



## Appendix A

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

Product Name: keyboard

Trade Mark: N/A

Test Model: KB02011

#### Environmental Conditions

|                    |             |
|--------------------|-------------|
| Temperature:       | 25.4°C      |
| Relative Humidity: | 51.9%       |
| ATM Pressure:      | 101Kpa      |
| Test Engineer:     | Simba Huang |
| Supervised by:     | Seal Chen   |

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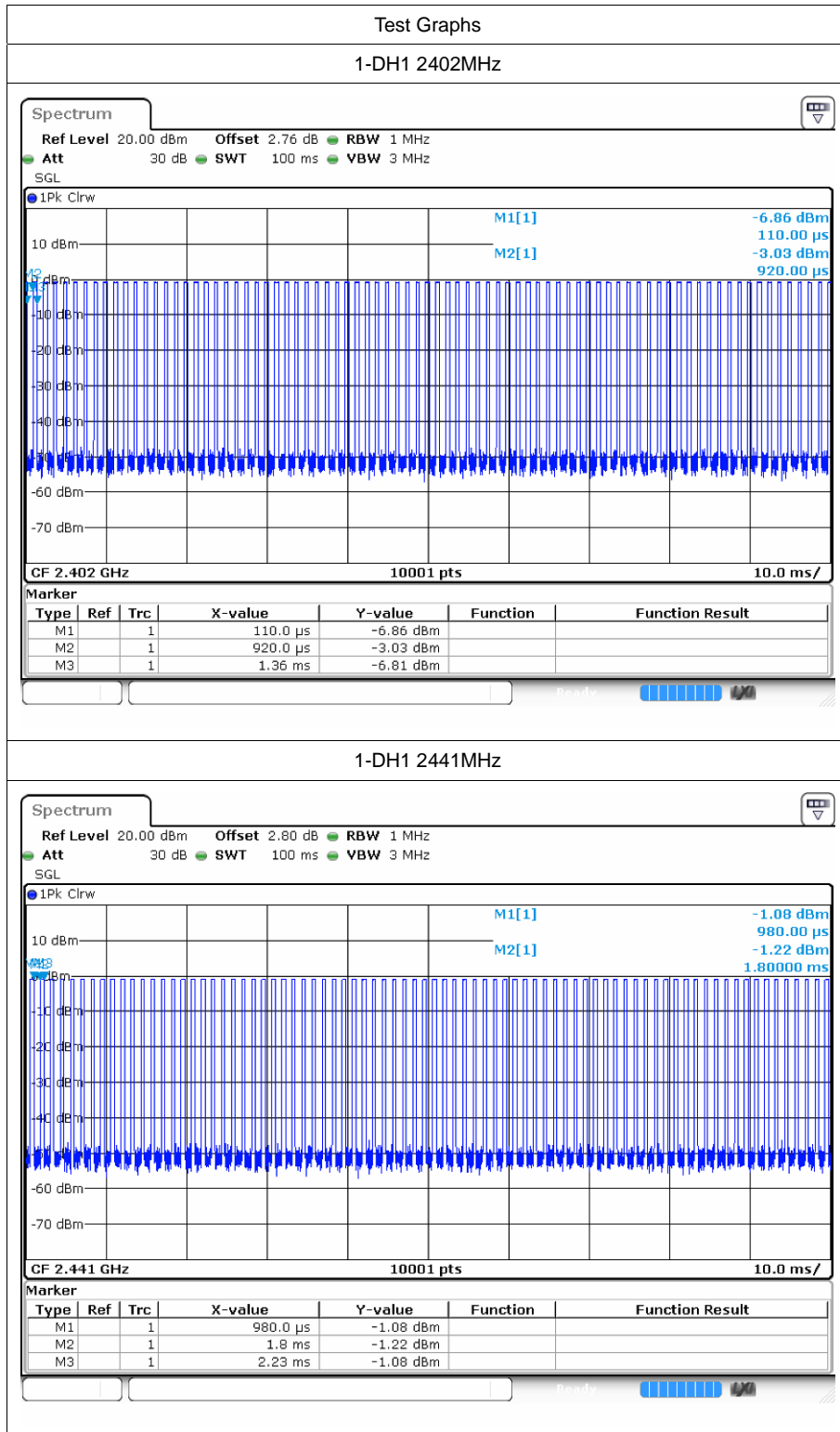


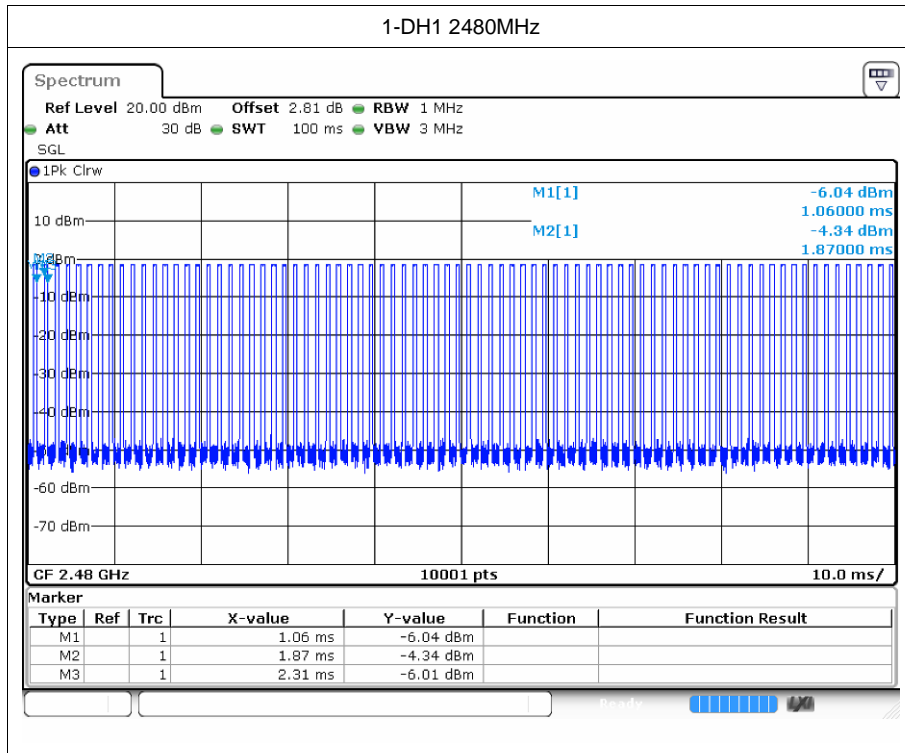
# 1 Duty Cycle

## 1.1 Test Result

| Mode  | Frequency (MHz) | Duty Cycle (%) | 1/T (kHz) |
|-------|-----------------|----------------|-----------|
| 1-DH1 | 2402            | 36.01          | 2.27      |
| 1-DH1 | 2441            | 35.2           | 2.33      |
| 1-DH1 | 2480            | 36             | 2.27      |

