

APPENDIX REPORT

Project No.	SHT2207065103EW	Radio Specification	Bluetooth EDR
Test sample No.	YPHT22070651011	Model No.	L300
Start test date	2022-07-26	Finish date	2022-07-26
Temperature	26.0℃	Humidity	32%
Test Engineer	Xiaoxiao Li	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

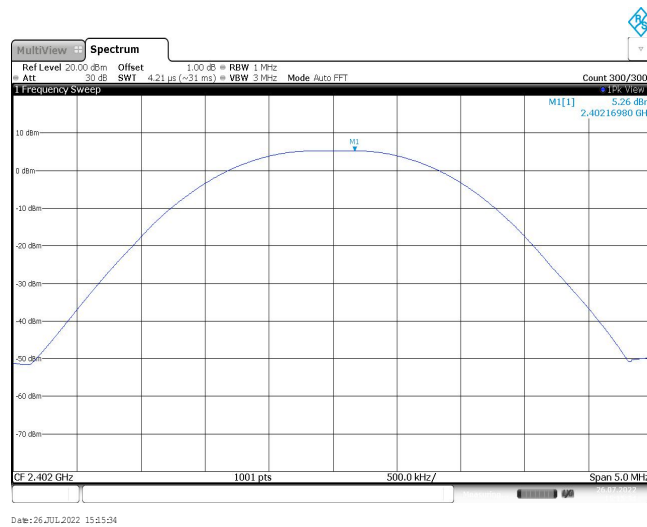
Appendix A: Peak Output Power

Modulation type	Channel	Peak Output power (dBm)	Average Output power (dBm)	Limit (dBm)	Result
GFSK	00	5.26	5.25	≤ 30.00	Pass
	39	3.68	3.67		
	78	2.91	2.90		
$\pi/4$ DQPSK	00	6.20	5.78	≤ 21.00	Pass
	39	4.76	4.40		
	78	3.80	3.44		
8DPSK	00	6.32	5.80	≤ 21.00	Pass
	39	4.89	4.49		
	78	3.88	3.50		

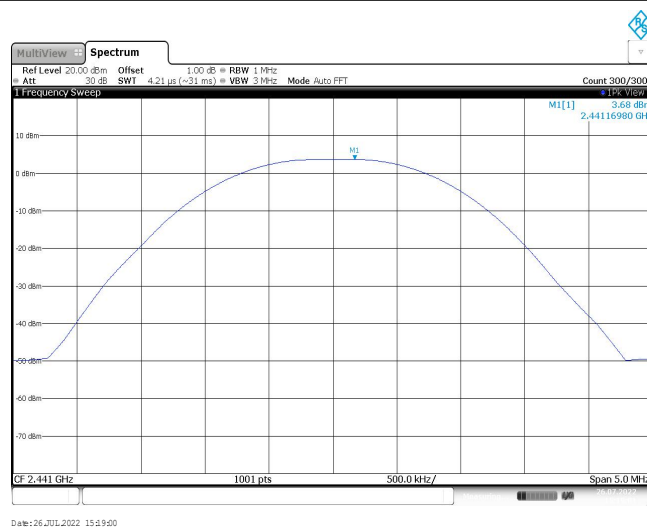
Modulation Type:

