

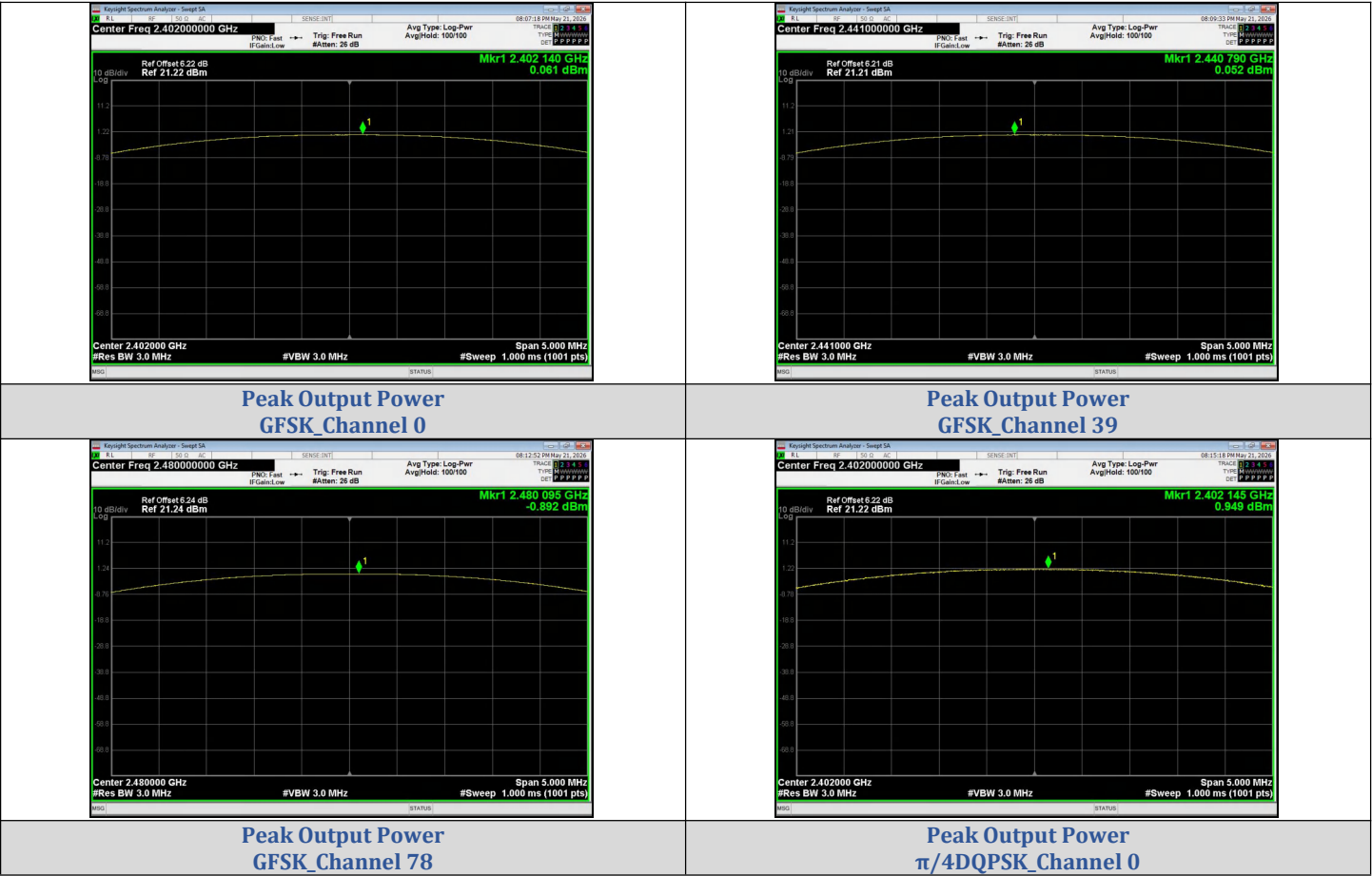
Appendix A:Test Results of Bluetooth BR & EDR

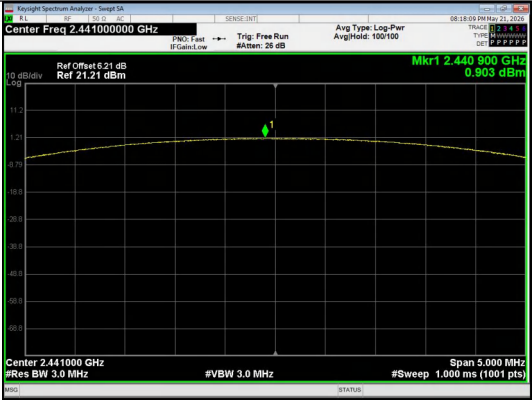
Conducted Output Power

Test Result

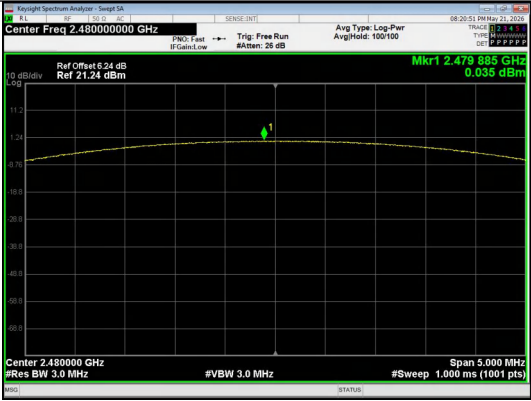
Modulation	Packet Type	Channel	Peak Output Power (dBm)	Peak Output Power (mW)	Max. Avg. Power (dBm)	Limit (dBm)	Result
GFSK	DH5	0	0.06	1.01	None	≤30	PASS
		39	0.05	1.01	None		PASS
		78	-0.89	0.81	None		PASS
$\pi/4$ DQPSK	2-DH5	0	0.95	1.24	None		PASS
		39	0.90	1.23	None		PASS
		78	0.04	1.01	None		PASS
8DPSK	3-DH5	0	1.38	1.37	None		PASS
		39	1.32	1.36	None		PASS
		78	0.42	1.10	None		PASS

