

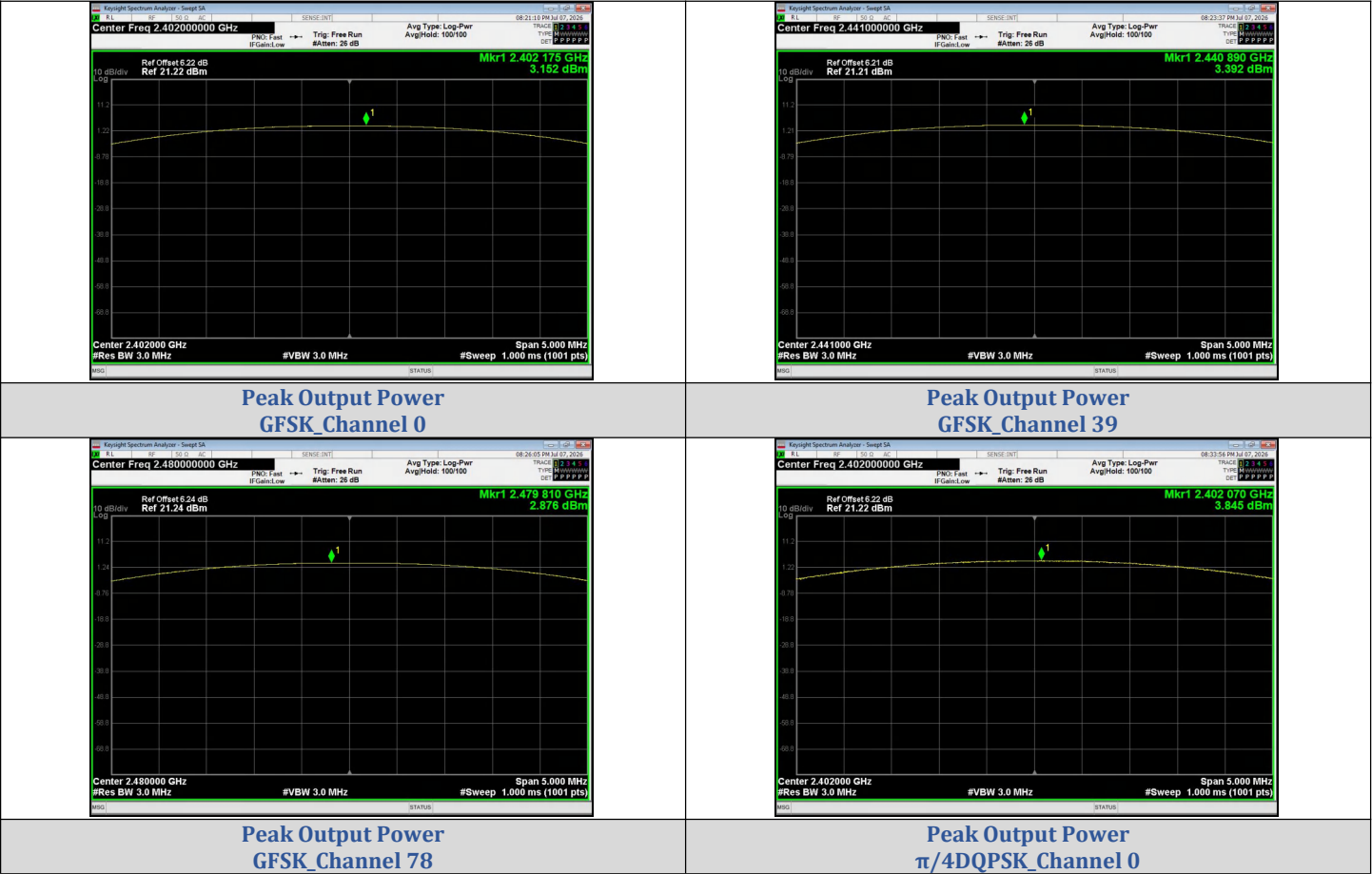
Appendix ATest Results of Bluetooth BR & EDR

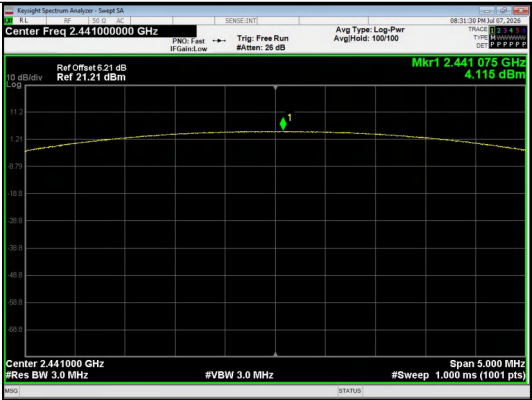
Conducted Output Power

Test Result

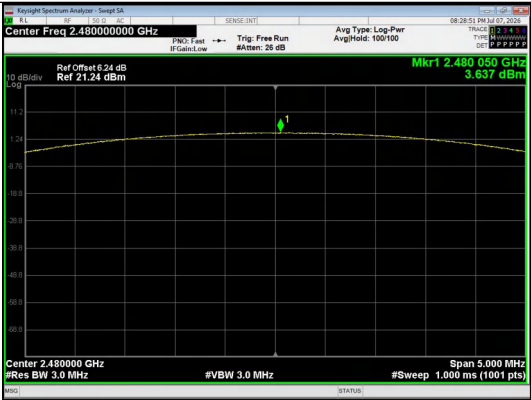
Modulation	Packet Type	Channel	Peak Output Power (dBm)	Peak Output Power (mW)	Max. Avg. Power (dBm)	Limit (dBm)	Verdict
GFSK	DH5	0	3.152	2.07	None	30	PASS
		39	3.392	2.18	None		PASS
		78	2.876	1.94	None		PASS
$\pi/4$ DQPSK	2-DH5	0	3.845	2.42	None		PASS
		39	4.115	2.58	None		PASS
		78	3.637	2.31	None		PASS
8DPSK	3-DH5	0	4.180	2.62	None		PASS
		39	4.464	2.80	None		PASS
		78	3.945	2.48	None		PASS

