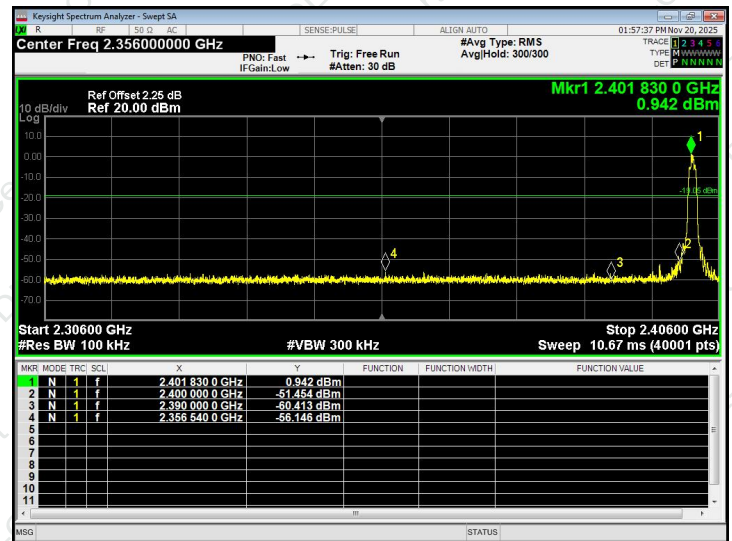
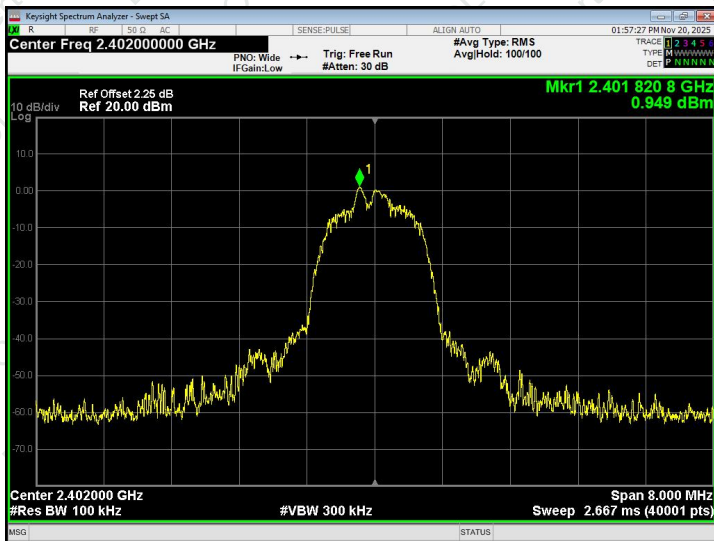
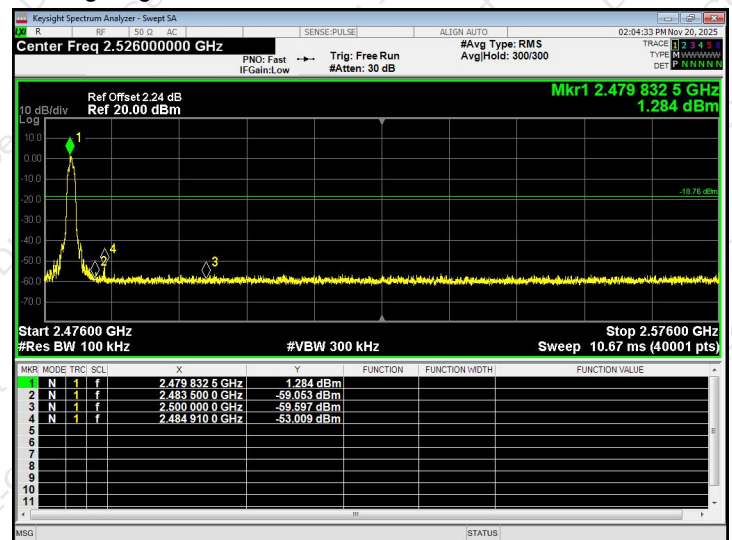
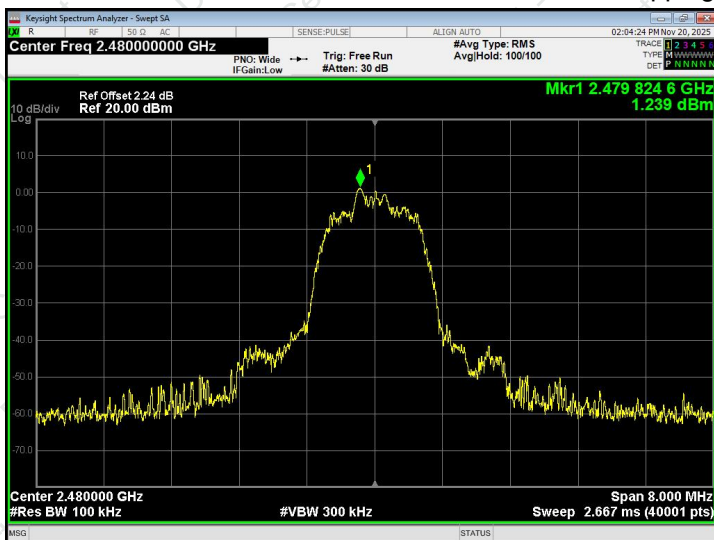




