

Test Information:

Serial No.:	2OXX-2	Test Date:	2024/08/28
Test Site:	RF	Test Mode:	Transmitting
Tester:	Lingling Li	Test Result:	PASS

Environmental Conditions:

Temperature: (°C):	26.9	Relative Humidity: (%)	52	ATM Pressure: (kPa)	100.4
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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	211002	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**

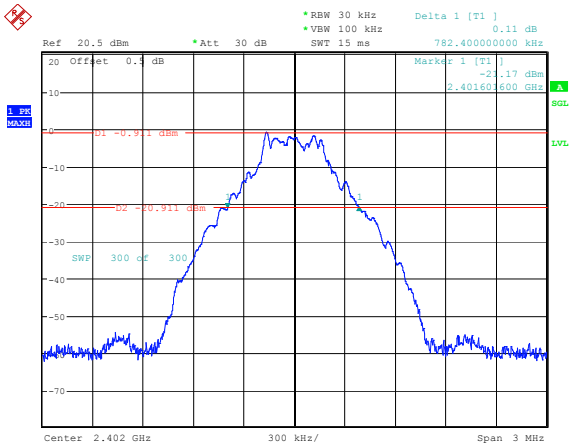
Mode	Value (MHz)
GFSK_Low	0.782
GFSK_Middle	0.780
GFSK_High	0.780

EDR

Mode	Value (MHz)
$\pi/4$ -DQPSK_Low	1.207
$\pi/4$ -DQPSK_Middle	1.210
$\pi/4$ -DQPSK_High	1.207
8DPSK_Low	1.222
8DPSK_Middle	1.219
8DPSK_High	1.222

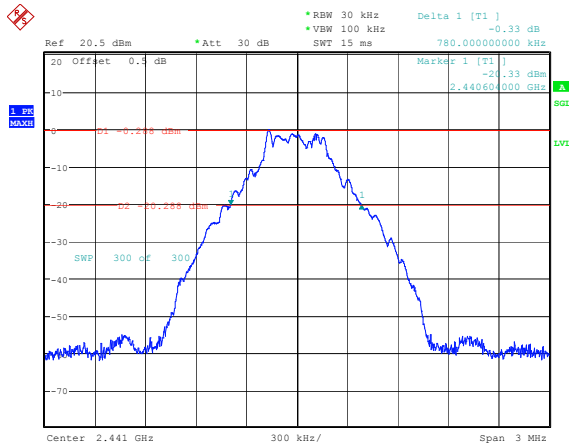
BDR

GFSK_Low 0.782MHz



Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 16:48:11

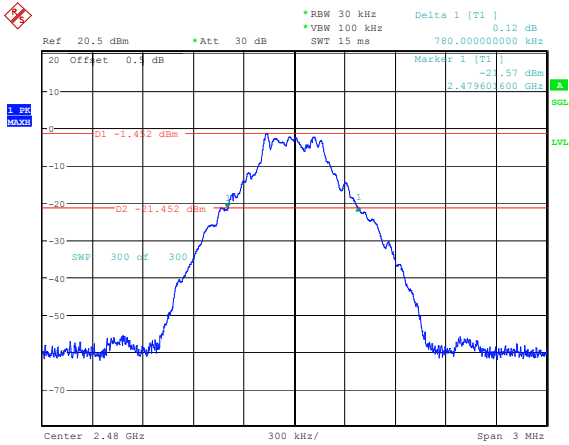
GFSK_Middle 0.780MHz



Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 16:52:10

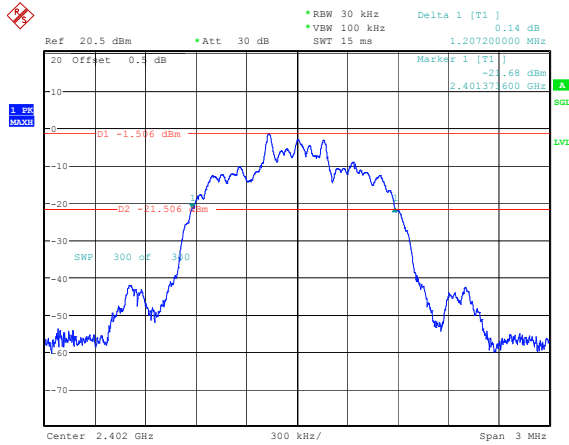
EDR

GFSK_High 0.780MHz



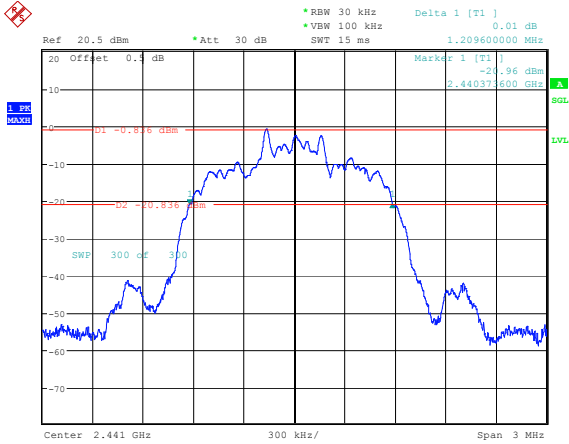
Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 16:55:05

$\pi/4$ -DQPSK_Low 1.207MHz



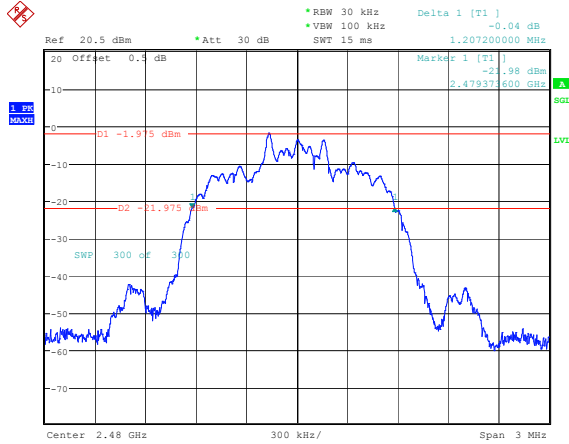
Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 17:27:11

$\pi/4$ -DQPSK_Middle 1.210MHz



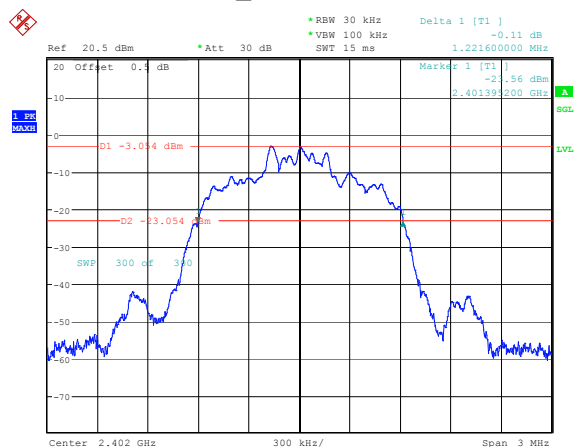
Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 17:32:04

