

# Appendix Report

|                |                  |
|----------------|------------------|
| Report No.:    | CISRR25010401704 |
| Test Engineer: | Lucas Huang      |
| Supervised by: | Rory Huang       |

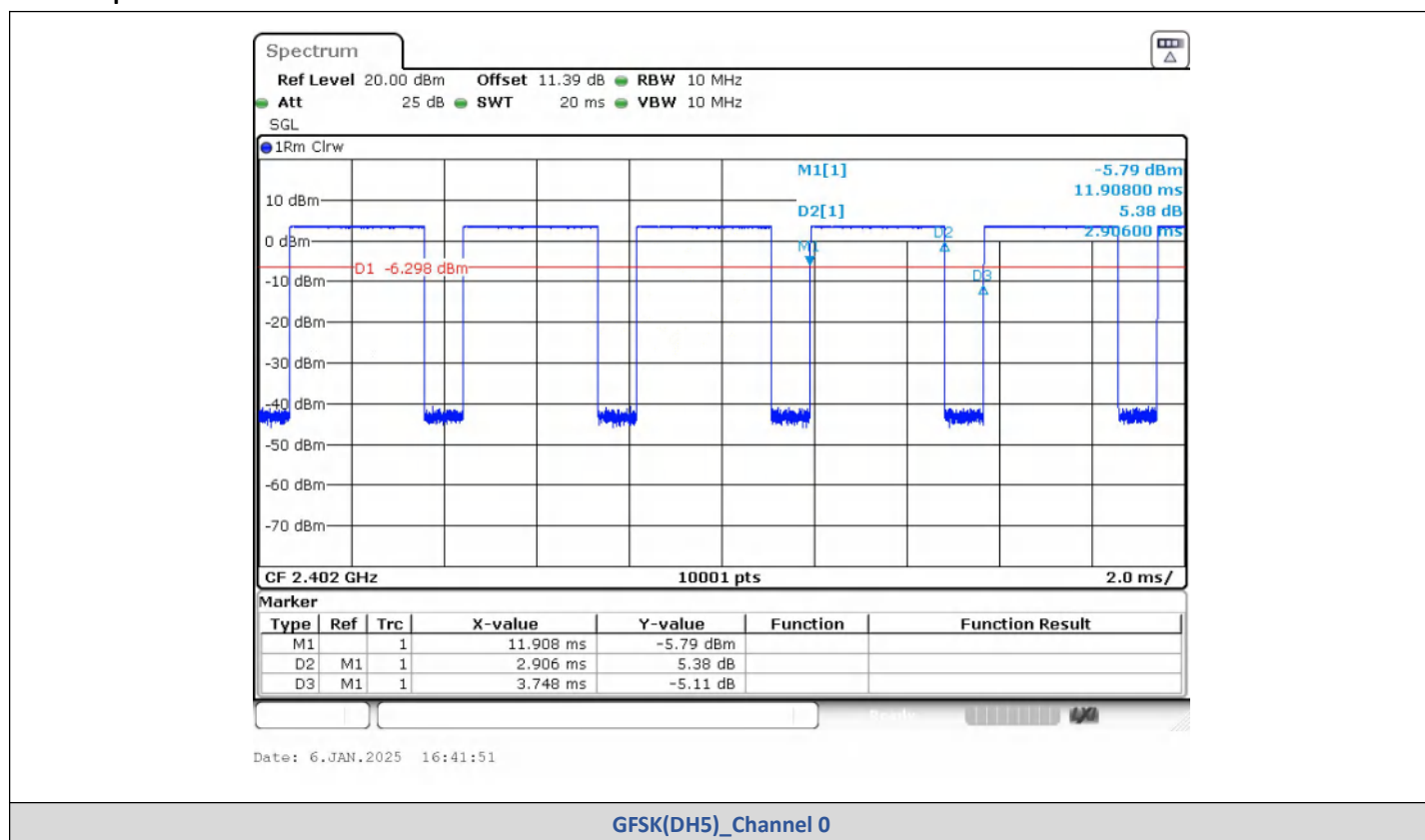
# 1) Duty Cycle

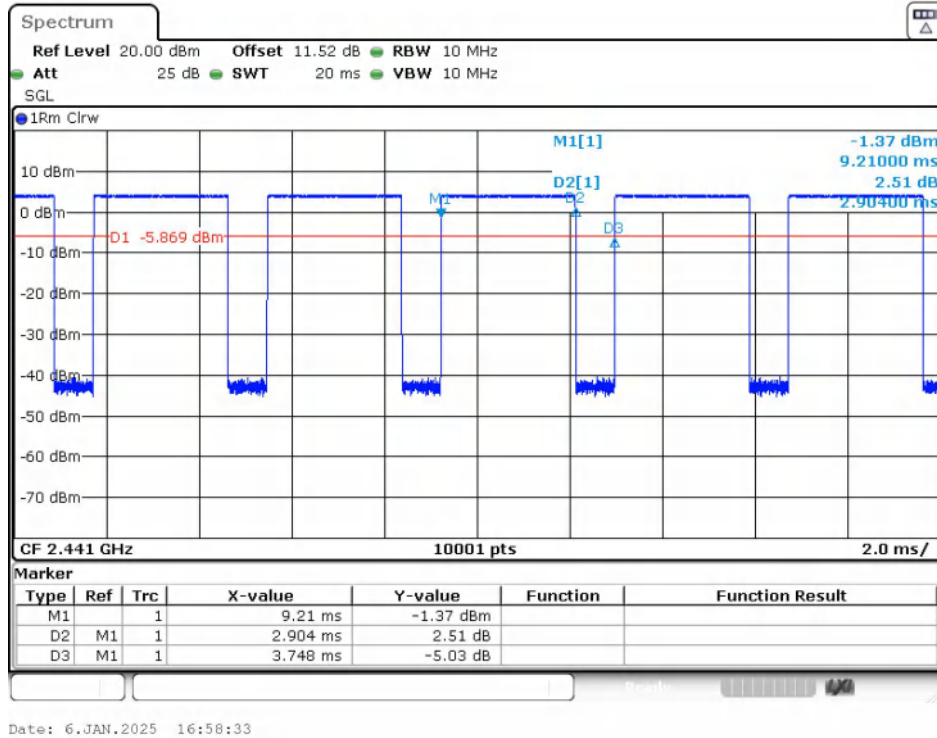
## Test Result

Left:

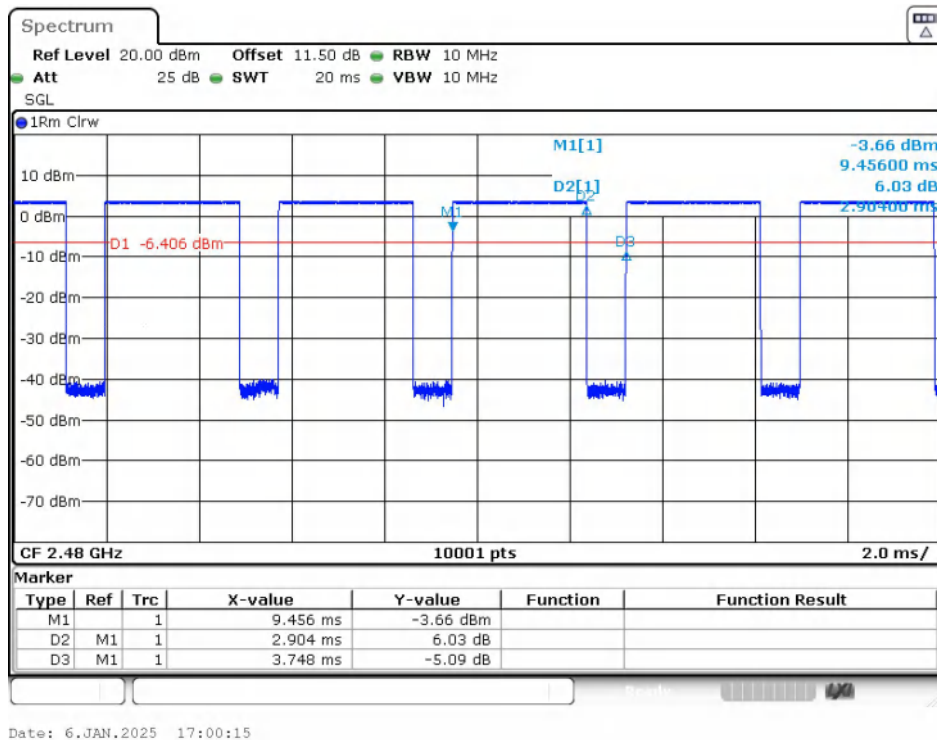
| Modulation    | Packets | Channel | On Time (ms) | Period (ms) | Duty Cycle (%) | Duty Cycle (linear) | Duty Cycle Factor (dB) | 1/T    |
|---------------|---------|---------|--------------|-------------|----------------|---------------------|------------------------|--------|
| GFSK          | DH5     | 0       | 2.906        | 3.748       | 77.53          | 0.7753              | 1.1053                 | 0.3441 |
|               |         | 39      | 2.904        | 3.748       | 77.48          | 0.7748              | 1.1081                 | 0.3444 |
|               |         | 78      | 2.904        | 3.748       | 77.48          | 0.7748              | 1.1081                 | 0.3444 |
| $\pi/4$ DQPSK | 2-DH5   | 0       | 2.910        | 3.748       | 77.64          | 0.7764              | 1.0991                 | 0.3436 |
|               |         | 39      | 2.910        | 3.748       | 77.64          | 0.7764              | 1.0991                 | 0.3436 |
|               |         | 78      | 2.912        | 3.748       | 77.69          | 0.7769              | 1.0963                 | 0.3434 |
| 8DPSK         | 3-DH5   | 0       | 2.914        | 3.748       | 77.75          | 0.7775              | 1.093                  | 0.3432 |
|               |         | 39      | 2.912        | 3.748       | 77.69          | 0.7769              | 1.0963                 | 0.3434 |
|               |         | 78      | 2.914        | 3.748       | 77.75          | 0.7775              | 1.093                  | 0.3432 |

