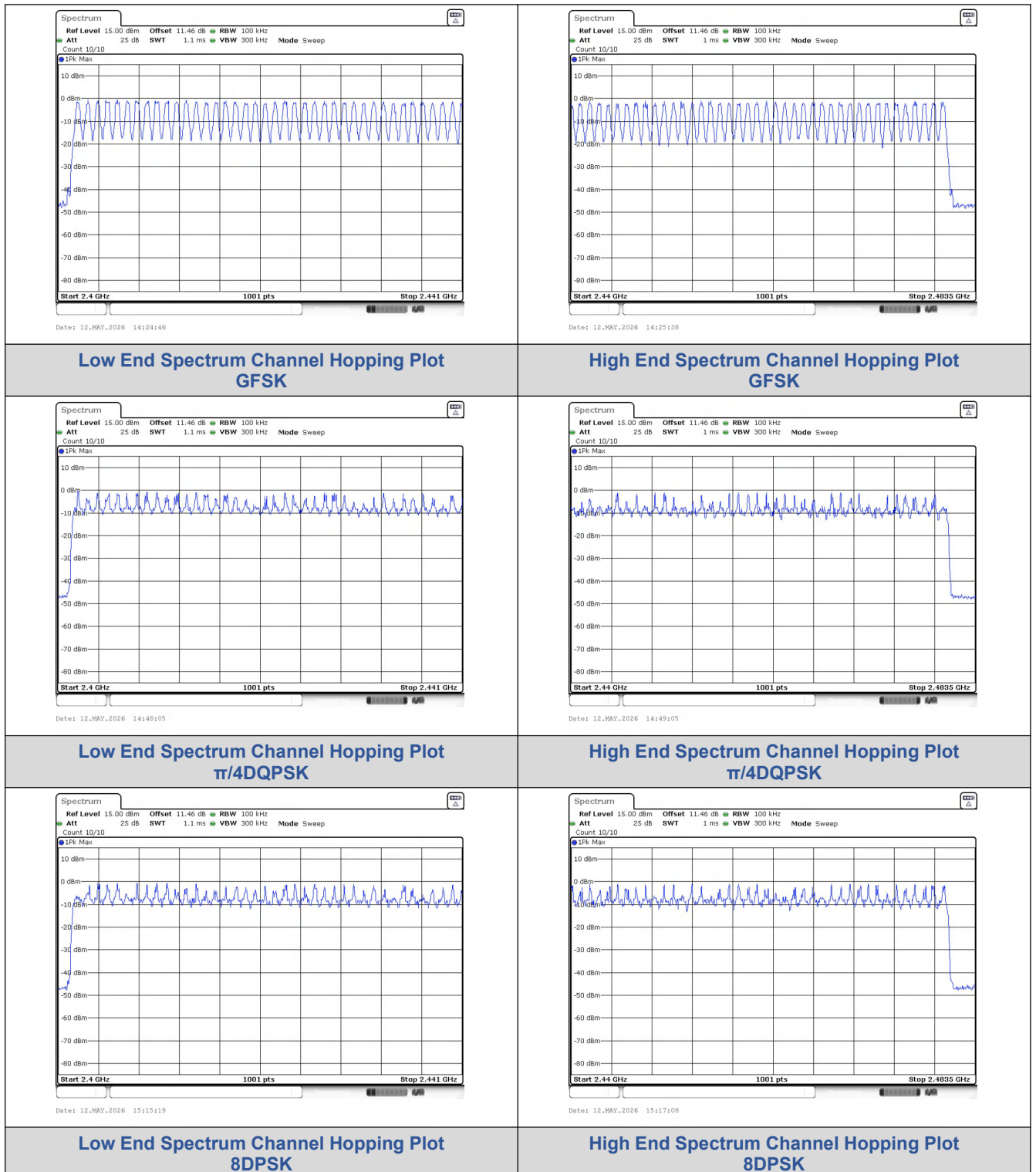


Right:

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



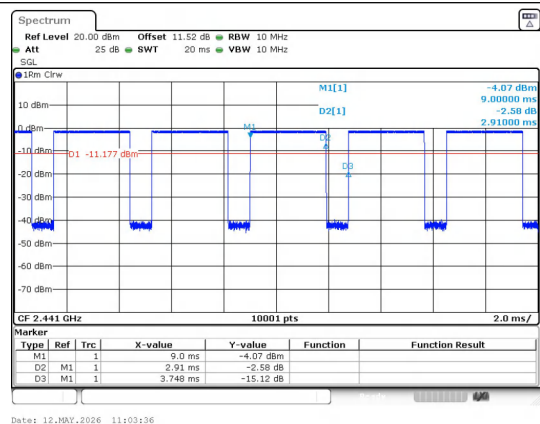
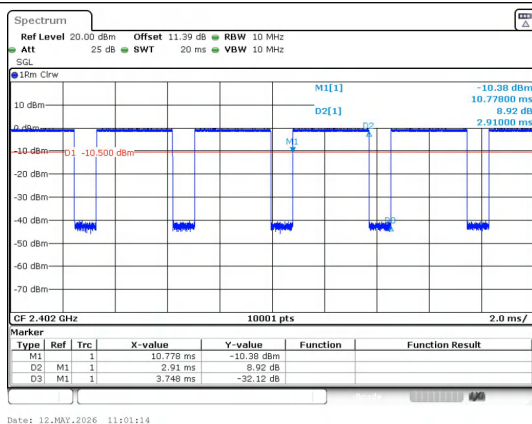
7.5. Duty Cycle

Test Result

Left:

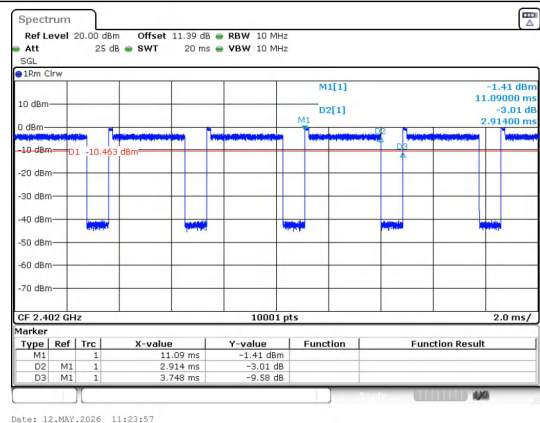
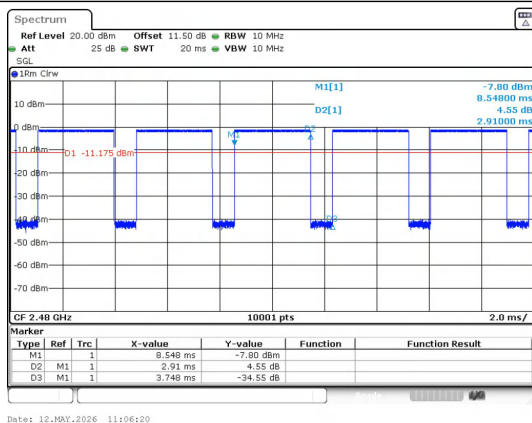
Modulation	Packets	Channel	On Time (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle (linear)	Duty Cycle Factor (dB)	1/T
GFSK	DH5	0	2.910	3.748	77.64	0.7764	1.0991	0.3436
		39	2.910	3.748	77.64	0.7764	1.0991	0.3436
		78	2.910	3.748	77.64	0.7764	1.0991	0.3436
$\pi/4$ DQPSK	2-DH5	0	2.914	3.748	77.75	0.7775	1.093	0.3432
		39	2.916	3.748	77.80	0.7780	1.0902	0.3429
		78	2.916	3.748	77.80	0.7780	1.0902	0.3429
8DPSK	3-DH5	0	2.916	3.748	77.80	0.7780	1.0902	0.3429
		39	2.918	3.748	77.85	0.7785	1.0874	0.3427
		78	2.918	3.748	77.85	0.7785	1.0874	0.3427