Test Graphs

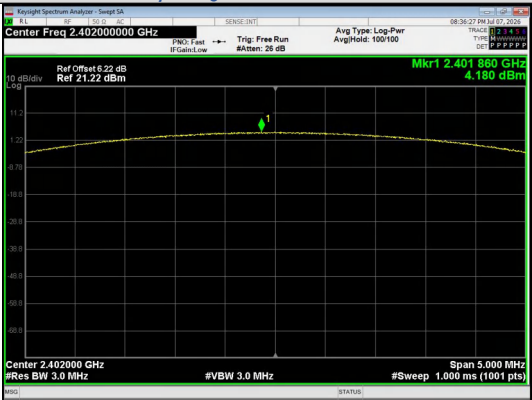




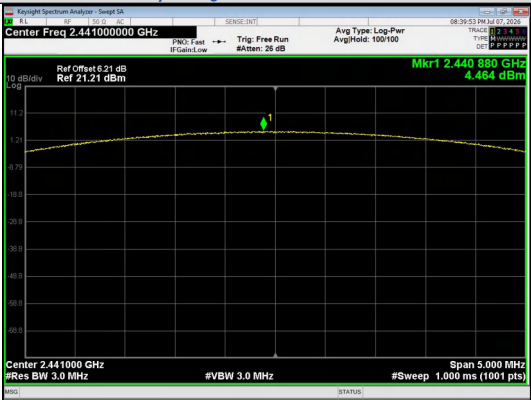
Peak Output Power
 π /4QPSK_Channel 39



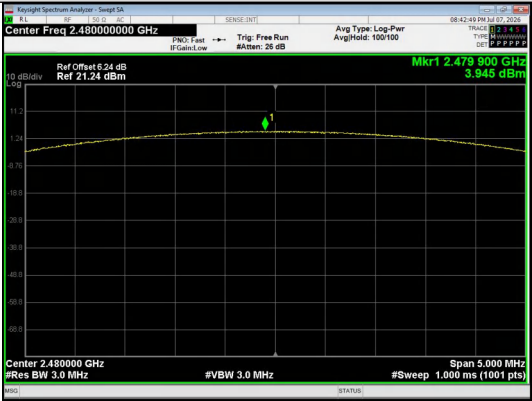
Peak Output Power
 π /4QPSK_Channel 78



Peak Output Power
8DPSK_Channel 0



Peak Output Power
8DPSK_Channel 39



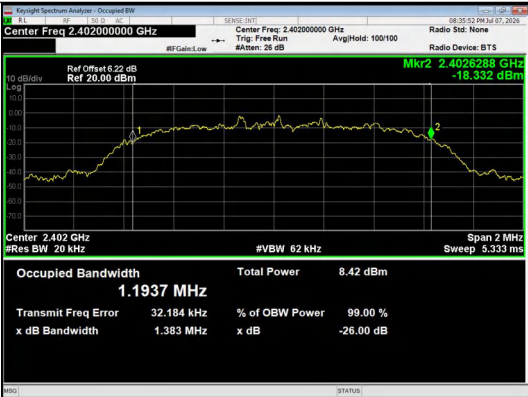
Peak Output Power
8DPSK_Channel 78

Test Result

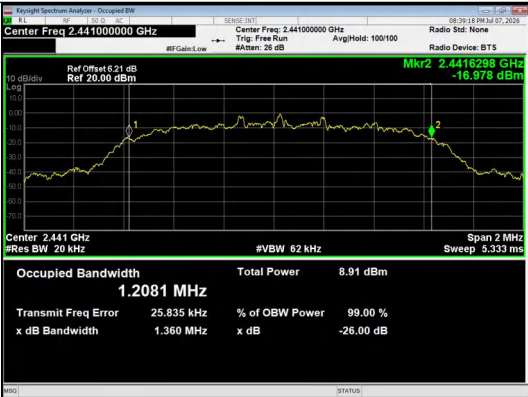
Modulation	Channel	Center Frequency (MHz)	99% BW (MHz)
GFSK	0	2402	0.88
	39	2441	0.89
	78	2480	0.88
$\pi/4$ DQPSK	0	2402	1.19
	39	2441	1.20
	78	2480	1.19
8DPSK	0	2402	1.19
	39	2441	1.21
	78	2480	1.20

