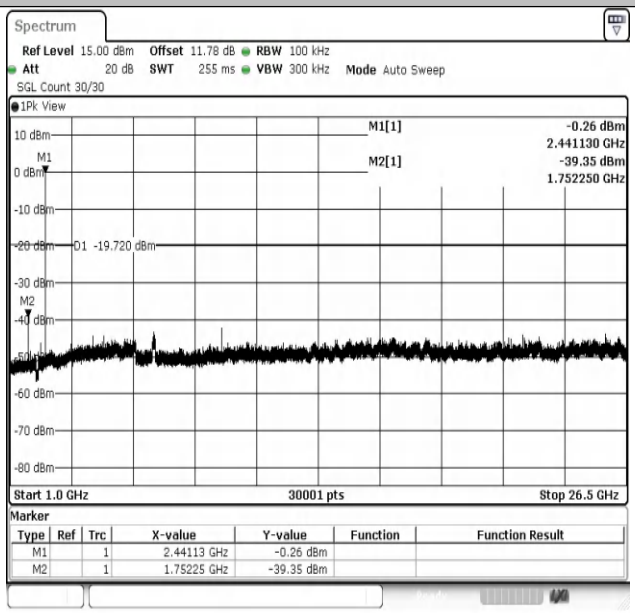

DH5-Ant1-2402-1000~26500-PASS



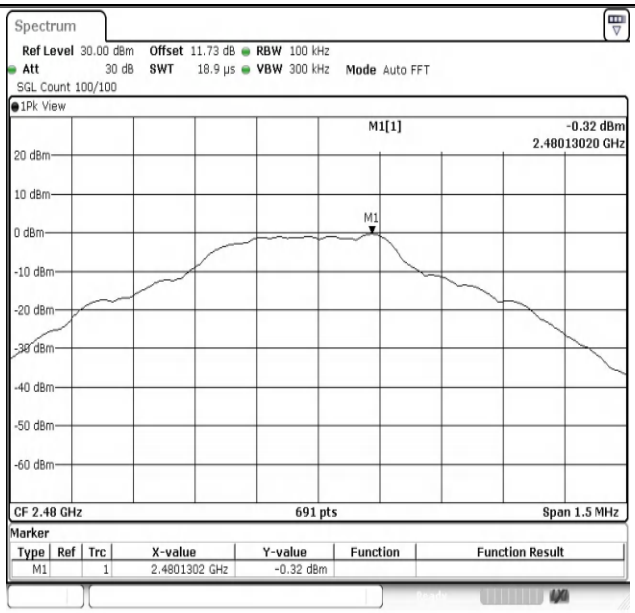

DH5-Ant1-2441-0~Reference-PASS



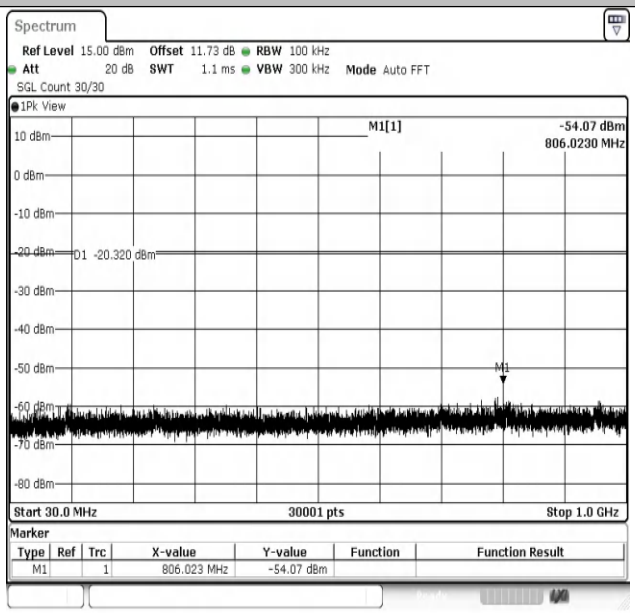

DH5-Ant1-2441-30~1000-PASS



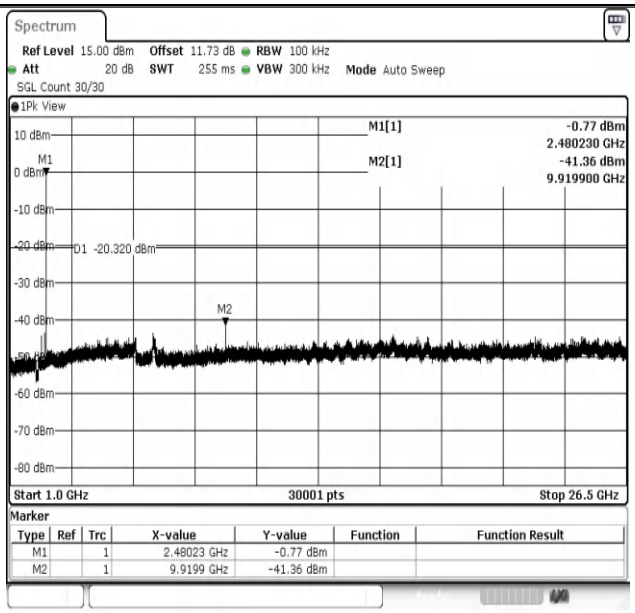

DH5-Ant1-2441-1000~26500-PASS



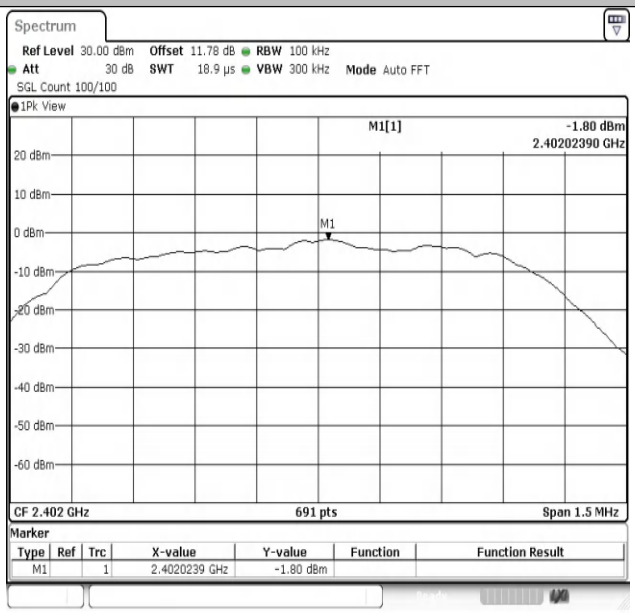

DH5-Ant1-2480-0~Reference-PASS



