

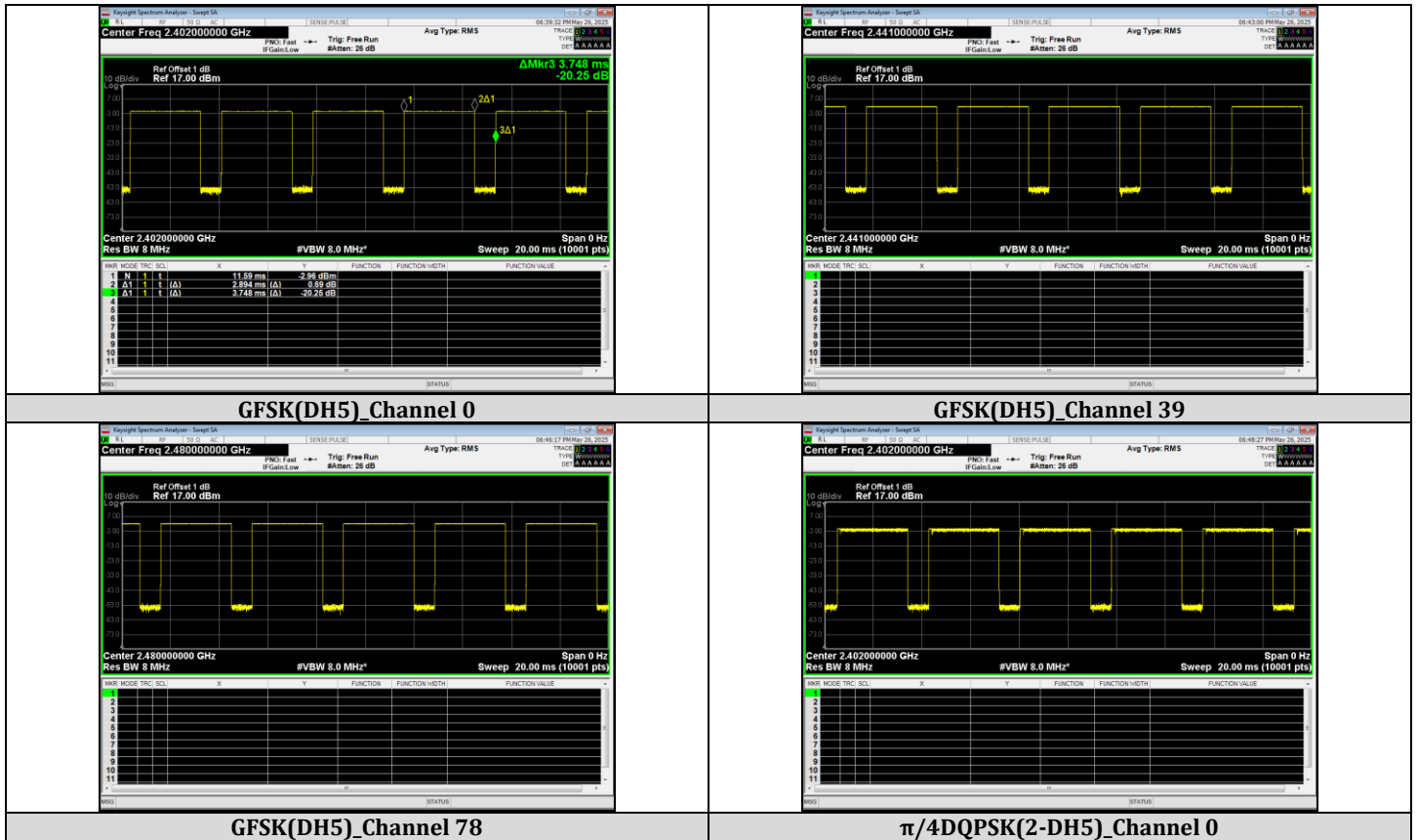
Appendix RF test data for BT 1 (AB5602D)

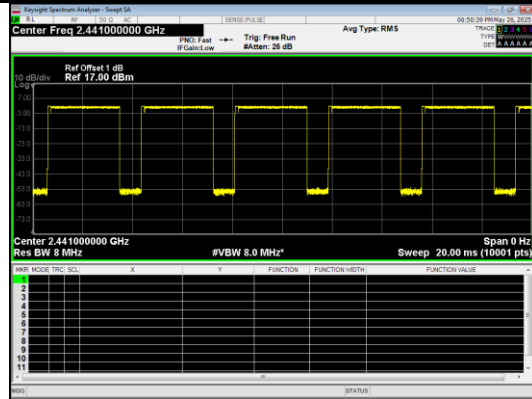
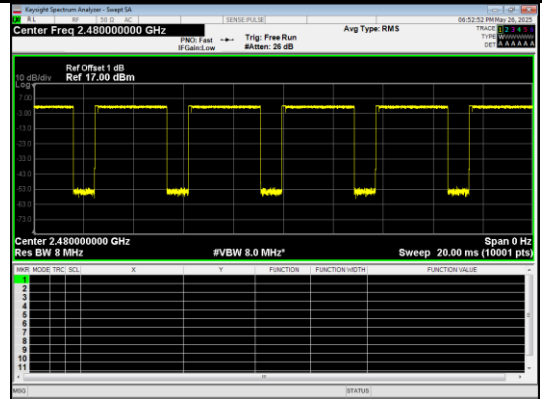
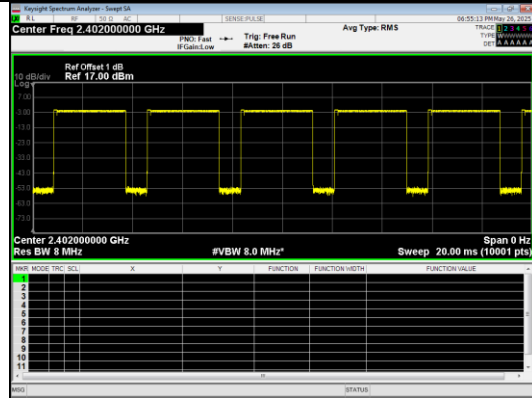
Duty Cycle