## Test Graphs

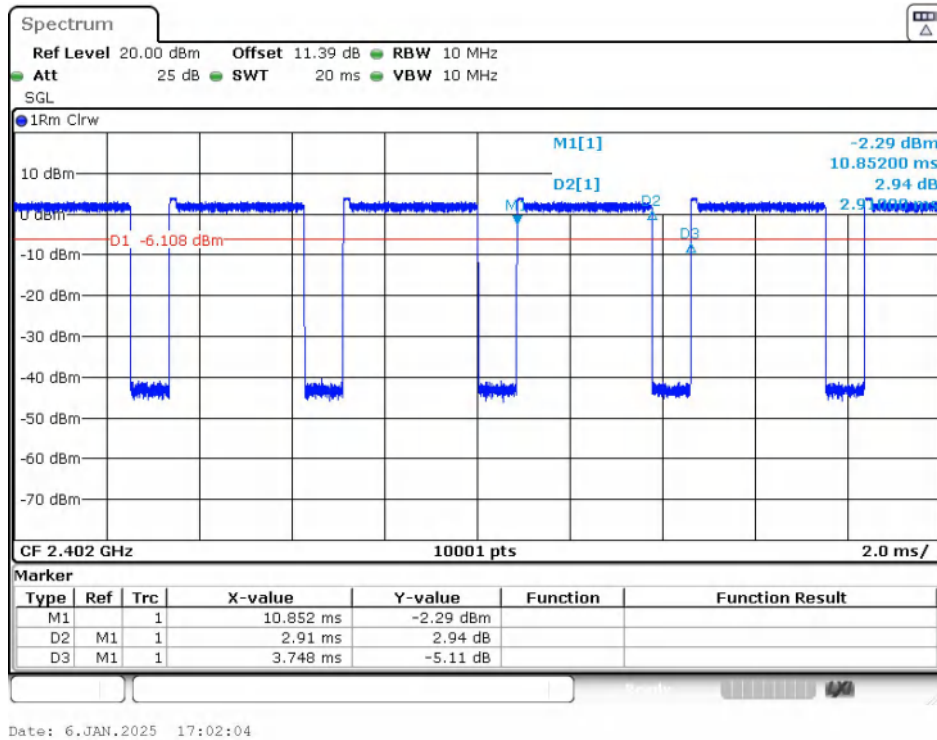




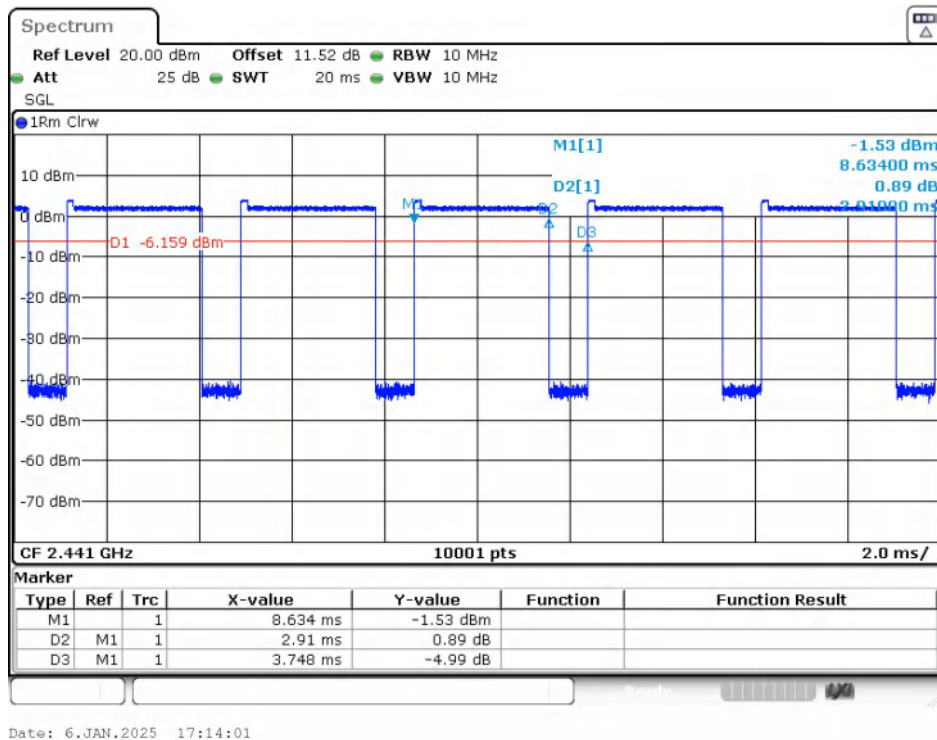
**GFSK(DH5)\_Channel 39**



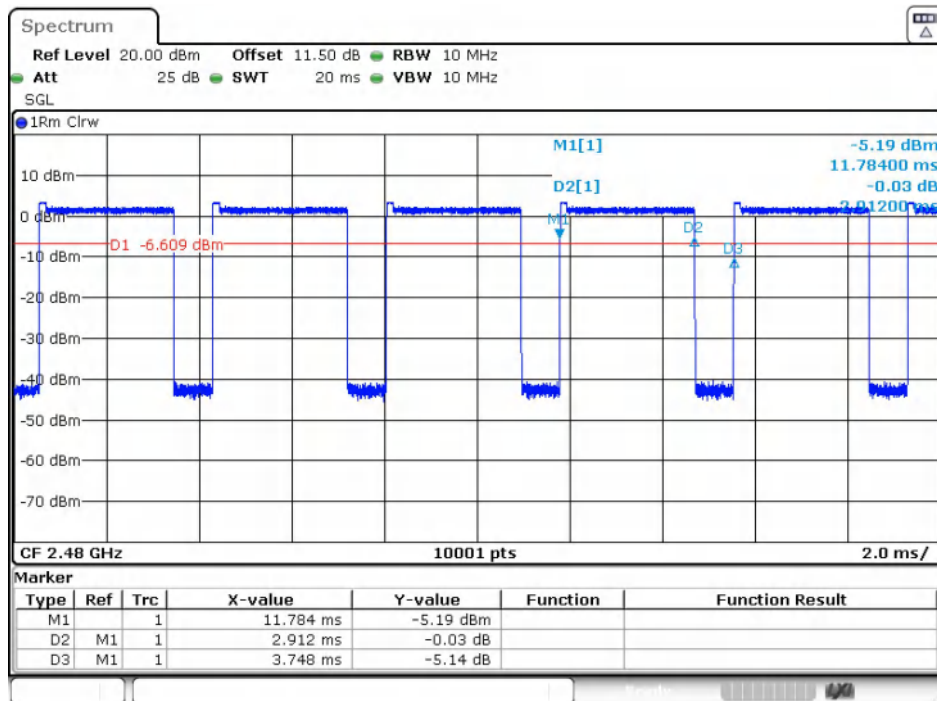
**GFSK(DH5)\_Channel 78**



$\pi/4$ DQPSK(2-DH5)\_Channel 0

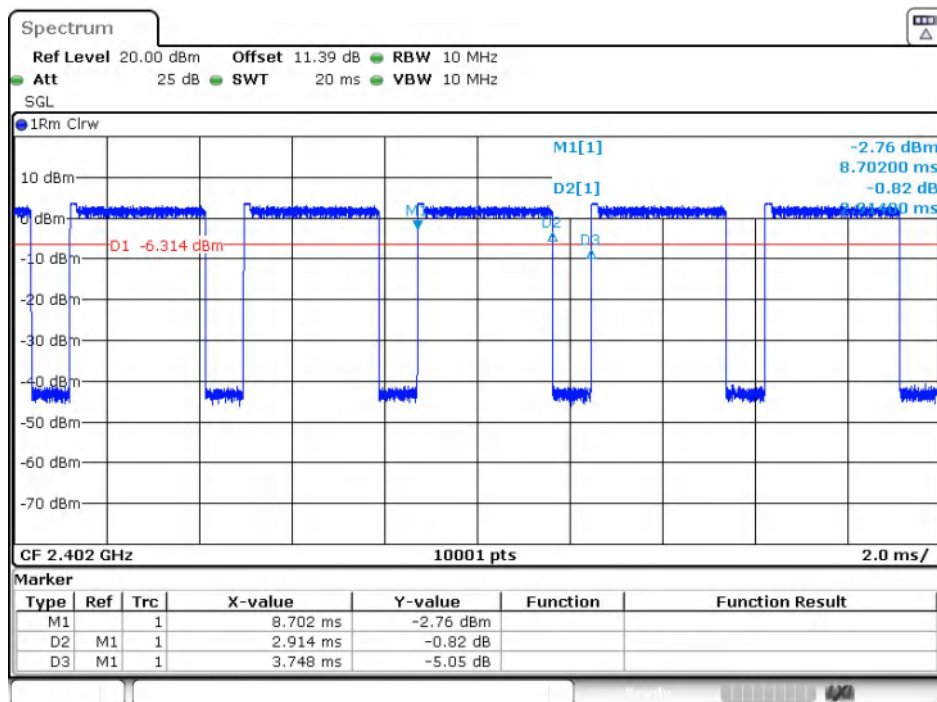


$\pi/4$ DQPSK(2-DH5)\_Channel 39



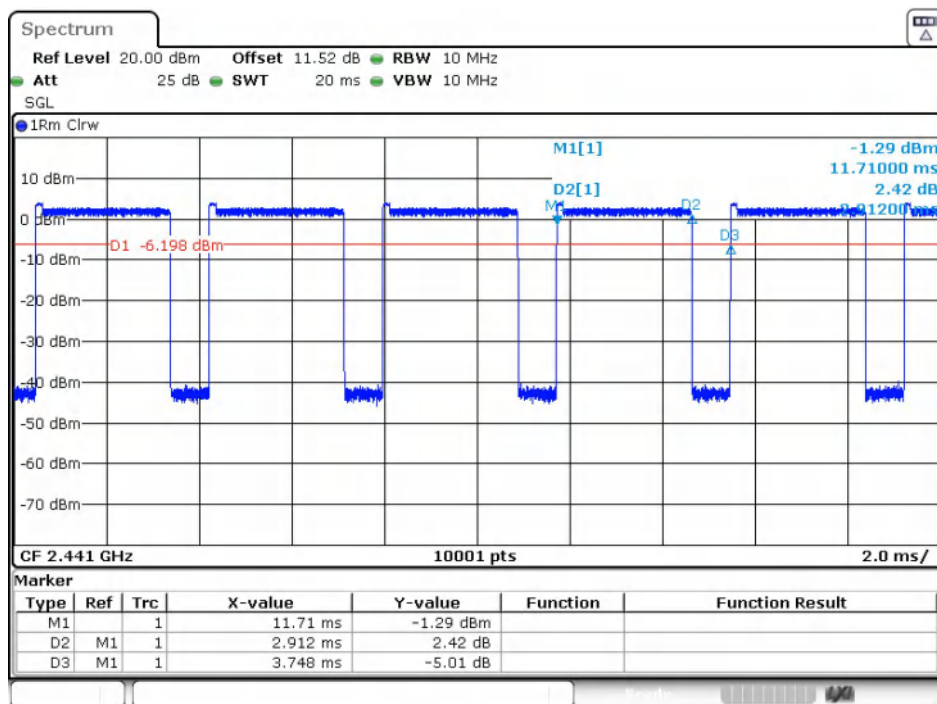
Date: 6, JAN. 2025 17:15:39

$\pi/4$ DQPSK(2-DH5)\_Channel 78



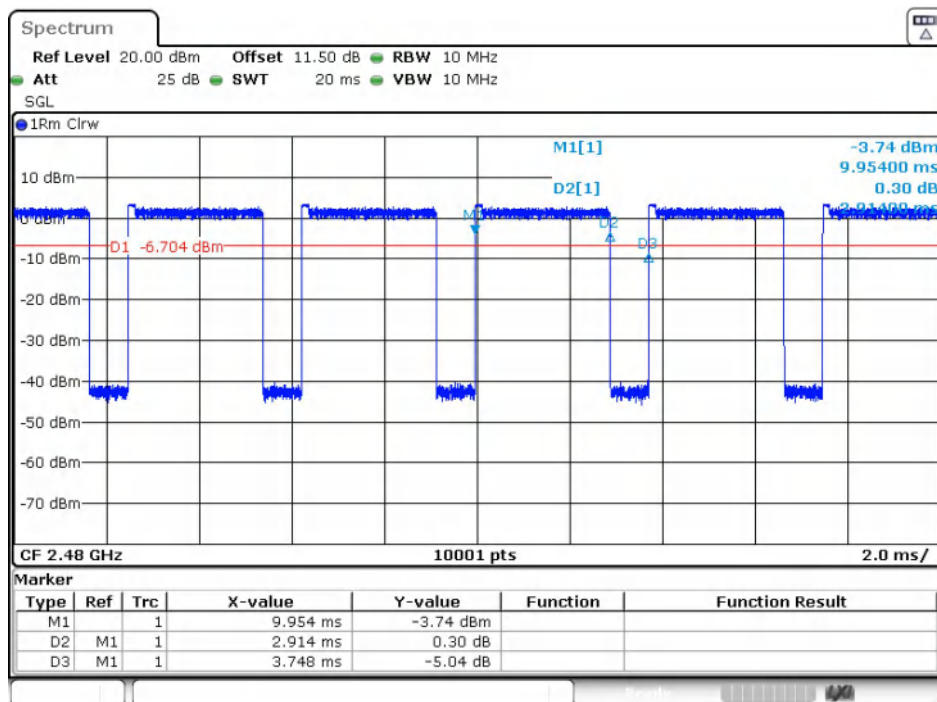
Date: 6, JAN. 2025 17:17:24

8DPSK(3-DH5)\_Channel 0



Date: 6, JAN. 2025 17:29:55

### 8DPSK(3-DH5)\_Channel 39



Date: 6, JAN. 2025 17:31:33

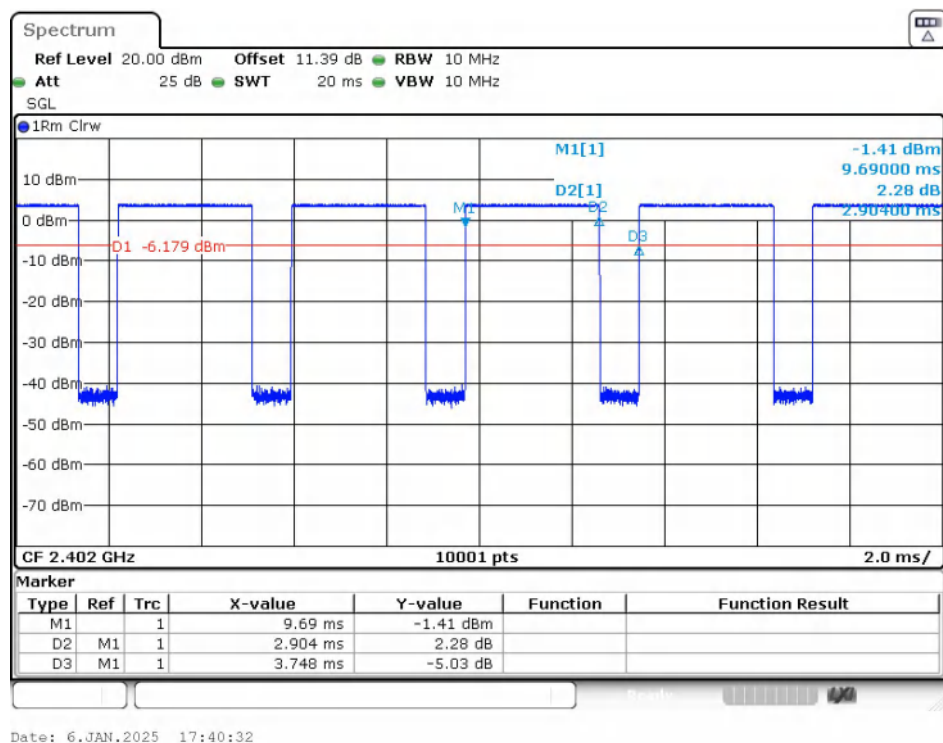
### 8DPSK(3-DH5)\_Channel 78

Right:

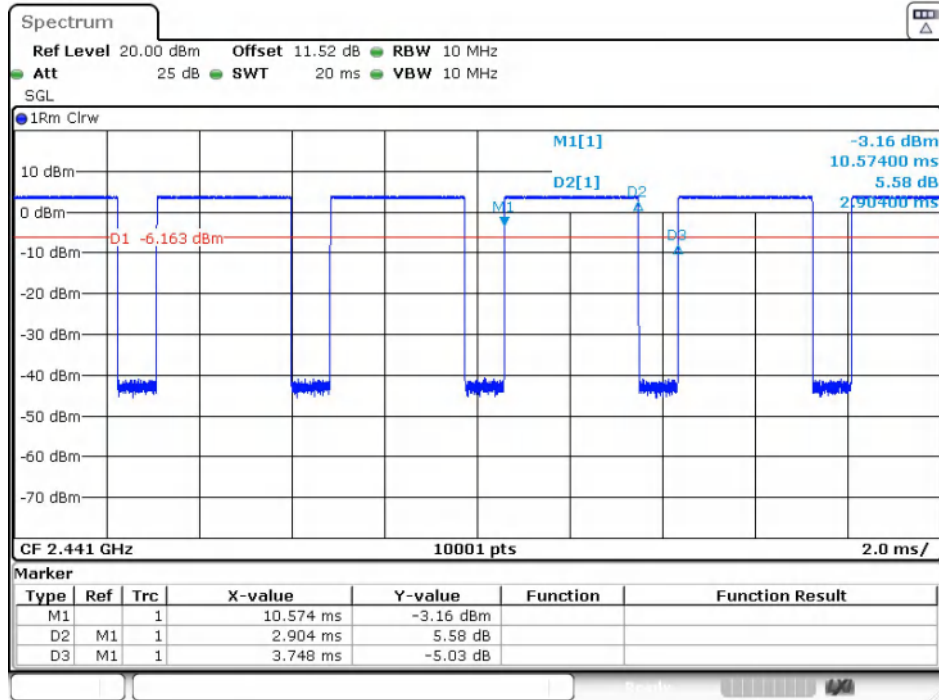
| Modulation | Packets | Channel | On Time (ms) | Period (ms) | Duty Cycle (%) | Duty Cycle (linear) | Duty Cycle Factor (dB) | 1/T    |
|------------|---------|---------|--------------|-------------|----------------|---------------------|------------------------|--------|
| GFSK       | DH5     | 0       | 2.904        | 3.748       | 77.48          | 0.7748              | 1.1081                 | 0.3444 |
|            |         | 39      | 2.904        | 3.748       | 77.48          | 0.7748              | 1.1081                 | 0.3444 |

|               |       |    |       |       |       |        |        |        |
|---------------|-------|----|-------|-------|-------|--------|--------|--------|
|               |       | 78 | 2.904 | 3.748 | 77.48 | 0.7748 | 1.1081 | 0.3444 |
| $\pi/4$ DQPSK | 2-DH5 | 0  | 2.910 | 3.748 | 77.64 | 0.7764 | 1.0991 | 0.3436 |
|               |       | 39 | 2.912 | 3.748 | 77.69 | 0.7769 | 1.0963 | 0.3434 |
|               |       | 78 | 2.910 | 3.748 | 77.64 | 0.7764 | 1.0991 | 0.3436 |
| 8DPSK         | 3-DH5 | 0  | 2.912 | 3.748 | 77.69 | 0.7769 | 1.0963 | 0.3434 |
|               |       | 39 | 2.914 | 3.748 | 77.75 | 0.7775 | 1.093  | 0.3432 |
|               |       | 78 | 2.914 | 3.748 | 77.75 | 0.7775 | 1.093  | 0.3432 |

