

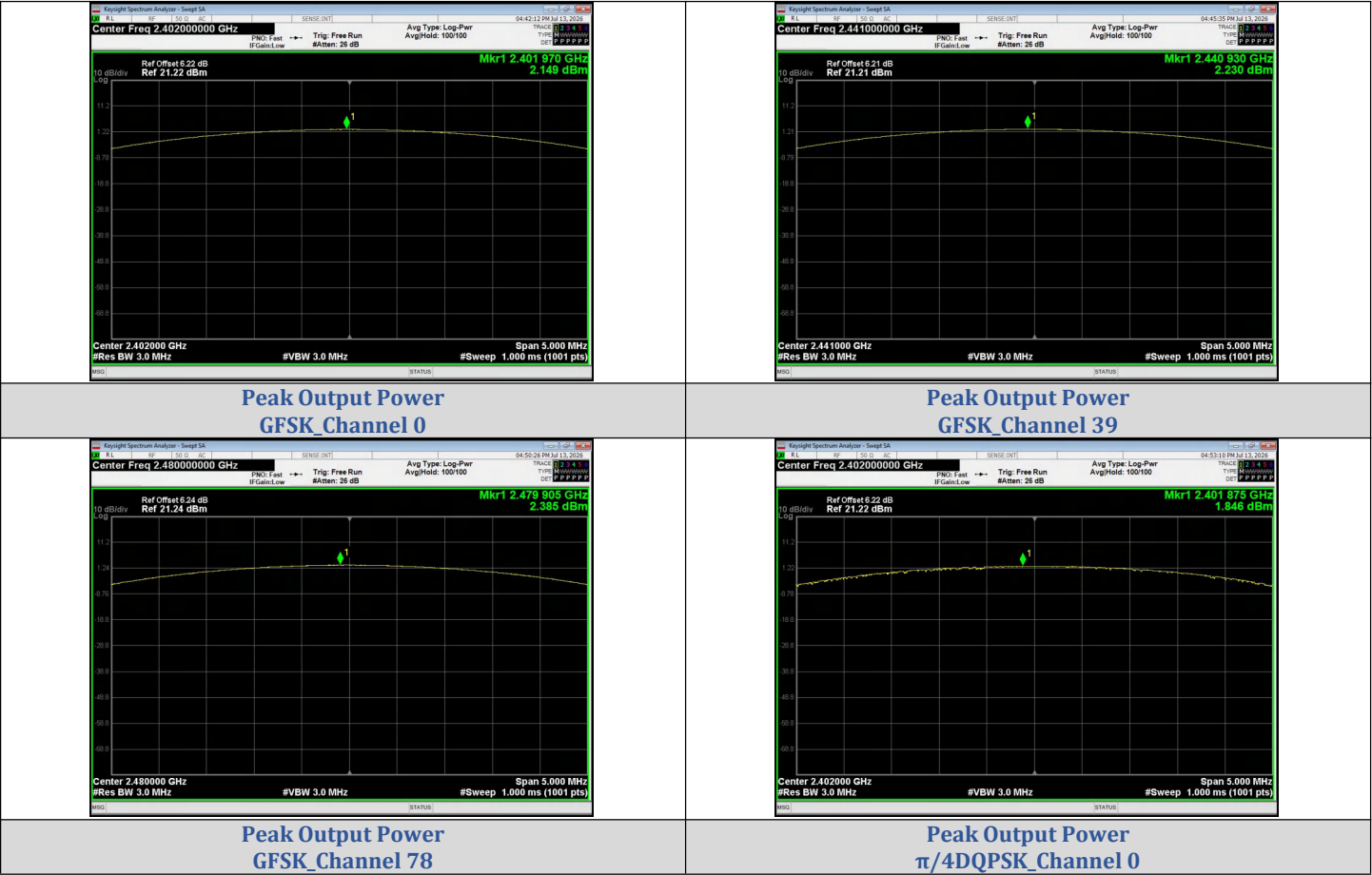
Appendix A:Test Results of Bluetooth BR & EDR

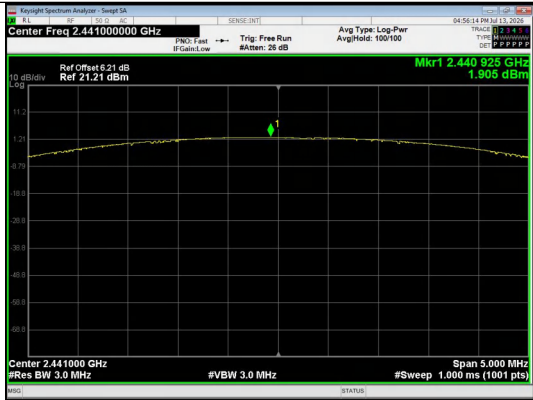
Conducted Output Power

Test Result

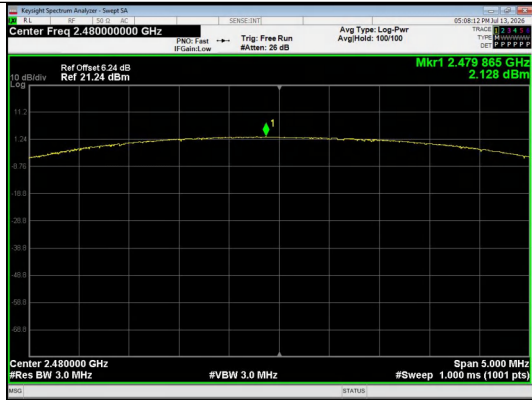
Modulation	Packet Type	Channel	Peak Output Power (dBm)	Peak Output Power (mW)	Max. Avg. Power (dBm)	Limit (dBm)	Verdict
GFSK	DH5	0	2.149	1.64	None	30	PASS
		39	2.230	1.67	None		PASS
		78	2.385	1.73	None		PASS
$\pi/4$ DQPSK	2-DH5	0	1.846	1.53	None		PASS
		39	1.905	1.55	None		PASS
		78	2.128	1.63	None		PASS
8DPSK	3-DH5	0	1.968	1.57	None		PASS
		39	2.116	1.63	None		PASS
		78	2.164	1.65	None		PASS

