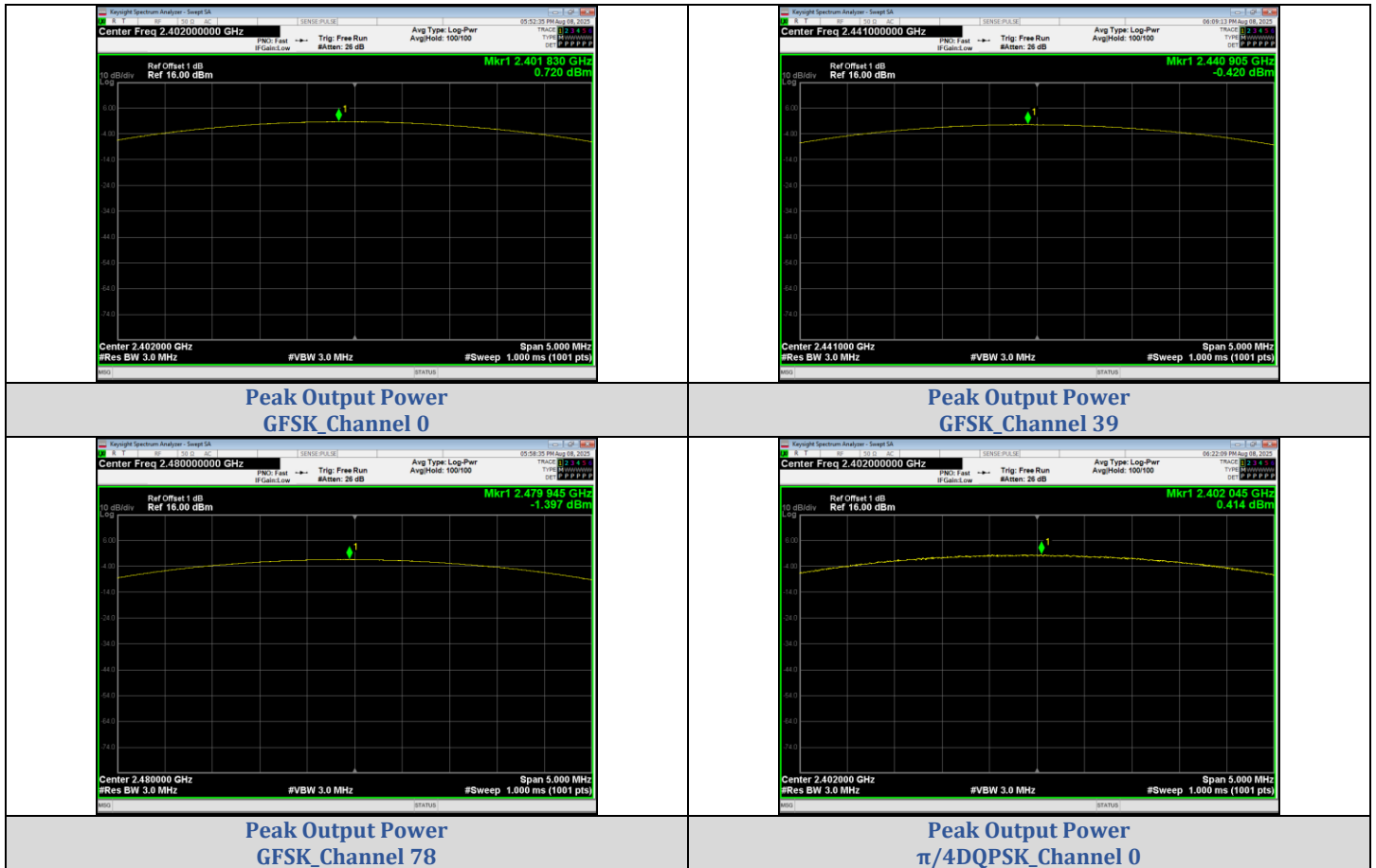


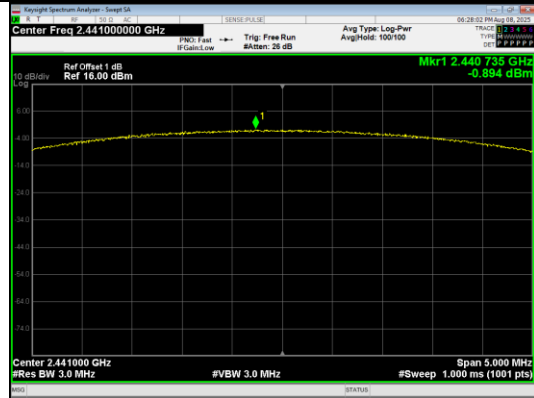
## Conducted Output Power

### Test Result

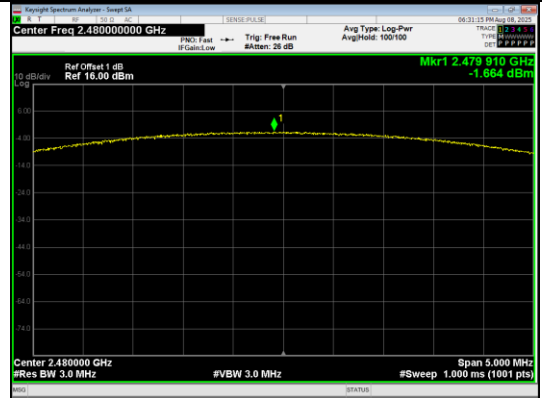
| Modulation    | Packet Type | Channel | Peak Output Power (dBm) | Peak Output Power (mW) | Limit (dBm) | Result |
|---------------|-------------|---------|-------------------------|------------------------|-------------|--------|
| GFSK          | DH5         | 0       | 0.72                    | 1.18                   | ≤30         | PASS   |
|               |             | 39      | -0.42                   | 0.91                   |             | PASS   |
|               |             | 78      | -1.40                   | 0.72                   |             | PASS   |
| $\pi/4$ DQPSK | 2-DH5       | 0       | 0.41                    | 1.10                   | ≤20.97      | PASS   |
|               |             | 39      | -0.89                   | 0.81                   |             | PASS   |
|               |             | 78      | -1.66                   | 0.68                   |             | PASS   |
| 8DPSK         | 3-DH5       | 0       | 0.96                    | 1.25                   |             | PASS   |
|               |             | 39      | -0.30                   | 0.93                   |             | PASS   |
|               |             | 78      | -1.04                   | 0.79                   |             | PASS   |

### Test Graphs

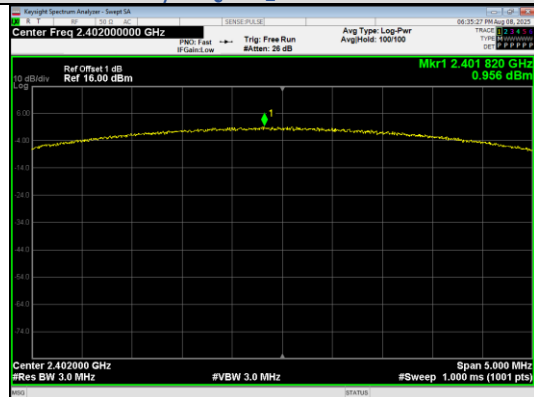




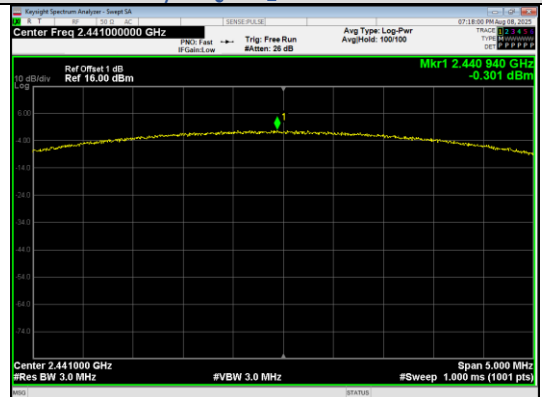
Peak Output Power  
 $\pi/4$ DQPSK\_Channel 39



