# Appendix C

## RF Test Data for 2.4GWIFI (Conducted Measurement)

**Product Name: Tablet**

**Trade Mark:**

SUAAT, UJJ, Oghrti, DEERTIME, ZIOVO, DMOAO, SKYEGG, fezawio, JUEDUR, Biegedy, FACETEL, JUSYEA, SEBBE, Oangcc

**Test Model: S10**

**Environmental Conditions**

| | |
|---|---|
| Temperature: | 24.6° C |
| Relative Humidity: | 52.4% |
| ATM Pressure: | 100.0 kPa |
| Test Engineer: | Emiya lin |
| Supervised by: | Simba Haung |

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# 1 Duty Cycle

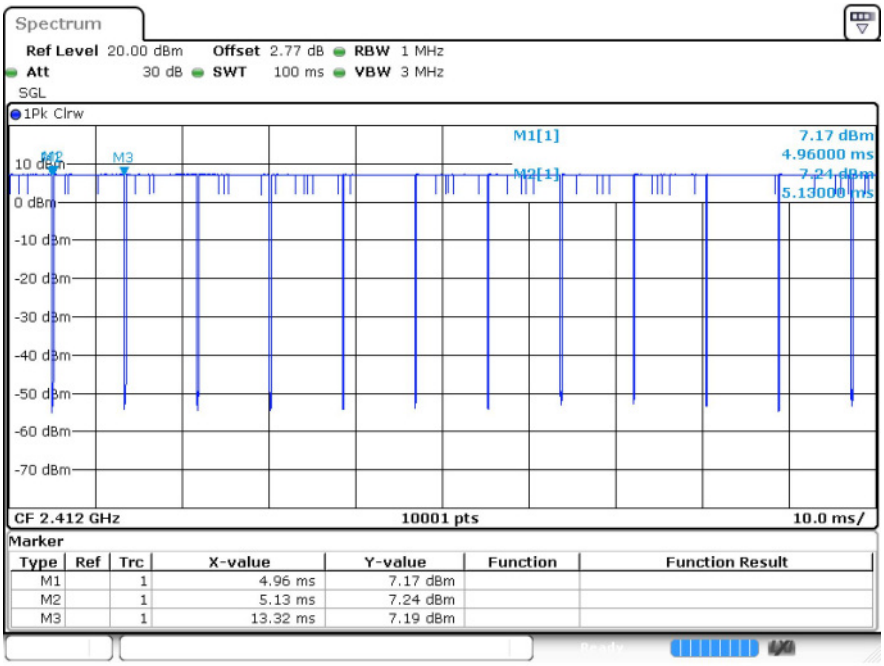
## 1.1 Test Result

| Mode | Frequency (MHz) | Antenna | Duty Cycle (%) | Correction Factor | 1/T (kHz) |
|---|---|---|---|---|---|
| b | 2412 | Ant1 | 97.92 | 0.09 | 0.12 |
| b | 2437 | Ant1 | 97.92 | 0.09 | 0.12 |
| b | 2462 | Ant1 | 98.06 | 0.09 | 0.12 |
| g | 2412 | Ant1 | 88.4 | 0.54 | 0.74 |
| g | 2437 | Ant1 | 88.41 | 0.53 | 0.74 |
| g | 2462 | Ant1 | 88.39 | 0.54 | 0.74 |
| n20 | 2412 | Ant1 | 87.14 | 0.6 | 0.88 |
| n20 | 2437 | Ant1 | 87.31 | 0.59 | 0.87 |
| n20 | 2462 | Ant1 | 87.15 | 0.6 | 0.87 |
| n40 | 2422 | Ant1 | 77.54 | 1.1 | 1.72 |
| n40 | 2437 | Ant1 | 77.76 | 1.09 | 1.75 |
| n40 | 2452 | Ant1 | 77.62 | 1.1 | 1.75 |

