



## Appendix A

### RF Test Data for BT(BDR/EDR) (Conducted Measurement)

Product Name: Wireless Headphones

Trade Mark: N/A

Test Model: T60

#### 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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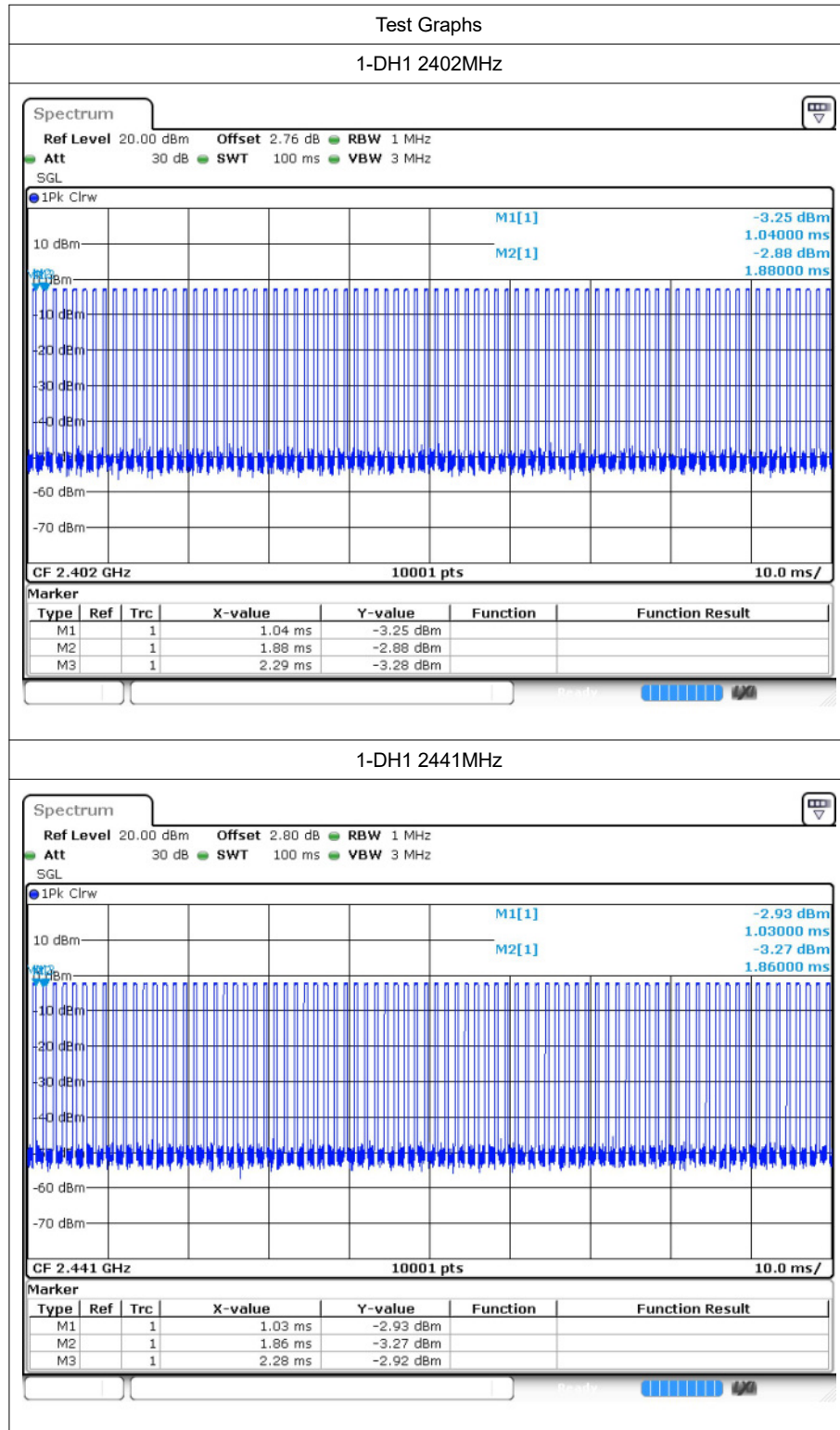
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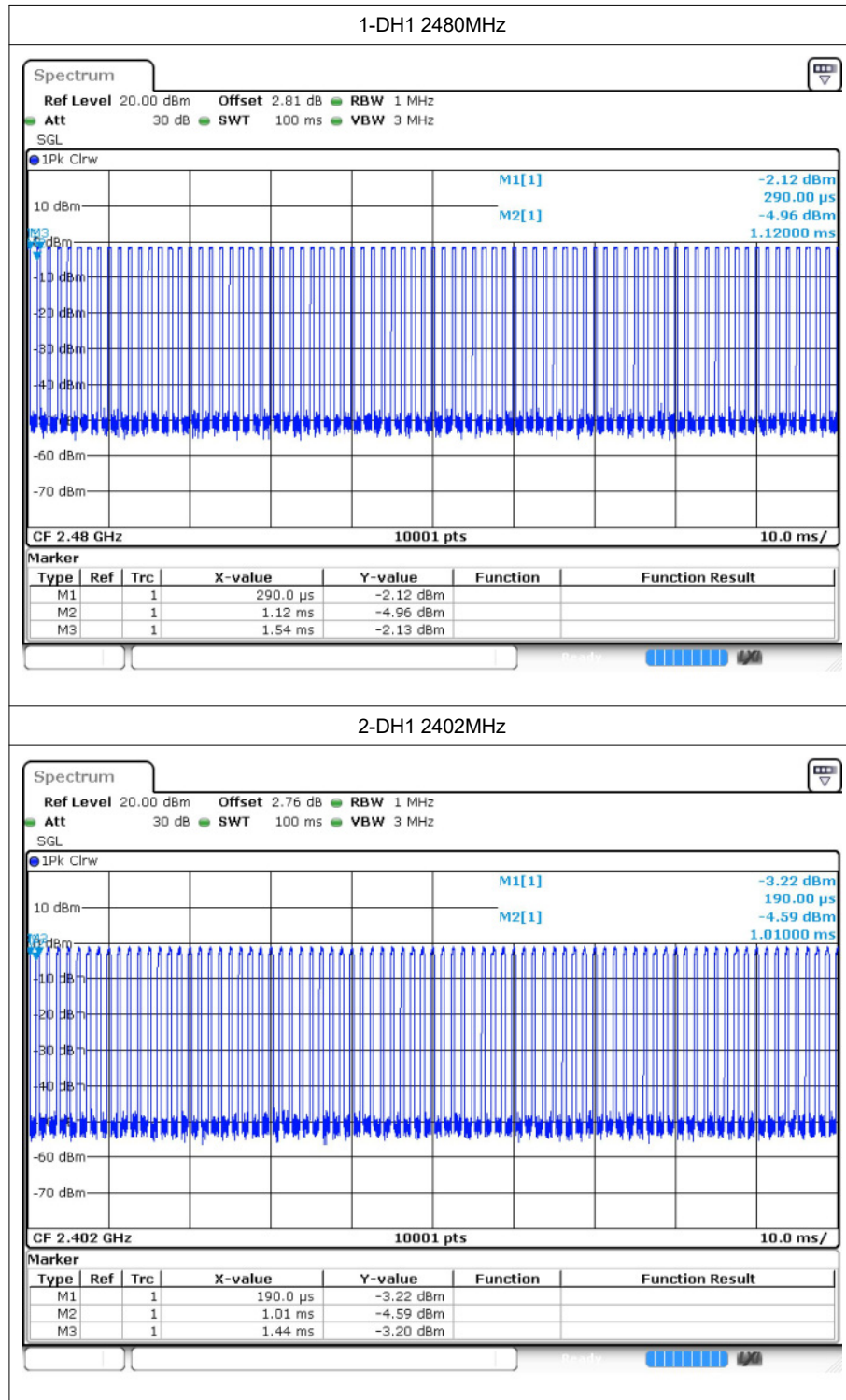
# 1 Duty Cycle