Test Graphs



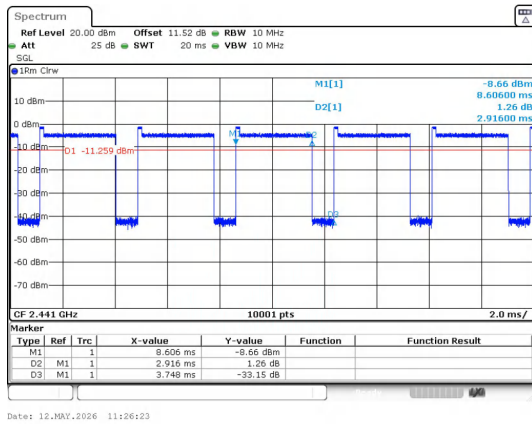
GFSK(DH5)_Channel 0

GFSK(DH5)_Channel 39

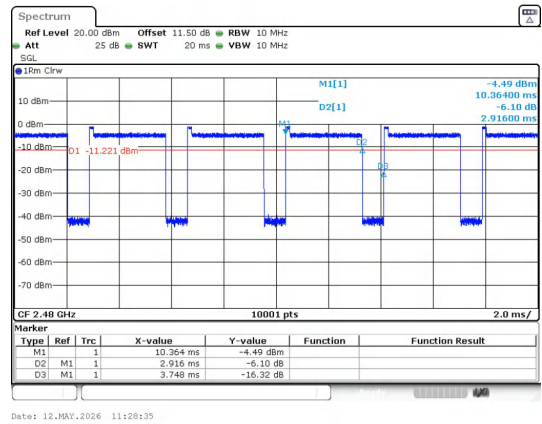


GFSK(DH5)_Channel 78

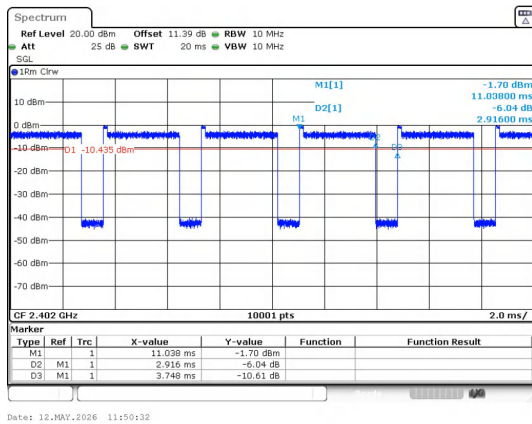
$\pi/4$ DQPSK(2-DH5)_Channel 0



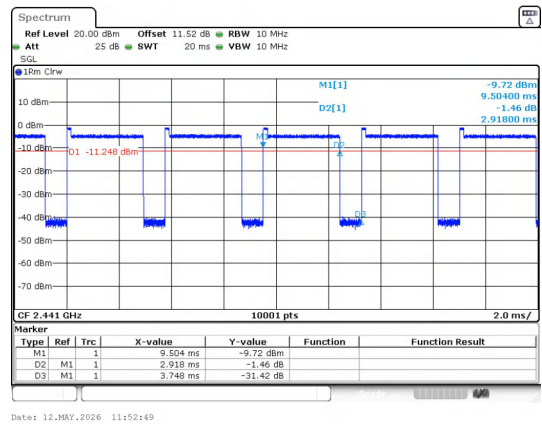
$\pi/4$ DQPSK(2-DH5)_Channel 39



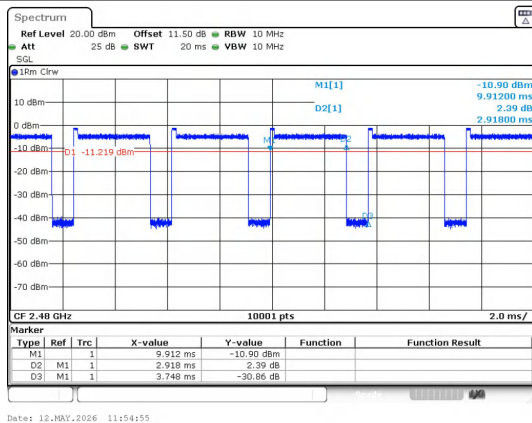
$\pi/4$ DQPSK(2-DH5)_Channel 78



8DPSK(3-DH5)_Channel 0



8DPSK(3-DH5)_Channel 39

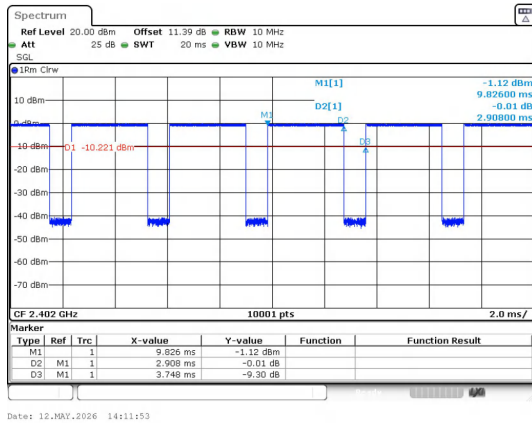


8DPSK(3-DH5)_Channel 78

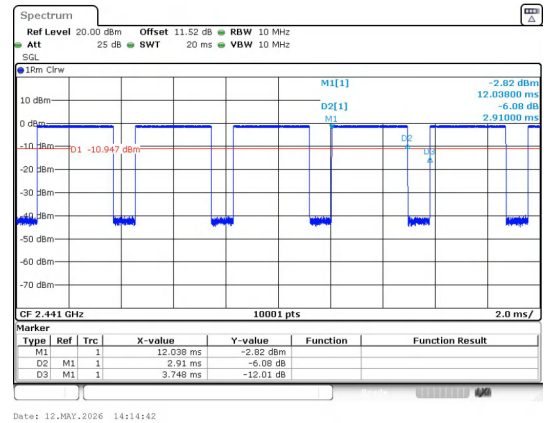
Right:

Modulation	Packets	Channel	On Time (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle (linear)	Duty Cycle Factor (dB)	1/T
GFSK	DH5	0	2.908	3.748	77.59	0.7759	1.1019	0.3439
		39	2.910	3.748	77.64	0.7764	1.0991	0.3436
		78	2.910	3.748	77.64	0.7764	1.0991	0.3436
$\pi/4$ DQPSK	2-DH5	0	2.916	3.748	77.80	0.7780	1.0902	0.3429
		39	2.916	3.748	77.80	0.7780	1.0902	0.3429
		78	2.916	3.748	77.80	0.7780	1.0902	0.3429
8DPSK	3-DH5	0	2.918	3.748	77.85	0.7785	1.0874	0.3427
		39	2.916	3.748	77.80	0.7780	1.0902	0.3429
		78	2.916	3.748	77.80	0.7780	1.0902	0.3429