Test Graphs

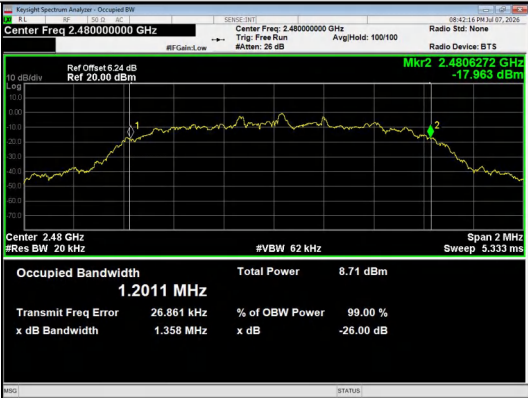




8DPSK_3-DH5_Channel 0



8DPSK_3-DH5_Channel 39

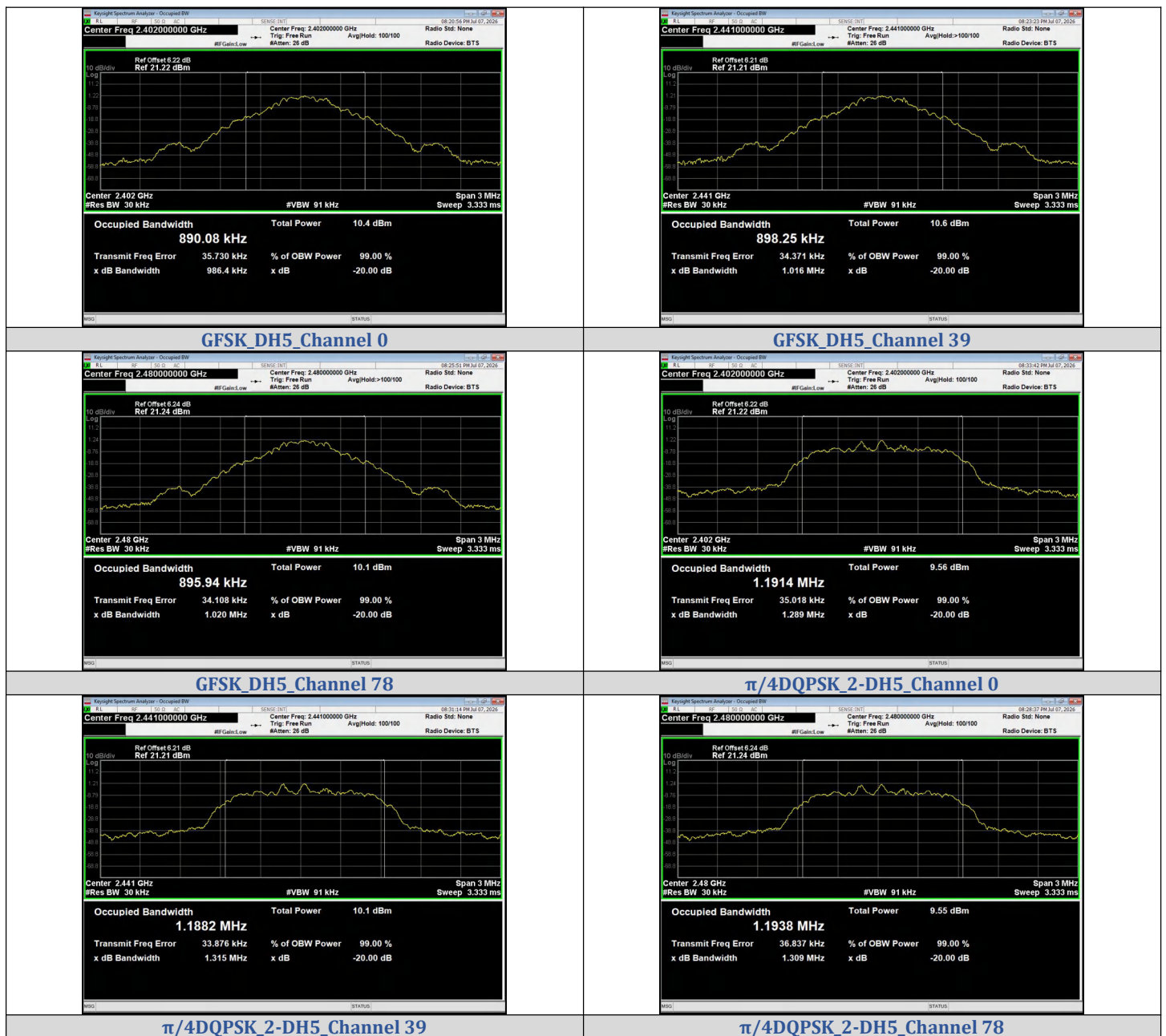


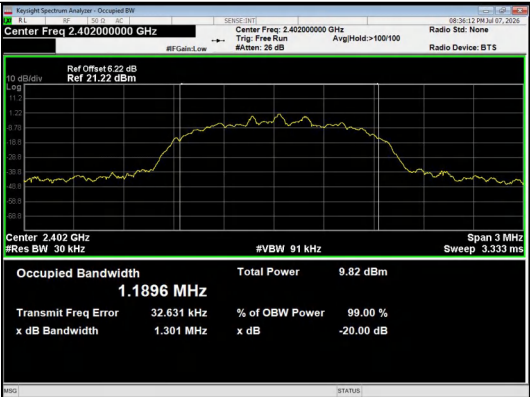
8DPSK_3-DH5_Channel 78

Test Result

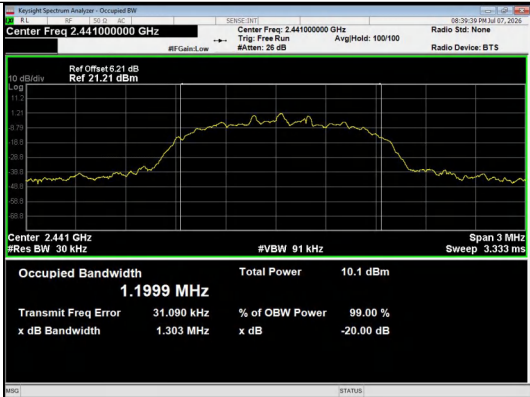
Modulation	Channel	Center Frequency (MHz)	20 dB Bandwidth (MHz)
GFSK	0	2402 MHz	0.9864
	39	2441 MHz	1.016
	78	2480 MHz	1.020
$\pi/4$ DQPSK	0	2402 MHz	1.289
	39	2441 MHz	1.315
	78	2480 MHz	1.309
8DPSK	0	2402 MHz	1.301
	39	2441 MHz	1.303
	78	2480 MHz	1.302