Test Graphs

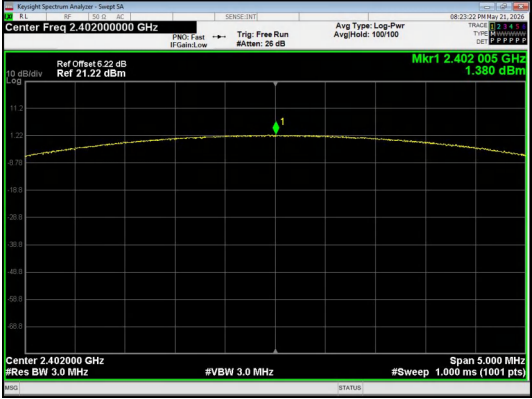




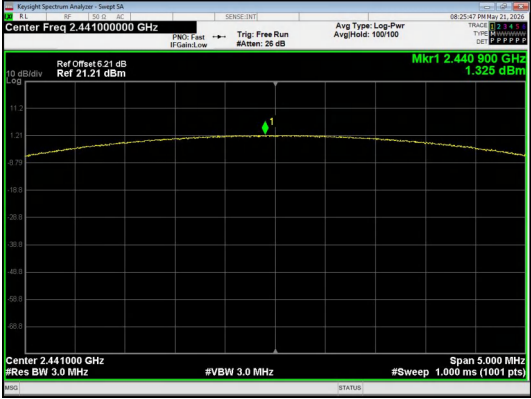
Peak Output Power
 $\pi/4$ DQPSK_Channel 39



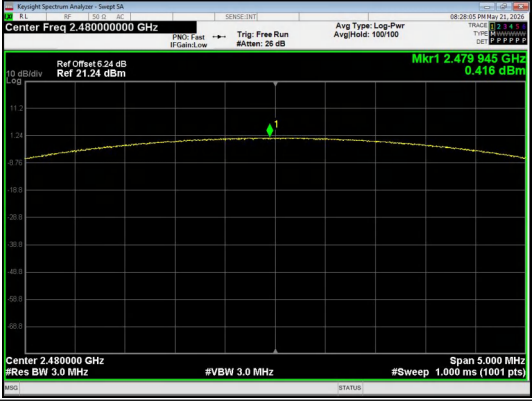
Peak Output Power
 $\pi/4$ DQPSK_Channel 78



Peak Output Power
8DPSK_Channel 0



Peak Output Power
8DPSK_Channel 39

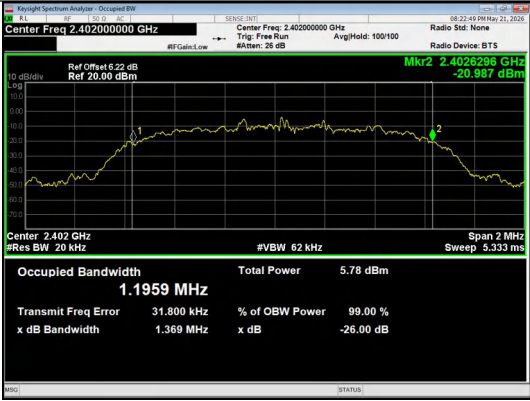


Peak Output Power
8DPSK_Channel 78

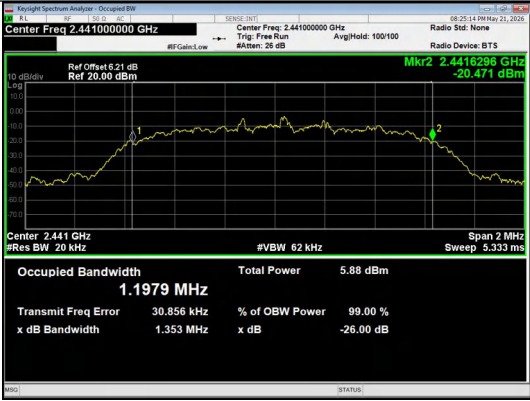
99% Bandwidth**Test Result**

Modulation	Channel	Center Frequency (MHz)	99% BW (MHz)
GFSK	0	2402	0.88087
	39	2441	0.87887
	78	2480	0.88072
$\pi/4$ DQPSK	0	2402	1.1944
	39	2441	1.1954
	78	2480	1.1964
8DPSK	0	2402	1.1959
	39	2441	1.1979
	78	2480	1.2043