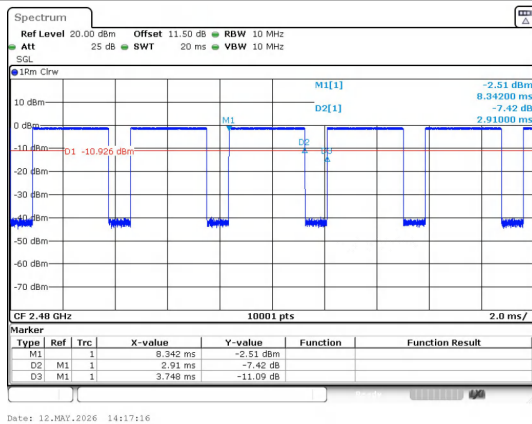
Test Graphs



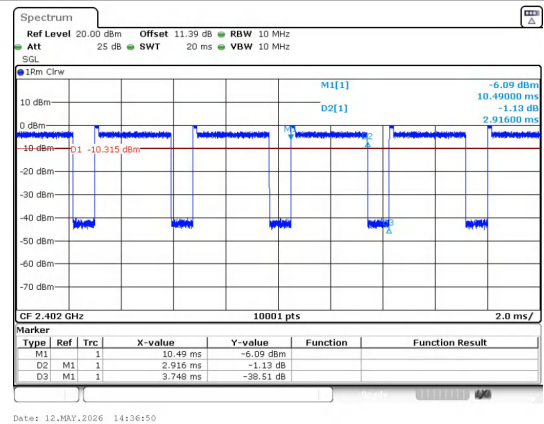
GFSK(DH5)_Channel 0



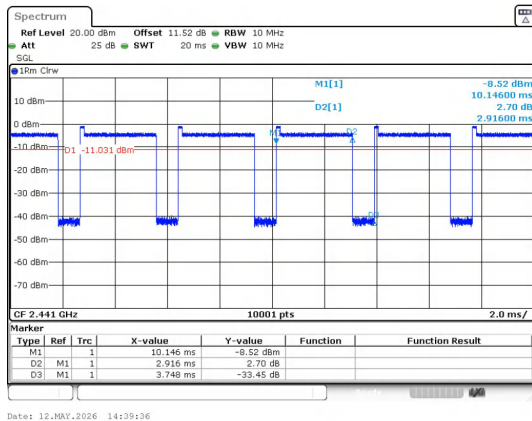
GFSK(DH5)_Channel 39



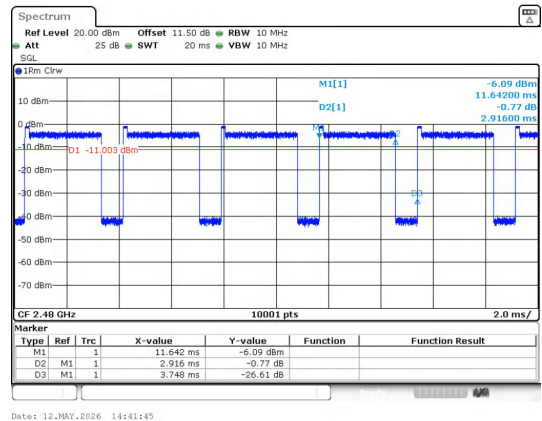
GFSK(DH5)_Channel 78



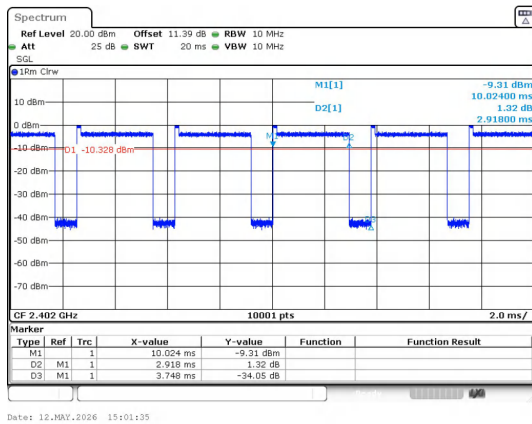
$\pi/4$ DQPSK(2-DH5)_Channel 0



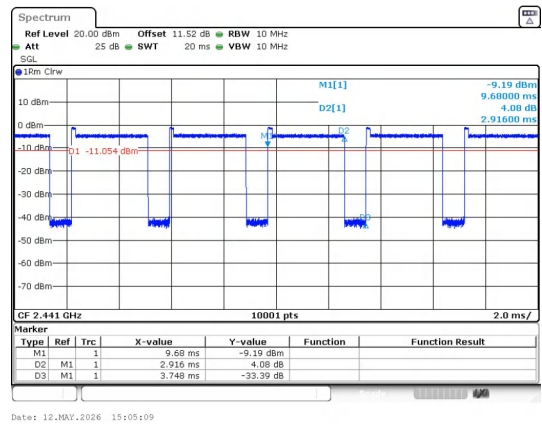
$\pi/4$ DQPSK(2-DH5)_Channel 39



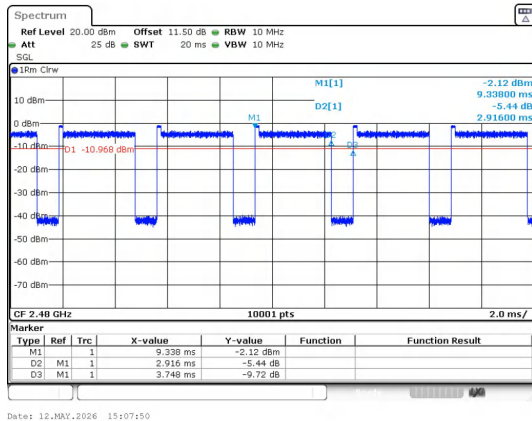
$\pi/4$ DQPSK(2-DH5)_Channel 78



8DPSK(3-DH5)_Channel 0



8DPSK(3-DH5)_Channel 39



8DPSK(3-DH5)_Channel 78

7.6. Dwell Time

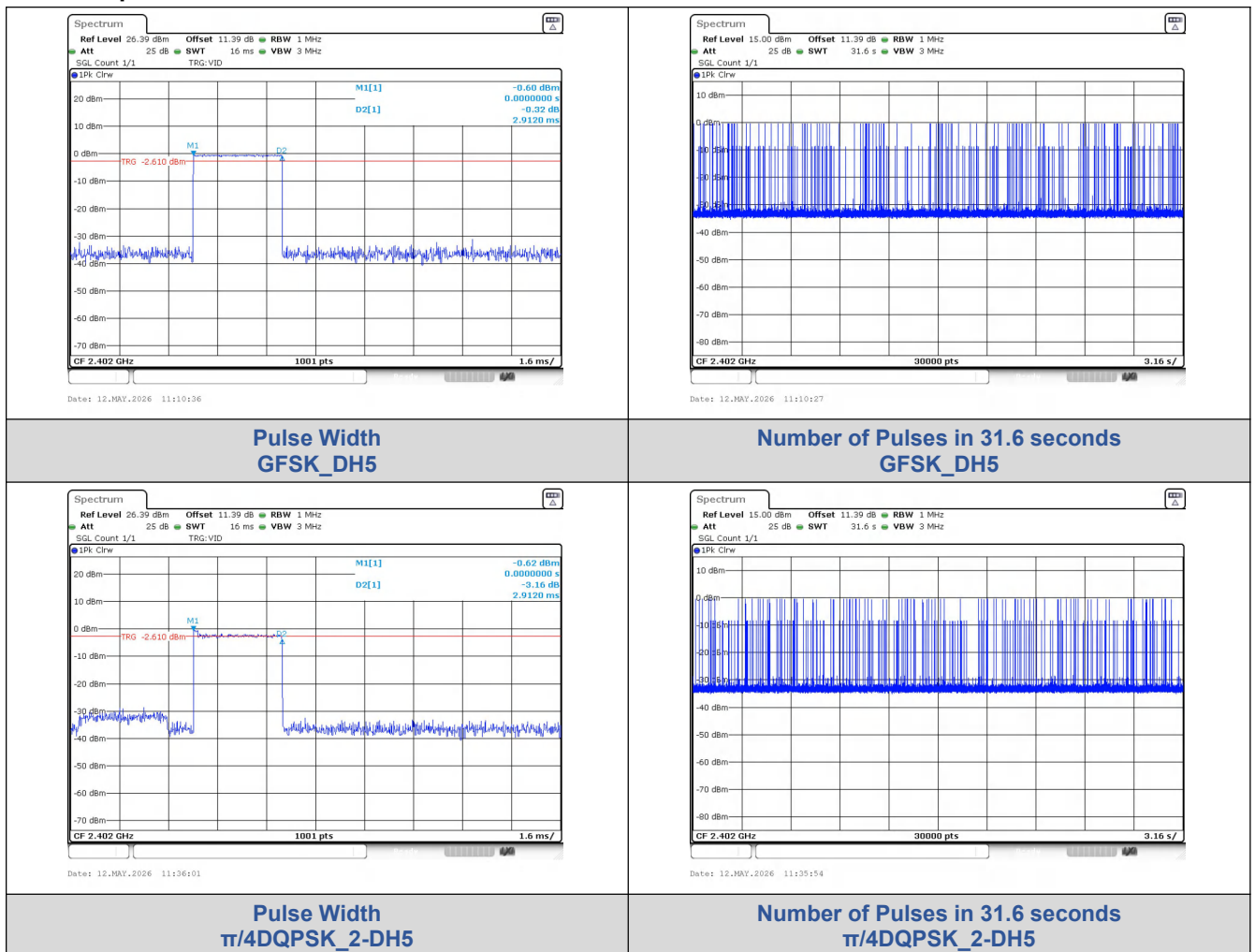
Test Result

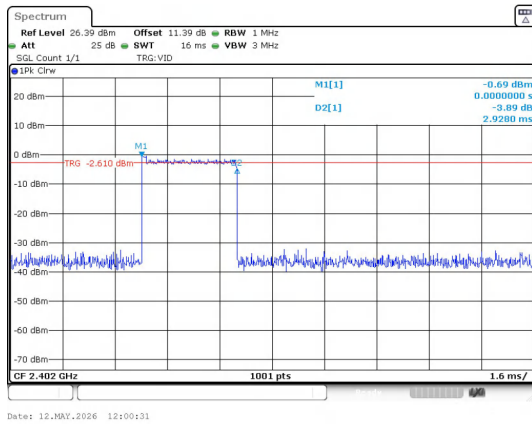
Left:

Modulation	Packet	Channel	Pulse Width (ms)	Number of Pulses in 31.6 seconds	Dwell Time (ms)	Limit (ms)	Result
GFSK	DH5	Hopping	2.912	113	329.06	< 400	PASS
$\pi/4$ DQPSK	2-DH5		2.912	101	294.11		PASS
8DPSK	3-DH5		2.928	94	275.23		PASS

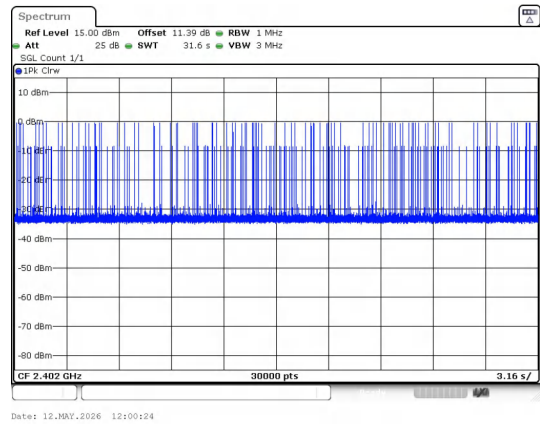
Note: Dwell time=Pulse time(ms)*Number of Pulses in 31.6 seconds

Test Graphs





**Pulse Width
8DPSK_3-DH5**



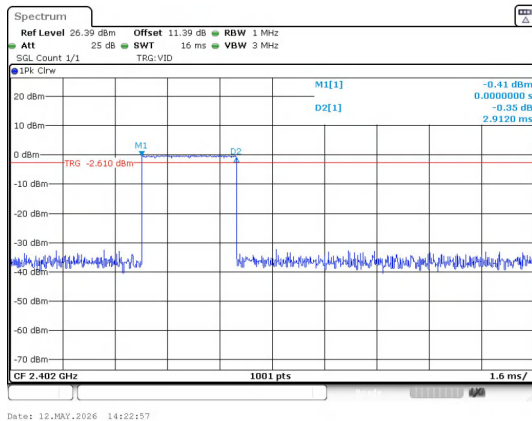
**Number of Pulses in 31.6 seconds
8DPSK_3-DH5**

Right:

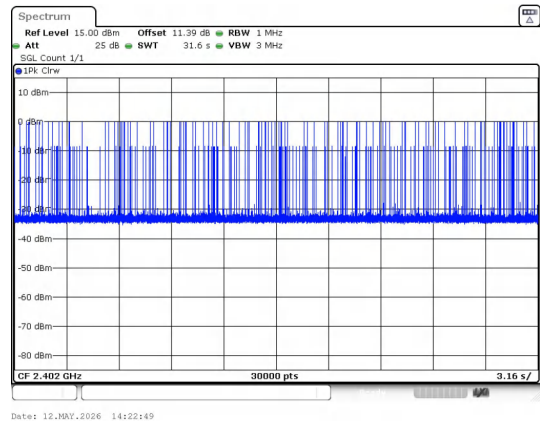
Modulation	Packet	Channel	Pulse Width (ms)	Number of Pulses in 31.6 seconds	Dwell Time (ms)	Limit (ms)	Result
GFSK	DH5	Hopping	2.912	111	323.23	< 400	PASS
$\pi/4$ DQPSK	2-DH5		2.928	114	333.79		PASS
8DPSK	3-DH5		2.928	110	322.08		PASS

