

Appendix Report

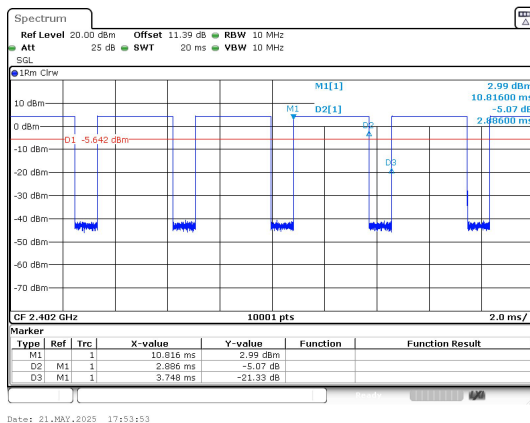
Project No.:	CISR250520108
Test Engineer:	James Wang
Supervised by:	Rory Huang

1) Duty Cycle

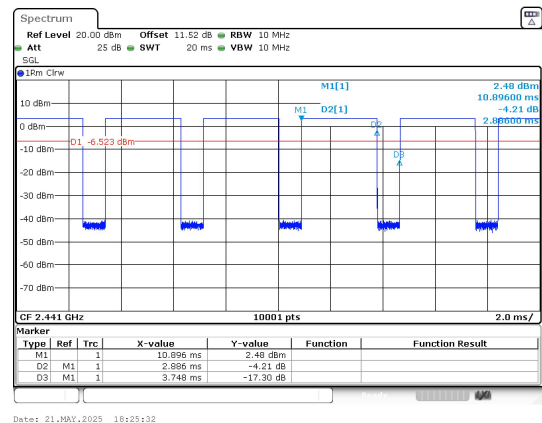
Test Result

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

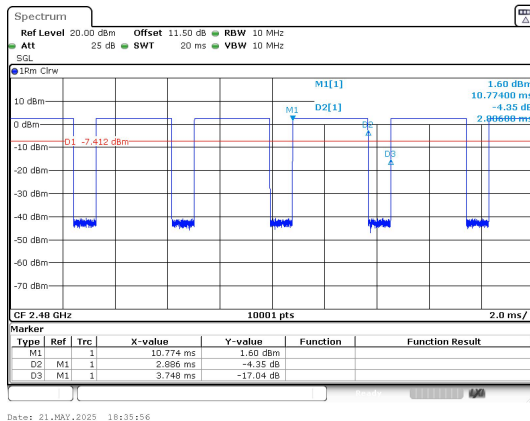
Test Graphs