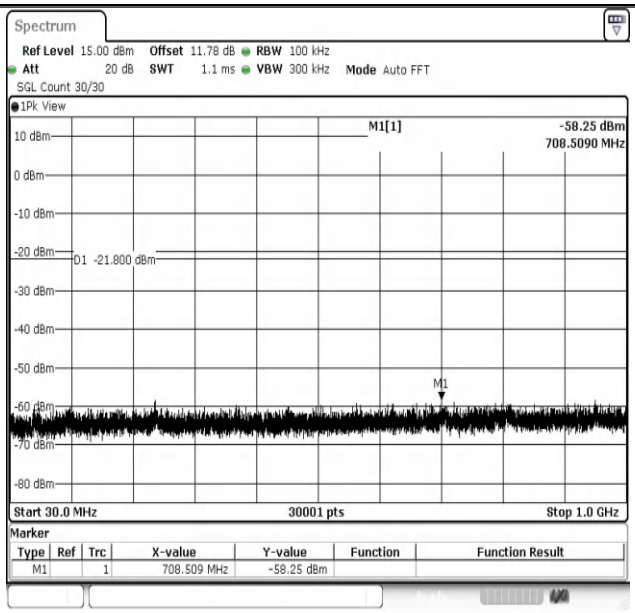

DH5-Ant1-2480-30~1000-PASS



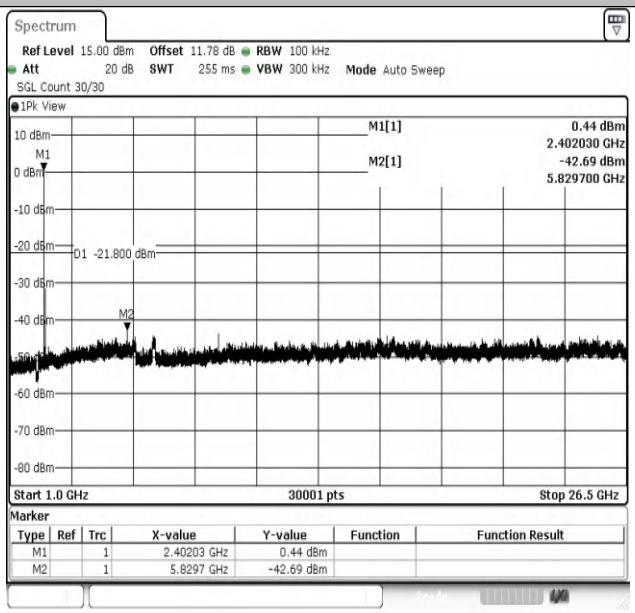

DH5-Ant1-2480-1000~26500-PASS



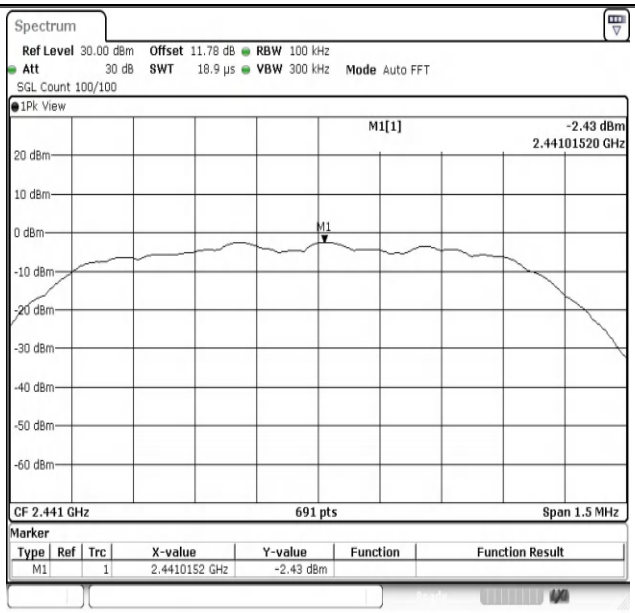

2DH5-Ant1-2402-0~Reference-PASS



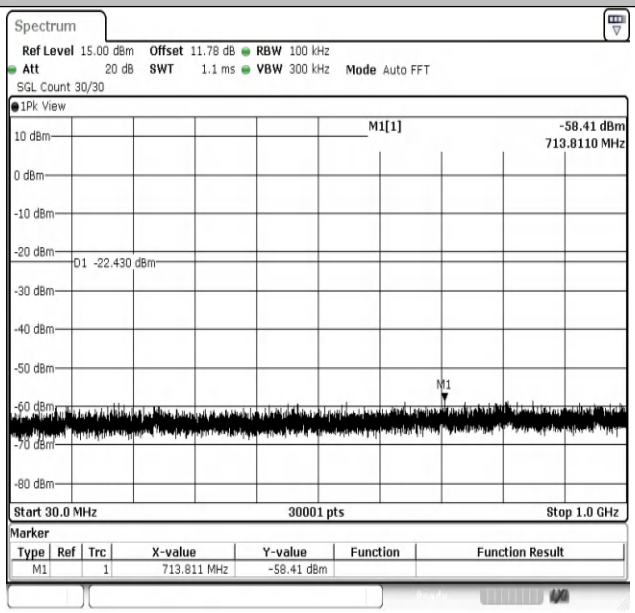

2DH5-Ant1-2402-30~1000-PASS




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




