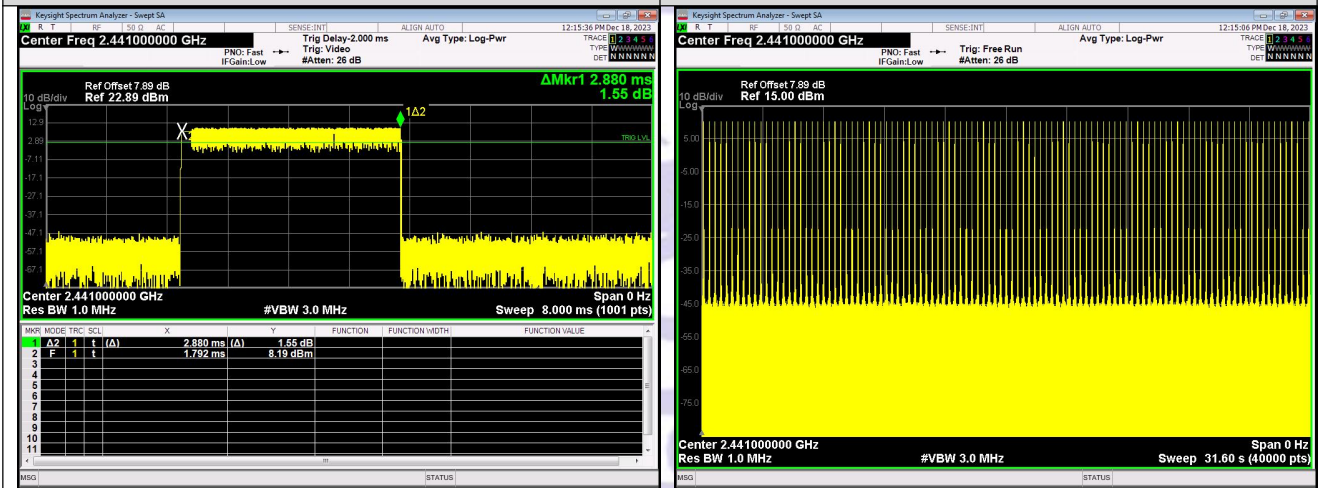


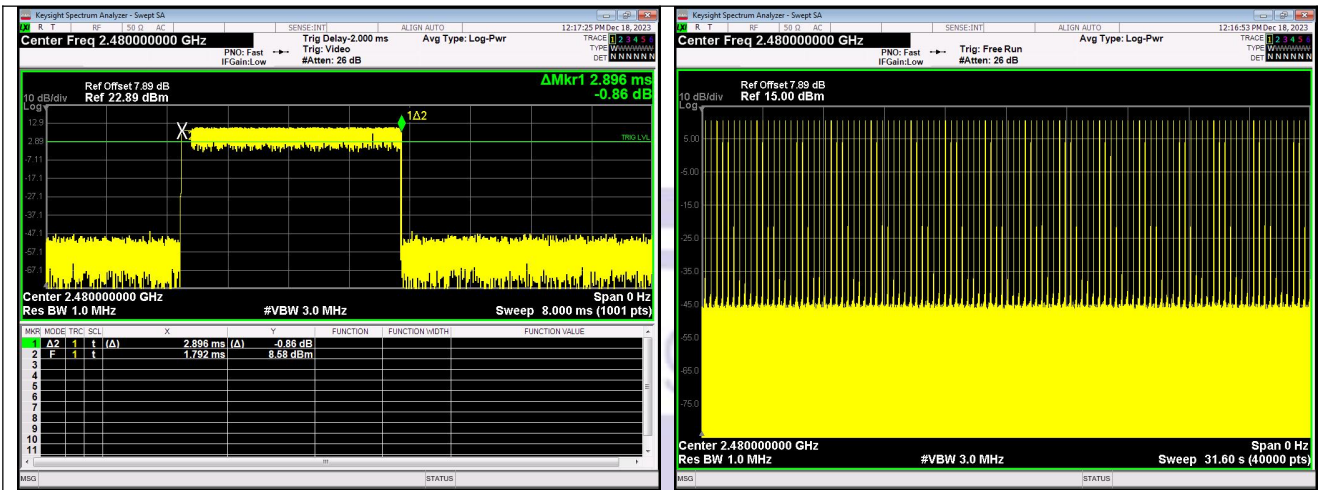
Pulse Width  
 $\pi/4$ DQPSK\_2-DH5

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



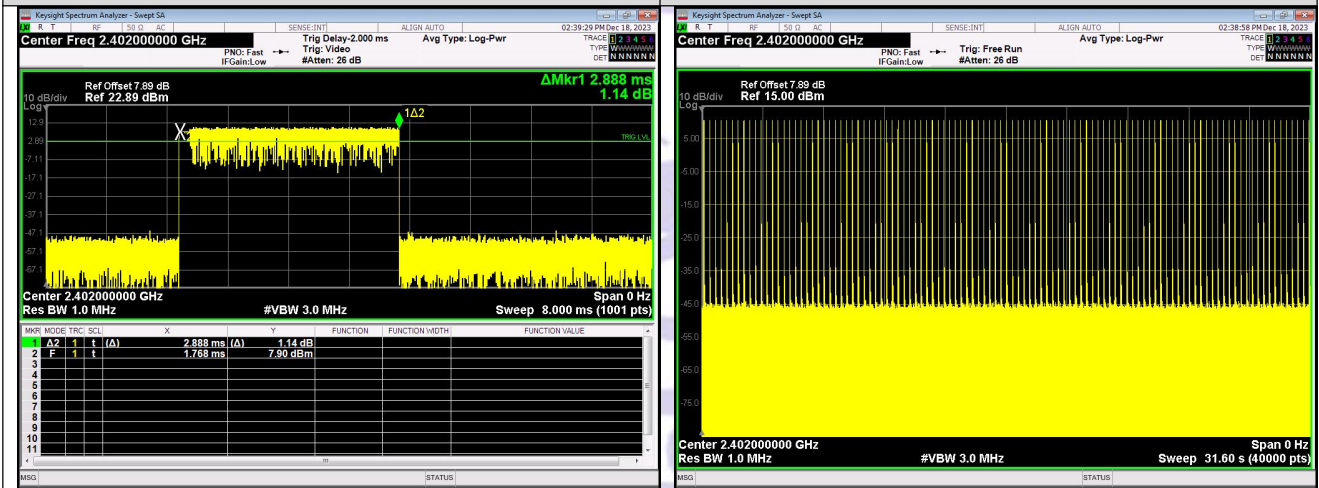