Test Result

Modulation	Packets	Channel	On Time (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle (linear)	Duty Cycle Factor (dB)	1/T
GFSK	DH5	0	2.894	3.748	77.21	0.7721	1.1233	0.3455
		39	2.894	3.748	77.21	0.7721	1.1233	0.3455
		78	2.894	3.748	77.21	0.7721	1.1233	0.3455
$\pi/4$ DQPSK	2-DH5	0	2.884	3.748	76.95	0.7695	1.1379	0.3467
		39	2.884	3.748	76.95	0.7695	1.1379	0.3467
		78	2.884	3.748	76.95	0.7695	1.1379	0.3467
8DPSK	3-DH5	0	2.882	3.748	76.89	0.7689	1.1413	0.3470
		39	2.882	3.748	76.89	0.7689	1.1413	0.3470
		78	2.882	3.748	76.89	0.7689	1.1413	0.3470

Test Graphs

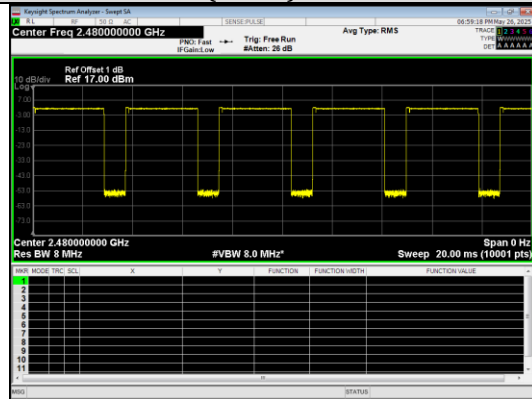



 $\pi/4$ DQPSK(2-DH5)_Channel 39

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


8DPSK(3-DH5)_Channel 0



8DPSK(3-DH5)_Channel 39



