

Test Information:

Serial No.:	2Q05-2	Test Date:	2024/08/28
Test Site:	RF	Test Mode:	Transmitting
Tester:	Mack Huang	Test Result:	Pass

Environmental Conditions:

Temperature: (°C):	26.3	Relative Humidity: (%)	67	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	FSV40	101591	2024/04/01	2025/03/31
zhuoxiang	Coaxial Cable	SMA-178	211001	Each time	N/A
HuiXunDa	DC Block	SMA-JK 18G	DCB181108042	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**

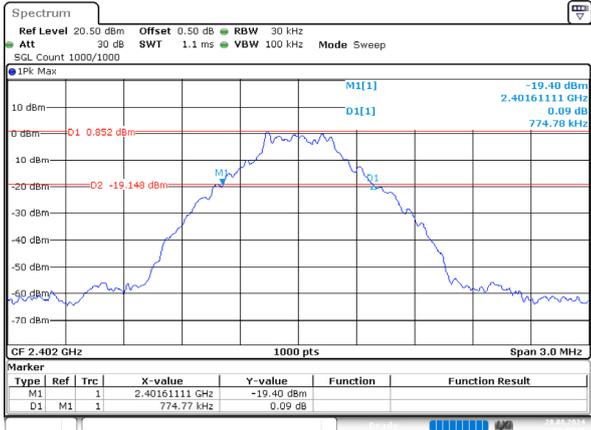
Mode	Value (MHz)
GFSK_Low	0.775
GFSK_Middle	0.775
GFSK_High	0.775

EDR

Mode	Value (MHz)
$\pi/4$ -DQPSK_Low	1.213
$\pi/4$ -DQPSK_Middle	1.213
$\pi/4$ -DQPSK_High	1.216
8DPSK_Low	1.219
8DPSK_Middle	1.219
8DPSK_High	1.219

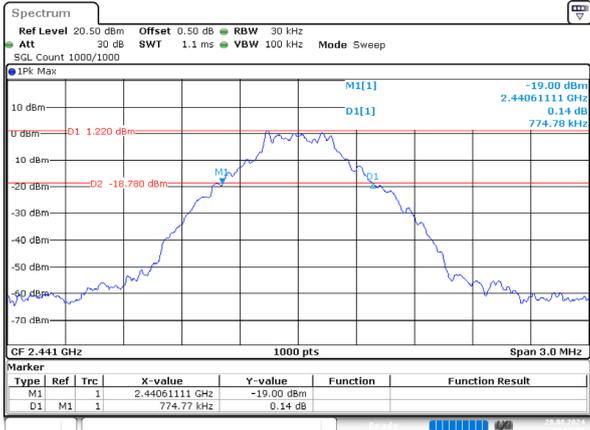
BDR

GFSK_Low 0.775MHz



ProjectNo.:2403W26164E-RF Tester:Mack Huang
Date: 28.AUG.2024 11:04:06

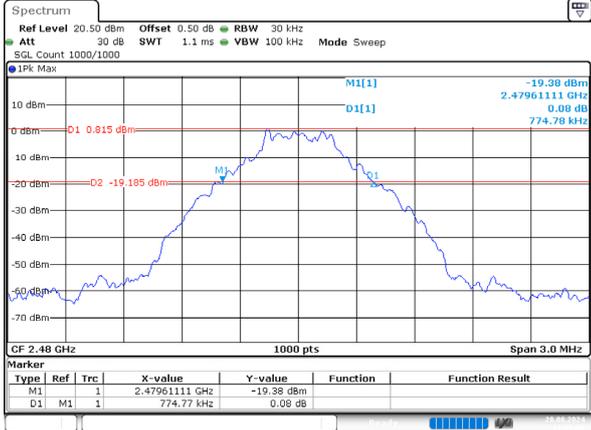
GFSK_Middle 0.775MHz



ProjectNo.:2403W26164E-RF Tester:Mack Huang
Date: 28.AUG.2024 11:07:02

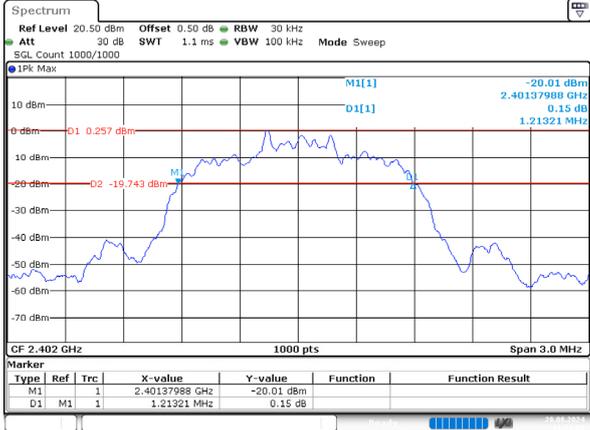
EDR

GFSK_High 0.775MHz



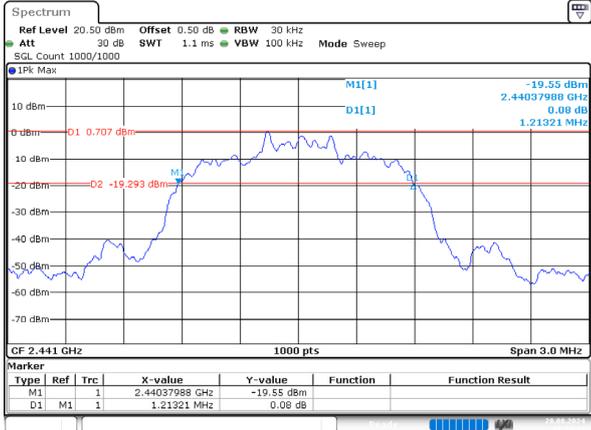
ProjectNo.:2403W26164E-RF Tester:Mack Huang
Date: 28.AUG.2024 11:09:08

$\pi/4$ -DQPSK_Low 1.213MHz



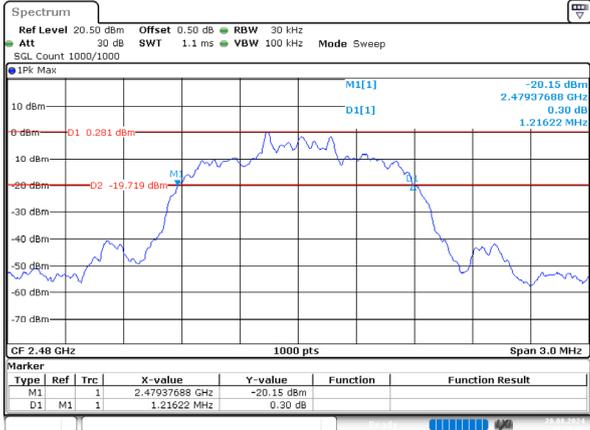
ProjectNo.:2403W26164E-RF Tester:Mack Huang
Date: 28.AUG.2024 11:22:05

