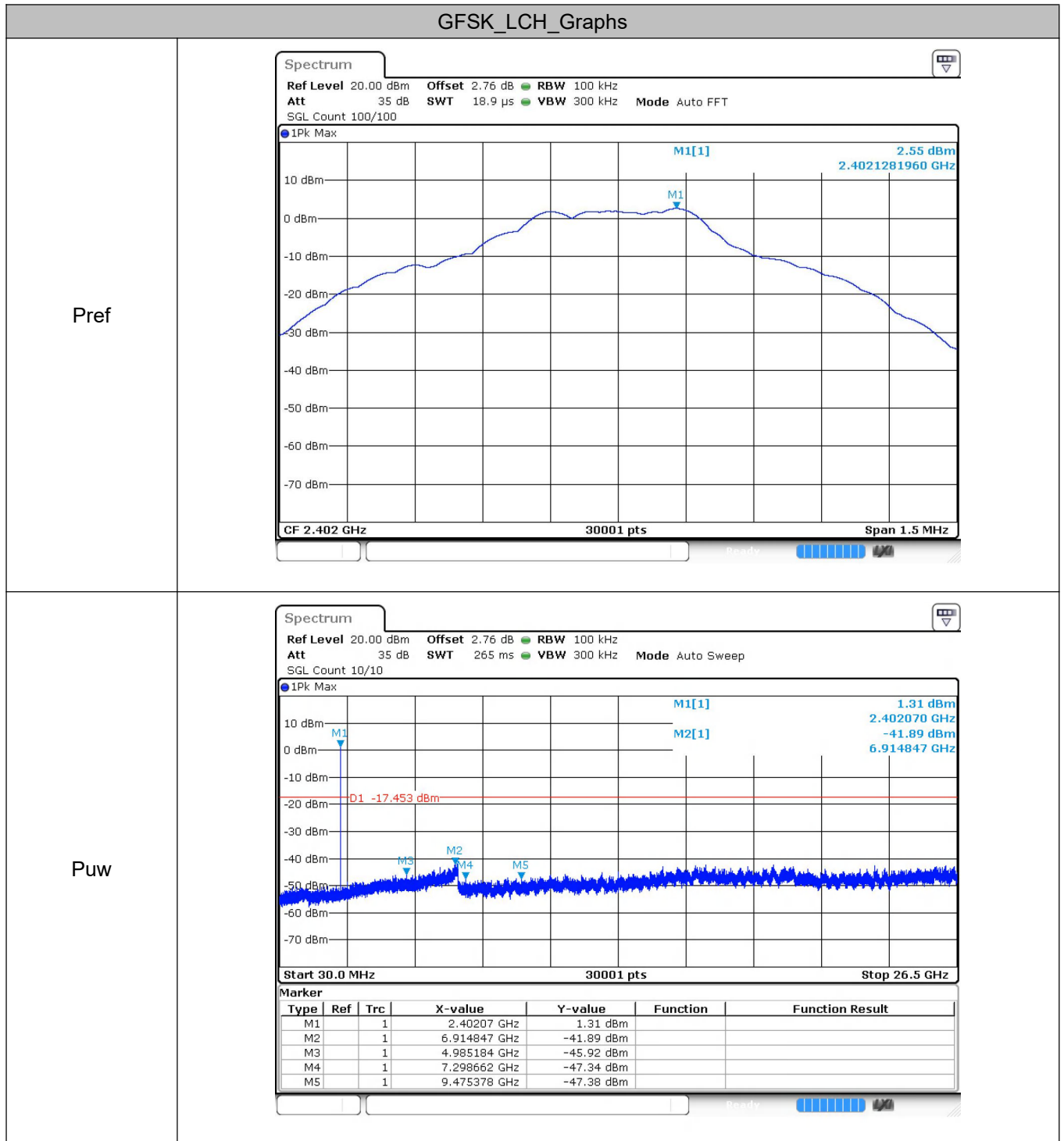


## 7 RF Conducted Spurious Emissions

### 7.1 Test Result

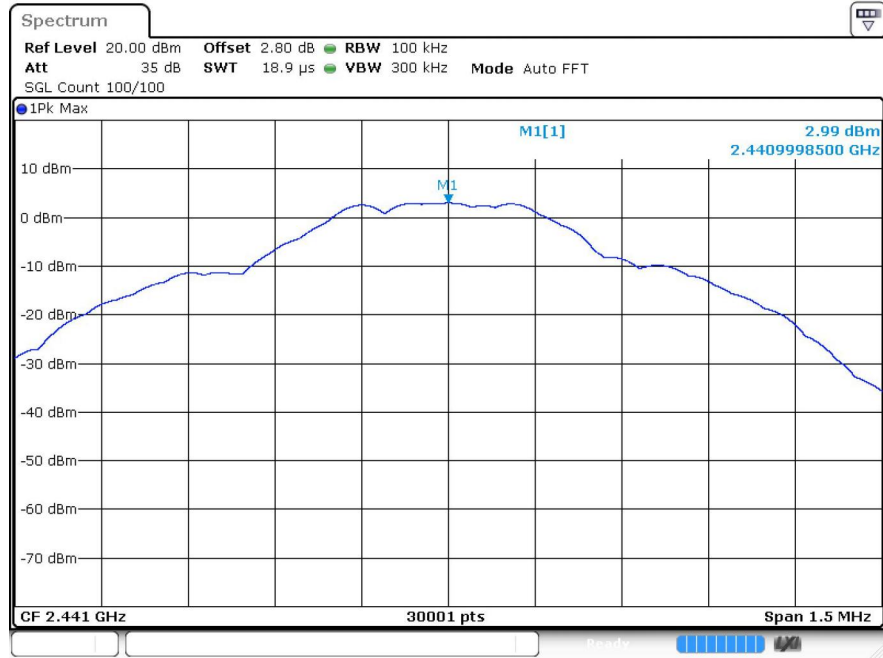
| Mode          | Channel | Max. Level [dBc] | Limit [dBc] | Verdict |
|---------------|---------|------------------|-------------|---------|
| GFSK          | LCH     | -44.44           | -20         | Pass    |
|               | MCH     | -43.58           | -20         | Pass    |
|               | HCH     | -43.74           | -20         | Pass    |
| $\pi/4$ DQPSK | LCH     | -43.32           | -20         | Pass    |
|               | MCH     | -42.73           | -20         | Pass    |
|               | HCH     | -42.09           | -20         | Pass    |
| 8DPSK         | LCH     | -40.99           | -20         | Pass    |
|               | MCH     | -41.83           | -20         | Pass    |
|               | HCH     | -42.52           | -20         | Pass    |