GFSK(DH5)_Channel 0



GFSK(DH5)_Channel 39



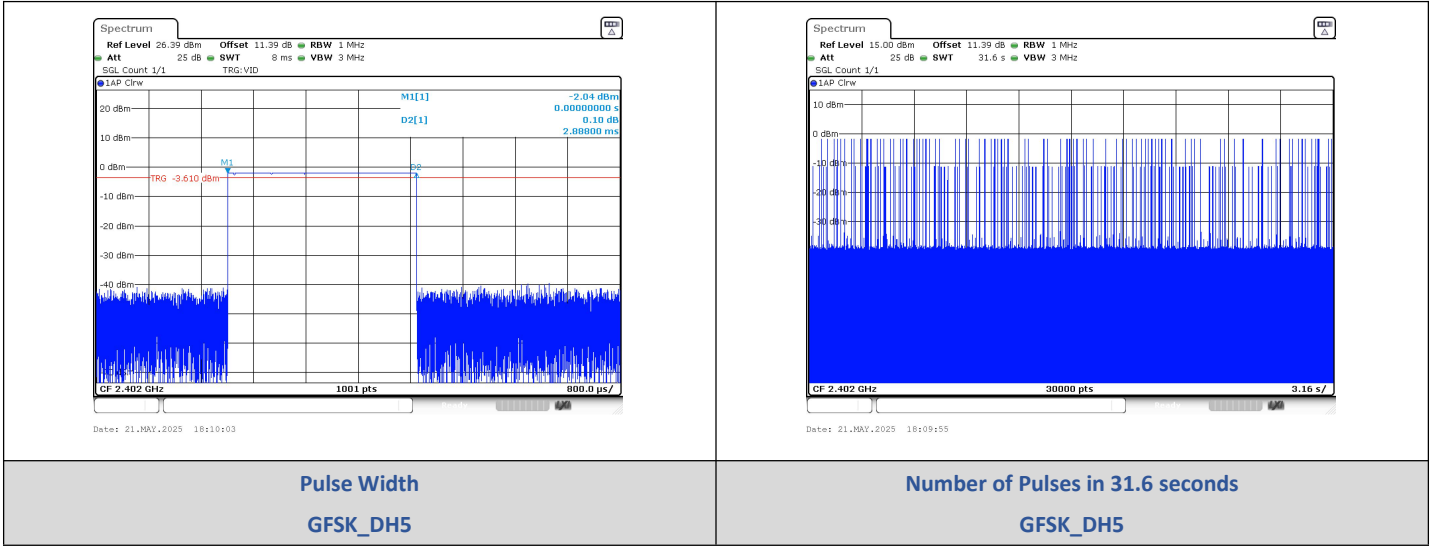
GFSK(DH5)_Channel 78

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	104	300.35	< 400	PASS

Test Graphs

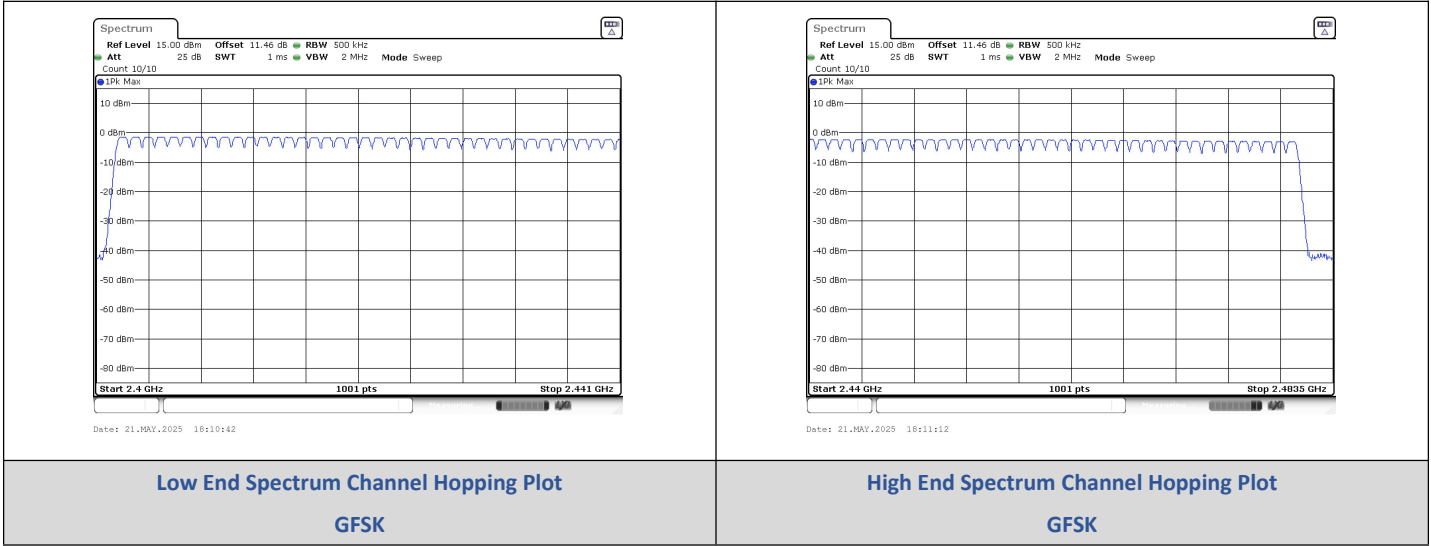


3) Number Of Hopping Channel

Test Result

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

