



# Certificate of Calibration Fluke Nederland B.V.

Certificate Number:	SA01259494	Date of Calibration:	27 Feb 2024
Receive Condition:	IN TOLERANCE	Date of Recalibration:	27 Feb 2025
Return Condition:	IN TOLERANCE	Place of Calibration:	Eindhoven
Manufacturer:	FLUKE NETWORKS	Temperature within:	(23.0 ± 3) °C
Model:	DSX-5000 INTL	Humidity within:	(45 ± 20) %rh
Serial Number:	3263189		
Description:	1 GHZ DSX CABLE ANALYZER		
Procedure:	Manual Procedure		
Customer:	LANCOMAT		
	PRAHA		
Customer Asset ID:	-		
RMA Number:	606324766		

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: 27 Feb 2024

Electronically signed

#### Authorized By

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Fluke Nederland B.V.

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### **Certificate of Calibration**

#### Certificate Number: SA01259494

#### 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
WP2467	DSX-CALVERST	E000069



### DSX Cable Analyzer

## Found-Left Report

Model

DSX-5000 CAT 6A/CLASS Fa 1000MHz Copper Module

Serial Number

3263189

Test date 27-Feb-24 Page 1 of 3

3386461

1100



Pass Worst margin: 0.400 at 1 MHz in pair 36-12. Worst accuracy at each frequency shown.



CDNEXT Artifact SN 3386449



Frequency (MHz)

Pass Worst margin: 0.330 at 31.13 MHz in pair 45-78. Worst accuracy at each frequency shown.



CMRL

Pass Worst margin: 0.390 at 366 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.



### DSX Cable Analyzer

## Found-Left Report



RL

DSX-5000 CAT 6A/CLASS Fa 1000MHz Copper Module

Serial Number

3263189

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Pass Worst margin: 0.390 at 915 MHz in pair 45. Worst accuracy at each frequency shown.

TCL



Pass Worst margin: 0.500 at 3.5 MHz in pair 45. Worst accuracy at each frequency shown.

IL **ILFEXT Artifact SN** 3386158 3.5 3.0 2.5 2.0 (ap) 2.0 ₽ 1.5 1.0 0.5 0.0 0 100 200 300 400 500 600 700 800 1000 900 1100 Frequency (MHz)

Pass Worst margin: 0.660 at 1.88 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.



### DSX Cable Analyzer

## Found-Left Report

DSX-5000 CAT 6A/CLASS Fa 1000MHz Copper Module Model 3263189 Test date 27-Feb-24 Serial Number Page 3 of 3 FEXT **ILFEXT Artifact SN** 3386158 3.5 3.0 2.5 2.0 (dB) 1.5 1.0 0.5 0.0 100 200 300 400 500 600 700 800 1000 0 900 1100 Frequency (MHz)

Pass Worst margin: 0.410 at 71 MHz in pair 12-36. 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

		p		00002.0	
	Measured	Expected	Limit		
Resistance on pair 12	0.16	0.00	0.80	Pass	
Resistance on pair 36	49.99	49.80	0.60	Pass	
Resistance on pair 45	99.93	99.80	1.60	Pass	
Resistance on pair 78	452.94	453.00	4.00	Pass	

Loop Resistance Artifact SN

**Resistance Unbalance Artifact SN** 

3386276

3386085

#### **Resistance imbalance**

	Measured	Expected	Limit	
Resistance on pair 12	0.23	0.00	0.80	Pass
Resistance on pair 36	25.07	24.90	0.90	Pass
Resistance on pair 45	12.27	12.13	0.90	Pass
Resistance on pair 78	24.25	24.05	0.90	Pass
Resistance imbalance on pair 12	0.00	0.00	0.05	Pass
Resistance imbalance on pair 36	0.01	0.00	0.13	Pass
Resistance imbalance on pair 45	0.33	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.

MIL	Not applicable	M_ILFEXT Artifact SN	-
M FEXT	Not applicable	M_ILFEXT Artifact SN	-