Test Graphs

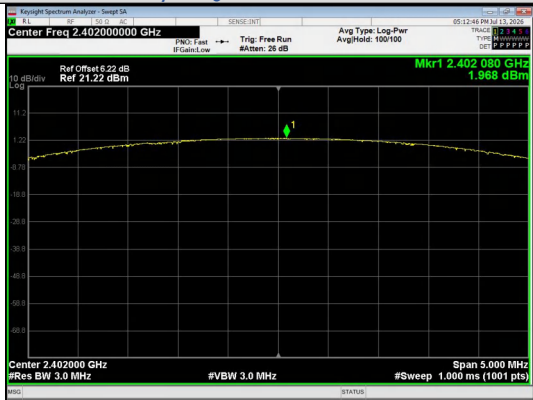




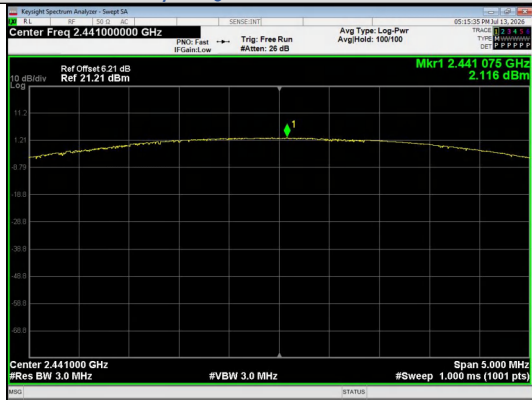
Peak Output Power
 $\pi/4$ DQPSK_Channel 39



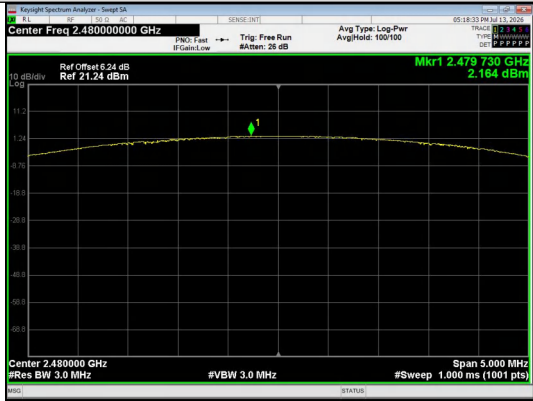
Peak Output Power
 $\pi/4$ DQPSK_Channel 78



Peak Output Power
8DPSK_Channel 0



Peak Output Power
8DPSK_Channel 78



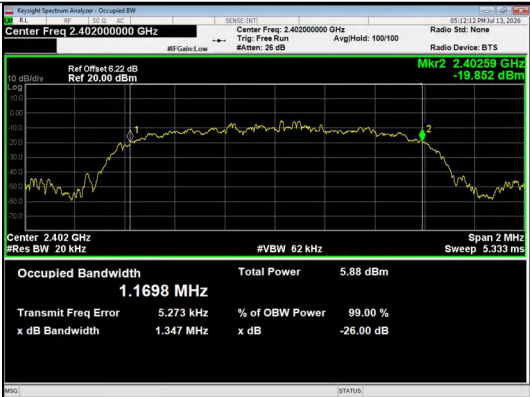
Peak Output Power
8DPSK_Channel 39

Test Result

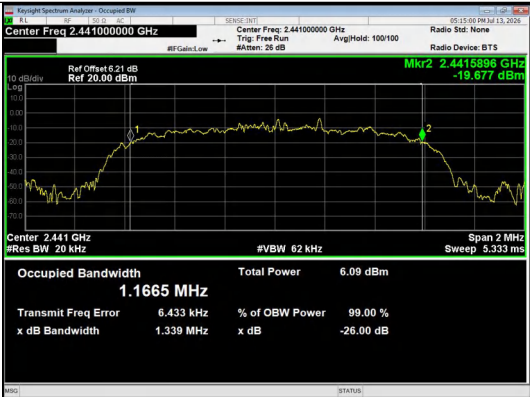
Modulation	Channel	Center Frequency (MHz)	99% BW (MHz)
GFSK	0	2402	0.75
	39	2441	0.76
	78	2480	0.75
$\pi/4$ DQPSK	0	2402	1.16
	39	2441	1.16
	78	2480	1.17
8DPSK	0	2402	1.17
	39	2441	1.17
	78	2480	1.18