$\pi/4$ -DQPSK_High 1.207MHz



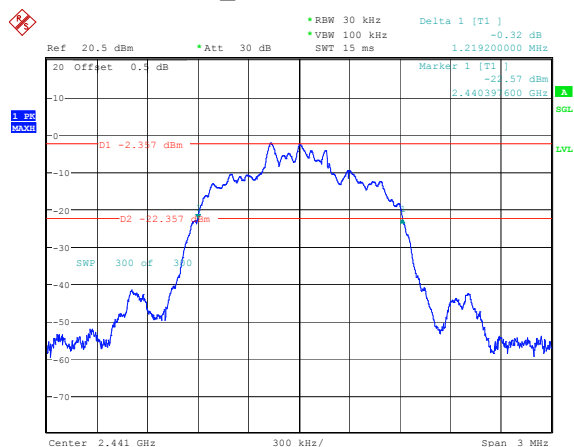
Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 17:34:54

8DPSK_Low 1.222MHz



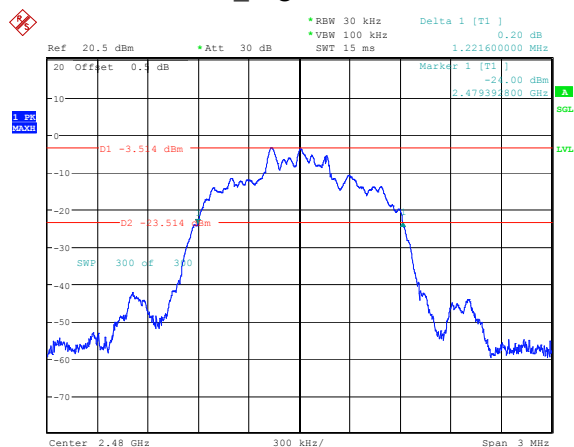
Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 17:40:51

8DPSK_Middle 1.219MHz



Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 17:44:38

8DPSK_High 1.222MHz



Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 17:47:23

99% Occupied Bandwidth**BDR**

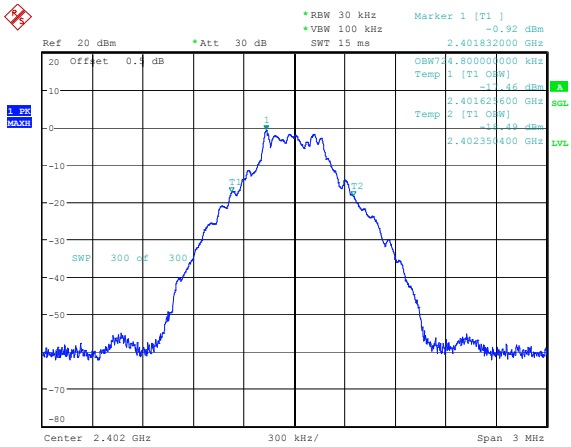
Mode	99% OBW (MHz)
GFSK_Low	0.725
GFSK_Middle	0.725
GFSK_High	0.722

EDR

Mode	99% OBW (MHz)
$\pi/4$ -DQPSK_Low	1.133
$\pi/4$ -DQPSK_Middle	1.133
$\pi/4$ -DQPSK_High	1.133
8DPSK_Low	1.123
8DPSK_Middle	1.126
8DPSK_High	1.123

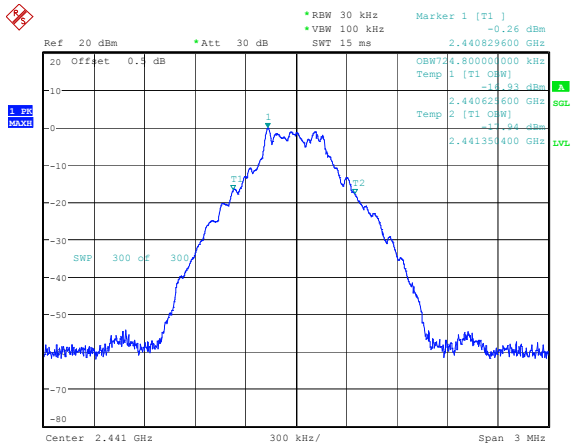
BDR

GFSK_Low 0.725MHz



Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 16:49:24

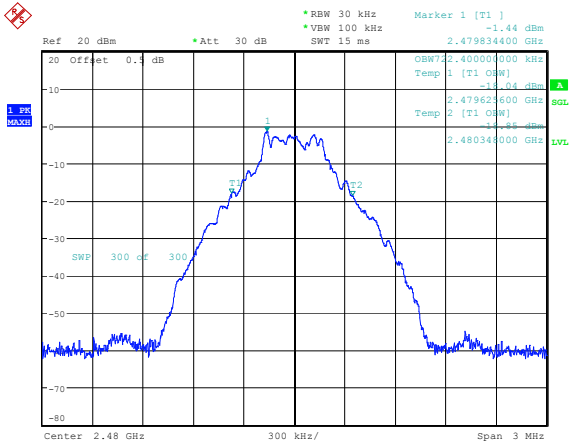
GFSK_Middle 0.725MHz



Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 16:52:40

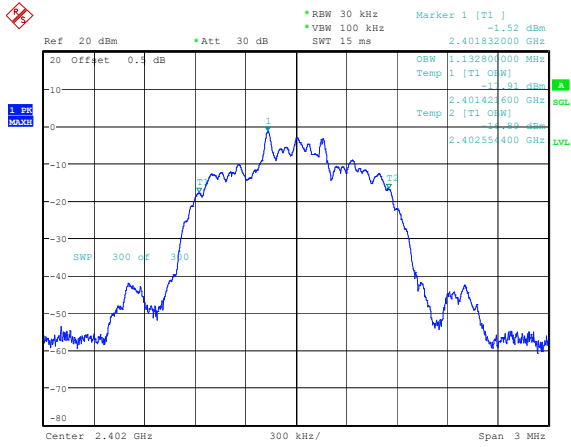
EDR

GFSK_High 0.722MHz



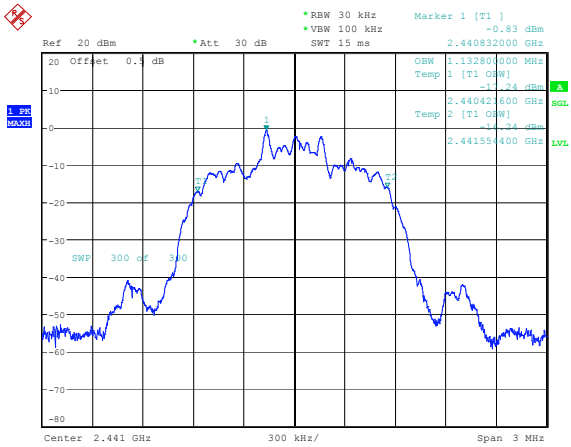
Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 16:56:24

