



## Appendix C

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

Product Name: Smart Glasses

Trade Mark: N/A

Test Model: GM6

#### Environmental Conditions

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



## Contents

Page

### COVER PAGE

|     |                                            |    |
|-----|--------------------------------------------|----|
| 1   | Duty Cycle .....                           | 3  |
| 1.1 | Test Result .....                          | 3  |
| 1.2 | Test Graphs .....                          | 4  |
| 2   | Maximum Conducted Output Power .....       | 10 |
| 2.1 | Test Result .....                          | 10 |
| 3   | -6dB Bandwidth .....                       | 11 |
| 3.1 | Test Result .....                          | 11 |
| 3.2 | Test Graphs .....                          | 12 |
| 4   | Maximum Power Spectral Density Level ..... | 18 |
| 4.1 | Test Result .....                          | 18 |
| 4.2 | Test Graphs .....                          | 19 |
| 5   | Band Edge .....                            | 25 |
| 5.1 | Test Result .....                          | 25 |
| 5.2 | Test Graphs .....                          | 26 |
| 6   | Conducted RF Spurious Emission .....       | 34 |
| 6.1 | Test Result .....                          | 34 |
| 6.2 | Test Graphs .....                          | 35 |
| 7   | Restrict Band .....                        | 47 |
| 7.1 | Test Result .....                          | 47 |
| 7.2 | Test Graphs .....                          | 49 |

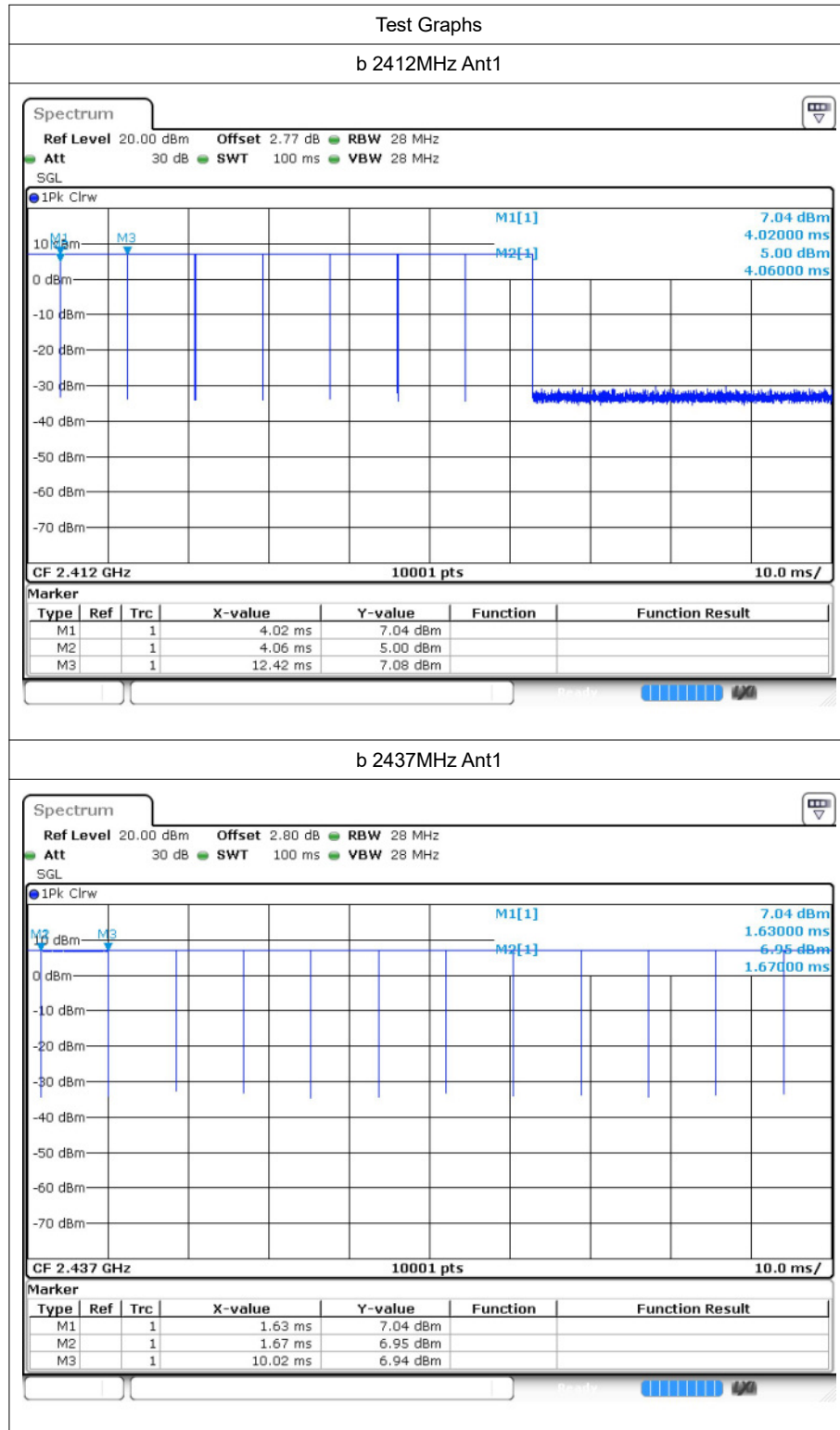


# 1 Duty Cycle

## 1.1 Test Result

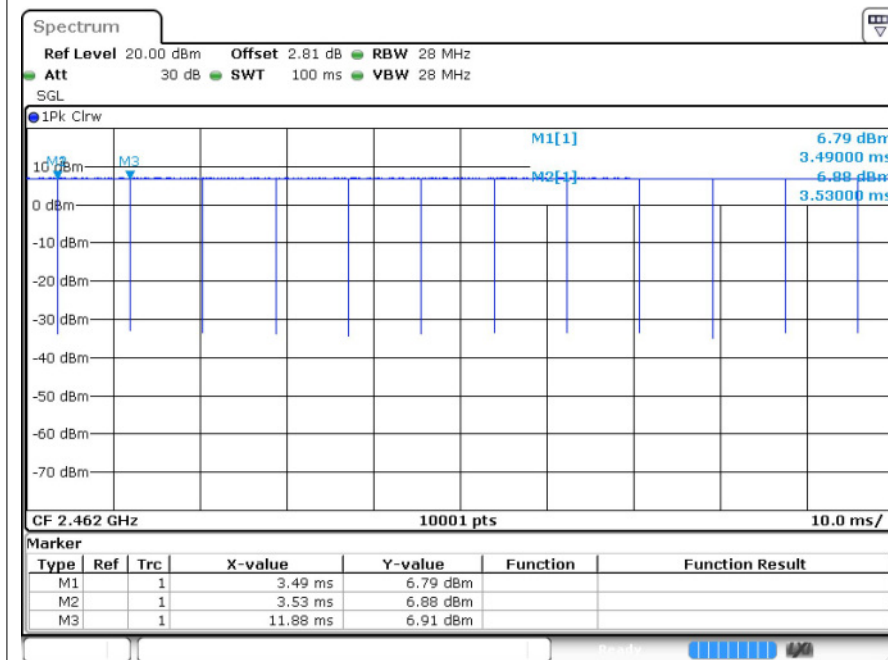
| Mode | Frequency (MHz) | Antenna | Duty Cycle (%) | Correction Factor | 1/T (kHz) |
|------|-----------------|---------|----------------|-------------------|-----------|
| b    | 2412            | Ant1    | 62.57          | 2.04              | 0.12      |
| b    | 2437            | Ant1    | 99.59          | 0.02              | 0.12      |
| b    | 2462            | Ant1    | 99.6           | 0.02              | 0.12      |
| g    | 2412            | Ant1    | 86.81          | 0.61              | 4.76      |
| g    | 2437            | Ant1    | 86.84          | 0.61              | 4.76      |
| g    | 2462            | Ant1    | 86.79          | 0.62              | 4.76      |
| n20  | 2412            | Ant1    | 87.49          | 0.58              | 4.35      |
| n20  | 2437            | Ant1    | 87.5           | 0.58              | 4.35      |
| n20  | 2462            | Ant1    | 87.52          | 0.58              | 4.17      |
| n40  | 2422            | Ant1    | 87.92          | 0.56              | 4.17      |
| n40  | 2437            | Ant1    | 87.93          | 0.56              | 4.17      |
| n40  | 2452            | Ant1    | 87.98          | 0.56              | 4         |