Test Graphs

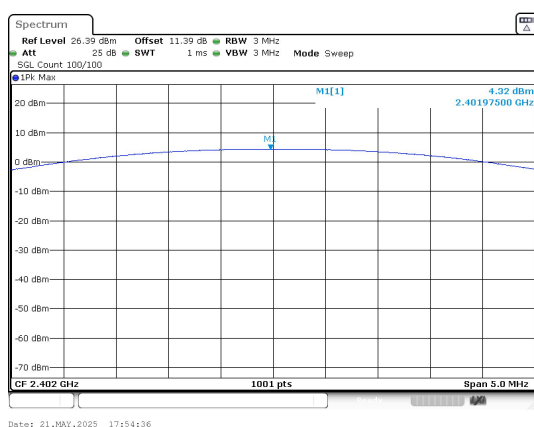


4) Conducted Output Power

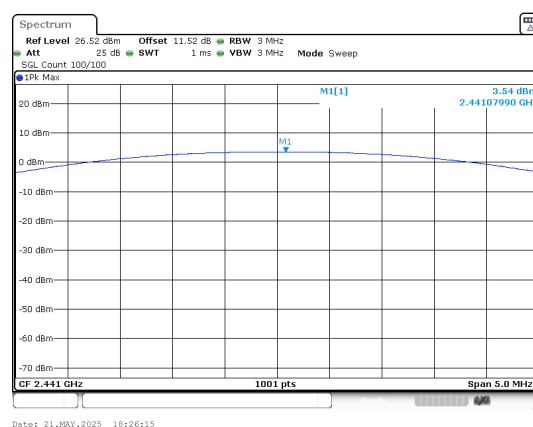
Test Result

Modulation	Packet Type	Channel	Peak Output Power (dBm)	Peak Output Power (mW)	Limit (dBm)	Result
GFSK	DH5	0	4.32	2.70	≤30	PASS
		39	3.54	2.26		PASS
		78	2.68	1.85		PASS

