Appendix A

Report No.:	CISRR240315073
FCC ID:	2BFHZ-A8888
Product Name:	Bluetooth headset
Model No.:	BLAISE V8S
Test Engineer:	Lucas Huang
Supervised by:	Rory Huang

1) Conducted Peak Output Power

Test Result

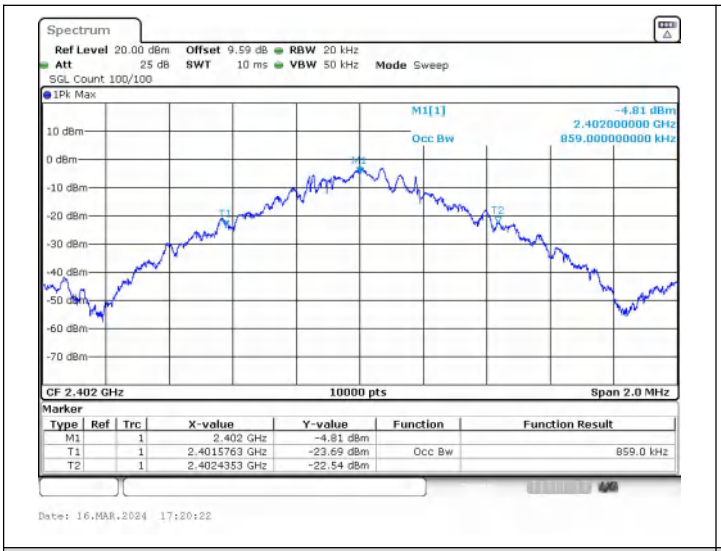
Modulation	Packet Type	Channel	Peak Output Power (dBm)	Peak Output Power (mW)	Limit (dBm)	Result
GFSK	DH5	0	0.482	1.118	30	PASS
		39	0.274	1.065		PASS
		78	-1.177	0.763		PASS
π/4DQPSK	2-DH5	0	1.214	1.323	20.97	PASS
		39	1.099	1.288		PASS
		78	-0.253	0.944		PASS
8DPSK	3-DH5	0	1.593	1.443		PASS
		39	1.454	1.398		PASS
		78	0.019	1.004		PASS

2) 99% Bandwidth

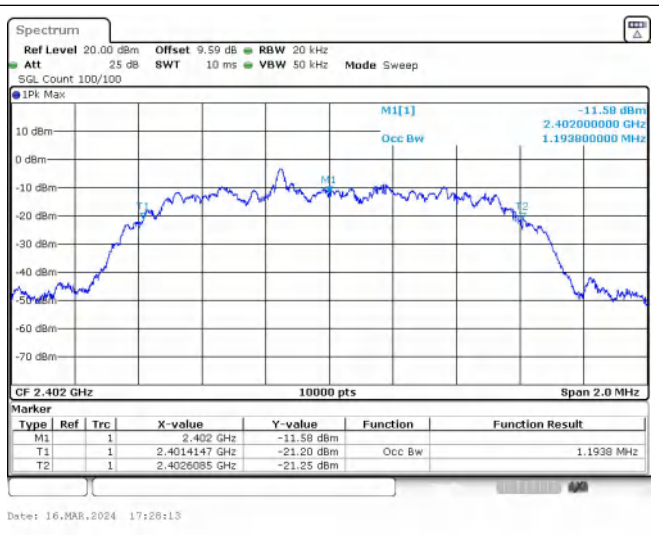
Test Result

Modulation	Channel	99% BW (MHz)
GFSK	0	0.85900
	39	0.86200
	78	0.85440
π/4DQPSK	0	1.1940
	39	1.1990
	78	1.1870
8DPSK	0	1.1960
	39	1.1950
	78	1.2020