Test Graphs

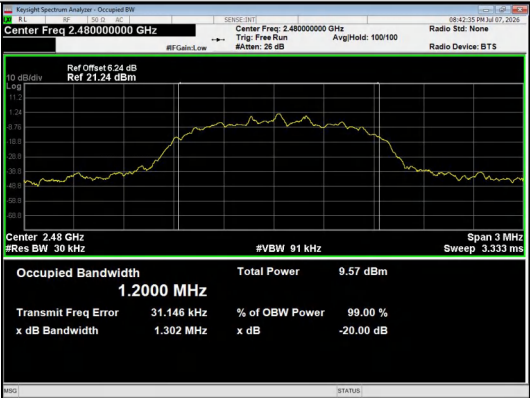




8DPSK_3-DH5_Channel 0



8DPSK_3-DH5_Channel 39



8DPSK_3-DH5_Channel 78

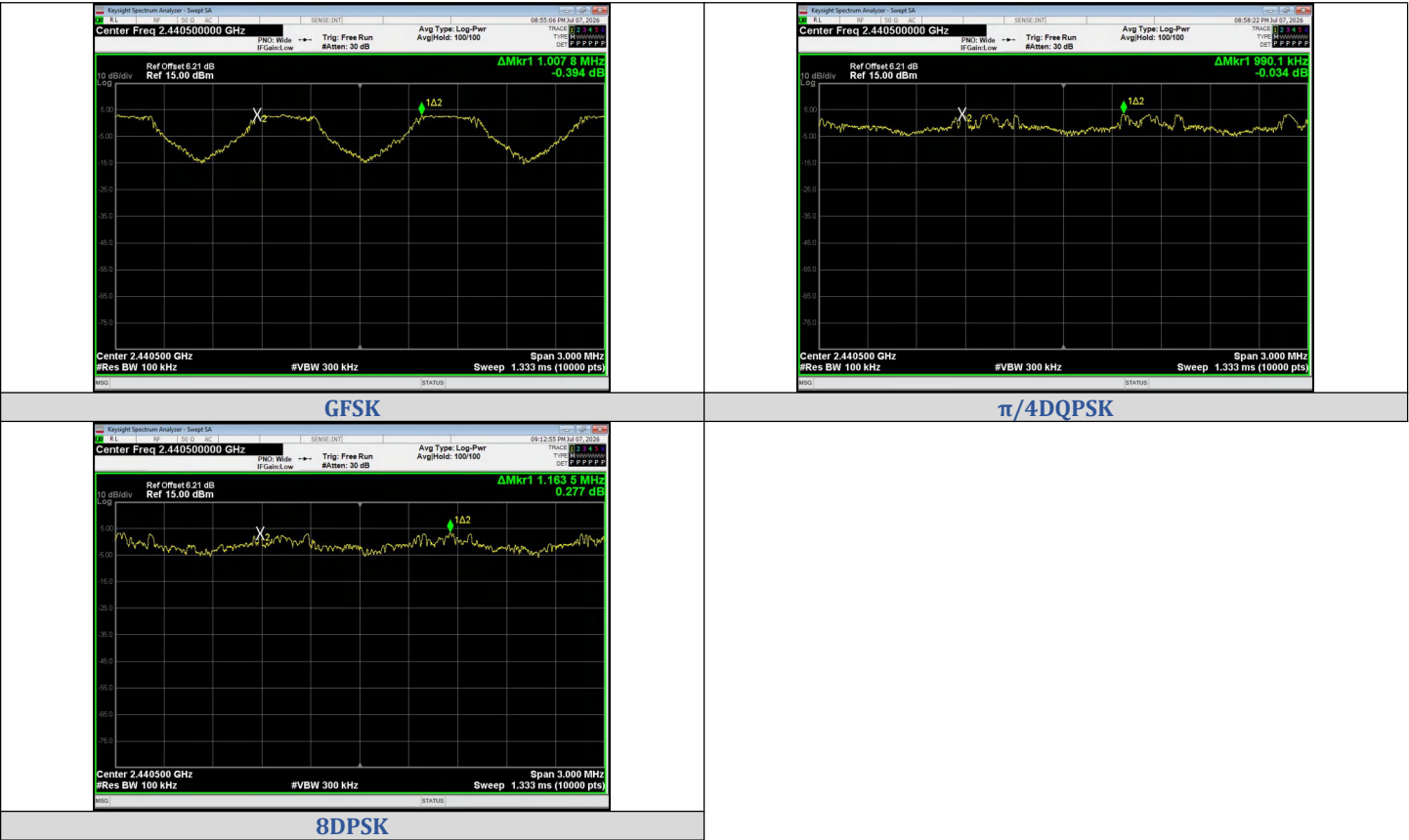
FCC ID:2BW3Q-H05

Carrier Frequencies Separation

Test Result

Modulation	Packet	Left Center frequency (MHz)	Right Center frequency (MHz)	Hopping Frequency Separation (MHz)	Minimum Limit (MHz)	Verdict
GFSK	DH5	2439.8707	2440.8785	1.0078	0.68	PASS
$\pi/4$ DQPSK	2-DH5	2439.8785	2440.8686	0.9901	0.877	PASS
8DPSK	3-DH5	2439.8887	2441.0522	1.1635	0.869	PASS

Test Graphs



FCC ID:2BW3Q-H05

Conducted Spurious & Band Edge Emission

Test Result

Non-Hopping

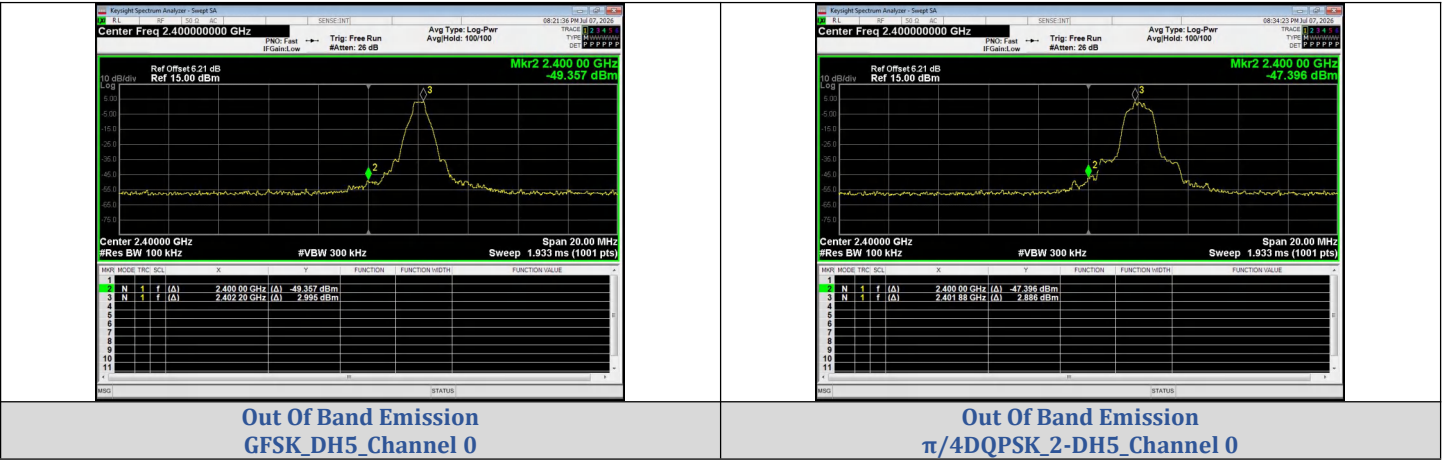
Modulation	Packet	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Verdict
GFSK	DH5	0	2400.00	-49.357	-17.00	-32.357	PASS
			9607.87	-38.304	-17.00	-21.304	PASS
		39	4882.30	-36.589	-16.76	-19.829	PASS
		78	2483.50	-56.384	-17.25	-39.134	PASS
			4960.33	-38.665	-17.25	-21.415	PASS
$\pi/4$ DQPSK	2-DH5	0	2400.00	-47.396	-17.11	-30.286	PASS
			9607.87	-38.038	-17.11	-20.928	PASS
		39	9763.93	-39.873	-16.98	-22.893	PASS
		78	2287.91	-40.523	-17.21	-23.313	PASS
			2483.50	-57.299	-17.21	-40.089	PASS
8DPSK	3-DH5	0	2400.00	-47.560	-17.07	-30.490	PASS
			9607.87	-38.095	-17.07	-21.025	PASS
		39	4881.67	-37.493	-16.77	-20.723	PASS
		78	2287.91	-41.438	-17.27	-24.168	PASS
			2483.50	-56.215	-17.27	-38.945	PASS

