

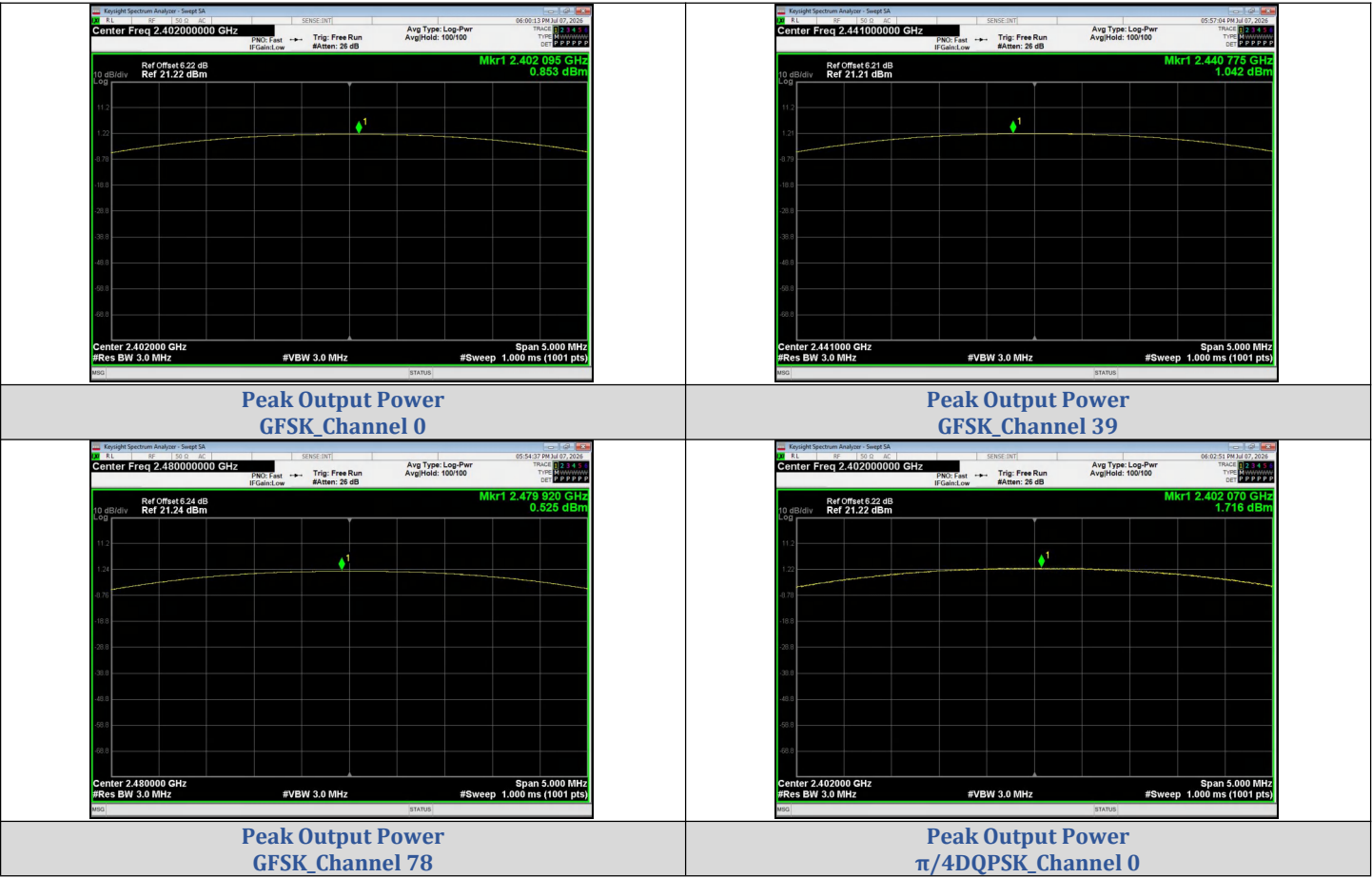
Appendix A:Test Results of Bluetooth BR & EDR

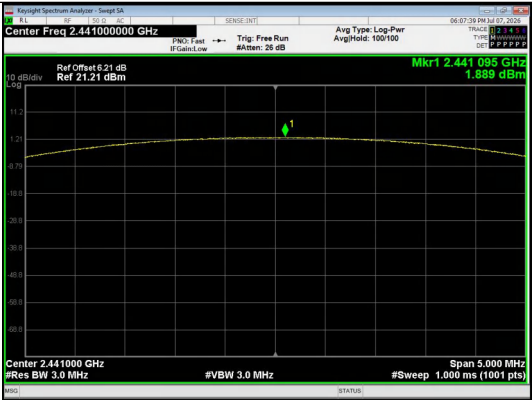
Conducted Output Power

Test Result

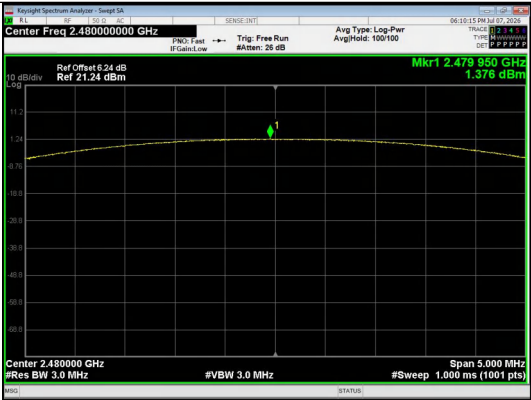
Modulation	Packet Type	Channel	Peak Output Power (dBm)	Peak Output Power (mW)	Max. Avg. Power (dBm)	Limit (dBm)	Verdict
GFSK	DH5	0	0.853	1.22	None	30	PASS
		39	1.042	1.27	None		PASS
		78	0.525	1.13	None		PASS
$\pi/4$ DQPSK	2-DH5	0	1.716	1.48	None		PASS
		39	1.889	1.54	None		PASS
		78	1.376	1.37	None		PASS
8DPSK	3-DH5	0	2.040	1.60	None		PASS
		39	2.236	1.67	None		PASS
		78	1.704	1.48	None		PASS