## 7.2 Test Graphs

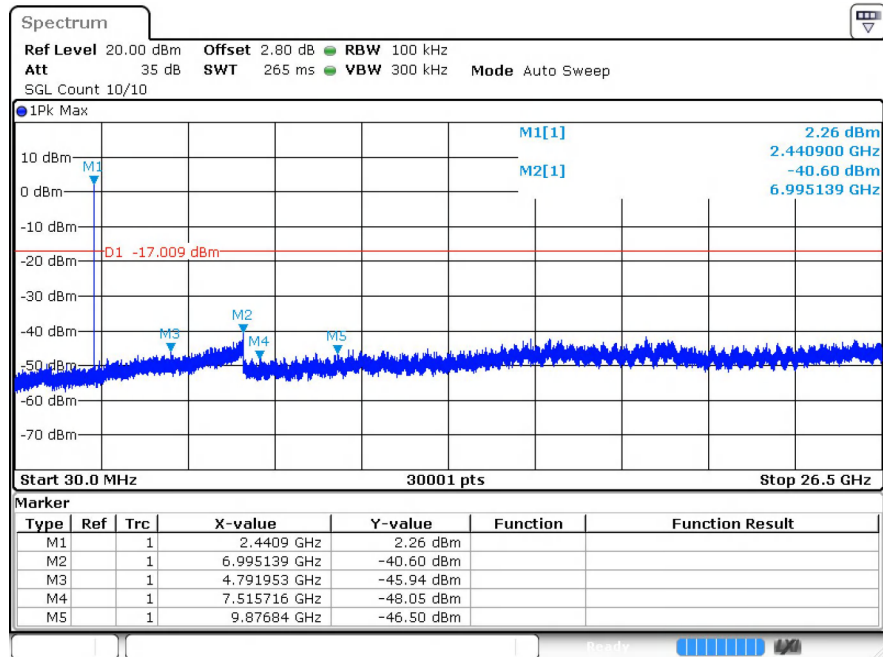


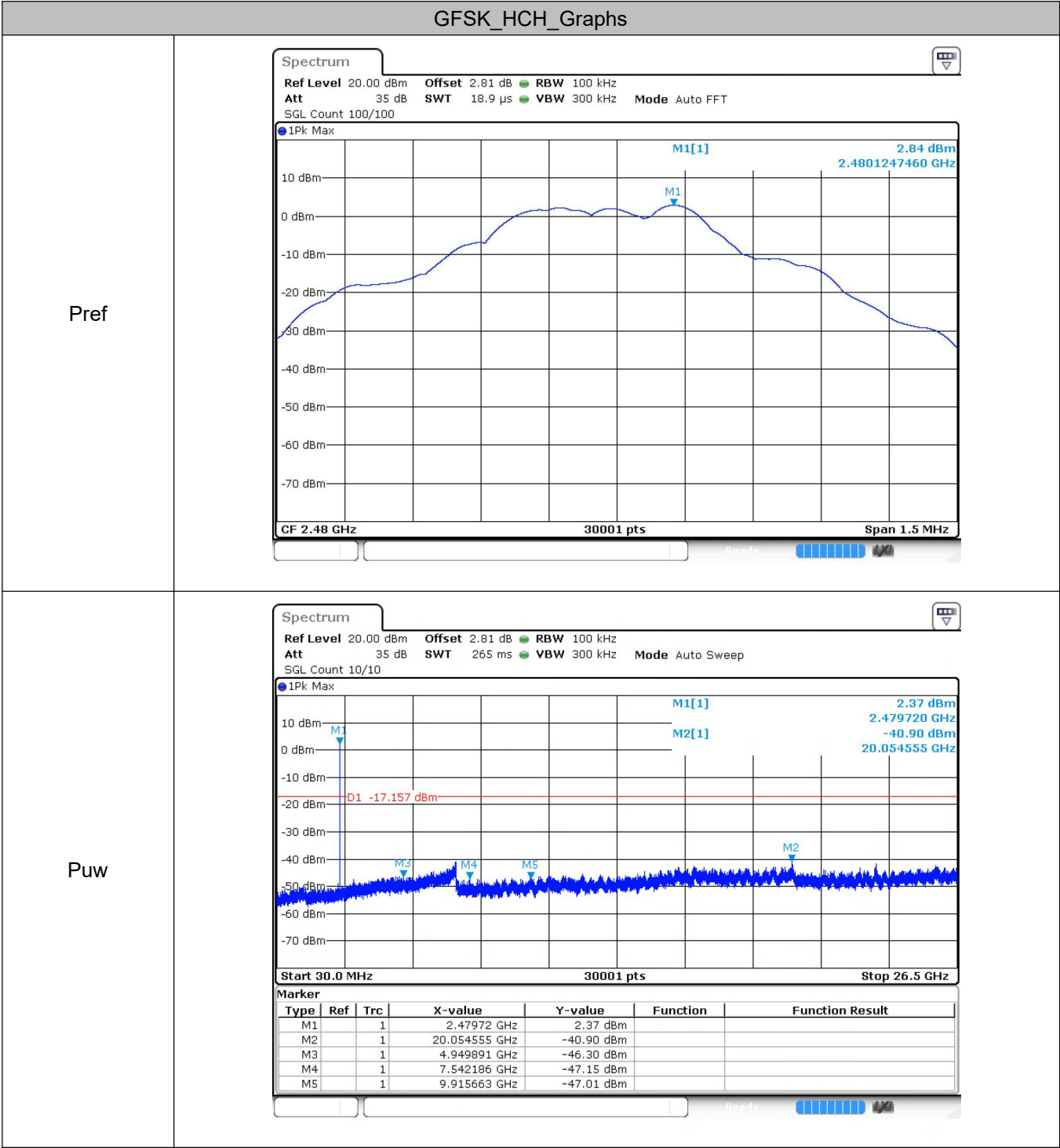
## GFSK\_MCH\_Graphs

Pref



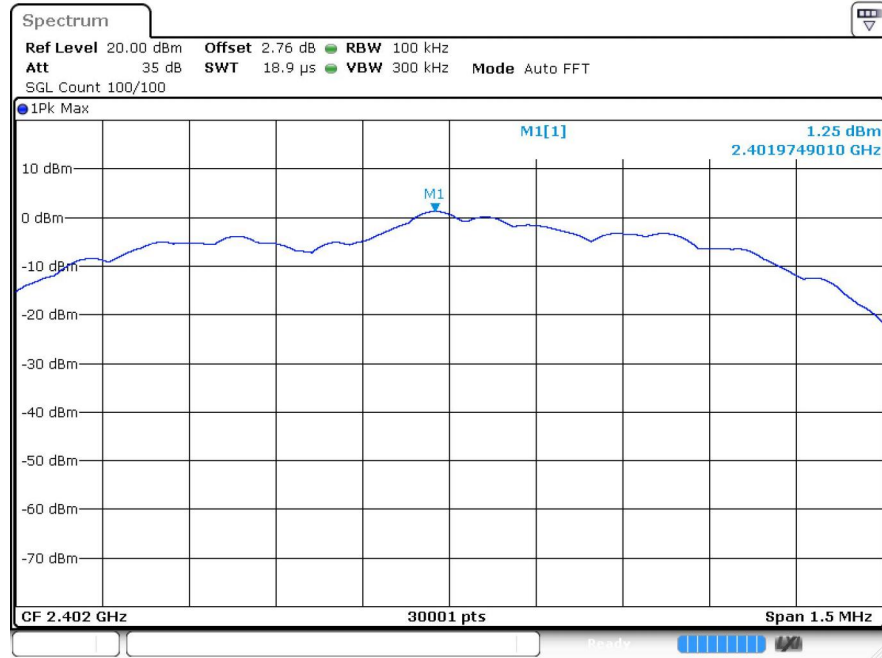
Puw



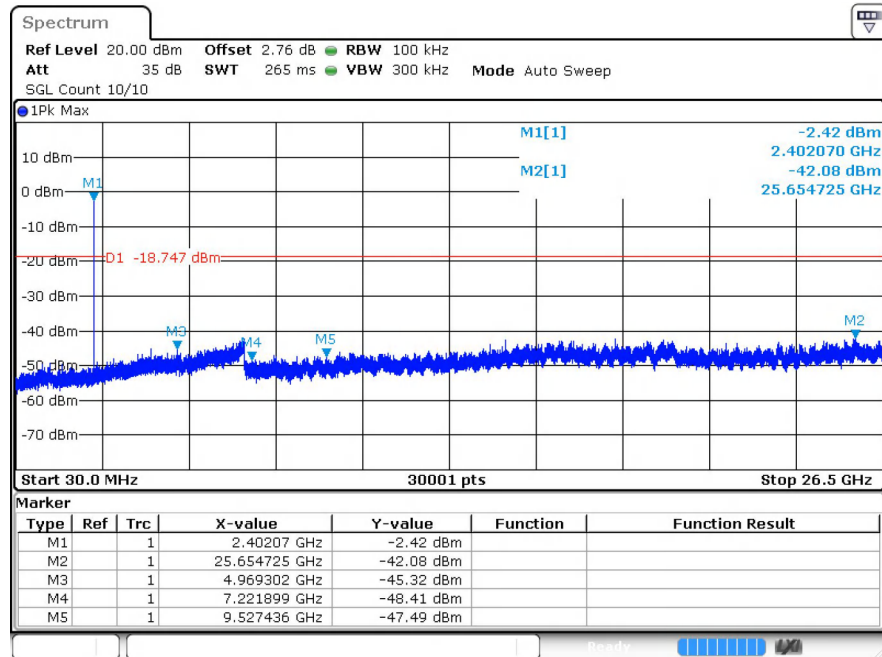


### $\pi/4$ DQPSK\_LCH\_Graphs

Pref

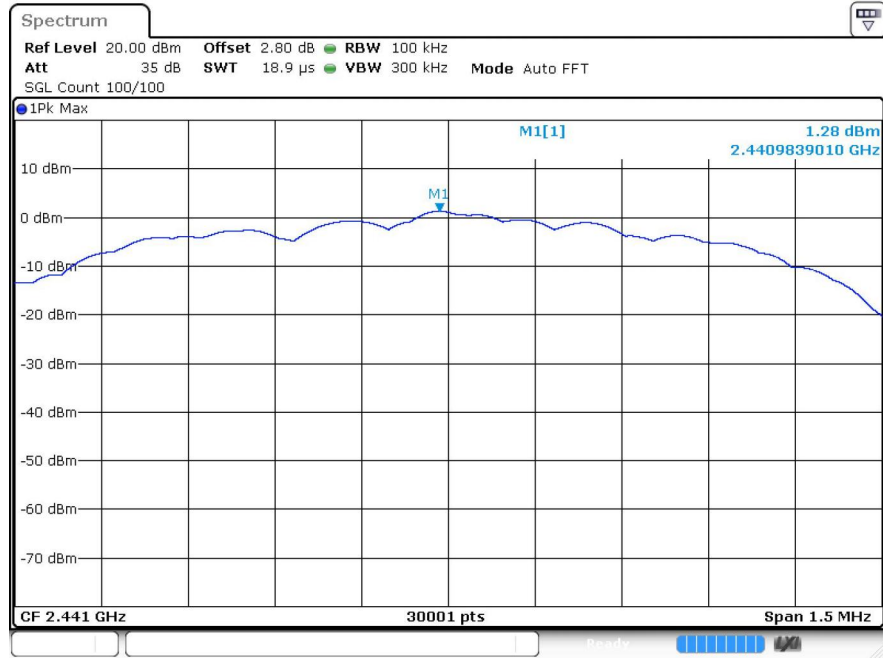


Puw

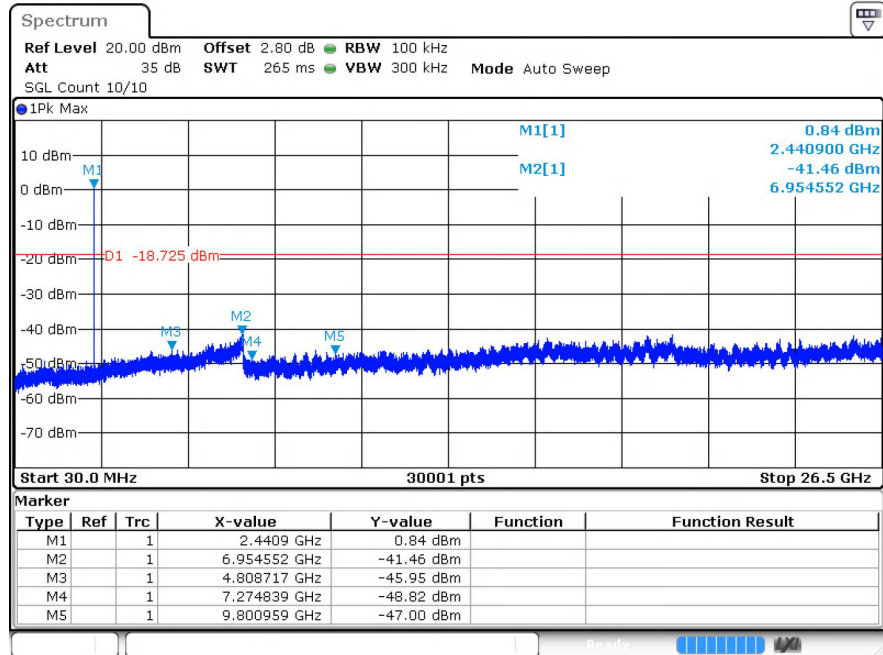


### $\pi/4$ DQPSK\_MCH\_Graphs

Pref

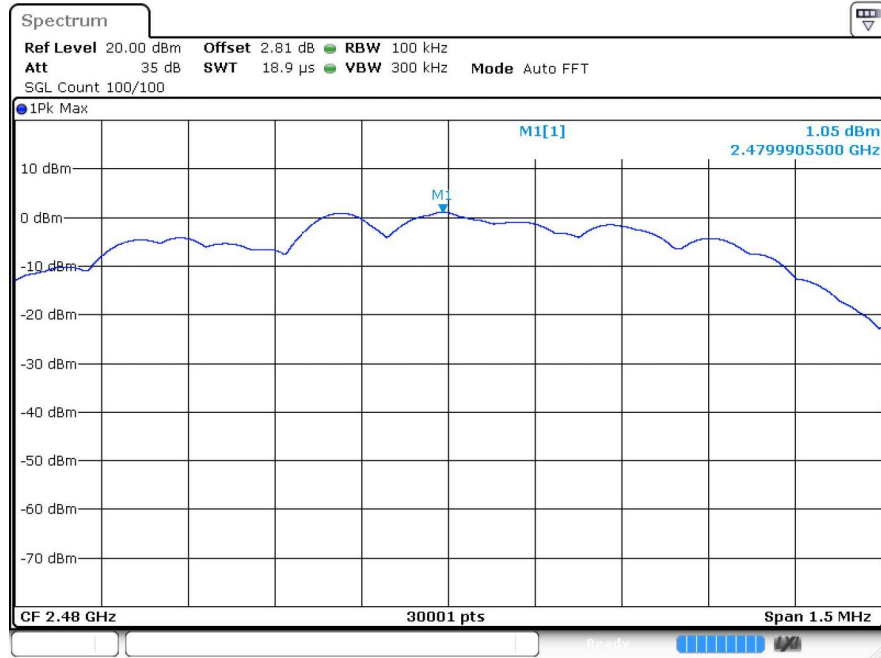


Puw

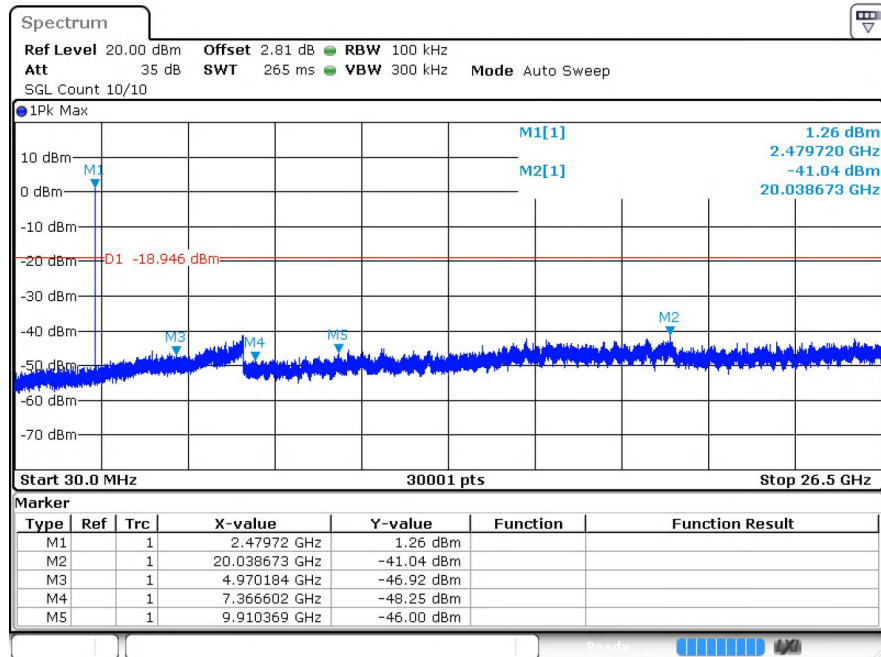


### $\pi/4$ DQPSK\_HCH\_Graphs

Pref

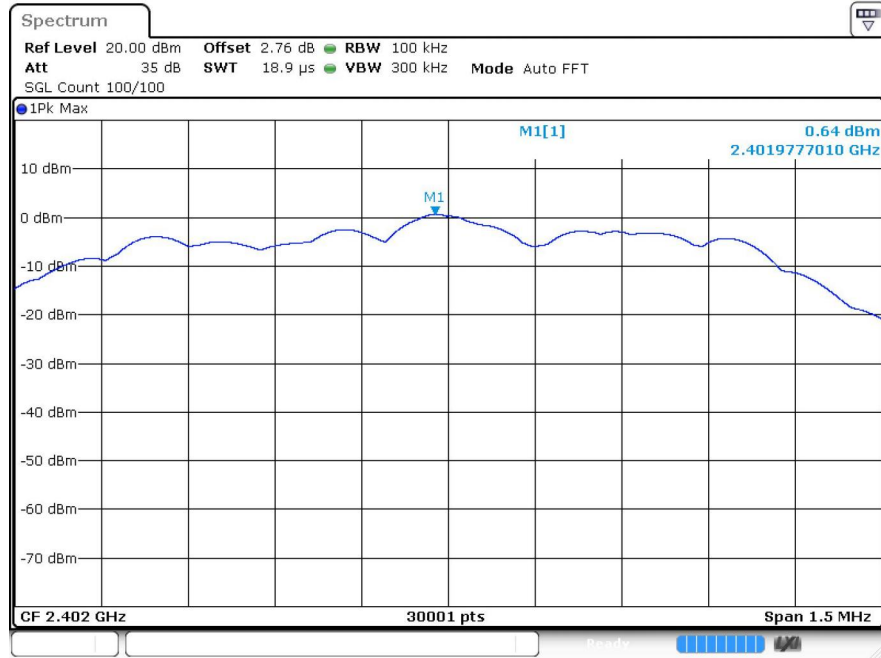


Puw

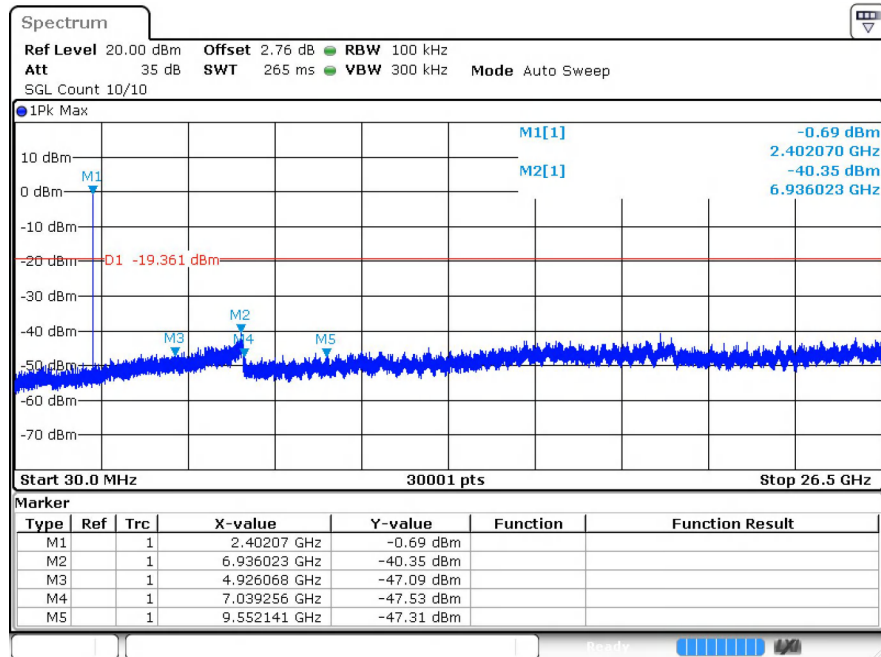


## 8DPSK\_LCH\_Graphs

Pref



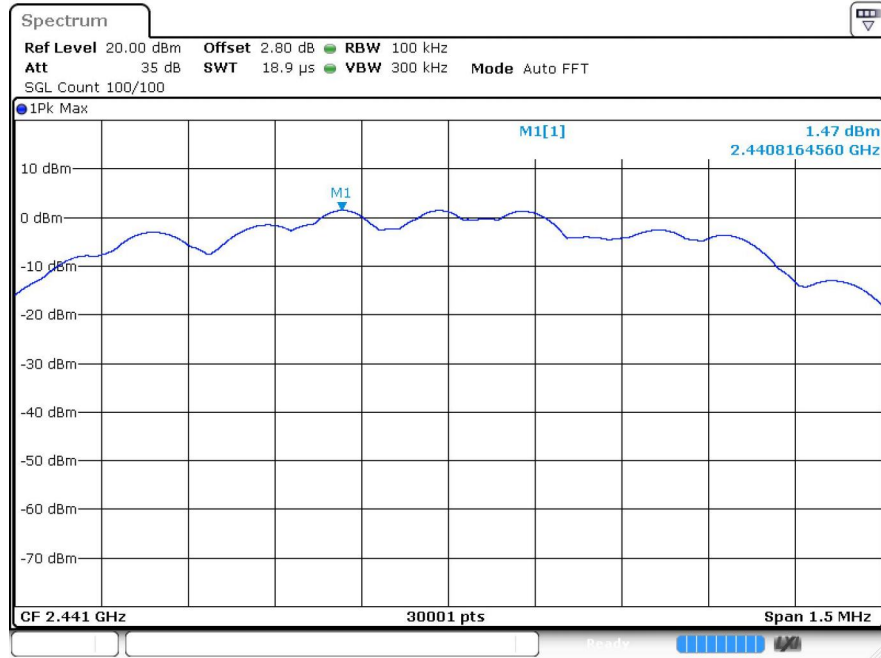
Puw



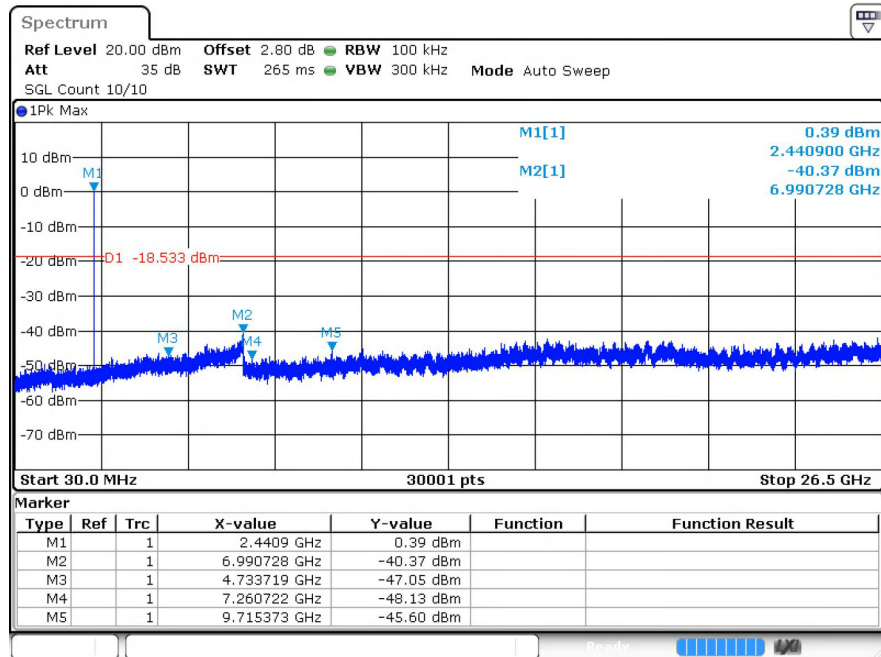


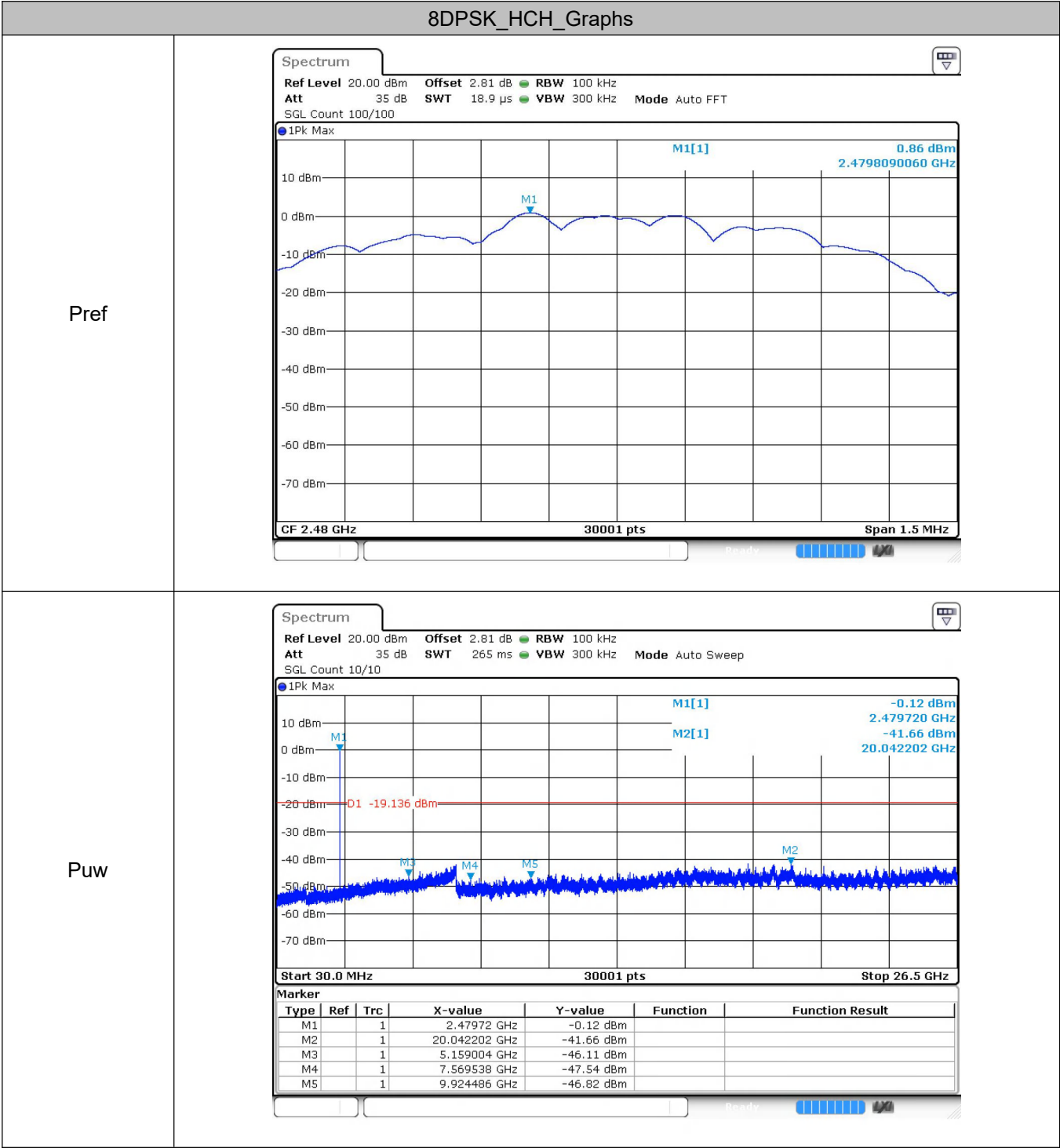
## 8DPSK\_MCH\_Graphs

Pref



Puw



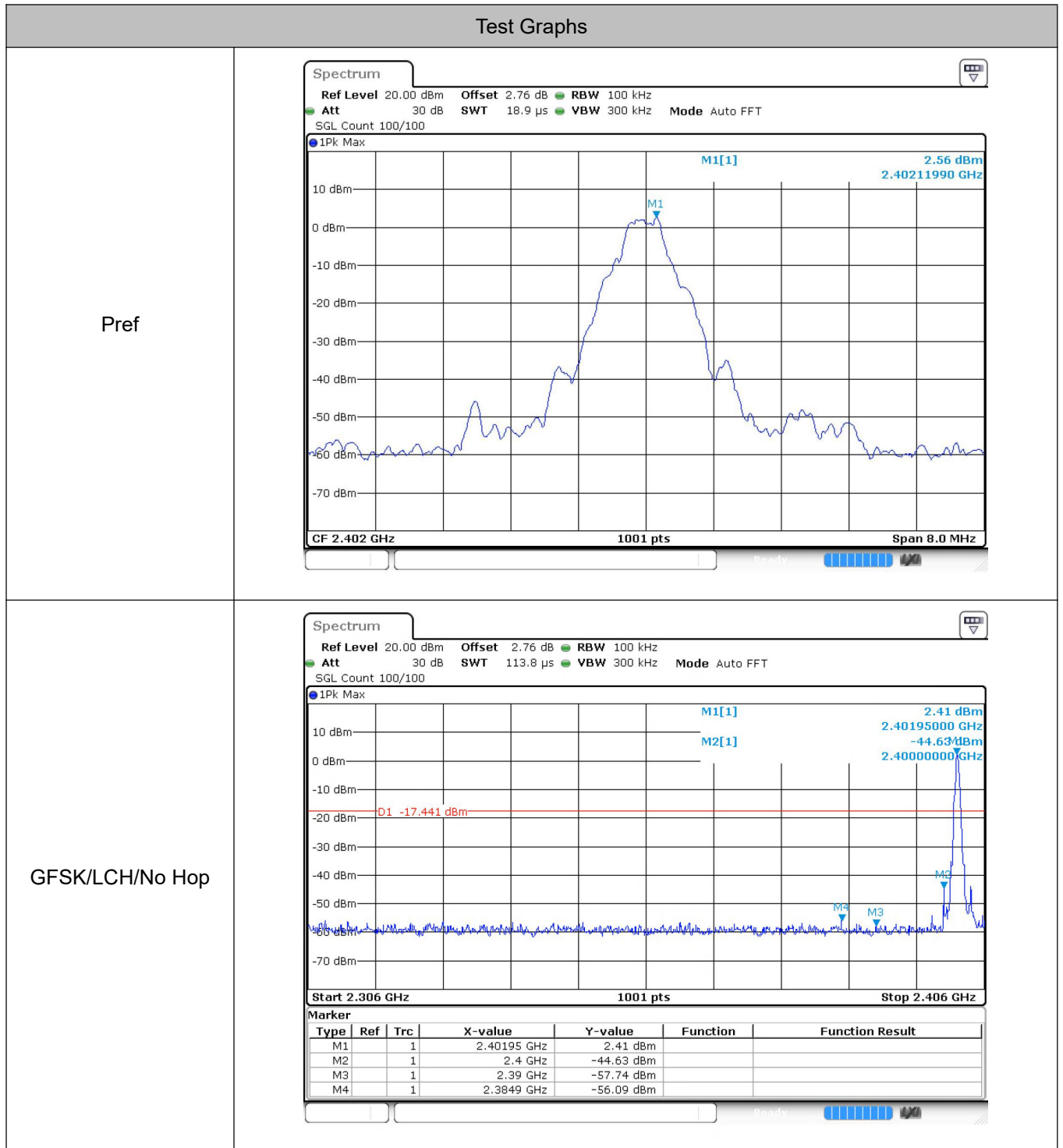


## 8 Band-edge for RF Conducted Emissions

### 8.1 Test Result

| Mode          | Channel | Carrier Frequency [MHz] | Frequency Hopping | Max Spurious Level [dBc] | Limit [dBc] | Verdict |
|---------------|---------|-------------------------|-------------------|--------------------------|-------------|---------|
| GFSK          | LCH     | 2402                    | Off               | -58.65                   | -20         | Pass    |
|               |         |                         | On                | -56.54                   | -20         | Pass    |
|               | HCH     | 2480                    | Off               | -55.84                   | -20         | Pass    |
|               |         |                         | On                | -51.91                   | -20         | Pass    |
| $\pi/4$ DQPSK | LCH     | 2402                    | Off               | -56.41                   | -20         | Pass    |
|               |         |                         | On                | -56.01                   | -20         | Pass    |
|               | HCH     | 2480                    | Off               | -48.77                   | -20         | Pass    |
|               |         |                         | On                | -54.9                    | -20         | Pass    |
| 8DPSK         | LCH     | 2402                    | Off               | -56.18                   | -20         | Pass    |
|               |         |                         | On                | -55.33                   | -20         | Pass    |
|               | HCH     | 2480                    | Off               | -53                      | -20         | Pass    |
|               |         |                         | On                | -54.35                   | -20         | Pass    |