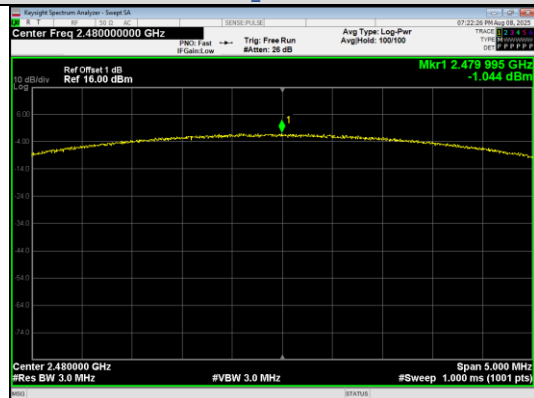
Peak Output Power  
 $\pi/4$ DQPSK\_Channel 78



Peak Output Power  
8DPSK\_Channel 0



Peak Output Power  
8DPSK\_Channel 39



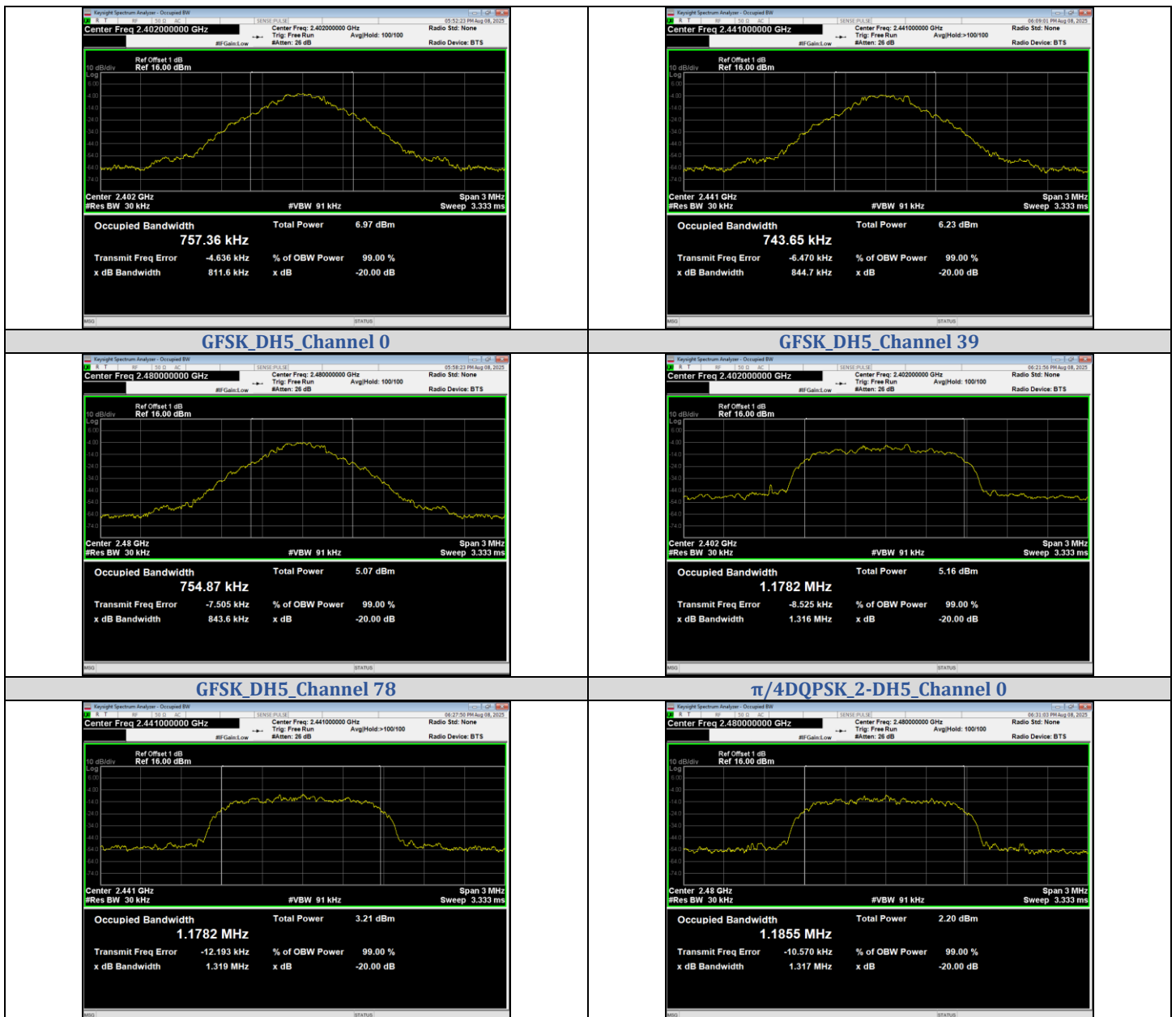
Peak Output Power  
8DPSK\_Channel 78

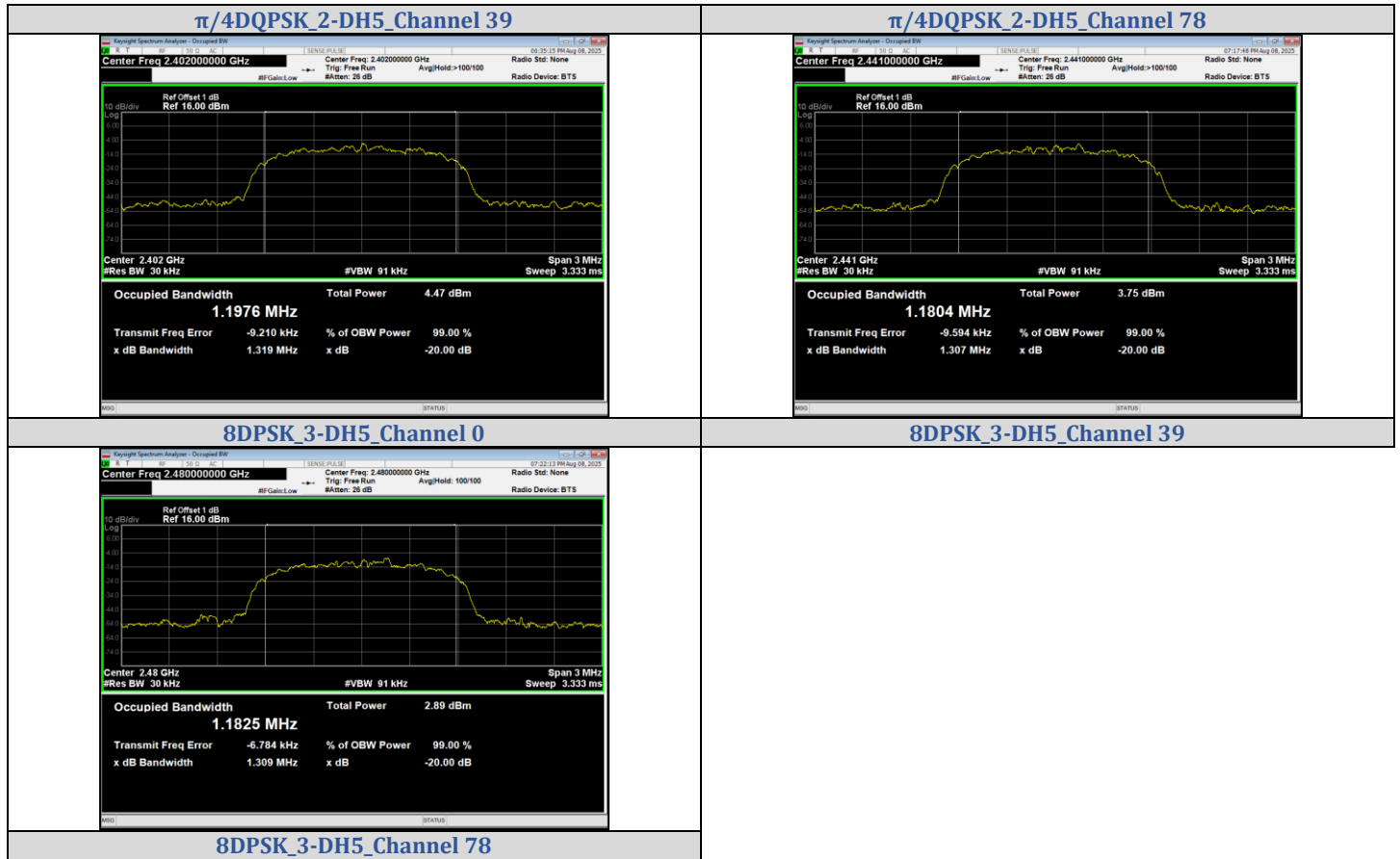
## 20dB Bandwidth

### Test Result

| Modulation    | Channel | Center Frequency (MHz) | 20 dB Bandwidth (MHz) |
|---------------|---------|------------------------|-----------------------|
| GFSK          | 0       | 2402 MHz               | 0.8100                |
|               | 39      | 2441 MHz               | 0.8400                |
|               | 78      | 2480 MHz               | 0.8400                |
| $\pi/4$ DQPSK | 0       | 2402 MHz               | 1.320                 |
|               | 39      | 2441 MHz               | 1.320                 |
|               | 78      | 2480 MHz               | 1.320                 |
| 8DPSK         | 0       | 2402 MHz               | 1.320                 |
