

Appendix Test Data for BT1(AC6956C8)

Duty Cycle Test Result

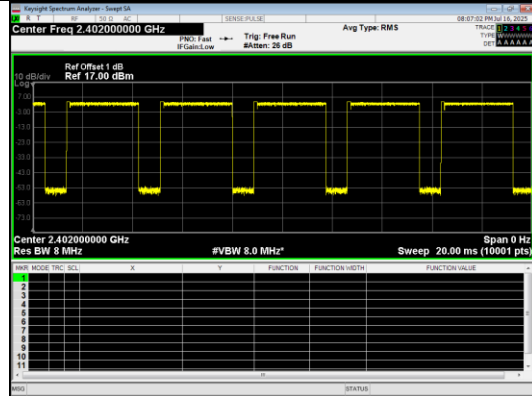
Modulation	Packets	Channel	On Time (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle (linear)	Duty Cycle Factor (dB)	1/T
GFSK	DH5	0	2.886	3.748	77.00	0.7700	1.1351	0.3465
		39	2.886	3.748	77.00	0.7700	1.1351	0.3465
		78	2.886	3.748	77.00	0.7700	1.1351	0.3465
$\pi/4$ DQPSK	2-DH5	0	2.892	3.748	77.16	0.7716	1.1261	0.3458
		39	2.892	3.748	77.16	0.7716	1.1261	0.3458
		78	2.892	3.748	77.16	0.7716	1.1261	0.3458
8DPSK	3-DH5	0	2.894	3.748	77.21	0.7721	1.1233	0.3455
		39	2.892	3.748	77.16	0.7716	1.1261	0.3458
		78	2.894	3.748	77.21	0.7721	1.1233	0.3455

Test Graphs

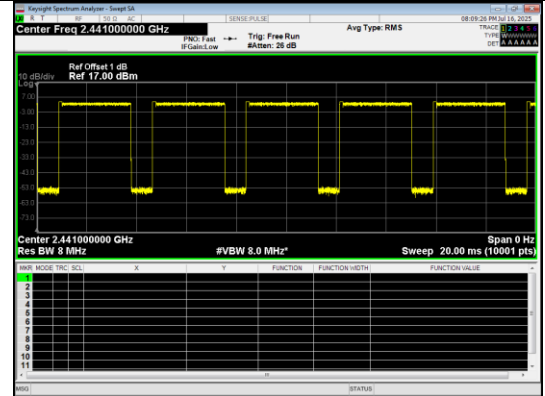




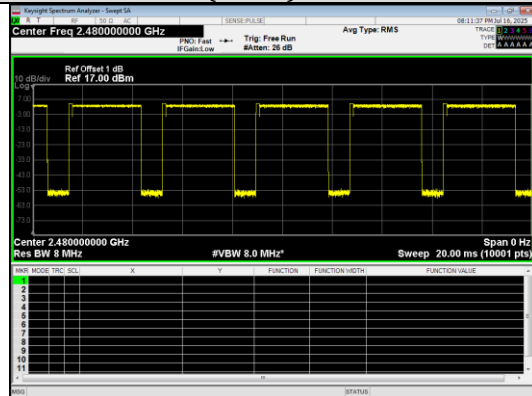
$\pi/4$ DQPSK(2-DH5)_Channel 39



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



8DPSK(3-DH5)_Channel 0



8DPSK(3-DH5)_Channel 39

8DPSK(3-DH5)_Channel 78



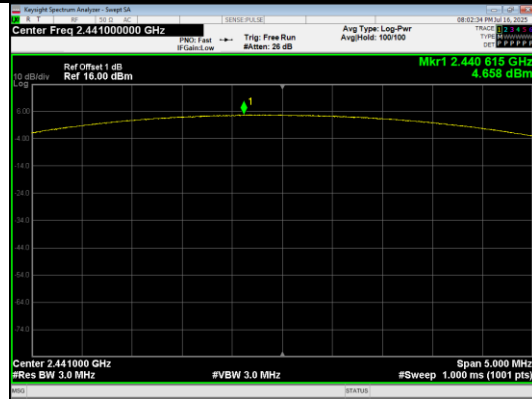
Conducted Output Power

Test Result

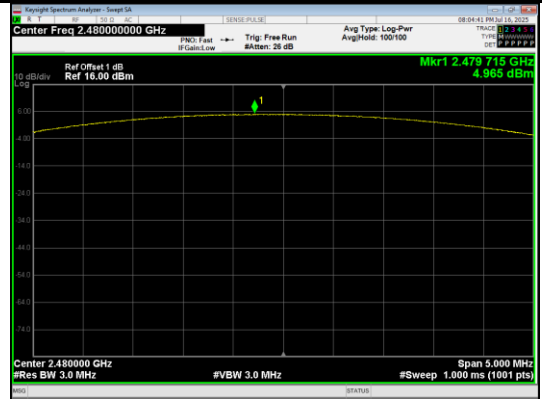
Modulation	Packet Type	Channel	Peak Output Power (dBm)	Peak Output Power (mW)	Limit (dBm)	Result
GFSK	DH5	0	3.98	2.50	≤30	PASS
		39	3.84	2.42		PASS
		78	4.15	2.60		PASS
$\pi/4$ DQPSK	2-DH5	0	4.64	2.91	≤20.97	PASS
		39	4.66	2.92		PASS
		78	4.96	3.13		PASS
8DPSK	3-DH5	0	4.94	3.12		PASS
		39	5.03	3.18		PASS
		78	5.29	3.38		PASS