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

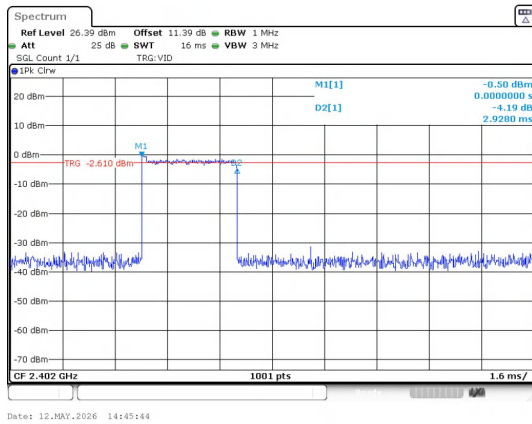
Test Graphs



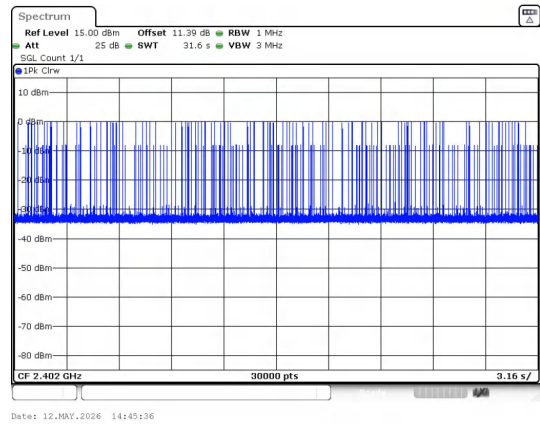
**Pulse Width
GFSK_DH5**



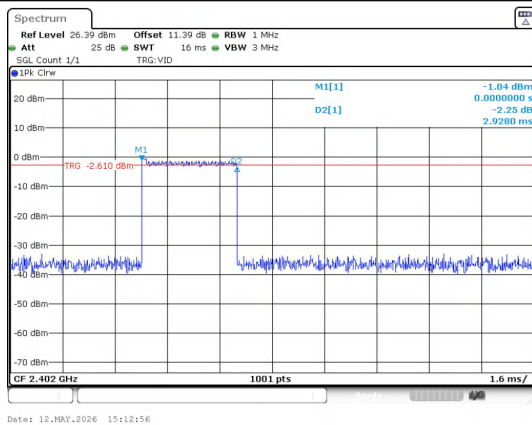
**Number of Pulses in 31.6 seconds
GFSK_DH5**



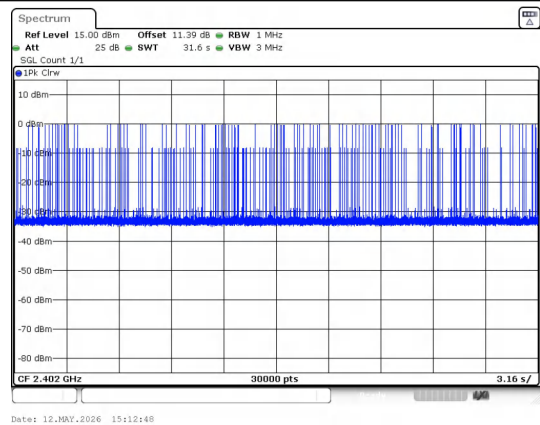
Pulse Width
 $\pi/4$ QPSK_2-DH5



Number of Pulses in 31.6 seconds
 $\pi/4$ QPSK_2-DH5



Pulse Width
8DPSK_3-DH5



Number of Pulses in 31.6 seconds
8DPSK_3-DH5

7.7. Conducted Out Of Band Emission

Test Result

Left:

Non-Hopping

Modulation	Packet	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
GFSK	DH5	0	2397.07	-46.448	-20.63	-25.818	PASS
			2400.00	-47.260	-20.63	-26.630	PASS
			6895.50	-48.079	-20.63	-27.449	PASS
		39	6925.47	-47.664	-21.48	-26.184	PASS
		78	2483.50	-48.400	-21.31	-27.090	PASS
			22069.8	-47.599	-21.31	-26.289	PASS
$\pi/4$ DQPSK	2-DH5	0	2398.77	-46.472	-20.68	-25.792	PASS
			2400.00	-48.560	-20.68	-27.880	PASS
			21977.4	-47.938	-20.68	-27.258	PASS
		39	6954.60	-47.529	-21.48	-26.049	PASS
		78	2483.50	-46.590	-21.27	-25.320	PASS
			6912.98	-47.846	-21.27	-26.576	PASS
8DPSK	3-DH5	0	2397.01	-46.350	-20.71	-25.640	PASS
			2400.00	-47.310	-20.71	-26.600	PASS
			5888.40	-48.580	-20.71	-27.870	PASS
		39	6185.52	-47.495	-21.34	-26.155	PASS
		78	2483.50	-46.980	-21.25	-25.730	PASS
			6902.16	-47.253	-21.25	-26.003	PASS

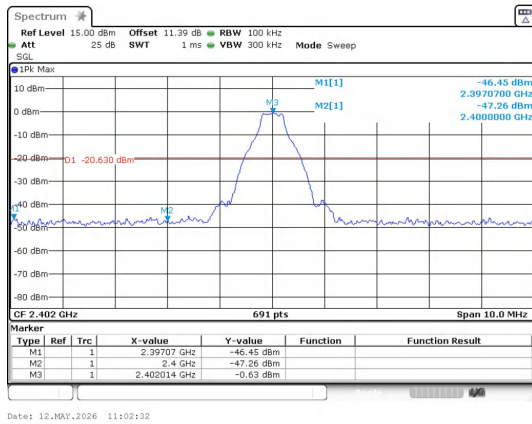
Note: input compensation coefficient (dB)= Cable Loss (dB)

Hopping

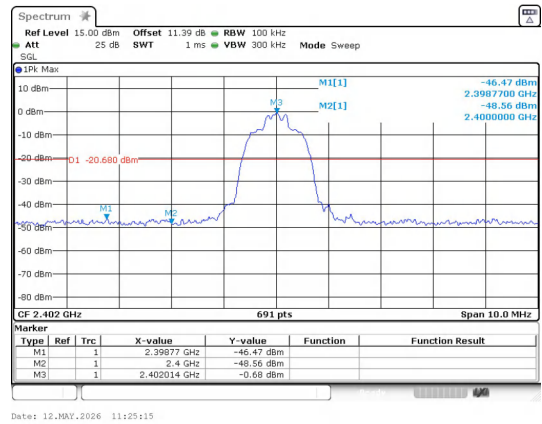
Modulation	Packet	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
GFSK	DH5	Hopping	2397.32	-44.946	-20.64	-24.306	PASS
			2400.00	-46.720	-20.64	-26.080	PASS
			2483.50	-46.240	-21.44	-24.800	PASS
π/4DQPSK	2-DH5		2396.21	-44.725	-20.83	-23.895	PASS
			2400.00	-46.530	-20.83	-25.700	PASS
			2483.50	-46.300	-21.31	-24.990	PASS
8DPSK	3-DH5		2398.97	-43.956	-20.33	-23.626	PASS
			2400.00	-44.970	-20.33	-24.640	PASS
			2483.50	-45.480	-21.1	-24.380	PASS

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

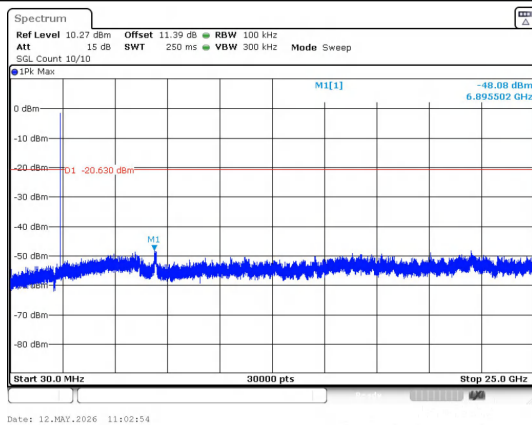
Test Graphs



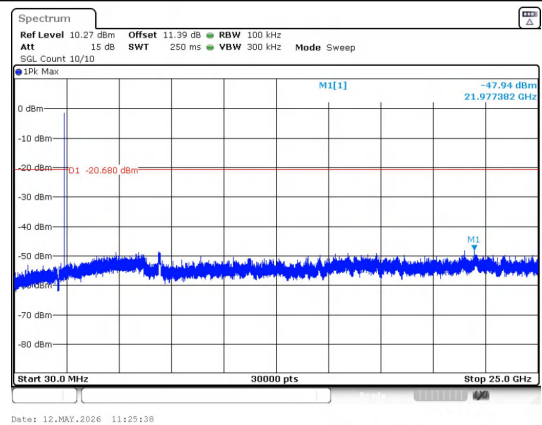
**Out Of Band Emission
GFSK_DH5_Channel 0**



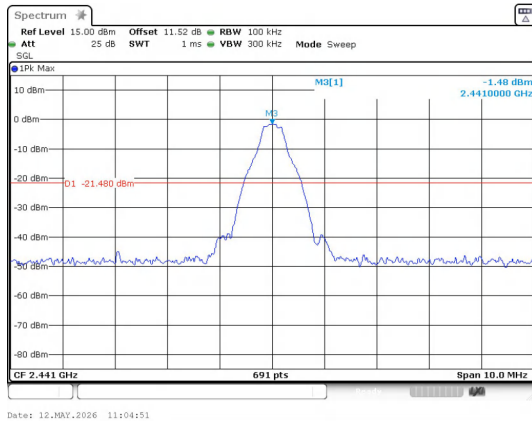
**Out Of Band Emission
π/4DQPSK_2-DH5_Channel 0**



