

Test Information:

Serial No.:	2N75-2	Test Date:	2024/07/24
Test Site:	RF	Test Mode:	Transmitting
Tester:	Chin Qin	Test Result:	Pass

Environmental Conditions:

Temperature: (°C):	26.1	Relative Humidity: (%)	58	ATM Pressure: (kPa)	100.7
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Test Equipment List and Details:

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
zhuoxiang	Coaxial Cable	SMA-178	211001	NCR	NCR
R&S	Spectrum Analyzer	FSU26	200256	2024/04/01	2025/03/31

** 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**

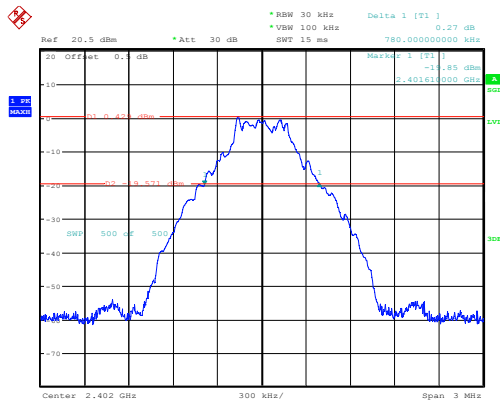
Mode	Value (MHz)
GFSK_Low	0.780
GFSK_Middle	0.783
GFSK_High	0.780

EDR

Mode	Value (MHz)
$\pi/4$ -DQPSK_Low	1.212
$\pi/4$ -DQPSK_Middle	1.215
$\pi/4$ -DQPSK_High	1.215
8DPSK_Low	1.221
8DPSK_Middle	1.224
8DPSK_High	1.224

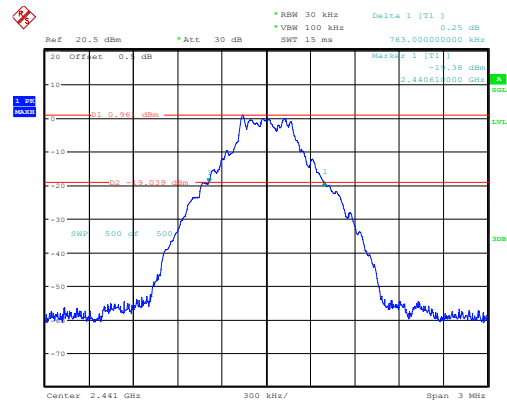
BDR

GFSK_Low 0.780MHz



ProjectNo.:2403U81808E-RF Tester:Chin Qin
Date: 24.JUL.2024 20:41:58

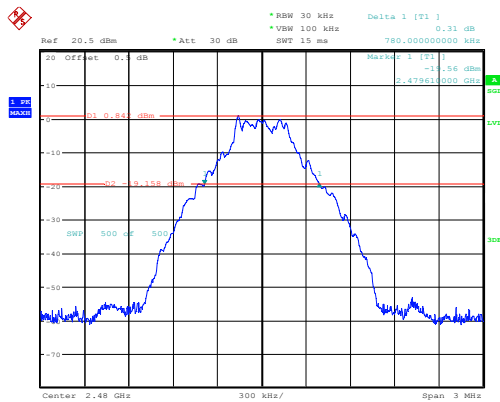
GFSK_Middle 0.783MHz



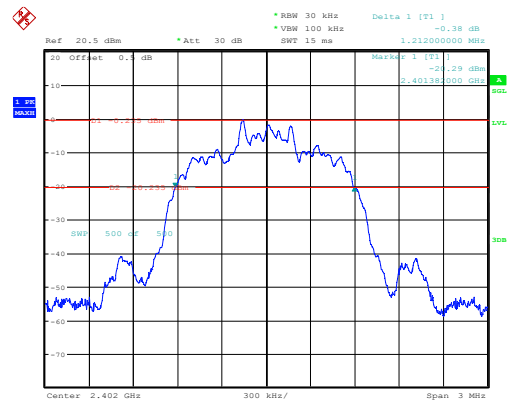
ProjectNo.:2403U81808E-RF Tester:Chin Qin
Date: 24.JUL.2024 20:46:38

EDR

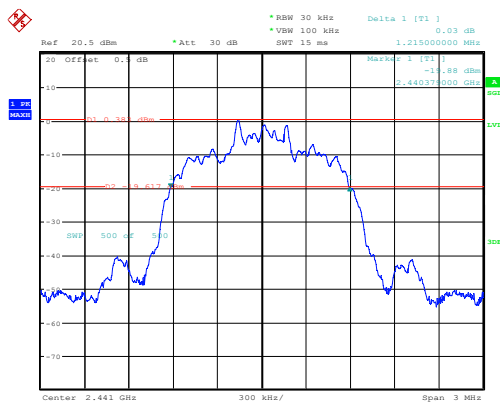
GFSK_High 0.780MHz



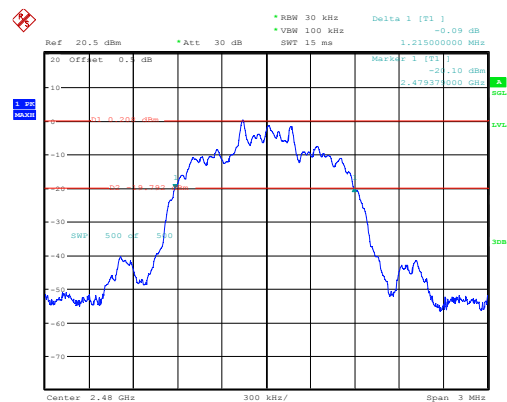
ProjectNo.:2403U81808E-RF Tester:Chin Qin
Date: 24.JUL.2024 20:49:51

 $\pi/4$ -DQPSK_Low 1.212MHz

ProjectNo.:2403U81808E-RF Tester:Chin Qin
Date: 24.JUL.2024 20:58:05

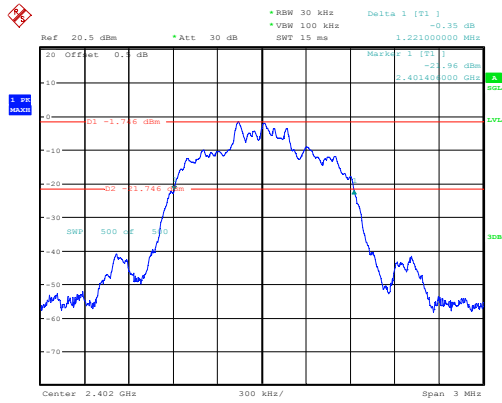
 $\pi/4$ -DQPSK_Middle 1.215MHz

ProjectNo.:2403U81808E-RF Tester:Chin Qin
Date: 24.JUL.2024 21:03:03

 $\pi/4$ -DQPSK_High 1.215MHz

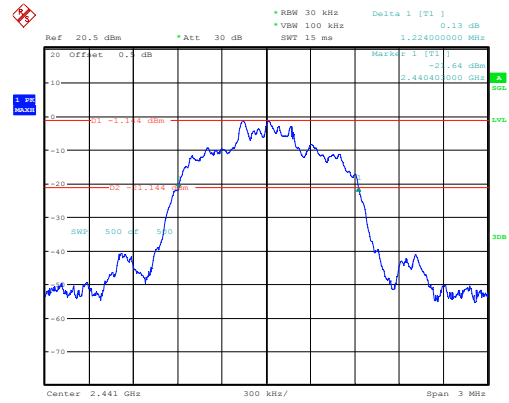
ProjectNo.:2403U81808E-RF Tester:Chin Qin
Date: 24.JUL.2024 21:07:20