$\pi/4$ -DQPSK - 2-DH1
No-hopping Band edge-left side



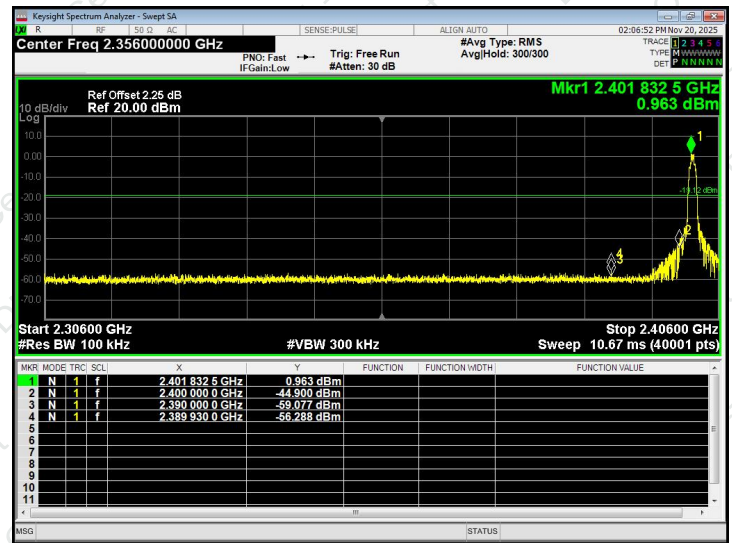
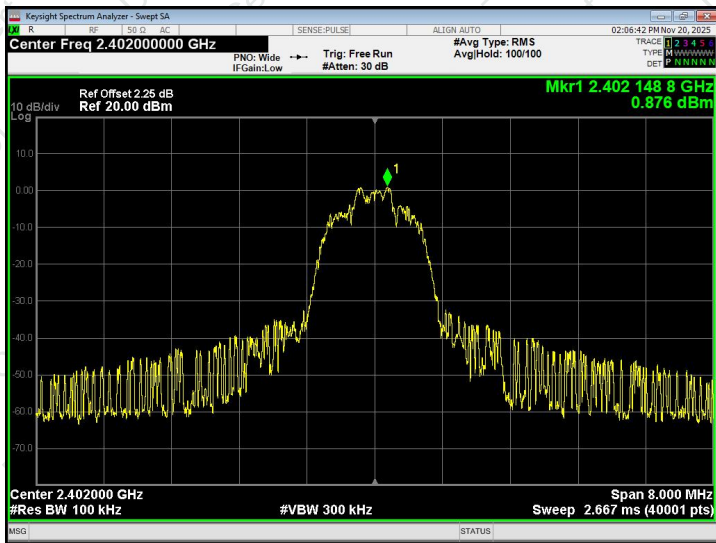
No-hopping Band edge-right side



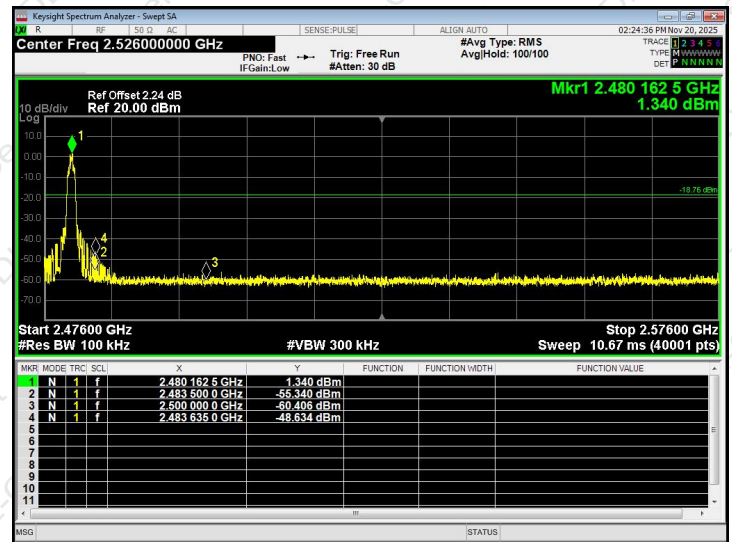
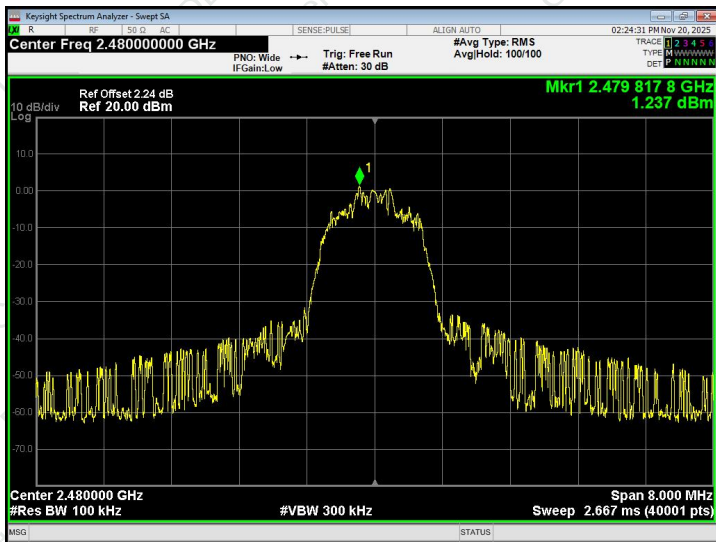