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

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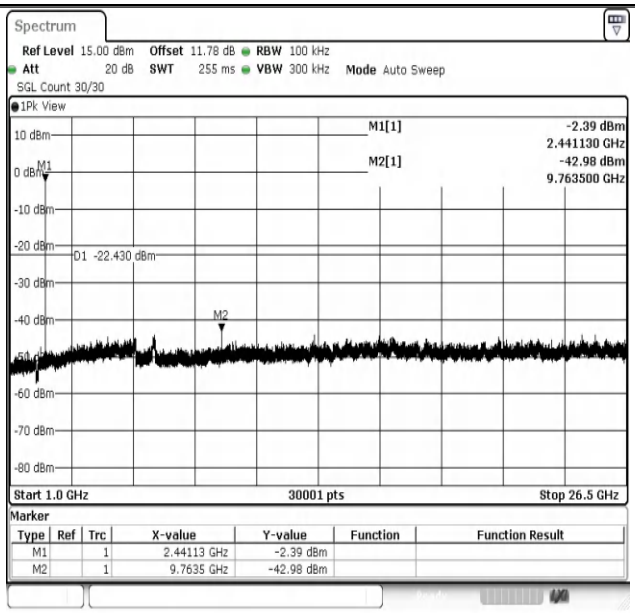


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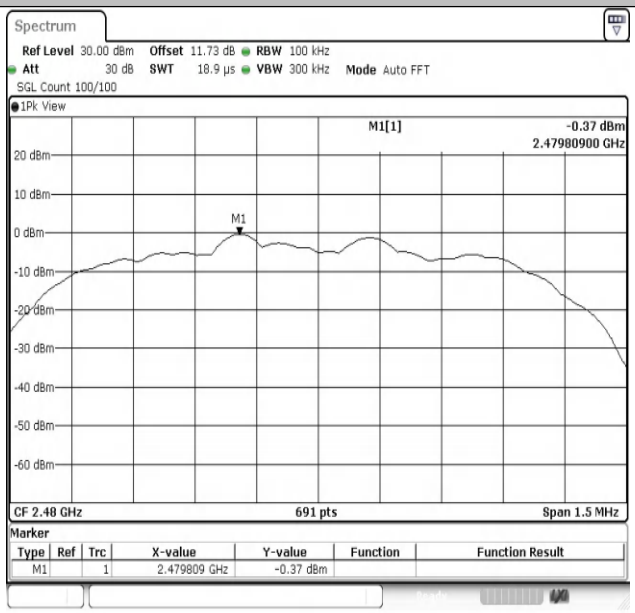


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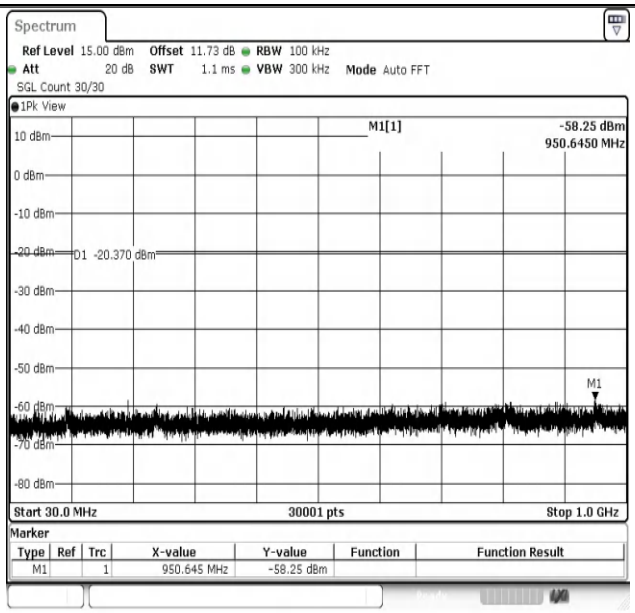


