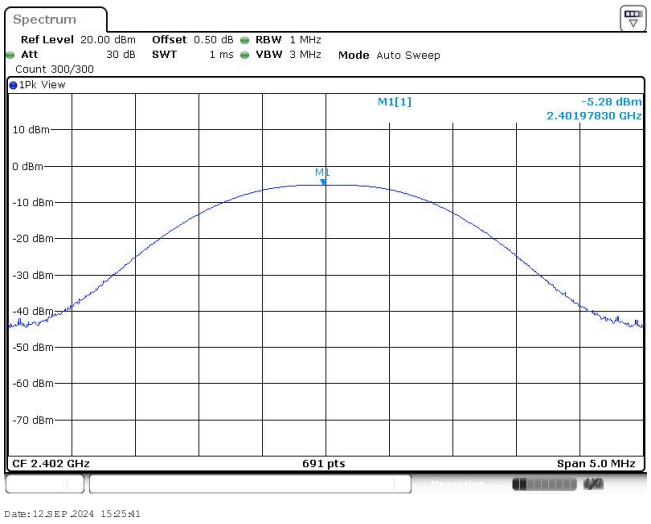
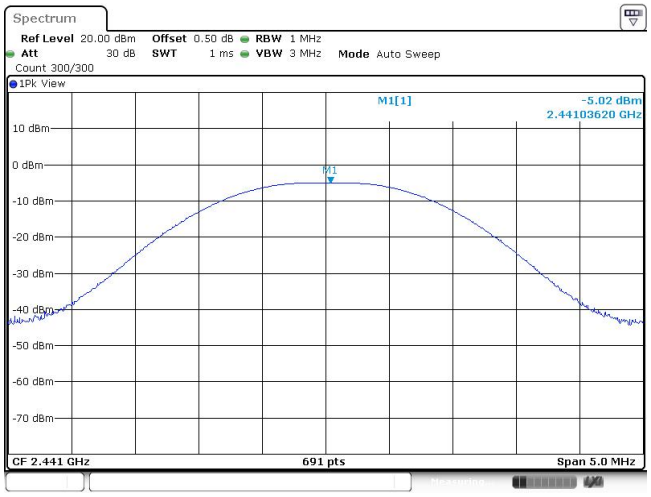
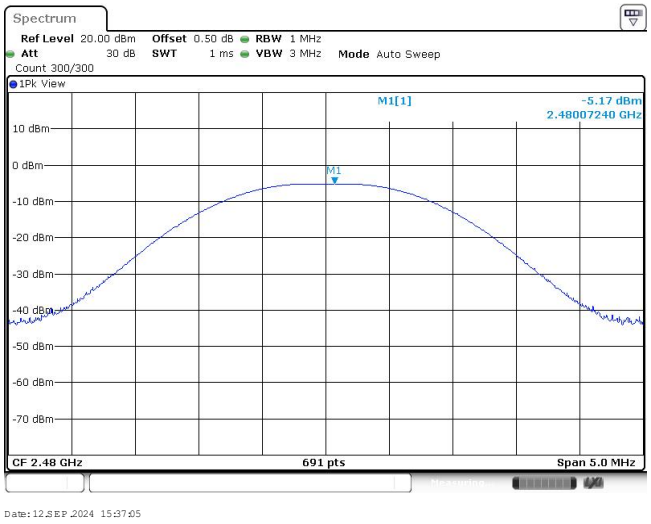
APPENDIX REPORT

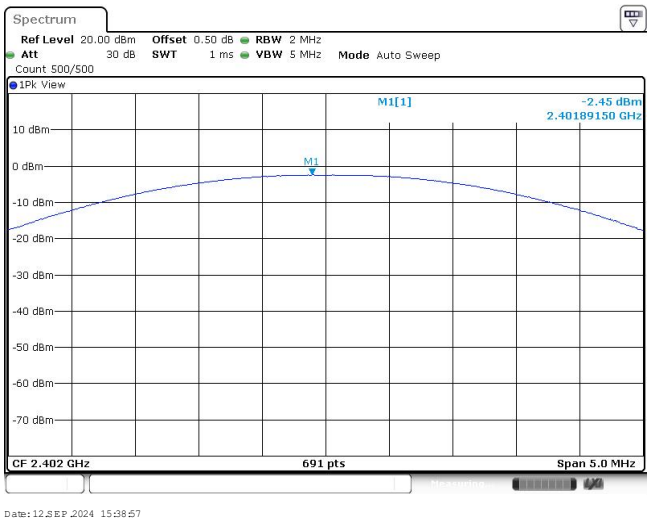
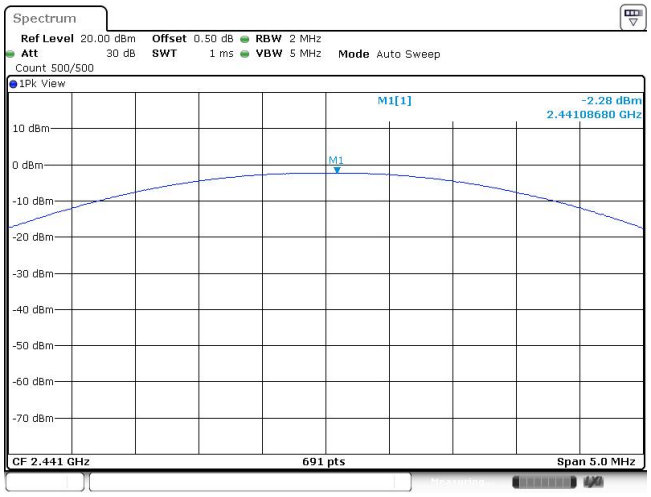
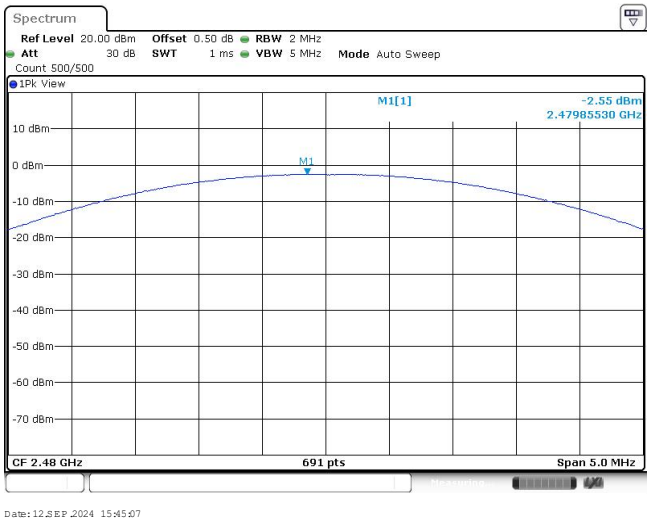
Project No.	SHT2404026304W	Radio Specification	Bluetooth BLE
Test sample No.	YPHT24040263007	Model No.	HD-18A
Start test date	2024-09-12	Finish date	2024-09-13
Temperature	24.8℃	Humidity	45%
Test Engineer	Chenxin Ling	Auditor	Xiaodong Zhao