Pulse Width  
 $\pi/4$ DQPSK\_2-DH5

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



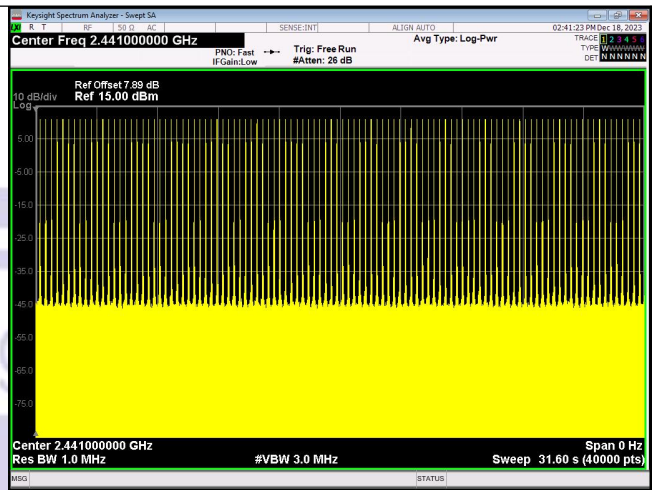
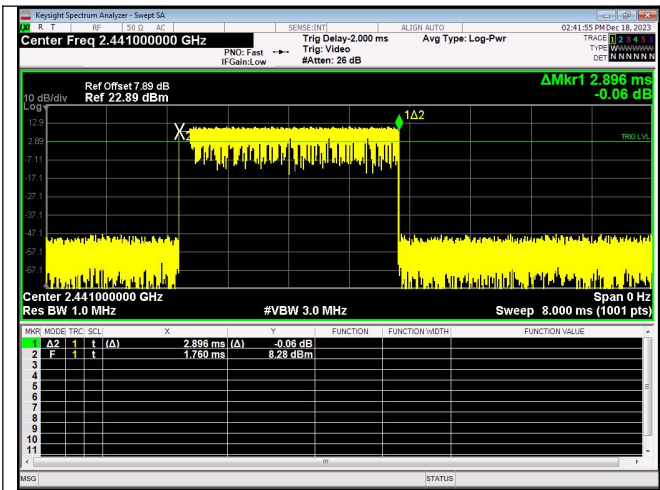
Pulse Width  
 $\pi/4$ DQPSK\_2-DH5

