

FCC Part 15.247

Test Information:

Serial No.:	2J6O-3	Test Date:	2024/04/03
Test Site:	RF	Test Mode:	Transmitting
Tester:	Lingling Li	Test Result:	Pass

Environmental Conditions:

Temperature: (°C)	26.1	Relative Humidity: (%)	48	ATM Pressure: (kPa)	101.3
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Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	Spectrum Analyzer	FSU26	100147	2024/04/01	2025/03/31
zhuoxiang	Coaxial Cable	SMA-178	211001	Each time	N/A

* Statement of Traceability: China Certification ICT Co., Ltd (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

20 dB Emission Bandwidth

BDR

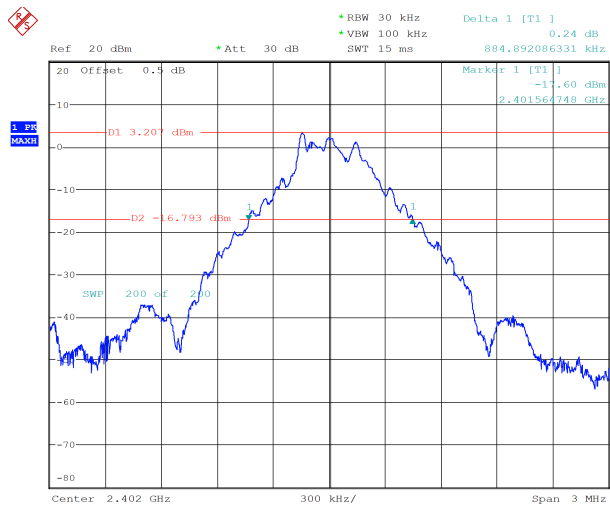
Mode	Value (MHz)
GFSK_Low	0.885
GFSK_Middle	0.885
GFSK_High	0.882

EDR

Mode	Value (MHz)
$\pi/4$ -DQPSK_Low	1.242
$\pi/4$ -DQPSK_Middle	1.242
$\pi/4$ -DQPSK_High	1.245
8DPSK_Low	1.254
8DPSK_Middle	1.252
8DPSK_High	1.252

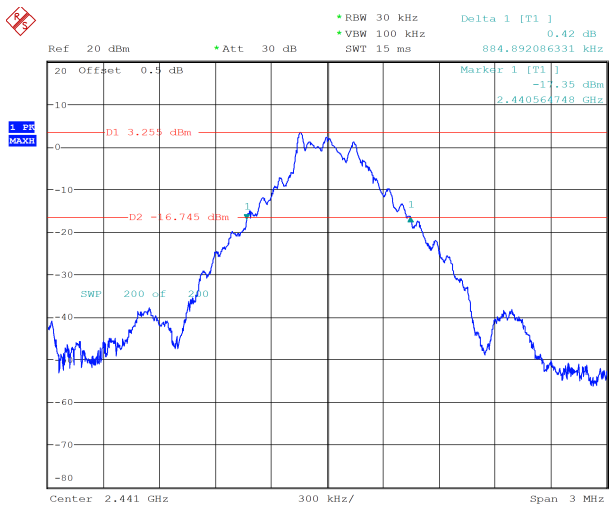
BDR

GFSK_Low 0.885 MHz



Comment: ProjectNo.:CR240315580-RF Tester:Lingling Li
Date: 3.APR.2024 15:48:08

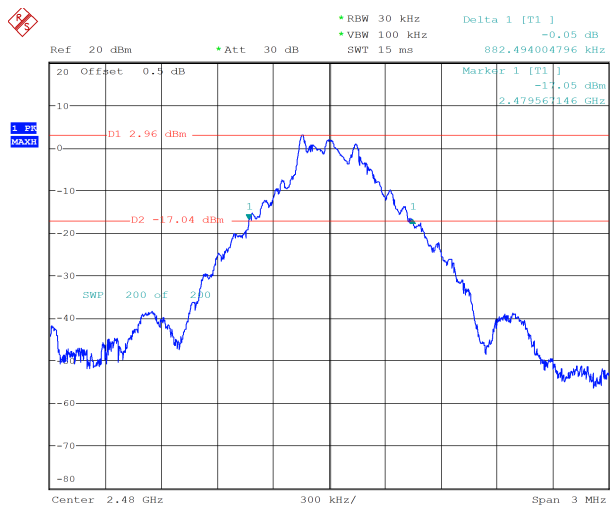
GFSK_Middle 0.885 MHz



Comment: ProjectNo.:CR240315580-RF Tester:Lingling Li
Date: 3.APR.2024 15:51:02

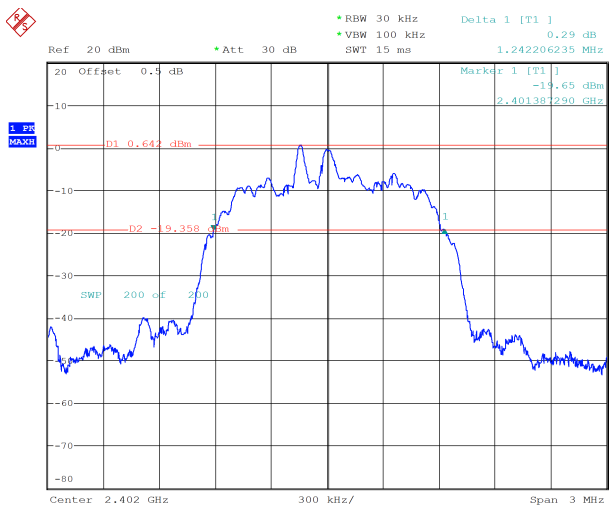
EDR

GFSK_High 0.882 MHz



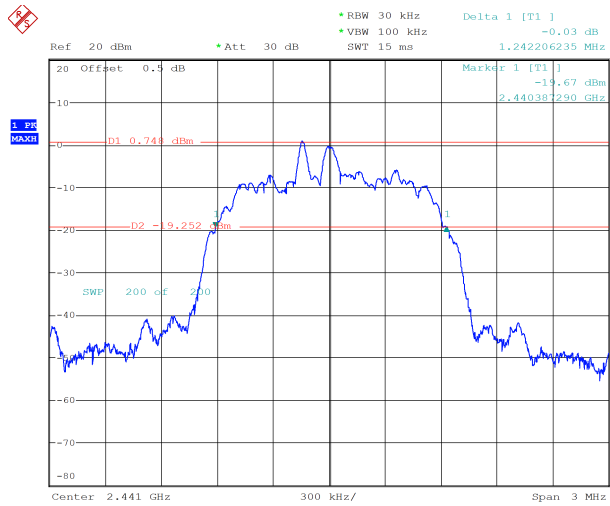
Comment: ProjectNo.:CR240315580-RF Tester:Lingling Li
Date: 3.APR.2024 15:54:01

$\pi/4$ -DQPSK_Low 1.242 MHz



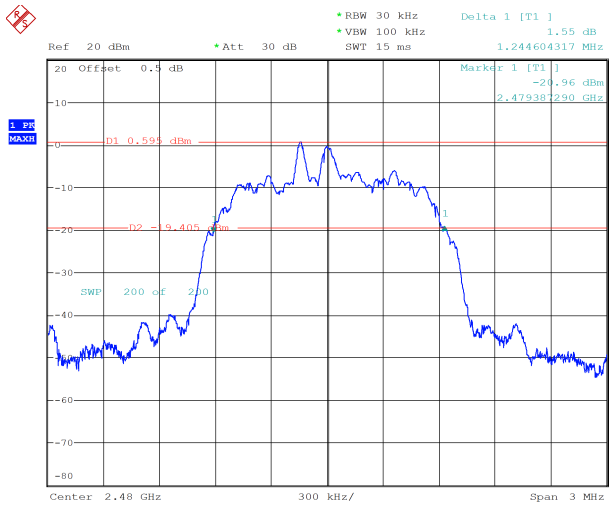
Comment: ProjectNo.:CR240315580-RF Tester:Lingling Li
Date: 3.APR.2024 16:14:16

$\pi/4$ -DQPSK_Middle 1.242 MHz



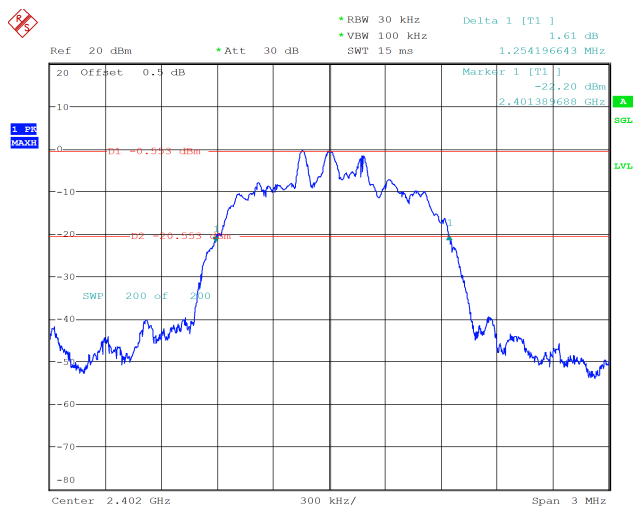
Comment: ProjectNo.:CR240315580-RF Tester:Lingling Li
Date: 3.APR.2024 16:17:52