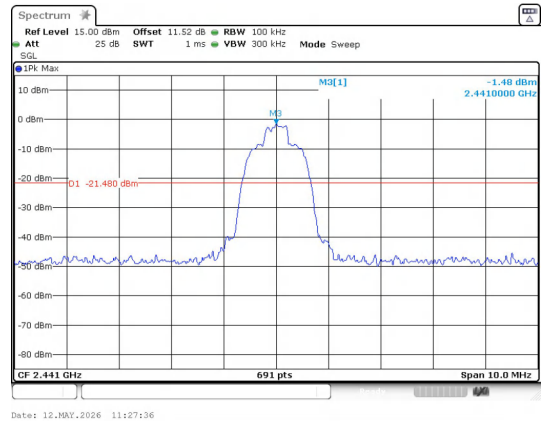
**30.0 MHz - 25000.0 MHz
GFSK_DH5_Channel 0**



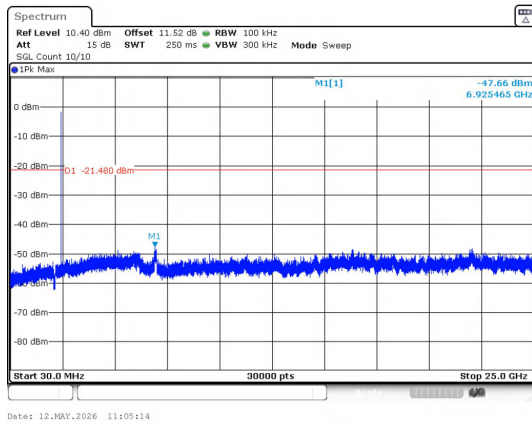
**30.0 MHz - 25000.0 MHz
π/4DQPSK_2-DH5_Channel 0**



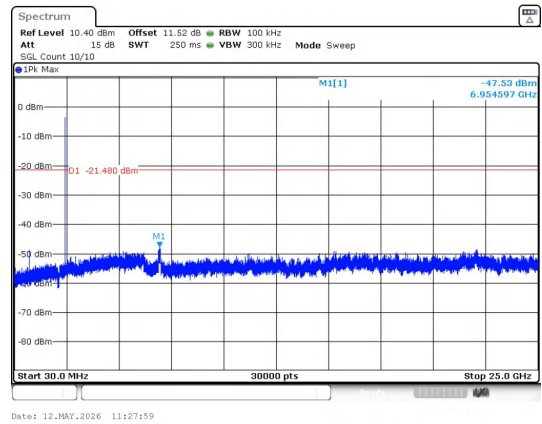
**Out Of Band Emission
GFSK_DH5_Channel 39**



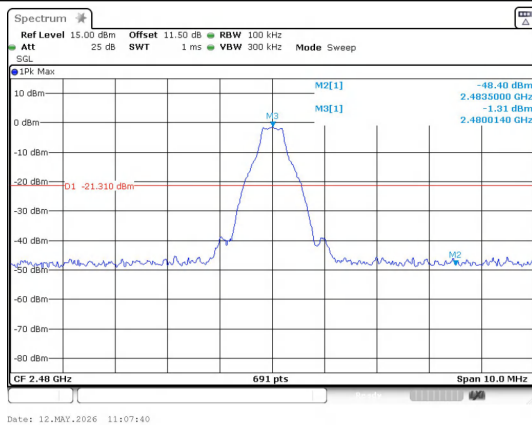
**Out Of Band Emission
π/4DQPSK_2-DH5_Channel 39**



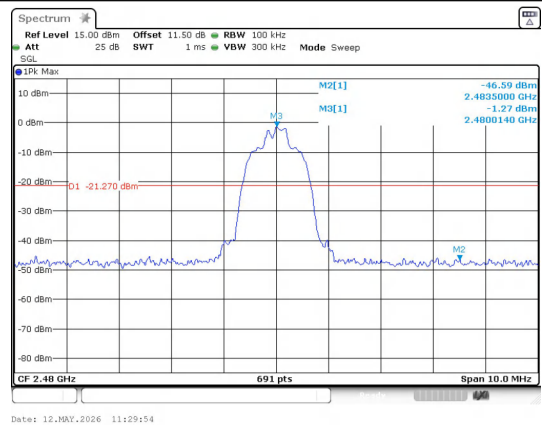
30.0 MHz - 25000.0 MHz
GFSK_DH5_Channel 39



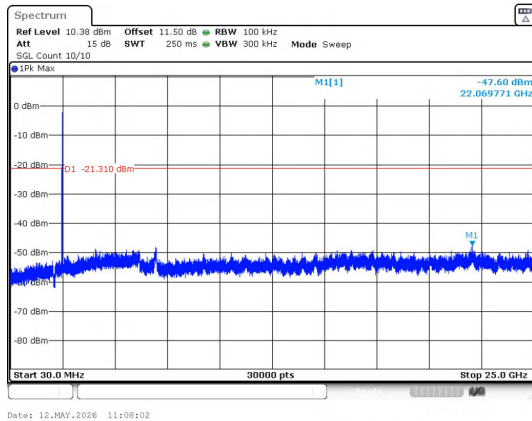
30.0 MHz - 25000.0 MHz
 $\pi/4$ DQPSK_2-DH5_Channel 39



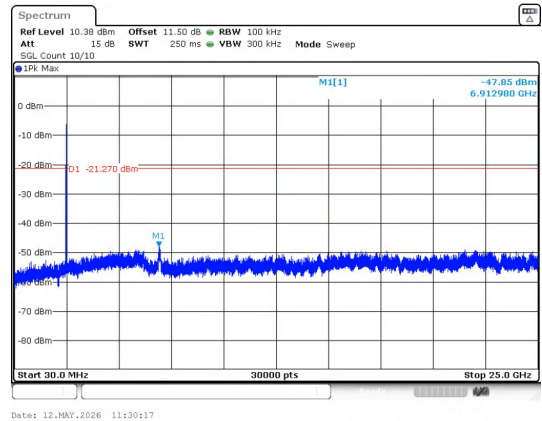
Out Of Band Emission
GFSK_DH5_Channel 78



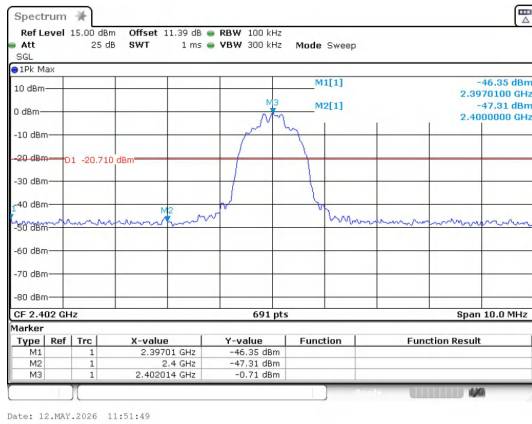
Out Of Band Emission
 $\pi/4$ DQPSK_2-DH5_Channel 78



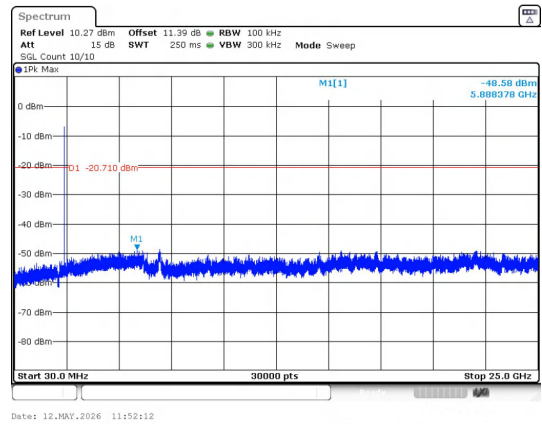
30.0 MHz - 25000.0 MHz
GFSK_DH5_Channel 78



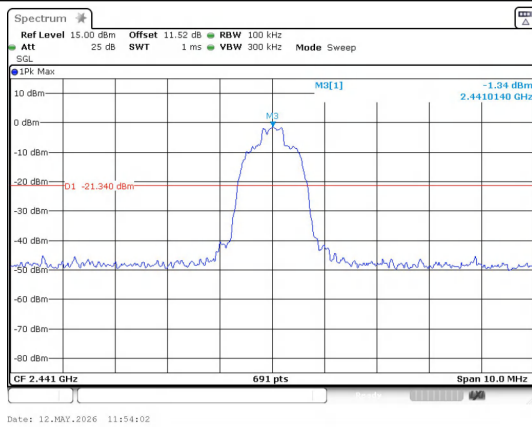
30.0 MHz - 25000.0 MHz
 $\pi/4$ DQPSK_2-DH5_Channel 78



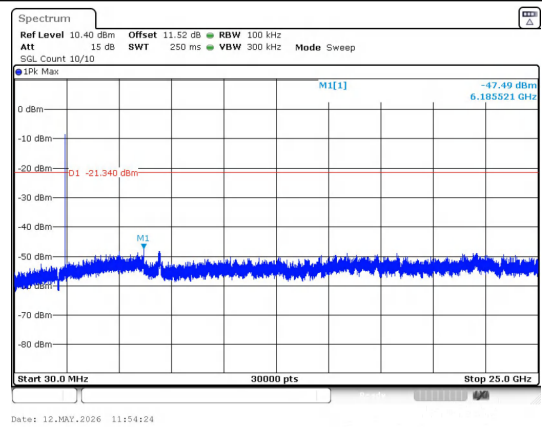
**Out Of Band Emission
8DPSK_3-DH5_Channel 0**