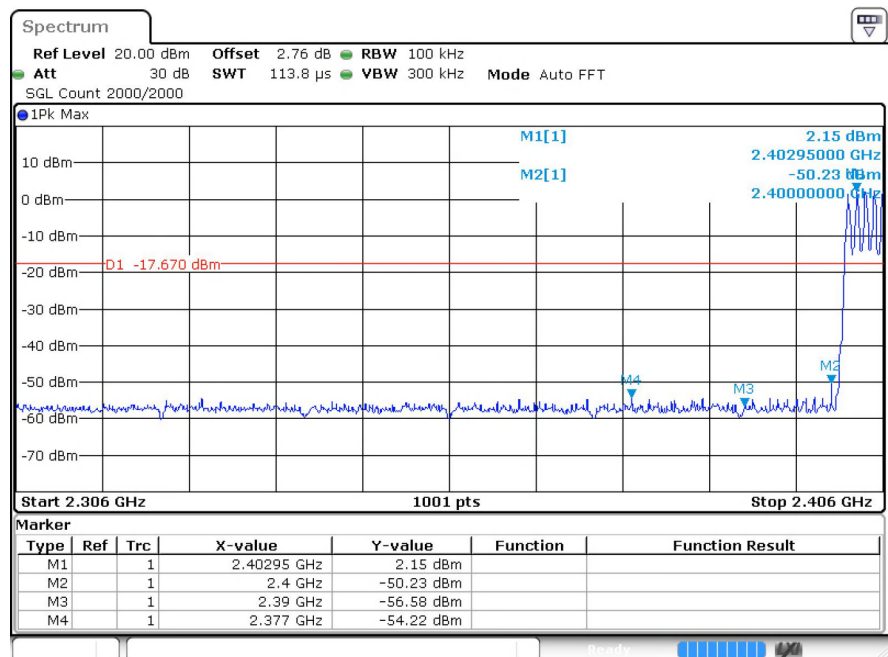
## 8.2 Test Graphs



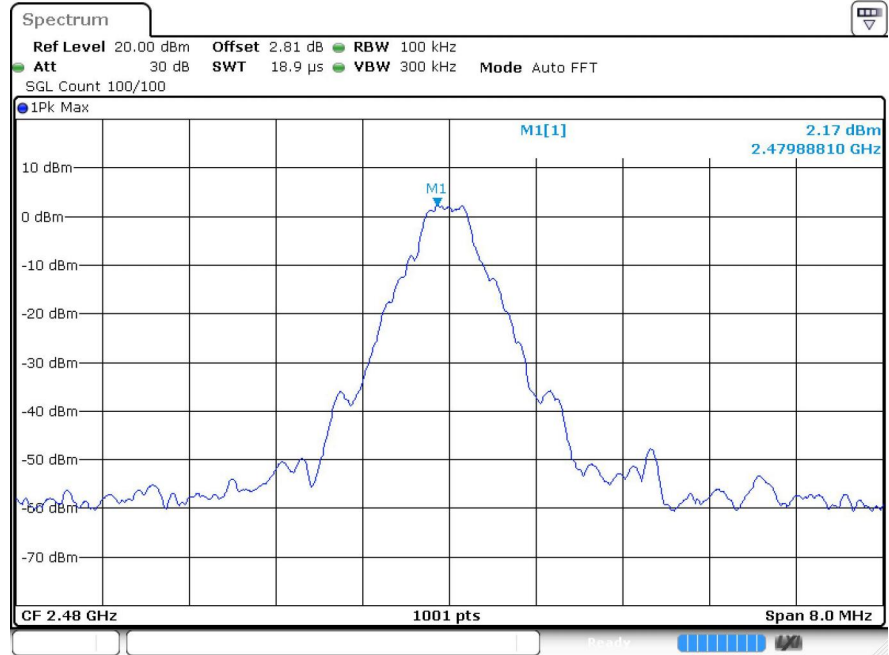
Ref



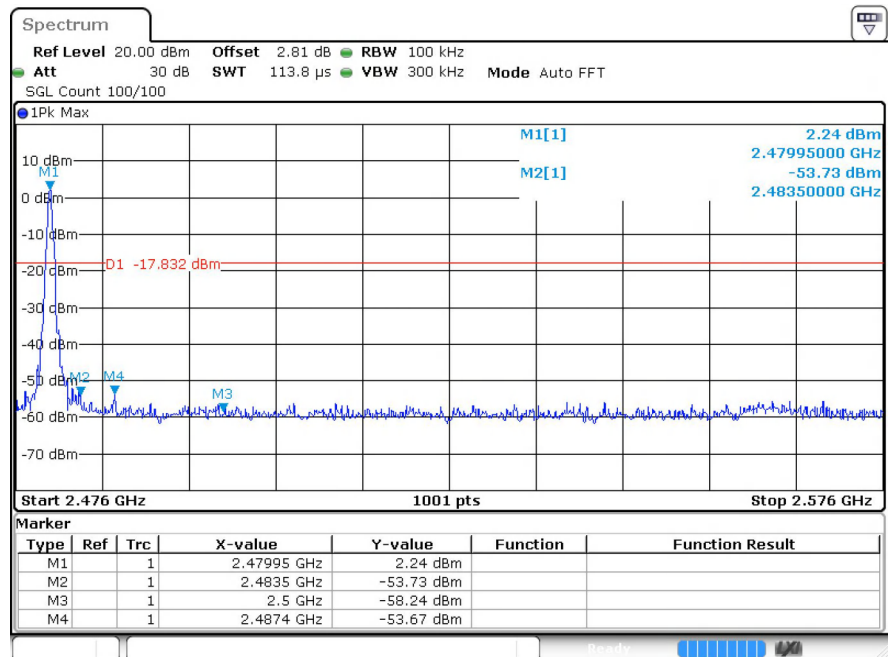
GFSK/LCH/Hop



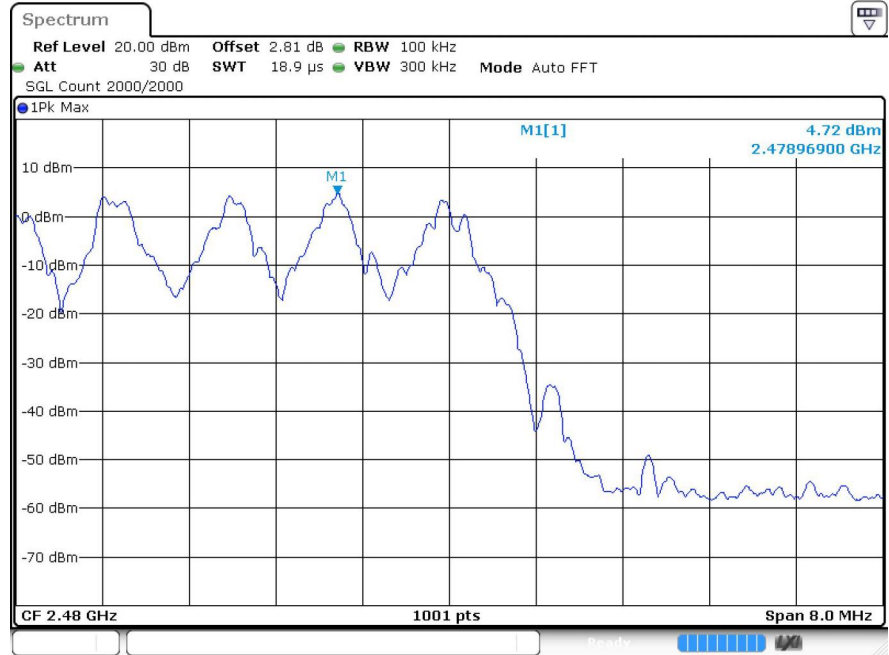
Ref



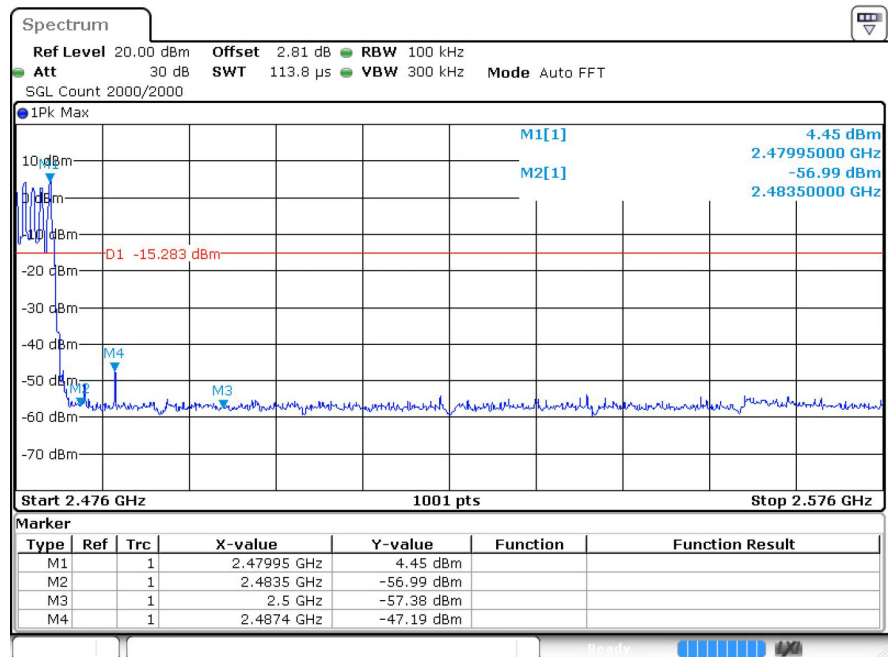
GFSK/HCH/No Hop



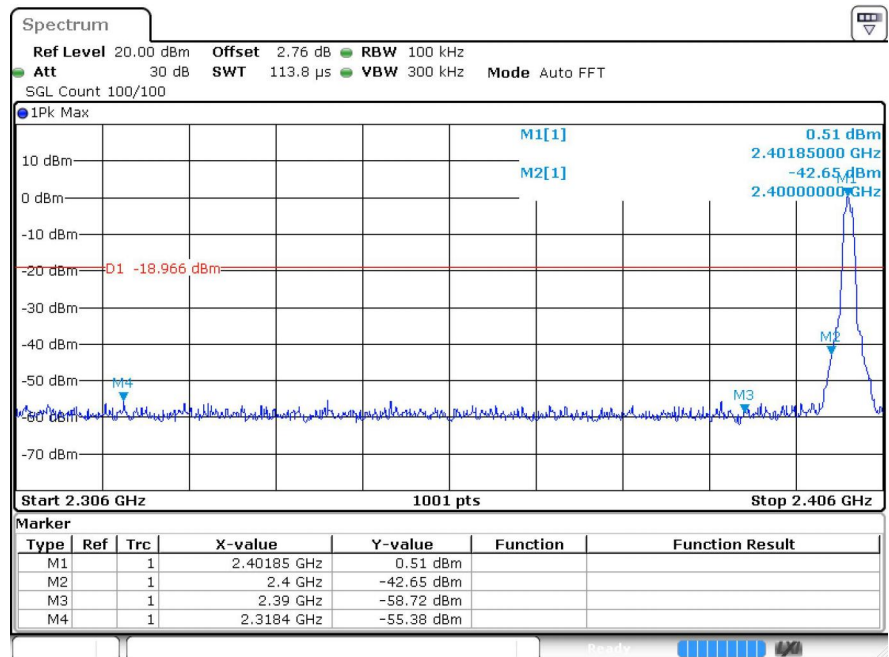
Ref.