$\pi/4$ -DQPSK_Middle 1.213MHz



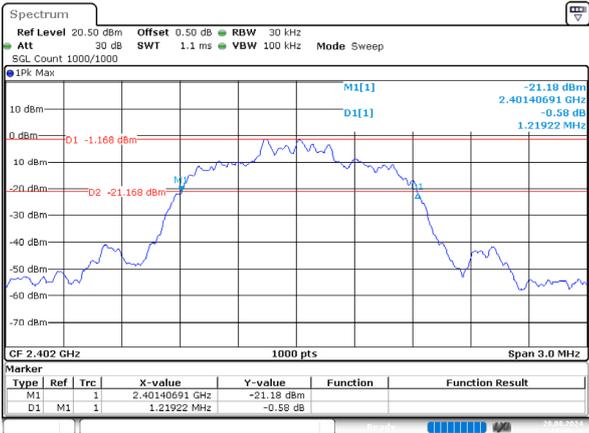
ProjectNo.:2403W26164E-RF Tester:Mack Huang
Date: 28.AUG.2024 11:24:12

$\pi/4$ -DQPSK_High 1.216MHz



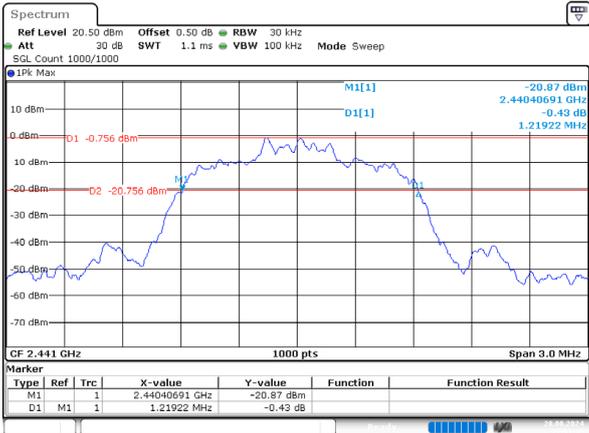
ProjectNo.:2403W26164E-RF Tester:Mack Huang
Date: 28.AUG.2024 11:26:09

8DPSK_Low 1.219MHz



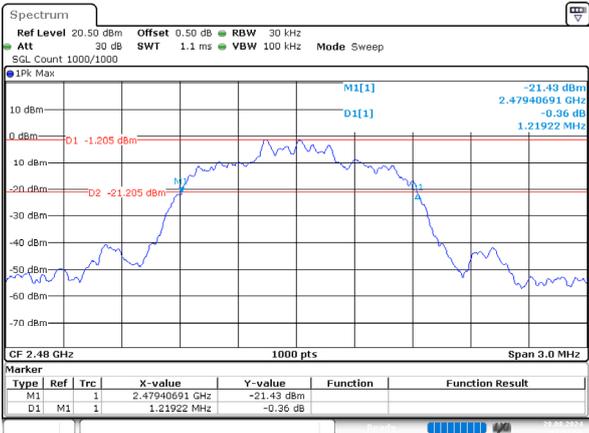
ProjectNo.:2403W26164E-RF Tester: Mack Huang
Date: 28.AUG.2024 11:49:11

8DPSK_Middle 1.219MHz



ProjectNo.:2403W26164E-RF Tester: Mack Huang
Date: 28.AUG.2024 11:51:36

8DPSK_High 1.219MHz



ProjectNo.:2403W26164E-RF Tester: Mack Huang
Date: 28.AUG.2024 11:52:56

Channel Separation**BDR**

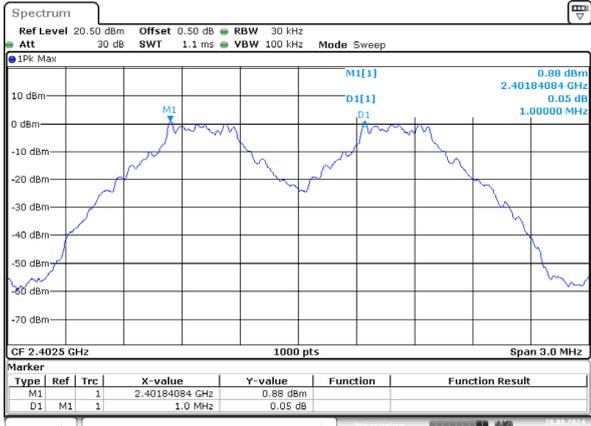
Mode	Value (MHz)	Limit (MHz)	Result
GFSK_Low	1	0.517	Pass
GFSK_Middle	1	0.517	Pass
GFSK_High	1.003	0.517	Pass

EDR

Mode	Value (MHz)	Limit (MHz)	Result
$\pi/4$ -DQPSK_Low	1	0.809	Pass
$\pi/4$ -DQPSK_Middle	1	0.809	Pass
$\pi/4$ -DQPSK_High	1	0.811	Pass
8DPSK_Low	1.003	0.813	Pass
8DPSK_Middle	1	0.813	Pass
8DPSK_High	1.003	0.813	Pass

