

Appendix A for test data:

1. Conducted Peak Output Power

Test Result

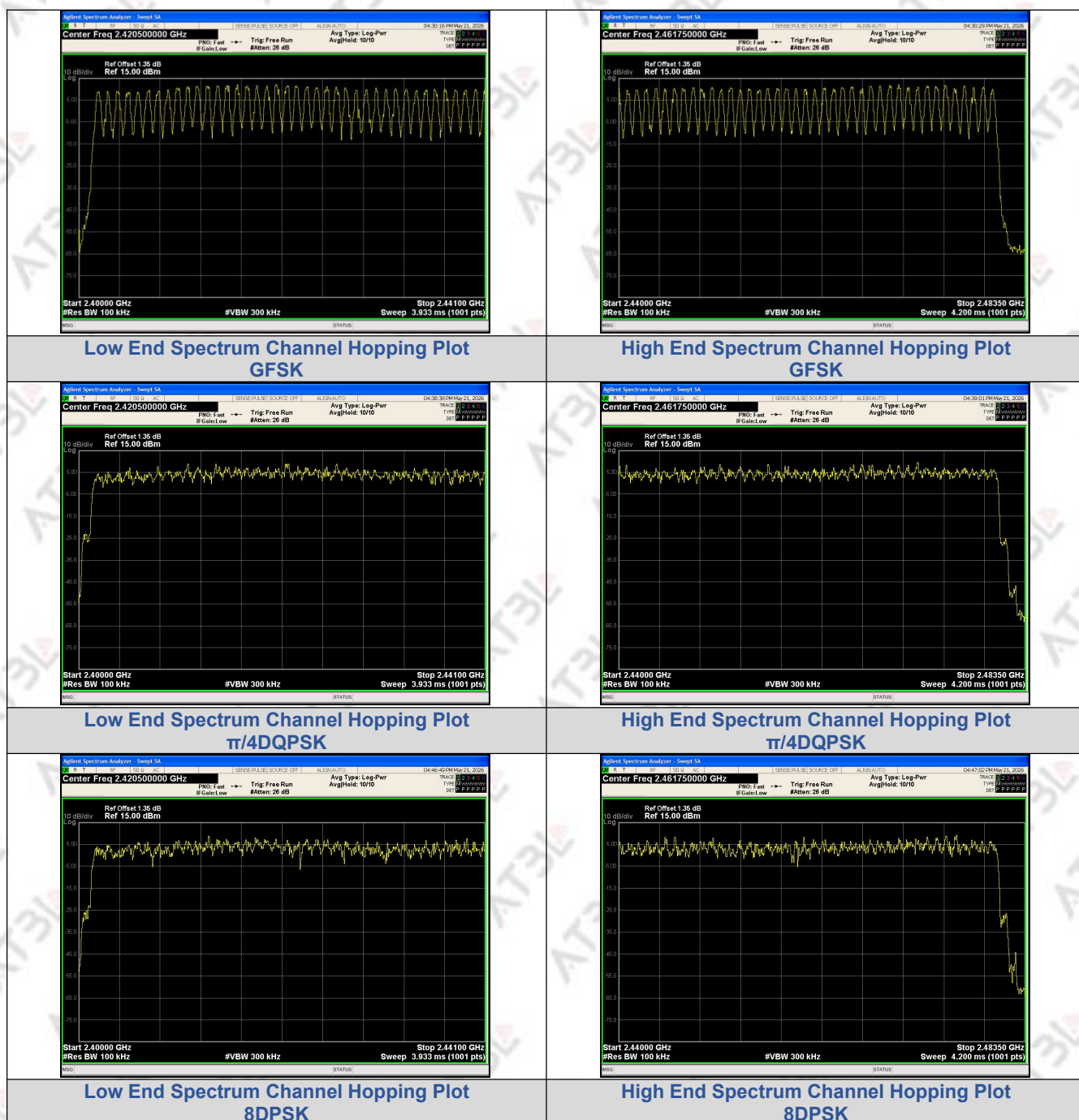
Modulation	Packet Type	Channel	Peak Output Power (dBm)	Peak Output Power Limit (dBm)	Result
GFSK	DH5	0	9.03	≤ 21	PASS
		39	10.43	≤ 21	PASS
		78	10.76	≤ 21	PASS
$\pi/4$ DQPSK	2-DH5	0	8.19	≤ 21	PASS
		39	9.56	≤ 21	PASS
		78	10.07	≤ 21	PASS
8DPSK	3-DH5	0	8.38	≤ 21	PASS
		39	9.78	≤ 21	PASS
		78	10.29	≤ 21	PASS