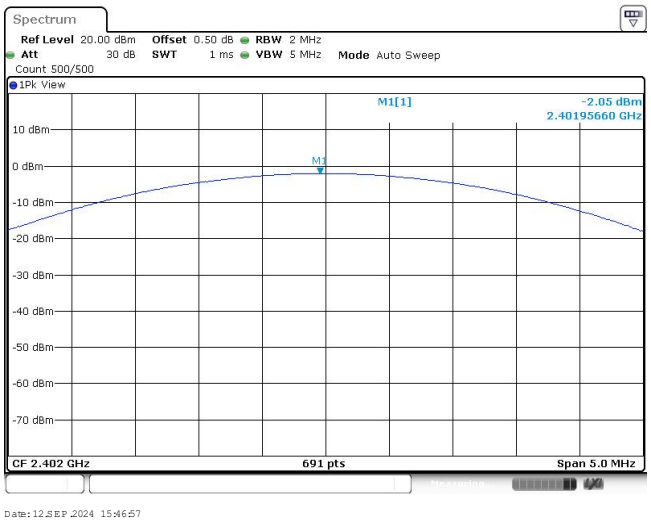
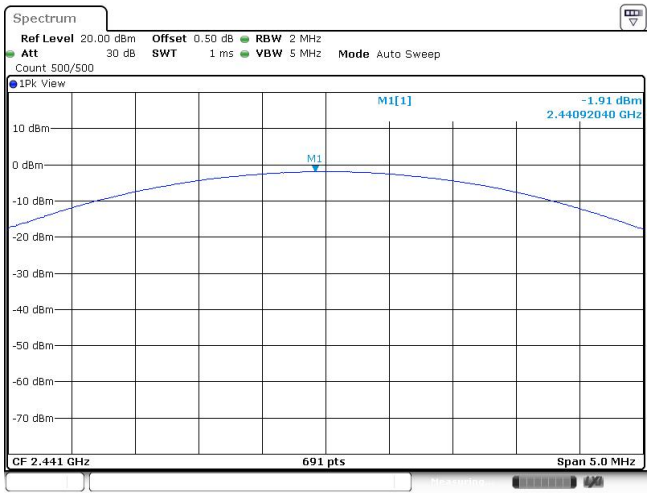
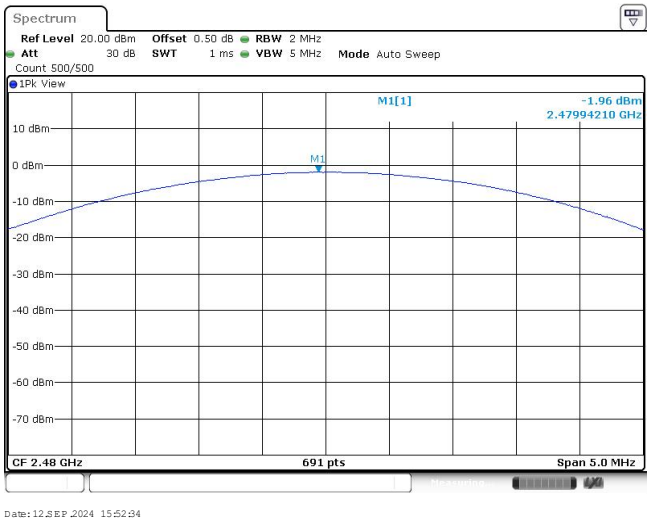
Appendix clause	Test item	Result
A	Peak Output Power	Pass
B	20 dB Bandwidth	Pass
C	99% Occupied Bandwidth	Pass
D	Carrier Frequencies Separation	Pass
E	Hopping Channel Number	Pass
F	Dwell Time	Pass
G	Duty Cycle Correction Factor (DCCF)	Pass
H	Band edge and Spurious Emissions(coducted)	Pass

Appendix A：Peak Output Power

Modulation type	Channel	Peak Output power (dBm)	Average Output power (dBm)	Limit (dBm)	Result
GFSK	00	-5.28	-5.42	≤ 30.00	Pass
	39	-5.02	-5.14		
	78	-5.17	-5.29		
π/4DQPSK	00	-2.45	-2.57	≤ 21.00	Pass
	39	-2.28	-2.41		
	78	-2.55	-2.66		
8DPSK	00	-2.05	-2.17	≤ 21.00	Pass
	39	-1.91	-2.04		
	78	-1.96	-2.07		

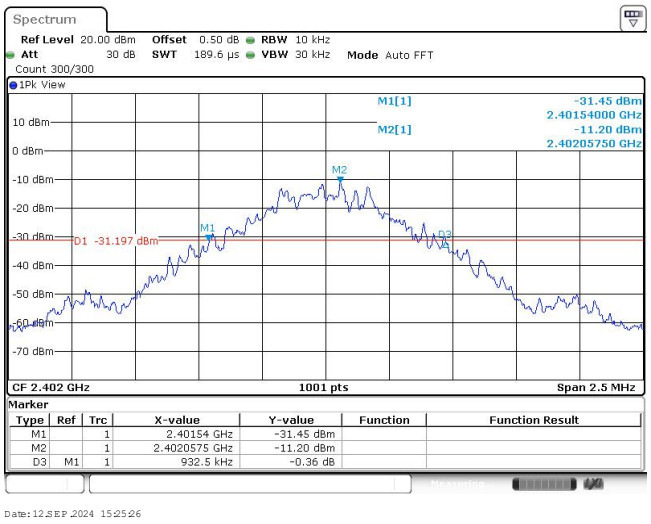
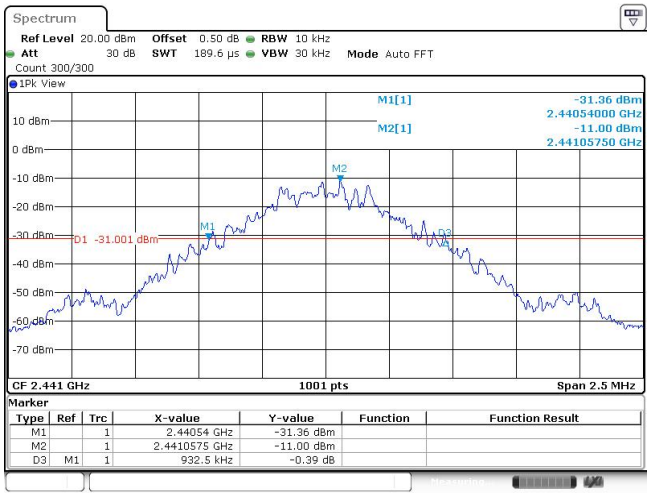
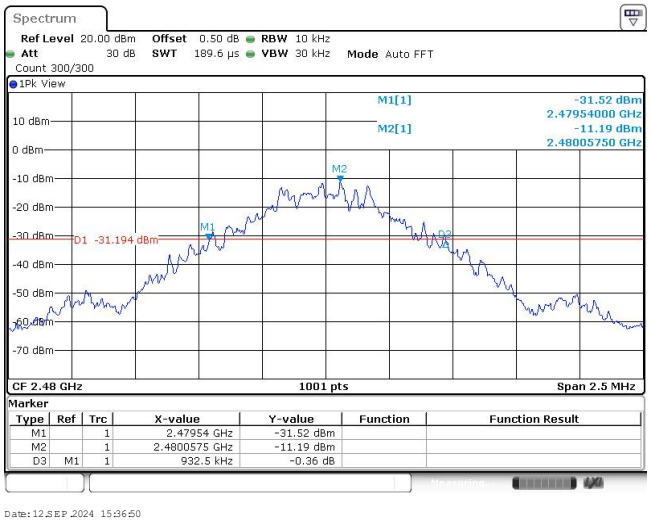
Modulation Type:	GFSK
CH00	
CH39	
CH78	