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



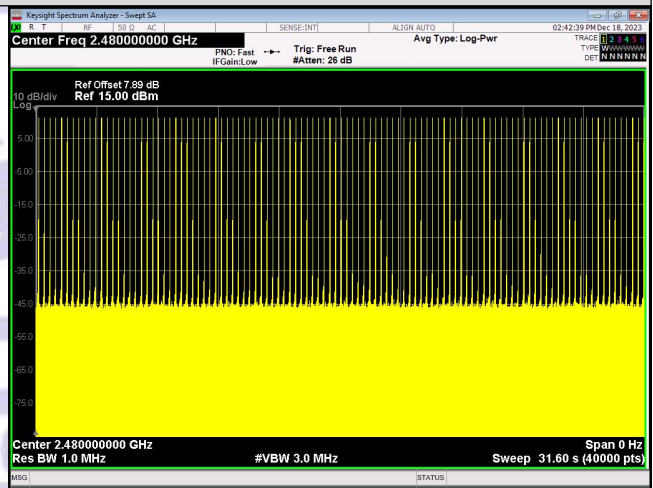
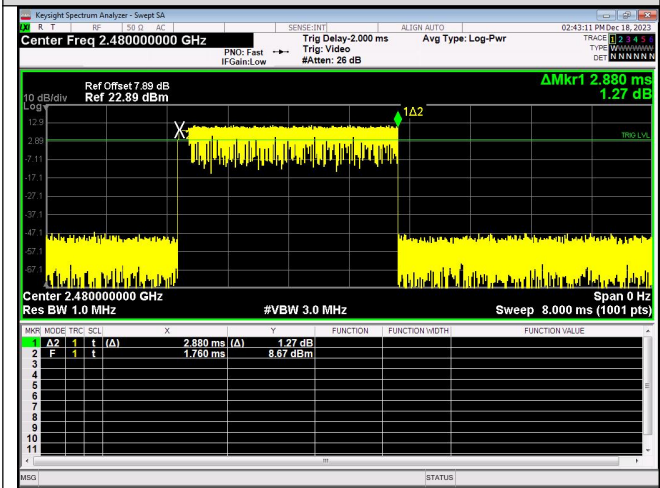
Pulse Width  
8DPSK\_3-DH5

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



Pulse Width  
8DPSK\_3-DH5

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



Pulse Width  
8DPSK\_3-DH5

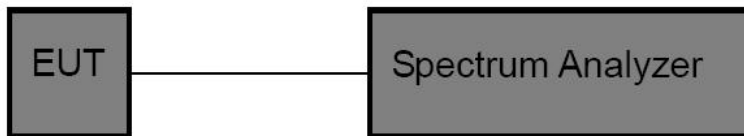
Number of Pulses in 31.6 seconds  
8DPSK\_3-DH5

## 13 100kHz Bandwidth of Frequency Band Edge Requirement

### 13.1 Test Standard and Limit

Test Standard	FCC Part15 C Section 15.247 (d)
Test Limit	in any 100 kHz bandwidth outside the frequency bands in which the spread spectrum intentional radiator in operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in 15.209(a).

### 13.2 Test Setup



### 13.3 Test Procedure

The EUT must have its hopping/Non-hopping function enabled. Using the following spectrum analyzer setting:

1. Set the RBW = 100kHz.
2. Set the VBW = 300kHz.
3. Sweep time = auto couple.
4. Detector function = peak.
5. Trace mode = max hold.
6. Allow trace to fully stabilize.

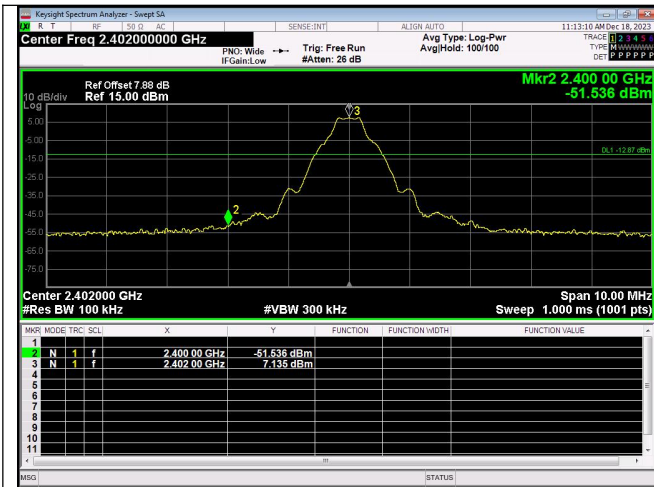
## 13.4 Test Data

### Non-Hopping

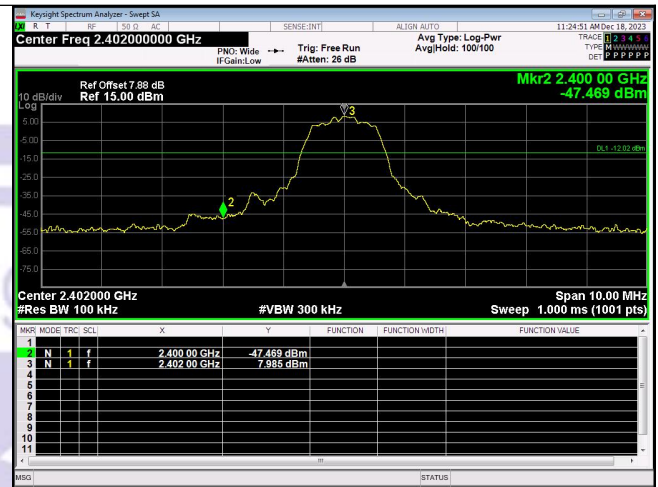
Modulation	Packet	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
GFSK	DH1	0	2400.00	-51.536	-12.87	-38.666	PASS
			3602.67	-46.560	-12.87	-33.690	PASS
		78	3661.98	-45.383	-11.84	-33.543	PASS
			3720.03	-54.309	-11.31	-42.999	PASS
$\pi/4$ DQPSK	2-DH1	0	2400.00	-47.469	-12.02	-35.449	PASS
			3603.30	-46.481	-12.02	-34.461	PASS
		78	3661.35	-45.111	-11.7	-33.411	PASS
			3720.03	-54.140	-11.3	-42.840	PASS
8DPSK	3-DH1	0	2400.00	-44.755	-12.03	-32.725	PASS
			3603.30	-44.667	-12.03	-32.637	PASS
		78	3661.35	-49.547	-11.64	-37.907	PASS
			2483.50	-50.655	-11.25	-39.405	PASS
			2487.73	-46.717	-11.25	-35.467	PASS