$\pi/4$ -DQPSK_High 1.245 MHz



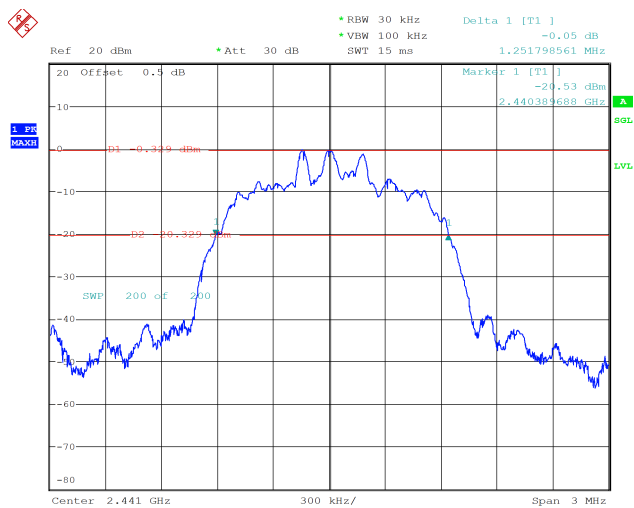
Comment: ProjectNo.:CR240315580-RF Tester:Lingling Li
Date: 3.APR.2024 16:19:56

8DPSK_Low 1.254 MHz



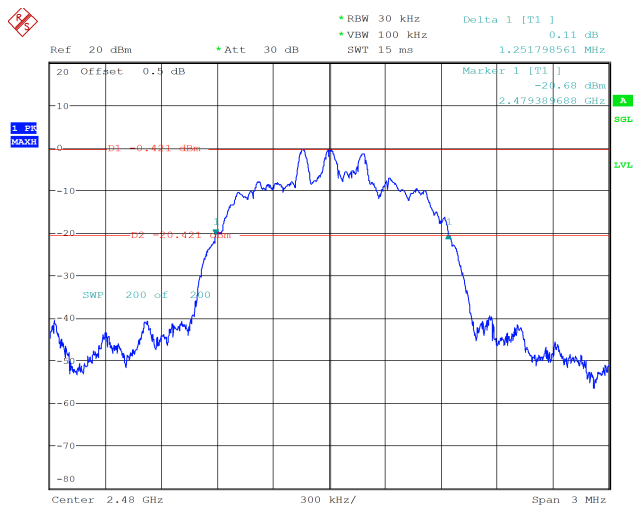
Comment: ProjectNo.:CR240315580-RF Tester:Lingling Li
Date: 3.APR.2024 16:25:28

8DPSK_Middle 1.252 MHz



Comment: ProjectNo.:CR240315580-RF Tester:Lingling Li
Date: 3.APR.2024 16:28:23

8DPSK_High 1.252 MHz



Comment: ProjectNo.:CR240315580-RF Tester:Lingling Li
Date: 3.APR.2024 16:35:48

99% Occupied Bandwidth**BDR**

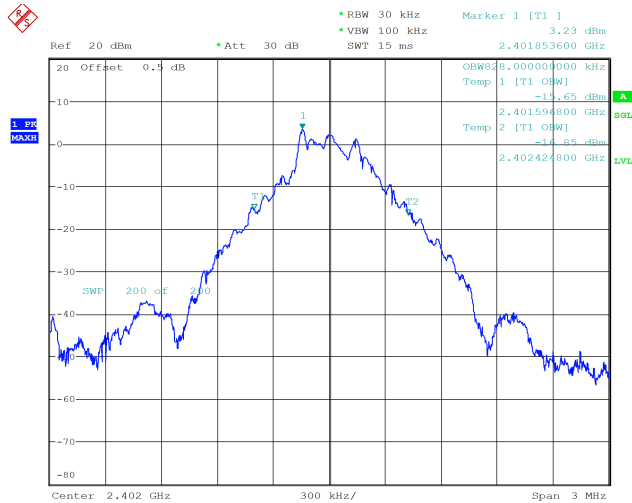
Mode	99% OBW (MHz)
GFSK_Low	0.828
GFSK_Middle	0.830
GFSK_High	0.830

EDR

Mode	99% OBW (MHz)
$\pi/4$ -DQPSK_Low	1.162
$\pi/4$ -DQPSK_Middle	1.162
$\pi/4$ -DQPSK_High	1.162
8DPSK_Low	1.142
8DPSK_Middle	1.142
8DPSK_High	1.142

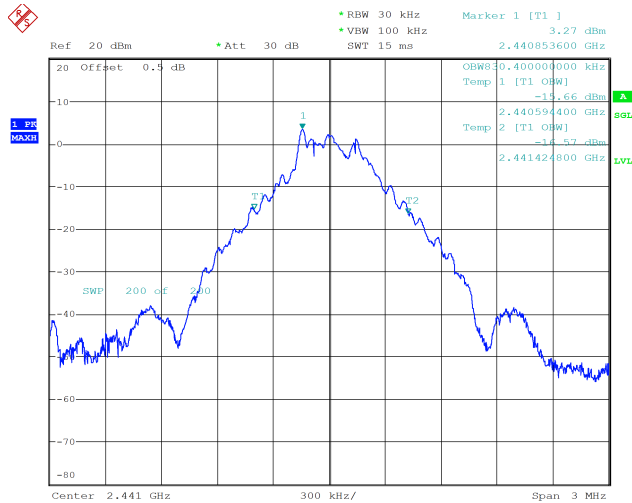
BDR

GFSK_Low 0.828 MHz



Comment: ProjectNo.:CR240315580-RF Tester:Lingling Li
Date: 3.APR.2024 15:49:04

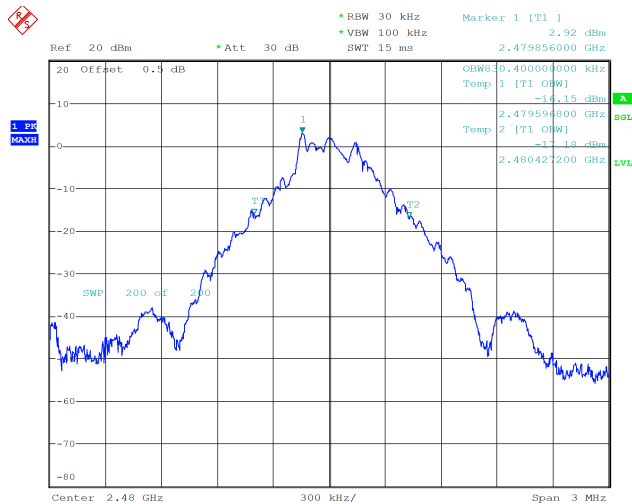
GFSK_Middle 0.830 MHz



Comment: ProjectNo.:CR240315580-RF Tester:Lingling Li
Date: 3.APR.2024 15:51:24

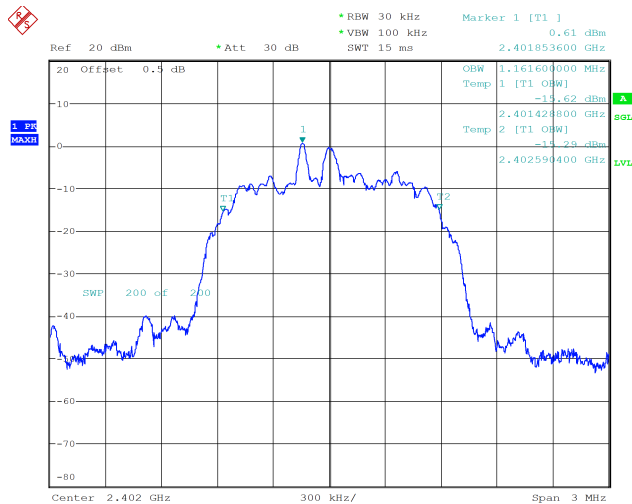
EDR

GFSK_High 0.830 MHz



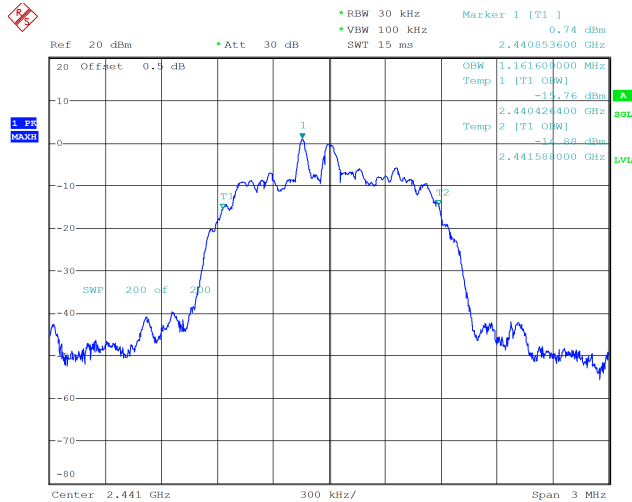
Comment: ProjectNo.:CR240315580-RF Tester:Lingling Li
Date: 3.APR.2024 15:55:04