## 1.2 Test Graphs



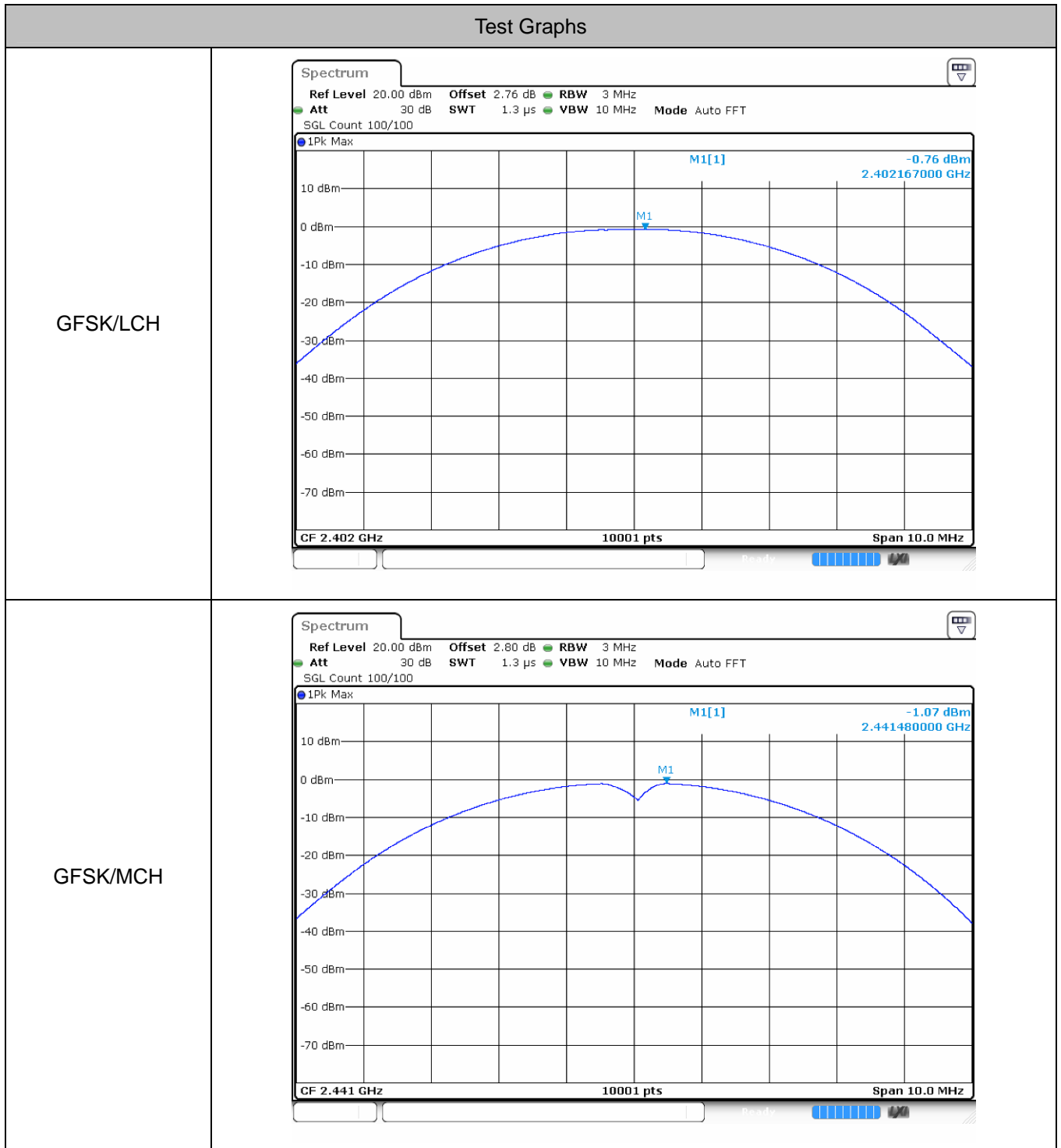


## 2 Maximum Conducted Peak Output Power

### 2.1 Test Result

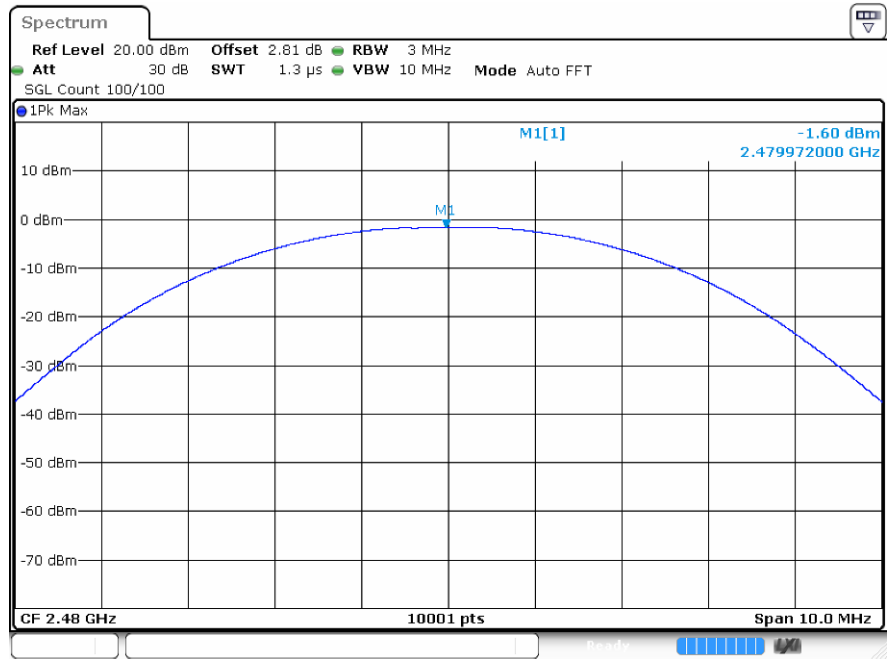
| Mode | Channel. | Maximum Peak Output Power [dBm] | Limit [dBm] | Verdict |
|------|----------|---------------------------------|-------------|---------|
| GFSK | LCH      | -0.76                           | 21          | Pass    |
|      | MCH      | -1.07                           | 21          | Pass    |
|      | HCH      | -1.6                            | 21          | Pass    |