## Test Graphs

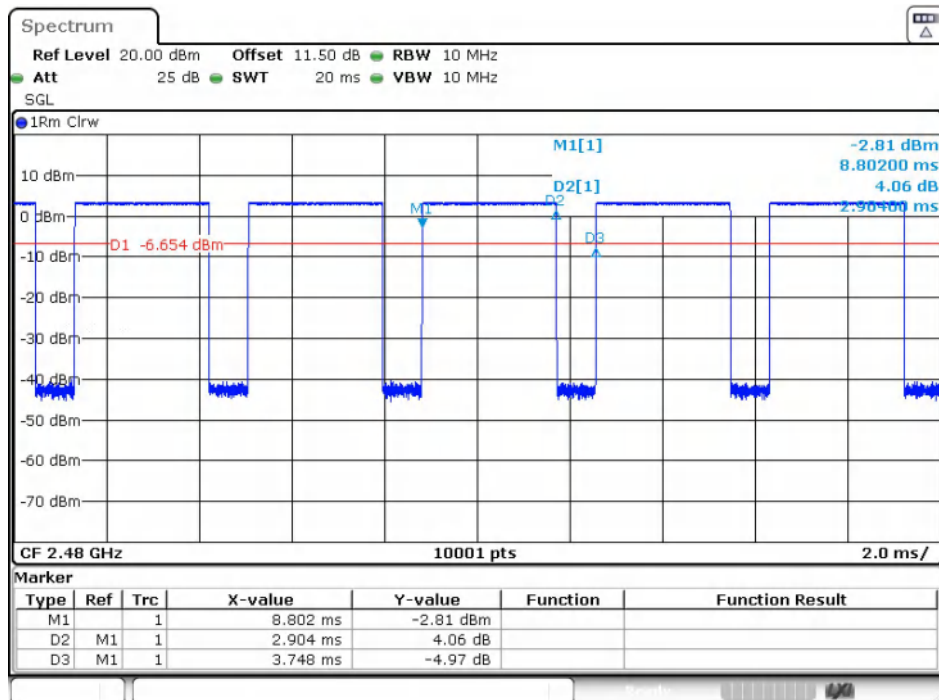


GFSK(DH5)\_Channel 0



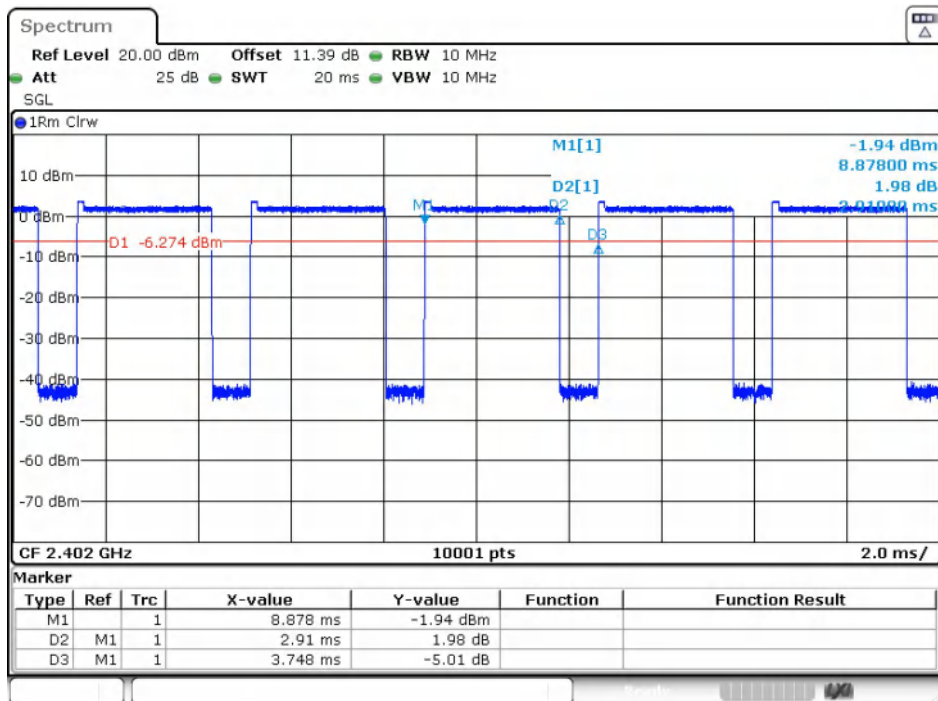
Date: 6.JAN.2025 17:51:29

#### GFSK(DH5)\_Channel 39



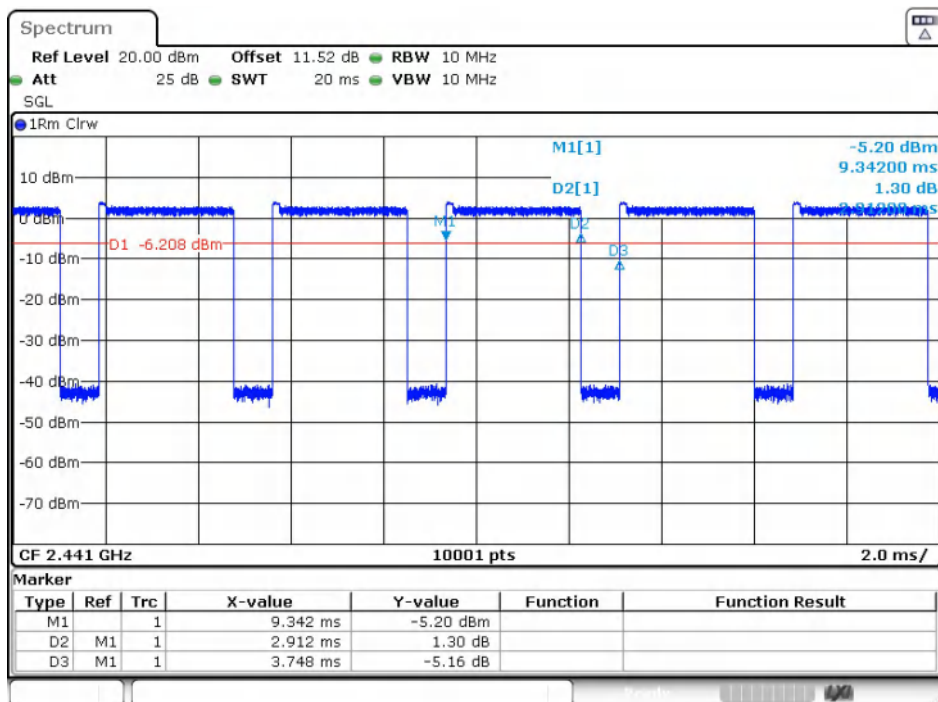
Date: 6.JAN.2025 17:53:37

#### GFSK(DH5)\_Channel 78



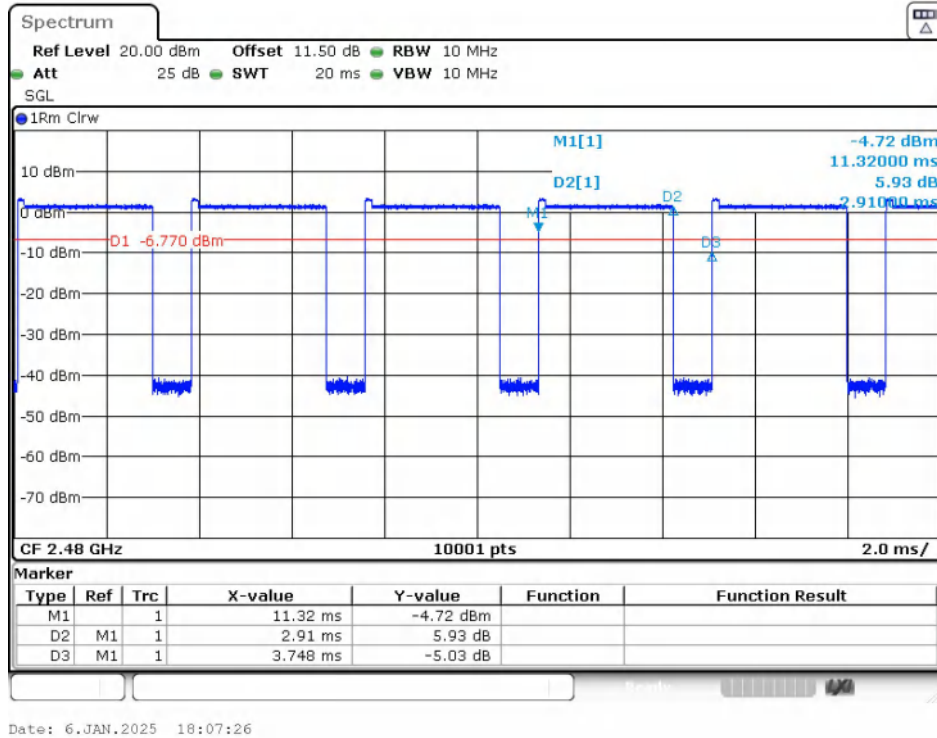
Date: 6, JAN. 2025 17:55:36

$\pi/4$ DQPSK(2-DH5)\_Channel 0

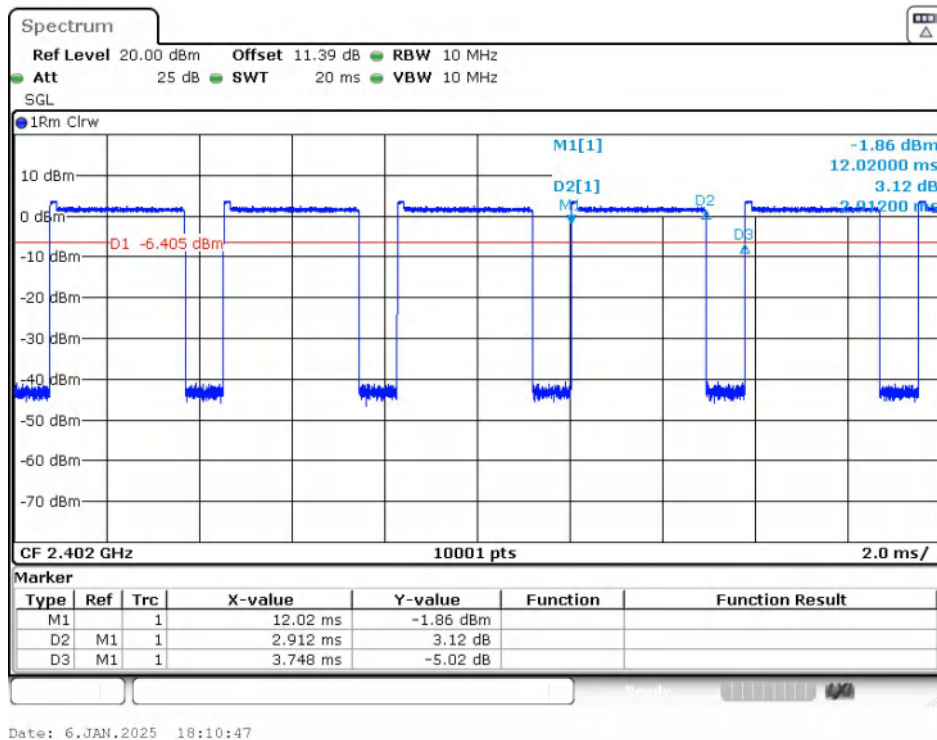


Date: 6, JAN. 2025 18:05:48

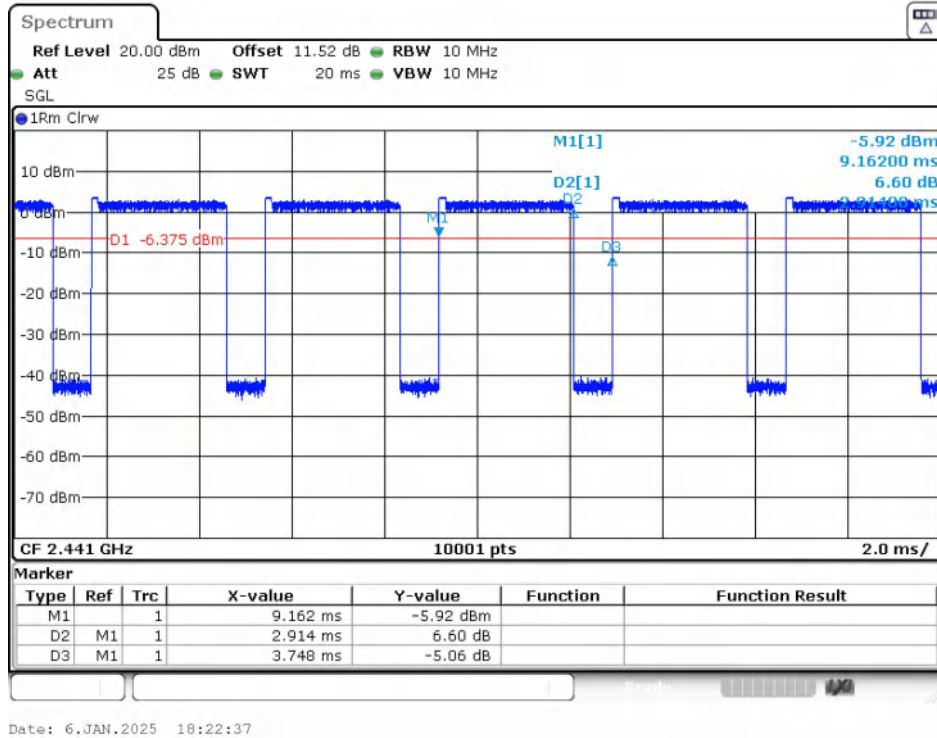
$\pi/4$ DQPSK(2-DH5)\_Channel 39



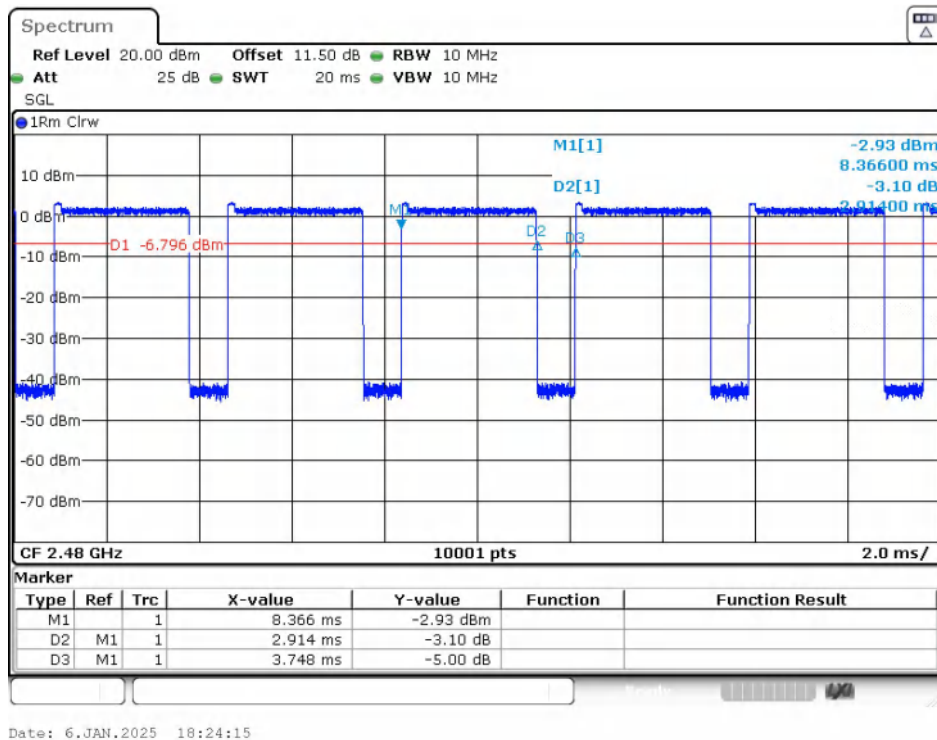
$\pi/4$ DQPSK(2-DH5)\_Channel 78



8DPSK(3-DH5)\_Channel 0



8DPSK(3-DH5)\_Channel 39



8DPSK(3-DH5)\_Channel 78

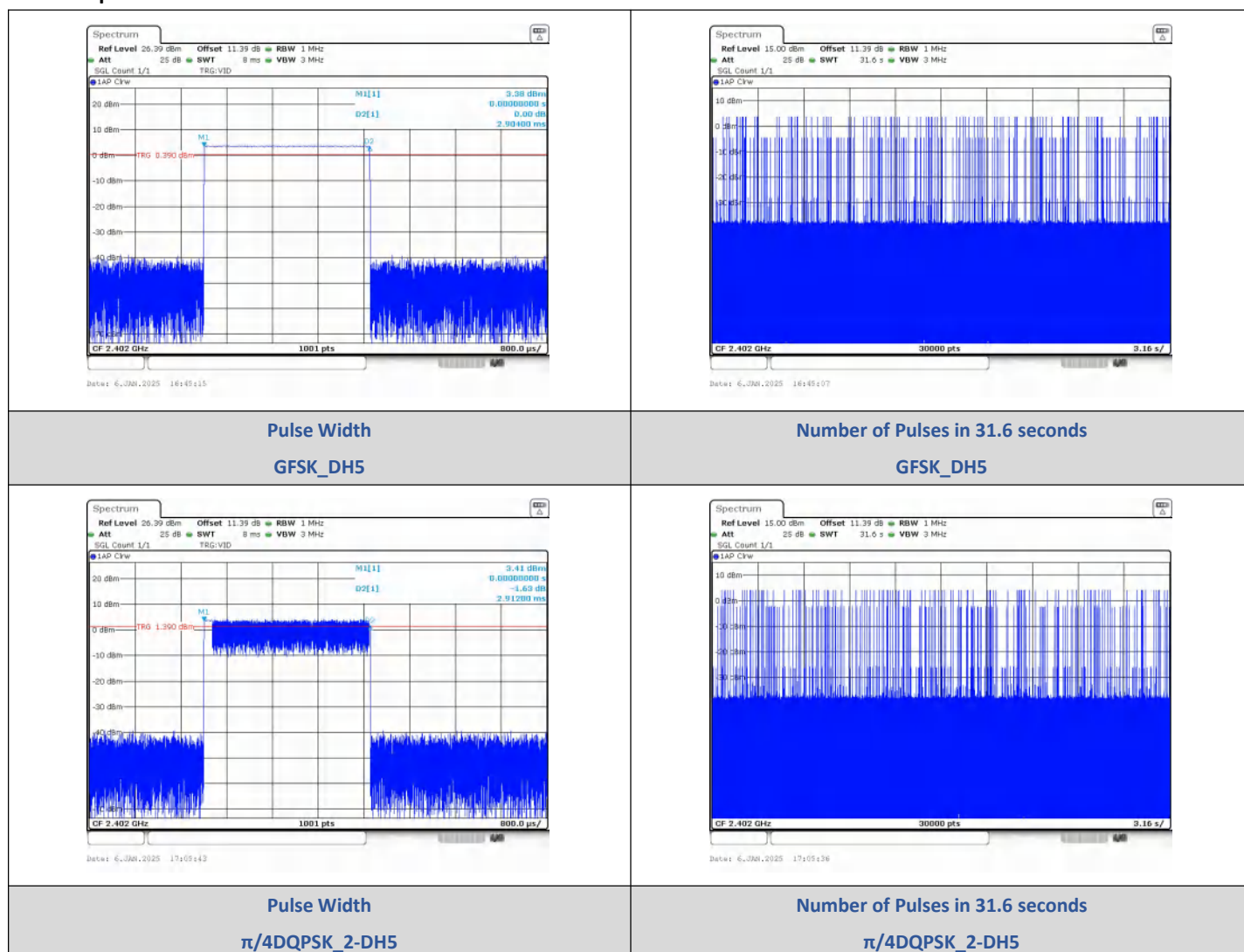
## 2) Dwell Time

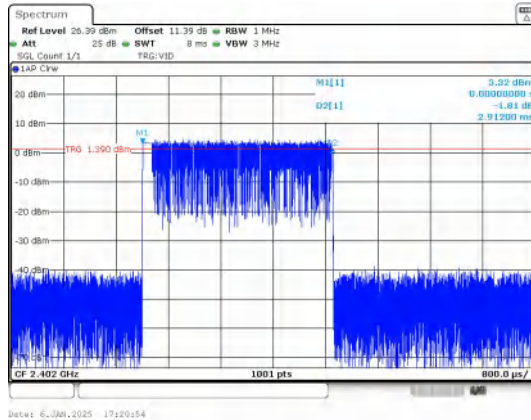
### Test Result

Left:

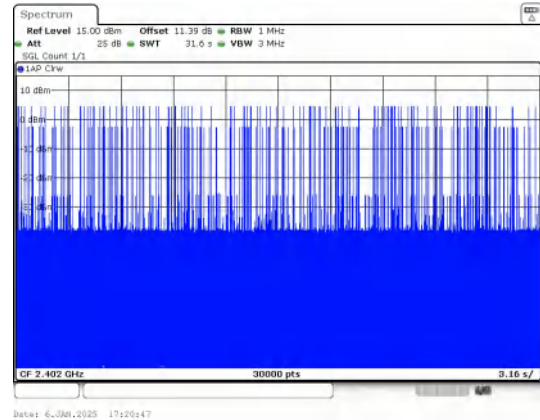
| Modulation    | Packet | Channel          | Pulse Width (ms) | Number of Pulses in 31.6 seconds | Dwell Time (ms) | Limit (ms) | Result |
|---------------|--------|------------------|------------------|----------------------------------|-----------------|------------|--------|
| GFSK          | DH5    | CH0<br>(2402MHz) | 2.904            | 103                              | 299.11          | < 400      | PASS   |
| $\pi/4$ DQPSK | 2-DH5  |                  | 2.912            | 109                              | 317.41          |            | PASS   |
| 8DPSK         | 3-DH5  |                  | 2.912            | 107                              | 311.58          |            | PASS   |

### Test Graphs





**Pulse Width**  
**8DPSK\_3-DH5**

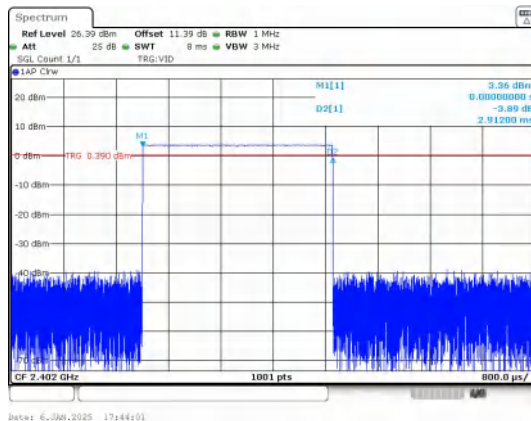


**Number of Pulses in 31.6 seconds**  
**8DPSK\_3-DH5**

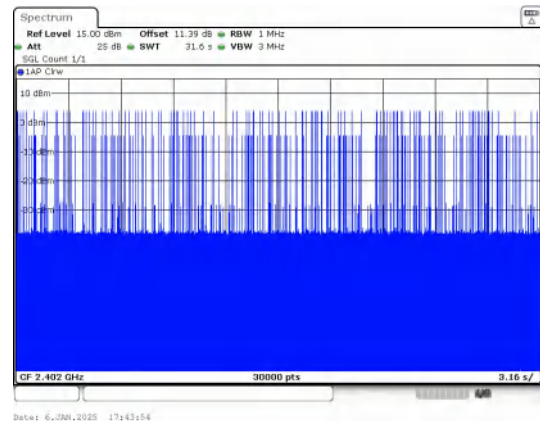
Right:

| Modulation    | Packet | Channel          | Pulse Width (ms) | Number of Pulses in 31.6 seconds | Dwell Time (ms) | Limit (ms) | Result |
|---------------|--------|------------------|------------------|----------------------------------|-----------------|------------|--------|
| GFSK          | DH5    | CH0<br>(2402MHz) | 2.912            | 109                              | 317.41          | < 400      | PASS   |
| $\pi/4$ DQPSK | 2-DH5  |                  | 2.912            | 102                              | 297.02          |            | PASS   |
| 8DPSK         | 3-DH5  |                  | 2.920            | 110                              | 321.2           |            | PASS   |

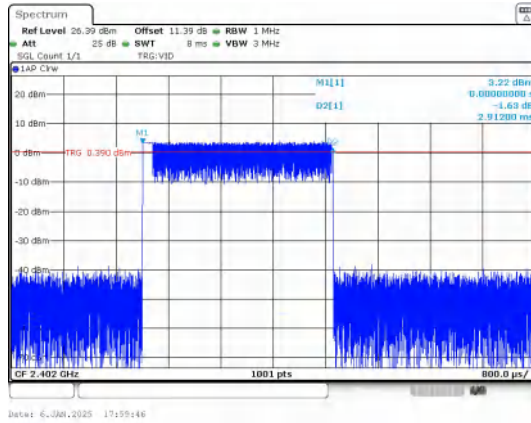
## Test Graphs



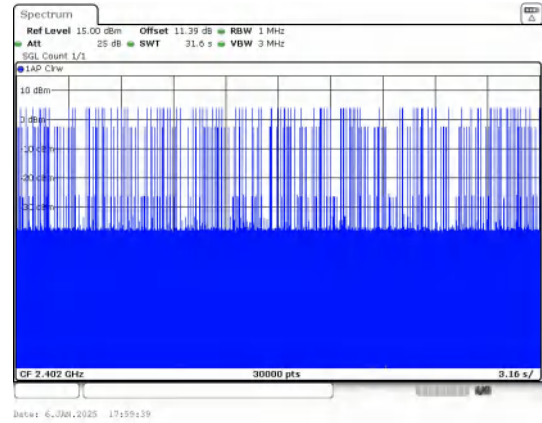
**Pulse Width**  
**GFSK\_DH5**



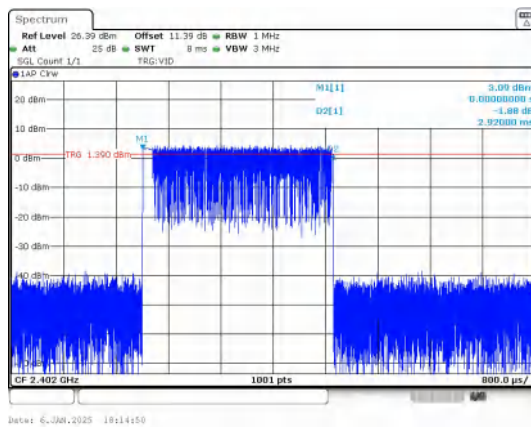
**Number of Pulses in 31.6 seconds**  
**GFSK\_DH5**