$\pi/4$ -DQPSK_Low 1.133MHz



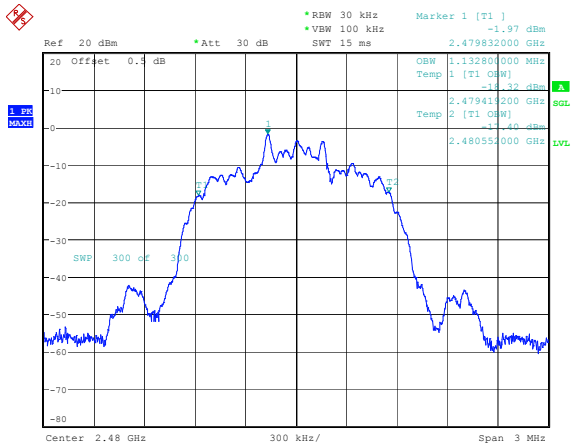
Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 17:28:23

$\pi/4$ -DQPSK_Middle 1.133MHz



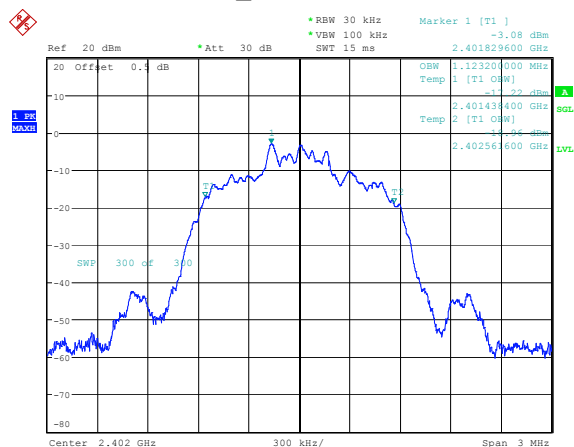
Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 17:32:33

$\pi/4$ -DQPSK_High 1.133MHz



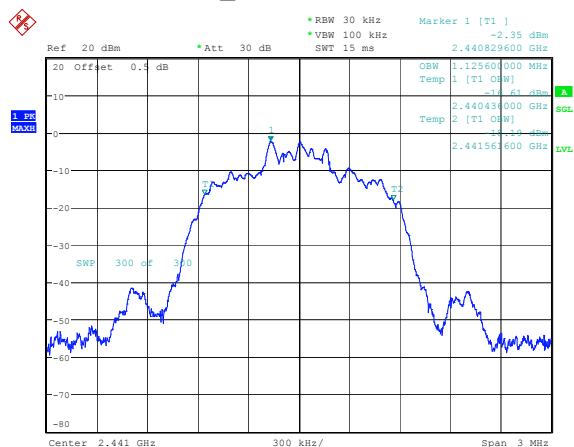
Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 17:36:12

8DPSK_Low 1.123MHz



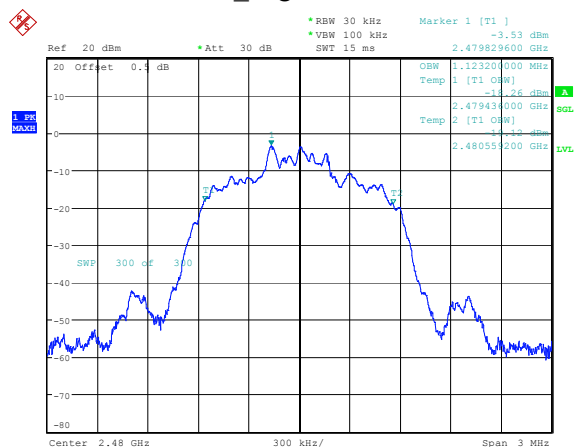
Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 17:42:04

8DPSK_Middle 1.126MHz



Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 17:45:07

8DPSK_High 1.123MHz



Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 17:48:41

Channel Separation**BDR**

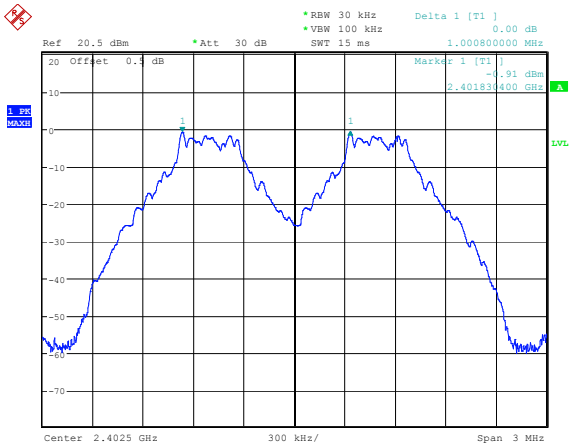
Mode	Value (MHz)	Limit (MHz)	Result
GFSK_Low	1.001	0.521	Pass
GFSK_Middle	1.001	0.520	Pass
GFSK_High	1.001	0.520	Pass

EDR

Mode	Value (MHz)	Limit (MHz)	Result
$\pi/4$ -DQPSK_Low	1.003	0.805	Pass
$\pi/4$ -DQPSK_Middle	1.001	0.807	Pass
$\pi/4$ -DQPSK_High	1.001	0.805	Pass
8DPSK_Low	1.003	0.815	Pass
8DPSK_Middle	1.001	0.813	Pass
8DPSK_High	1.001	0.815	Pass