## 1.2 Test Graphs

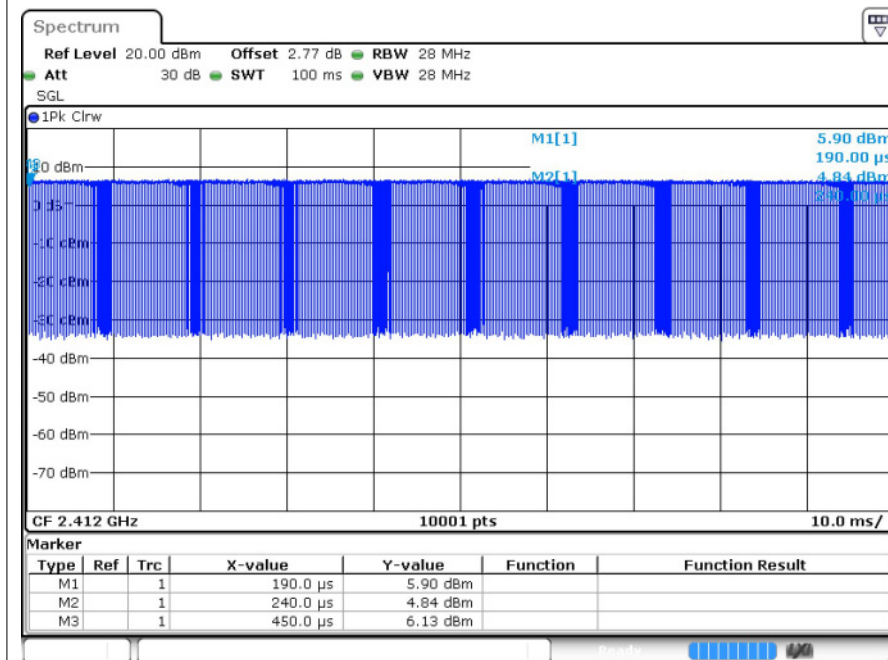


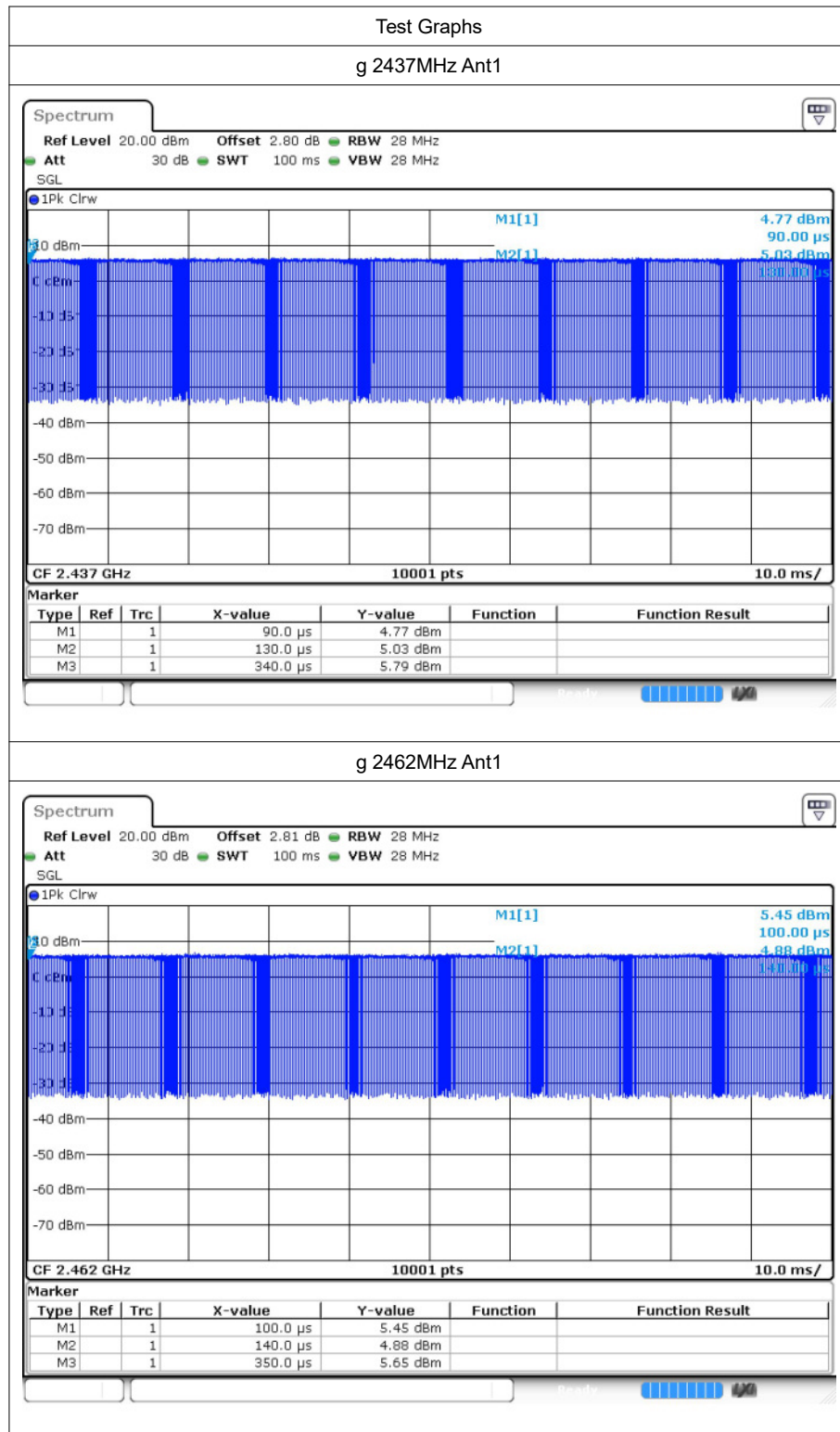
## Test Graphs

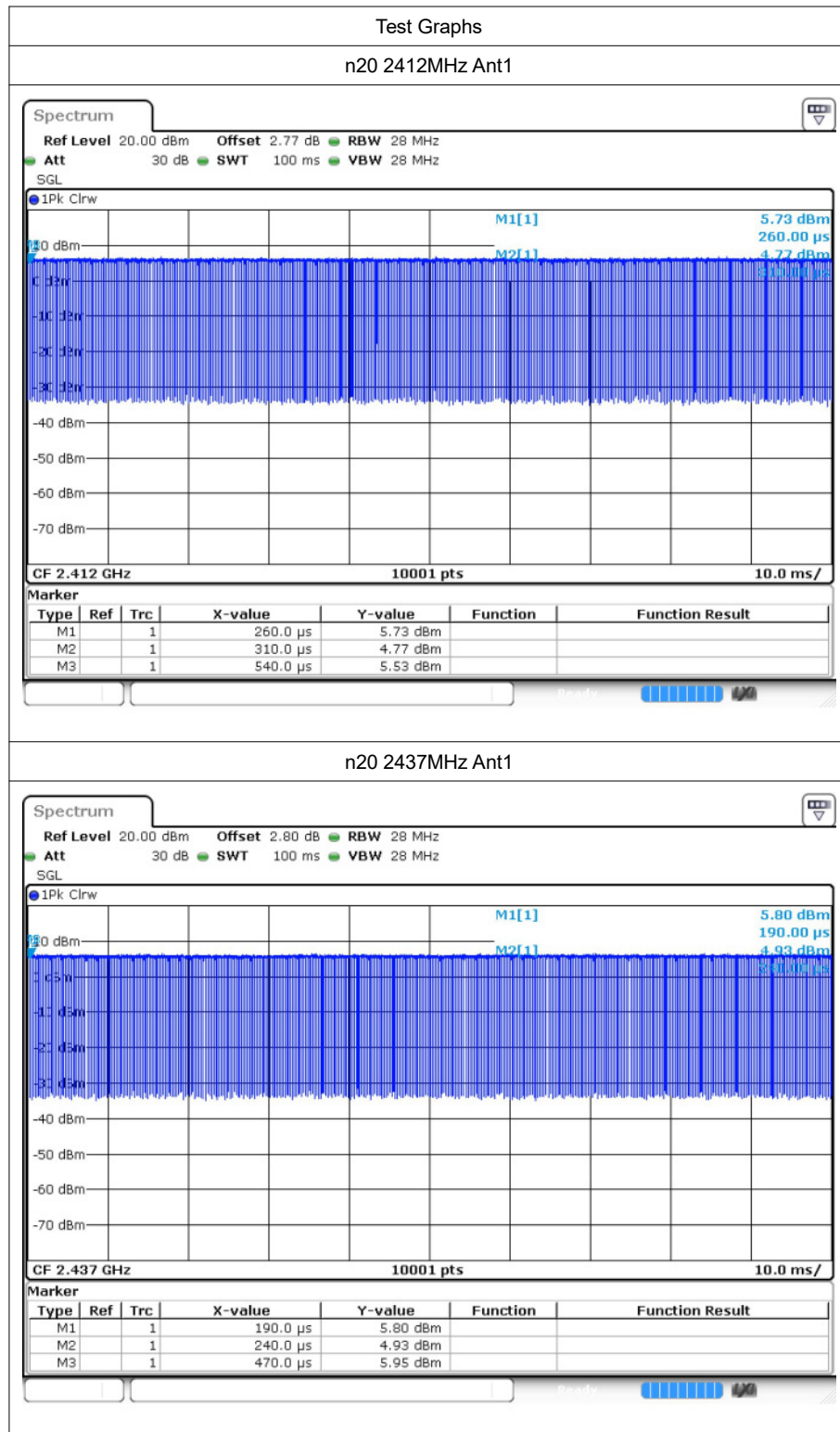
b 2462MHz Ant1

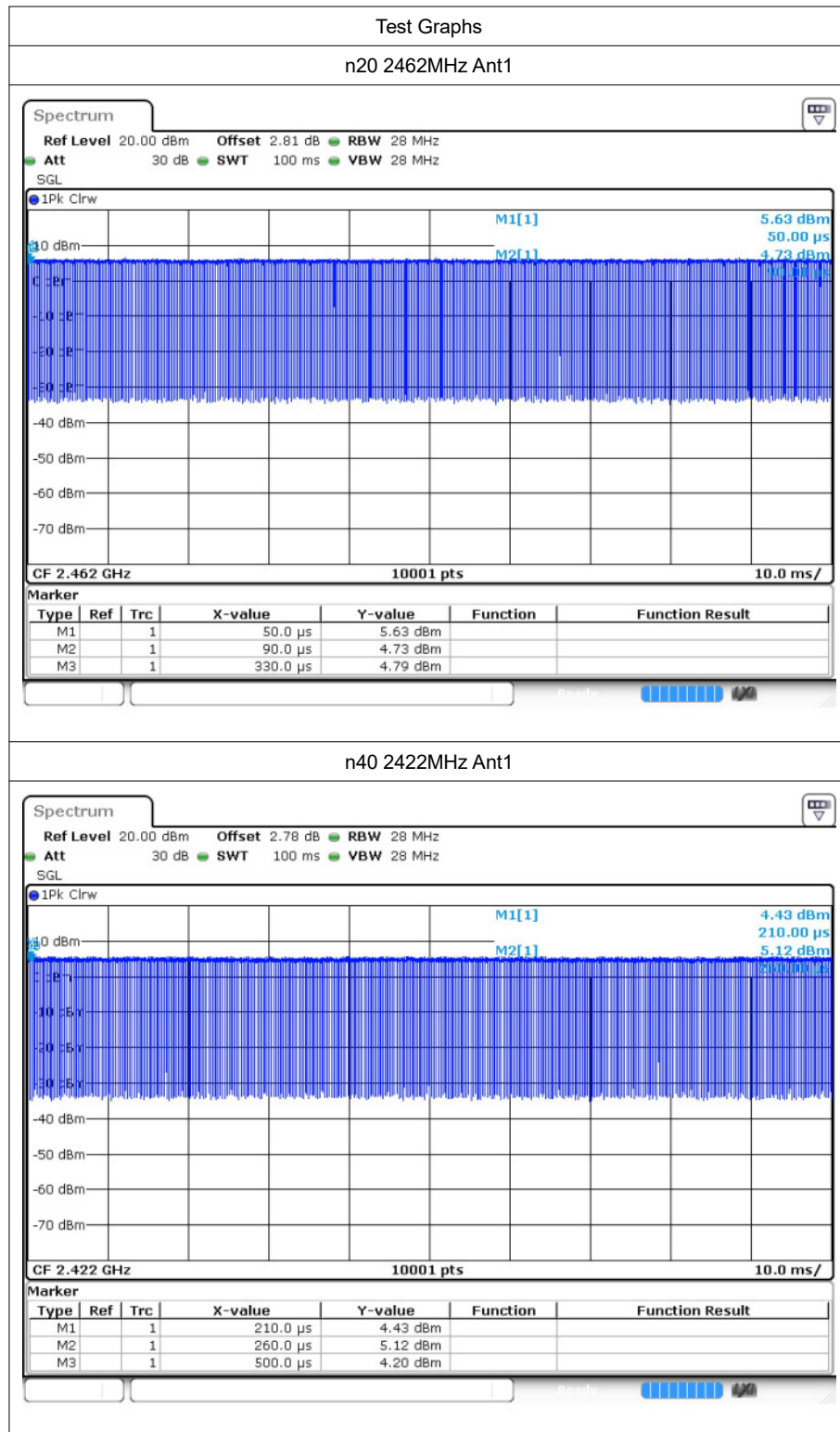


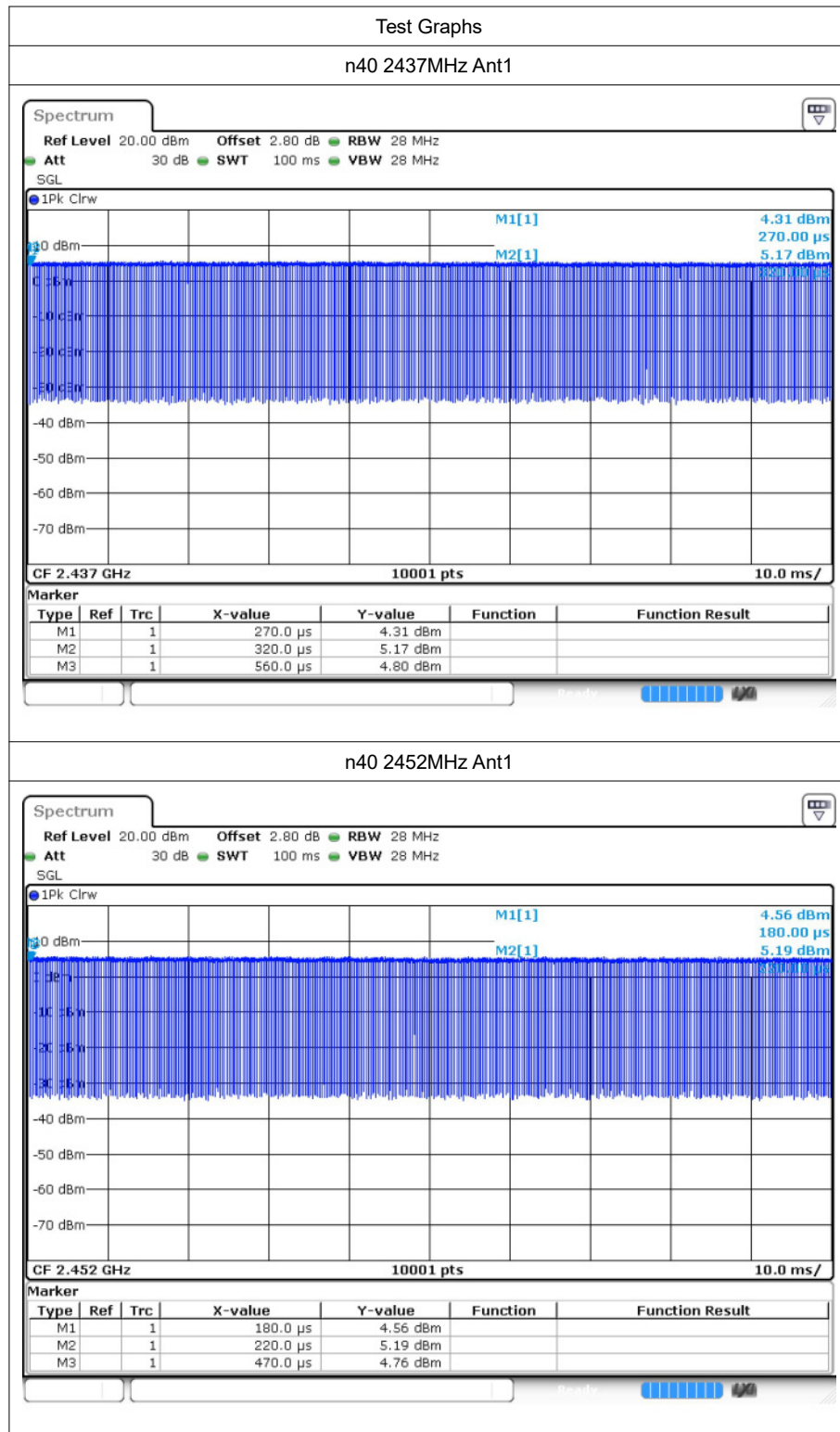
g 2412MHz Ant1











## 2 Maximum Conducted Output Power

### 2.1 Test Result

| Mode | Frequency (MHz) | Antenna | Conducted Power (dBm) | Limit (dBm) | Verdict |
|------|-----------------|---------|-----------------------|-------------|---------|
| b    | 2412            | Ant1    | 8.19                  | 30          | Pass    |
| b    | 2437            | Ant1    | 8.14                  | 30          | Pass    |
| b    | 2462            | Ant1    | 7.83                  | 30          | Pass    |
| g    | 2412            | Ant1    | 7.84                  | 30          | Pass    |
| g    | 2437            | Ant1    | 7.81                  | 30          | Pass    |
| g    | 2462            | Ant1    | 7.5                   | 30          | Pass    |
| n20  | 2412            | Ant1    | 7.84                  | 30          | Pass    |
| n20  | 2437            | Ant1    | 7.81                  | 30          | Pass    |
| n20  | 2462            | Ant1    | 7.62                  | 30          | Pass    |
| n40  | 2422            | Ant1    | 8.22                  | 30          | Pass    |
| n40  | 2437            | Ant1    | 8.16                  | 30          | Pass    |
| n40  | 2452            | Ant1    | 8.23                  | 30          | Pass    |

