

# Certificate of Calibration

## Fluke Nederland B.V.

<b>Certificate Number:</b>	SA01282213	<b>Date of Calibration:</b>	08 May 2024
<b>Receive Condition:</b>	IN TOLERANCE	<b>Date of Recalibration:</b>	08 May 2026
<b>Return Condition:</b>	IN TOLERANCE AFTER REPAIR/ADJUSTMENT	<b>Place of Calibration:</b>	Eindhoven
<b>Manufacturer:</b>	FLUKE NETWORKS	<b>Temperature within:</b>	(23.0 ± 3) °C
<b>Model:</b>	DSX-5000 INTL	<b>Humidity within:</b>	(45 ± 20) %rh
<b>Serial Number:</b>	18390458		
<b>Description:</b>	1 GHZ DSX CABLE ANALYZER		
<b>Procedure:</b>	Manual Procedure		

**Customer:** JMP TELEFON PIOTR KURYLO  
KRAKOW

**Customer Asset ID:** -

**RMA Number:** 606328938

All measurements are traceable to national and/or international standards or have been derived by approved ratio techniques. When possible standards used for this calibration are ISO/IEC 17025 accredited calibrated.

This calibration is performed by a DEKRA certified lab for ISO 9001. This certificate may not be reproduced other than in full. Calibration certificates without signatures, either electronic or handwritten, are not valid.



**Issue Date:** 08 May 2024

Electronically signed

**Authorized By**

D.B.J. Smits

## Certificate of Calibration

**Certificate Number:** SA01282213

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**Remarks**

- The calibration status found in this certificate on the top of each results page must be interpreted as:
  - As Found : Data collected before the unit was adjusted and / or repaired
  - As Left : Data collected after the unit has been adjusted and / or repaired
  - Found / Left : Data collected without any adjustment and / or repair performed
- The calibration interval (due date) is the responsibility of the end user.
- According to the European norm 'Operation of electrical installations' NEN-EN 50110-1 release 2013 and the Dutch norm NEN 3140 release 2015 paragraph 5.102.12 through 5.102.16, a safety test is not required. Therefore not performed.
- Temperature conversions (if applicable) are performed according to ISO/IEC 60584:2013 for thermocouples, and ISO/IEC 60751:2022 for resistance temperature devices.

**Standards and test-equipment used**

Inventory No	Model	Serial No
WP2391	DSX-CALVERST	E000062

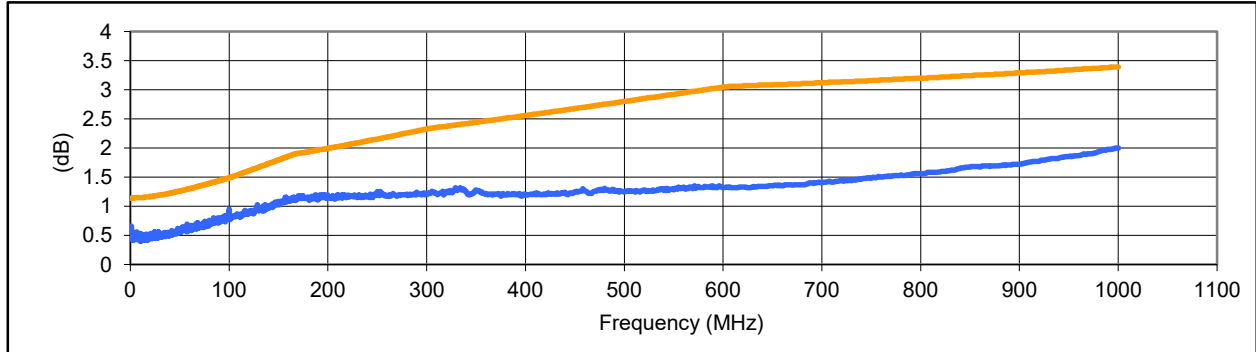
# As-Left Report

Model **DSX-5000 CAT 6A/CLASS Fa 1000MHz Copper Module**  
 Serial Number **18390458**