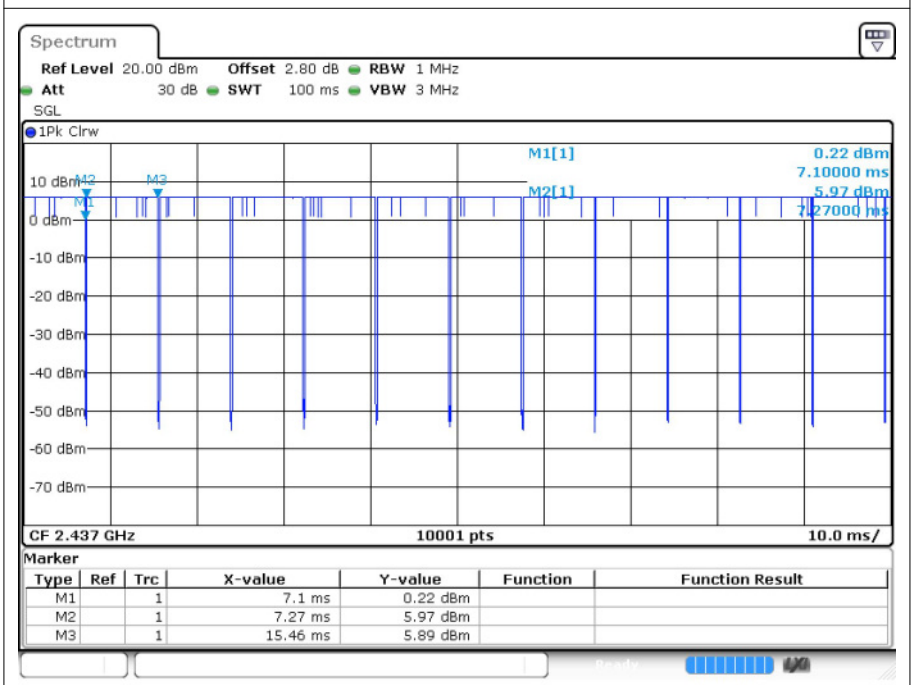
## 1.2 Test Graphs

Test Graphs

b 2412MHz Ant1

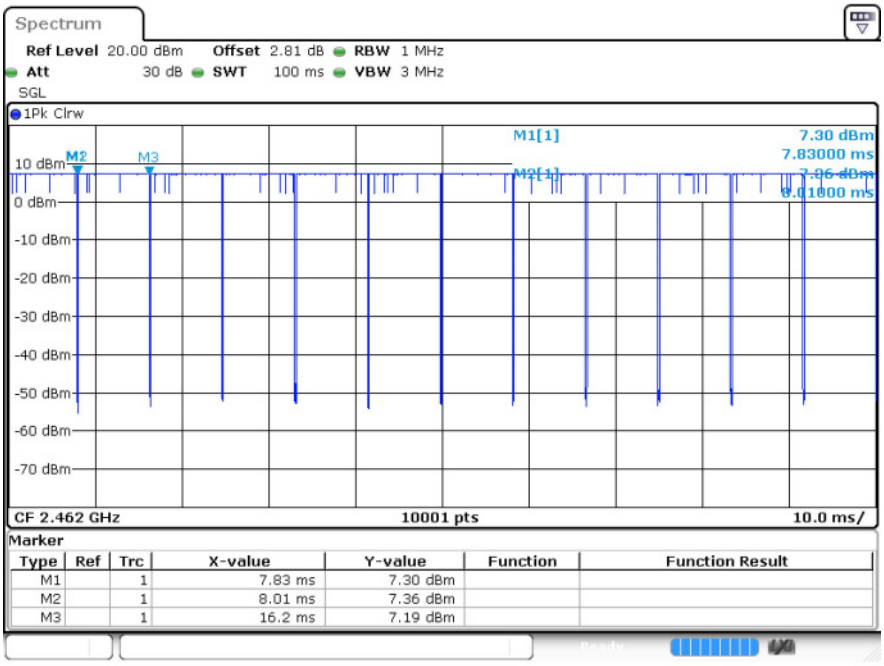



b 2437MHz Ant1

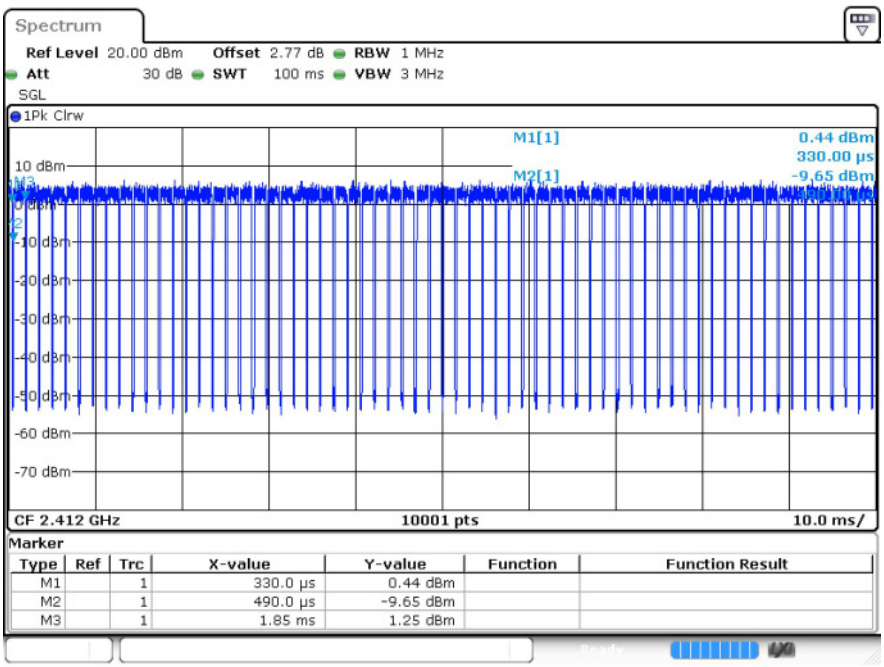


Test Graphs

b 2462MHz Ant1

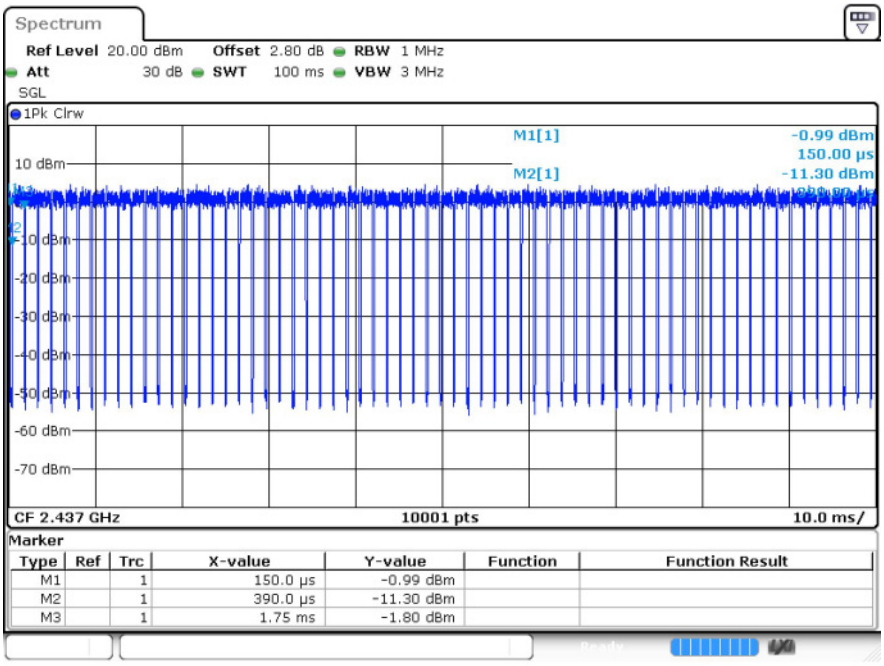



g 2412MHz Ant1

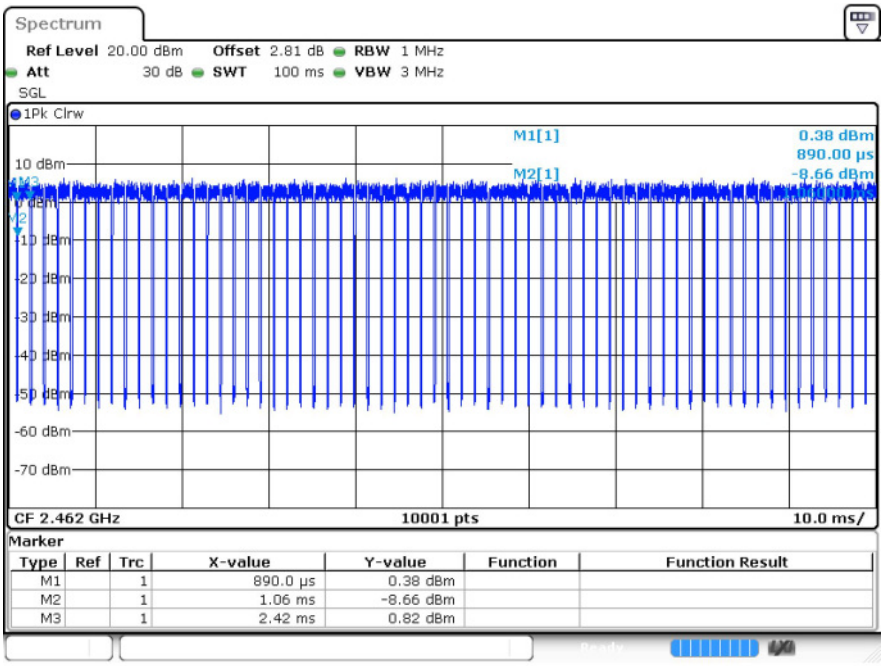


Test Graphs

g 2437MHz Ant1

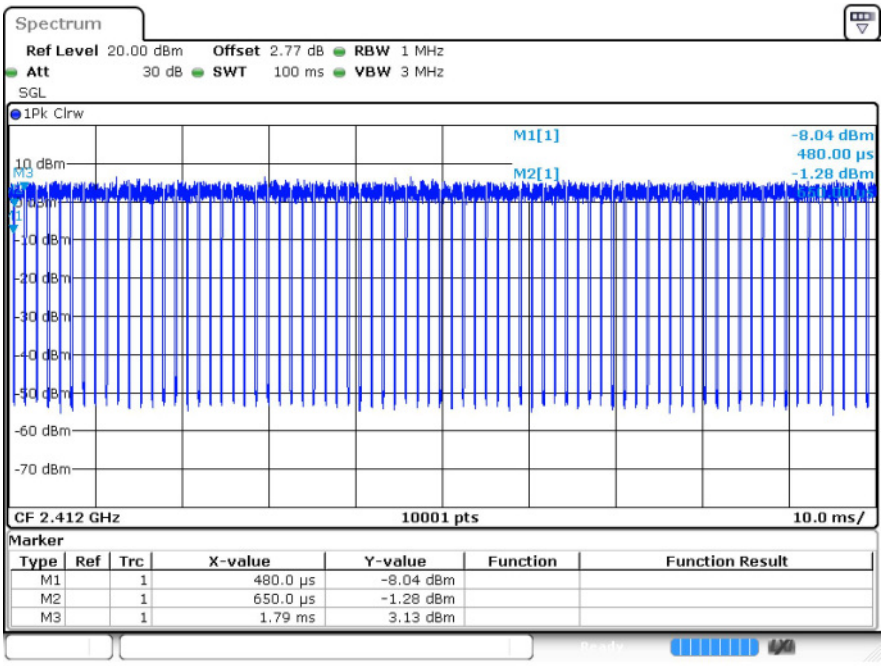



g 2462MHz Ant1

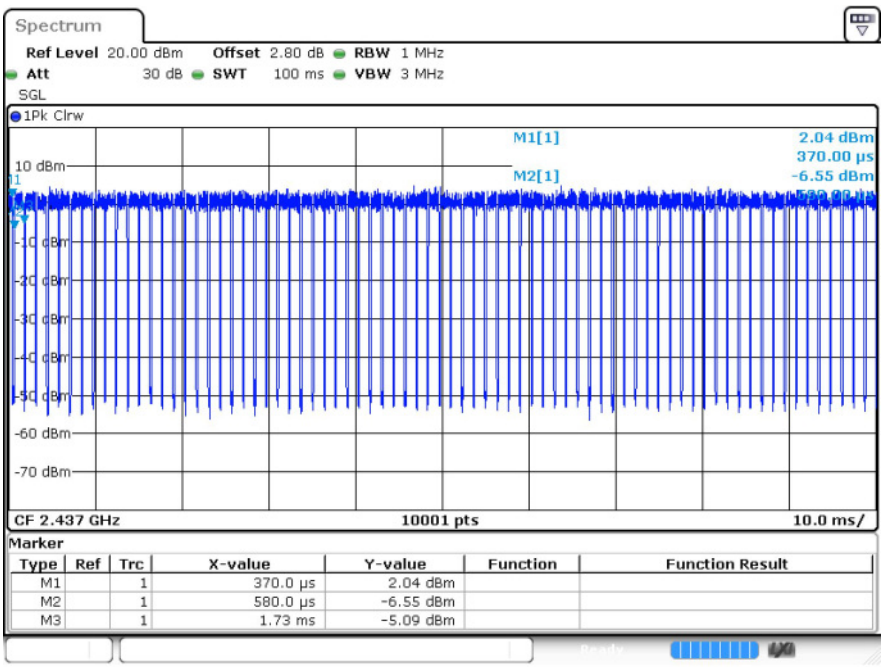


Test Graphs

n20 2412MHz Ant1

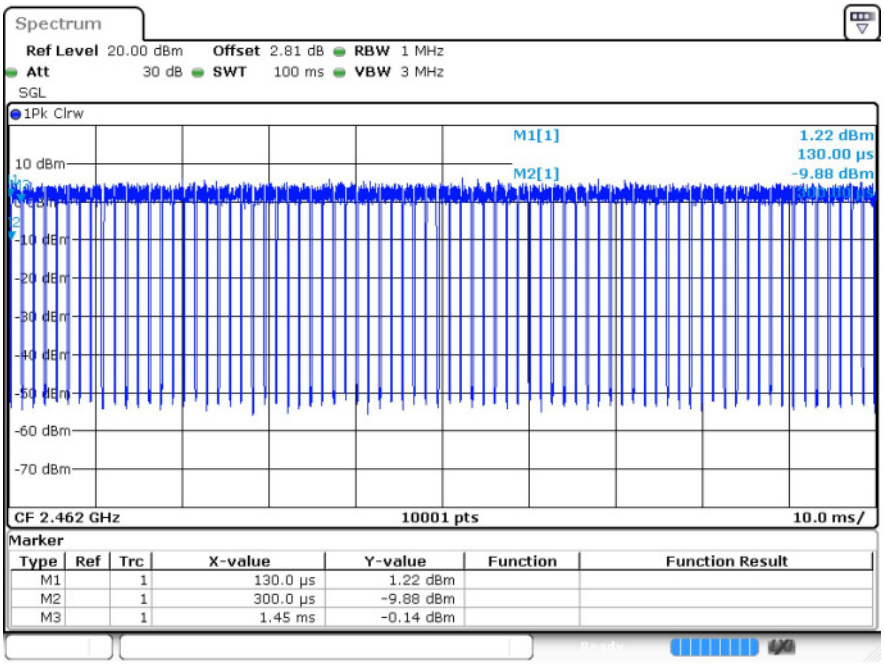



n20 2437MHz Ant1

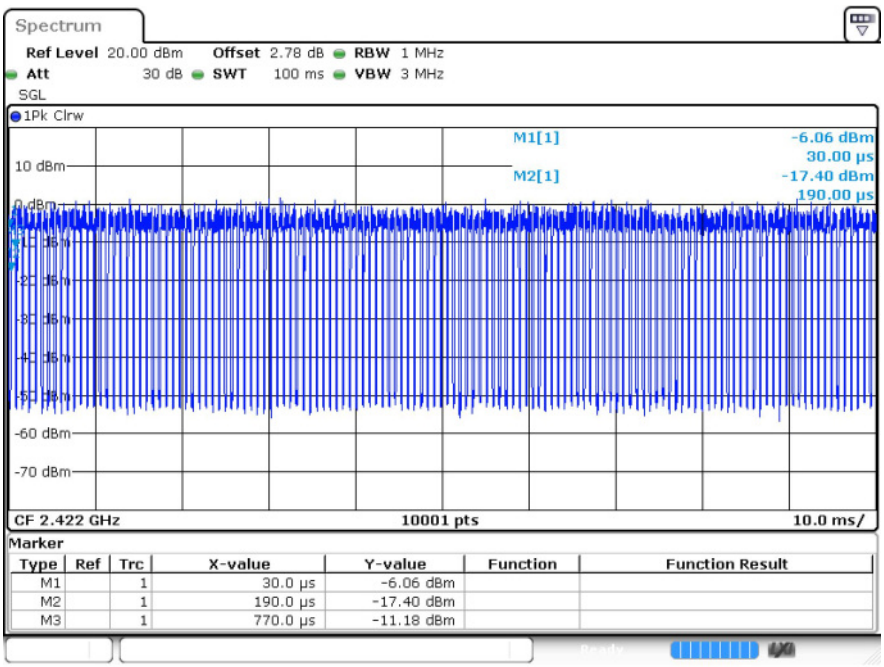


Test Graphs

n20 2462MHz Ant1

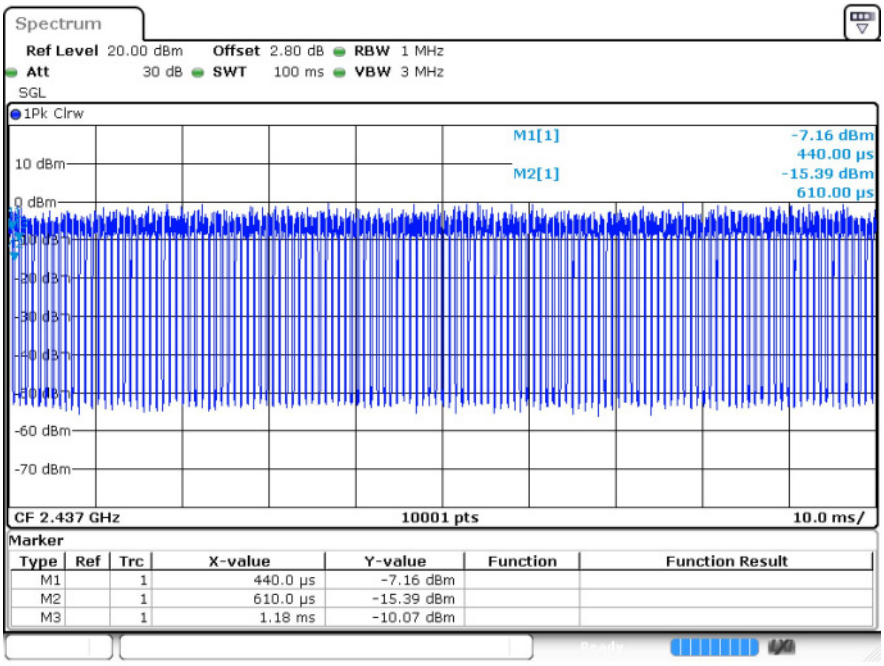



n40 2422MHz Ant1

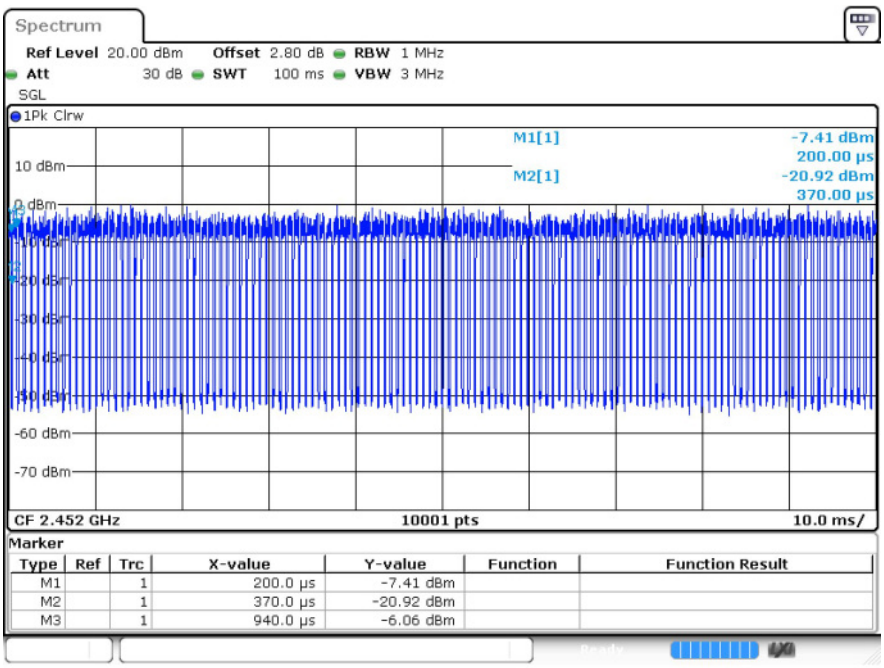


Test Graphs

n40 2437MHz Ant1




n40 2452MHz Ant1



# 2 Maximum Conducted Output Power

## 2.1 Test Result

| Mode | Frequency (MHz) | Antenna | Conducted Power (dBm) | Limit (dBm) | Verdict |
|---|---|---|---|---|---|
| b | 2412 | Ant1 | 17.66 | 30 | Pass |
| b | 2437 | Ant1 | 16.38 | 30 | Pass |
| b | 2462 | Ant1 | 17.85 | 30 | Pass |
| g | 2412 | Ant1 | 16.17 | 30 | Pass |
| g | 2437 | Ant1 | 14.4 | 30 | Pass |
| g | 2462 | Ant1 | 16.03 | 30 | Pass |
| n20 | 2412 | Ant1 | 16.16 | 30 | Pass |
| n20 | 2437 | Ant1 | 14.4 | 30 | Pass |
| n20 | 2462 | Ant1 | 16.07 | 30 | Pass |
| n40 | 2422 | Ant1 | 15.56 | 30 | Pass |
| n40 | 2437 | Ant1 | 15.72 | 30 | Pass |
| n40 | 2452 | Ant1 | 16.08 | 30 | Pass |