Test Graphs



8DPSK_3-DH5_Channel 0



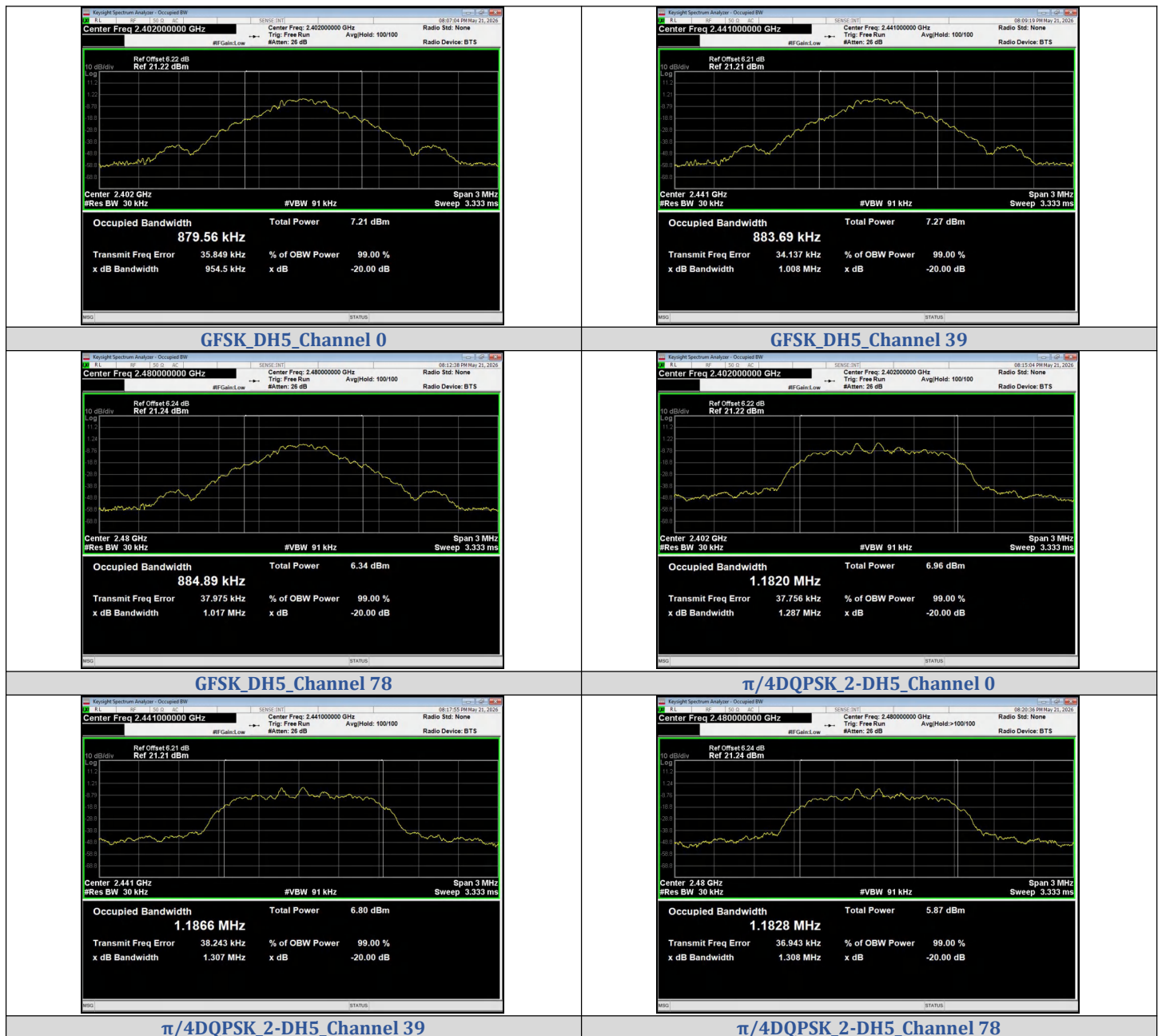
8DPSK_3-DH5_Channel 39

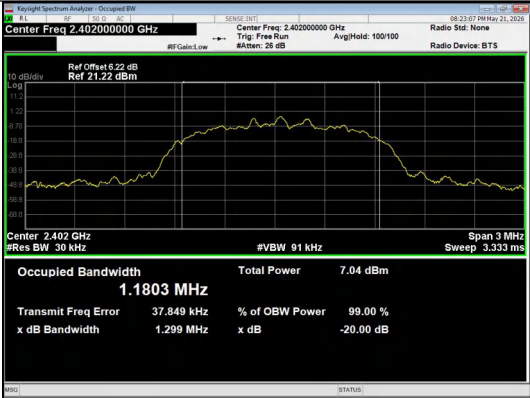


8DPSK_3-DH5_Channel 78

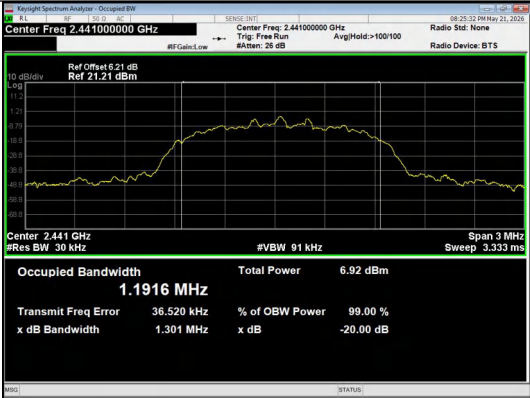
20dB Bandwidth**Test Result**

Modulation	Channel	Center Frequency (MHz)	20 dB Bandwidth (MHz)
GFSK	0	2402 MHz	0.9545
	39	2441 MHz	1.008
	78	2480 MHz	1.017
$\pi/4$ DQPSK	0	2402 MHz	1.287
	39	2441 MHz	1.307
	78	2480 MHz	1.308
8DPSK	0	2402 MHz	1.299
	39	2441 MHz	1.301
	78	2480 MHz	1.303