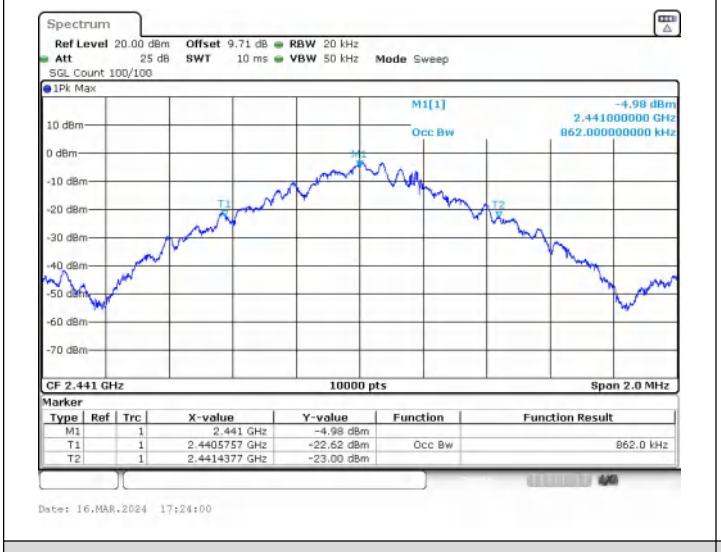
Test Graphs



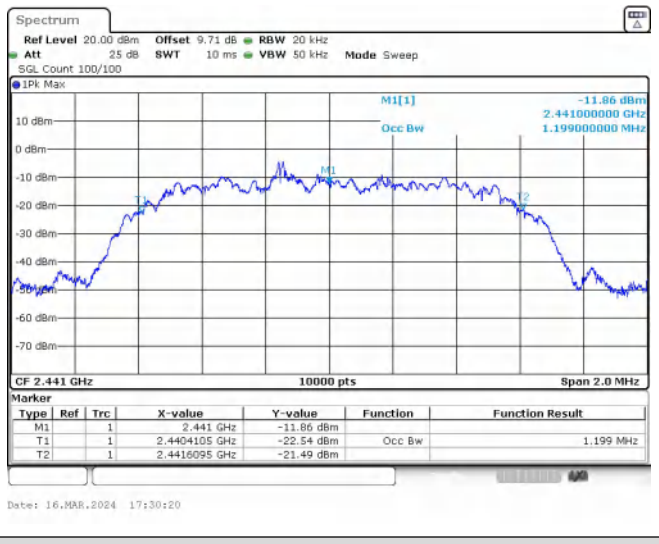
GFSK_DH5_Channel 0



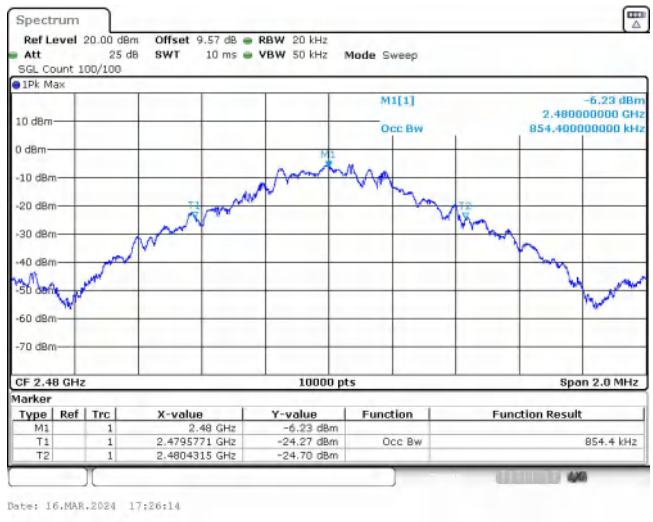
π/4DQPSK_2-DH5_Channel 0



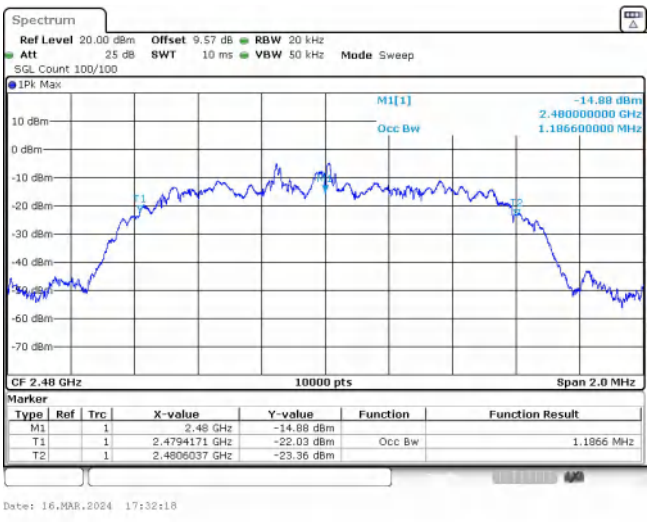
GFSK_DH5_Channel 39



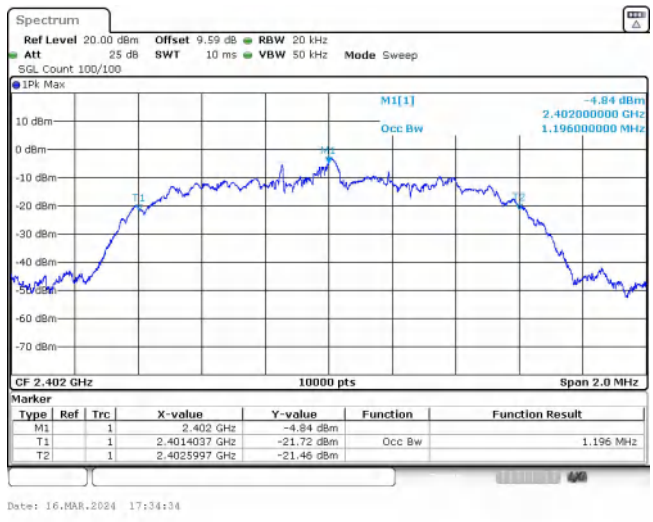
π/4DQPSK_2-DH5_Channel 39



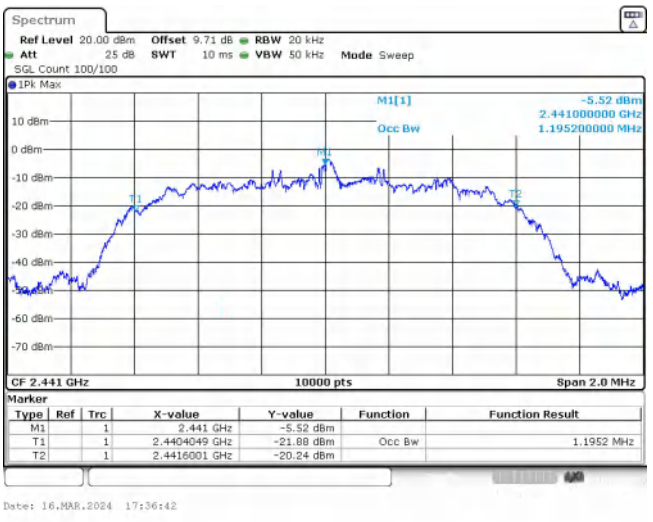
GFSK_DH5_Channel 78



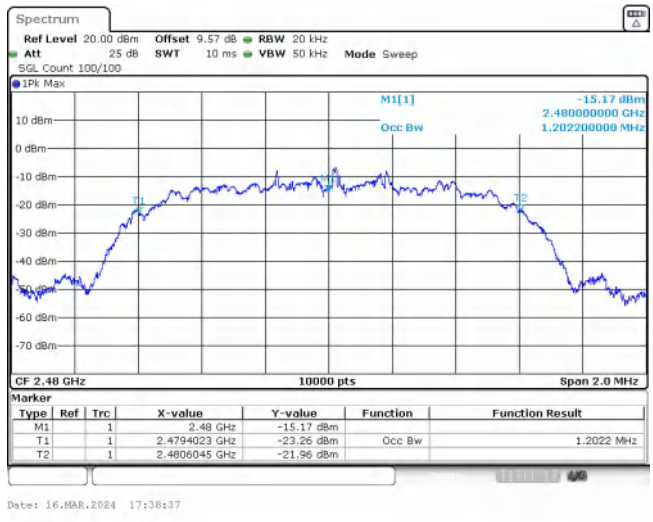
π/4DQPSK_2-DH5_Channel 78



8DPSK_3-DH5_Channel 0



8DPSK_3-DH5_Channel 39



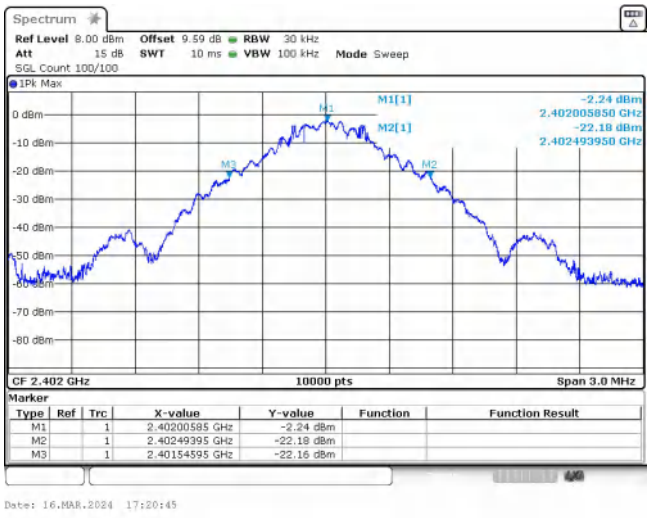
8DPSK_3-DH5_Channel 78

3) 20dB Bandwidth

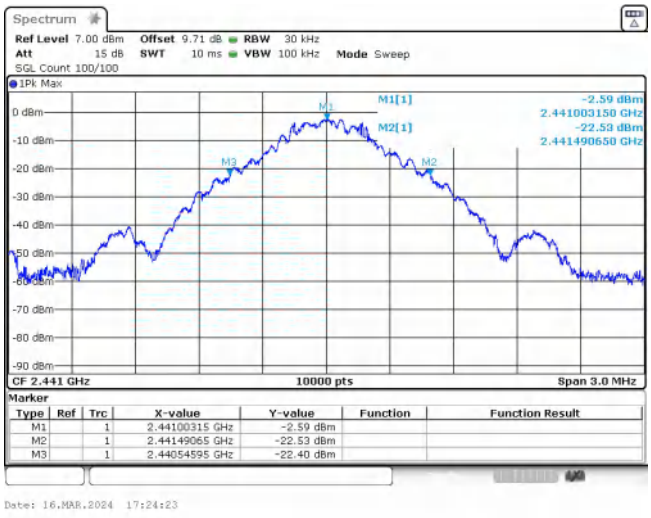
Test Result

Modulation	Channel	Center Frequency (MHz)	20 dB Bandwidth (MHz)
GFSK	0	2402 MHz	0.9400
	39	2441 MHz	0.9400
	78	2480 MHz	0.9500
π/4DQPSK	0	2402 MHz	1.300
	39	2441 MHz	1.300
	78	2480 MHz	1.300
8DPSK	0	2402 MHz	1.290
	39	2441 MHz	1.290
	78	2480 MHz	1.290

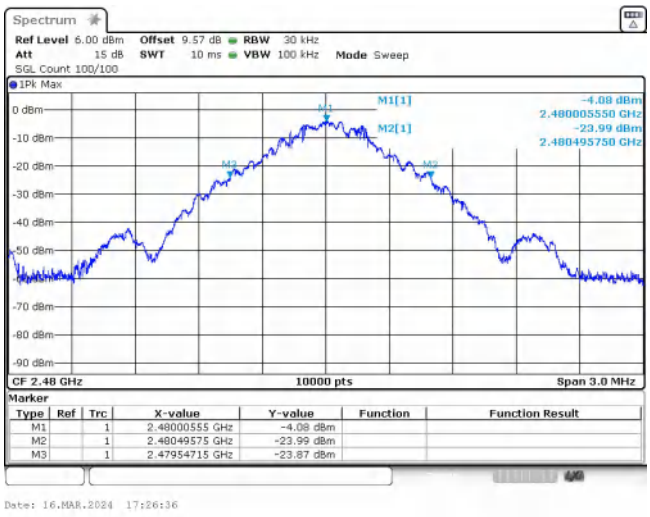
Test Graphs



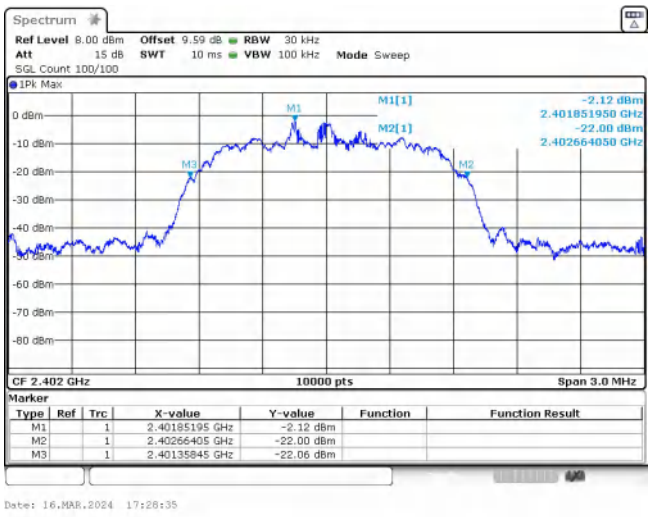
GFSK_DH5_Channel 0



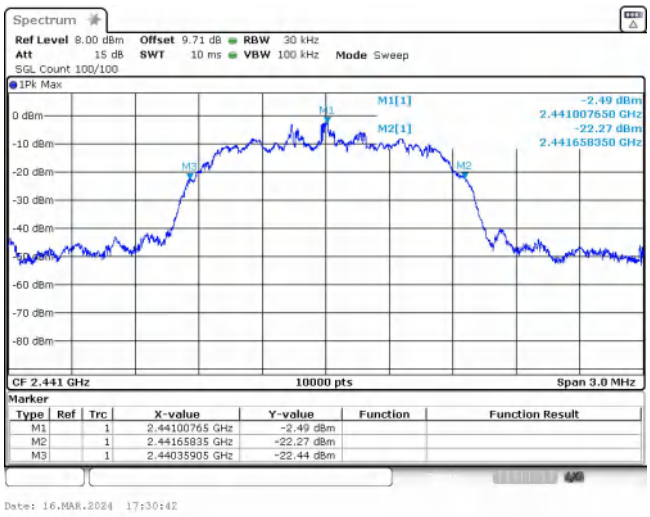
GFSK_DH5_Channel 39



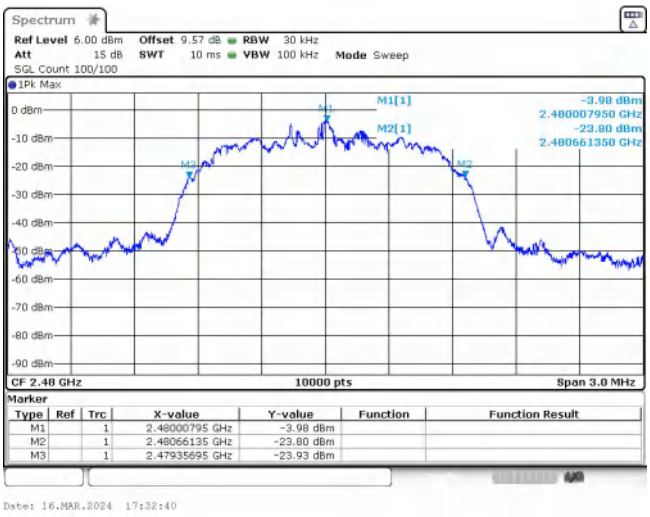
GFSK_DH5_Channel 78



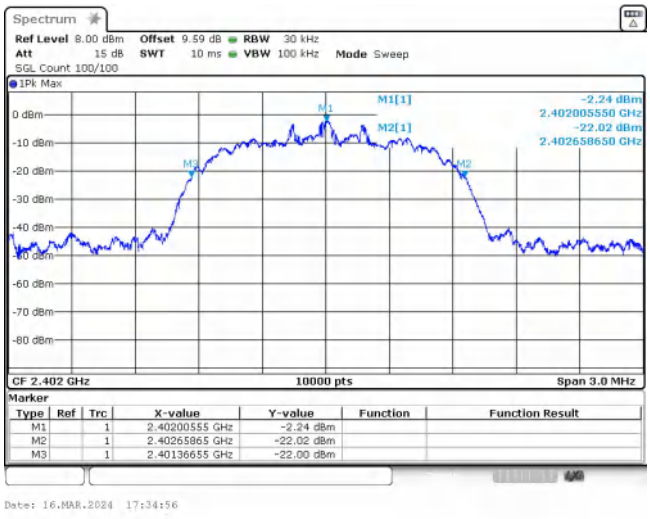
π/4DQPSK_2-DH5_Channel 0



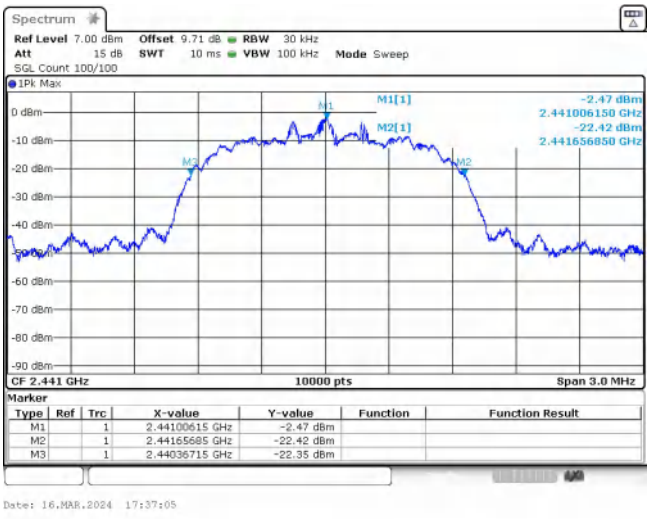
π/4DQPSK_2-DH5_Channel 39



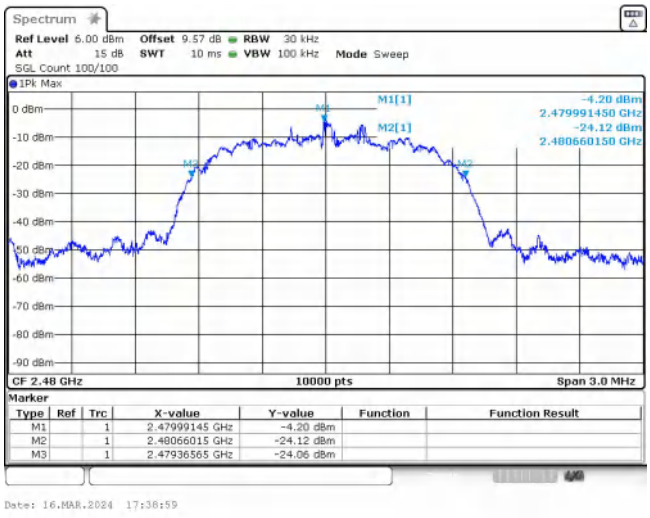
π/4DQPSK_2-DH5_Channel 78



8DPSK_3-DH5_Channel 0



8DPSK_3-DH5_Channel 39



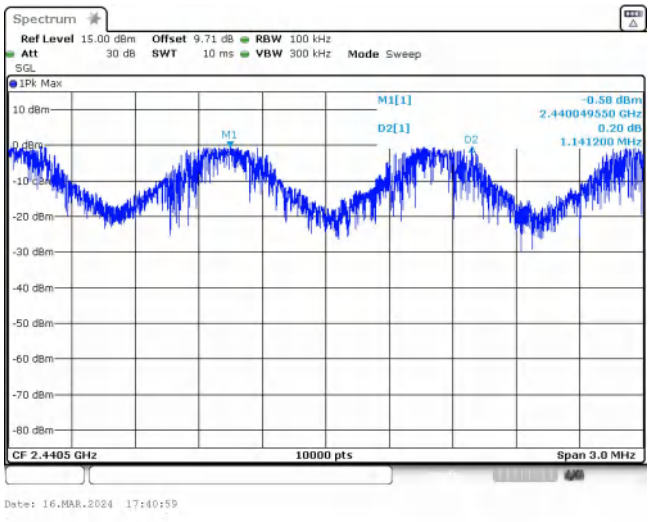
8DPSK_3-DH5_Channel 78

4) Carrier Frequencies Separation

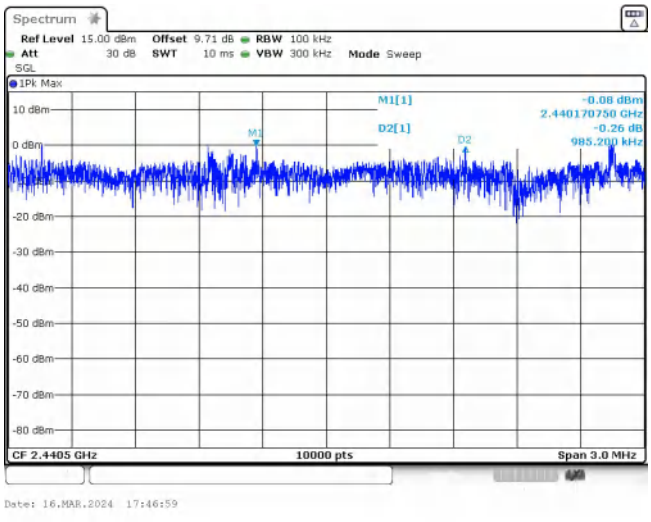
Test Result

Modulation	Packet	Left Center frequency (MHz)	Right Center frequency (MHz)	Hopping Frequency Separation (MHz)	Limit (MHz)	Result
GFSK	DH5	2440.0496	2441.1908	1.1412	0.627	PASS
π/4DQPSK	2-DH5	2440.1708	2441.1559	0.9852	0.867	PASS
8DPSK	3-DH5	2439.941	2441.1316	1.1907	0.86	PASS