Test Graphs

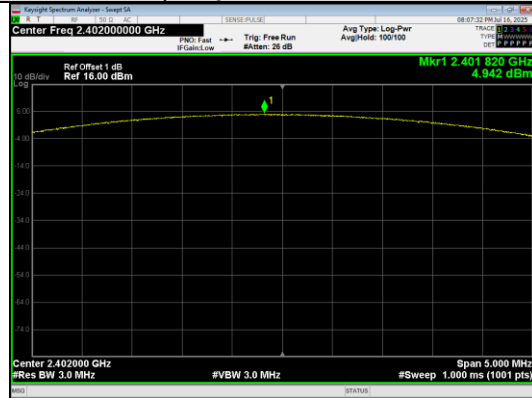




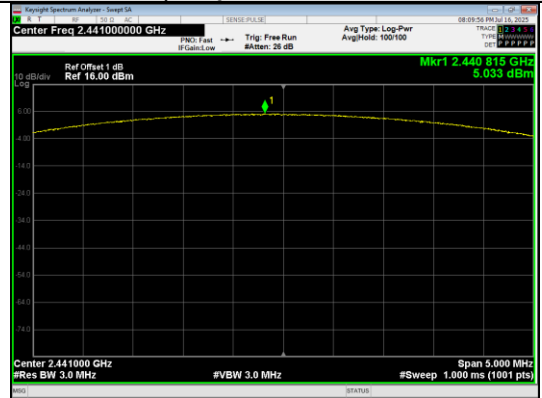
Peak Output Power
 $\pi/4$ DQPSK_Channel 39



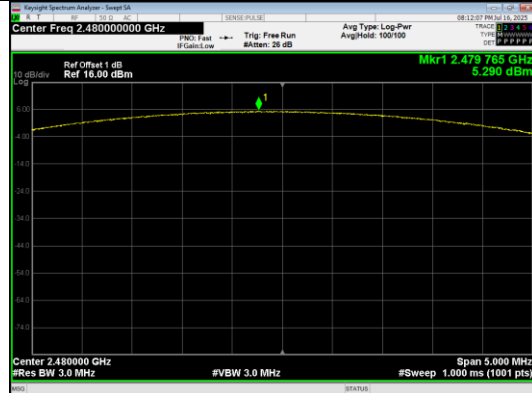
Peak Output Power
 $\pi/4$ DQPSK_Channel 78