Test Graphs

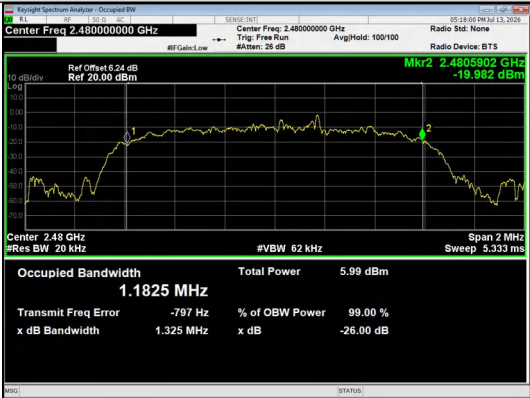




8DPSK_3-DH5_Channel 0



8DPSK_3-DH5_Channel 39



8DPSK_3-DH5_Channel 78

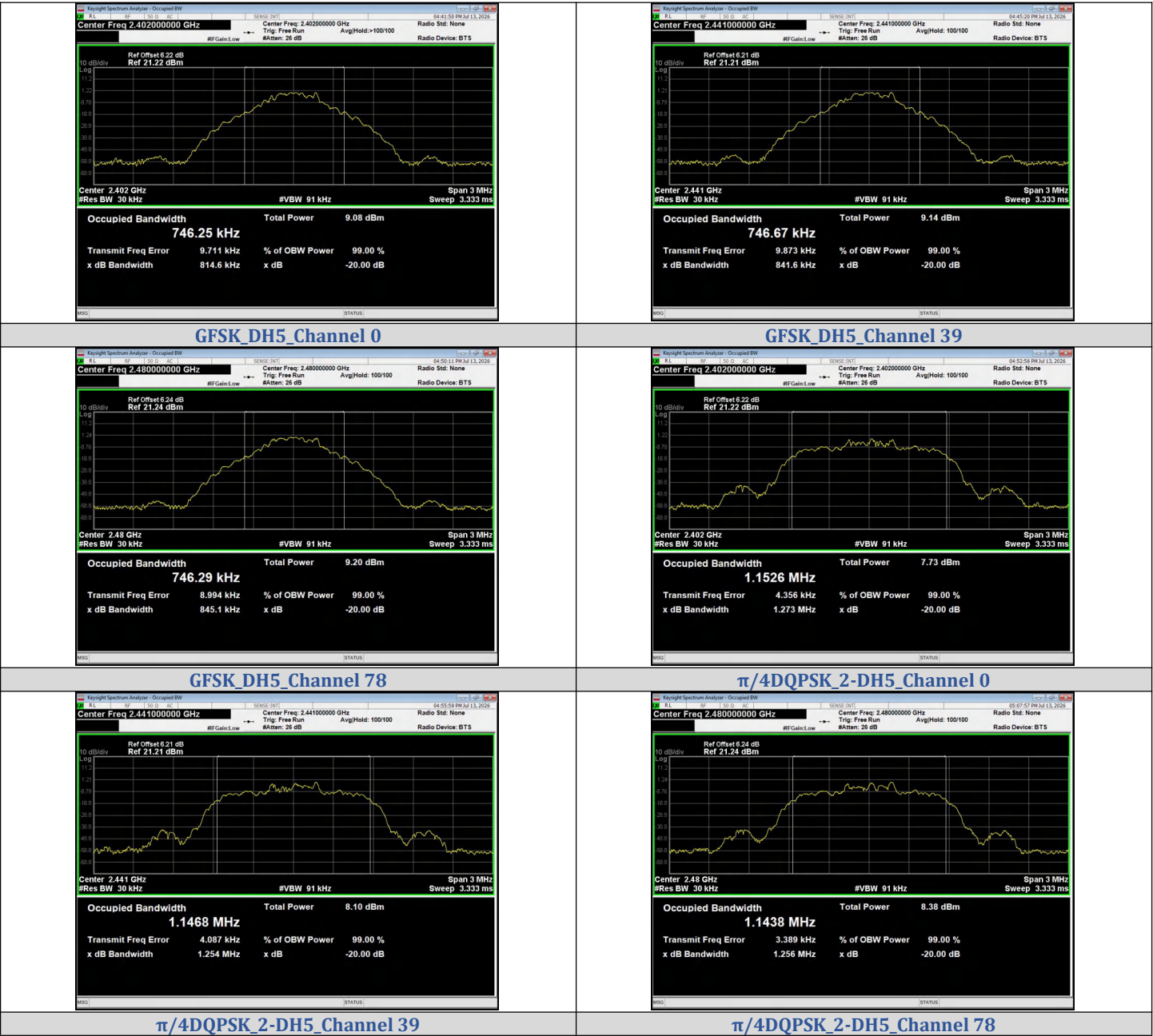
FCC ID:2BXCS-S02

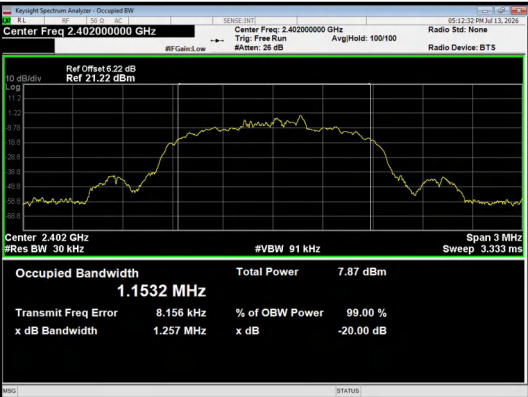
20dB Bandwidth

Test Result

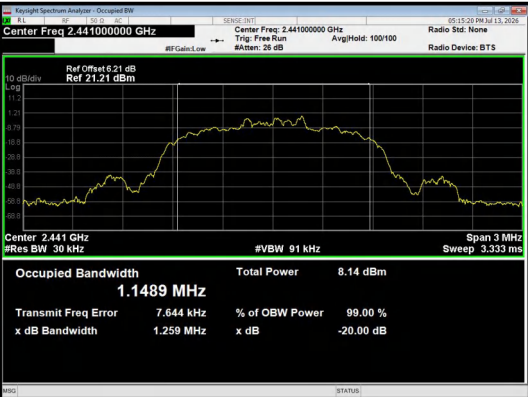
Modulation	Channel	Center Frequency (MHz)	20 dB Bandwidth (MHz)
GFSK	0	2402 MHz	0.8146
	39	2441 MHz	0.8416
	78	2480 MHz	0.8451
$\pi/4$ DQPSK	0	2402 MHz	1.273
	39	2441 MHz	1.254
	78	2480 MHz	1.256
8DPSK	0	2402 MHz	1.257
	39	2441 MHz	1.259
	78	2480 MHz	1.258