$\pi/4$ -DQPSK_Low 1.162 MHz



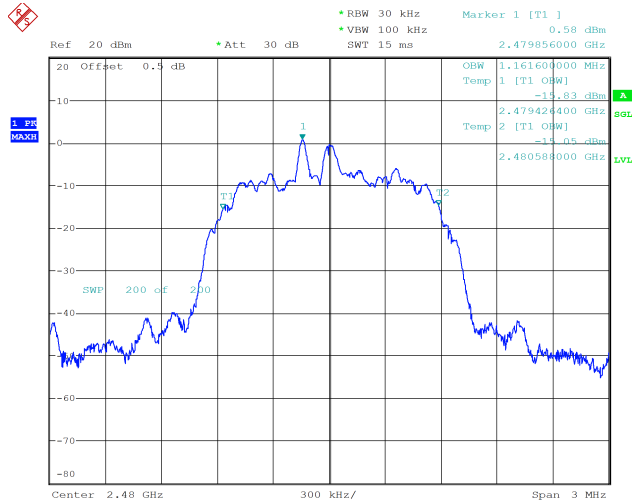
Comment: ProjectNo.:CR240315580-RF Tester:Lingling Li
Date: 3.APR.2024 16:15:13

$\pi/4$ -DQPSK_Middle 1.162 MHz



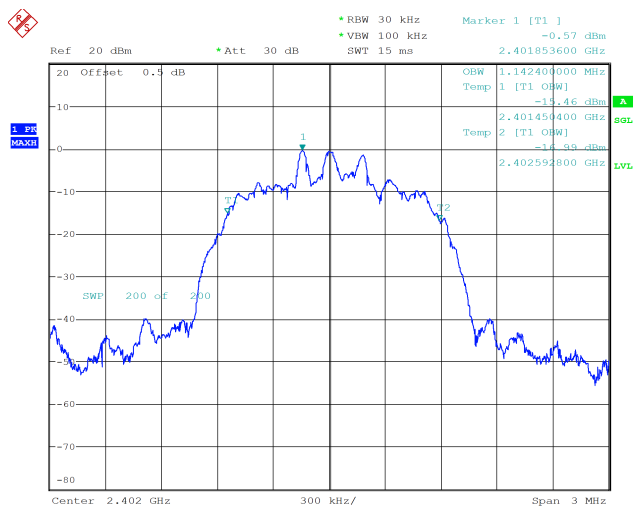
Comment: ProjectNo.:CR240315580-RF Tester:Lingling Li
Date: 3.APR.2024 16:18:14

$\pi/4$ -DQPSK_High 1.162 MHz



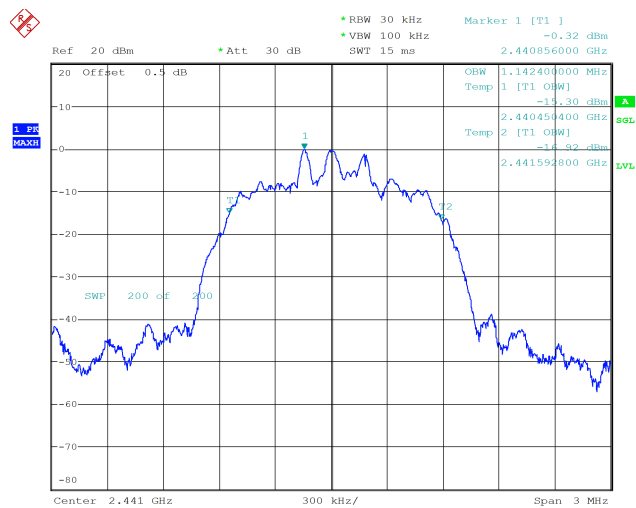
Comment: ProjectNo.:CR240315580-RF Tester:Lingling Li
Date: 3.APR.2024 16:21:00

8DPSK_Low 1.142 MHz



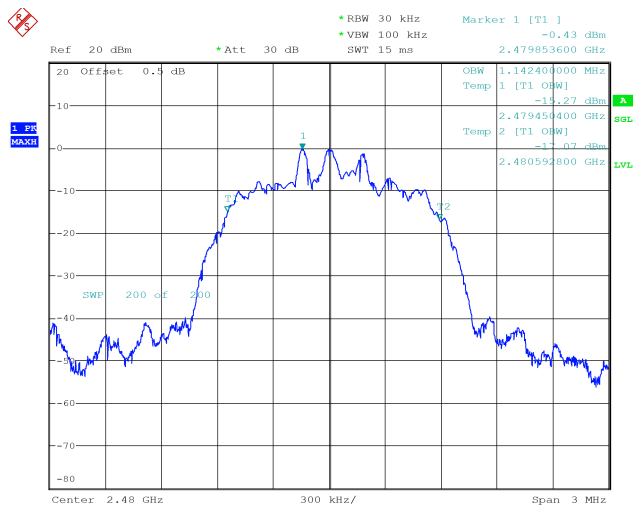
Comment: ProjectNo.:CR240315580-RF Tester:Lingling Li
Date: 3.APR.2024 16:26:25

8DPSK_Middle 1.142 MHz



Comment: ProjectNo.:CR240315580-RF Tester:Lingling Li
Date: 3.APR.2024 16:28:45

8DPSK_High 1.142 MHz



Comment: ProjectNo.:CR240315580-RF Tester:Lingling Li
Date: 3.APR.2024 16:36:54

Channel Separation**BDR**

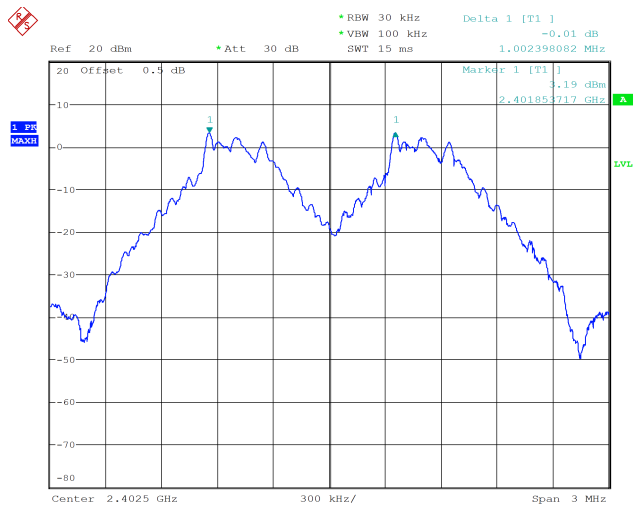
Mode	Value (MHz)	Limit (MHz)	Result
GFSK_Low	1.002	0.590	Pass
GFSK_Middle	1.002	0.590	Pass
GFSK_High	1.000	0.588	Pass

EDR

Mode	Value (MHz)	Limit (MHz)	Result
$\pi/4$ -DQPSK_Low	1.002	0.828	Pass
$\pi/4$ -DQPSK_Middle	1.002	0.828	Pass
$\pi/4$ -DQPSK_High	1.000	0.830	Pass
8DPSK_Low	1.005	0.836	Pass
8DPSK_Middle	1.005	0.835	Pass
8DPSK_High	1.000	0.835	Pass