8DPSK_Low 1.221MHz



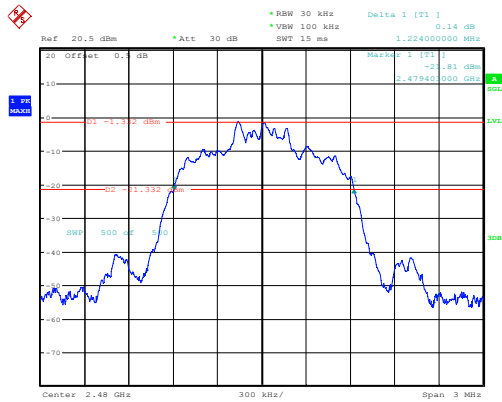
ProjectNo.:2403U81808E-RF Tester:Chin Qin
Date: 24.JUL.2024 21:16:19

8DPSK_Middle 1.224MHz



ProjectNo.:2403U81808E-RF Tester:Chin Qin
Date: 24.JUL.2024 21:21:07

8DPSK_High 1.224MHz



ProjectNo.:2403U81808E-RF Tester:Chin Qin
Date: 24.JUL.2024 21:25:00

99% Occupied Bandwidth**BDR**

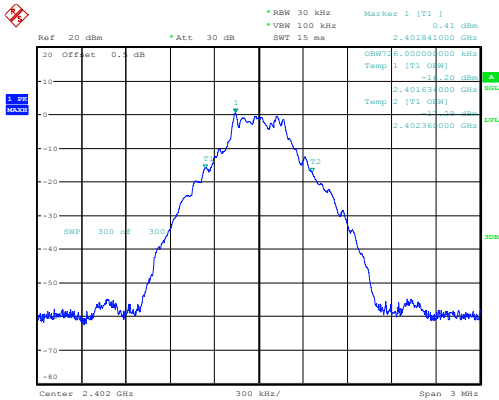
Mode	99% OBW (MHz)
GFSK_Low	0.726
GFSK_Middle	0.726
GFSK_High	0.726

EDR

Mode	99% OBW (MHz)
$\pi/4$ -DQPSK_Low	1.134
$\pi/4$ -DQPSK_Middle	1.134
$\pi/4$ -DQPSK_High	1.131
8DPSK_Low	1.125
8DPSK_Middle	1.128
8DPSK_High	1.125

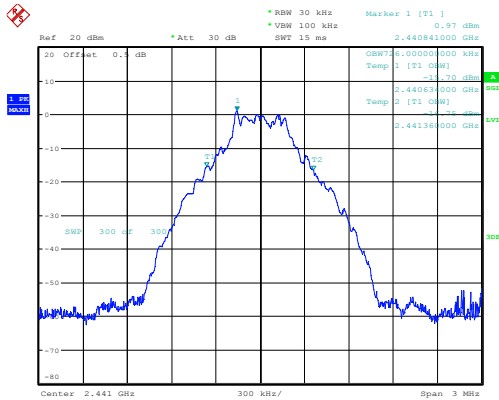
BDR

GFSK_Low 0.726MHz



ProjectNo.:2403U81808E-RF Tester:Chin Qin
Date: 24.JUL.2024 20:43:43

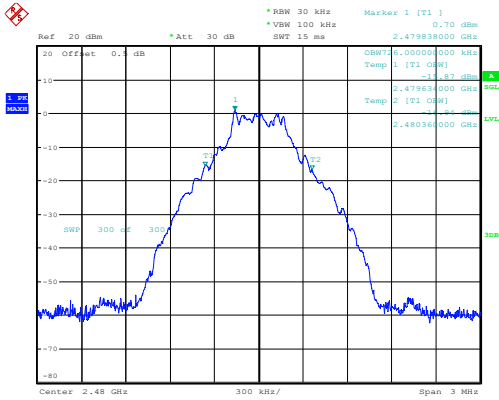
GFSK_Middle 0.726MHz



ProjectNo.:2403U81808E-RF Tester:Chin Qin
Date: 24.JUL.2024 20:47:15

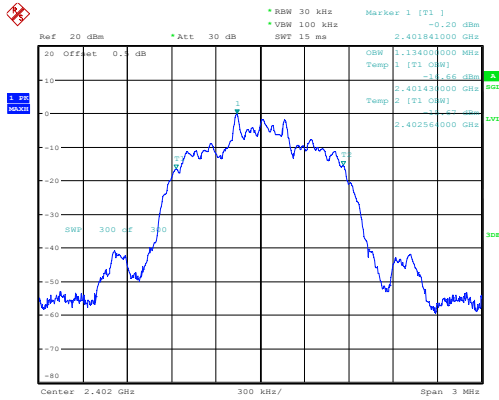
EDR

GFSK_High 0.726MHz



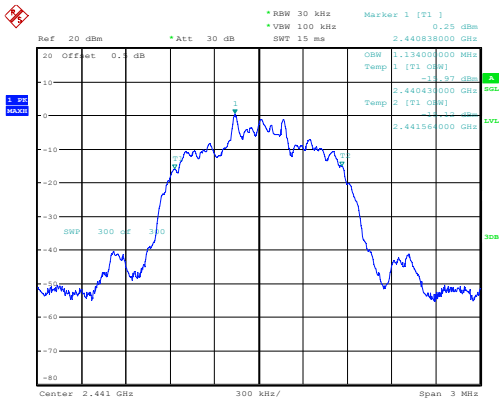
ProjectNo.:2403U81808E-RF Tester:Chin Qin
Date: 24.JUL.2024 20:51:57

$\pi/4$ -DQPSK_Low 1.134MHz



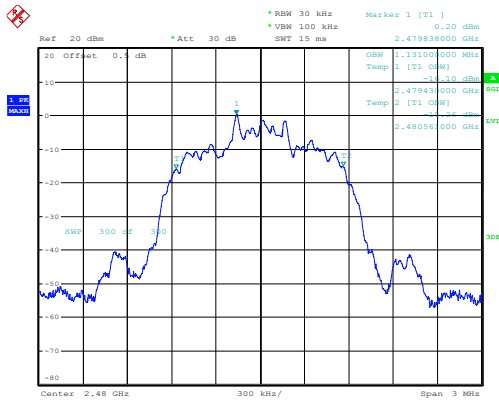
ProjectNo.:2403U81808E-RF Tester:Chin Qin
Date: 24.JUL.2024 20:59:49