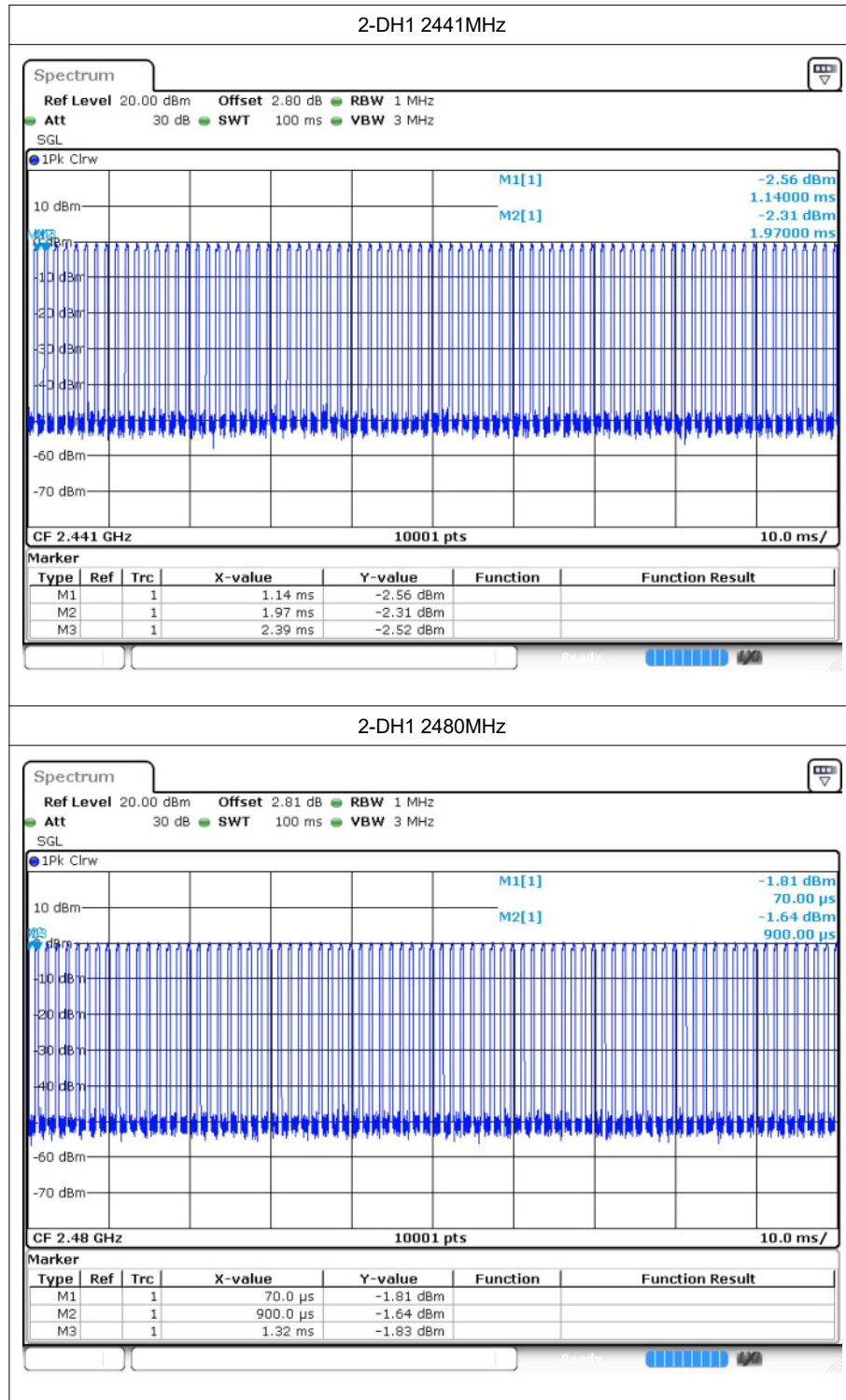
## 1.1 Test Result

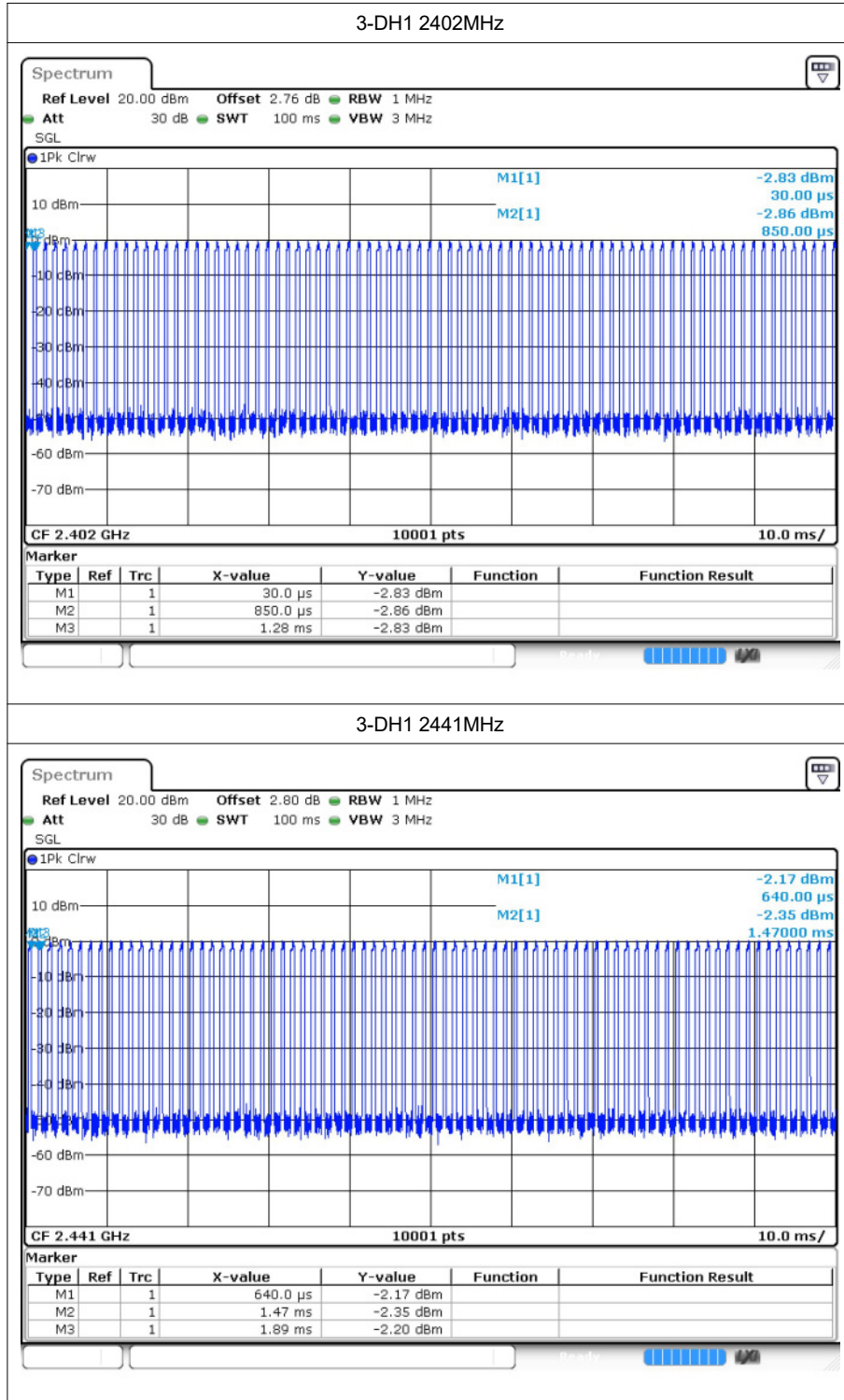
| Mode  | Frequency (MHz) | Duty Cycle (%) | Correction Factor | 1/T (kHz) |
|-------|-----------------|----------------|-------------------|-----------|
| 1-DH1 | 2402            | 33.6           | 4.74              | 2.44      |
| 1-DH1 | 2441            | 34.15          | 4.67              | 2.38      |
| 1-DH1 | 2480            | 33.97          | 4.69              | 2.38      |
| 2-DH1 | 2402            | 34.85          | 4.58              | 2.33      |
| 2-DH1 | 2441            | 34.4           | 4.63              | 2.38      |
| 2-DH1 | 2480            | 34.58          | 4.61              | 2.38      |
| 3-DH1 | 2402            | 35.21          | 4.53              | 2.33      |
| 3-DH1 | 2441            | 34.4           | 4.63              | 2.38      |
| 3-DH1 | 2480            | 34.4           | 4.63              | 2.38      |

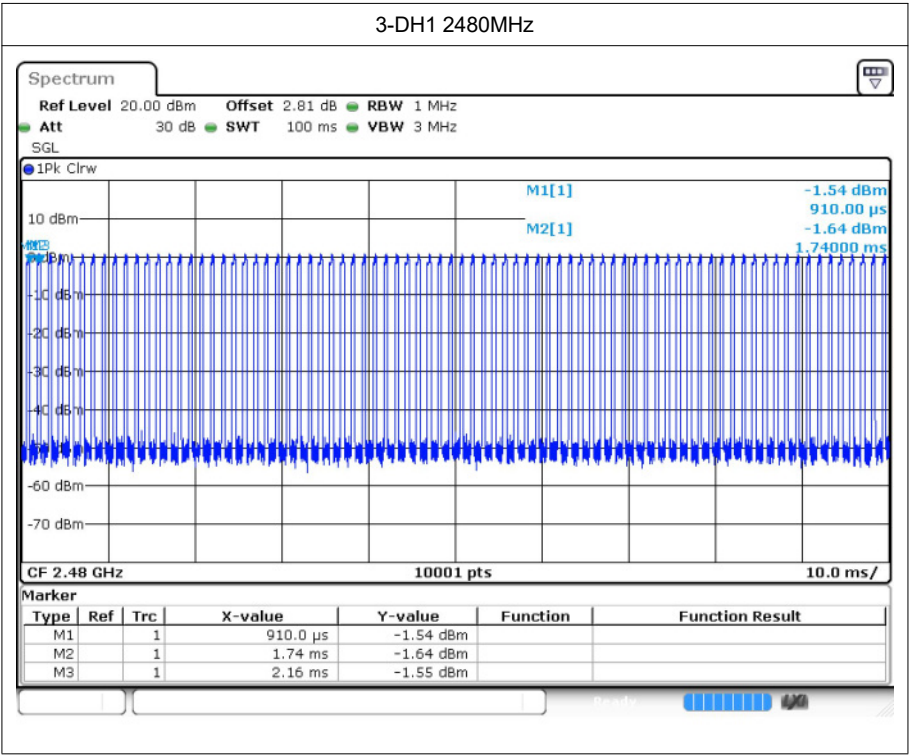
## 1.2 Test Graphs











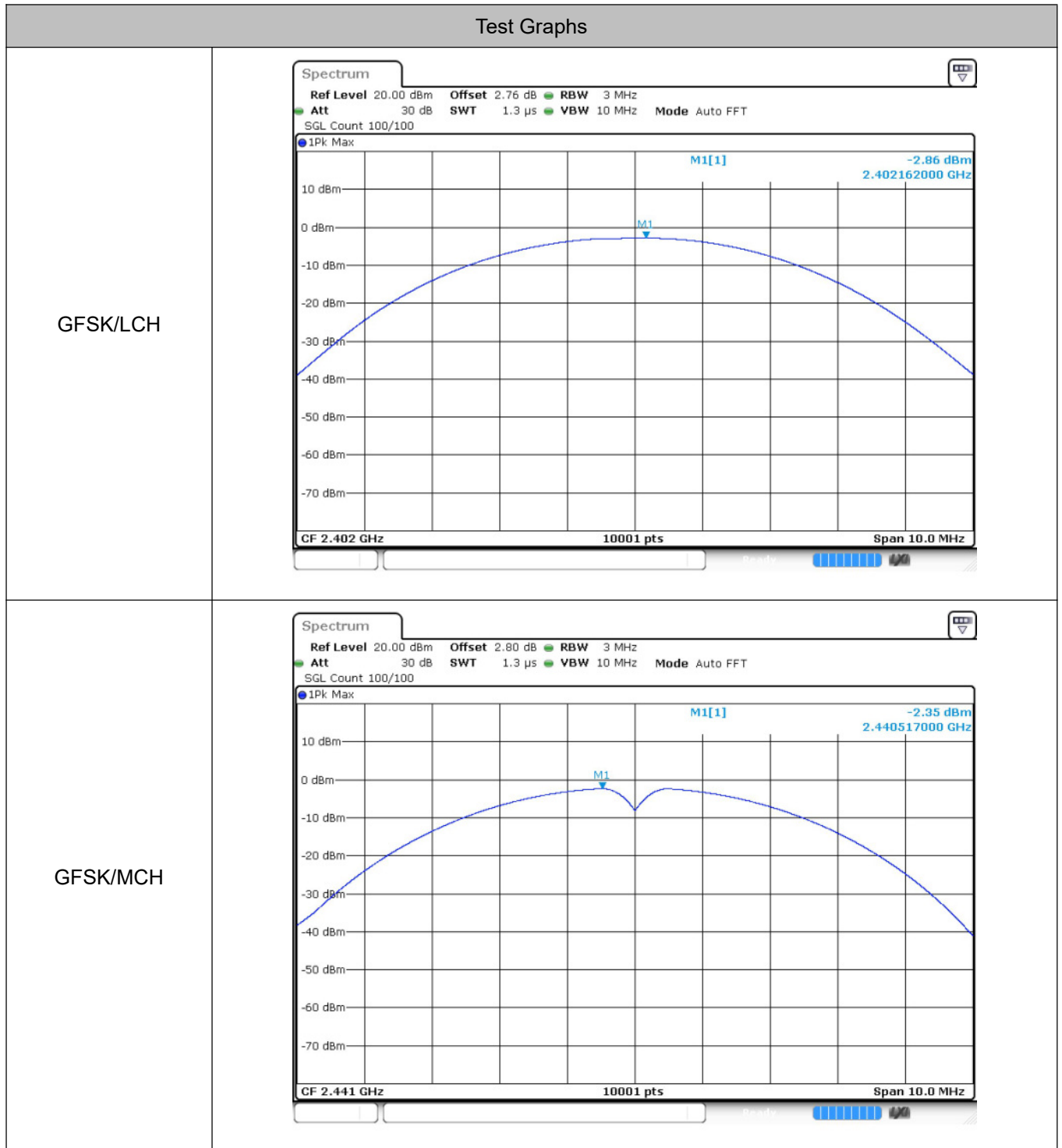


## 2 Maximum Conducted Peak Output Power

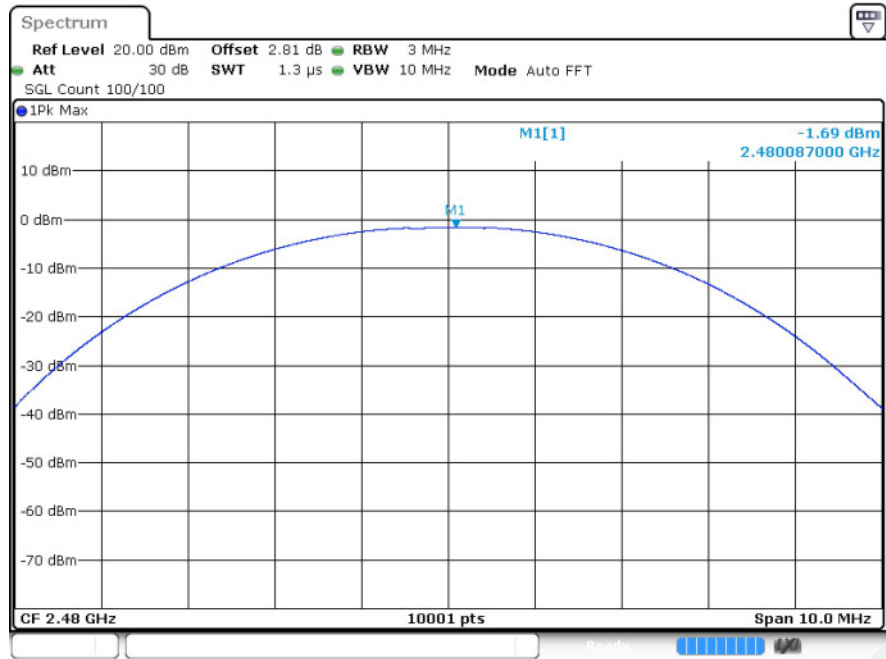
### 2.1 Test Result

| Mode          | Channel. | Maximum Peak Output Power<br>[dBm] | Limit<br>[dBm] | Verdict |
|---------------|----------|------------------------------------|----------------|---------|
| GFSK          | LCH      | -2.86                              | 21             | Pass    |
|               | MCH      | -2.35                              | 21             | Pass    |
|               | HCH      | -1.69                              | 21             | Pass    |
| $\pi/4$ DQPSK | LCH      | -1.11                              | 21             | Pass    |
|               | MCH      | -0.51                              | 21             | Pass    |
|               | HCH      | -0.08                              | 21             | Pass    |
| 8DPSK         | LCH      | -0.75                              | 21             | Pass    |
|               | MCH      | -0.41                              | 21             | Pass    |
|               | HCH      | -0.23                              | 21             | Pass    |