Test Graphs

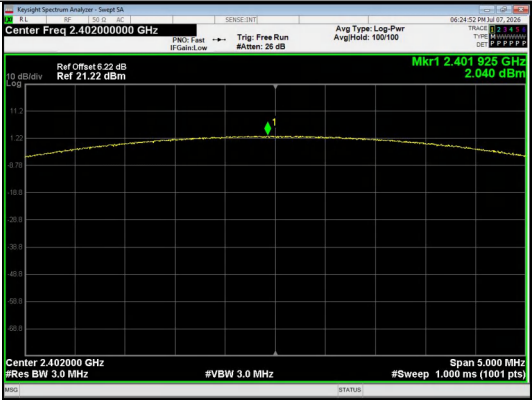




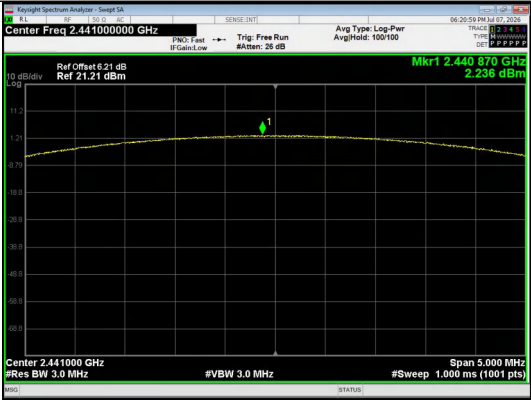
Peak Output Power
 $\pi/4$ DQPSK_Channel 39



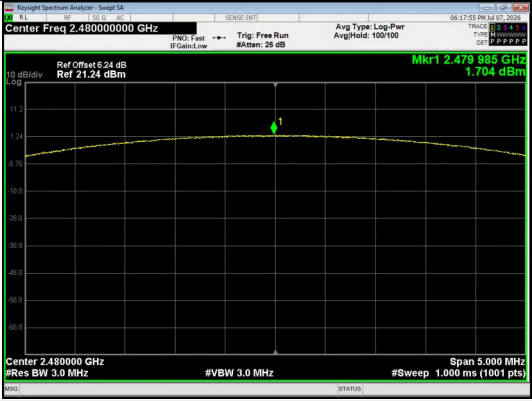
Peak Output Power
 $\pi/4$ DQPSK_Channel 78