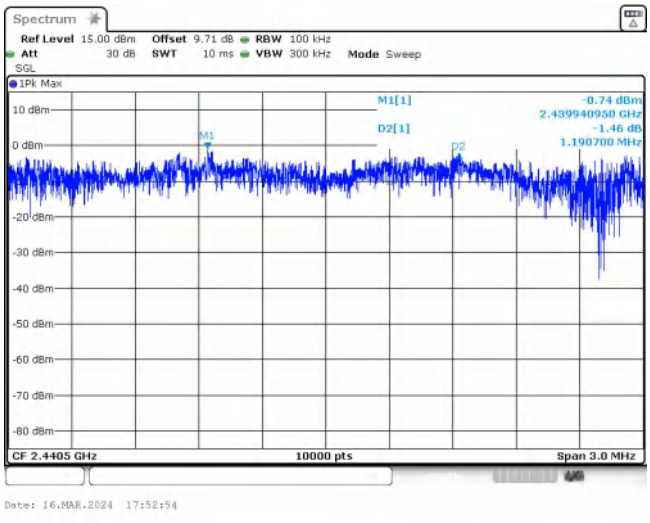
Test Graphs



GFSK



π/4DQPSK



8DPSK

5) Conducted Out Of Band Emission

Test Result

Non-Hopping

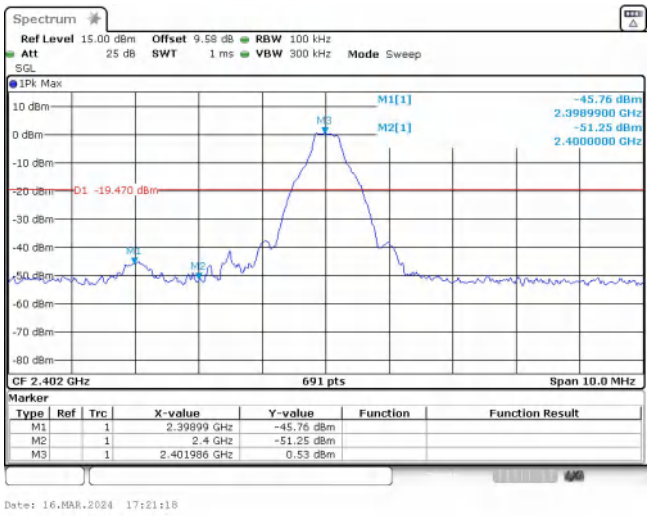
Modulation	Packet	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
GFSK	DH5	0	2400.00	-51.252	-19.47	-31.782	PASS
			2398.99	-45.763	-19.47	-26.293	PASS
			9602.20	-37.373	-19.47	-17.903	PASS
		39	9757.90	-39.124	-19.94	-19.184	PASS
		78	2483.50	-51.341	-21.23	-30.111	PASS
			9914.37	-40.474	-21.23	-19.244	PASS
π/4DQPSK	2-DH5	0	2400.00	-49.926	-19.65	-30.276	PASS
			2399.00	-46.022	-19.65	-26.372	PASS
			9602.20	-38.483	-19.65	-18.833	PASS
		39	9757.90	-39.816	-19.83	-19.986	PASS
		78	2483.50	-51.932	-21.2	-30.732	PASS
			9914.37	-40.691	-21.2	-19.491	PASS
8DPSK	3-DH5	0	2400.00	-49.419	-19.57	-29.849	PASS
			2399.00	-46.242	-19.57	-26.672	PASS
			9602.20	-38.488	-19.57	-18.918	PASS
		39	9757.90	-39.477	-20.11	-19.367	PASS
		78	2483.50	-51.499	-21.27	-30.229	PASS
			9914.37	-40.457	-21.27	-19.187	PASS

Hopping

Modulation	Packet	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
GFSK	DH5	Hopping	2398.97	-47.682	-19.78	-27.902	PASS
			2400.00	-48.250	-19.78	-28.470	PASS
			2483.50	-52.389	-21.5	-30.889	PASS
			2397.50	-44.923	-19.99	-24.933	PASS
			2400.00	-48.170	-19.99	-28.180	PASS
			2483.50	-51.446	-21.66	-29.786	PASS
π/4DQPSK	2-DH5		2396.53	-45.794	-20.77	-25.024	PASS
			2400.00	-48.312	-20.77	-27.542	PASS
			2483.50	-51.647	-21.77	-29.877	PASS
			2400.00	-45.879	-19.64	-26.239	PASS
			2483.50	-52.805	-21.19	-31.615	PASS
8DPSK	3-DH5		2396.99	-45.532	-19.95	-25.582	PASS
			2400.00	-48.074	-19.95	-28.124	PASS
			2483.50	-52.325	-22.4	-29.925	PASS
			2398.51	-47.135	-19.96	-27.175	PASS

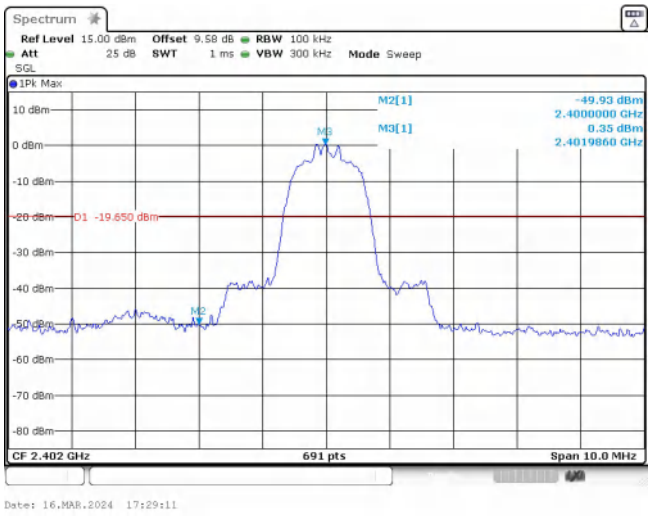
			2400.00	-49.408	-19.96	-29.448	PASS
			2483.50	-52.195	-21.23	-30.965	PASS