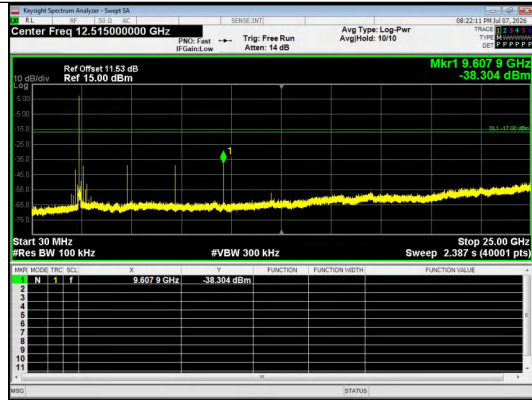
Note: input compensation coefficient (dB)= Cable Loss (dB)

Hopping

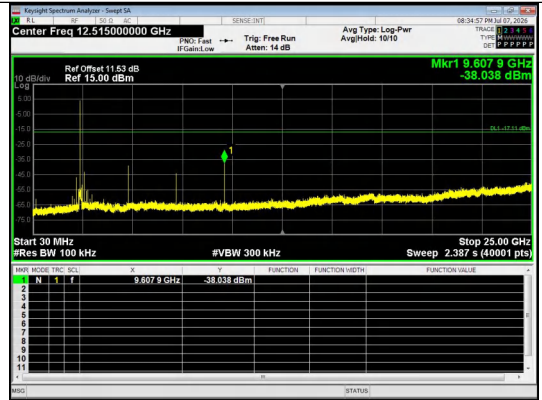
Modulation	Packet	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Verdict
GFSK	DH5	Hopping	2369.20	-51.306	-16.98	-34.326	PASS
			2400.00	-53.202	-16.98	-36.222	PASS
			2483.50	-55.462	-17.18	-38.282	PASS
$\pi/4$ DQPSK	2-DH5		2400.00	-48.640	-16.80	-31.840	PASS
			2483.50	-54.802	-16.93	-37.872	PASS
8DPSK	3-DH5		2365.20	-51.580	-16.75	-34.830	PASS
			2400.00	-55.299	-16.75	-38.549	PASS
			2483.50	-55.511	-16.93	-38.581	PASS
Note: input compensation coefficient (dB)= Cable Loss (dB)							

Test Graphs

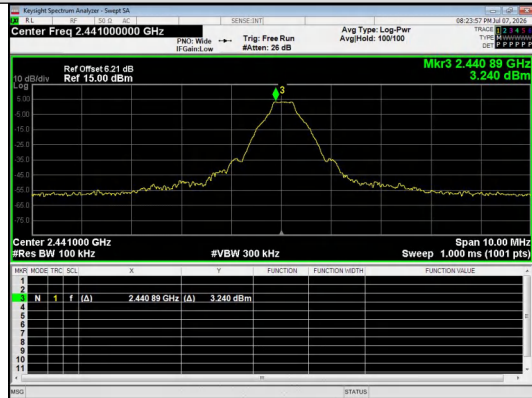




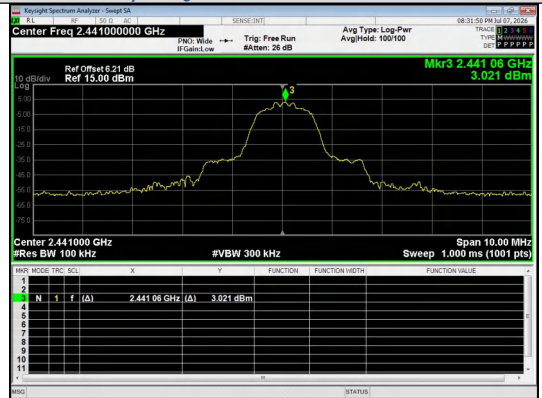
30.0 MHz - 25000.0 MHz
GFSK_DH5_Channel 0



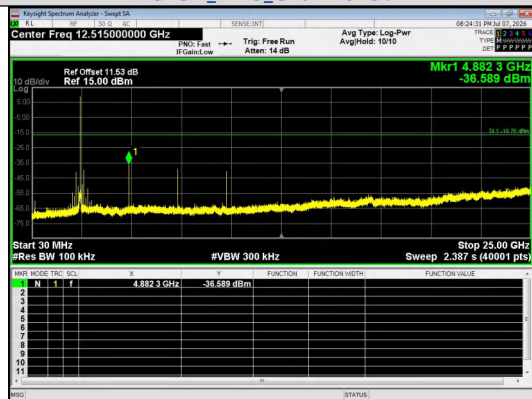
30.0 MHz - 25000.0 MHz
 $\pi/4$ DQPSK_2-DH5_Channel 0