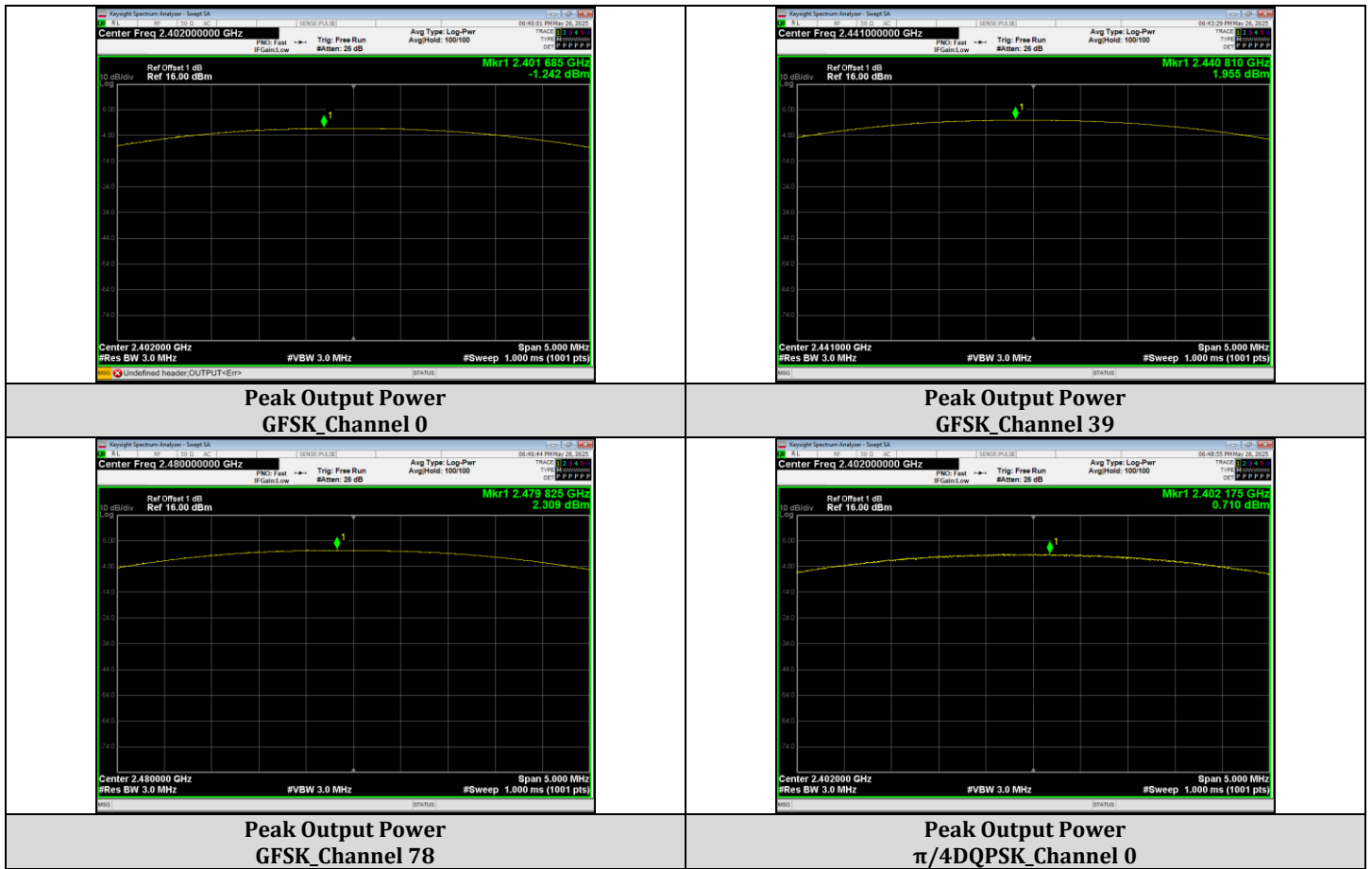
8DPSK(3-DH5)_Channel 78

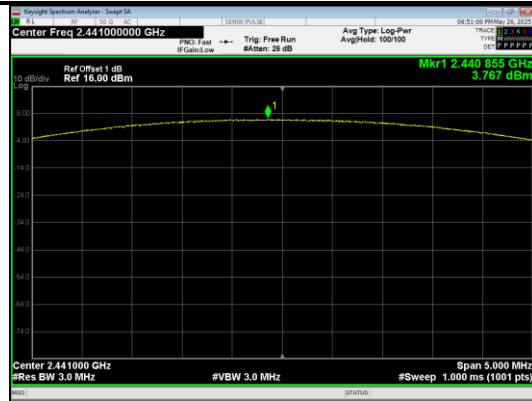
Conducted Output Power

Test Result

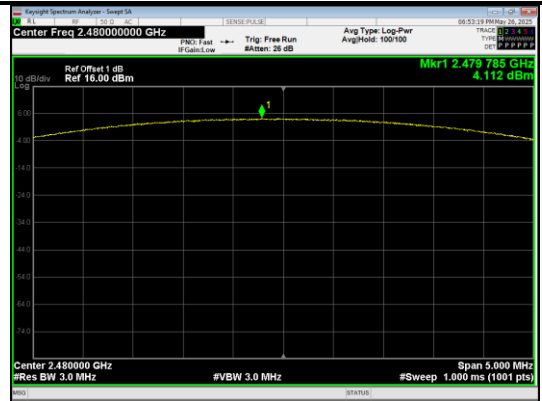
Modulation	Packet Type	Channel	Peak Output Power (dBm)	Peak Output Power (mW)	Limit (dBm)	Result
GFSK	DH5	0	-1.24	0.75	≤30	PASS
		39	1.96	1.57		PASS
		78	2.31	1.70		PASS
$\pi/4$ DQPSK	2-DH5	0	0.71	1.18	≤20.97	PASS
		39	3.77	2.38		PASS
		78	4.11	2.58		PASS
8DPSK	3-DH5	0	1.18	1.31		PASS
		39	4.25	2.66		PASS
		78	4.46	2.79		PASS

Test Graphs

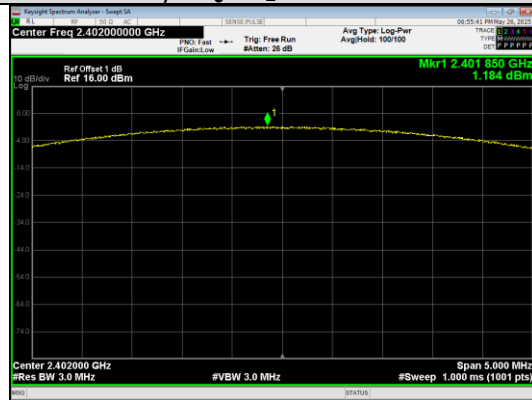




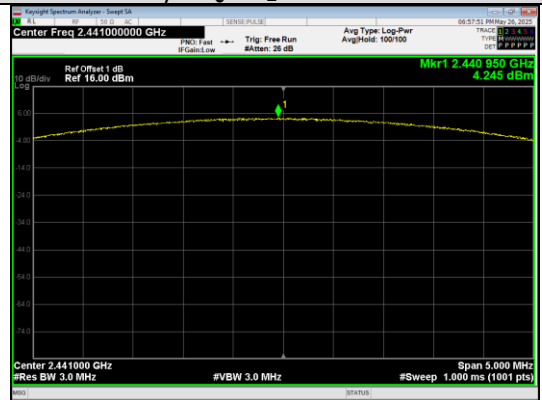
Peak Output Power
 $\pi/4$ DQPSK_Channel 39



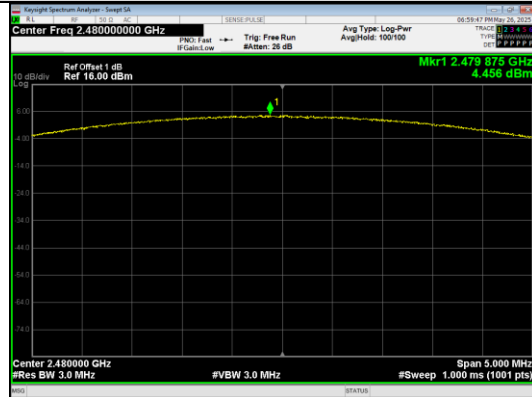
Peak Output Power
 $\pi/4$ DQPSK_Channel 78