Test Graphs

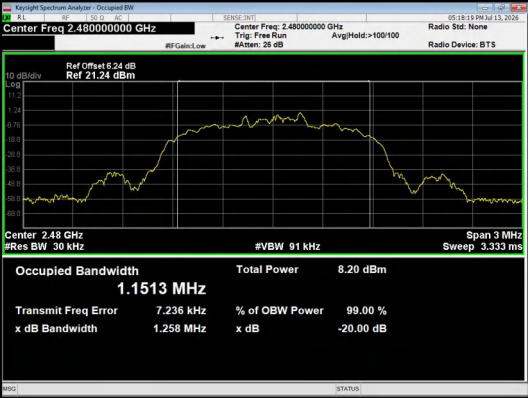




8DPSK_3-DH5_Channel 0



8DPSK_3-DH5_Channel 39



8DPSK_3-DH5_Channel 78

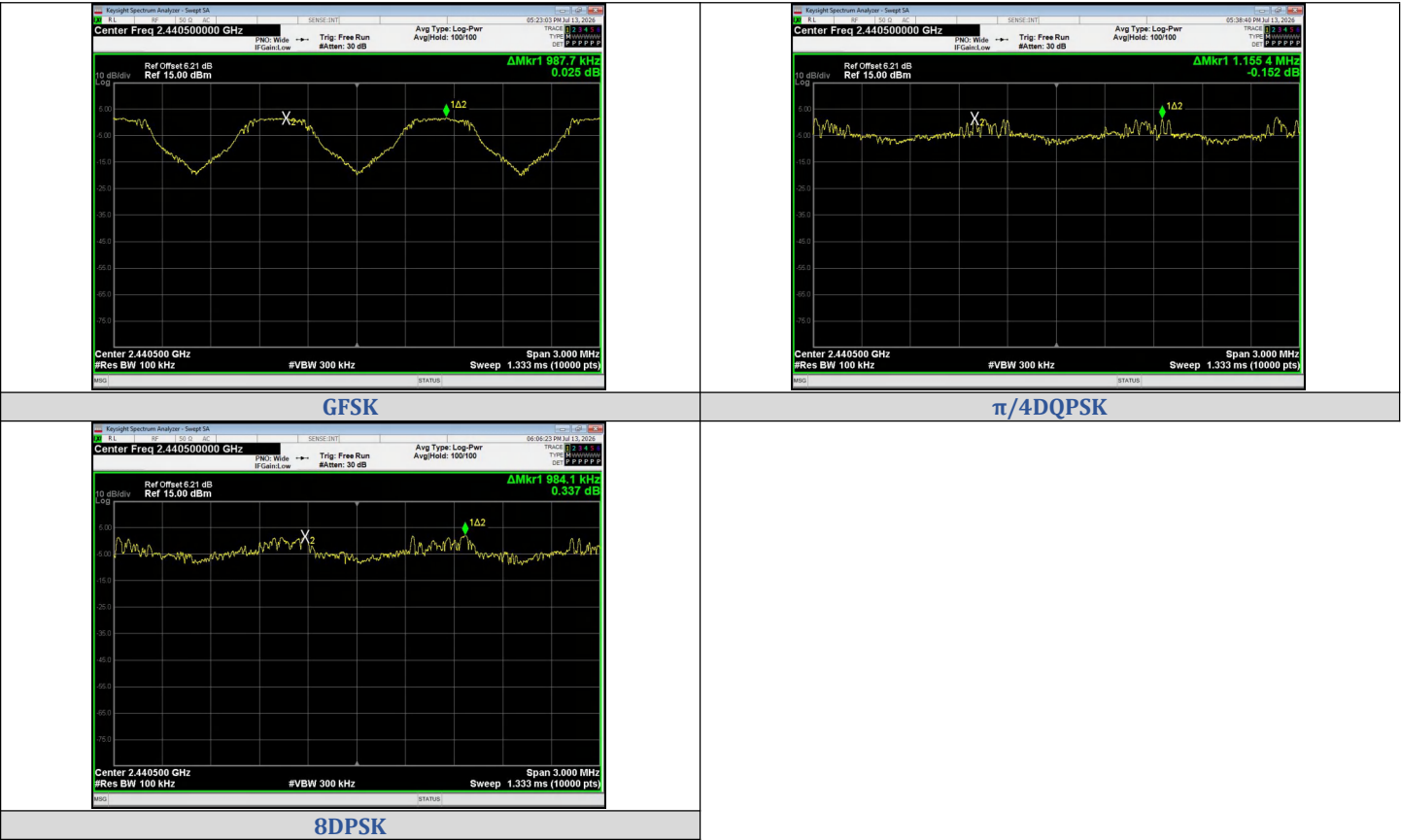
FCC ID:2BXCS-S02

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	2440.063	2441.0507	0.9877	0.563	PASS
$\pi/4$ DQPSK	2-DH5	2439.9961	2441.1515	1.1554	0.849	PASS
8DPSK	3-DH5	2440.1818	2441.1659	0.9841	0.839	PASS

Test Graphs



Conducted Spurious & Band Edge Emission**Test Result**

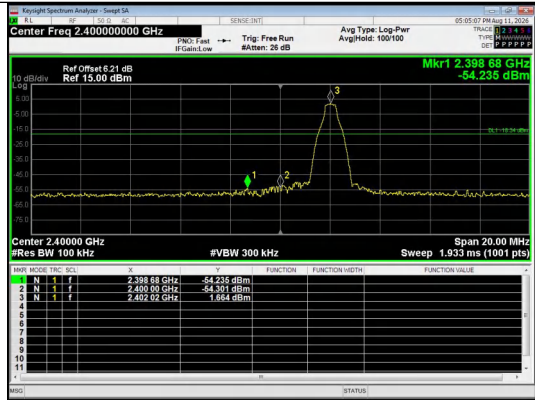
Non-Hopping

Modulation	Packet	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Verdict
GFSK	DH5	0	2398.68	-54.236	-18.34	-35.895	PASS
			2400.00	-54.301	-18.34	-35.961	PASS
			24685.4	-51.024	-18.34	-32.684	PASS
		39	24473.8	-51.198	-18.02	-33.178	PASS
			78	2483.50	-57.401	-18.02	-39.381
		24304.0		-50.719	-18.02	-32.699	PASS
$\pi/4$ DQPSK	2-DH5	0	2398.86	-53.356	-18.35	-35.006	PASS
			2400.00	-56.144	-18.35	-37.794	PASS
			24918.2	-50.663	-18.35	-32.313	PASS
		39	24900.7	-50.800	-18.28	-32.520	PASS
			78	2483.50	-55.815	-18.24	-37.575
		24620.5		-50.996	-18.24	-32.756	PASS
8DPSK	3-DH5	0	2400.00	-53.831	-18.32	-35.511	PASS
			24548.7	-49.998	-18.32	-31.678	PASS
		39	24843.9	-50.525	-18.32	-32.205	PASS
			78	2483.50	-57.909	-18.26	-39.649
		24917.6		-51.073	-18.26	-32.813	PASS
Note: input compensation coefficient (dB)= Cable Loss (dB)							