Test Graphs



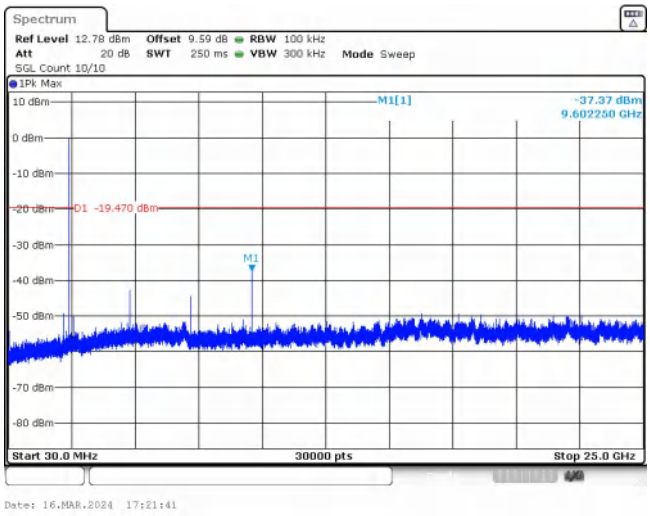
Out Of Band Emission

GFSK_DH5_Channel 0



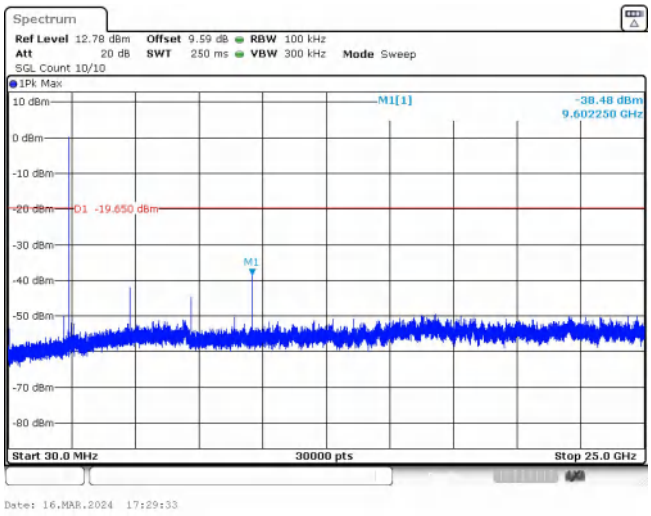
Out Of Band Emission

π/4DQPSK_2-DH5_Channel 0



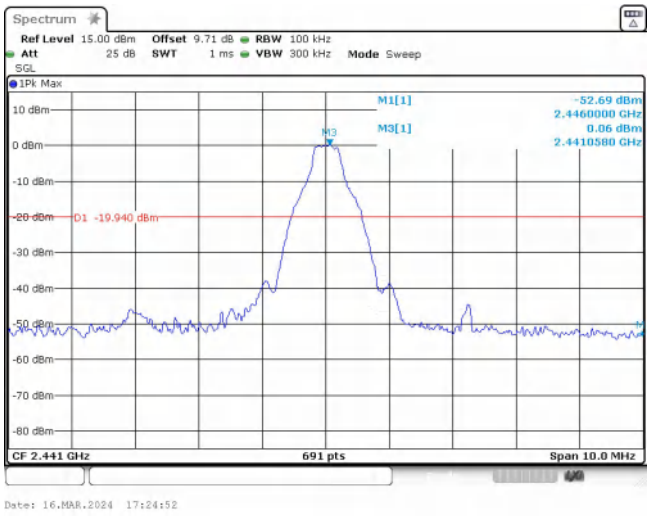
Spurious Emission

GFSK_DH5_Channel 0



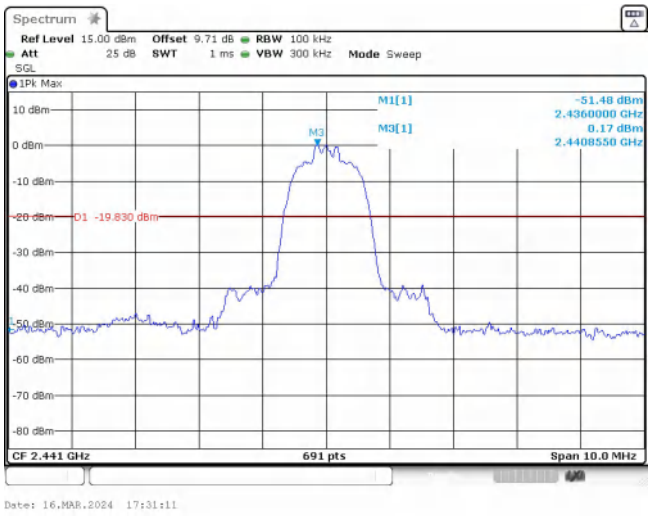
Spurious Emission

π/4DQPSK_2-DH5_Channel 0



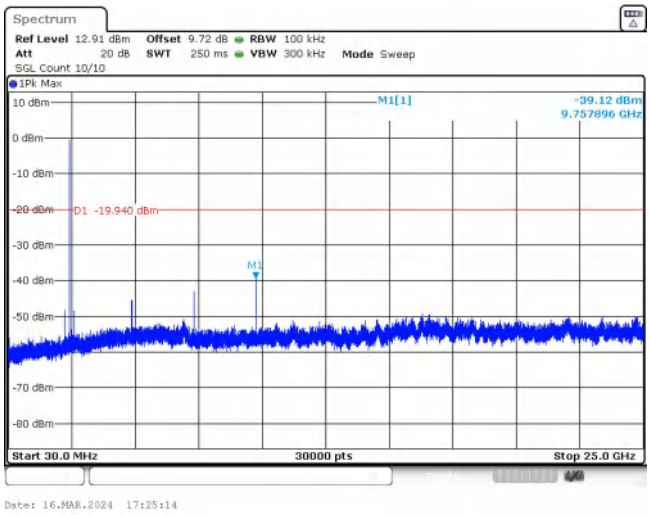
Out Of Band Emission

GFSK_DH5_Channel 39



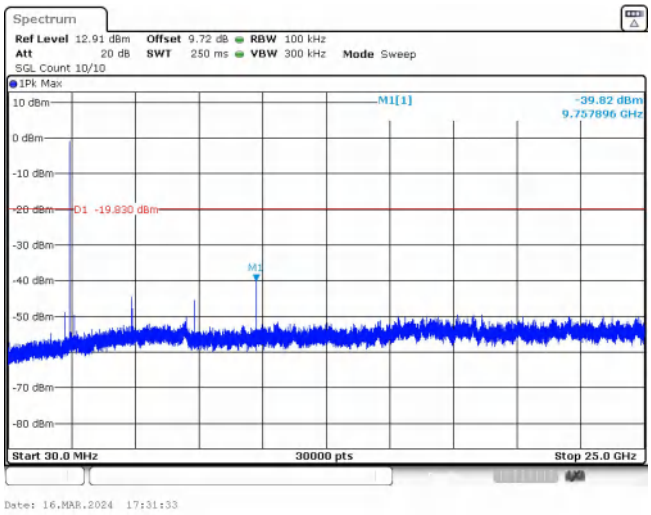
Out Of Band Emission

π/4DQPSK_2-DH5_Channel 39



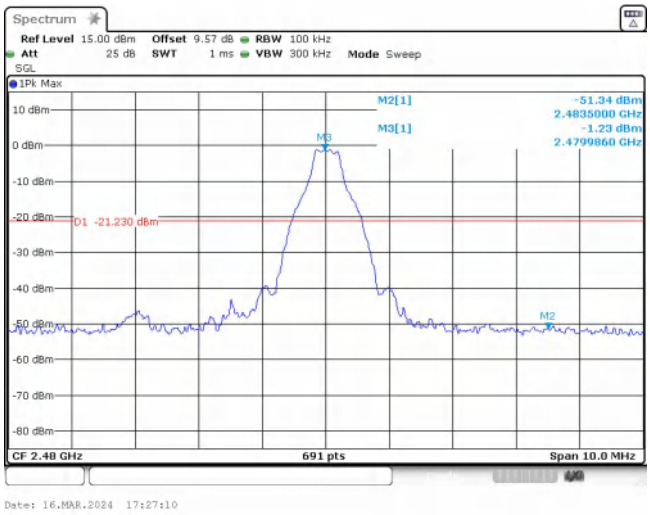
Spurious Emissions

GFSK_DH5_Channel 39



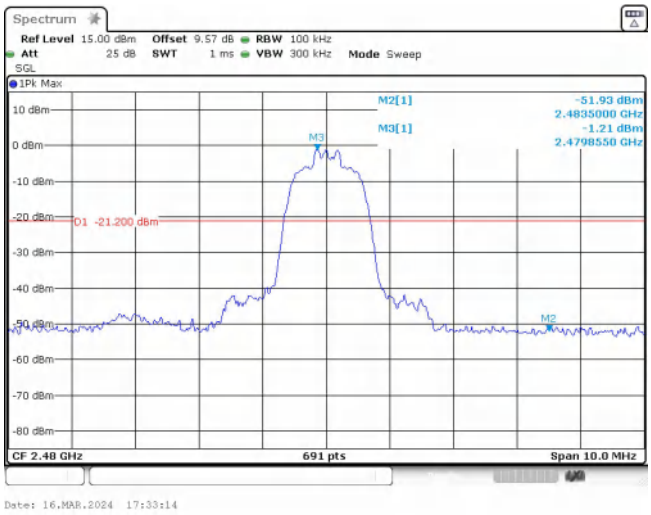
Spurious Emissions

π/4DQPSK_2-DH5_Channel 39



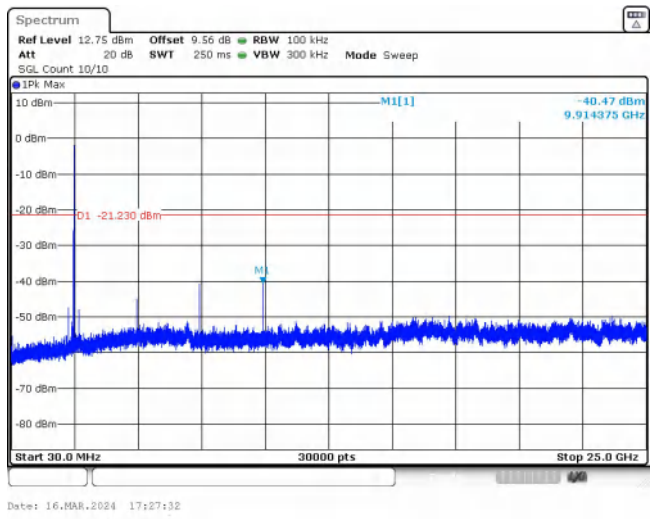
Out Of Band Emission

GFSK_DH5_Channel 78



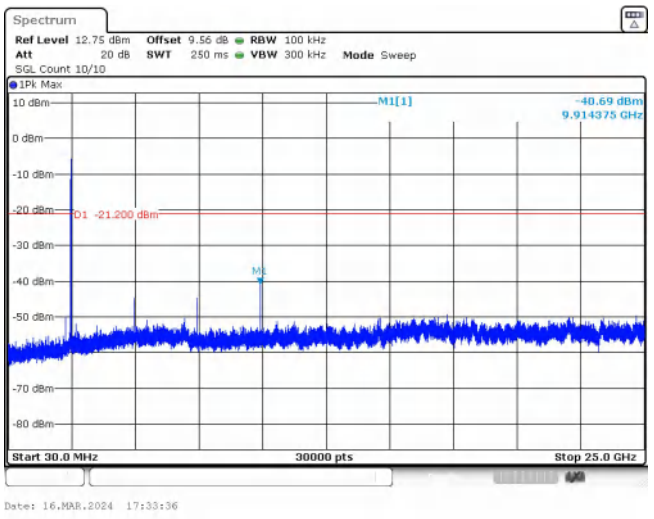
Out Of Band Emission

π/4DQPSK_2-DH5_Channel 78



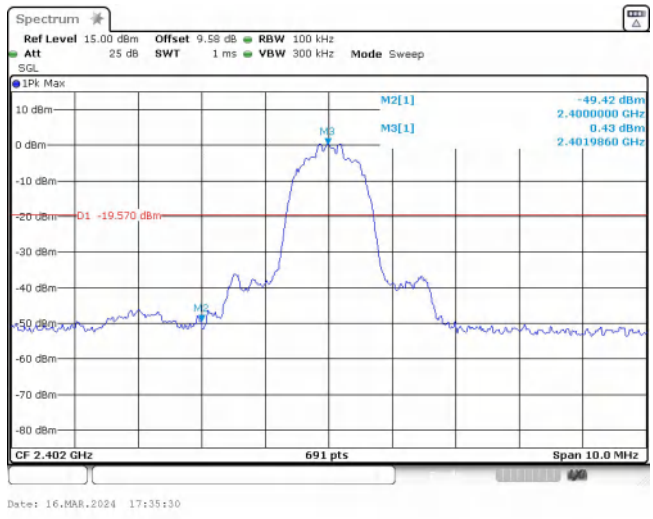
Spurious Emission

GFSK_DH5_Channel 78



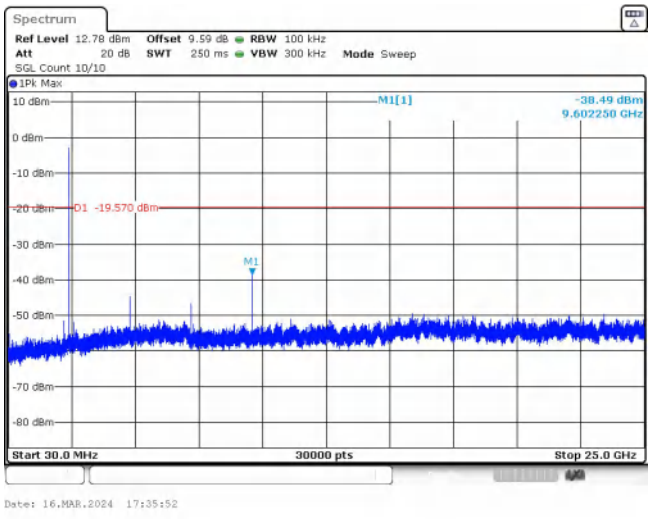
Spurious Emission

π/4DQPSK_2-DH5_Channel 78