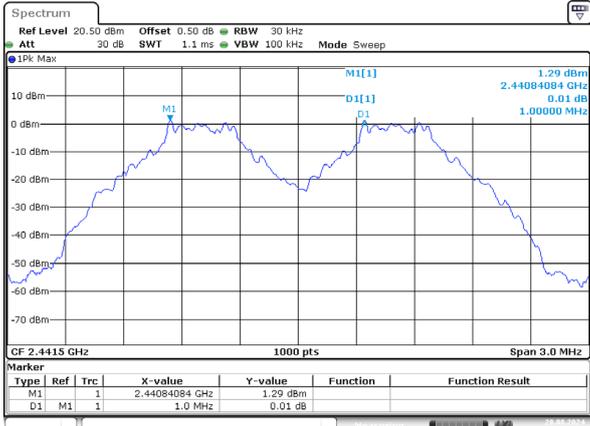
BDR

GFSK_Low 1MHz



ProjectNo.:2403W26164E-RF Tester:Mack Huang
Date: 28.AUG.2024 11:06:23

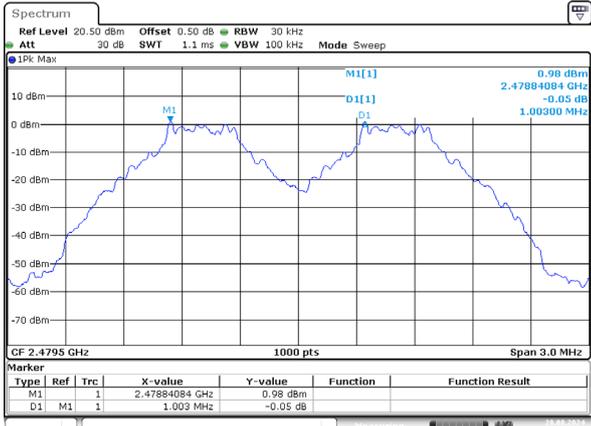
GFSK_Middle 1MHz



ProjectNo.:2403W26164E-RF Tester:Mack Huang
Date: 28.AUG.2024 11:08:22

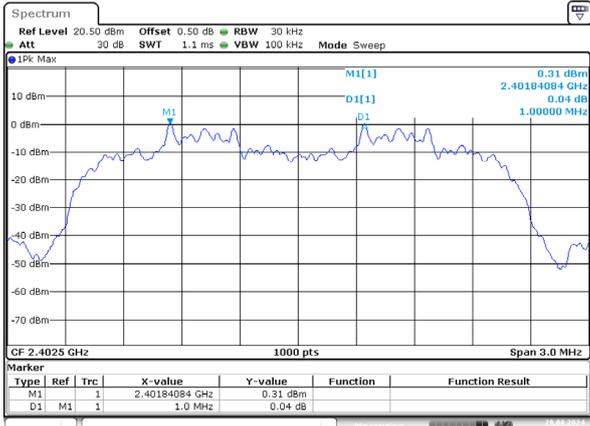
EDR

GFSK_High 1.003MHz



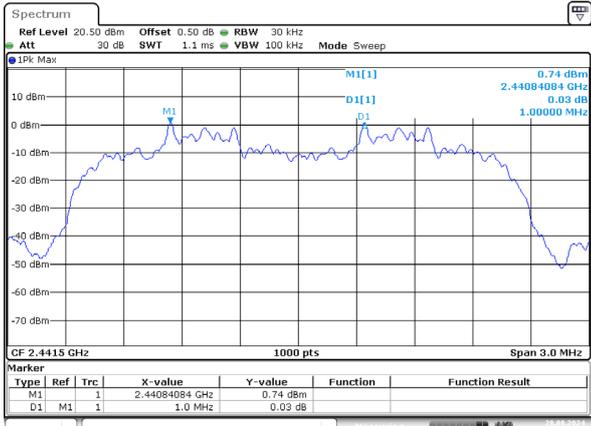
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Date: 28.AUG.2024 11:11:26

$\pi/4$ -DQPSK_Low 1MHz



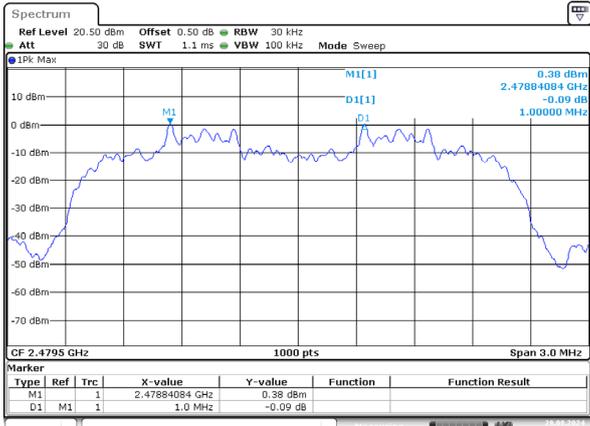
ProjectNo.:2403W26164E-RF Tester:Mack Huang
Date: 28.AUG.2024 11:23:43

$\pi/4$ -DQPSK_Middle 1MHz



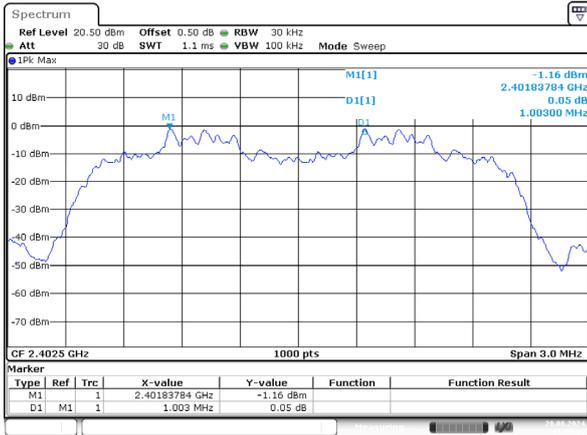
ProjectNo.:2403W26164E-RF Tester:Mack Huang
Date: 28.AUG.2024 11:25:37

$\pi/4$ -DQPSK_High 1MHz



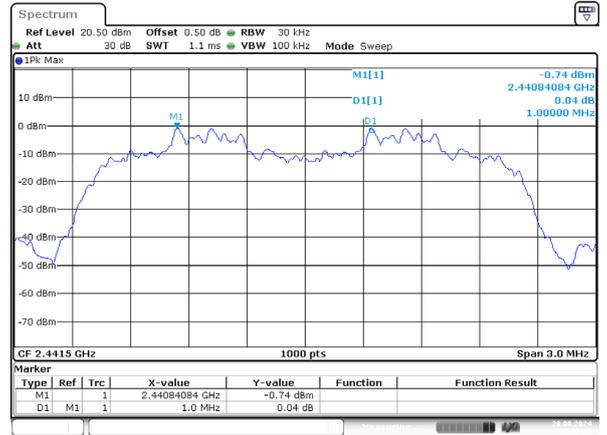
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Date: 28.AUG.2024 11:28:25

8DPSK_Low 1.003MHz



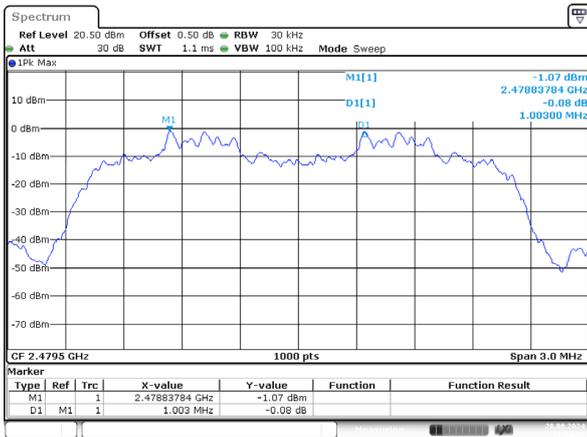
ProjectNo.:2403W26164E-RF Tester: Mack Huang
Date: 28.AUG.2024 11:51:02

8DPSK_Middle 1MHz



ProjectNo.:2403W26164E-RF Tester: Mack Huang
Date: 28.AUG.2024 11:52:22

8DPSK_High 1.003MHz



ProjectNo.:2403W26164E-RF Tester: Mack Huang
Date: 28.AUG.2024 11:54:55

Number of Hopping Frequency**BDR**

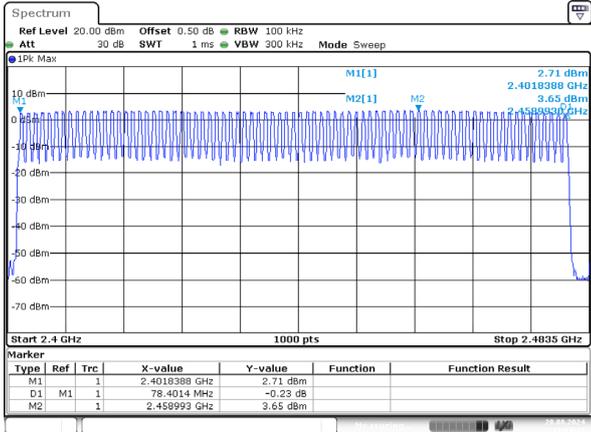
Mode	Value	Limit	Result
GFSK_Hopping	79	15	Pass