2.Number of Hopping Frequencies

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



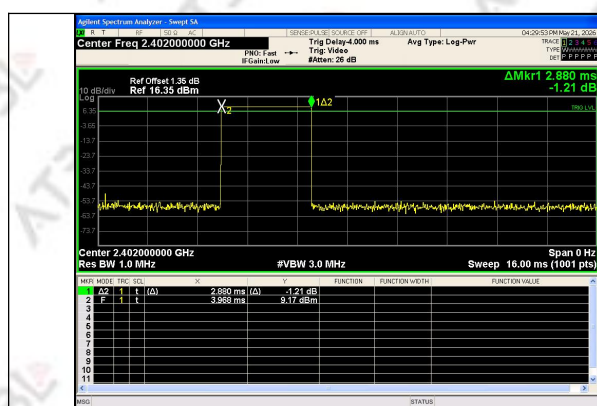
3.Dwell Time

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		2.880	102	293.76		PASS
8DPSK	3-DH5		2.880	110	316.8		PASS

Note: Dwell time=Pulse time(ms)*Number of Pulses in 31.6 seconds

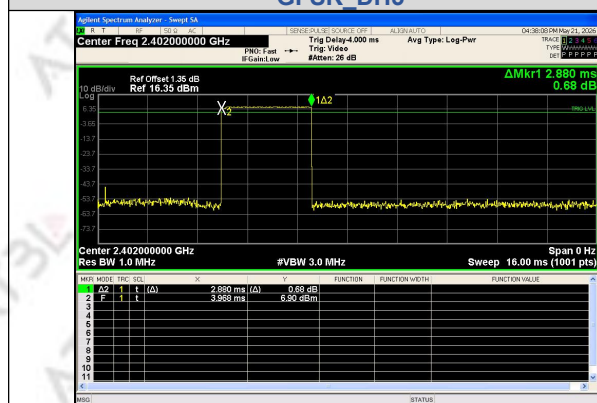
Test Graphs



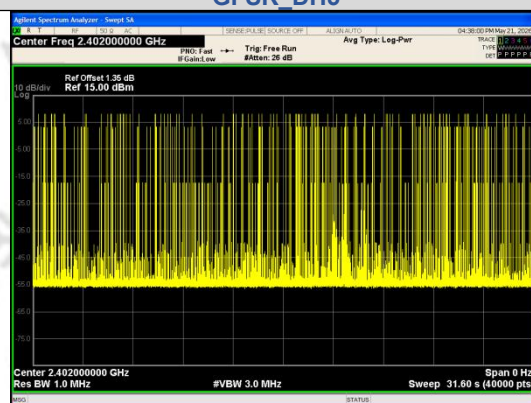
Pulse Width
GFSK DH5



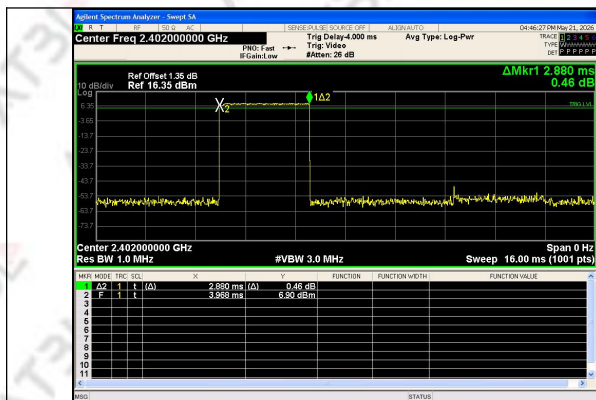
Number of Pulses in 31.6 seconds
GFSK DH5