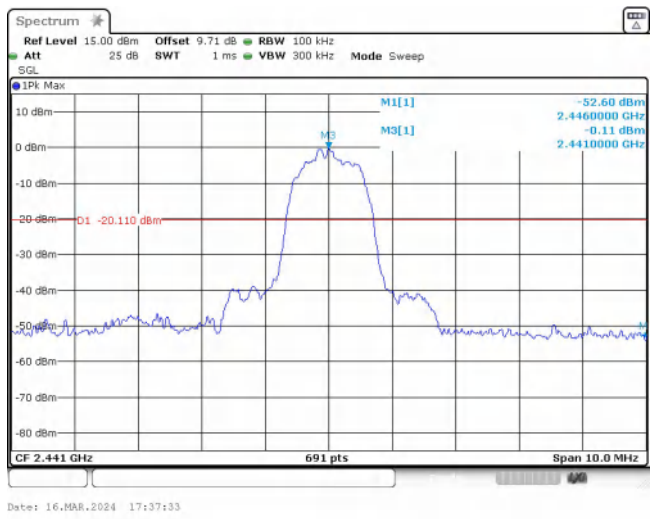
Out Of Band Emission

8DPSK_3-DH5_Channel 0



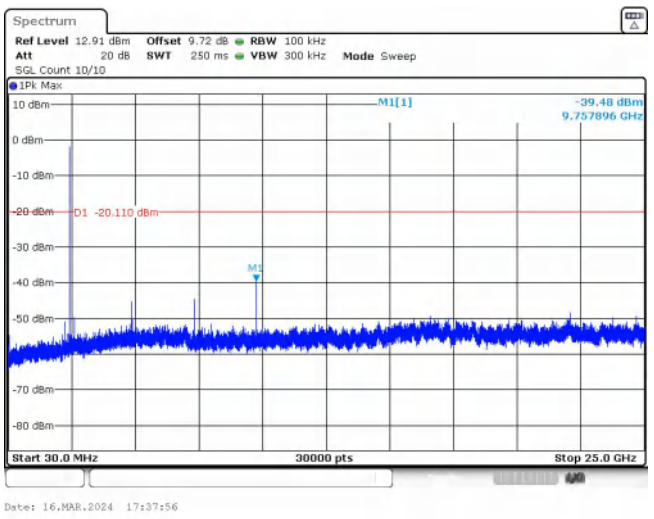
Spurious Emission

8DPSK_3-DH5_Channel 0



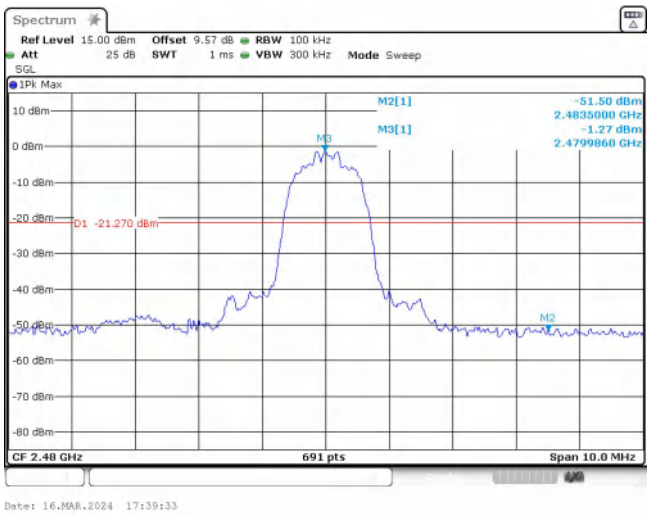
Out Of Band Emission

8DPSK_3-DH5_Channel 39



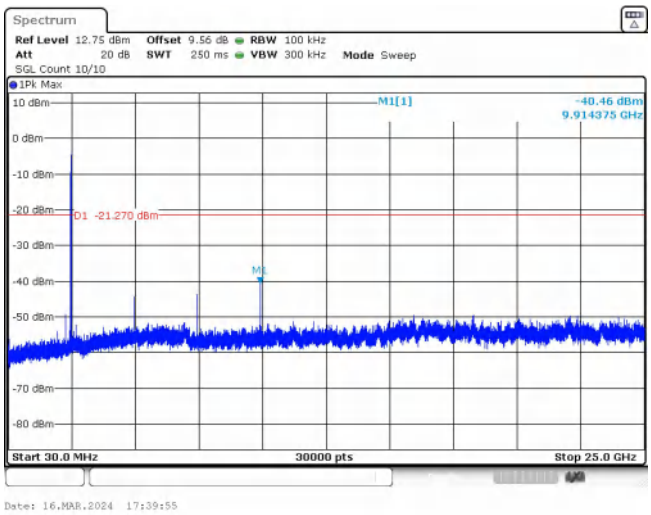
Spurious Emissions

8DPSK_3-DH5_Channel 39



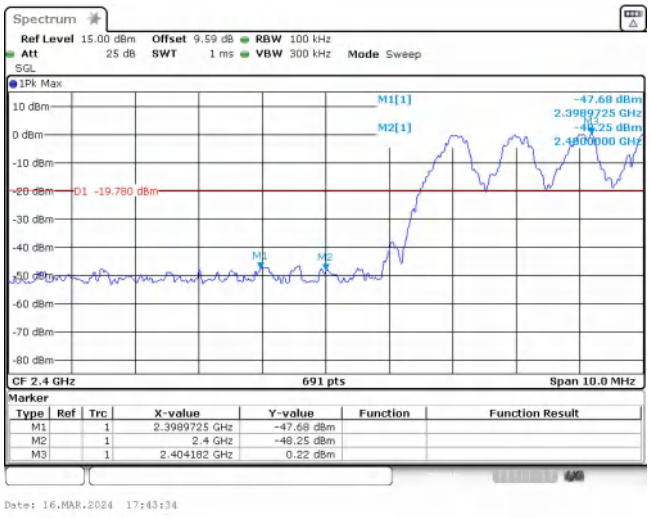
Out Of Band Emission

8DPSK_3-DH5_Channel 78



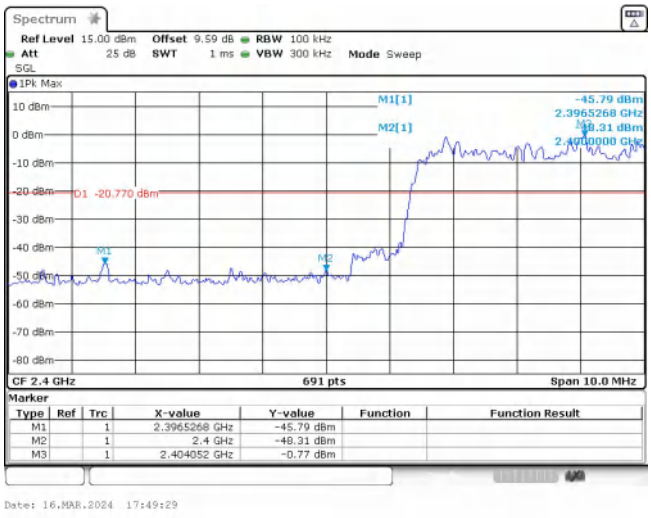
Spurious Emission

8DPSK_3-DH5_Channel 78



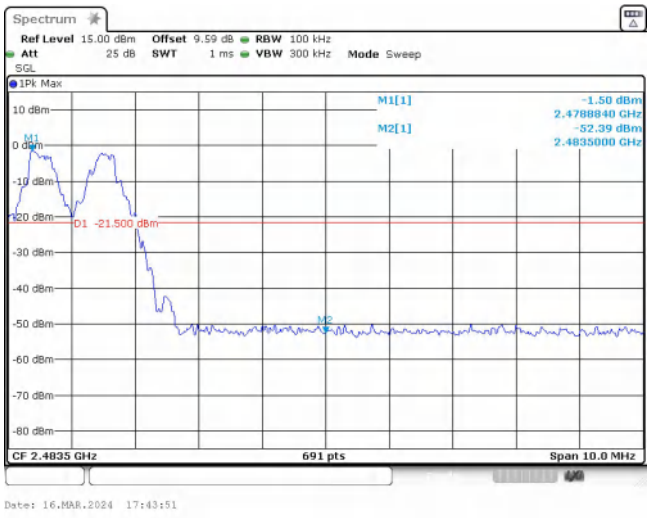
Out Of Band Emission(Left)

GFSK_DH5_Channel Hopping

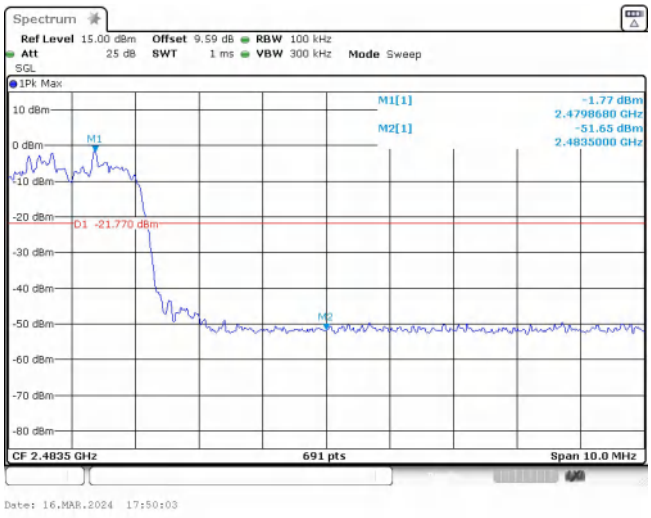


Out Of Band Emission(Left)

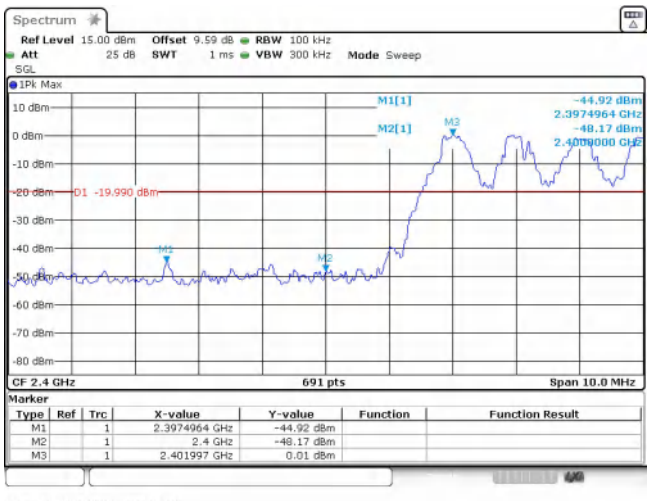
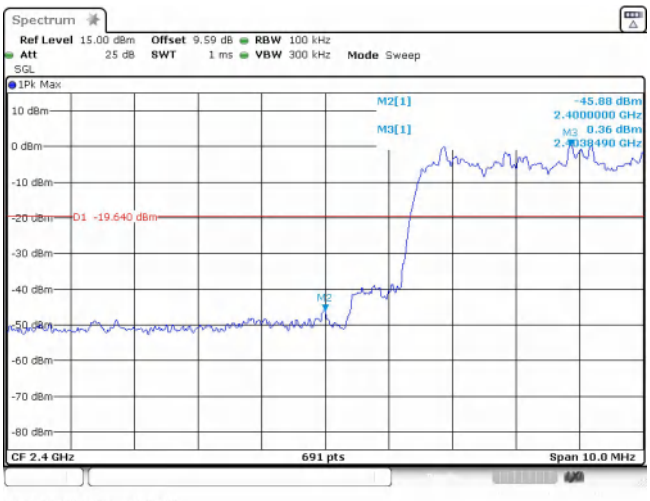
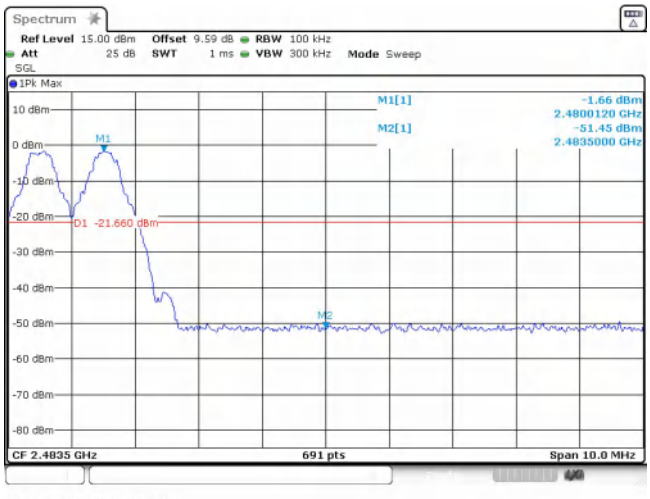
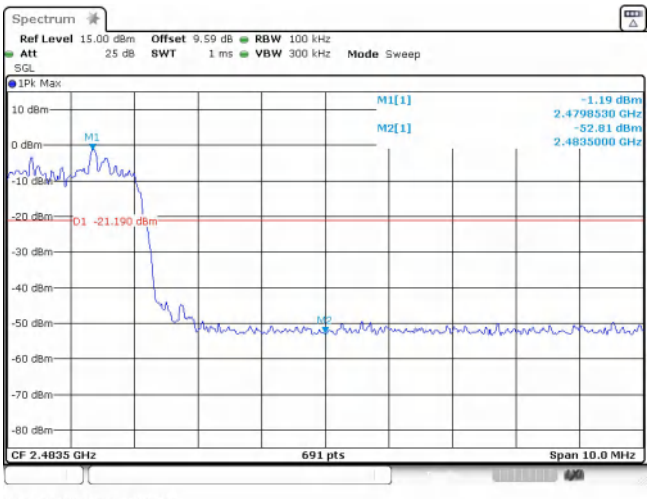
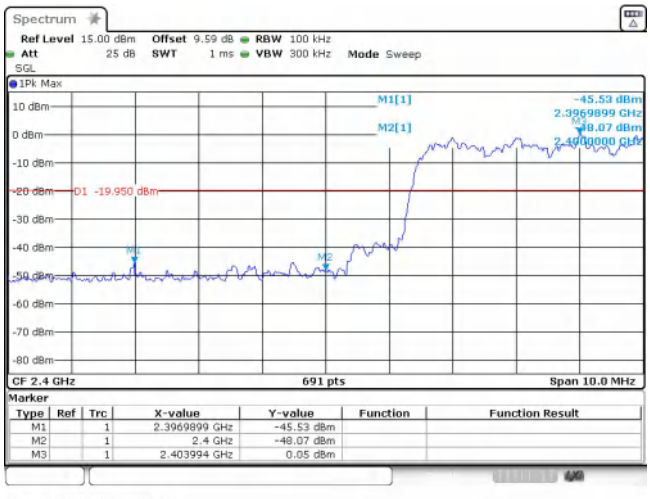
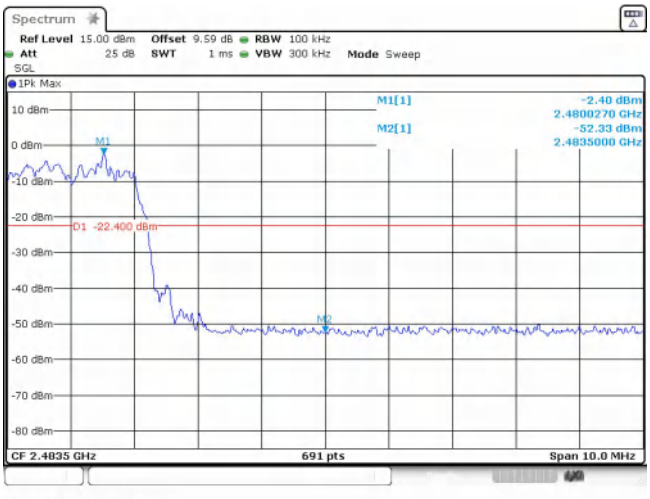
π/4DQPSK_2-DH5_Channel Hopping

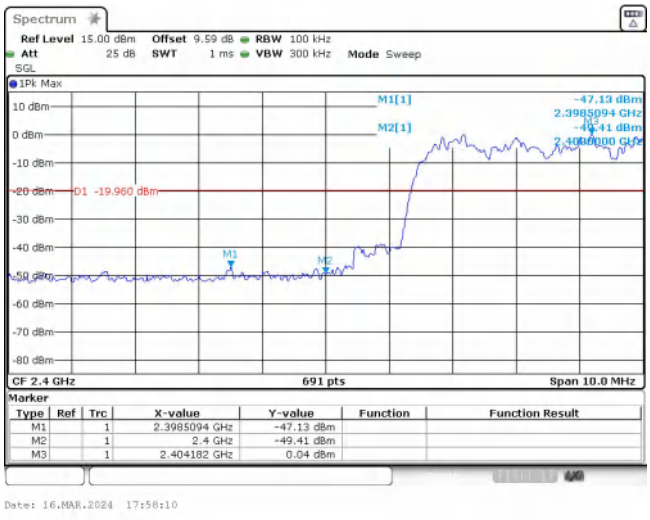
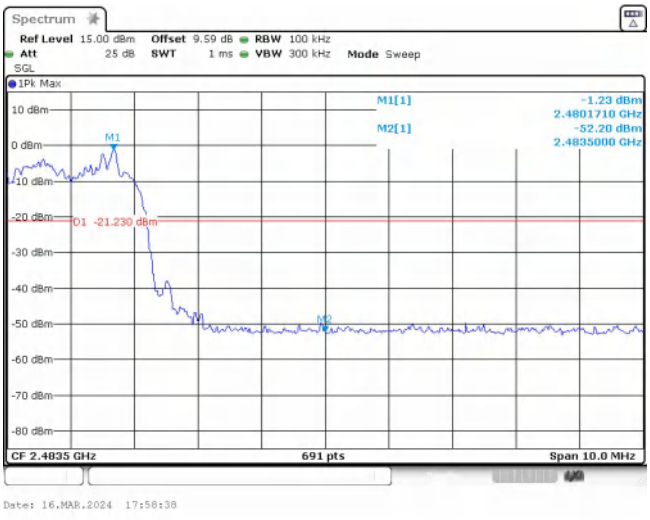