Test Graphs



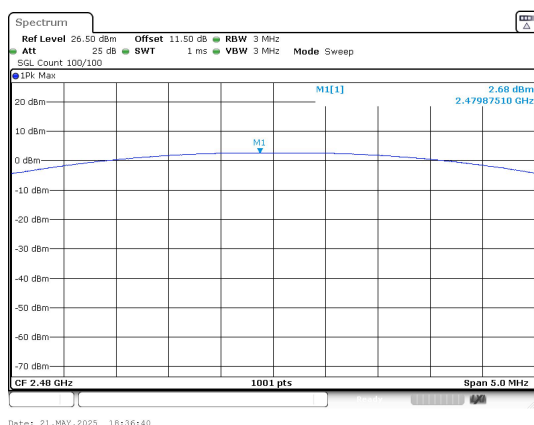
Date: 21.MAY.2025 17:54:36



Date: 21.MAY.2025 18:26:15

Peak Output Power
GFSK_Channel 0

Peak Output Power
GFSK_Channel 39



Date: 21.MAY.2025 18:36:40

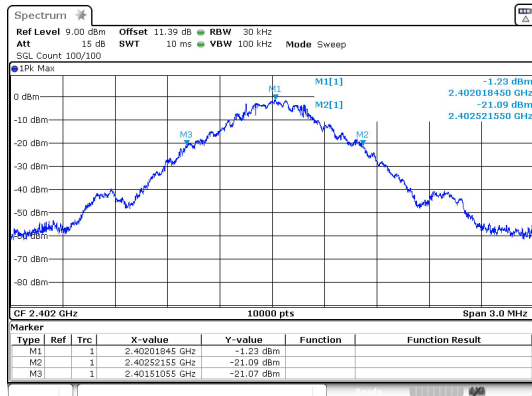
Peak Output Power
GFSK_Channel 78

5) 20dB Bandwidth

Test Result

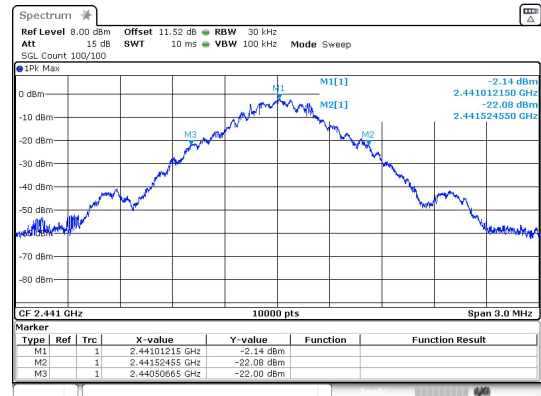
Modulation	Channel	Center Frequency (MHz)	20 dB Bandwidth (MHz)
GFSK	0	2402 MHz	1.01
	39	2441 MHz	1.01
	78	2480 MHz	1.01

Test Graphs



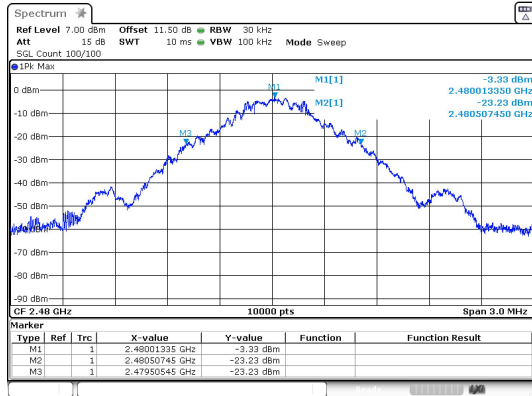
Date: 21.MAY.2025 17:54:20

GFSK_DH5_Channel 0



Date: 21.MAY.2025 18:25:59

GFSK_DH5_Channel 39



Date: 21.MAY.2025 18:36:24

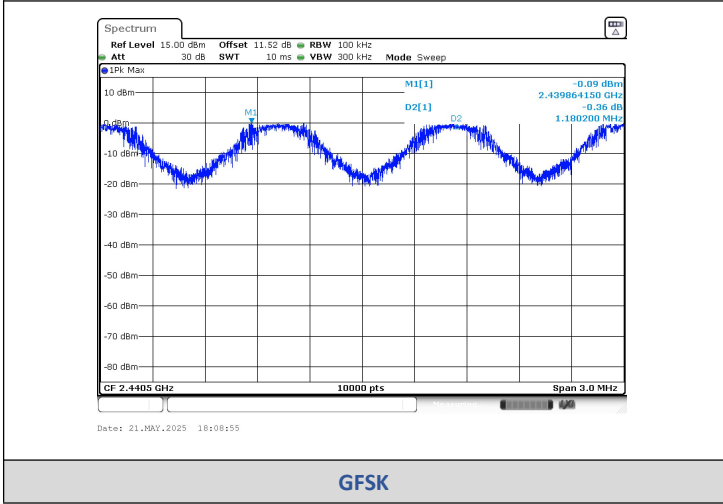
GFSK_DH5_Channel 78

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	2439.8641	2441.0444	1.1802	1.01	PASS