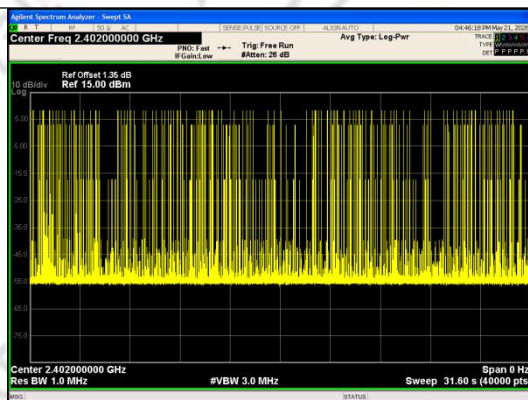
Pulse Width
 $\pi/4$ DQPSK 2-DH5



Number of Pulses in 31.6 seconds
 $\pi/4$ DQPSK 2-DH5



Pulse Width
8DPSK_3-DH5



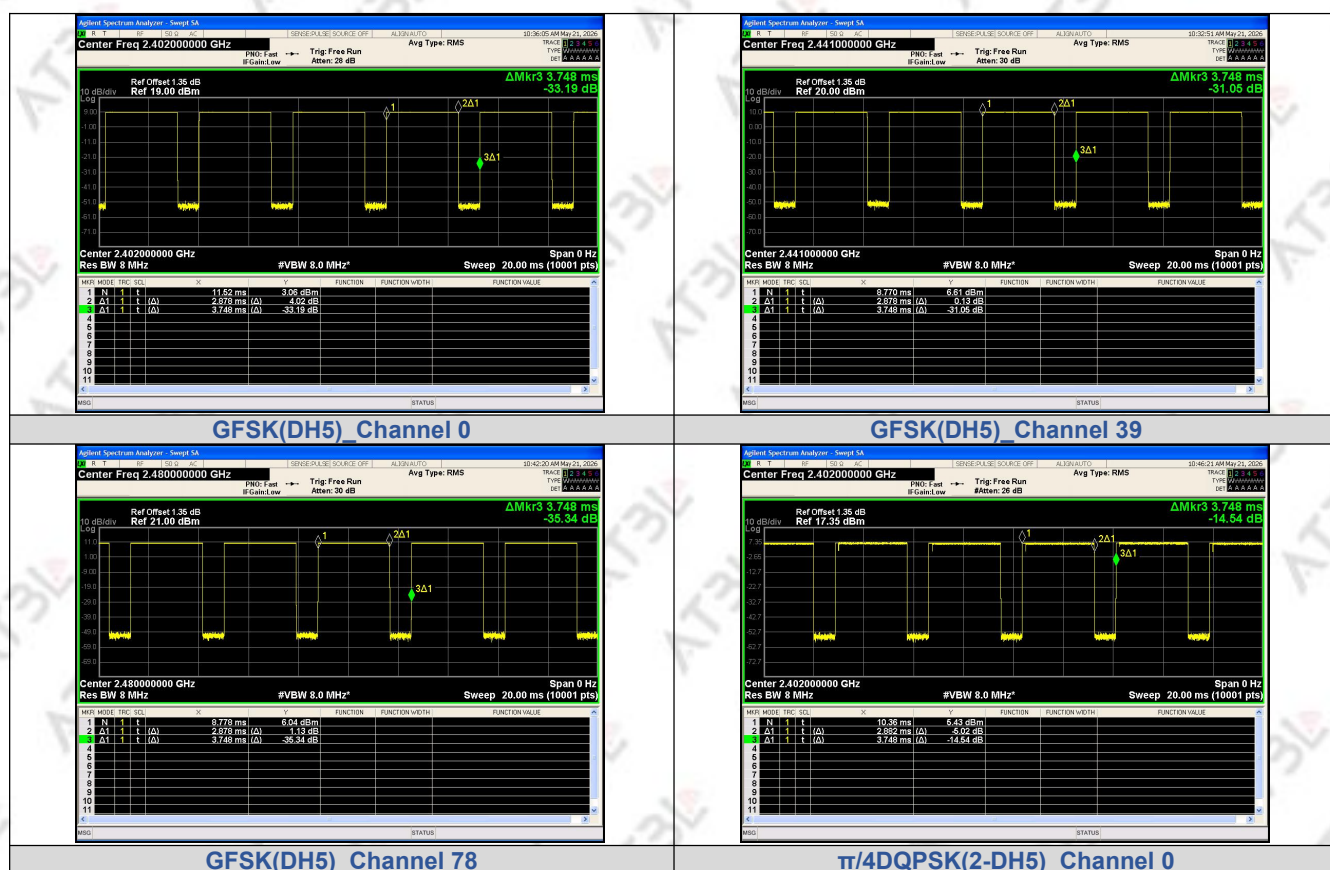
Number of Pulses in 31.6 seconds
8DPSK_3-DH5