Test date **8-May-24**  
 Page 1 of 3

## NEXT

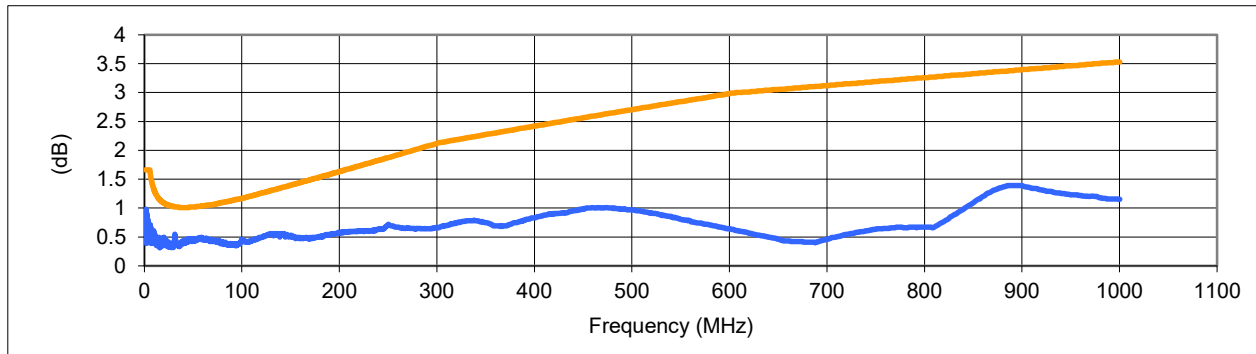
NEXT Artifact SN 2820074



Pass Worst margin: 0.480 at 1.13 MHz in pair 12-45. Worst accuracy at each frequency shown.

## CDNEXT

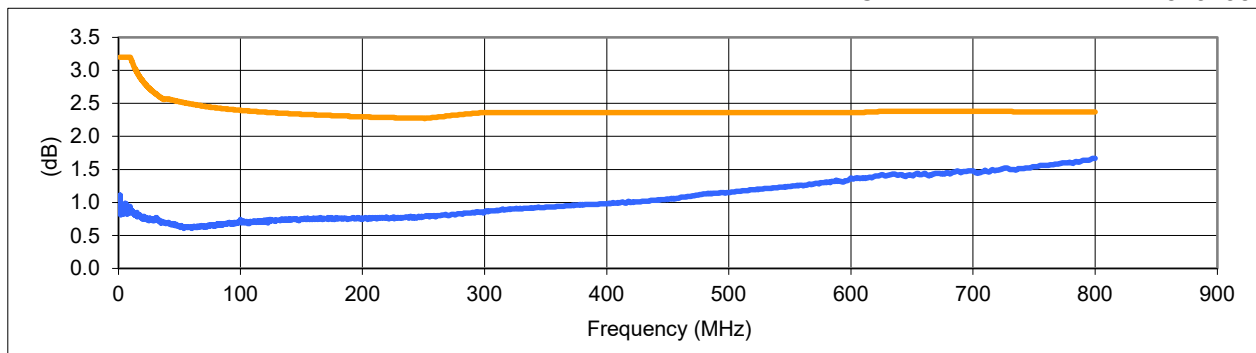
CDNEXT Artifact SN 2820038



Pass Worst margin: 0.470 at 31.25 MHz in pair 45-78. Worst accuracy at each frequency shown.

## CMRL

CMDMRL Artifact SN 2843438



Pass Worst margin: 0.700 at 798 MHz in pair 45. Worst accuracy at each frequency shown.

■ Measured difference of DSX and reference laboratory equipment added to measurement accuracy of reference laboratory equipment. Worst accuracy at each frequency shown.

■ Corresponding measurement accuracy requirement for nominally compliant Level IV or Level 2G/VI field tester.

