

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°C	Humidity	32%
Test Engineer	Xiaoxiao Li	Auditor	Xiaodong Zheo

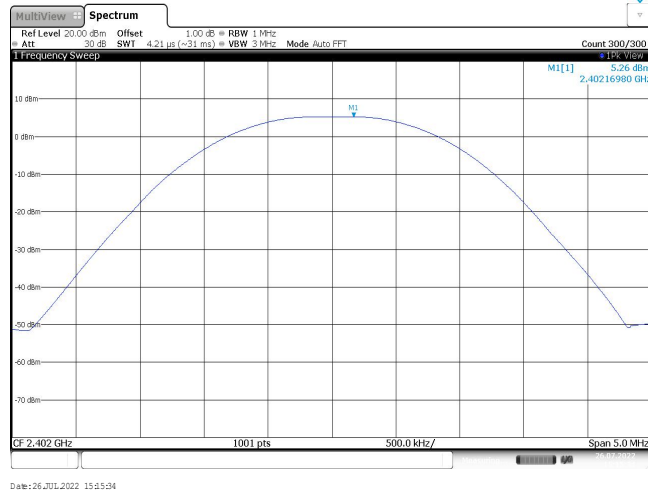
Appendix clause	Test item	Result
A	Peak Output Power	PASS
B	20 dB Bandwidth	PASS
C	99% Occupied Bandwidth	PASS
D	Carrier Frequencies Separation	PASS
E	Hopping Channel Number	PASS
F	Dwell Time	PASS
G	Duty Cycle Correction Factor (DCCF)	PASS
H	Band edge and Spurious Emissions(coducted)	PASS

Appendix A: Peak Output Power

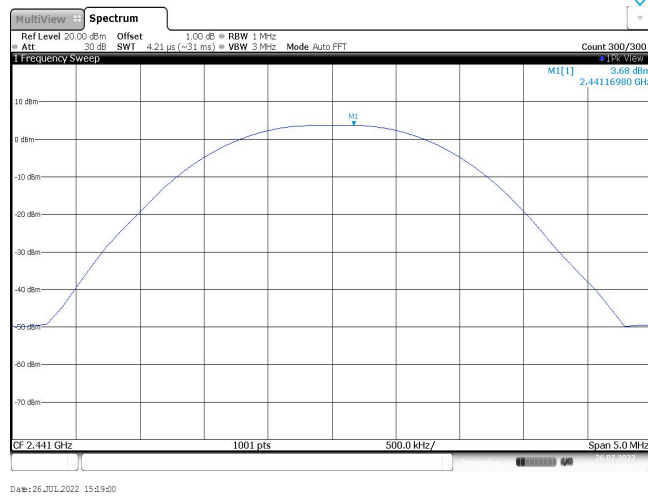
Modulation type	Channel	Peak Output power (dBm)	Average Output power (dBm)	Limit (dBm)	Result
GFSK	00	5.26	5.25	≤ 30.00	Pass
	39	3.68	3.67		
	78	2.91	2.90		
π/4DQPSK	00	6.20	5.78	≤ 21.00	Pass
	39	4.76	4.40		
	78	3.80	3.44		
8DPSK	00	6.32	5.80	≤ 21.00	Pass
	39	4.89	4.49		
	78	3.88	3.50		