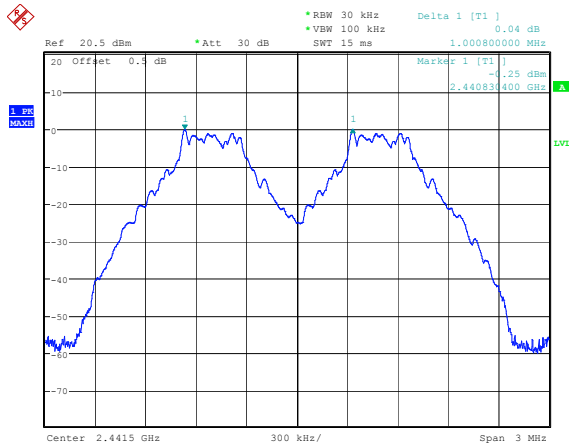
BDR

GFSK_Low 1.001MHz



Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 16:51:35

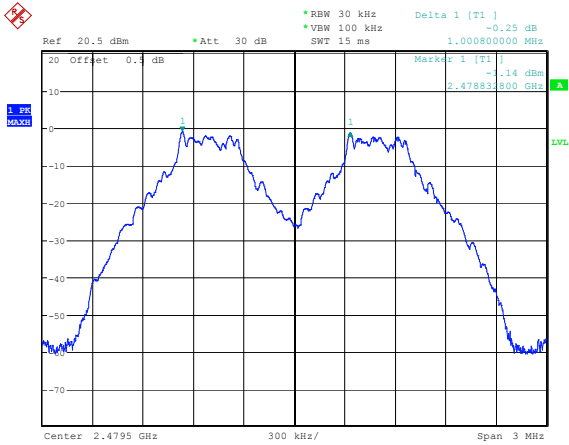
GFSK_Middle 1.001MHz



Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 16:54:29

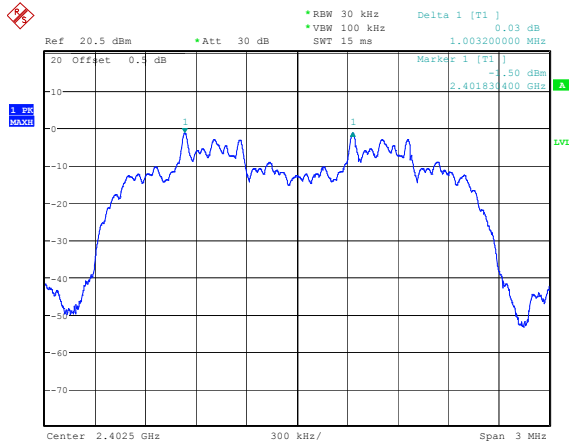
EDR

GFSK_High 1.001MHz



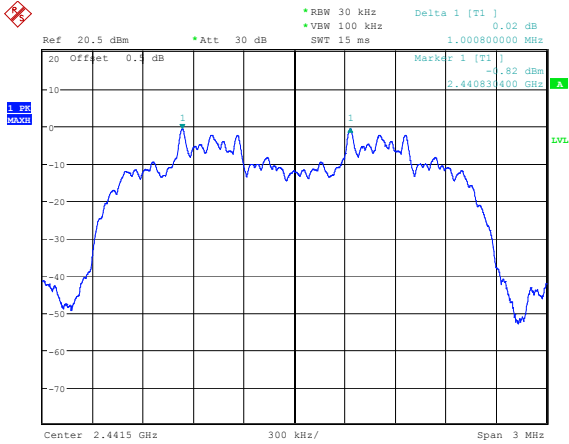
Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 16:57:51

$\pi/4$ -DQPSK_Low 1.003MHz



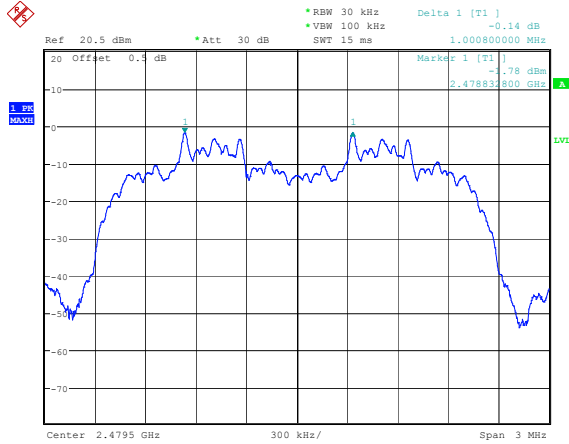
Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 17:31:32

$\pi/4$ -DQPSK_Middle 1.001MHz



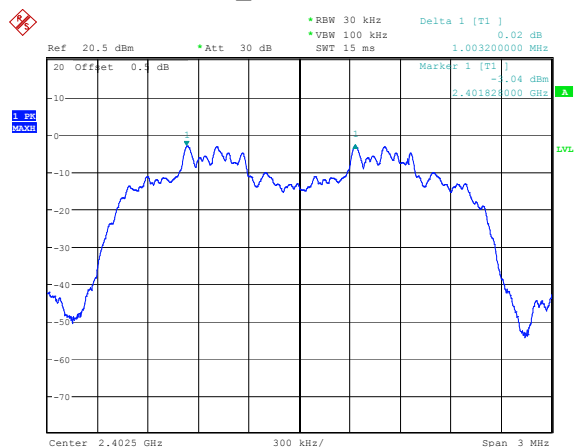
Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 17:34:20

$\pi/4$ -DQPSK_High 1.001MHz



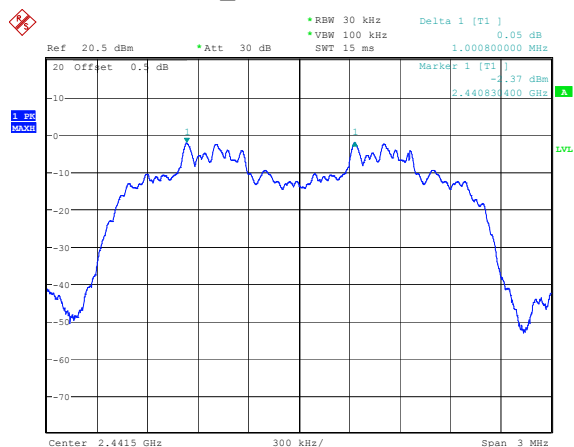
Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 17:38:04

8DPSK_Low 1.003MHz



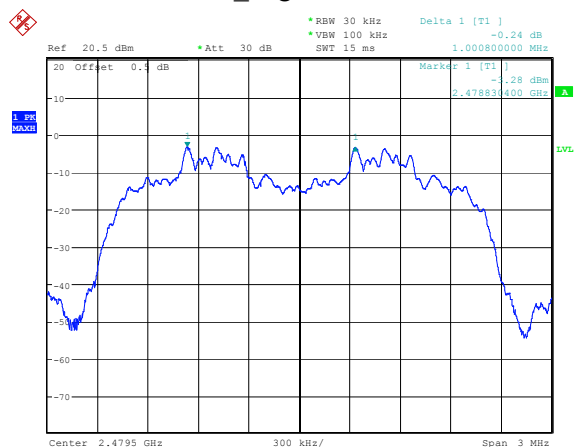
Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 17:43:57

8DPSK_Middle 1.001MHz



Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 17:46:50

8DPSK_High 1.001MHz



Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 17:50:22

Number of Hopping Frequency

BDR

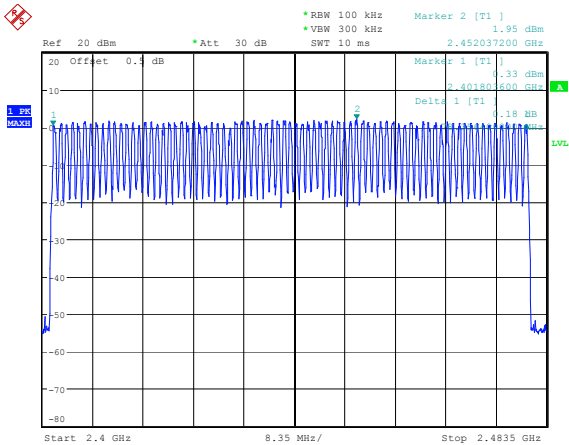
Mode	Value	Limit	Result
GFSK_Hopping	79	15	Pass