|               | 39      | 2441 MHz               | 1.310                 |
|               | 78      | 2480 MHz               | 1.310                 |

### Test Graphs



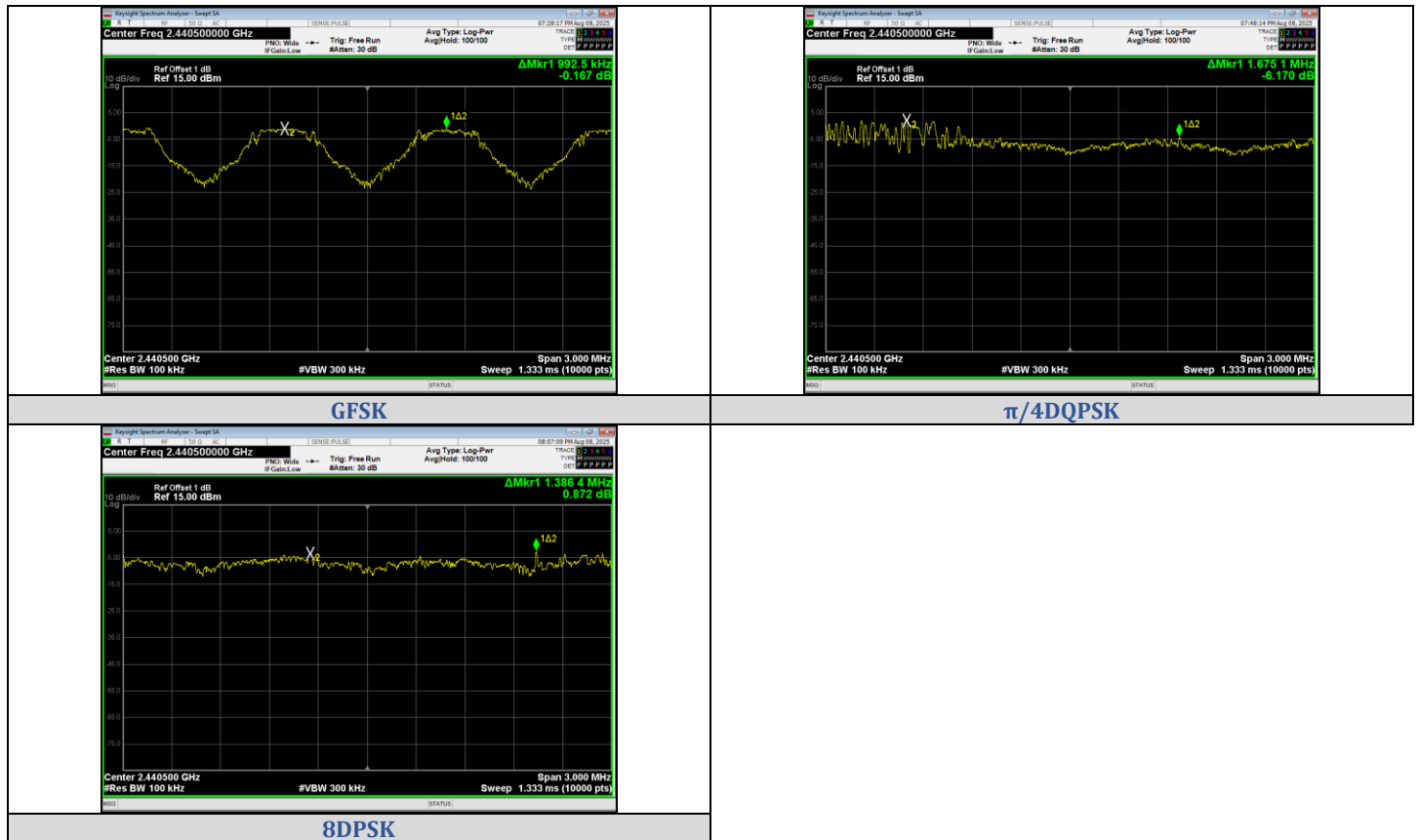


## Carrier Frequencies Separation

### Test Result

| Modulation    | Packet | Left Center frequency (MHz) | Right Center frequency (MHz) | Hopping Frequency Separation (MHz) | Limit (MHz) | Result |
|---------------|--------|-----------------------------|------------------------------|------------------------------------|-------------|--------|
| GFSK          | DH5    | 2439.9928                   | 2440.9853                    | 0.9925                             | 0.99        | PASS   |
| $\pi/4$ DQPSK | 2-DH5  | 2439.4965                   | 2441.1716                    | 1.6751                             | 0.99        | PASS   |
| 8DPSK         | 3-DH5  | 2440.1503                   | 2441.5368                    | 1.3864                             | 0.99        | PASS   |