8-DPSK - 3-DH1

No-hopping Band edge-left side



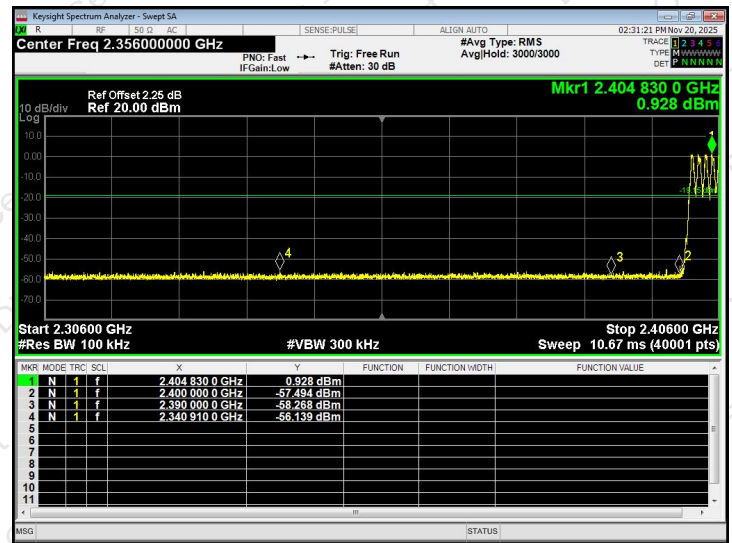
NO-hopping Band edge-left side



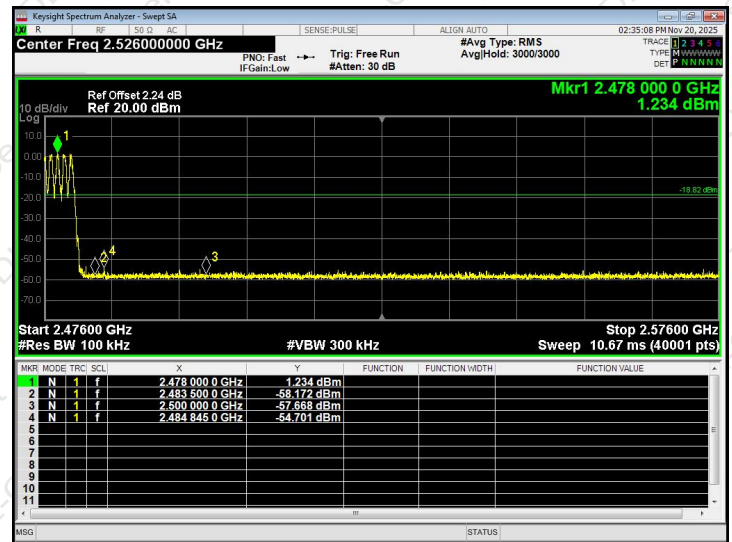


GFSK - 1-DH1

Hopping Band edge-left side

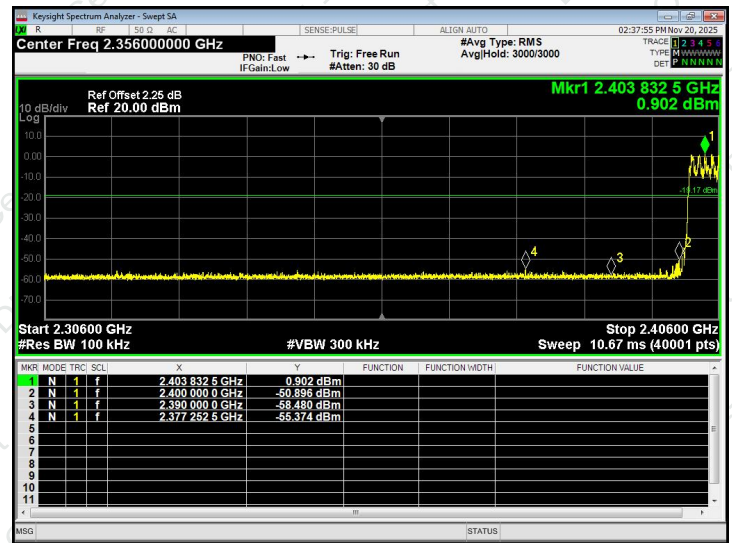
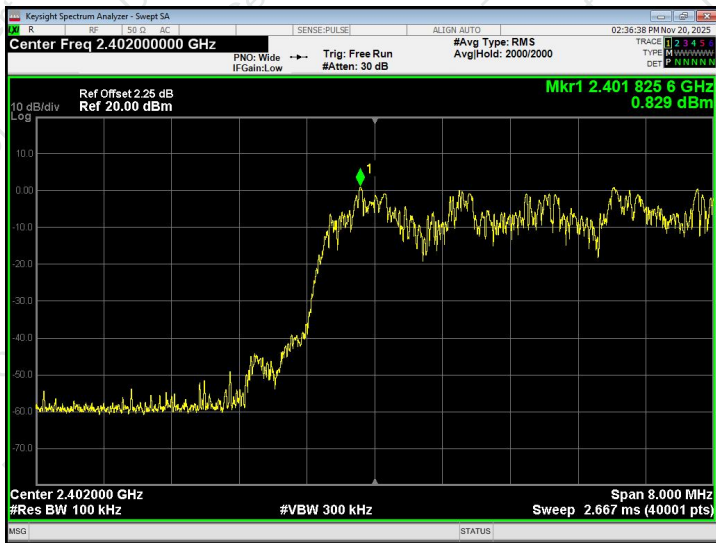