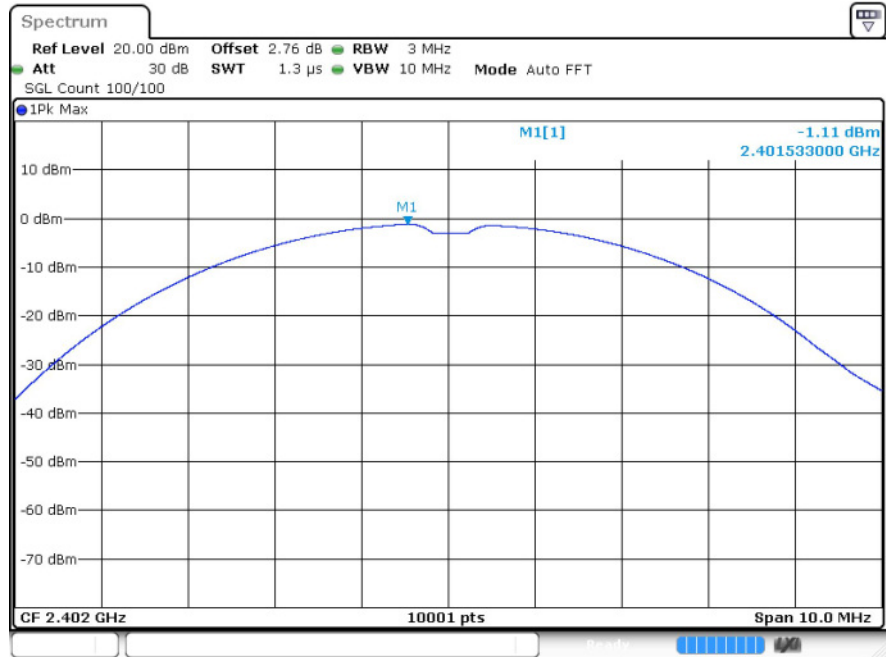
## 2.2 Test Graphs



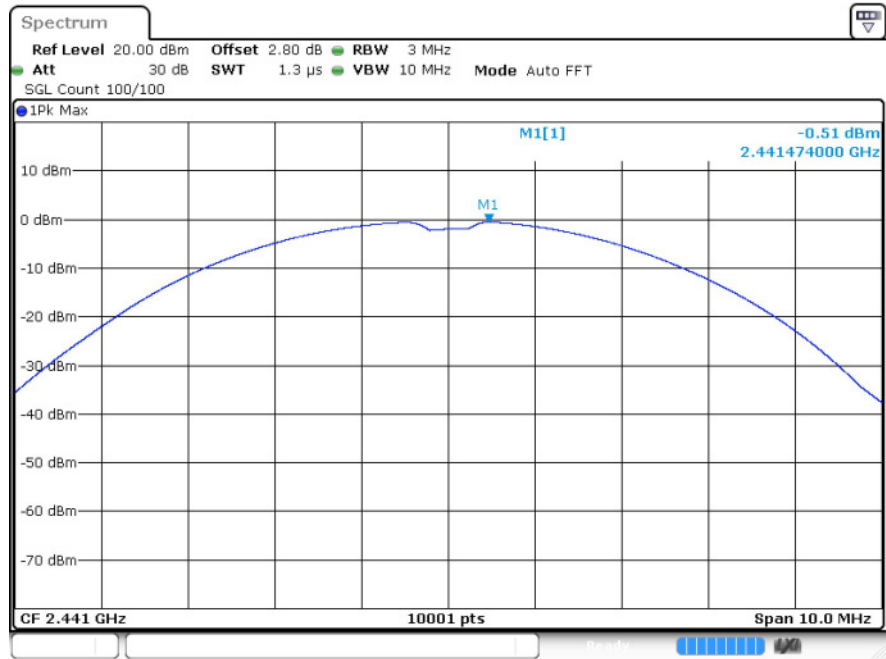
GFSK/HCH



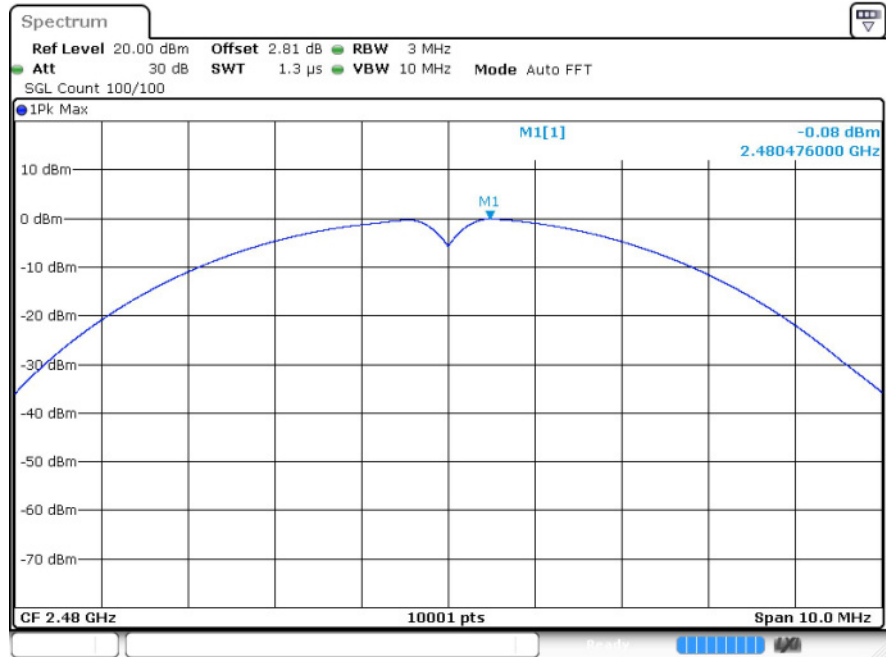
$\pi/4$ DQPSK/LCH



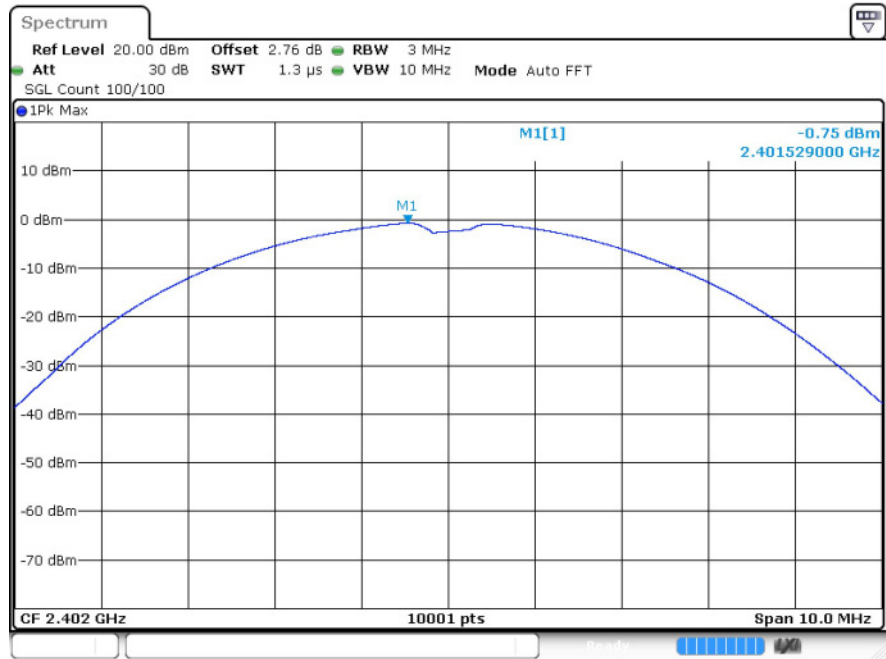
$\pi/4$ DQPSK/MCH



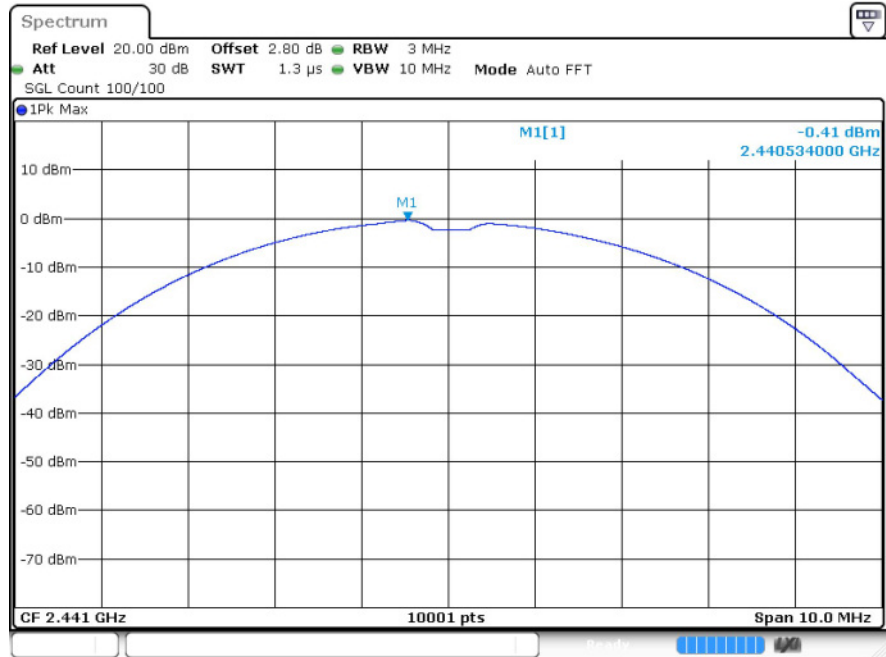
$\pi/4$ DQPSK/HCH



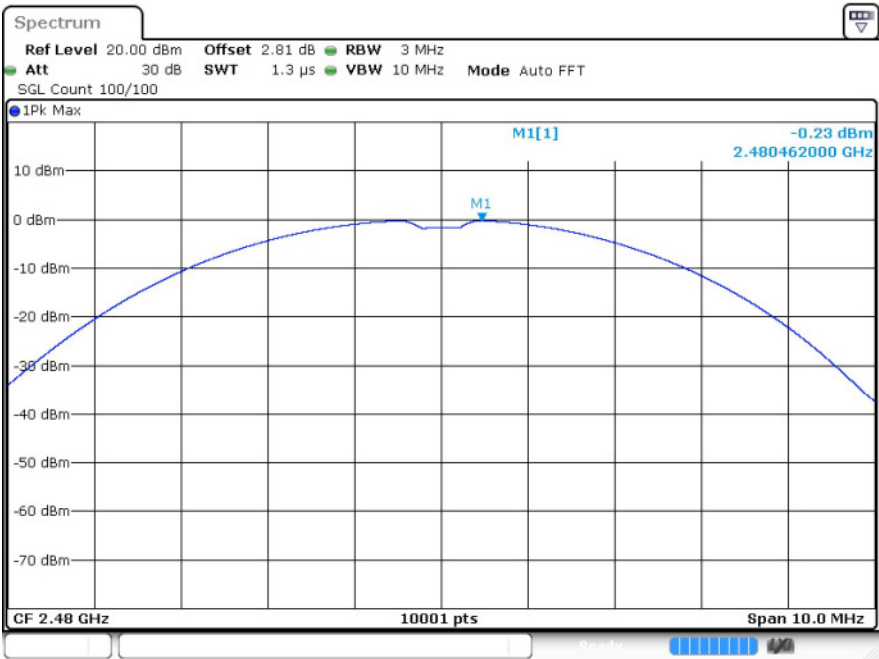
8DPSK/LCH



8DPSK/MCH



8DPSK/HCH

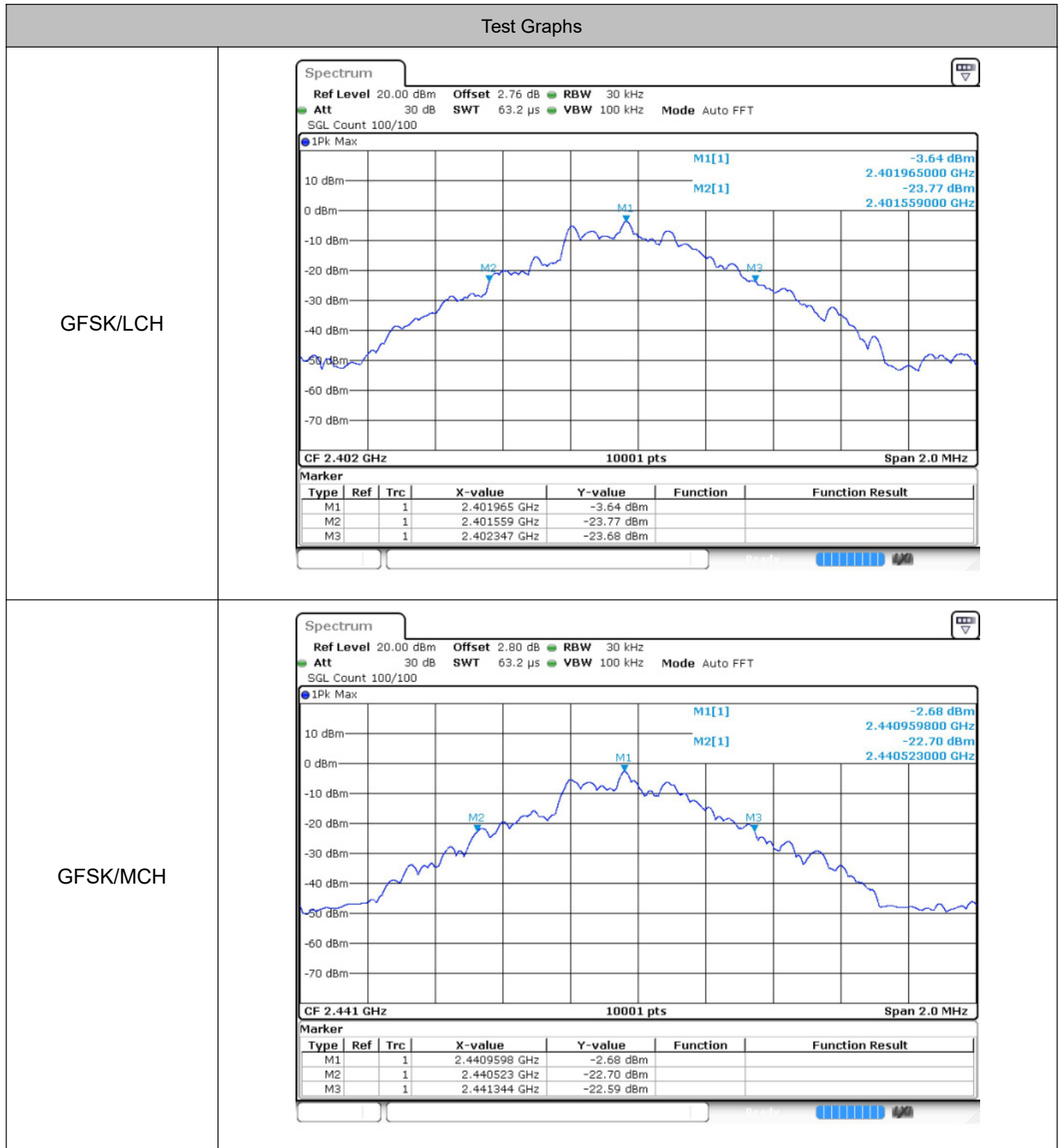


### 3 20dB Bandwidth

#### 3.1 Test Result

| Mode          | Channel. | 20dB Bandwidth [MHz] | Limit [MHz]   | Verdict |
|---------------|----------|----------------------|---------------|---------|
| GFSK          | LCH      | 0.787                | Not Specified | Pass    |