$\pi/4$ -DQPSK_Middle 1.134MHz



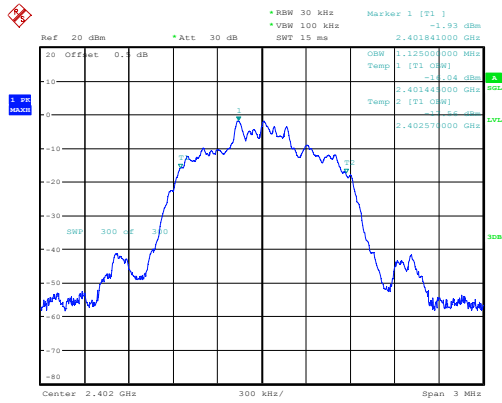
ProjectNo.:2403U81808E-RF Tester:Chin Qin
Date: 24.JUL.2024 21:03:41

$\pi/4$ -DQPSK_High 1.131MHz



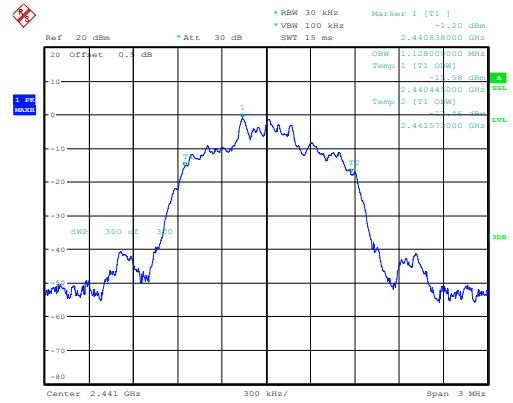
ProjectNo.:2403U81808E-RF Tester:Chin Qin
Date: 24.JUL.2024 21:09:27

8DPSK_Low 1.125MHz



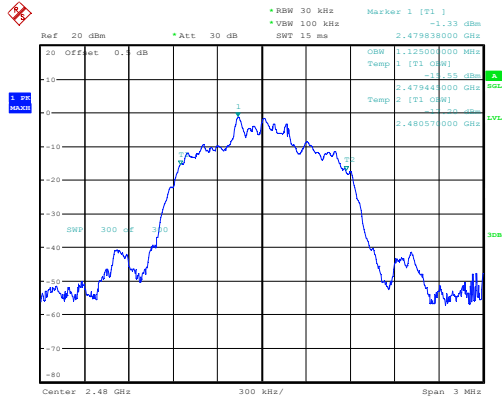
ProjectNo.:2403U81808E-RF Tester:Chin Qin
Date: 24.JUL.2024 21:18:03

8DPSK_Middle 1.128MHz



ProjectNo.:2403U81808E-RF Tester:Chin Qin
Date: 24.JUL.2024 22:09:29

8DPSK_High 1.125MHz



ProjectNo.:2403U81808E-RF Tester:Chin Qin
Date: 24.JUL.2024 21:27:08

Channel Separation**BDR**

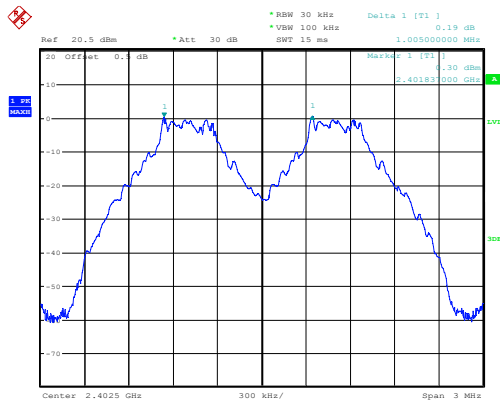
Mode	Value (MHz)	Limit (MHz)	Result
GFSK_Low	1.005	0.520	Pass
GFSK_Middle	1.005	0.522	Pass
GFSK_High	1.002	0.520	Pass

EDR

Mode	Value (MHz)	Limit (MHz)	Result
$\pi/4$ -DQPSK_Low	0.999	0.808	Pass
$\pi/4$ -DQPSK_Middle	0.999	0.810	Pass
$\pi/4$ -DQPSK_High	0.999	0.810	Pass
8DPSK_Low	0.999	0.814	Pass
8DPSK_Middle	0.999	0.816	Pass
8DPSK_High	1.002	0.816	Pass

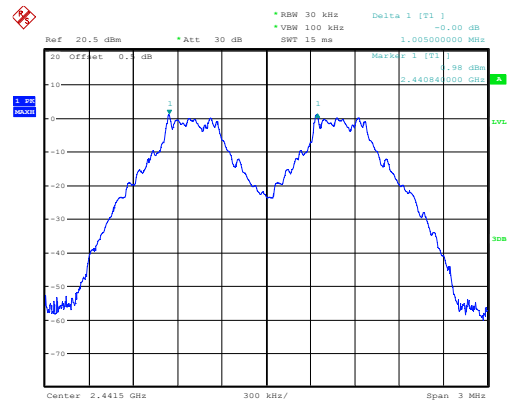
BDR

GFSK_Low 1.005MHz



ProjectNo.:2403U81808E-RF Tester:Chin Qin
Date: 24.JUL.2024 20:45:12

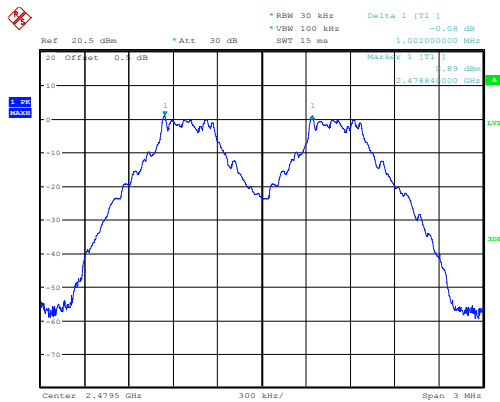
GFSK_Middle 1.005MHz



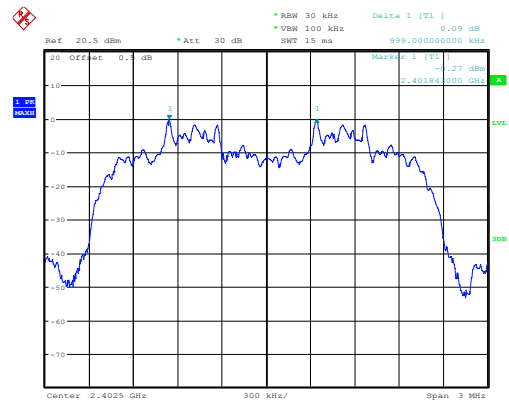
ProjectNo.:2403U81808E-RF Tester:Chin Qin
Date: 24.JUL.2024 20:48:32