Peak Output Power
 8DPSK_Channel 0



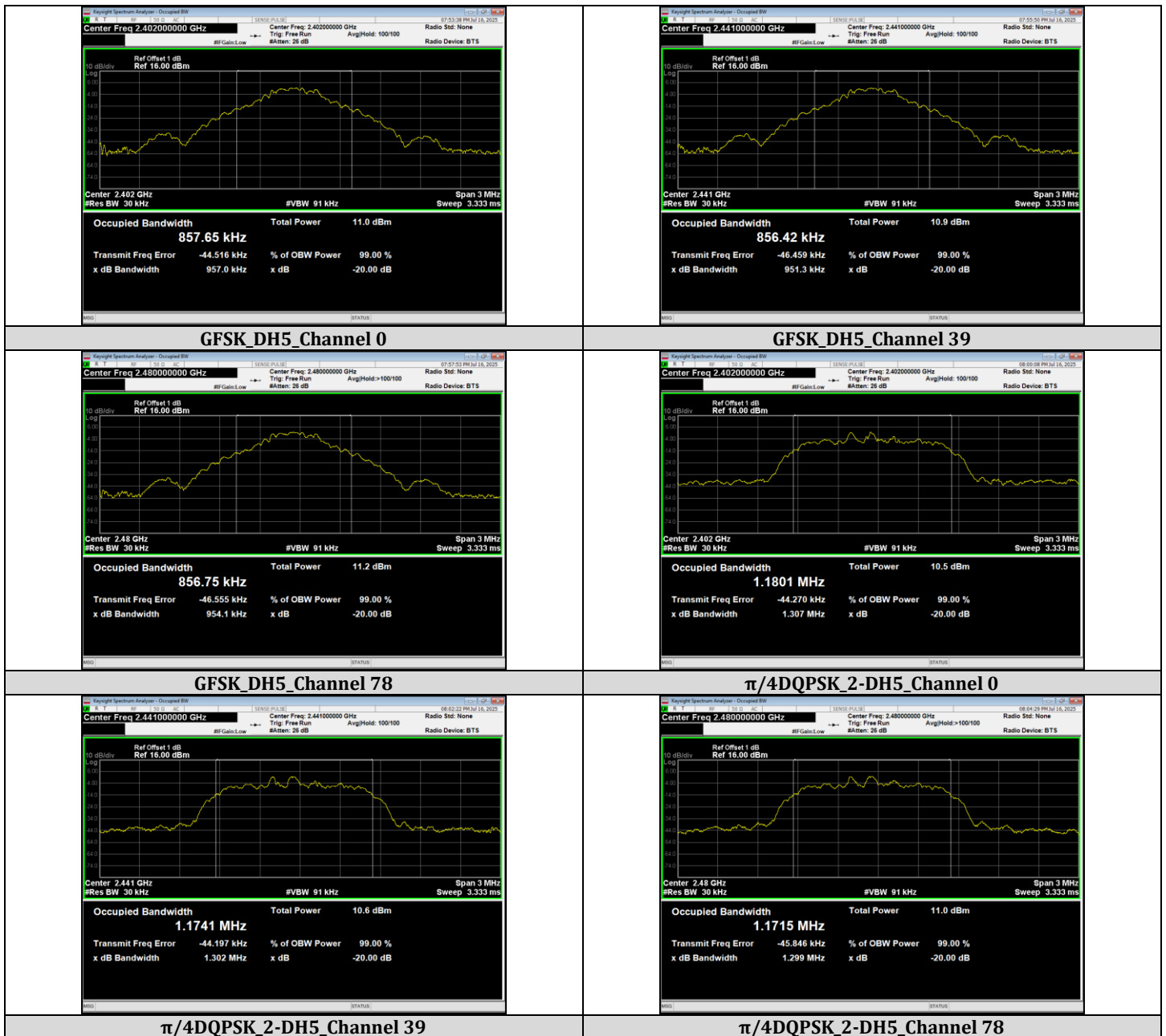
Peak Output Power
 8DPSK_Channel 39

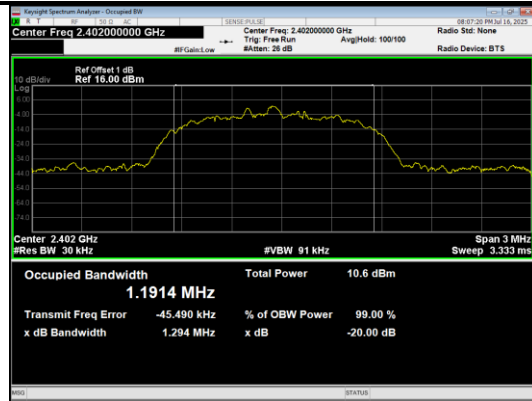


Peak Output Power
 8DPSK_Channel 78

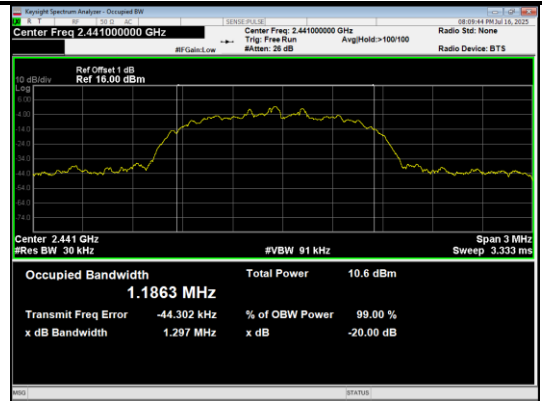
**20dB Bandwidth****Test Result**

Modulation	Channel	Center Frequency (MHz)	20 dB Bandwidth (MHz)
GFSK	0	2402 MHz	0.9600
	39	2441 MHz	0.9500
	78	2480 MHz	0.9500
$\pi/4$ DQPSK	0	2402 MHz	1.310
	39	2441 MHz	1.300
	78	2480 MHz	1.300
8DPSK	0	2402 MHz	1.290
	39	2441 MHz	1.300
	78	2480 MHz	1.290

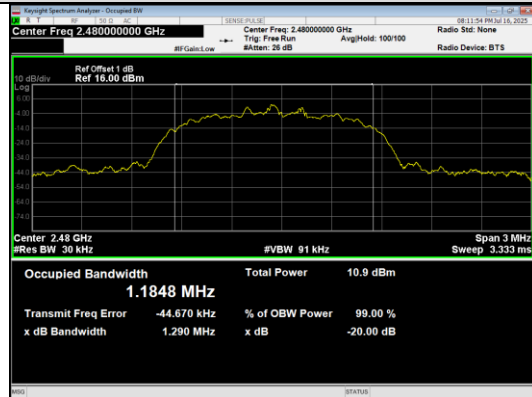
Test Graphs



8DPSK_3-DH5_Channel 0



8DPSK_3-DH5_Channel 39



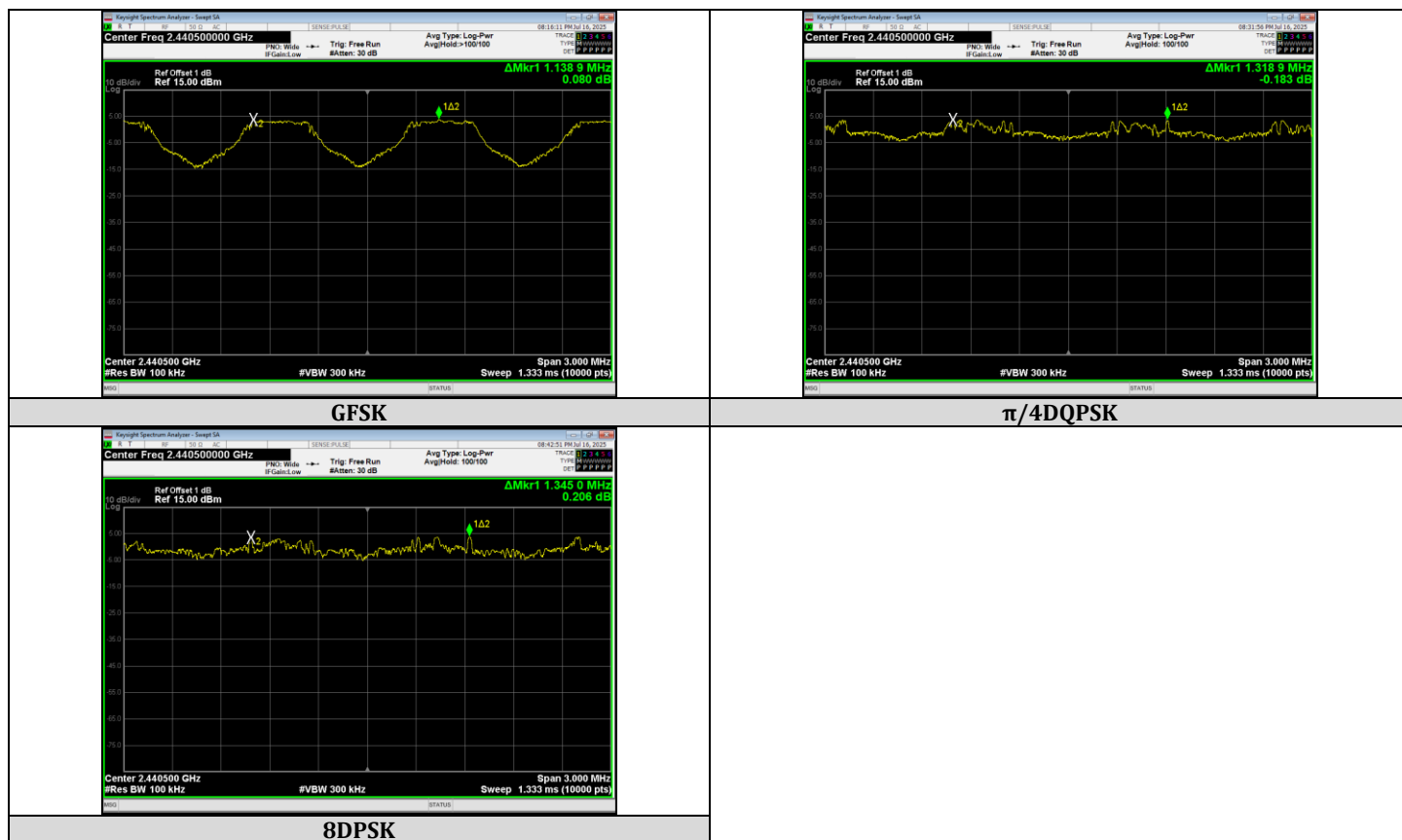
8DPSK_3-DH5_Channel 78

Carrier Frequencies Separation

Test Result

Modulation	Packet	Left Center frequency (MHz)	Right Center frequency (MHz)	Hopping Frequency Separation (MHz)	Limit (MHz)	Result
GFSK	DH5	2439.7996	2440.9385	1.1389	0.99	PASS
$\pi/4$ DQPSK	2-DH5	2439.7903	2441.1092	1.3189	0.99	PASS
8DPSK	3-DH5	2439.7825	2441.1275	1.3450	0.99	PASS