|               | MCH      | 0.821                | Not Specified | Pass    |
|               | HCH      | 0.825                | Not Specified | Pass    |
| $\pi/4$ DQPSK | LCH      | 1.206                | Not Specified | Pass    |
|               | MCH      | 1.219                | Not Specified | Pass    |
|               | HCH      | 1.213                | Not Specified | Pass    |
| 8DPSK         | LCH      | 1.221                | Not Specified | Pass    |
|               | MCH      | 1.228                | Not Specified | Pass    |
|               | HCH      | 1.211                | Not Specified | Pass    |

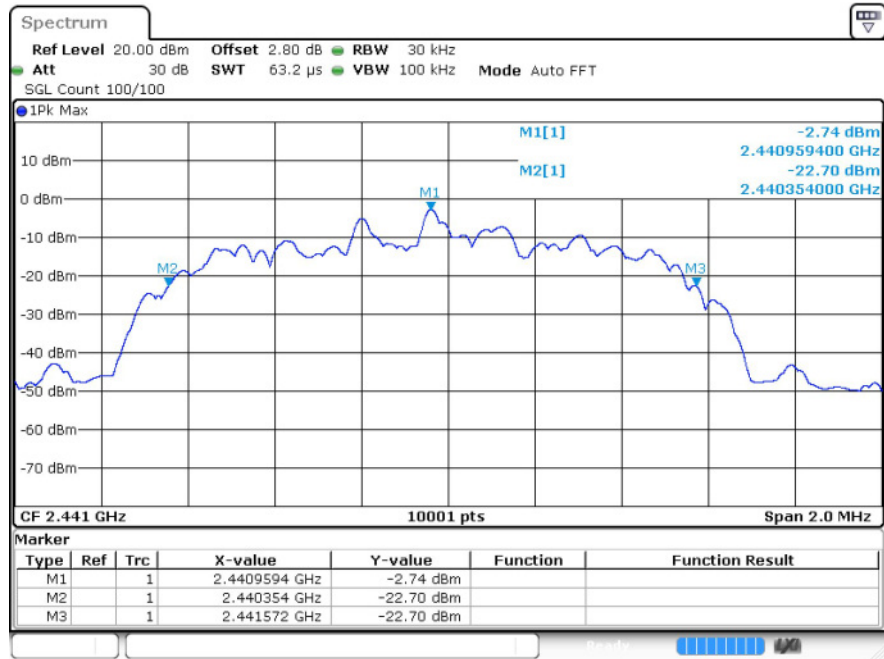
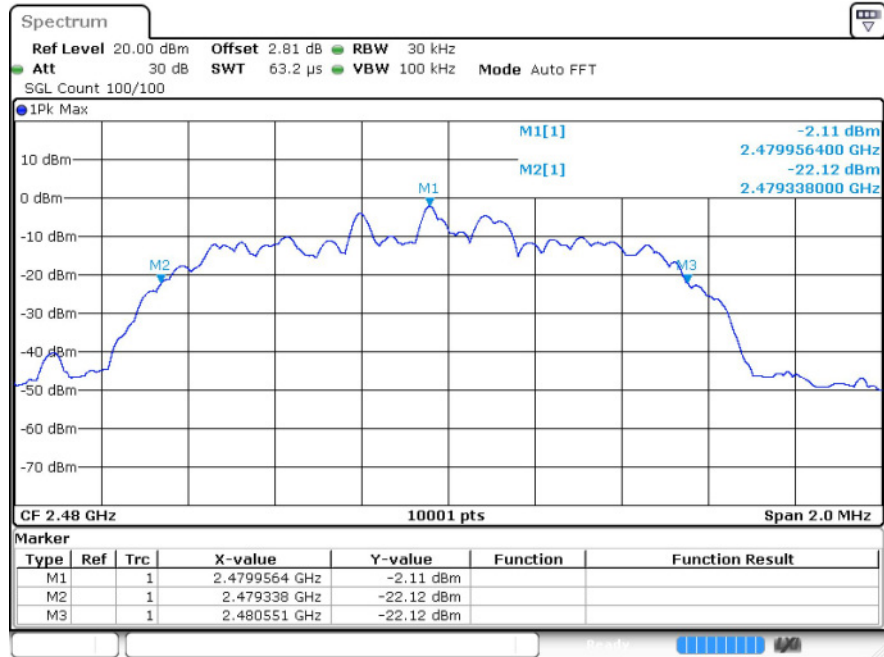
### 3.2 Test Graphs