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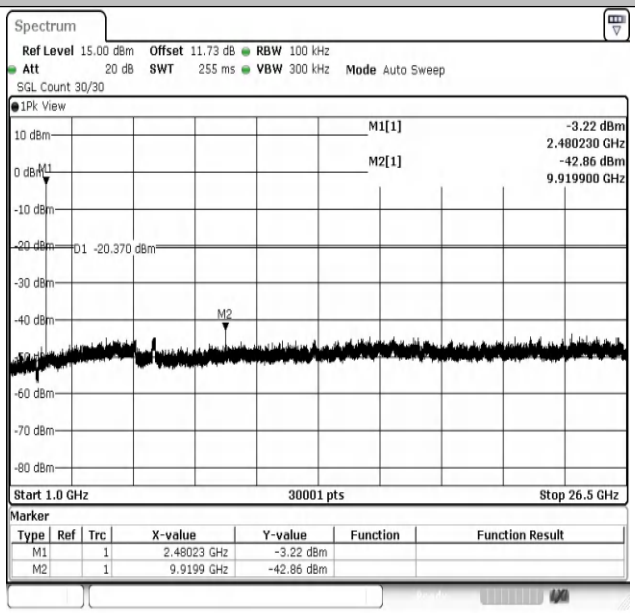
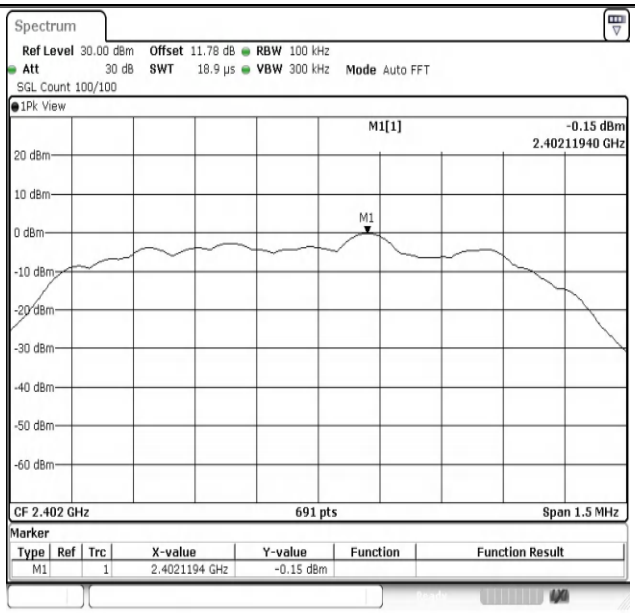



2DH5-Ant1-2480-1000~26500-PASS

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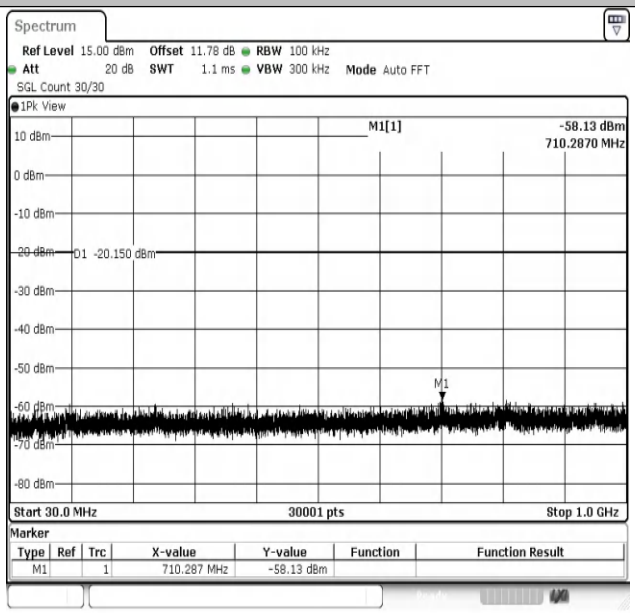