Peak Output Power
8DPSK_Channel 0



Peak Output Power
8DPSK_Channel 39



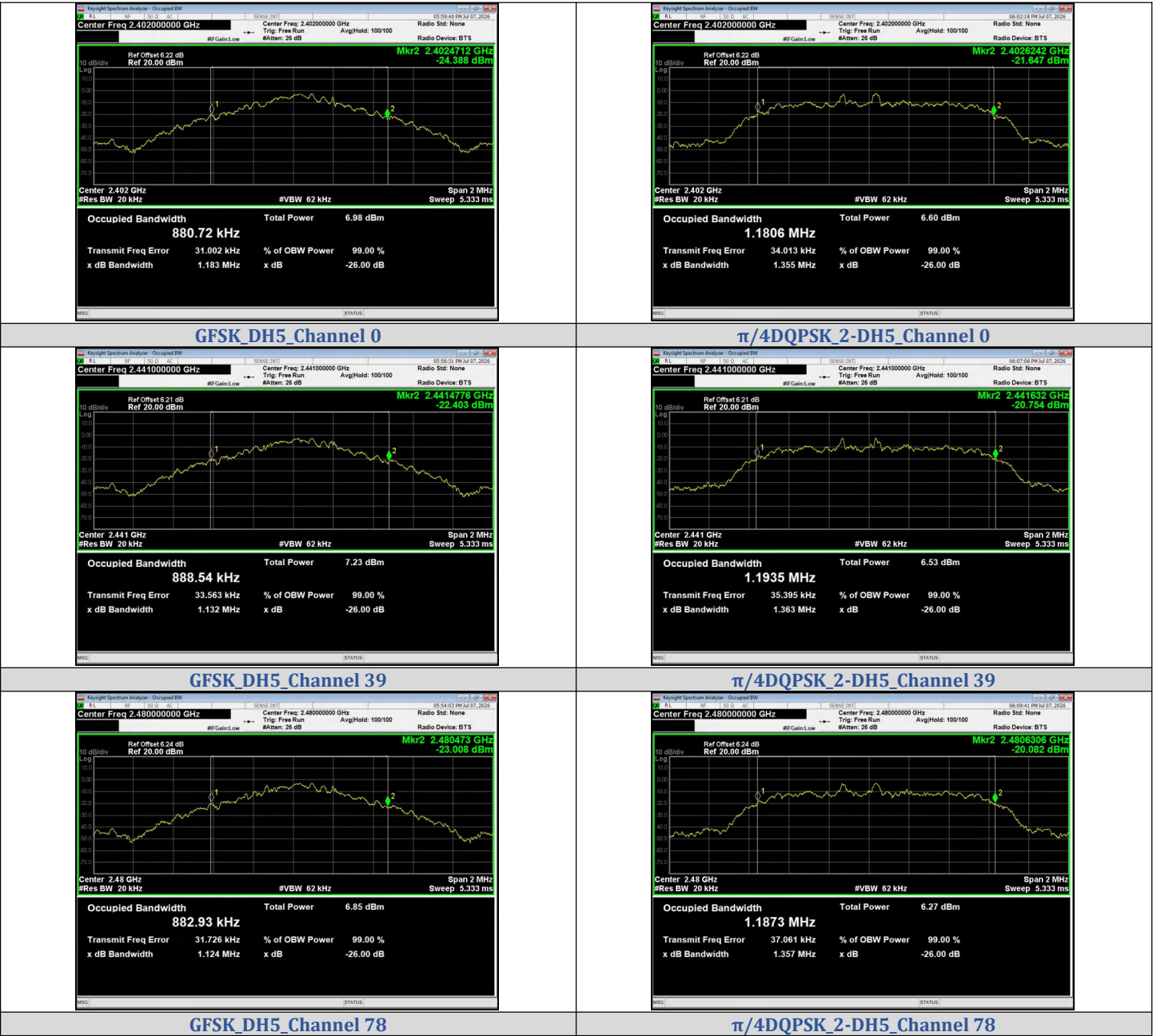
Peak Output Power
8DPSK_Channel 78

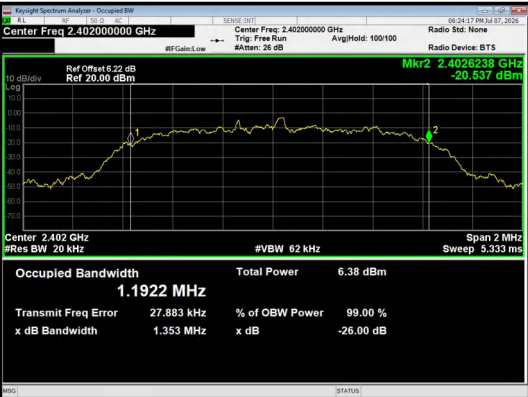
99% Bandwidth

Test Result

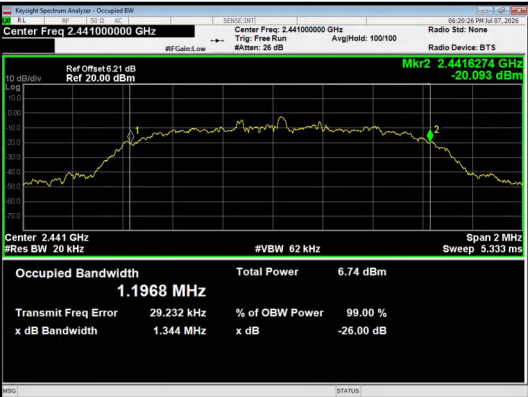
Modulation	Channel	Center Frequency (MHz)	99% BW (MHz)
GFSK	0	2402	0.88
	39	2441	0.89
	78	2480	0.88
$\pi/4$ DQPSK	0	2402	1.18
	39	2441	1.19
	78	2480	1.19
8DPSK	0	2402	1.19
	39	2441	1.20
	78	2480	1.21