Peak Output Power
8DPSK_Channel 0



Peak Output Power
8DPSK_Channel 39



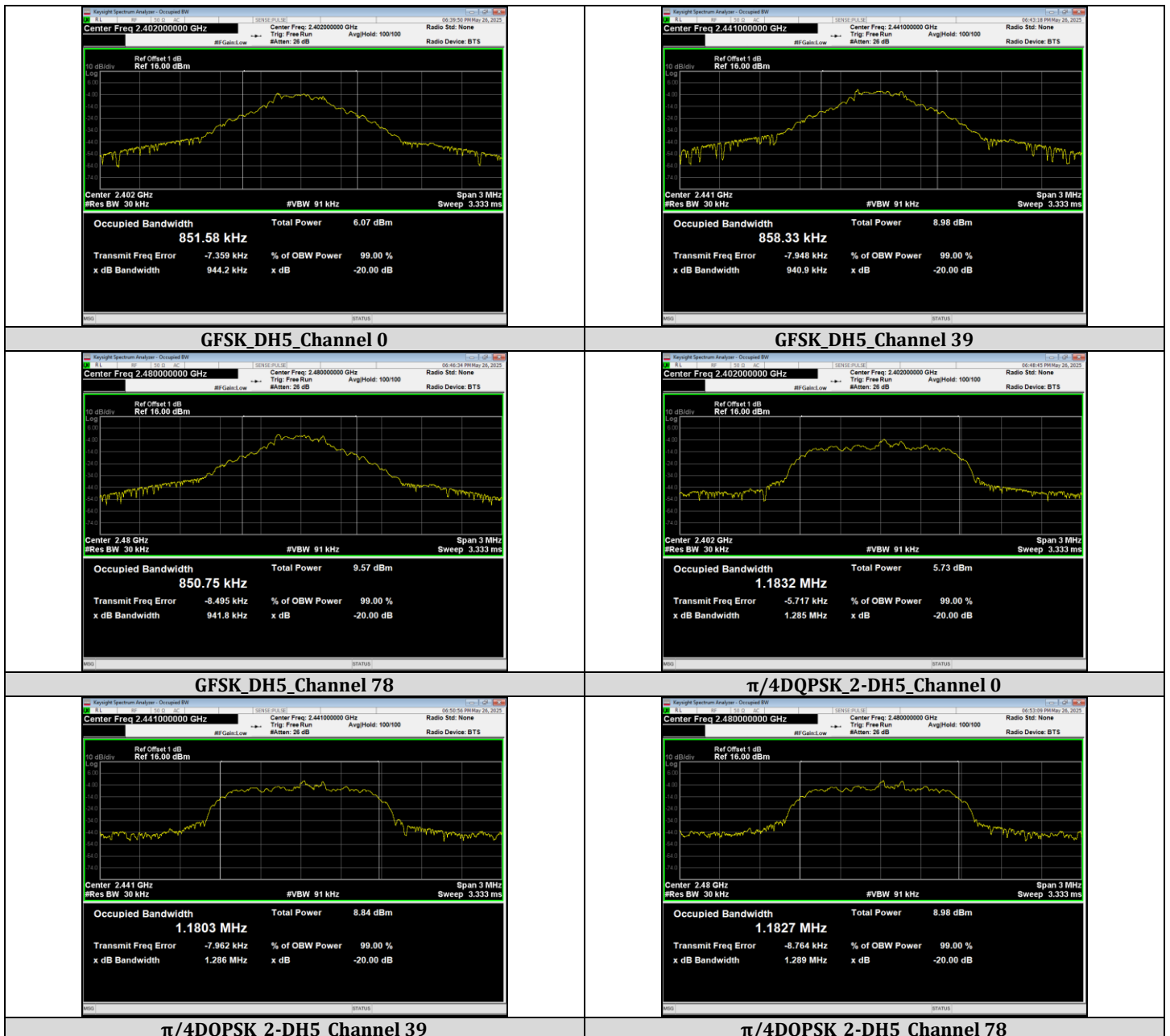
Peak Output Power
8DPSK_Channel 78

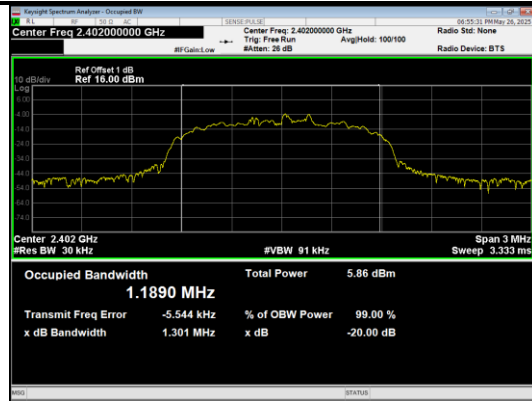
20dB Bandwidth

Test Result

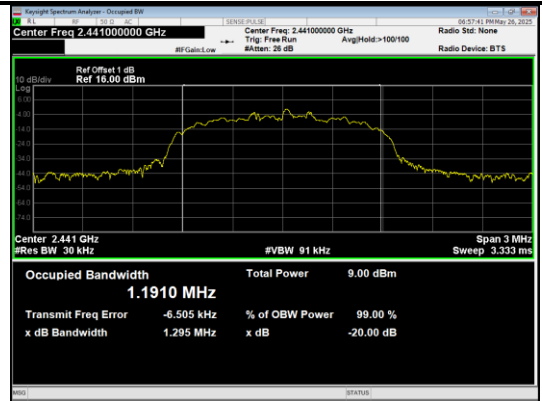
Modulation	Channel	Center Frequency (MHz)	20 dB Bandwidth (MHz)
GFSK	0	2402 MHz	0.9442
	39	2441 MHz	0.9409
	78	2480 MHz	0.9418
$\pi/4$ DQPSK	0	2402 MHz	1.285
	39	2441 MHz	1.286
	78	2480 MHz	1.289
8DPSK	0	2402 MHz	1.301
	39	2441 MHz	1.295
	78	2480 MHz	1.300