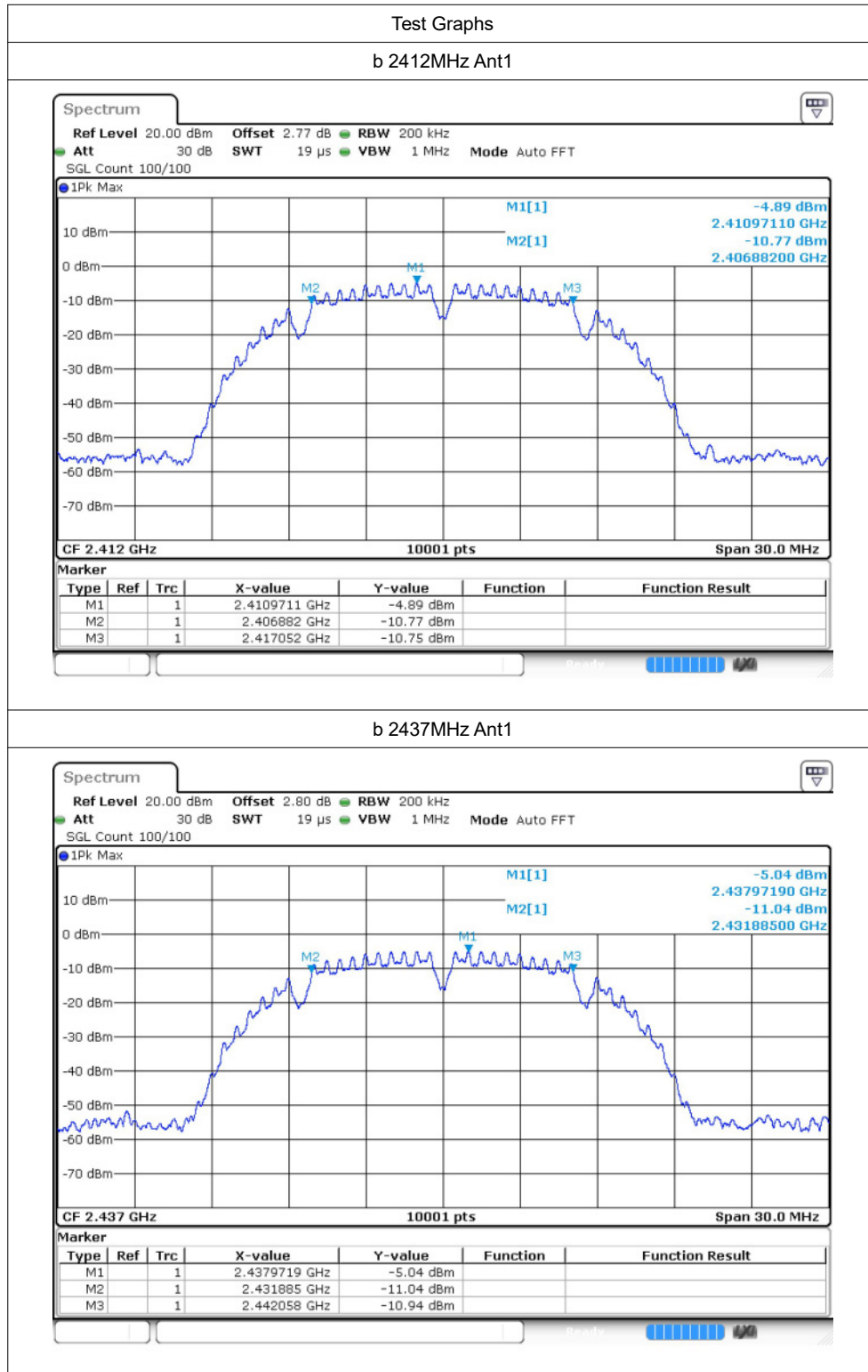


### 3 -6dB Bandwidth

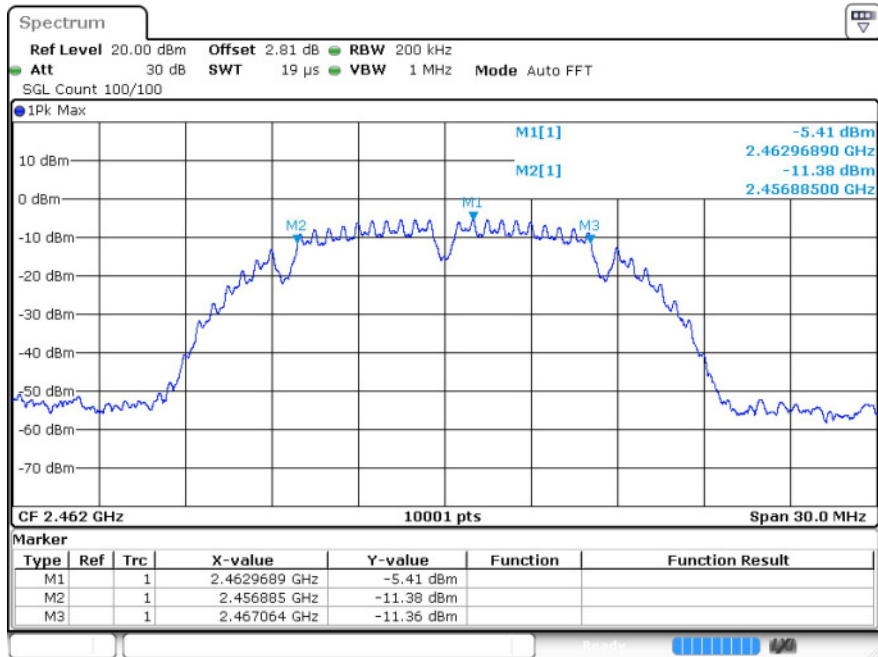
#### 3.1 Test Result

| Mode | Frequency (MHz) | Antenna | -6 dB Bandwidth (MHz) | Limit -6 dB Bandwidth (MHz) | Verdict |
|------|-----------------|---------|-----------------------|-----------------------------|---------|
| b    | 2412            | Ant1    | 10.17                 | 0.5                         | Pass    |
| b    | 2437            | Ant1    | 10.173                | 0.5                         | Pass    |
| b    | 2462            | Ant1    | 10.179                | 0.5                         | Pass    |
| g    | 2412            | Ant1    | 15.45                 | 0.5                         | Pass    |
| g    | 2437            | Ant1    | 14.508                | 0.5                         | Pass    |
| g    | 2462            | Ant1    | 15.591                | 0.5                         | Pass    |
| n20  | 2412            | Ant1    | 16.272                | 0.5                         | Pass    |
| n20  | 2437            | Ant1    | 15.333                | 0.5                         | Pass    |
| n20  | 2462            | Ant1    | 15.516                | 0.5                         | Pass    |
| n40  | 2422            | Ant1    | 35.964                | 0.5                         | Pass    |
| n40  | 2437            | Ant1    | 33.504                | 0.5                         | Pass    |
| n40  | 2452            | Ant1    | 36.024                | 0.5                         | Pass    |