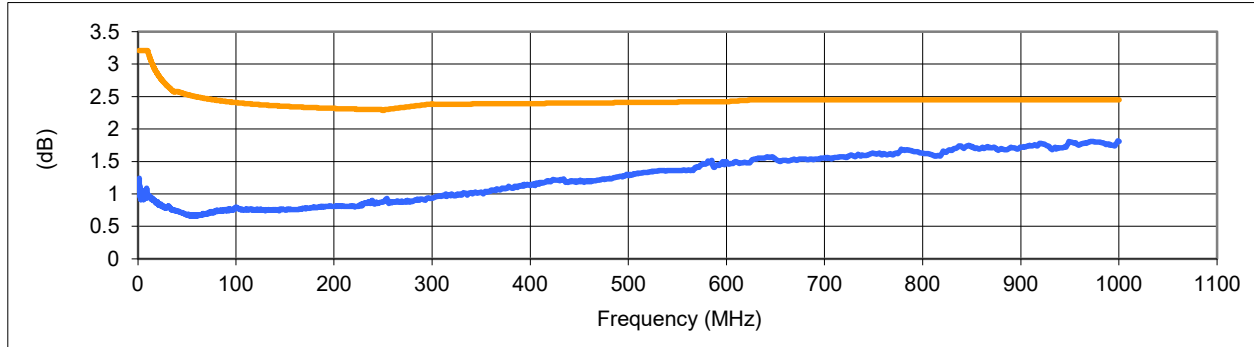
# As-Left Report

Model **DSX-5000 CAT 6A/CLASS Fa 1000MHz Copper Module**  
 Serial Number **18390458**

Test date **8-May-24**  
 Page 2 of 3

## RL

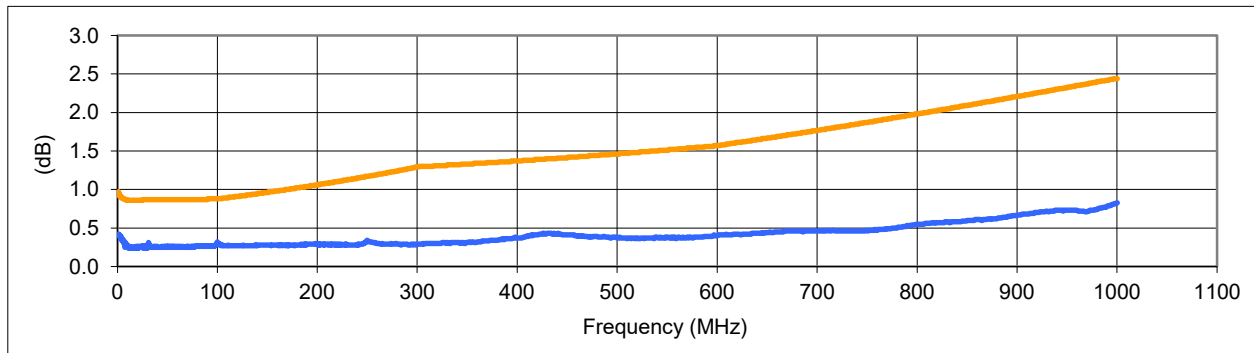
CMDMRL Artifact SN 2843438



Pass Worst margin: 0.630 at 999 MHz in pair 78. Worst accuracy at each frequency shown.

## TCL

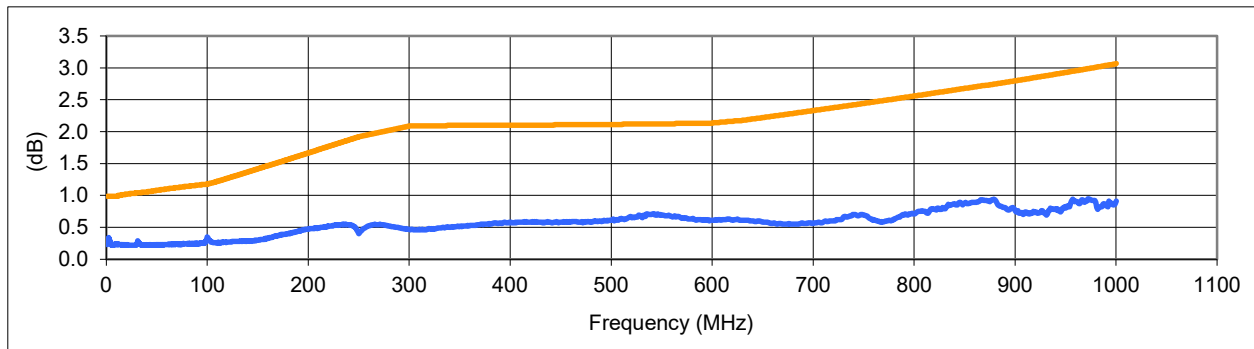
TCL Artifact SN 2843446



Pass Worst margin: 0.510 at 3.88 MHz in pair 12. Worst accuracy at each frequency shown.