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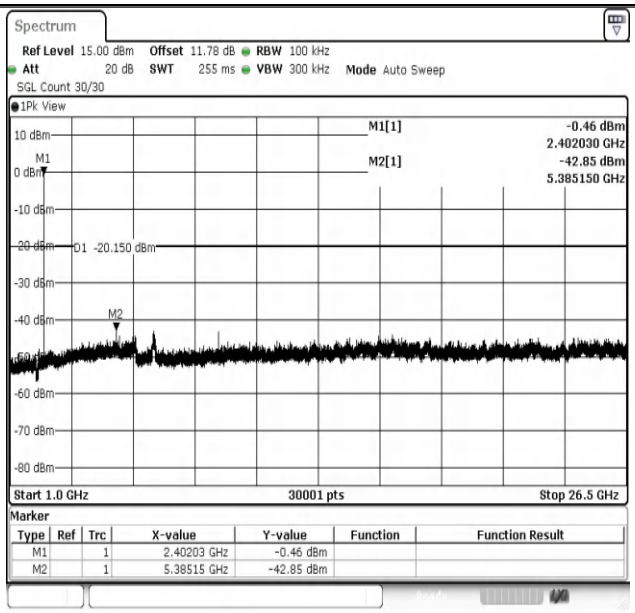
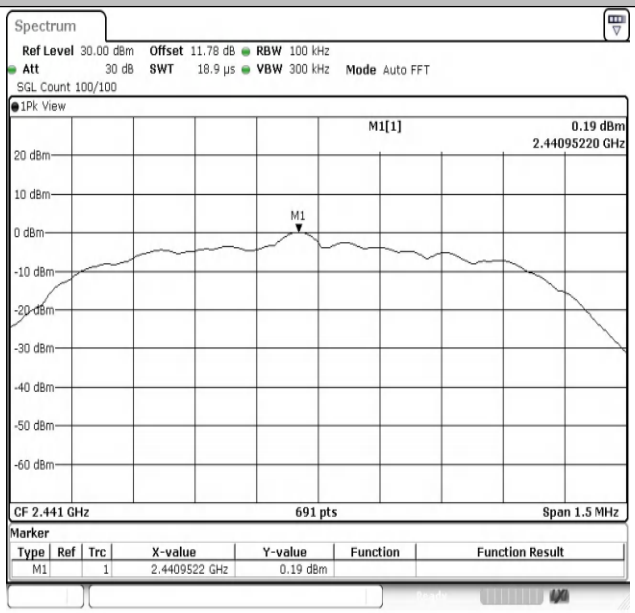



3DH5-Ant1-2402-1000~26500-PASS

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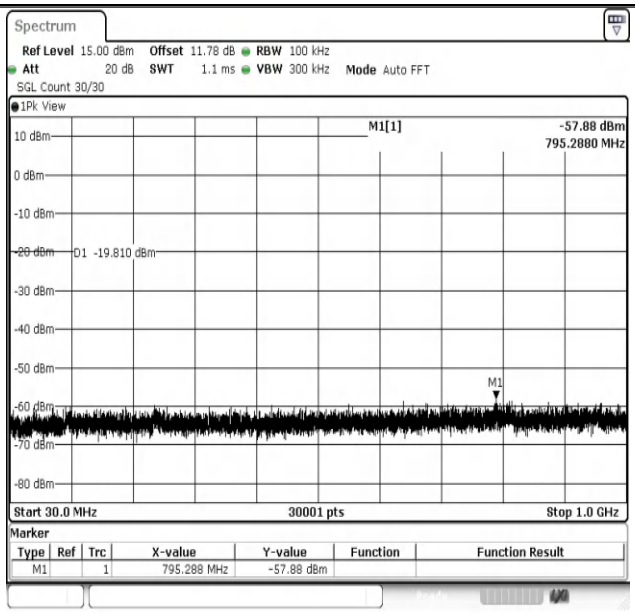


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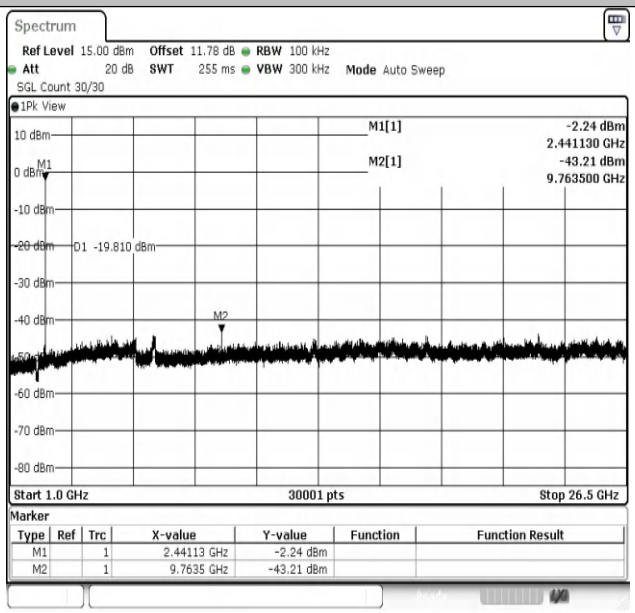
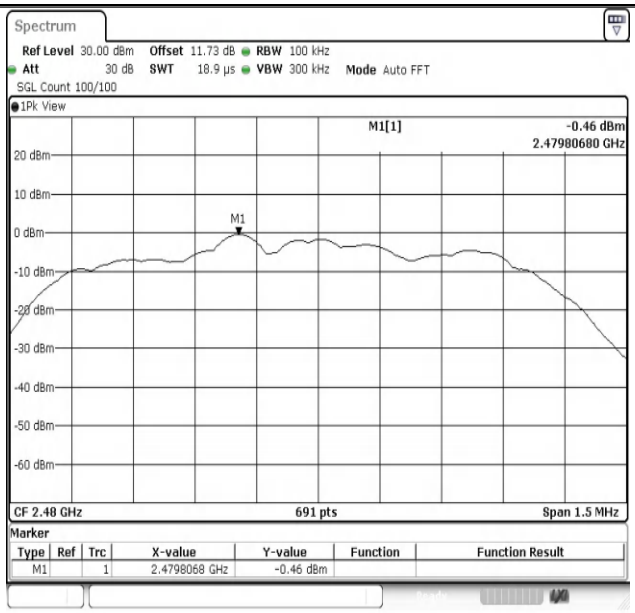
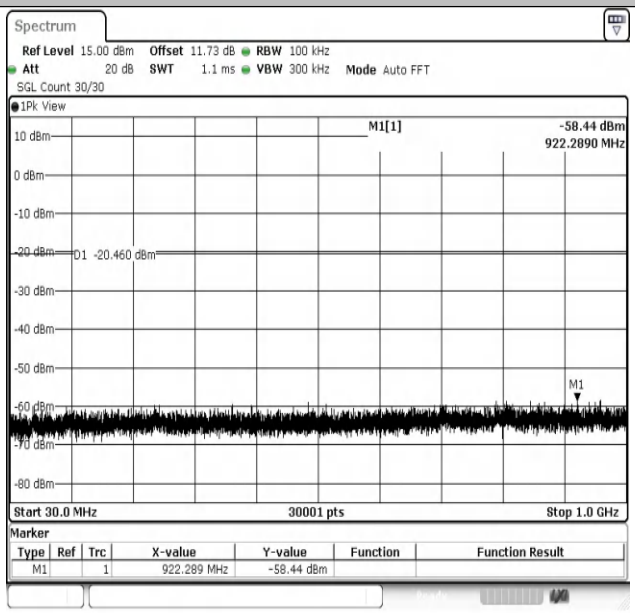