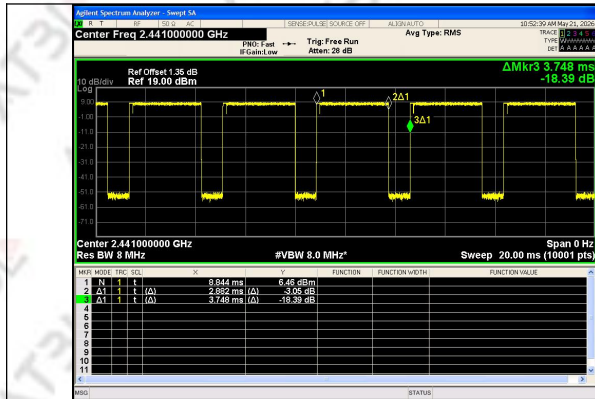
4.Duty Cycle

Test Result

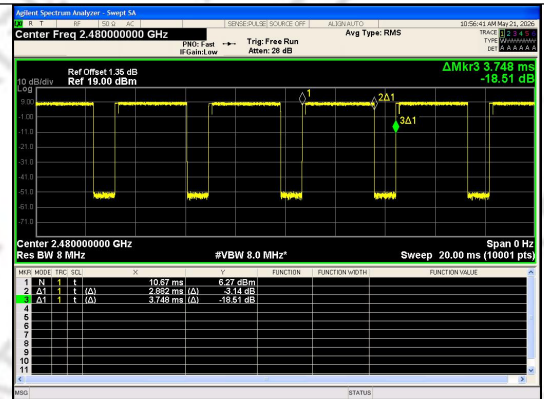
Modulation	Packets	Channel	On Time (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle (linear)	Duty Cycle Factor (dB)	1/T
GFSK	DH5	0	2.878	3.748	76.79	0.7679	1.147	0.3475
		39	2.878	3.748	76.79	0.7679	1.147	0.3475
		78	2.878	3.748	76.79	0.7679	1.147	0.3475
$\pi/4$ DQPSK	2-DH5	0	2.882	3.748	76.89	0.7689	1.1413	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
8DPSK	3-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