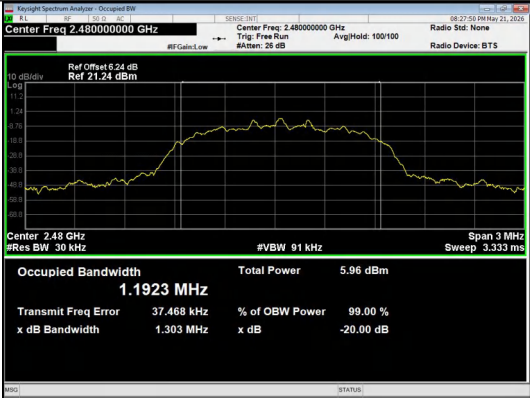
Test Graphs



8DPSK_3-DH5_Channel 0



8DPSK_3-DH5_Channel 39



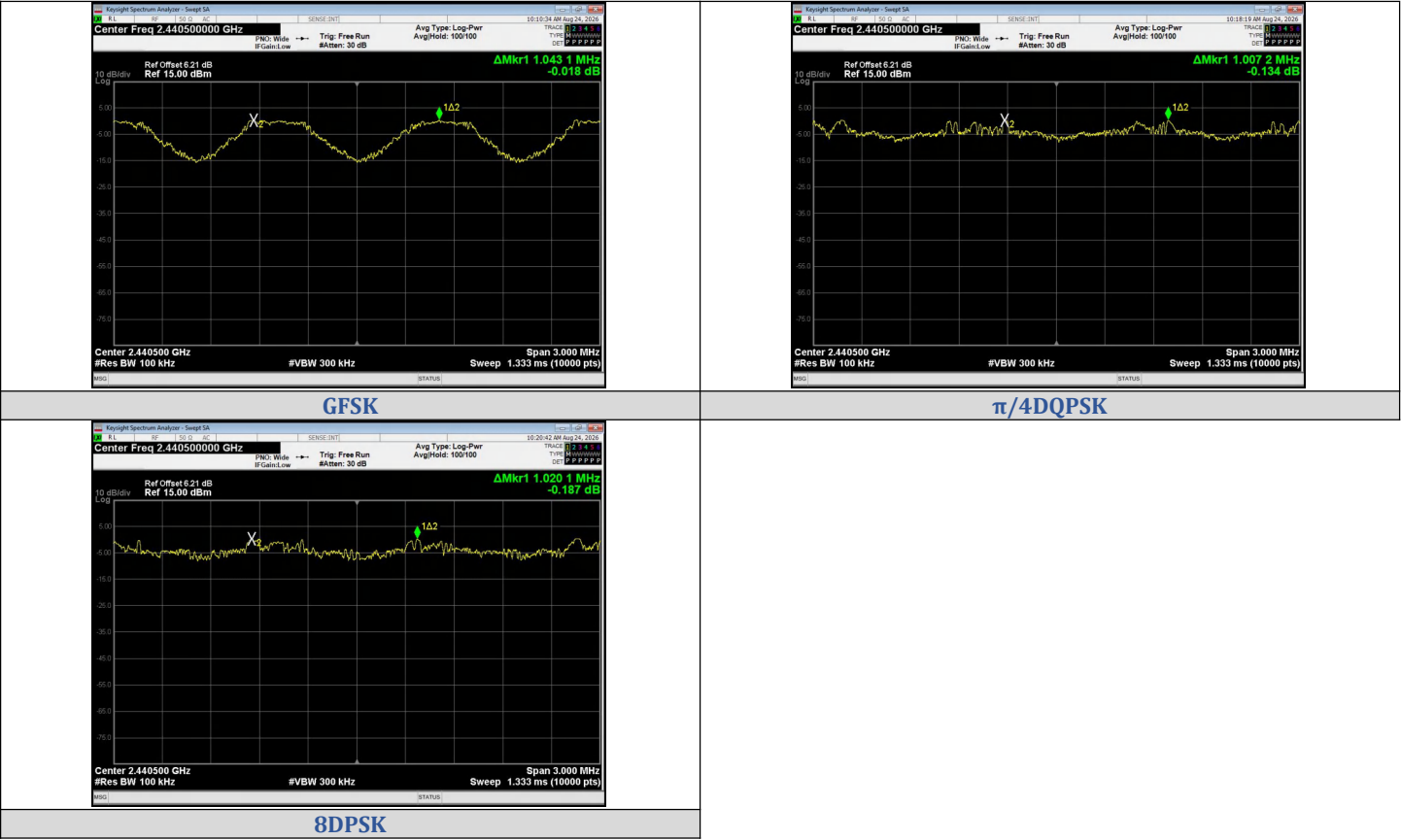
8DPSK_3-DH5_Channel 78

Carrier Frequencies Separation

Test Result

Modulation	Packet	Left Center frequency (MHz)	Right Center frequency (MHz)	Hopping Frequency Separation (MHz)	Limit (MHz)	Result
GFSK	DH5	2439.8626	2441.0057	1.0431	0.678	PASS
$\pi/4$ DQPSK	2-DH5	2440.1803	2441.1875	1.0072	0.872	PASS
8DPSK	3-DH5	2439.8515	2440.8716	1.0201	0.869	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)	Result
GFSK	DH5	0	2400.00	-53.215	-19.98	-33.235	PASS
			4804.26	-47.394	-19.98	-27.414	PASS
		39	9763.93	-45.966	-20.01	-25.956	PASS
		78	2483.50	-58.393	-21.05	-37.343	PASS
			9919.99	-46.311	-21.05	-25.261	PASS
$\pi/4$ DQPSK	2-DH5	0	2400.00	-52.516	-19.97	-32.546	PASS
			9607.87	-47.312	-19.97	-27.342	PASS
		39	9763.93	-45.858	-19.98	-25.878	PASS
		78	2483.50	-56.973	-20.95	-36.023	PASS
			9919.99	-45.435	-20.95	-24.485	PASS
8DPSK	3-DH5	0	2400.00	-49.347	-19.89	-29.457	PASS
			9607.87	-47.113	-19.89	-27.223	PASS
		39	9763.93	-45.882	-19.92	-25.962	PASS
		78	2483.50	-57.832	-20.93	-36.902	PASS
			9919.99	-45.370	-20.93	-24.440	PASS

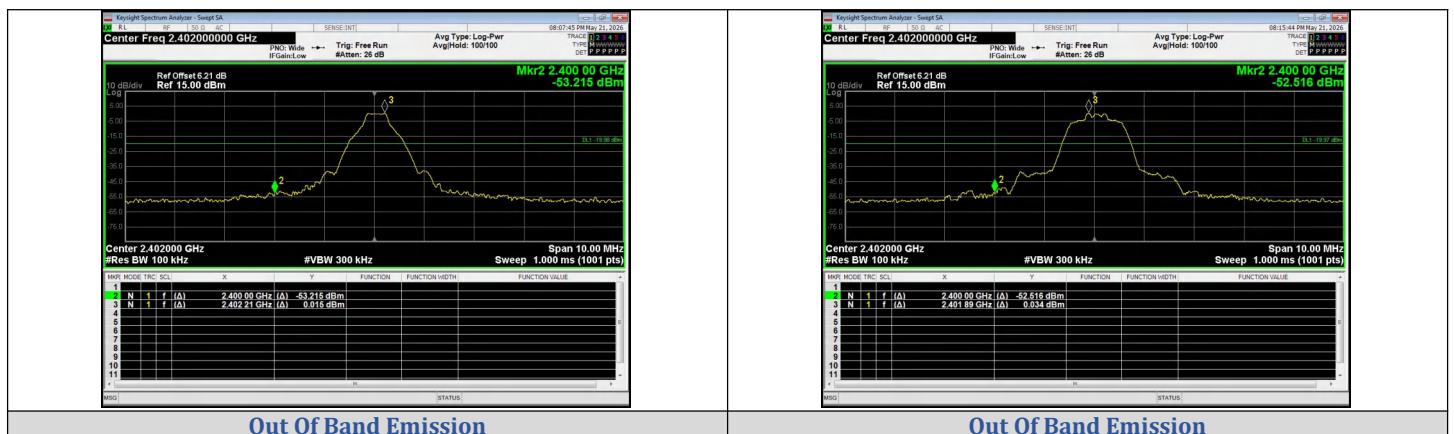
Note: input compensation coefficient (dB)= Cable Loss (dB)