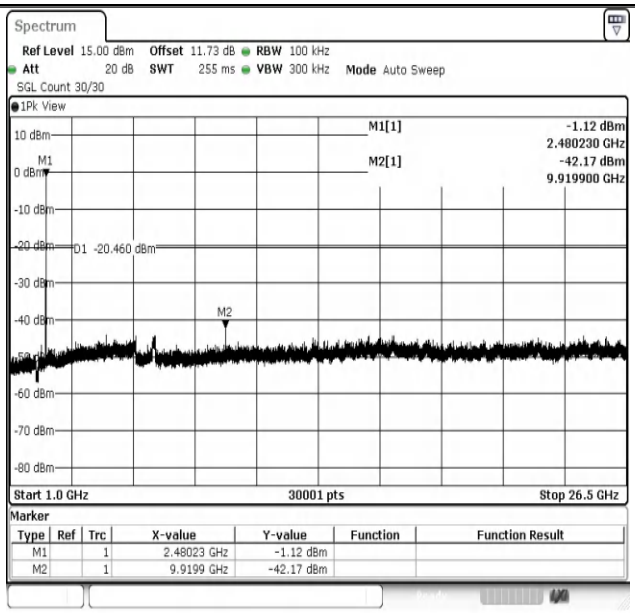

3DH5-Ant1-2441-1000~26500-PASS




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




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



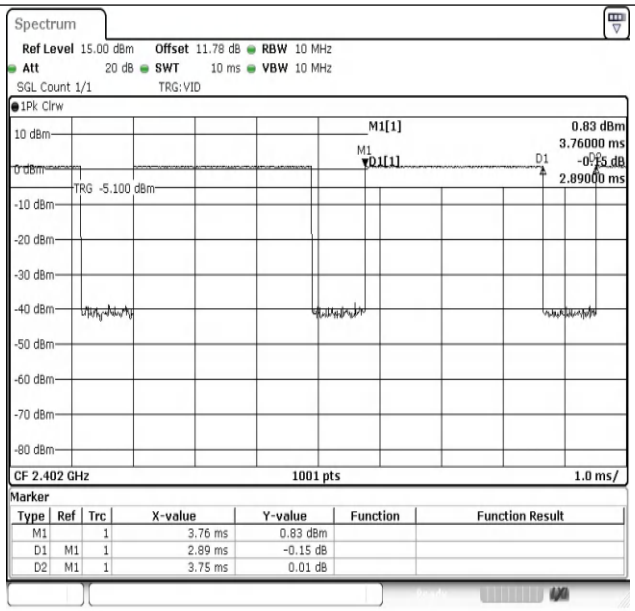

3DH5-Ant1-2480-1000~26500-PASS

# Appendix I: Duty Cycle

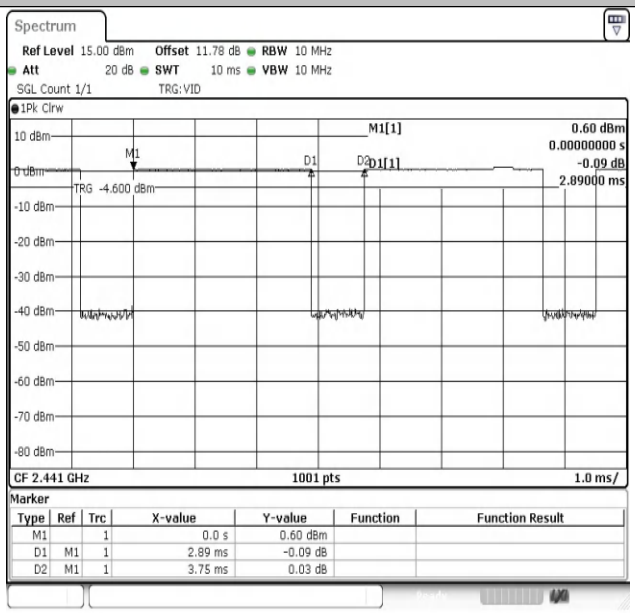
## Test Result

| Test Mode | Antenna | Frequency[MHz] | ON Time [ms] | Period [ms] | Duty Cycle [%] | Duty Cycle Factor[dB] |
|---|---|---|---|---|---|---|
| DH5 | Ant1 | 2402 | 2.89 | 3.75 | 77.07 | 1.13 |
| DH5 | Ant1 | 2441 | 2.89 | 3.75 | 77.07 | 1.13 |
| DH5 | Ant1 | 2480 | 2.89 | 3.75 | 77.07 | 1.13 |
| 2DH5 | Ant1 | 2402 | 2.90 | 3.75 | 77.33 | 1.12 |
| 2DH5 | Ant1 | 2441 | 2.90 | 3.76 | 77.13 | 1.13 |
| 2DH5 | Ant1 | 2480 | 2.89 | 3.75 | 77.07 | 1.13 |
| 3DH5 | Ant1 | 2402 | 2.90 | 3.75 | 77.33 | 1.12 |
| 3DH5 | Ant1 | 2441 | 2.90 | 3.75 | 77.33 | 1.12 |
| 3DH5 | Ant1 | 2480 | 2.90 | 3.76 | 77.13 | 1.13 |