GFSK/HCH/Hop

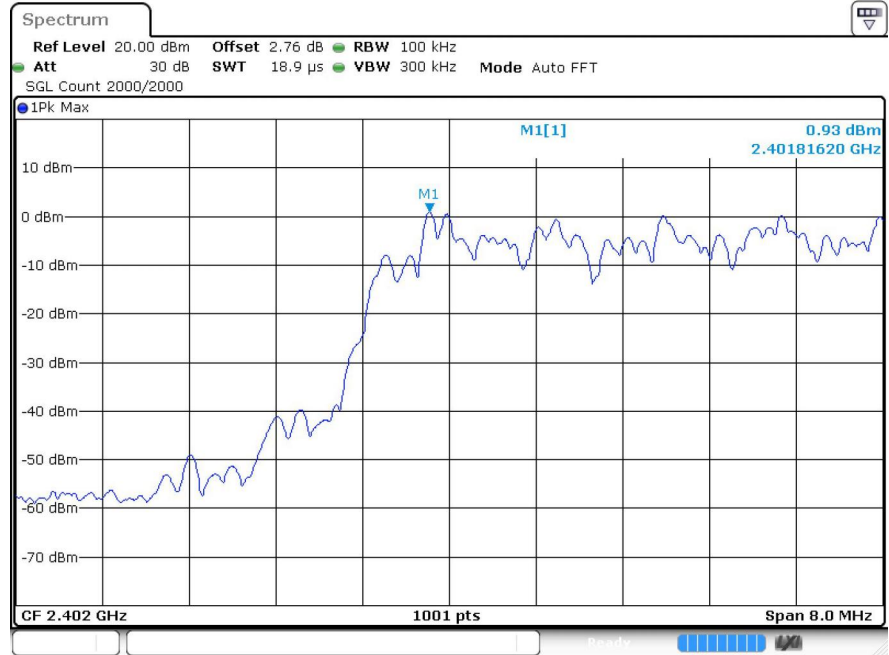
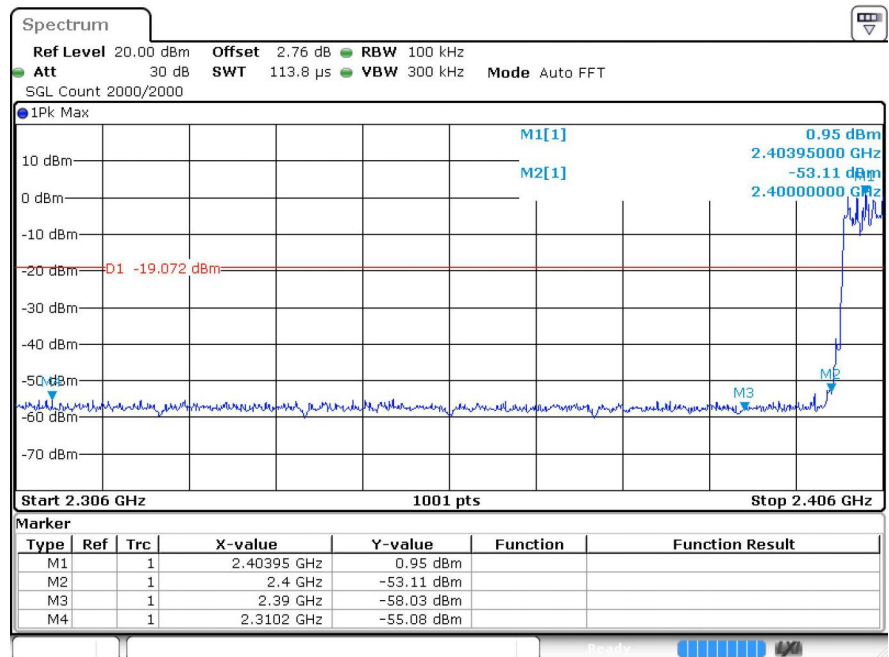


Ref

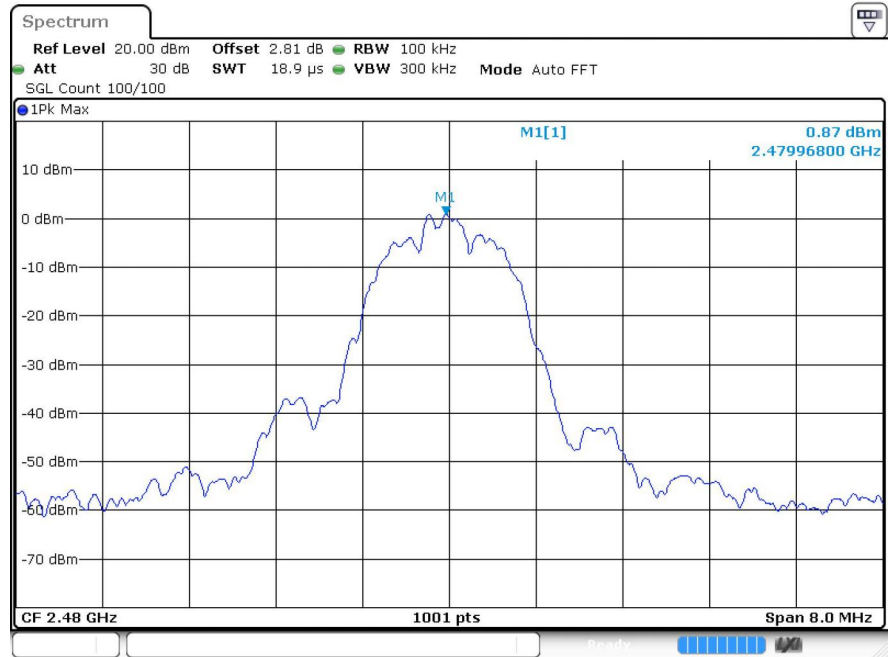
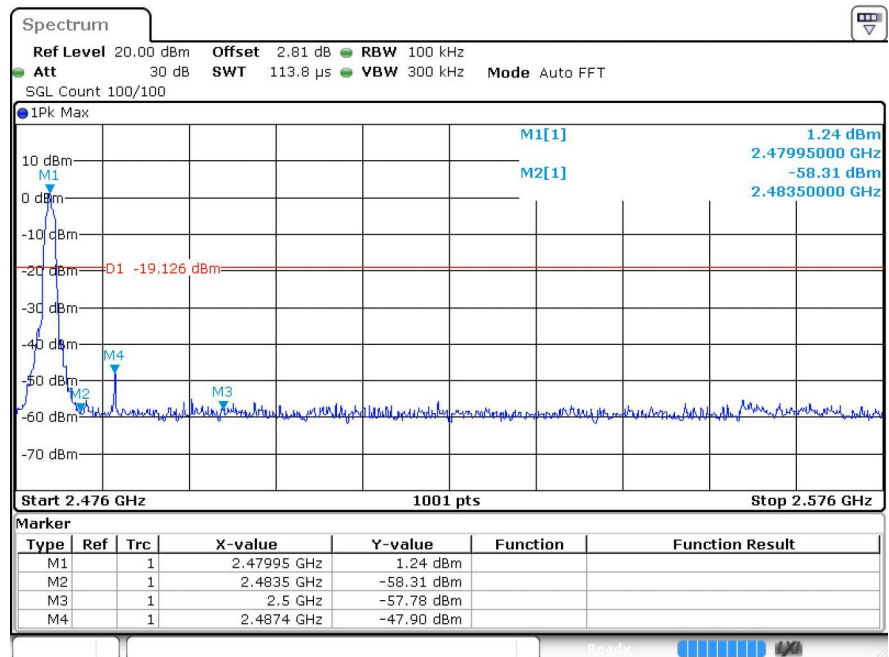

 $\pi/4$ DQPSK/LCH/No Hop




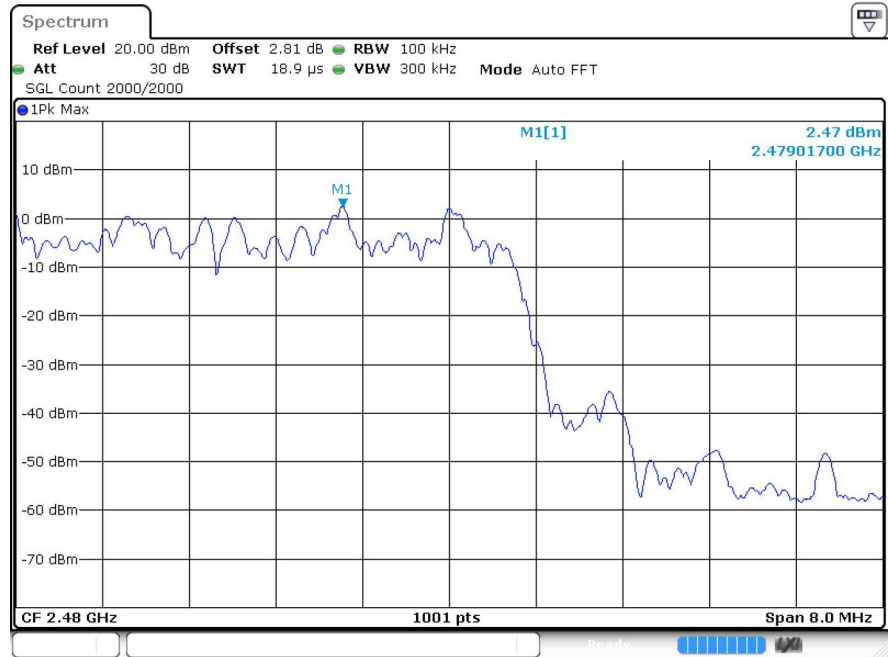
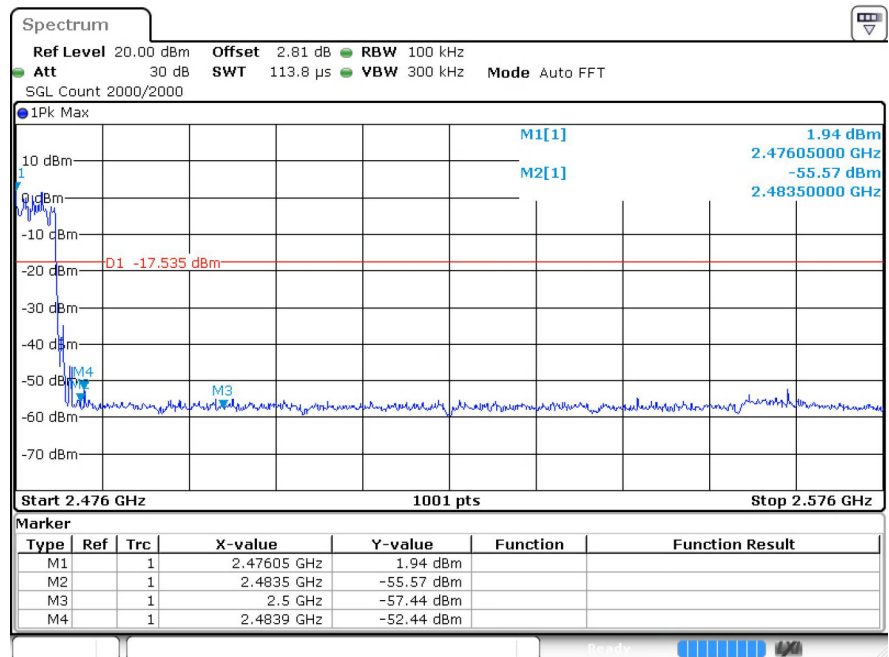
Ref