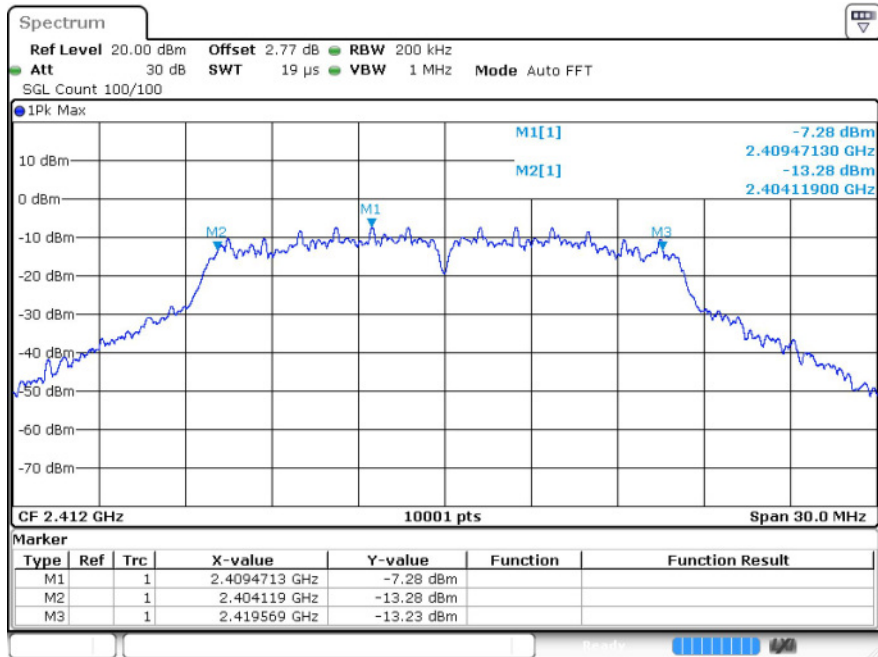
### 3.2 Test Graphs



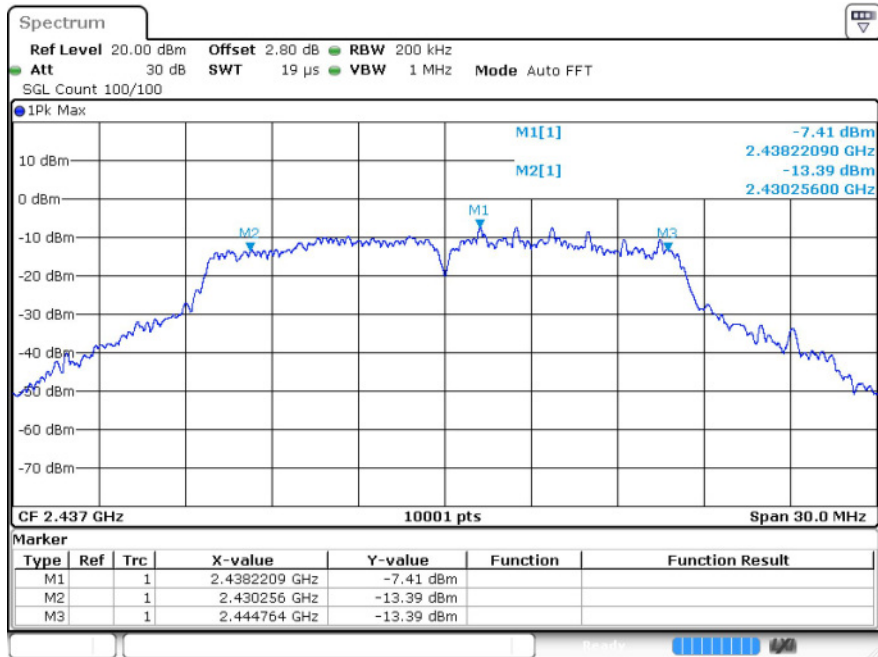
b 2462MHz Ant1



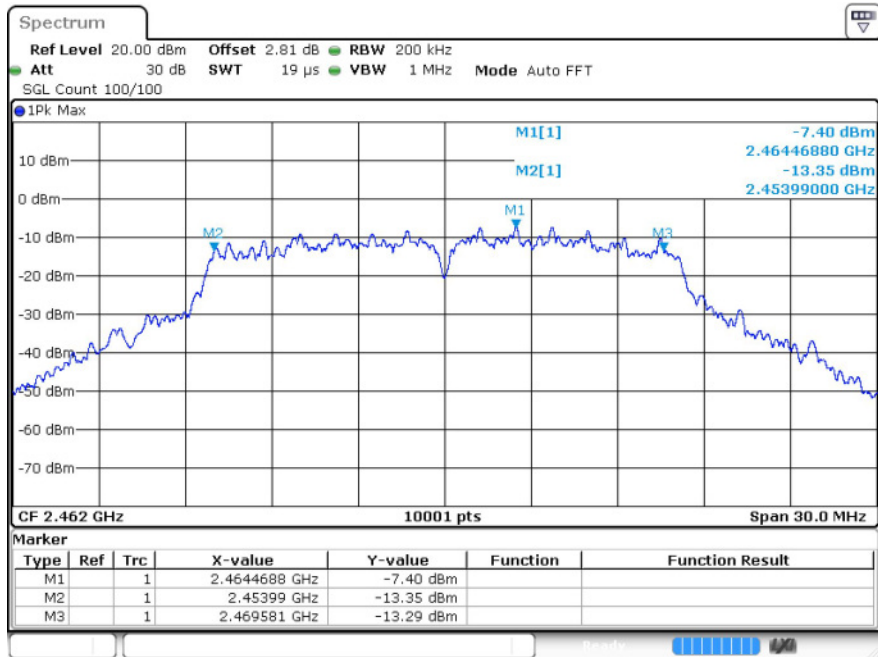
g 2412MHz Ant1



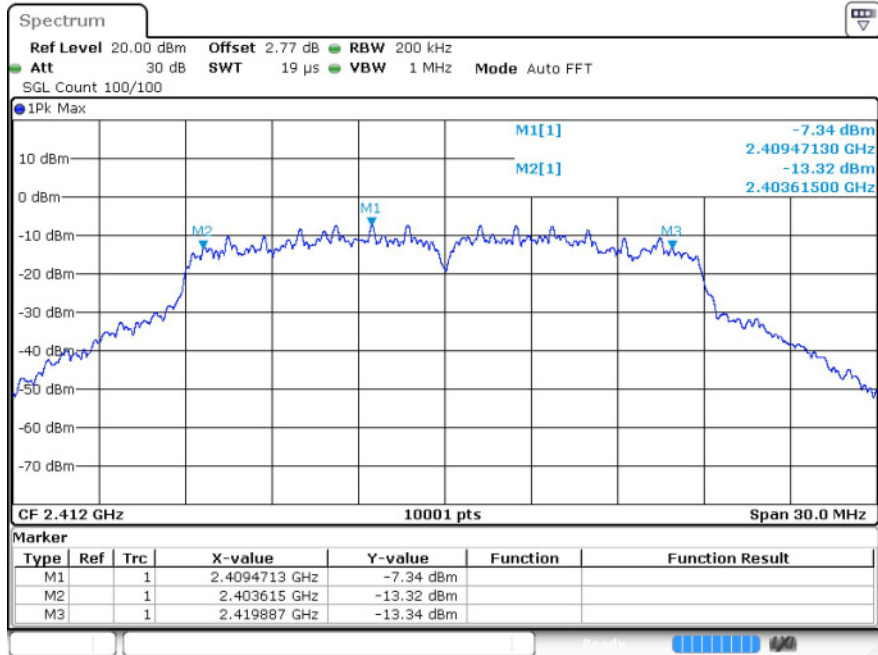
## g 2437MHz Ant1



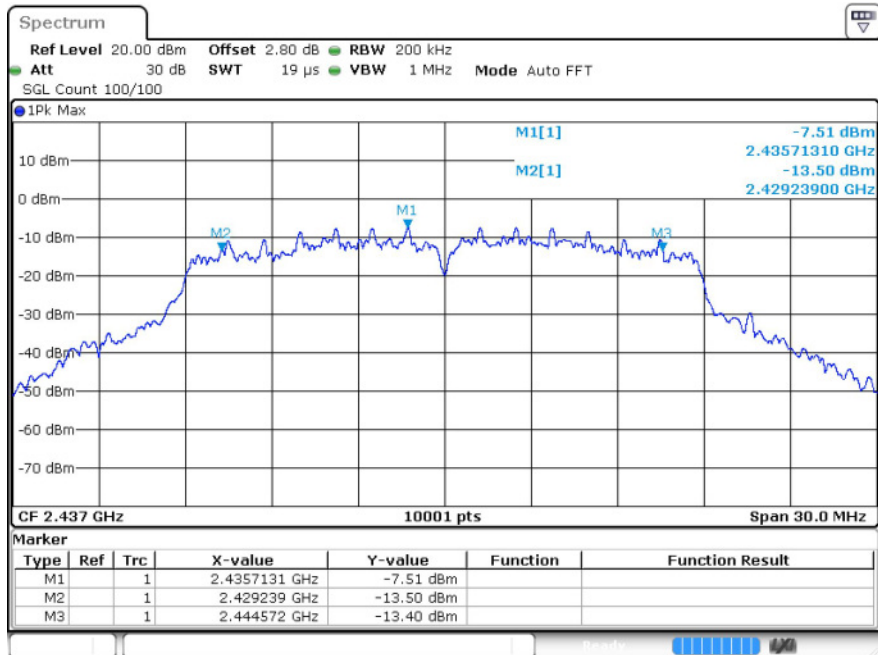
## g 2462MHz Ant1

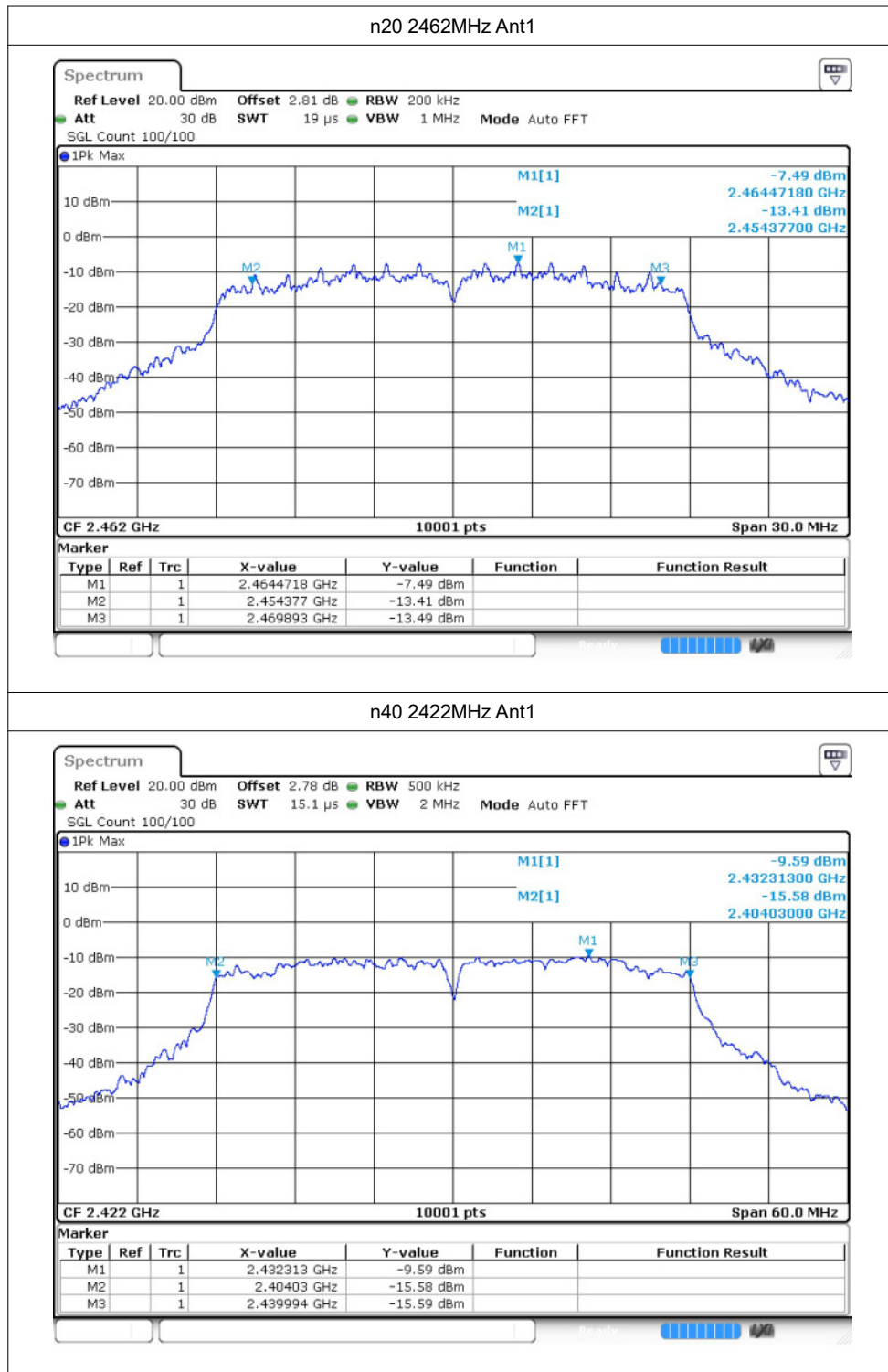


## n20 2412MHz Ant1

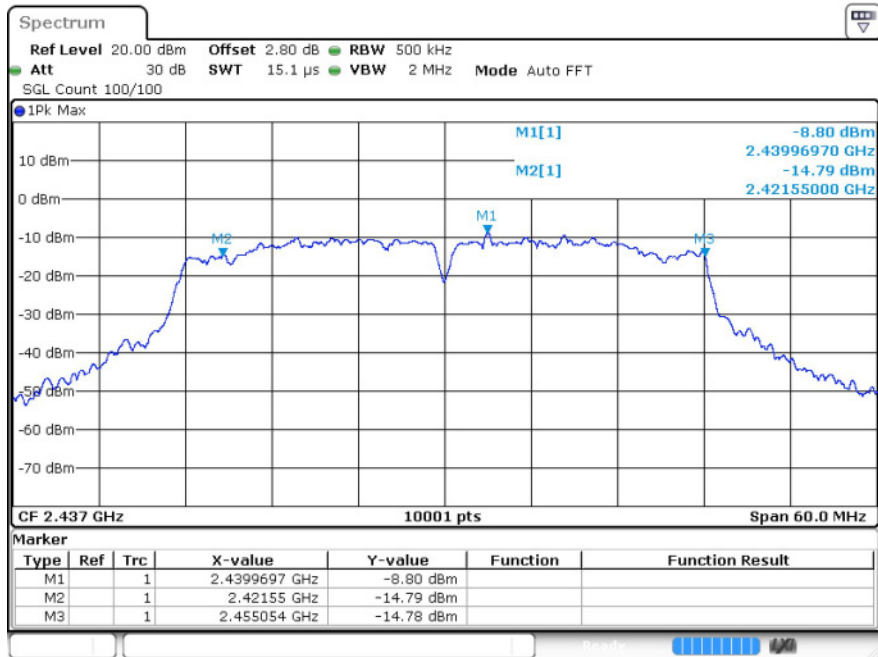


## n20 2437MHz Ant1

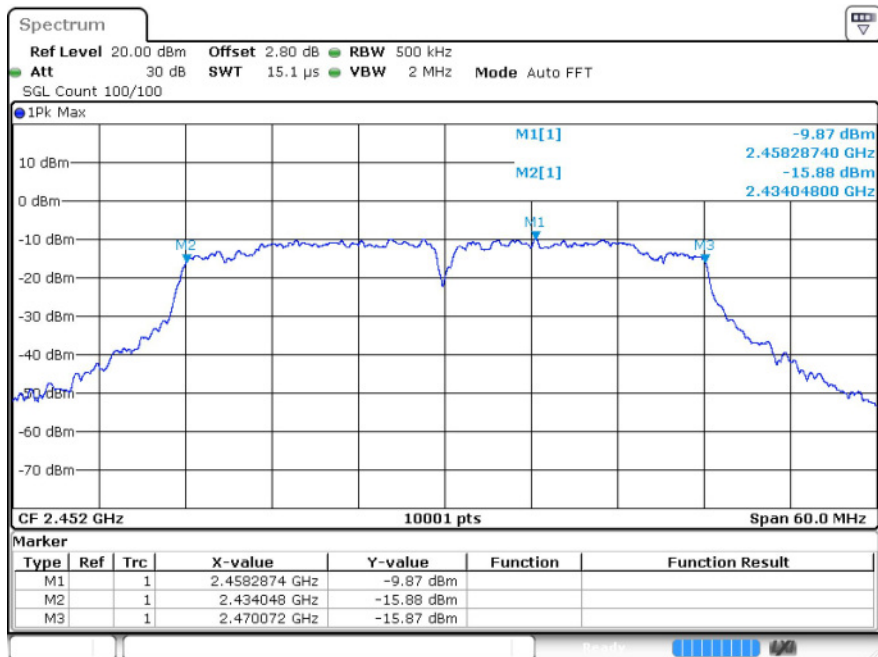




n40 2437MHz Ant1



n40 2452MHz Ant1

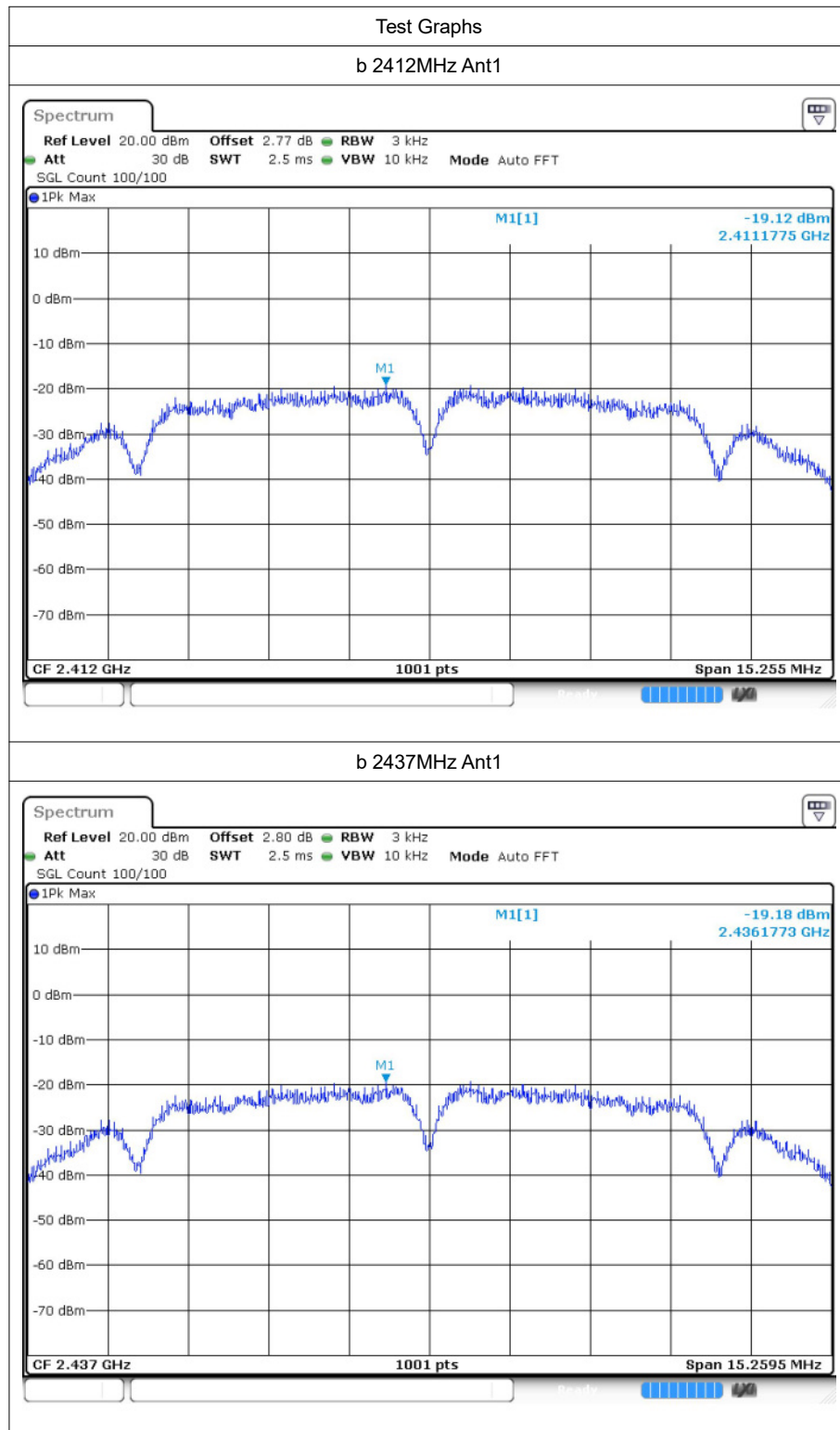


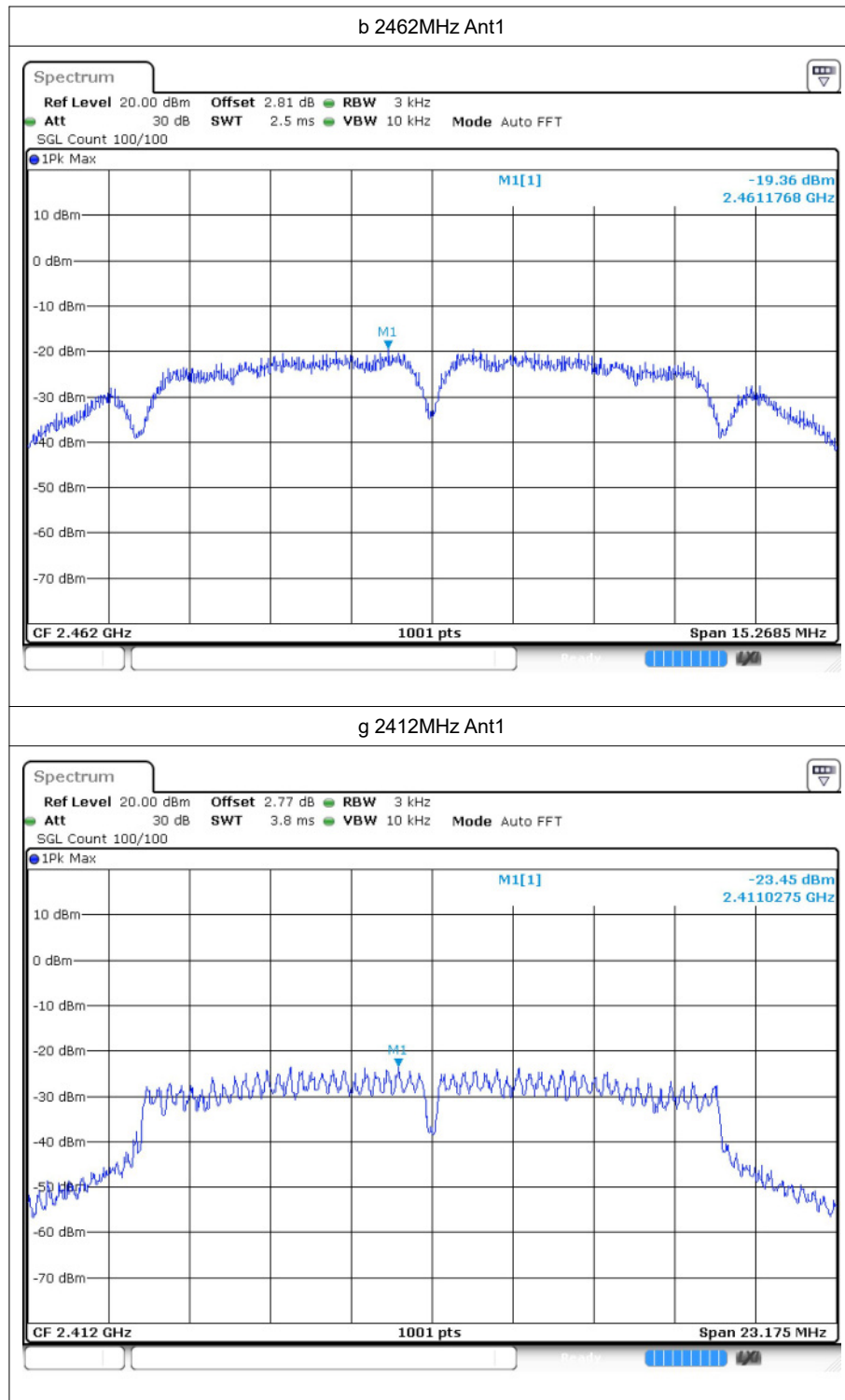
## 4 Maximum Power Spectral Density Level

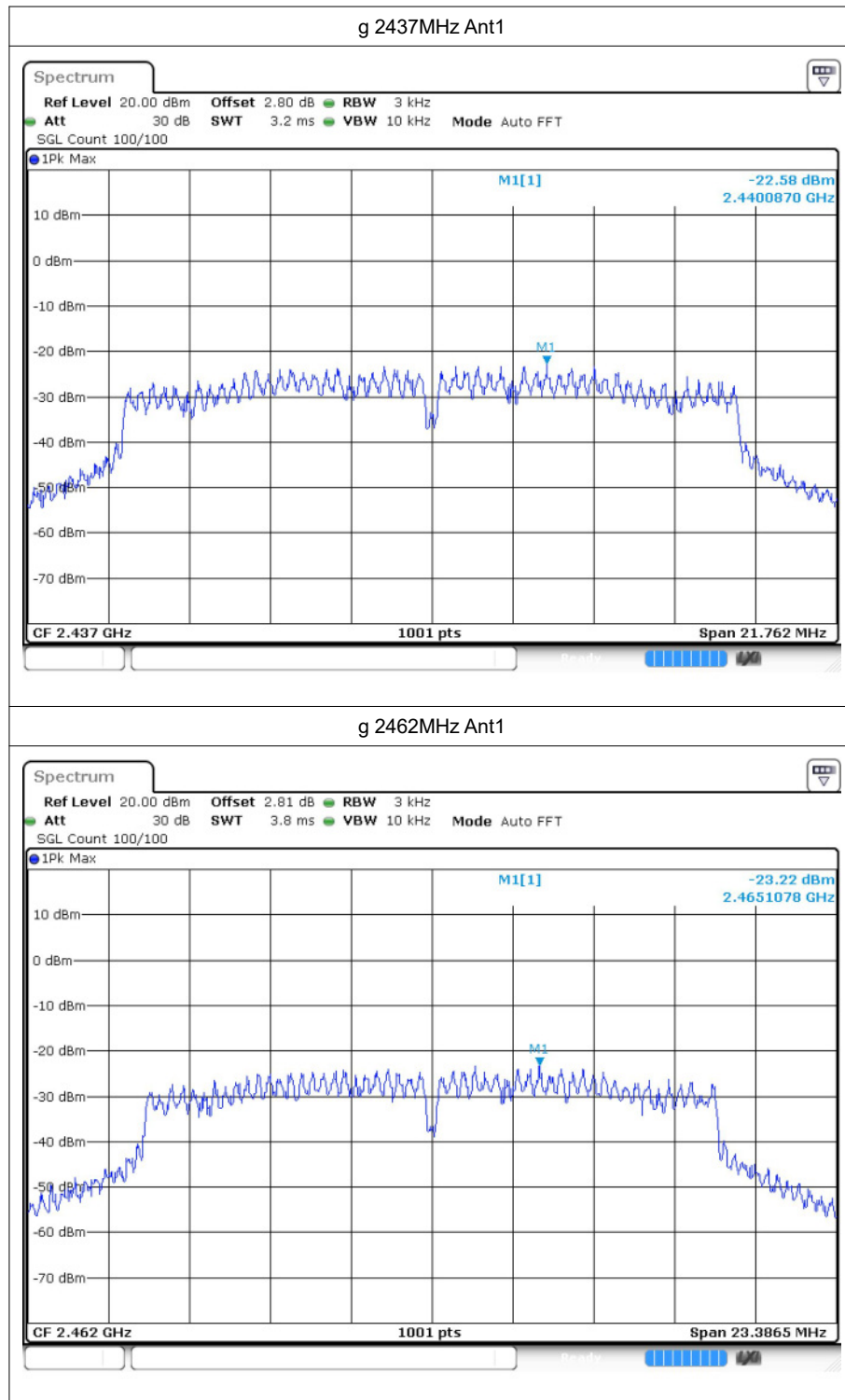
### 4.1 Test Result

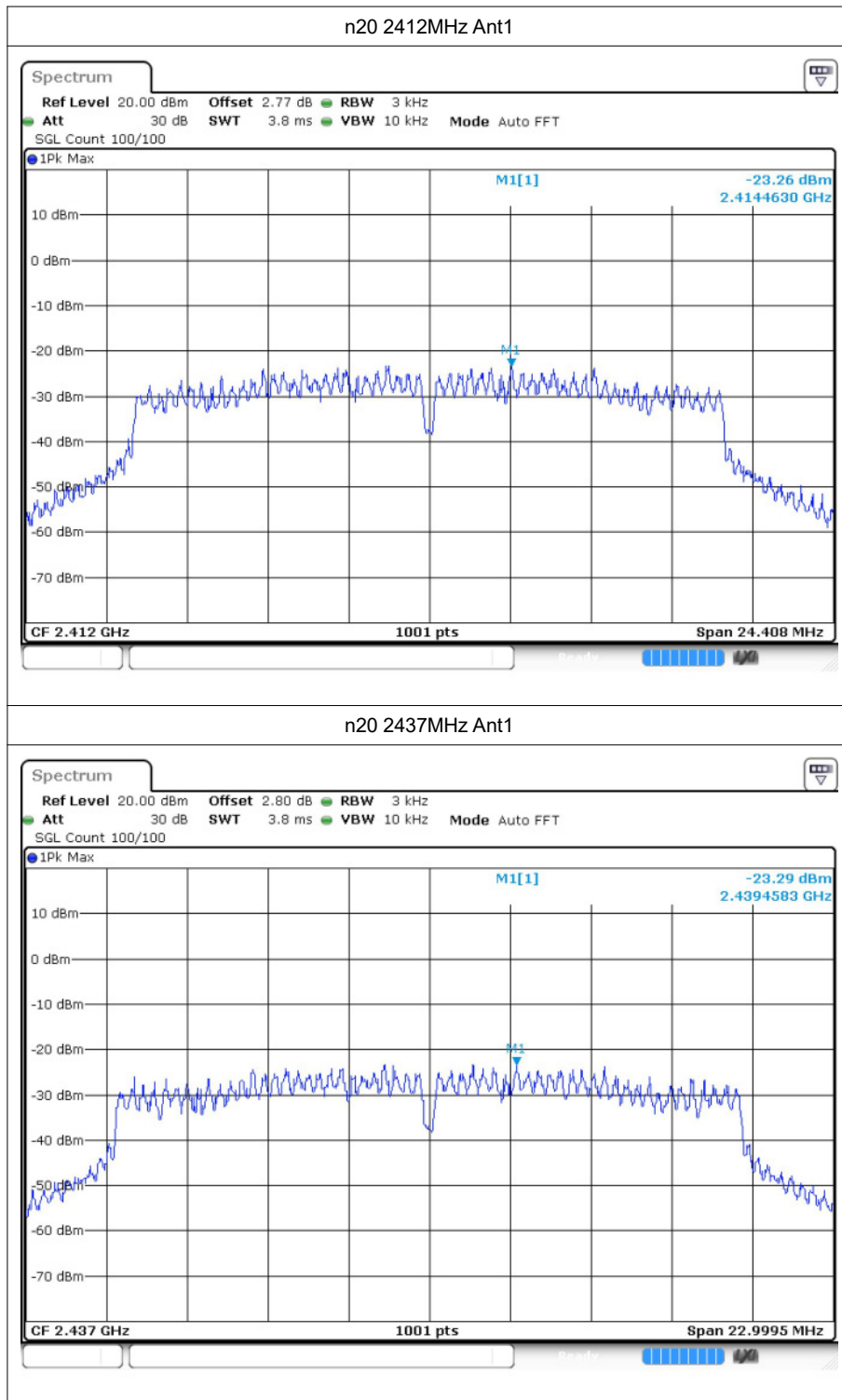
| Mode | Frequency (MHz) | Antenna | Conducted PSD<br>(dBm/3-100kHz) | Limit<br>(dBm/3kHz) | Verdict |
|------|-----------------|---------|---------------------------------|---------------------|---------|
| b    | 2412            | Ant1    | -19.12                          | ≤8                  | Pass    |
| b    | 2437            | Ant1    | -19.18                          | ≤8                  | Pass    |
| b    | 2462            | Ant1    | -19.36                          | ≤8                  | Pass    |
| g    | 2412            | Ant1    | -23.45                          | ≤8                  | Pass    |
| g    | 2437            | Ant1    | -22.58                          | ≤8                  | Pass    |
| g    | 2462            | Ant1    | -23.22                          | ≤8                  | Pass    |
| n20  | 2412            | Ant1    | -23.26                          | ≤8                  | Pass    |
| n20  | 2437            | Ant1    | -23.29                          | ≤8                  | Pass    |
| n20  | 2462            | Ant1    | -22.57                          | ≤8                  | Pass    |
| n40  | 2422            | Ant1    | -26.11                          | ≤8                  | Pass    |
| n40  | 2437            | Ant1    | -26.65                          | ≤8                  | Pass    |
| n40  | 2452            | Ant1    | -26.79                          | ≤8                  | Pass    |