### Test Graphs



## Conducted Out Of Band Emission

### Test Result

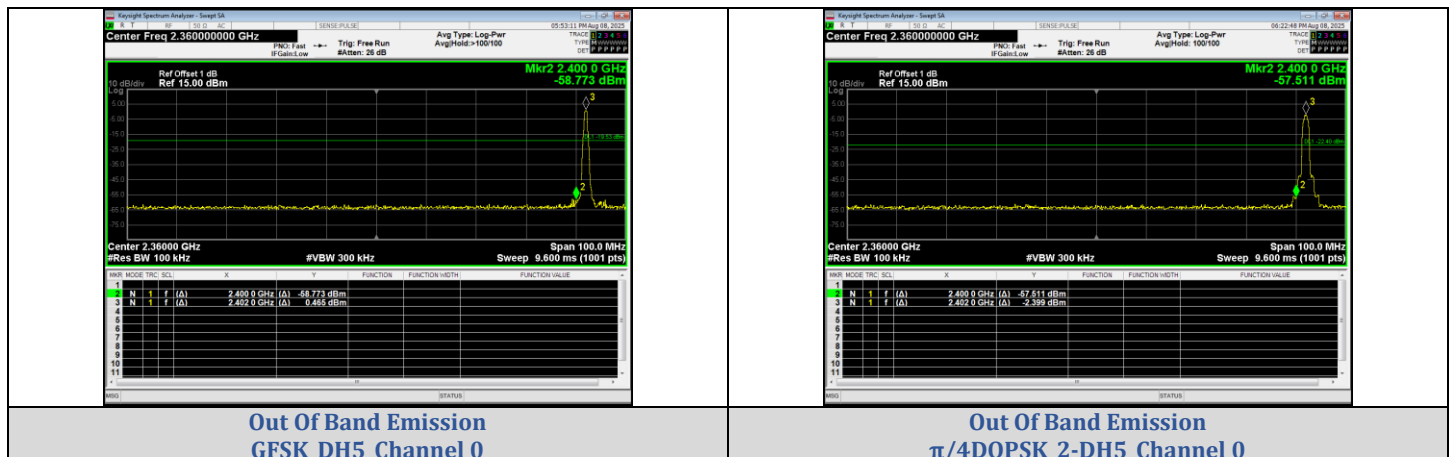
#### Non-Hopping

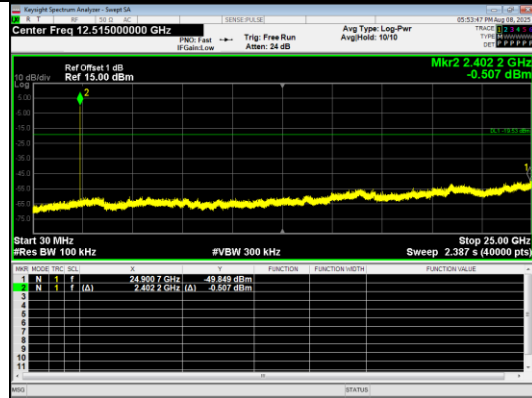
| Modulation    | Packet | Channel | OOB Emission Frequency (MHz) | OOB Emission Level (dBm) | Limit (dBm) | Over Limit (dB) | Result |
|---------------|--------|---------|------------------------------|--------------------------|-------------|-----------------|--------|
| GFSK          | DH5    | 0       | 2400.00                      | -58.770                  | -19.53      | -39.240         | PASS   |
|               |        |         | 24900.7                      | -49.849                  | -19.53      | -30.319         | PASS   |
|               |        | 39      | 24970.0                      | -49.416                  | -20.48      | -28.936         | PASS   |
|               |        | 78      | 2483.50                      | -64.610                  | -21.67      | -42.940         | PASS   |
| $\pi/4$ DQPSK | 2-DH5  | 0       | 2400.00                      | -57.510                  | -22.4       | -35.110         | PASS   |
|               |        |         | 24970.0                      | -50.192                  | -22.4       | -27.792         | PASS   |
|               |        | 39      | 24877.6                      | -49.567                  | -24.2       | -25.367         | PASS   |
|               |        | 78      | 2483.50                      | -62.980                  | -24.54      | -38.440         | PASS   |
| 8DPSK         | 3-DH5  | 0       | 2400.00                      | -56.810                  | -22.62      | -34.190         | PASS   |
|               |        |         | 24964.4                      | -49.302                  | -22.62      | -26.682         | PASS   |
|               |        | 39      | 24996.9                      | -49.640                  | -23.82      | -25.820         | PASS   |
|               |        | 78      | 2483.50                      | -63.700                  | -24.67      | -39.030         | PASS   |
|               |        |         | 24969.4                      | -49.987                  | -24.67      | -25.317         | PASS   |

#### Hopping

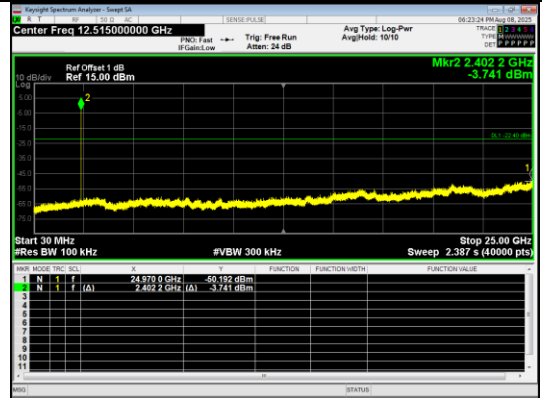
| Modulation | Packet | Channel | OOB<br>Emission<br>Frequency<br>(MHz) | OOB<br>Emission<br>Level<br>(dBm) | Limit<br>(dBm) | Over Limit<br>(dB) | Result |
|------------|--------|---------|---------------------------------------|-----------------------------------|----------------|--------------------|--------|
| GFSK       | DH5    | Hopping | 2397.56                               | -53.224                           | -19.61         | -33.614            | PASS   |
|            |        |         | 2400.00                               | -60.770                           | -19.61         | -41.160            | PASS   |
|            |        |         | 2483.50                               | -55.640                           | -21.41         | -34.230            | PASS   |
| π/4DQPSK   | 2-DH5  |         | 2400.00                               | -50.990                           | -22.4          | -28.590            | PASS   |
|            |        |         | 2483.50                               | -62.120                           | -24.44         | -37.680            | PASS   |
| 8DPSK      | 3-DH5  |         | 2398.95                               | -38.436                           | -22.46         | -15.976            | PASS   |
|            |        |         | 2400.00                               | -50.810                           | -22.46         | -28.350            | PASS   |
|            |        |         | 2483.50                               | -54.460                           | -24.41         | -30.050            | PASS   |

### Test Graphs

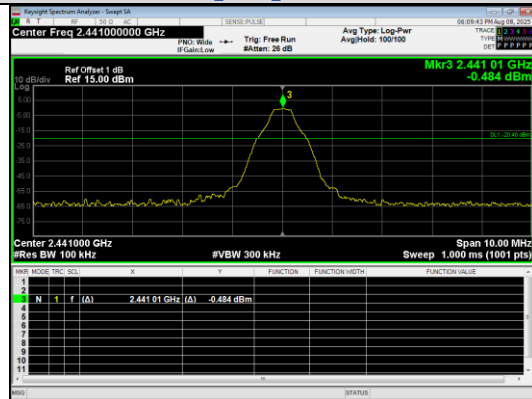




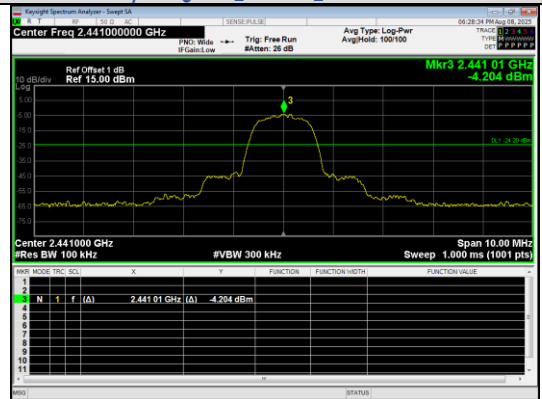
30.0 MHz - 25000.0 MHz  
GFSK\_DH5\_Channel 0