## 2.2 Test Graphs





GFSK/HCH



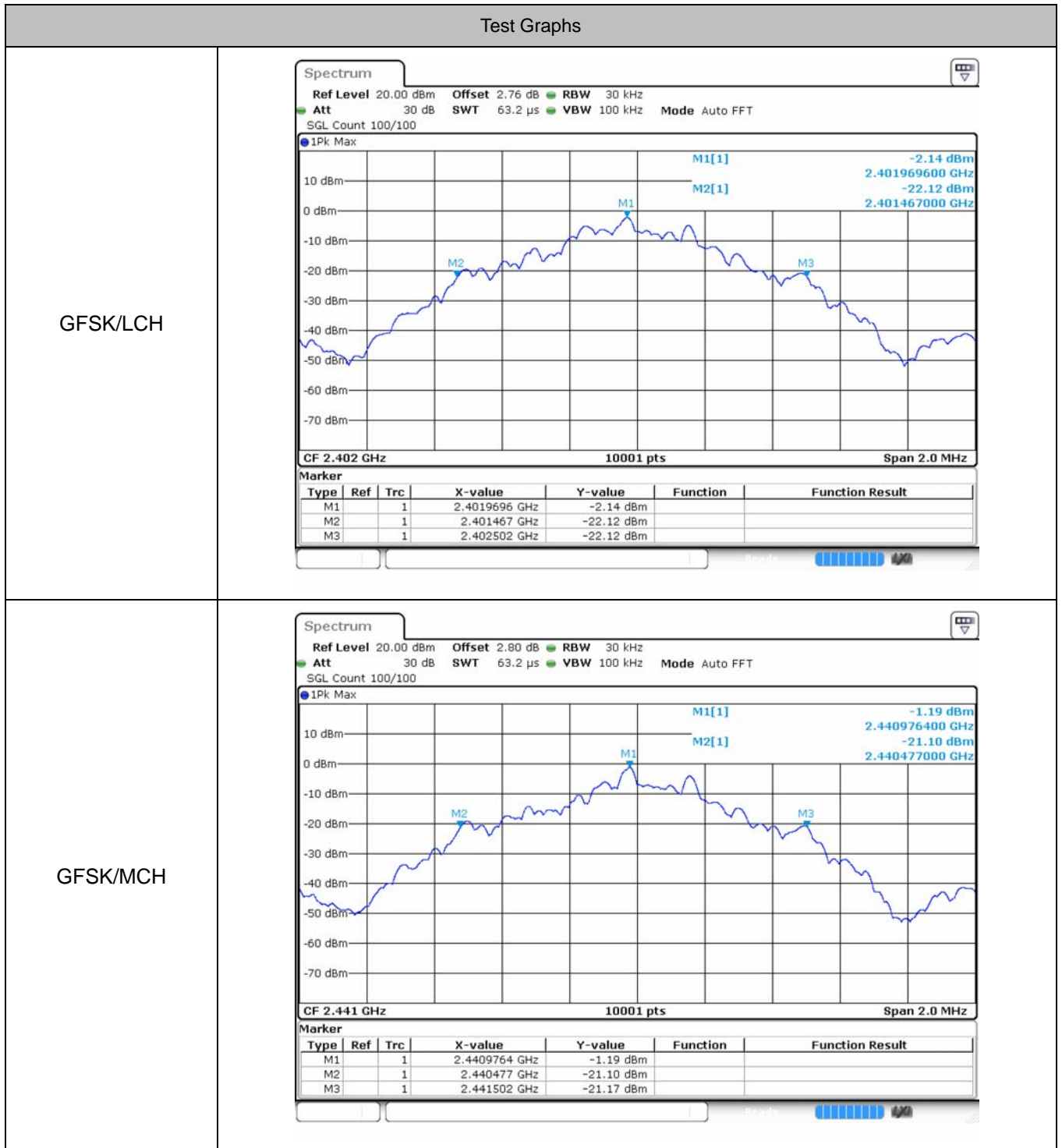


### 3 20dB Bandwidth

#### 3.1 Test Result

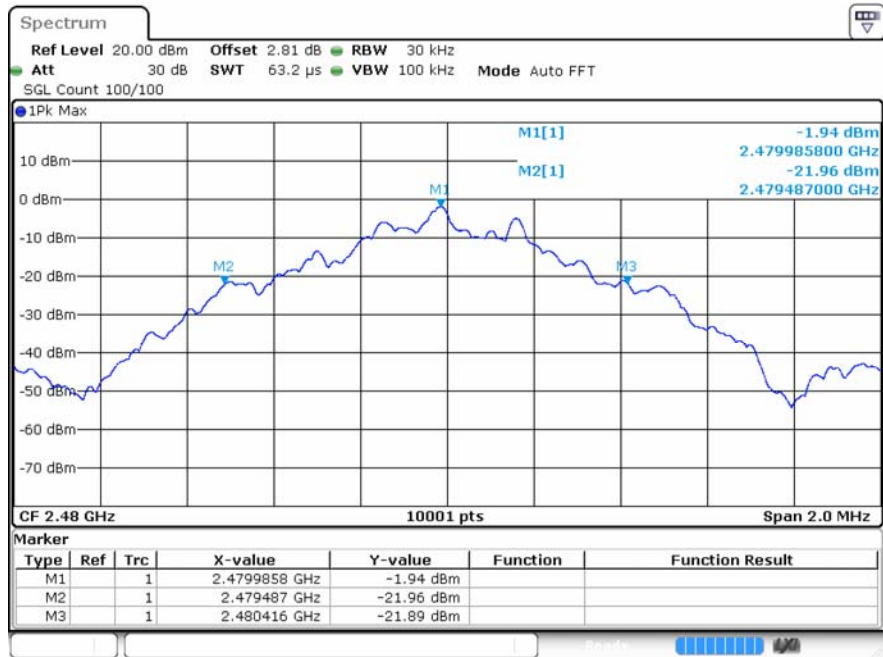
| Mode | Channel. | 20dB Bandwidth [MHz] | Limit [MHz]   | Verdict |
|------|----------|----------------------|---------------|---------|
| GFSK | LCH      | 1.035                | Not Specified | Pass    |
|      | MCH      | 1.026                | Not Specified | Pass    |
|      | HCH      | 0.929                | Not Specified | Pass    |

### 3.2 Test Graphs





GFSK/HCH

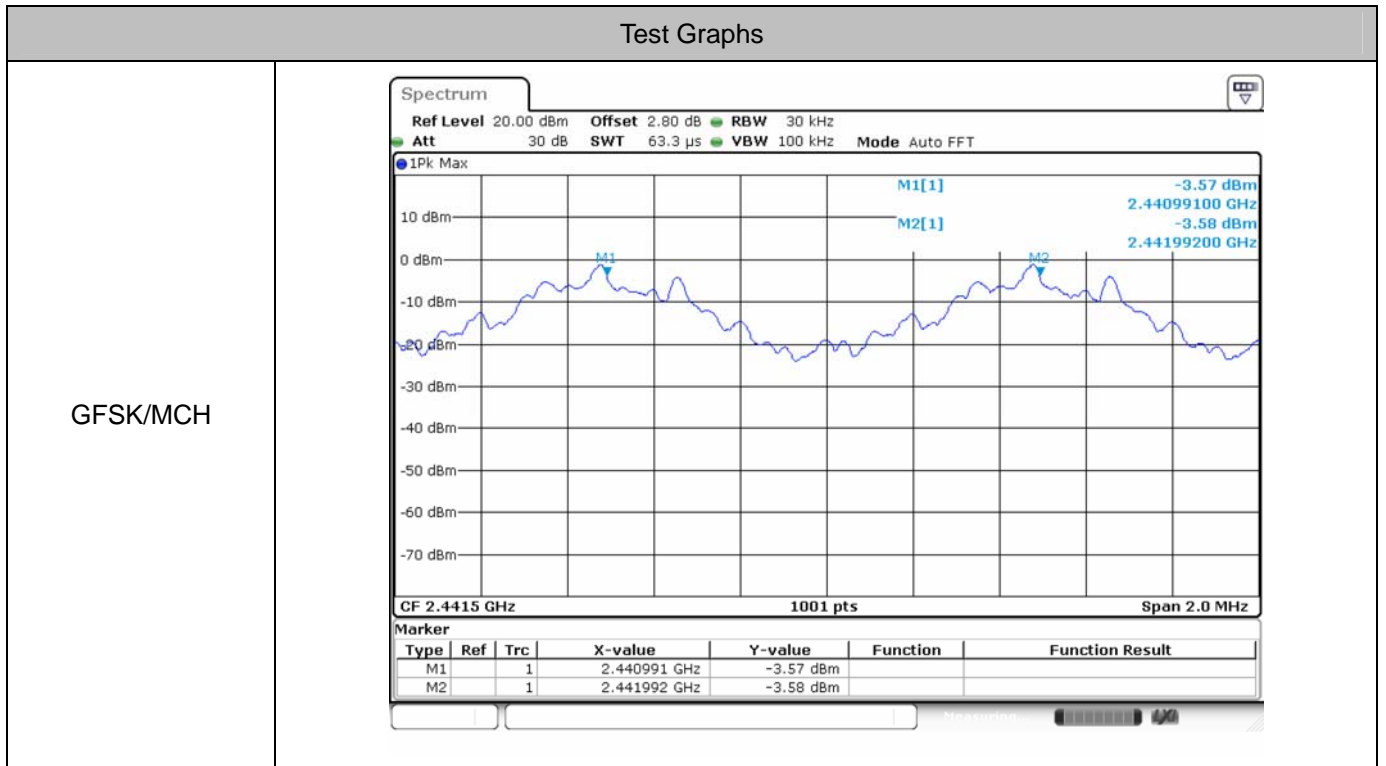


## 4 Carrier Frequency Separation

### 4.1 Test Result

| Mode | Channel. | Carrier Frequency Separation [MHz] | Limit [MHz] | Verdict |
|------|----------|------------------------------------|-------------|---------|
| GFSK | MCH      | 1.001                              | 0.684       | Pass    |

## 4.2 Test Graphs





## 5 Hopping Channel Number

### 5.1 Test Result

| Mode | Channel. | Number of Hopping Channel [N] | Limit [N] | Verdict |
|------|----------|-------------------------------|-----------|---------|
| GFSK | Hop      | 79                            | $\geq 15$ | PASS    |