GFSK

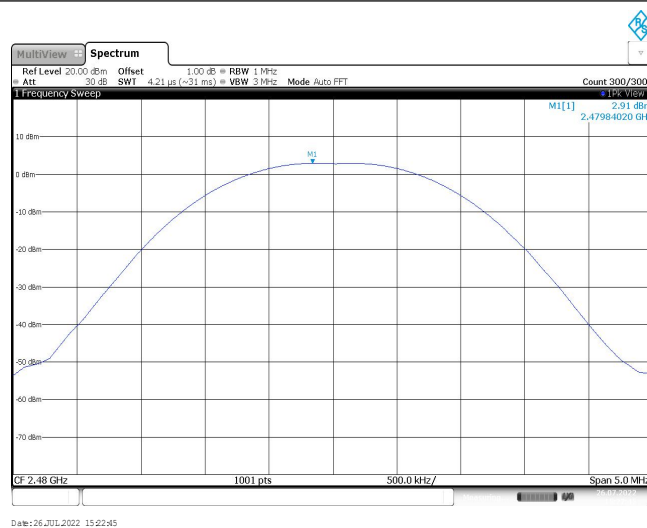
CH00

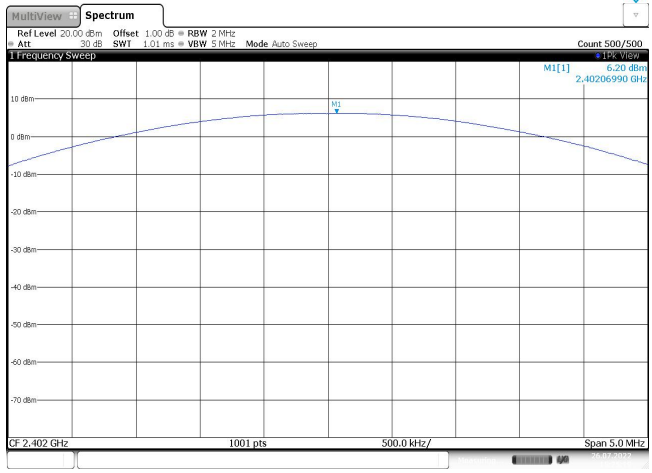
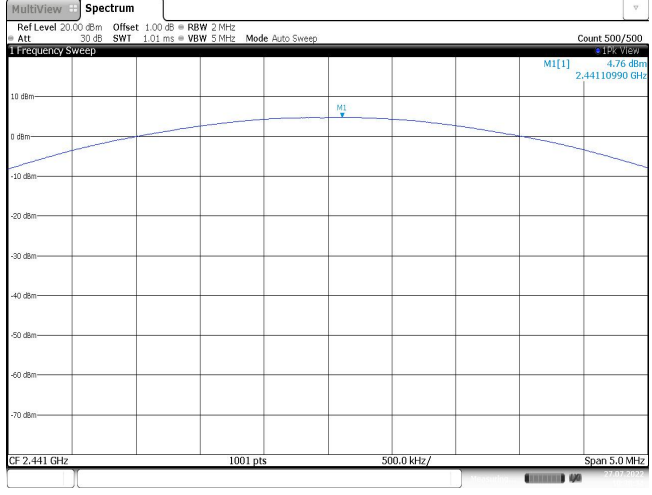
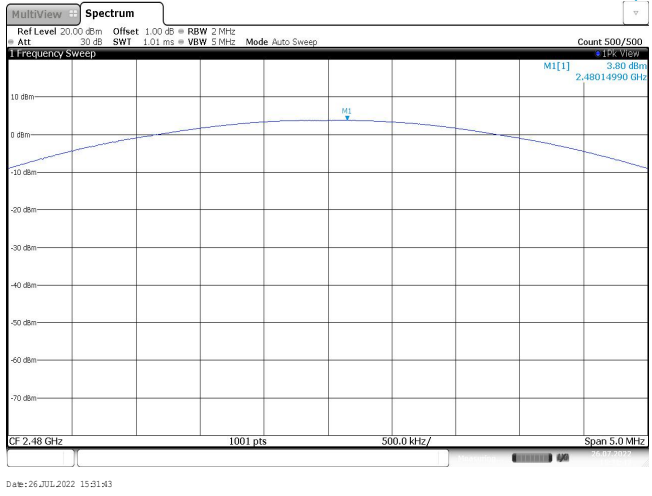


