

Appendix Report

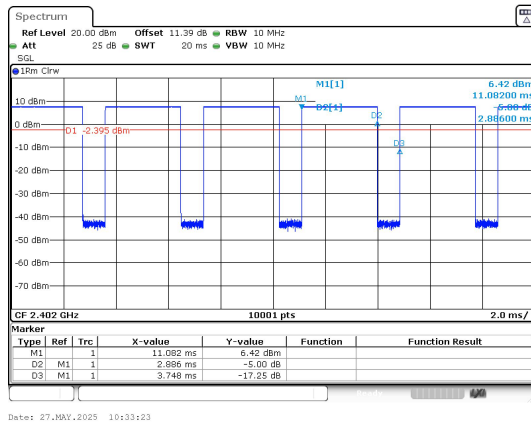
Project No.:	CISR250522094A
Test Engineer:	James Wang
Supervised by:	Rory Huang

1) Duty Cycle

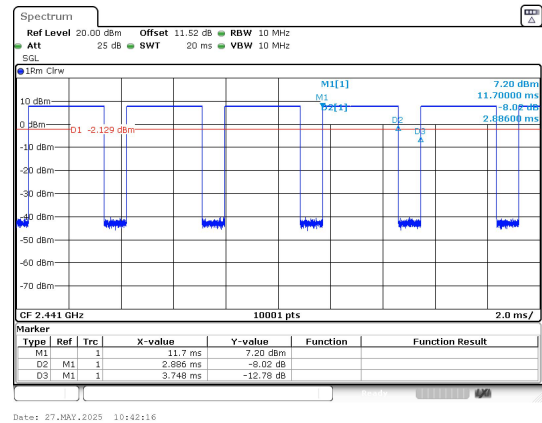
Test Result

Modulation	Packets	Channel	On Time (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle (linear)	Duty Cycle Factor (dB)	1/T
GFSK	DH5	0	2.886	3.748	77.00	0.7700	1.1351	0.3465
		39	2.886	3.748	77.00	0.7700	1.1351	0.3465
		78	2.886	3.748	77.00	0.7700	1.1351	0.3465

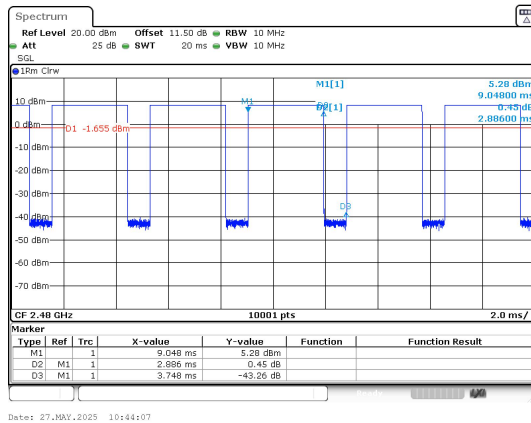
Test Graphs



GFSK(DH5)_Channel 0



GFSK(DH5)_Channel 39



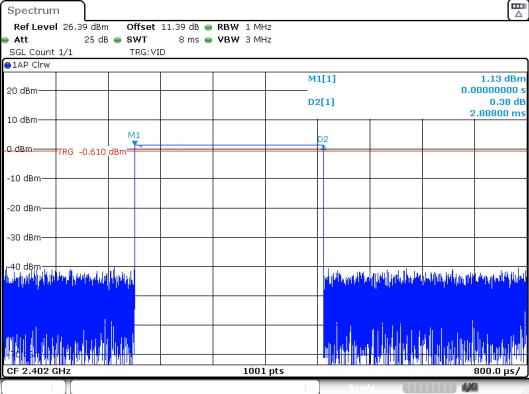
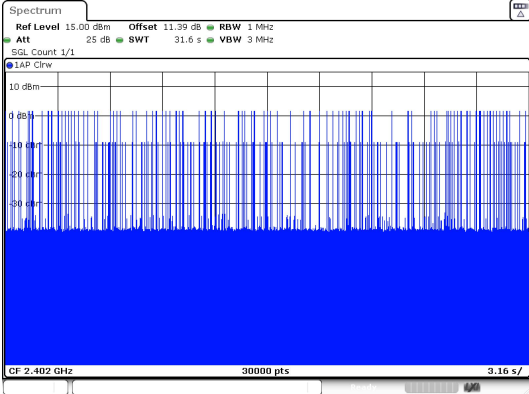
GFSK(DH5)_Channel 78