Test Graphs

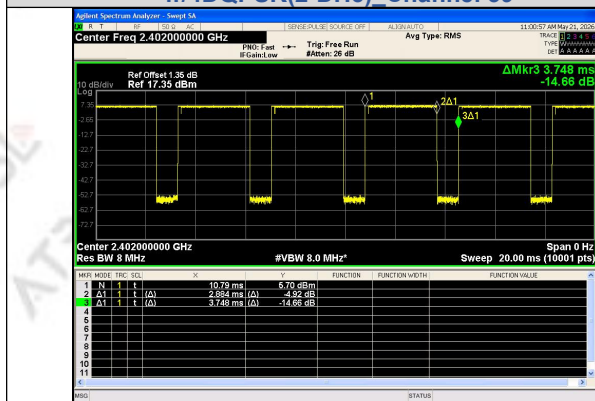




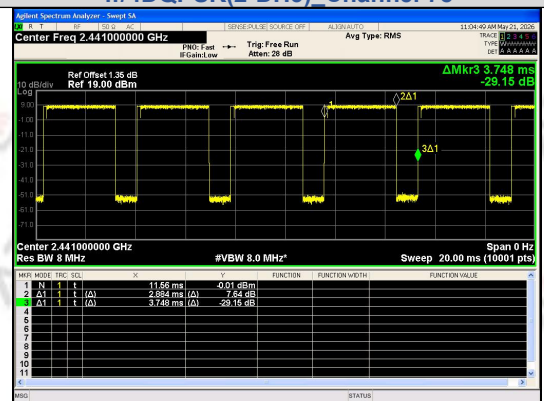
$\pi/4$ DQPSK(2-DH5)_Channel 39



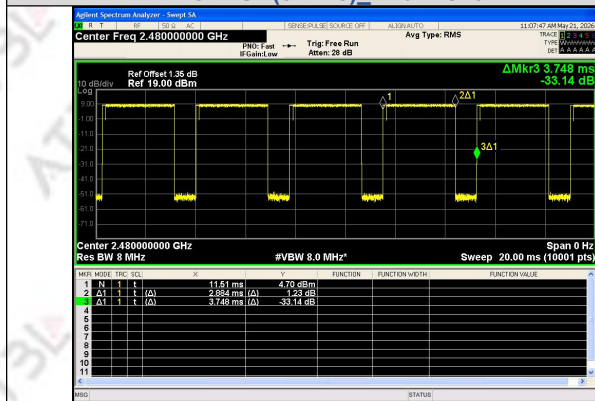
$\pi/4$ DQPSK(2-DH5)_Channel 78



8DPSK(3-DH5)_Channel 0



8DPSK(3-DH5)_Channel 39



8DPSK(3-DH5)_Channel 78

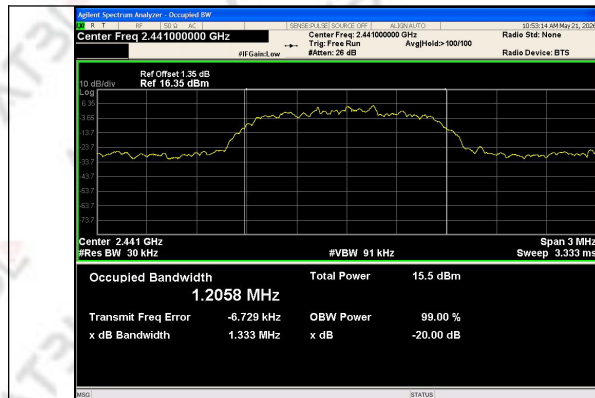
5.20dB Bandwidth

Test Result

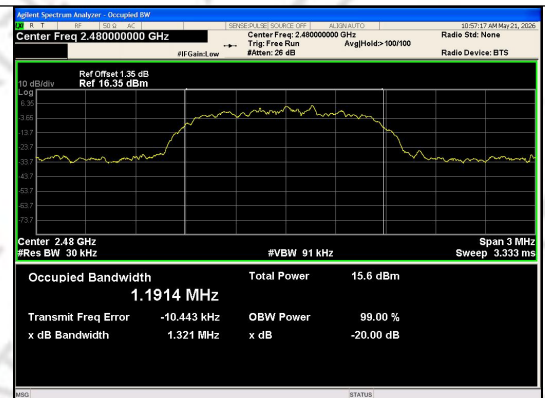
Modulation	Channel	Center Frequency (MHz)	20 dB Bandwidth (MHz)
GFSK	0	2402 MHz	0.85
	39	2441 MHz	0.85
	78	2480 MHz	0.85
$\pi/4$ DQPSK	0	2402 MHz	1.32
	39	2441 MHz	1.33
	78	2480 MHz	1.32
8DPSK	0	2402 MHz	1.31
	39	2441 MHz	1.33