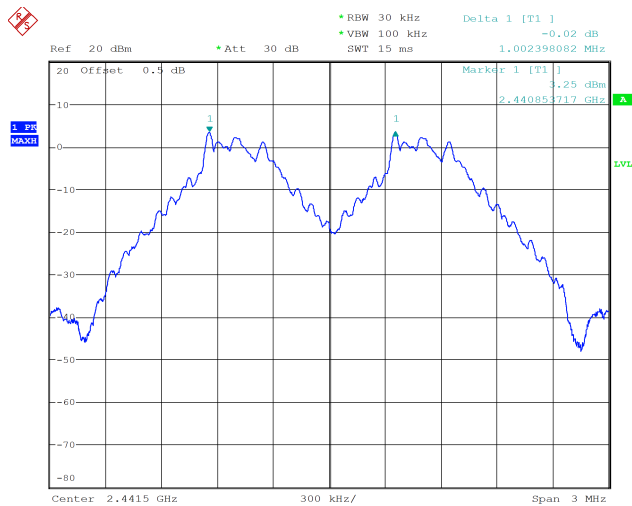
BDR

GFSK_Low 1.002 MHz



Comment: ProjectNo.:CR240315580-RF Tester:Lingling Li
Date: 3.APR.2024 15:50:31

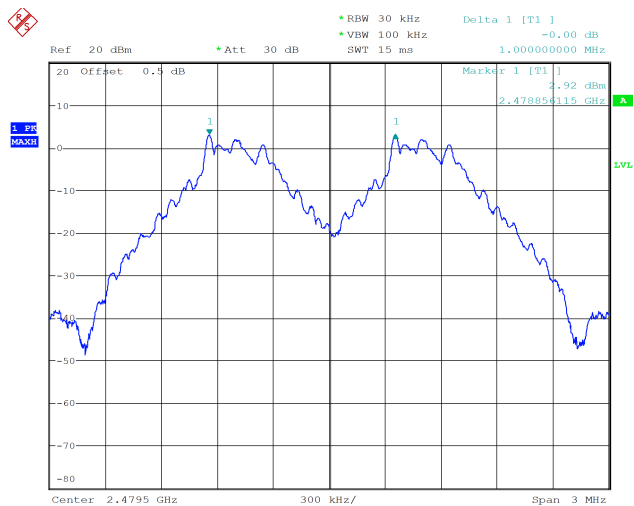
GFSK_Middle 1.002 MHz



Comment: ProjectNo.:CR240315580-RF Tester:Lingling Li
Date: 3.APR.2024 15:53:10

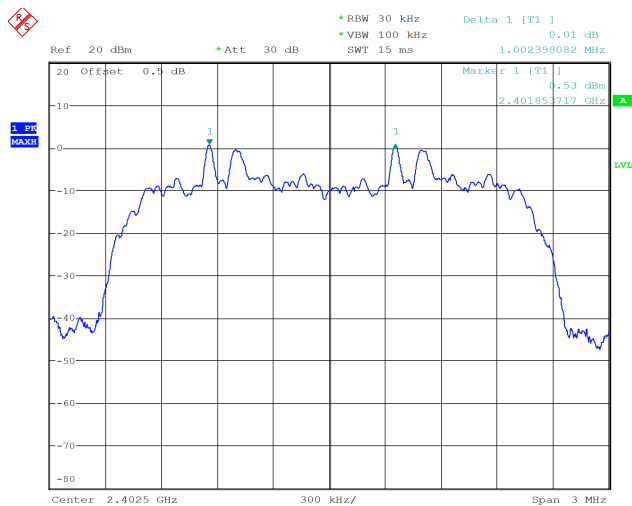
EDR

GFSK_High 1.000 MHz



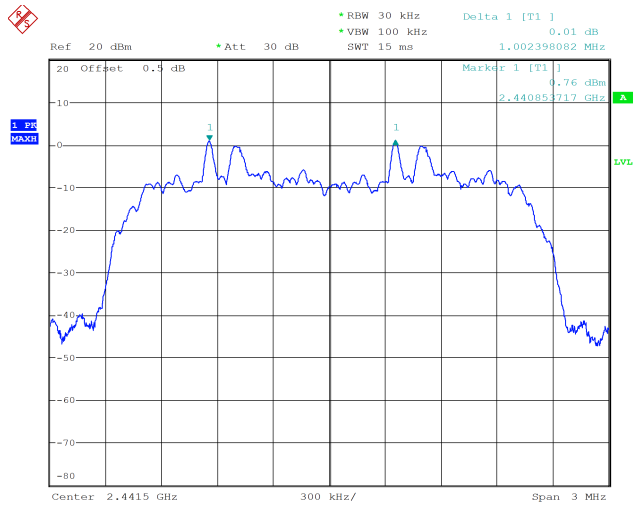
Comment: ProjectNo.:CR240315580-RF Tester:Lingling Li
Date: 3.APR.2024 15:56:34

$\pi/4$ -DQPSK_Low 1.002 MHz



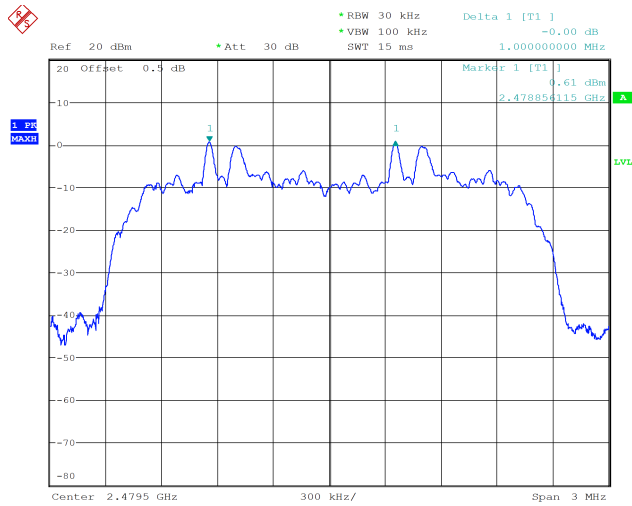
Comment: ProjectNo.:CR240315580-RF Tester:Lingling Li
Date: 3.APR.2024 16:17:22

$\pi/4$ -DQPSK_Middle 1.002 MHz



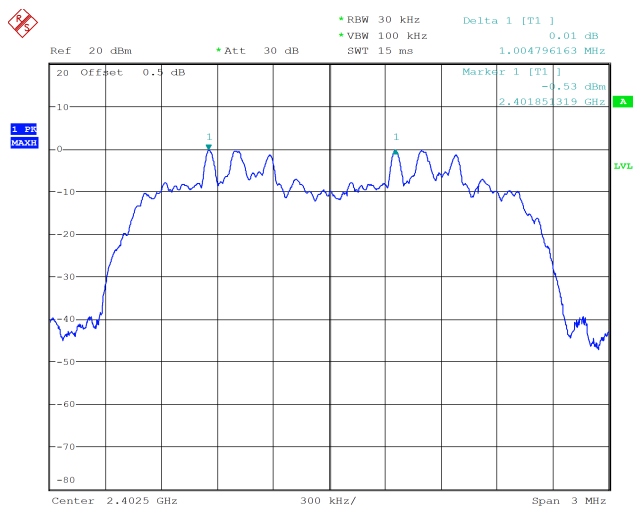
Comment: ProjectNo.:CR240315580-RF Tester:Lingling Li
Date: 3.APR.2024 16:19:28

$\pi/4$ -DQPSK_High 1.000 MHz



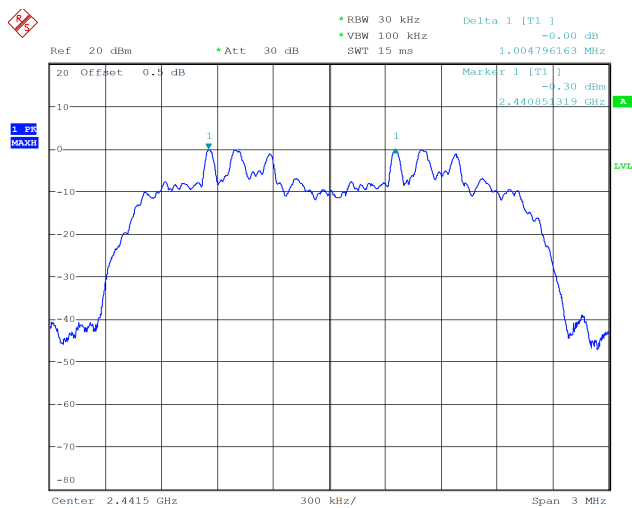
Comment: ProjectNo.:CR240315580-RF Tester:Lingling Li
Date: 3.APR.2024 16:23:22

8DPSK_Low 1.005 MHz



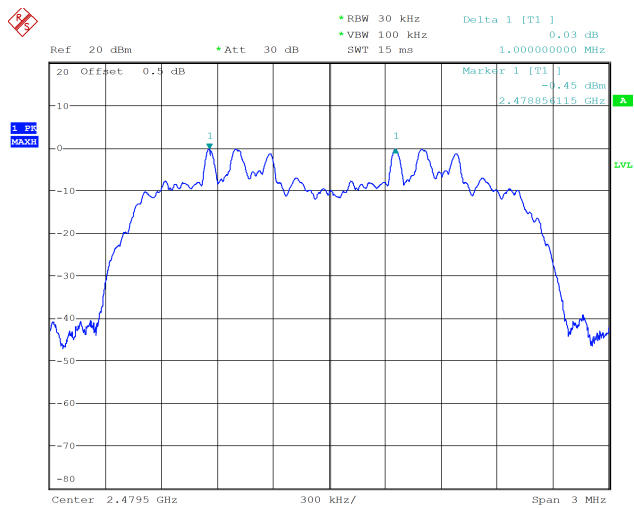
Comment: ProjectNo.:CR240315580-RF Tester:Lingling Li
Date: 3.APR.2024 16:27:57