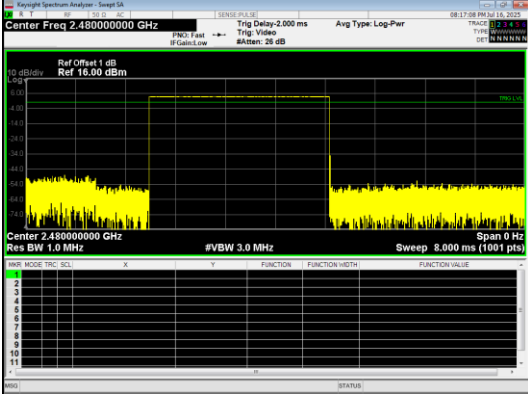
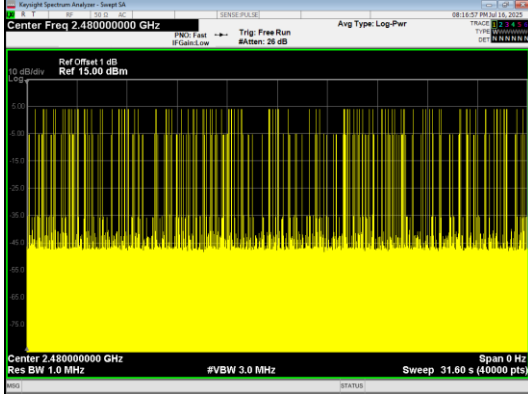
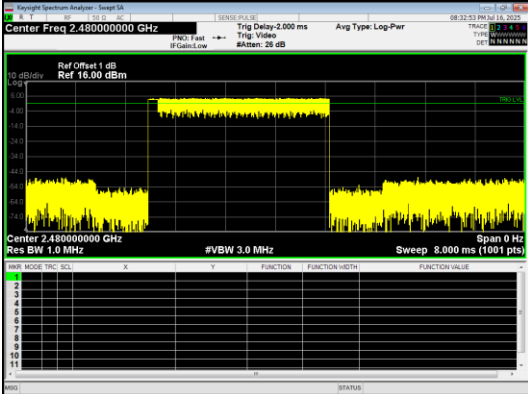
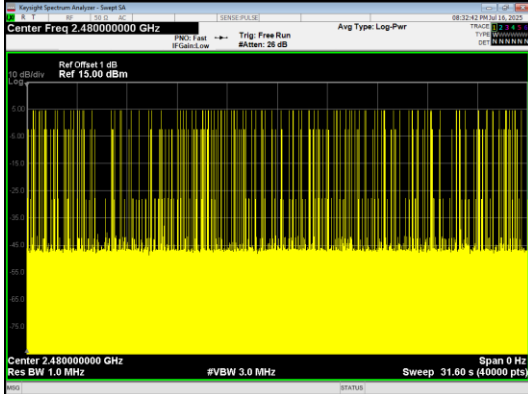
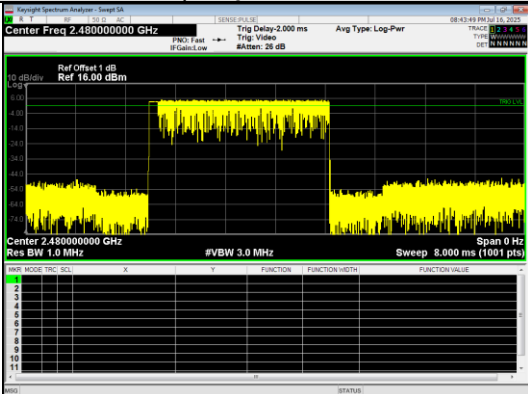
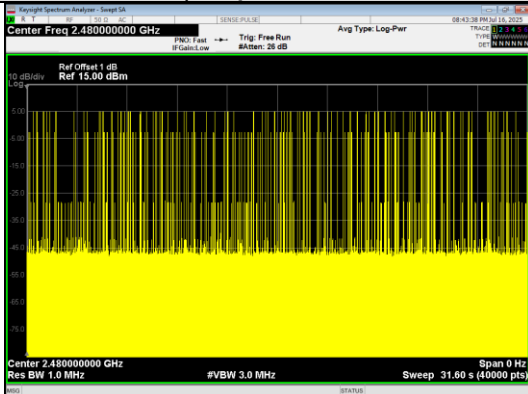
Test Graphs



**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	102	293.76	< 400	PASS
$\pi/4$ DQPSK	2-DH5		2.896	106	306.98		PASS
8DPSK	3-DH5		2.880	111	319.68		PASS