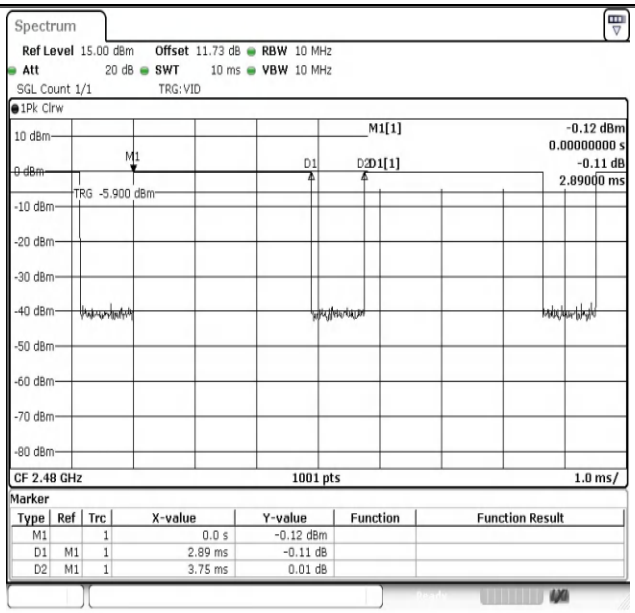
## Test Graphs



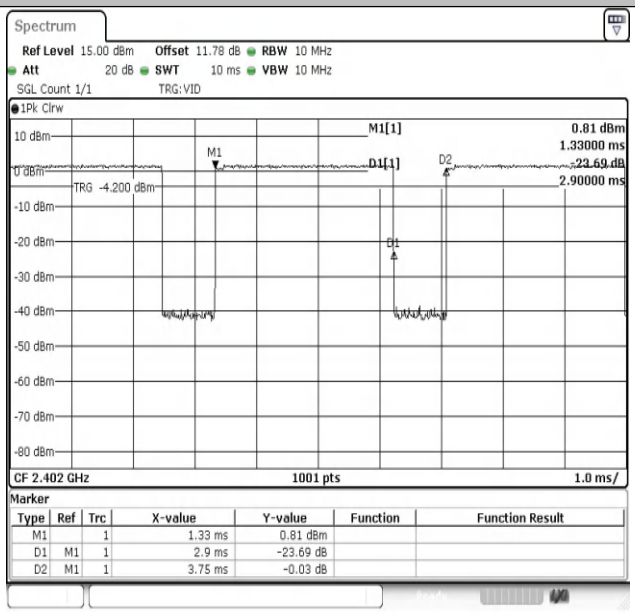

NTNV-DH5-Ant1-2402



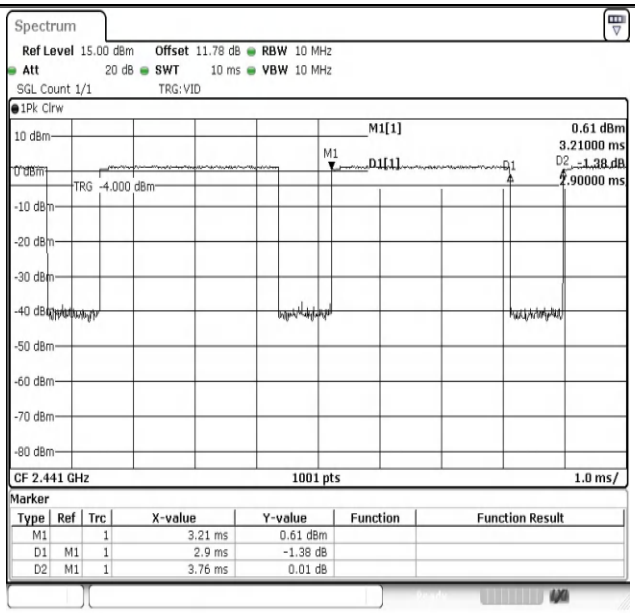

NTNV-DH5-Ant1-2441



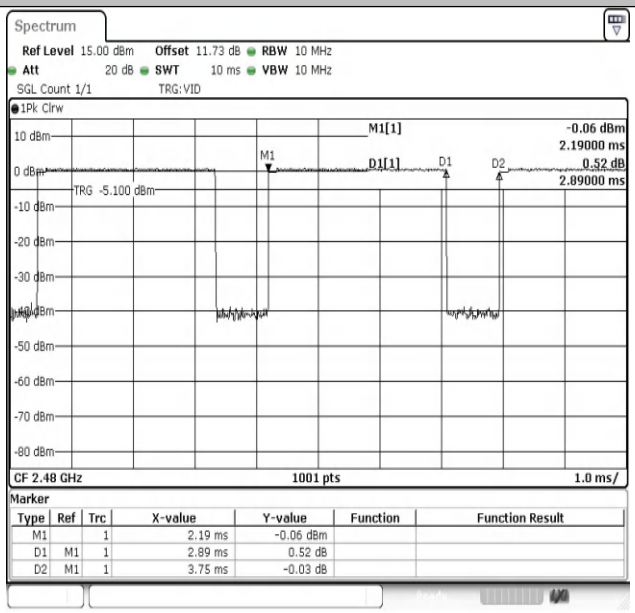

NTNV-DH5-Ant1-2480



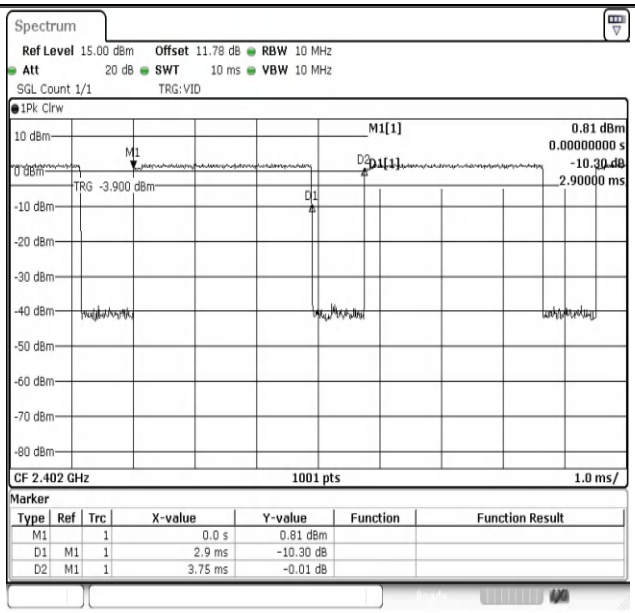