Hopping

Modulation	Packet	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
GFSK	DH5	Hopping	2375.07	-52.306	-19.76	-32.546	PASS
			2400.00	-56.153	-19.76	-36.393	PASS
			2483.50	-56.693	-20.68	-36.013	PASS
$\pi/4$ DQPSK	2-DH5		2376.86	-53.045	-19.71	-33.335	PASS
			2400.00	-56.614	-19.71	-36.904	PASS
			2483.50	-57.012	-20.75	-36.262	PASS
8DPSK	3-DH5		2380.95	-53.858	-20.03	-33.828	PASS
			2400.00	-55.530	-20.03	-35.500	PASS
			2483.50	-56.417	-20.58	-35.837	PASS
Note: input compensation coefficient (dB)= Cable Loss (dB)							

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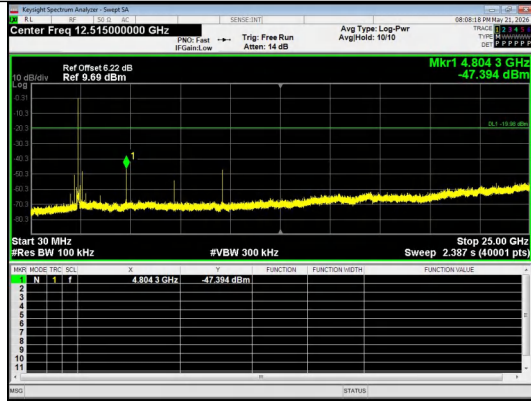
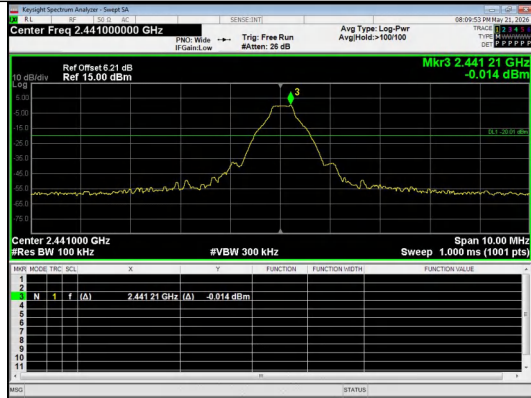
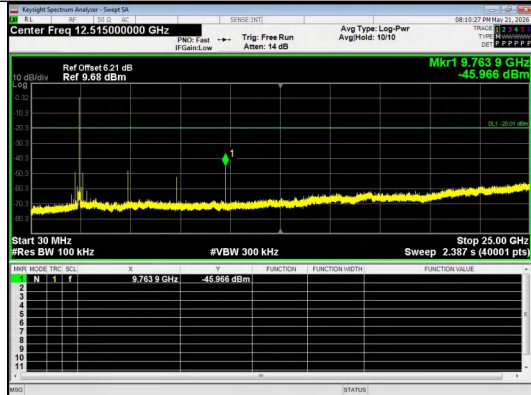
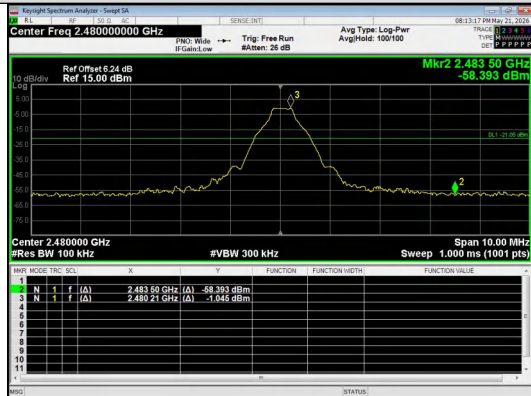
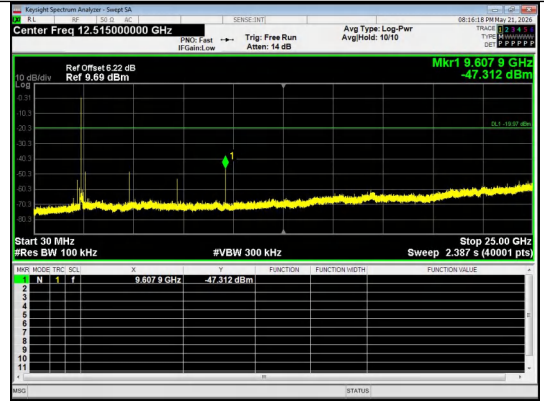
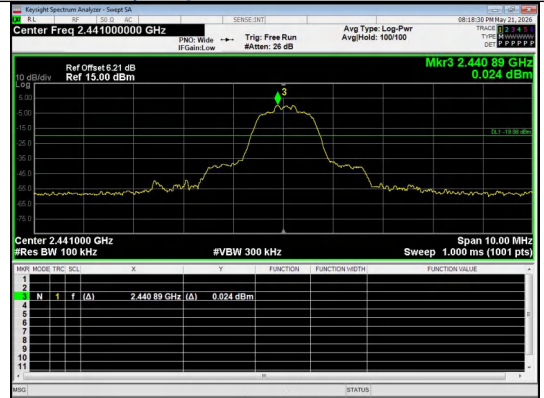
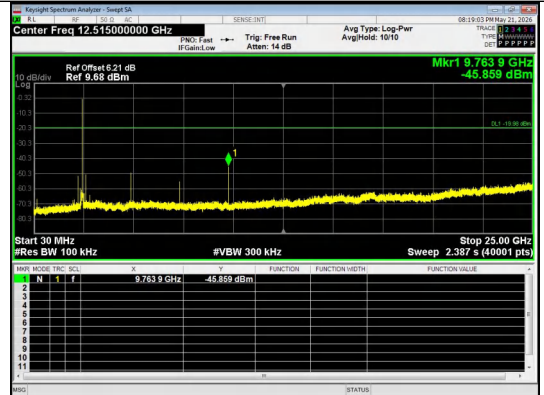
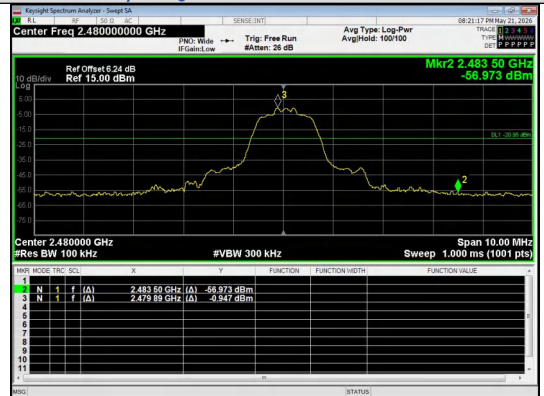
Test Graphs