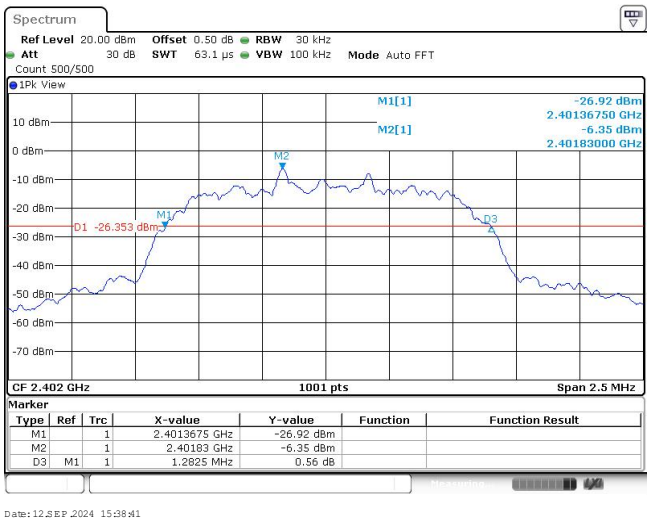
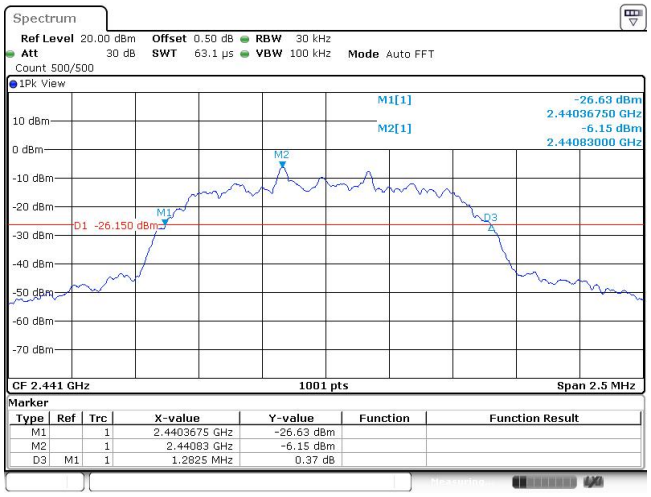
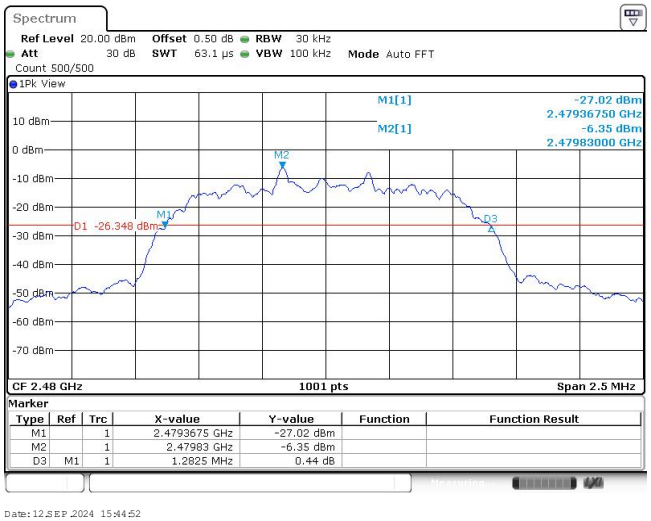
Modulation Type:	π/4DQPSK
CH00	
CH39	
CH78	

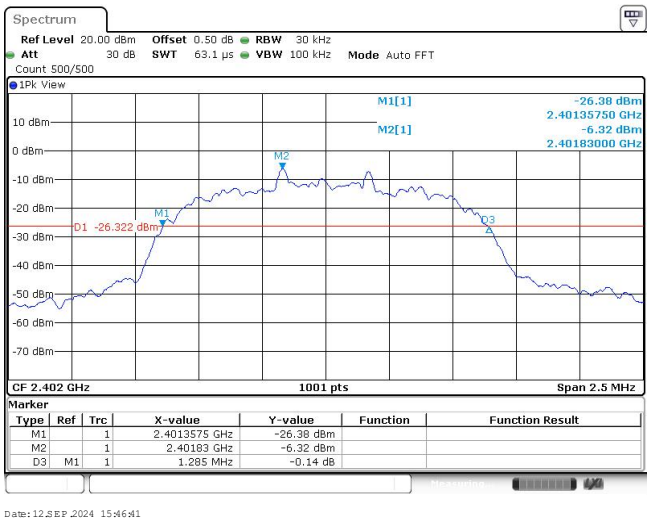
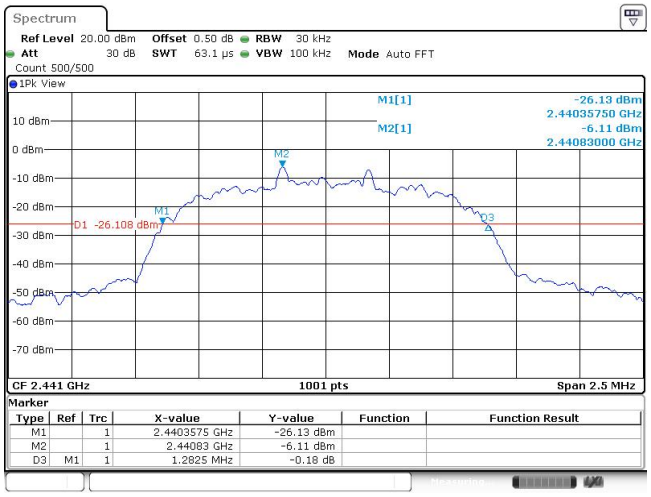
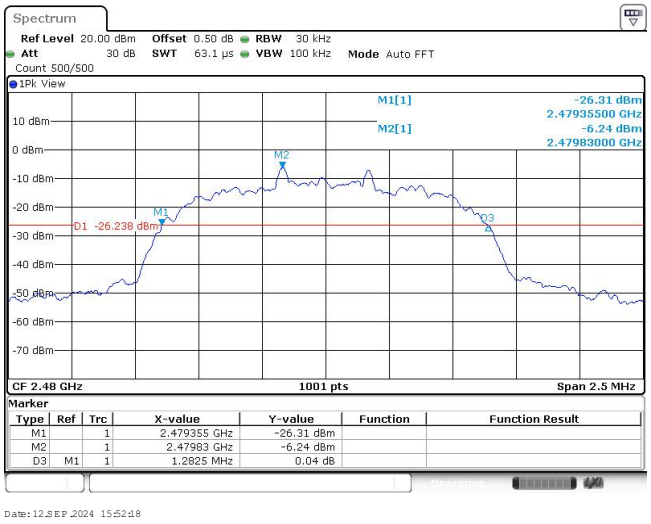
Modulation Type:	8DPSK
CH00	
CH39	
CH78	