8DPSK_Middle 1.005 MHz



Comment: ProjectNo.:CR240315580-RF Tester:Lingling Li
Date: 3.APR.2024 16:30:18

8DPSK_High 1.000 MHz



Comment: ProjectNo.:CR240315580-RF Tester:Lingling Li
Date: 3.APR.2024 16:38:29

Number of Hopping Frequency

BDR

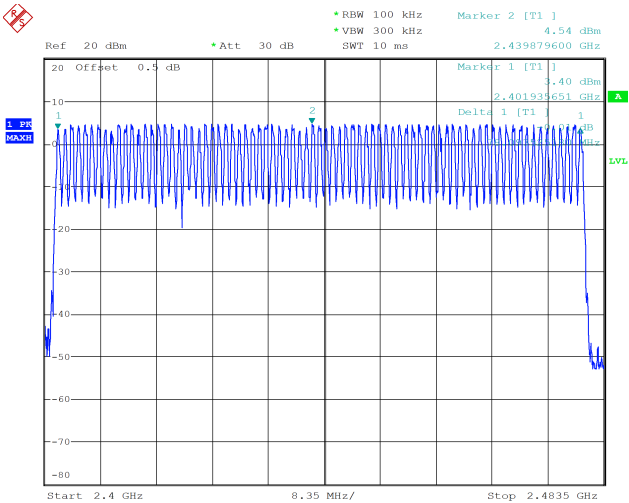
Mode	Value	Limit	Result
GFSK_Hopping	79	15	Pass

EDR

Mode	Value	Limit	Result
$\pi/4$ -DQPSK_Hopping	79	15	Pass
8DPSK_Hopping	79	15	Pass

BDR

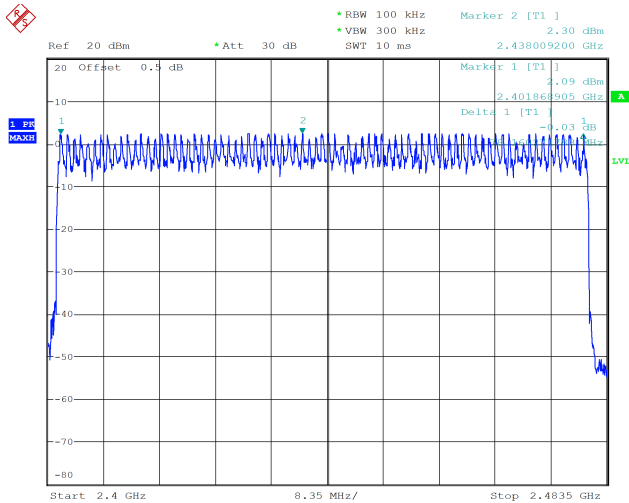
GFSK_Hopping 79



Comment: ProjectNo.:CR240315580-RF Tester:Lingling Li
Date: 3.APR.2024 17:02:01

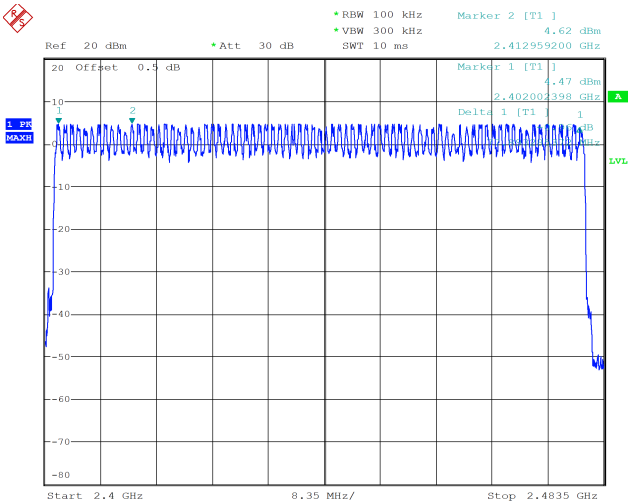
EDR

$\pi/4$ -DQPSK_Hopping 79



Comment: ProjectNo.:CR240315580-RF Tester:Lingling Li
Date: 3.APR.2024 17:33:28

8DPSK_Hopping 79



Comment: ProjectNo.:CR240315580-RF Tester:Lingling Li
Date: 3.APR.2024 17:16:48

Time of Occupancy (dwell time)**BDR**

Mode	Pulse width (ms)	Dwell time (s)	Limit (s)	Result
GFSK_Hopping_DH1	0.392	0.125	0.400	Pass
GFSK_Hopping_DH3	1.652	0.264	0.400	Pass
GFSK_Hopping_DH5	2.910	0.310	0.400	Pass

EDR

Mode	Pulse width (ms)	Dwell time (s)	Limit (s)	Result
$\pi/4$ -DQPSK_Hopping_2DH1	0.401	0.128	0.400	Pass
$\pi/4$ -DQPSK_Hopping_2DH3	1.659	0.266	0.400	Pass
$\pi/4$ -DQPSK_Hopping_2DH5	2.914	0.311	0.400	Pass
8DPSK_Hopping_3DH1	0.401	0.128	0.400	Pass
8DPSK_Hopping_3DH3	1.659	0.266	0.400	Pass
8DPSK_Hopping_3DH5	2.918	0.311	0.400	Pass

Note:

DH1:Dwell time=Pulse time (ms) $\times$ (1600/2/79) $\times$ 31.6 s

DH3:Dwell time=Pulse time (ms) $\times$ (1600/4/79) $\times$ 31.6 s

DH5:Dwell time=Pulse time (ms) $\times$ (1600/6/79) $\times$ 31.6 s

2DH1: Dwell time=Pulse time (ms) $\times$ (1600/2/79) $\times$ 31.6 s

2DH3: Dwell time=Pulse time (ms) $\times$ (1600/4/79) $\times$ 31.6 s

2DH5: Dwell time=Pulse time (ms) $\times$ (1600/6/79) $\times$ 31.6 s

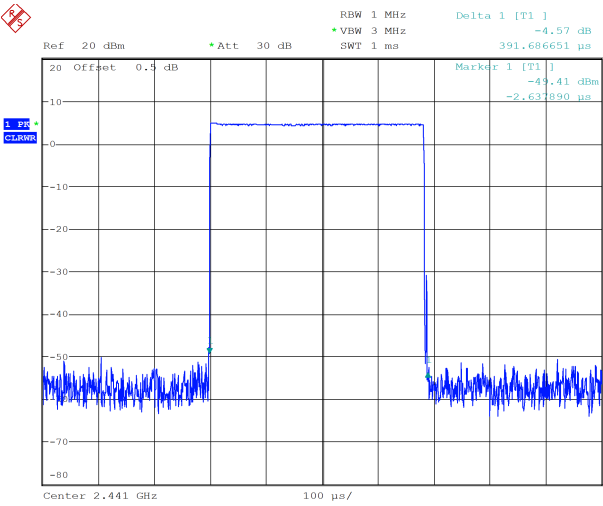
3DH1: Dwell time=Pulse time (ms) $\times$ (1600/2/79) $\times$ 31.6 s