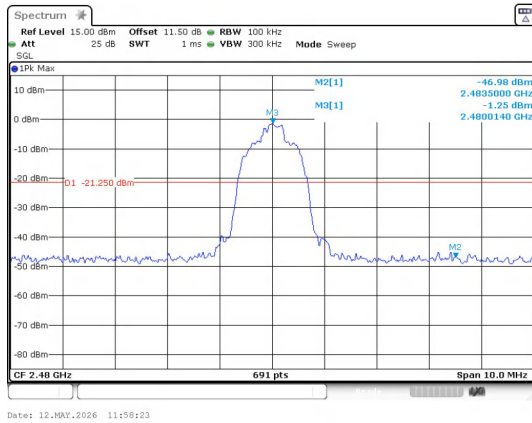
**30.0 MHz - 25000.0 MHz
8DPSK_3-DH5_Channel 0**



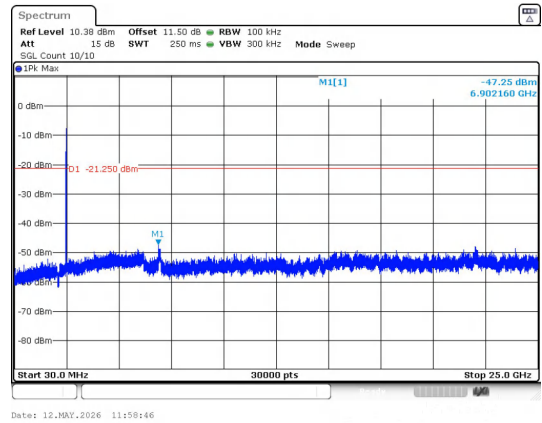
**Out Of Band Emission
8DPSK_3-DH5_Channel 39**



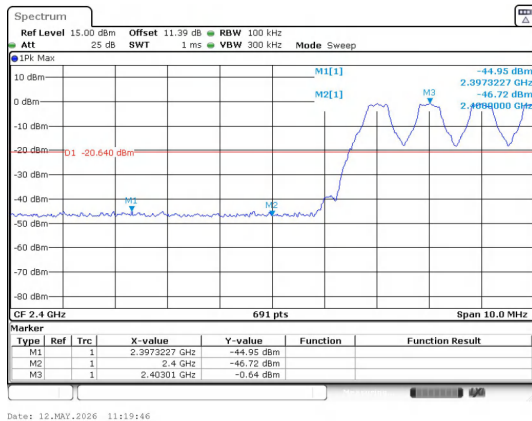
**30.0 MHz - 25000.0 MHz
8DPSK_3-DH5_Channel 39**



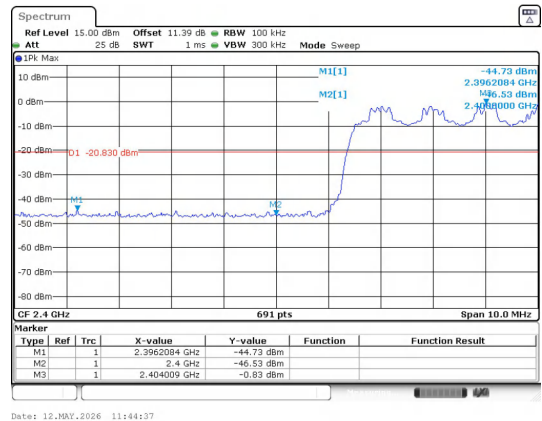
**Out Of Band Emission
8DPSK_3-DH5_Channel 78**



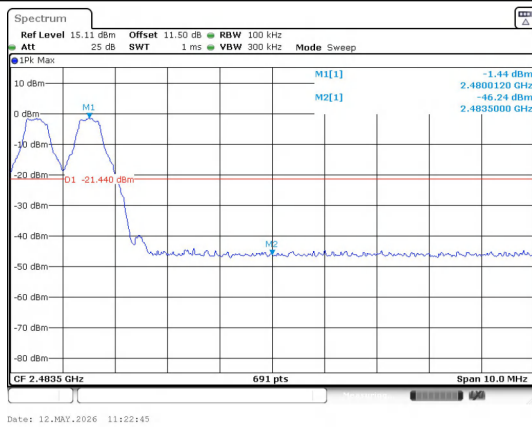
**30.0 MHz - 25000.0 MHz
8DPSK_3-DH5_Channel 78**



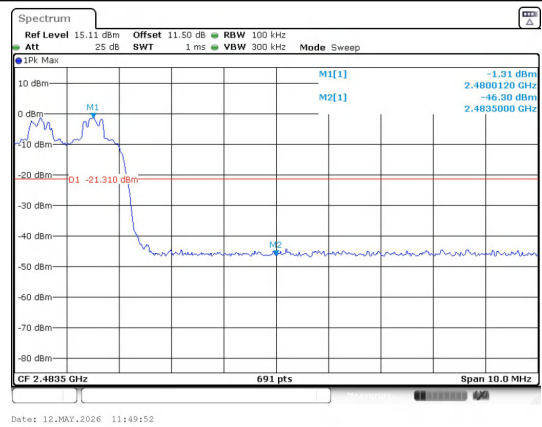
**Out Of Band Emission(Left)
GFSK_DH5_Channel Hopping**



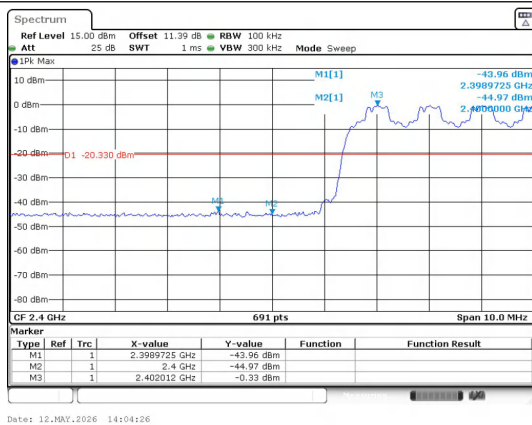
**Out Of Band Emission(Left)
 $\pi/4$ DQPSK_2-DH5_Channel Hopping**



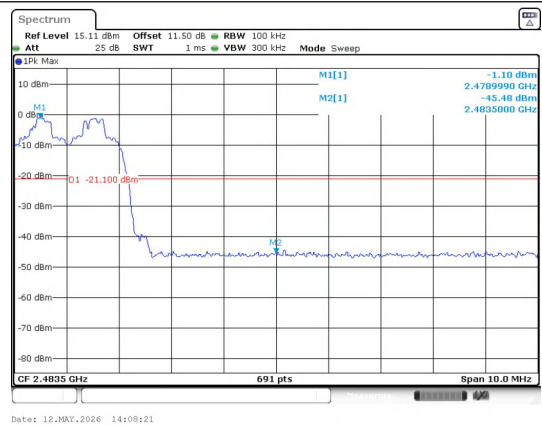
**Out Of Band Emission(Right)
GFSK_DH5_Channel Hopping**



**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**

Right:
Non-Hopping

Modulation	Packet	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
GFSK	DH5	0	2398.99	-46.666	-20.39	-26.276	PASS
			2400.00	-47.860	-20.39	-27.470	PASS
			4803.80	-47.660	-20.39	-27.270	PASS
		39	23328.3	-48.211	-21.3	-26.911	PASS
		78	2483.50	-48.920	-21.01	-27.910	PASS
			17352.1	-47.449	-21.01	-26.439	PASS
$\pi/4$ DQPSK	2-DH5	0	2398.76	-46.126	-20.42	-25.706	PASS
			2400.00	-47.110	-20.42	-26.690	PASS
			22046.5	-47.761	-20.42	-27.341	PASS
		39	6896.33	-48.288	-21.16	-27.128	PASS
		78	2483.50	-47.460	-21.07	-26.390	PASS
			6898.83	-47.804	-21.07	-26.734	PASS
8DPSK	3-DH5	0	2398.60	-45.713	-20.44	-25.273	PASS
			2400.00	-48.250	-20.44	-27.810	PASS
			6937.10	-48.372	-20.44	-27.932	PASS
		39	22041.5	-47.936	-21.26	-26.676	PASS
		78	2483.50	-46.800	-21.26	-25.540	PASS
			6924.63	-47.841	-21.26	-26.581	PASS

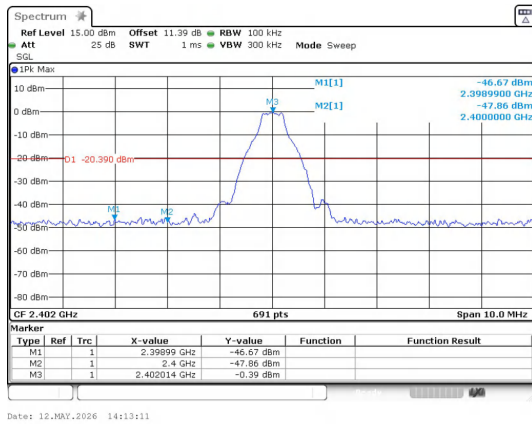
Note: input compensation coefficient (dB)= Cable Loss (dB)

Hopping

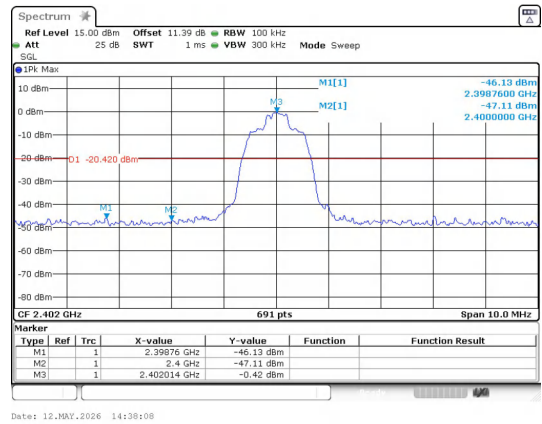
Modulation	Packet	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
GFSK	DH5	Hopping	2396.24	-45.054	-20.39	-24.664	PASS
			2400.00	-46.260	-20.39	-25.870	PASS
			2483.50	-46.800	-20.99	-25.810	PASS
π/4DQPSK	2-DH5		2395.51	-44.859	-20.58	-24.279	PASS
			2400.00	-46.460	-20.58	-25.880	PASS
			2483.50	-46.260	-21.23	-25.030	PASS
8DPSK	3-DH5		2395.54	-45.495	-20.64	-24.855	PASS
			2400.00	-47.320	-20.64	-26.680	PASS
			2483.50	-45.700	-21.09	-24.610	PASS