 $\pi/4$ DQPSK/LCH/Hop


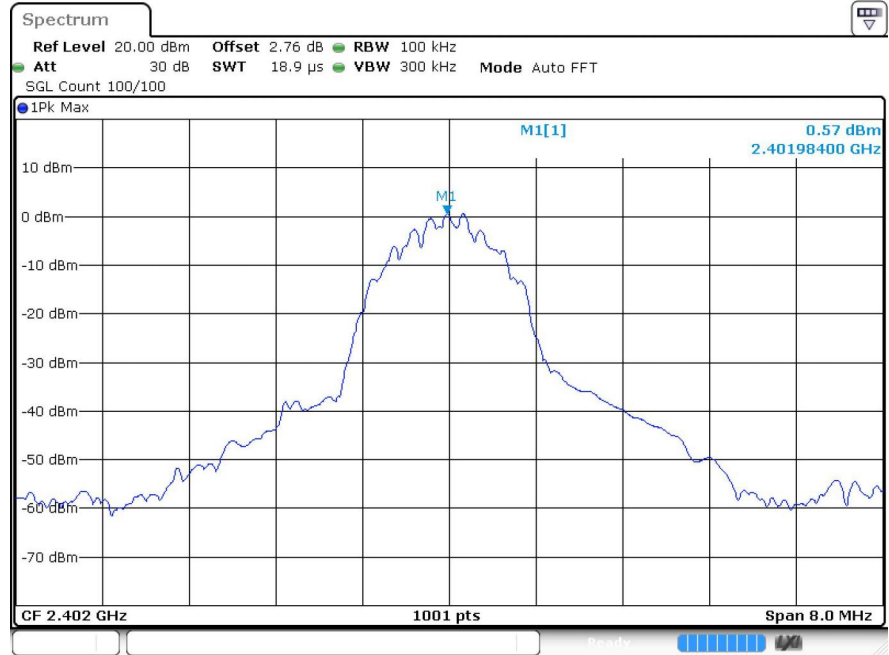
Ref


 $\pi/4$ DQPSK/HCH/No Hop


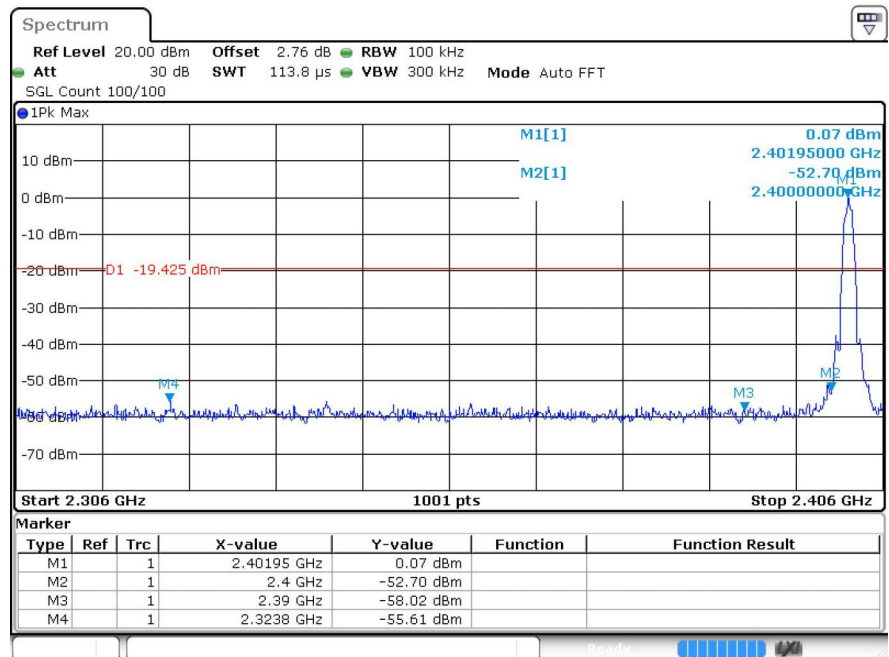
Ref


 $\pi/4$ DQPSK/HCH/Hop


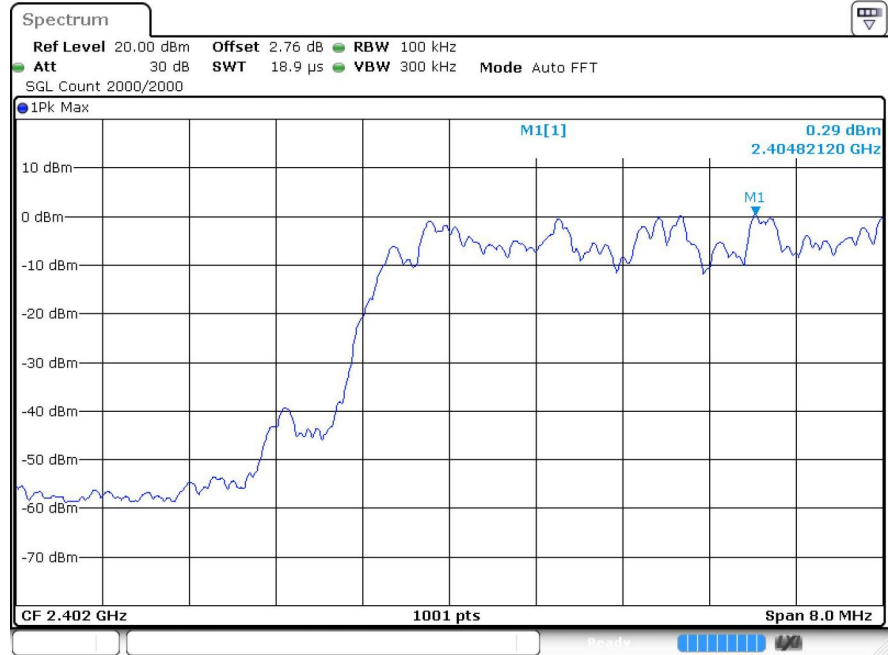
Ref



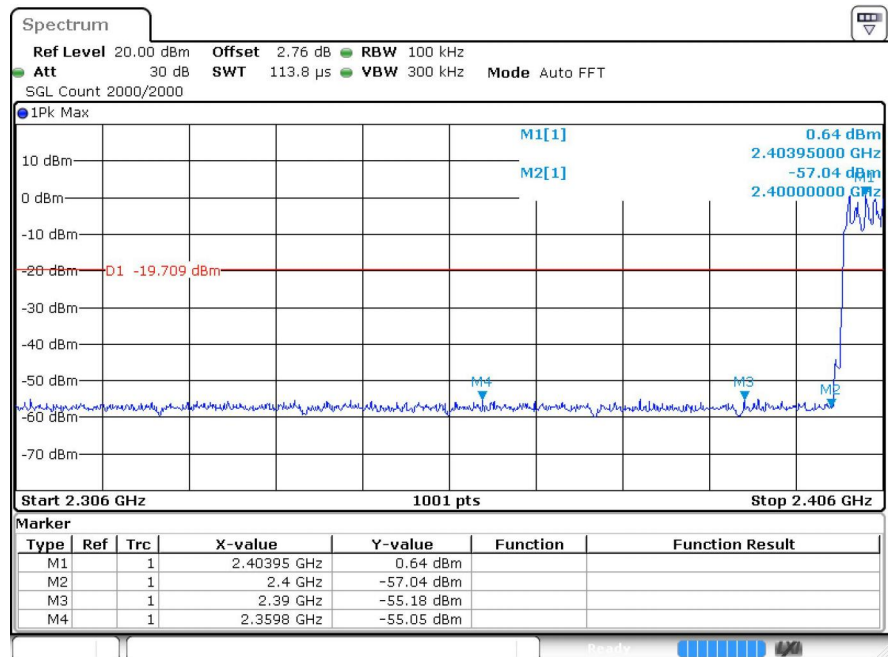
8DPSK/LCH/No Hop



Ref



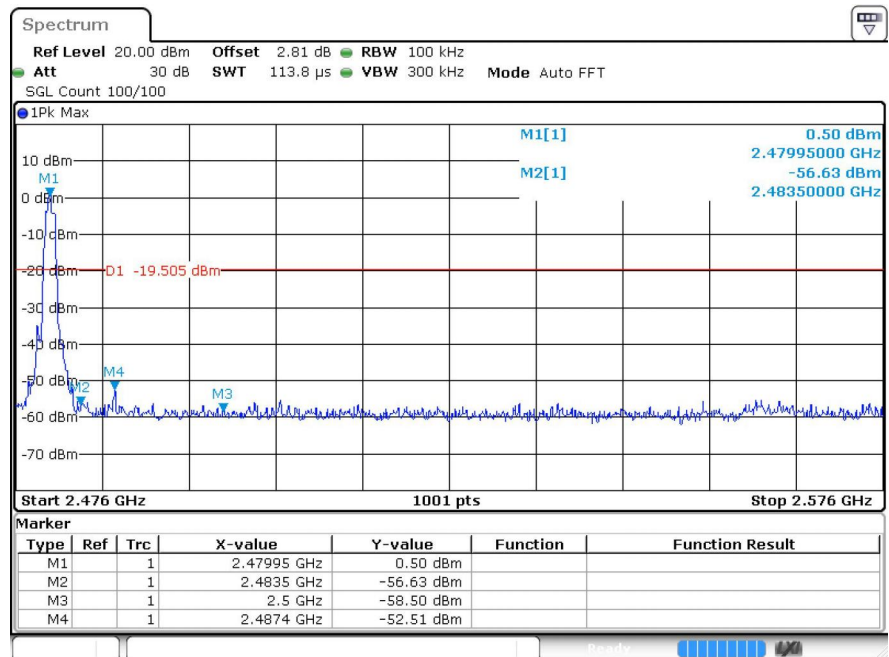
8DPSK/LCH/Hop



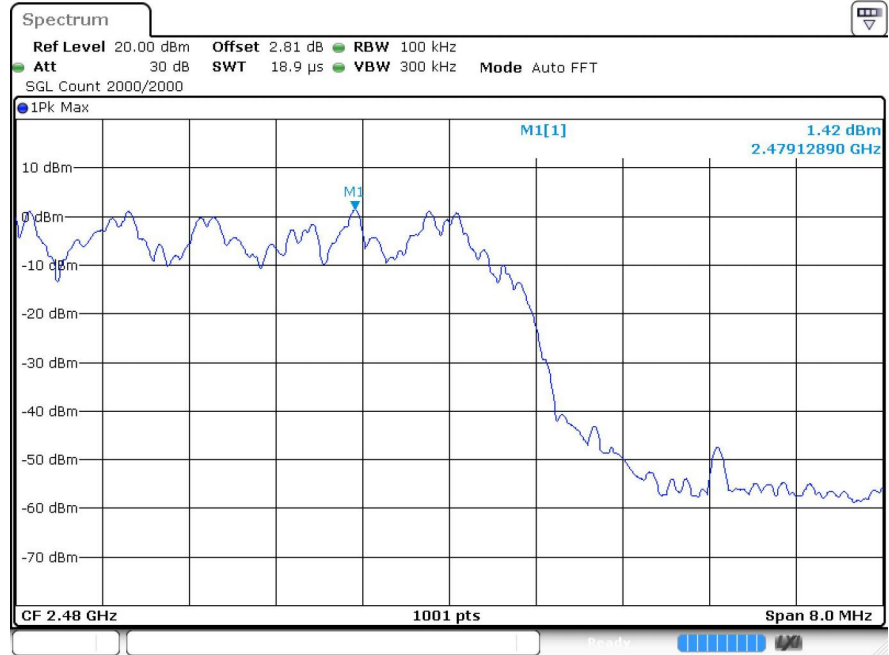
Ref



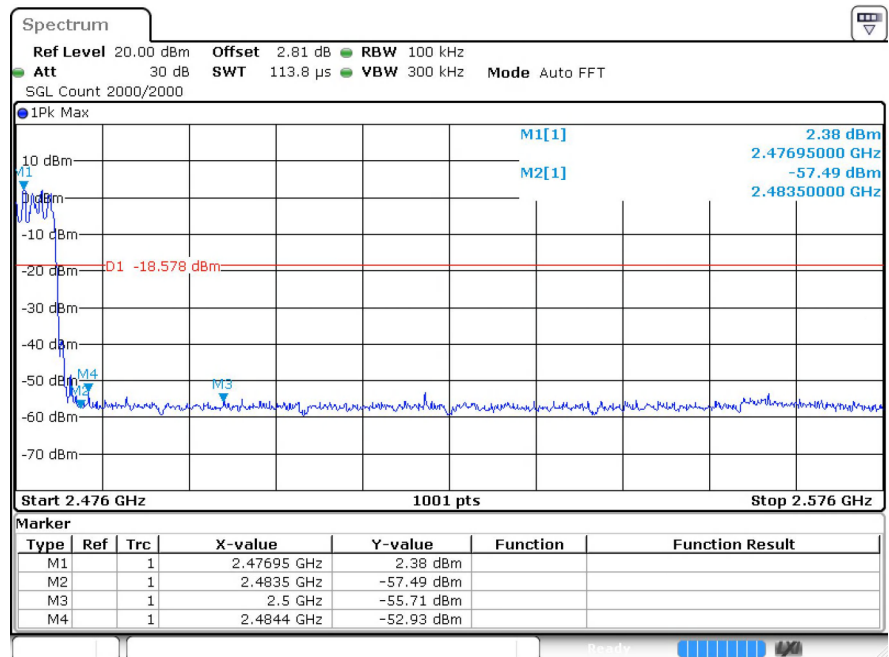
8DPSK/HCH/No Hop



Ref



8DPSK/HCH/Hop



## 9 Restrict-band band-edge measurements

### 9.1 Test Result

| Test Mode     | Hopping | Freq.    | Power [dBm] | Gain | Duty Factor | E [dBuV/m] | Detector | Limit [dBuV/m] | Verdict |
|---------------|---------|----------|-------------|------|-------------|------------|----------|----------------|---------|
| GFSK          | Off     | 2310.0   | -49.04      | 3.3  | -           | 49.49      | PEAK     | 74             | Pass    |
|               | Off     | 2310.0   | -56.69      | 3.3  | 5.06        | 46.9       | AV       | 54             | Pass    |
|               | Off     | 2324.304 | -45.64      | 3.3  | -           | 52.89      | PEAK     | 74             | Pass    |
|               | Off     | 2338.032 | -54.5       | 3.3  | 5.06        | 49.09      | AV       | 54             | Pass    |
|               | Off     | 2390.0   | -51.39      | 3.3  | -           | 47.14      | PEAK     | 74             | Pass    |
|               | Off     | 2390.0   | -56.88      | 3.3  | 5.06        | 46.71      | AV       | 54             | Pass    |
|               | Off     | 2483.5   | -47.43      | 3.3  | -           | 51.1       | PEAK     | 74             | Pass    |
|               | Off     | 2483.5   | -56.51      | 3.3  | 5.06        | 47.08      | AV       | 54             | Pass    |
|               | Off     | 2494.72  | -46.76      | 3.3  | -           | 51.77      | PEAK     | 74             | Pass    |
|               | Off     | 2498.752 | -55.31      | 3.3  | 5.06        | 48.28      | AV       | 54             | Pass    |
|               | Off     | 2500.0   | -49         | 3.3  | -           | 49.53      | PEAK     | 74             | Pass    |
|               | Off     | 2500.0   | -56.35      | 3.3  | 5.06        | 47.24      | AV       | 54             | Pass    |
| $\pi/4$ DQPSK | Off     | 2310.0   | -51.07      | 3.3  | -           | 47.46      | PEAK     | 74             | Pass    |
|               | Off     | 2310.0   | -56.25      | 3.3  | 4.9         | 47.18      | AV       | 54             | Pass    |
|               | Off     | 2343.024 | -46.89      | 3.3  | -           | 51.64      | PEAK     | 74             | Pass    |
|               | Off     | 2339.568 | -54.1       | 3.3  | 4.9         | 49.33      | AV       | 54             | Pass    |
|               | Off     | 2390.0   | -49.91      | 3.3  | -           | 48.62      | PEAK     | 74             | Pass    |
|               | Off     | 2390.0   | -57.04      | 3.3  | 4.9         | 46.39      | AV       | 54             | Pass    |
|               | Off     | 2483.5   | -48.91      | 3.3  | -           | 49.62      | PEAK     | 74             | Pass    |
|               | Off     | 2483.5   | -56.34      | 3.3  | 4.95        | 47.14      | AV       | 54             | Pass    |
|               | Off     | 2487.448 | -45.33      | 3.3  | -           | 53.2       | PEAK     | 74             | Pass    |
|               | Off     | 2484.568 | -55.79      | 3.3  | 4.95        | 47.69      | AV       | 54             | Pass    |
|               | Off     | 2500.0   | -46.88      | 3.3  | -           | 51.65      | PEAK     | 74             | Pass    |
|               | Off     | 2500.0   | -56.48      | 3.3  | 4.95        | 47         | AV       | 54             | Pass    |
| 8DPSK         | Off     | 2310.0   | -50.2       | 3.3  | -           | 48.33      | PEAK     | 74             | Pass    |
|               | Off     | 2310.0   | -56.6       | 3.3  | 4.95        | 46.88      | AV       | 54             | Pass    |
|               | Off     | 2339.568 | -45.48      | 3.3  | -           | 53.05      | PEAK     | 74             | Pass    |
|               | Off     | 2338.32  | -53.89      | 3.3  | 4.95        | 49.59      | AV       | 54             | Pass    |