3DH3: Dwell time=Pulse time (ms) $\times$ (1600/4/79) $\times$ 31.6 s

3DH5: Dwell time=Pulse time (ms) $\times$ (1600/6/79) $\times$ 31.6 s

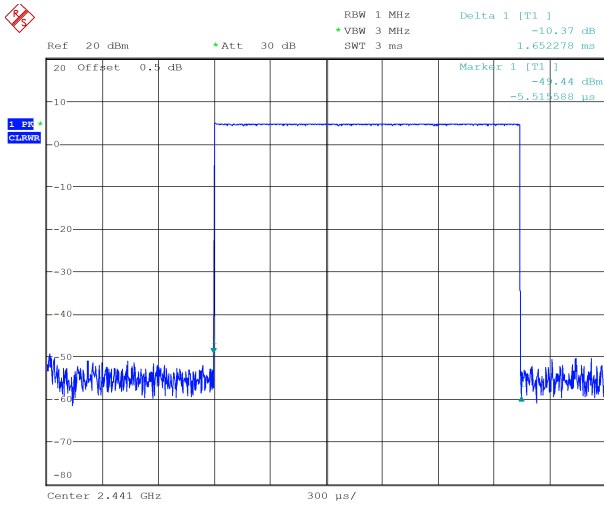
BDR

GFSK_Hopping_DH1 0.392ms



Comment: ProjectNo.:CR240315580-RF Tester:Lingling Li
Date: 3.APR.2024 16:45:28

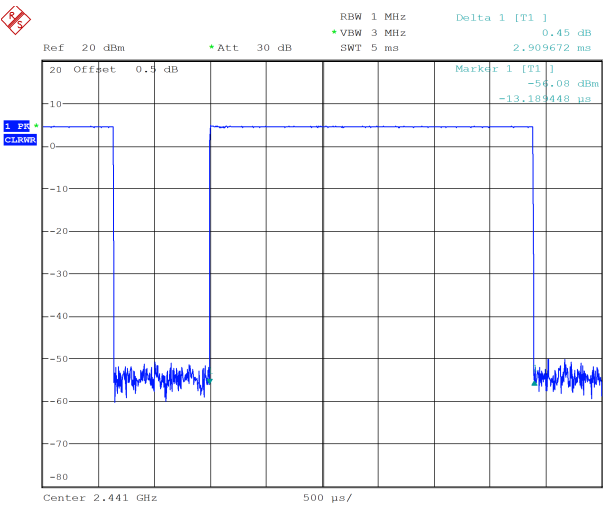
GFSK_Hopping_DH3 1.652ms



Comment: ProjectNo.:CR240315580-RF Tester:Lingling Li
Date: 3.APR.2024 16:45:56

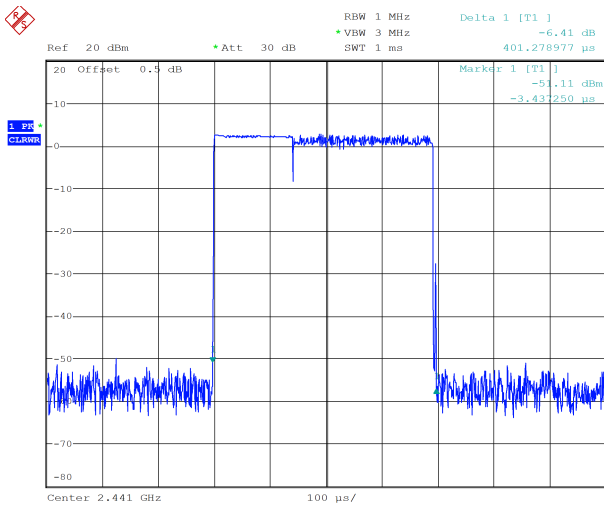
EDR

GFSK_Hopping_DH5 2.910ms



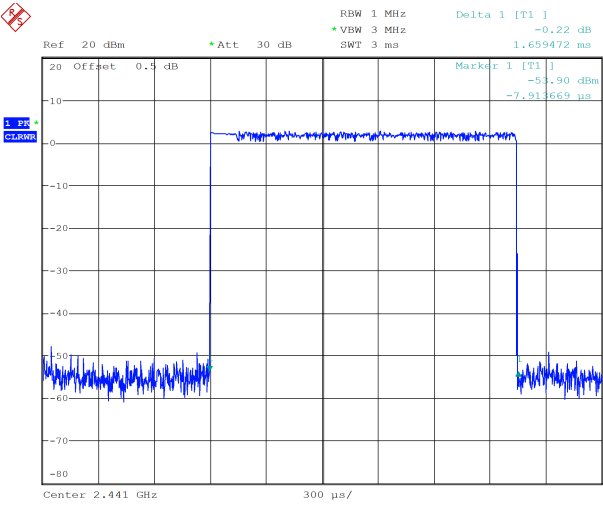
Comment: ProjectNo.:CR240315580-RF Tester:Lingling Li
Date: 3.APR.2024 16:57:39

$\pi/4$ -DQPSK_Hopping_2DH1 0.401ms



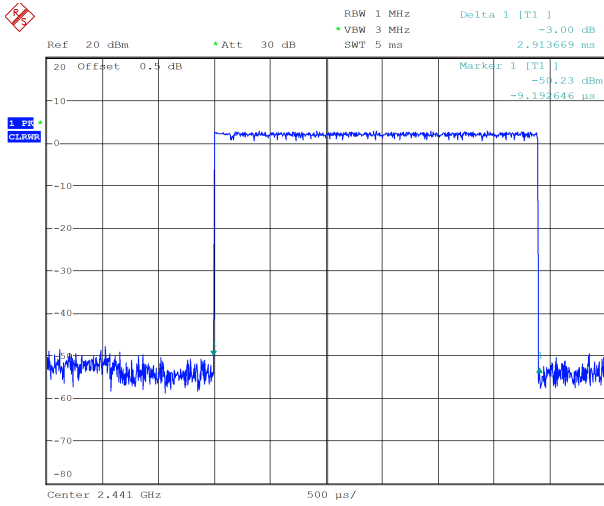
Comment: ProjectNo.:CR240315580-RF Tester:Lingling Li
Date: 3.APR.2024 16:47:11

$\pi/4$ -DQPSK_Hopping_2DH3 1.659ms



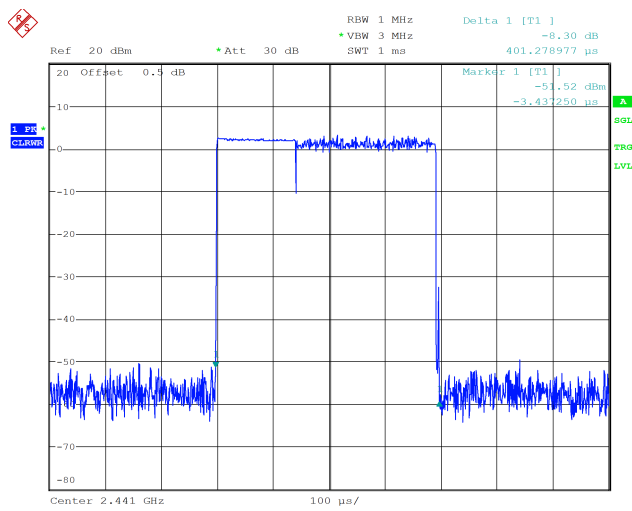
Comment: ProjectNo.:CR240315580-RF Tester:Lingling Li
Date: 3.APR.2024 16:58:06

$\pi/4$ -DQPSK_Hopping_2DH5 2.914ms



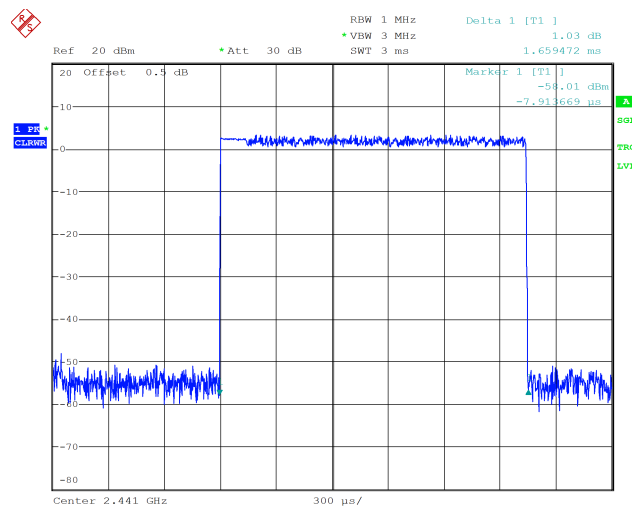
Comment: ProjectNo.:CR240315580-RF Tester:Lingling Li
Date: 3.APR.2024 16:49:52

8DPSK_Hopping_3DH1 0.401ms



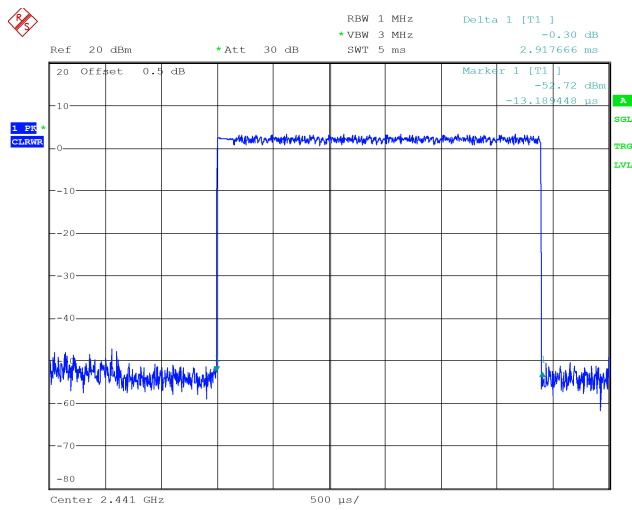
Comment: ProjectNo.:CR240315580-RF Tester:Lingling Li
Date: 3.APR.2024 16:50:42

8DPSK_Hopping_3DH3 1.659ms



Comment: ProjectNo.:CR240315580-RF Tester:Lingling Li
Date: 3.APR.2024 16:55:31

8DPSK_Hopping_3DH5 2.918ms



Comment: ProjectNo.:CR240315580-RF Tester:Lingling Li
Date: 3.APR.2024 16:51:54

Maximum Conducted Output Power**BDR**

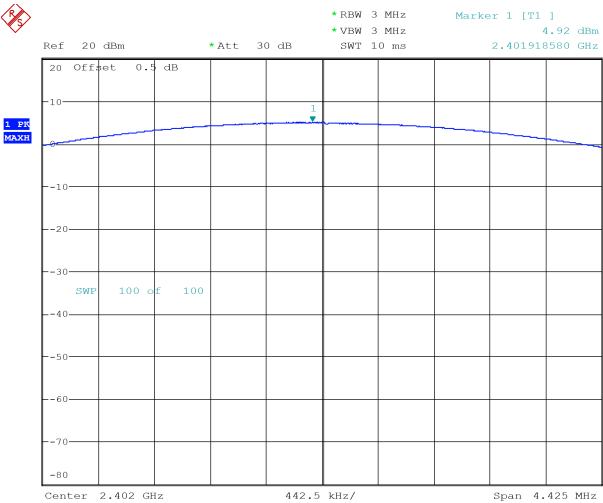
Mode	Value (dBm)	Limit (dBm)	Result
GFSK_Low	4.92	21.00	Pass
GFSK_Middle	4.98	21.00	Pass
GFSK_High	4.65	21.00	Pass