Test Graphs

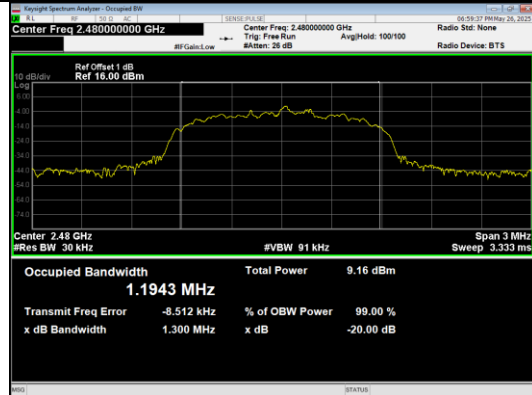




8DPSK_3-DH5_Channel 0



8DPSK_3-DH5_Channel 39



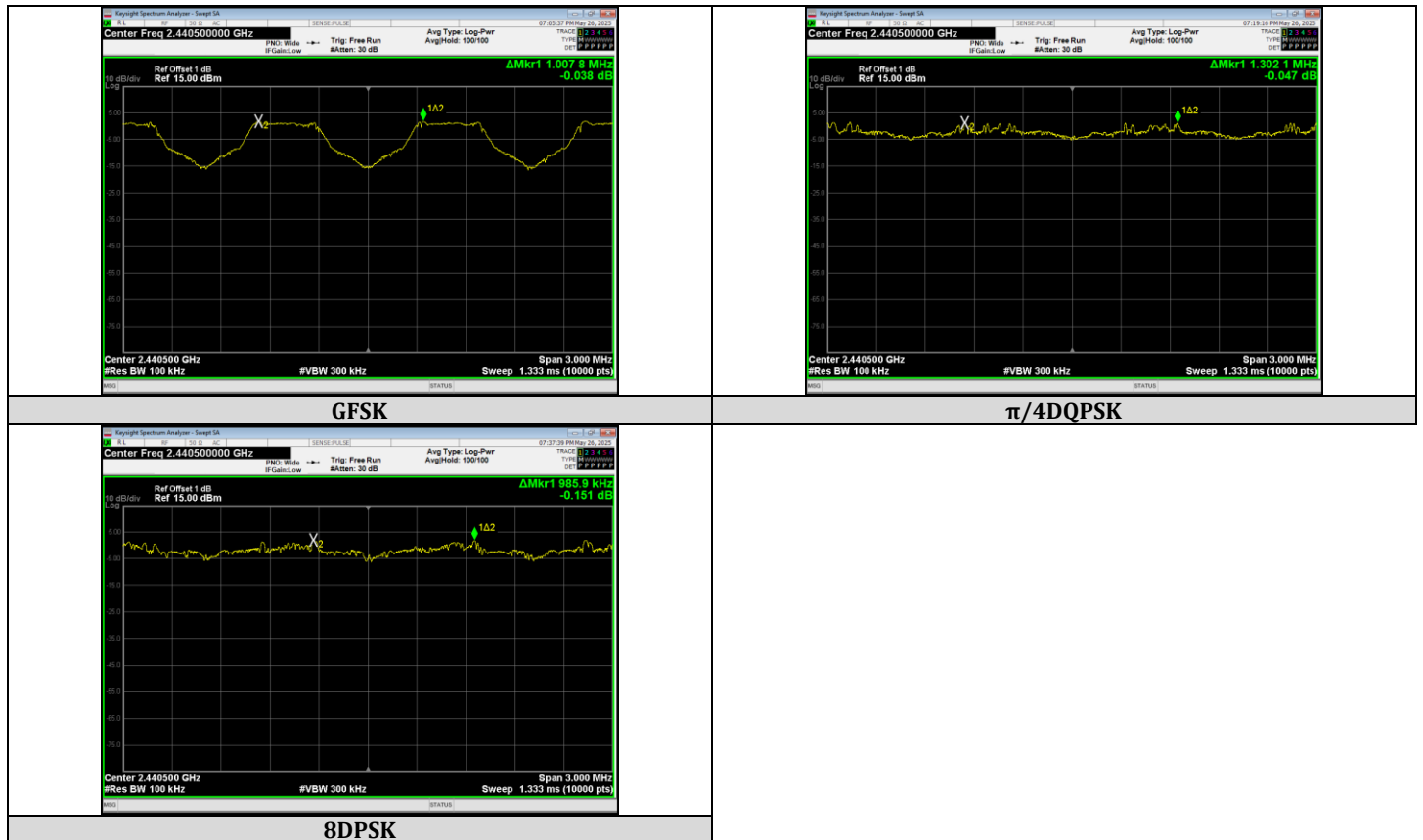
8DPSK_3-DH5_Channel 78

Carrier Frequencies Separation

Test Result

Modulation	Packet	Left Center frequency (MHz)	Right Center frequency (MHz)	Hopping Frequency Separation (MHz)	Limit (MHz)	Result
GFSK	DH5	2439.829	2440.8368	1.0078	0.629	PASS
$\pi/4$ DQPSK	2-DH5	2439.8422	2441.1443	1.3021	0.859	PASS
8DPSK	3-DH5	2440.165	2441.1509	0.9859	0.867	PASS

Test Graphs



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

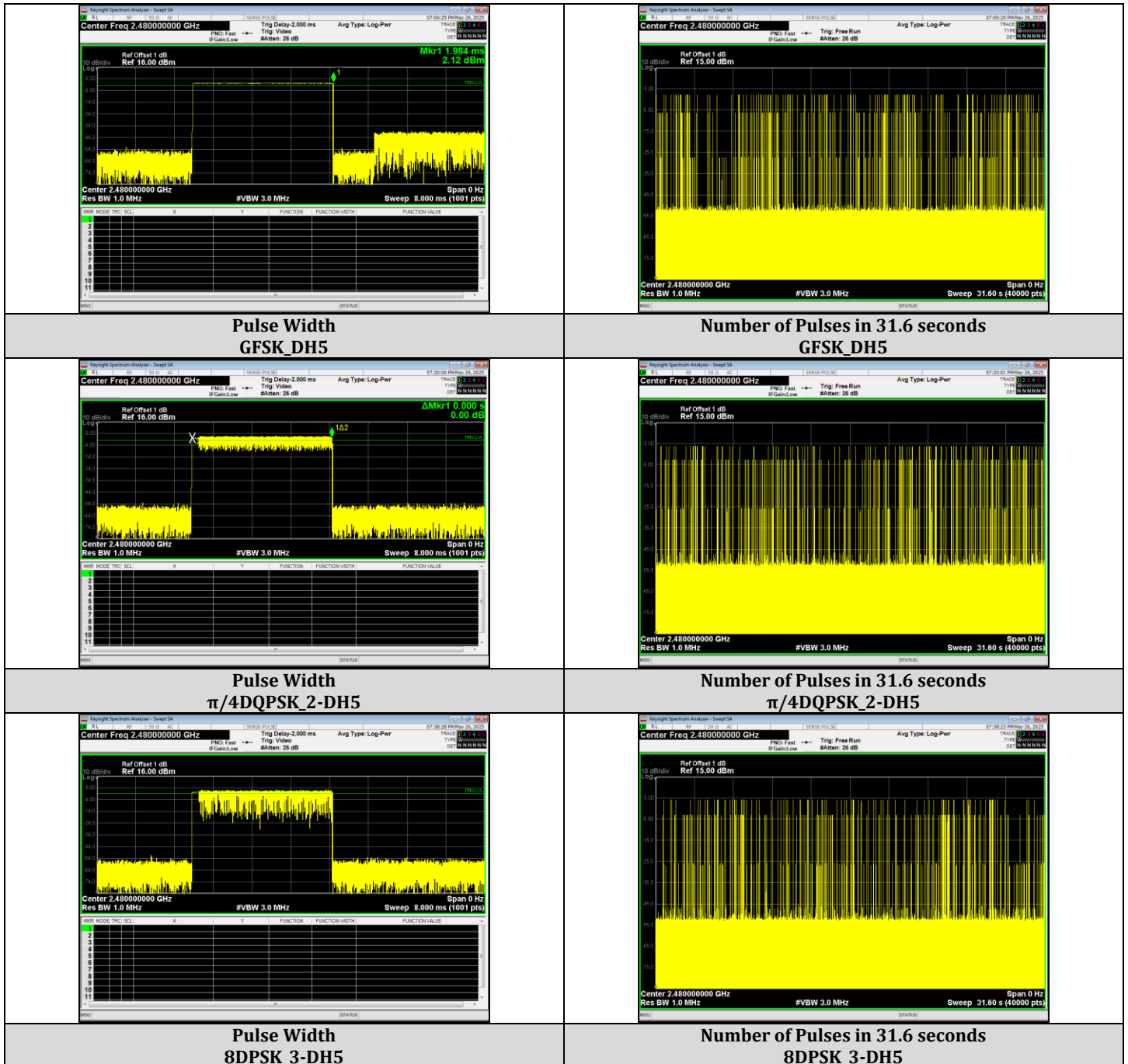


Dwell Time

Test Result

Modulation	Packet	Channel	Pulse Width (ms)	Number of Pulses in 31.6 seconds	Dwell Time (ms)	Limit (ms)	Result
GFSK	DH5	CH78 (2480MHz)	2.896	122	353.31	< 400	PASS
$\pi/4$ DQPSK	2-DH5		2.880	108	311.04		PASS
8DPSK	3-DH5		2.896	93	269.33		PASS