CH39



CH78

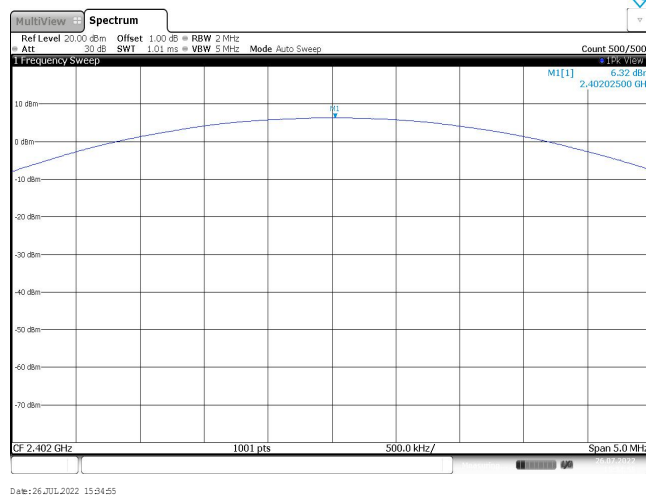


Modulation Type:	$\pi/4$ DQPSK
CH00	 16.20 dBm 6.20 dBm 2.4026990 GHz Count 500/500 10K View Ref Level 20.00 dBm Offset 1.00 dB RBW 2 MHz Att 30 dB SWI 1.01 ms VBW 5 MHz Mode Auto Sweep 1 Frequency Sweep 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 2.402 GHz 1001 pts 500.0 kHz/ Span 5.0 MHz Date: 26 JUL 2022 15:25:19
CH39	 4.76 dBm 2.4410990 GHz Count 500/500 10K View Ref Level 20.00 dBm Offset 1.00 dB RBW 2 MHz Att 30 dB SWI 1.01 ms VBW 5 MHz Mode Auto Sweep 1 Frequency Sweep 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 2.441 GHz 1001 pts 500.0 kHz/ Span 5.0 MHz Date: 27 JUL 2022 10:38:34
CH78	 3.80 dBm 2.48014990 GHz Count 500/500 10K View Ref Level 20.00 dBm Offset 1.00 dB RBW 2 MHz Att 30 dB SWI 1.01 ms VBW 5 MHz Mode Auto Sweep 1 Frequency Sweep 10 dBm 0 dBm -10 dBm -20 dBm -30 dBm -40 dBm -50 dBm -60 dBm -70 dBm CF 2.48 GHz 1001 pts 500.0 kHz/ Span 5.0 MHz Date: 26 JUL 2022 15:21:43

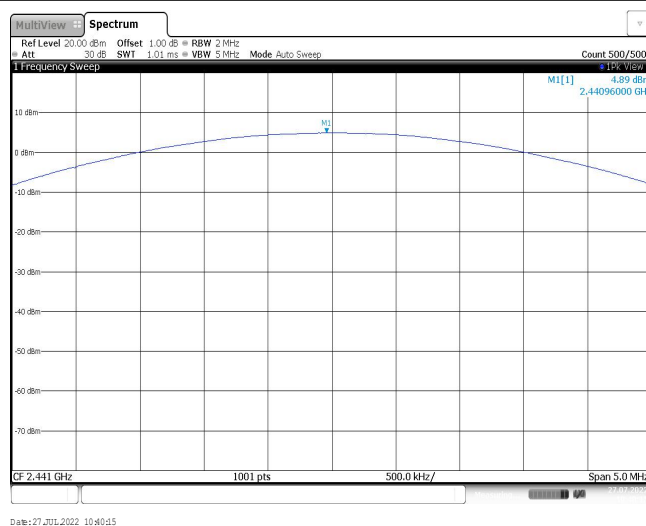
Modulation Type:

8DPSK

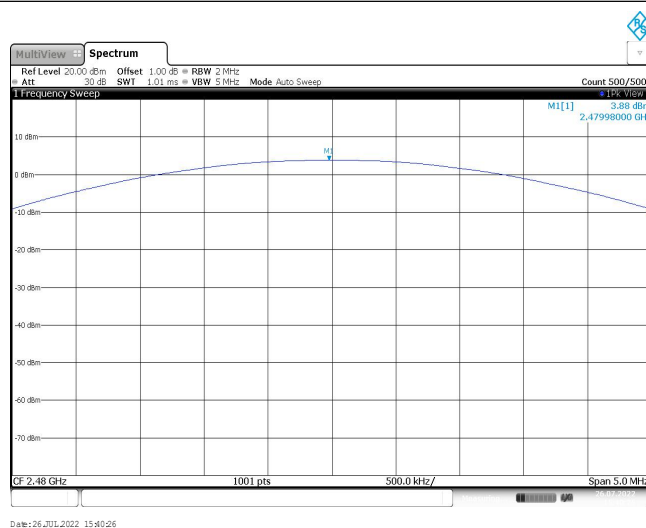
CH00



CH39



CH78



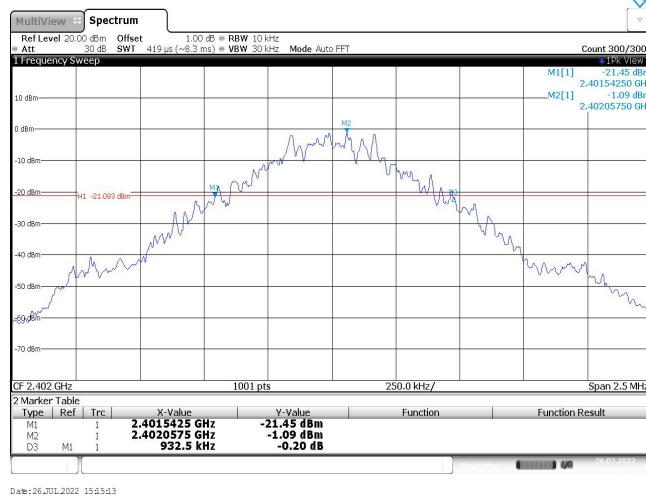
Appendix B : 20 dB Bandwidth

Modulation type	Channel	20 dB Bandwidth (kHz)	Limit (kHz)	Result
GFSK	00	932.50	-	Pass
	39	932.50		
	78	935.00		
$\pi/4$ DQPSK	00	1312.50	-	Pass
	39	1342.50		
	78	1320.00		
8DPSK	00	1305.00	-	Pass
	39	1320.00		
	78	1305.00		