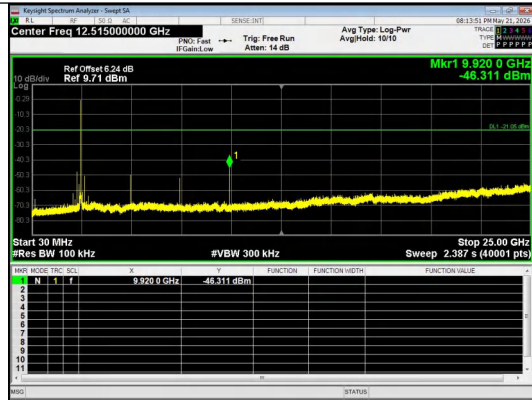


Out Of Band Emission

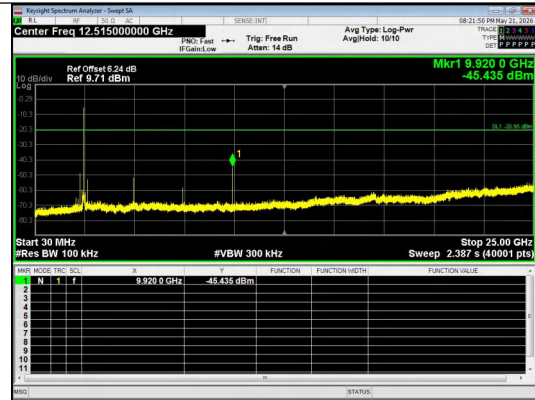
Out Of Band Emission

GFSK_DH5_Channel 0

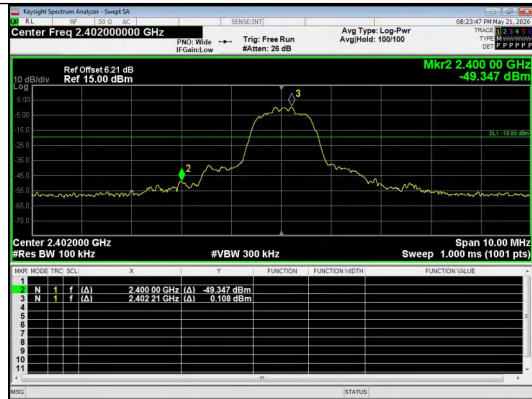
30.0 MHz - 25000.0 MHz
GFSK_DH5_Channel 0Out Of Band Emission
GFSK_DH5_Channel 3930.0 MHz - 25000.0 MHz
GFSK_DH5_Channel 39Out Of Band Emission
GFSK_DH5_Channel 78 $\pi/4$ DQPSK_2-DH5_Channel 030.0 MHz - 25000.0 MHz
 $\pi/4$ DQPSK_2-DH5_Channel 0Out Of Band Emission
 $\pi/4$ DQPSK_2-DH5_Channel 3930.0 MHz - 25000.0 MHz
 $\pi/4$ DQPSK_2-DH5_Channel 39Out Of Band Emission
 $\pi/4$ DQPSK_2-DH5_Channel 78



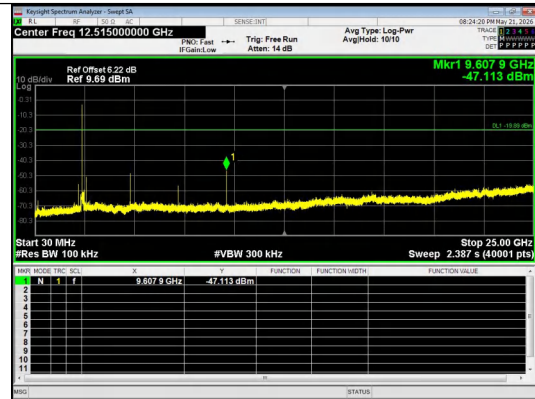
30.0 MHz - 25000.0 MHz
GFSK_DH5_Channel 78



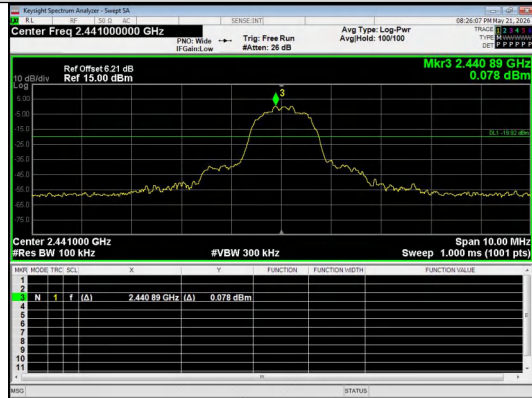
30.0 MHz - 25000.0 MHz
 $\pi/4$ DQPSK_2-DH5_Channel 78