Out Of Band Emission(Right)



Out Of Band Emission(Right)

GFSK_DH5_Channel Hopping	π/4DQPSK_2-DH5_Channel Hopping
	
Out Of Band Emission(Left) GFSK_DH5_Channel Hopping	Out Of Band Emission(Left) π/4DQPSK_2-DH5_Channel Hopping
	
Out Of Band Emission(Right) GFSK_DH5_Channel Hopping	Out Of Band Emission(Right) π/4DQPSK_2-DH5_Channel Hopping
	
Out Of Band Emission(Left)	Out Of Band Emission(Right)

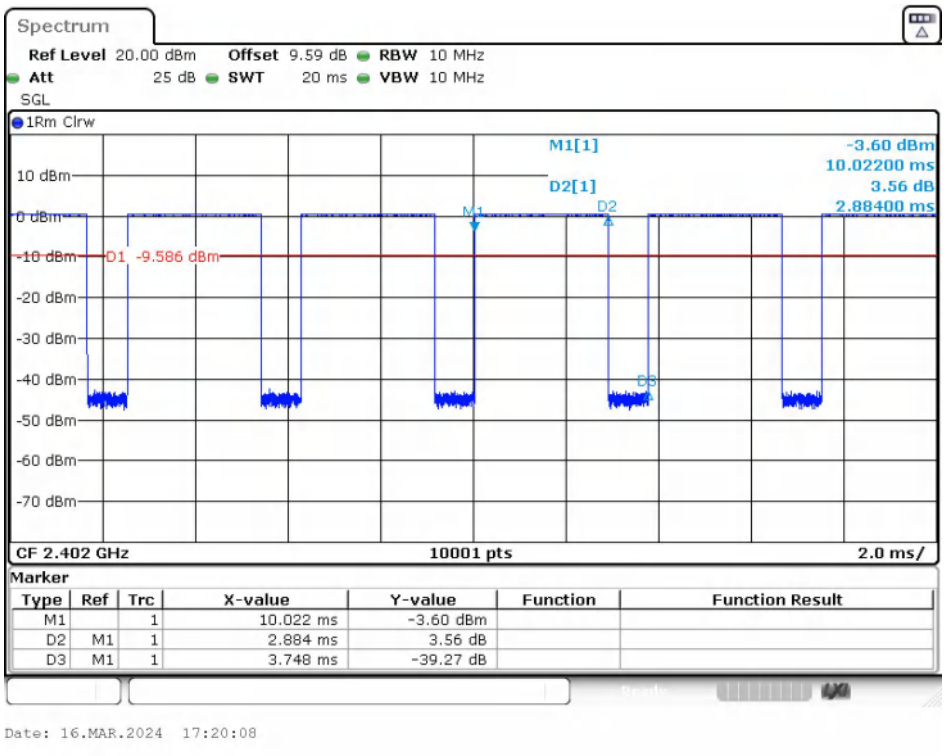
8DPSK_3-DH5_Channel Hopping	8DPSK_3-DH5_Channel Hopping
	
Out Of Band Emission(Left) 8DPSK_3-DH5_Channel Hopping	Out Of Band Emission(Right) 8DPSK_3-DH5_Channel Hopping

6) Duty Cycle

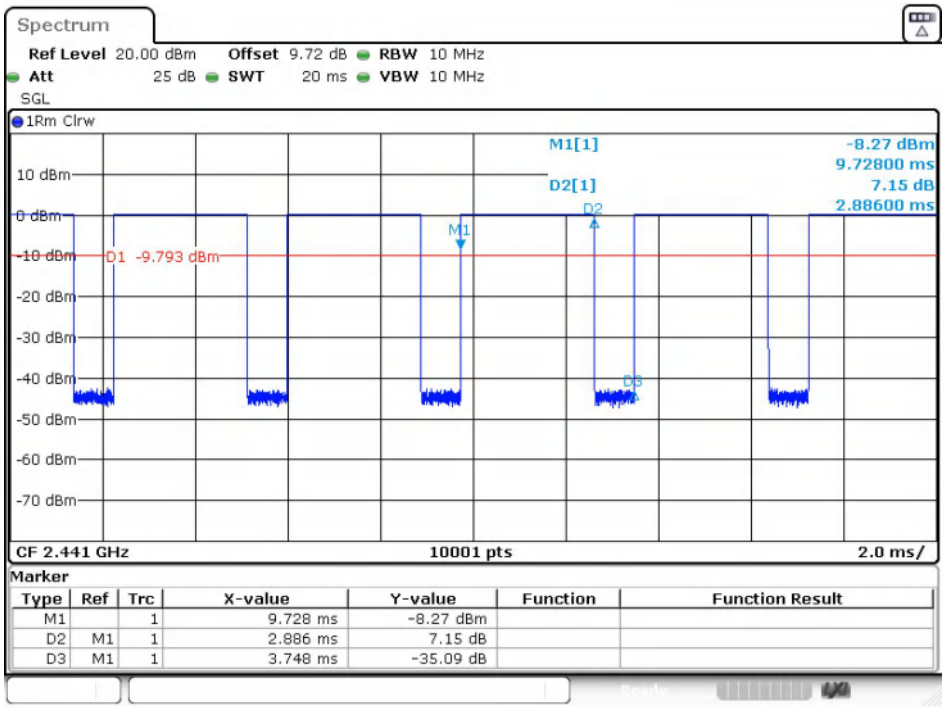
Test Result

Modulation	Packets	Channel	On Time (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle (linear)	Duty Cycle Factor (dB)	1/T
GFSK	DH5	0	2.884	3.748	76.95	0.7695	1.1379	0.35
		39	2.886	3.748	77.00	0.7700	1.1351	0.35
		78	2.886	3.748	77.00	0.7700	1.1351	0.35
π/4DQPSK	2-DH5	0	2.892	3.748	77.16	0.7716	1.1261	0.35
		39	2.890	3.748	77.11	0.7711	1.1289	0.35
		78	2.890	3.748	77.11	0.7711	1.1289	0.35
8DPSK	3-DH5	0	2.892	3.748	77.16	0.7716	1.1261	0.35
		39	2.894	3.748	77.21	0.7721	1.1233	0.35
		78	2.892	3.748	77.16	0.7716	1.1261	0.35