	78	2480 MHz	1.32

Test Graphs

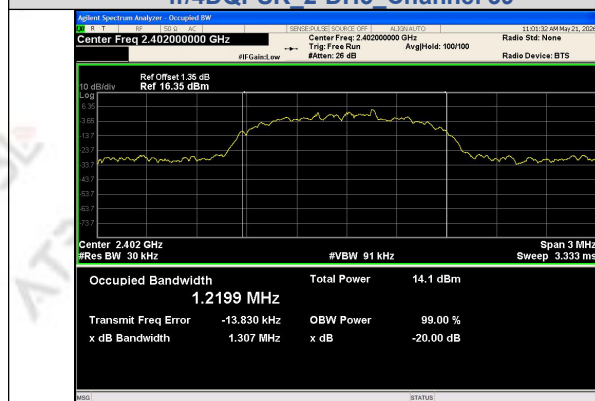




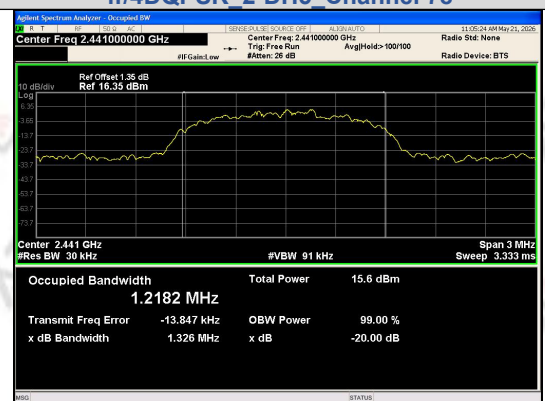
$\pi/4$ DQPSK 2-DH5 Channel 39



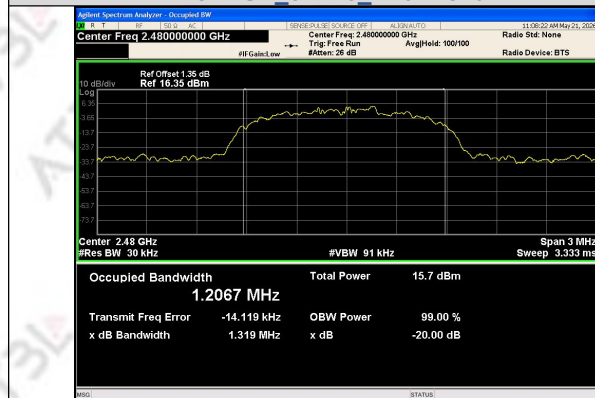
$\pi/4$ DQPSK 2-DH5 Channel 78



8DPSK 3-DH5 Channel 0



8DPSK 3-DH5 Channel 39



8DPSK 3-DH5 Channel 78

6.Carrier Frequencies Separation Test Result

Modulation	Packet	Left Center frequency (MHz)	Right Center frequency (MHz)	Hopping Frequency Separation (MHz)	Limit (MHz)	Result
GFSK	DH5	2440.1542	2441.1533	0.9991	0.57	PASS
$\pi/4$ DQPSK	2-DH5	2440.1143	2441.1092	0.9949	0.889	PASS
8DPSK	3-DH5	2439.9256	2441.4761	1.5506	0.884	PASS