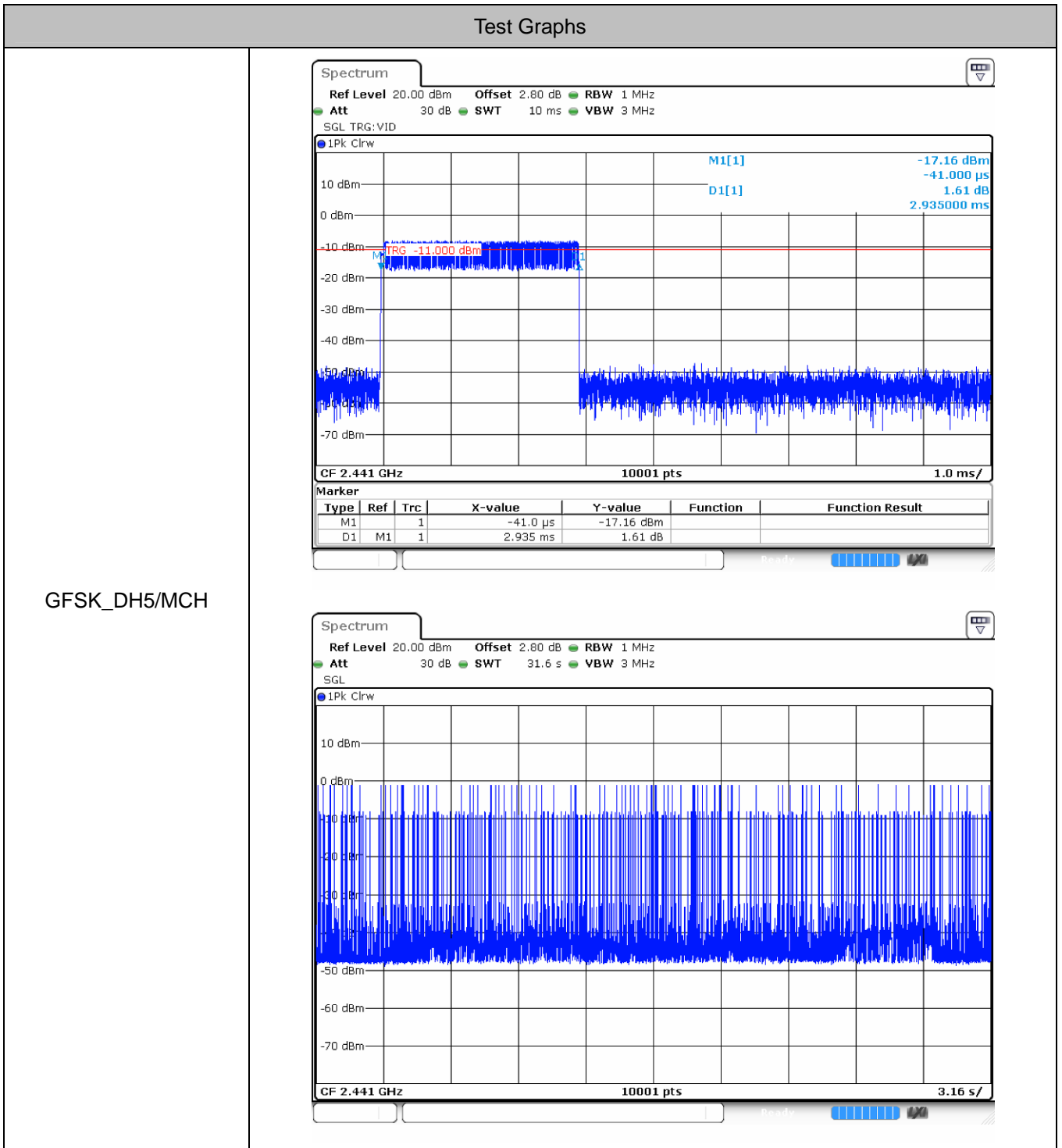
## 6 Dwell Time

### 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     | 2.935                      | 95                    | 278.825        | 0.4       | Pass    |