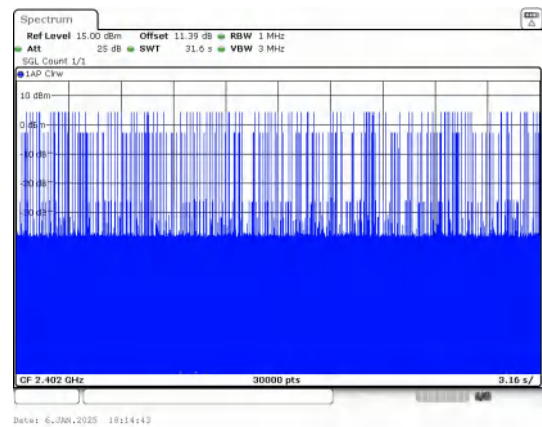
Pulse Width  
 $\pi/4$ DQPSK\_2-DH5



Number of Pulses in 31.6 seconds  
 $\pi/4$ DQPSK\_2-DH5



Pulse Width  
8DPSK\_3-DH5



Number of Pulses in 31.6 seconds  
8DPSK\_3-DH5

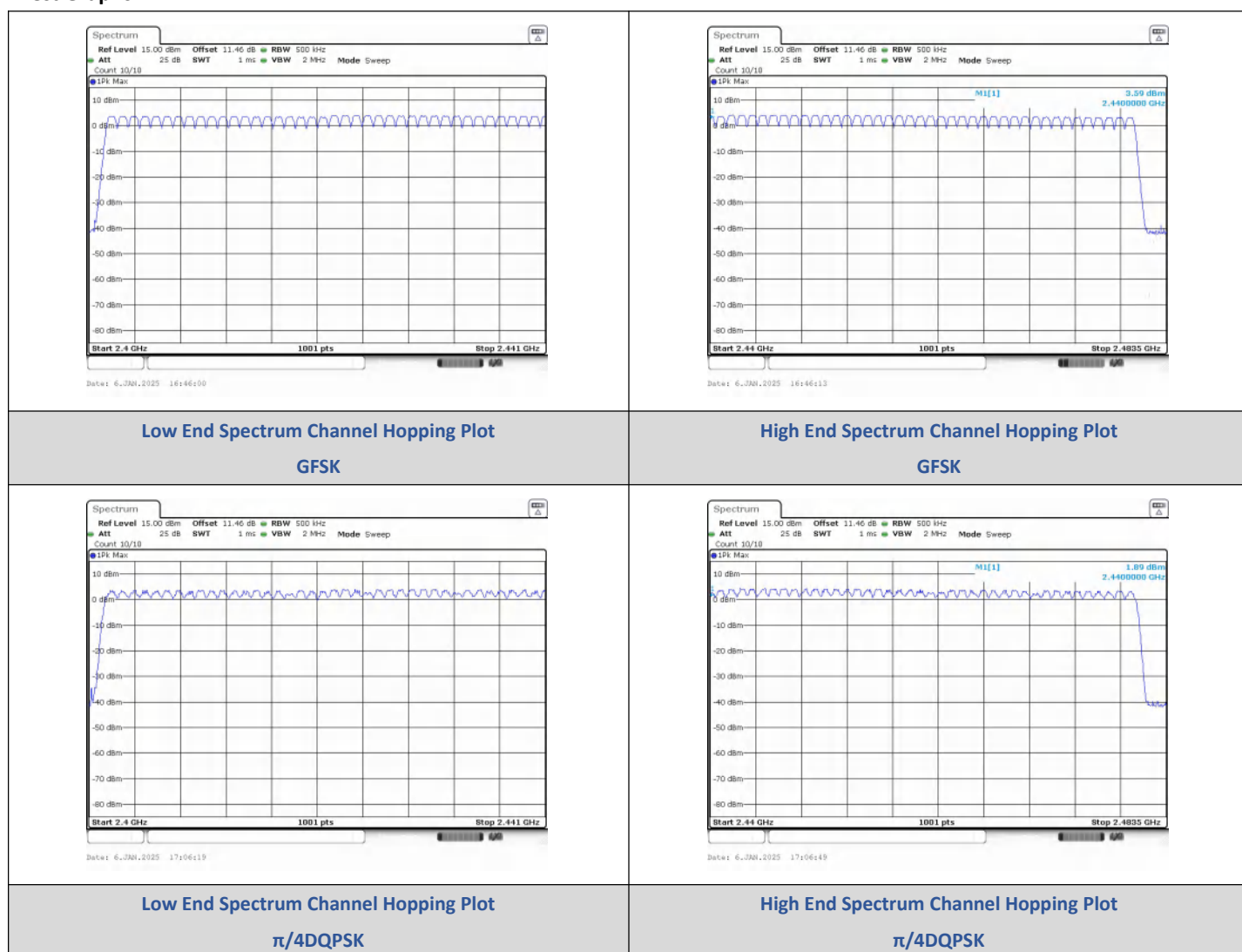
### 3) Number Of Hopping Channel

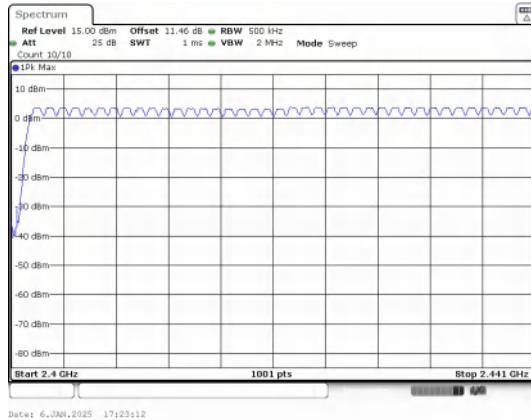
#### Test Result

Left:

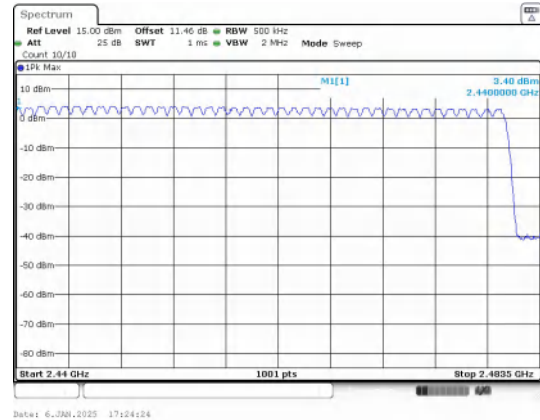
| Modulation    | Packet | Number of Hopping Channel | Limit | Result |
|---------------|--------|---------------------------|-------|--------|
| GFSK          | DH5    | 79                        | 15    | PASS   |
| $\pi/4$ DQPSK | 2-DH5  | 79                        | 15    | PASS   |
| 8DPSK         | 3-DH5  | 79                        | 15    | PASS   |

#### Test Graphs





Low End Spectrum Channel Hopping Plot  
8DPSK



High End Spectrum Channel Hopping Plot  
8DPSK

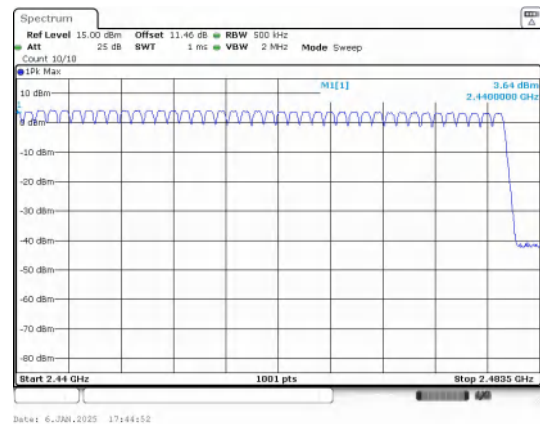
Right:

| Modulation    | Packet | Number of Hopping Channel | Limit | Result |
|---------------|--------|---------------------------|-------|--------|
| GFSK          | DH5    | 79                        | 15    | PASS   |
| $\pi/4$ DQPSK | 2-DH5  | 79                        | 15    | PASS   |
| 8DPSK         | 3-DH5  | 79                        | 15    | PASS   |

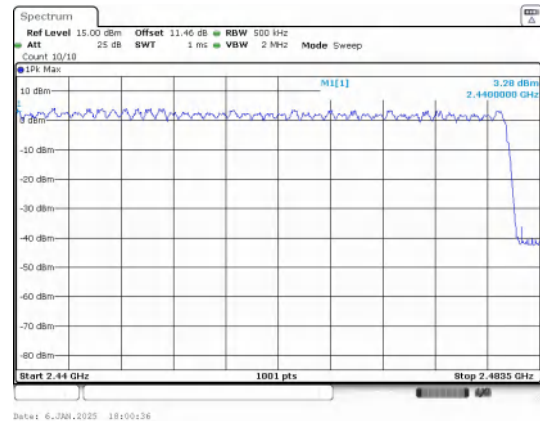
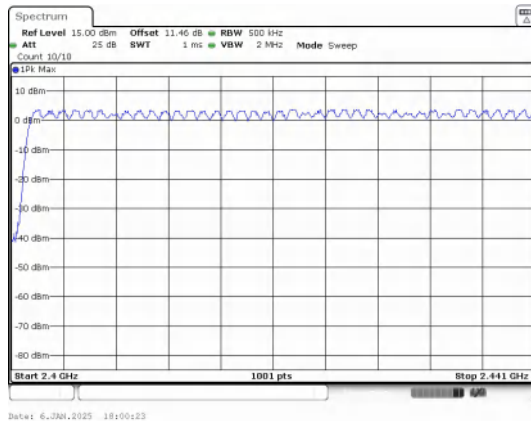
### Test Graphs



Low End Spectrum Channel Hopping Plot  
GFSK

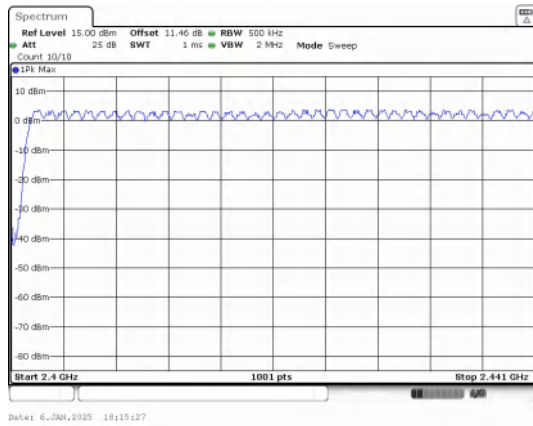


High End Spectrum Channel Hopping Plot  
GFSK



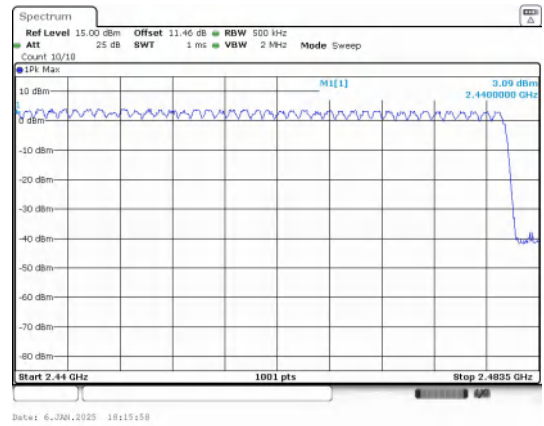
Low End Spectrum Channel Hopping Plot

$\pi/4$ DQPSK



High End Spectrum Channel Hopping Plot

$\pi/4$ DQPSK



Low End Spectrum Channel Hopping Plot

8DPSK

High End Spectrum Channel Hopping Plot

8DPSK

## 4) Conducted Peak Output Power

### Test Result

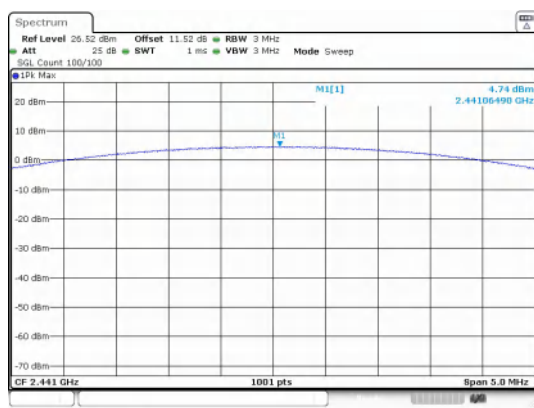
Left:

| Modulation    | Packet Type | Channel | Peak Output Power (dBm) | Peak Output Power (mW) | Limit (dBm) | Result |
|---------------|-------------|---------|-------------------------|------------------------|-------------|--------|
| GFSK          | DH5         | 0       | 3.76                    | 2.38                   | ≤30         | PASS   |
|               |             | 39      | 4.18                    | 2.62                   |             | PASS   |
|               |             | 78      | 3.61                    | 2.30                   |             | PASS   |
| $\pi/4$ DQPSK | 2-DH5       | 0       | 4.75                    | 2.99                   | ≤20.97      | PASS   |
|               |             | 39      | 4.74                    | 2.98                   |             | PASS   |
|               |             | 78      | 4.21                    | 2.64                   |             | PASS   |
| 8DPSK         | 3-DH5       | 0       | 5.09                    | 3.23                   |             | PASS   |
|               |             | 39      | 5.19                    | 3.30                   |             | PASS   |
|               |             | 78      | 4.72                    | 2.96                   |             | PASS   |

### Test Graphs

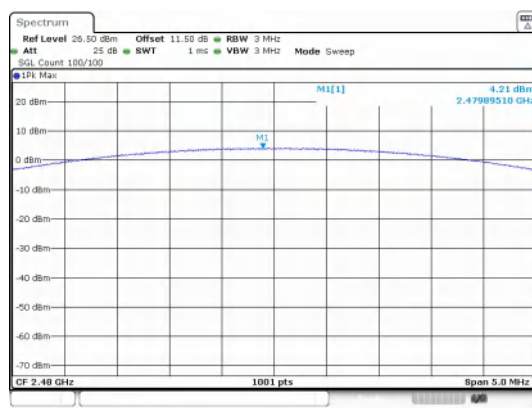


GFSK\_Channel 78



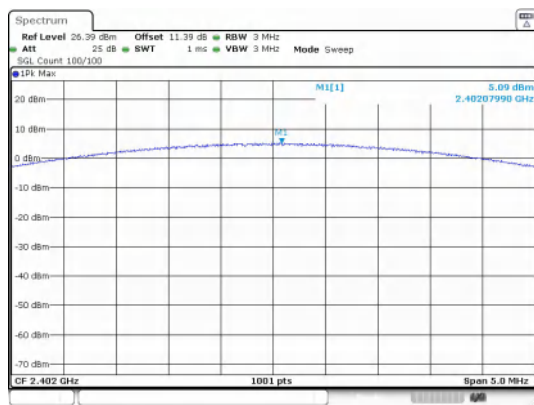
Date: 6\_JAN\_2025 17:14:31

$\pi$ /4DQPSK\_Channel 0



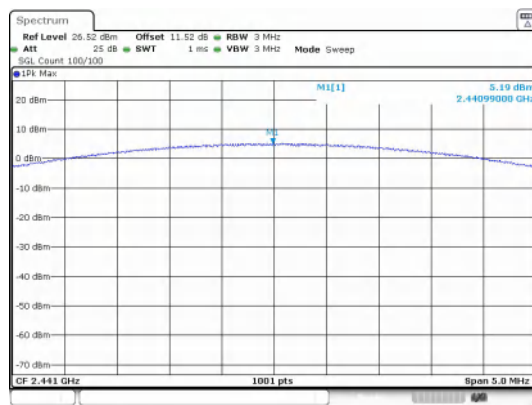
Date: 6\_JAN\_2025 17:16:10

Peak Output Power  
 $\pi$ /4DQPSK\_Channel 39



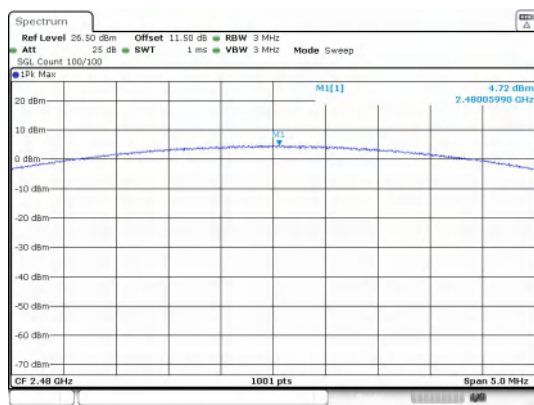
Date: 6\_JAN\_2025 17:17:54

Peak Output Power  
 $\pi$ /4DQPSK\_Channel 78



Date: 6\_JAN\_2025 17:30:26

Peak Output Power  
8DPSK\_Channel 0



Date: 6\_JAN\_2025 17:32:03

Peak Output Power  
8DPSK\_Channel 39

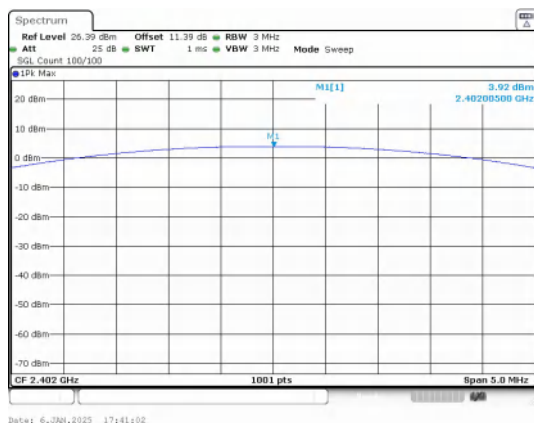
Peak Output Power  
8DPSK\_Channel 78

Right:

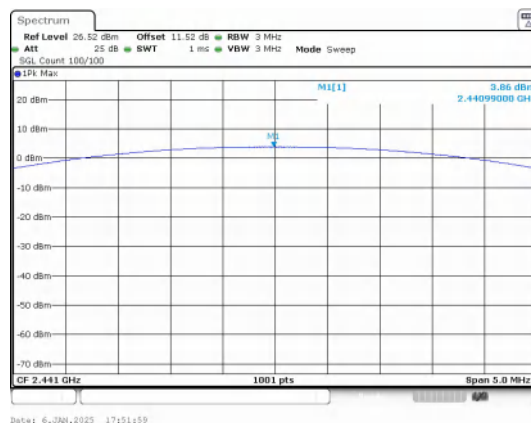
| Modulation | Packet Type | Channel | Peak Output Power (dBm) | Peak Output Power (mW) | Limit (dBm) | Result |
|------------|-------------|---------|-------------------------|------------------------|-------------|--------|
| GFSK       | DH5         | 0       | 3.92                    | 2.47                   | ≤30         | PASS   |

|               |       |    |      |      |              |      |
|---------------|-------|----|------|------|--------------|------|
|               |       | 39 | 3.86 | 2.43 |              | PASS |
|               |       | 78 | 3.41 | 2.19 |              | PASS |
|               |       | 0  | 4.51 | 2.82 |              | PASS |
| $\pi/4$ DQPSK | 2-DH5 | 39 | 4.59 | 2.88 | $\leq 20.97$ | PASS |
|               |       | 78 | 4.05 | 2.54 |              | PASS |
|               |       | 0  | 4.99 | 3.16 |              | PASS |
| 8DPSK         | 3-DH5 | 39 | 5.03 | 3.18 |              | PASS |
|               |       | 78 | 4.56 | 2.86 |              | PASS |
|               |       |    |      |      |              | PASS |