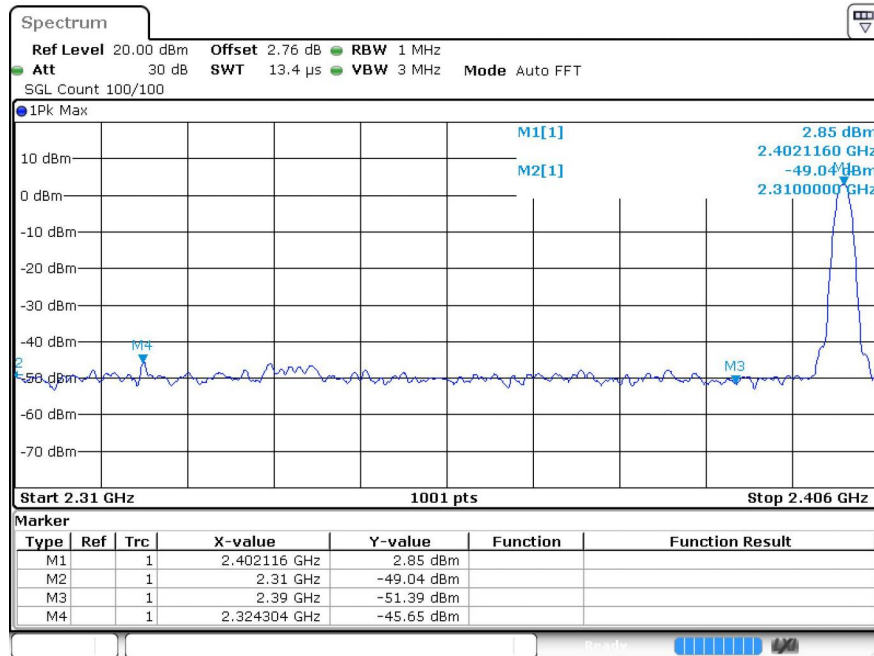




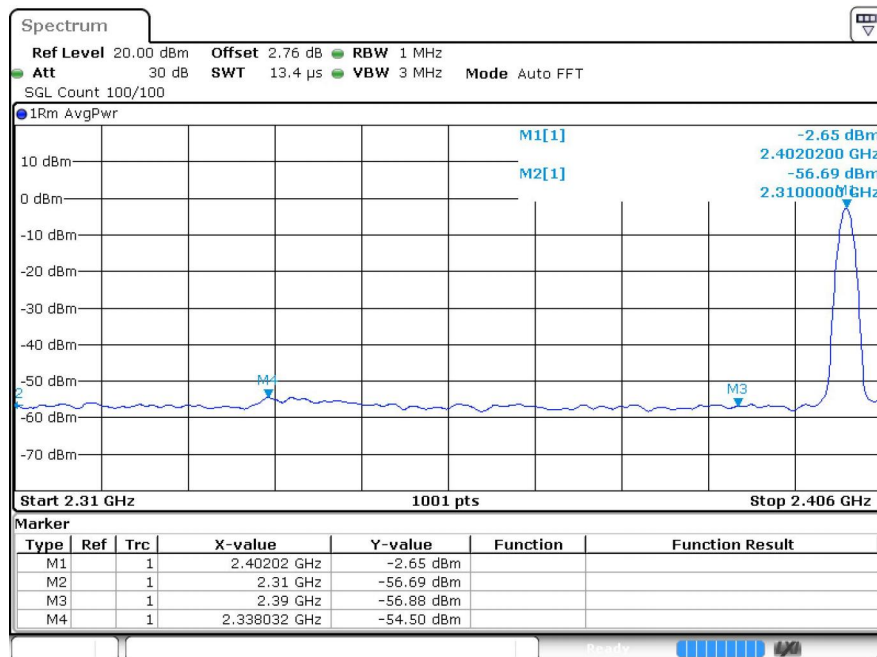
|     |          |        |     |      |       |      |    |      |
|-----|----------|--------|-----|------|-------|------|----|------|
| Off | 2390.0   | -50.91 | 3.3 | -    | 47.62 | PEAK | 74 | Pass |
| Off | 2390.0   | -57.18 | 3.3 | 4.95 | 46.3  | AV   | 54 | Pass |
| Off | 2483.5   | -42.92 | 3.3 | -    | 55.61 | PEAK | 74 | Pass |
| Off | 2483.5   | -55.87 | 3.3 | 4.95 | 47.61 | AV   | 54 | Pass |
| Off | 2487.424 | -42.81 | 3.3 | -    | 55.72 | PEAK | 74 | Pass |
| Off | 2484.424 | -55.72 | 3.3 | 4.95 | 47.76 | AV   | 54 | Pass |
| Off | 2500.0   | -49.64 | 3.3 | -    | 48.89 | PEAK | 74 | Pass |
| Off | 2500.0   | -55.89 | 3.3 | 4.95 | 47.59 | AV   | 54 | Pass |

## 9.2 Test Graphs

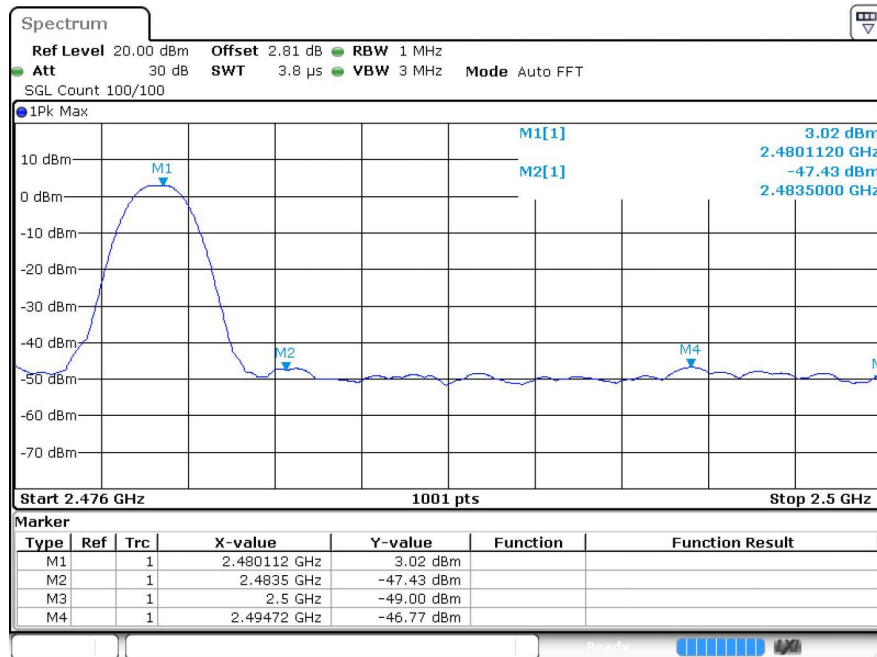
Restrict-band band-edge measurements\_Hopping Off\_ GFSK\_PEAK (Low Channel)



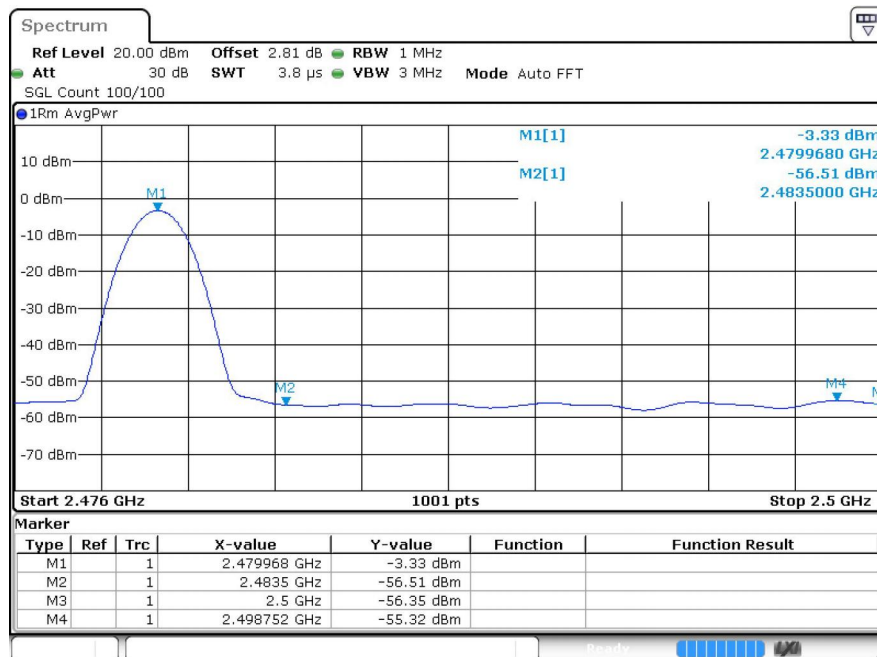
Restrict-band band-edge measurements\_Hopping Off\_ GFSK\_Average (Low Channel)



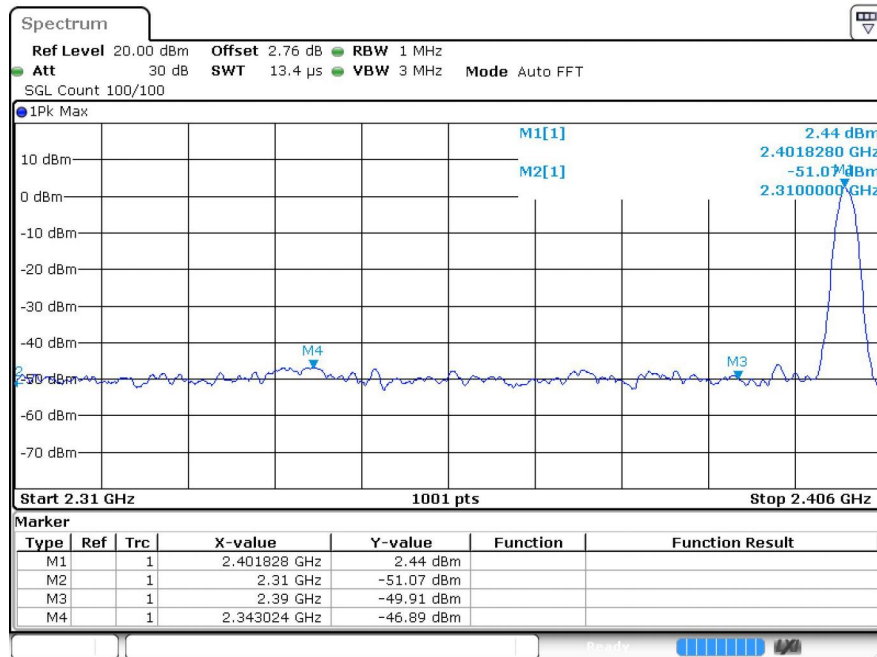
## Restrict-band band-edge measurements\_Hopping Off\_ GFSK\_PEAK (High Channel)