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

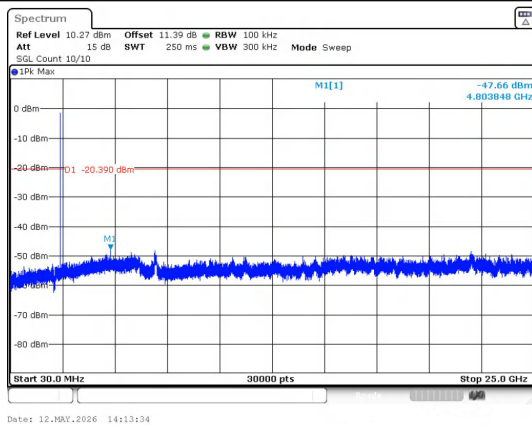
Test Graphs



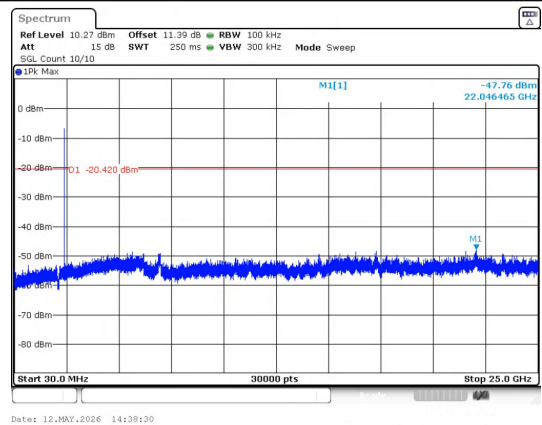
**Out Of Band Emission
GFSK_DH5_Channel 0**



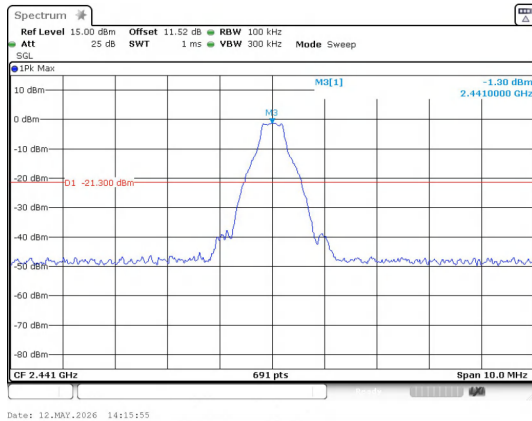
**Out Of Band Emission
π/4DQPSK_2-DH5_Channel 0**



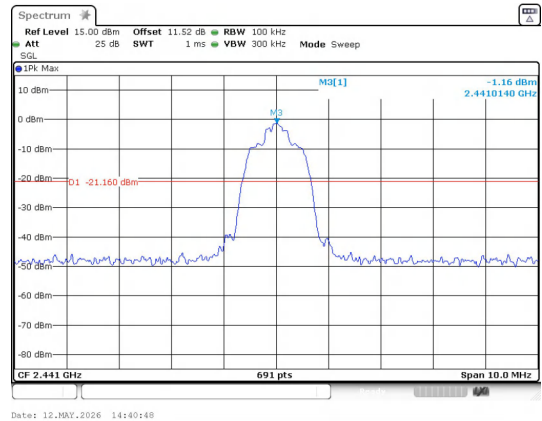
**30.0 MHz - 25000.0 MHz
GFSK_DH5_Channel 0**



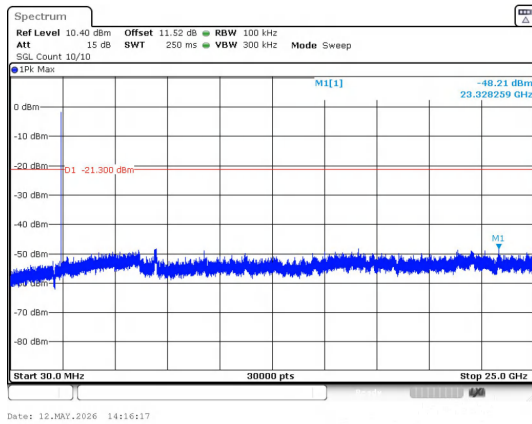
**30.0 MHz - 25000.0 MHz
π/4DQPSK_2-DH5_Channel 0**



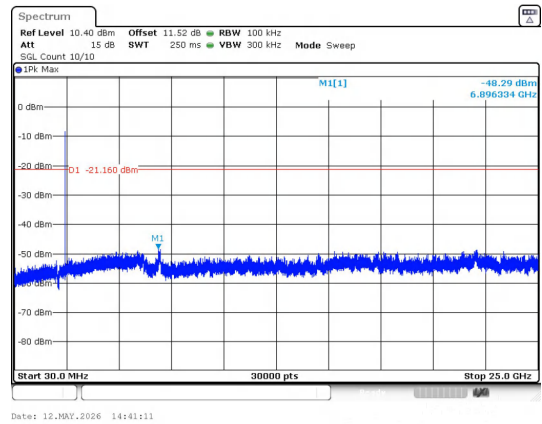
**Out Of Band Emission
GFSK_DH5_Channel 39**



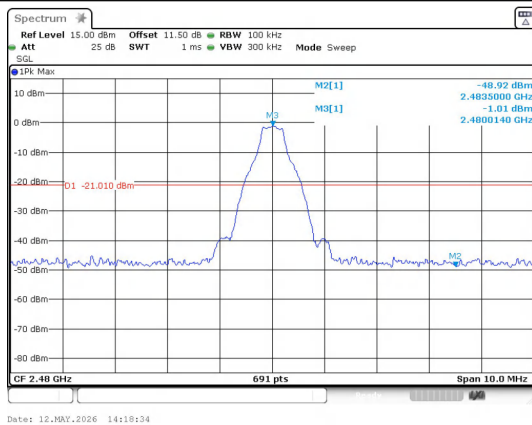
**Out Of Band Emission
π/4DQPSK_2-DH5_Channel 39**



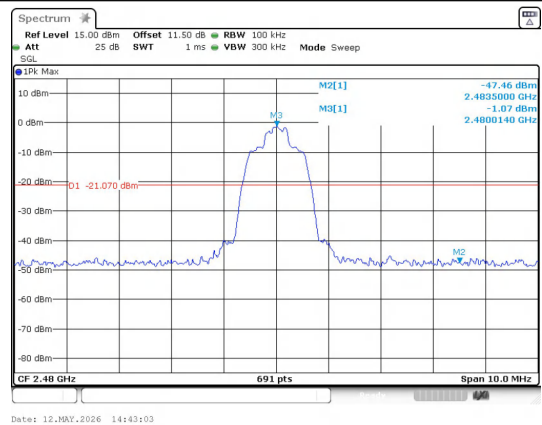
30.0 MHz - 25000.0 MHz
GFSK_DH5_Channel 39



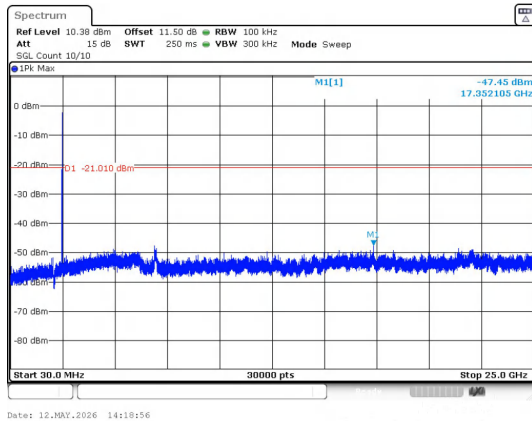
30.0 MHz - 25000.0 MHz
 $\pi/4$ DQPSK_2-DH5_Channel 39



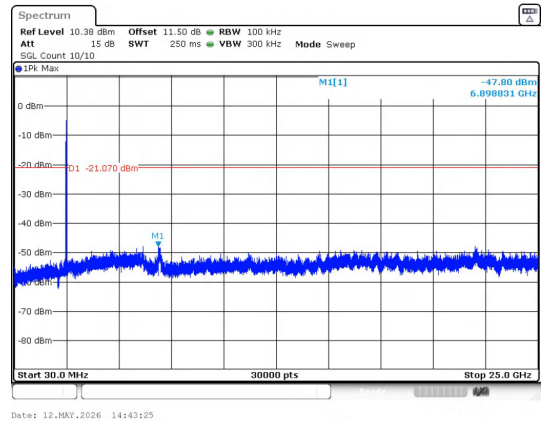
Out Of Band Emission
GFSK_DH5_Channel 78