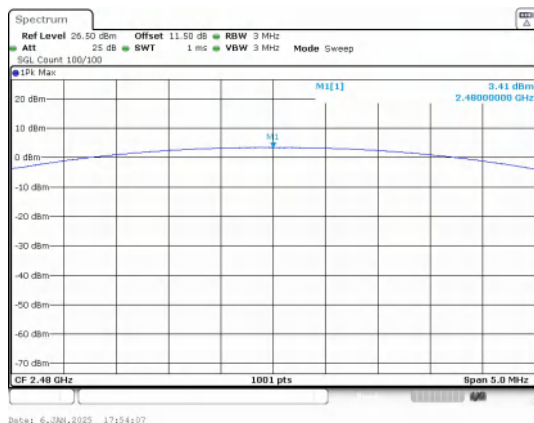
## Test Graphs



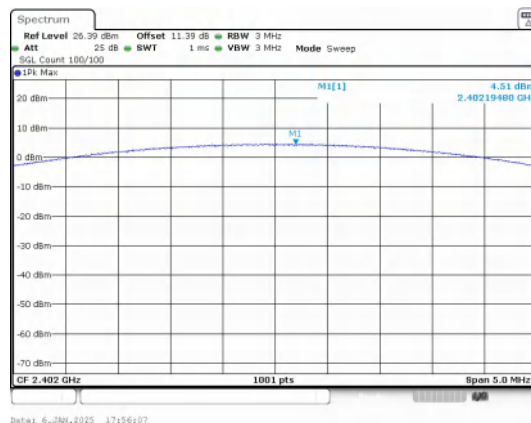
Peak Output Power  
GFSK\_Channel 0



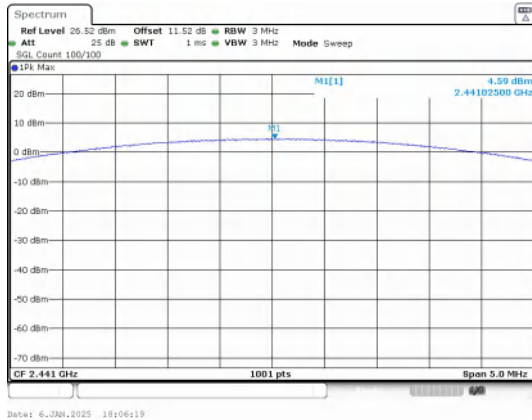
Peak Output Power  
GFSK\_Channel 39



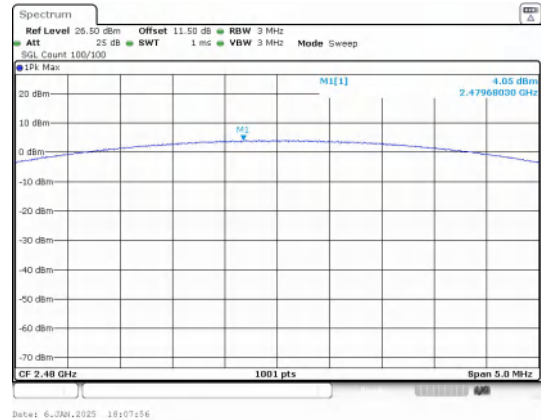
Peak Output Power  
GFSK\_Channel 78



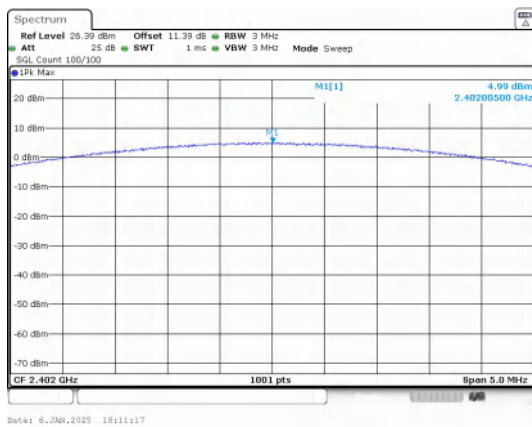
Peak Output Power  
 $\pi/4$ DQPSK\_Channel 0



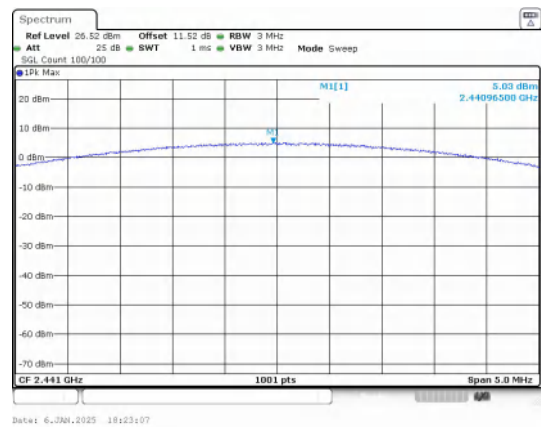
**Peak Output Power**  
 **$\pi/4$ DQPSK\_Channel 39**



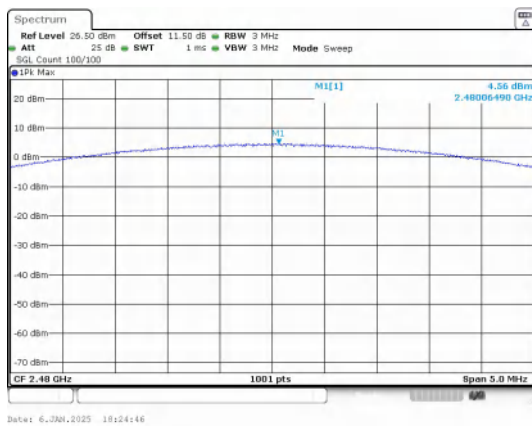
**Peak Output Power**  
 **$\pi/4$ DQPSK\_Channel 78**



**Peak Output Power**  
**8DPSK\_Channel 0**



**Peak Output Power**  
**8DPSK\_Channel 39**



**Peak Output Power**  
**8DPSK\_Channel 78**

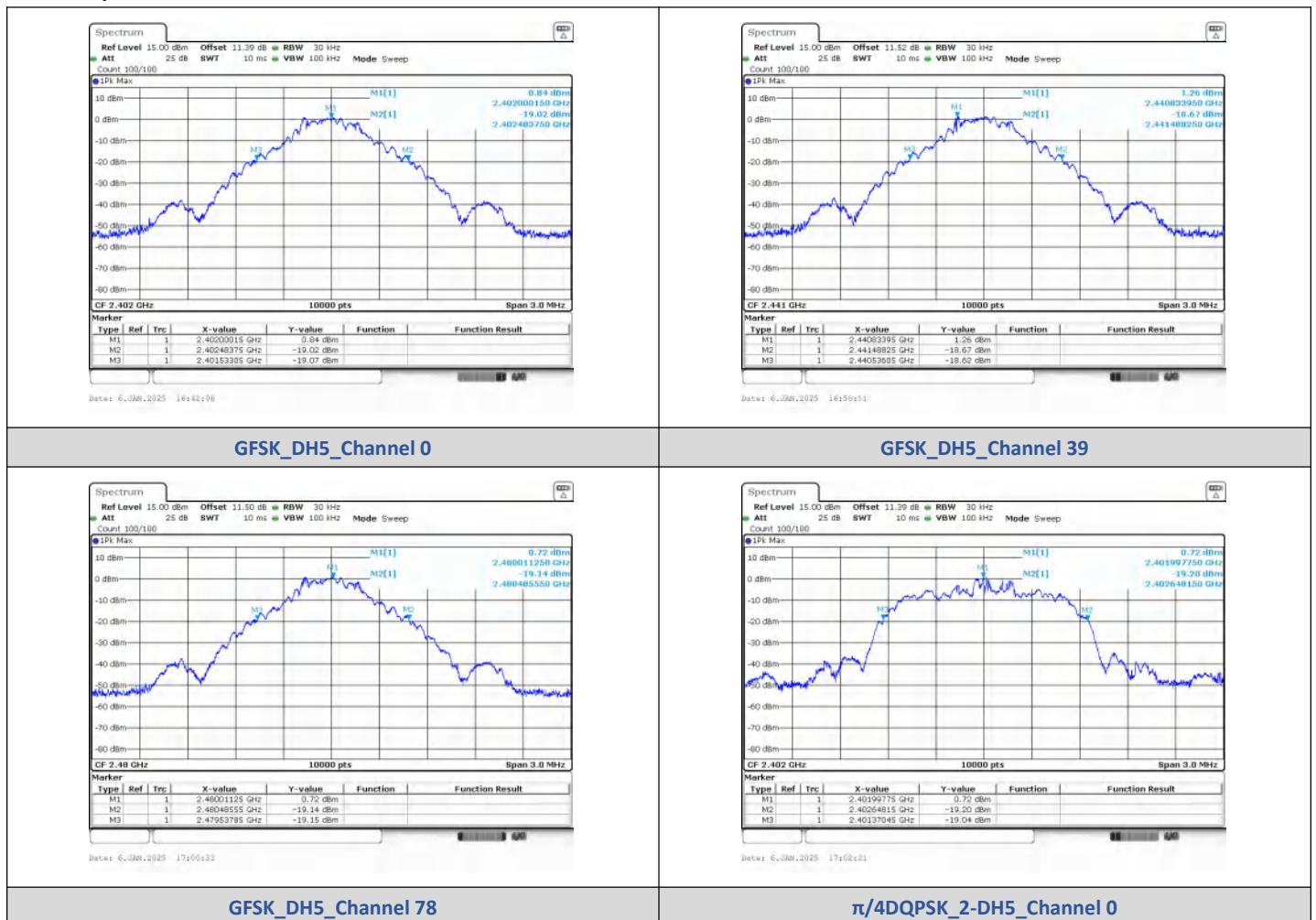
## 5) 20dB Bandwidth

### Test Result

Left:

| Modulation    | Channel | Center Frequency (MHz) | 20 dB Bandwidth (MHz) |
|---------------|---------|------------------------|-----------------------|
| GFSK          | 0       | 2402 MHz               | 0.9500                |
|               | 39      | 2441 MHz               | 0.9500                |
|               | 78      | 2480 MHz               | 0.9500                |
| $\pi/4$ DQPSK | 0       | 2402 MHz               | 1.280                 |
|               | 39      | 2441 MHz               | 1.280                 |
|               | 78      | 2480 MHz               | 1.280                 |
| 8DPSK         | 0       | 2402 MHz               | 1.270                 |
|               | 39      | 2441 MHz               | 1.280                 |
|               | 78      | 2480 MHz               | 1.280                 |

### Test Graphs





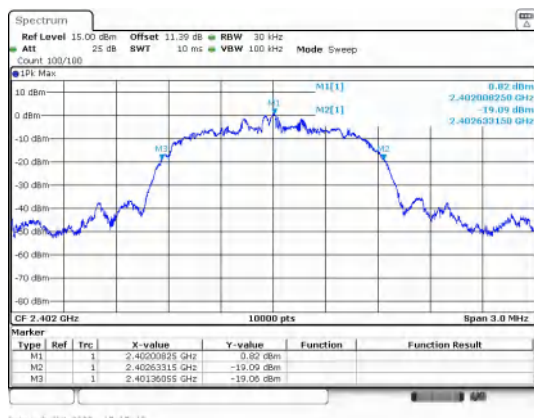
Date: 6-Jun-2025 17:14:19

$\pi/4$ DQPSK\_2-DH5\_Channel 39



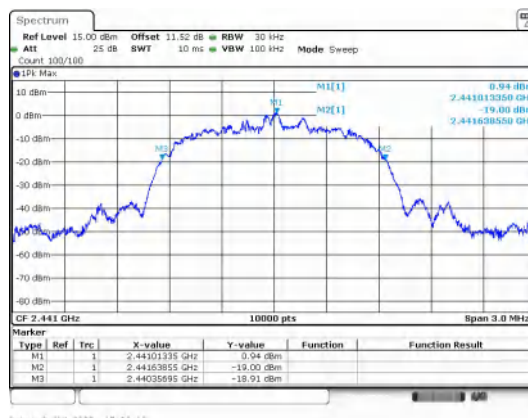
Date: 6-Jun-2025 17:15:57

$\pi/4$ DQPSK\_2-DH5\_Channel 78



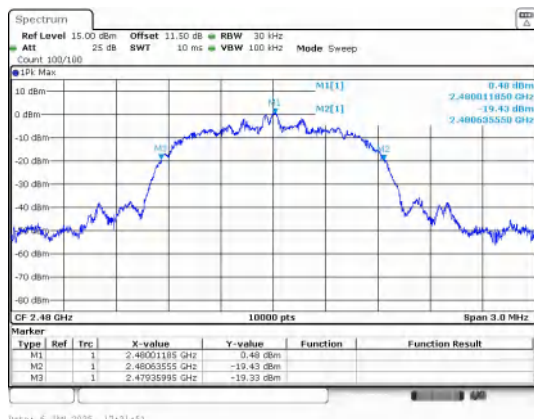
Date: 6-Jun-2025 17:17:42

8DPSK\_3-DH5\_Channel 0



Date: 6-Jun-2025 17:19:13

8DPSK\_3-DH5\_Channel 39



Date: 6-Jun-2025 17:31:51

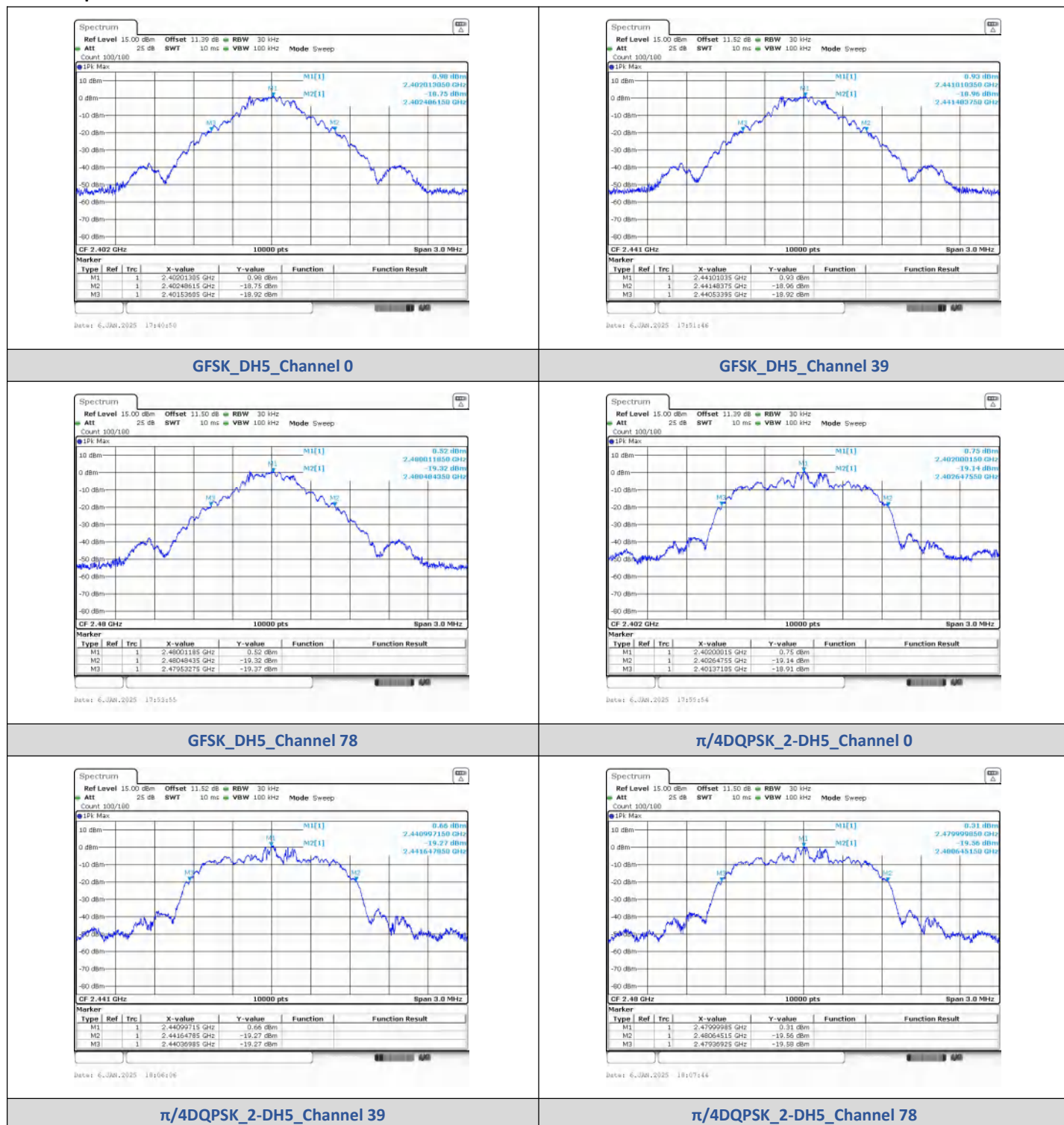
8DPSK\_3-DH5\_Channel 78

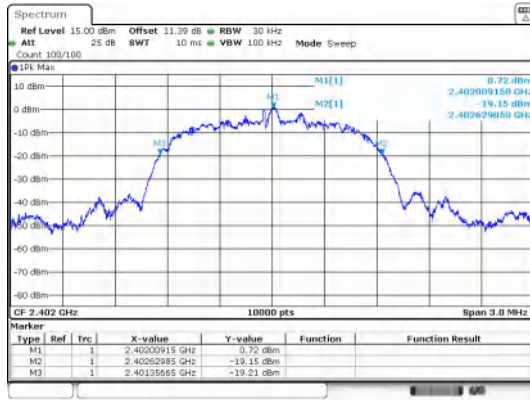
Right:

| Modulation    | Channel | Center Frequency (MHz) | 20 dB Bandwidth (MHz) |
|---------------|---------|------------------------|-----------------------|
| GFSK          | 0       | 2402 MHz               | 0.9500                |
|               | 39      | 2441 MHz               | 0.9500                |
|               | 78      | 2480 MHz               | 0.9500                |
| $\pi/4$ DQPSK | 0       | 2402 MHz               | 1.280                 |
|               | 39      | 2441 MHz               | 1.280                 |
|               | 78      | 2480 MHz               | 1.280                 |

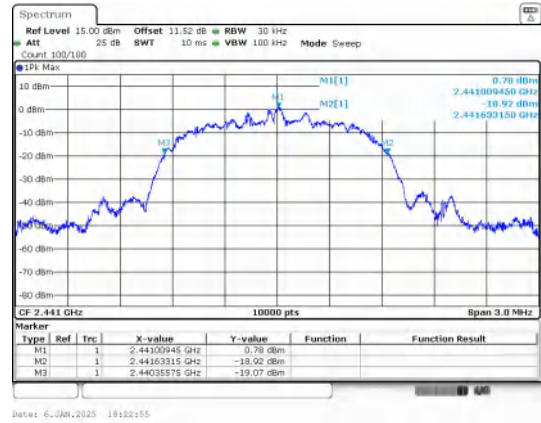
|       |    |          |       |
|-------|----|----------|-------|
| 8DPSK | 0  | 2402 MHz | 1.270 |
|       | 39 | 2441 MHz | 1.270 |
|       | 78 | 2480 MHz | 1.280 |