EDR

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

BDR

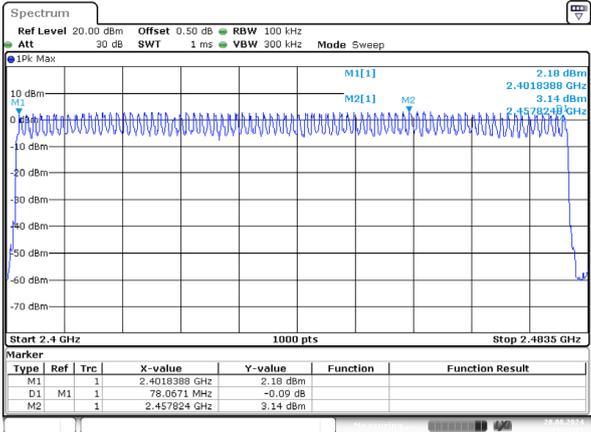
GFSK_Hopping 79



ProjectNo.:2403W26164E-RF Tester:Mack Huang
Date: 28.AUG.2024 11:14:42

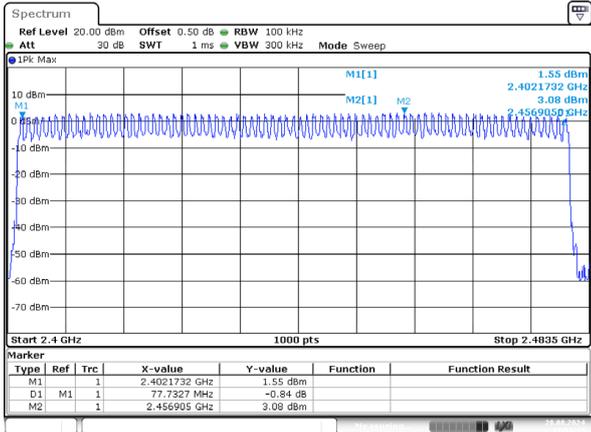
EDR

$\pi/4$ -DQPSK_Hopping 79



ProjectNo.:2403W26164E-RF Tester:Mack Huang
Date: 28.AUG.2024 11:31:11

8DPSK_Hopping 79



ProjectNo.:2403W26164E-RF Tester:Mack Huang
Date: 28.AUG.2024 11:58:14

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

Mode	Pulse width (ms)	Dwell time (s)	Limit (s)	Result
GFSK_Hopping_DH1	0.387	0.124	0.400	Pass
GFSK_Hopping_DH3	1.652	0.264	0.400	Pass
GFSK_Hopping_DH5	2.903	0.310	0.400	Pass

EDR

Mode	Pulse width (ms)	Dwell time (s)	Limit (s)	Result
$\pi/4$ -DQPSK_Hopping_2DH1	0.398	0.127	0.400	Pass
$\pi/4$ -DQPSK_Hopping_2DH3	1.646	0.263	0.400	Pass
$\pi/4$ -DQPSK_Hopping_2DH5	2.903	0.310	0.400	Pass
8DPSK_Hopping_3DH1	0.401	0.128	0.400	Pass
8DPSK_Hopping_3DH3	1.658	0.265	0.400	Pass
8DPSK_Hopping_3DH5	2.908	0.310	0.400	Pass

Note:

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

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

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

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

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

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

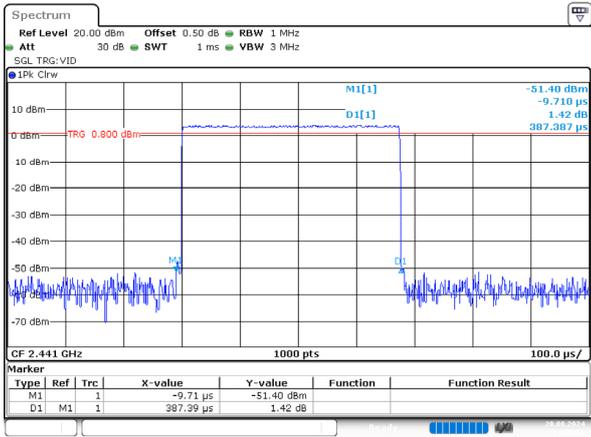
3DH1: Dwell time=Pulse width (ms) × (1600/2/79) ×31.6 s