### Hopping

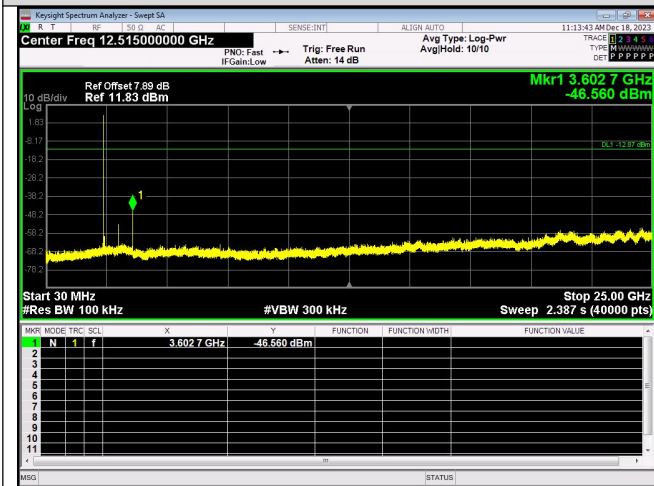
Modulation	Packet	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
GFSK	DH1	Hopping	2396.99	-45.824	-11.99	-33.834	PASS
			2400.00	-46.457	-11.99	-34.467	PASS
			2483.50	-55.205	-11.29	-43.915	PASS
$\pi/4$ DQPSK	2-DH1		2397.02	-46.773	-12.06	-34.713	PASS
			2400.00	-47.495	-12.06	-35.435	PASS
			2483.50	-52.157	-11.41	-40.747	PASS
8DPSK	3-DH1	2400.00	-46.191	-12.04	-34.151	PASS	
		2483.50	-50.607	-11.17	-39.437	PASS	



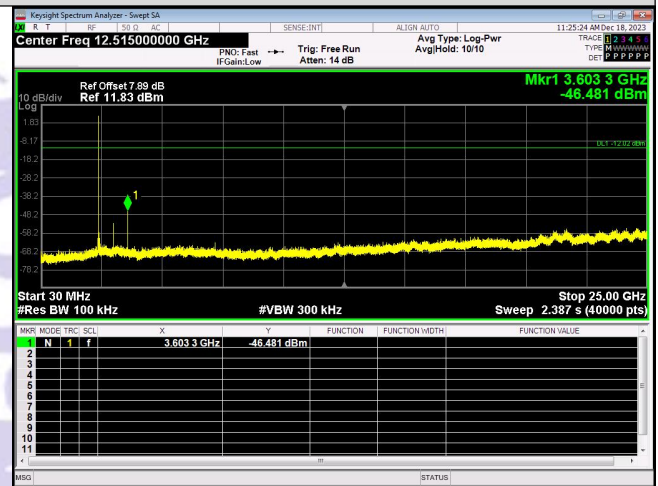
Out Of Band Emission  
GFSK\_DH1\_Channel 0



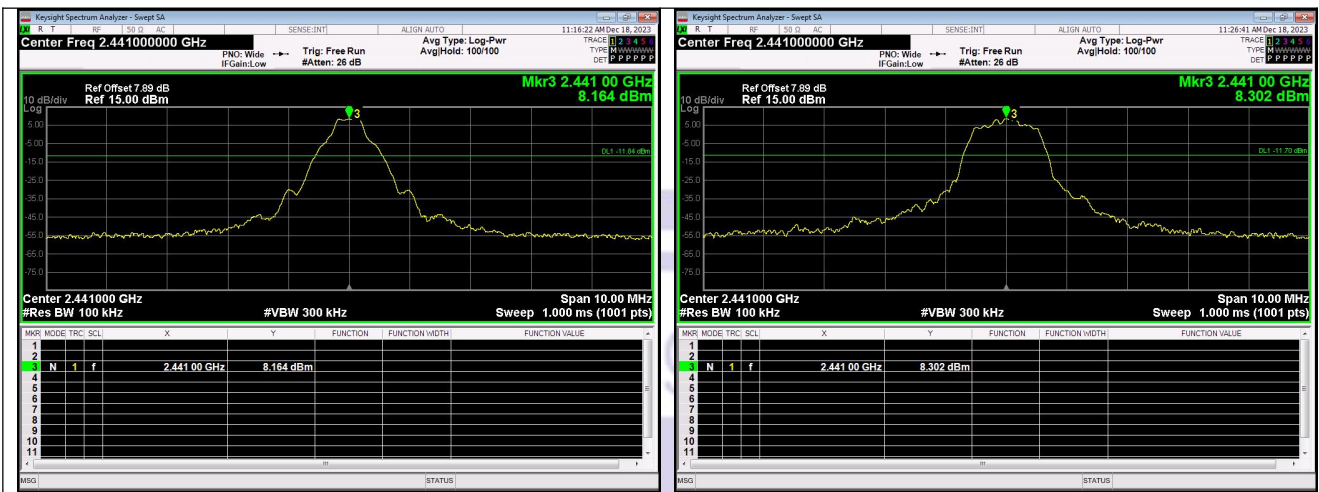
Out Of Band Emission  
 $\pi/4$ DQPSK\_2-DH1\_Channel 0