Modulation Type: GFSK

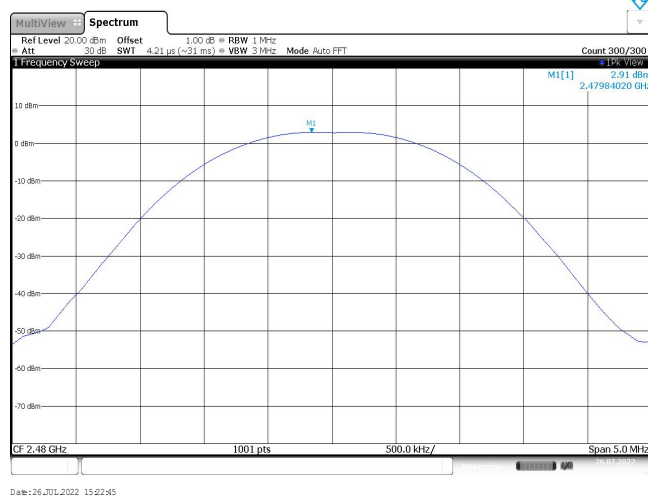
CH00



CH39



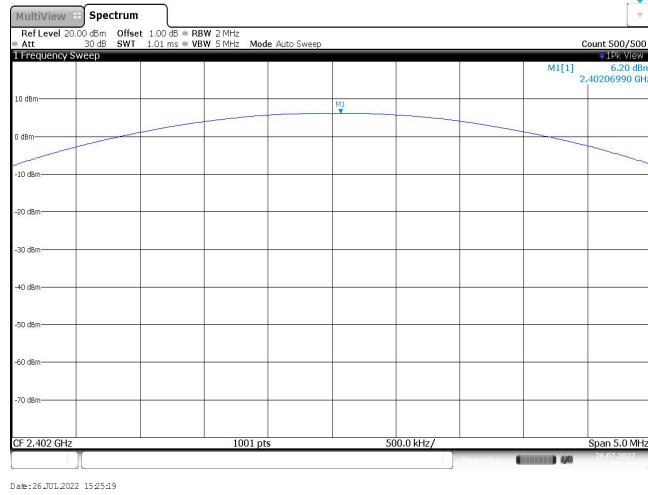
CH78



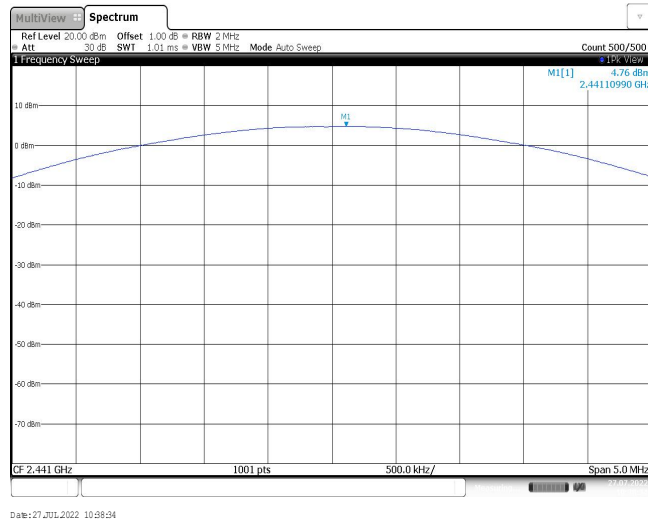
Modulation Type:

$\pi/4$ DQPSK

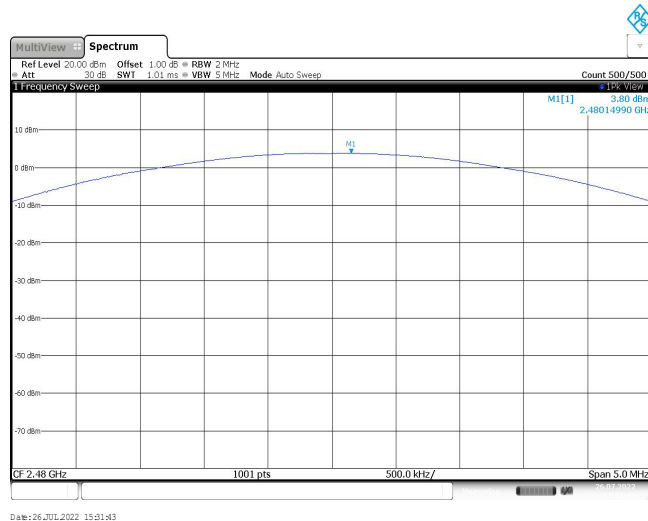
CH00



CH39



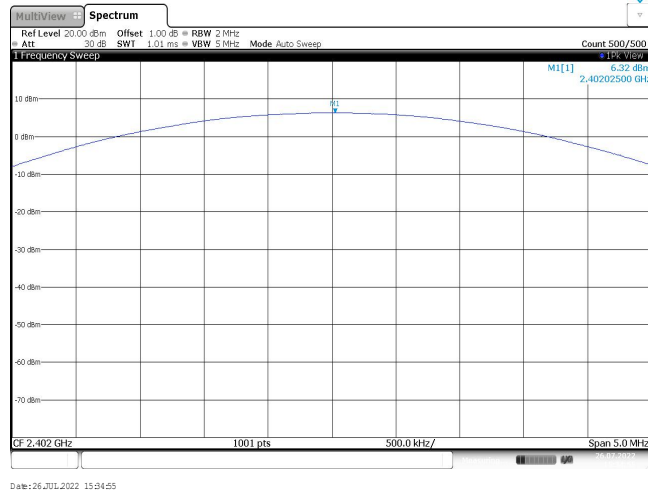
CH78



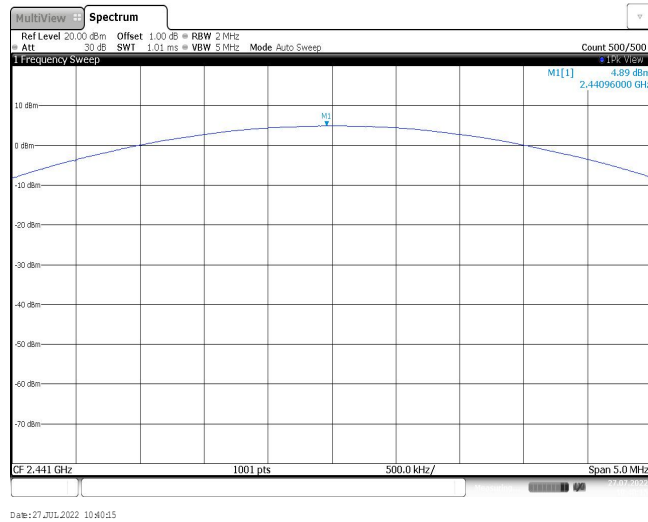
Modulation Type:

8DPSK

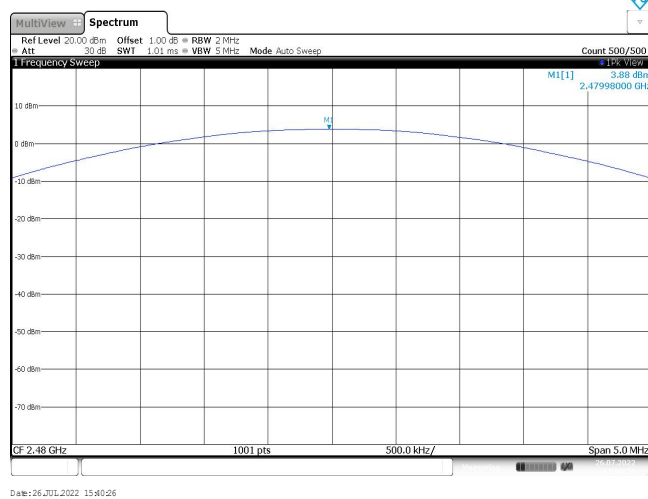
CH00



CH39



CH78



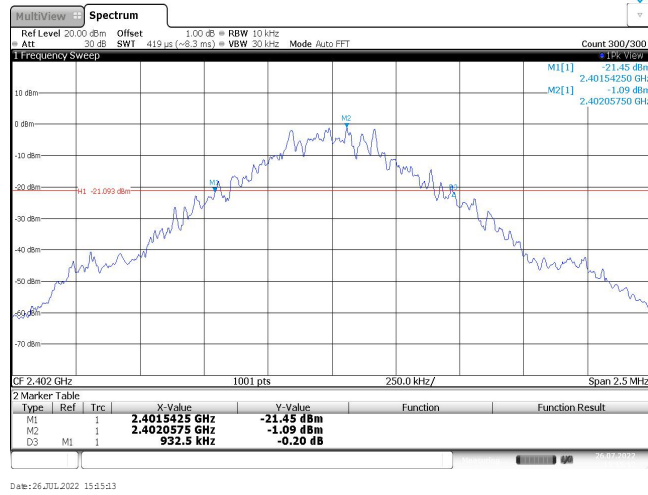
Appendix B : 20 dB Bandwidth

Modulation type	Channel	20 dB Bandwidth (kHz)	Limit (kHz)	Result
GFSK	00	932.50	-	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		

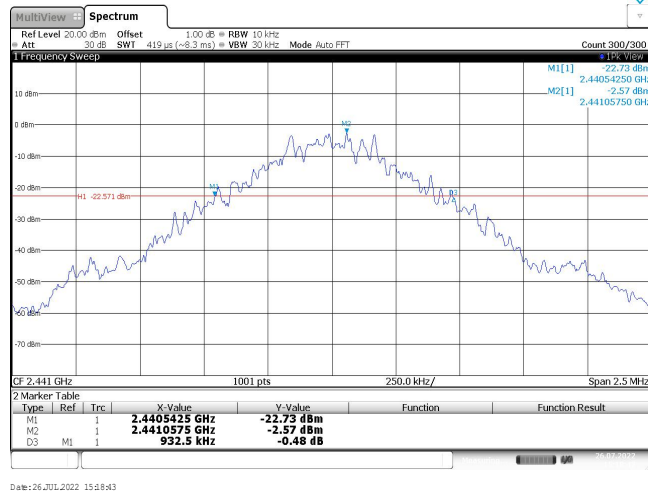
Modulation Type:

GFSK

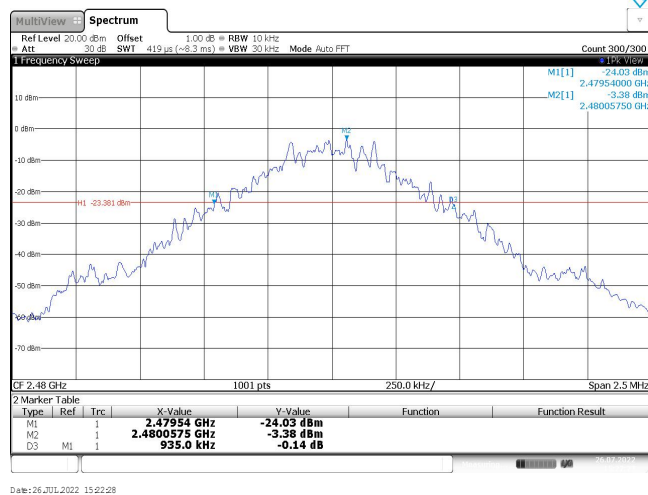
CH00



CH39



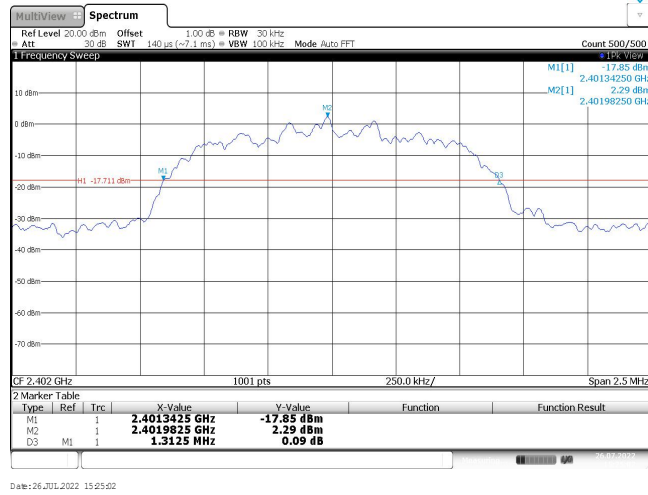
CH78



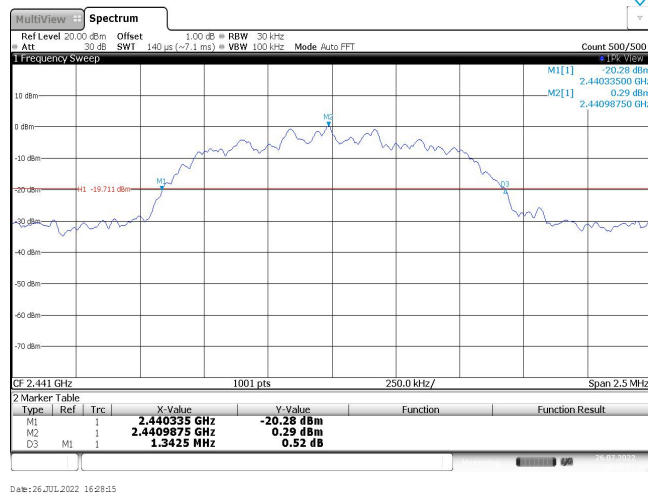
Modulation Type:

$\pi/4$ DQPSK

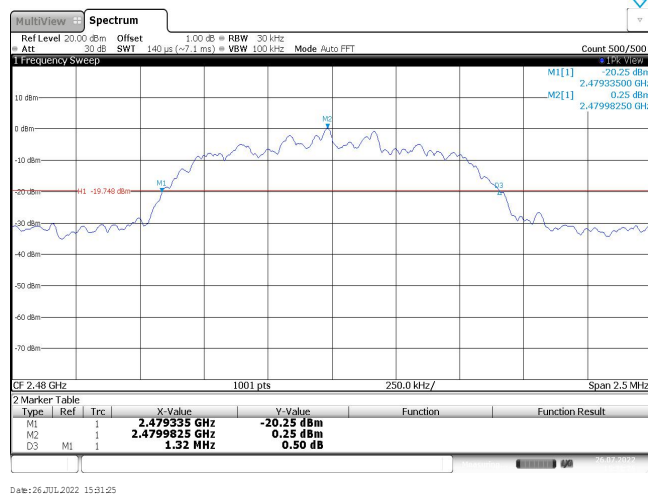
CH00



CH39



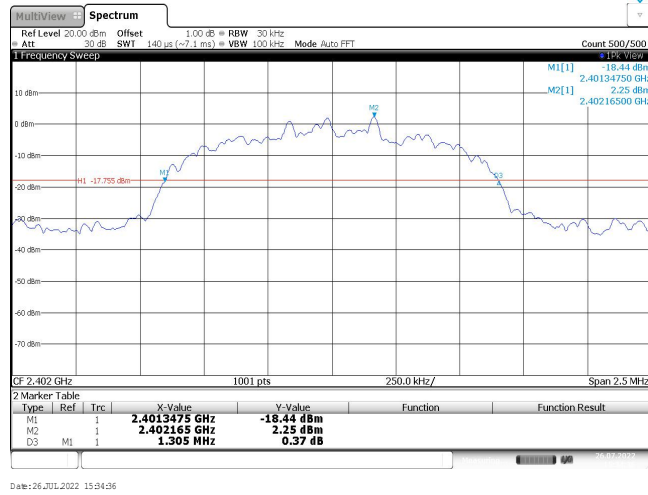
CH78



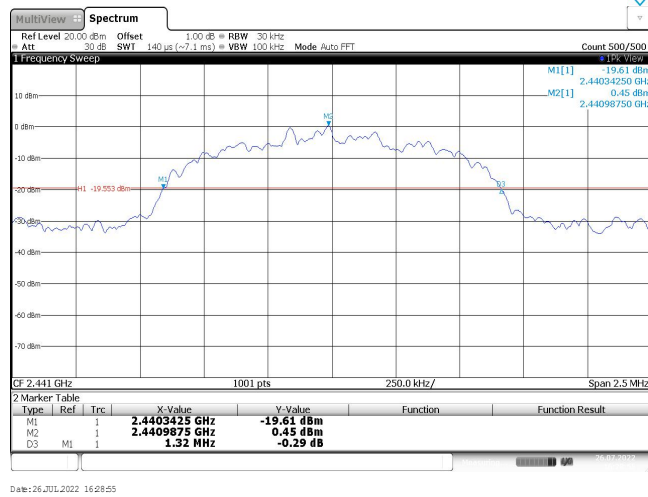
Modulation Type:

8DPSK

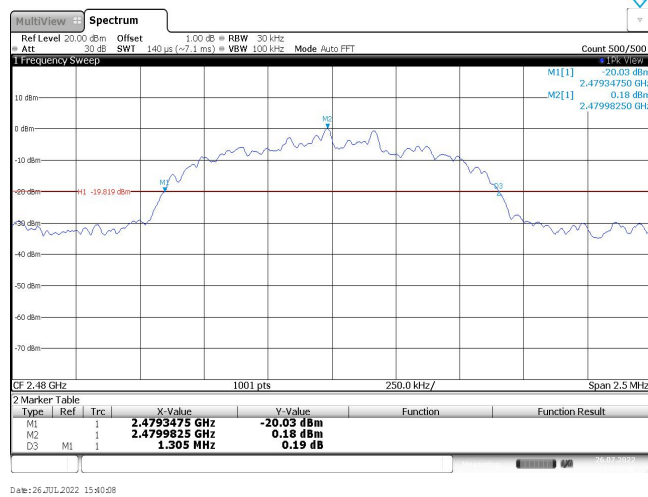
CH00



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



Date: 26.7.2022 15:55:25

CH39



Date: 26.7.2022 15:58:51

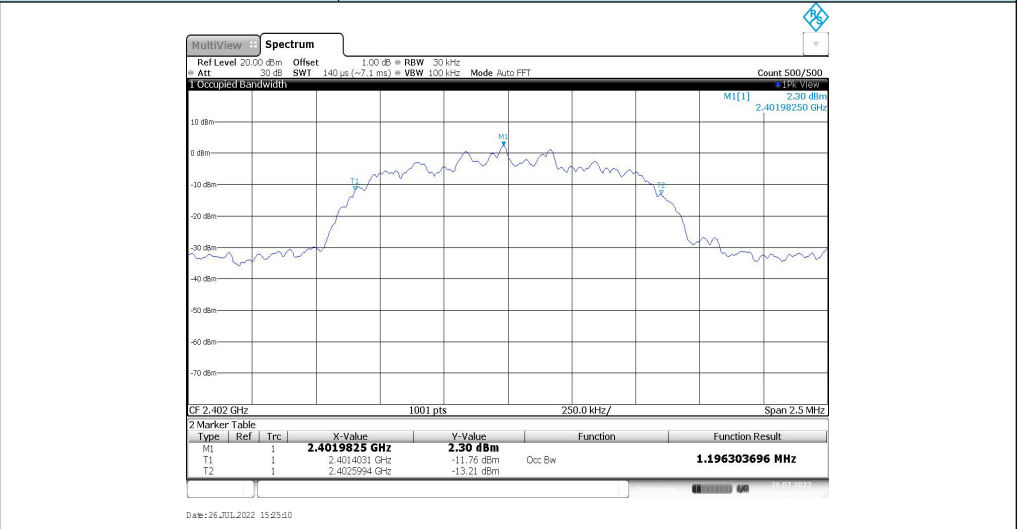
CH78



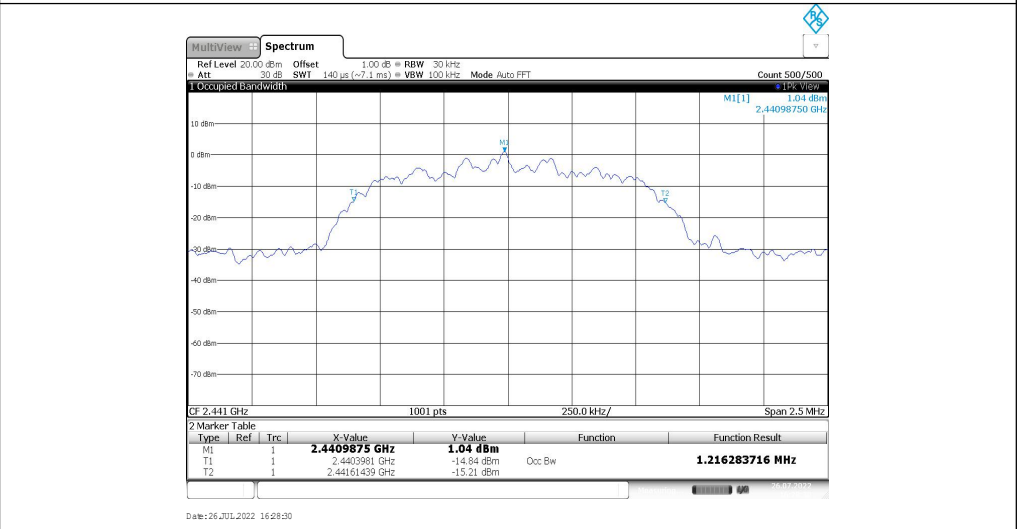
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Modulation Type: $\pi/4$ DQPSK