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

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

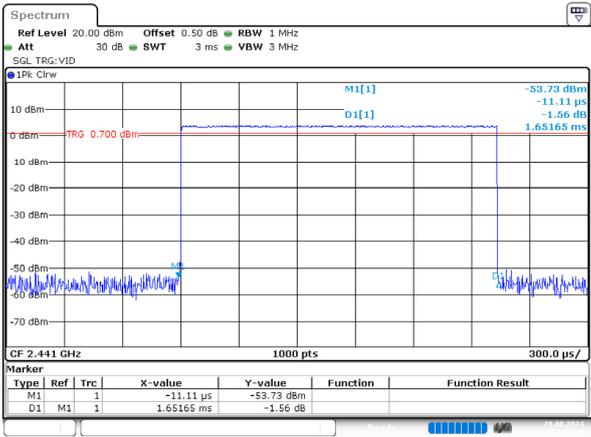
BDR

GFSK_Hopping_DH1 0.387ms



ProjectNo.:2403W26164E-RF Tester:Mack Huang
Date: 28.AUG.2024 14:00:57

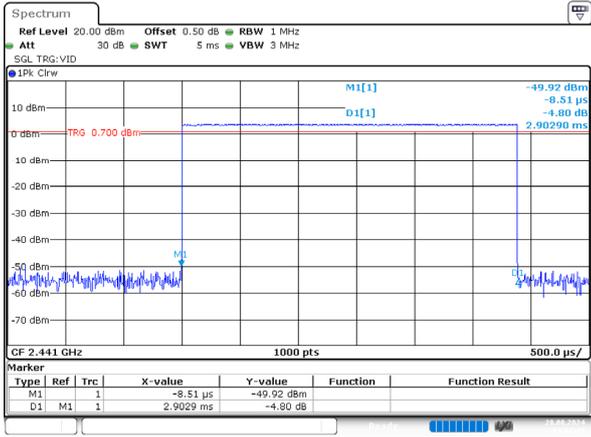
GFSK_Hopping_DH3 1.652ms



ProjectNo.:2403W26164E-RF Tester:Mack Huang
Date: 28.AUG.2024 14:01:43

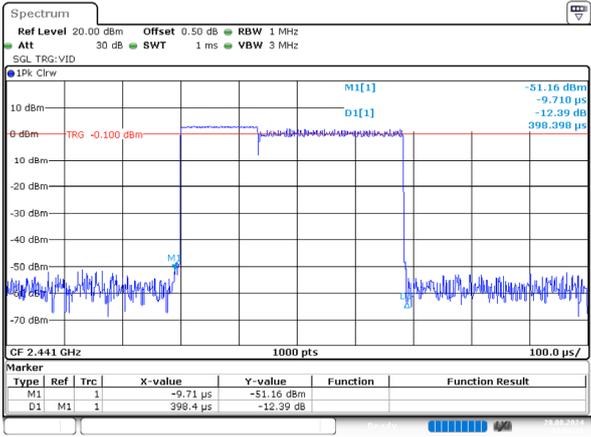
EDR

GFSK_Hopping_DH5 2.903ms



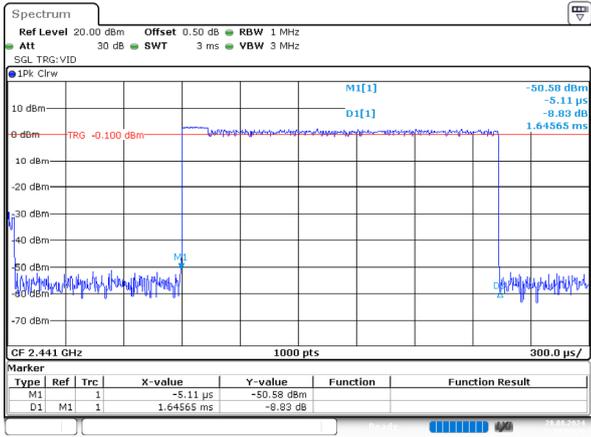
ProjectNo.:2403W26164E-RF Tester:Mack Huang
Date: 28.AUG.2024 14:02:29

π/4-DQPSK_Hopping_2DH1 0.398ms



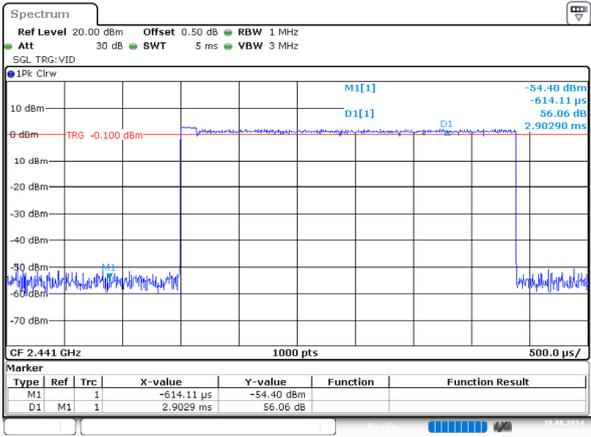
ProjectNo.:2403W26164E-RF Tester:Mack Huang
Date: 28.AUG.2024 14:03:32

π/4-DQPSK_Hopping_2DH3 1.646ms



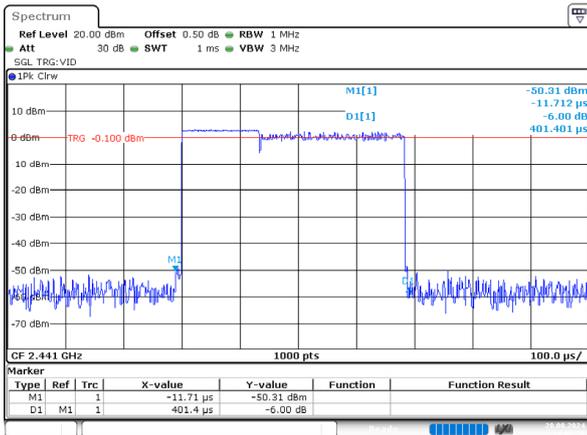
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Date: 28.AUG.2024 14:05:36

π/4-DQPSK_Hopping_2DH5 2.903ms



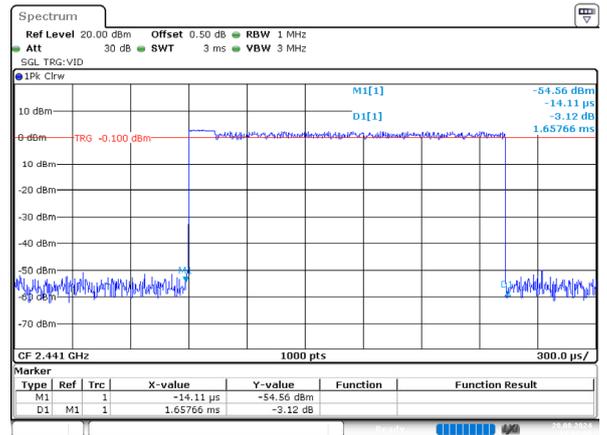
ProjectNo.:2403W26164E-RF Tester:Mack Huang
Date: 28.AUG.2024 14:06:15

8DPSK_Hopping_3DH1 0.401ms



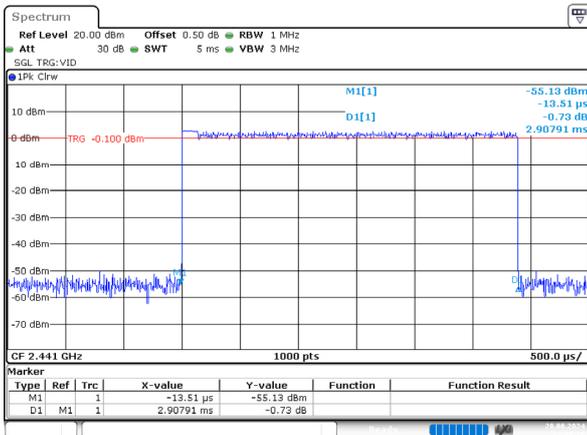
ProjectNo.:2403W26164E-RF Tester: Mack Huang
Date: 28.AUG.2024 14:06:57

8DPSK_Hopping_3DH3 1.658ms



ProjectNo.:2403W26164E-RF Tester: Mack Huang
Date: 28.AUG.2024 14:07:38

8DPSK_Hopping_3DH5 2.908ms



ProjectNo.:2403W26164E-RF Tester: Mack Huang
Date: 28.AUG.2024 14:08:20

Maximum Conducted Output Power**BDR**

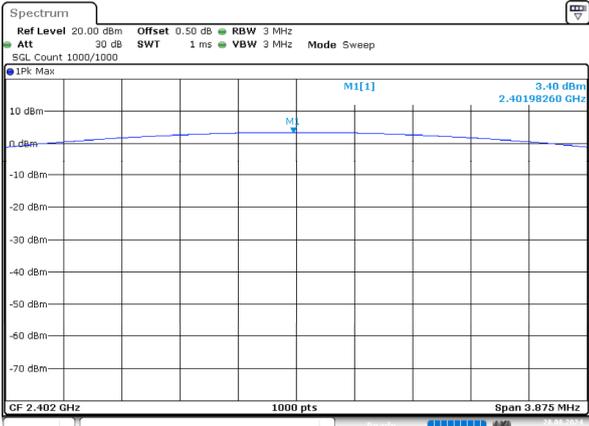
Mode	Value (dBm)	Limit (dBm)	Result
GFSK_Low	3.40	21.00	Pass
GFSK_Middle	3.73	21.00	Pass
GFSK_High	3.39	21.00	Pass