Test Graphs



7. Conducted Spurious & Band Edge Emission

Test Result

Modulation	Packet	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
GFSK	DH5	0	2400.00	-54.951	-11.19	-43.761	PASS
			4804.89	-65.064	-11.19	-53.874	PASS
			7205.75	-56.667	-11.19	-45.477	PASS
			9607.24	-65.349	-11.19	-54.159	PASS
			24804.0	-52.203	-11.19	-41.013	PASS
		39	4882.30	-61.941	-9.78	-52.161	PASS
			7323.74	-56.139	-9.78	-46.359	PASS
			9763.31	-66.957	-9.78	-57.177	PASS
			24718.5	-52.539	-9.78	-42.759	PASS
		78	2483.50	-61.360	-9.51	-51.850	PASS
			4960.33	-62.428	-9.51	-52.918	PASS
			7439.85	-56.429	-9.51	-46.919	PASS
$\pi/4$ DQPSK	2-DH5	0	2398.49	-49.344	-13.41	-35.934	PASS
			2400.00	-49.775	-13.41	-36.365	PASS
			4804.90	-65.819	-13.41	-52.409	PASS
			7205.80	-66.260	-13.41	-52.850	PASS
			9607.90	-66.726	-13.41	-53.316	PASS
		39	24991.3	-52.848	-13.41	-39.438	PASS
			4881.05	-65.208	-12.04	-53.168	PASS
			7323.74	-62.832	-12.04	-50.792	PASS
			9764.55	-65.253	-12.04	-53.213	PASS
			24935.1	-51.928	-12.04	-39.888	PASS
		78	2483.50	-56.615	-11.91	-44.705	PASS
			4959.08	-64.023	-11.91	-52.113	PASS
8DPSK	3-DH5	0	2400.00	-49.028	-13.36	-35.668	PASS
			4803.64	-65.611	-13.36	-52.251	PASS
			7205.13	-62.339	-13.36	-48.979	PASS
			9607.87	-66.387	-13.36	-53.027	PASS
			24777.1	-52.013	-13.36	-38.653	PASS
		39	4881.67	-63.760	-11.9	-51.860	PASS
			5763.11	-46.371	-11.9	-34.471	PASS
			7323.11	-64.103	-11.9	-52.203	PASS
			9764.55	-66.465	-11.9	-54.565	PASS
		78	2483.50	-54.707	-11.78	-42.927	PASS
			4960.33	-62.742	-11.78	-50.962	PASS
			7440.47	-63.897	-11.78	-52.117	PASS
			9920.62	-64.656	-11.78	-52.876	PASS
			24922.6	-52.696	-11.78	-40.916	PASS