EDR

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

BDR

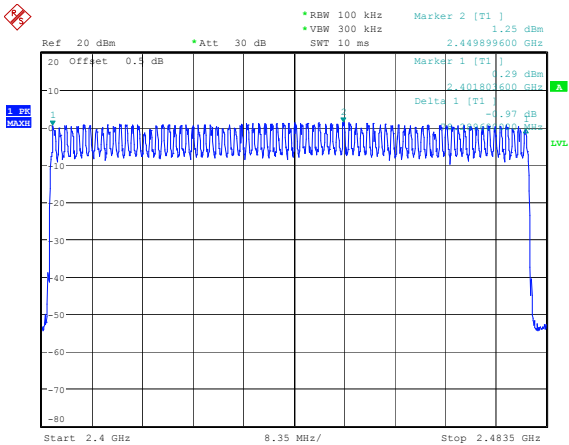
GFSK_Hopping 79



Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 17:24:48

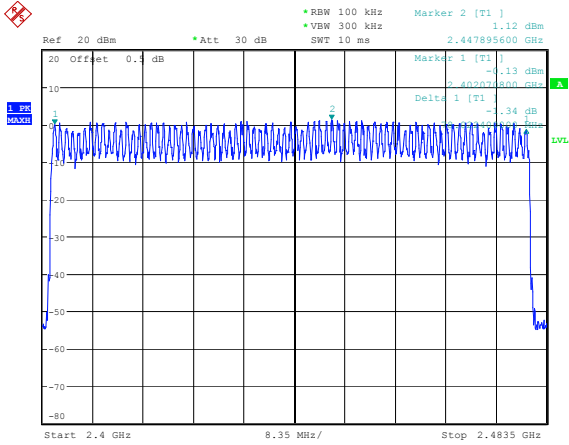
EDR

$\pi/4$ -DQPSK_Hopping 79



Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 17:09:30

8DPSK_Hopping 79



Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 17:15:13

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

Mode	Pulse width (ms)	Dwell time (s)	Limit (s)	Result
GFSK_Hopping_DH1	0.394	0.126	0.400	Pass
GFSK_Hopping_DH3	1.656	0.265	0.400	Pass
GFSK_Hopping_DH5	2.912	0.311	0.400	Pass

EDR

Mode	Pulse width (ms)	Dwell time (s)	Limit (s)	Result
$\pi/4$ -DQPSK_Hopping_2DH1	0.402	0.129	0.400	Pass
$\pi/4$ -DQPSK_Hopping_2DH3	1.658	0.265	0.400	Pass
$\pi/4$ -DQPSK_Hopping_2DH5	2.916	0.311	0.400	Pass
8DPSK_Hopping_3DH1	0.401	0.128	0.400	Pass
8DPSK_Hopping_3DH3	1.656	0.265	0.400	Pass
8DPSK_Hopping_3DH5	2.912	0.311	0.400	Pass

Note:

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

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

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

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

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

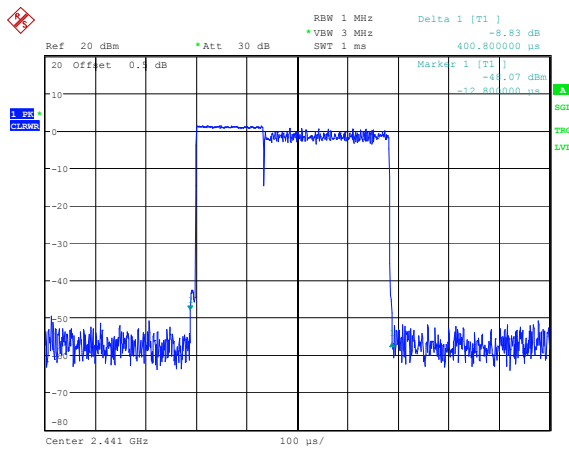
2DH5: Dwell time = Pulse width (ms) $\times$ (1600/6/79) $\times$ 31.6 s

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

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

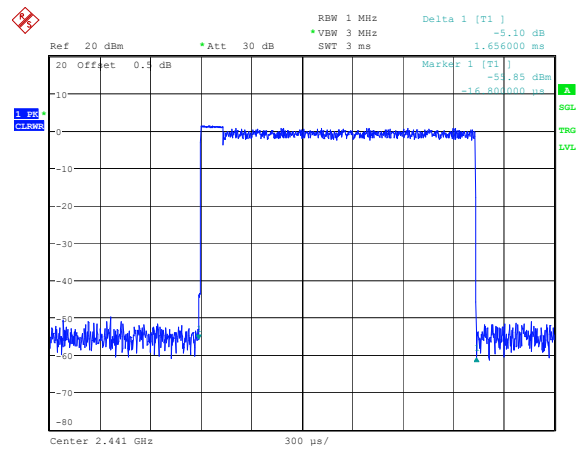
3DH5: Dwell time = Pulse width (ms) $\times$ (1600/6/79) $\times$ 31.6 s

8DPSK_Hopping_3DH1 0.401ms



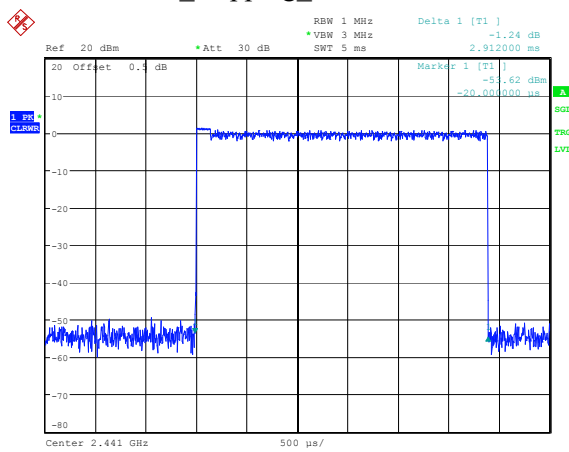
Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 18:44:51

8DPSK_Hopping_3DH3 1.656ms



Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 18:45:33

8DPSK_Hopping_3DH5 2.912ms



Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 18:46:42

Maximum Conducted Output Power**BDR**

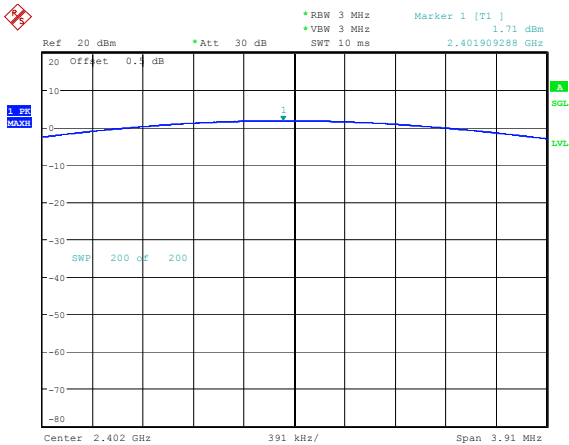
Mode	Value (dBm)	Limit (dBm)	Result
GFSK_Low	1.71	21.00	Pass
GFSK_Middle	2.33	21.00	Pass
GFSK_High	1.21	21.00	Pass