2) 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	111	320.57	< 400	PASS

Test Graphs

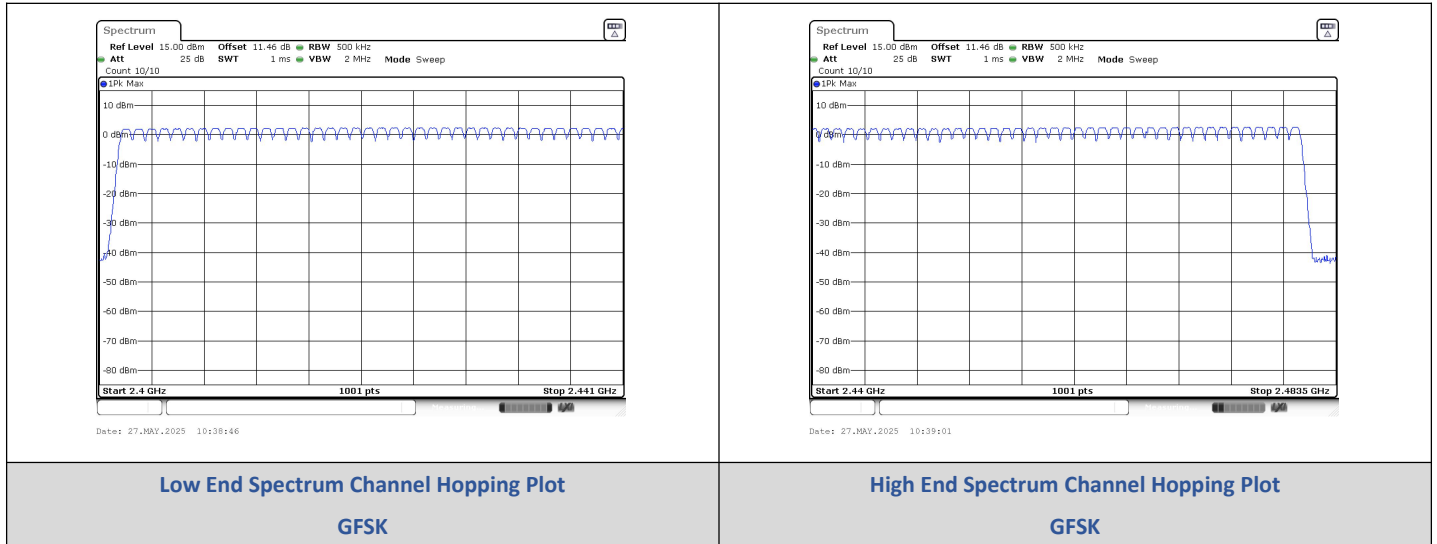
 Ref Level 26.39 dBm Offset 11.39 dB RBW 1 MHz Att 25 dB SWT 8 ms VBW 3 MHz SQL Count 1/1 TRG:VID M1[1] 1.13 dBm M2[1] 0.39 dBm 2.88800 ms CF 2.402 GHz 1001 pts 800.0 μs/ Date: 27.MAY.2025 10:38:13	 Ref Level 15.00 dBm Offset 11.39 dB RBW 1 MHz Att 25 dB SWT 31.6 s VBW 3 MHz SQL Count 1/1 TRG:VID M1[1] 15.00 dBm M2[1] 0.39 dBm 3.16000 s CF 2.402 GHz 30000 pts 3.16 s/ Date: 27.MAY.2025 10:38:05
Pulse Width GFSK_DH5	Number of Pulses in 31.6 seconds GFSK_DH5