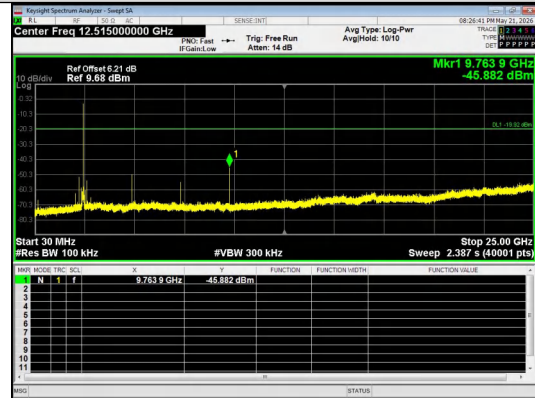
Out Of Band Emission
8DPSK_3-DH5_Channel 0



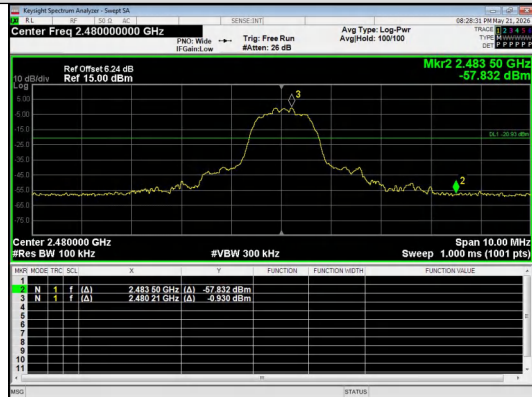
30.0 MHz - 25000.0 MHz
8DPSK_3-DH5_Channel 0



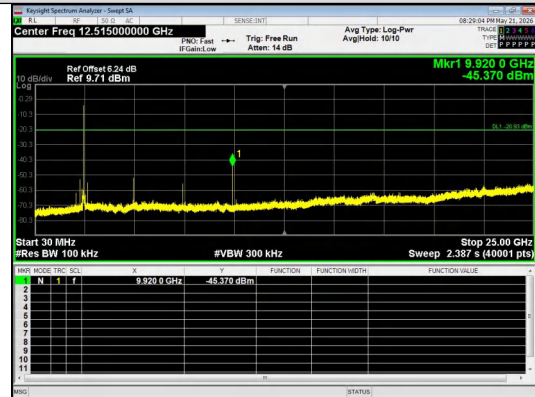
Out Of Band Emission
8DPSK_3-DH5_Channel 39



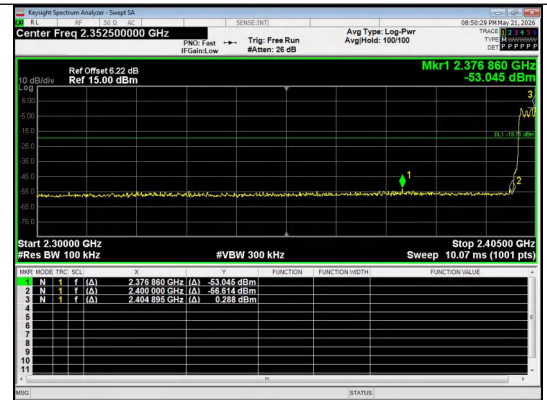
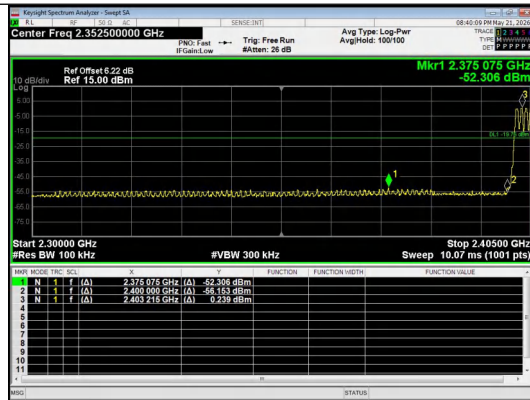
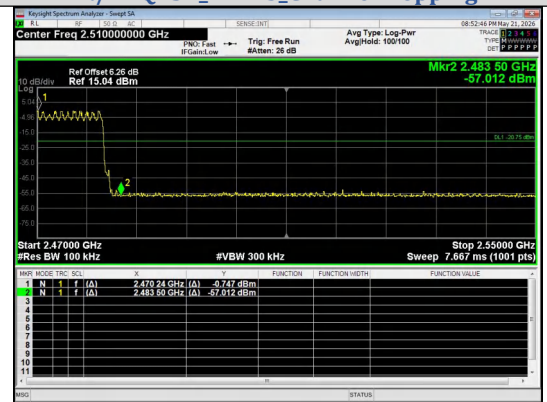
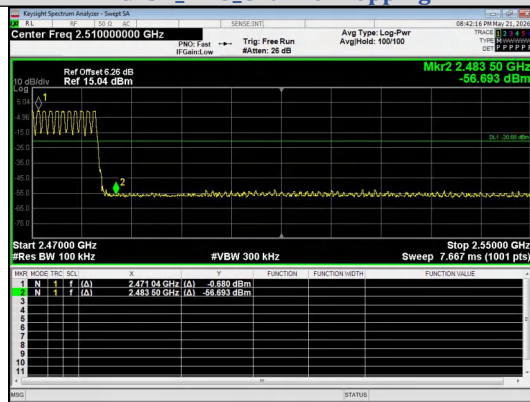
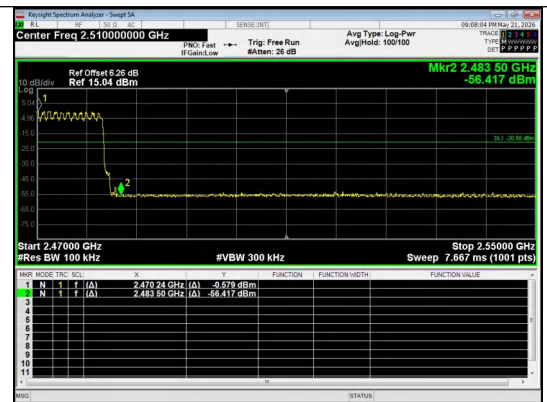
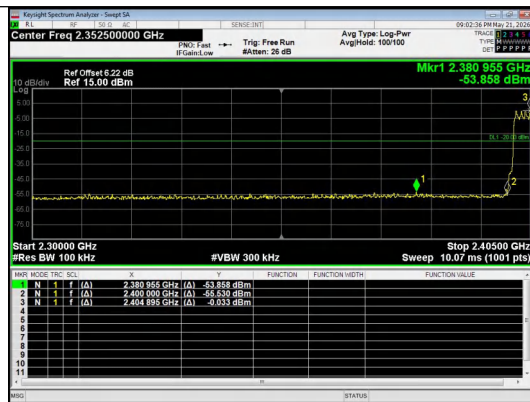
30.0 MHz - 25000.0 MHz
8DPSK_3-DH5_Channel 39