EDR

Mode	Value (dBm)	Limit (dBm)	Result
$\pi/4$ -DQPSK_Low	0.81	21.00	Pass
$\pi/4$ -DQPSK_Middle	1.48	21.00	Pass
$\pi/4$ -DQPSK_High	0.33	21.00	Pass
8DPSK_Low	0.62	21.00	Pass
8DPSK_Middle	1.29	21.00	Pass
8DPSK_High	0.13	21.00	Pass

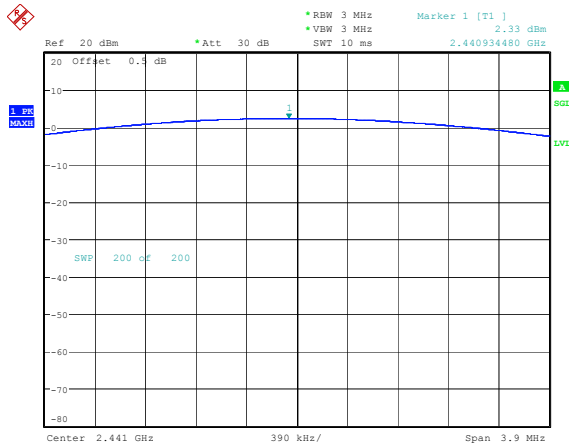
BDR

GFSK_Low 1.71dBm



Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 16:50:00

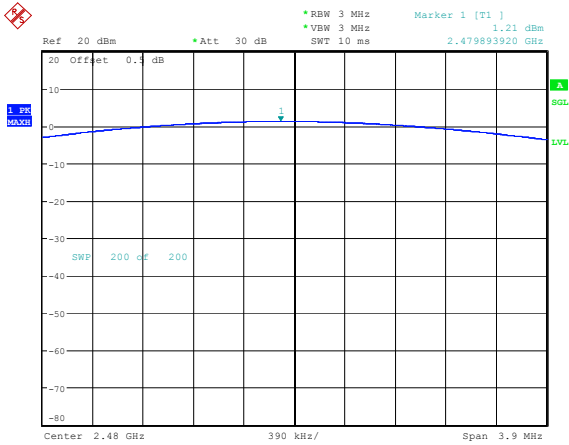
GFSK_Middle 2.33dBm



Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 16:53:01

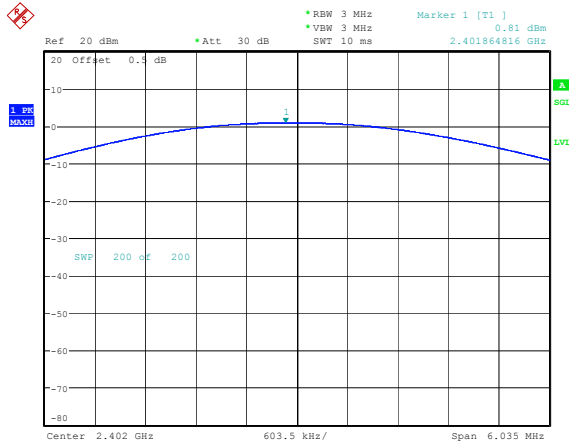
EDR

GFSK_High 1.21dBm



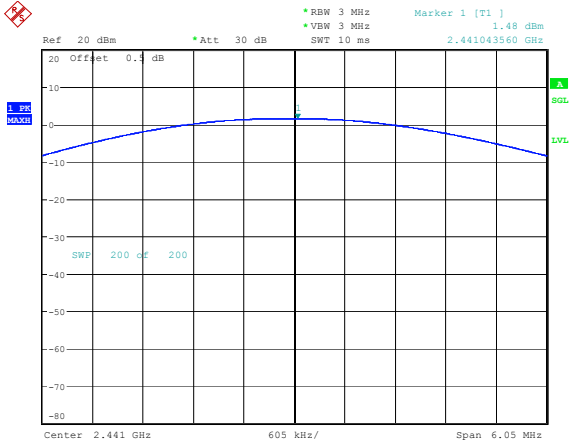
Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 16:56:48

$\pi/4$ -DQPSK_Low 0.81dBm



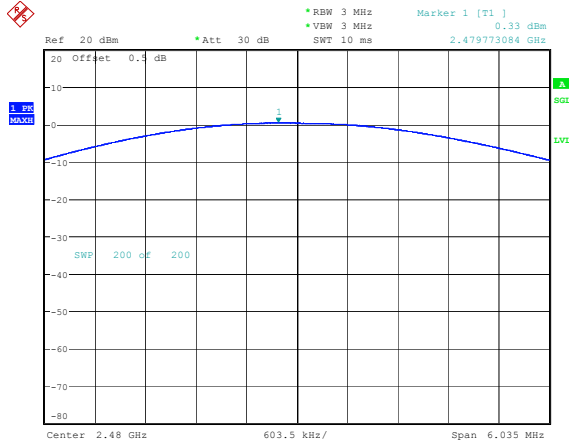
Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 17:30:37

$\pi/4$ -DQPSK_Middle 1.48dBm



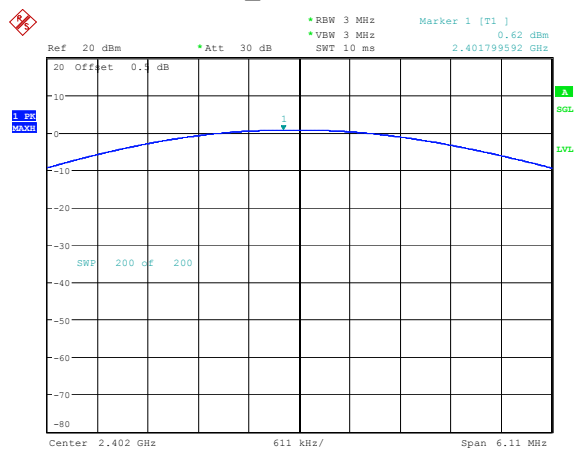
Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 17:32:54

$\pi/4$ -DQPSK_High 0.33dBm



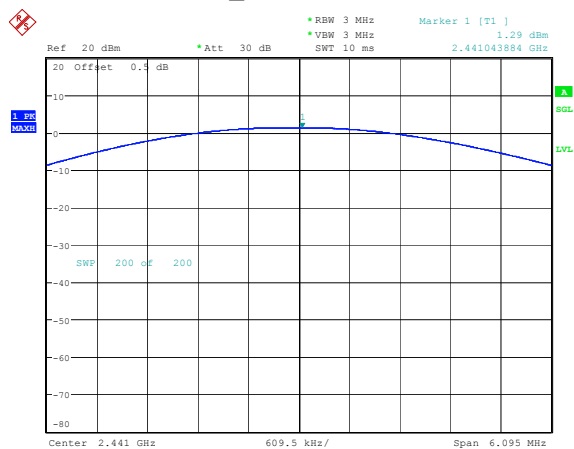
Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 17:36:46