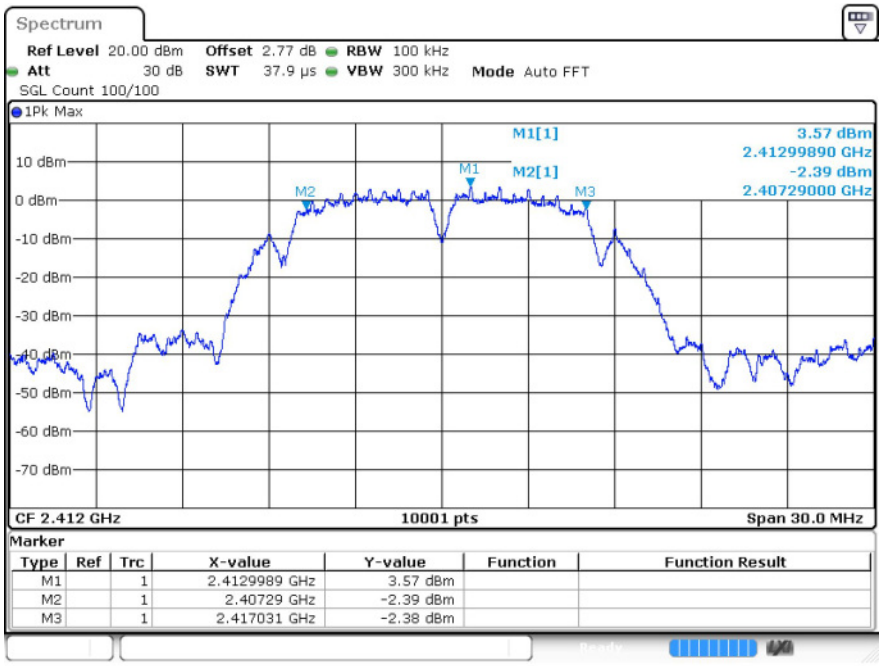
# 3 -6dB Bandwidth

## 3.1 Test Result

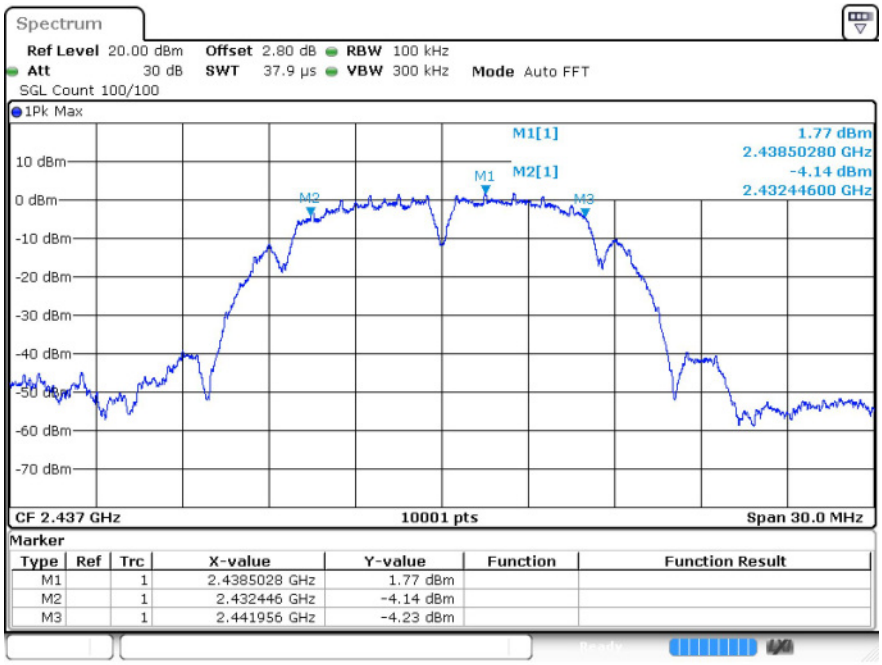
| Mode | Frequency (MHz) | Antenna | -6 dB Bandwidth (MHz) | Limit -6 dB Bandwidth (MHz) | Verdict |
|---|---|---|---|---|---|
| b | 2412 | Ant1 | 9.741 | 0.5 | Pass |
| b | 2437 | Ant1 | 9.51 | 0.5 | Pass |
| b | 2462 | Ant1 | 9.78 | 0.5 | Pass |
| g | 2412 | Ant1 | 15.717 | 0.5 | Pass |
| g | 2437 | Ant1 | 16.449 | 0.5 | Pass |
| g | 2462 | Ant1 | 16.308 | 0.5 | Pass |
| n20 | 2412 | Ant1 | 16.875 | 0.5 | Pass |
| n20 | 2437 | Ant1 | 17.46 | 0.5 | Pass |
| n20 | 2462 | Ant1 | 16.245 | 0.5 | Pass |
| n40 | 2422 | Ant1 | 32.088 | 0.5 | Pass |
| n40 | 2437 | Ant1 | 35.592 | 0.5 | Pass |
| n40 | 2452 | Ant1 | 36.03 | 0.5 | Pass |

## 3.2 Test Graphs

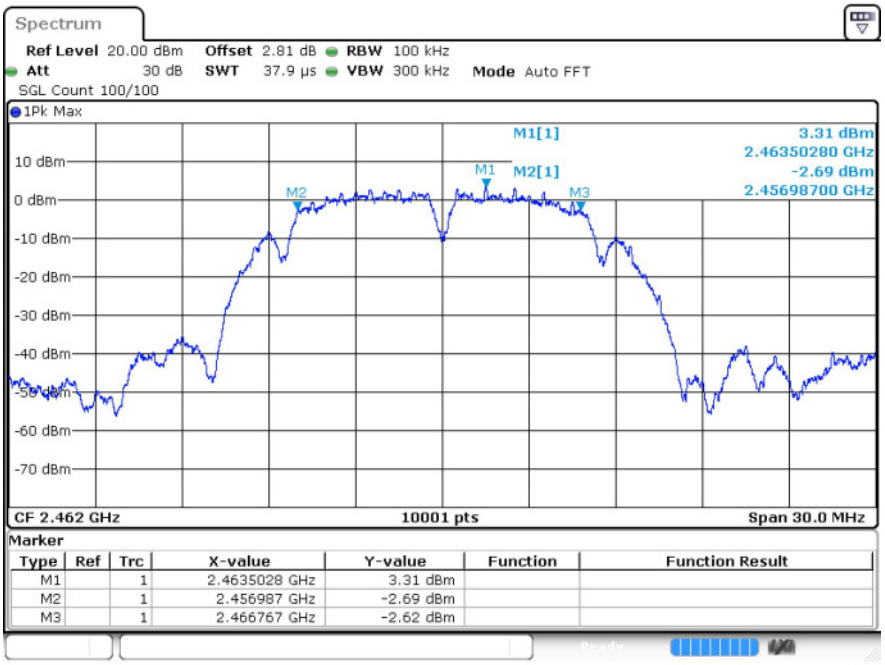
| Test Graphs |
|---|
| b 2412MHz Ant1 |