EDR

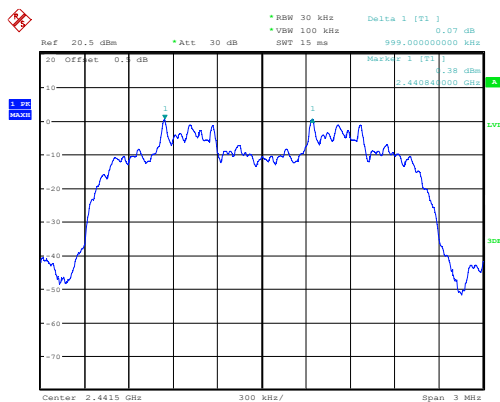
GFSK_High 1.002MHz



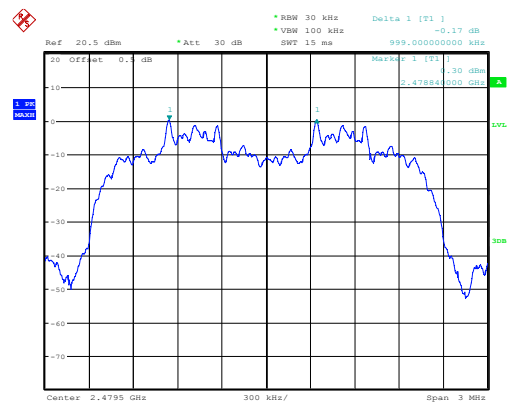
ProjectNo.:2403U81808E-RF Tester:Chin Qin
Date: 24.JUL.2024 20:53:52

 $\pi/4$ -DQPSK_Low 0.999MHz

ProjectNo.:2403U81808E-RF Tester:Chin Qin
Date: 24.JUL.2024 21:01:02

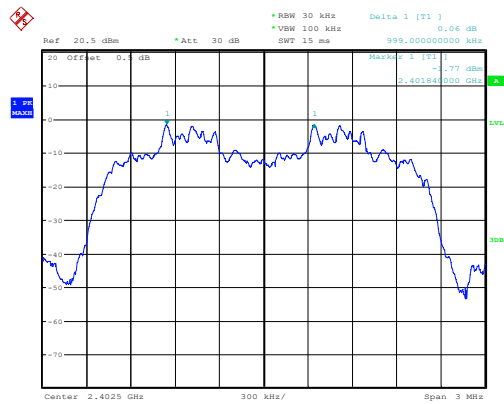
 $\pi/4$ -DQPSK_Middle 0.999MHz

ProjectNo.:2403U81808E-RF Tester:Chin Qin
Date: 24.JUL.2024 21:06:01

 $\pi/4$ -DQPSK_High 0.999MHz

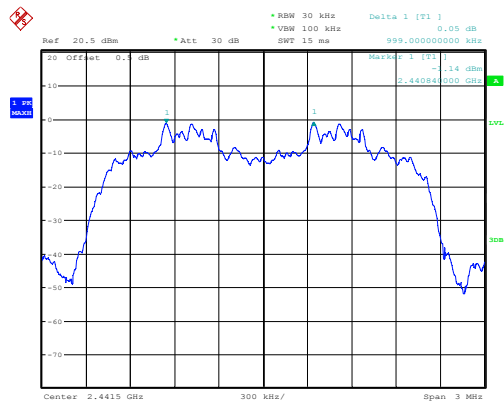
ProjectNo.:2403U81808E-RF Tester:Chin Qin
Date: 24.JUL.2024 21:12:03

8DPSK_Low 0.999MHz



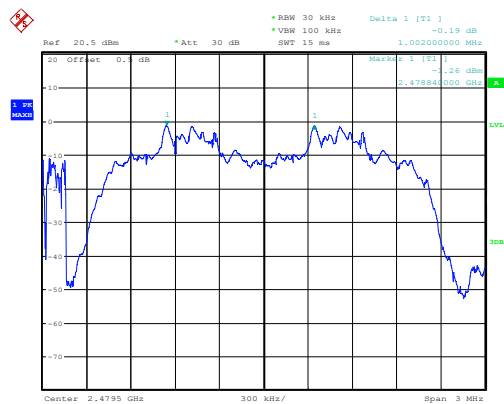
ProjectNo.:2403U81808E-RF Tester:Chin Qin
Date: 24.JUL.2024 21:19:47

8DPSK_Middle 0.999MHz



ProjectNo.:2403U81808E-RF Tester:Chin Qin
Date: 24.JUL.2024 21:23:47

8DPSK_High 1.002MHz



ProjectNo.:2403U81808E-RF Tester:Chin Qin
Date: 24.JUL.2024 21:28:24

Number of Hopping Frequency**BDR**

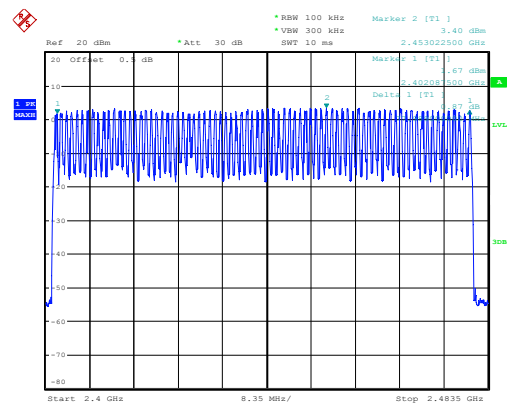
Mode	Value	Limit	Result
GFSK_Hopping	79	15	Pass

EDR

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

BDR

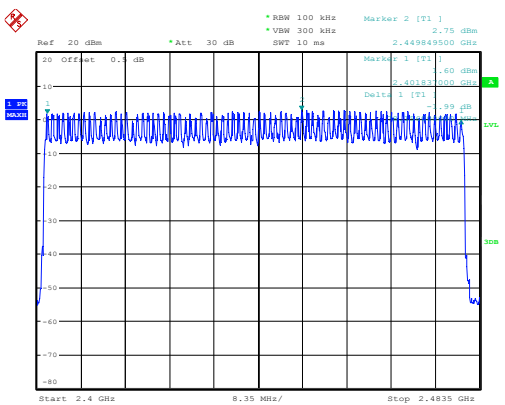
GFSK_Hopping 79



ProjectNo.:2403U81808E-RF Tester:Chin Qin
Date: 24.JUL.2024 21:35:19

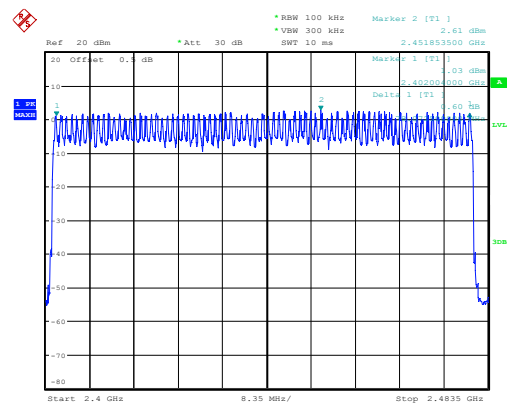
EDR

$\pi/4$ -DQPSK_Hopping 79



ProjectNo.:2403U81808E-RF Tester:Chin Qin
Date: 24.JUL.2024 21:42:04

8DPSK_Hopping 79



ProjectNo.:2403U81808E-RF Tester:Chin Qin
Date: 24.JUL.2024 21:49:19

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

Mode	Pulse width (ms)	Dwell time (s)	Limit (s)	Result
GFSK_Hopping_DH1	0.396	0.127	0.400	Pass
GFSK_Hopping_DH3	1.660	0.266	0.400	Pass
GFSK_Hopping_DH5	2.932	0.313	0.400	Pass