Test Graphs

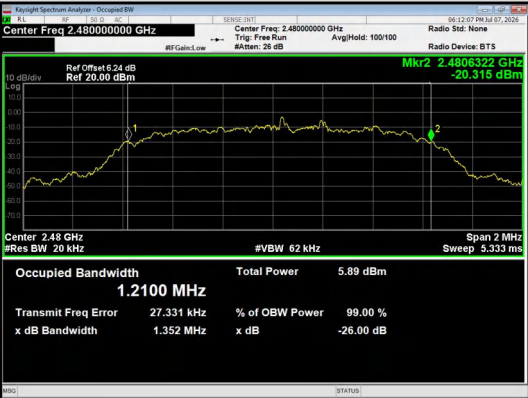




8DPSK_3-DH5_Channel 0



8DPSK_3-DH5_Channel 39



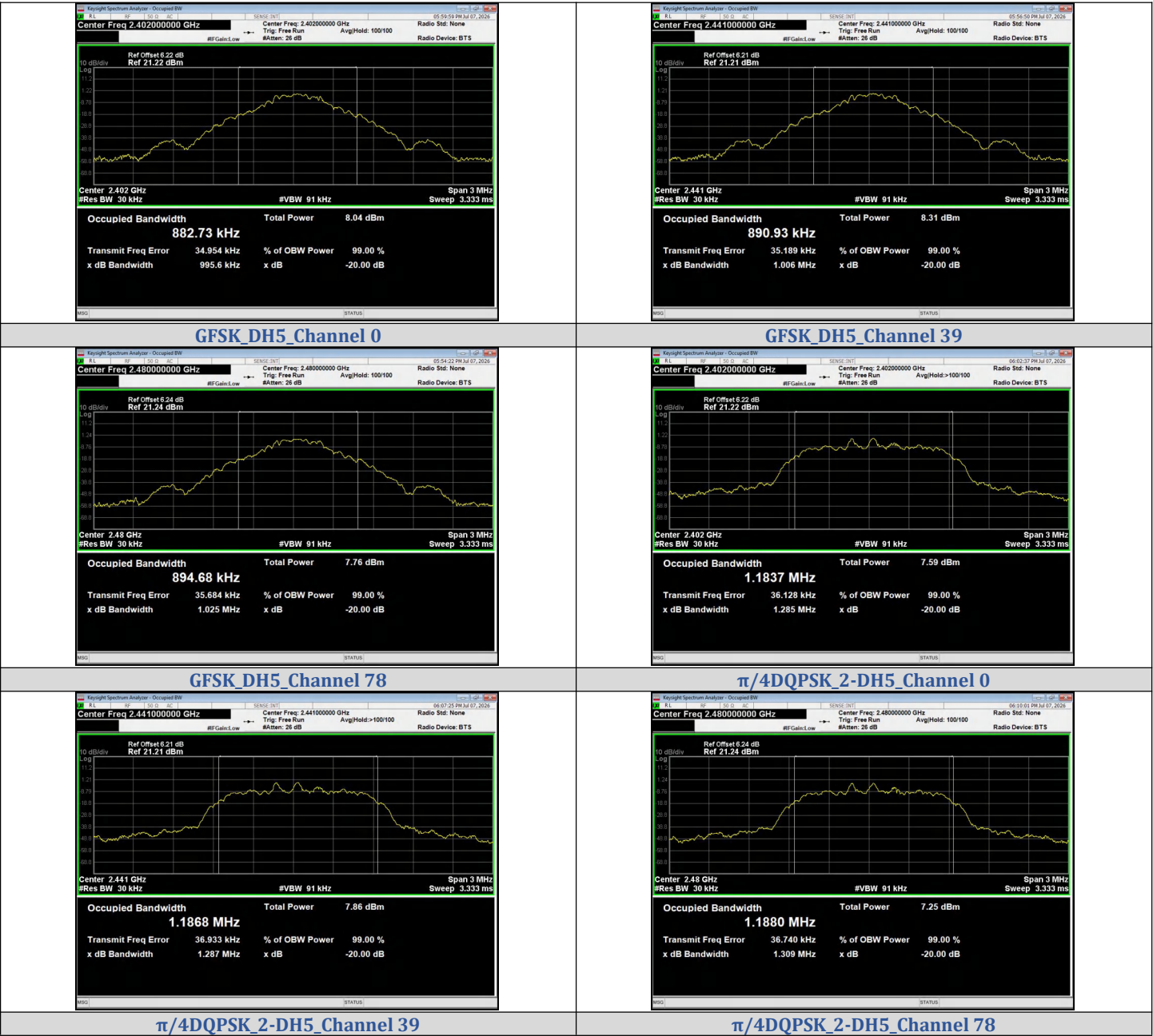
8DPSK_3-DH5_Channel 78

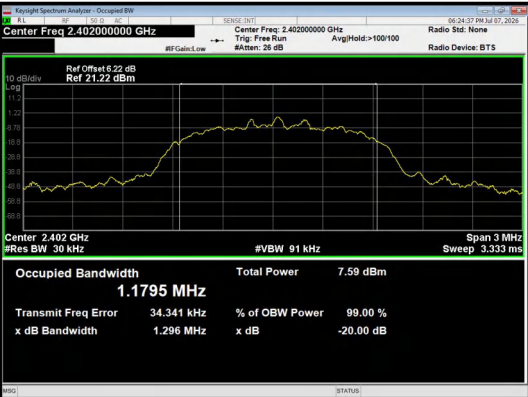
20dB Bandwidth

Test Result

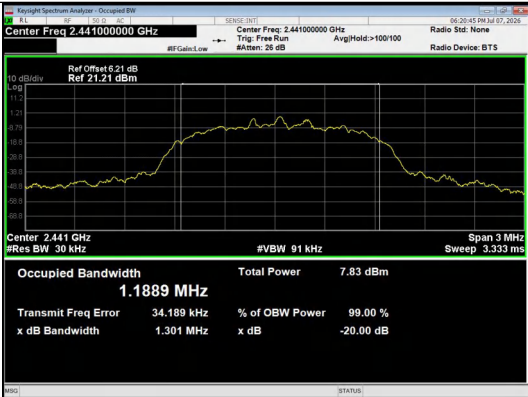
Modulation	Channel	Center Frequency (MHz)	20 dB Bandwidth (MHz)
GFSK	0	2402 MHz	0.9956
	39	2441 MHz	1.006
	78	2480 MHz	1.025
$\pi/4$ DQPSK	0	2402 MHz	1.285
	39	2441 MHz	1.287
	78	2480 MHz	1.309
8DPSK	0	2402 MHz	1.296
	39	2441 MHz	1.301
	78	2480 MHz	1.302

Test Graphs

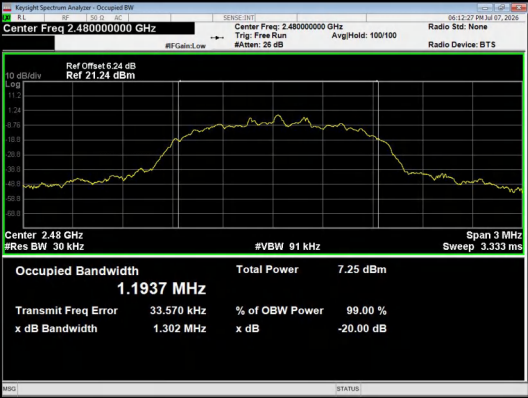




8DPSK_3-DH5_Channel 0



8DPSK_3-DH5_Channel 39



8DPSK_3-DH5_Channel 78

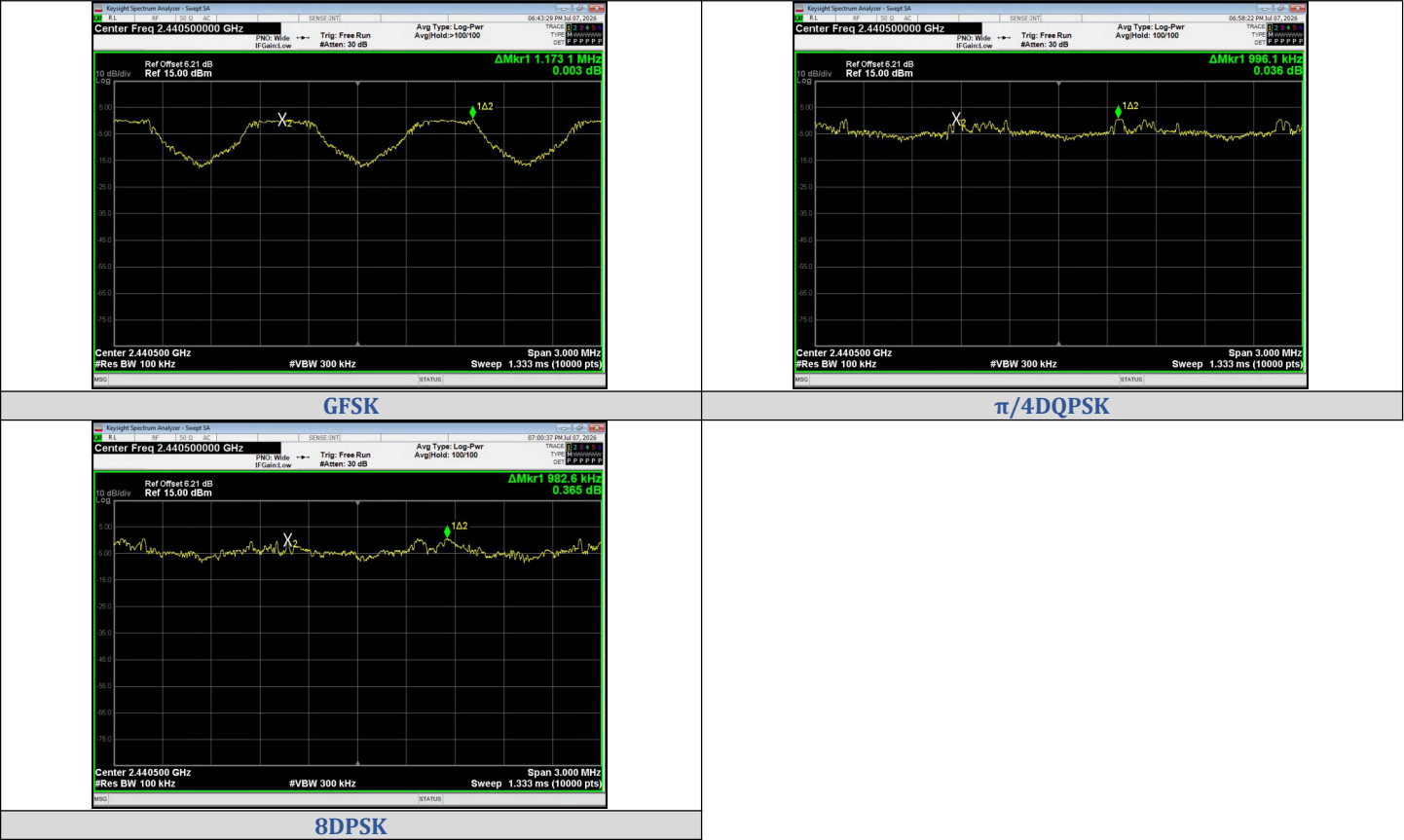
FCC ID:2BW3Q-H03C

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	2440.0351	2441.2082	1.1731	0.683	PASS
$\pi/4$ DQPSK	2-DH5	2439.8692	2440.8653	0.9961	0.873	PASS
8DPSK	3-DH5	2440.069	2441.0516	0.9826	0.868	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	2400.00	-49.398	-19.20	-30.198	PASS
			9607.87	-38.948	-19.20	-19.748	PASS
		39	4882.30	-39.040	-19.13	-19.910	PASS
			2483.50	-57.075	-19.57	-37.505	PASS
			4960.33	-40.740	-19.57	-21.170	PASS
$\pi/4$ DQPSK	2-DH5	0	2400.00	-52.033	-19.21	-32.823	PASS
			9607.87	-39.162	-19.21	-19.952	PASS
		39	9763.93	-40.709	-19.11	-21.599	PASS
			2483.50	-56.681	-19.57	-37.111	PASS
			4960.33	-41.687	-19.57	-22.117	PASS
8DPSK	3-DH5	0	2400.00	-49.283	-19.32	-29.963	PASS
			9607.87	-38.946	-19.32	-19.626	PASS
		39	4882.30	-40.093	-19.16	-20.933	PASS
			2483.50	-57.618	-19.54	-38.078	PASS
			4960.33	-41.228	-19.54	-21.688	PASS