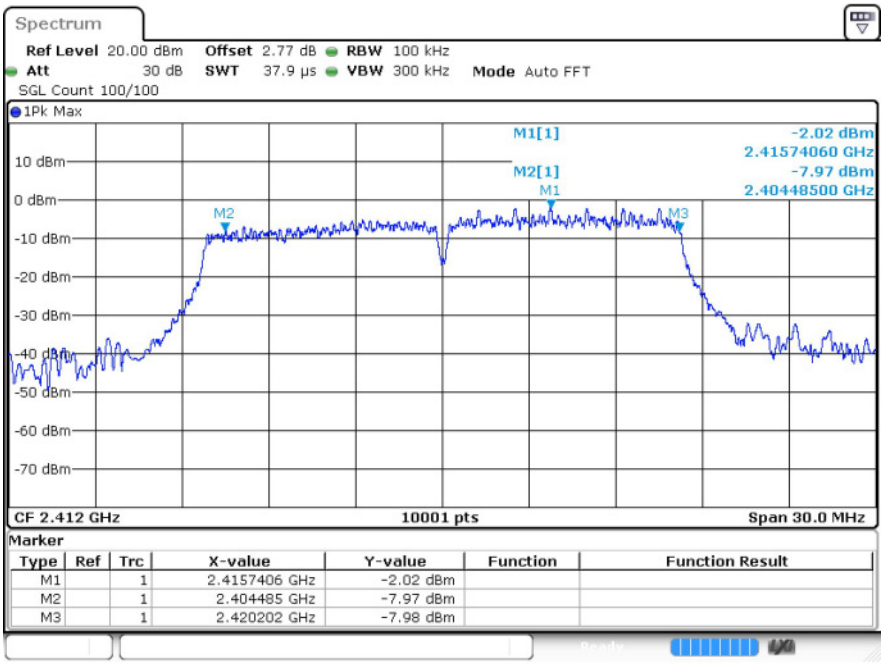

| b 2437MHz Ant1 |
|---|



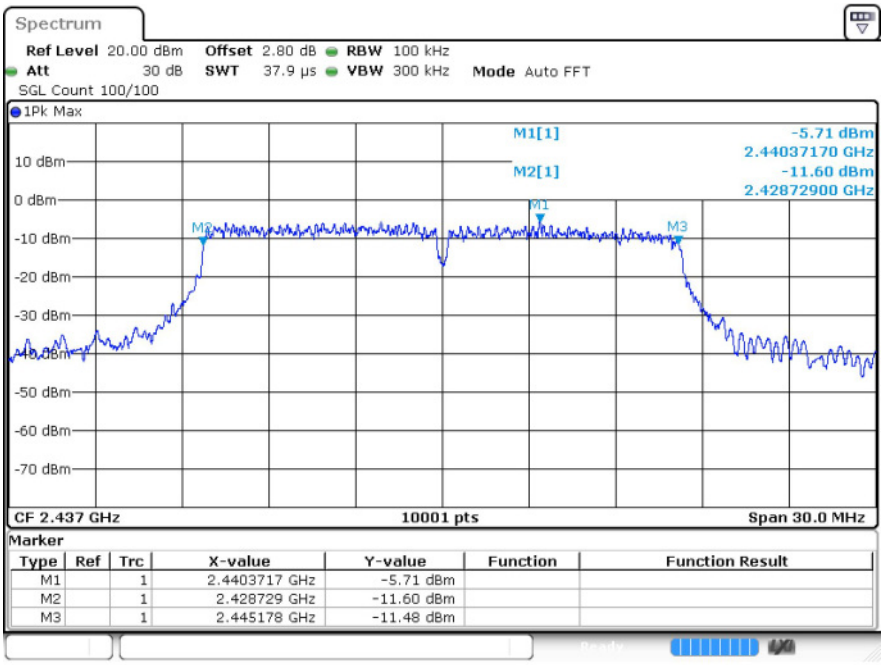
b 2462MHz Ant1



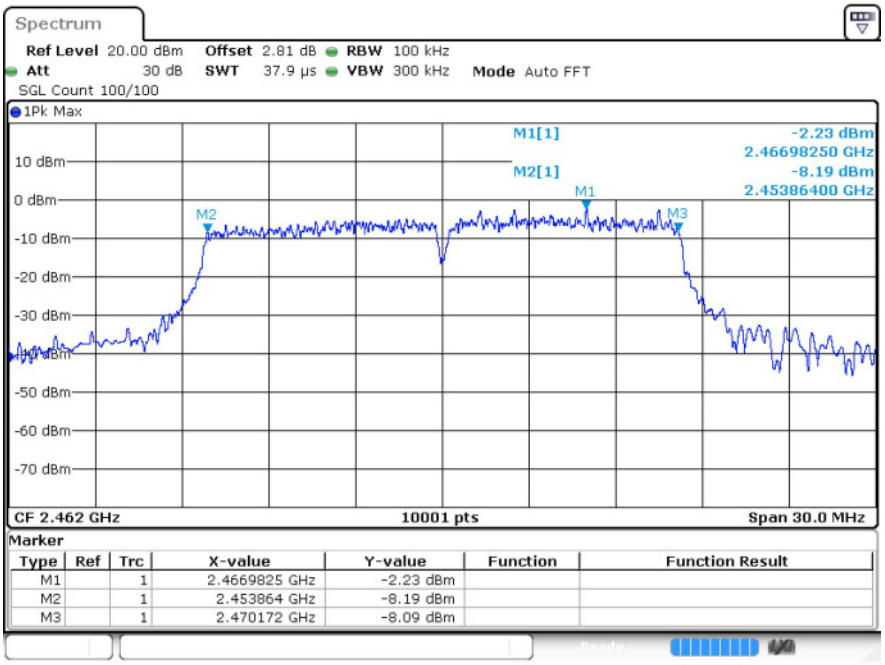

g 2412MHz Ant1



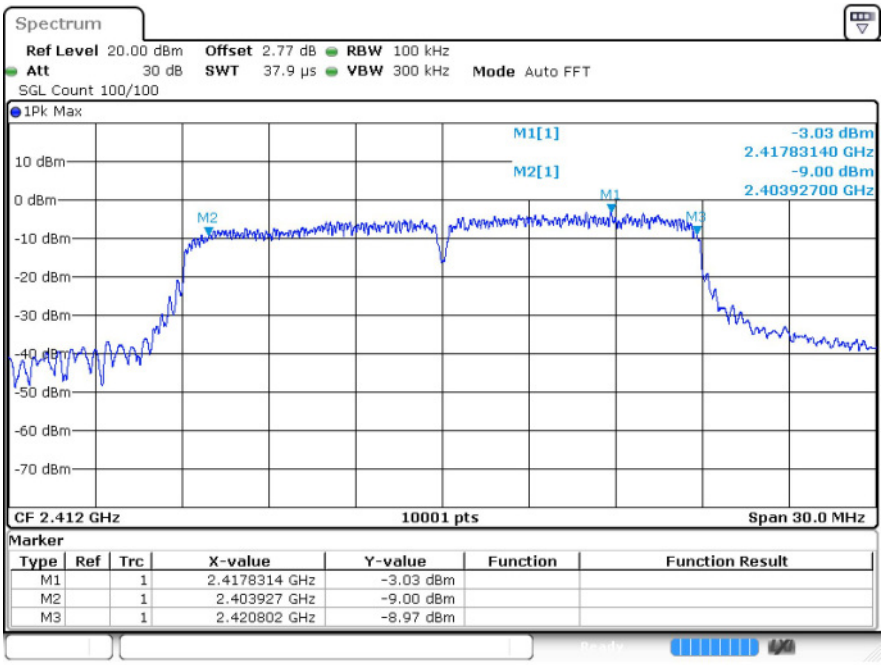
g 2437MHz Ant1



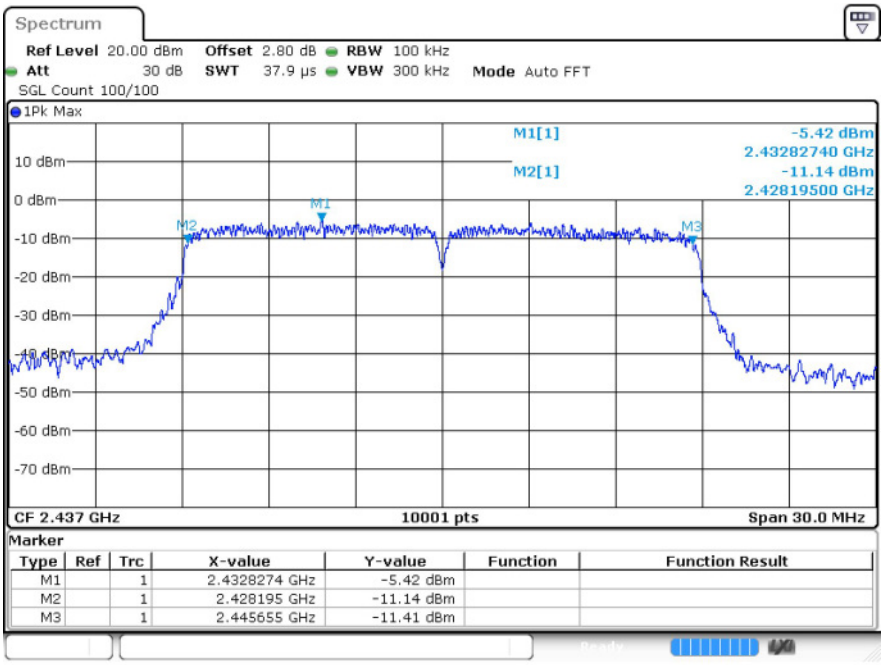

g 2462MHz Ant1



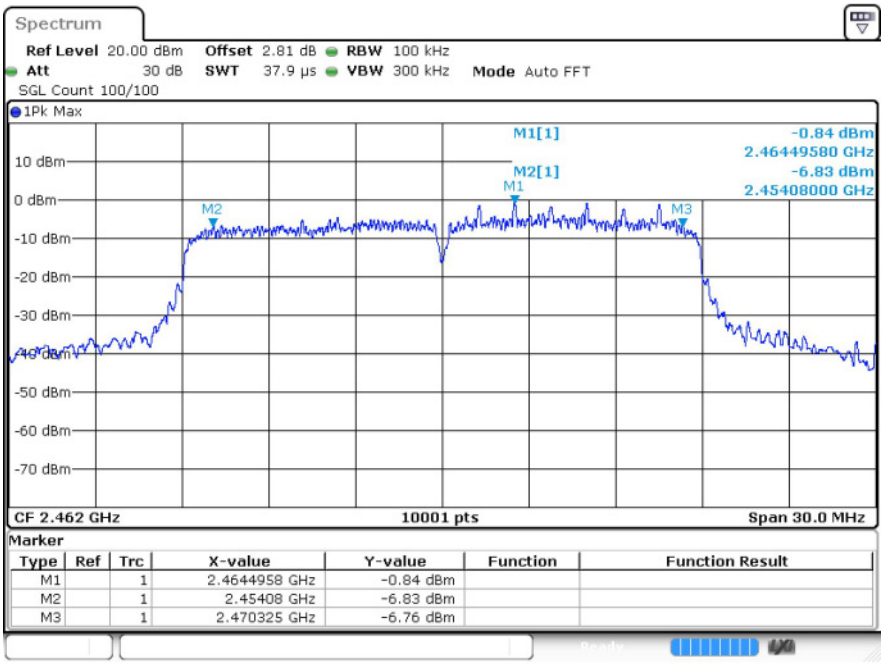
n20 2412MHz Ant1



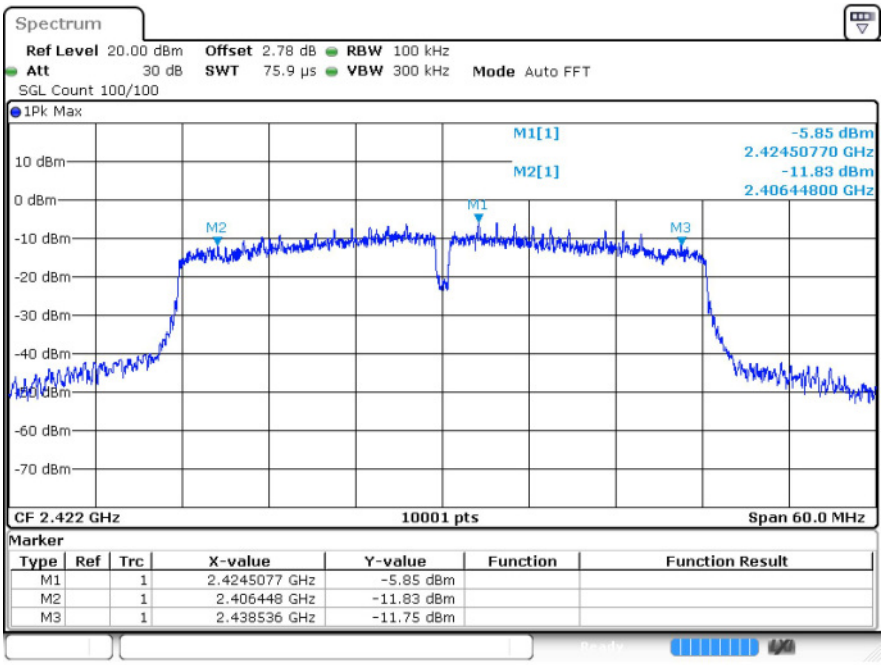

n20 2437MHz Ant1



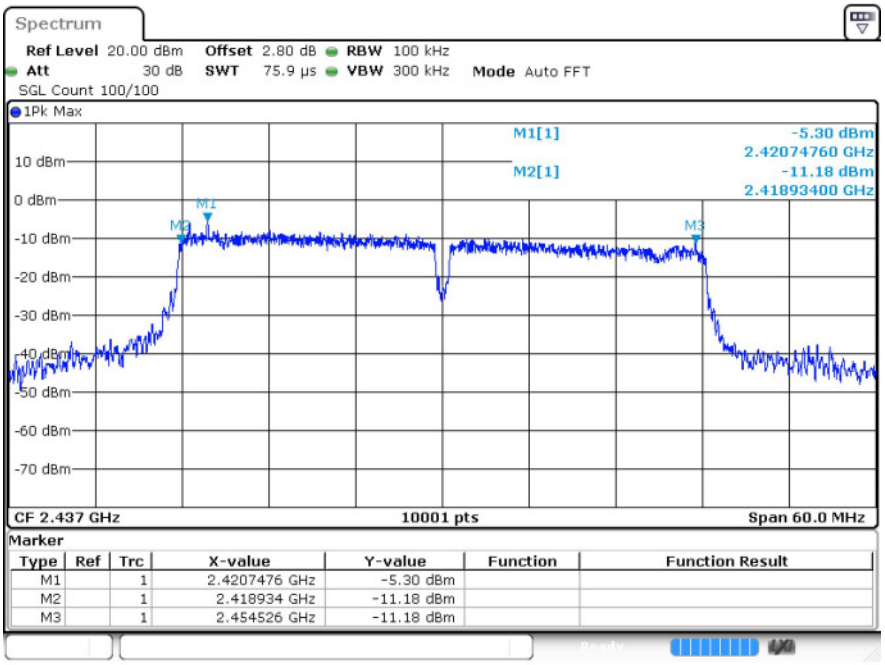
n20 2462MHz Ant1



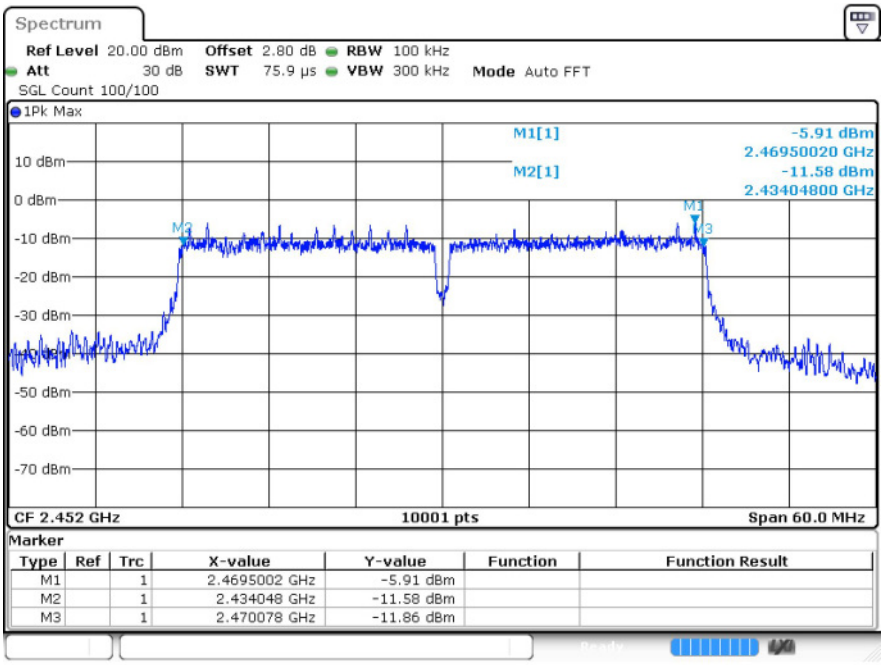

n40 2422MHz Ant1



n40 2437MHz Ant1




n40 2452MHz Ant1

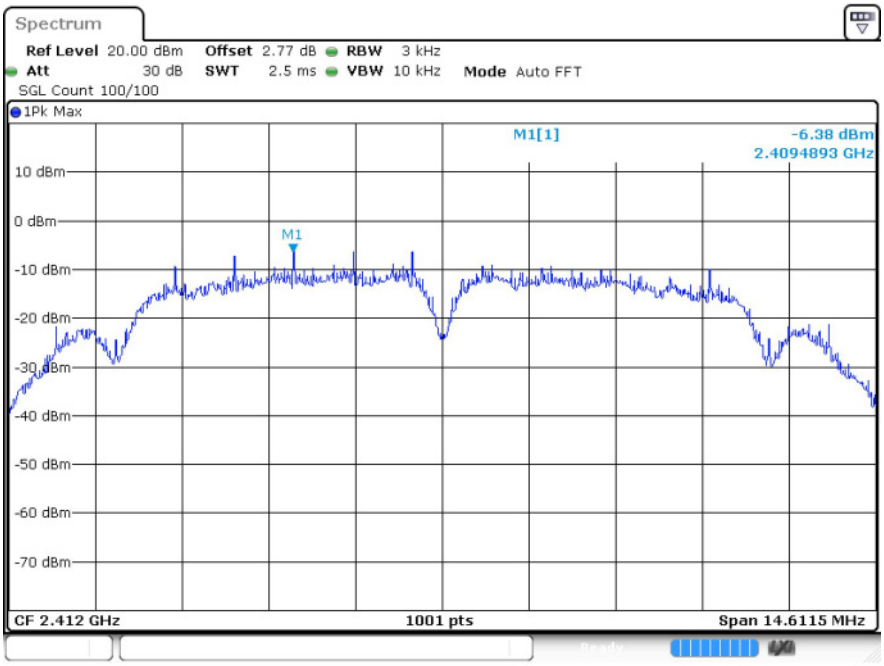
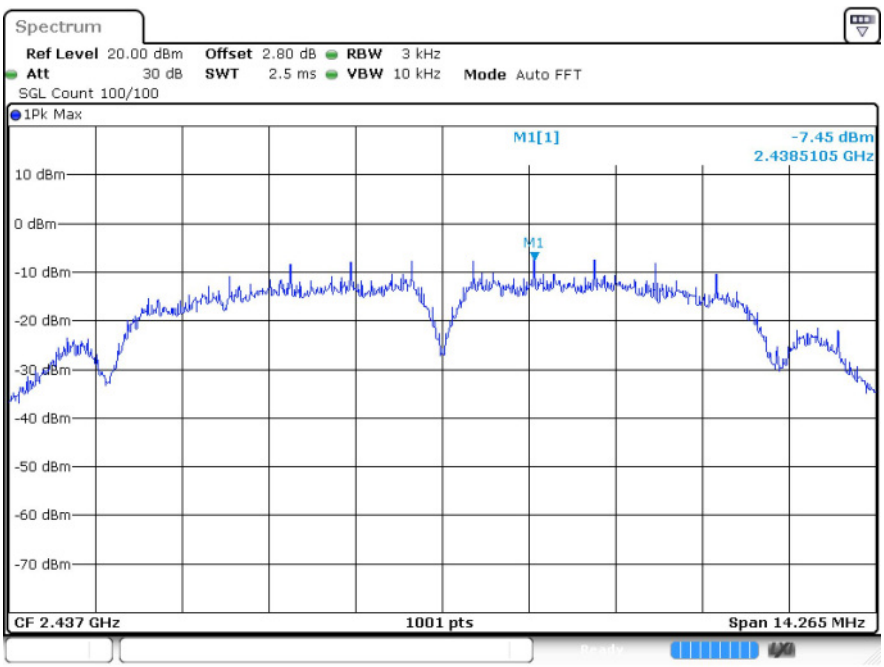