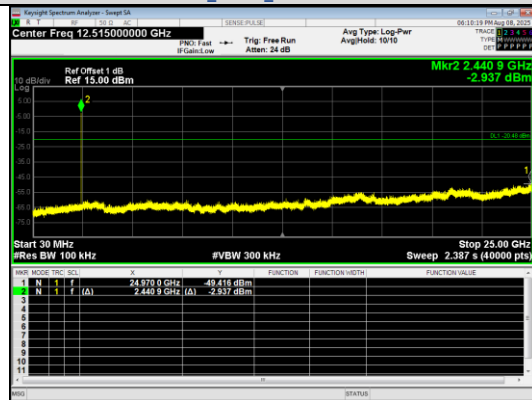
30.0 MHz - 25000.0 MHz  
 $\pi/4$ DQPSK\_2-DH5\_Channel 0



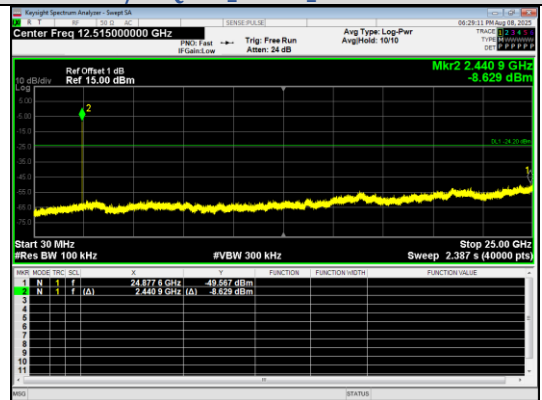
Out Of Band Emission  
GFSK\_DH5\_Channel 39



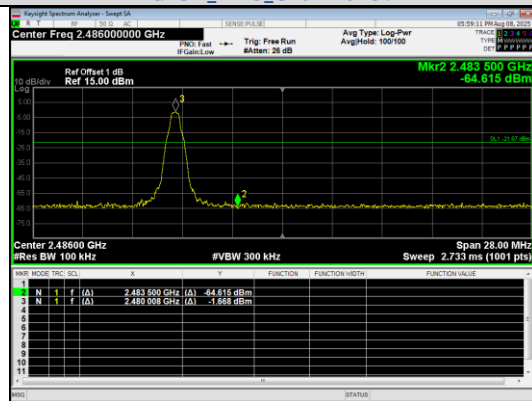
Out Of Band Emission  
 $\pi/4$ DQPSK\_2-DH5\_Channel 39



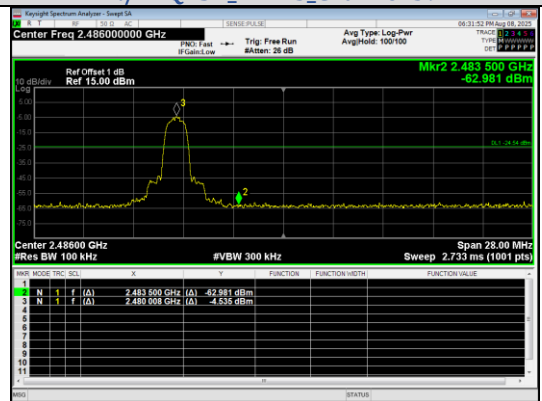
30.0 MHz - 25000.0 MHz  
GFSK\_DH5\_Channel 39



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

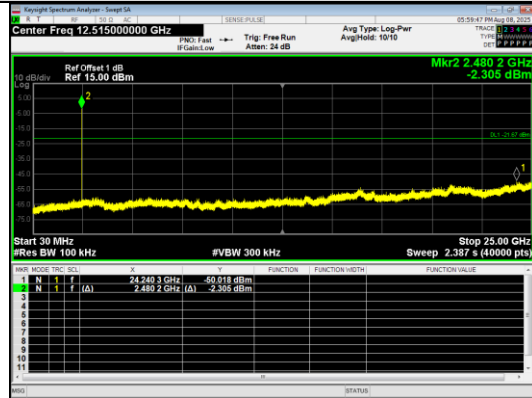


Out Of Band Emission



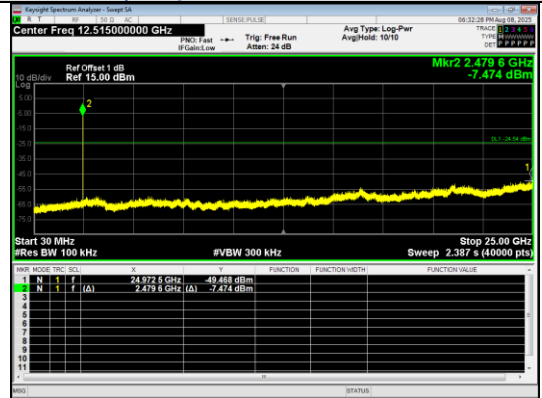
Out Of Band Emission

### GFSK\_DH5\_Channel 78

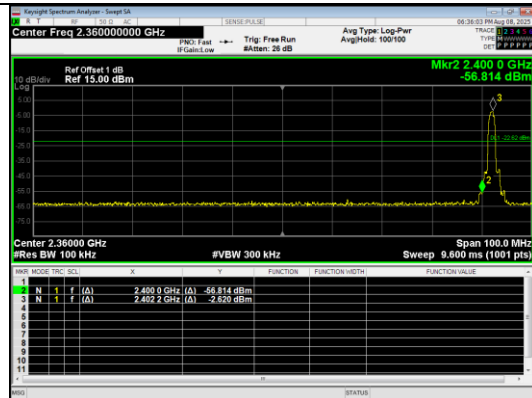


30.0 MHz - 25000.0 MHz  
GFSK\_DH5\_Channel 78

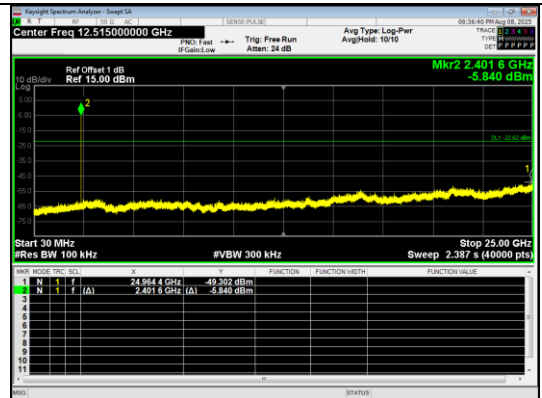
### $\pi/4$ DQPSK\_2-DH5\_Channel 78



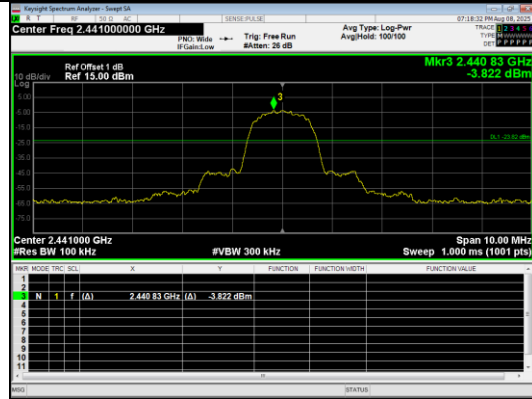
30.0 MHz - 25000.0 MHz  
 $\pi/4$ DQPSK\_2-DH5\_Channel 78