Test Graphs

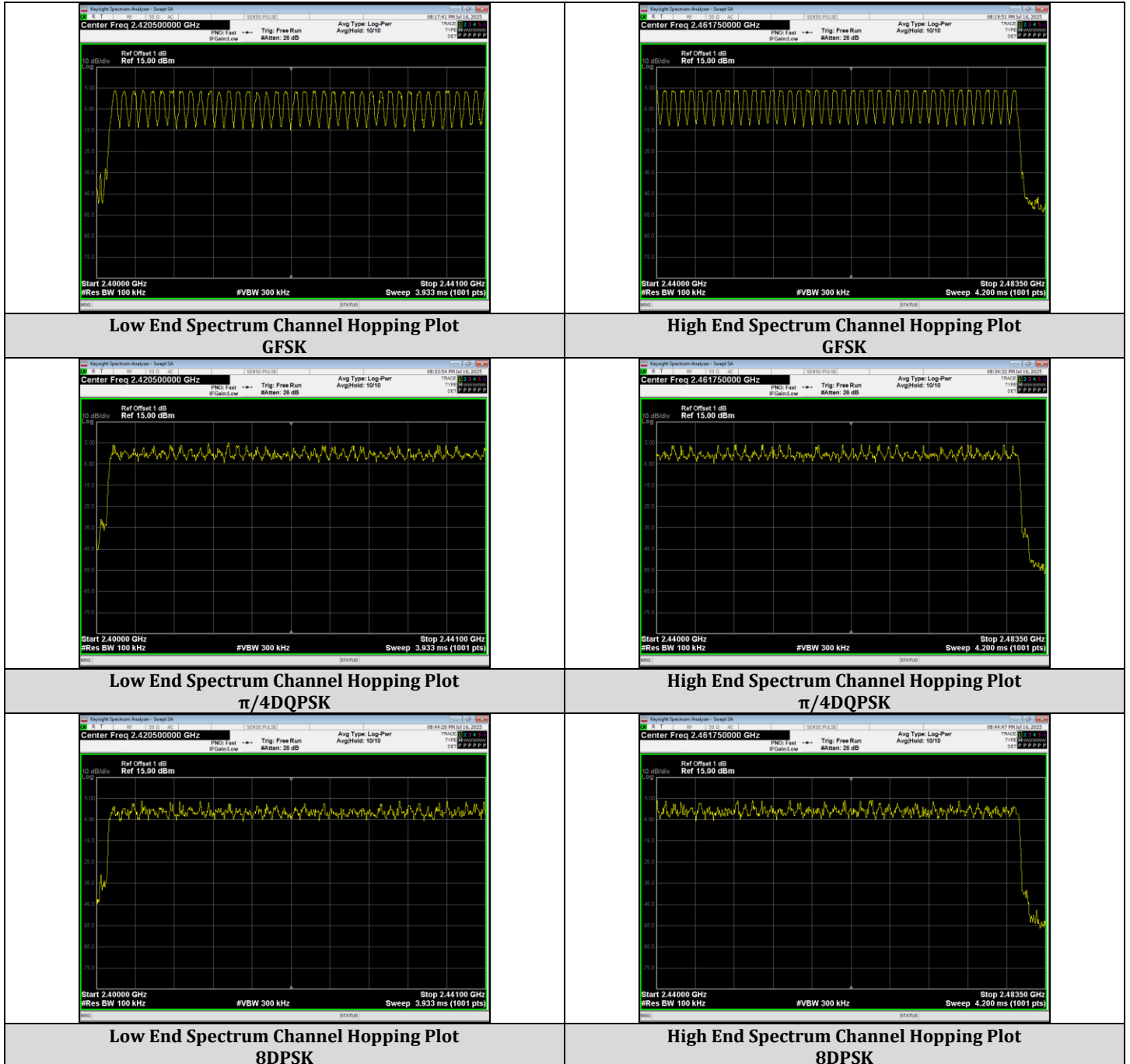
	
Pulse Width GFSK_DH5	Number of Pulses in 31.6 seconds GFSK_DH5
	
Pulse Width $\pi/4$DQPSK_2-DH5	Number of Pulses in 31.6 seconds $\pi/4$DQPSK_2-DH5
	