# 4 Maximum Power Spectral Density Level

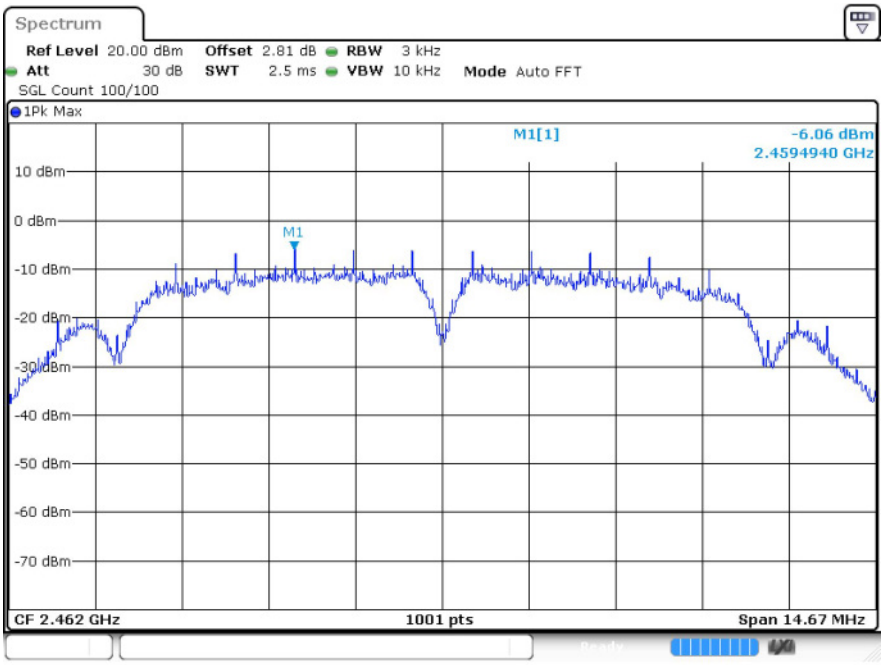
## 4.1 Test Result

| Mode | Frequency (MHz) | Antenna | Conducted PSD (dBm/3-100kHz) | Limit (dBm/3kHz) | Verdict |
|---|---|---|---|---|---|
| b | 2412 | Ant1 | -6.38 | ≤8 | Pass |
| b | 2437 | Ant1 | -7.45 | ≤8 | Pass |
| b | 2462 | Ant1 | -6.06 | ≤8 | Pass |
| g | 2412 | Ant1 | -14.58 | ≤8 | Pass |
| g | 2437 | Ant1 | -17.45 | ≤8 | Pass |
| g | 2462 | Ant1 | -14.73 | ≤8 | Pass |
| n20 | 2412 | Ant1 | -14.39 | ≤8 | Pass |
| n20 | 2437 | Ant1 | -16.82 | ≤8 | Pass |
| n20 | 2462 | Ant1 | -14.62 | ≤8 | Pass |
| n40 | 2422 | Ant1 | -20.01 | ≤8 | Pass |
| n40 | 2437 | Ant1 | -20.06 | ≤8 | Pass |
| n40 | 2452 | Ant1 | -18.82 | ≤8 | Pass |