Test Graphs



7) Conducted Out Of Band Emission

Test Result

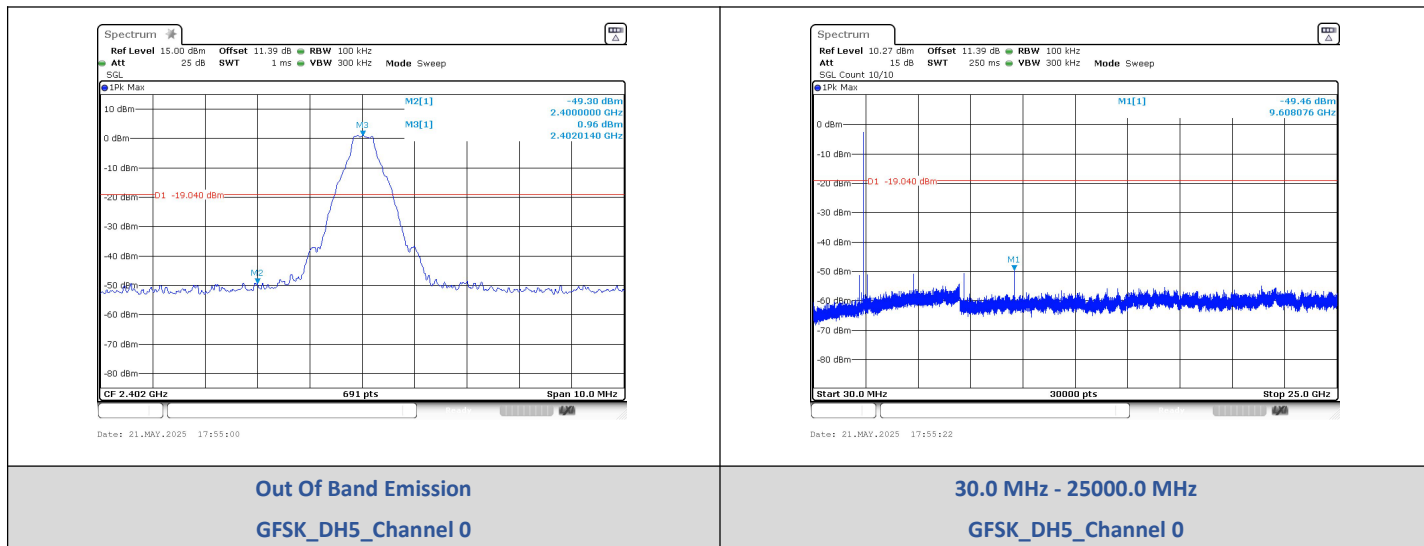
Non-Hopping

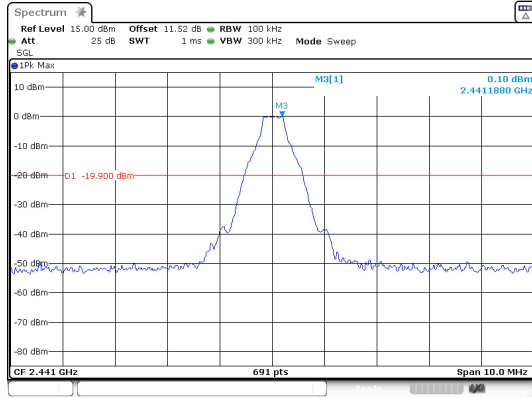
Modulation	Packet	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
GFSK	DH5	0	2400.00	-49.300	-19.04	-30.260	PASS
			9608.08	-49.459	-19.04	-30.419	PASS
		39	9763.72	-46.788	-19.9	-26.888	PASS
		78	2483.50	-50.940	-20.78	-30.160	PASS
			9920.20	-44.369	-20.78	-23.589	PASS

Hopping

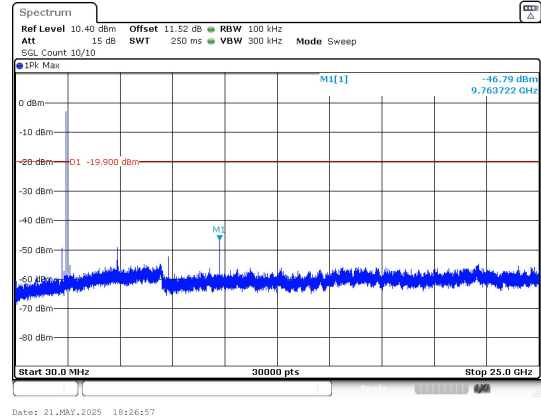
Modulation	Packet	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
GFSK	DH5	Hopping	2396.82	-48.575	-19.0	-29.575	PASS
			2400.00	-48.860	-19.0	-29.860	PASS
			2483.50	-48.580	-20.67	-27.910	PASS