EDR

Mode	Pulse width (ms)	Dwell time (s)	Limit (s)	Result
$\pi/4$ - DQPSK_Hopping_2DH 1	0.403	0.129	0.400	Pass
$\pi/4$ - DQPSK_Hopping_2DH 3	1.663	0.266	0.400	Pass
$\pi/4$ - DQPSK_Hopping_2DH 5	2.932	0.313	0.400	Pass
8DPSK_Hopping_3DH1	0.403	0.129	0.400	Pass
8DPSK_Hopping_3DH3	1.663	0.266	0.400	Pass
8DPSK_Hopping_3DH5	2.937	0.313	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

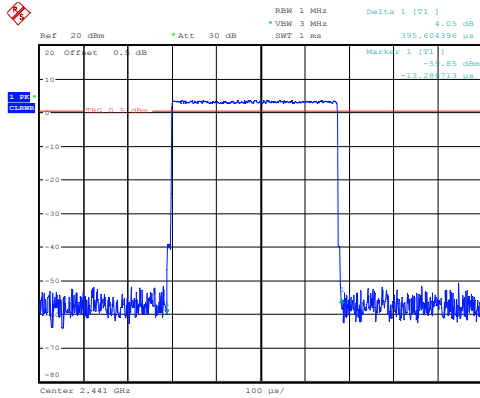
3DH1: Dwell time=Pulse width (ms) $\times$ (1600/2/79) $\times$ 31.6 s

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

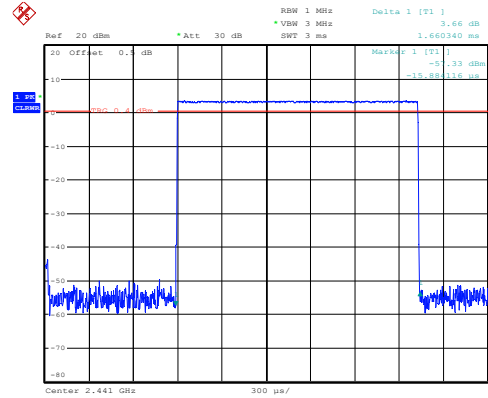
BDR

GFSK_Hopping_DH1 0.396ms



ProjectNo.:2403U81808E-RF Tester:Chin Qin
Date: 24.JUL.2024 21:50:42

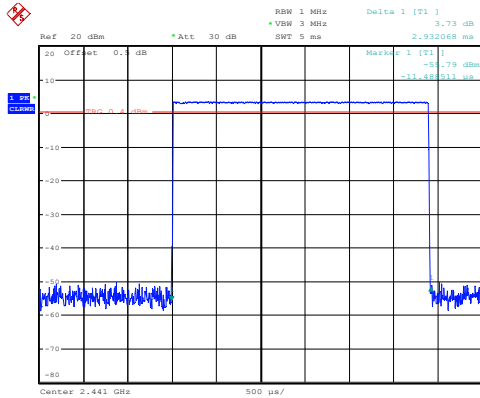
GFSK_Hopping_DH3 1.660ms



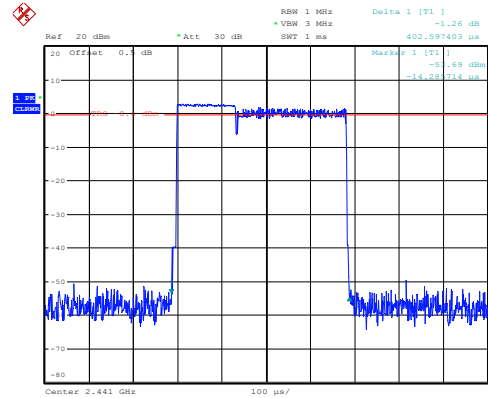
ProjectNo.:2403U81808E-RF Tester:Chin Qin
Date: 24.JUL.2024 21:52:00

EDR

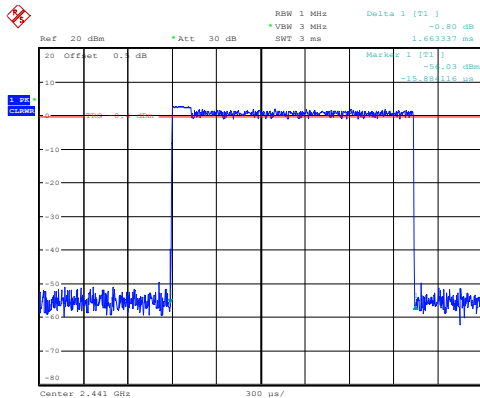
GFSK_Hopping_DH5 2.932ms



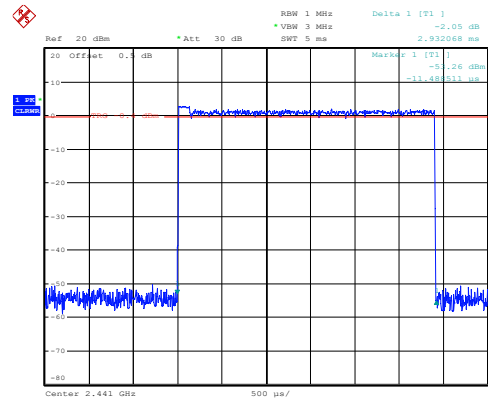
ProjectNo.:2403U81808E-RF Tester:Chin Qin
Date: 24.JUL.2024 21:52:47

 $\pi/4$ -DQPSK_Hopping_2DH1 0.403ms

ProjectNo.:2403U81808E-RF Tester:Chin Qin
Date: 24.JUL.2024 21:54:13

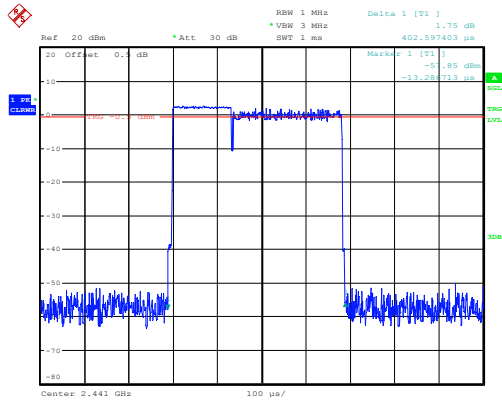
 $\pi/4$ -DQPSK_Hopping_2DH3 1.663ms

ProjectNo.:2403U81808E-RF Tester:Chin Qin
Date: 24.JUL.2024 21:55:10

 $\pi/4$ -DQPSK_Hopping_2DH5 2.932ms

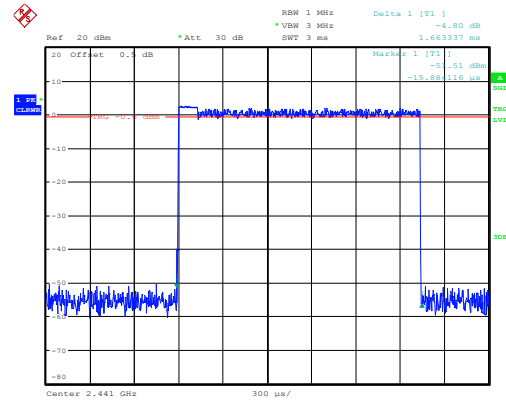
ProjectNo.:2403U81808E-RF Tester:Chin Qin
Date: 24.JUL.2024 22:05:51