EDR

Mode	Value (dBm)	Limit (dBm)	Result
$\pi/4$ -DQPSK_Low	2.54	21.00	Pass
$\pi/4$ -DQPSK_Middle	2.94	21.00	Pass
$\pi/4$ -DQPSK_High	2.51	21.00	Pass
8DPSK_Low	2.55	21.00	Pass
8DPSK_Middle	2.95	21.00	Pass
8DPSK_High	2.54	21.00	Pass

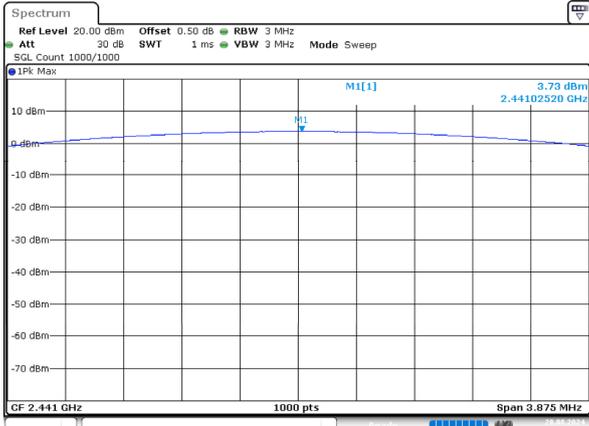
BDR

GFSK_Low 3.40dBm



ProjectNo.:2403W26164E-RF Tester:Mack Huang
Date: 28.AUG.2024 11:05:19

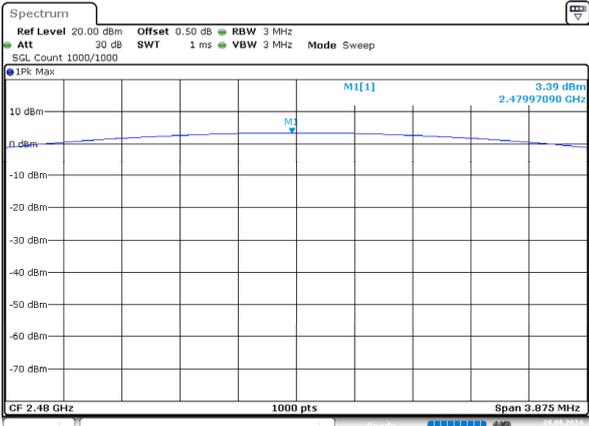
GFSK_Middle 3.73dBm



ProjectNo.:2403W26164E-RF Tester:Mack Huang
Date: 28.AUG.2024 11:07:23

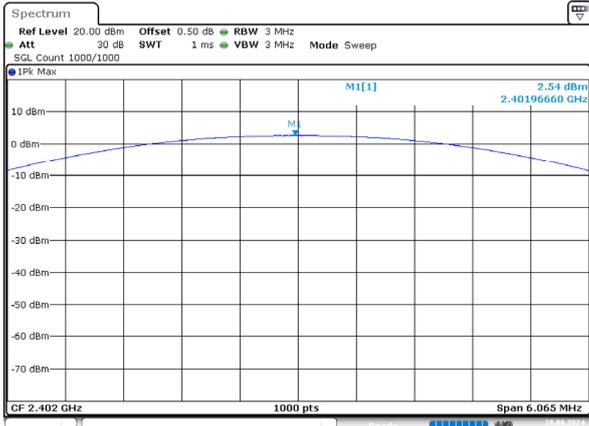
EDR

GFSK_High 3.39dBm



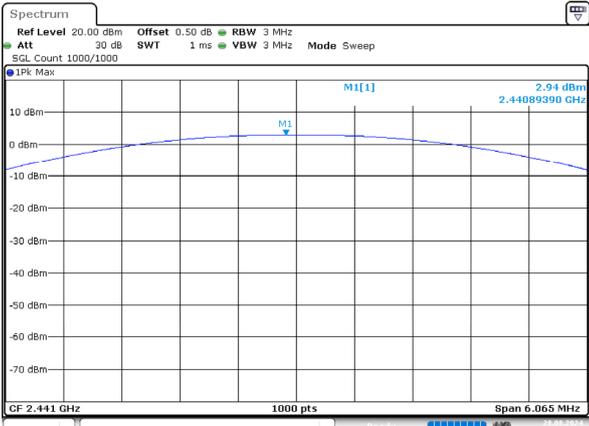
ProjectNo.:2403W26164E-RF Tester:Mack Huang
Date: 28.AUG.2024 11:10:34

$\pi/4$ -DQPSK_Low 2.54dBm



ProjectNo.:2403W26164E-RF Tester:Mack Huang
Date: 28.AUG.2024 11:23:09

$\pi/4$ -DQPSK_Middle 2.94dBm



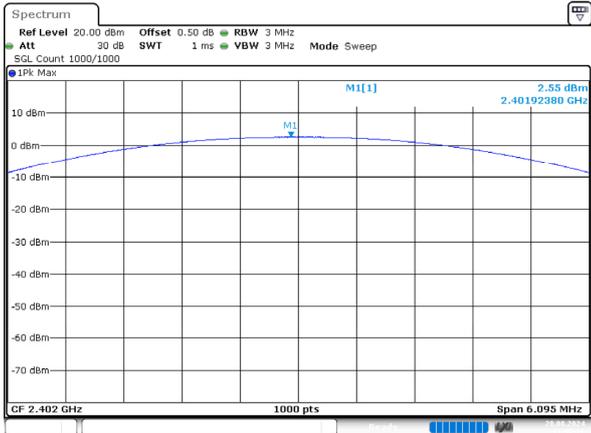
ProjectNo.:2403W26164E-RF Tester:Mack Huang
Date: 28.AUG.2024 11:24:29

$\pi/4$ -DQPSK_High 2.51dBm



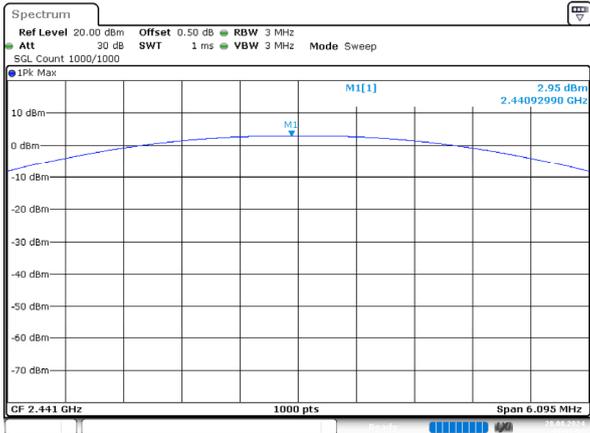
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Date: 28.AUG.2024 11:27:05