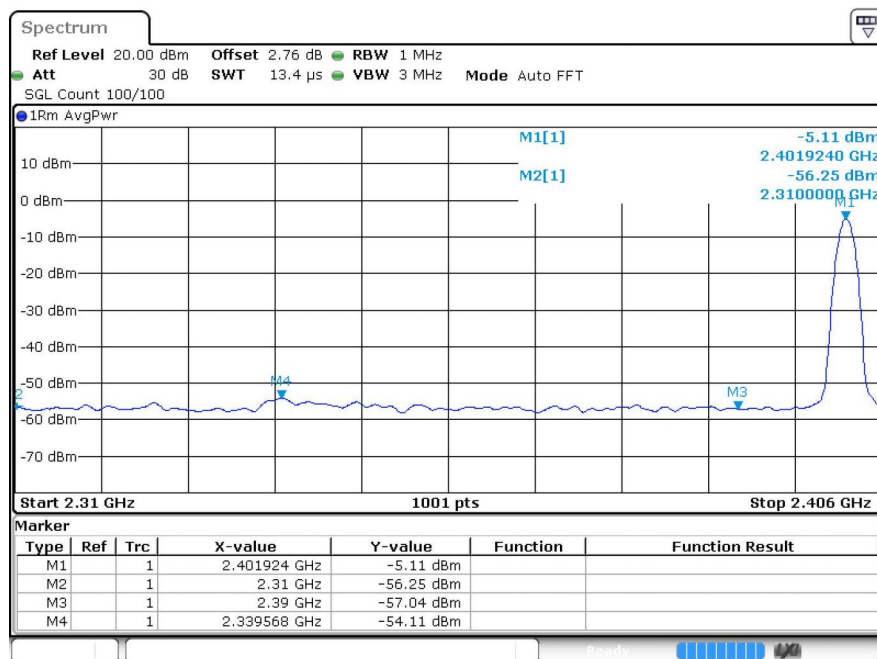
## Restrict-band band-edge measurements\_Hopping Off\_ GFSK\_Average (High Channel)



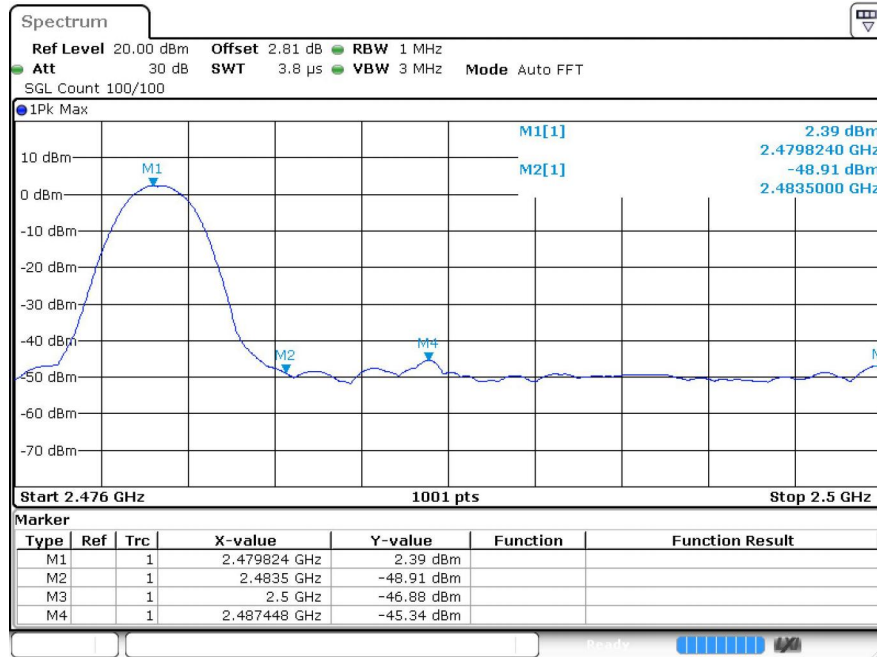
## Restrict-band band-edge measurements\_Hopping Off\_π/4-DQPSK\_PEAK (Low Channel)



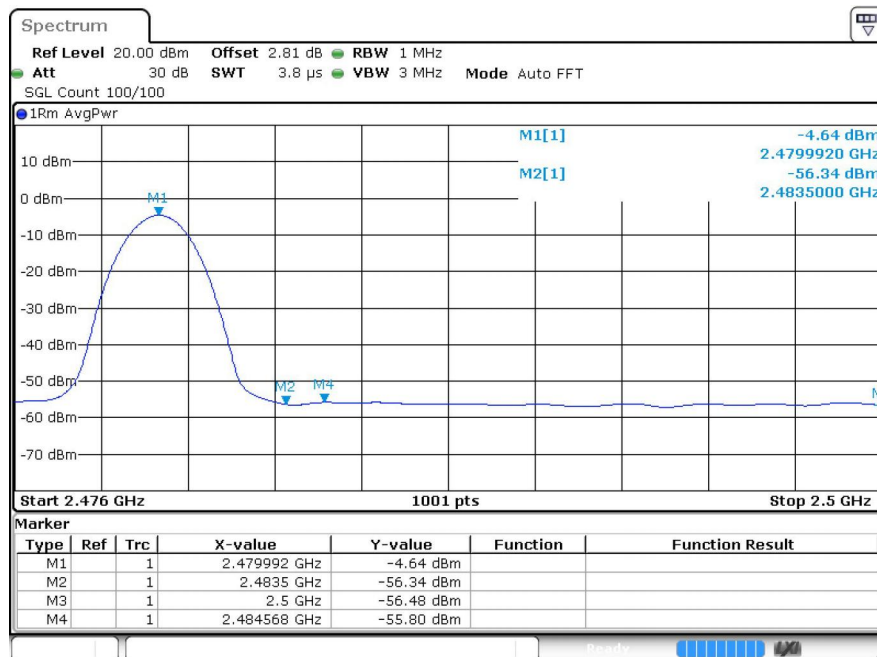
## Restrict-band band-edge measurements\_Hopping Off\_π/4-DQPSK\_Average (Low Channel)



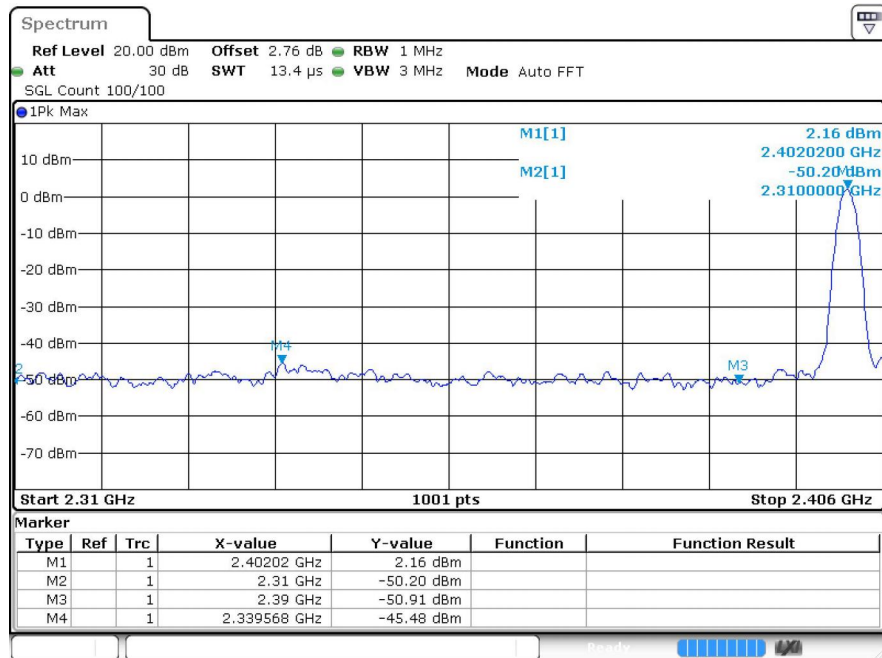
### Restrict-band band-edge measurements\_Hopping Off\_π/4-DQPSK\_PEAK (High Channel)



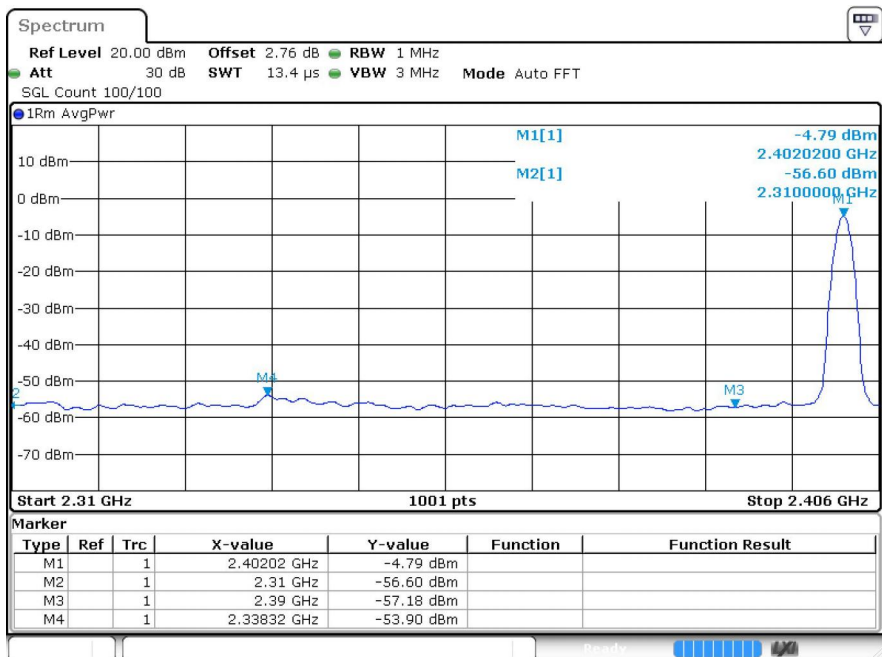
### Restrict-band band-edge measurements\_Hopping Off\_π/4-DQPSK\_Average (High Channel)



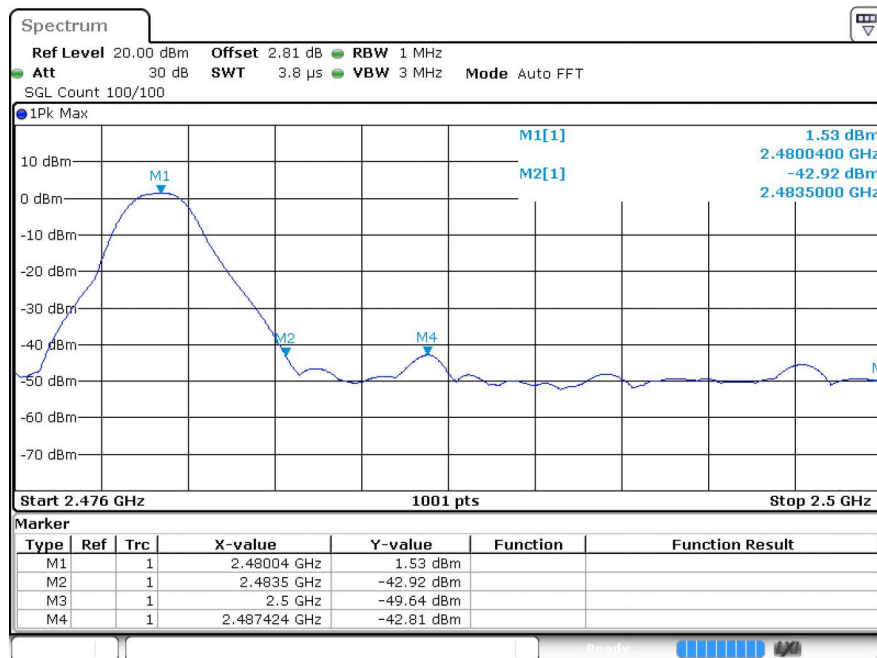
## Restrict-band band-edge measurements\_Hopping Off\_8DPSK\_PEAK (Low Channel)



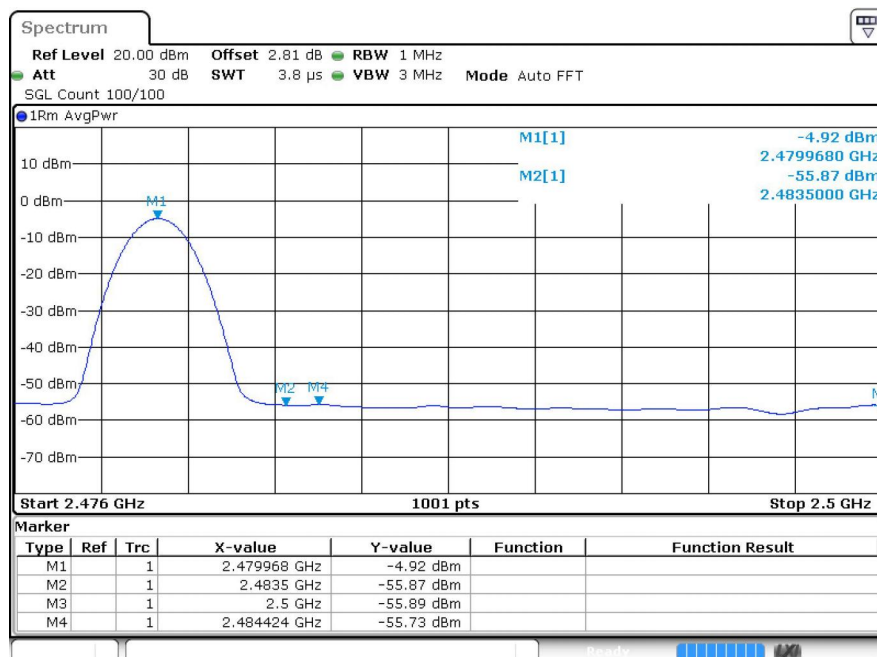
## Restrict-band band-edge measurements\_Hopping Off\_8DPSK\_Average (Low Channel)



## Restrict-band band-edge measurements\_Hopping Off\_8DPSK\_PEAK (High Channel)



## Restrict-band band-edge measurements\_Hopping Off\_8DPSK\_Average (High Channel)



---The End---