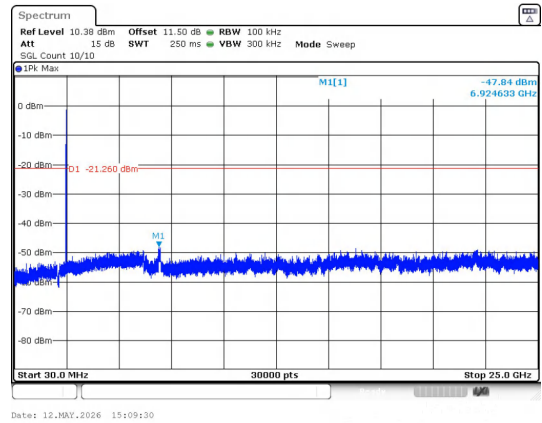
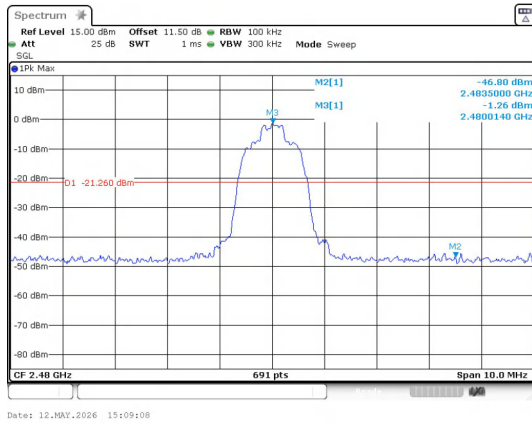
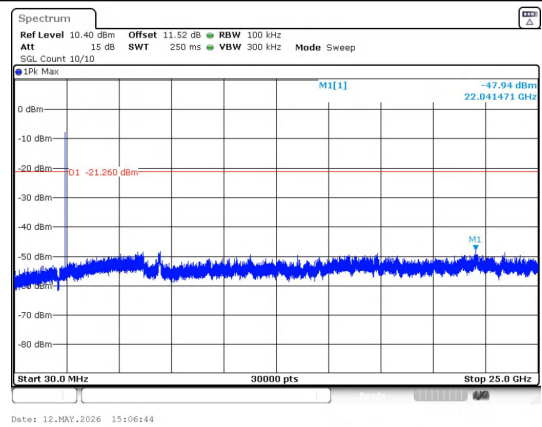
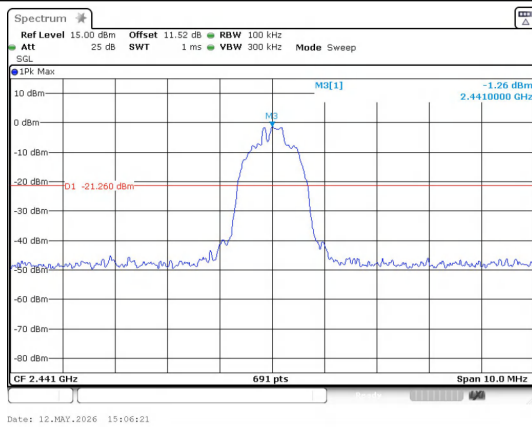
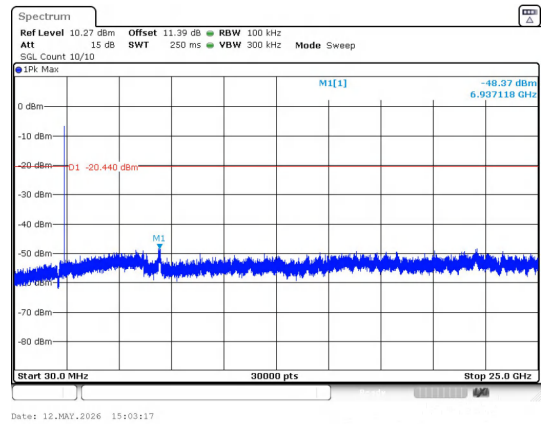
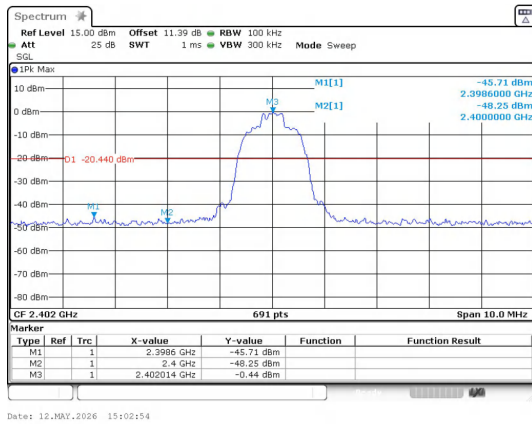
Out Of Band Emission
 $\pi/4$ DQPSK_2-DH5_Channel 78

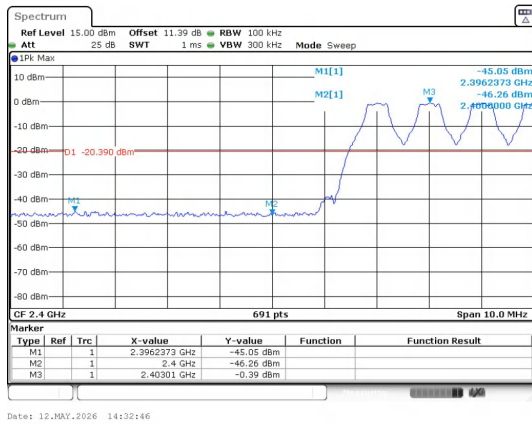


30.0 MHz - 25000.0 MHz
GFSK_DH5_Channel 78

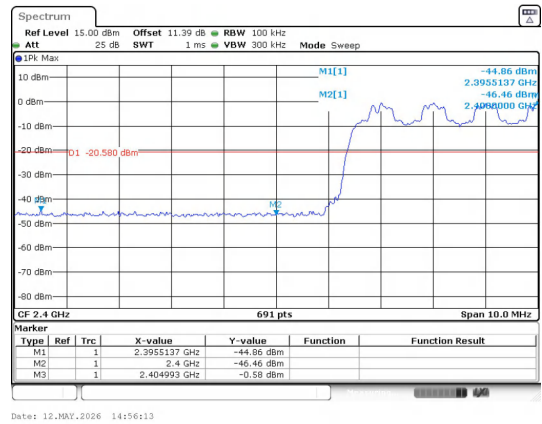


30.0 MHz - 25000.0 MHz
 $\pi/4$ DQPSK_2-DH5_Channel 78

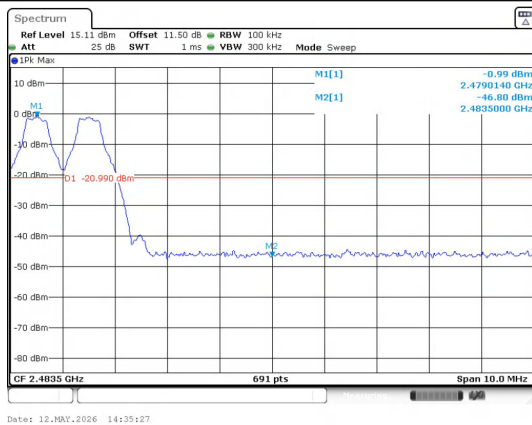




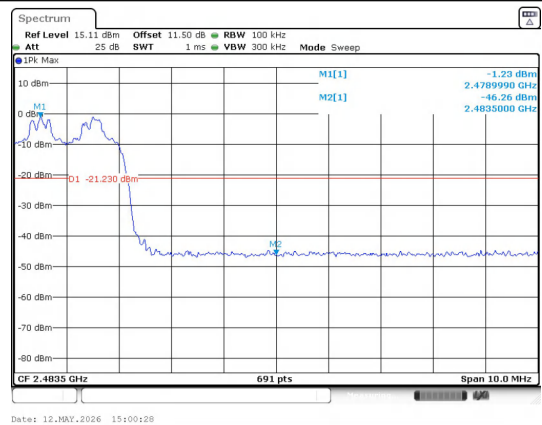
**Out Of Band Emission(Left)
GFSK_DH5_Channel Hopping**



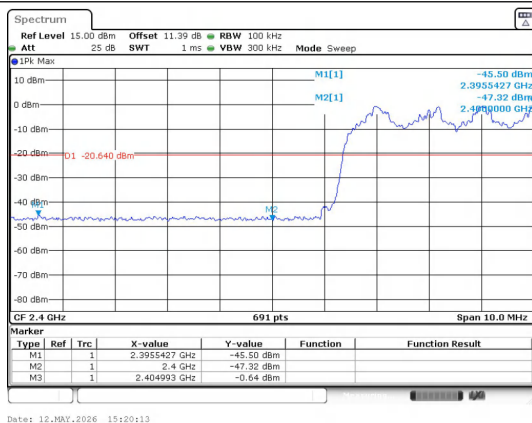
**Out Of Band Emission(Left)
 $\pi/4$ DQPSK_2-DH5_Channel Hopping**



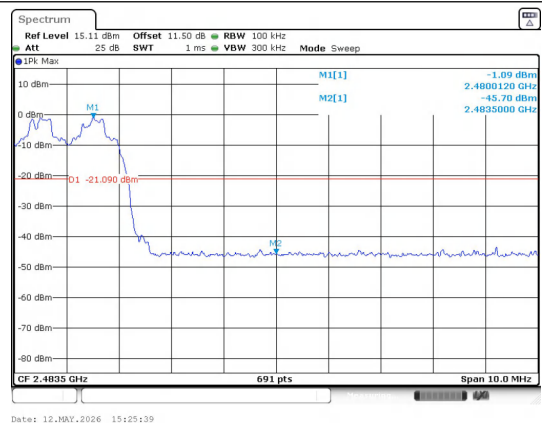
**Out Of Band Emission(Right)
GFSK_DH5_Channel Hopping**



**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 the report-----