Test Graphs

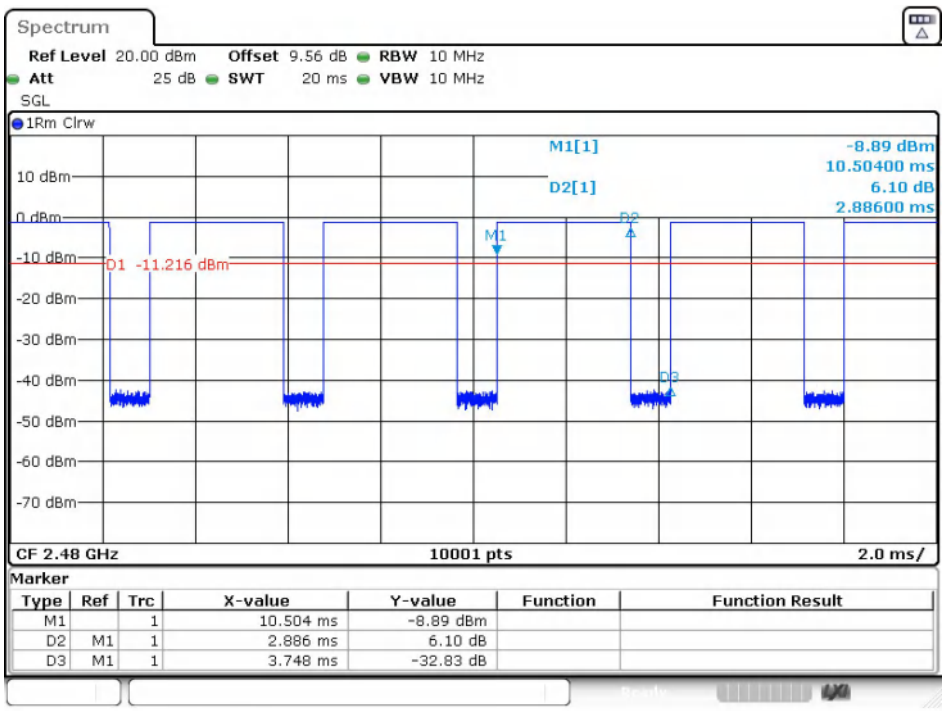


GFSK(DH5)_Channel 0



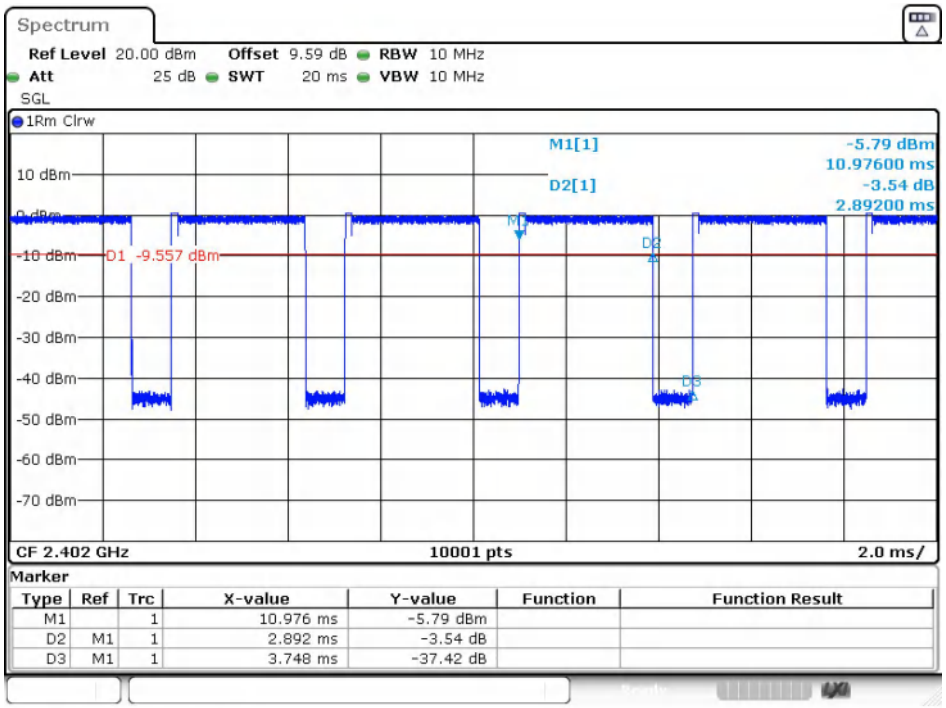
Date: 16.MAR.2024 17:23:46

GFSK(DH5)_Channel 39



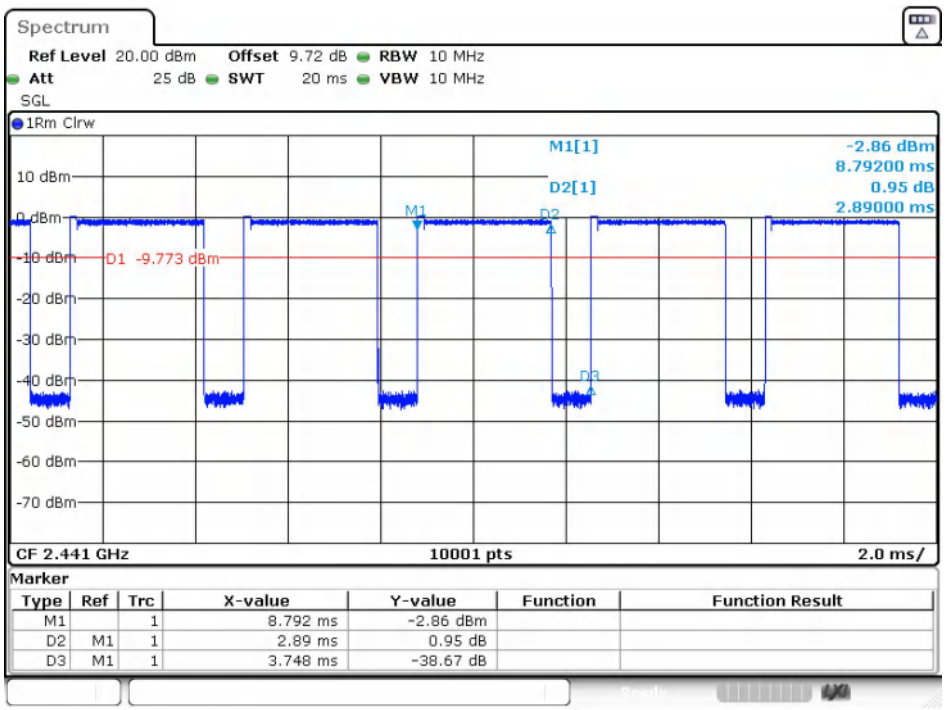
Date: 16.MAR.2024 17:25:59

GFSK(DH5)_Channel 78



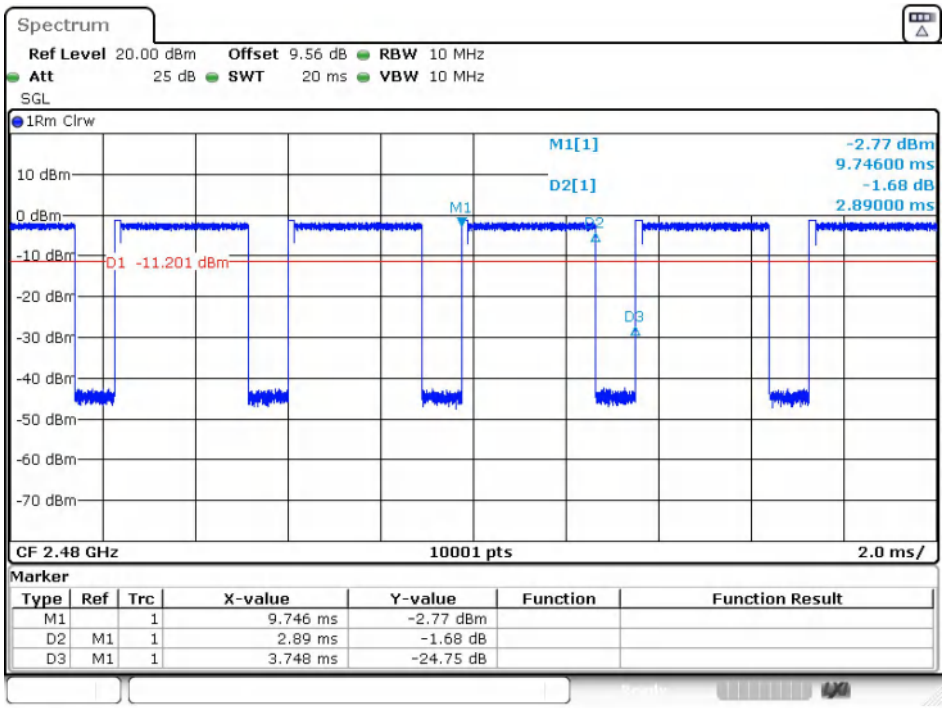
Date: 16.MAR.2024 17:27:58

π/4DQPSK(2-DH5)_Channel 0

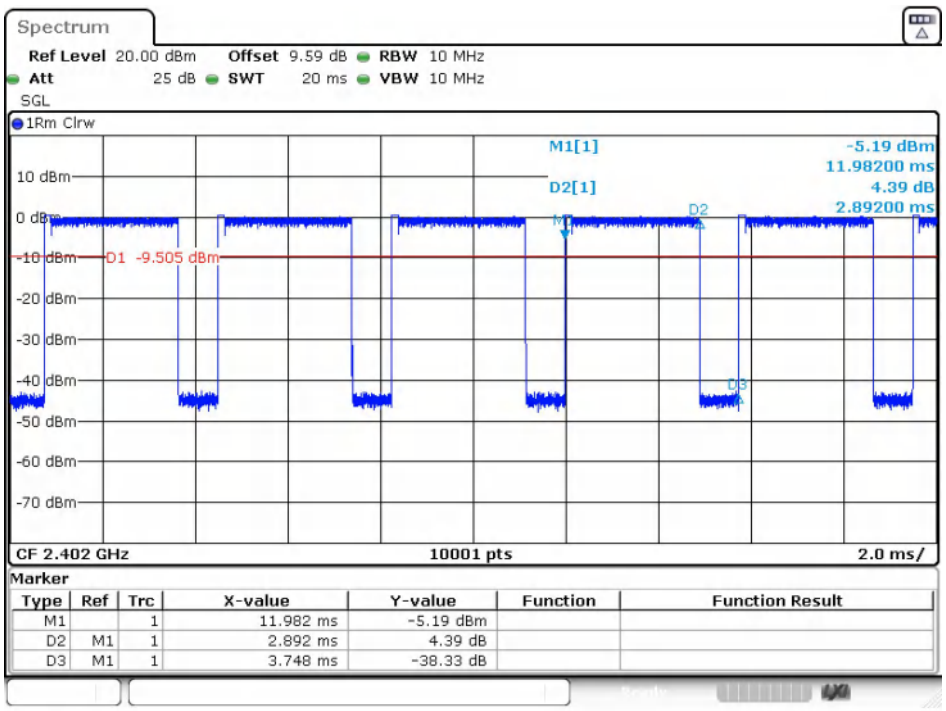


Date: 16.MAR.2024 17:30:06

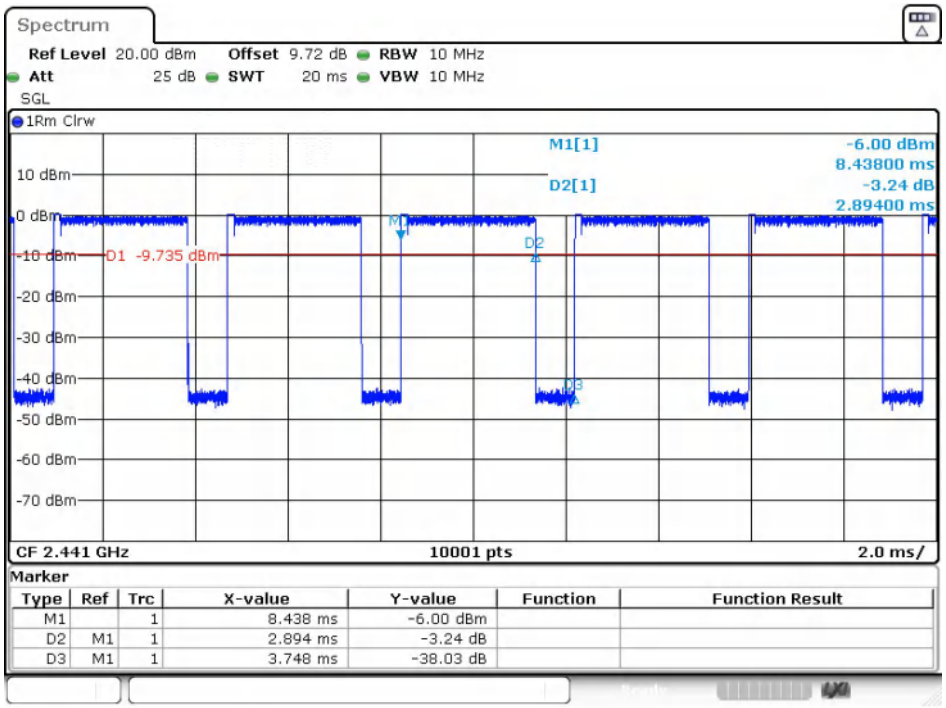
π/4DQPSK(2-DH5)_Channel 39



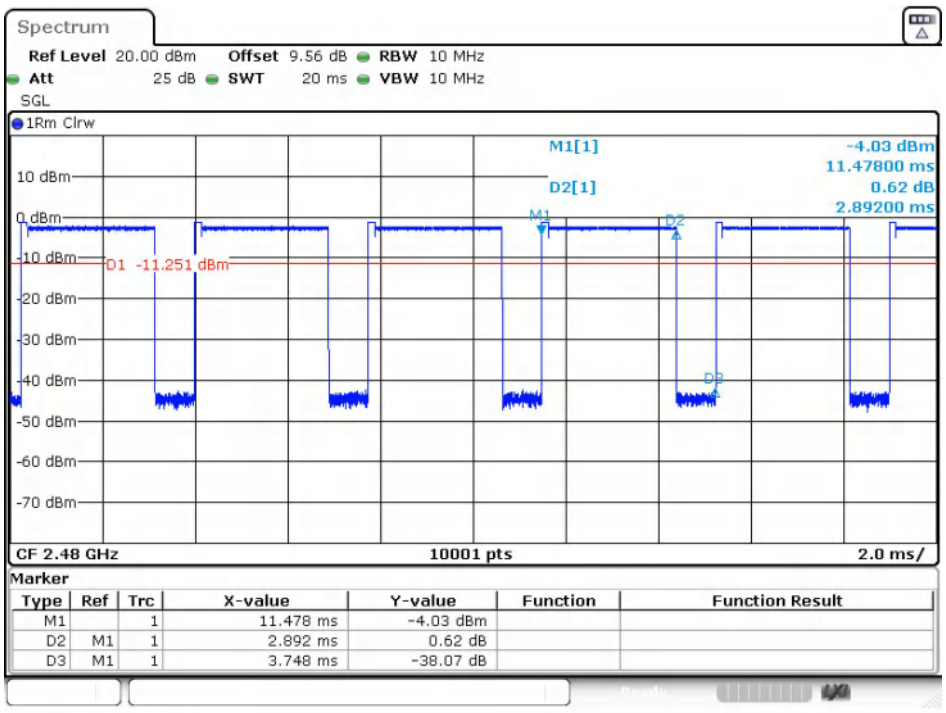
π/4DQPSK(2-DH5)_Channel 78



8DPSK(3-DH5)_Channel 0



8DPSK(3-DH5)_Channel 39



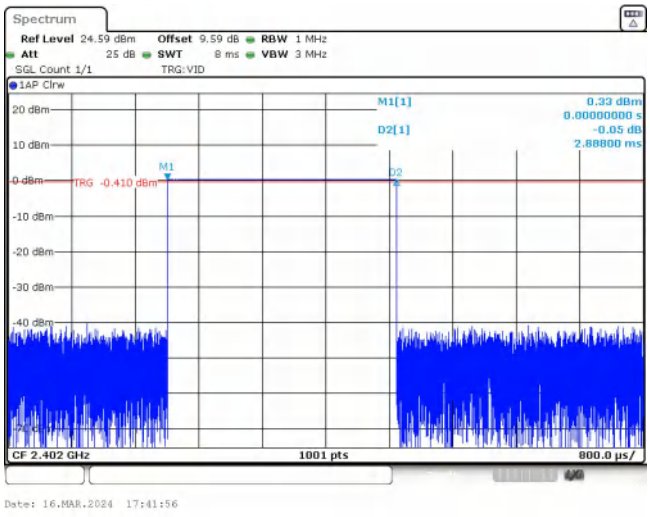
8DPSK(3-DH5)_Channel 78

7) Dwell Time

Test Result

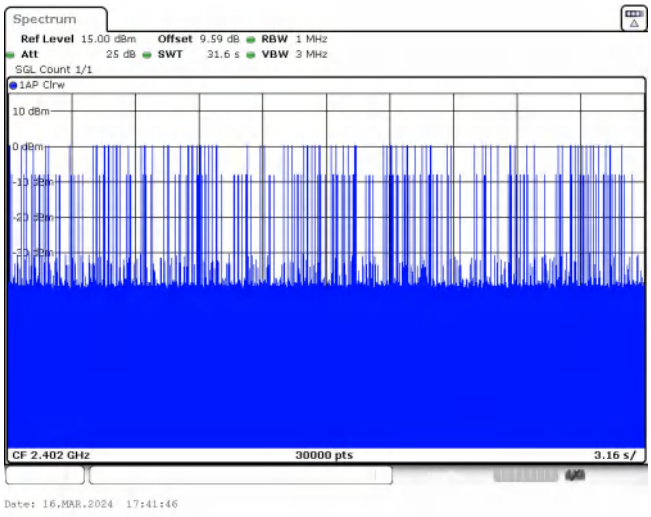
Modulation	Packet	Channel	Pulse Width (ms)	Number of Pulses in 31.6 seconds	Dwell Time (ms)	Limit (ms)	Result
GFSK	DH5	CH0 (2402MHz)	2.888	98	283.02	< 400	PASS
π/4DQPSK	2-DH5		2.888	101	291.69		PASS
8DPSK	3-DH5		2.896	105	304.08		PASS