## 6.2 Test Graphs

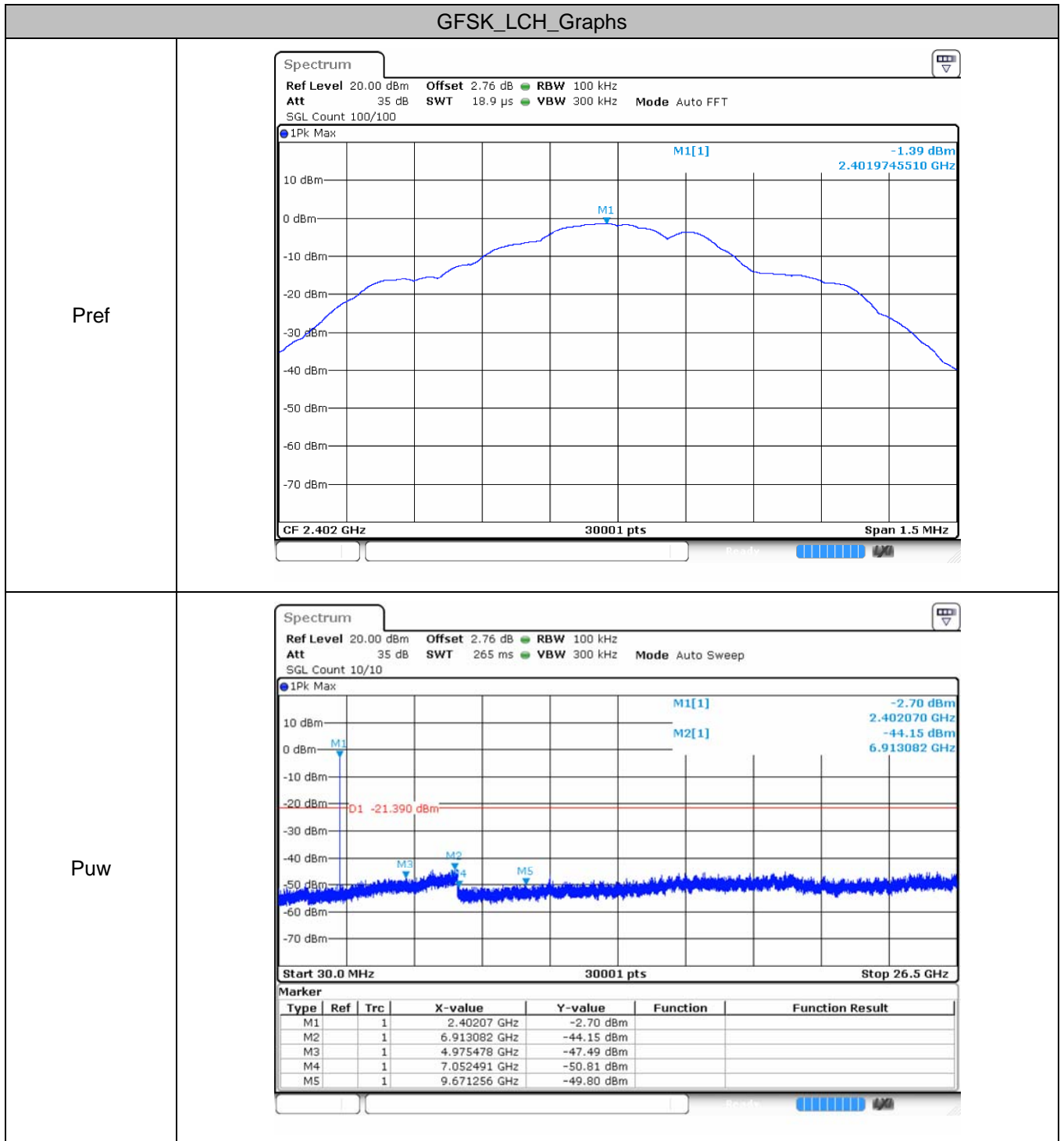


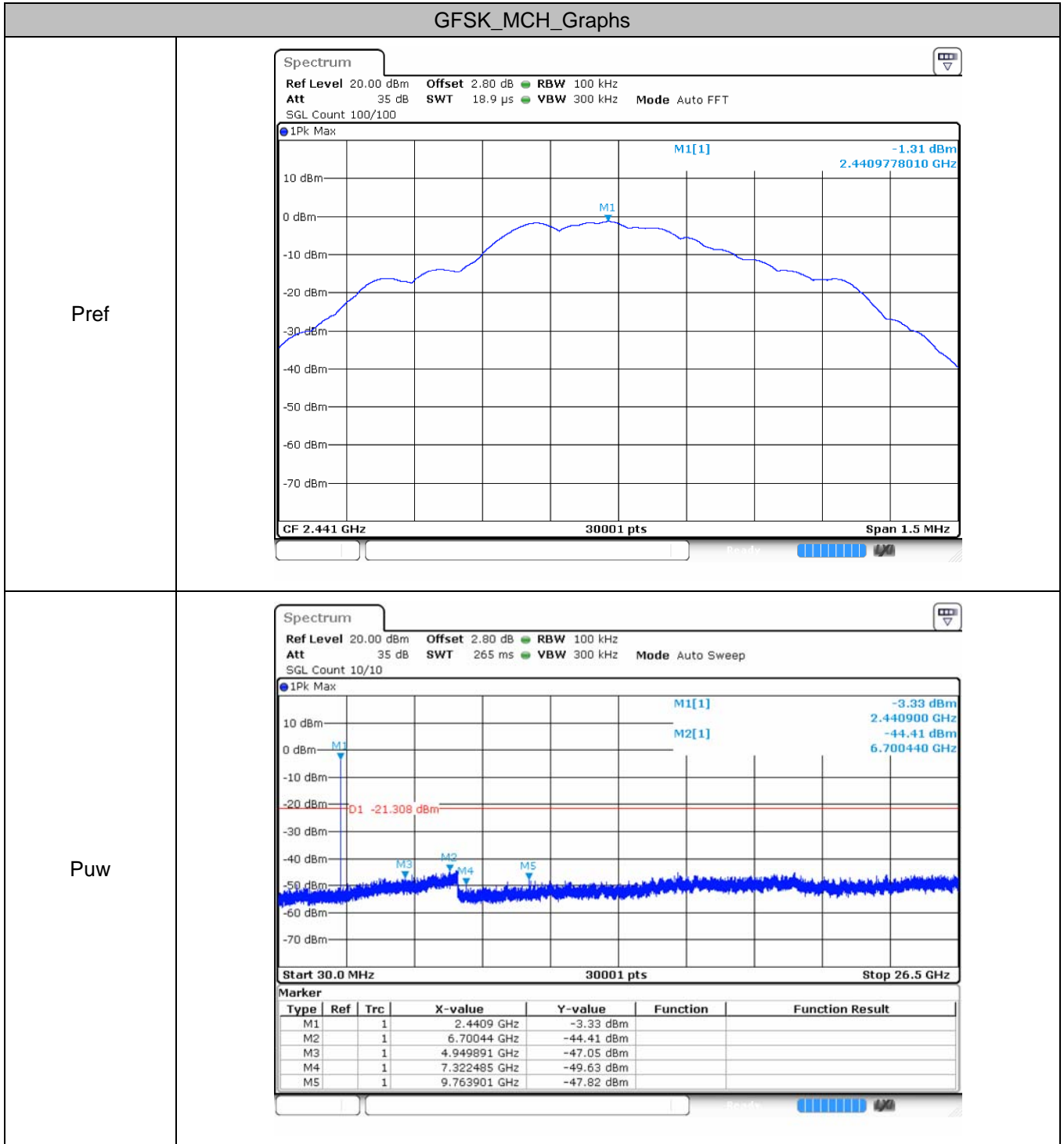
## 7 RF Conducted Spurious Emissions

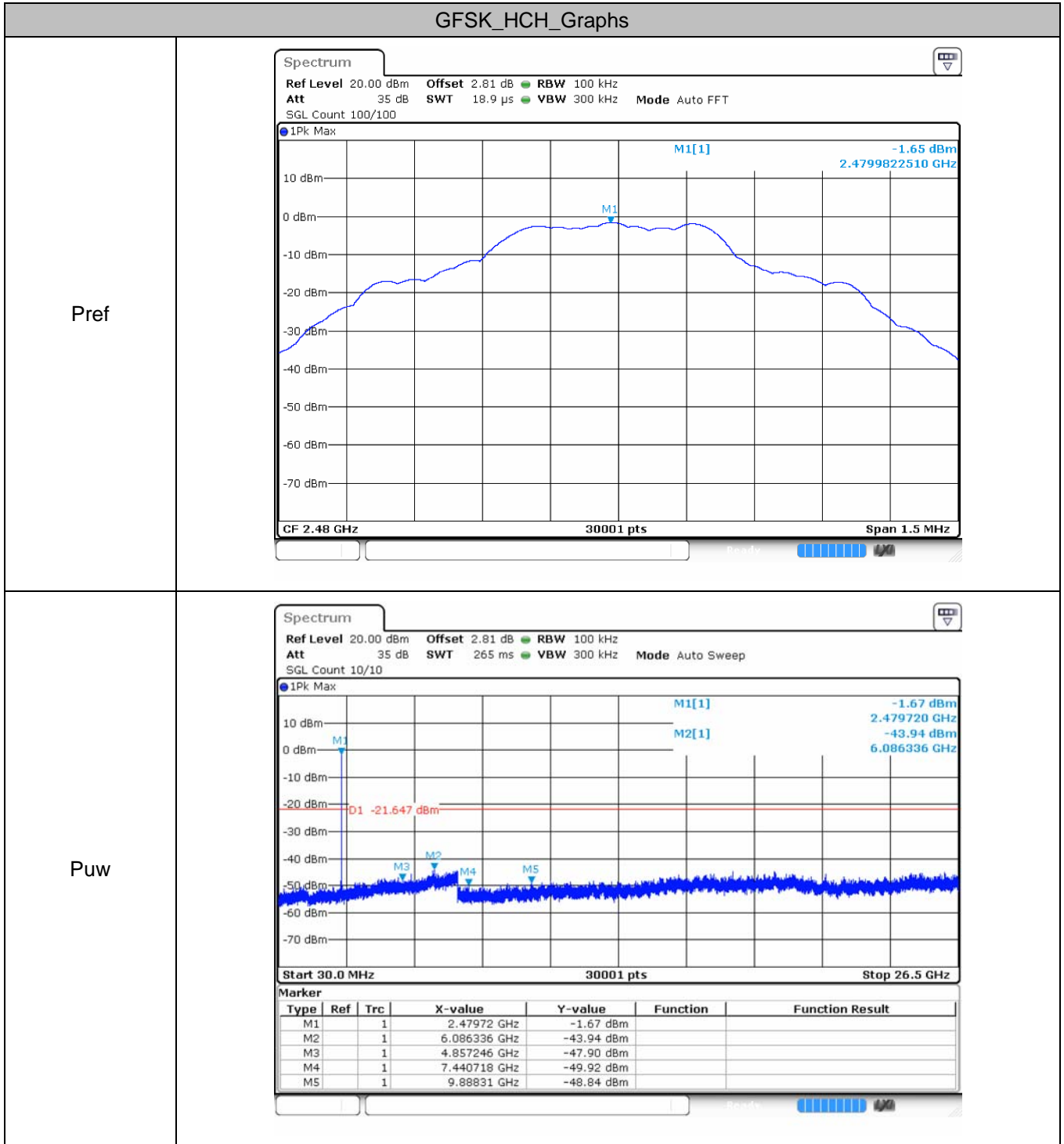
### 7.1 Test Result

| Mode | Channel | Max. Level [dBc] | Limit [dBc] | Verdict |
|------|---------|------------------|-------------|---------|
| GFSK | LCH     | -42.76           | -20         | Pass    |
|      | MCH     | -43.1            | -20         | Pass    |
|      | HCH     | -42.28           | -20         | Pass    |