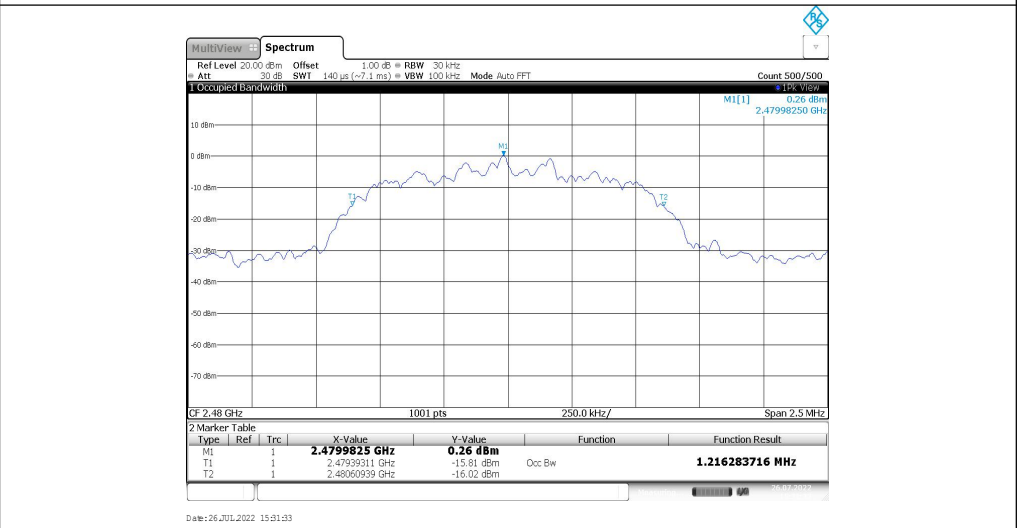
CH00



CH39



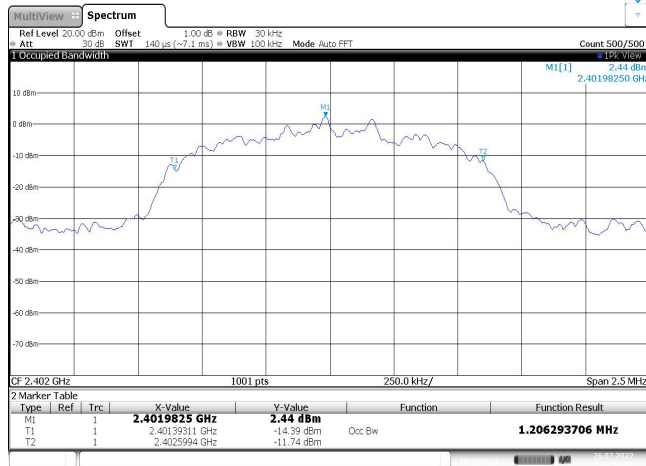
CH78



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	≥935.00	Pass
π/4DQPSK	39	1.00	≥895.00	Pass
8DPSK	39	1.00	≥870.00	Pass

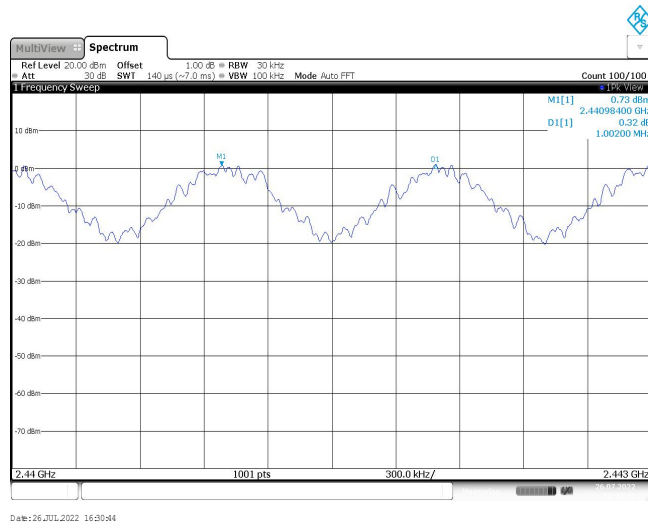
Note:

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

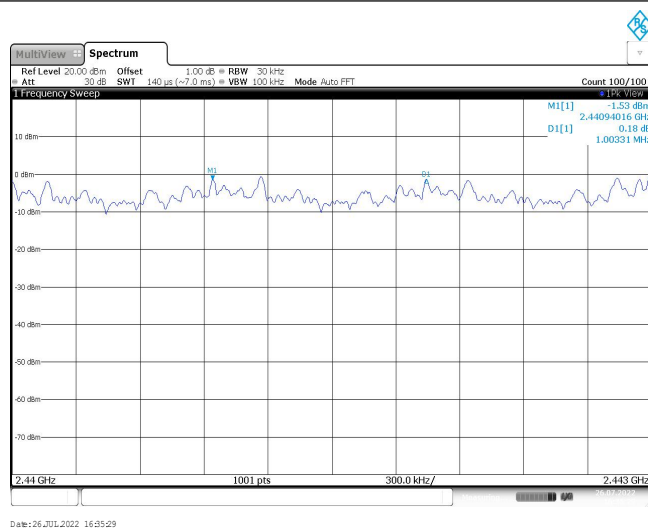
π/4DQPSK limit = 2/3 * The maximum 20 dB Bandwidth for π/4DQPSK modulation on the appendix B.