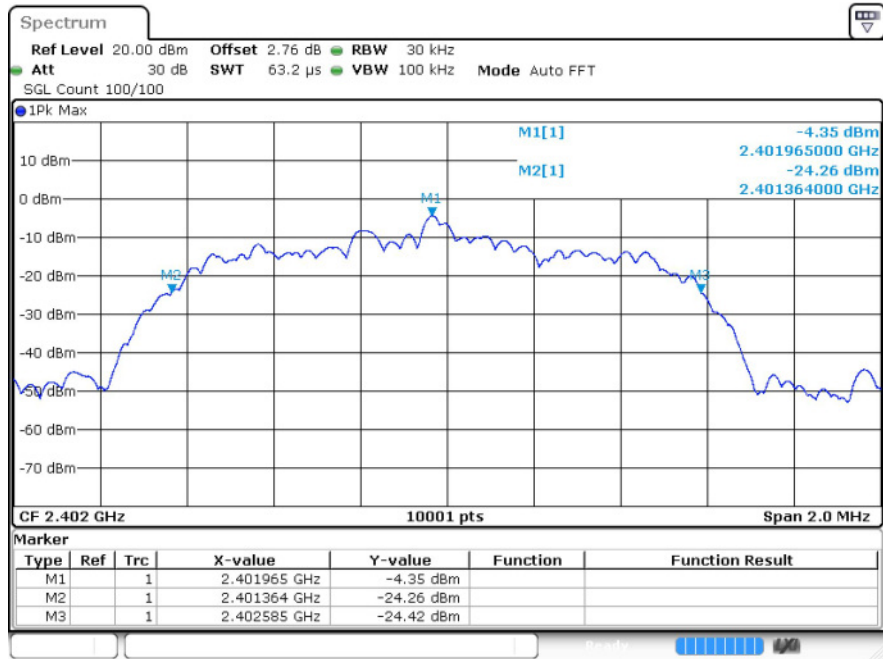


GFSK/HCH

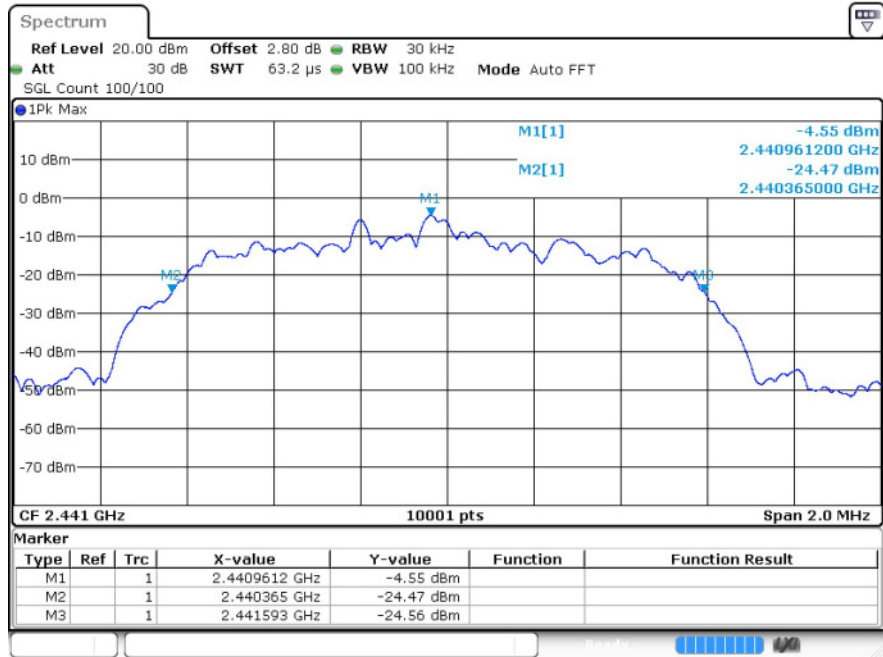

 $\pi/4$ DQPSK/LCH


$\pi/4$ DQPSK/MCH

 $\pi/4$ DQPSK/HCH


8DPSK/LCH



8DPSK/MCH



8DPSK/HCH

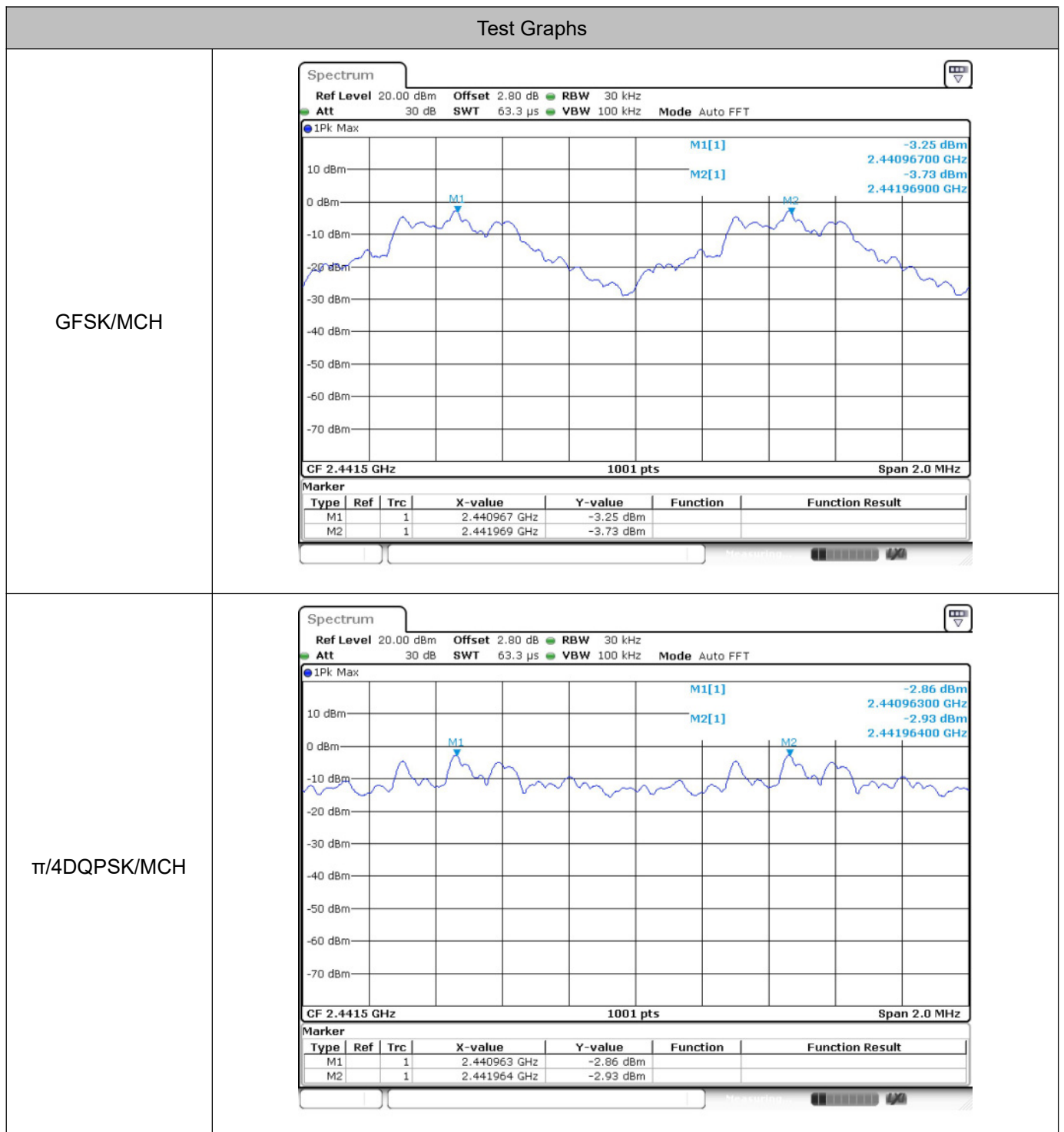


## 4 Carrier Frequency Separation

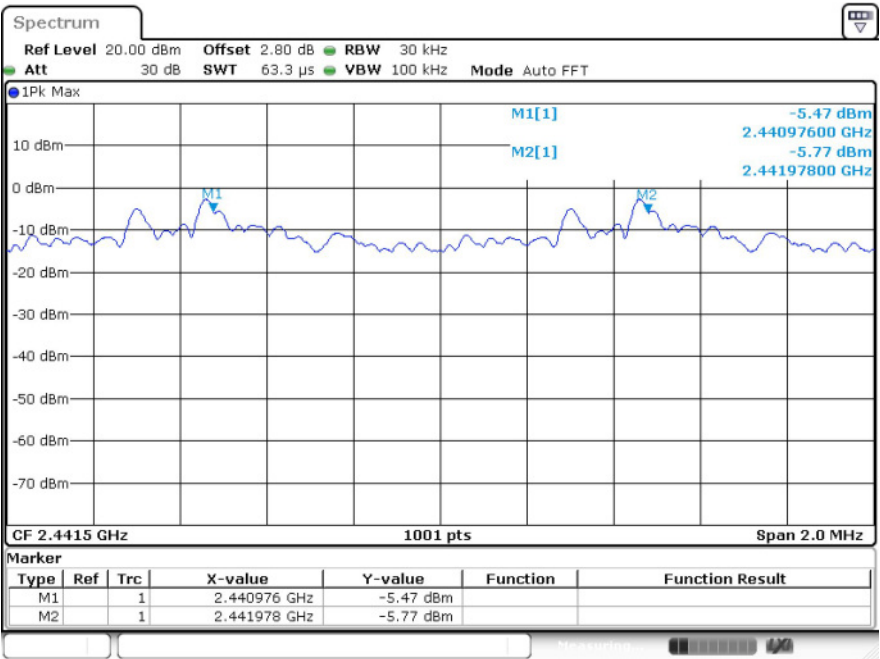
### 4.1 Test Result

| Mode          | Channel. | Carrier Frequency Separation [MHz] | Limit [MHz] | Verdict |
|---------------|----------|------------------------------------|-------------|---------|
| GFSK          | MCH      | 1.002                              | 0.547       | Pass    |
| $\pi/4$ DQPSK | MCH      | 1.001                              | 0.813       | Pass    |
| 8DPSK         | MCH      | 1.002                              | 0.819       | Pass    |

## 4.2 Test Graphs



8DPSK/MCH



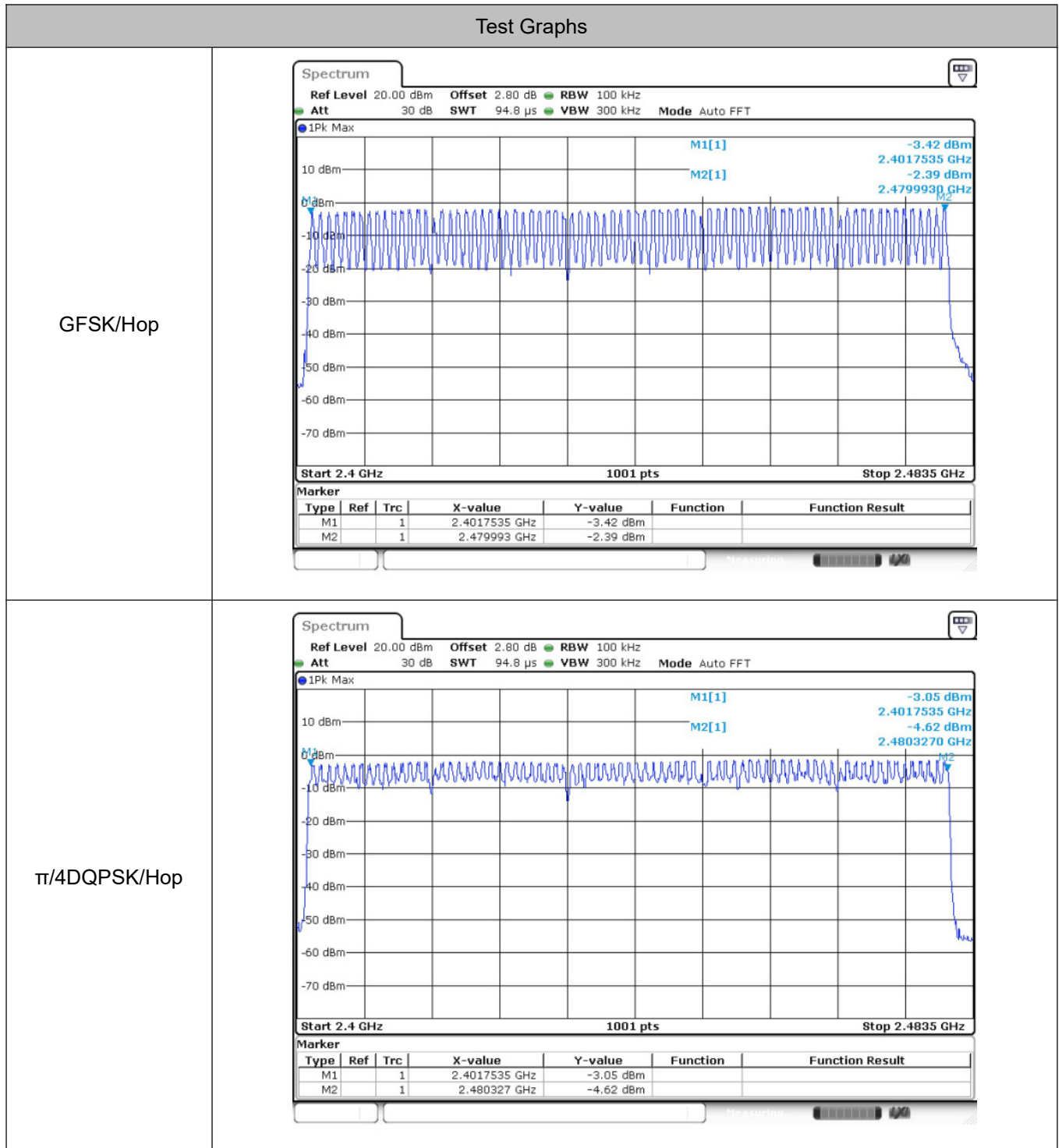
## 5 Hopping Channel Number

### 5.1 Test Result

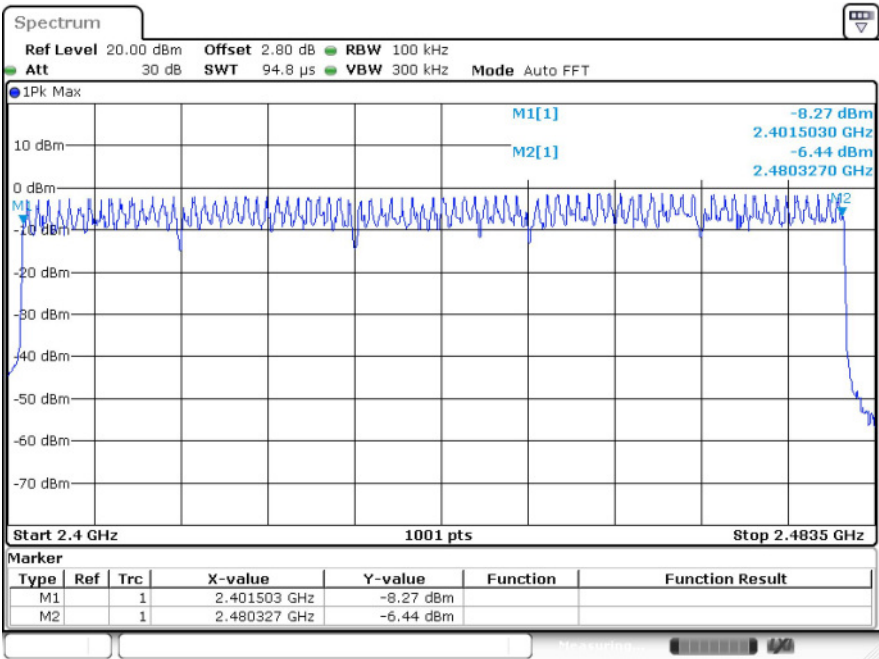
| Mode          | Channel. | Number of Hopping Channel [N] | Limit [N] | Verdict |
|---------------|----------|-------------------------------|-----------|---------|
| GFSK          | Hop      | 79                            | $\geq 15$ | PASS    |
| $\pi/4$ DQPSK | Hop      | 79                            | $\geq 15$ | PASS    |
| 8DPSK         | Hop      | 79                            | $\geq 15$ | PASS    |