Spurious Emission  
GFSK\_DH1\_Channel 0

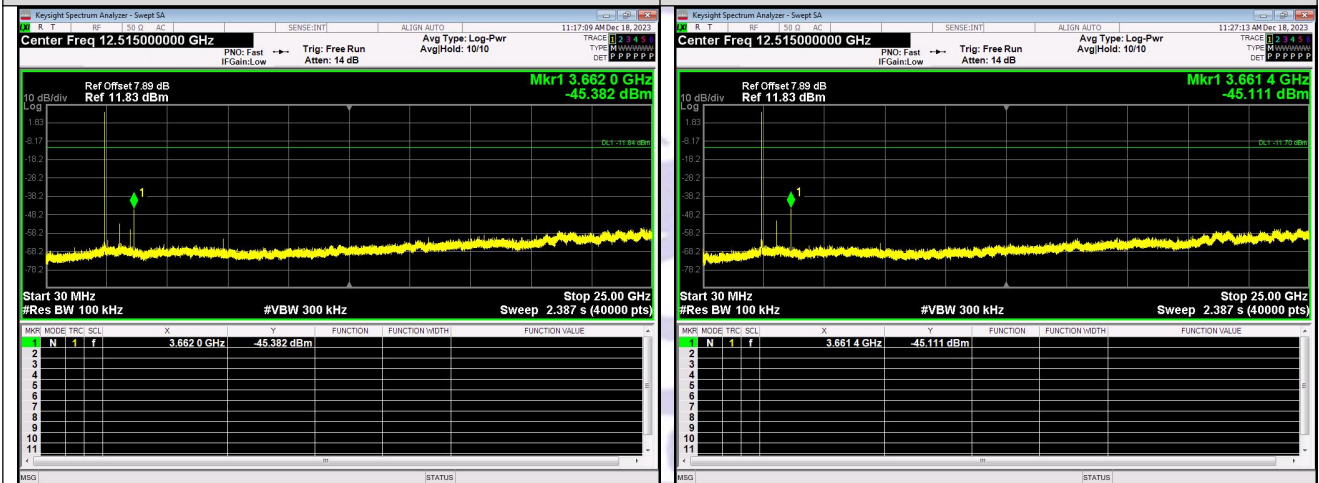


Spurious Emission  
 $\pi/4$ DQPSK\_2-DH1\_Channel 0



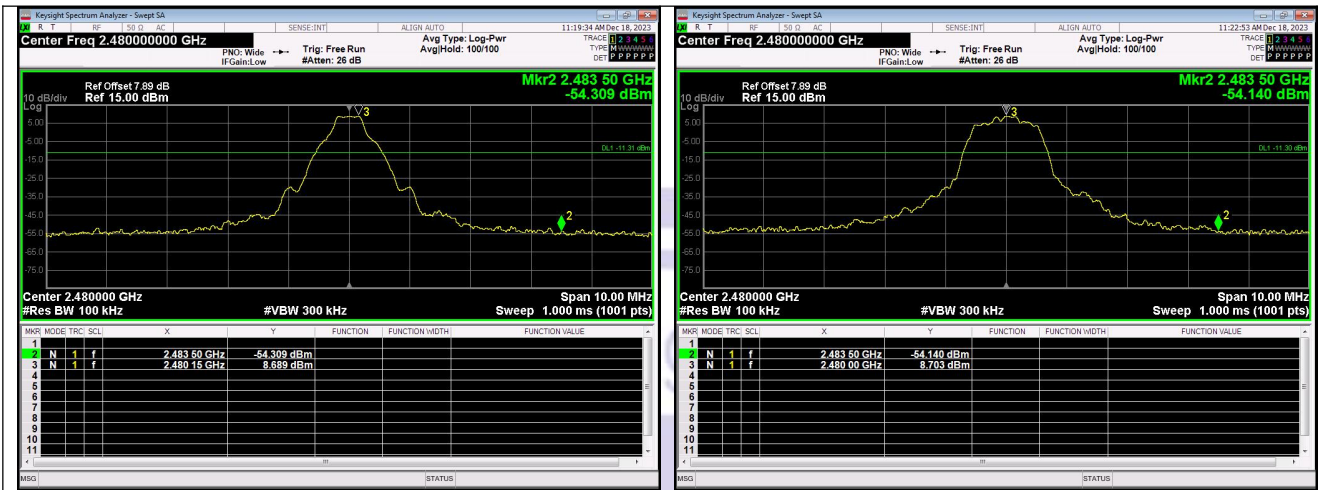
Out Of Band Emission  
GFSK\_DH1\_Channel 39