Hopping Band edge-left side

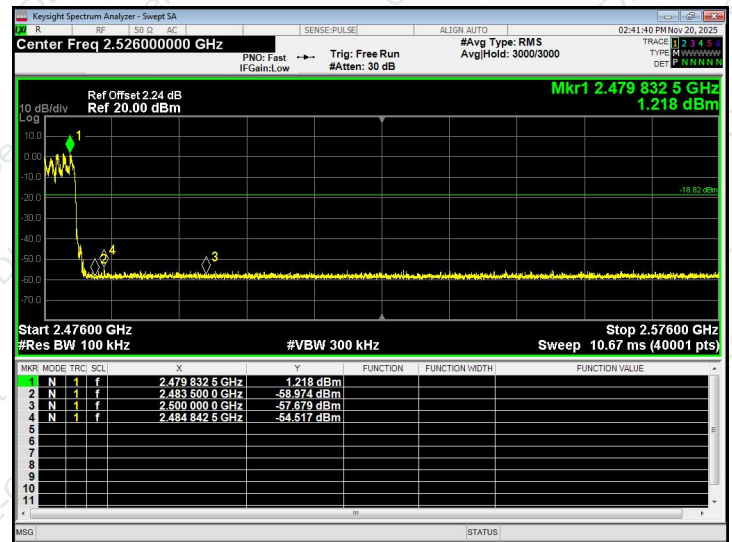


 $\pi/4$ -DQPSK - 2-DH1

Hopping Band edge-left side



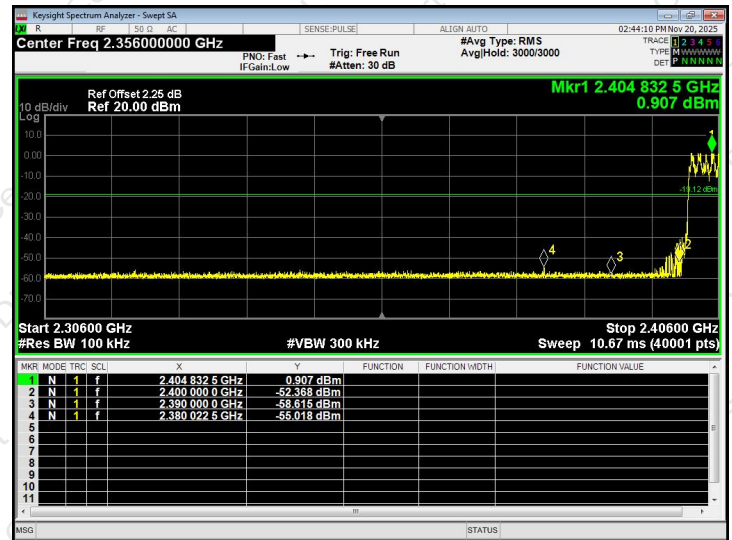
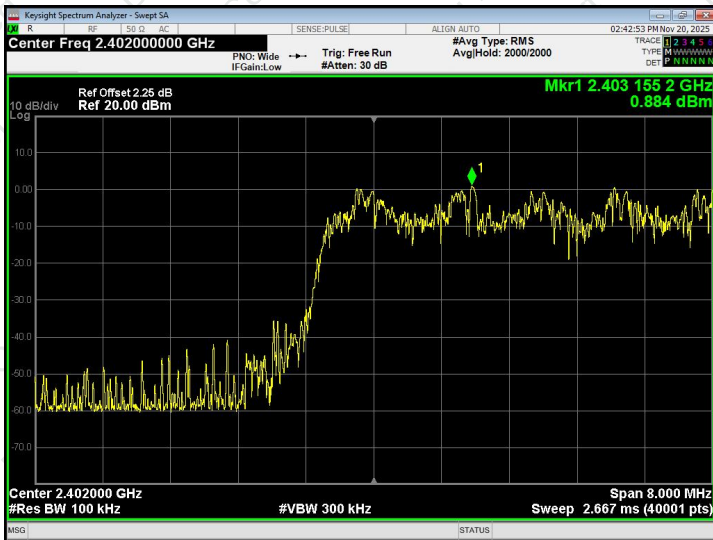
Hopping Band edge-left side



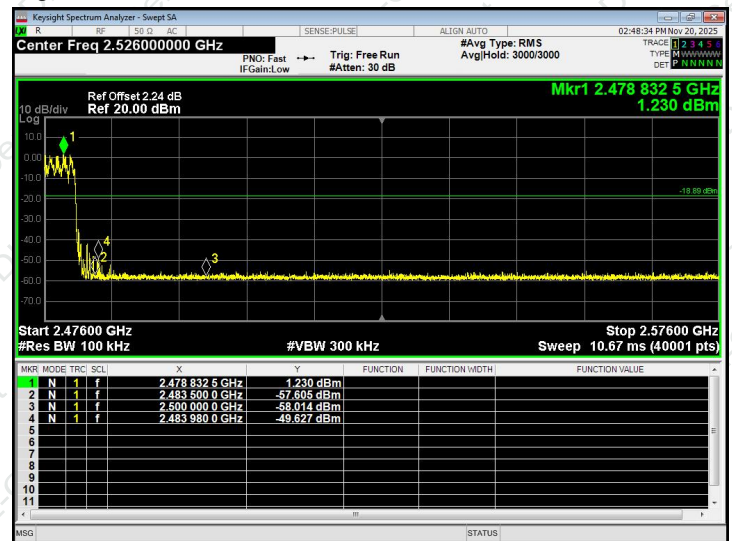
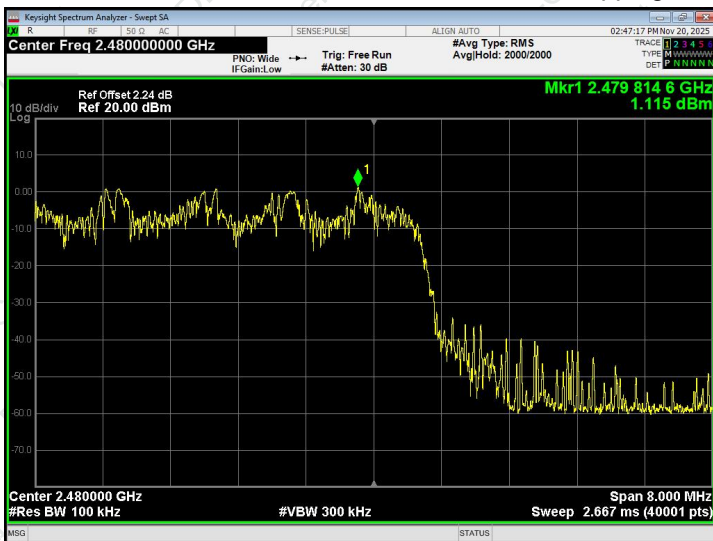