## Test Graphs

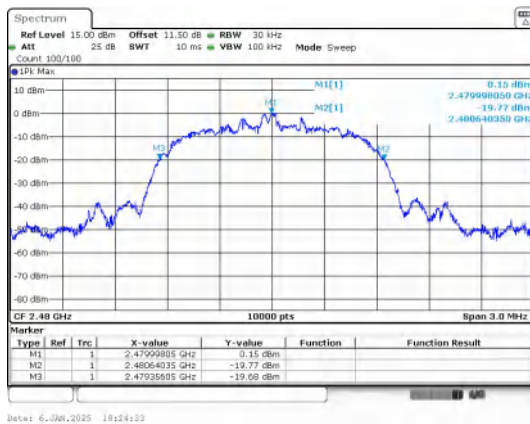




8DPSK\_3-DH5\_Channel 0



8DPSK\_3-DH5\_Channel 39



8DPSK\_3-DH5\_Channel 78

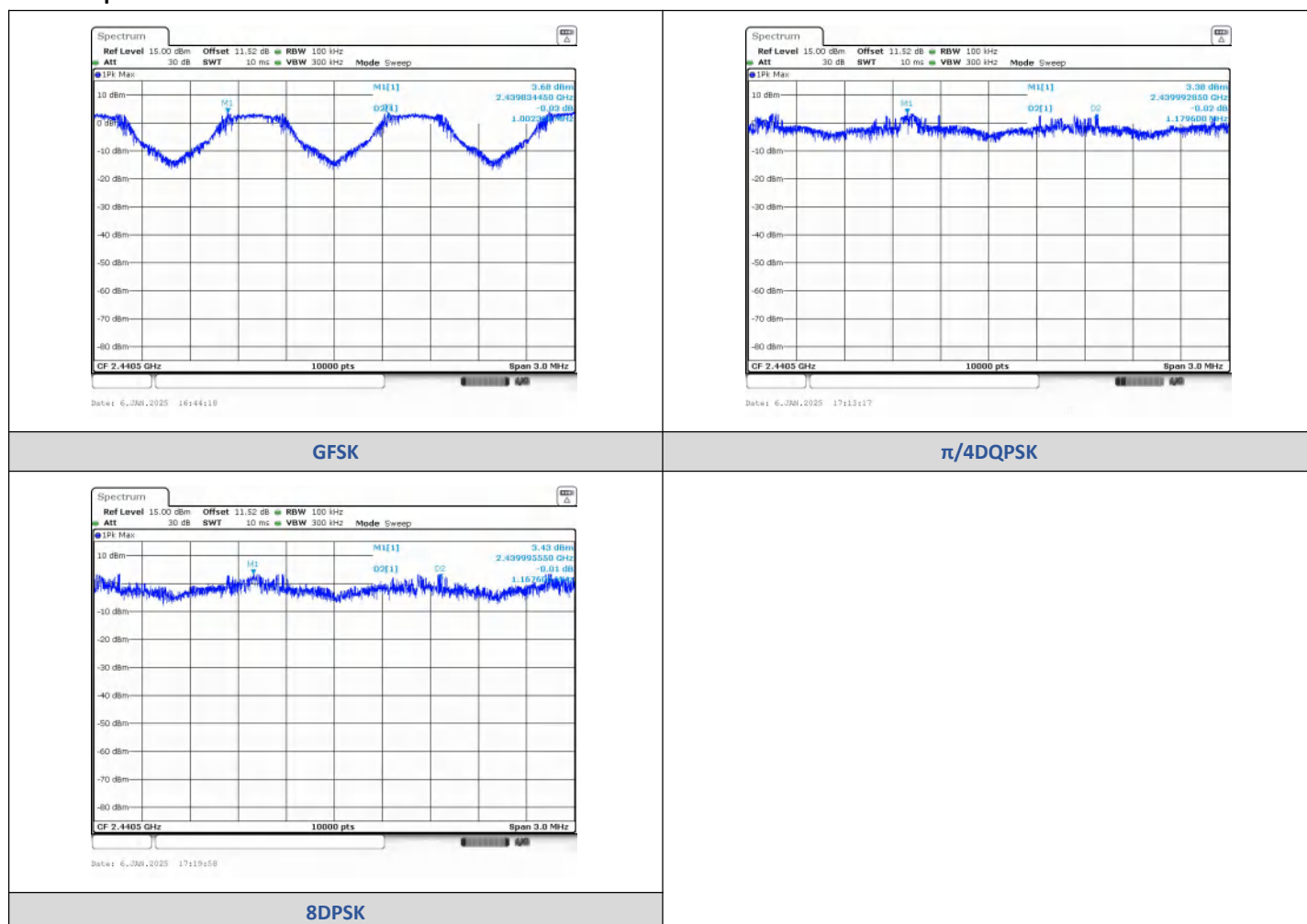
## 6) Carrier Frequencies Separation

### Test Result

Left:

| Modulation    | Packet | Left Center frequency (MHz) | Right Center frequency (MHz) | Hopping Frequency Separation (MHz) | Limit (MHz) | Result |
|---------------|--------|-----------------------------|------------------------------|------------------------------------|-------------|--------|
| GFSK          | DH5    | 2439.8344                   | 2440.8367                    | 1.0023                             | 0.95        | PASS   |
| $\pi/4$ DQPSK | 2-DH5  | 2439.9929                   | 2441.1725                    | 1.1796                             | 0.853       | PASS   |
| 8DPSK         | 3-DH5  | 2439.9956                   | 2441.1631                    | 1.1676                             | 0.847       | PASS   |

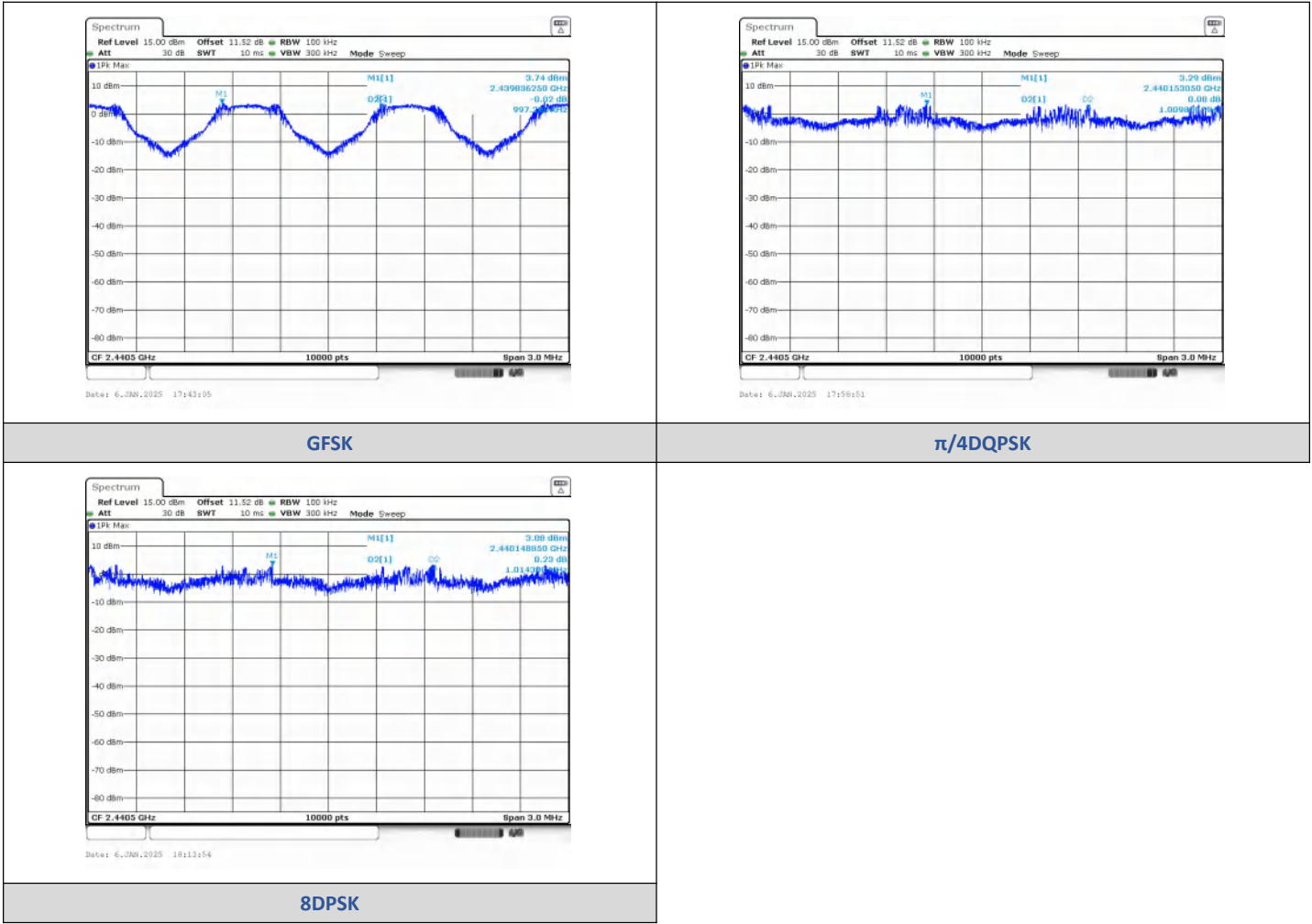
### Test Graphs



Right:

| Modulation    | Packet | Left Center frequency (MHz) | Right Center frequency (MHz) | Hopping Frequency Separation (MHz) | Limit (MHz) | Result |
|---------------|--------|-----------------------------|------------------------------|------------------------------------|-------------|--------|
| GFSK          | DH5    | 2439.8362                   | 2440.8335                    | 0.9972                             | 0.95        | PASS   |
| $\pi/4$ DQPSK | 2-DH5  | 2440.153                    | 2441.1629                    | 1.0098                             | 0.853       | PASS   |
| 8DPSK         | 3-DH5  | 2440.1489                   | 2441.1631                    | 1.0143                             | 0.847       | PASS   |

Test Graphs



## 7) Conducted Out Of Band Emission

### Test Result

#### Left:

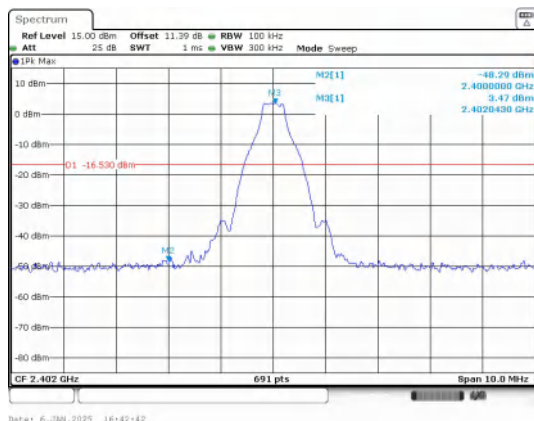
#### Non-Hopping

| Modulation    | Packet | Channel | OOB Emission Frequency (MHz) | OOB Emission Level (dBm) | Limit (dBm) | Over Limit (dB) | Result |
|---------------|--------|---------|------------------------------|--------------------------|-------------|-----------------|--------|
| GFSK          | DH5    | 0       | 2400.00                      | -48.290                  | -16.53      | -31.760         | PASS   |
|               |        |         | 7205.13                      | -50.994                  | -16.53      | -34.464         | PASS   |
|               |        | 39      | 7323.32                      | -51.768                  | -16.12      | -35.648         | PASS   |
|               |        | 78      | 835.28                       | -46.471                  | -16.59      | -29.881         | PASS   |
|               |        |         | 2483.50                      | -48.790                  | -16.59      | -32.200         | PASS   |
| $\pi/4$ DQPSK | 2-DH5  | 0       | 2400.00                      | -48.660                  | -16.48      | -32.180         | PASS   |
|               |        |         | 4803.85                      | -52.007                  | -16.48      | -35.527         | PASS   |
|               |        | 39      | 6226.31                      | -52.853                  | -16.23      | -36.623         | PASS   |
|               |        | 78      | 2483.50                      | -48.710                  | -16.82      | -31.890         | PASS   |
|               |        |         | 7439.85                      | -51.510                  | -16.82      | -34.690         | PASS   |
| 8DPSK         | 3-DH5  | 0       | 2400.00                      | -46.470                  | -16.6       | -29.870         | PASS   |
|               |        |         | 9608.08                      | -52.202                  | -16.6       | -35.602         | PASS   |
|               |        | 39      | 6987.89                      | -52.609                  | -16.43      | -36.179         | PASS   |
|               |        | 78      | 2483.50                      | -50.010                  | -16.91      | -33.100         | PASS   |
|               |        |         | 5902.53                      | -52.791                  | -16.91      | -35.881         | PASS   |

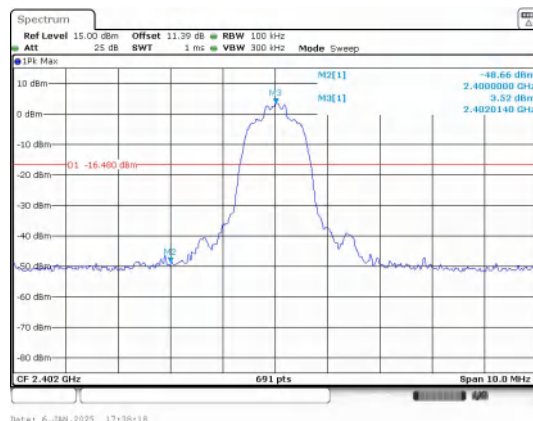
#### Hopping

| Hopping       |        |         |                                    |                                |                |                    |        |
|---------------|--------|---------|------------------------------------|--------------------------------|----------------|--------------------|--------|
| Modulation    | Packet | Channel | OOB Emission<br>Frequency<br>(MHz) | OOB Emission<br>Level<br>(dBm) | Limit<br>(dBm) | Over Limit<br>(dB) | Result |
| GFSK          | DH5    | Hopping | 2400.00                            | -46.970                        | -16.41         | -30.560            | PASS   |
|               |        |         | 2483.50                            | -49.080                        | -16.59         | -32.490            | PASS   |
| $\pi/4$ DQPSK | 2-DH5  |         | 2396.21                            | -47.331                        | -16.44         | -30.891            | PASS   |
|               |        |         | 2400.00                            | -49.130                        | -16.44         | -32.690            | PASS   |
|               |        |         | 2483.50                            | -49.330                        | -16.87         | -32.460            | PASS   |
| 8DPSK         | 3-DH5  |         | 2398.44                            | -48.282                        | -16.54         | -31.742            | PASS   |
|               |        |         | 2400.00                            | -49.670                        | -16.54         | -33.130            | PASS   |
|               |        |         | 2483.50                            | -49.250                        | -17.42         | -31.830            | PASS   |

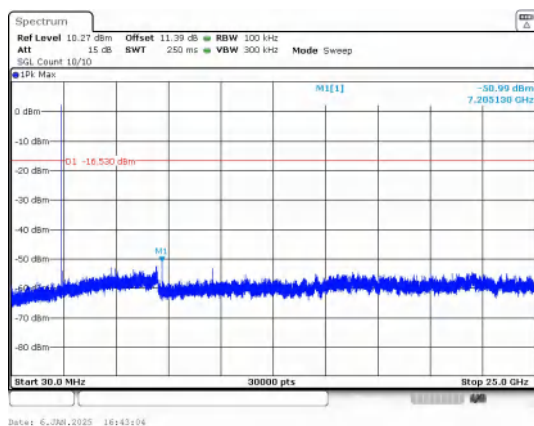
### Test Graphs



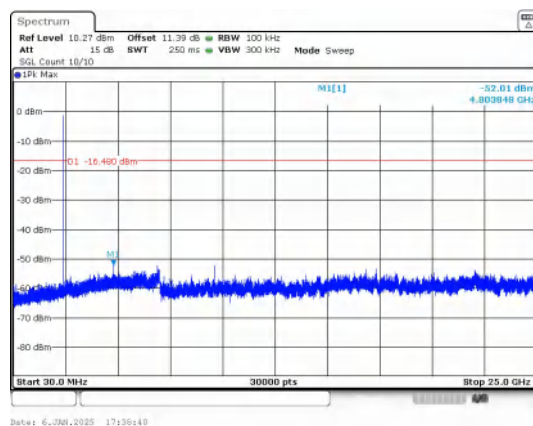
Out Of Band Emission  
GFSK\_DH5\_Channel 0



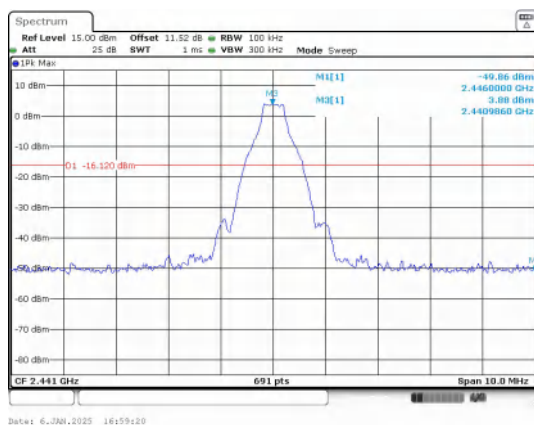
Out Of Band Emission  
 $\pi/4$ DQPSK\_2-DH5\_Channel 0



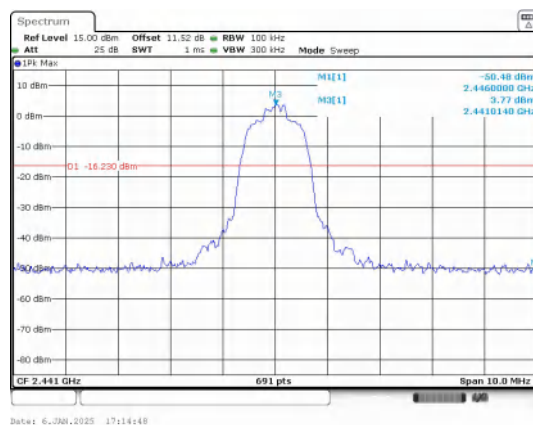
30.0 MHz - 25000.0 MHz  
GFSK\_DH5\_Channel 0



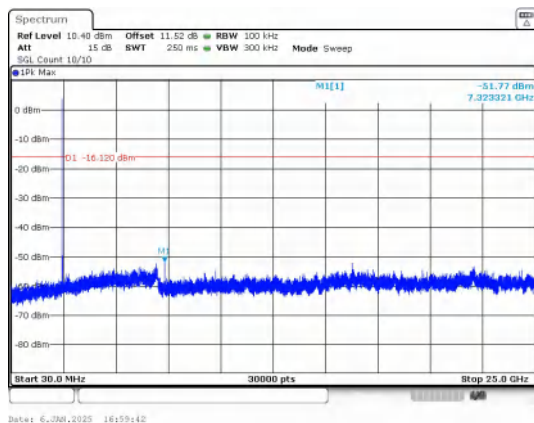
30.0 MHz - 25000.0 MHz  
 $\pi/4$ DQPSK\_2-DH5\_Channel 0