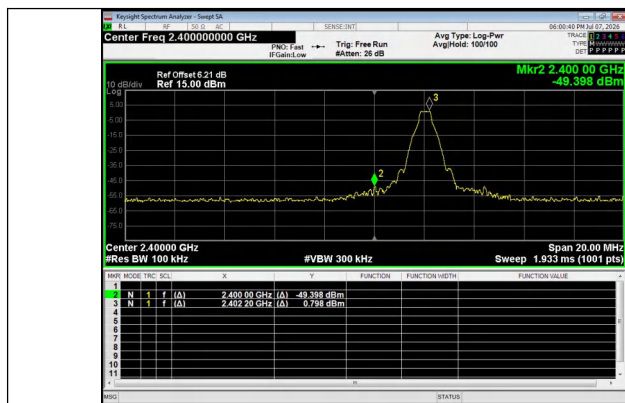
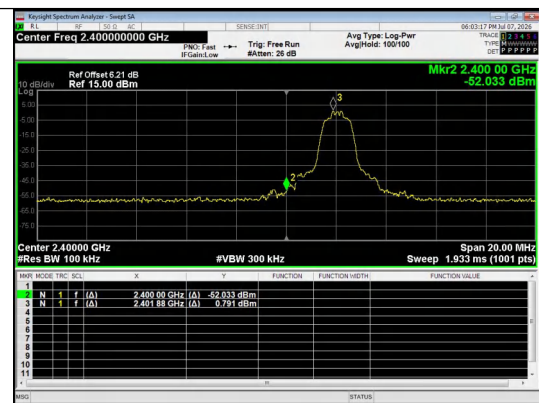
Note: input compensation coefficient (dB)= Cable Loss (dB)

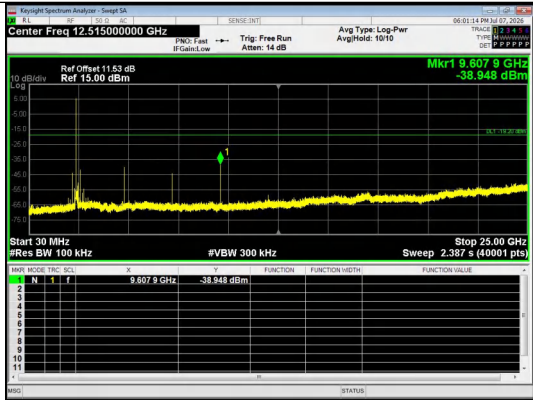
Hopping

Modulation	Packet	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Verdict
GFSK	DH5	Hopping	2374.03	-51.082	-19.34	-31.742	PASS
			2400.00	-53.719	-19.34	-34.379	PASS
			2483.50	-55.948	-19.72	-36.228	PASS
π/4DQPSK	2-DH5		2360.90	-53.239	-19.44	-33.799	PASS
			2400.00	-56.039	-19.44	-36.599	PASS
			2483.50	-56.216	-19.76	-36.456	PASS
8DPSK	3-DH5		2400.00	-50.060	-19.43	-30.630	PASS
			2483.50	-55.051	-19.84	-35.211	PASS

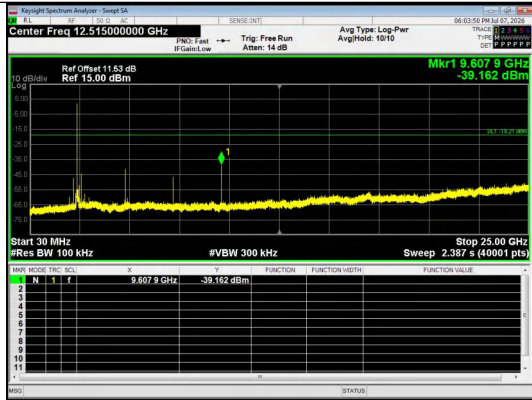
Note: input compensation coefficient (dB)= Cable Loss (dB)

Test Graphs

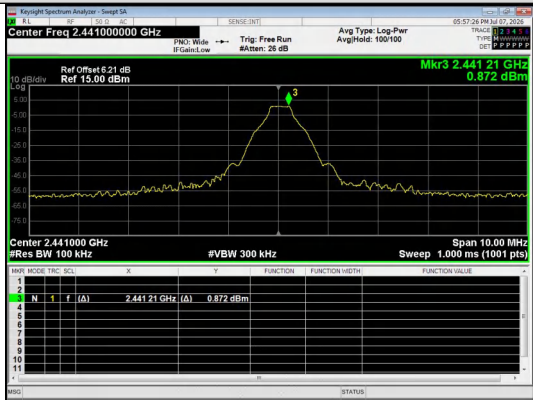
Out Of Band Emission
GFSK_DH5_Channel 0Out Of Band Emission
 $\pi/4$ DQPSK_2-DH5_Channel 0



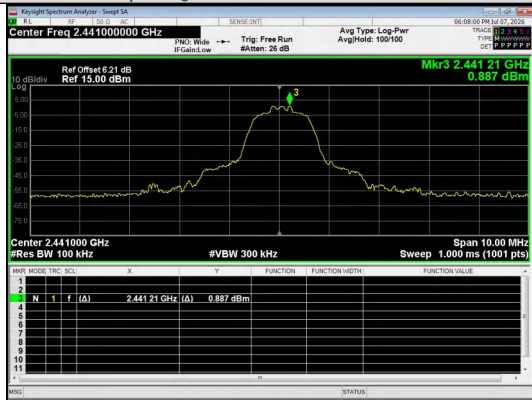
30.0 MHz - 25000.0 MHz
GFSK_DH5_Channel 0