8DPSK_Low 2.55dBm



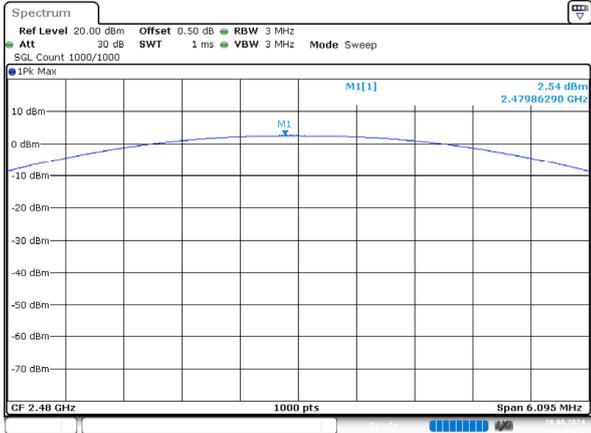
ProjectNo.:2403W26164E-RF Tester:Mack Huang
Date: 28.AUG.2024 11:50:16

8DPSK_Middle 2.95dBm



ProjectNo.:2403W26164E-RF Tester:Mack Huang
Date: 28.AUG.2024 11:51:52

8DPSK_High 2.54dBm



ProjectNo.:2403W26164E-RF Tester:Mack Huang
Date: 28.AUG.2024 11:54:18

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

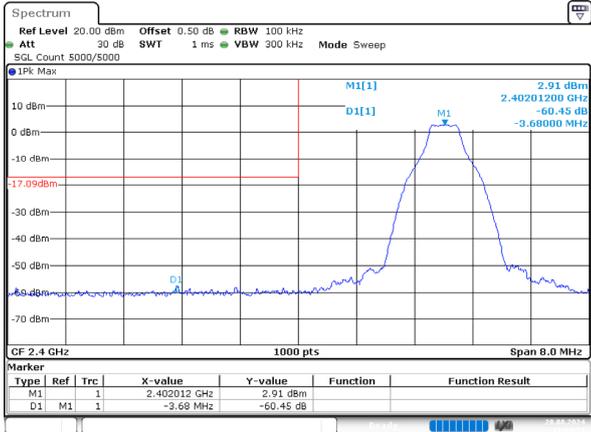
Mode	Value (dB)	Limit (dB)	Result
GFSK_Low	60.45	20.00	Pass
GFSK_High	61.18	20.00	Pass
GFSK_Hopping_Lower	61.72	20.00	Pass
GFSK_Hopping_Upper	55.32	20.00	Pass

EDR

Mode	Value (dB)	Limit (dB)	Result
$\pi/4$ -DQPSK_Low	60.35	20.00	Pass
$\pi/4$ -DQPSK_High	60.39	20.00	Pass
$\pi/4$ -DQPSK_Hopping_Lower	60.95	20.00	Pass
$\pi/4$ -DQPSK_Hopping_Upper	55.73	20.00	Pass
8DPSK_Low	59.27	20.00	Pass
8DPSK_High	59.61	20.00	Pass
8DPSK_Hopping_Lower	56.82	20.00	Pass
8DPSK_Hopping_Upper	57.18	20.00	Pass

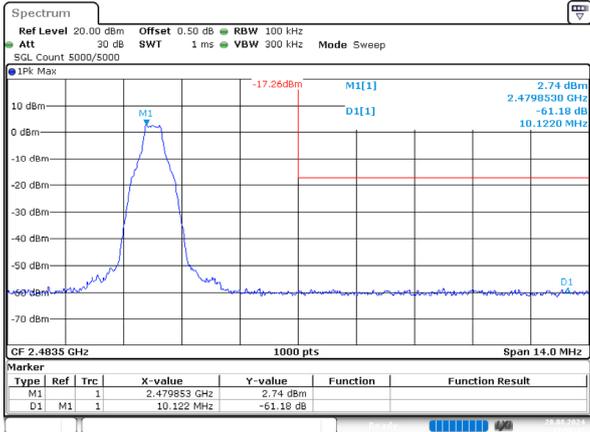
BDR

GFSK_Low 60.45dB



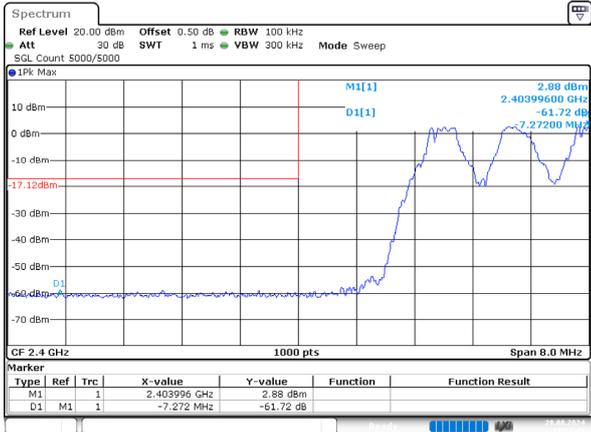
ProjectNo.:2403W26164E-RF Tester:Mack Huang
Date: 28.AUG.2024 11:04:53

GFSK_High 61.18dB



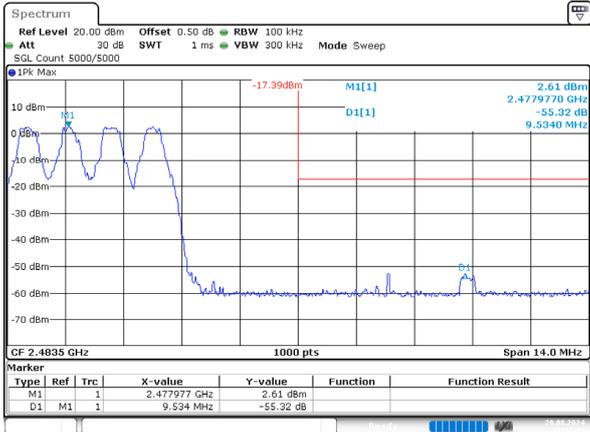
ProjectNo.:2403W26164E-RF Tester:Mack Huang
Date: 28.AUG.2024 11:09:49