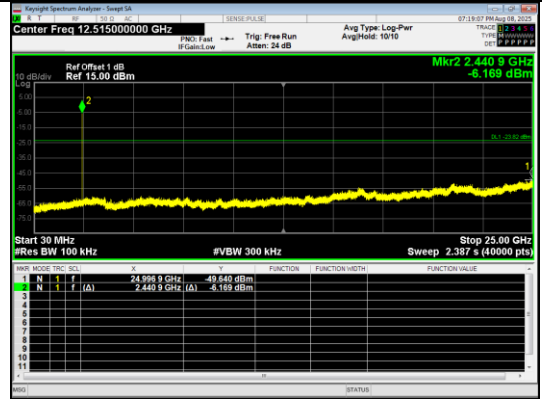
Out Of Band Emission  
8DPSK\_3-DH5\_Channel 0



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

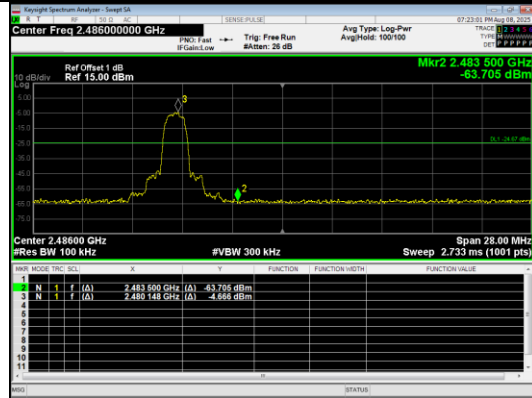


Out Of Band Emission  
8DPSK\_3-DH5\_Channel 39

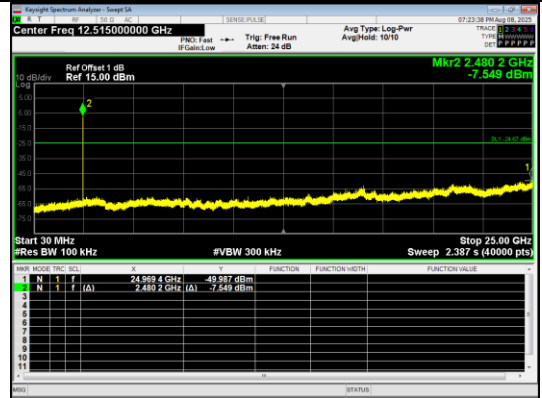


30.0 MHz - 25000.0 MHz  
8DPSK\_3-DH5\_Channel 39

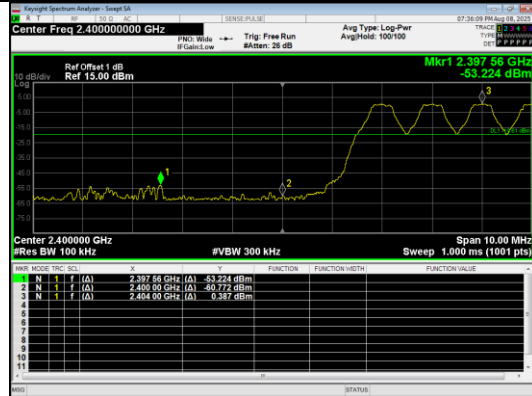




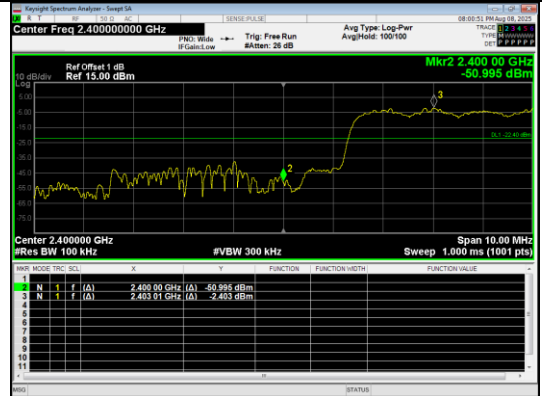
Out Of Band Emission  
8DPSK\_3-DH5\_Channel 78



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



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



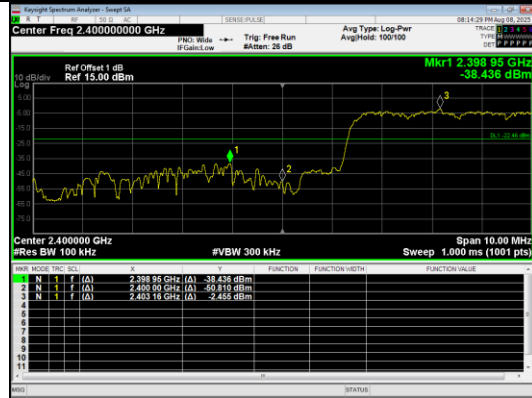
Out Of Band Emission(Left)  
π/4DQPSK\_2-DH5\_Channel Hopping



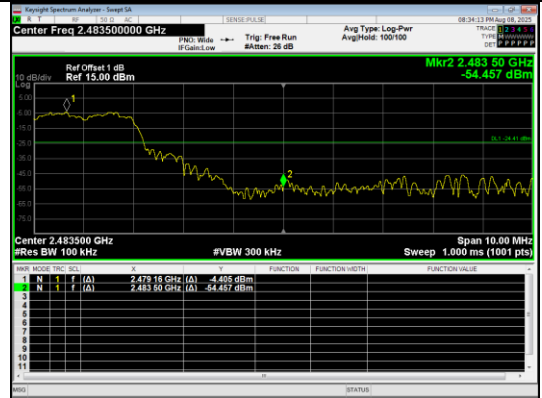
Out Of Band Emission(Right)  
GFSK\_DH5\_Channel Hopping



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



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



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

## Duty Cycle

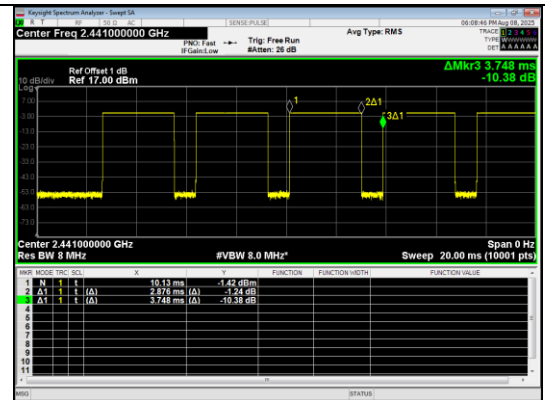
### Test Result

| Modulation    | Packets | Channel | On Time (ms) | Period (ms) | Duty Cycle (%) | Duty Cycle (linear) | Duty Cycle Factor (dB) | 1/T    |
|---------------|---------|---------|--------------|-------------|----------------|---------------------|------------------------|--------|
| GFSK          | DH5     | 0       | 2.882        | 3.748       | 76.89          | 0.7689              | 1.1413                 | 0.3470 |
|               |         | 39      | 2.876        | 3.748       | 76.73          | 0.7673              | 1.1503                 | 0.3477 |
|               |         | 78      | 2.877        | 3.747       | 76.78          | 0.7678              | 1.1475                 | 0.3476 |
| $\pi/4$ DQPSK | 2-DH5   | 0       | 2.882        | 3.748       | 76.89          | 0.7689              | 1.1413                 | 0.3470 |
|               |         | 39      | 2.880        | 3.747       | 76.86          | 0.7686              | 1.143                  | 0.3472 |
|               |         | 78      | 2.884        | 3.748       | 76.95          | 0.7695              | 1.1379                 | 0.3467 |
| 8DPSK         | 3-DH5   | 0       | 2.883        | 3.747       | 76.94          | 0.7694              | 1.1385                 | 0.3469 |
|               |         | 39      | 2.883        | 3.745       | 77.00          | 0.7700              | 1.1351                 | 0.3469 |
|               |         | 78      | 2.886        | 3.748       | 77.00          | 0.7700              | 1.1351                 | 0.3465 |