8DPSK_Low 0.62dBm



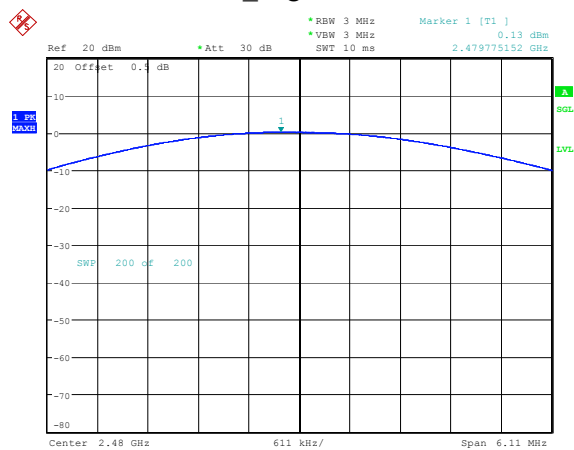
Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 17:42:25

8DPSK_Middle 1.29dBm



Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 17:45:27

8DPSK_High 0.13dBm



Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 17:49:02

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

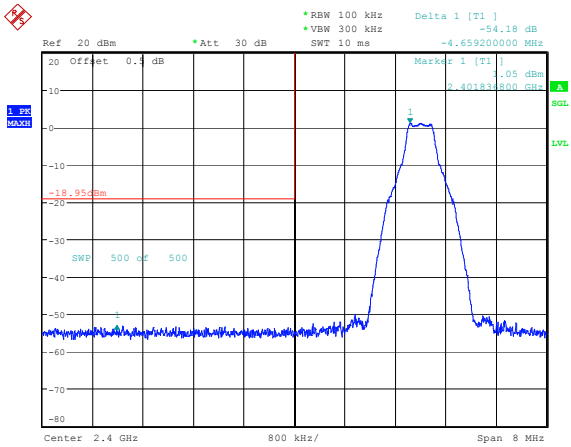
Mode	Value (dB)	Limit (dB)	Result
GFSK_Low	54.18	20.00	Pass
GFSK_High	52.48	20.00	Pass
GFSK_Hopping_Lower	50.89	20.00	Pass
GFSK_Hopping_Upper	53.84	20.00	Pass

EDR

Mode	Value (dB)	Limit (dB)	Result
$\pi/4$ -DQPSK_Low	52.97	20.00	Pass
$\pi/4$ -DQPSK_High	52.13	20.00	Pass
$\pi/4$ -DQPSK_Hopping_Lower	53.08	20.00	Pass
$\pi/4$ -DQPSK_Hopping_Upper	53.20	20.00	Pass
8DPSK_Low	52.97	20.00	Pass
8DPSK_High	51.58	20.00	Pass
8DPSK_Hopping_Lower	53.09	20.00	Pass
8DPSK_Hopping_Upper	52.43	20.00	Pass

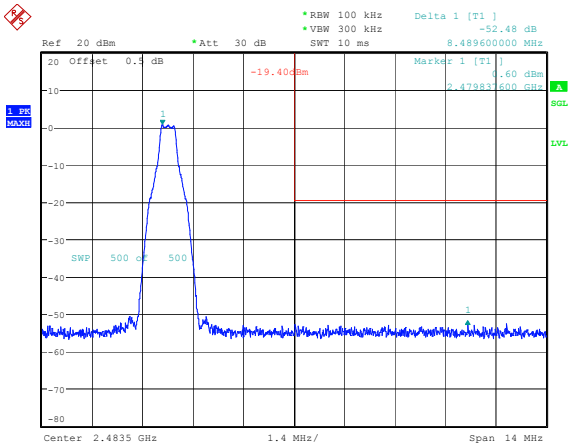
BDR

GFSK_Low 54.18dB



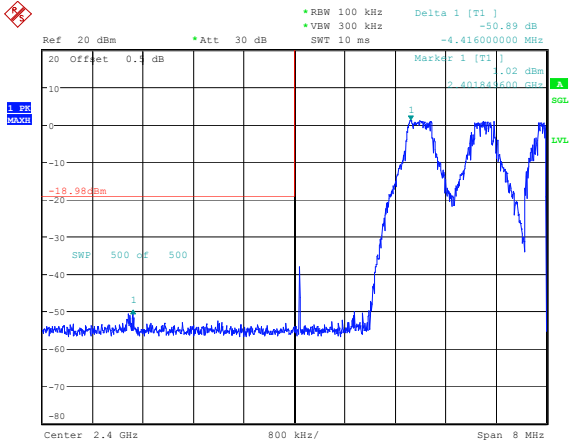
Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 16:48:53

GFSK_High 52.48dB



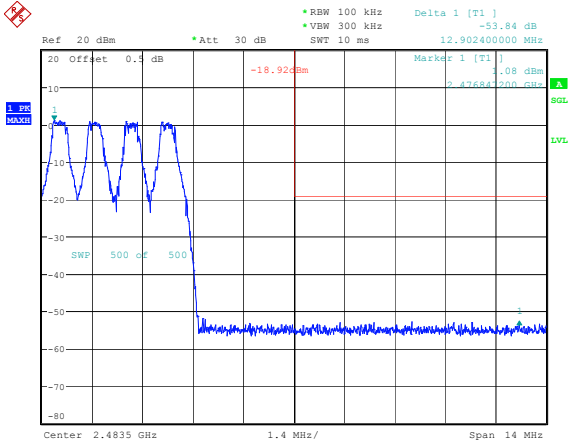
Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 16:55:54