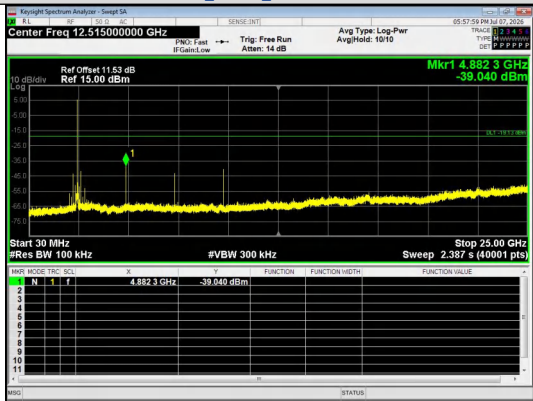
30.0 MHz - 25000.0 MHz
 $\pi/4$ DQPSK_2-DH5_Channel 0



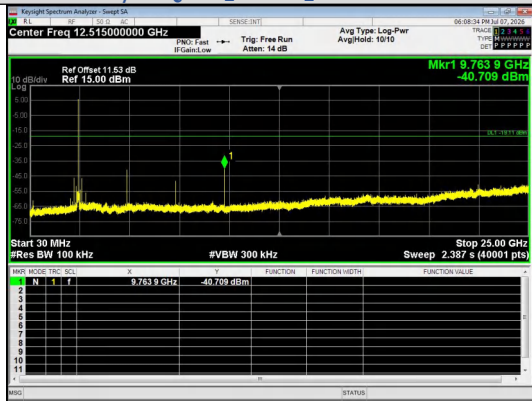
Out Of Band Emission
GFSK_DH5_Channel 39



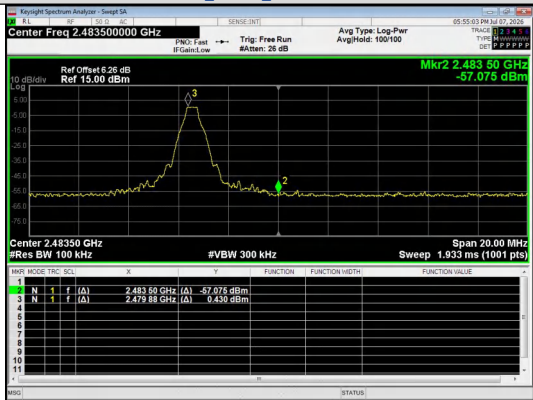
Out Of Band Emission
 $\pi/4$ DQPSK_2-DH5_Channel 39



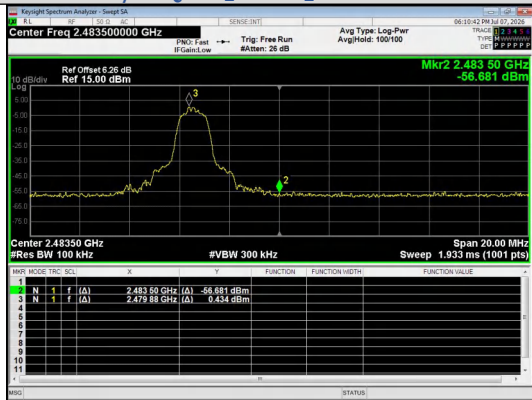
30.0 MHz - 25000.0 MHz
GFSK_DH5_Channel 39



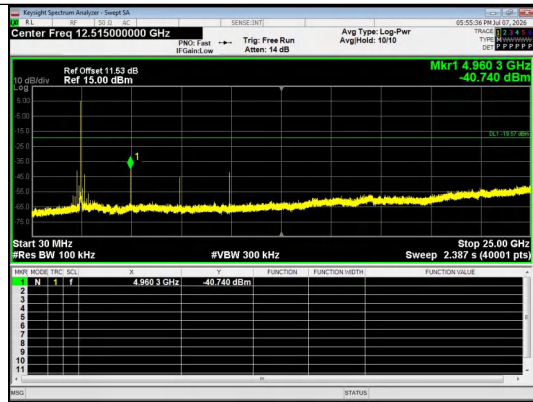
30.0 MHz - 25000.0 MHz
 $\pi/4$ DQPSK_2-DH5_Channel 39



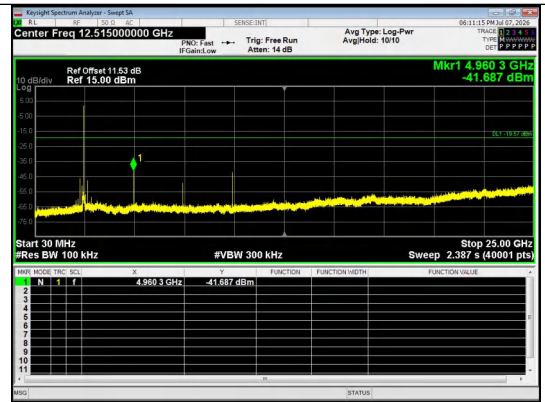
Out Of Band Emission
GFSK_DH5_Channel 78



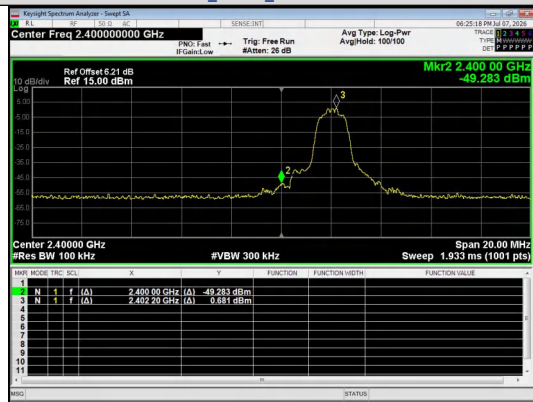
Out Of Band Emission
 $\pi/4$ DQPSK_2-DH5_Channel 78



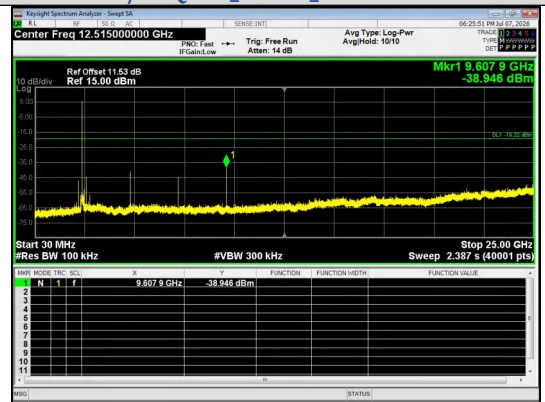
30.0 MHz - 25000.0 MHz
GFSK_DH5_Channel 78