8-DPSK - 3-DH1

Hopping Band edge-left side



Hopping Band edge-left side

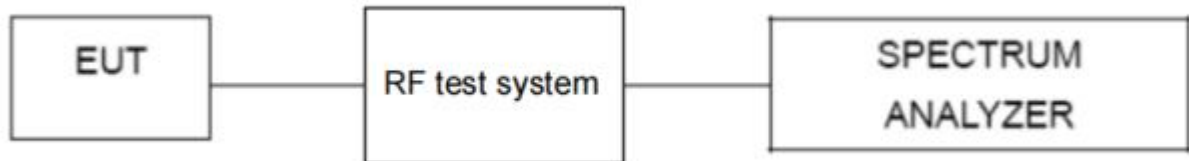




7. 20DB OCCUPIED BANDWIDTH

Test Requirement:	FCC Part15 C Section 15.247 (a)(1)
Test Method:	ANSI C63.10:2020

7.1 TEST SETUP



7.2 LIMIT

N/A

7.3 TEST PROCEDURE

The steps for 6dB Bandwidth are as follows:

- Set RBW = shall be in the range of 1% to 5% of the OBW but not less than 100 kHz.
- Set the VBW $\geq [3 \times \text{RBW}]$.
- Detector = peak.
- Trace mode = max-hold.
- Sweep = No faster than coupled (auto) time.
- Allow the trace to stabilize.
- Measure the maximum width of the emission by placing two markers, one at the lowest frequency and the other at the highest frequency of the envelope of the spectral display, such that each marker is at or slightly below the “-6 dB down amplitude”. If a marker is below this “-6 dB down amplitude” value, then it shall be as close as possible to this value.

7.4 DEVIATION FROM STANDARD

No deviation.



7.5 TEST RESULT

Modulation	Packet	Test Channel	20dB Occupied Bandwidth (MHz)	Result
GFSK	1-DH1	Lowest	0.875	Pass
		Middle	0.875	
		Highest	0.875	
$\pi/4$ -DQPSK	2-DH1	Lowest	1.240	Pass
		Middle	1.246	
		Highest	1.243	
8-DPSK	3-DH1	Lowest	1.210	Pass
		Middle	1.212	
		Highest	1.211	

