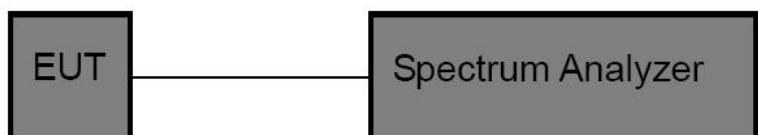


## 13 100kHz Bandwidth of Frequency Band Edge Requirement

### 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 is 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.

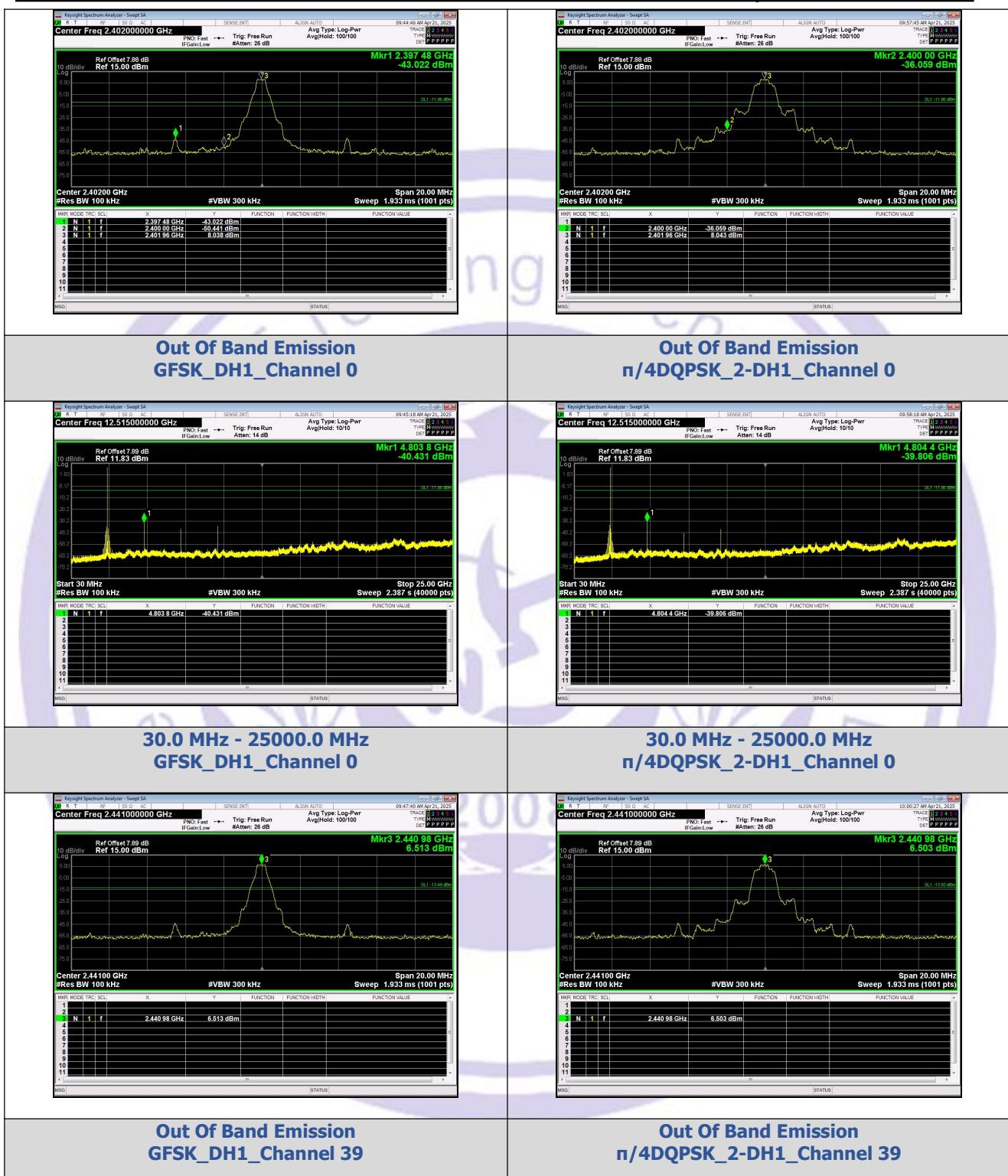
### 13.4 Test Data

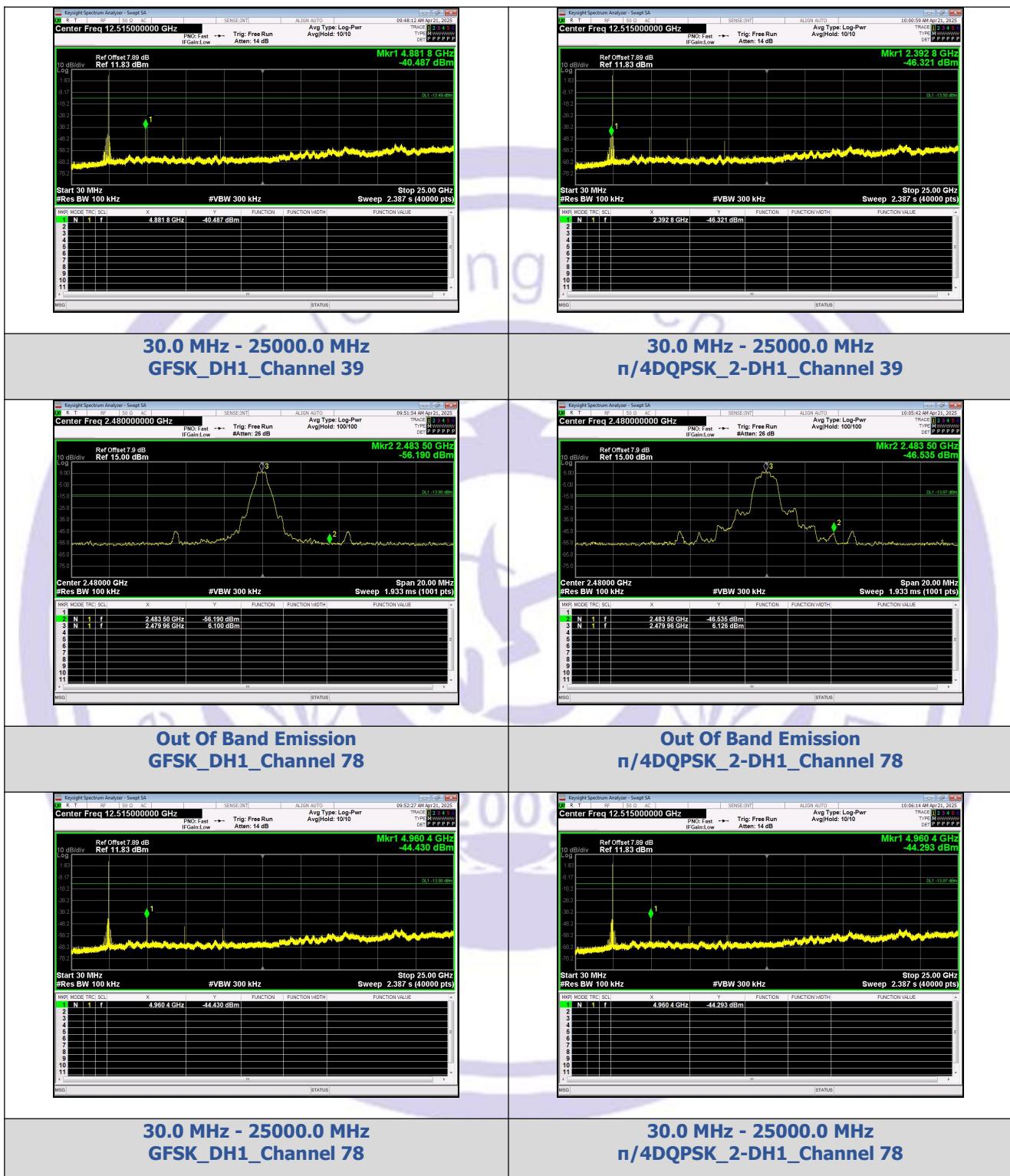
#### Non-Hopping

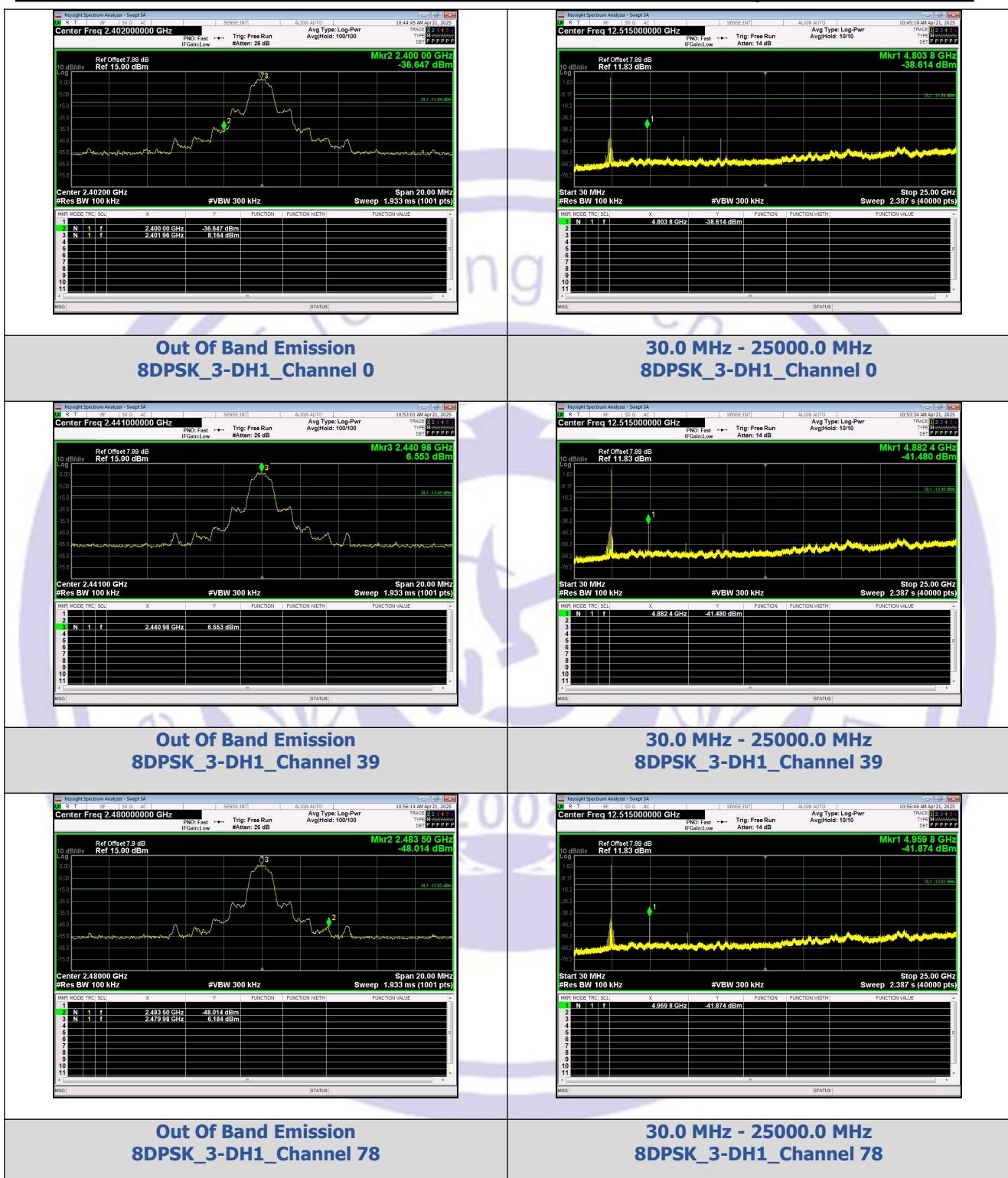
Modulation	Packet	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
GFSK	DH1	0	2397.48	-43.022	-11.96	-31.062	PASS
			2400.00	-50.441	-11.96	-38.481	PASS
		39	4803.80	-40.431	-11.96	-28.471	PASS
		78	4881.79	-40.487	-13.49	-26.997	PASS
			2483.50	-56.190	-13.9	-42.290	PASS
$\pi/4$ DQPSK	2-DH1	0	4960.45	-44.430	-13.9	-30.530	PASS
			2400.00	-36.059	-11.96	-24.099	PASS
		39	4804.38	-39.806	-11.96	-27.846	PASS
		78	2392.85	-46.321	-13.5	-32.821	PASS
			2483.50	-46.535	-13.87	-32.665	PASS
8DPSK	3-DH1	0	4960.45	-44.293	-13.87	-30.423	PASS
			2400.00	-36.647	-11.84	-24.807	PASS
		39	4803.76	-38.614	-11.84	-26.774	PASS
		78	4882.42	-41.480	-13.45	-28.030	PASS
			2483.50	-48.014	-13.82	-34.194	PASS