## 7.2 Test Graphs





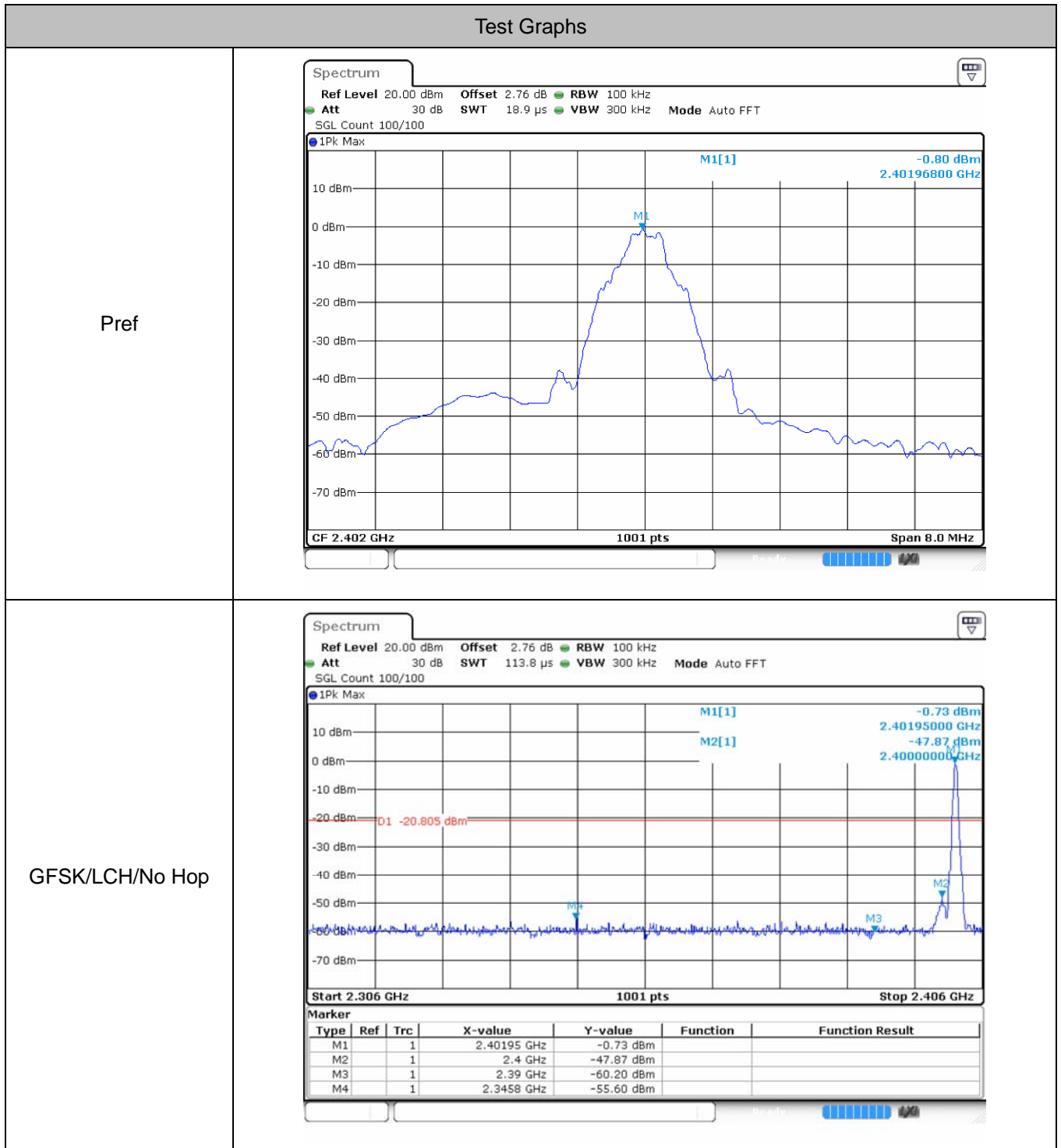


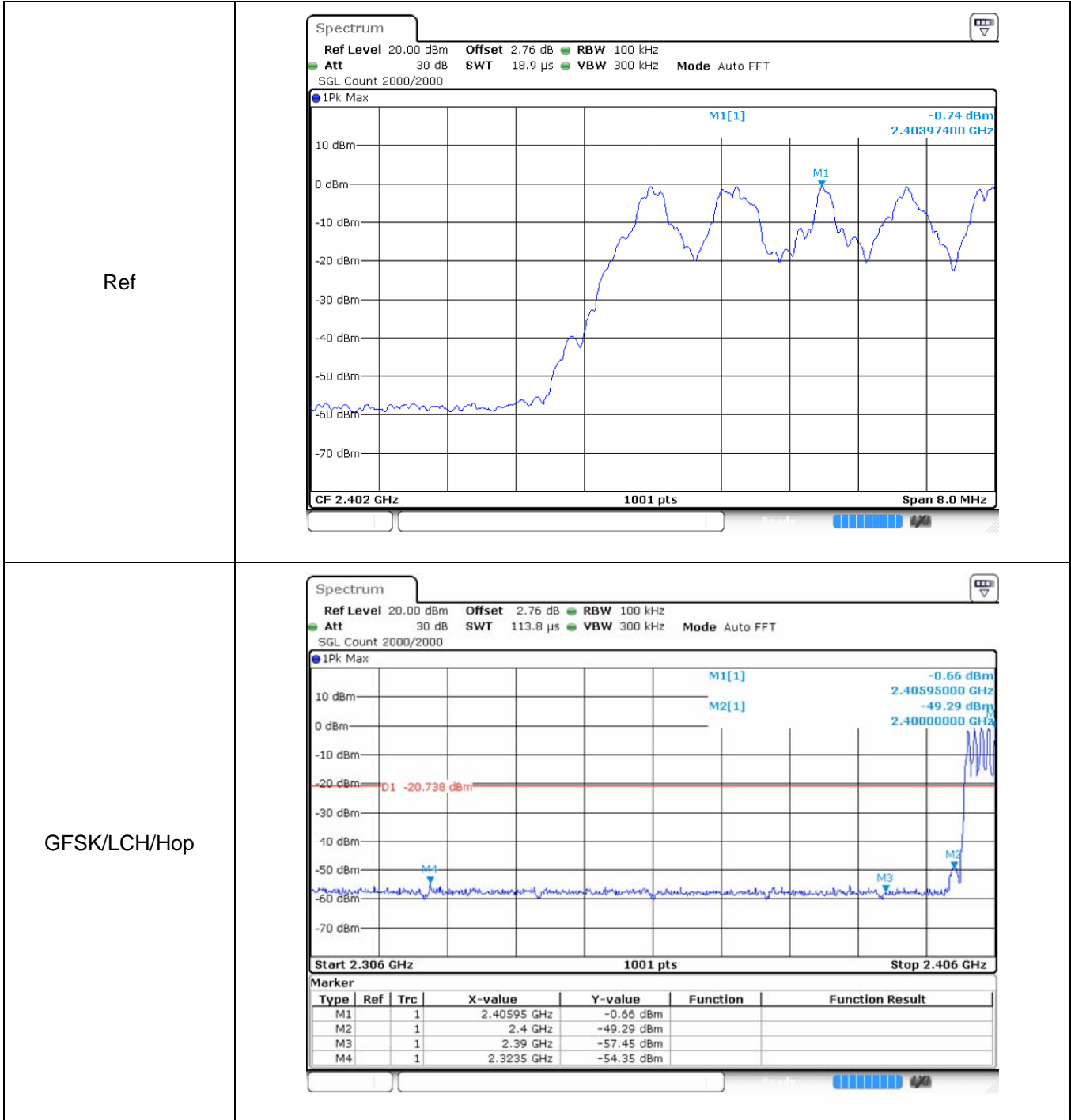
## 8 Band-edge for RF Conducted Emissions