GFSK_Hopping_Lower 61.72dB



ProjectNo.:2403W26164E-RF Tester:Mack Huang
Date: 28.AUG.2024 11:12:42

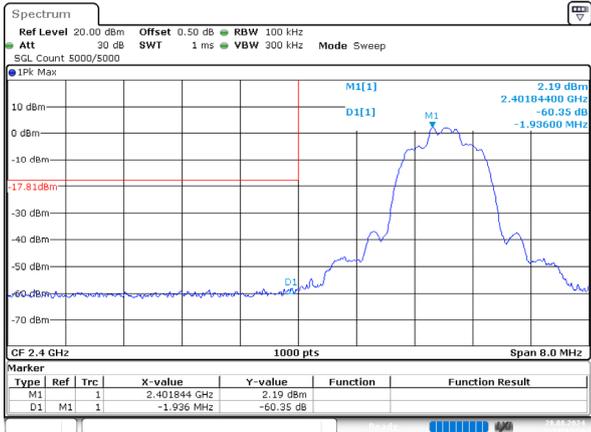
GFSK_Hopping_Upper 55.32dB



ProjectNo.:2403W26164E-RF Tester:Mack Huang
Date: 28.AUG.2024 11:13:39

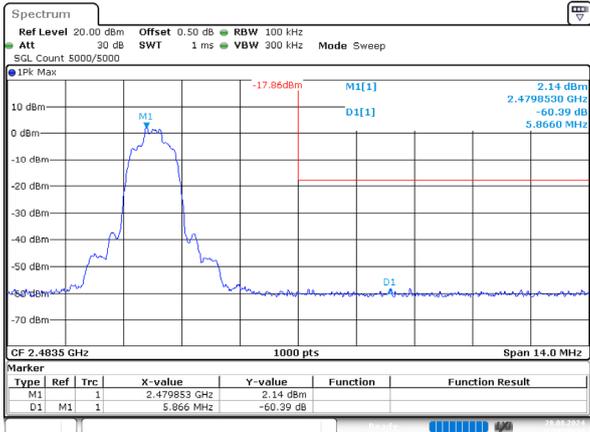
EDR

$\pi/4$ -DQPSK_Low 60.35dB



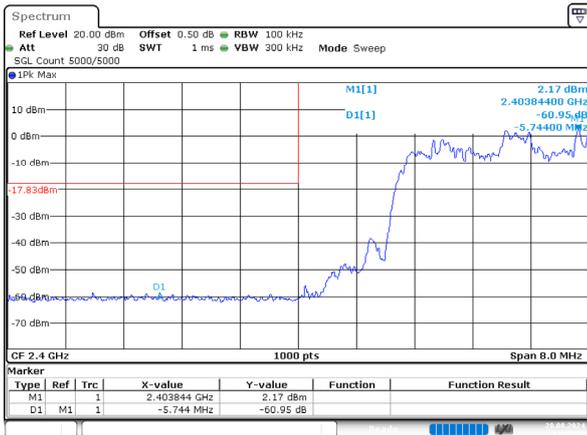
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Date: 28.AUG.2024 11:22:53

$\pi/4$ -DQPSK_High 60.39dB



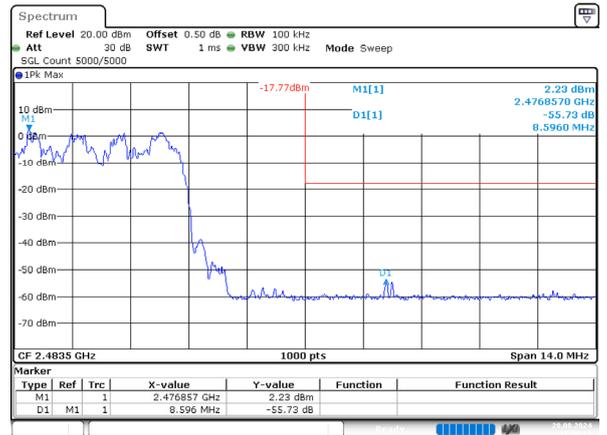
ProjectNo.:2403W26164E-RF Tester:Mack Huang
Date: 28.AUG.2024 11:26:49

$\pi/4$ -DQPSK_Hopping_Lower 60.95dB



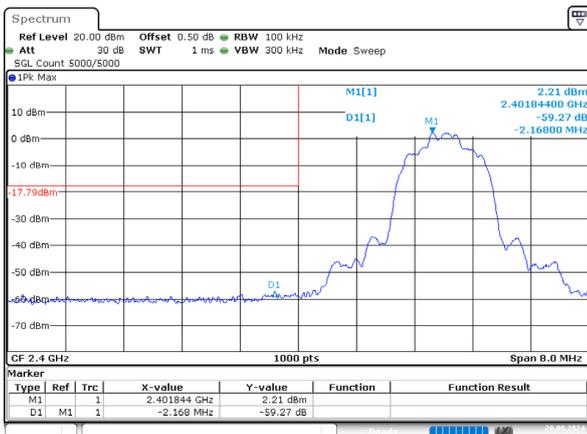
ProjectNo.:2403W26164E-RF Tester:MacK Huang
Date: 28.AUG.2024 11:29:34

$\pi/4$ -DQPSK_Hopping_Upper 55.73dB



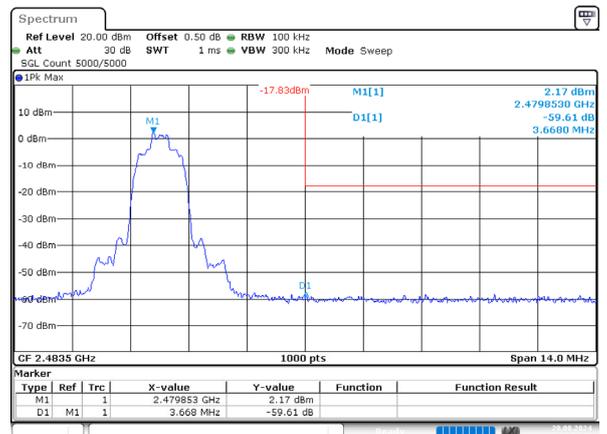
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Date: 28.AUG.2024 11:30:23

8DPSK_Low 59.27dB



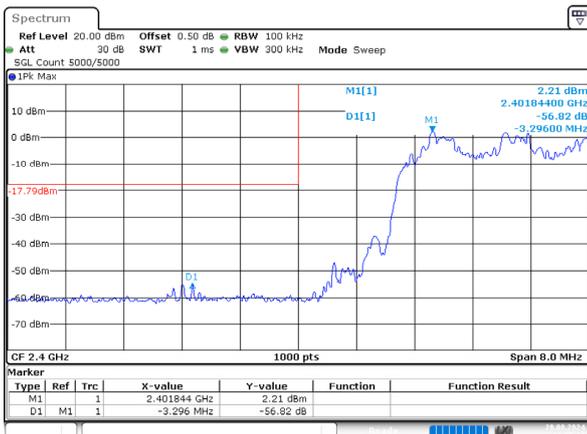
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Date: 28.AUG.2024 11:50:00

8DPSK_High 59.61dB



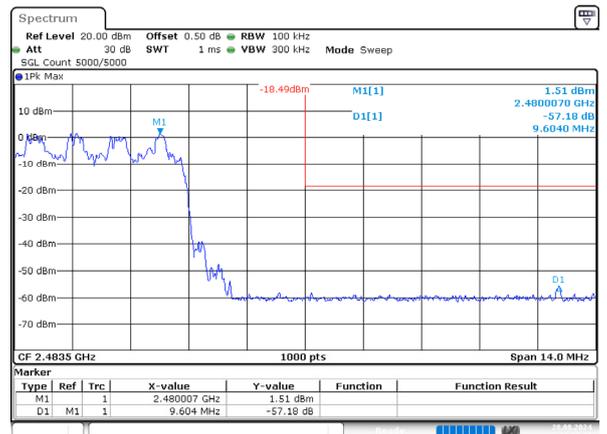
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Date: 28.AUG.2024 11:53:37

8DPSK_Hopping_Lower 56.82dB



ProjectNo.:2403W26164E-RF Tester:MacK Huang
Date: 28.AUG.2024 11:56:11

8DPSK_Hopping_Upper 57.18dB



ProjectNo.:2403W26164E-RF Tester:MacK Huang
Date: 28.AUG.2024 11:57:30