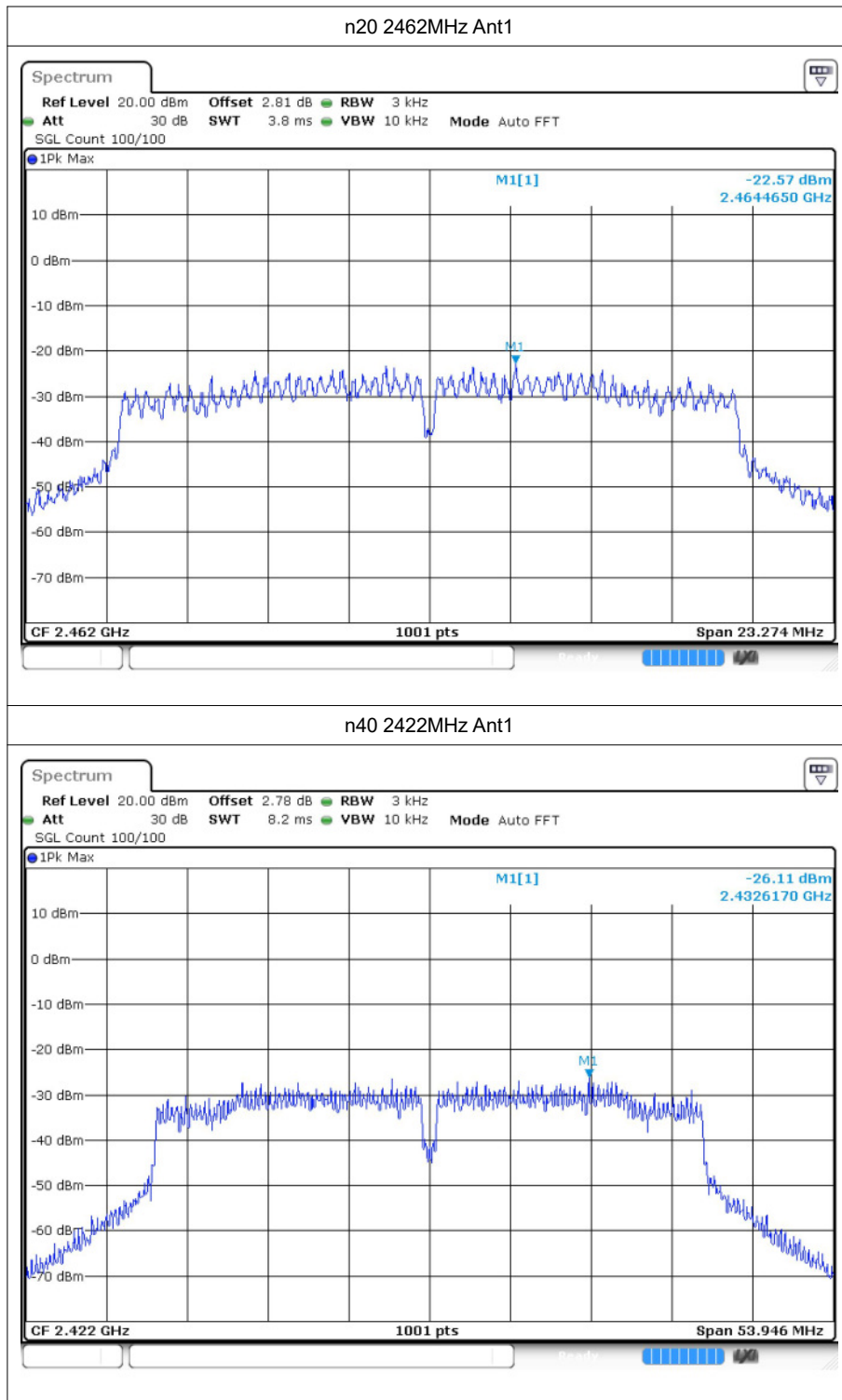
## 4.2 Test Graphs

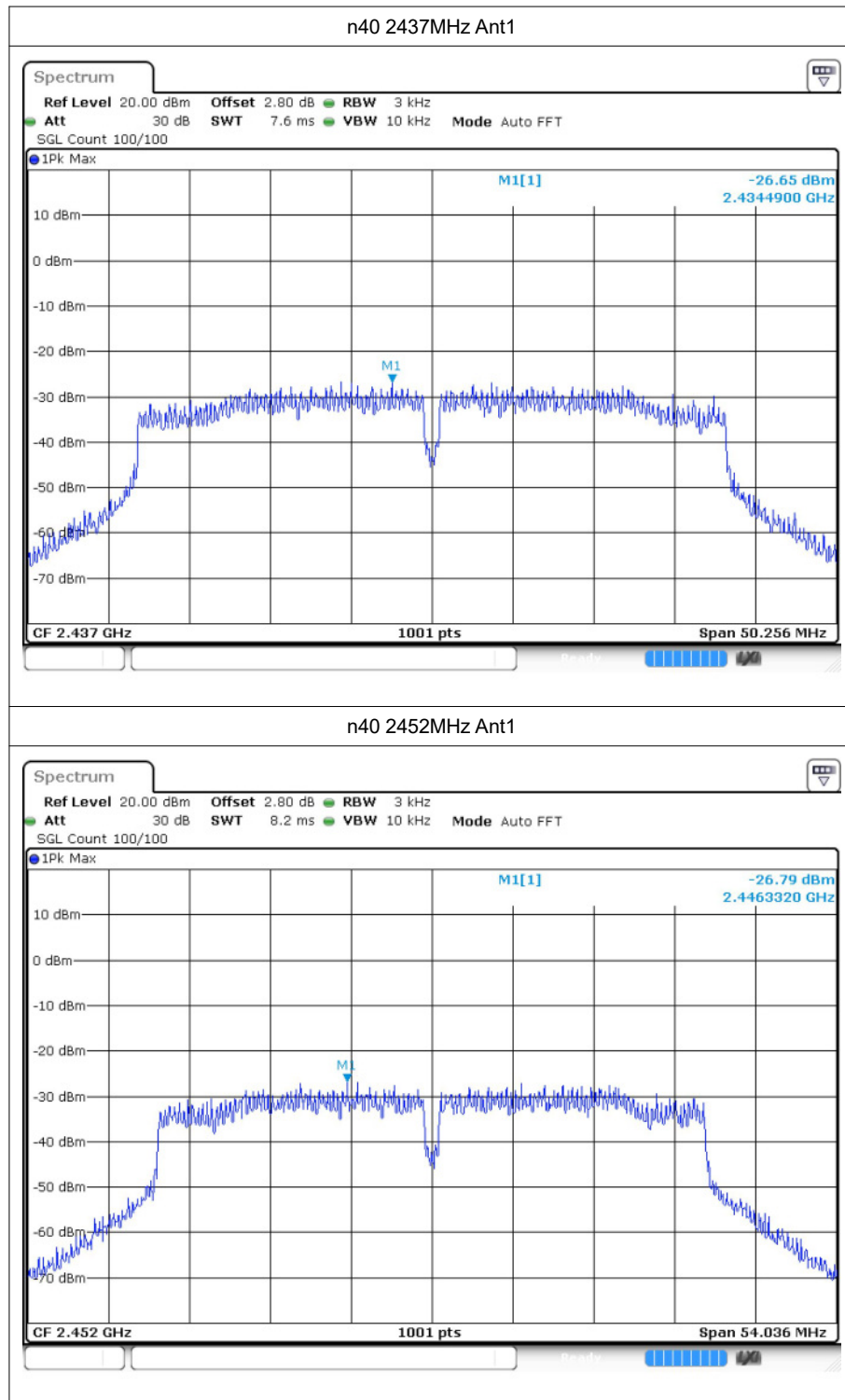












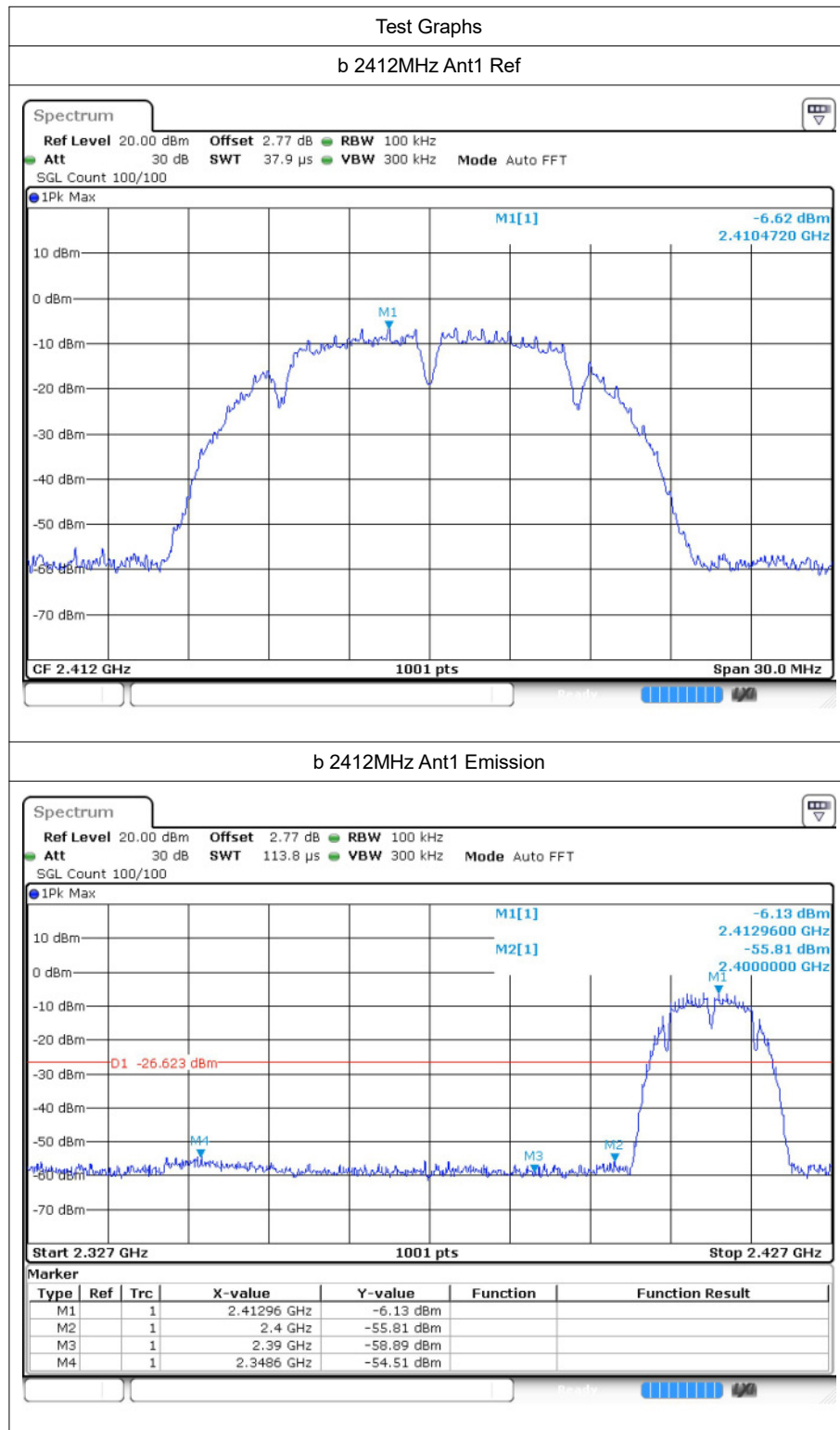


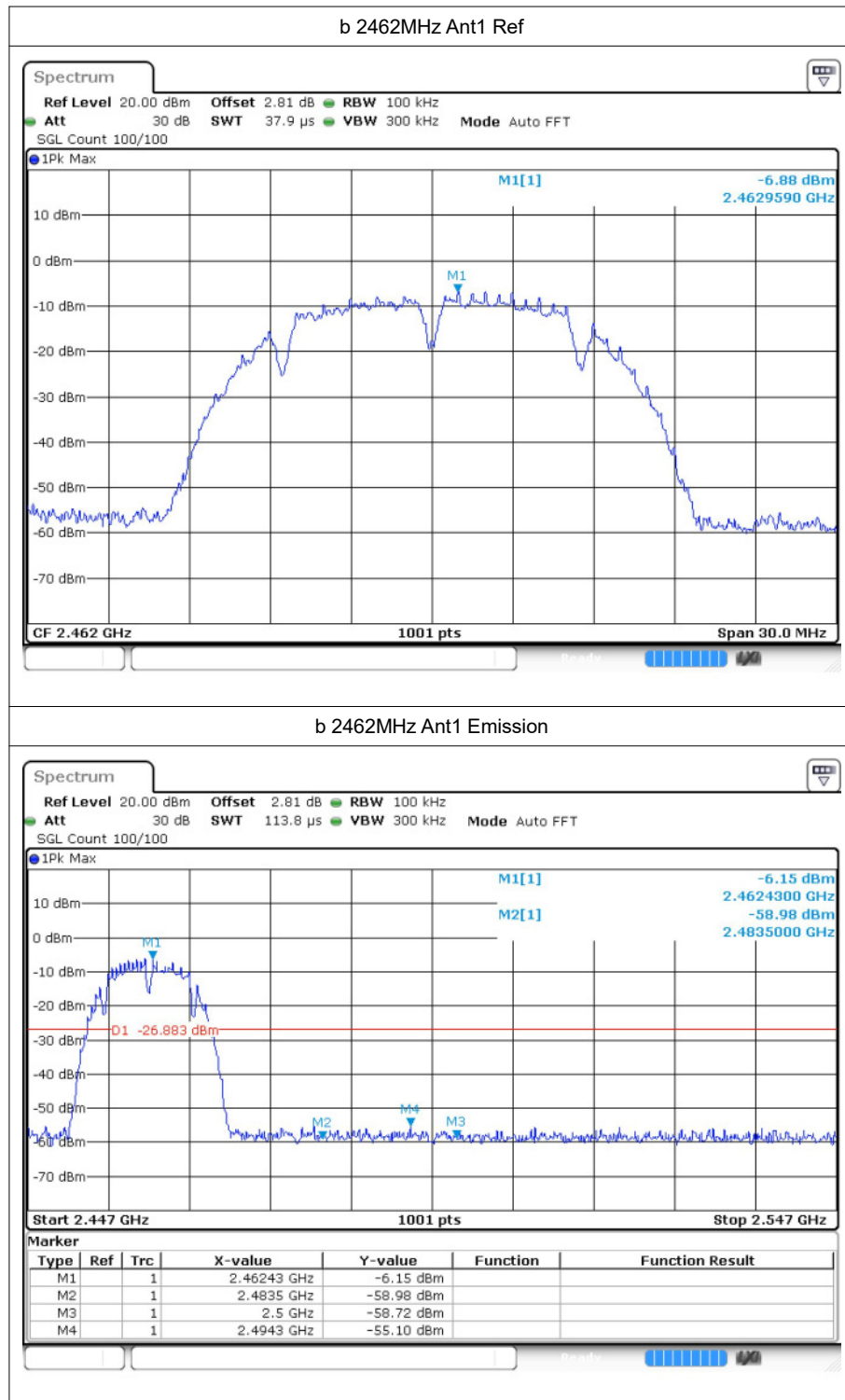
## 5 Band Edge

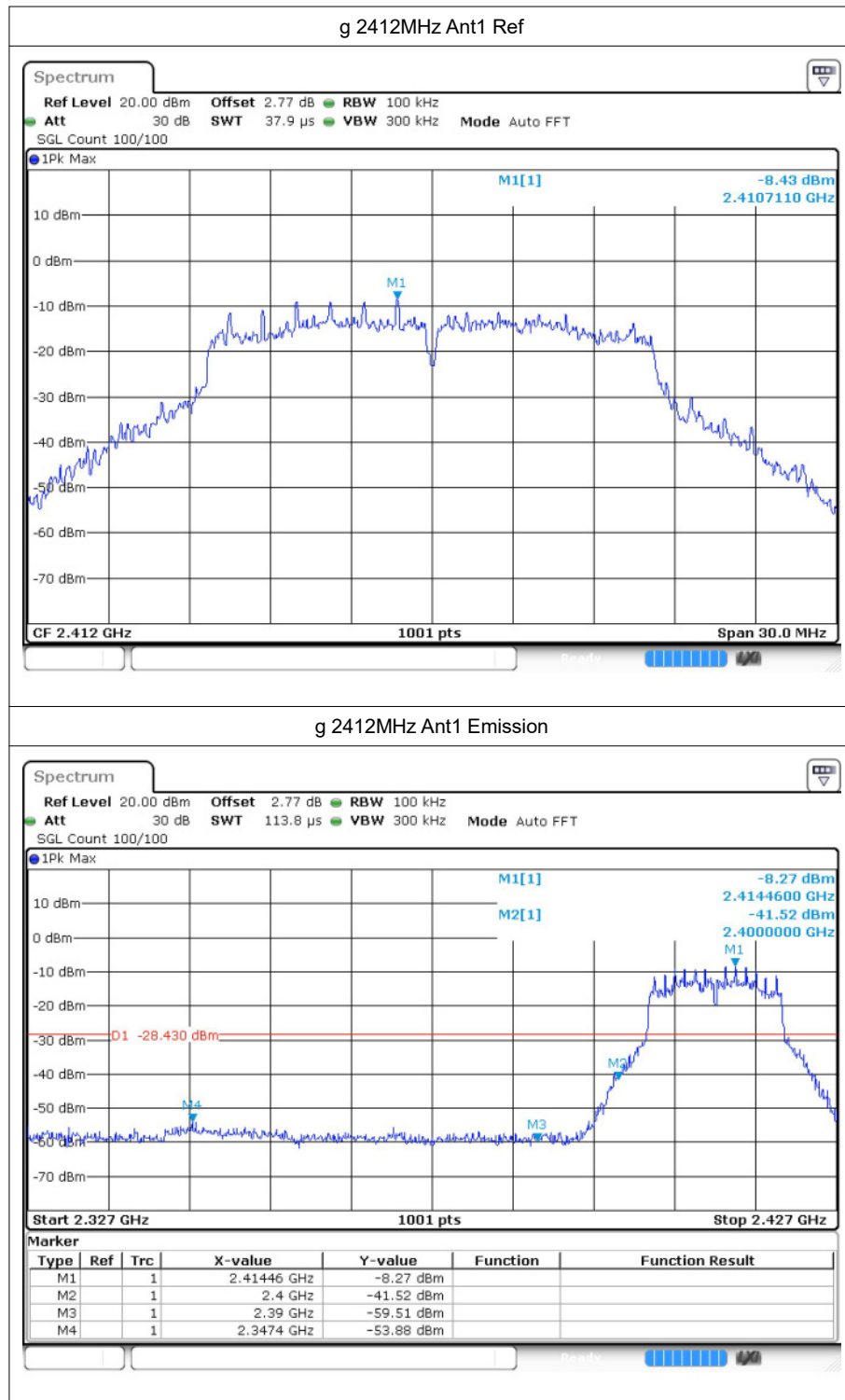
### 5.1 Test Result

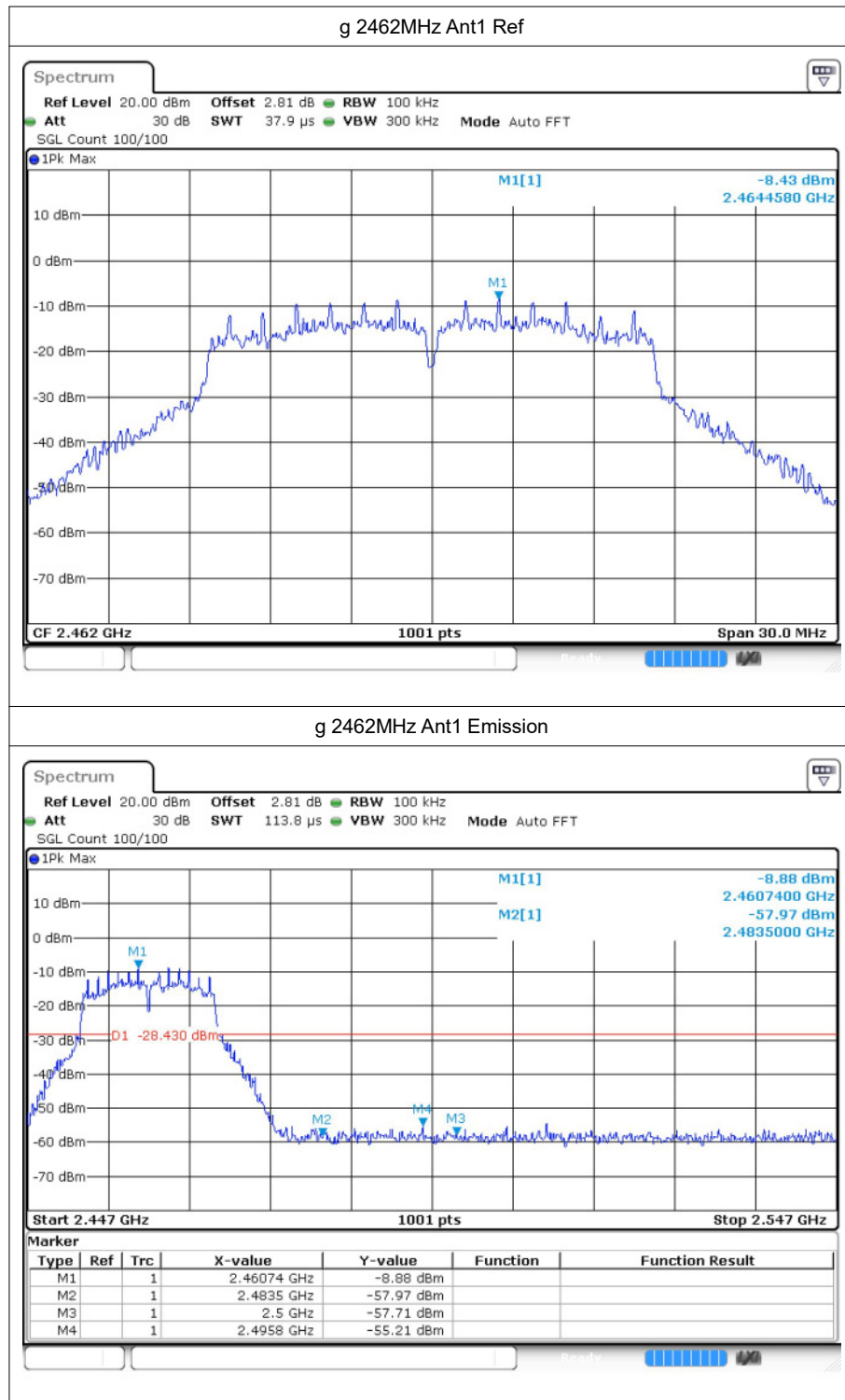
| Mode | Frequency (MHz) | Antenna | Max Value (dBc) | Limit (dBc) | Verdict |
|------|-----------------|---------|-----------------|-------------|---------|
| b    | 2412            | Ant1    | -47.89          | -20         | Pass    |
| b    | 2462            | Ant1    | -48.22          | -20         | Pass    |
| g    | 2412            | Ant1    | -45.44          | -20         | Pass    |
| g    | 2462            | Ant1    | -46.78          | -20         | Pass    |
| n20  | 2412            | Ant1    | -46.27          | -20         | Pass    |
| n20  | 2462            | Ant1    | -47.15          | -20         | Pass    |
| n40  | 2422            | Ant1    | -43.08          | -20         | Pass    |
| n40  | 2452            | Ant1    | -43.75          | -20         | Pass    |