Test Graphs



Conducted Out Of Band Emission

Test Result

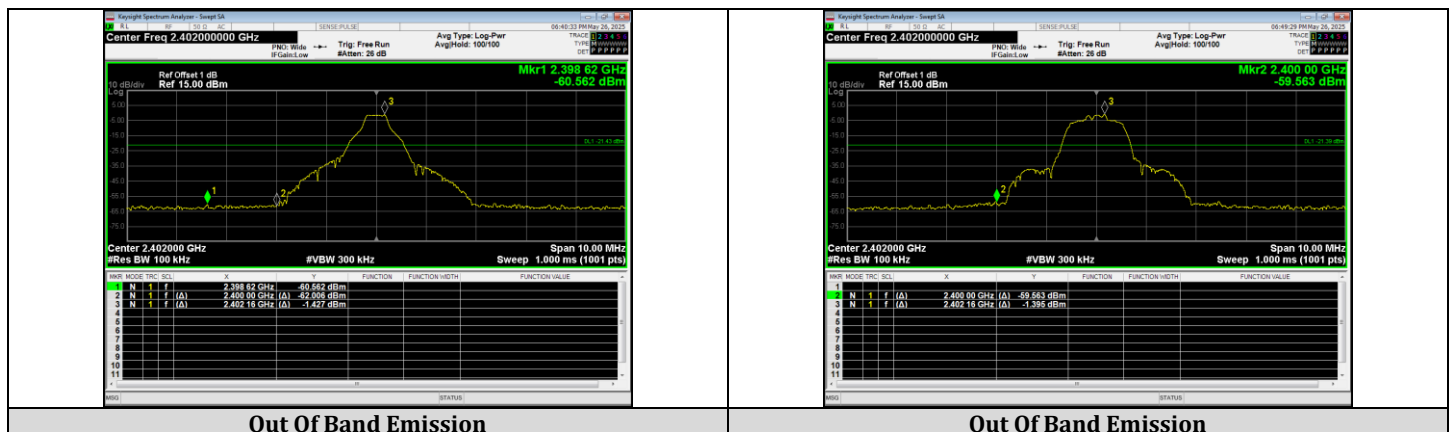
Non-Hopping

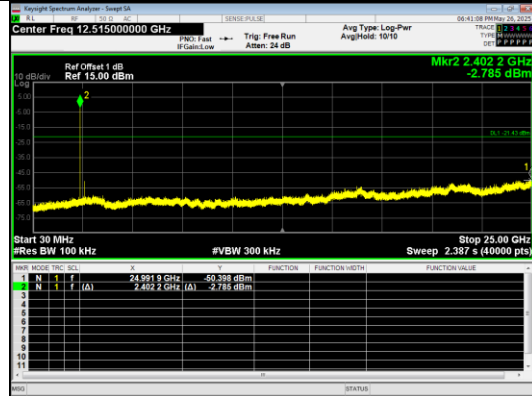
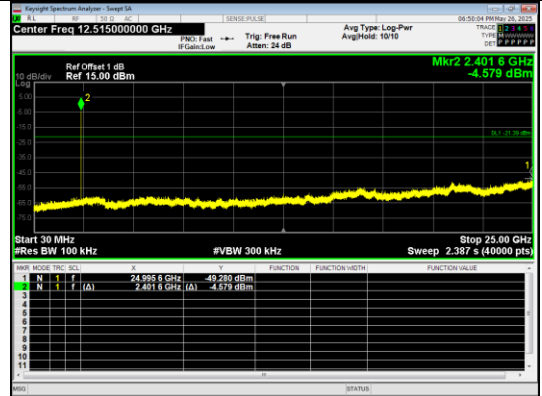
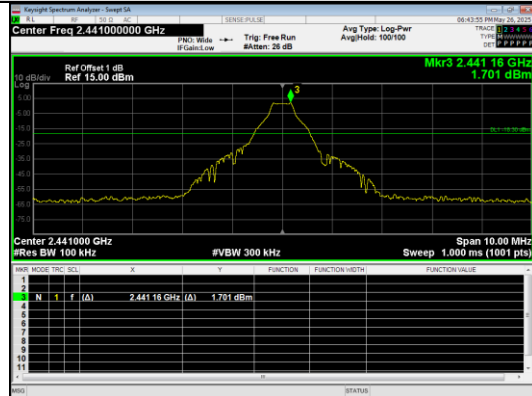
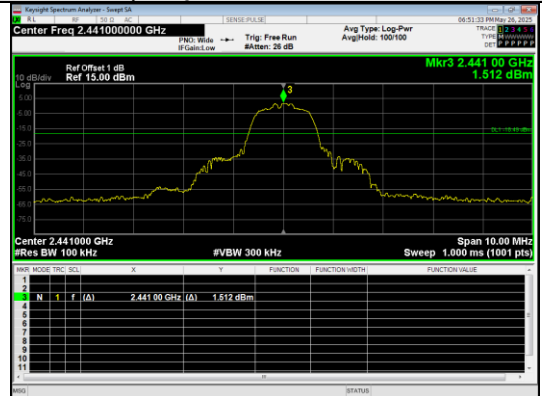
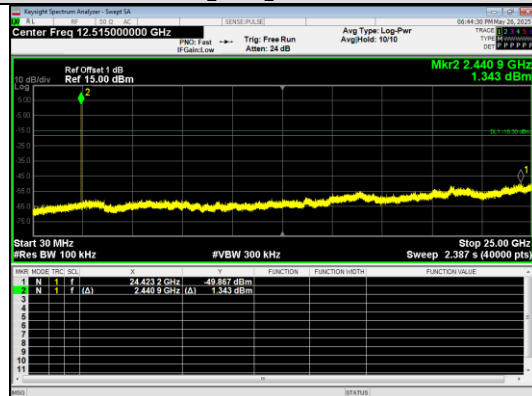
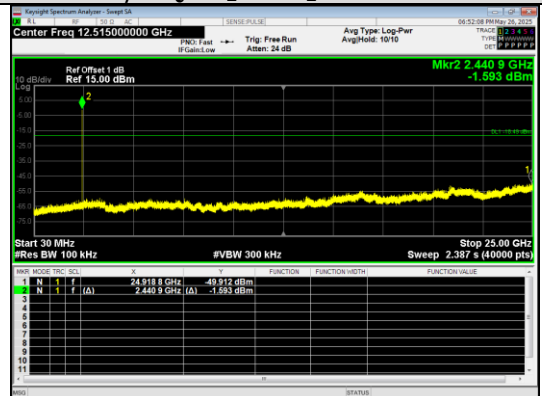
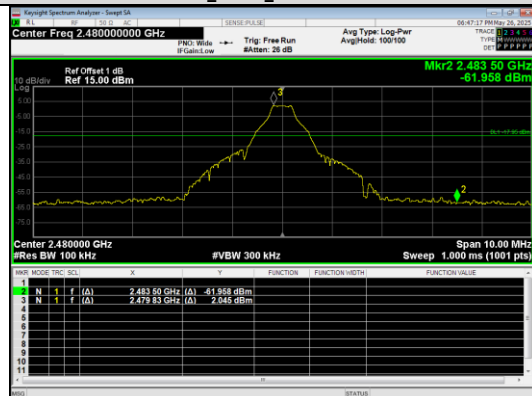
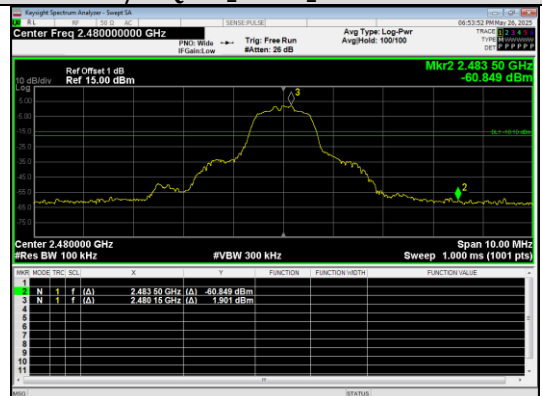
Modulation	Packet	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
GFSK	DH5	0	2398.62	-60.562	-21.43	-39.132	PASS
			2400.00	-62.006	-21.43	-40.576	PASS
			24991.9	-50.398	-21.43	-28.968	PASS
		39	24423.2	-49.867	-18.3	-31.567	PASS
		78	2483.50	-61.958	-17.95	-44.008	PASS
			24316.4	-49.877	-17.95	-31.927	PASS
$\pi/4$ DQPSK	2-DH5	0	2400.00	-59.563	-21.39	-38.173	PASS
			24995.6	-49.280	-21.39	-27.890	PASS
		39	24918.8	-49.912	-18.49	-31.422	PASS
		78	2483.50	-60.849	-18.1	-42.749	PASS
			24953.8	-49.761	-18.1	-31.661	PASS
8DPSK	3-DH5	0	2400.00	-59.236	-21.35	-37.886	PASS
			24956.9	-50.001	-21.35	-28.651	PASS
		39	24964.4	-49.411	-18.28	-31.131	PASS
		78	2483.50	-61.359	-18.04	-43.319	PASS
			24948.8	-49.928	-18.04	-31.888	PASS