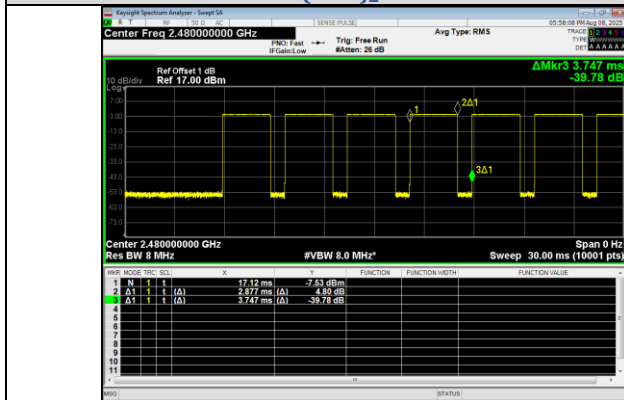
### Test Graphs



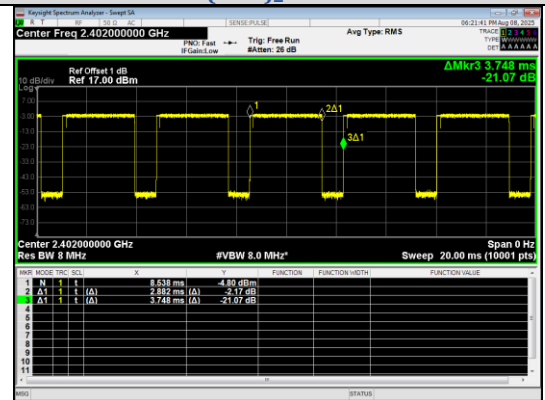
GFSK(DH5)\_Channel 0



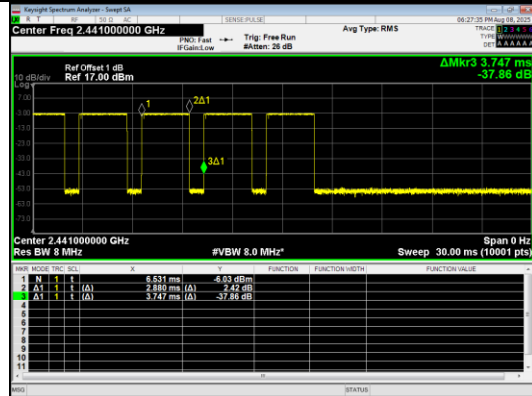
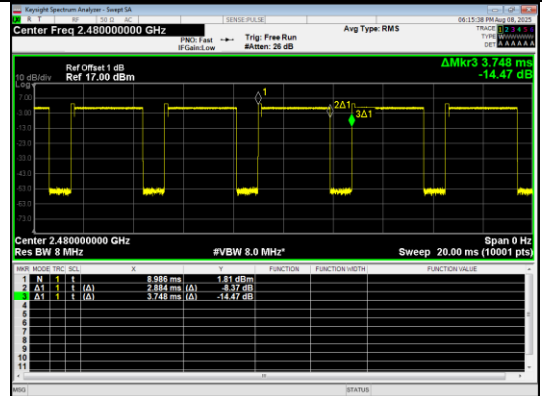
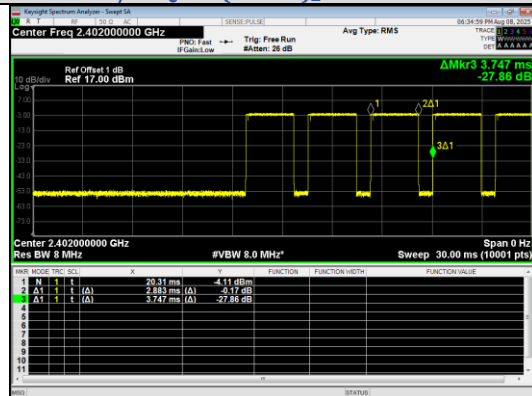
GFSK(DH5)\_Channel 39