### 8.1 Test Result

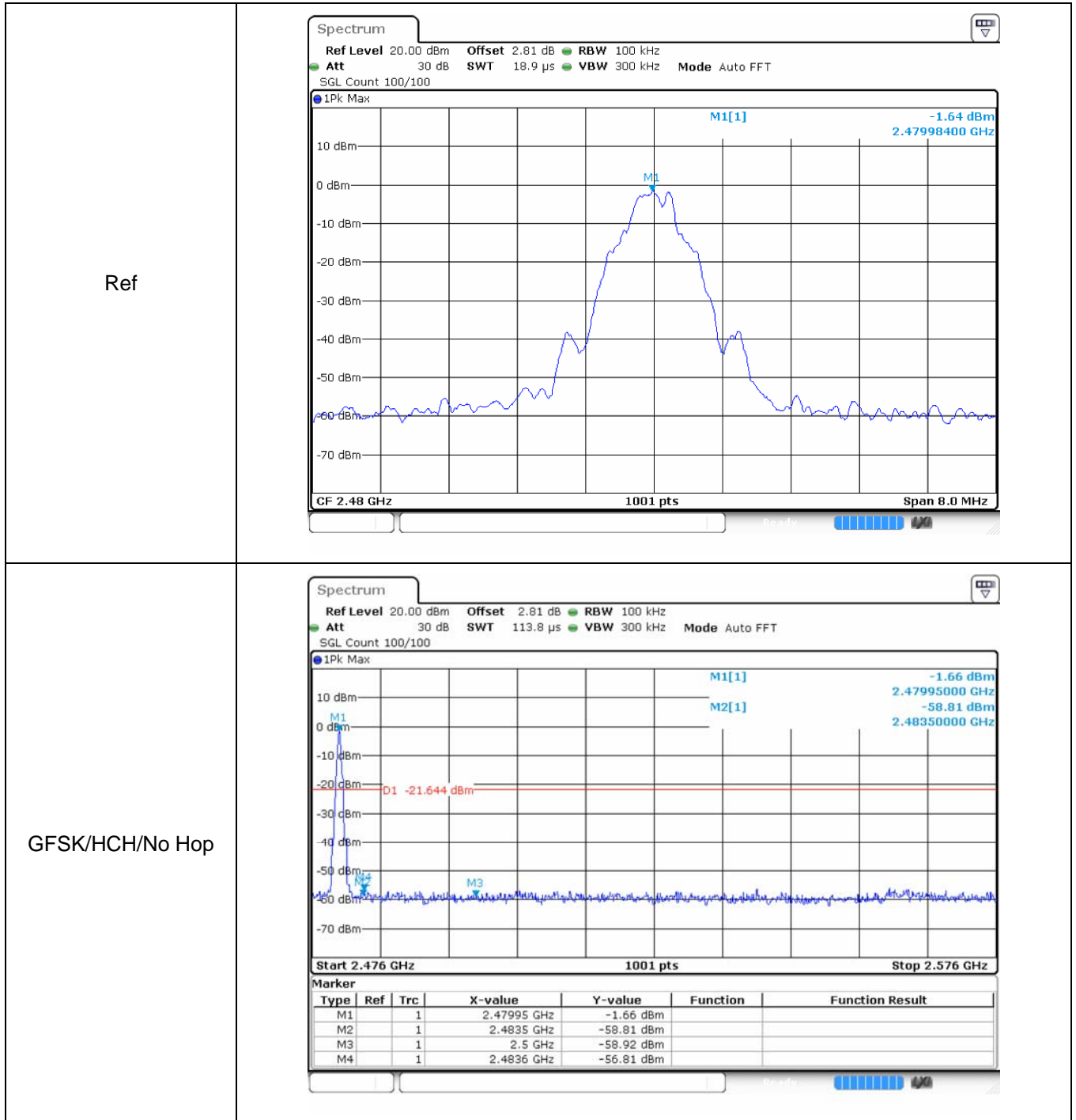
| Mode | Channel | Carrier Frequency [MHz] | Frequency Hopping | Max Spurious Level [dBc] | Limit [dBc] | Verdict |
|------|---------|-------------------------|-------------------|--------------------------|-------------|---------|
| GFSK | LCH     | 2402                    | Off               | -54.8                    | -20         | Pass    |
|      |         |                         | On                | -53.61                   | -20         | Pass    |
|      | HCH     | 2480                    | Off               | -55.16                   | -20         | Pass    |
|      |         |                         | On                | -54.17                   | -20         | Pass    |

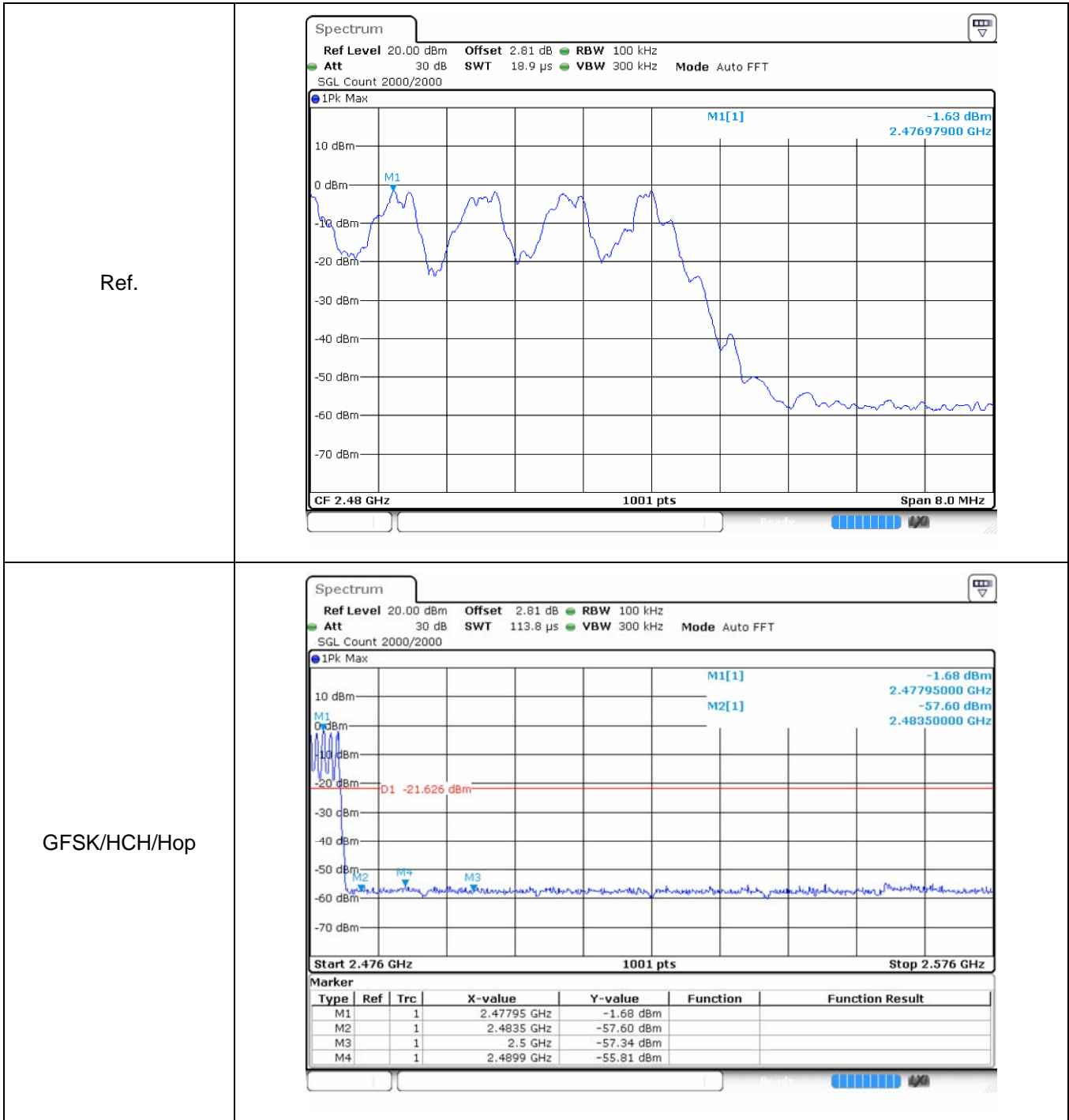
## 8.2 Test Graphs











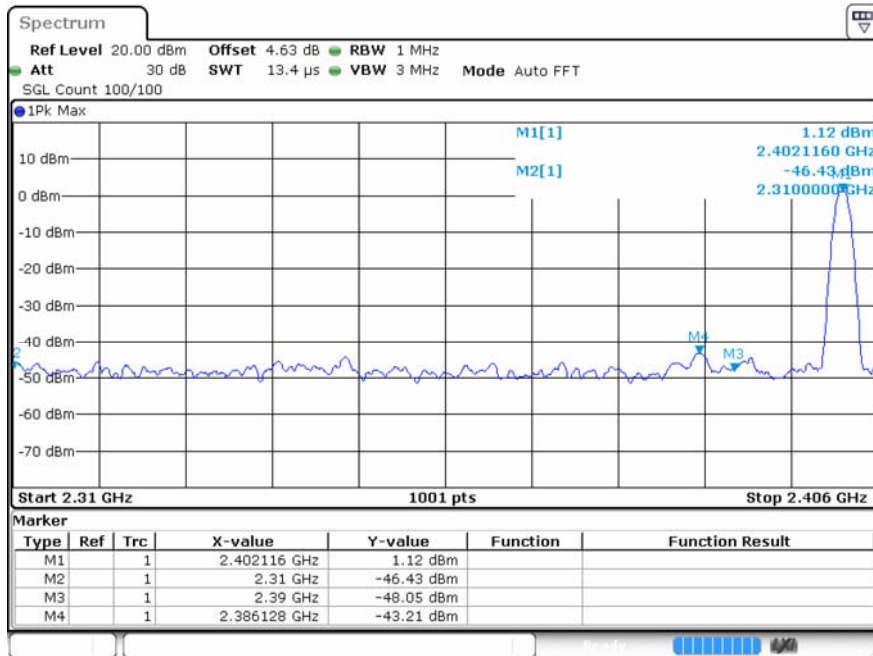
## 9 Restrict-band band-edge measurements