Hopping

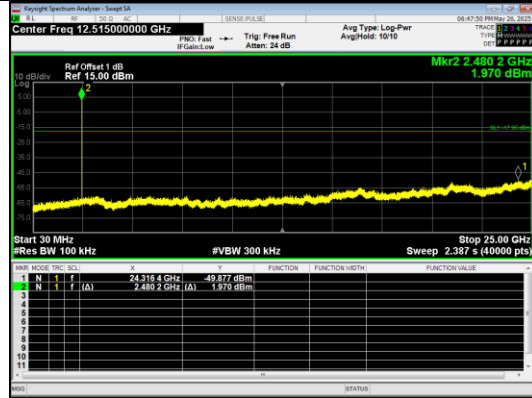
Modulation	Packet	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
GFSK	DH5	Hopping	2395.04	-60.663	-20.92	-39.743	PASS
			2400.00	-61.503	-20.92	-40.583	PASS
			2483.50	-60.374	-17.57	-42.804	PASS
π/4DQPSK	2-DH5		2398.98	-60.149	-20.96	-39.189	PASS
			2400.00	-61.171	-20.96	-40.211	PASS
			2483.50	-62.510	-17.91	-44.600	PASS
8DPSK	3-DH5		2395.00	-60.767	-21.25	-39.517	PASS
			2400.00	-61.518	-21.25	-40.268	PASS
			2483.50	-62.311	-17.54	-44.771	PASS