8DPSK_Hopping_3DH1 0.403ms



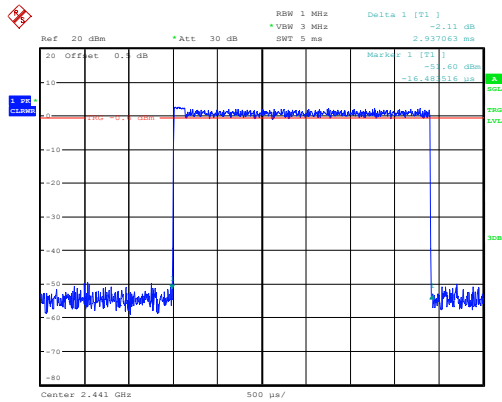
ProjectNo.:2403U81808E-RF Tester:Chin Qin
Date: 24.JUL.2024 22:01:09

8DPSK_Hopping_3DH3 1.663ms



ProjectNo.:2403U81808E-RF Tester:Chin Qin
Date: 24.JUL.2024 22:01:45

8DPSK_Hopping_3DH5 2.937ms



ProjectNo.:2403U81808E-RF Tester:Chin Qin
Date: 24.JUL.2024 22:03:00

Maximum Conducted Output Power**BDR**

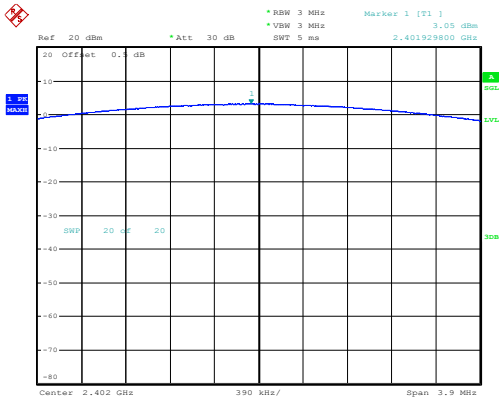
Mode	Value (dBm)	Limit (dBm)	Result
GFSK_Low	3.05	21.00	Pass
GFSK_Middle	3.51	21.00	Pass
GFSK_High	3.35	21.00	Pass

EDR

Mode	Value (dBm)	Limit (dBm)	Result
$\pi/4$ -DQPSK_Low	2.10	21.00	Pass
$\pi/4$ -DQPSK_Middle	2.67	21.00	Pass
$\pi/4$ -DQPSK_High	2.46	21.00	Pass
8DPSK_Low	1.94	21.00	Pass
8DPSK_Middle	2.51	21.00	Pass
8DPSK_High	2.32	21.00	Pass

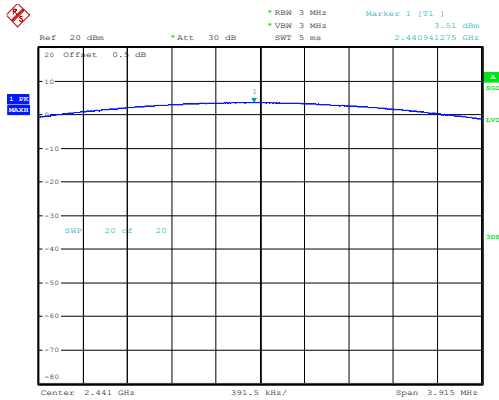
BDR

GFSK_Low 3.05dBm



ProjectNo.:2403U81808E-RF Tester:Chin Qin
Date: 24.JUL.2024 20:44:06

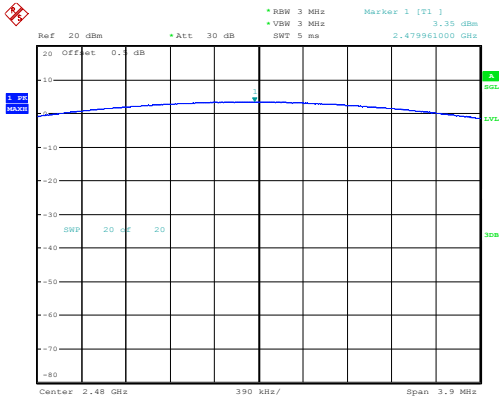
GFSK_Middle 3.51dBm



ProjectNo.:2403U81808E-RF Tester:Chin Qin
Date: 24.JUL.2024 20:47:30

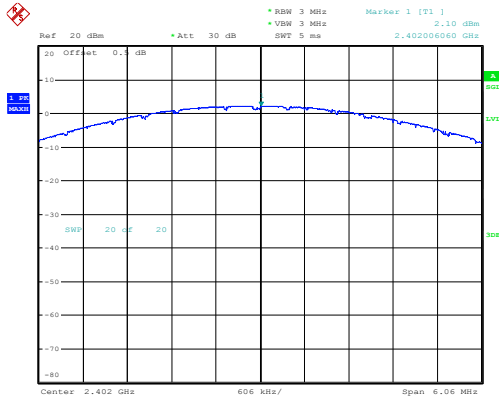
EDR

GFSK_High 3.35dBm



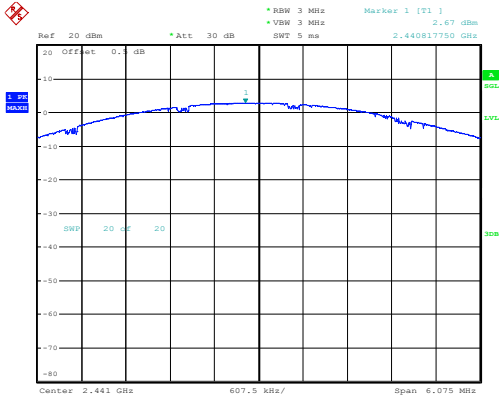
ProjectNo.:2403U81808E-RF Tester:Chin Qin
Date: 24.JUL.2024 20:52:10

$\pi/4$ -DQPSK_Low 2.10dBm



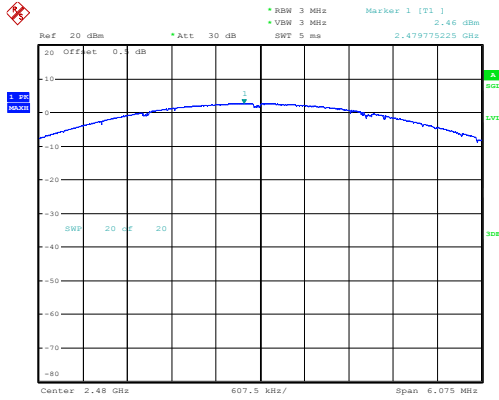
ProjectNo.:2403U81808E-RF Tester:Chin Qin
Date: 24.JUL.2024 21:00:02