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

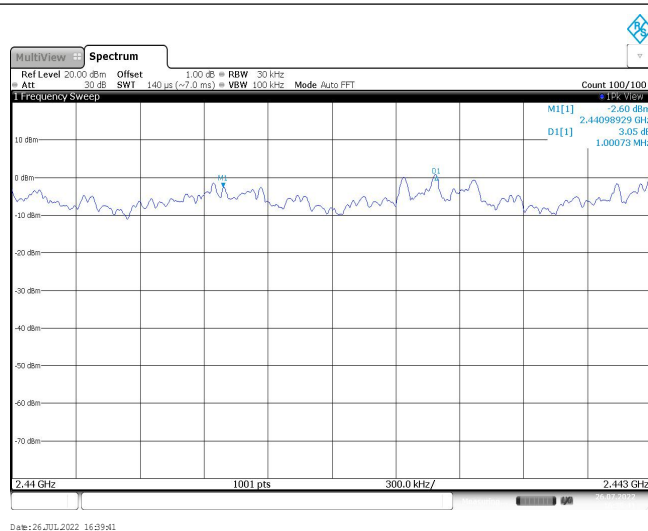
GFSK



$\pi/4$ DQPSK



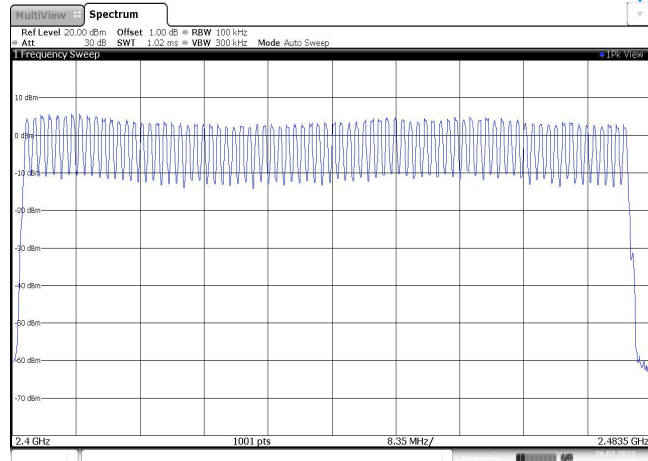
8DPSK



Appendix E: Hopping Channel Number

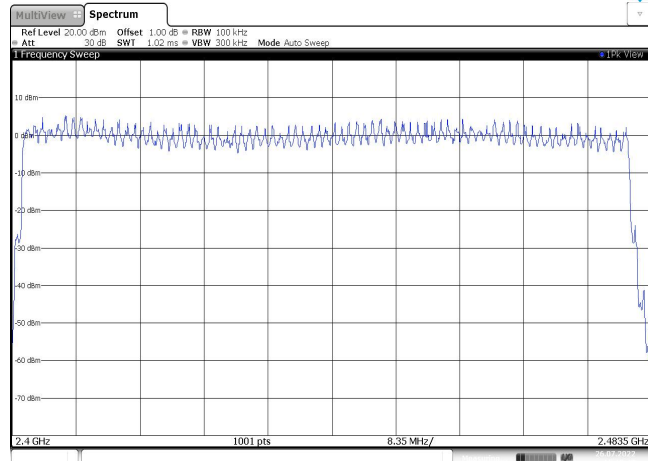
Modulation type	Channel number	Limit	Result
GFSK	79	≥15.00	Pass
π/4DQPSK	79		
8DPSK	79		

GFSK



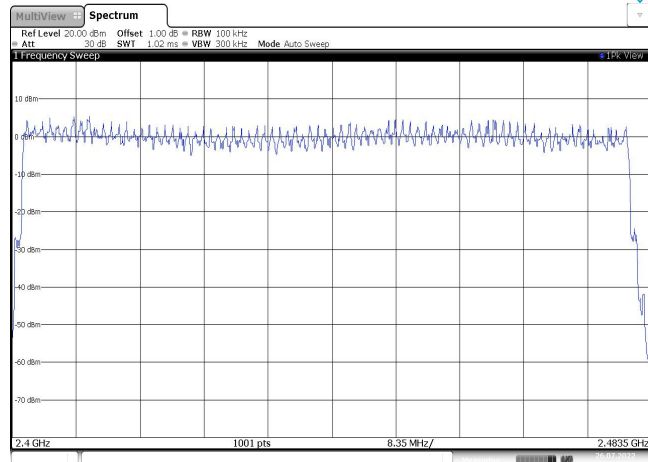
Date: 26 JUL 2022 15:47:21

$\pi/4$ DQPSK



Date: 26 JUL 2022 15:48:47

8DPSK



Date: 26 JUL 2022 15:50:08

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		
π/4DQPSK	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		