Test Graphs



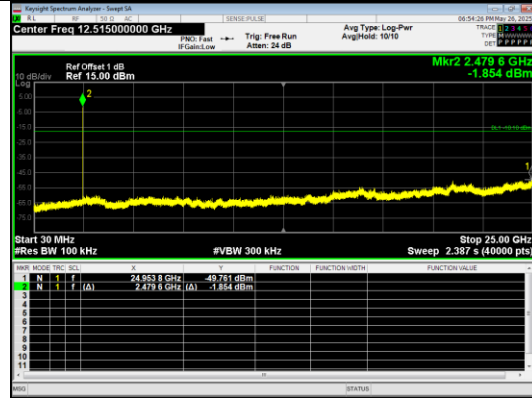
GFSK_DH5_Channel 0

 $\pi/4$ 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

GFSK_DH5_Channel 78

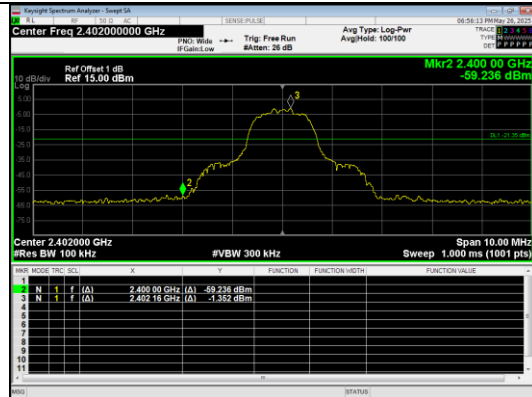


30.0 MHz - 25000.0 MHz
GFSK_DH5_Channel 78

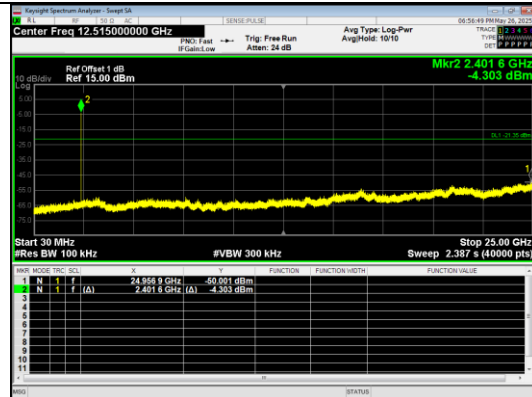
$\pi/4$ DQPSK 2-DH5_Channel 78



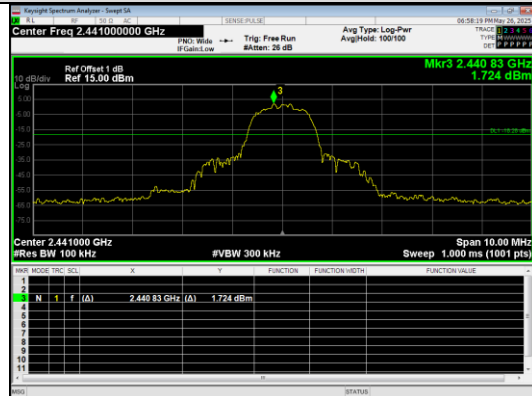
30.0 MHz - 25000.0 MHz
 $\pi/4$ DQPSK 2-DH5_Channel 78



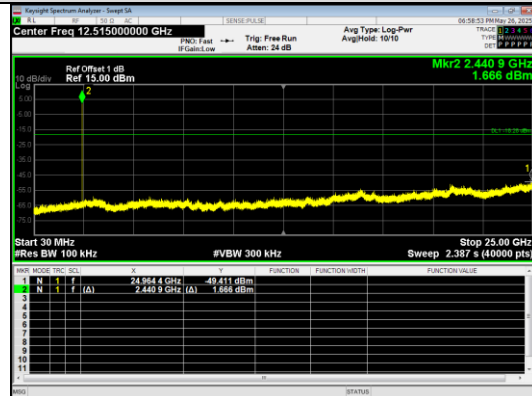
Out Of Band Emission
8DPSK_3-DH5_Channel 0



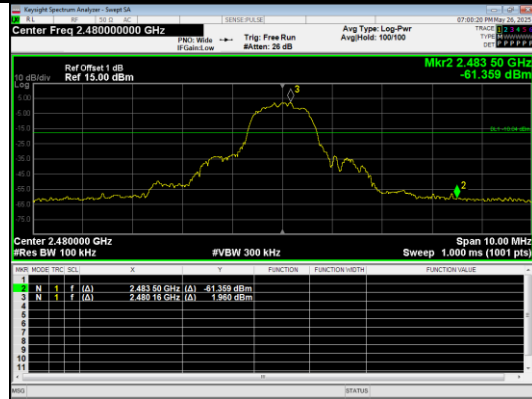
30.0 MHz - 25000.0 MHz
8DPSK_3-DH5_Channel 0



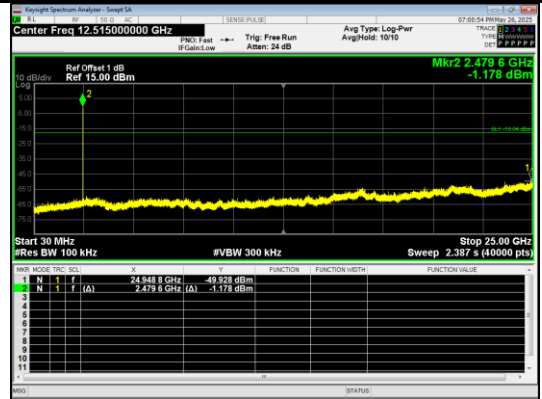
Out Of Band Emission
8DPSK_3-DH5_Channel 39



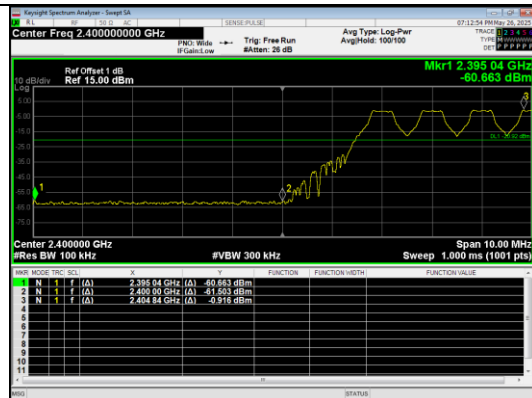
30.0 MHz - 25000.0 MHz
8DPSK_3-DH5_Channel 39



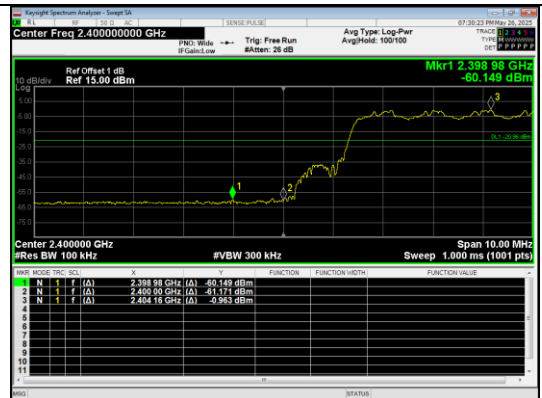
Out Of Band Emission
8DPSK_3-DH5_Channel 78



30.0 MHz - 25000.0 MHz
8DPSK_3-DH5_Channel 78



Out Of Band Emission (Left)
GFSK_DH5_Channel Hopping



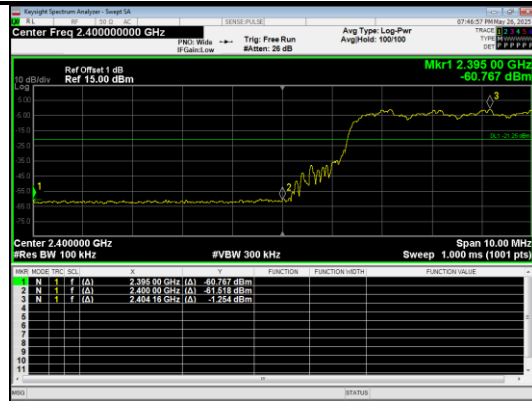
Out Of Band Emission (Left)
 $\pi/4$ DQPSK_2-DH5_Channel Hopping



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 *****