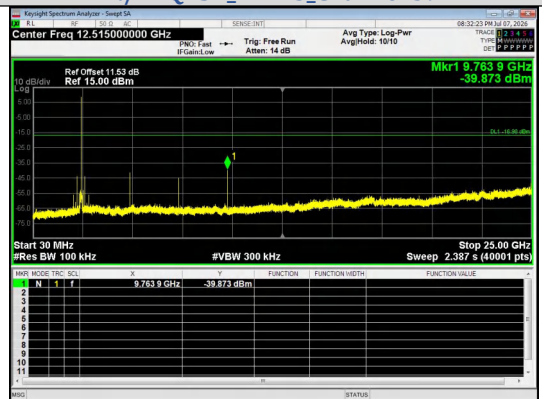
Out Of Band Emission
GFSK_DH5_Channel 39



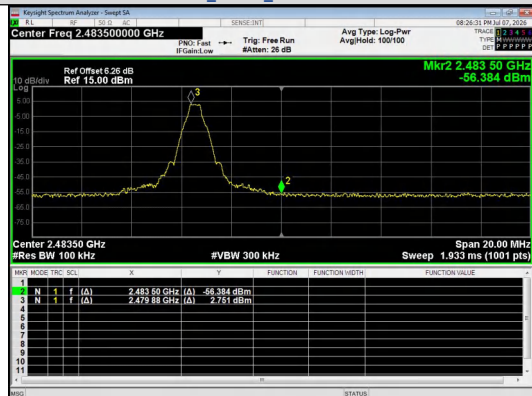
Out Of Band Emission
 $\pi/4$ DQPSK_2-DH5_Channel 39



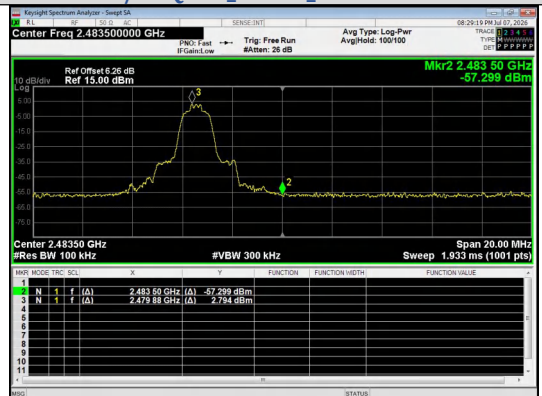
30.0 MHz - 25000.0 MHz
GFSK_DH5_Channel 39



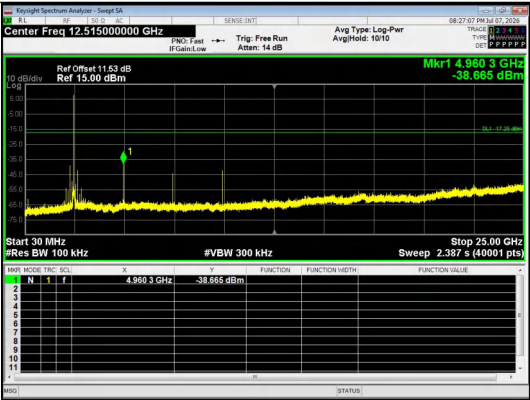
30.0 MHz - 25000.0 MHz
 $\pi/4$ DQPSK_2-DH5_Channel 39



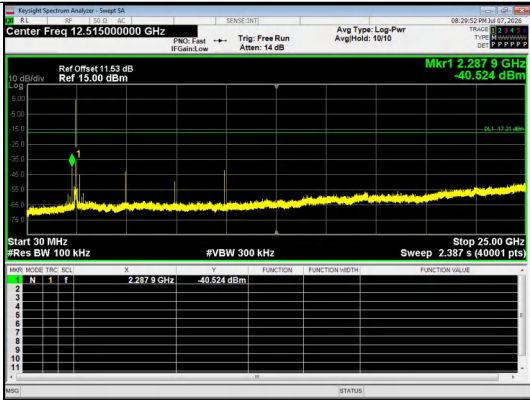
Out Of Band Emission
GFSK_DH5_Channel 78



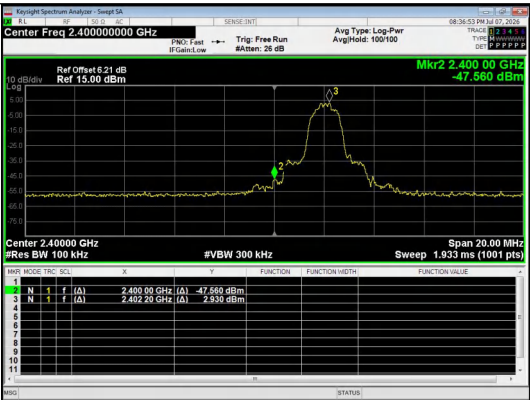
Out Of Band Emission
 $\pi/4$ DQPSK_2-DH5_Channel 78



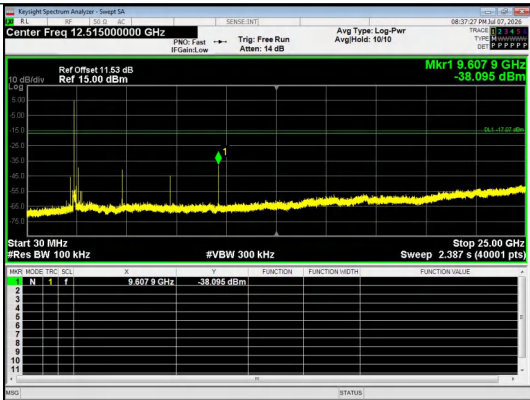
30.0 MHz - 25000.0 MHz
GFSK_DH5_Channel 78



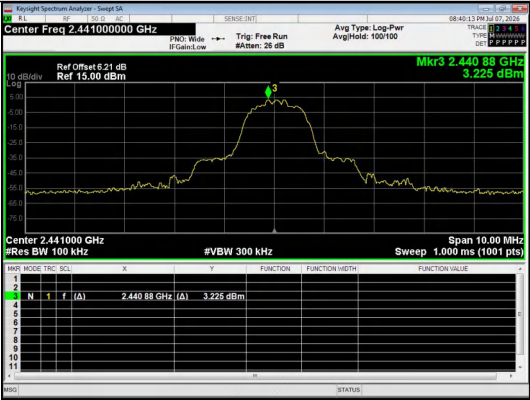
30.0 MHz - 25000.0 MHz
 $\pi/4$ DQPSK_2-DH5_Channel 78