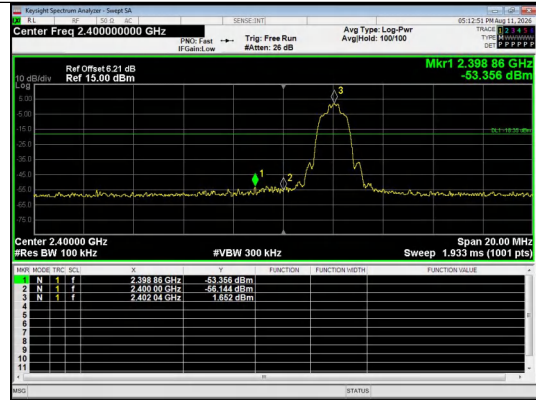
Hopping

Modulation	Packet	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Verdict
GFSK	DH5	Hopping	2371.82	-55.356	-18.32	-37.036	PASS
			2400.00	-57.832	-18.32	-39.512	PASS
			2483.50	-56.558	-18.10	-38.458	PASS
$\pi/4$ DQPSK	2-DH5		2396.39	-55.359	-18.51	-36.849	PASS
			2400.00	-57.767	-18.51	-39.257	PASS
			2483.50	-57.209	-18.26	-38.949	PASS
8DPSK	3-DH5		2377.80	-55.747	-18.64	-37.107	PASS
			2400.00	-57.102	-18.64	-38.462	PASS
			2483.50	-56.592	-18.48	-38.112	PASS
Note: input compensation coefficient (dB)= Cable Loss (dB)							

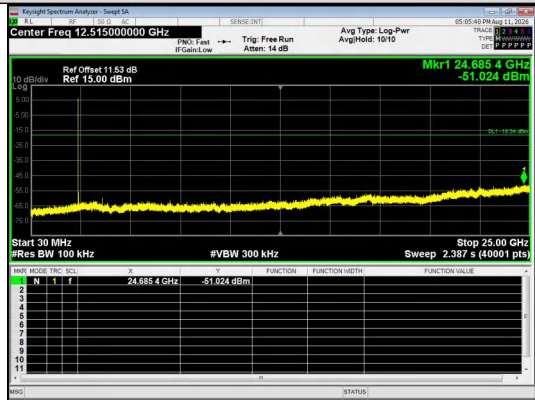
Test Graphs



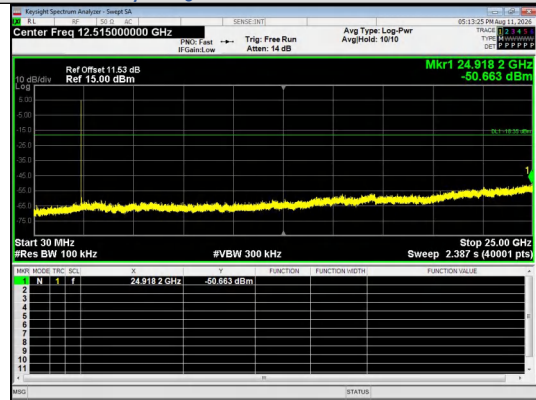
Out Of Band Emission
GFSK_DH5_Channel 0



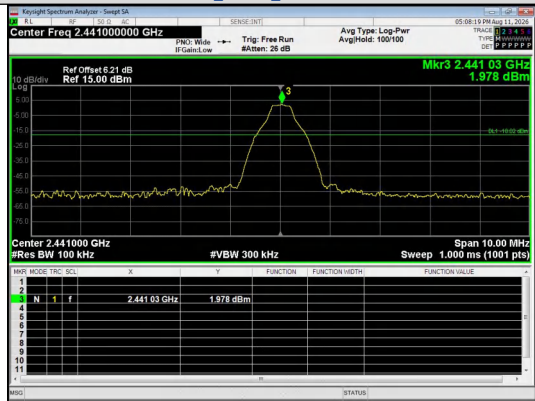
Out Of Band Emission
 $\pi/4$ DQPSK_2-DH5_Channel 0



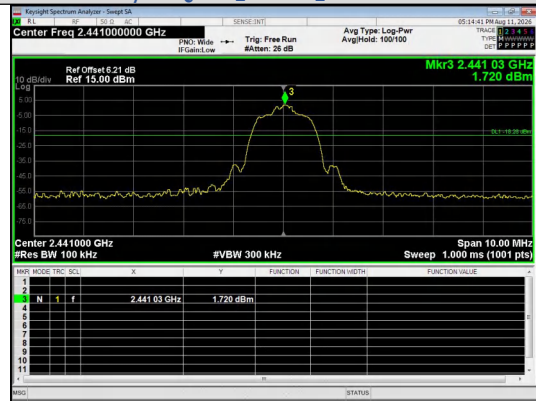
30.0 MHz - 25000.0 MHz
GFSK_DH5_Channel 0



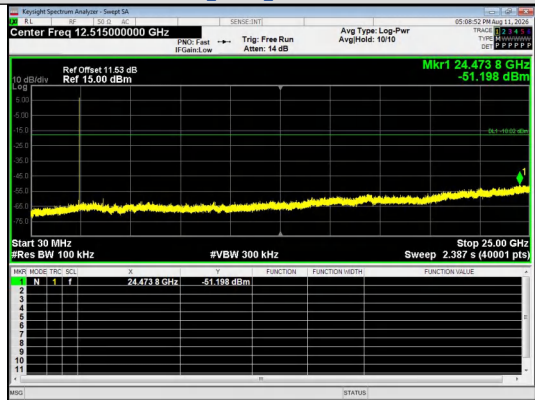
30.0 MHz - 25000.0 MHz
 $\pi/4$ DQPSK_2-DH5_Channel 0