Appendix B : 20 dB Bandwidth

Modulation type	Channel	20 dB Bandwidth (kHz)	Limit (kHz)	Result
GFSK	00	932.00	-	Pass
	39	932.00		
	78	932.00		
π/4DQPSK	00	1283.00	-	Pass
	39	1283.00		
	78	1283.00		
8DPSK	00	1285.00	-	Pass
	39	1282.00		
	78	1282.00		

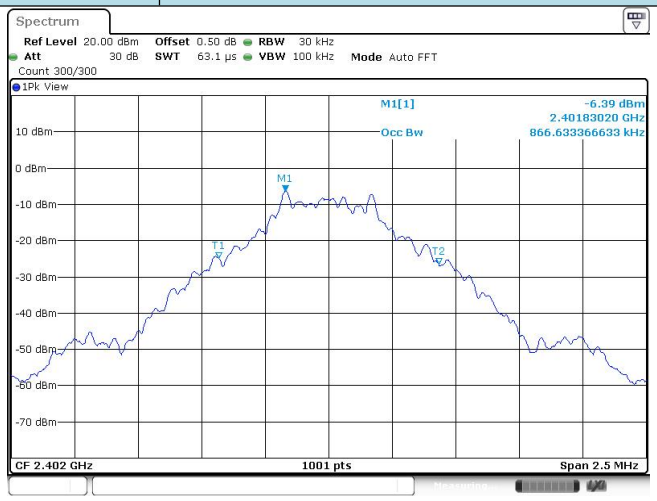
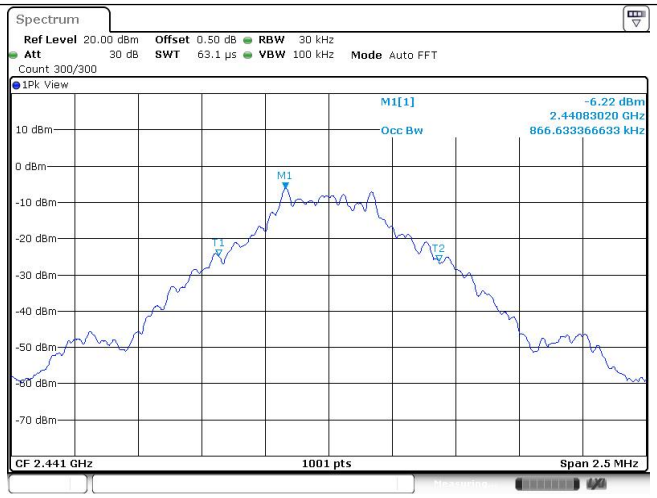
Modulation Type:	GFSK
CH00	
CH39	
CH78	

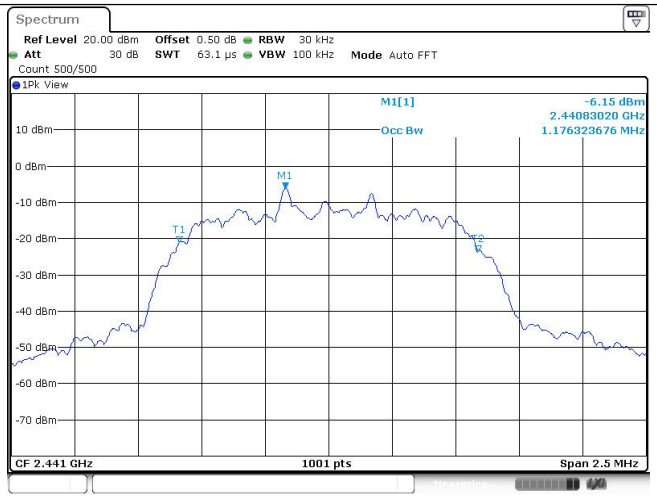
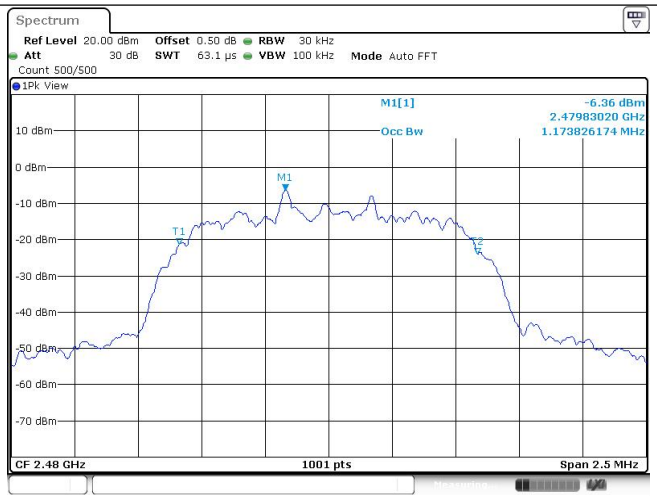
Modulation Type:	π/4DQPSK
CH00	
CH39	
CH78	

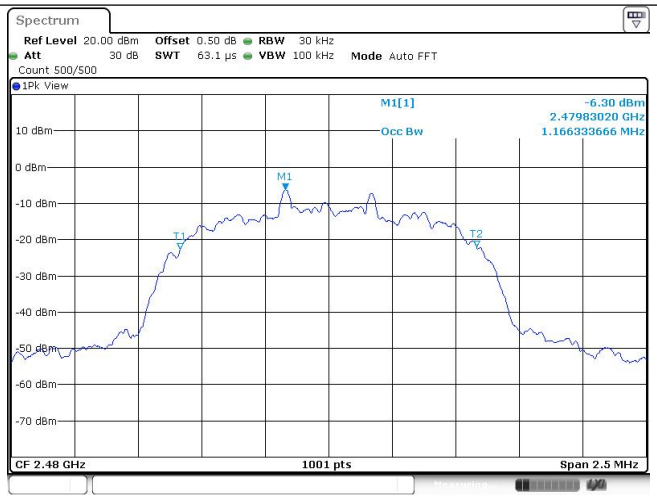
Modulation Type:	8DPSK
CH00	
CH39	
CH78	

Appendix C：99% Occupied Bandwidth

Modulation type	Channel	99% Occupied Bandwidth (MHz)	Limit (MHz)	Result
GFSK	00	0.87	-	Pass
	39	0.87		
	78	0.87		
π/4DQPSK	00	1.17	-	Pass
	39	1.18		
	78	1.17		
8DPSK	00	1.17	-	Pass
	39	1.17		
	78	1.17		