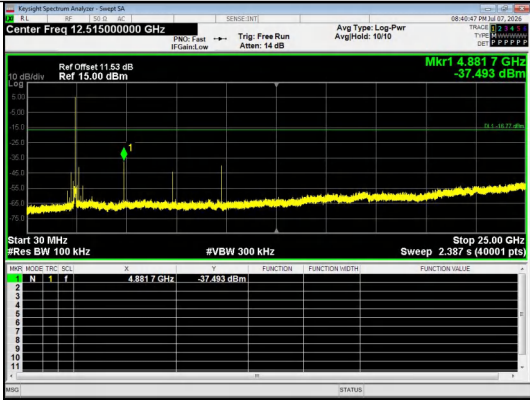
Out Of Band Emission
8DPSK_3-DH5_Channel 0



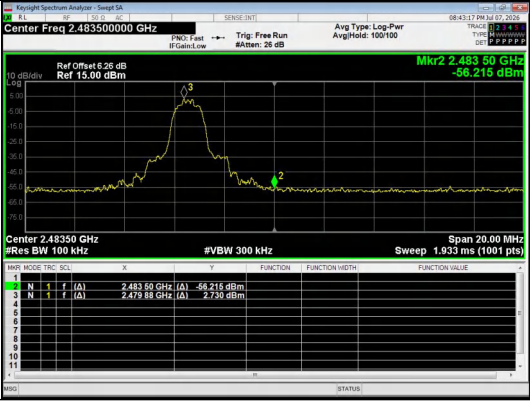
30.0 MHz - 25000.0 MHz
8DPSK_3-DH5_Channel 0



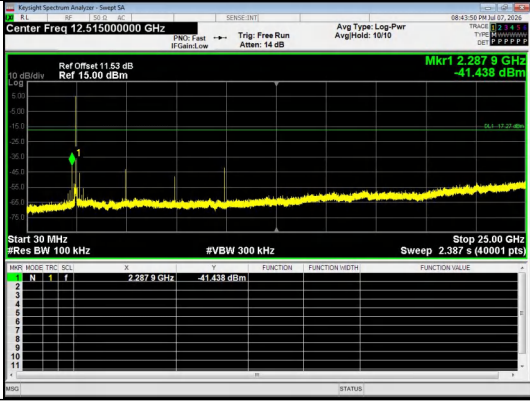
Out Of Band Emission
8DPSK_3-DH5_Channel 39



30.0 MHz - 25000.0 MHz
8DPSK_3-DH5_Channel 39



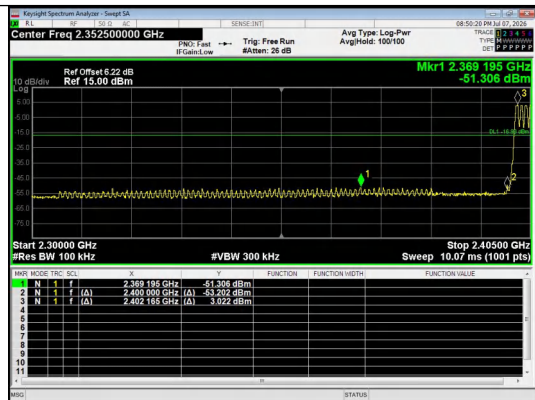
Out Of Band Emission



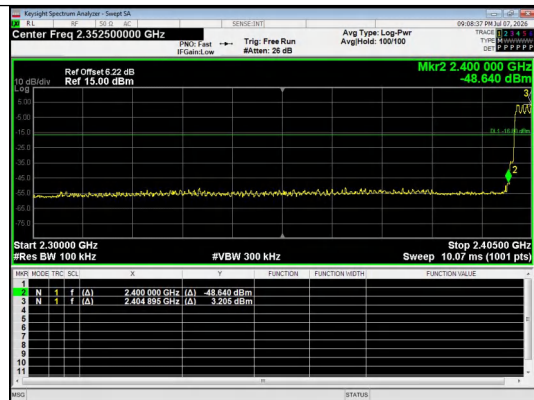
30.0 MHz - 25000.0 MHz

8DPSK_3-DH5_Channel 78

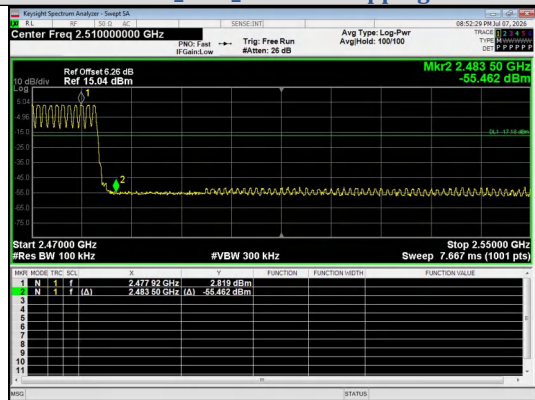
8DPSK_3-DH5_Channel 78



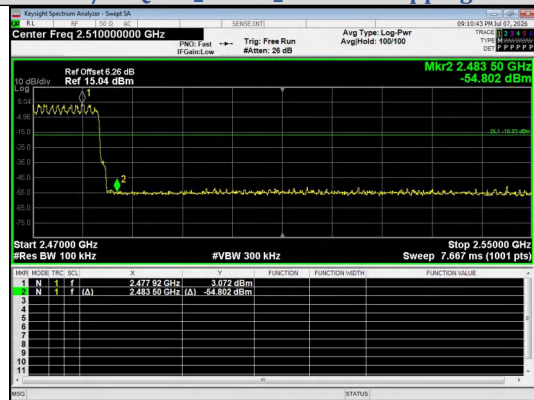
Out Of Band Emission(Left)
GFSK_DH5_Channel Hopping