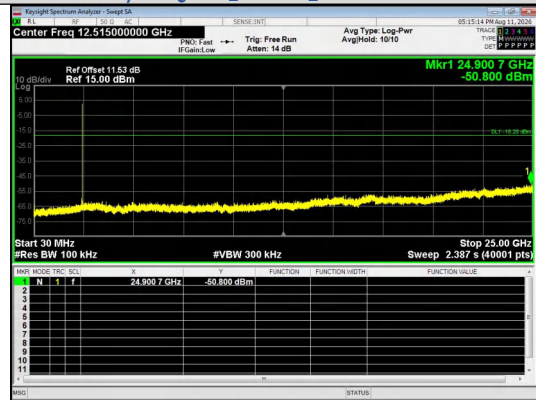
Out Of Band Emission
GFSK_DH5_Channel 39



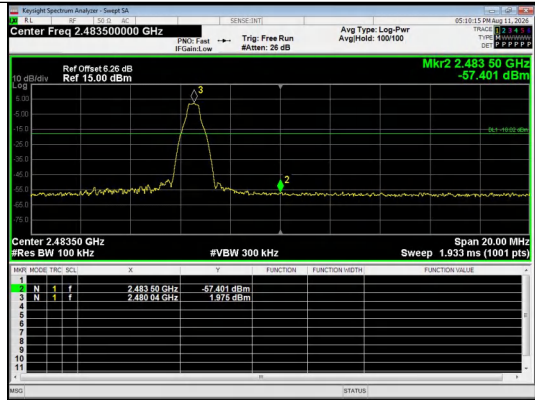
Out Of Band Emission
 $\pi/4$ DQPSK_2-DH5_Channel 39



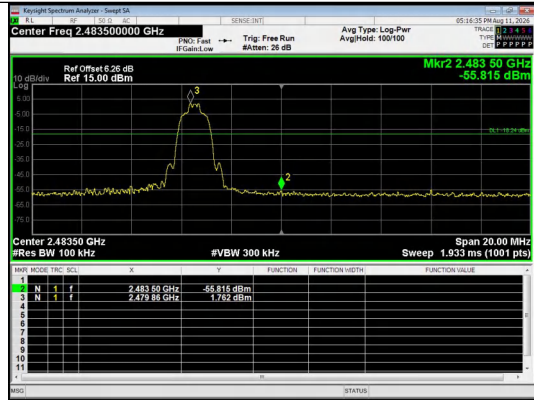
30.0 MHz - 25000.0 MHz
GFSK_DH5_Channel 39



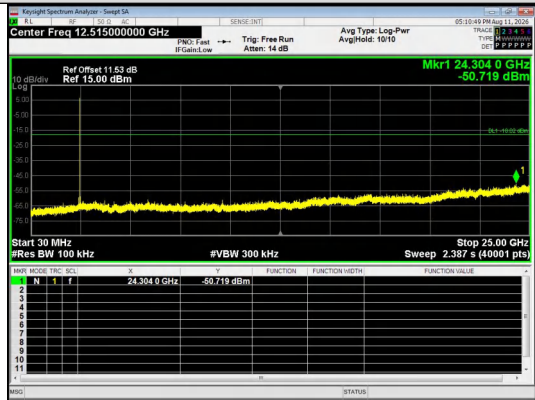
30.0 MHz - 25000.0 MHz
 $\pi/4$ DQPSK_2-DH5_Channel 39



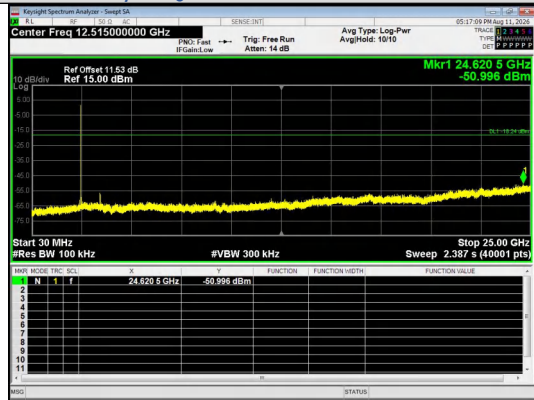
Out Of Band Emission
GFSK_DH5_Channel 78



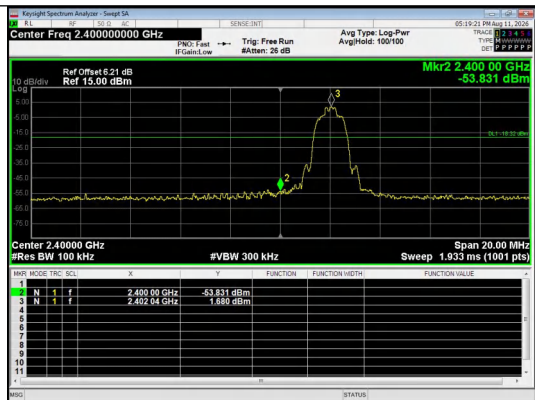
Out Of Band Emission
 $\pi/4$ DQPSK_2-DH5_Channel 78



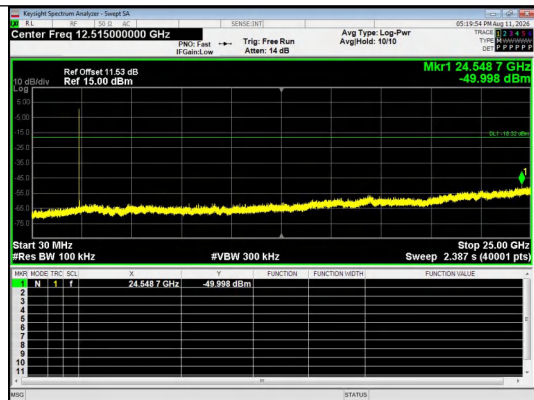
30.0 MHz - 25000.0 MHz
GFSK_DH5_Channel 78



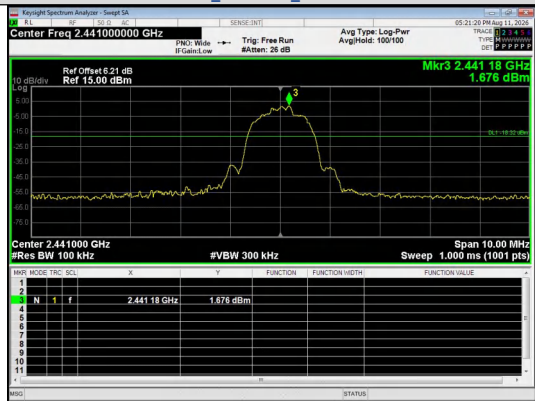
30.0 MHz - 25000.0 MHz
 $\pi/4$ DQPSK_2-DH5_Channel 78