EDR

Mode	Value (dBm)	Limit (dBm)	Result
$\pi/4$ -DQPSK_Low	2.96	21.00	Pass
$\pi/4$ -DQPSK_Middle	3.11	21.00	Pass
$\pi/4$ -DQPSK_High	2.97	21.00	Pass
8DPSK_Low	3.47	21.00	Pass
8DPSK_Middle	3.69	21.00	Pass
8DPSK_High	3.57	21.00	Pass

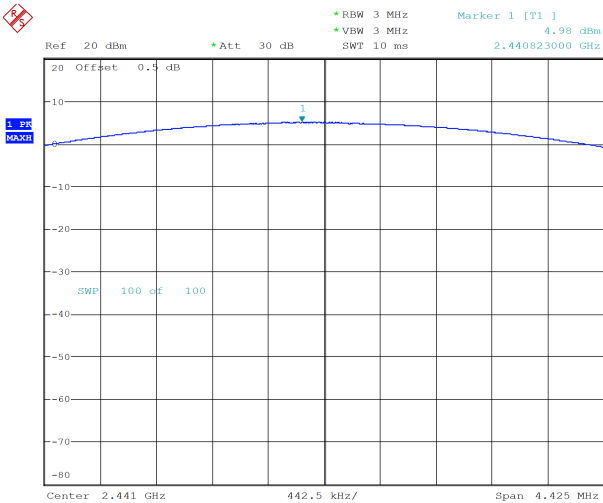
BDR

GFSK_Low 4.92 dBm



Comment: ProjectNo.:CR240315580-RF Tester:Lingling Li
Date: 3.APR.2024 15:49:21

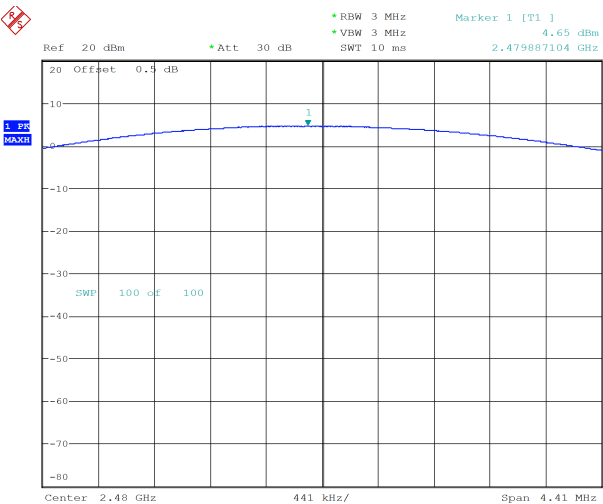
GFSK_Middle 4.98 dBm



Comment: ProjectNo.:CR240315580-RF Tester:Lingling Li
Date: 3.APR.2024 15:51:50

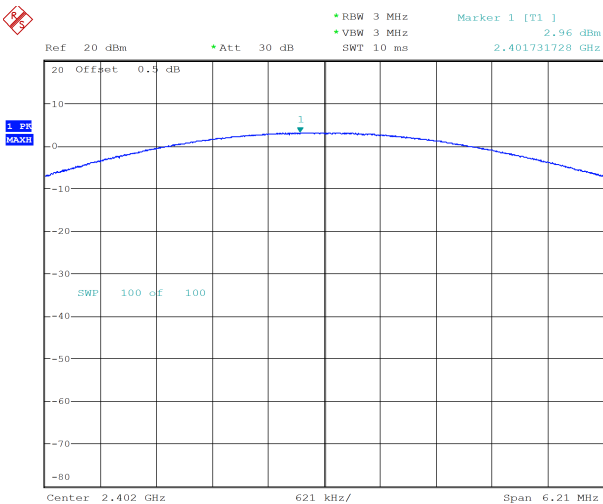
EDR

GFSK_High 4.65 dBm



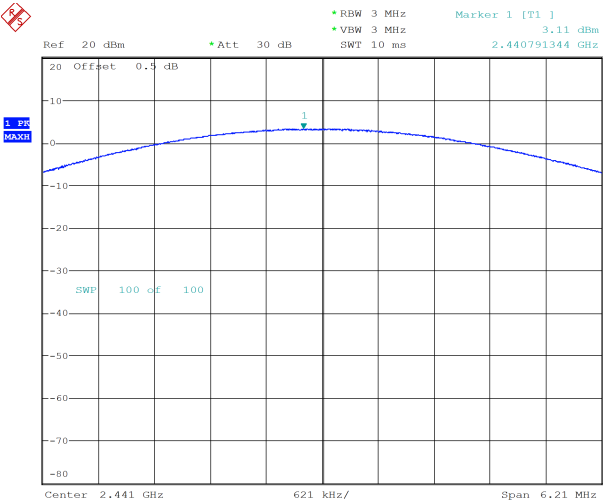
Comment: ProjectNo.:CR240315580-RF Tester:Lingling Li
Date: 3.APR.2024 15:55:20

$\pi/4$ -DQPSK_Low 2.96 dBm



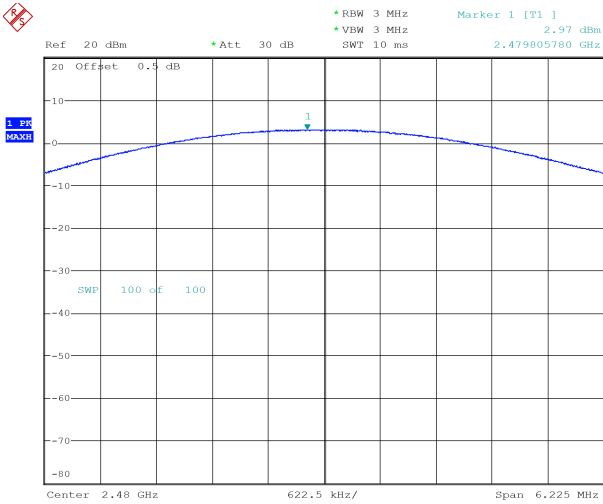
Comment: ProjectNo.:CR240315580-RF Tester:Lingling Li
Date: 3.APR.2024 16:15:28

$\pi/4$ -DQPSK_Middle 3.11 dBm



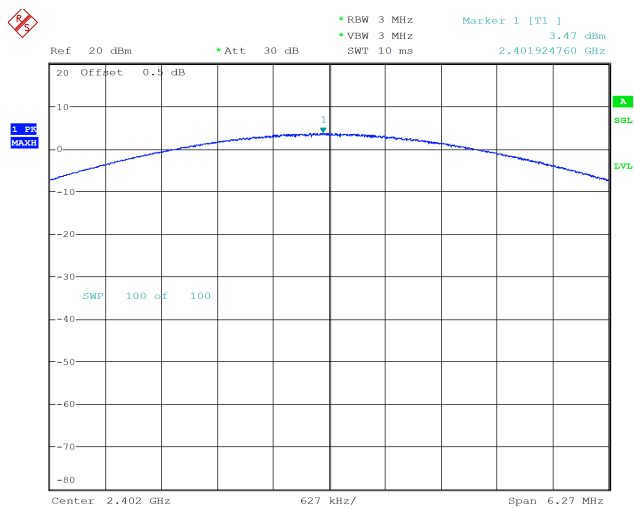
Comment: ProjectNo.:CR240315580-RF Tester:Lingling Li
Date: 3.APR.2024 16:18:29

$\pi/4$ -DQPSK_High 2.97 dBm



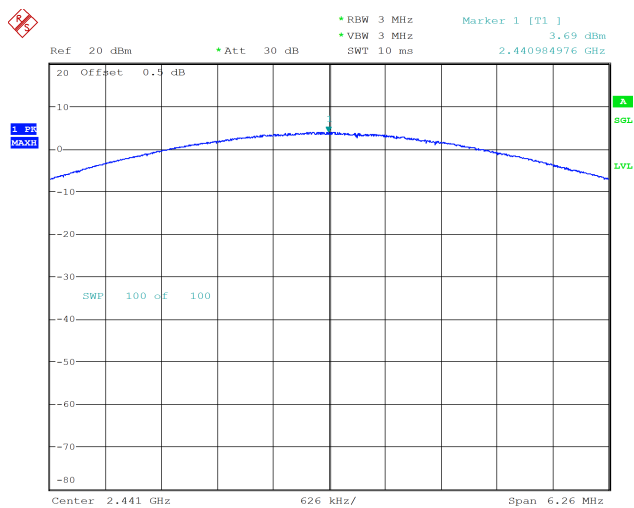
Comment: ProjectNo.:CR240315580-RF Tester:Lingling Li
Date: 3.APR.2024 16:21:35