Test Graphs



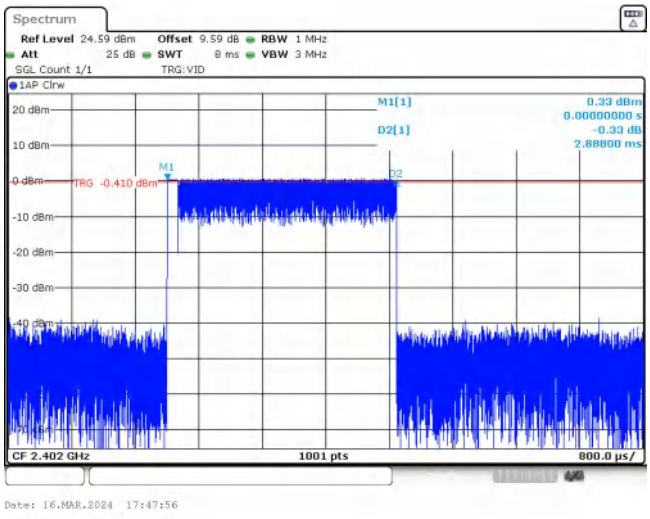
Pulse Width

GFSK_DH5



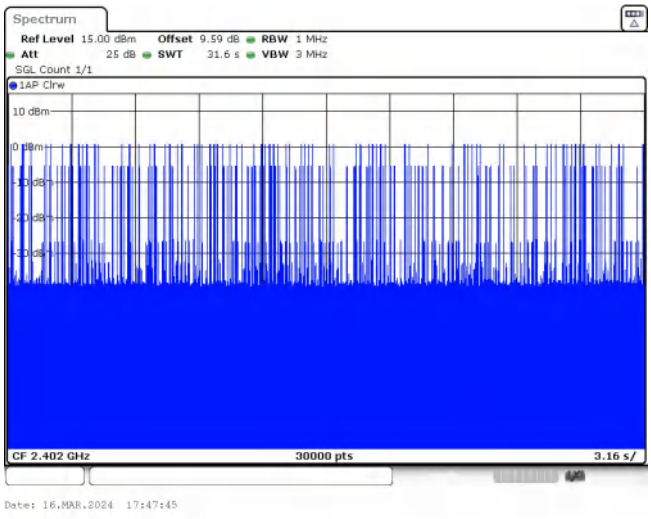
Number of Pulses in 31.6 seconds

GFSK_DH5



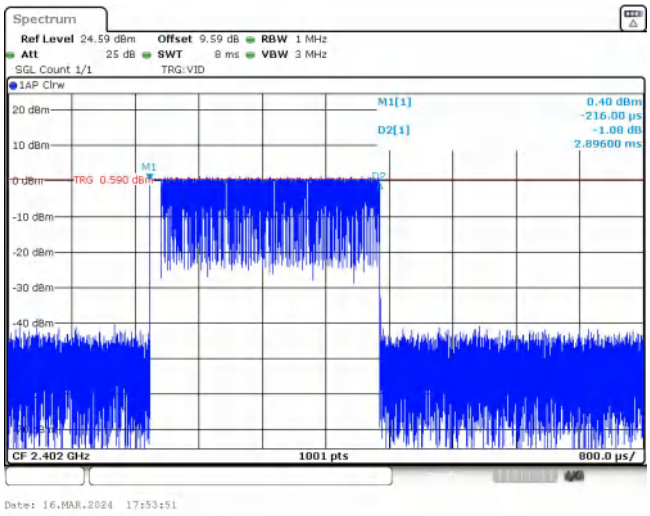
Pulse Width

π/4DQPSK_2-DH5



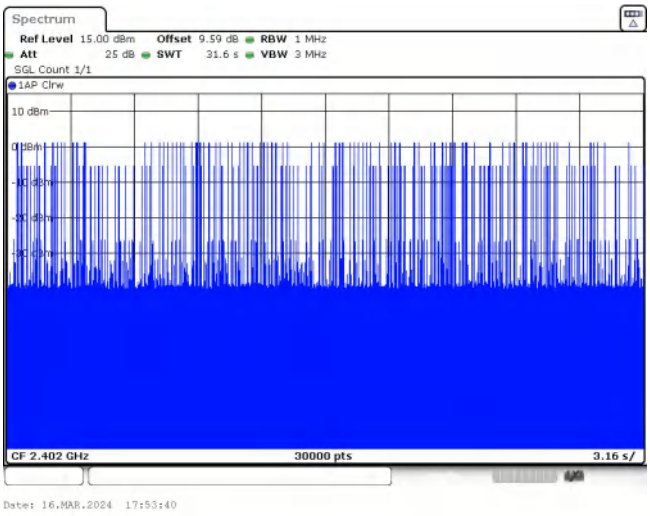
Number of Pulses in 31.6 seconds

π/4DQPSK_2-DH5



Pulse Width

8DPSK_3-DH5



Number of Pulses in 31.6 seconds

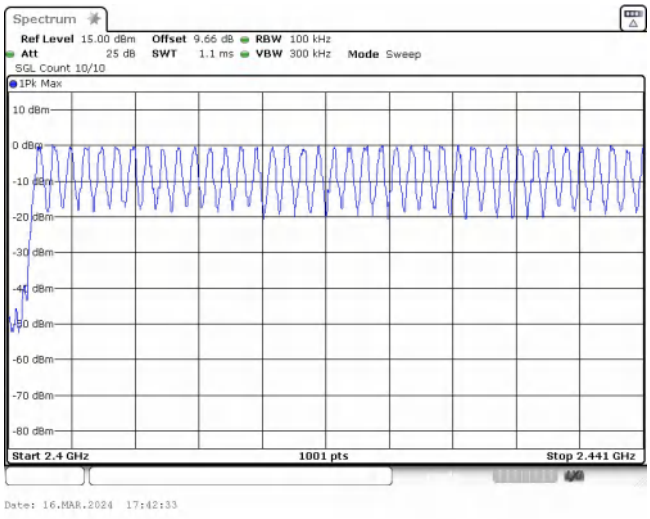
8DPSK_3-DH5

8) Number Of Hopping Channel

Test Result

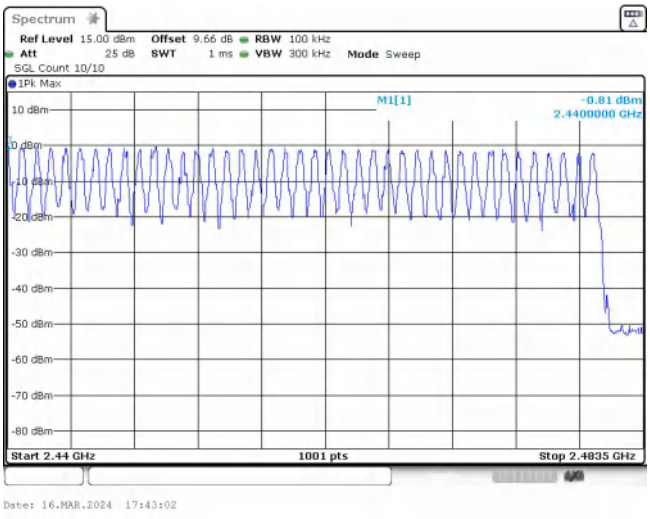
Modulation	Packet	Number of Hopping Channel	Limit	Result
GFSK	DH5	79	15	PASS
π/4DQPSK	2-DH5	79	15	PASS
8DPSK	3-DH5	79	15	PASS

Test Graphs



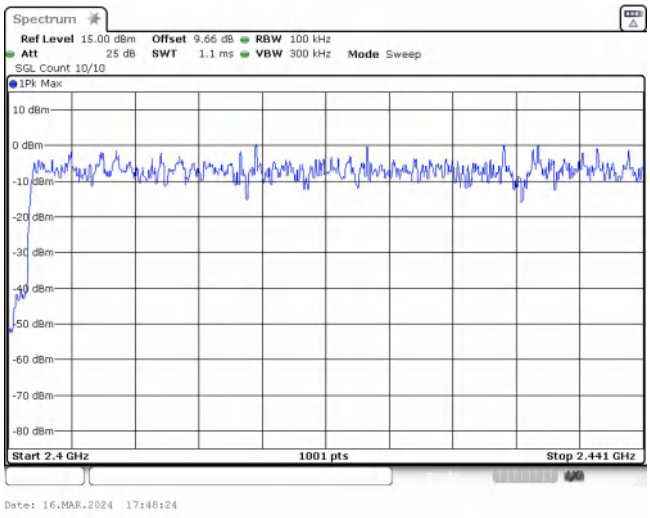
Low End Spectrum Channel Hopping Plot

GFSK



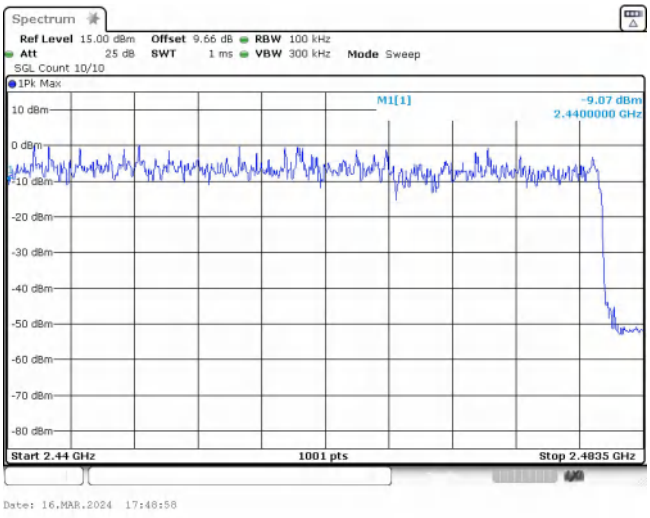
High End Spectrum Channel Hopping Plot

GFSK



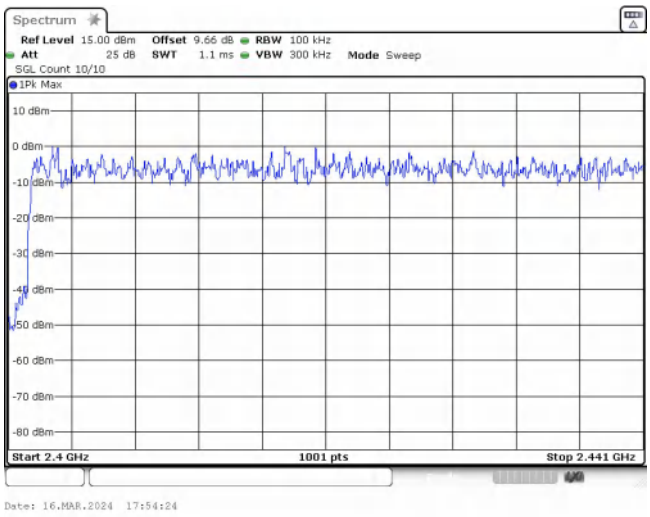
Low End Spectrum Channel Hopping Plot

π/4DQPSK



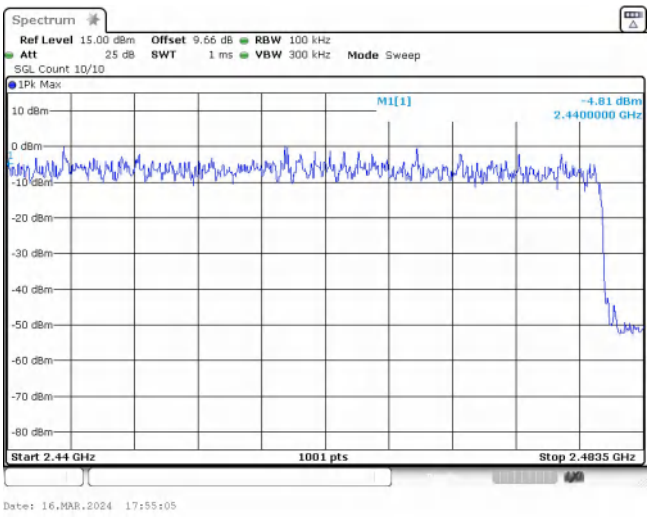
High End Spectrum Channel Hopping Plot

π/4DQPSK



Low End Spectrum Channel Hopping Plot

8DPSK



High End Spectrum Channel Hopping Plot

8DPSK