Pulse Width 8DPSK_3-DH5	Number of Pulses in 31.6 seconds 8DPSK_3-DH5

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



Conducted Out Of Band Emission

Test Result

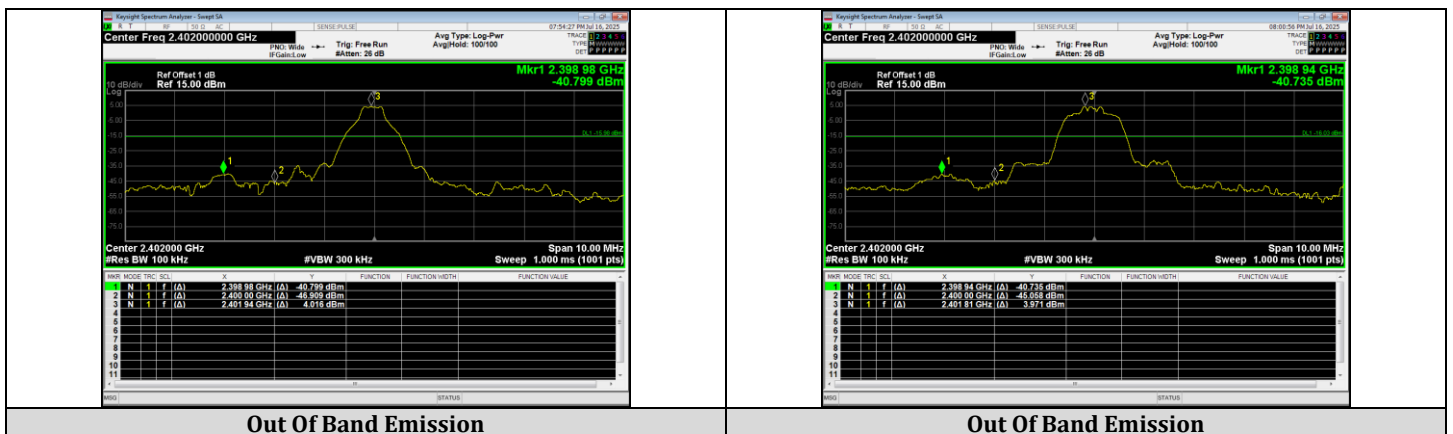
Non-Hopping

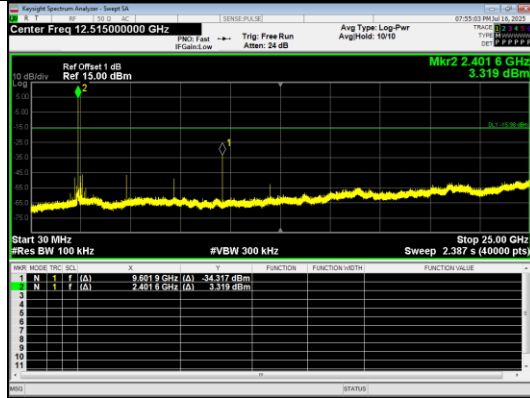
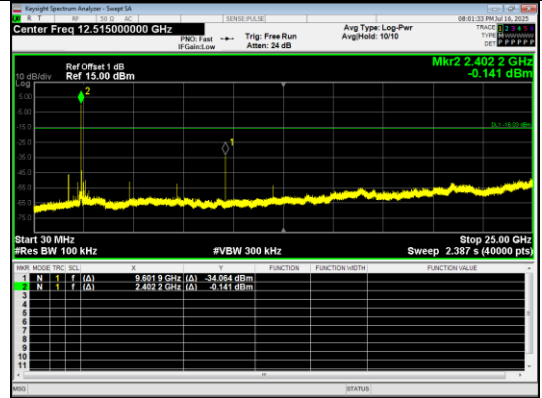
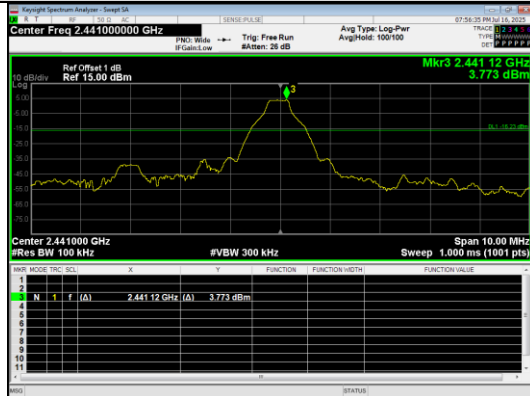
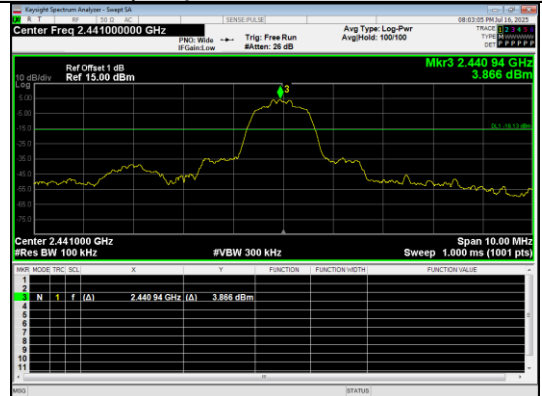
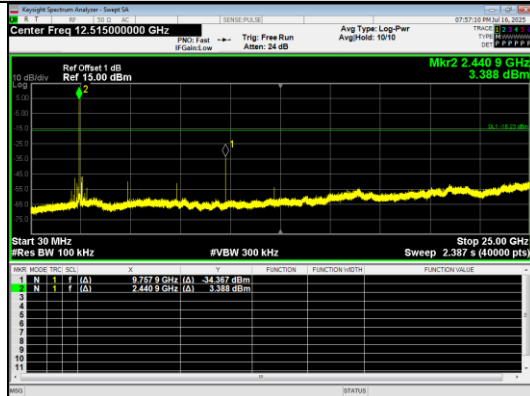
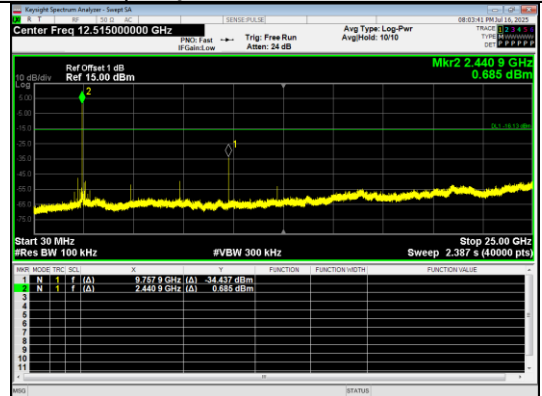
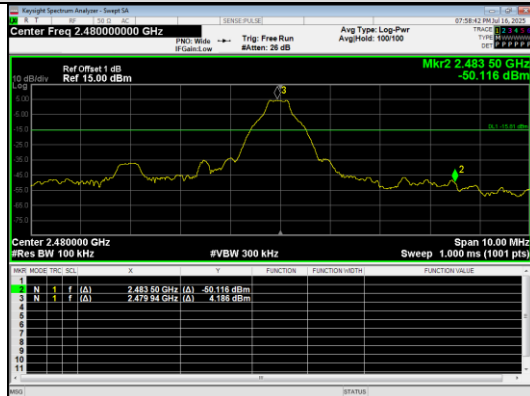
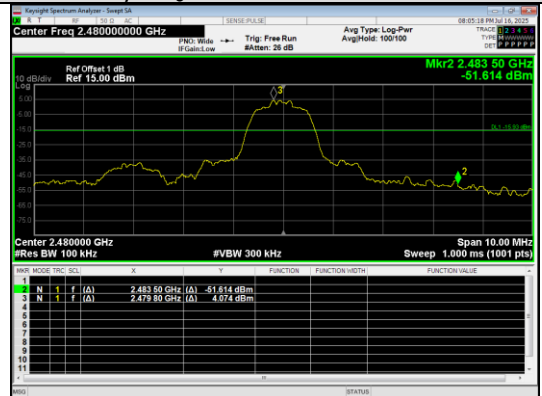
Modulation	Packet	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
GFSK	DH5	0	2398.98	-40.799	-15.98	-24.819	PASS
			2400.00	-46.910	-15.98	-30.930	PASS
			9601.90	-34.317	-15.98	-18.337	PASS
		39	9757.93	-34.367	-16.23	-18.137	PASS
		78	2483.50	-50.120	-15.81	-34.310	PASS
			9914.00	-35.892	-15.81	-20.082	PASS
$\pi/4$ DQPSK	2-DH5	0	2398.94	-40.735	-16.03	-24.705	PASS
			2400.00	-45.060	-16.03	-29.030	PASS
			9601.90	-34.064	-16.03	-18.034	PASS
		39	9757.93	-34.437	-16.13	-18.307	PASS
		78	2483.50	-51.610	-15.93	-35.680	PASS
			5233.88	-33.617	-15.93	-17.687	PASS
8DPSK	3-DH5	0	2398.96	-41.014	-16.03	-24.984	PASS
			2400.00	-45.490	-16.03	-29.460	PASS
			9601.90	-34.029	-16.03	-17.999	PASS
		39	9757.93	-34.378	-16.07	-18.308	PASS
		78	2483.50	-52.050	-15.91	-36.140	PASS
			5238.87	-33.780	-15.91	-17.870	PASS