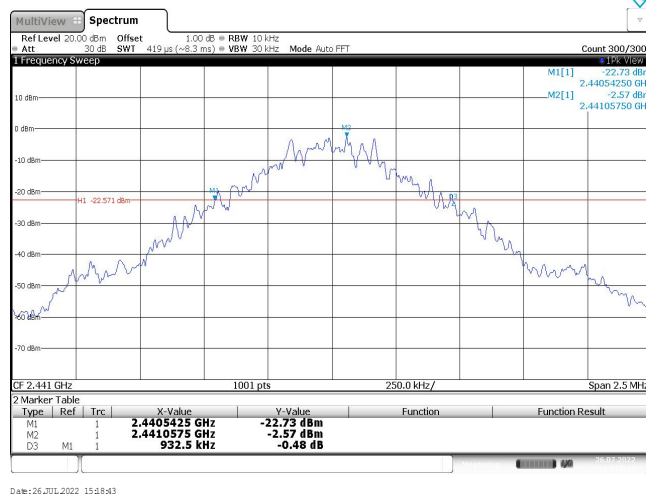
Modulation Type:

GFSK

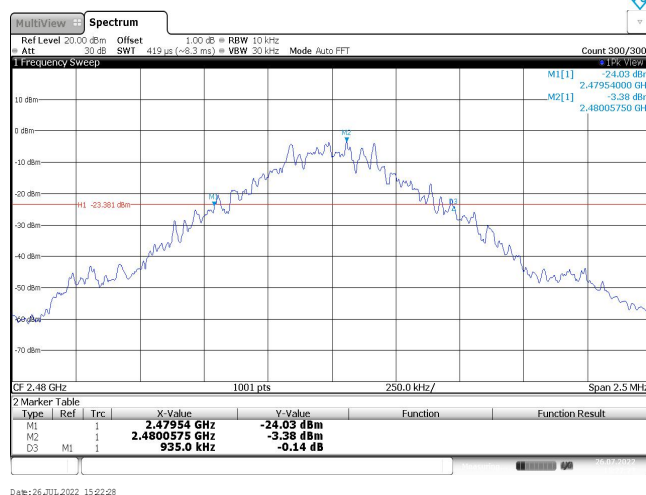
CH00



CH39



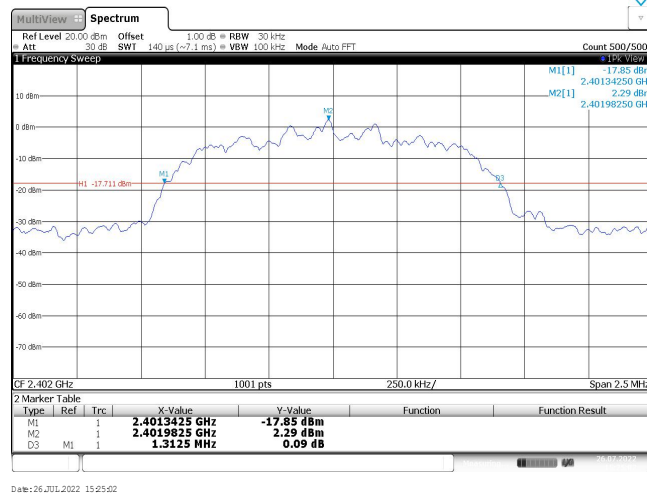
CH78



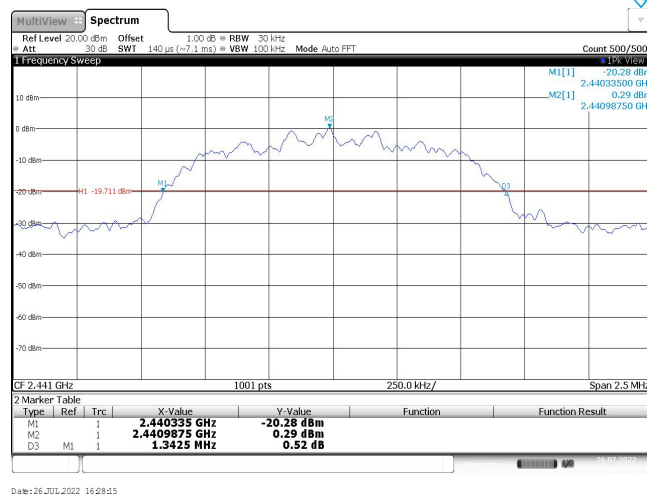
Modulation Type:

 $\pi/4$ DQPSK

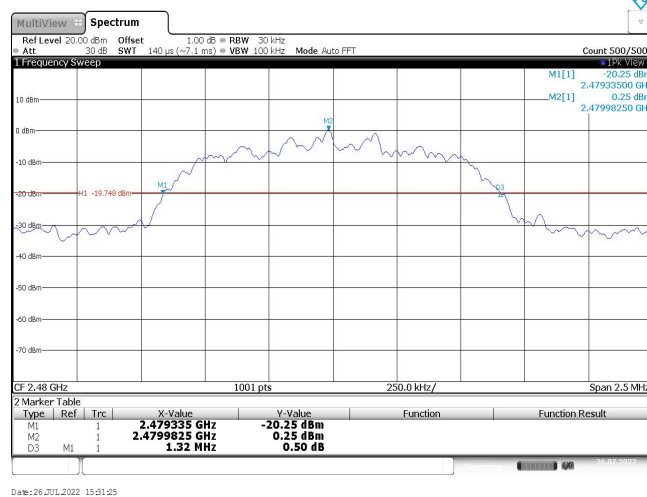
CH00



CH39



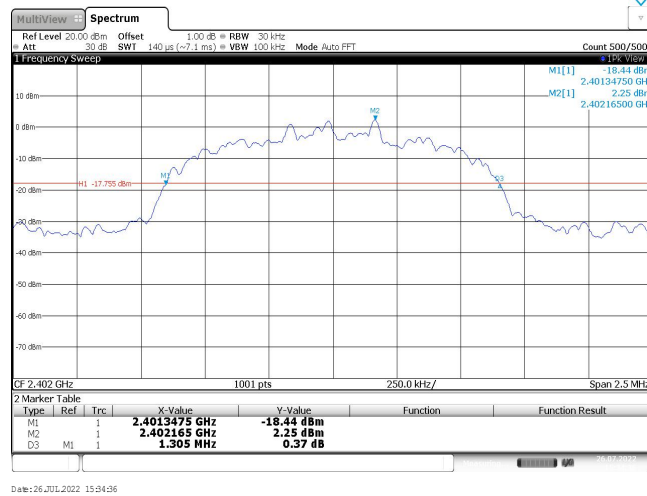
CH78



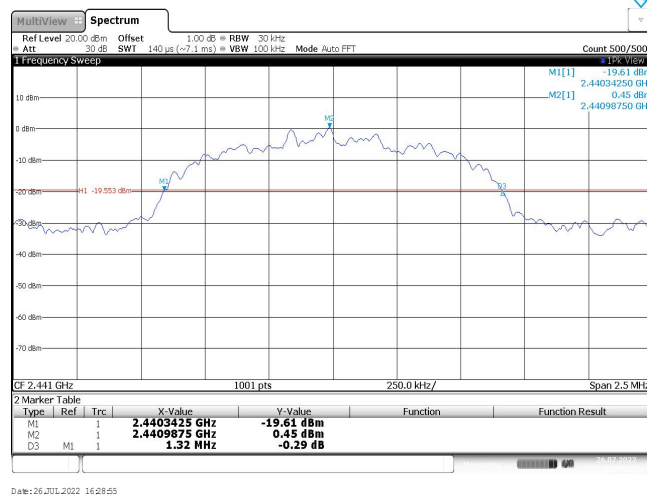
Modulation Type:

8DPSK

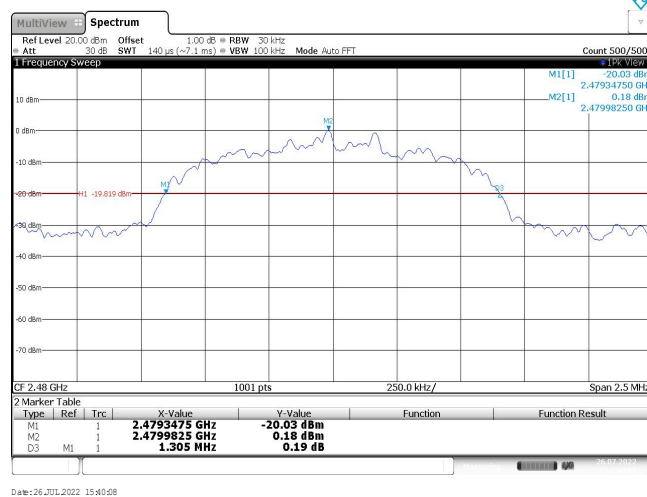
CH00



CH39



CH78



Appendix C: 99% Occupied Bandwidth

Modulation type	Channel	99% Occupied Bandwidth (MHz)	Limit (MHz)	Result
GFSK	00	0.90	-	Pass
	39	0.91		
	78	0.90		
$\pi/4$ DQPSK	00	1.20	-	Pass
	39	1.22		
	78	1.22		
8DPSK	00	1.21	-	Pass
	39	1.23		
	78	1.22		