### 9.1 Test Result

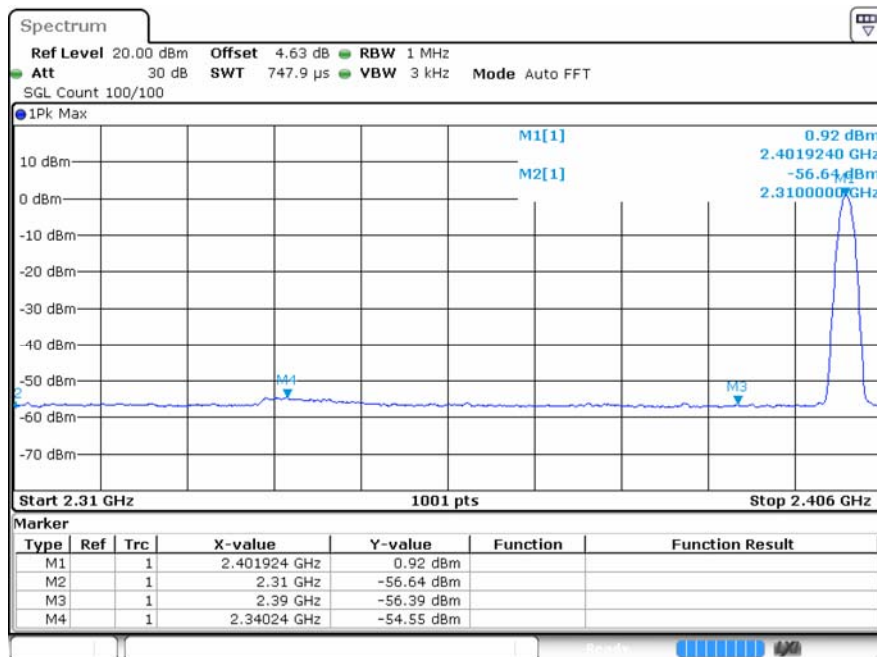
| Test Mode | Hopping | Freq.    | Power [dBm] | Gain | E [dBuV/m] | Detector | Limit [dBuV/m] | Verdict |
|-----------|---------|----------|-------------|------|------------|----------|----------------|---------|
| GFSK      | Off     | 2310.0   | -46.43      | 2    | 50.83      | PEAK     | 74             | Pass    |
|           | Off     | 2310.0   | -56.64      | 2    | 40.62      | AV       | 54             | Pass    |
|           | Off     | 2386.128 | -43.21      | 2    | 54.05      | PEAK     | 74             | Pass    |
|           | Off     | 2340.24  | -54.54      | 2    | 42.72      | AV       | 54             | Pass    |
|           | Off     | 2390.0   | -48.05      | 2    | 49.21      | PEAK     | 74             | Pass    |
|           | Off     | 2390.0   | -56.39      | 2    | 40.87      | AV       | 54             | Pass    |
|           | Off     | 2483.5   | -47.6       | 2    | 49.66      | PEAK     | 74             | Pass    |
|           | Off     | 2483.5   | -56.29      | 2    | 40.97      | AV       | 54             | Pass    |
|           | Off     | 2498.152 | -45.38      | 2    | 51.88      | PEAK     | 74             | Pass    |
|           | Off     | 2499.184 | -55.72      | 2    | 41.54      | AV       | 54             | Pass    |
|           | Off     | 2500.0   | -47.45      | 2    | 49.81      | PEAK     | 74             | Pass    |
|           | Off     | 2500.0   | -56.31      | 2    | 40.95      | AV       | 54             | Pass    |

## 9.2 Test Graphs

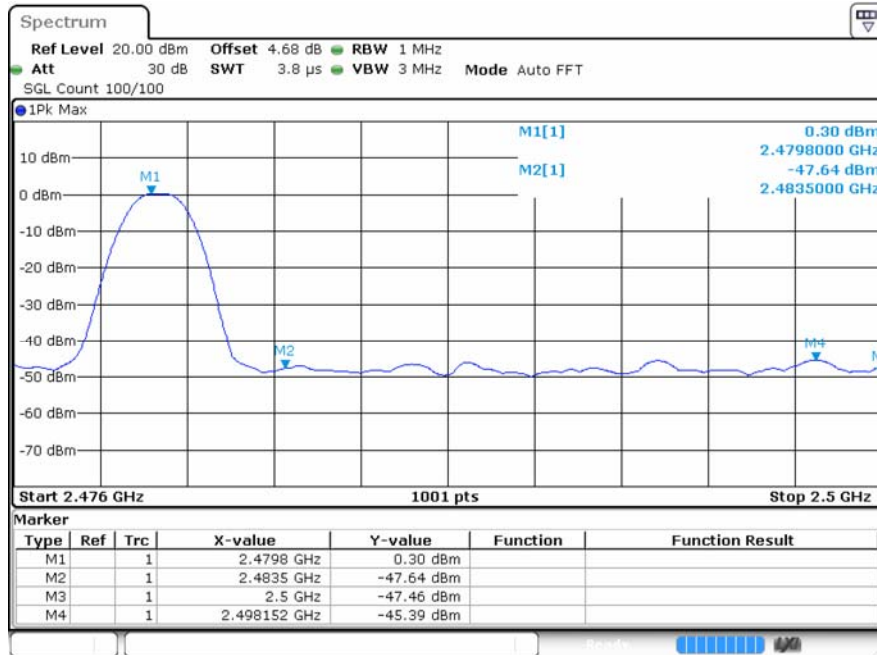
Restrict-band band-edge measurements\_Hopping Off\_ GFSK\_PEAK (Low Channel)



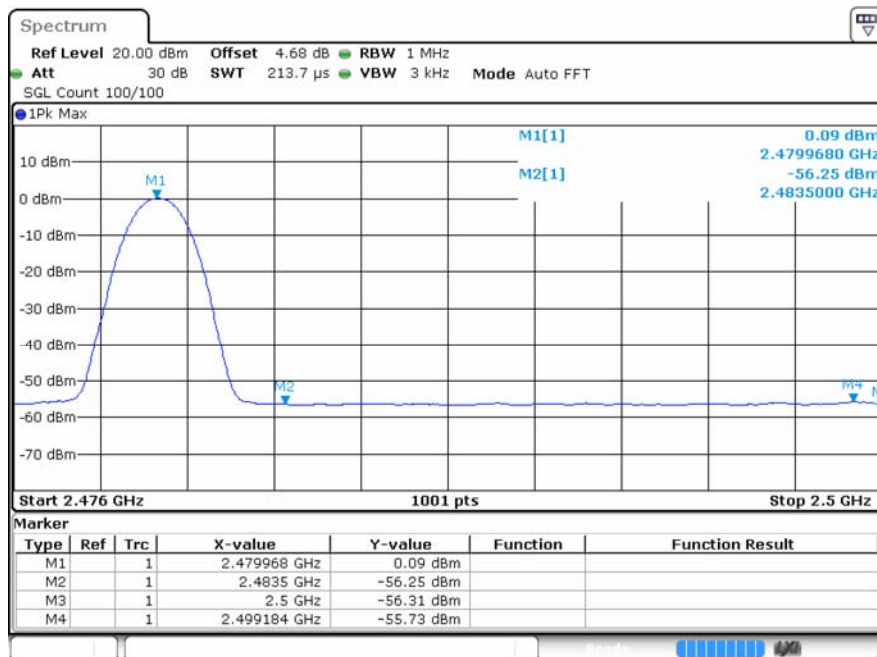
Restrict-band band-edge measurements\_Hopping Off\_ GFSK\_Average (Low Channel)



Restrict-band band-edge measurements\_Hopping Off\_ GFSK\_PEAK (High Channel)



Restrict-band band-edge measurements\_Hopping Off\_ GFSK\_Average (High Channel)



---The End---