Modulation Type:	GFSK
CH00	
CH39	
CH78	

Modulation Type:	π/4DQPSK
CH00	
CH39	
CH78	

Modulation Type:	8DPSK
CH00	
CH39	
CH78	

Appendix D：Carrier Frequencies Separation

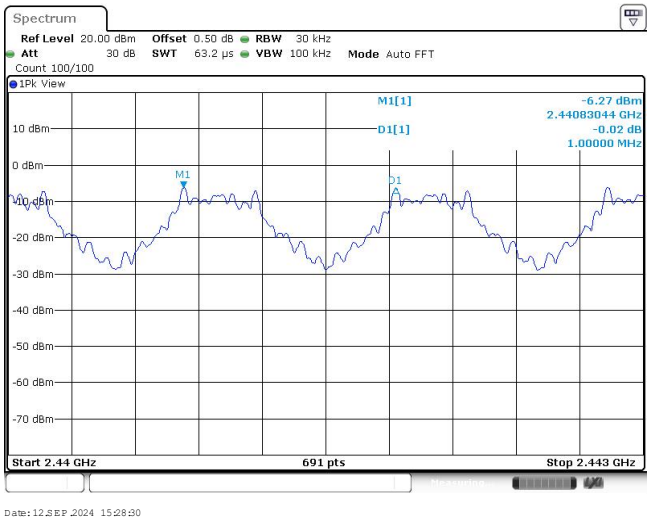
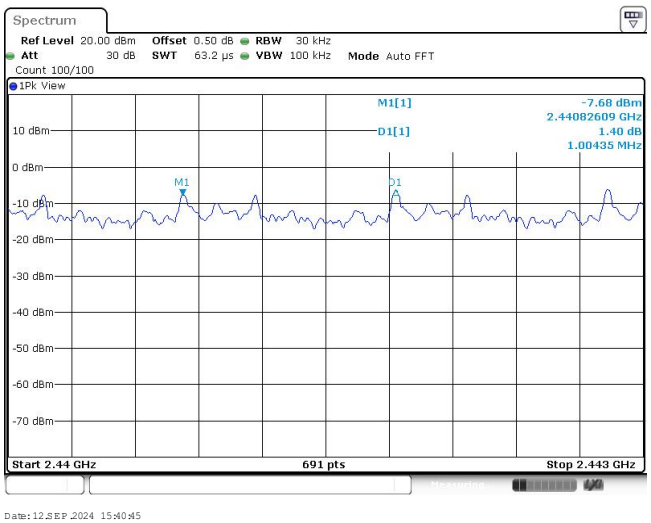
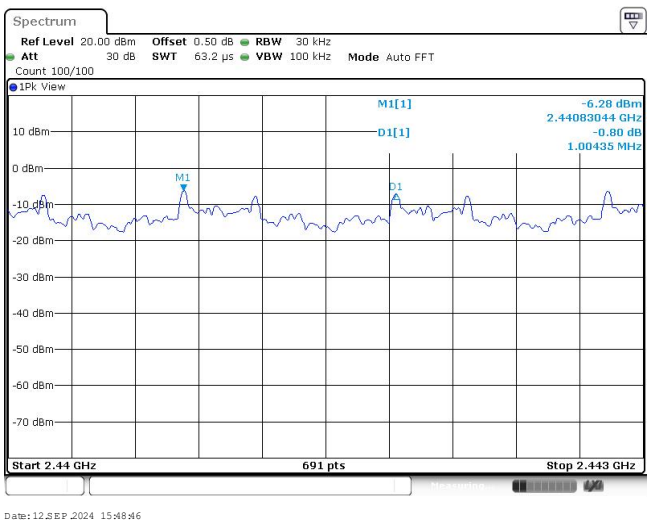
Modulation type	Channel	Carrier Frequencies Separation (MHz)	Limit (kHz) *	Result
GFSK	39	1.00	≥932.00	Pass
π/4DQPSK	39	1.00	≥853.33	Pass
8DPSK	39	1.00	≥856.67	Pass

Note:

*: GFSK limit = The maximum 20 dB Bandwidth for GFSK modulation on the appendix B.

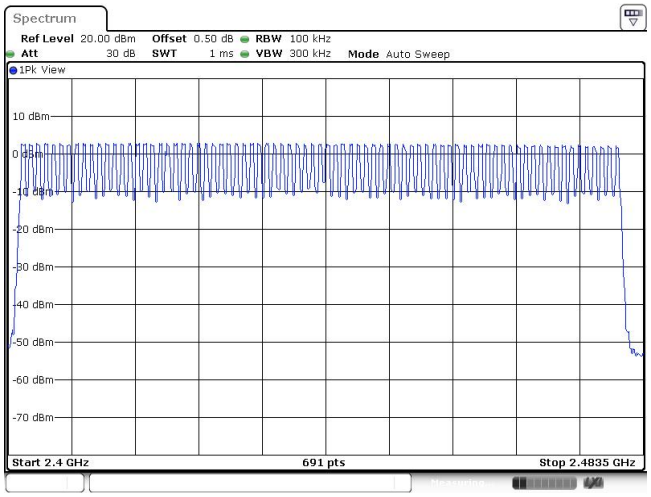
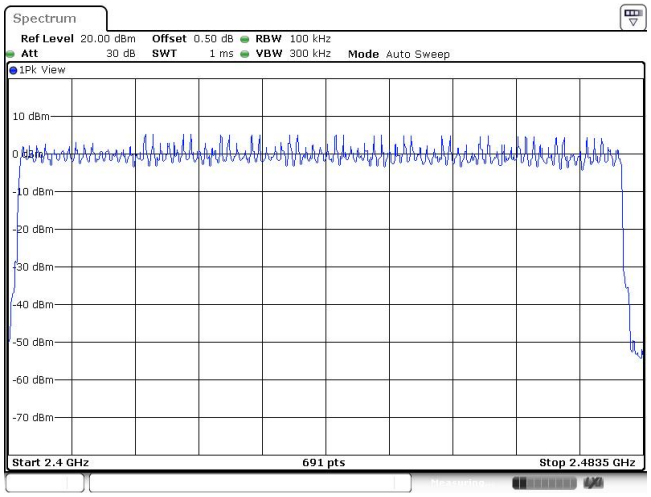
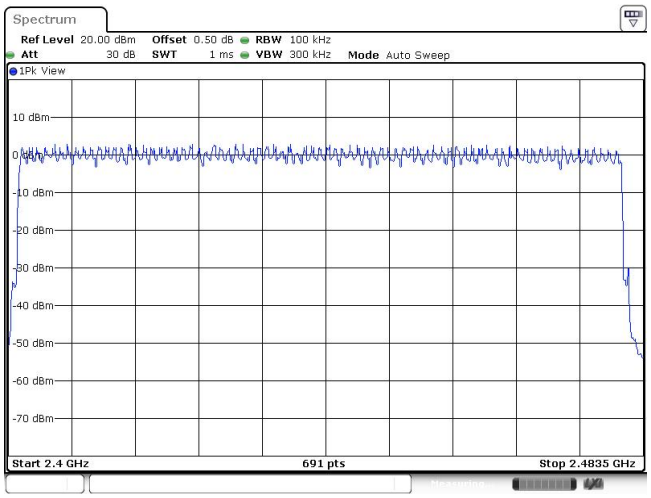
π/4DQPSK limit = 2/3 * The maximum 20 dB Bandwidth for π/4DQPSK modulation on the appendix B.