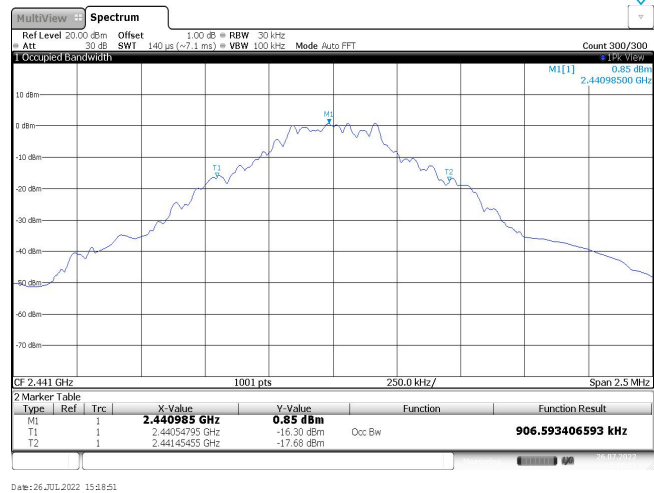
Modulation Type:

GFSK

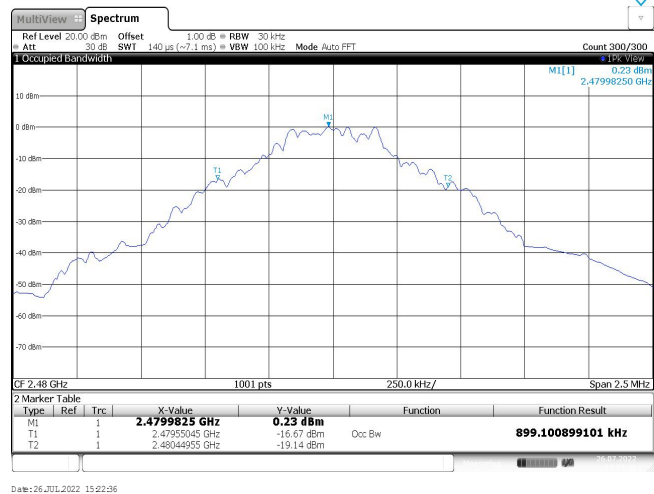
CH00



CH39



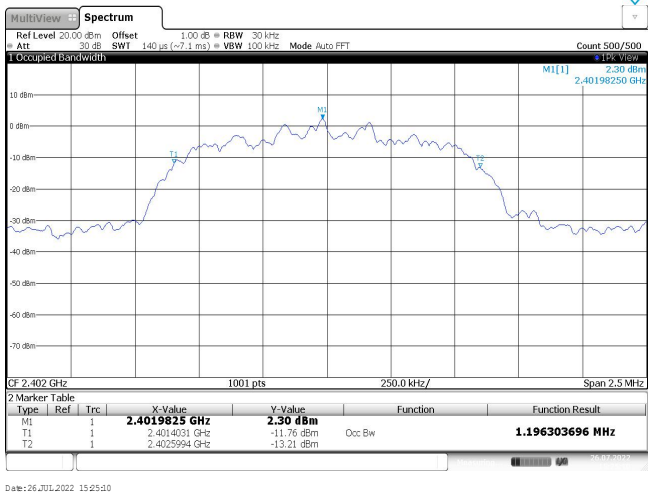
CH78



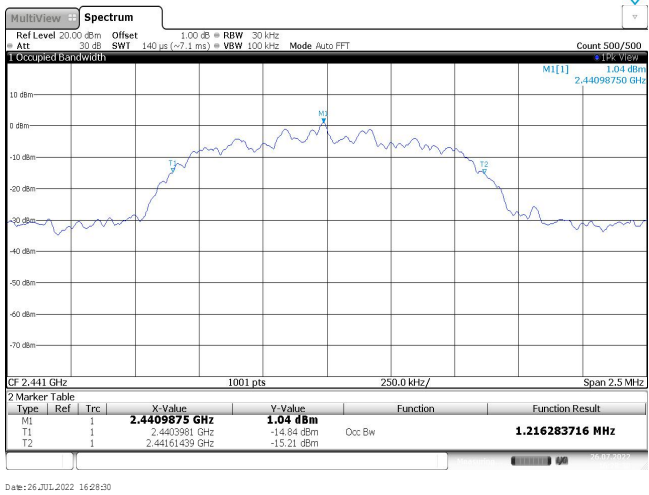
Modulation Type:

π /4DQPSK

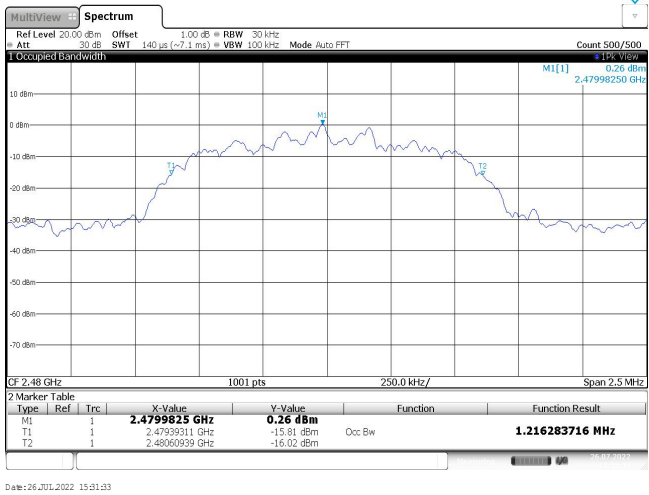
CH00



CH39



CH78



Modulation Type:

8DPSK

CH00



Date: 26 JUL 2022 15:34:46

CH39



Date: 26 JUL 2022 16:29:03

CH78



Date: 26 JUL 2022 15:40:17

Appendix D: Carrier Frequencies Separation

Modulation type	Channel	Carrier Frequencies Separation (MHz)	Limit (kHz) *	Result
GFSK	39	1.00	≥935.00	Pass
π/4DQPSK	39	1.00	≥895.00	Pass
8DPSK	39	1.00	≥870.00	Pass

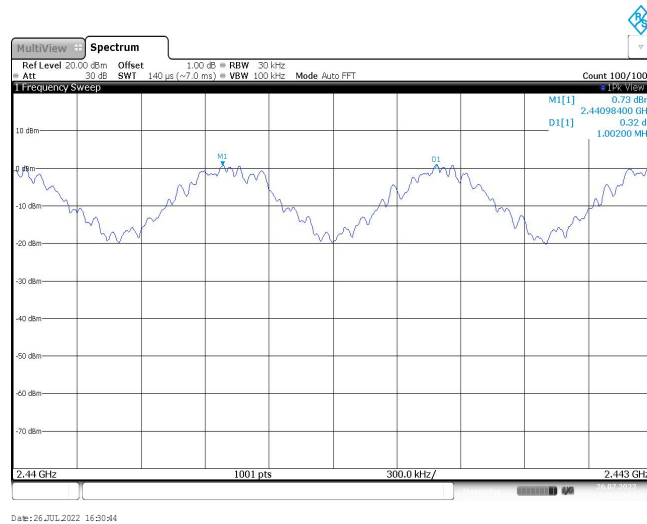
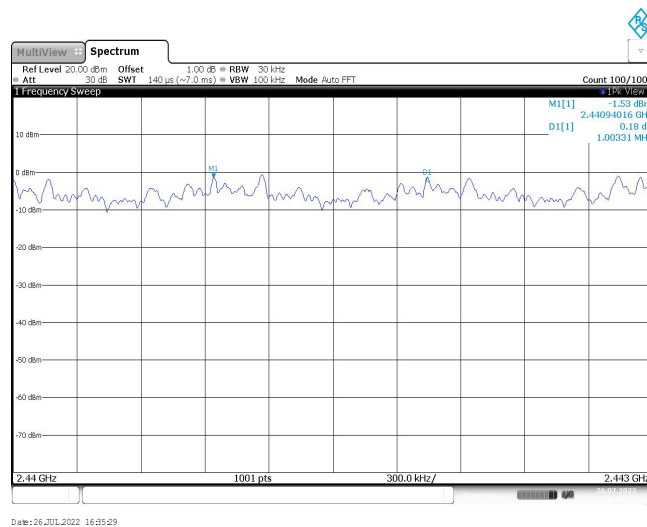
Note:

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

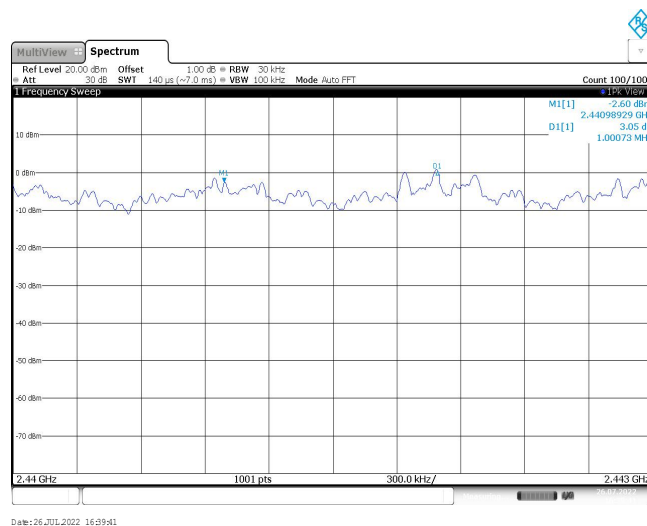
π/4DQPSK limit = 2/3 * The maximum 20 dB Bandwidth for π/4DQPSK modulation on the appendix B.