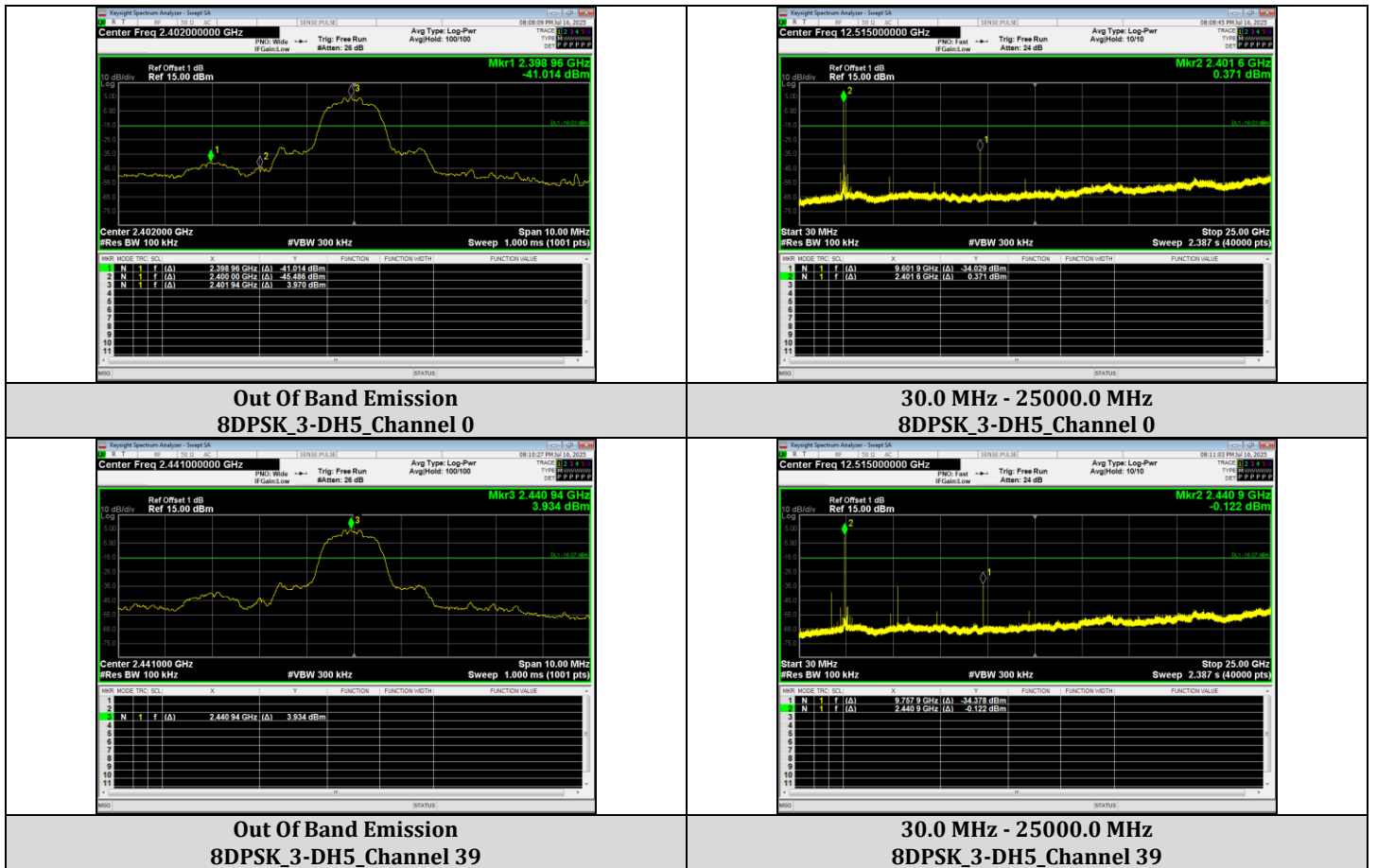
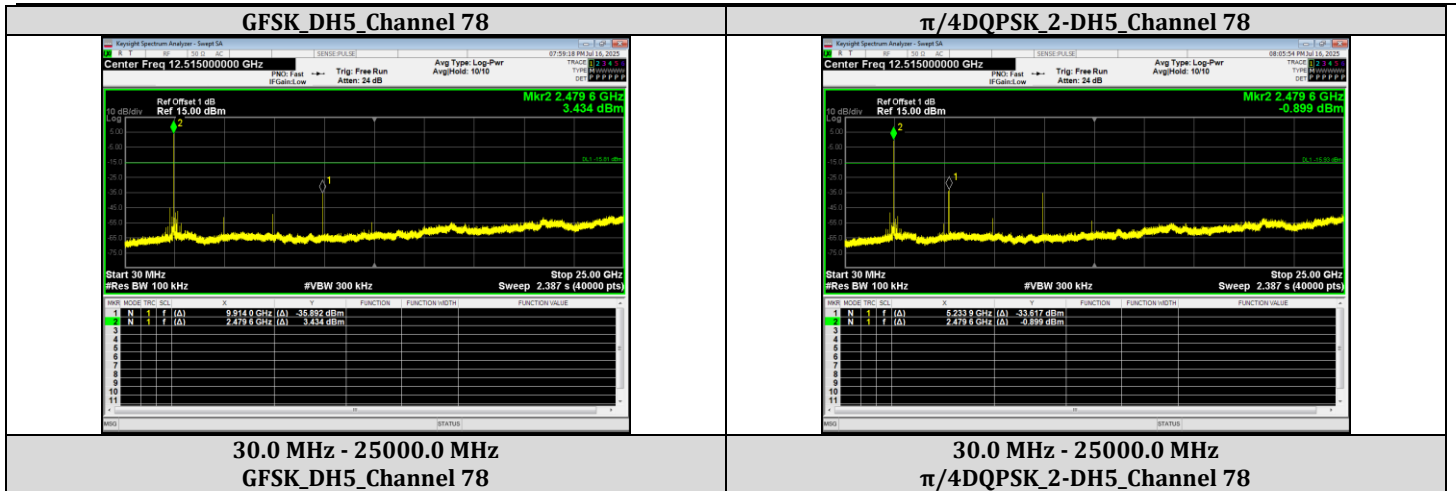
Hopping