Test Graphs

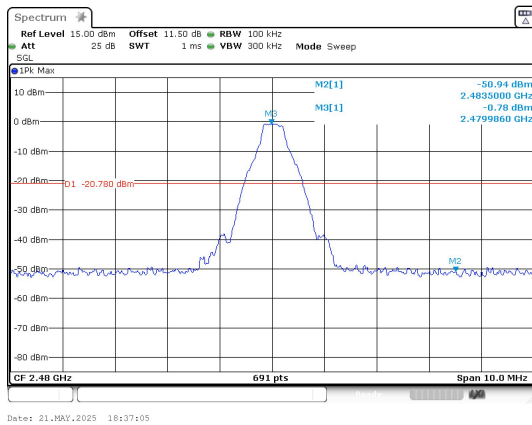




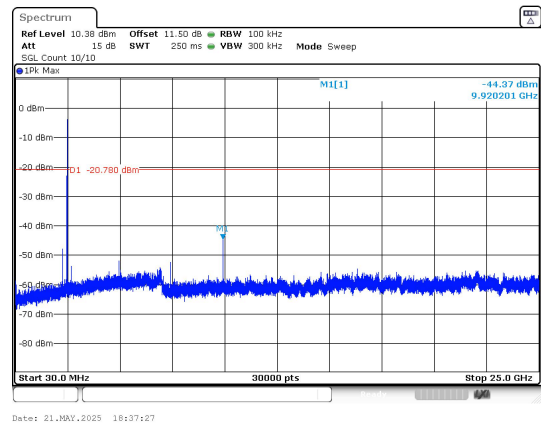
Out Of Band Emission
GFSK_DH5_Channel 39



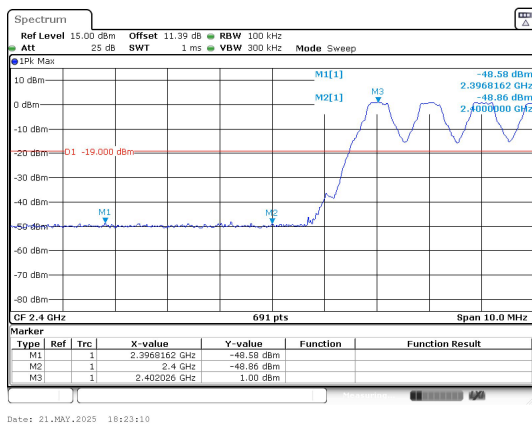
30.0 MHz - 25000.0 MHz
GFSK_DH5_Channel 39



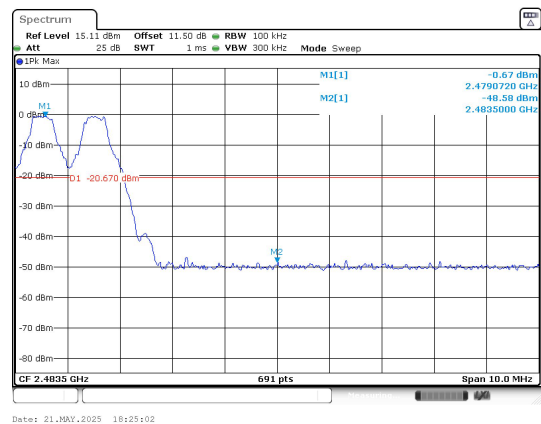
Out Of Band Emission
GFSK_DH5_Channel 78



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-----