## 5.2 Test Graphs



8DPSK/Hop



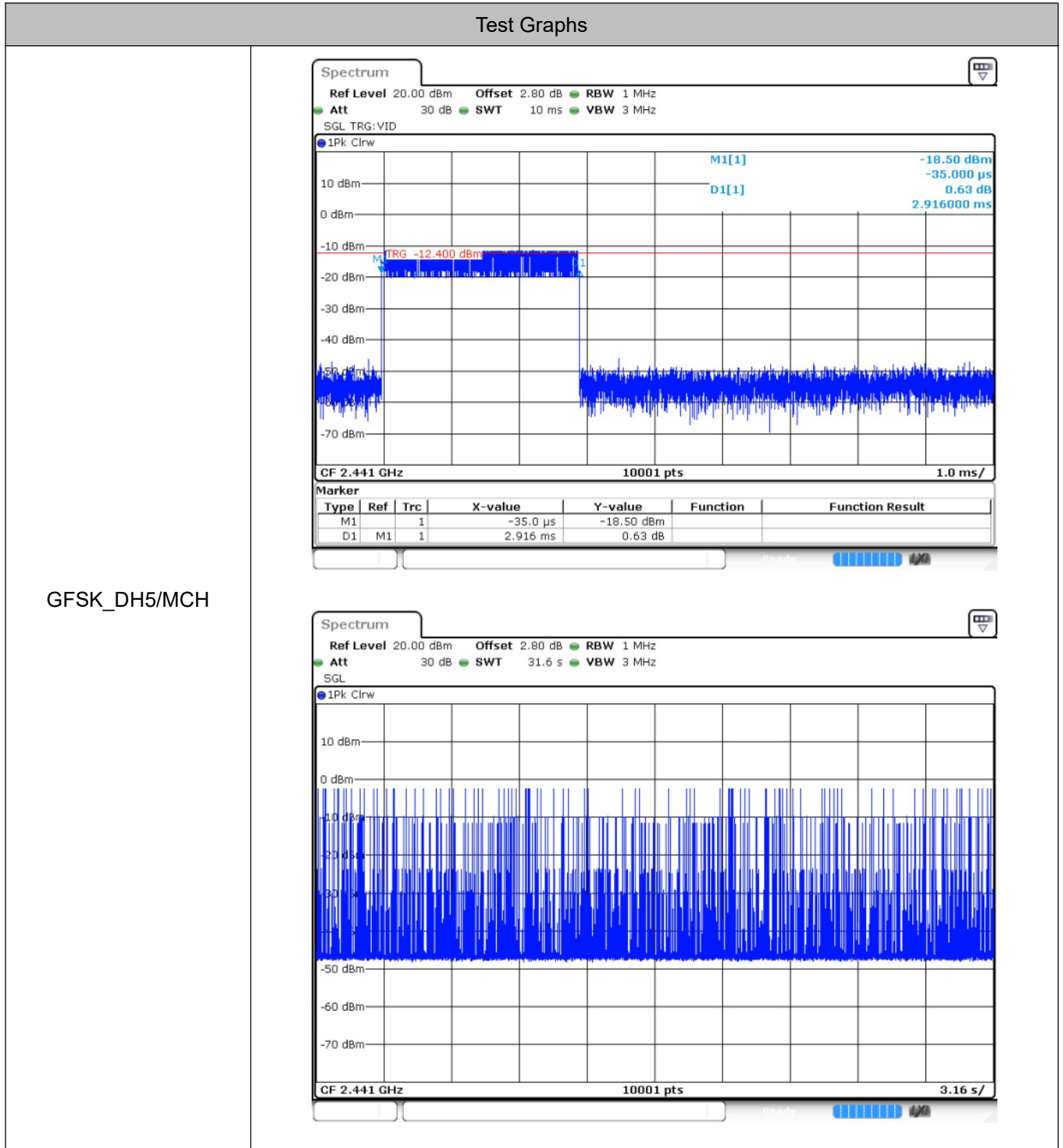


## 6 Dwell Time

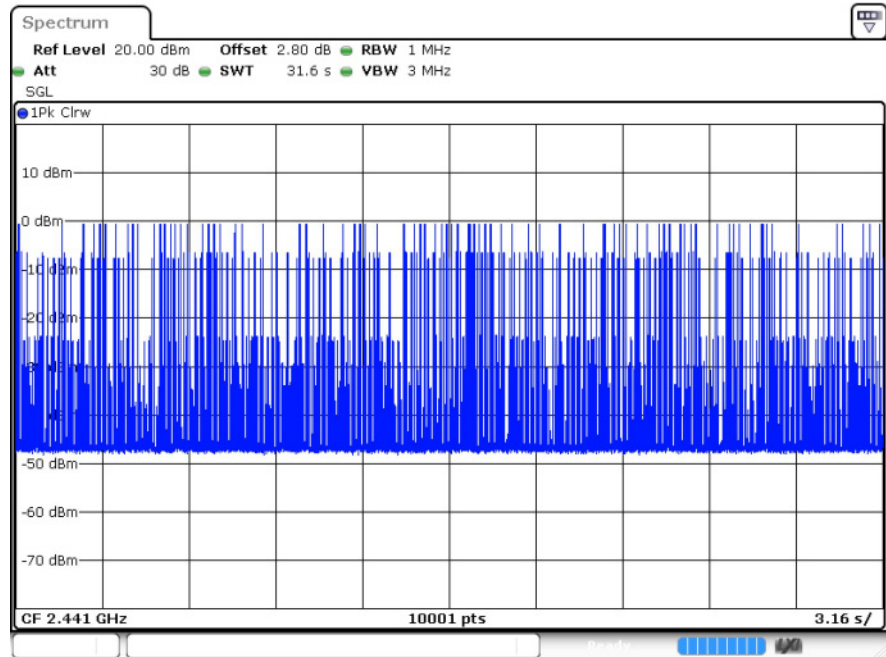
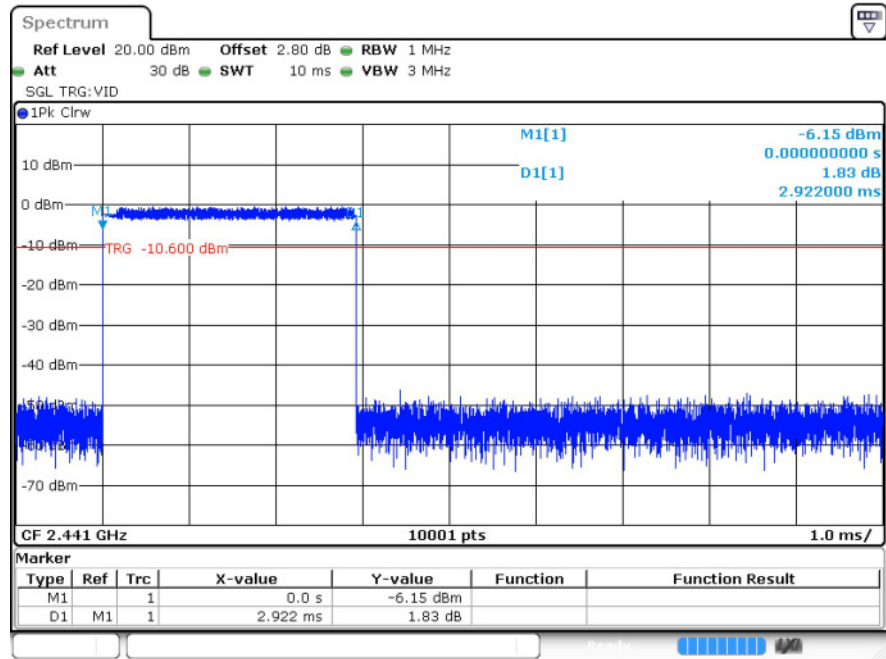
### 6.1 Test Result

| Mode          | Packet | Channel | Burst Width<br>[ms/hop/ch] | Total<br>Hops[hop*ch] | Dwell Time[ms] | Limit [s] | Verdict |
|---------------|--------|---------|----------------------------|-----------------------|----------------|-----------|---------|
| GFSK          | DH5    | MCH     | 2.916                      | 93                    | 271.188        | 0.4       | Pass    |
| $\pi/4$ DQPSK | 2DH5   | MCH     | 2.922                      | 105                   | 306.81         | 0.4       | Pass    |
| 8DPSK         | 3DH5   | MCH     | 2.925                      | 99                    | 289.575        | 0.4       | Pass    |

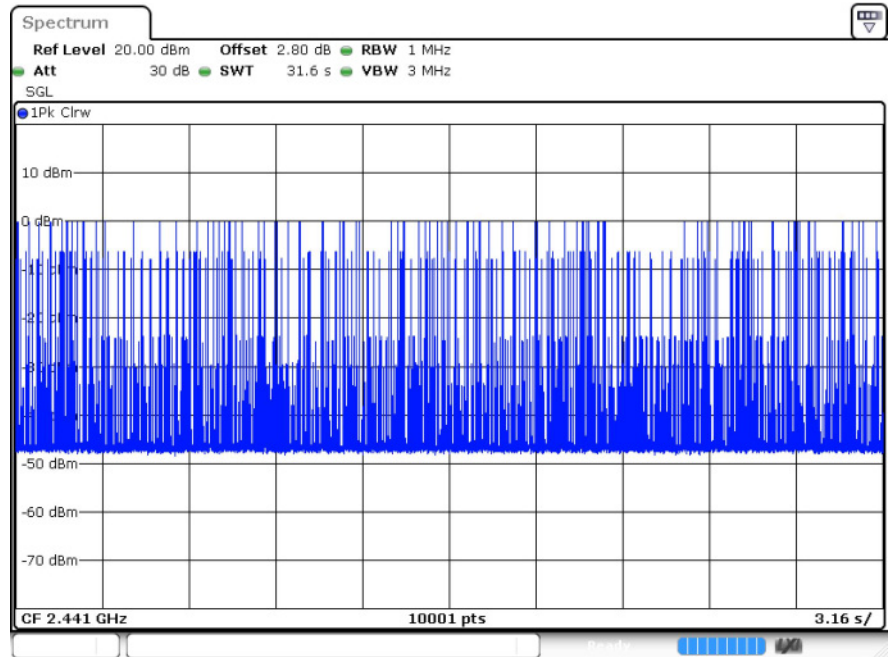
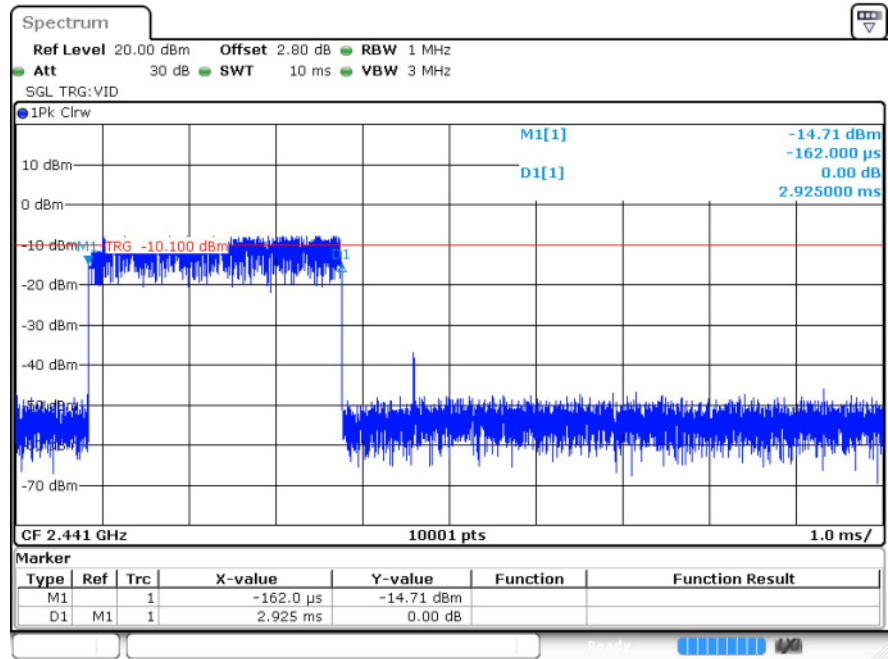
## 6.2 Test Graphs