Out Of Band Emission  
 $\pi/4$ DQPSK\_2-DH1\_Channel 39



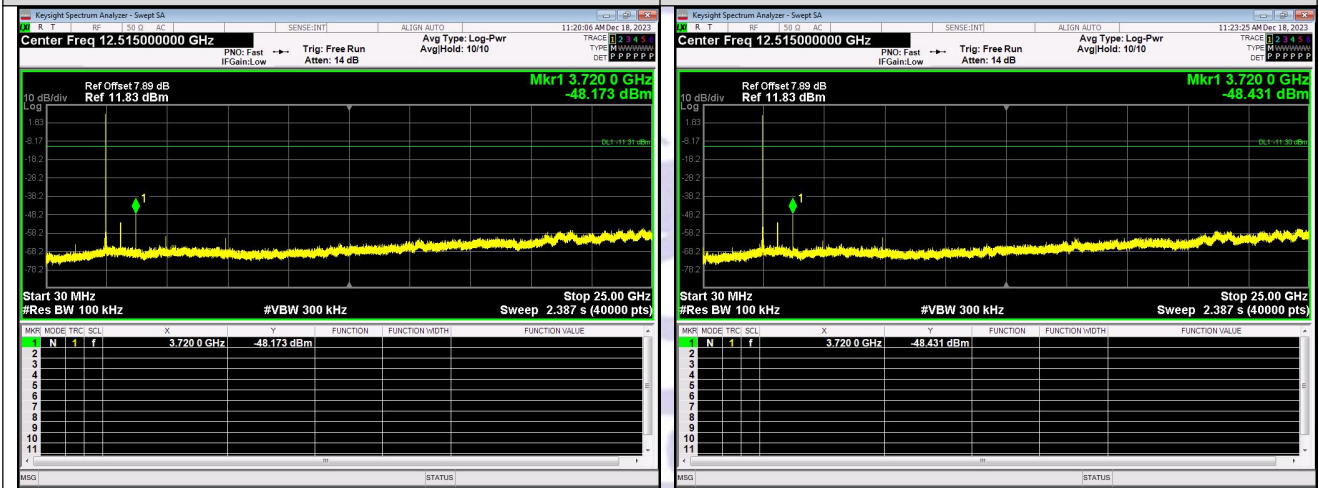
Spurious Emissions  
GFSK\_DH1\_Channel 39

Spurious Emissions  
 $\pi/4$ DQPSK\_2-DH1\_Channel 39



Out Of Band Emission  
GFSK\_DH1\_Channel 78

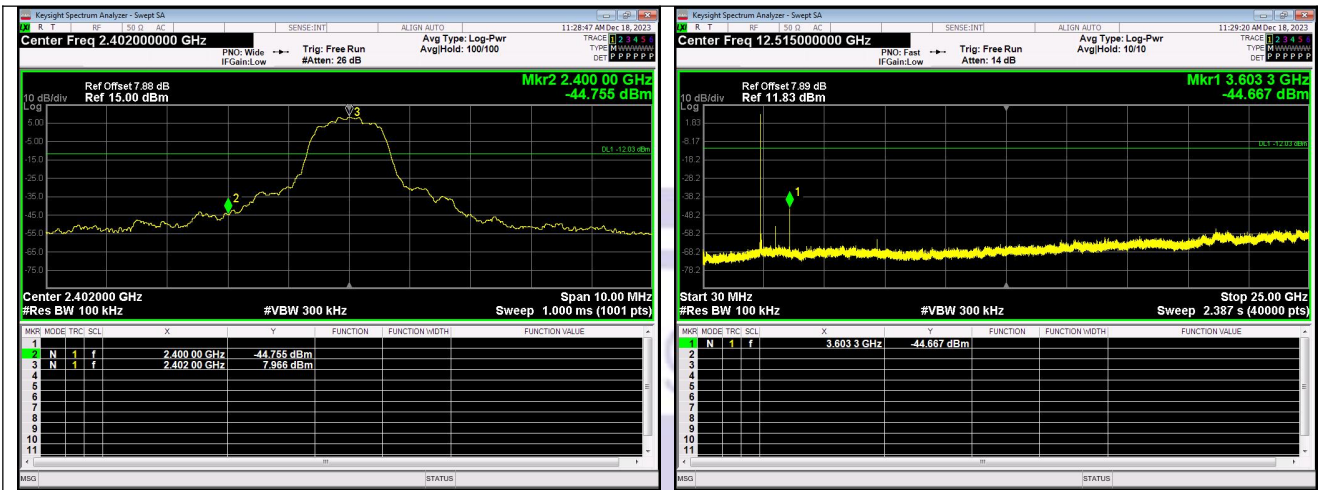
Out Of Band Emission  
 $\pi/4$ DQPSK\_2-DH1\_Channel 78