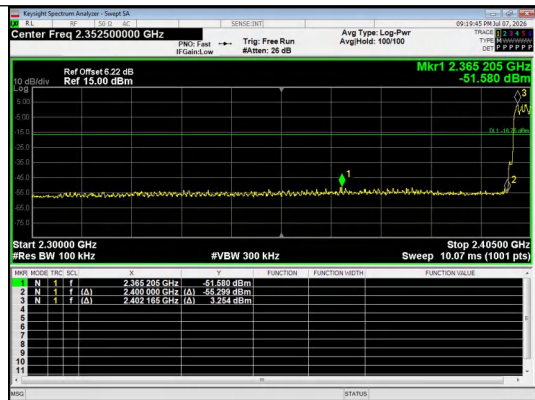
Out Of Band Emission(Left)
 $\pi/4$ DQPSK_2-DH5_Channel Hopping



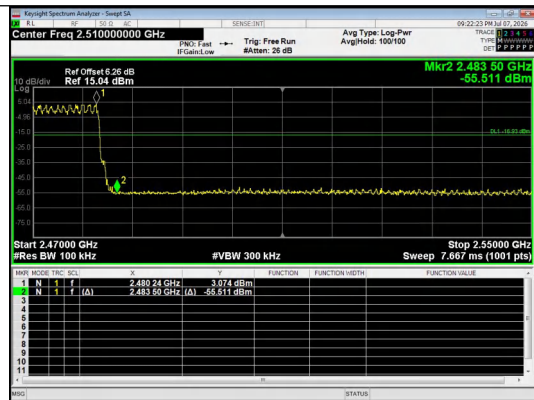
Out Of Band Emission(Right)
GFSK_DH5_Channel Hopping



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



Out Of Band Emission(Left)
8DPSK_3-DH5_Channel Hopping



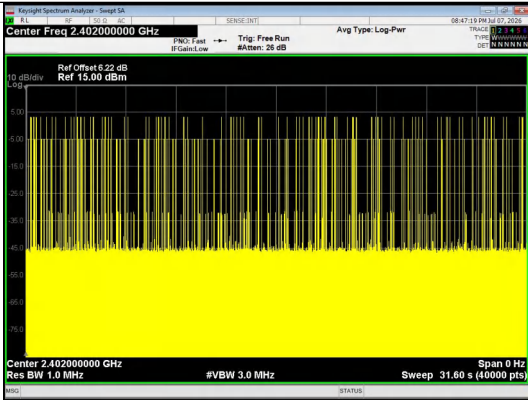
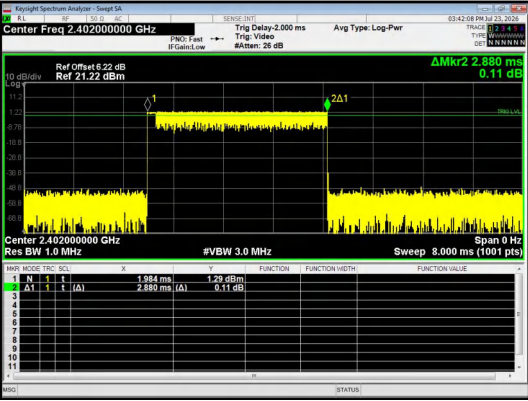
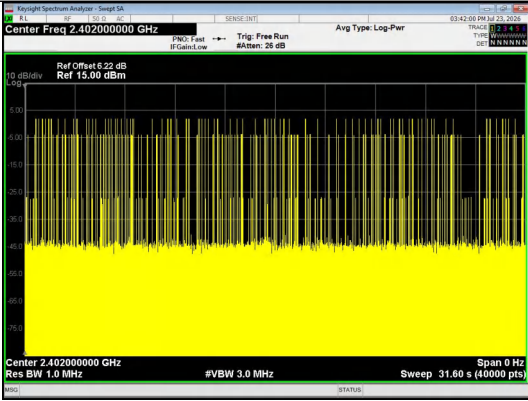
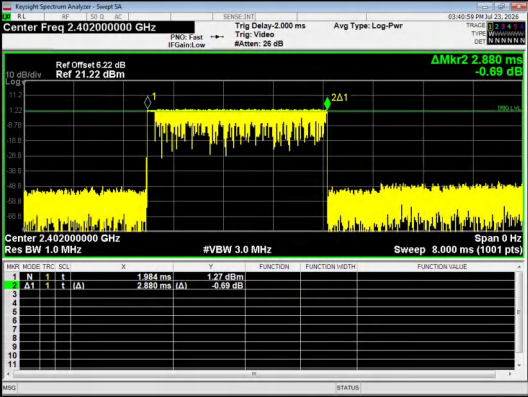
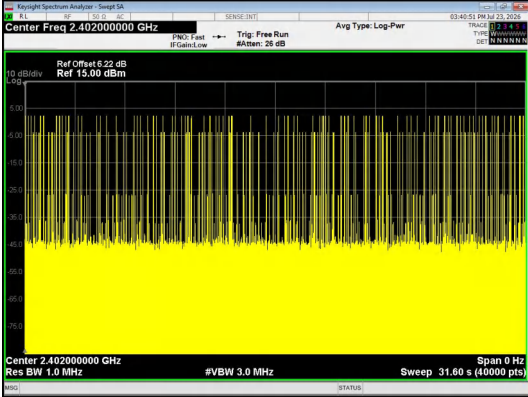
Out Of Band Emission(Right)
8DPSK_3-DH5_Channel Hopping

Dwell Time

Test Result

Modulation	Packet	Channel	Pulse Width (ms)	Number of Pulses in 31.6 seconds	Dwell Time (ms)	Limit (ms)	Verdict
GFSK	DH5	Hopping	2.8800	102	293.76	< 400	PASS
$\pi/4$ DQPSK	2-DH5		2.8800	88	253.44		PASS
8DPSK	3-DH5		2.8800	104	299.52		PASS
Note: Dwell time=Pulse time(ms)*Number of Pulses in 31.6 seconds							

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

FCC ID:2BW3Q-H05

Number Of Hopping Channel

Test Result

Modulation	Packet	Number of Hopping Channel	Limit	Verdict
GFSK	DH5	79	15	PASS
$\pi/4$ DQPSK	2-DH5	79	15	PASS
8DPSK	3-DH5	79	15	PASS

Test Graphs