8DPSK limit = 2/3 * The maximum 20 dB Bandwidth for 8DPSK modulation on the appendix B

GFSK	
π/4DQPSK	
8DPSK	

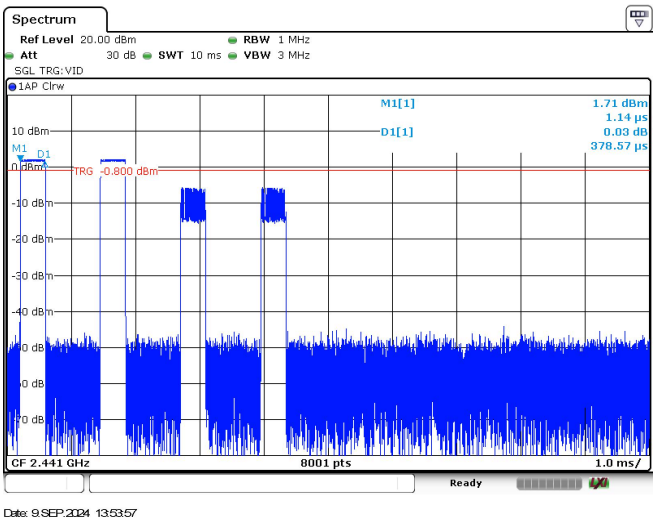
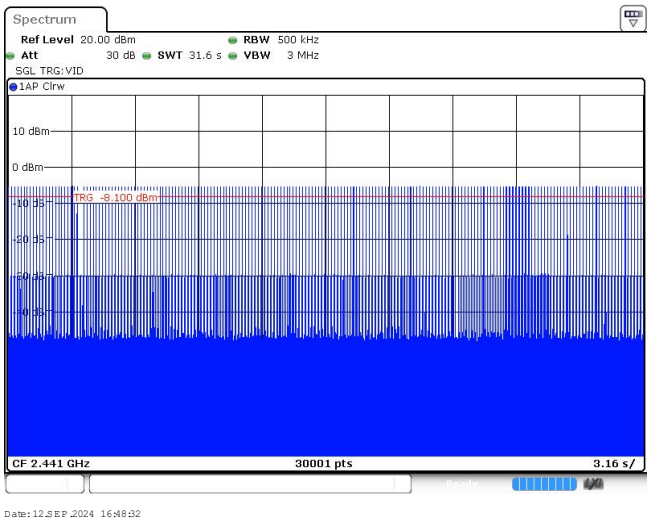
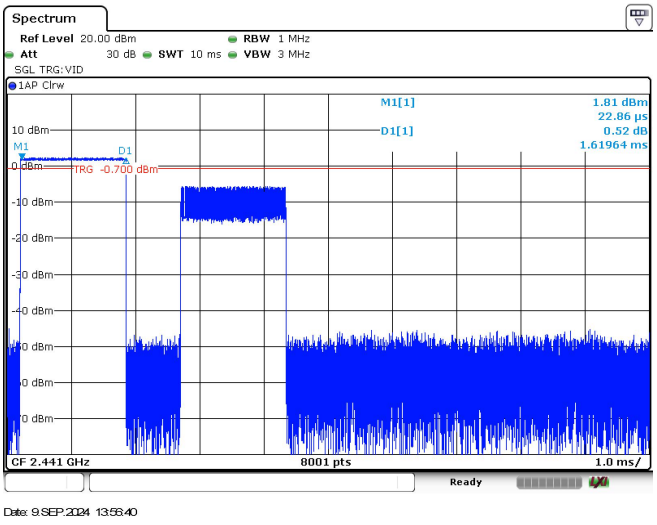
Appendix E：Hopping Channel Number

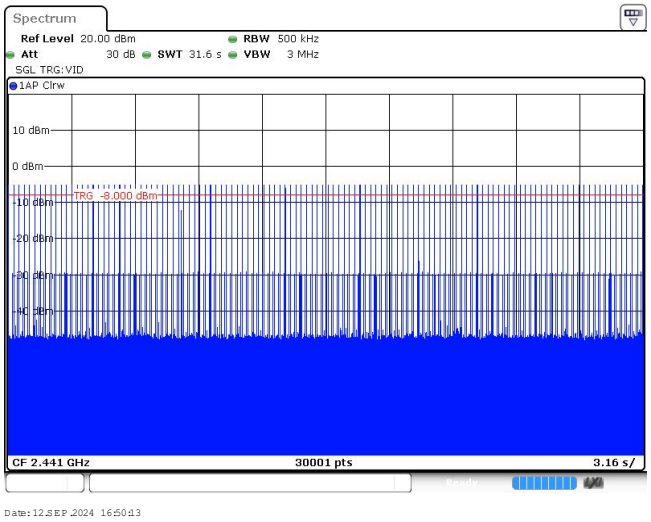
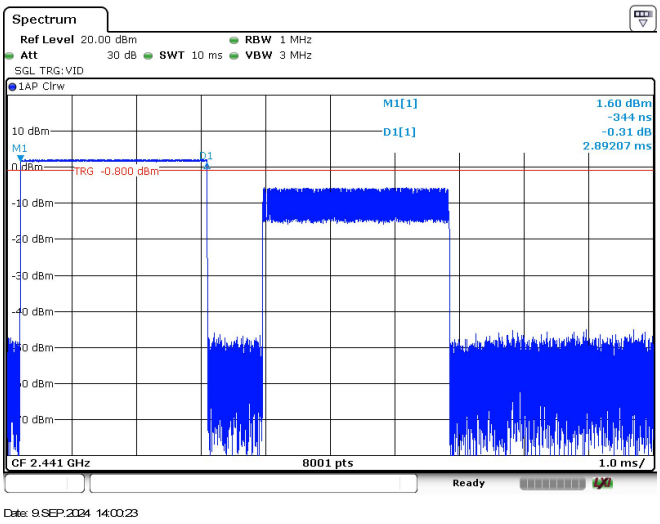
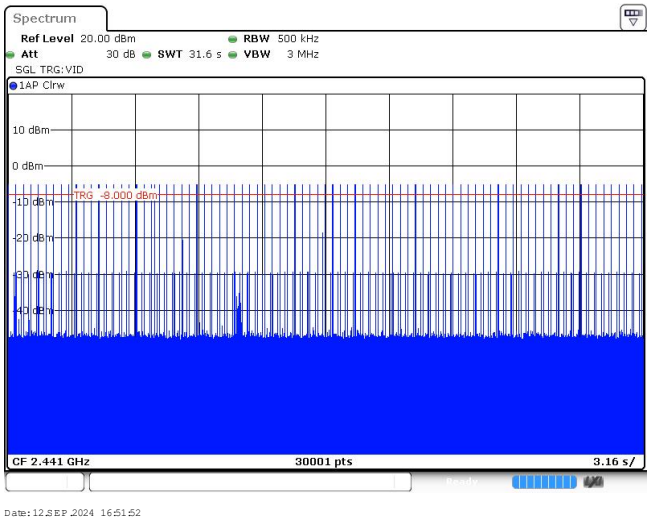
Modulation type	Channel number	Limit	Result
GFSK	79	≥15.00	Pass
π/4DQPSK	79		
8DPSK	79		