GFSK_Hopping_Lower 50.89dB



Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 16:58:46

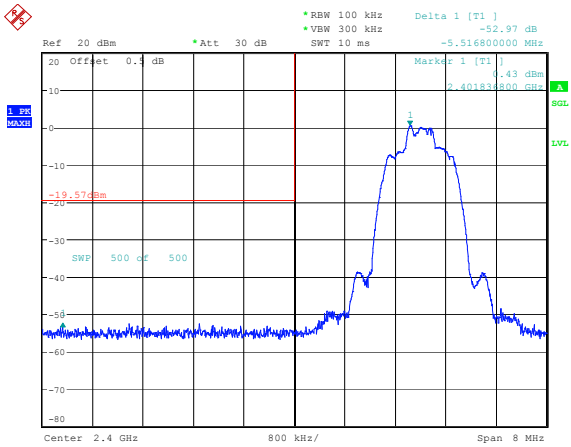
GFSK_Hopping_Upper 53.84dB



Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 16:59:39

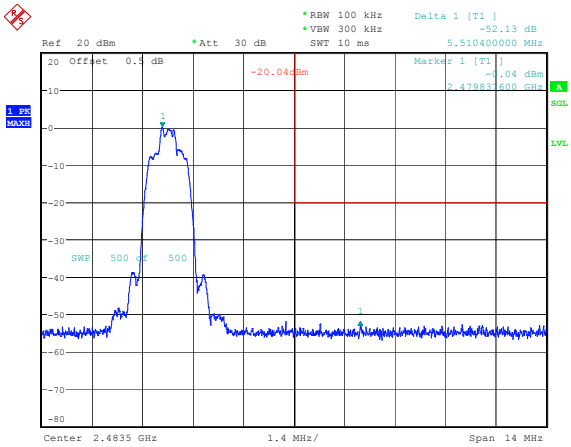
EDR

$\pi/4$ -DQPSK_Low 52.97dB



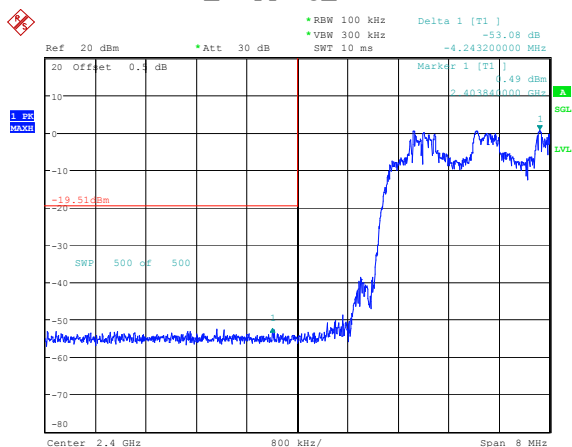
Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 17:27:53

$\pi/4$ -DQPSK_High 52.13dB



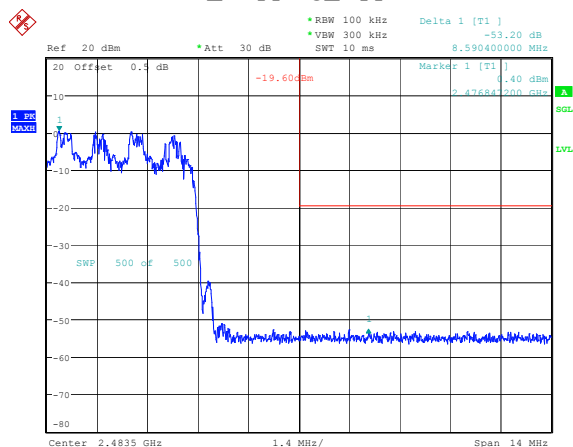
Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 17:35:42

$\pi/4$ -DQPSK_Hopping_Lower 53.08dB



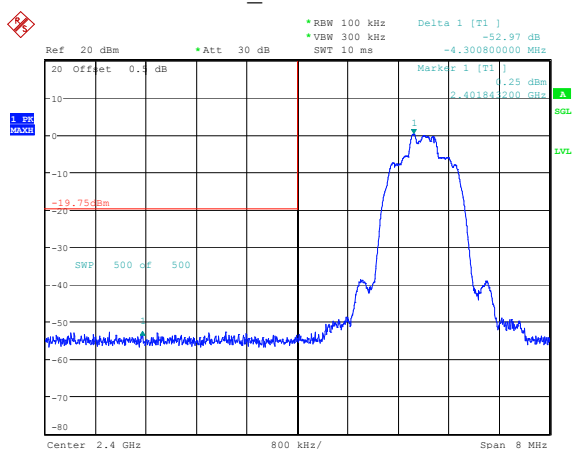
Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 17:58:36

$\pi/4$ -DQPSK_Hopping_Upper 53.20dB



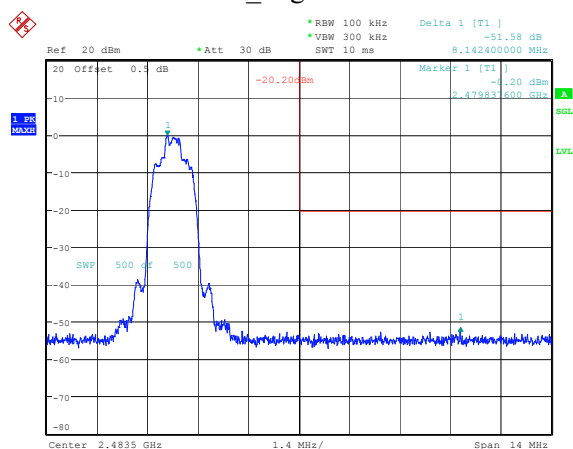
Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 17:40:05

8DPSK_Low 52.97dB



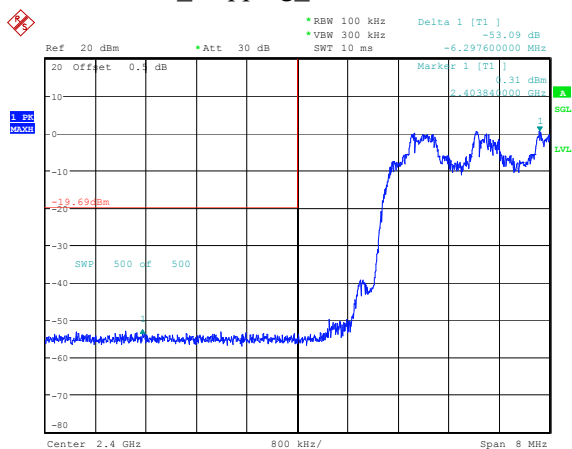
Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 17:41:33

8DPSK_High 51.58dB



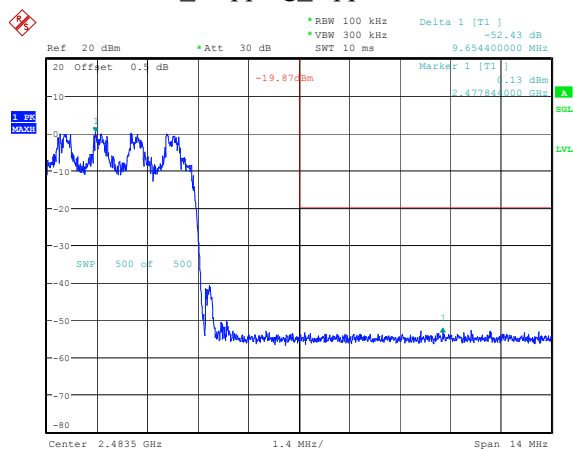
Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 17:48:12

8DPSK_Hopping_Lower 53.09dB



Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 17:51:18

8DPSK_Hopping_Upper 52.43dB



Comment: ProjectNo.:2403V87404E-RF Tester:Lingling Li
Date: 28.AUG.2024 17:52:13