$\pi/4$ DQPSK  
\_2DH5/MCH



8DPSK\_3DH5/MCH



## 7 RF Conducted Spurious Emissions

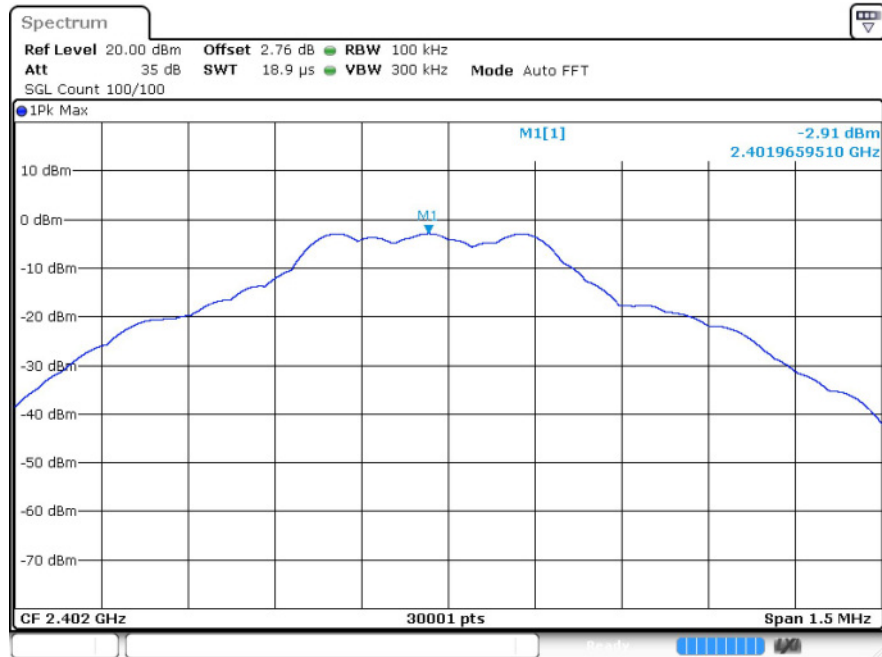
### 7.1 Test Result

| Mode          | Channel | Max. Level [dBc] | Limit [dBc] | Verdict |
|---------------|---------|------------------|-------------|---------|
| GFSK          | LCH     | -35.56           | -20         | Pass    |
|               | MCH     | -34.41           | -20         | Pass    |
|               | HCH     | -30.78           | -20         | Pass    |
| $\pi/4$ DQPSK | LCH     | -33.26           | -20         | Pass    |
|               | MCH     | -31.83           | -20         | Pass    |
|               | HCH     | -31.04           | -20         | Pass    |
| 8DPSK         | LCH     | -36.04           | -20         | Pass    |
|               | MCH     | -39.21           | -20         | Pass    |
|               | HCH     | -40.04           | -20         | Pass    |