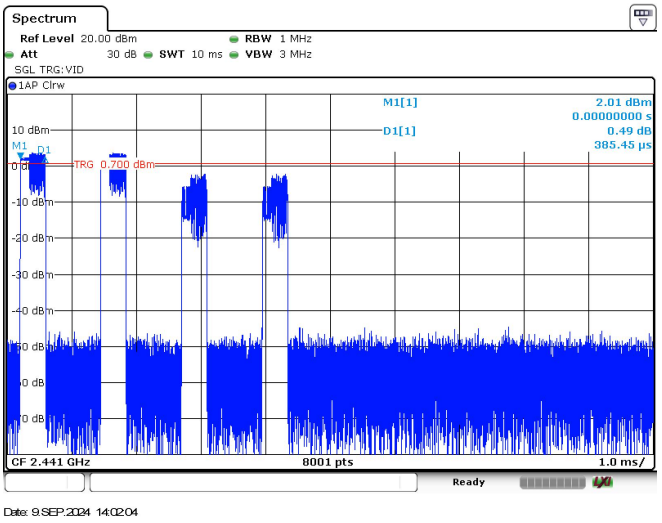
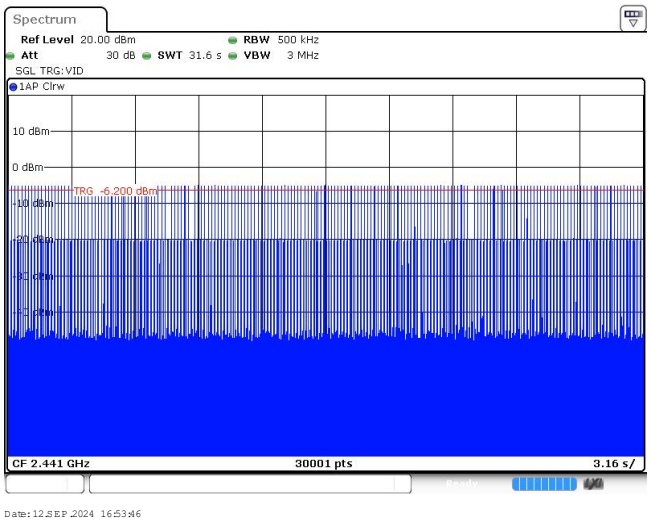
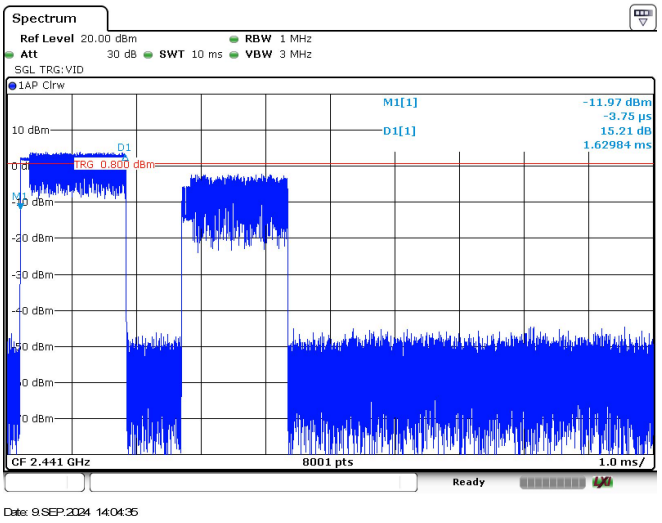
GFSK	
π/4DQPSK	
8DPSK	

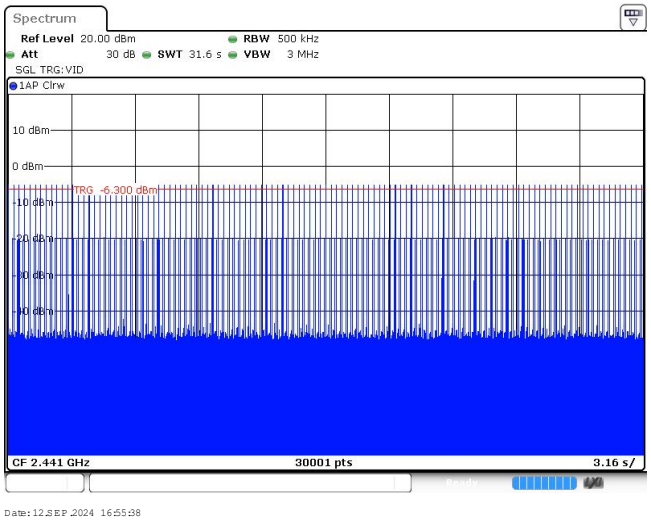
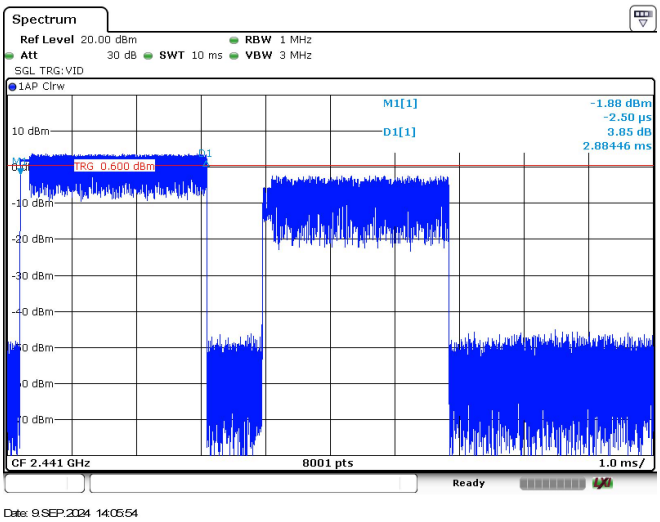
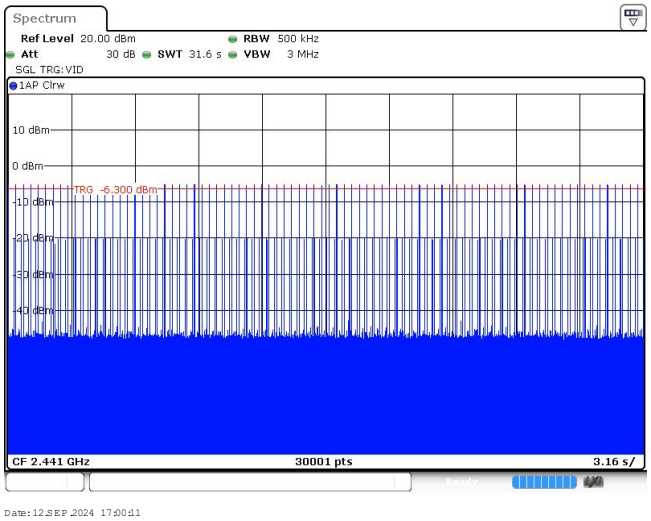
Appendix F：Dwell Time