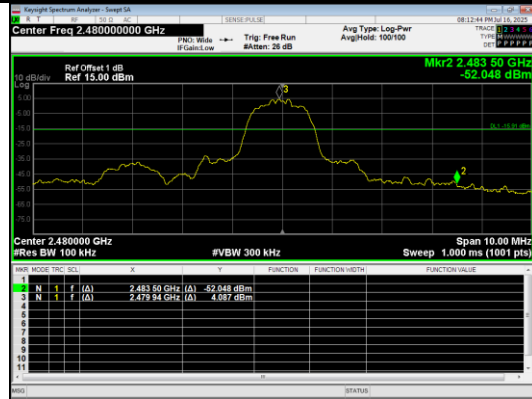
Modulation	Packet	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
GFSK	DH5	Hopping	2400.00	-40.700	-15.91	-24.790	PASS
π/4DQPSK	2-DH5		2483.50	-49.890	-15.95	-33.940	PASS
			2398.94	-41.352	-16.01	-25.341	PASS
			2400.00	-42.950	-16.01	-26.940	PASS
			2483.50	-50.830	-15.97	-34.860	PASS
8DPSK	3-DH5		2400.00	-42.030	-15.99	-26.040	PASS
		2483.50	-53.780	-15.97	-37.810	PASS	

Test Graphs

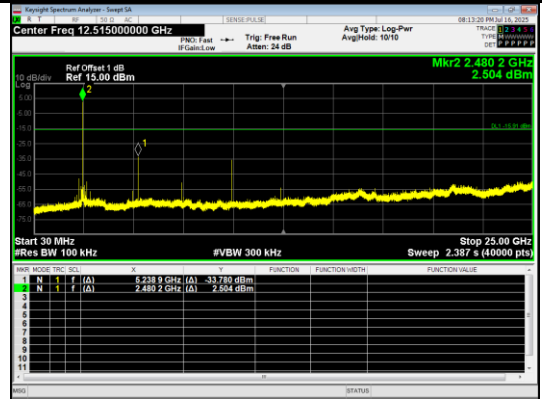


GFSK_DH5_Channel 0

 $\pi/4$ 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
Out Of Band Emission

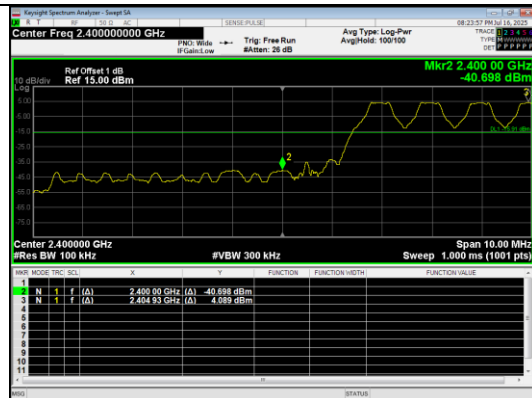




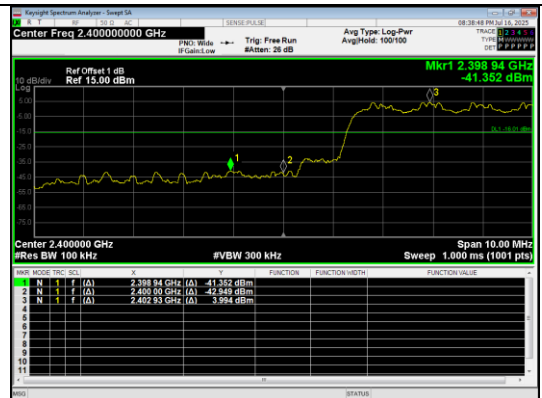
Out Of Band Emission
8DPSK_3-DH5_Channel 78



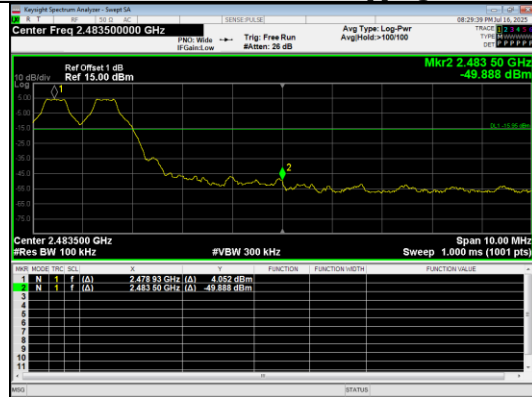
30.0 MHz - 25000.0 MHz
8DPSK_3-DH5_Channel 78



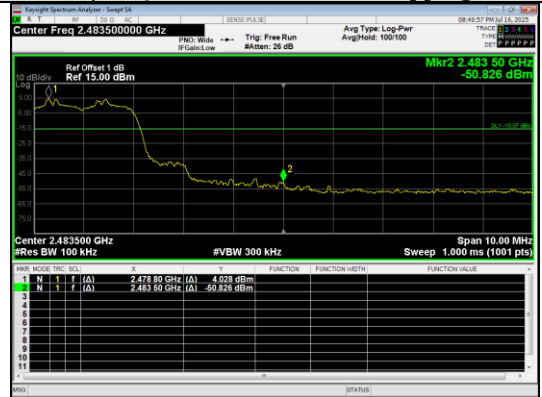
Out Of Band Emission(Left)
GFSK_DH5_Channel Hopping



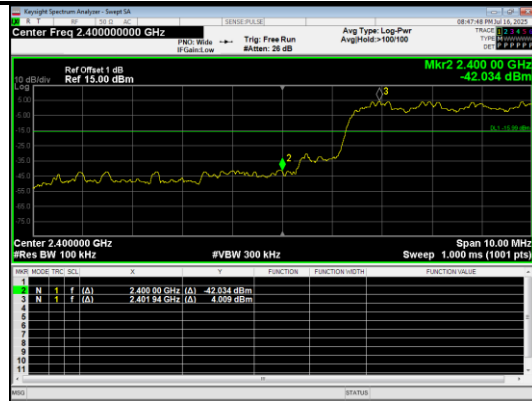
Out Of Band Emission(Left)
 $\pi/4$ DQPSK_2-DH5_Channel Hopping



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 Report *****