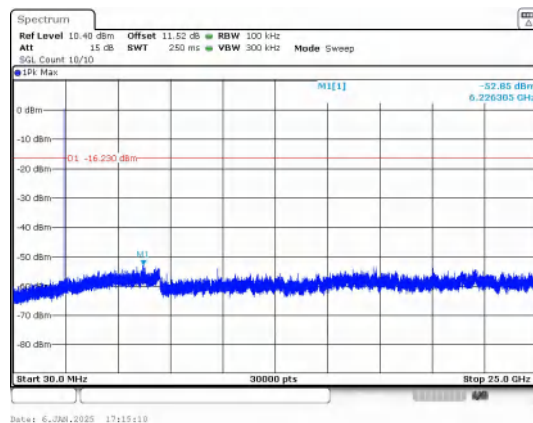
Out Of Band Emission  
GFSK\_DH5\_Channel 39



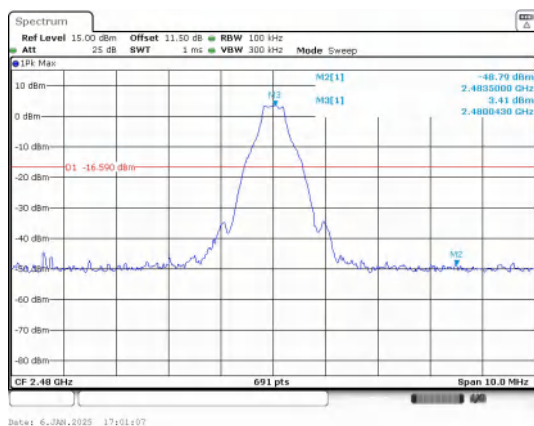
Out Of Band Emission  
 $\pi/4$ DQPSK\_2-DH5\_Channel 39



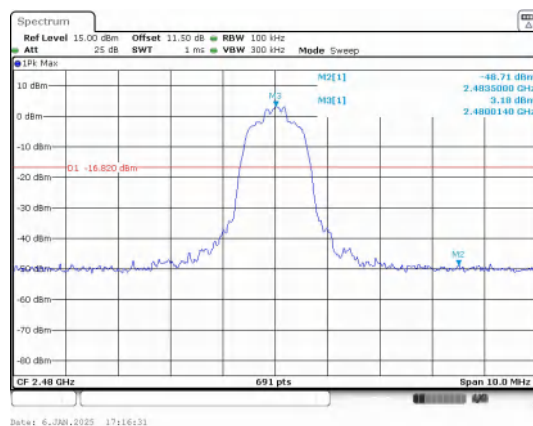
30.0 MHz - 25000.0 MHz  
GFSK\_DH5\_Channel 39



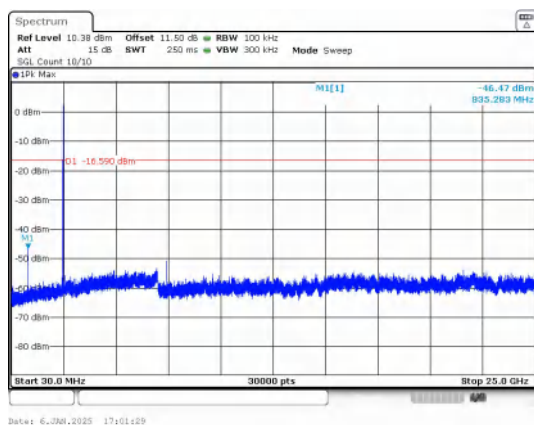
30.0 MHz - 25000.0 MHz  
 $\pi/4$ DQPSK\_2-DH5\_Channel 39



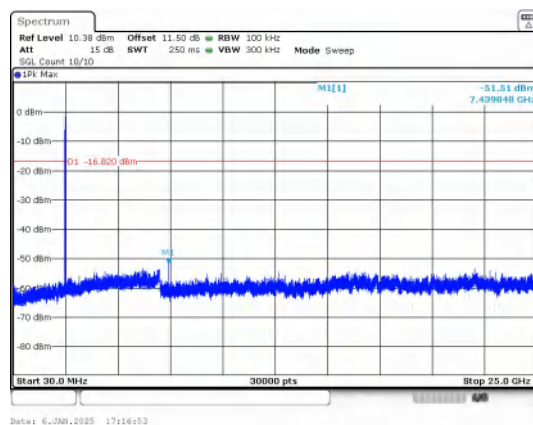
Out Of Band Emission  
GFSK\_DH5\_Channel 78



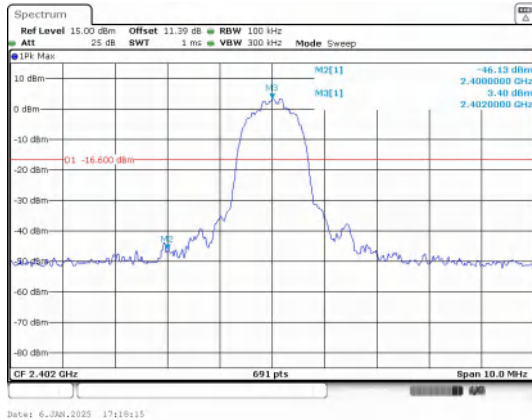
Out Of Band Emission  
 $\pi/4$ DQPSK\_2-DH5\_Channel 78



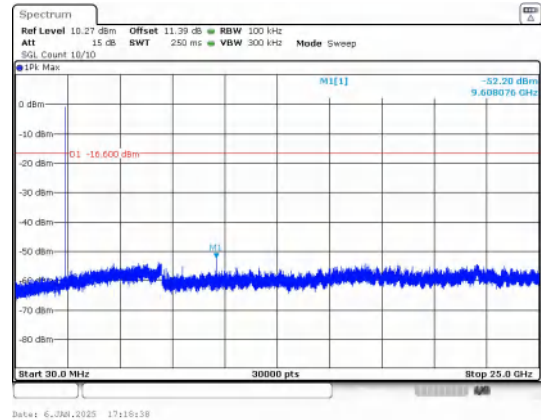
30.0 MHz - 25000.0 MHz  
GFSK\_DH5\_Channel 78



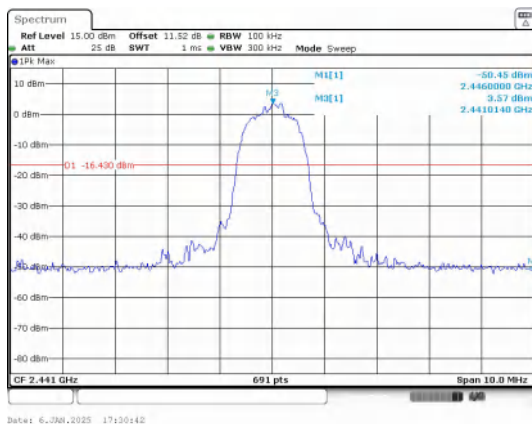
30.0 MHz - 25000.0 MHz  
 $\pi/4$ DQPSK\_2-DH5\_Channel 78



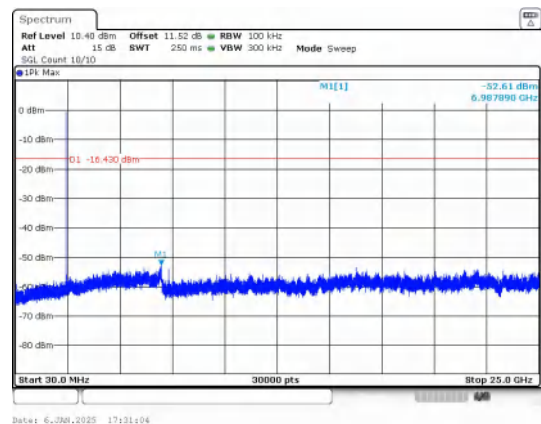
Out Of Band Emission  
8DPSK\_3-DH5\_Channel 0



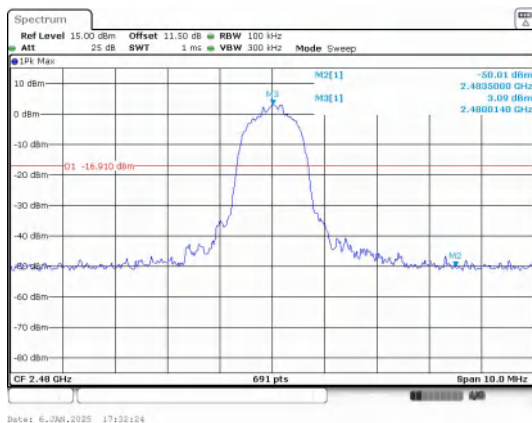
30.0 MHz - 25000.0 MHz  
8DPSK\_3-DH5\_Channel 0



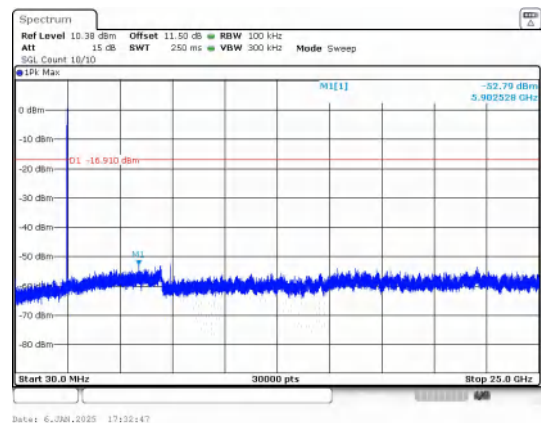
Out Of Band Emission  
8DPSK\_3-DH5\_Channel 39



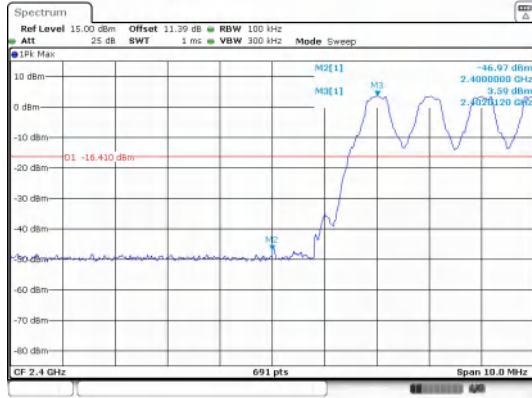
30.0 MHz - 25000.0 MHz  
8DPSK\_3-DH5\_Channel 39



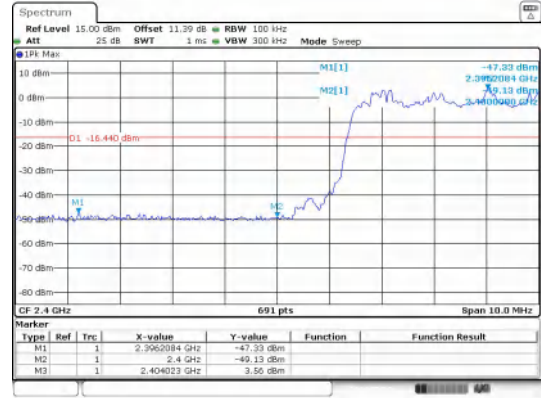
Out Of Band Emission  
8DPSK\_3-DH5\_Channel 78



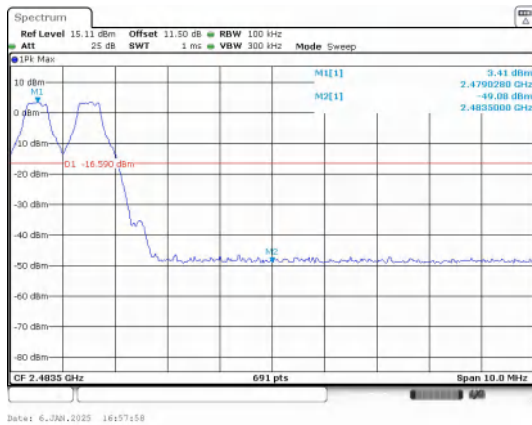
30.0 MHz - 25000.0 MHz  
8DPSK\_3-DH5\_Channel 78



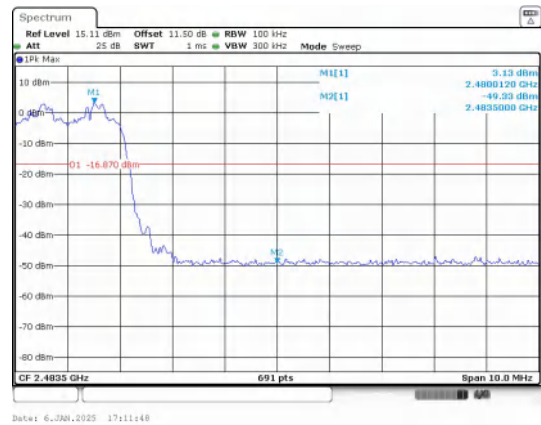
Out Of Band Emission(Left)  
GFSK\_DH5\_Channel Hopping



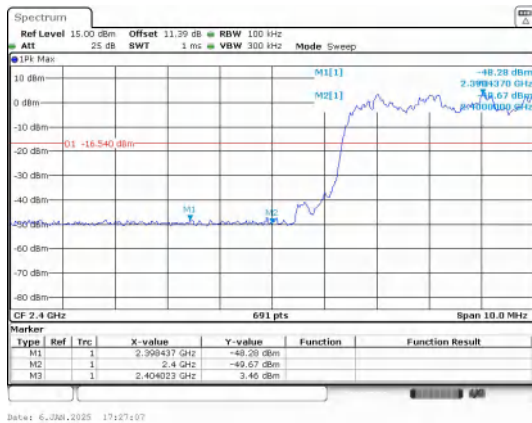
Out Of Band Emission(Left)  
 $\pi/4$ DQPSK\_2-DH5\_Channel Hopping



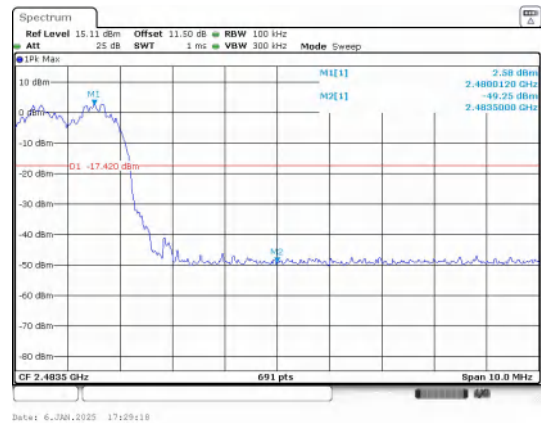
Out Of Band Emission(Right)  
GFSK\_DH5\_Channel Hopping



Out Of Band Emission(Right)  
 $\pi/4$ DQPSK\_2-DH5\_Channel Hopping



Out Of Band Emission(Left)  
8DPSK\_3-DH5\_Channel Hopping



Out Of Band Emission(Right)  
8DPSK\_3-DH5\_Channel Hopping

Right:  
Non-Hopping

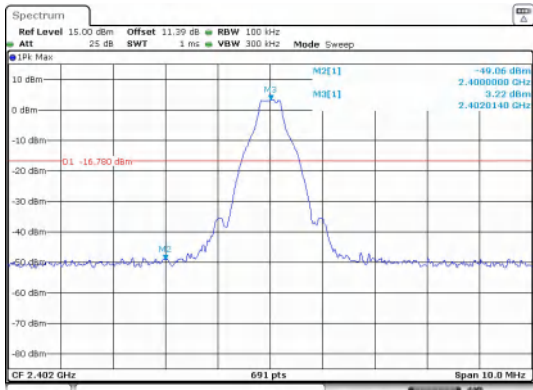
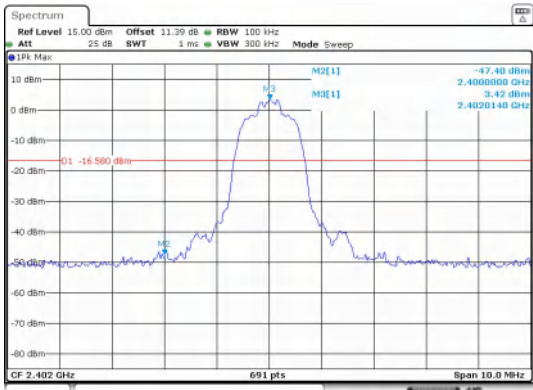
| Modulation | Packet | Channel | OOB Emission<br>Frequency<br>(MHz) | OOB Emission<br>Level<br>(dBm) | Limit<br>(dBm) | Over Limit<br>(dB) | Result |
|------------|--------|---------|------------------------------------|--------------------------------|----------------|--------------------|--------|
|------------|--------|---------|------------------------------------|--------------------------------|----------------|--------------------|--------|

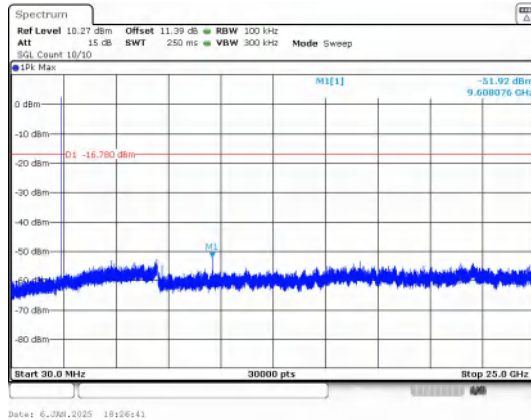
|               |       |    |         |         |        |         |      |
|---------------|-------|----|---------|---------|--------|---------|------|
| GFSK          | DH5   | 0  | 2400.00 | -49.060 | -16.78 | -32.280 | PASS |
|               |       |    | 9608.08 | -51.922 | -16.78 | -35.142 | PASS |
|               |       | 39 | 7323.32 | -52.729 | -16.34 | -36.389 | PASS |
|               |       | 78 | 2483.50 | -50.170 | -16.84 | -33.330 | PASS |
|               |       |    | 7439.85 | -49.777 | -16.84 | -32.937 | PASS |
| $\pi/4$ DQPSK | 2-DH5 | 0  | 2400.00 | -47.400 | -16.58 | -30.820 | PASS |
|               |       |    | 9608.08 | -51.763 | -16.58 | -35.183 | PASS |
|               |       | 39 | 6952.93 | -52.221 | -16.46 | -35.761 | PASS |
|               |       | 78 | 2483.50 | -50.410 | -16.93 | -33.480 | PASS |
|               |       |    | 22024.0 | -53.580 | -16.93 | -36.650 | PASS |
| 8DPSK         | 3-DH5 | 0  | 2400.00 | -47.100 | -16.77 | -30.330 | PASS |
|               |       |    | 7205.96 | -51.238 | -16.77 | -34.468 | PASS |
|               |       | 39 | 22095.6 | -53.058 | -16.68 | -36.378 | PASS |
|               |       | 78 | 2483.50 | -50.730 | -17.06 | -33.670 | PASS |
|               |       |    | 6973.74 | -52.519 | -17.06 | -35.459 | PASS |