## IL

ILFEXT Artifact SN 22170704



Pass Worst margin: 0.650 at 2.13 MHz in pair 12. Worst accuracy at each frequency shown.

- Measured difference of DSX and reference laboratory equipment added to measurement accuracy of reference laboratory equipment. Worst accuracy at each frequency shown.
- Corresponding measurement accuracy requirement for nominally compliant Level IV or Level 2G/VI field tester.

# As-Left Report

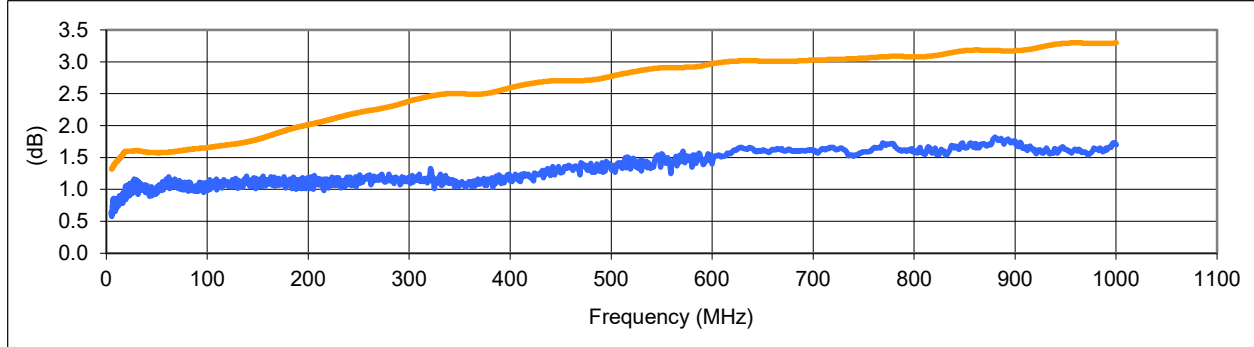
Model **DSX-5000 CAT 6A/CLASS Fa 1000MHz Copper Module**  
 Serial Number **18390458**

Test date 8-May-24

Page 3 of 3

## FEXT

ILFEXT Artifact SN 22170704



Pass Worst margin: 0.380 at 62 MHz in pair 45-78. Worst accuracy at each frequency shown.

■ Measured difference of DSX and reference laboratory equipment added to measurement accuracy of reference laboratory equipment. Worst accuracy at each frequency shown.

■ Corresponding measurement accuracy requirement for nominally compliant Level IV or Level 2G/VI field tester.

## Loop Resistance

Loop Resistance Artifact SN 22170787

	Measured	Expected	Limit	
Resistance on pair 12	0.30	0.00	0.80	Pass
Resistance on pair 36	50.05	49.80	0.60	Pass
Resistance on pair 45	100.05	99.80	1.60	Pass
Resistance on pair 78	453.09	453.00	4.00	Pass

## Resistance imbalance

Resistance Unbalance Artifact SN 22170720

	Measured	Expected	Limit	
Resistance on pair 12	0.22	0.00	0.80	Pass
Resistance on pair 36	25.13	24.90	0.90	Pass
Resistance on pair 45	12.33	12.13	0.90	Pass
Resistance on pair 78	24.34	24.05	0.90	Pass
Resistance imbalance on pair 12	0.02	0.00	0.05	Pass
Resistance imbalance on pair 36	0.00	0.00	0.13	Pass
Resistance imbalance on pair 45	0.34	0.32	0.06	Pass
Resistance imbalance on pair 78	0.85	0.85	0.12	Pass

DSX-8000 only: M\_IL and M\_FEXT measurements validate the ability of the DSX-8000 to make measurements with DSX-5000 adapters.

**M IL** Not applicable M\_ILFEXT Artifact SN -

**M FEXT** Not applicable M\_ILFEXT Artifact SN -