3) Number Of Hopping Channel

Test Result

Modulation	Packet	Number of Hopping Channel	Limit	Result
GFSK	DH5	79	15	PASS

Test Graphs

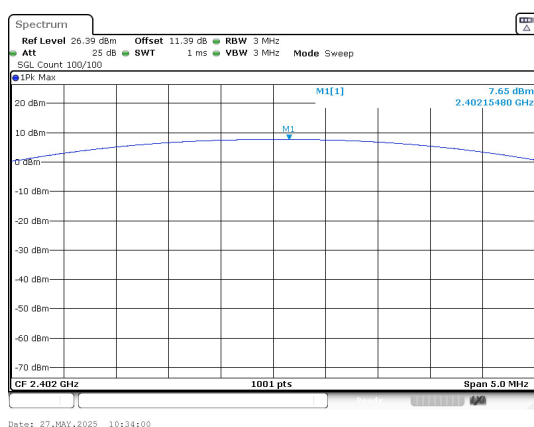


4) Conducted Output Power

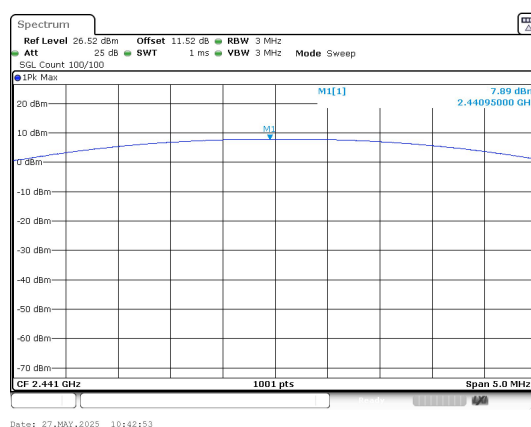
Test Result

Modulation	Packet Type	Channel	Peak Output Power (dBm)	Peak Output Power (mW)	Limit (dBm)	Result
GFSK	DH5	0	7.65	5.82	≤30	PASS
		39	7.89	6.15		PASS
		78	8.39	6.90		PASS