NTNV-2DH5-Ant1-2402



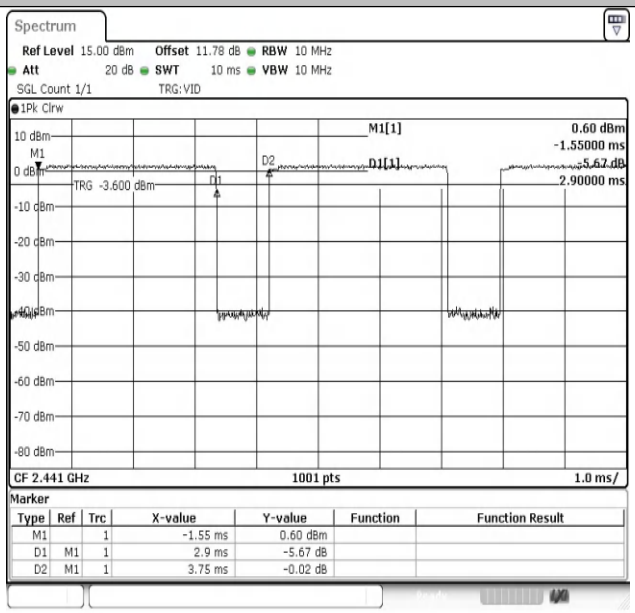

NTNV-2DH5-Ant1-2441




NTNV-2DH5-Ant1-2480




NTNV-3DH5-Ant1-2402

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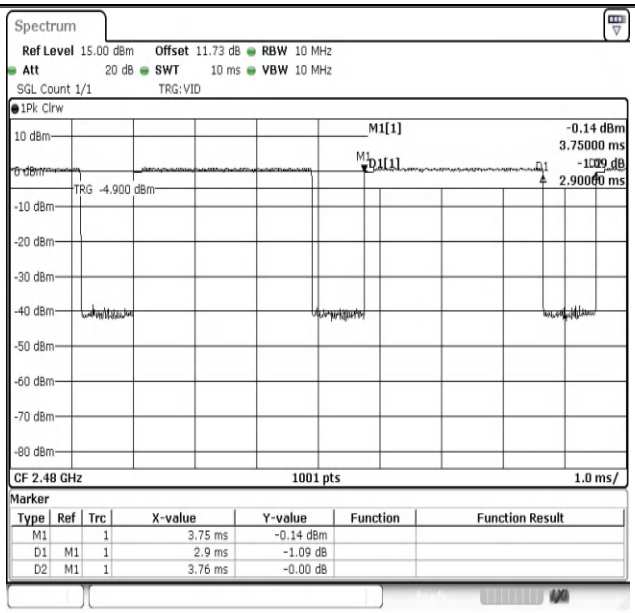


NTNV-3DH5-Ant1-2480

---End---