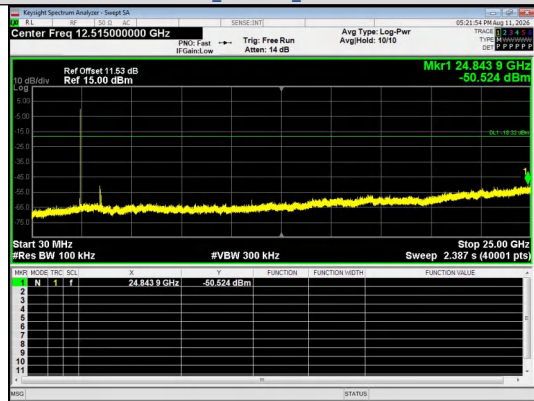
Out Of Band Emission
8DPSK_3-DH5_Channel 0



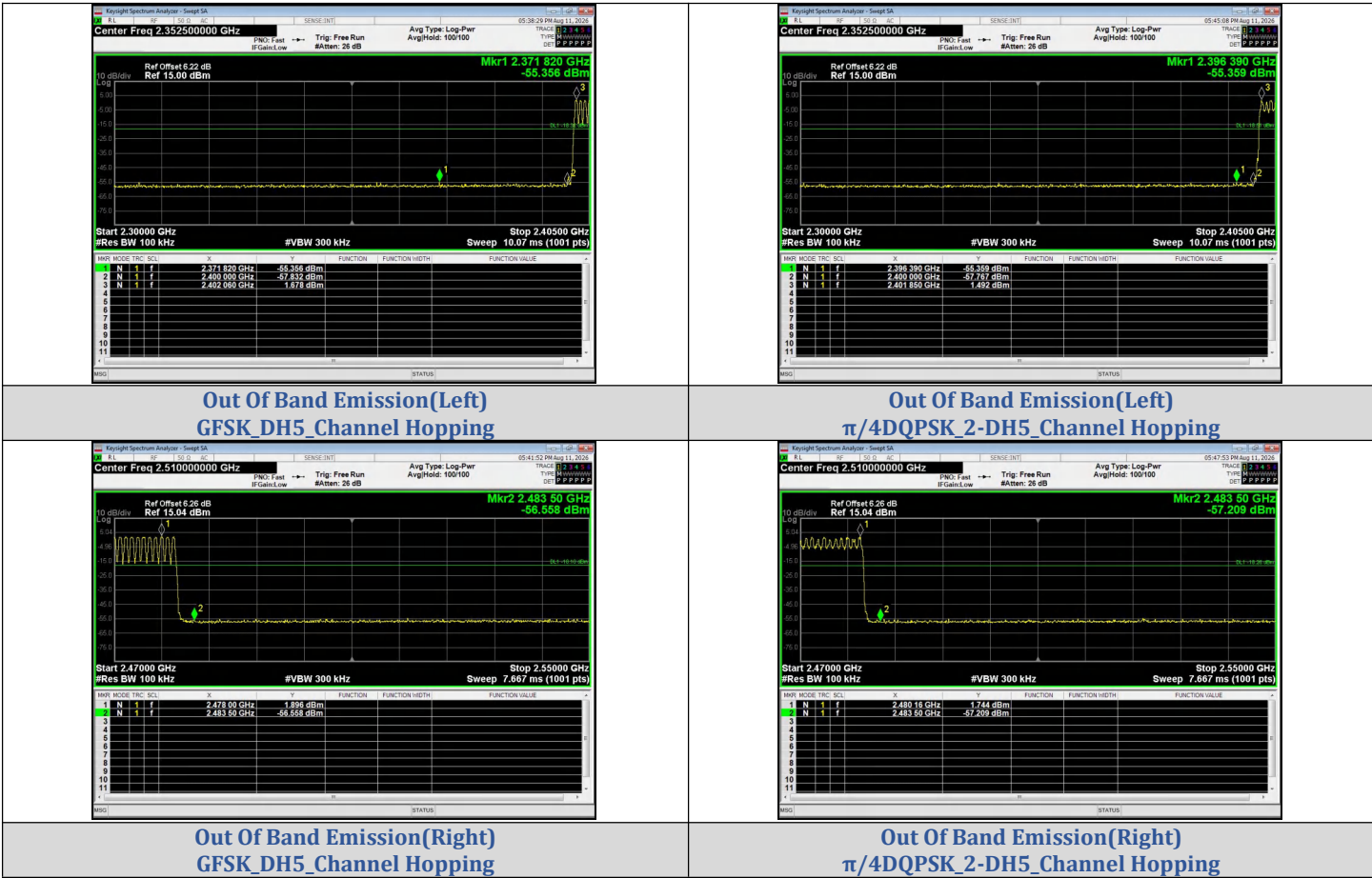
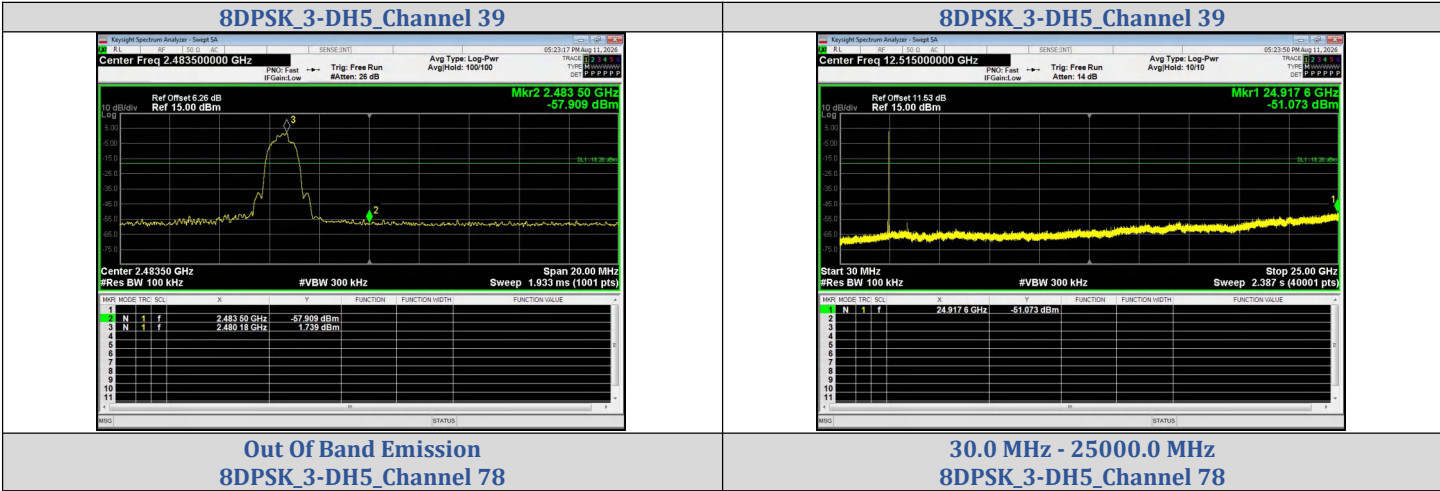
30.0 MHz - 25000.0 MHz
8DPSK_3-DH5_Channel 0