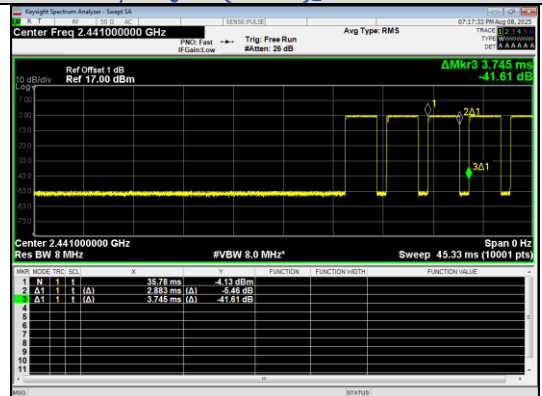
GFSK(DH5)\_Channel 78



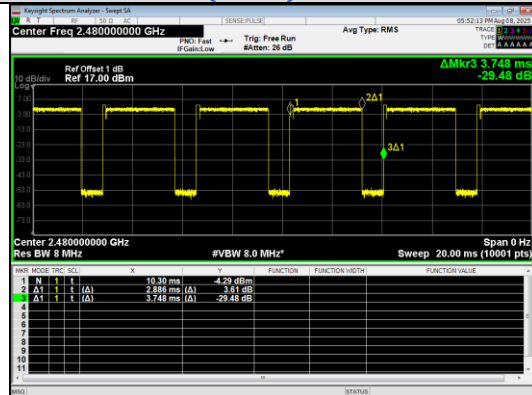
$\pi/4$ DQPSK(2-DH5)\_Channel 0


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

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


8DPSK(3-DH5)\_Channel 0



8DPSK(3-DH5)\_Channel 39



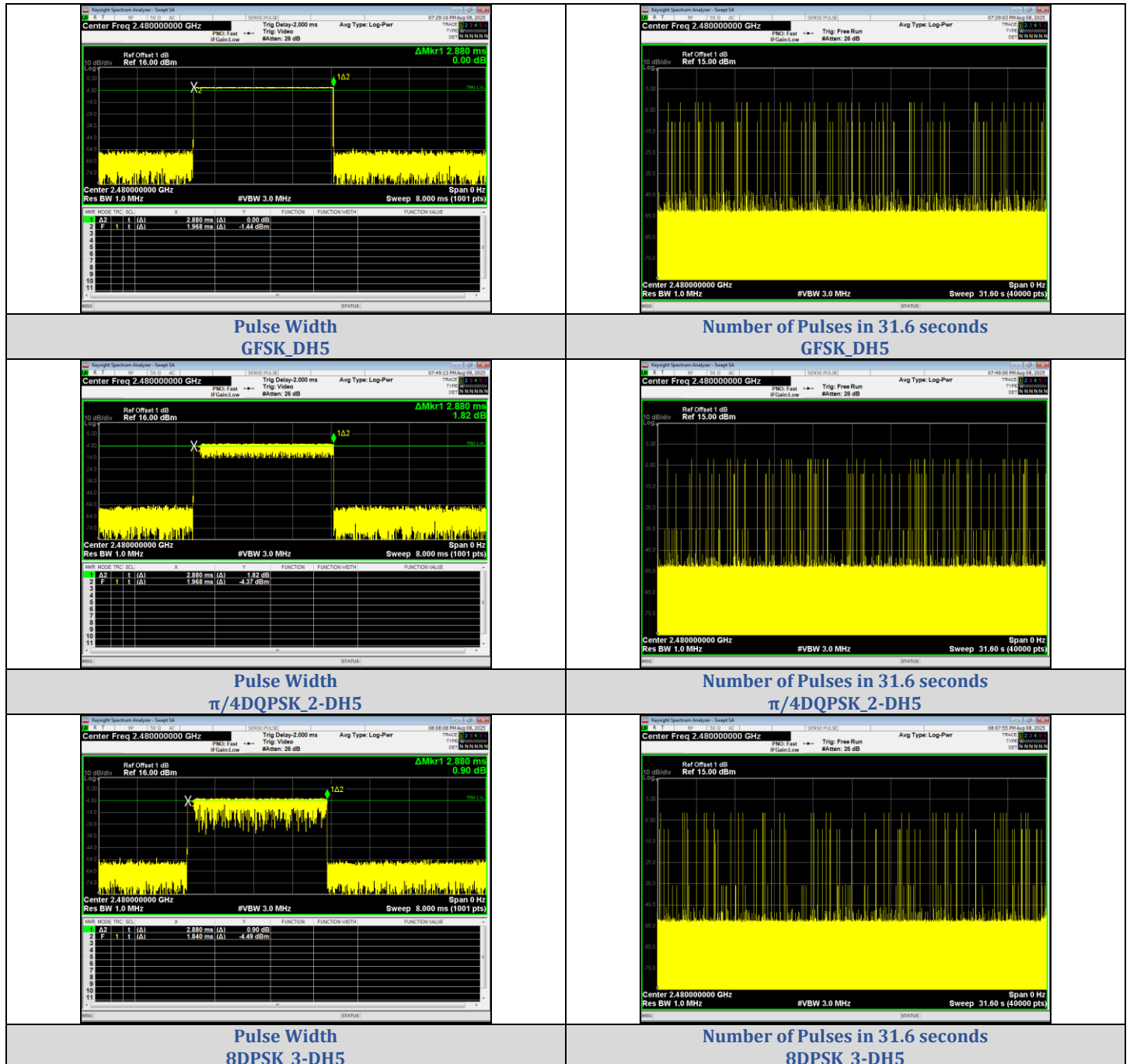
8DPSK(3-DH5)\_Channel 78

## Dwell Time

### Test Result

| Modulation    | Packet | Channel | Pulse Width (ms) | Number of Pulses in 31.6 seconds | Dwell Time (ms) | Limit (ms) | Result |
|---------------|--------|---------|------------------|----------------------------------|-----------------|------------|--------|
| GFSK          | DH5    | Hopping | 2.880            | 41                               | 118.08          | < 400      | PASS   |
| $\pi/4$ DQPSK | 2-DH5  |         | 2.880            | 43                               | 123.84          |            | PASS   |
| 8DPSK         | 3-DH5  |         | 2.880            | 37                               | 106.56          |            | PASS   |

### Test Graphs

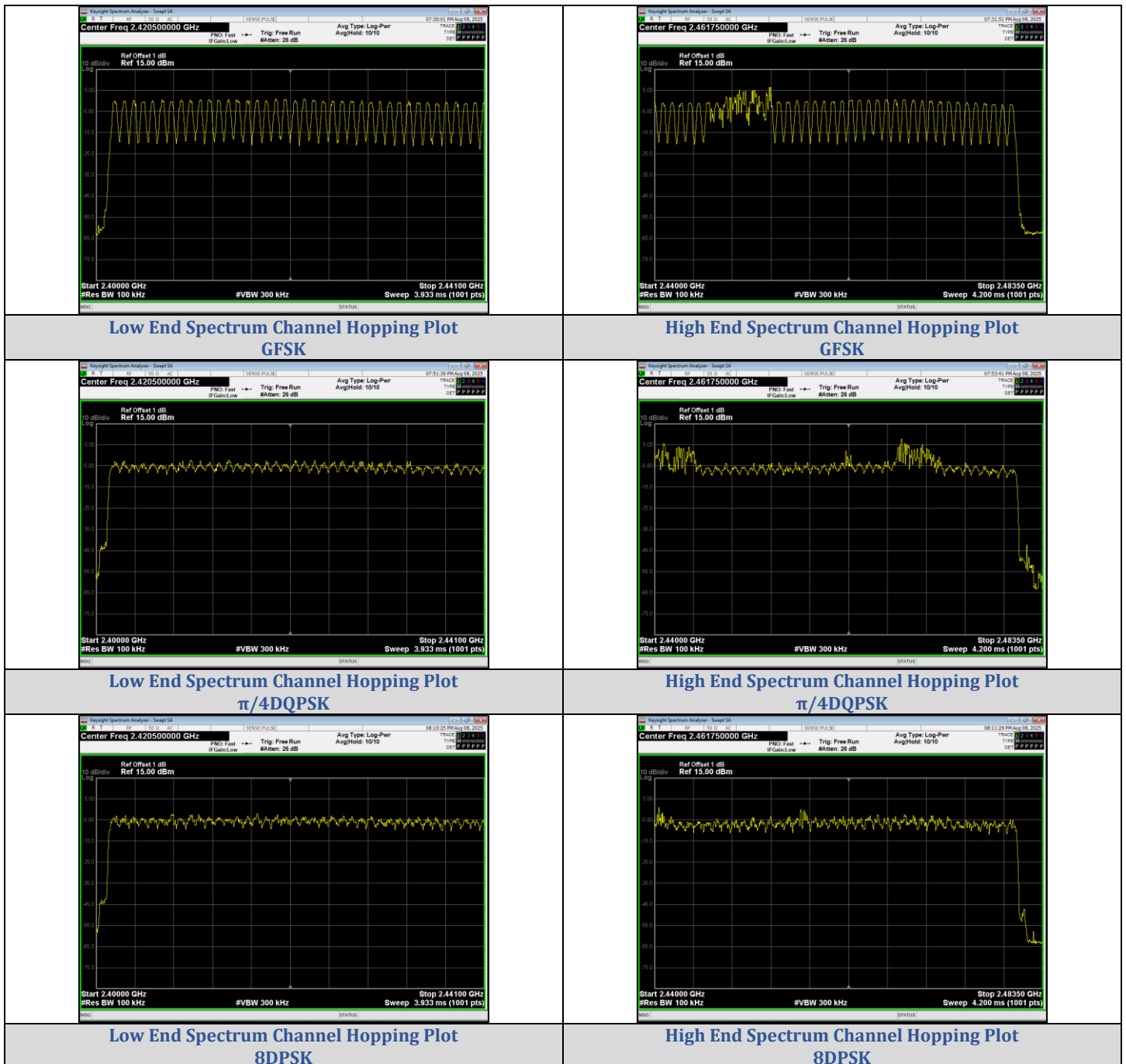


## Number Of Hopping Channel

### Test Result

| 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



\*\*\*\*\* End of Report \*\*\*\*\*