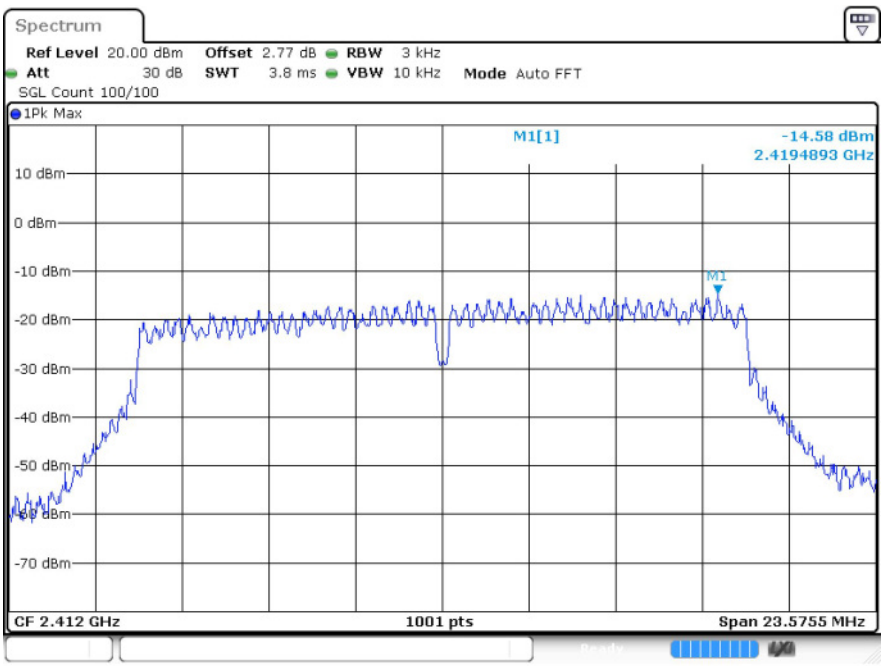
## 4.2 Test Graphs

| Test Graphs |
|---|
| b 2412MHz Ant1 |
|  |
| b 2437MHz Ant1 |
|  |

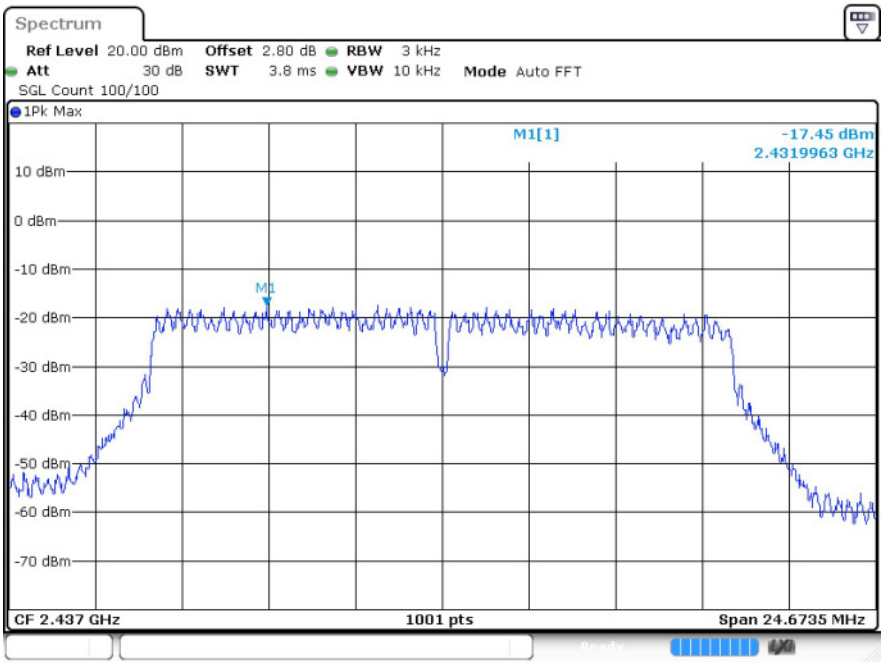
b 2462MHz Ant1



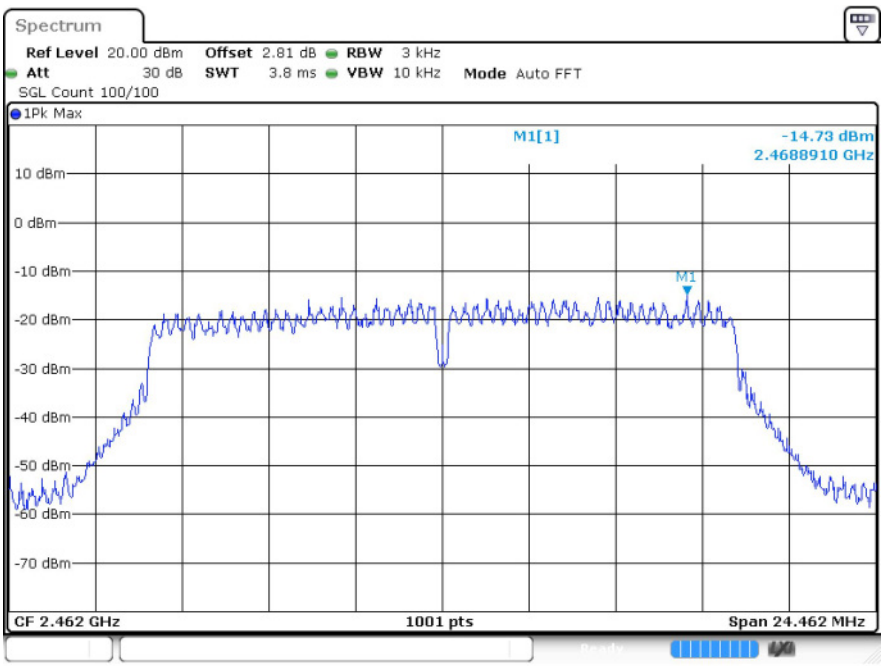

g 2412MHz Ant1



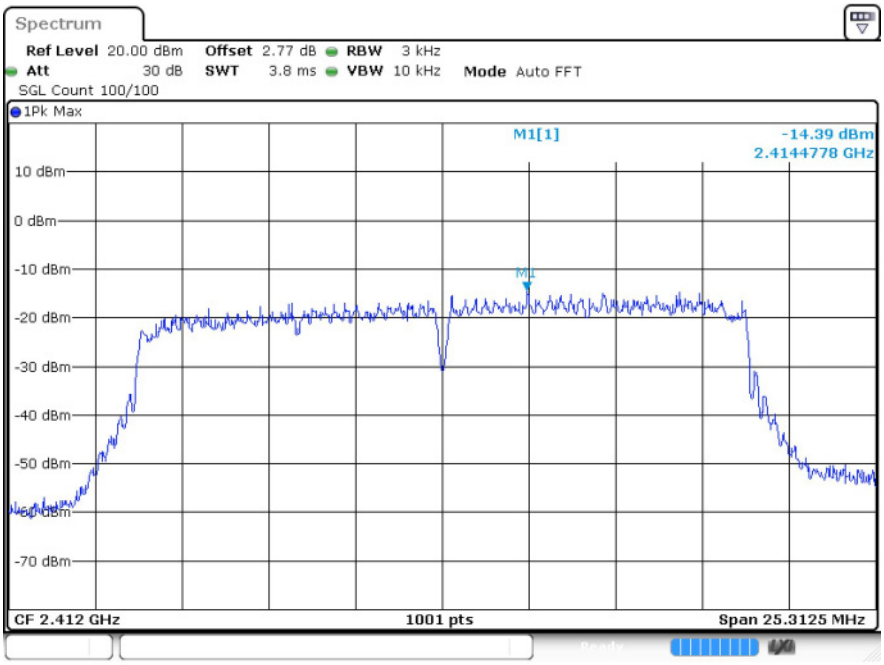
g 2437MHz Ant1



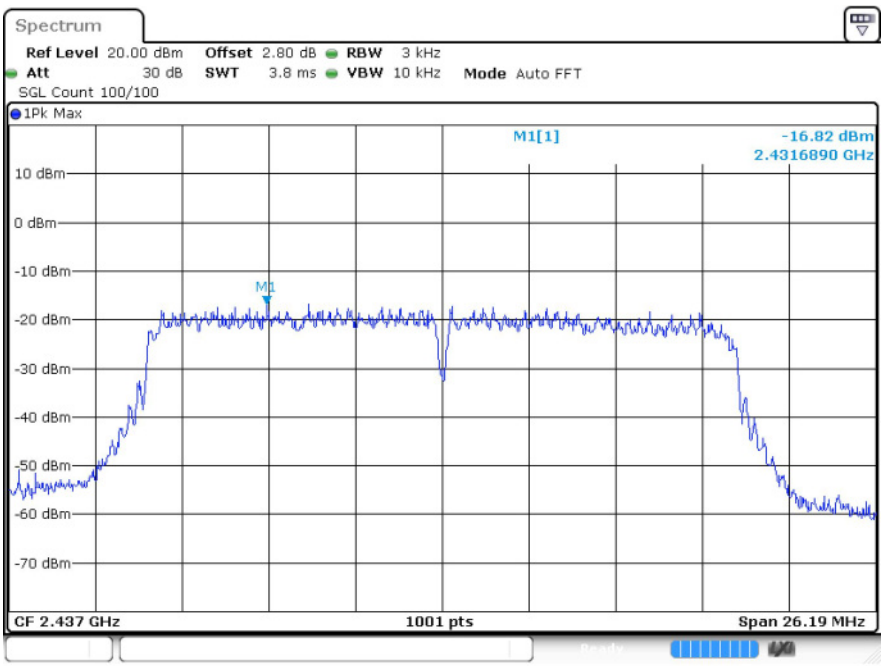

g 2462MHz Ant1



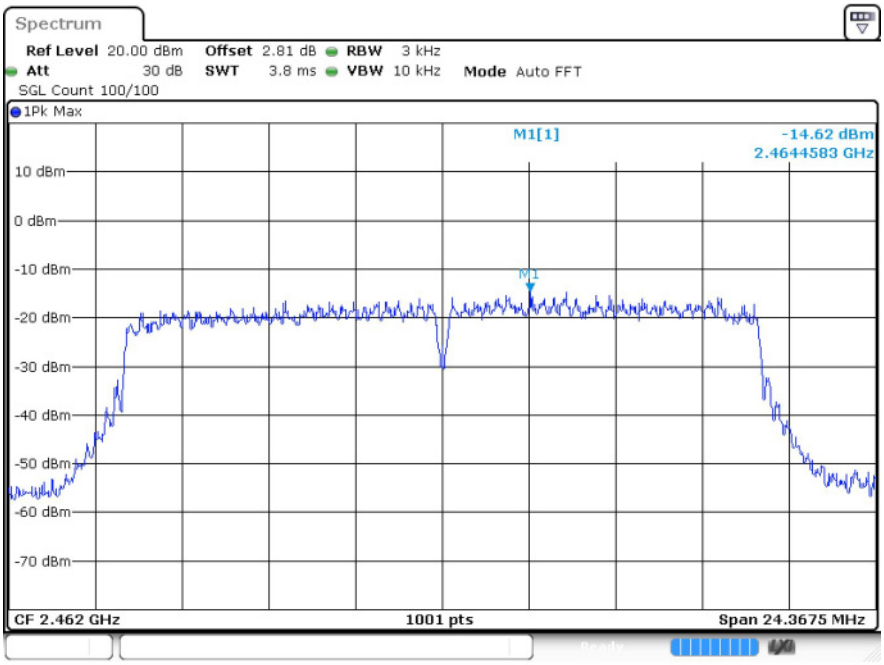
n20 2412MHz Ant1



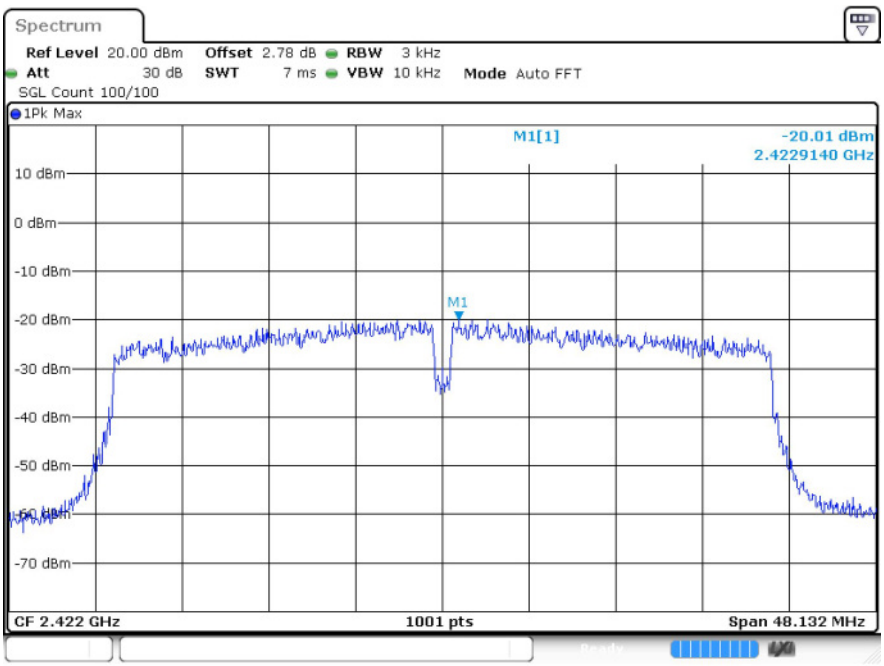

n20 2437MHz Ant1



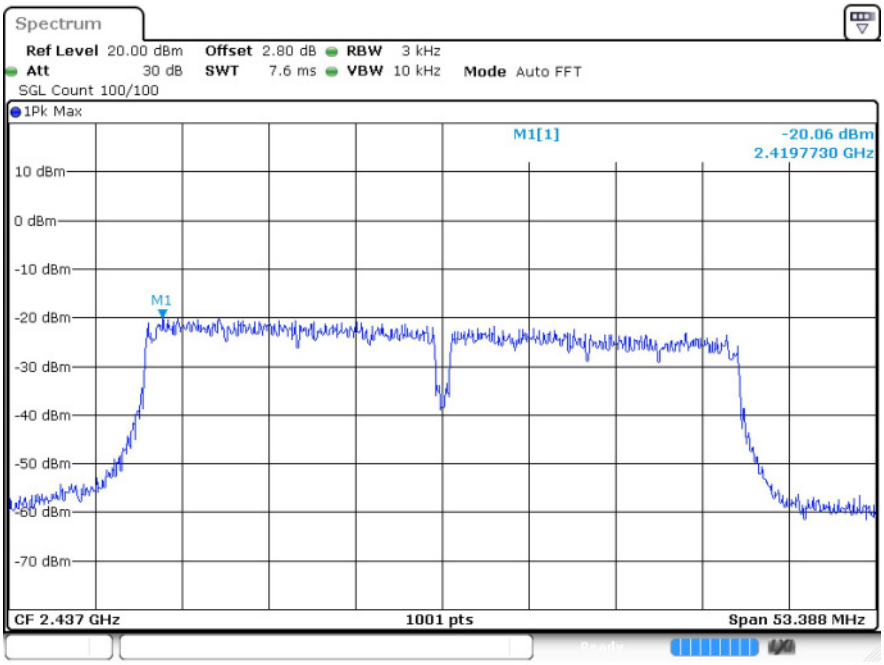
n20 2462MHz Ant1



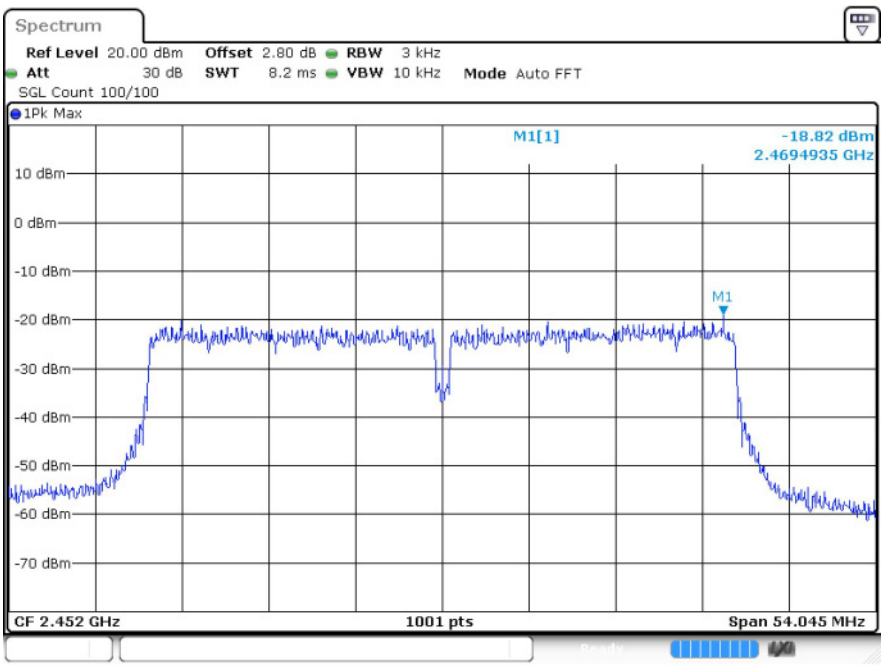

n40 2422MHz Ant1



n40 2437MHz Ant1




n40 2452MHz Ant1



# 5 Band Edge

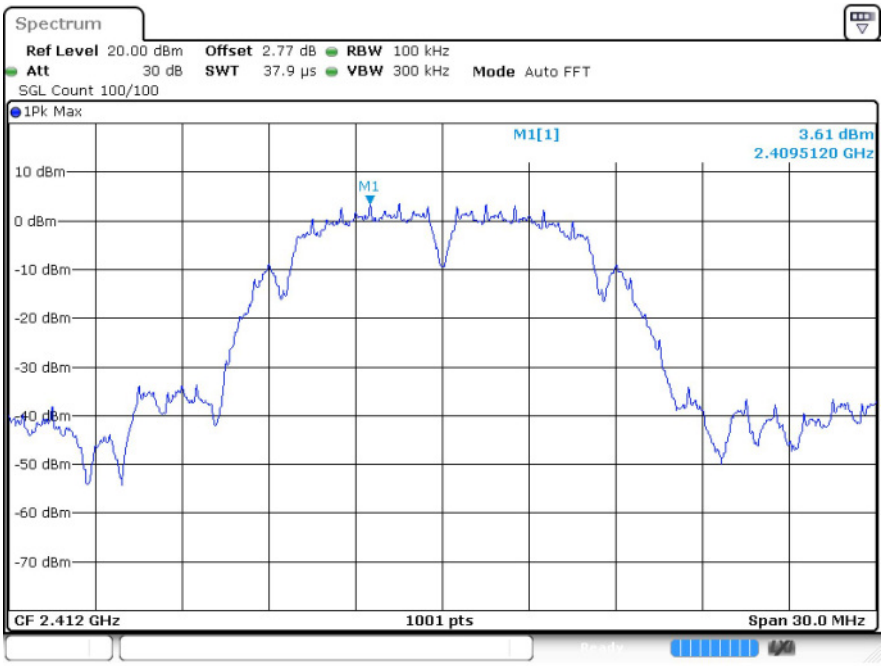
## 5.1 Test Result

| Mode | Frequency (MHz) | Antenna | Max Value (dBc) | Limit (dBc) | Verdict |
|---|---|---|---|---|---|
| b | 2412 | Ant1 | -57.26 | -20 | Pass |
| b | 2462 | Ant1 | -52.27 | -20 | Pass |
| g | 2412 | Ant1 | -53.41 | -20 | Pass |
| g | 2462 | Ant1 | -44.46 | -20 | Pass |
| n20 | 2412 | Ant1 | -52.47 | -20 | Pass |
| n20 | 2462 | Ant1 | -46.8 | -20 | Pass |
| n40 | 2422 | Ant1 | -47.88 | -20 | Pass |
| n40 | 2452 | Ant1 | -38.06 | -20 | Pass |