$\pi/4$ -DQPSK_Middle 2.67dBm



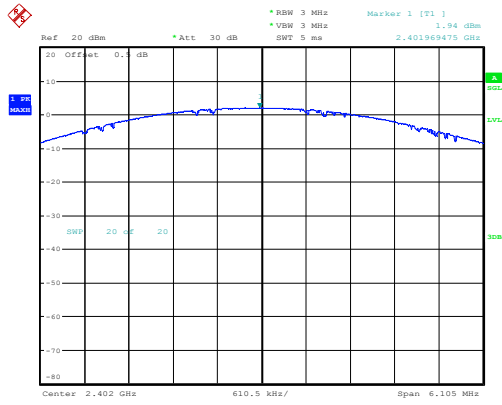
ProjectNo.:2403U81808E-RF Tester:Chin Qin
Date: 24.JUL.2024 21:04:18

$\pi/4$ -DQPSK_High 2.46dBm



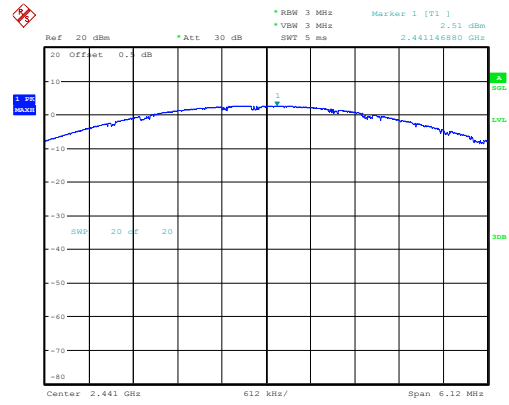
ProjectNo.:2403U81808E-RF Tester:Chin Qin
Date: 24.JUL.2024 21:09:54

8DPSK_Low 1.94dBm



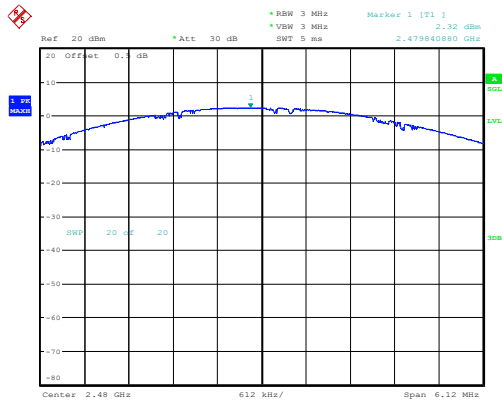
ProjectNo.:2403U81808E-RF Tester:Chin Qin
Date: 24.JUL.2024 21:18:17

8DPSK_Middle 2.51dBm



ProjectNo.:2403U81808E-RF Tester:Chin Qin
Date: 24.JUL.2024 21:22:22

8DPSK_High 2.32dBm



ProjectNo.:2403U81808E-RF Tester:Chin Qin
Date: 24.JUL.2024 21:27:26

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

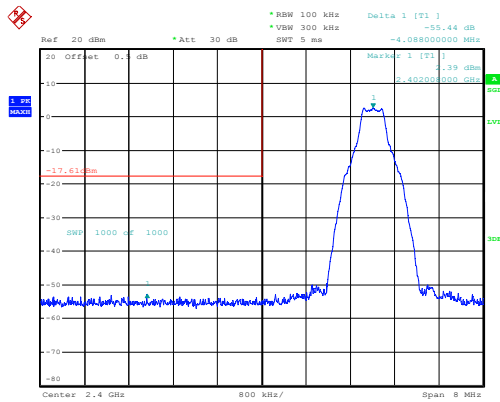
Mode	Value (dB)	Limit (dB)	Result
GFSK_Low	55.44	20.00	Pass
GFSK_High	56.18	20.00	Pass
GFSK_Hopping_Lower	50.97	20.00	Pass
GFSK_Hopping_Upper	55.58	20.00	Pass

EDR

Mode	Value (dB)	Limit (dB)	Result
$\pi/4$ -DQPSK_Low	54.63	20.00	Pass
$\pi/4$ -DQPSK_High	54.81	20.00	Pass
$\pi/4$ -DQPSK_Hopping_Lower	55.13	20.00	Pass
$\pi/4$ -DQPSK_Hopping_Upper	55.28	20.00	Pass
8DPSK_Low	55.06	20.00	Pass
8DPSK_High	54.67	20.00	Pass
8DPSK_Hopping_Lower	54.44	20.00	Pass
8DPSK_Hopping_Upper	54.74	20.00	Pass

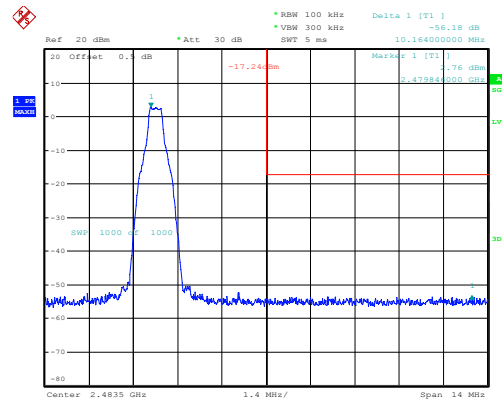
BDR

GFSK_Low 55.44dB



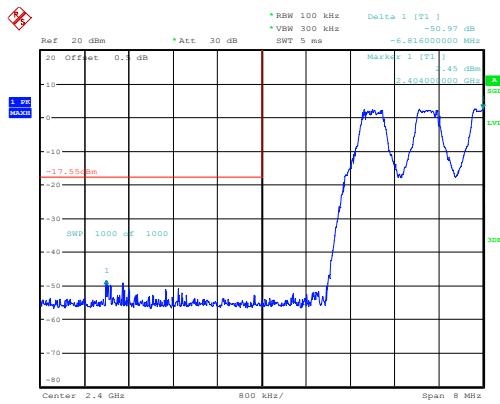
ProjectNo.:2403U81808E-RF Tester:Chin Qin
Date: 24.JUL.2024 20:43:03

GFSK_High 56.18dB



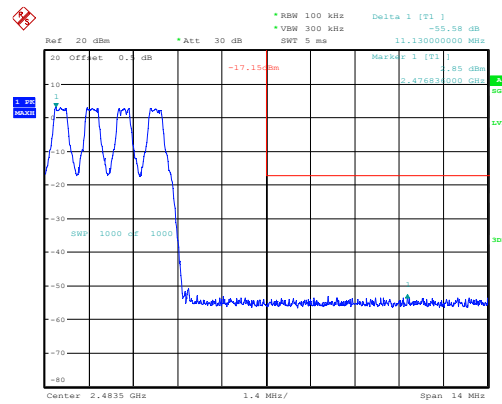
ProjectNo.:2403U81808E-RF Tester:Chin Qin
Date: 24.JUL.2024 20:51:19