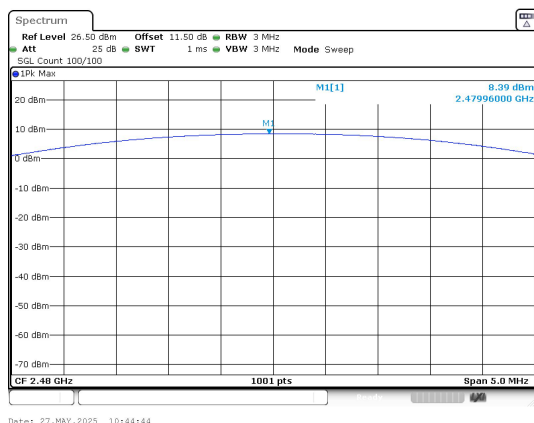
Test Graphs



Peak Output Power
GFSK_Channel 0



Peak Output Power
GFSK_Channel 39



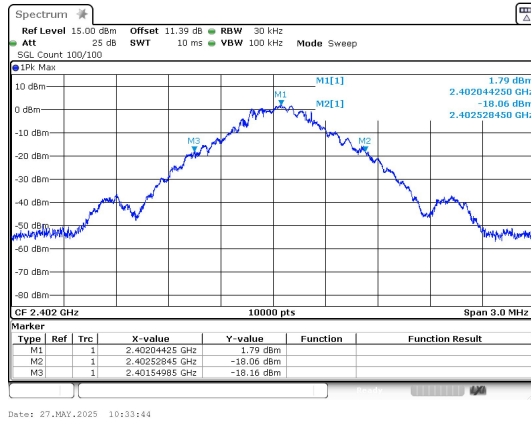
Peak Output Power
GFSK_Channel 78

5) 20dB Bandwidth

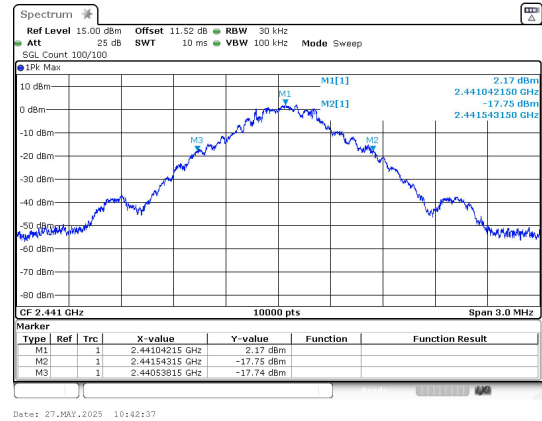
Test Result

Modulation	Channel	Center Frequency (MHz)	20 dB Bandwidth (MHz)
GFSK	0	2402 MHz	0.98
	39	2441 MHz	0.98
	78	2480 MHz	0.98

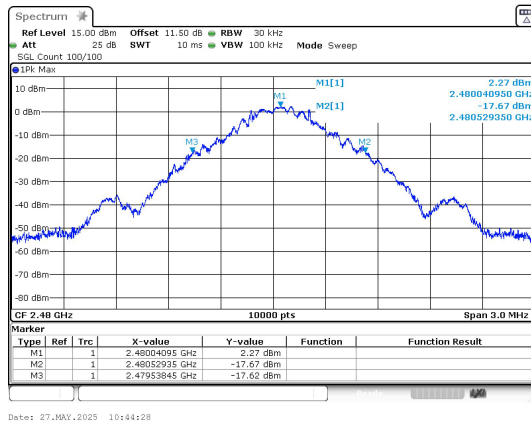
Test Graphs



GFSK_DH5_Channel 0



GFSK_DH5_Channel 39



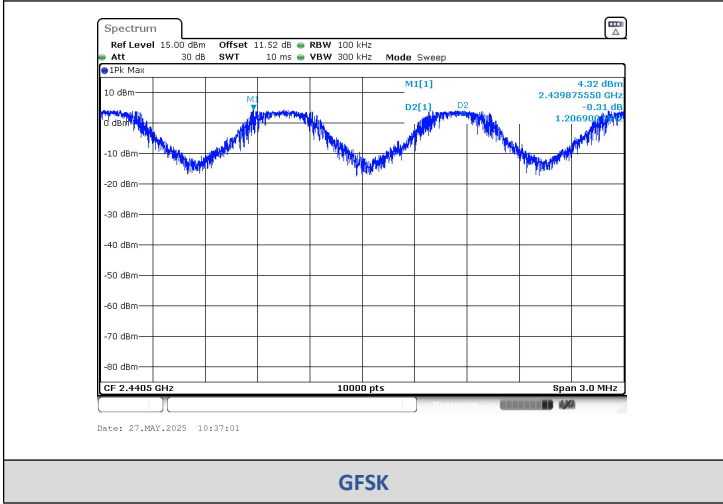
GFSK_DH5_Channel 78

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	2439.8756	2441.0824	1.2069	0.98	PASS