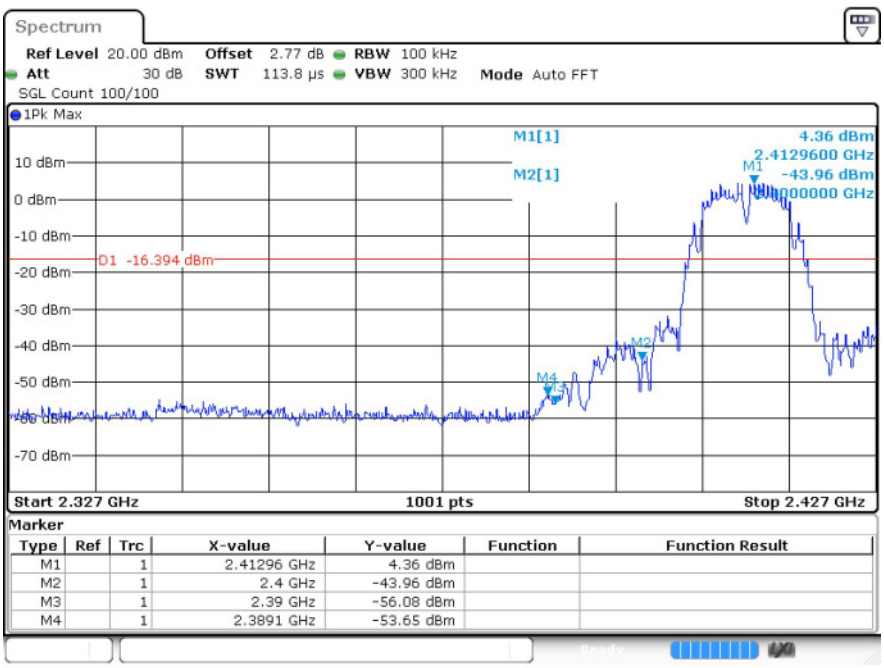
## 5.2 Test Graphs

Test Graphs

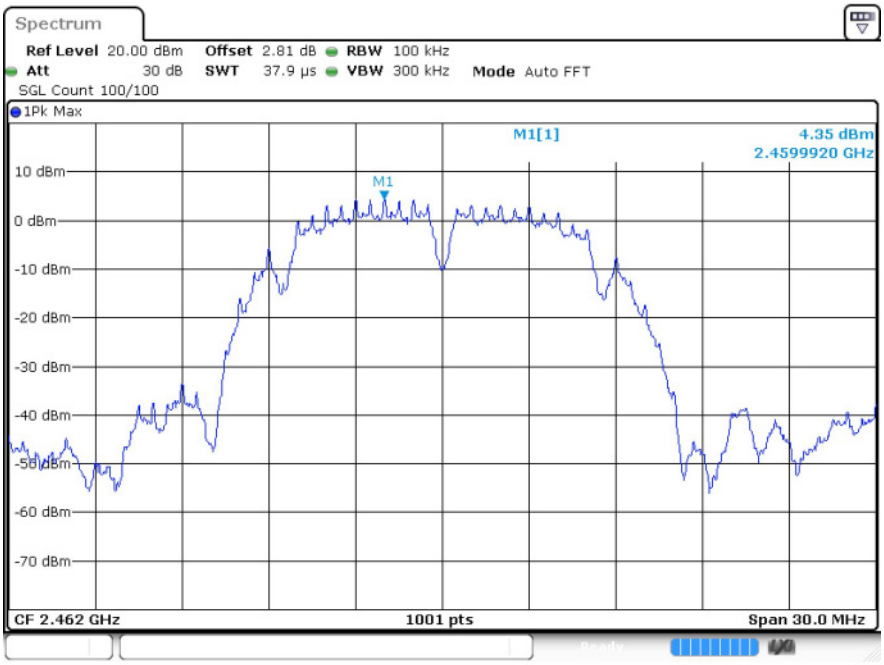
b 2412MHz Ant1 Ref



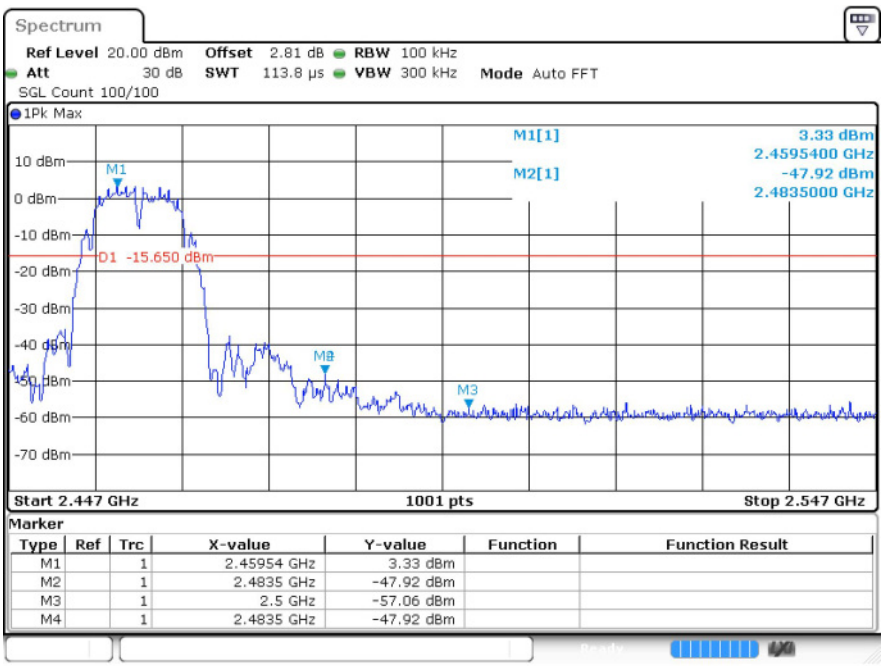

b 2412MHz Ant1 Emission



b 2462MHz Ant1 Ref

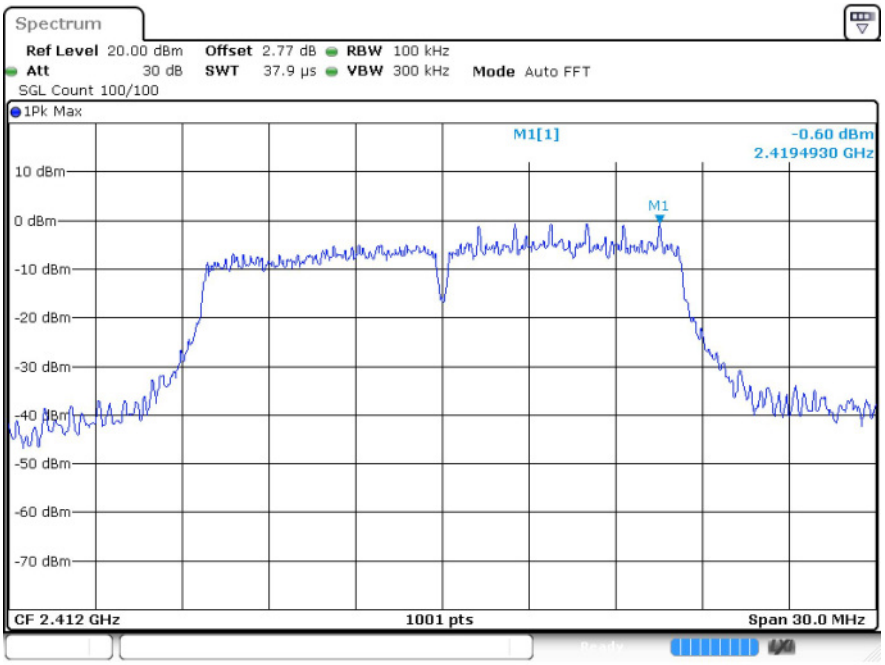



b 2462MHz Ant1 Emission

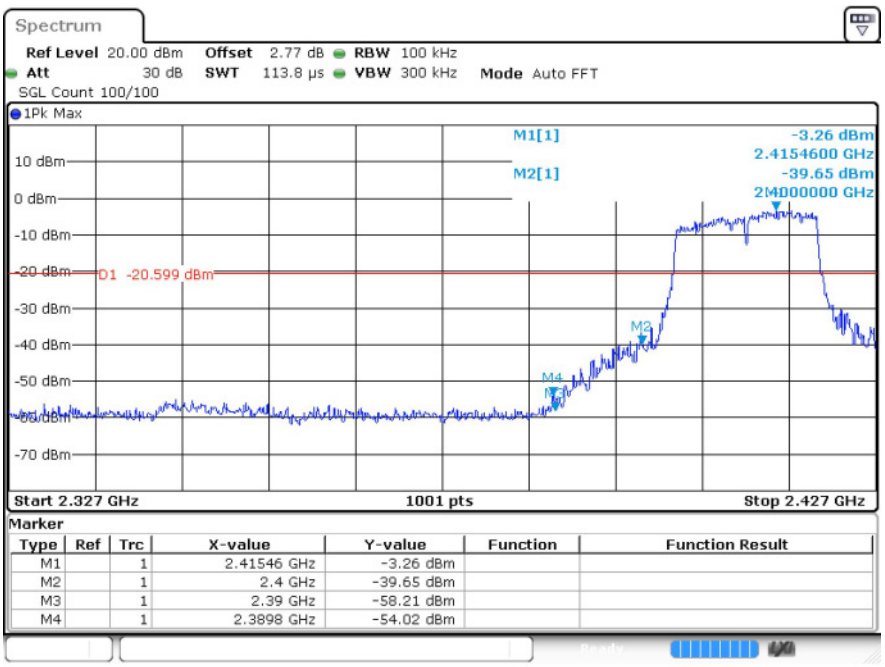



| Type | Ref | Trc | X-value | Y-value | Function | Function Result |
|---|---|---|---|---|---|---|
| M1 | | 1 | 2.45954 GHz | 3.33 dBm | | |
| M2 | | 1 | 2.4835 GHz | -47.92 dBm | | |
| M3 | | 1 | 2.5 GHz | -57.06 dBm | | |
| M4 | | 1 | 2.4835 GHz | -47.92 dBm | | |

g 2412MHz Ant1 Ref



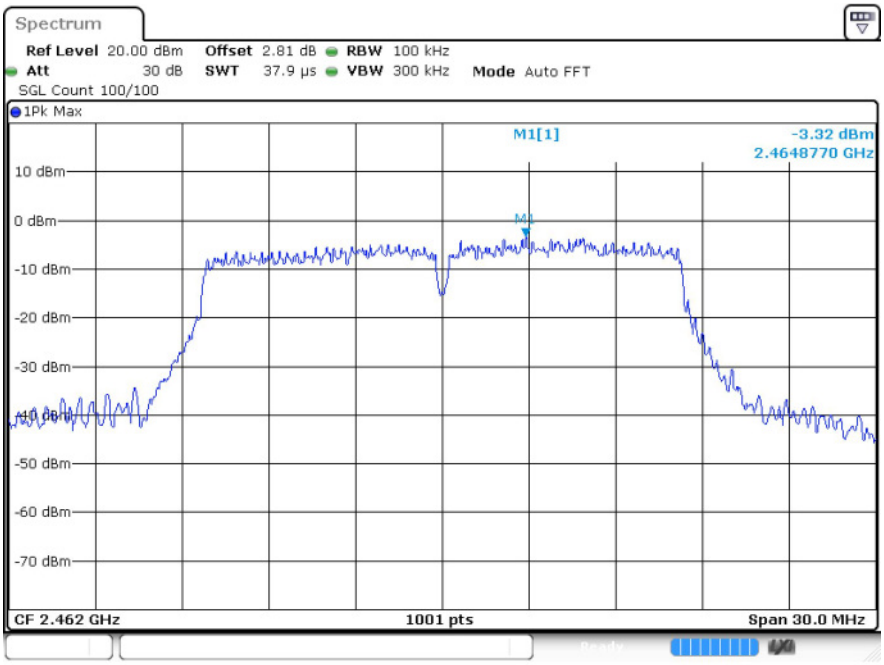

g 2412MHz Ant1 Emission



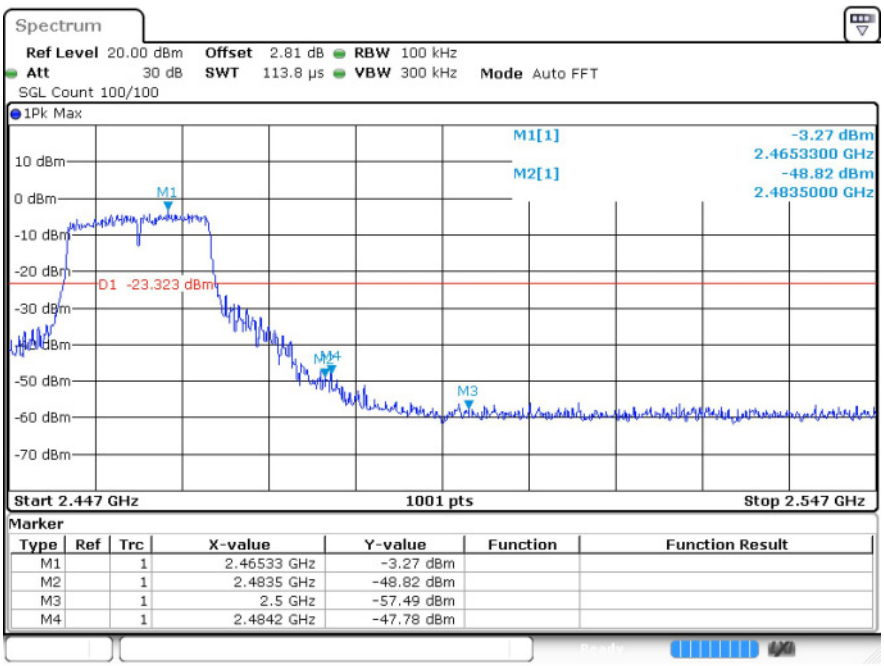

Marker

| Type | Ref | Trc | X-value | Y-value | Function | Function Result |
|---|---|---|---|---|---|---|
| M1 | | 1 | 2.41546 GHz | -3.26 dBm | | |
| M2 | | 1 | 2.4 GHz | -39.65 dBm | | |
| M3 | | 1 | 2.39 GHz | -58.21 dBm | | |
| M4 | | 1 | 2.3898 GHz | -54.02 dBm | | |