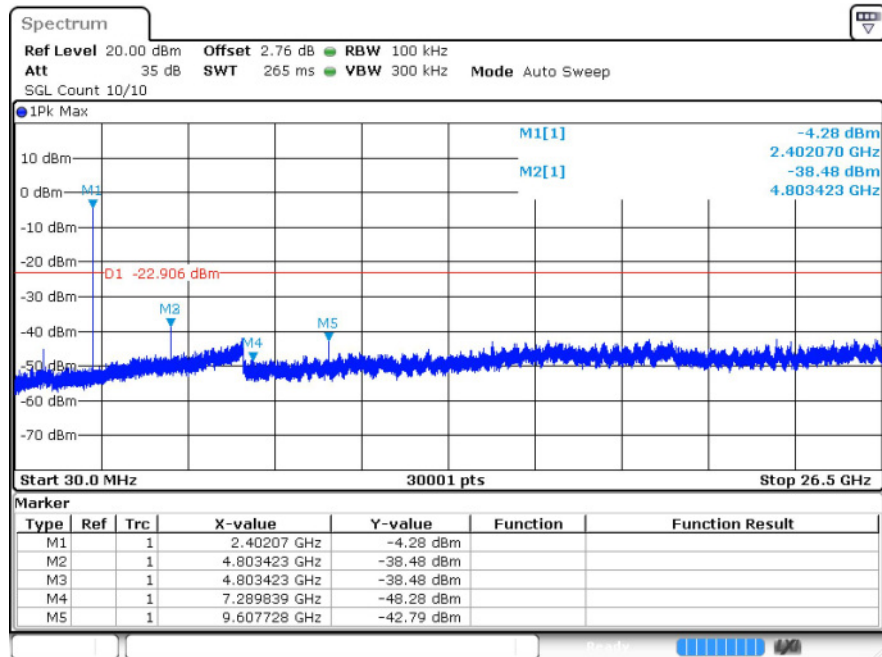
## 7.2 Test Graphs

GFSK\_LCH\_Graphs

Pref



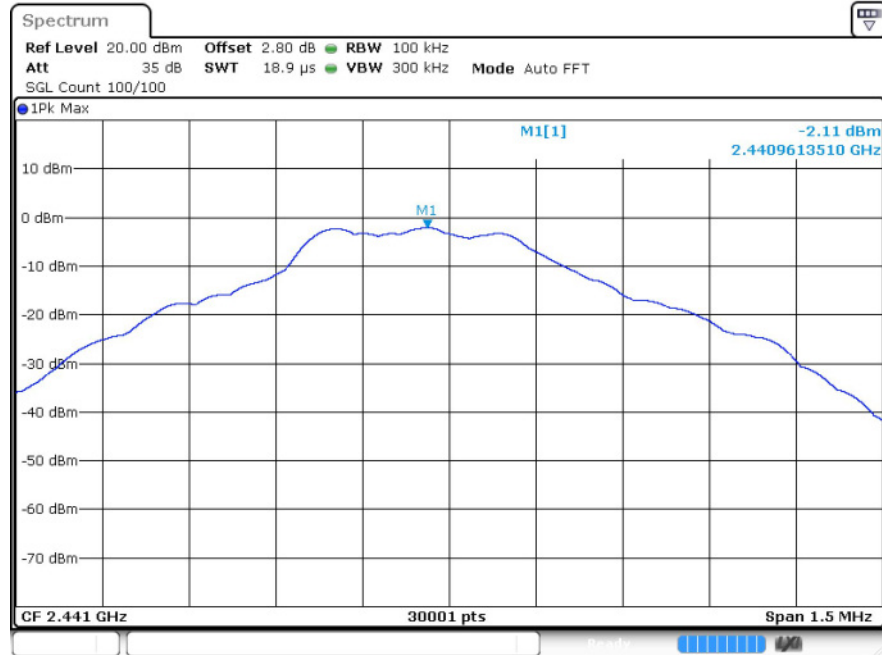
Puw



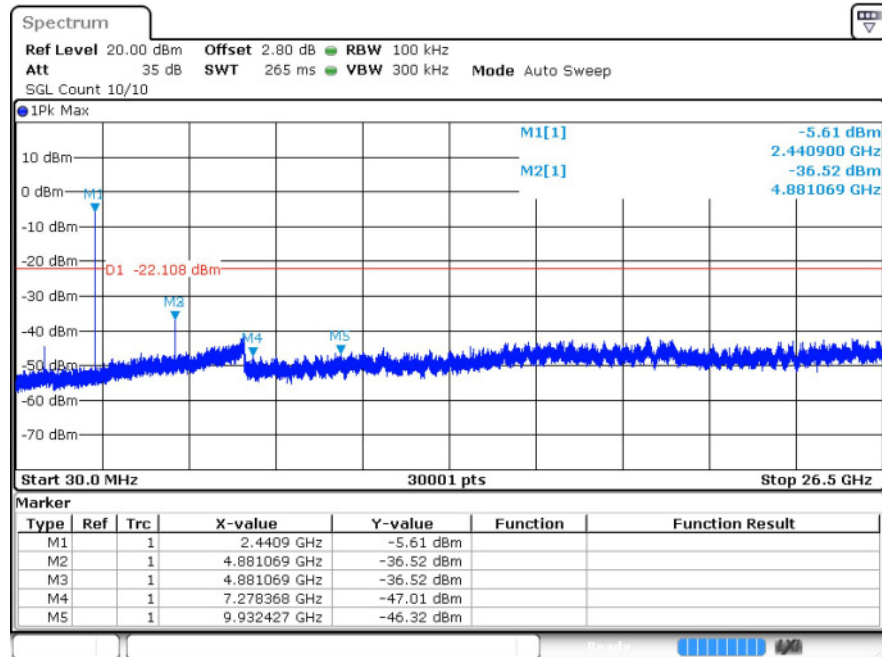


## GFSK\_MCH\_Graphs

Pref

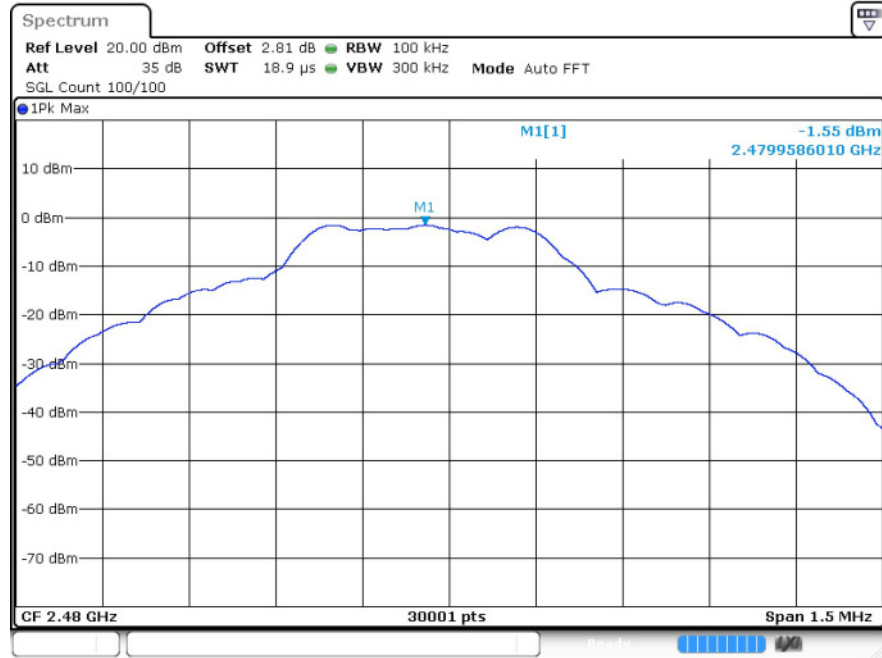


Puw

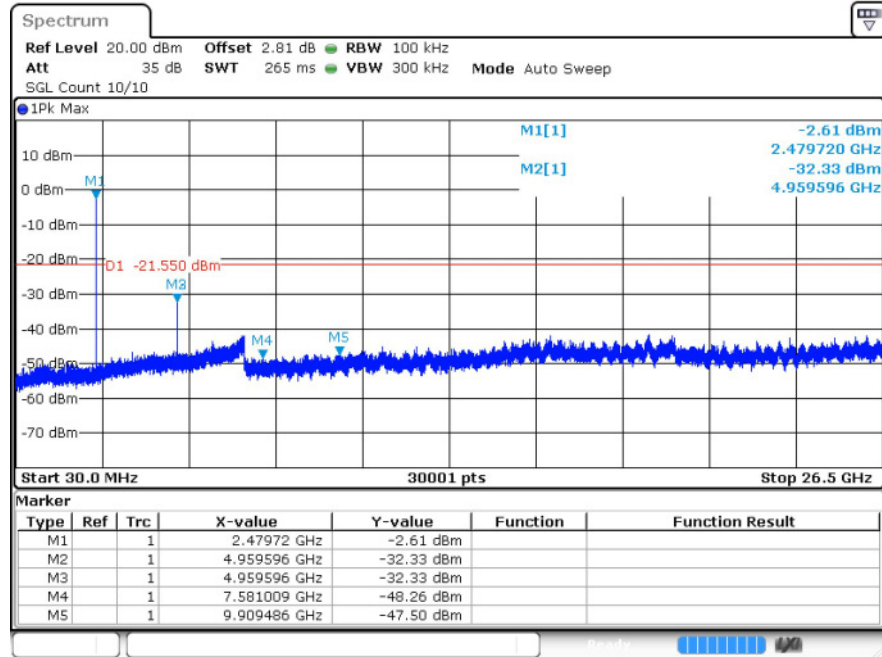


## GFSK\_HCH\_Graphs

Pref

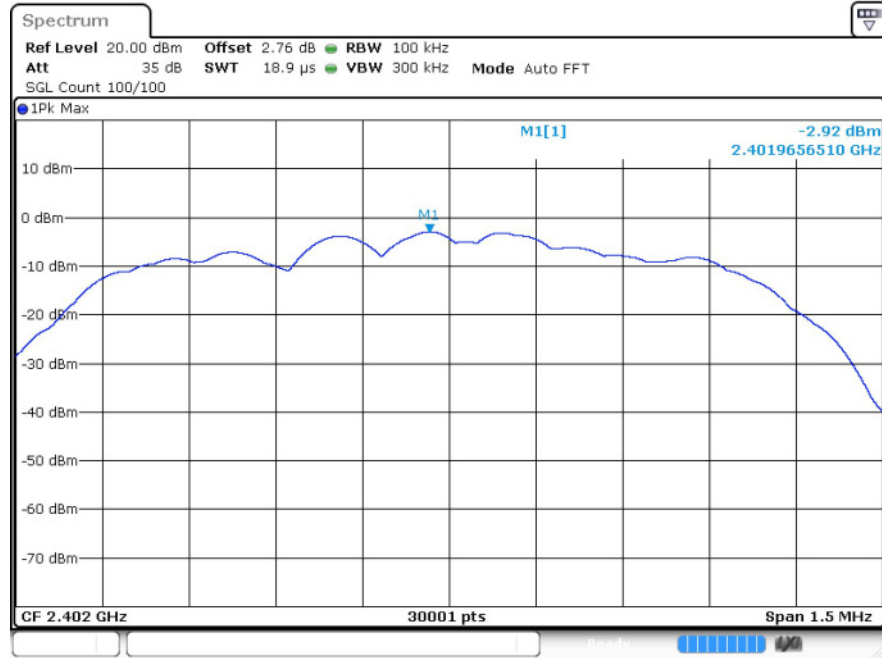


Puw

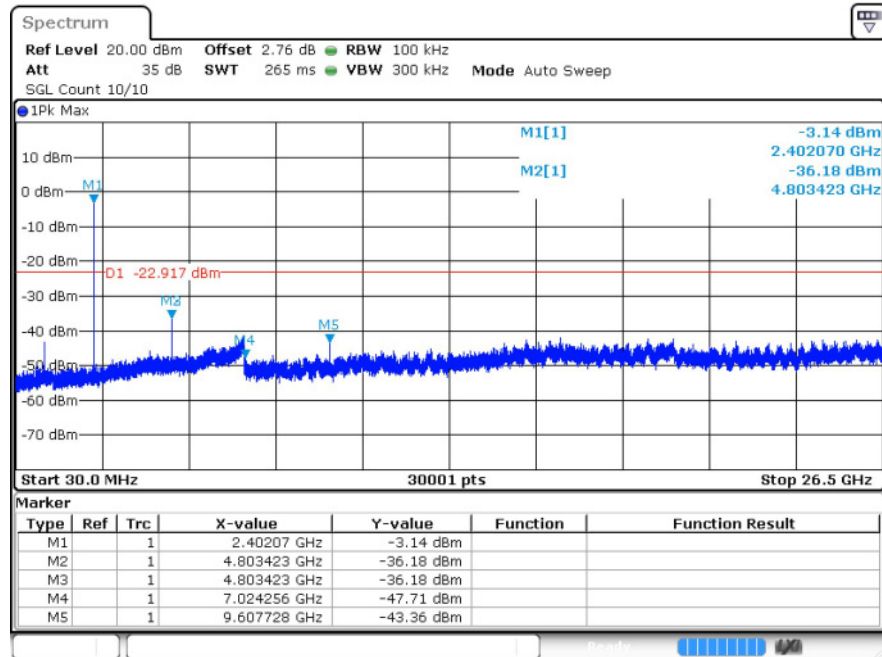


# $\pi/4$ DQPSK\_LCH\_Graphs

Pref

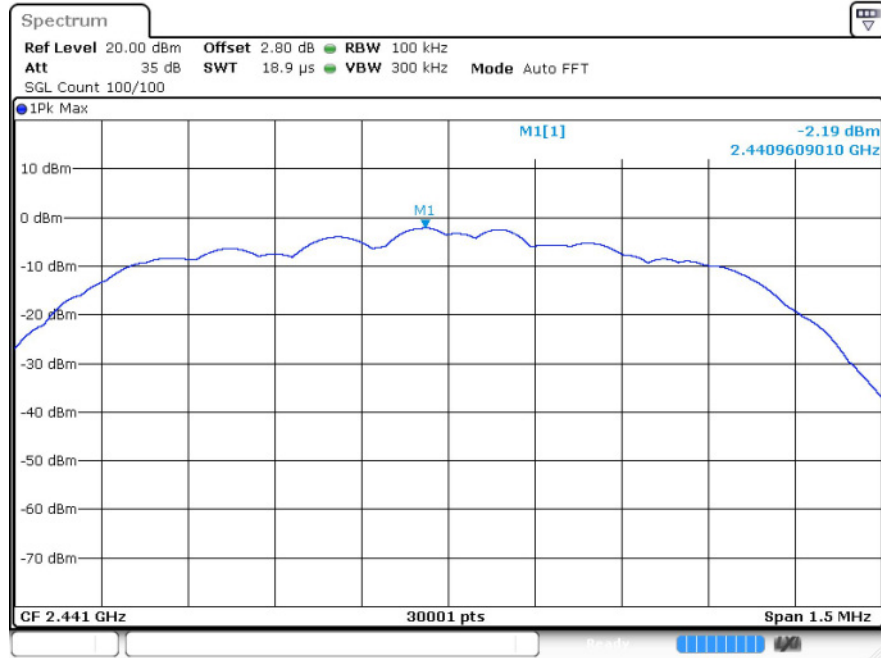


Puw

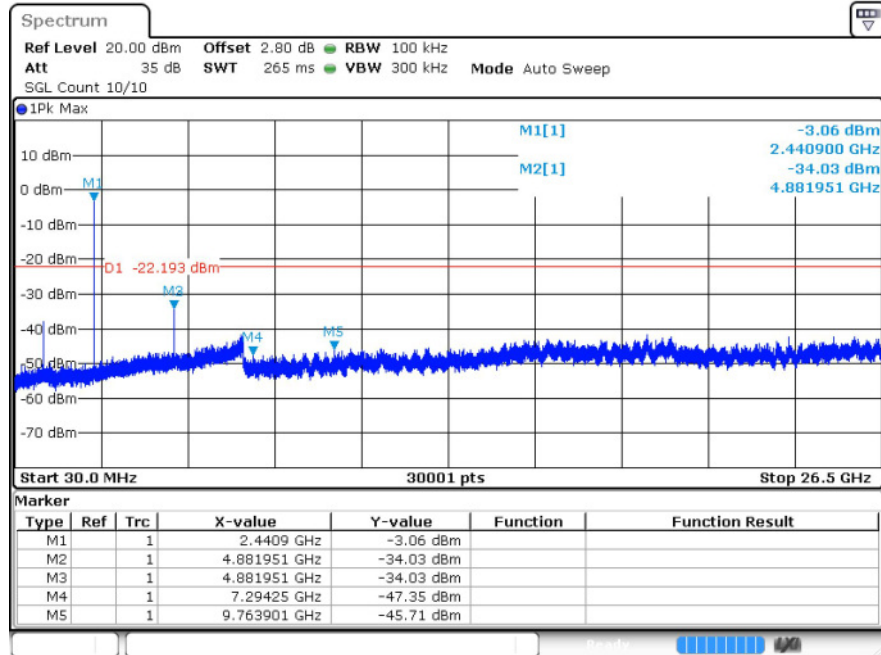


# $\pi$ /4DQPSK\_MCH\_Graphs

Pref

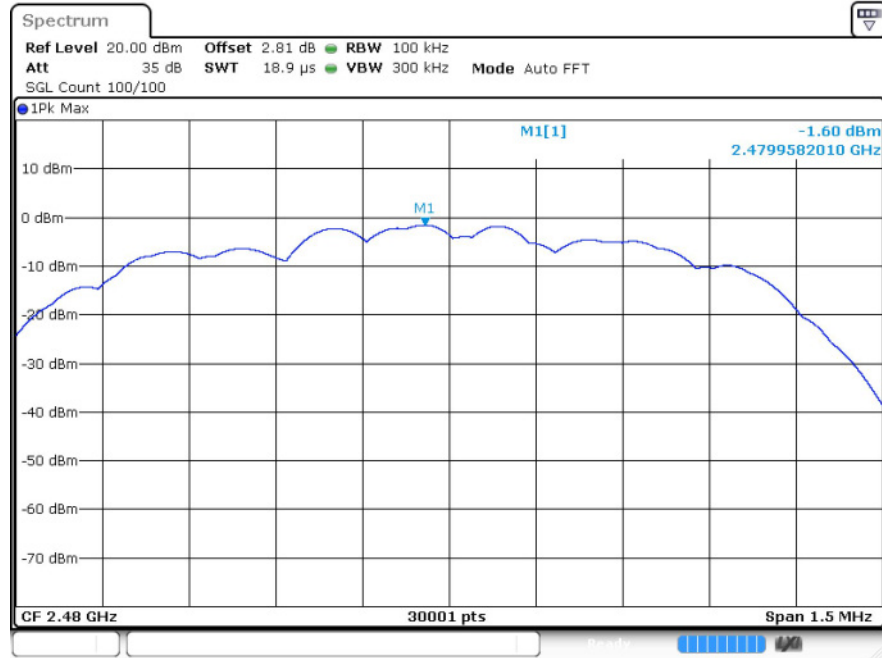


Puw



# $\pi/4$ DQPSK\_HCH\_Graphs

Pref



Puw