Spurious Emission  
GFSK\_DH1\_Channel 78

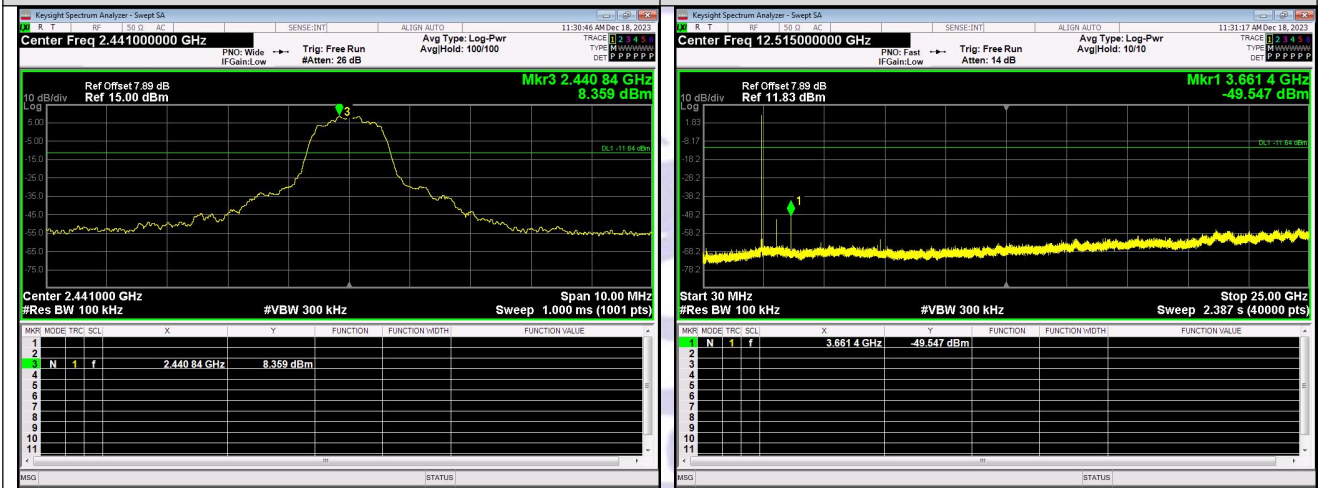
Spurious Emission  
 $\pi/4$ DQPSK\_2-DH1\_Channel 78





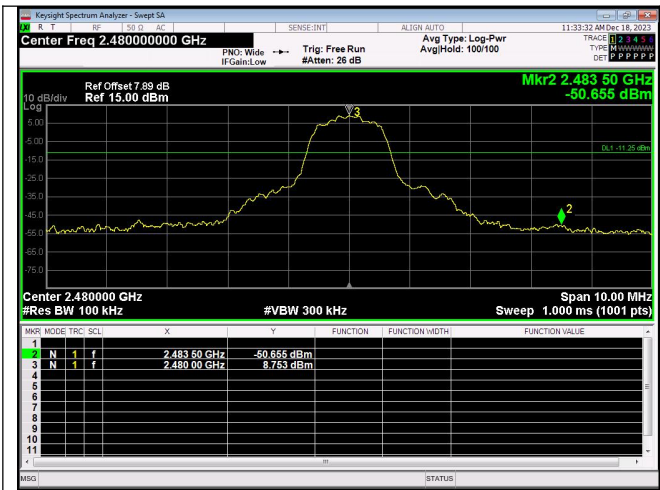
Out Of Band Emission  
8DPSK\_3-DH1\_Channel 0