Out Of Band Emission



30.0 MHz - 25000.0 MHz

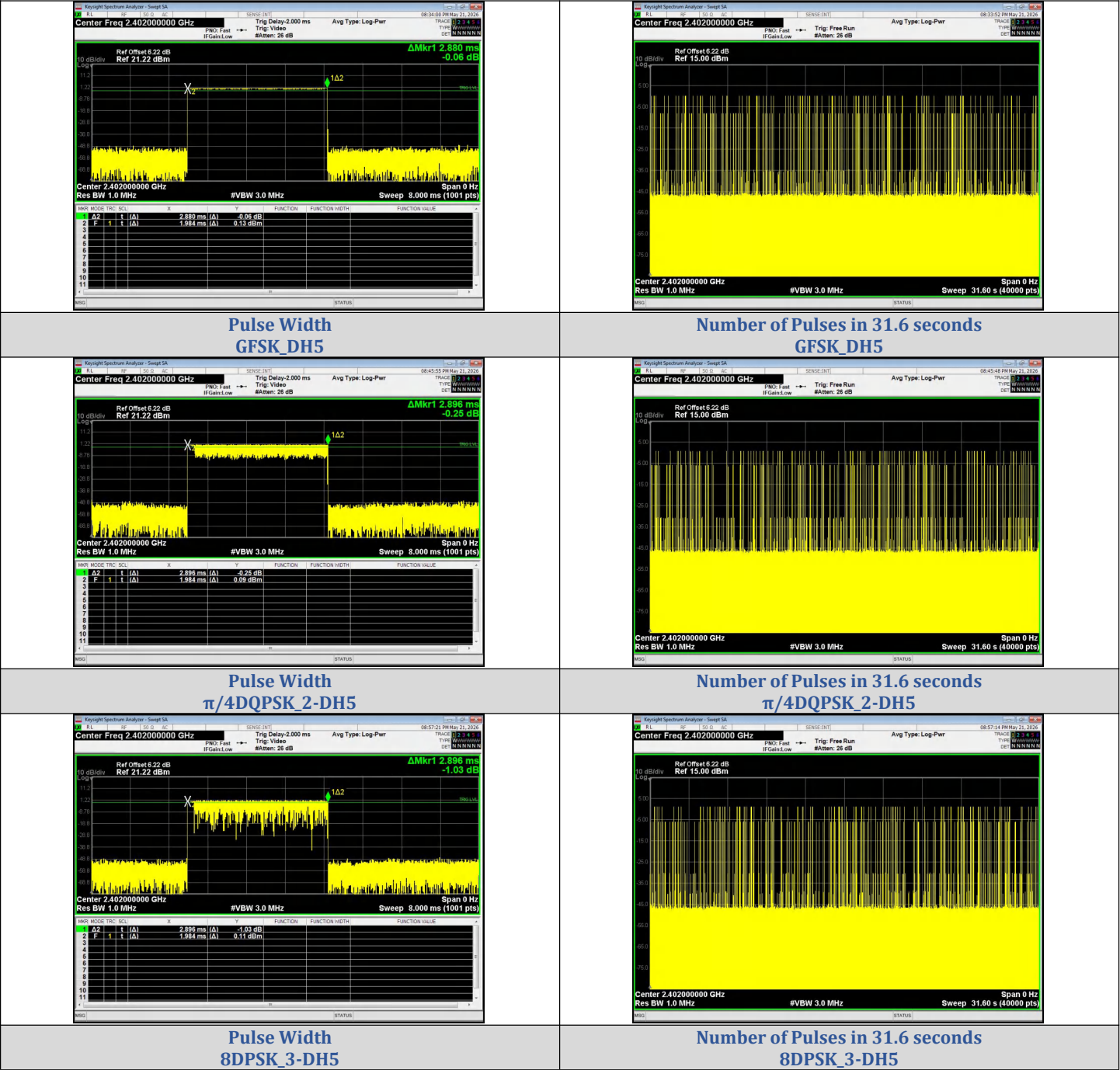
Out Of Band Emission(Left)
GFSK_DH5_Channel HoppingOut Of Band Emission(Left)
 $\pi/4$ DQPSK_2-DH5_Channel HoppingOut Of Band Emission(Right)
GFSK_DH5_Channel HoppingOut Of Band Emission(Right)
 $\pi/4$ DQPSK_2-DH5_Channel HoppingOut Of Band Emission(Left)
8DPSK_3-DH5_Channel HoppingOut Of Band Emission(Right)
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)	Result
GFSK	DH5	Hopping	2.880	108	311.04	< 400	PASS
$\pi/4$ DQPSK	2-DH5		2.896	98	283.81		PASS
8DPSK	3-DH5		2.896	113	327.25		PASS
Note: Dwell time=Pulse time(ms)*Number of Pulses in 31.6 seconds							

Test Graphs



FCC ID:2BXRK-HTMSSNGLYWF

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