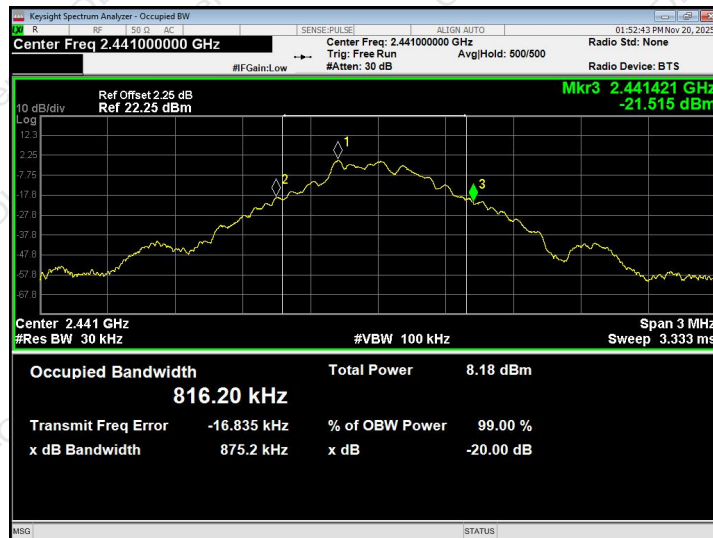


GFSK - 1-DH1 Test plots

Low Channel



Middle Channel

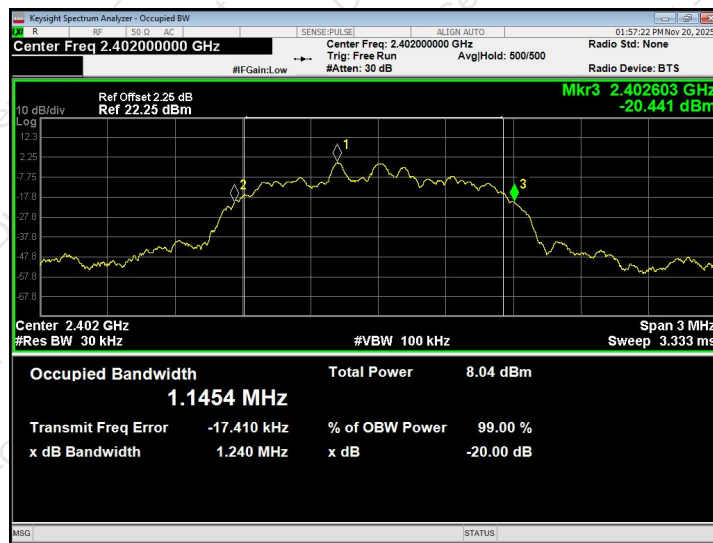


High Channel

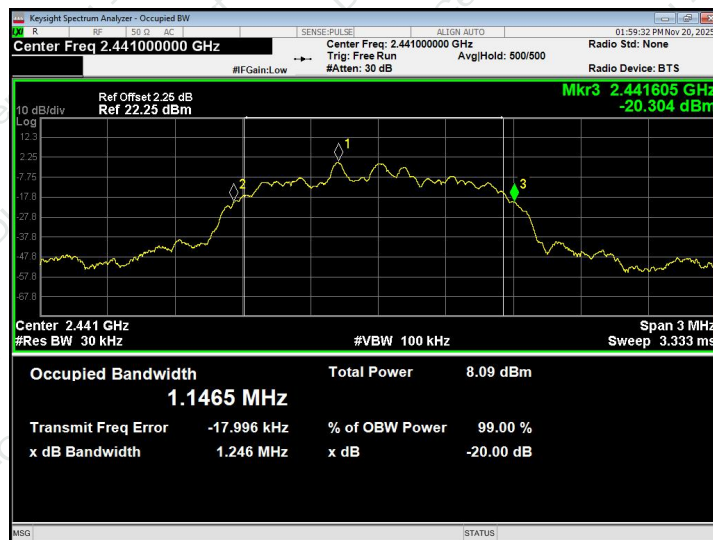


 $\pi/4$ -DQPSK - 2-DH1 Test plots

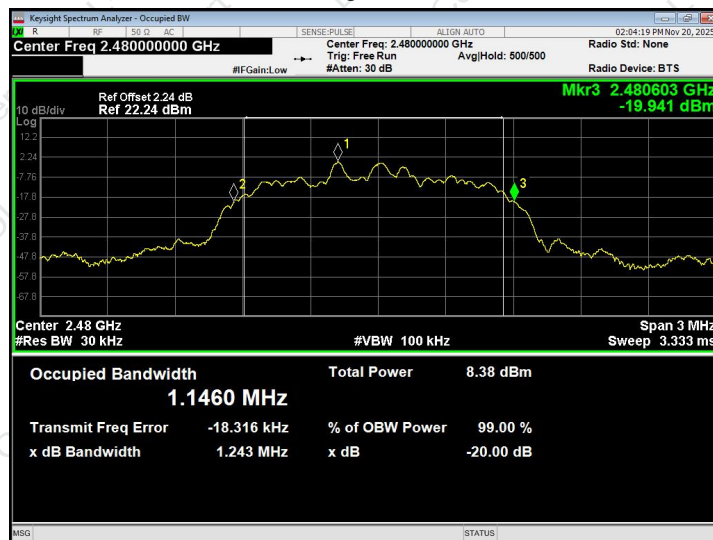
Low Channel



Middle Channel



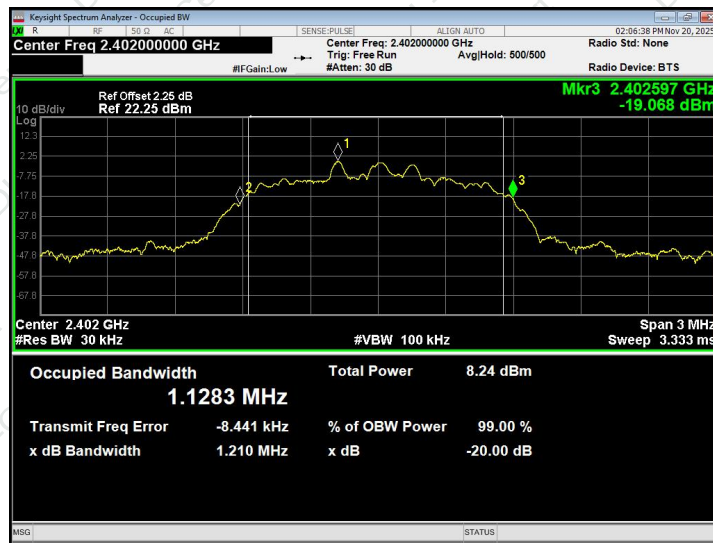
High Channel



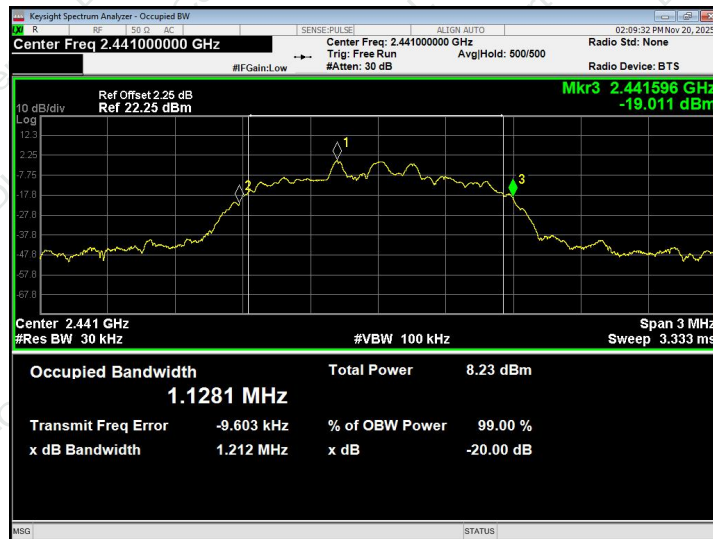


8-DPSK - 3-DH1 Test plots

Low Channel



Middle Channel



High Channel

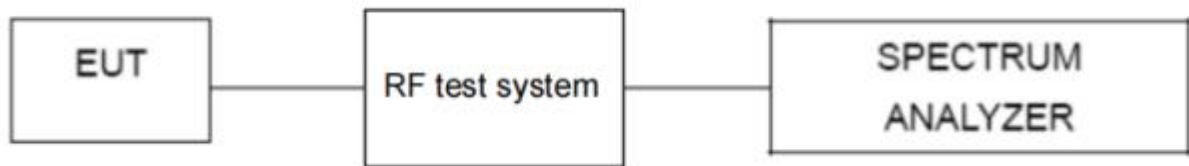




8. Maximum Peak Output Power

Test Requirement:	FCC Part15 C Section 15.247 (b)(1)
Test Method:	ANSI C63.10:2020
Limit:	GFSK: 30dBm $\pi/4$ -DQPSK & 8-DPSK: 20.97 dBm

8.1 BLOCK DIAGRAM OF TEST SETUP



8.2 LIMIT

For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 non-overlapping hopping channels, and all frequency hopping systems in the 5725-5850 MHz band: 1 watt. For all other frequency hopping systems in the 2400-2483.5 MHz band: 0.125 watts.

For FHSs operating in the band 2400-2483.5 MHz, the maximum peak conducted output power shall not exceed 1.0 W if the hopset uses 75 or more hopping channels; the maximum peak conducted output power shall not exceed 0.125 W if the hopset uses less than 75 hopping channels.