GFSK_Hopping_Lower 50.97dB



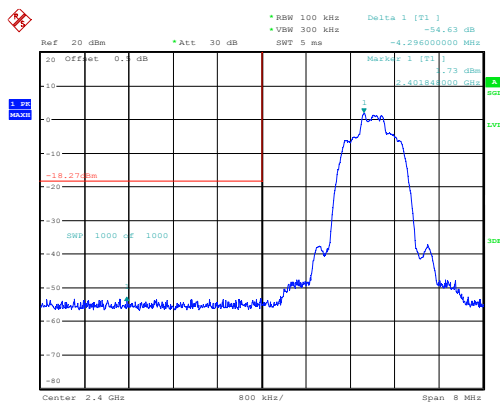
ProjectNo.:2403U81808E-RF Tester:Chin Qin
Date: 24.JUL.2024 20:55:12

GFSK_Hopping_Upper 55.58dB

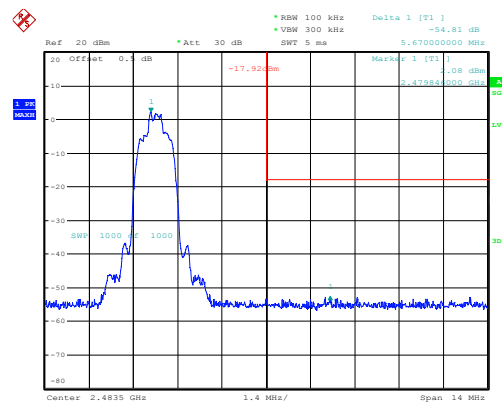


ProjectNo.:2403U81808E-RF Tester:Chin Qin
Date: 24.JUL.2024 20:56:51

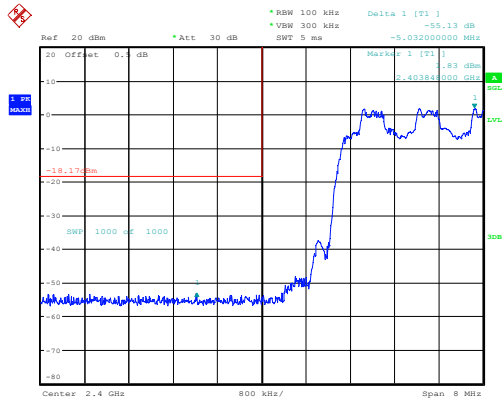
EDR

 $\pi/4$ -DQPSK_Low 54.63dB

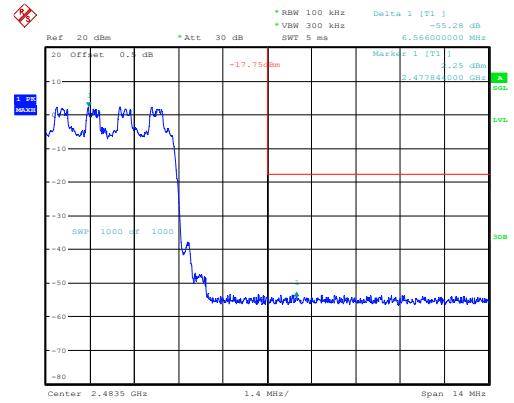
ProjectNo.:2403U81808E-RF Tester:Chin Qin
Date: 24.JUL.2024 20:59:09

 $\pi/4$ -DQPSK_High 54.81dB

ProjectNo.:2403U81808E-RF Tester:Chin Qin
Date: 24.JUL.2024 21:08:49

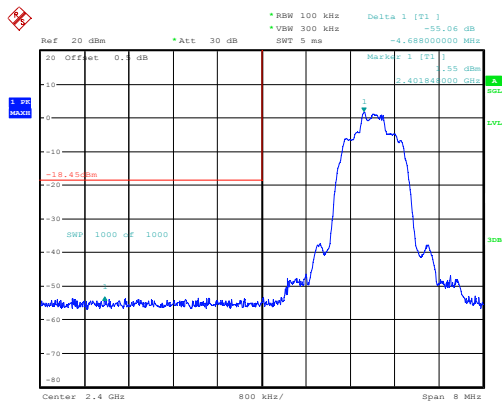
$\pi/4$ -DQPSK_Hopping_Lower 55.13dB

ProjectNo.:2403U81808E-RF Tester:Chin Qin
Date: 24.JUL.2024 21:13:29

 $\pi/4$ -DQPSK_Hopping_Upper 55.28dB

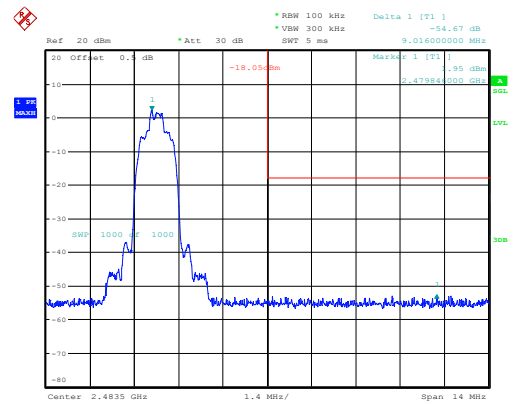
ProjectNo.:2403U81808E-RF Tester:Chin Qin
Date: 24.JUL.2024 21:15:18

8DPSK_Low 55.06dB



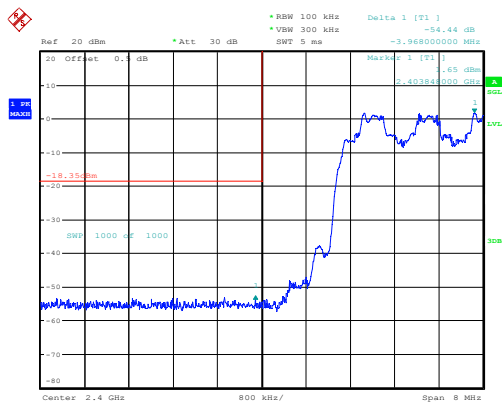
ProjectNo.:2403U81808E-RF Tester:Chin Qin
Date: 24.JUL.2024 21:17:23

8DPSK_High 54.67dB



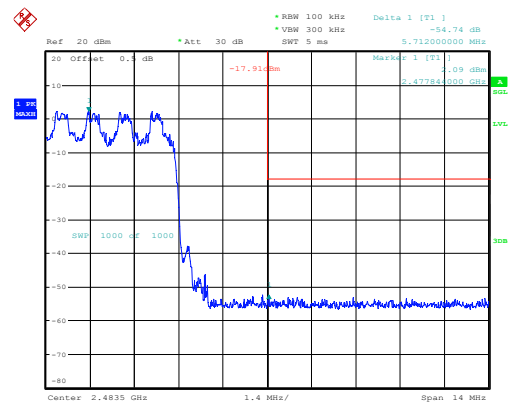
ProjectNo.:2403U81808E-RF Tester:Chin Qin
Date: 24.JUL.2024 21:26:29

8DPSK_Hopping_Lower 54.44dB



ProjectNo.:2403U81808E-RF Tester:Chin Qin
Date: 24.JUL.2024 21:29:45

8DPSK_Hopping_Upper 54.74dB



ProjectNo.:2403U81808E-RF Tester:Chin Qin
Date: 24.JUL.2024 21:31:27