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

GFSK

 $\pi/4$ DQPSK

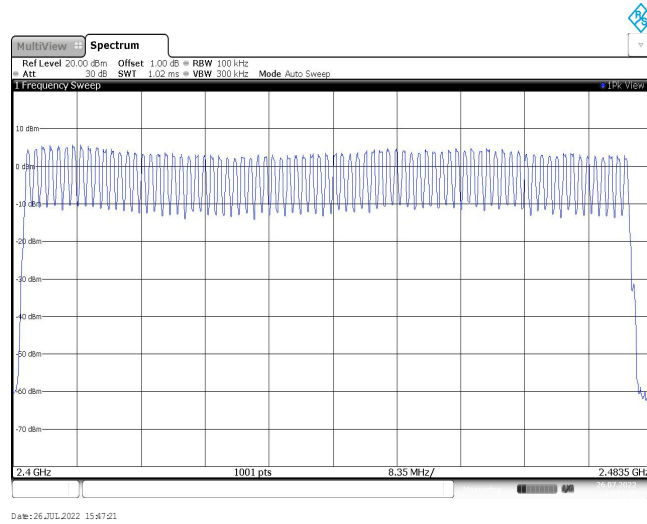
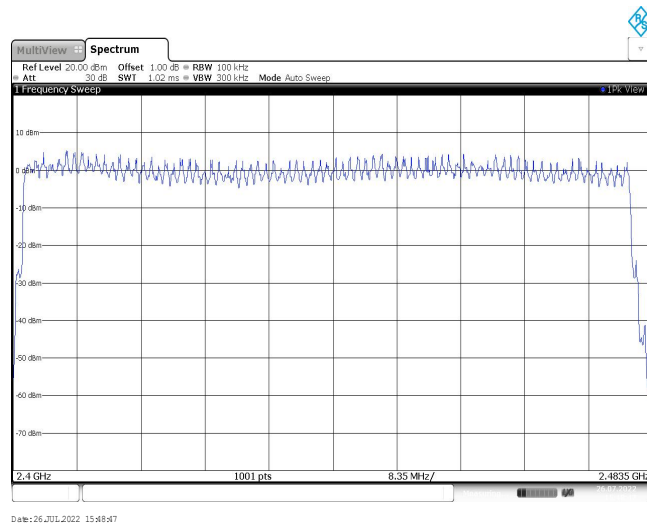
8DPSK



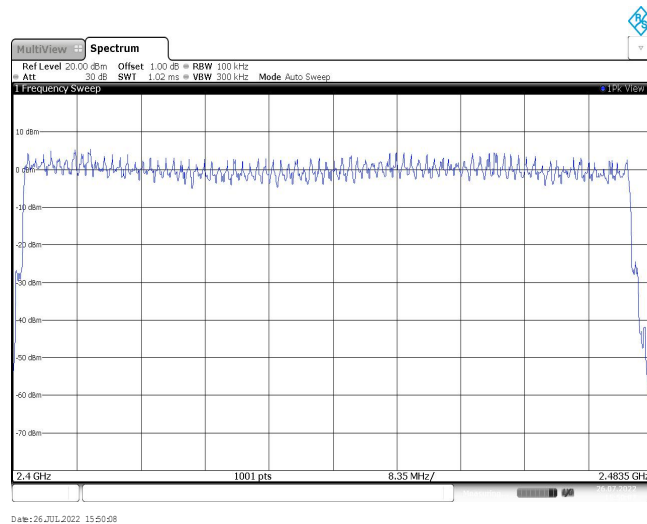
Appendix E: Hopping Channel Number

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

GFSK

 $\pi/4$ DQPSK

8DPSK



Appendix F: Dwell Time

Modulation type	Packet	Burst Width [ms]	Total Hops[hop*ch]	Dwell time (Second)	Limit (Second)	Result
GFSK	DH1	0.40	321	0.13	≤ 0.40	Pass
	DH3	1.66	160	0.27		
	DH5	2.91	107	0.31		
$\pi/4$ DQPSK	2DH1	0.40	321	0.13	≤ 0.40	Pass
	2DH3	1.65	160	0.26		
	2DH5	2.90	114	0.33		
8DPSK	3DH1	0.39	320	0.13	≤ 0.40	Pass
	3DH3	1.65	157	0.26		
	3DH5	2.90	103	0.30		