## Hopping

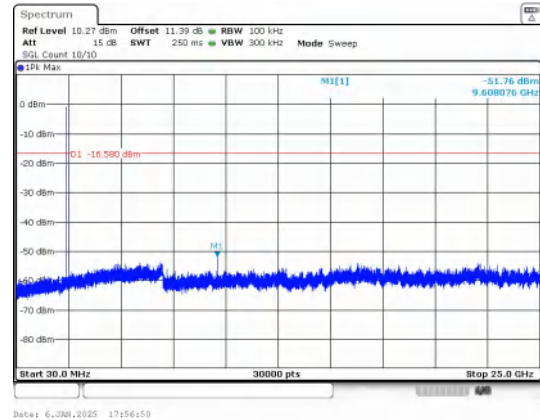
| Modulation    | Packet | Channel | OOB Emission<br>Frequency<br>(MHz) | OOB Emission<br>Level<br>(dBm) | Limit<br>(dBm) | Over Limit<br>(dB) | Result |
|---------------|--------|---------|------------------------------------|--------------------------------|----------------|--------------------|--------|
| GFSK          | DH5    | Hopping | 2397.68                            | -47.062                        | -16.53         | -30.532            | PASS   |
|               |        |         | 2400.00                            | -48.210                        | -16.53         | -31.680            | PASS   |
|               |        |         | 2483.50                            | -49.490                        | -16.75         | -32.740            | PASS   |
| $\pi/4$ DQPSK | 2-DH5  |         | 2398.08                            | -48.057                        | -16.54         | -31.517            | PASS   |
|               |        |         | 2400.00                            | -49.110                        | -16.54         | -32.570            | PASS   |
|               |        |         | 2483.50                            | -49.450                        | -17.57         | -31.880            | PASS   |
| 8DPSK         | 3-DH5  |         | 2395.27                            | -47.624                        | -16.59         | -31.034            | PASS   |
|               |        |         | 2400.00                            | -48.680                        | -16.59         | -32.090            | PASS   |
|               |        |         | 2483.50                            | -49.750                        | -17.76         | -31.990            | PASS   |

## Test Graphs

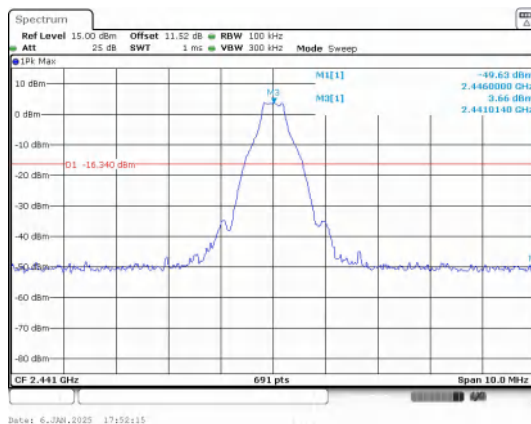
|                                                                                                                                        |                                                                                                                                                              |
|----------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  <p>Out Of Band Emission<br/>GFSK_DH5_Channel 0</p> |  <p>Out Of Band Emission<br/><math>\pi/4</math>DQPSK_2-DH5_Channel 0</p> |
|----------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|



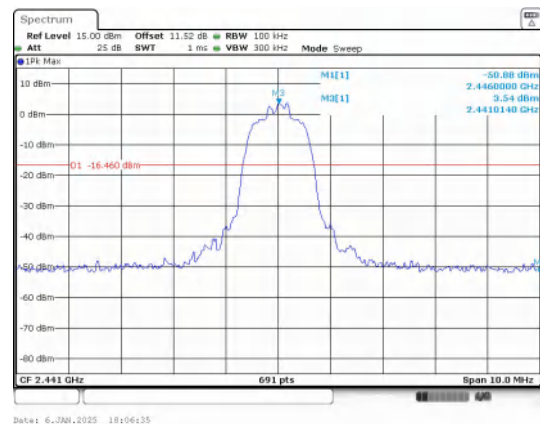
30.0 MHz - 25000.0 MHz  
GFSK\_DH5\_Channel 0



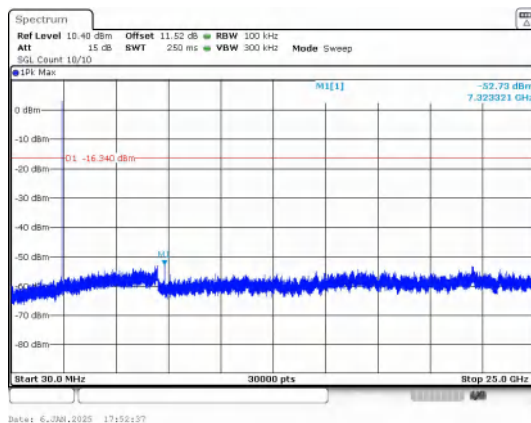
30.0 MHz - 25000.0 MHz  
 $\pi/4$ DQPSK\_2-DH5\_Channel 0



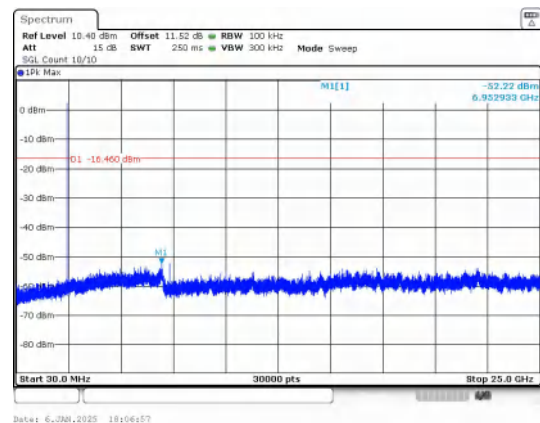
Out Of Band Emission  
GFSK\_DH5\_Channel 39



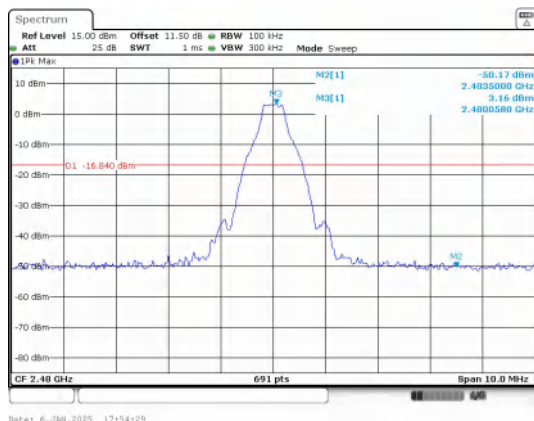
Out Of Band Emission  
 $\pi/4$ DQPSK\_2-DH5\_Channel 39



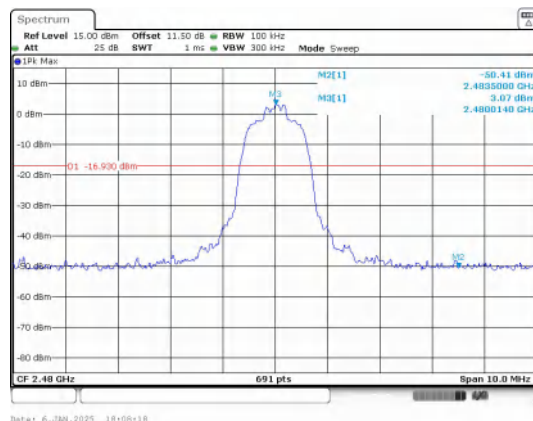
30.0 MHz - 25000.0 MHz  
GFSK\_DH5\_Channel 39



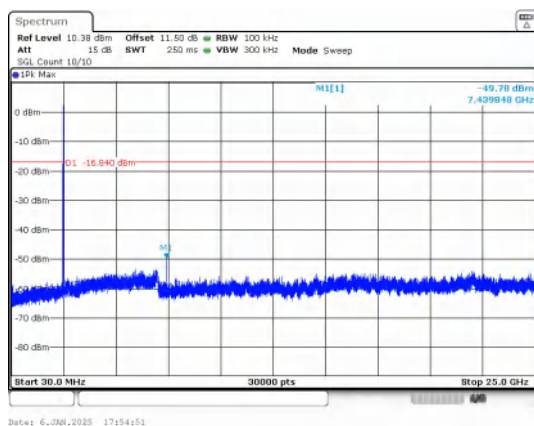
30.0 MHz - 25000.0 MHz  
 $\pi/4$ DQPSK\_2-DH5\_Channel 39



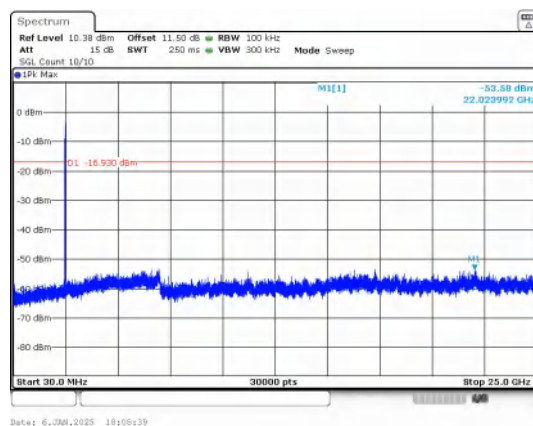
Out Of Band Emission  
GFSK\_DH5\_Channel 78



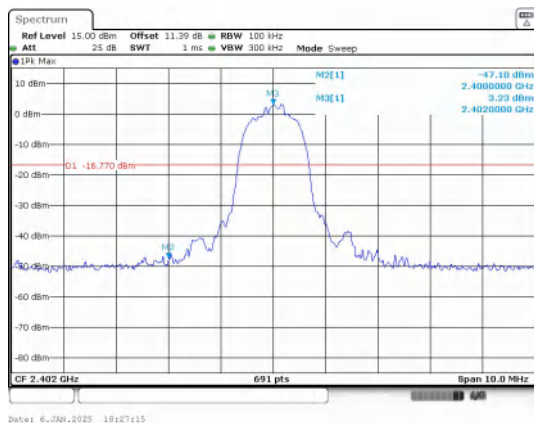
Out Of Band Emission  
 $\pi/4$ DQPSK\_2-DH5\_Channel 78



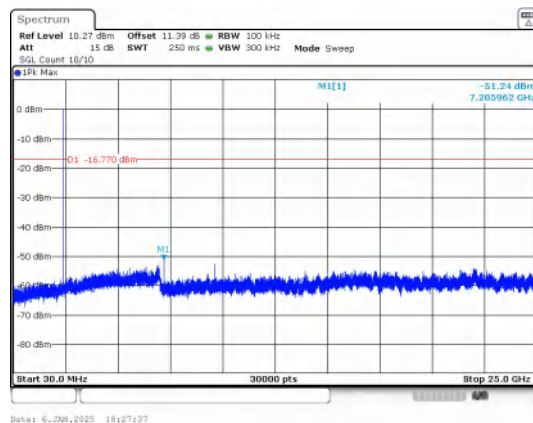
30.0 MHz - 25000.0 MHz  
GFSK\_DH5\_Channel 78



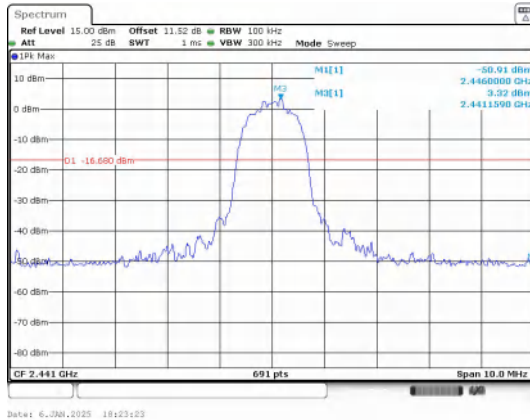
30.0 MHz - 25000.0 MHz  
 $\pi/4$ DQPSK\_2-DH5\_Channel 78



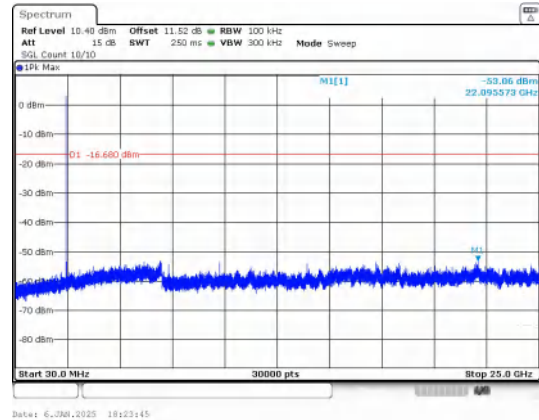
Out Of Band Emission  
8DPSK\_3-DH5\_Channel 0



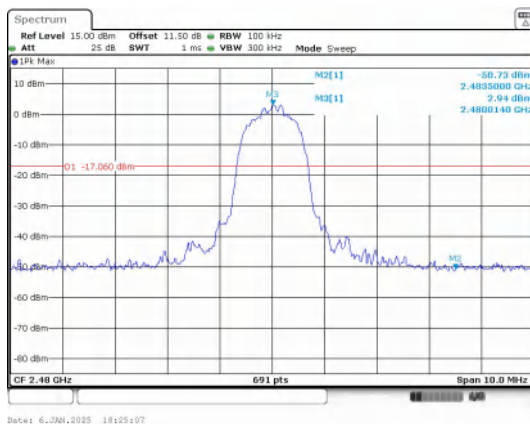
30.0 MHz - 25000.0 MHz  
8DPSK\_3-DH5\_Channel 0



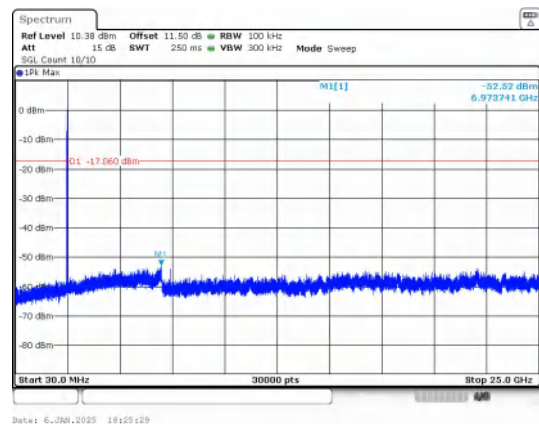
Out Of Band Emission  
8DPSK\_3-DH5\_Channel 39



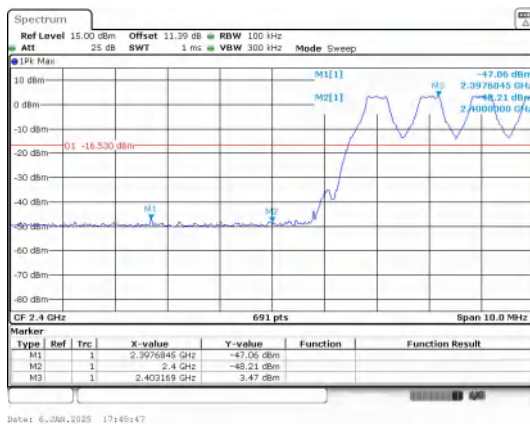
30.0 MHz - 25000.0 MHz  
8DPSK\_3-DH5\_Channel 39



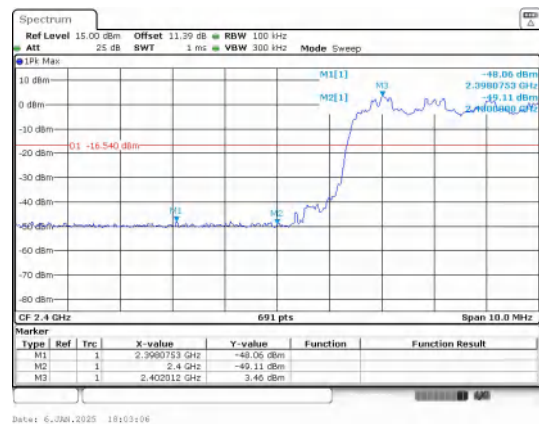
Out Of Band Emission  
8DPSK\_3-DH5\_Channel 78



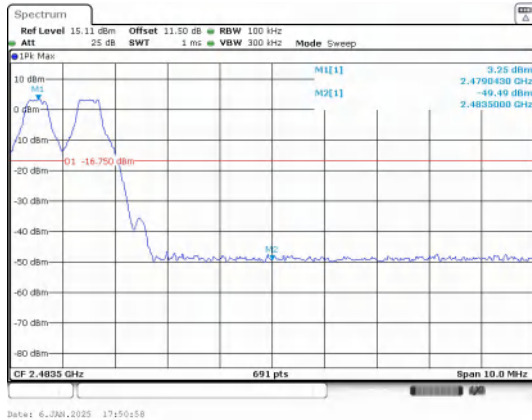
30.0 MHz - 25000.0 MHz  
8DPSK\_3-DH5\_Channel 78



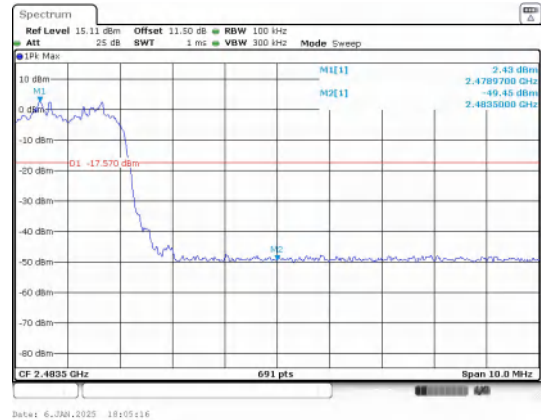
Out Of Band Emission(Left)  
GFSK\_DH5\_Channel Hopping



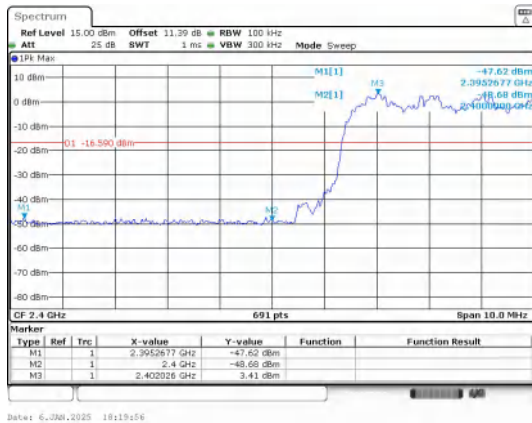
Out Of Band Emission(Left)  
 $\pi/4$ DQPSK\_2-DH5\_Channel Hopping



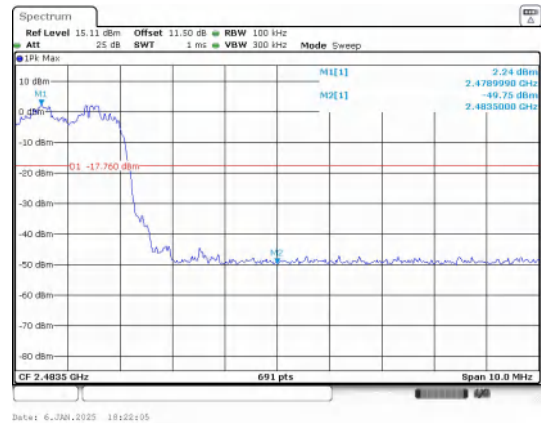
Out Of Band Emission(Right)  
GFSK\_DH5\_Channel Hopping



Out Of Band Emission(Right)  
 $\pi/4$ DQPSK\_2-DH5\_Channel Hopping



Out Of Band Emission(Left)  
8DPSK\_3-DH5\_Channel Hopping



Out Of Band Emission(Right)  
8DPSK\_3-DH5\_Channel Hopping

-----End of the report-----