Test Graphs



7) Conducted Out Of Band Emission

Test Result

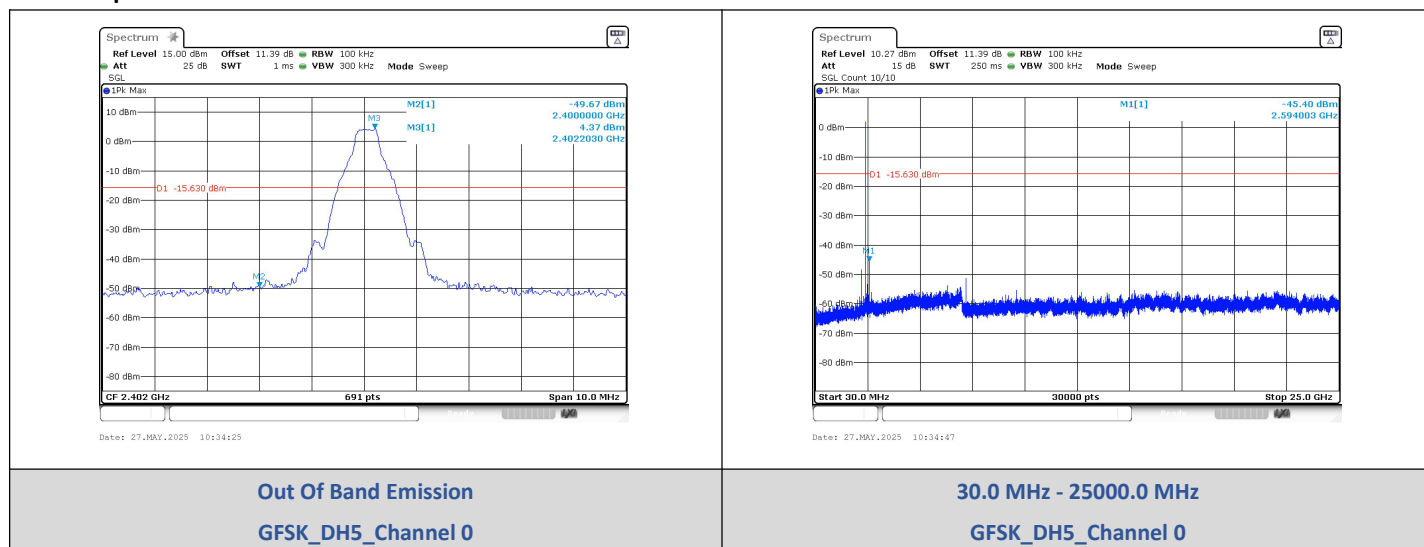
Non-Hopping

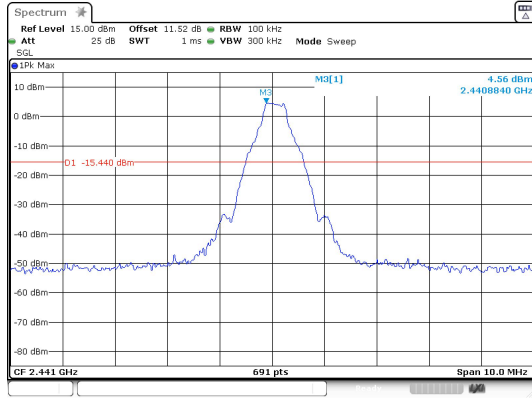
Modulation	Packet	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
GFSK	DH5	0	2400.00	-49.670	-15.63	-34.040	PASS
			2594.00	-45.405	-15.63	-29.775	PASS
		39	2633.12	-46.637	-15.44	-31.197	PASS
		78	2287.70	-48.073	-15.03	-33.043	PASS
			2483.50	-52.530	-15.03	-37.500	PASS

Hopping

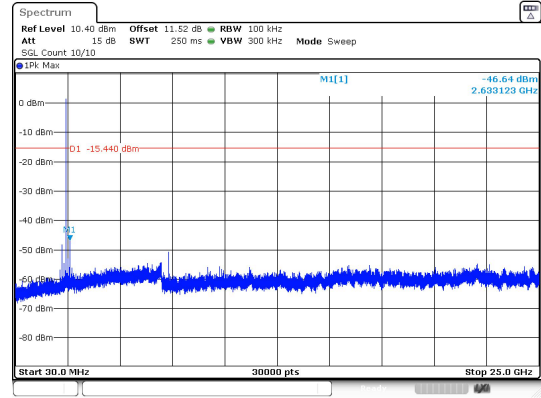
Modulation	Packet	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
GFSK	DH5	Hopping	2395.99	-49.458	-15.91	-33.548	PASS
			2400.00	-51.260	-15.91	-35.350	PASS
			2483.50	-50.880	-15.41	-35.470	PASS