8.3 TEST PROCEDURE

1. Remove the antenna from the EUT and then connect a low RF cable from the antenna port to the spectrum.
2. Set the spectrum analyzer: RBW = 2MHz. VBW = 6MHz. Sweep = auto; Detector Function = Peak.
3. Keep the EUT in transmitting at lowest, medium and highest channel individually. Record the max value.

8.4 DEVIATION FROM STANDARD

No deviation.



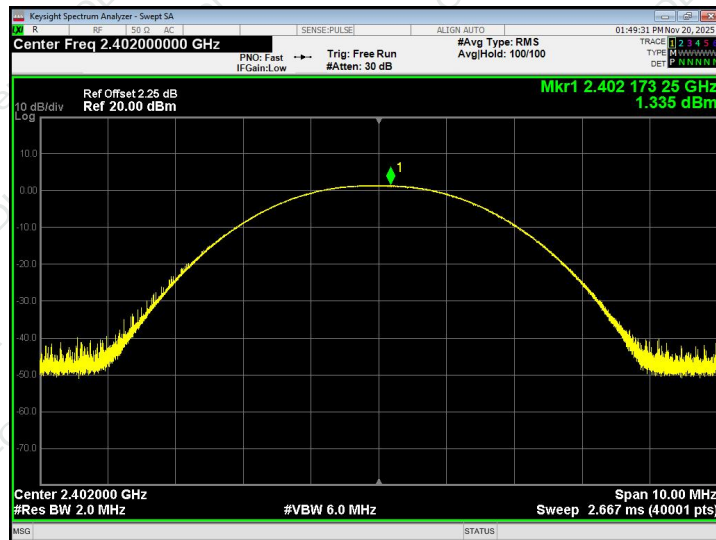
8.5 TEST RESULT

Modulation	Packet	Test Channel	Peak Output Power (dBm)	Limit (dBm)	Result
GFSK	1-DH1	Lowest	1.335	30.00	Pass
		Middle	1.351		
		Highest	1.648		
$\pi/4$ -DQPSK	2-DH1	Lowest	1.836	21.00	Pass
		Middle	1.884		
		Highest	2.227		
8-DPSK	3-DH1	Lowest	2.772	21.00	Pass
		Middle	2.788		
		Highest	3.169		