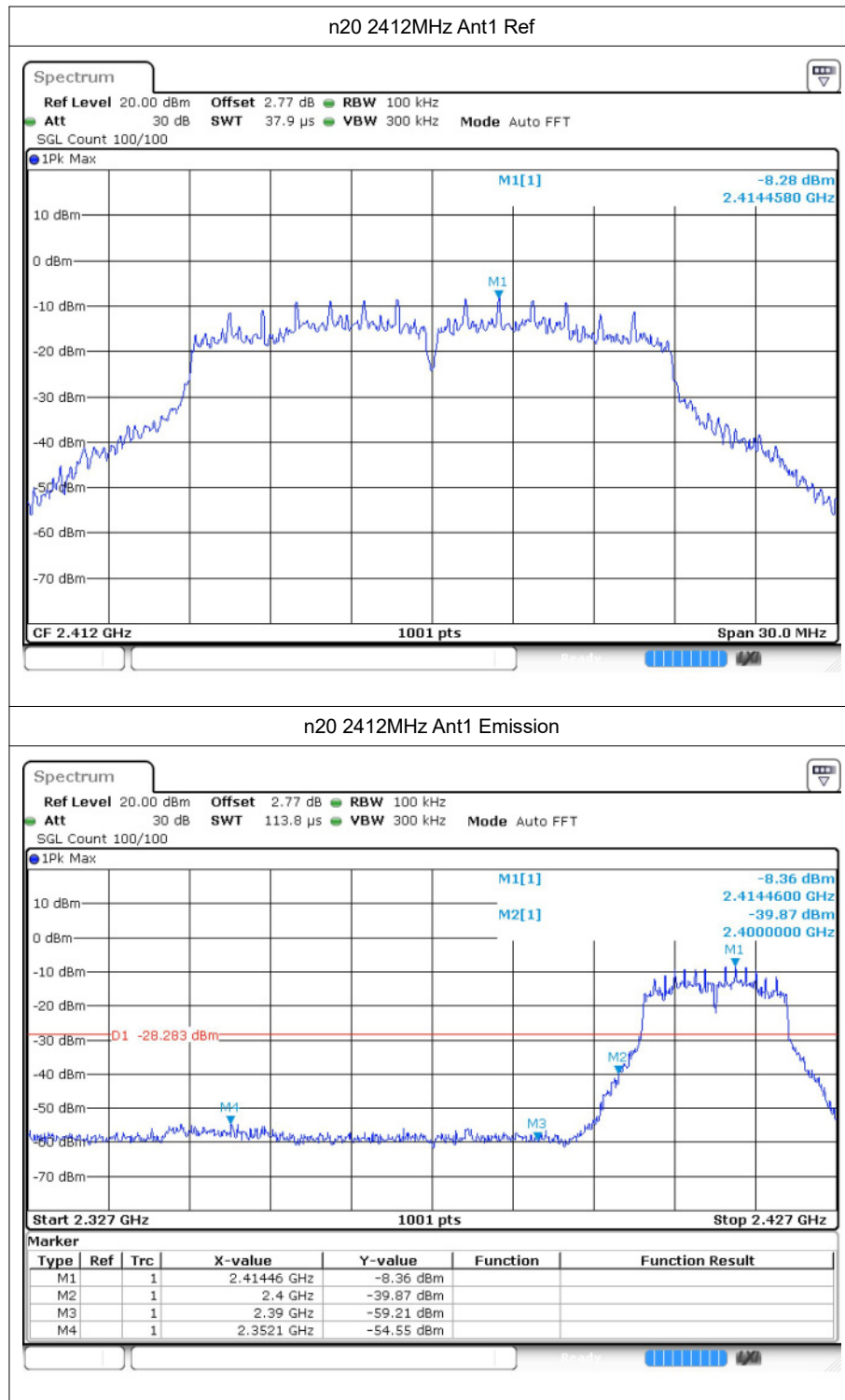
## 5.2 Test Graphs

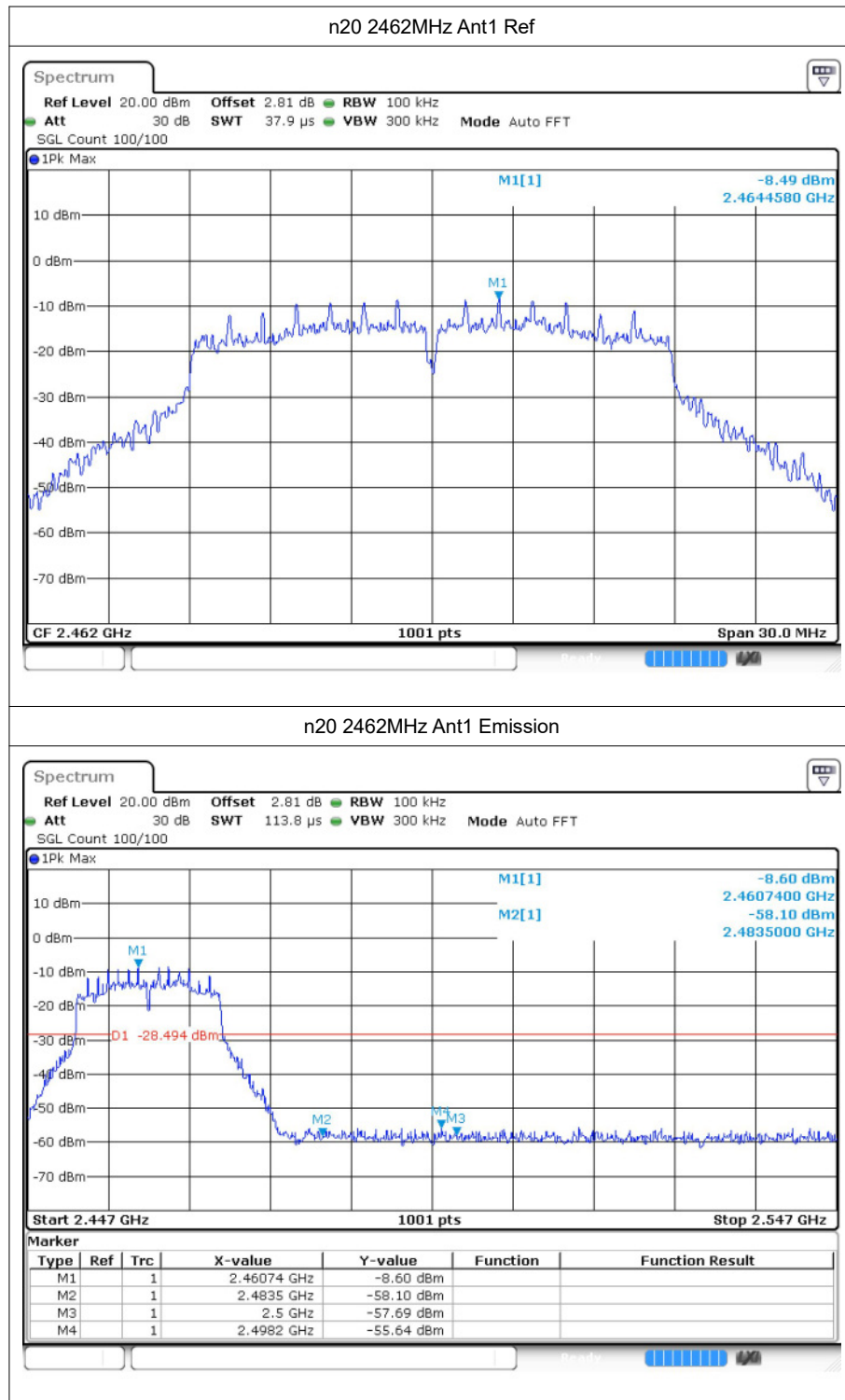


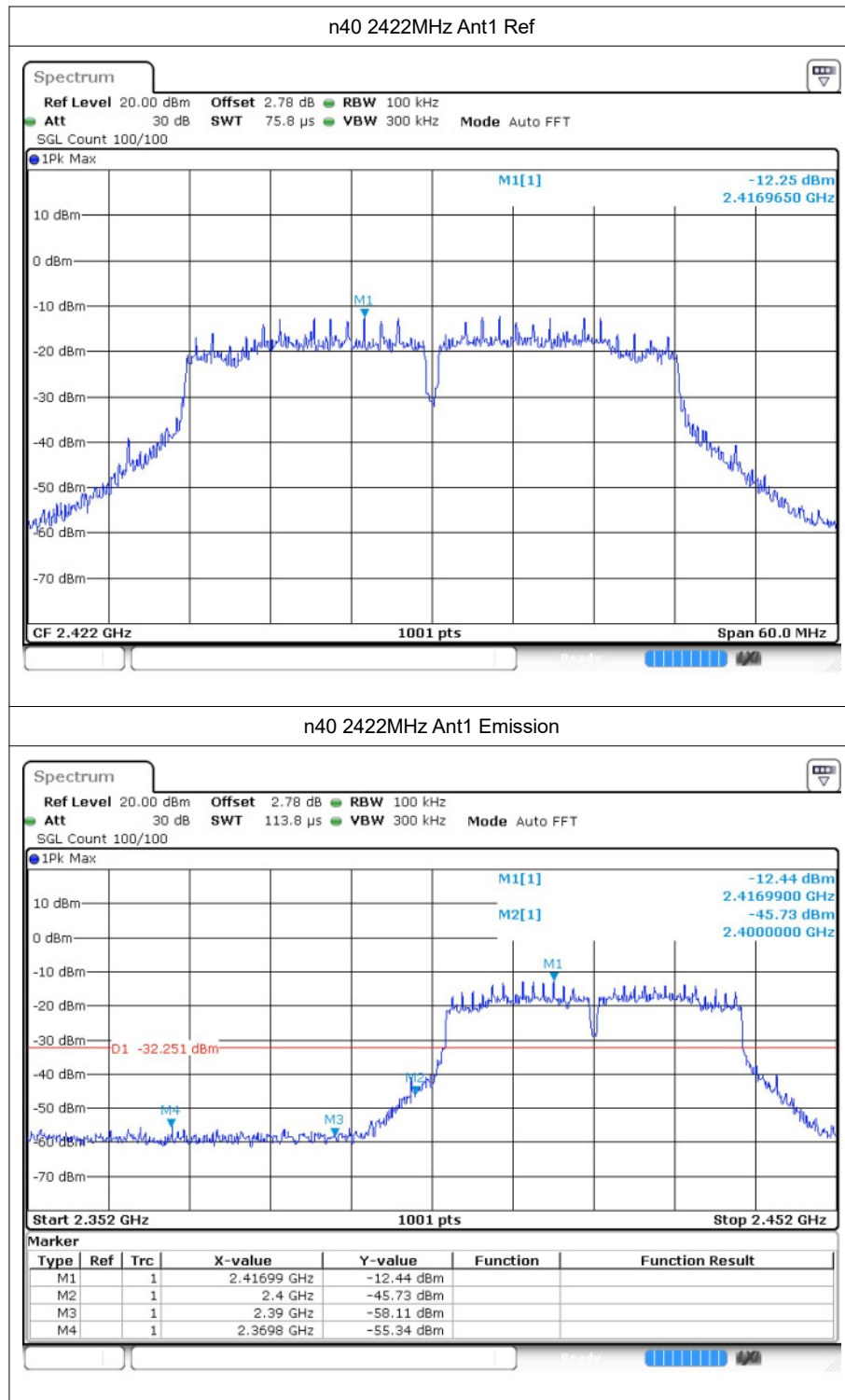


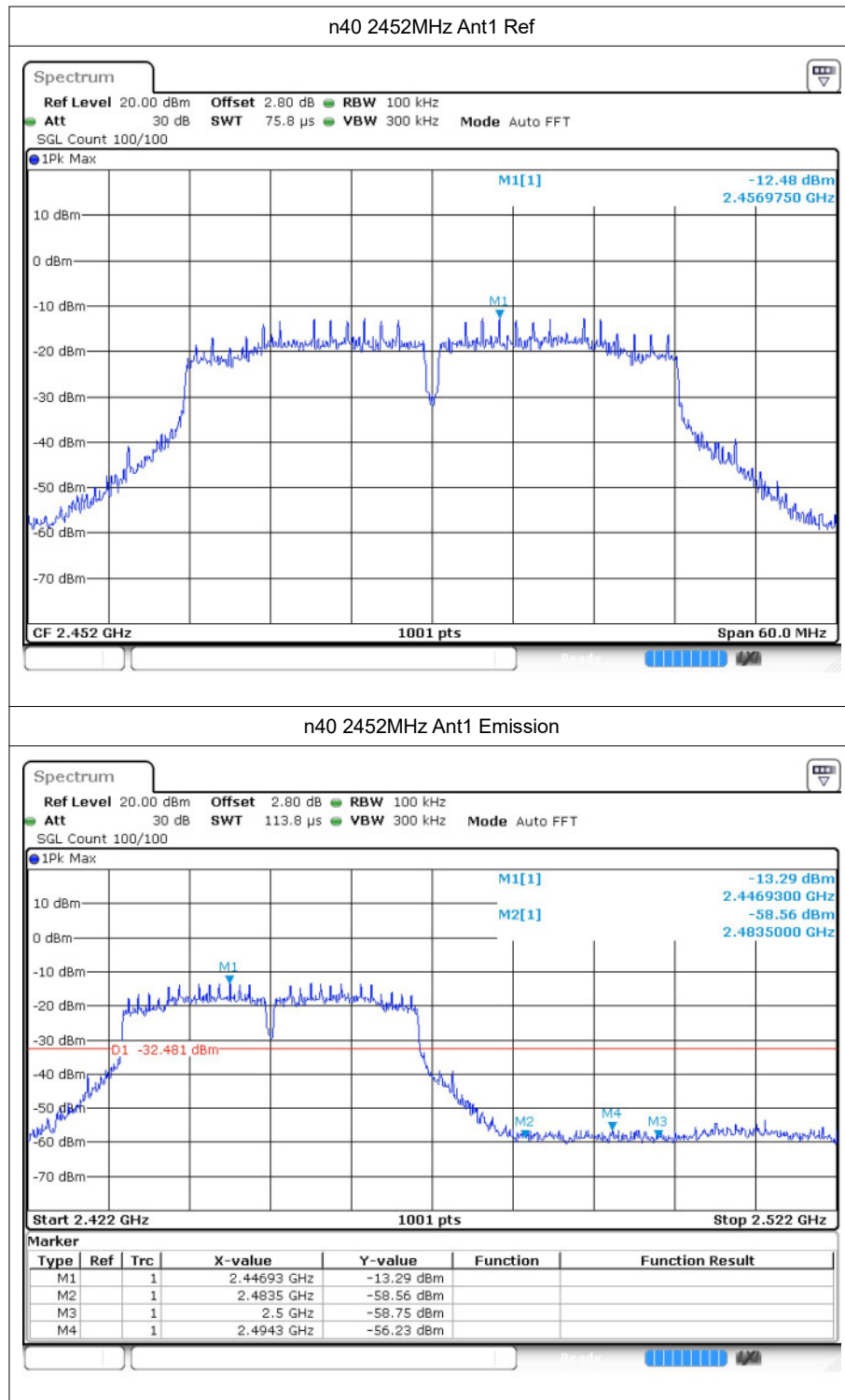














## 6 Conducted RF Spurious Emission

### 6.1 Test Result

| Mode | Frequency (MHz) | Antenna | Max Value (dBc) | Limit (dBc) | Verdict |
|------|-----------------|---------|-----------------|-------------|---------|
| b    | 2412            | Ant1    | -36.27          | -20         | Pass    |
| b    | 2437            | Ant1    | -35.26          | -20         | Pass    |
| b    | 2462            | Ant1    | -36.08          | -20         | Pass    |
| g    | 2412            | Ant1    | -32.48          | -20         | Pass    |
| g    | 2437            | Ant1    | -33.46          | -20         | Pass    |
| g    | 2462            | Ant1    | -33.12          | -20         | Pass    |
| n20  | 2412            | Ant1    | -32.59          | -20         | Pass    |
| n20  | 2437            | Ant1    | -33.17          | -20         | Pass    |
| n20  | 2462            | Ant1    | -31.72          | -20         | Pass    |
| n40  | 2422            | Ant1    | -27.73          | -20         | Pass    |
| n40  | 2437            | Ant1    | -29.4           | -20         | Pass    |
| n40  | 2452            | Ant1    | -29.02          | -20         | Pass    |

## 6.2 Test Graphs