Test Graphs

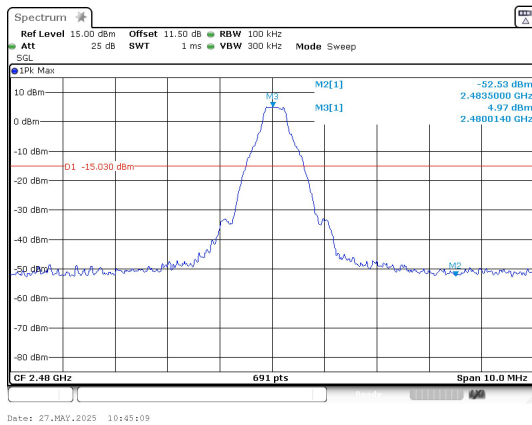




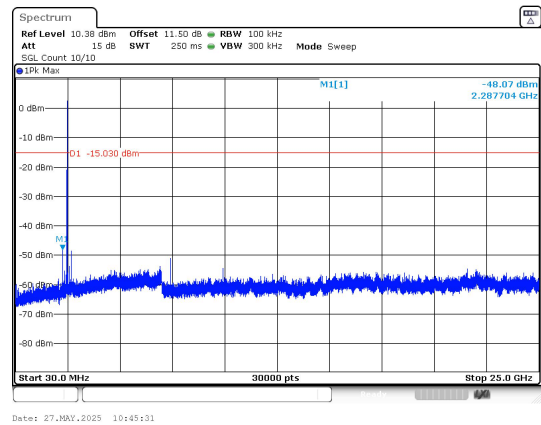
**Out Of Band Emission
GFSK_DH5_Channel 39**



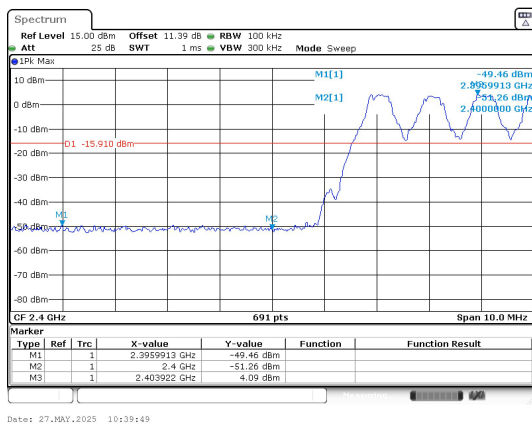
**30.0 MHz - 25000.0 MHz
GFSK_DH5_Channel 39**



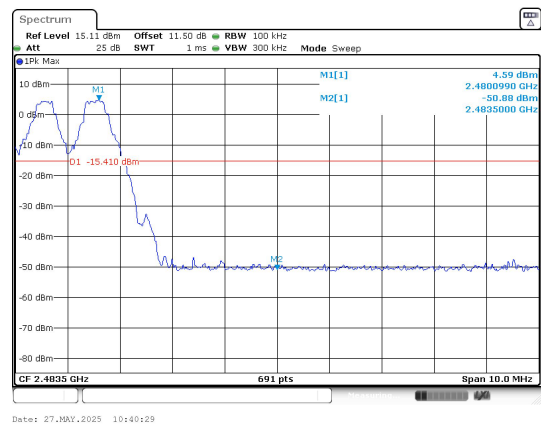
**Out Of Band Emission
GFSK_DH5_Channel 78**



**30.0 MHz - 25000.0 MHz
GFSK_DH5_Channel 78**



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



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

-----End of the report-----