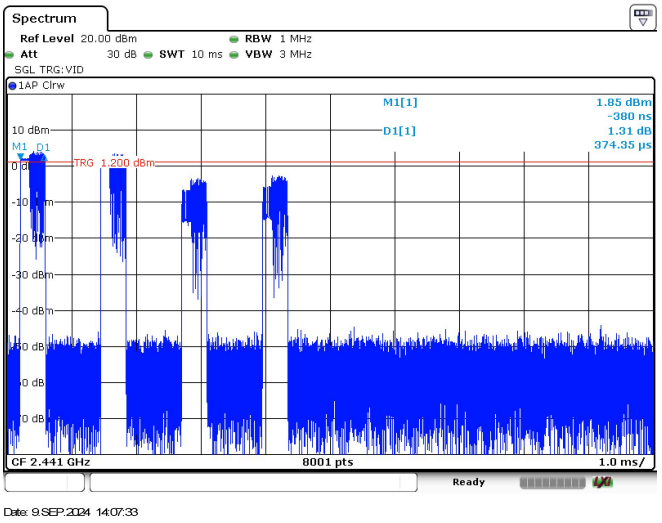
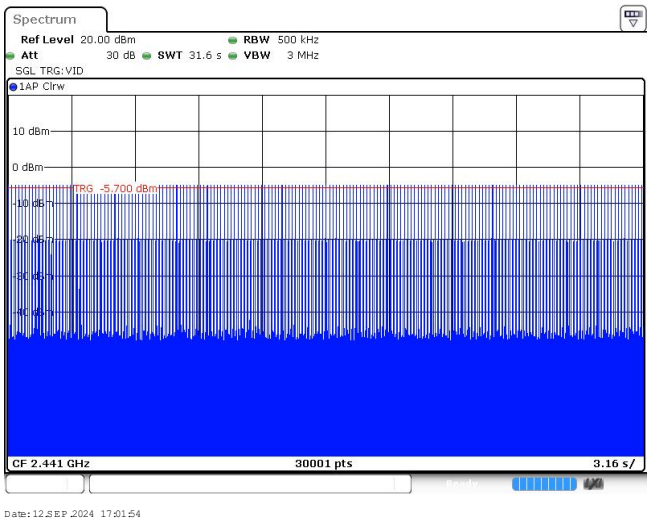
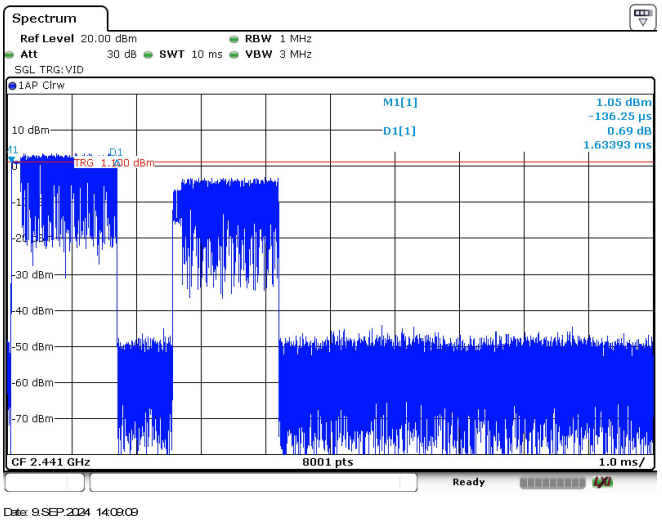
Modulation type	Packet	Burst Width [ms]	Total Hops[hop*ch]	Dwell time (Second)	Limit (Second)	Result
GFSK	DH1	0.38	202.00	0.08	≤ 0.40	Pass
	DH3	1.62	120.00	0.19		
	DH5	2.89	86.00	0.25		
π/4DQPSK	2DH1	0.39	197.00	0.08	≤ 0.40	Pass
	2DH3	1.63	119.00	0.19		
	2DH5	2.89	85.00	0.25		
8DPSK	3DH1	0.37	187.00	0.07	≤ 0.40	Pass
	3DH3	1.63	119.00	0.19		
	3DH5	2.88	86.00	0.25		

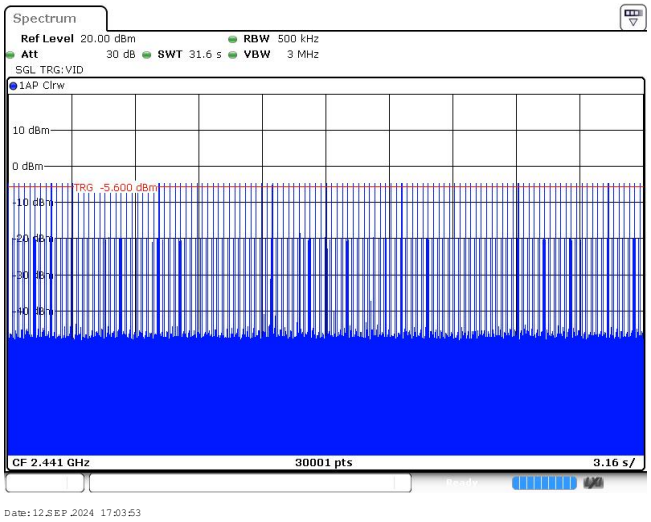
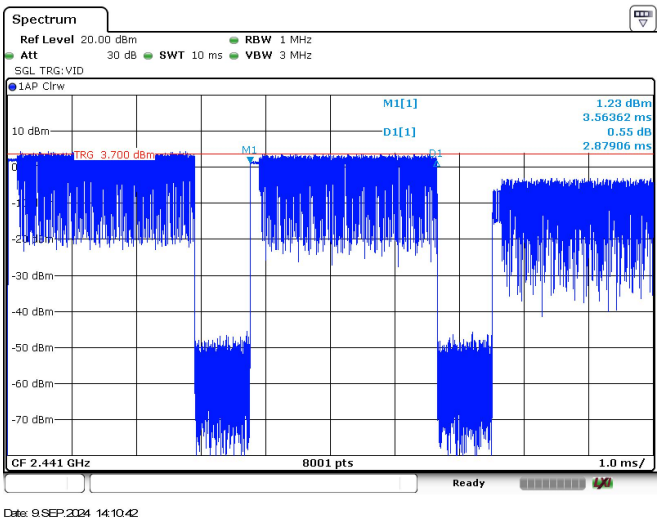
Modulation Type:	GFSK
DH1 Burst width	
DH1 Burst number	
DH3 Burst width	

DH3 Burst number	
DH5 Burst width	
DH5 Burst number	

Modulation Type:	π/4DQPSK
2DH1 Burst width	
2DH1 Burst number	
2DH3 Burst width	

2DH3 Burst number	
2DH5 Burst width	
2DH5 Burst number	

Modulation Type:	8DPSK
3DH1 Burst width	
3DH1 Burst number	
3DH3 Burst width	

3DH3 Burst number	
3DH5 Burst width	
3DH5 Burst number