Spurious Emission  
8DPSK\_3-DH1\_Channel 0

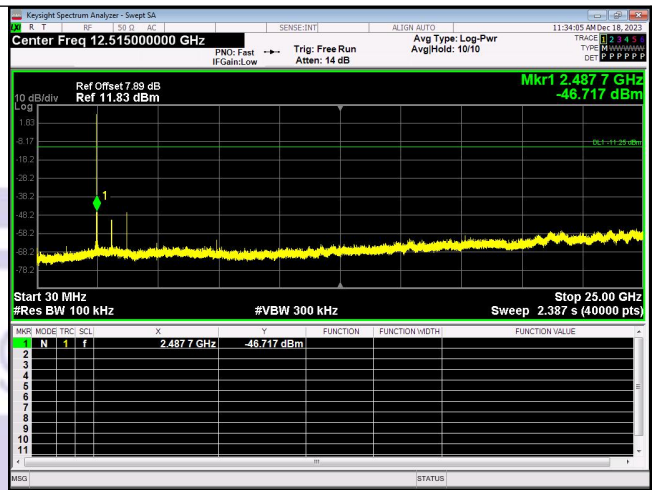


Out Of Band Emission  
8DPSK\_3-DH1\_Channel 39

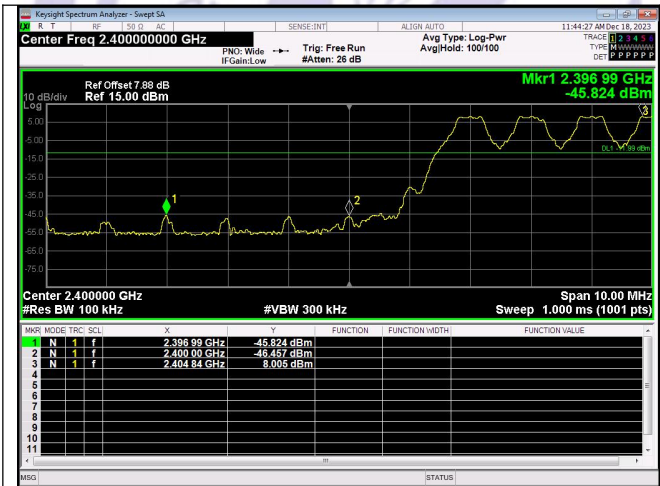
Spurious Emissions  
8DPSK\_3-DH1\_Channel 39



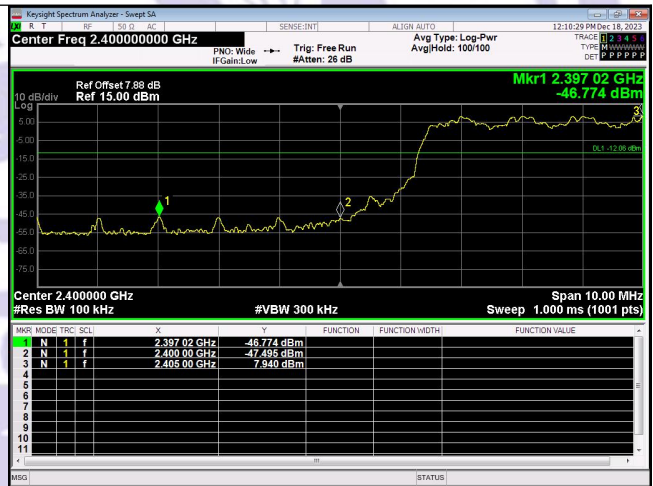
Out Of Band Emission  
8DPSK\_3-DH1\_Channel 78



Spurious Emission  
8DPSK\_3-DH1\_Channel 78



Out Of Band Emission(Left)  
GFSK\_DH1\_Channel Hopping



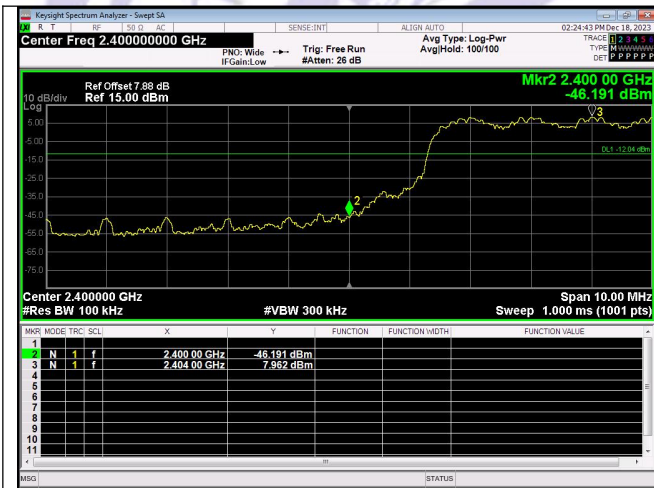
Out Of Band Emission(Left)  
 $\pi/4$ DQPSK\_2-DH1\_Channel Hopping



Out Of Band Emission(Right)  
GFSK\_DH1\_Channel Hopping



Out Of Band Emission(Right)  
 $\pi/4$ DQPSK\_2-DH1\_Channel Hopping



Out Of Band Emission(Left)  
8DPSK\_3-DH1\_Channel Hopping



Out Of Band Emission(Right)  
8DPSK\_3-DH1\_Channel Hopping

## 14 Antenna Requirement

### 14.1 Test Standard and Requirement

Test Standard	FCC Part15 Section 15.203 /247(c)
Requirement	<p>1) 15.203 requirement:</p> <p>An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.</p> <p>2) 15.247(c) (1)(i) requirement:</p> <p>Systems operating in the 2400-2483.5 MHz band that is used exclusively for fixed. Point-to-point operations may employ transmitting antennas with directional gain greater than 6dBi provided the maximum conducted output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6 dBi.</p>

### 14.2 Antenna Connected Construction

The antenna is Button antenna which permanently attached, and the best case gain of the antenna is 2.29 dBi. It complies with the standard requirement.

## 15 APPENDIX I -- TEST SETUP PHOTOGRAPH

Please see the attachment for details.



## 16 APPENDIX II -- EUT PHOTOGRAPH

Please see the attachment for details.

----- End of Report -----