g 2462MHz Ant1 Ref

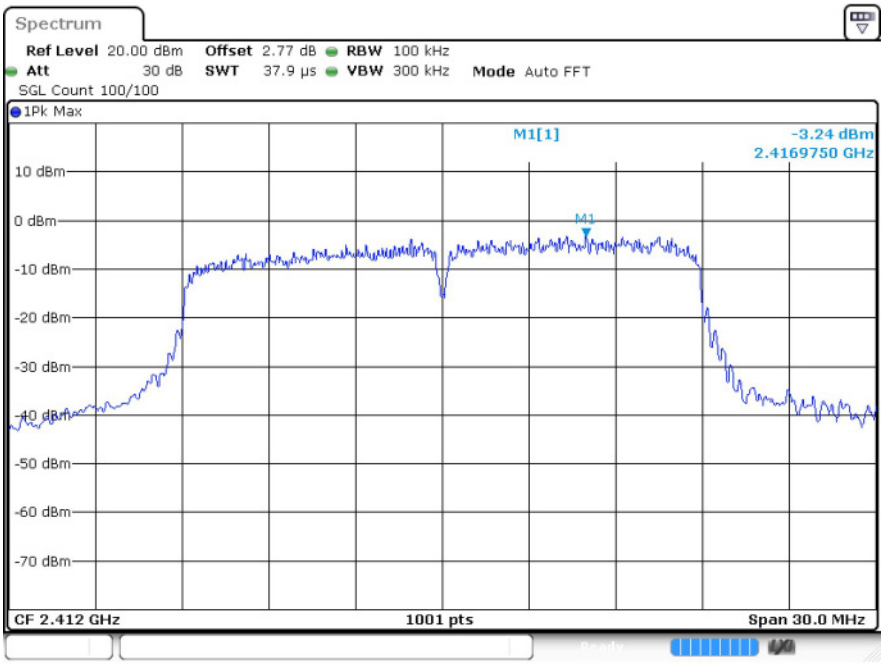



g 2462MHz Ant1 Emission

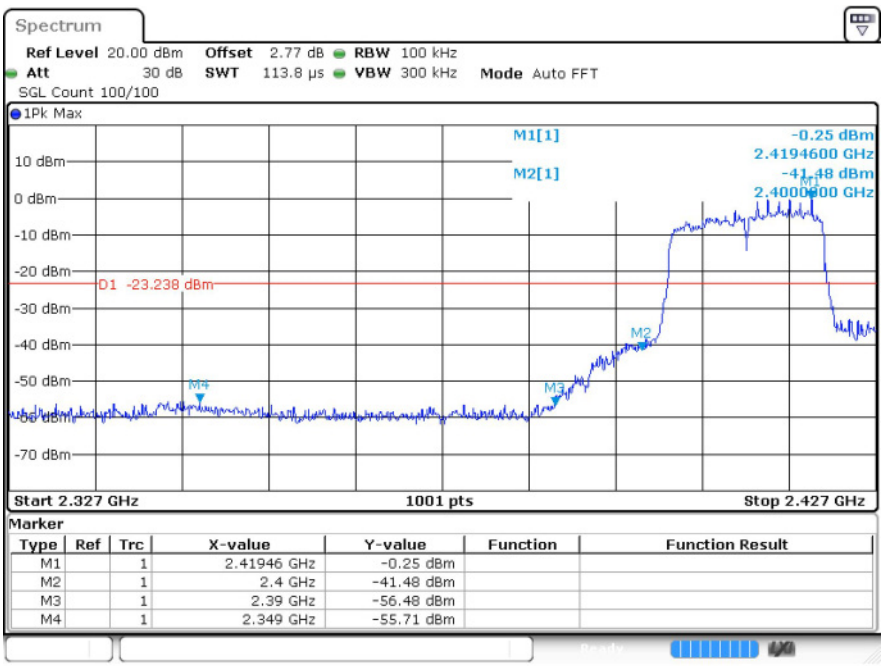



| Type | Ref | Trc | X-value | Y-value | Function | Function Result |
|---|---|---|---|---|---|---|
| M1 | | 1 | 2.46533 GHz | -3.27 dBm | | |
| M2 | | 1 | 2.4835 GHz | -48.82 dBm | | |
| M3 | | 1 | 2.5 GHz | -57.49 dBm | | |
| M4 | | 1 | 2.4842 GHz | -47.78 dBm | | |

n20 2412MHz Ant1 Ref



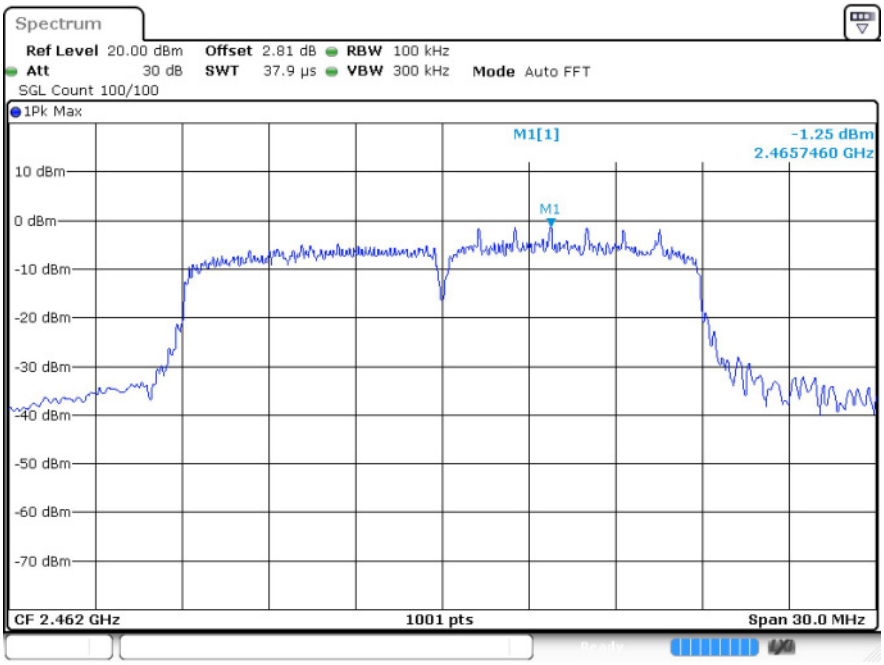

n20 2412MHz Ant1 Emission



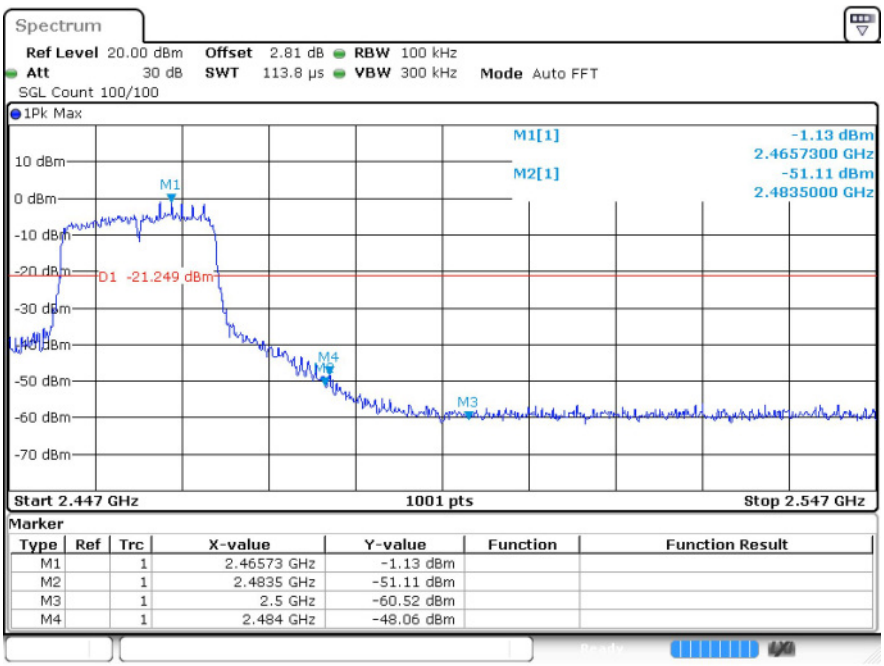

Marker

| Type | Ref | Trc | X-value | Y-value | Function | Function Result |
|---|---|---|---|---|---|---|
| M1 | | 1 | 2.41946 GHz | -0.25 dBm | | |
| M2 | | 1 | 2.4 GHz | -41.48 dBm | | |
| M3 | | 1 | 2.39 GHz | -56.48 dBm | | |
| M4 | | 1 | 2.349 GHz | -55.71 dBm | | |

n20 2462MHz Ant1 Ref



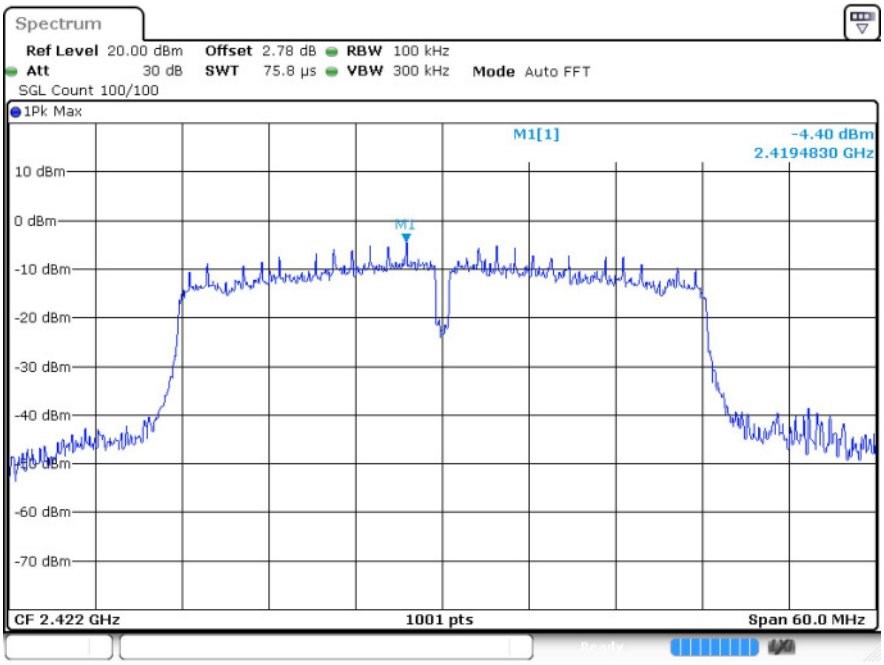

n20 2462MHz Ant1 Emission

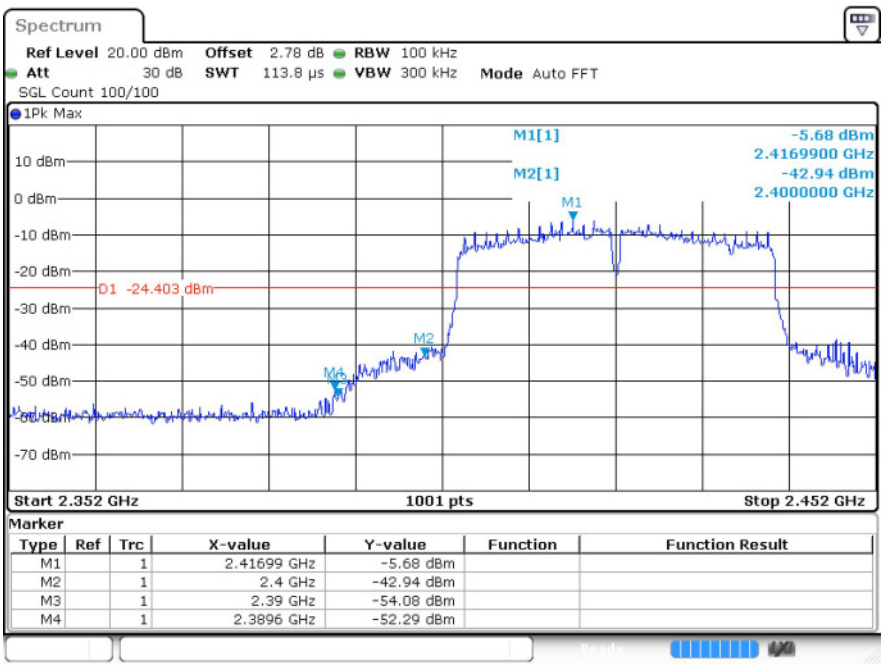



Marker

| Type | Ref | Trc | X-value | Y-value | Function | Function Result |
|---|---|---|---|---|---|---|
| M1 | | 1 | 2.46573 GHz | -1.13 dBm | | |
| M2 | | 1 | 2.4835 GHz | -51.11 dBm | | |
| M3 | | 1 | 2.5 GHz | -60.52 dBm | | |
| M4 | | 1 | 2.484 GHz | -48.06 dBm | | |

n40 2422MHz Ant1 Ref




n40 2422MHz Ant1 Emission