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

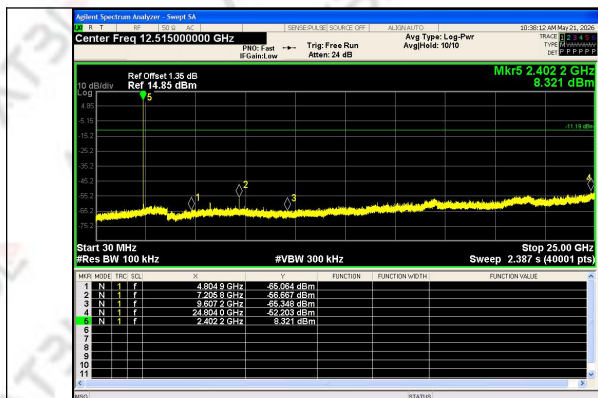
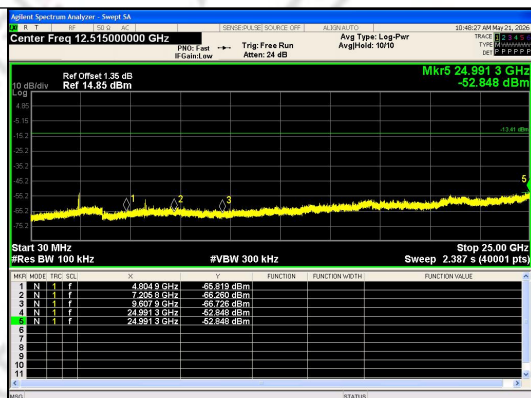
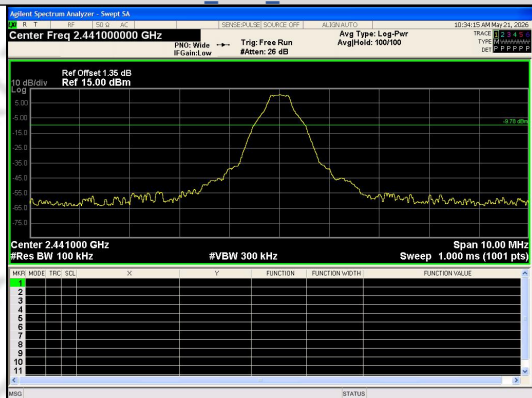
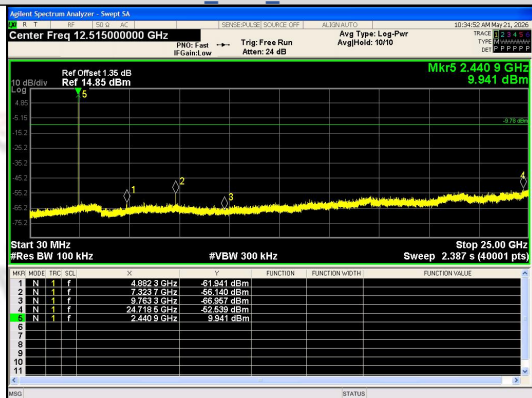
Hopping

Hopping							
Modulation	Packet	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
GFSK	DH5	Hopping	2392.19	-45.114	-10.59	-34.524	PASS
			2400.00	-46.410	-10.59	-35.820	PASS
			2483.50	-61.489	-8.05	-53.439	PASS
π/4DQPSK	2-DH5		2398.18	-43.524	-12.61	-30.914	PASS
			2400.00	-49.041	-12.61	-36.431	PASS
			2483.50	-57.564	-10.69	-46.874	PASS
8DPSK	3-DH5		2400.00	-44.730	-13.96	-30.770	PASS
			2483.50	-58.718	-10.44	-48.278	PASS
Note: input compensation coefficient (dB)= Cable Loss (dB)							

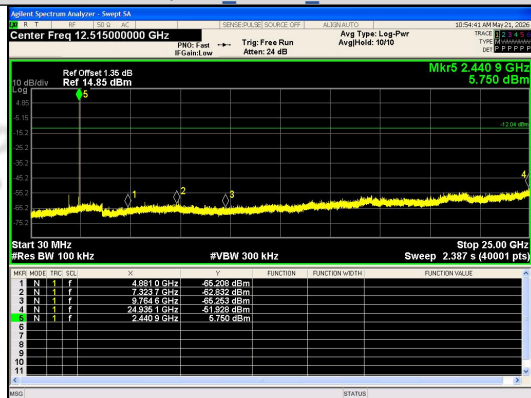
Note: input compensation coefficient (dB)= Cable Loss (dB)

Test Graphs



30.0 MHz - 25000.0 MHz
GFSK DH5 Channel 030.0 MHz - 25000.0 MHz
 $\pi/4$ DQPSK 2-DH5 Channel 0In-Band Reference Level
GFSK DH5 Channel 39In-Band Reference Level
 $\pi/4$ DQPSK 2-DH5 Channel 39Out Of Band Emission
GFSK DH5 Channel 39Out Of Band Emission
 $\pi/4$ DQPSK 2-DH5 Channel 39

30.0 MHz - 25000.0 MHz



30.0 MHz - 25000.0 MHz