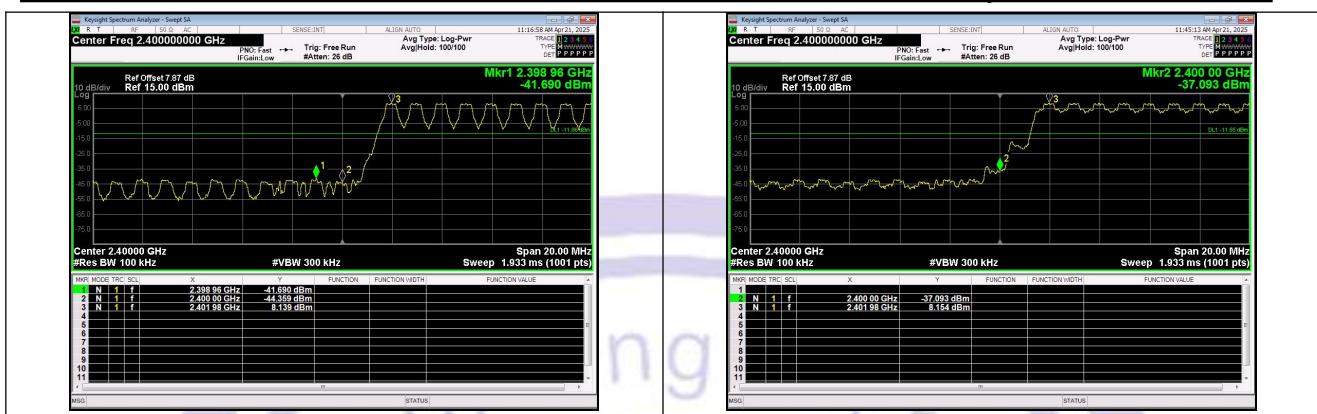
#### Hopping

Modulation	Packet	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result	
GFSK	DH1	Hopping	2398.96	-41.690	-11.86	-29.830	PASS	
			2400.00	-44.359	-11.86	-32.499	PASS	
$\pi/4$ DQPSK	2-DH1		2483.50	-55.192	-13.68	-41.512	PASS	
			2400.00	-37.093	-11.85	-25.243	PASS	
8DPSK	3-DH1		2483.50	-45.856	-13.64	-32.216	PASS	
			2400.00	-36.424	-11.87	-24.554	PASS	

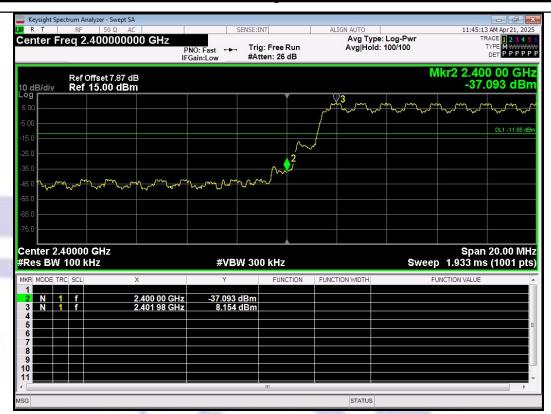




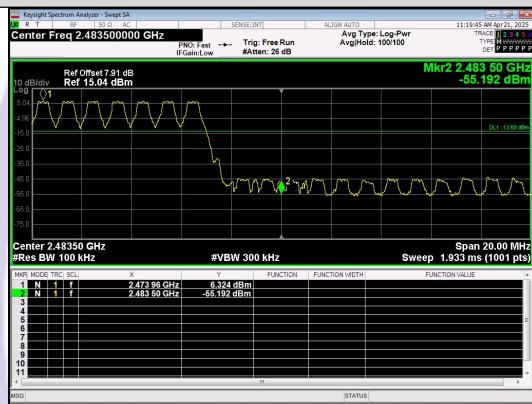




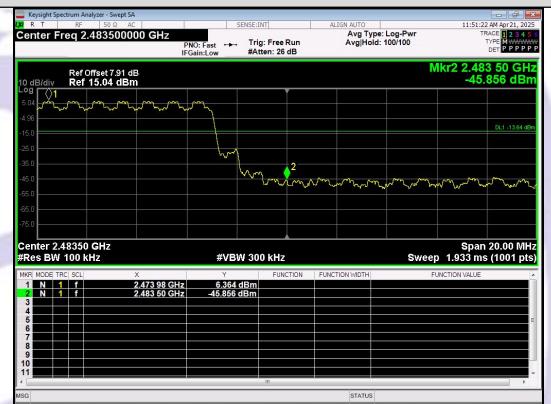
Out Of Band Emission(Left)  
GFSK\_DH1\_Channel Hopping



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



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



Out Of Band Emission(Left)  
n/4DQPSK\_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 EUT antenna is an External antenna, and its antenna gain is 2.5dBi, which meets the standard requirements.

## 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 -----