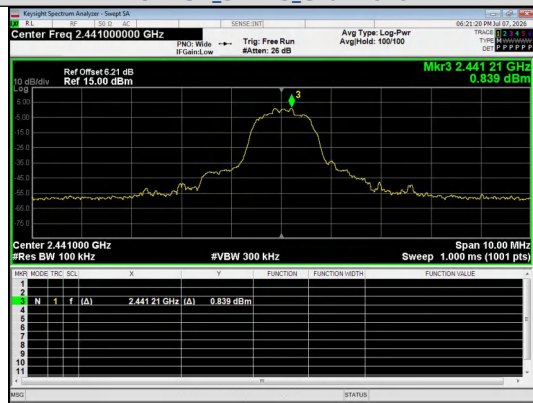
30.0 MHz - 25000.0 MHz
 $\pi/4$ DQPSK_2-DH5_Channel 78



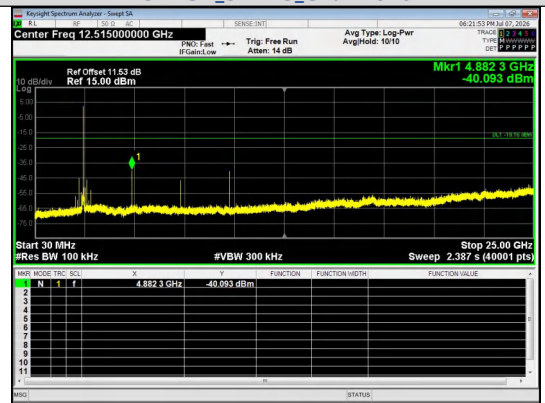
Out Of Band Emission
8DPSK_3-DH5_Channel 0



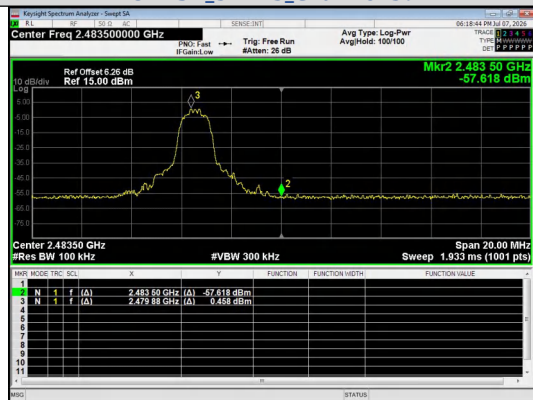
30.0 MHz - 25000.0 MHz
 $\pi/4$ DQPSK_2-DH5_Channel 78



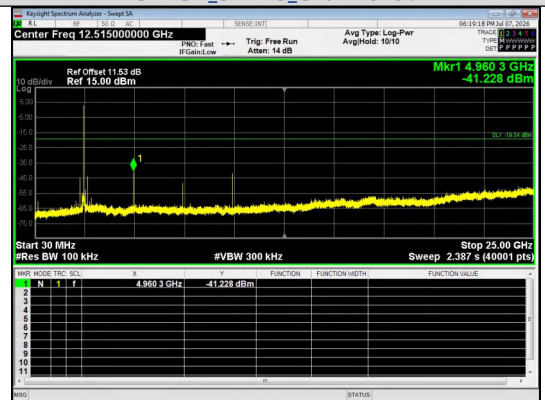
Out Of Band Emission
8DPSK_3-DH5_Channel 0



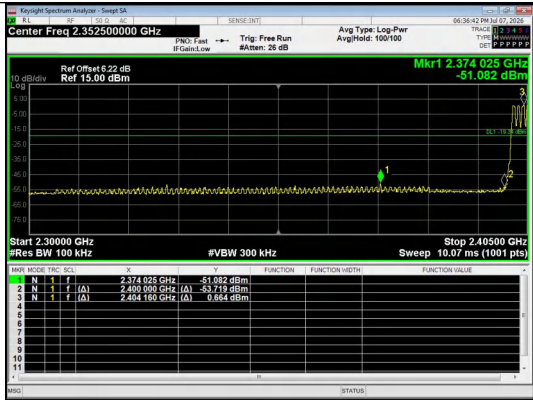
30.0 MHz - 25000.0 MHz
8DPSK_3-DH5_Channel 0



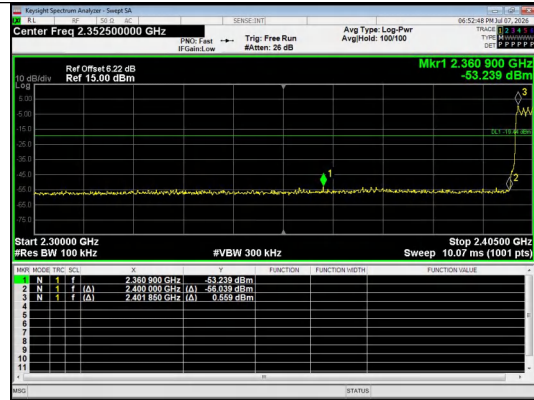
Out Of Band Emission
8DPSK_3-DH5_Channel 39



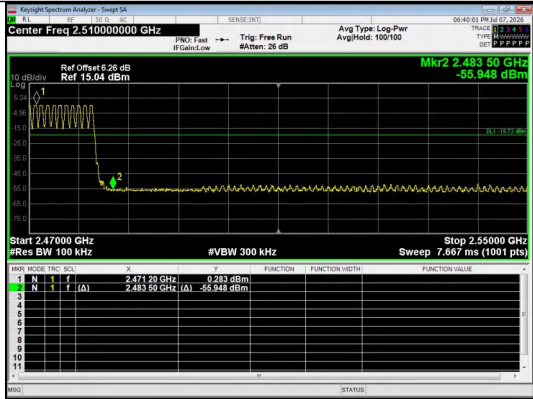
30.0 MHz - 25000.0 MHz
8DPSK_3-DH5_Channel 39