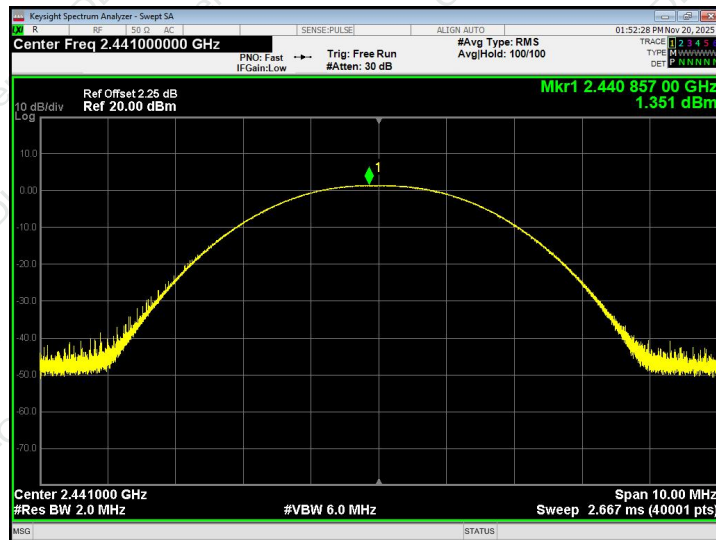


GFSK - 1-DH1 Test plots

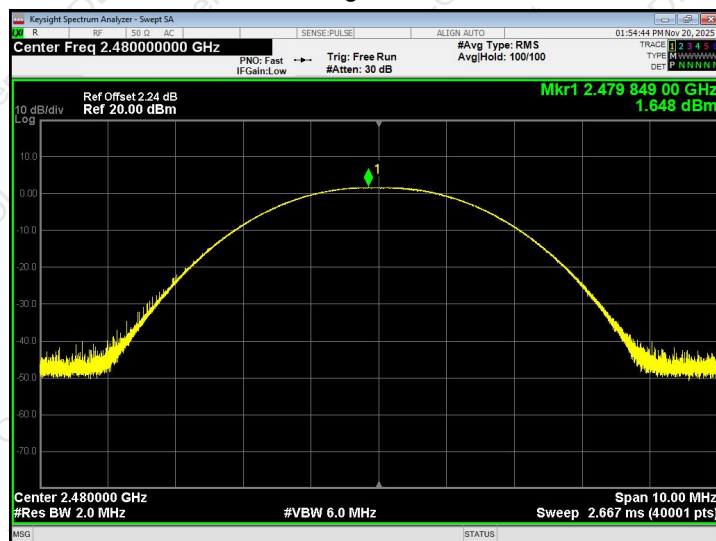
Low Channel



Middle Channel

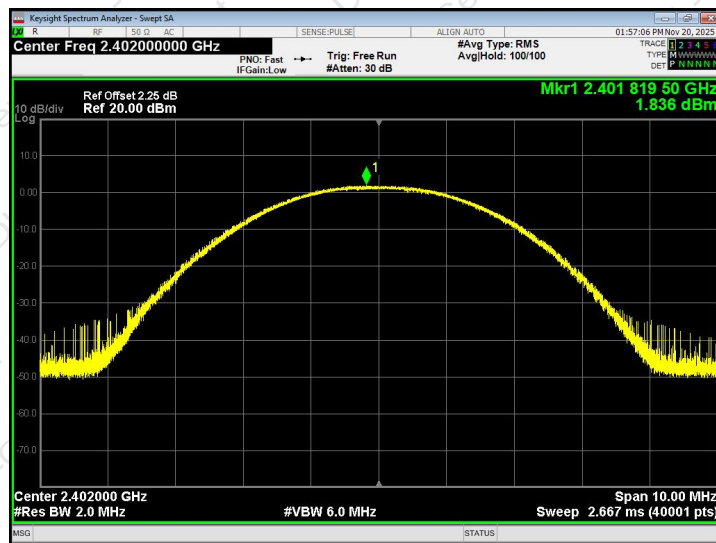


High Channel

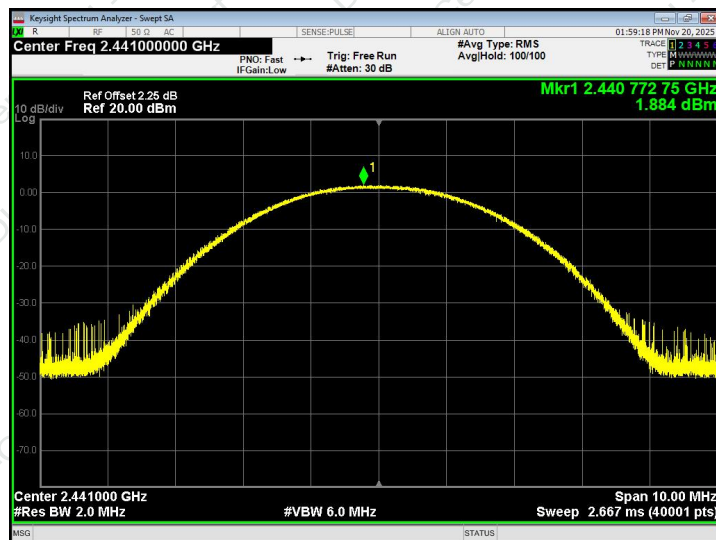


 $\pi/4$ -DQPSK - 2-DH1 Test plots

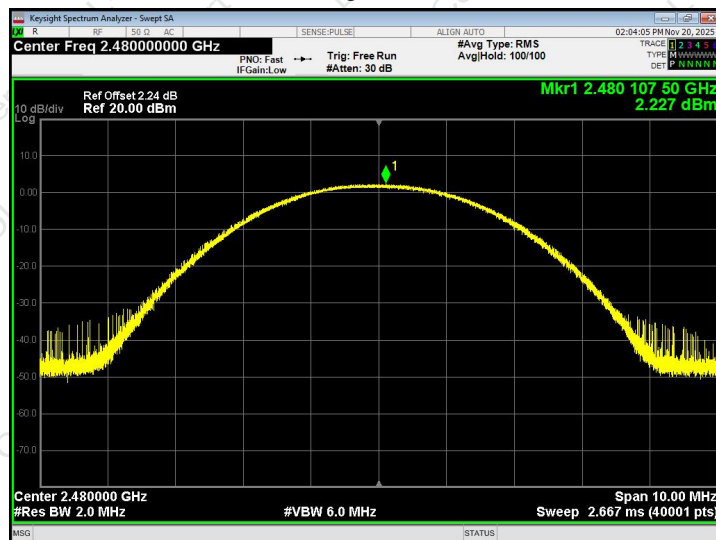
Low Channel



Middle Channel



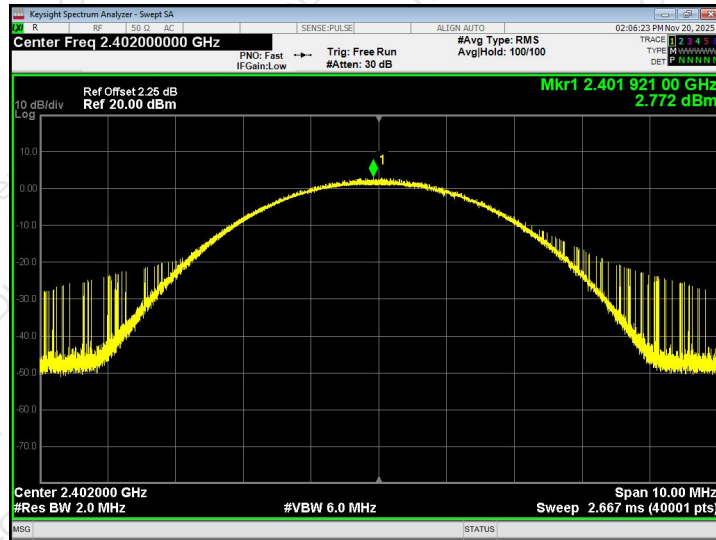
High Channel



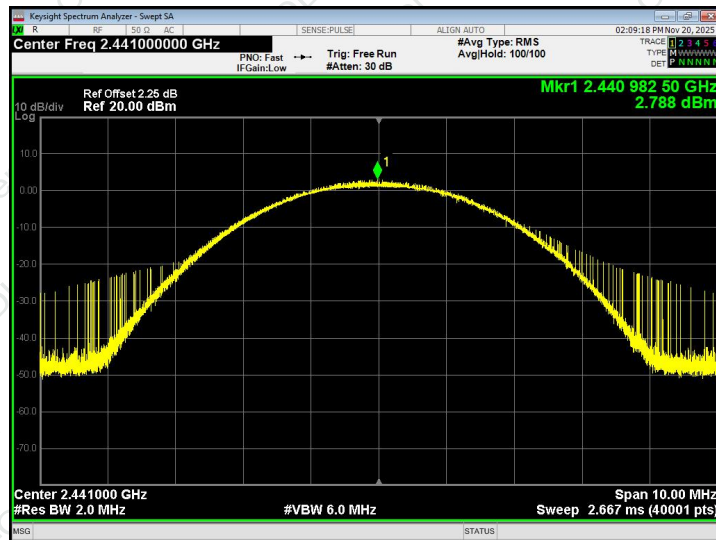
8-DPSK - 3-DH1 Test plots



Low Channel



Middle Channel



High Channel