8DPSK_Low 3.47 dBm



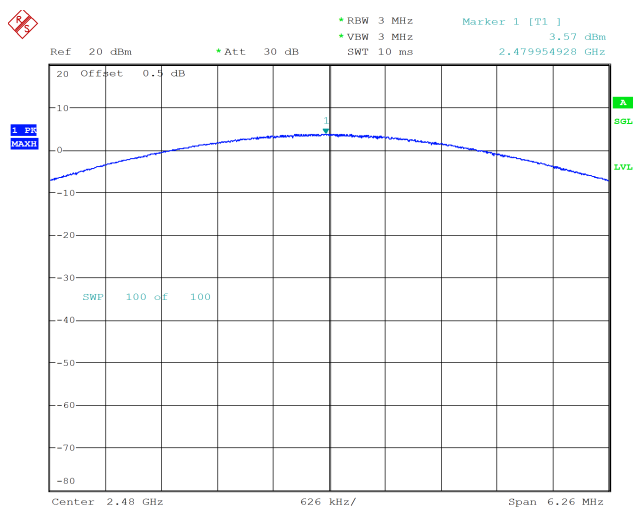
Comment: ProjectNo.:CR240315580-RF Tester:Lingling Li
Date: 3.APR.2024 16:26:41

8DPSK_Middle 3.69 dBm



Comment: ProjectNo.:CR240315580-RF Tester:Lingling Li
Date: 3.APR.2024 16:29:06

8DPSK_High 3.57 dBm



Comment: ProjectNo.:CR240315580-RF Tester:Lingling Li
Date: 3.APR.2024 16:37:12

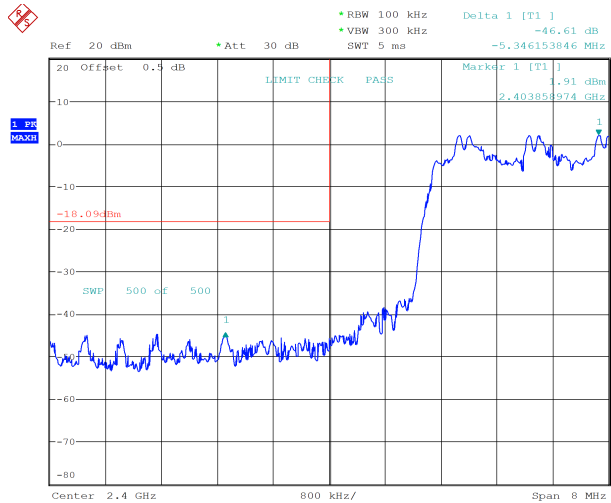
100 kHz Bandwidth of Frequency Band Edge**BDR**

Mode	Value (dB)	Limit (dB)	Result
GFSK_Low	45.90	20.00	Pass
GFSK_High	51.79	20.00	Pass
GFSK_Hopping_Lower	46.11	20.00	Pass
GFSK_Hopping_Upper	53.96	20.00	Pass

EDR

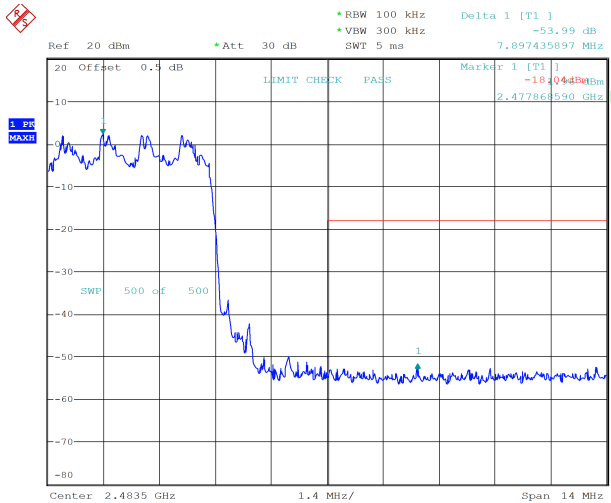
Mode	Value (dB)	Limit (dB)	Result
$\pi/4$ -DQPSK_Low	45.84	20.00	Pass
$\pi/4$ -DQPSK_High	52.25	20.00	Pass
$\pi/4$ -DQPSK_Hopping_Lower	46.61	20.00	Pass
$\pi/4$ -DQPSK_Hopping_Upper	53.99	20.00	Pass
8DPSK_Low	45.68	20.00	Pass
8DPSK_High	52.65	20.00	Pass
8DPSK_Hopping_Lower	46.13	20.00	Pass
8DPSK_Hopping_Upper	53.23	20.00	Pass

$\pi/4$ -DQPSK_Hopping_Lower 46.61 dB



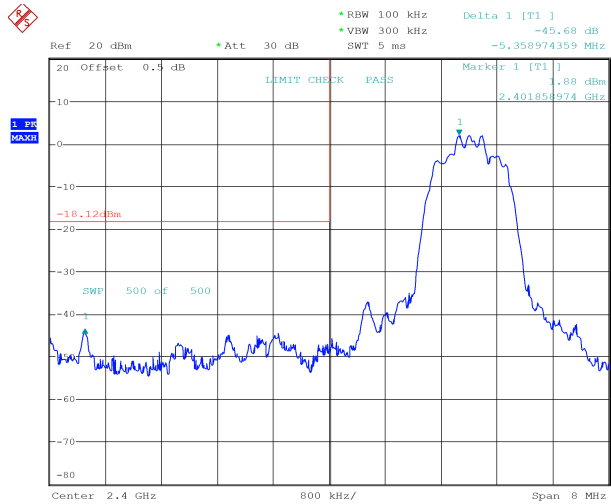
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$\pi/4$ -DQPSK_Hopping_Upper 53.99 dB



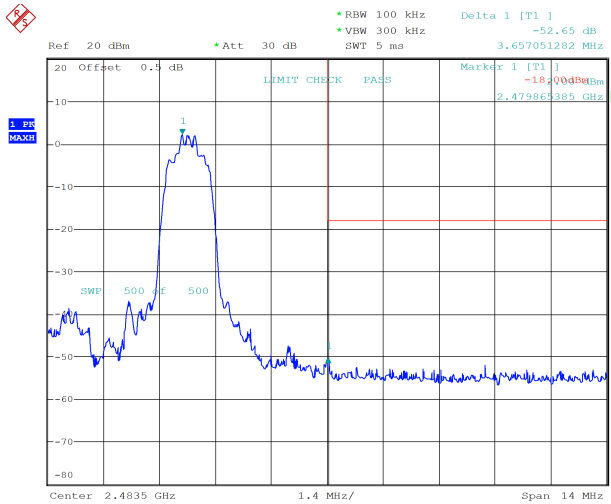
Comment: ProjectNo.:CR240315580-RF Tester:Lingling Li
Date: 3.APR.2024 16:24:54

8DPSK_Low 45.68 dB



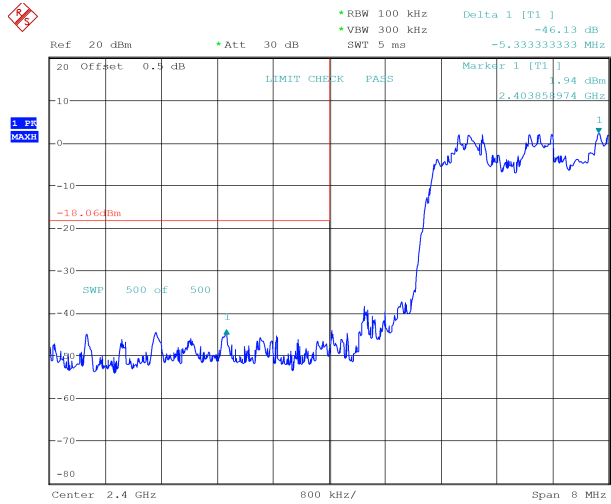
Comment: ProjectNo.:CR240315580-RF Tester:Lingling Li
Date: 3.APR.2024 16:26:01

8DPSK_High 52.65 dB



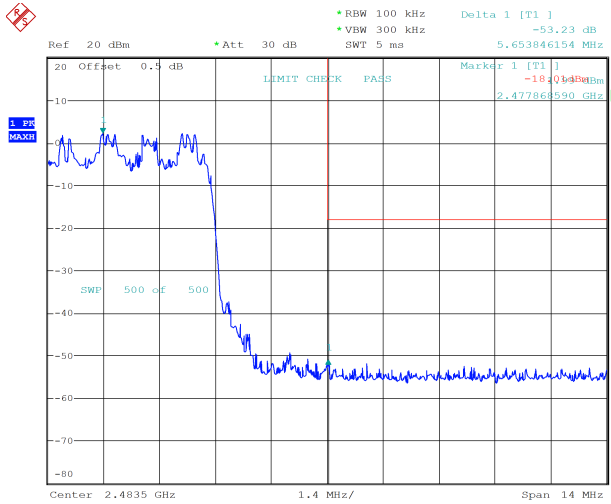
Comment: ProjectNo.:CR240315580-RF Tester:Lingling Li
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8DPSK_Hopping_Lower 46.13 dB



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8DPSK_Hopping_Upper 53.23 dB



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