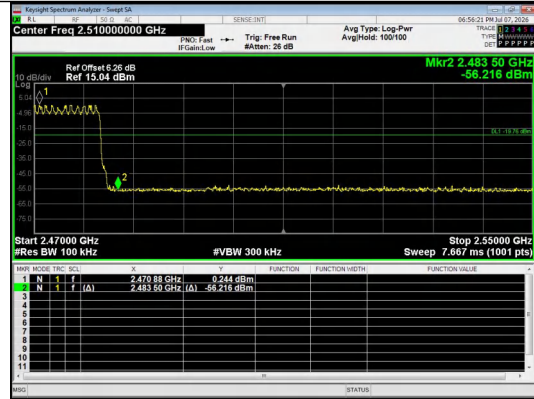
Out Of Band Emission(Left)
GFSK_DH5_Channel Hopping



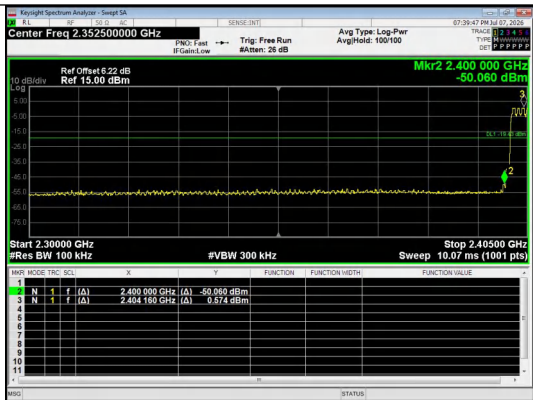
Out Of Band Emission(Left)
 $\pi/4$ DQPSK_2-DH5_Channel Hopping



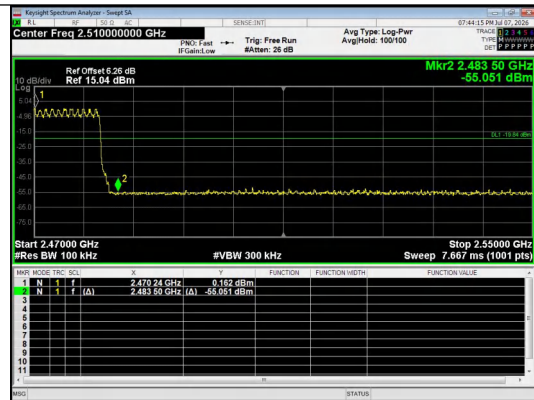
Out Of Band Emission(Right)
GFSK_DH5_Channel Hopping



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



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



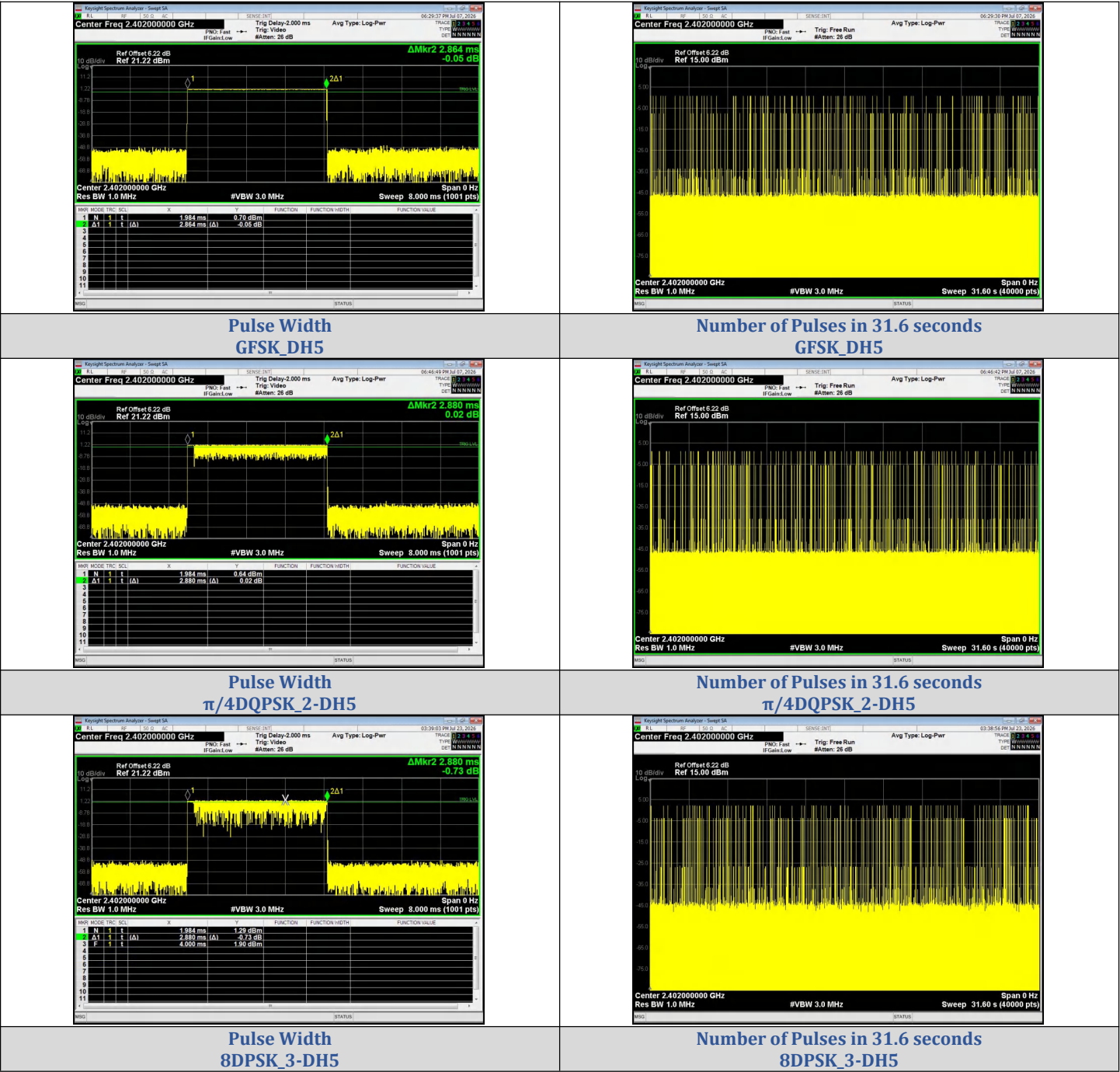
Out Of Band Emission(Right)
8DPSK_3-DH5_Channel Hopping

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	2.8640	98	280.67	< 400	PASS
$\pi/4$ DQPSK	2-DH5		2.8800	99	285.12		PASS
8DPSK	3-DH5		2.8800	103	296.64		PASS
Note: Dwell time=Pulse time(ms)*Number of Pulses in 31.6 seconds							

Test Graphs



FCC ID:2BW3Q-H03C

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