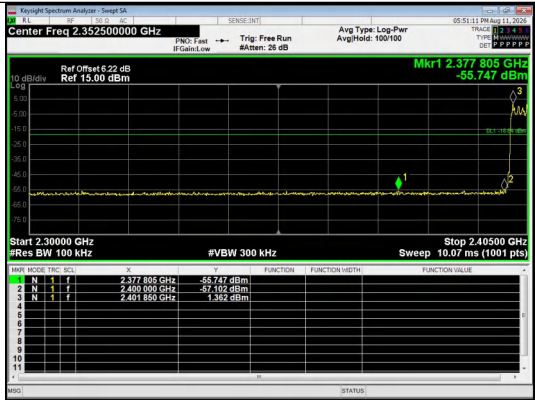


Out Of Band Emission

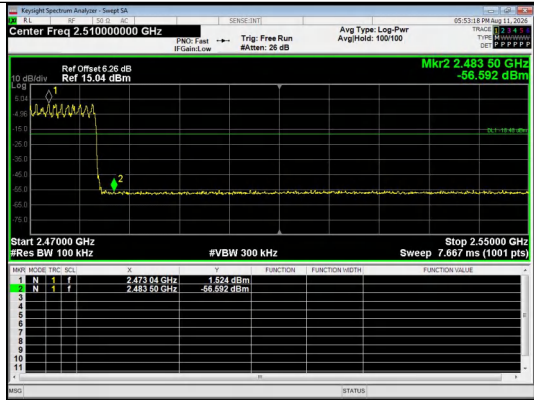


30.0 MHz - 25000.0 MHz





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



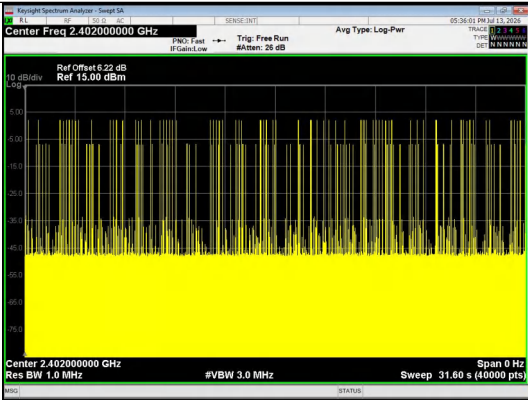
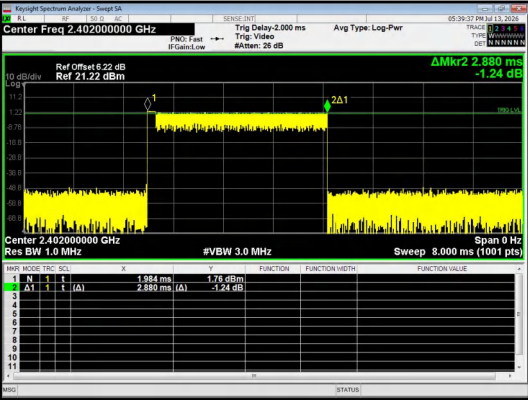
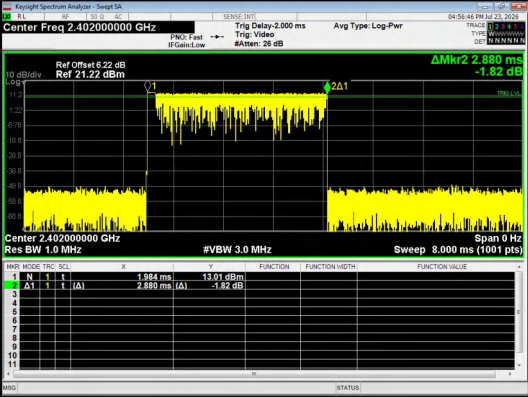
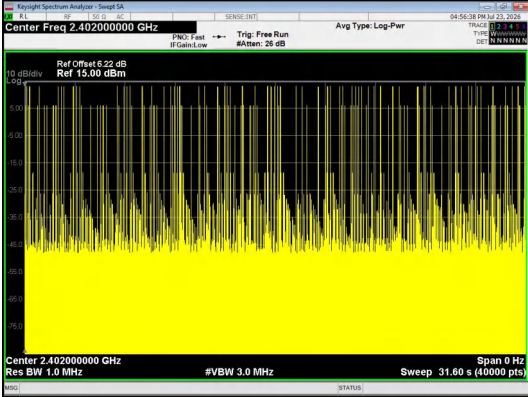
Out Of Band Emission(Right)
8DPSK_3-DH5_Channel Hopping

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	81	233.28	< 400	PASS
$\pi/4$ DQPSK	2-DH5		2.8800	74	213.12		PASS
8DPSK	3-DH5		2.8800	76	218.88		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

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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



