

We certify that the instrument below meets or exceeds its published specifications at the points measured and has been calibrated using standards whose accuracies are traceable to national or international accepted standards or have been derived by the ratio type of self-calibration techniques. Measurement uncertainties at the time of calibration are given where applicable and are calculated in accordance with the method described in the Expression of the Uncertainty of Measurement in Calibration (EA-4/02). The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by a coverage factor. the calibration is performed in Met/Cal version 2.1

Identification

Model No.	179
Serial No.	XXXX
Description	Multimeter D
Manufacturer	FLUKE
CMS Asset No. / Customer No.	26080104
Customer	Caltech AB
Address	street
City	Nässjö
Number of Pages	6
Date of Calibration	2025-10-01
Next Recommended Cal. Month	2026-Oct

Calibration Conditions

Environmental temperature	21.50°C
Relative humidity	49.90%RH
Calibrated by	Mats Svensson
Calibration Location	CALTECH AB
Calibration procedure + Ver	Fluke 179: (1 yr) CAL VER /5560
	Revision: 1.2 \$

Summary Calibration Information

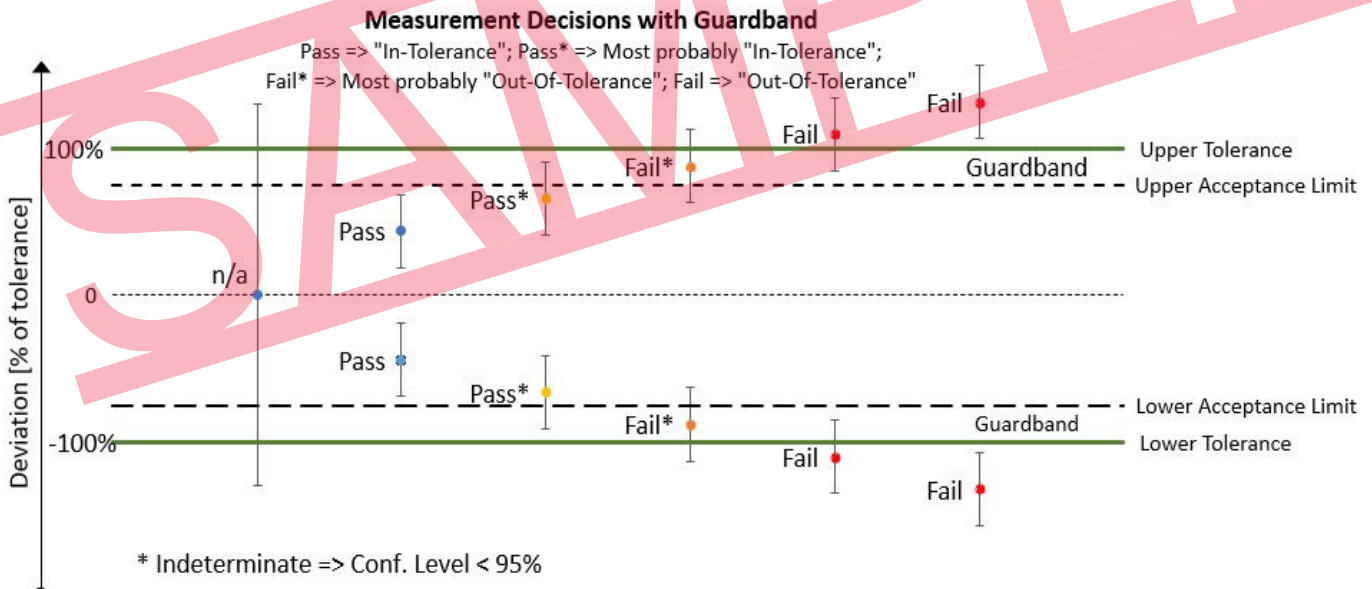
Incoming Status	Pass
Outgoing failed test(s)	0
Outgoing Status	Pass

Notes:

Conformance with Specification

The following pages contain the calibration results with two further columns indicating the instrument performance relative to the stated specifications. To determine conformance with specification the "ILAC-G8:09/2019, APPENDIX B, Example 2" guideline was used as a reference. The column headed '% of Tol' is the measured error as percentage of the stated limits with no allowance being made for the calibration uncertainty. The column headed 'Status' indicates conformance or otherwise with specification, taking the measurement uncertainty into account, if available. When no expanded uncertainty is calculated, the status is limited to Pass or Fail and are solely based on the measurement result itself. The possible conditions are indicated as follows:

Indicator	Explanation
Pass	Pass, the equipment conforms with the stated specification at the measured points, due allowance having been made for the uncertainty of the measurements.
Pass*	Pass indeterminate, the measurement result is within the specification limit by a margin less than the measurement uncertainty; it is therefore not possible to state conformance based on the stated level of confidence. However, the results indicate that conformance is more probable than non-conformance with the specification limit.
Fail*	Fail indeterminate, the measurement result is outside the specification limit by a margin less than the measurement uncertainty; it is therefore not possible to state non-conformance based on the stated level of confidence. However, the results indicate that non-conformance is more probable than conformance with the specification limit.
Fail	Fail, the equipment does not conform with the stated specification at the measured points, due allowance having been made for the uncertainty of the measurements.
n/a	It is not possible to determine conformance with specification.



The calibration status at the top of each results page of this certificate shall 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

Based on the chosen guard banding strategy (if applicable) it is possible that one or more tests only conditionally passed (Pass* or conditionally failed (Fail* . For a complete status overview of all tests performed, please review the Summary Report(s) at the end of each result set (As Found, As Left or Found / Left. The calibration interval (due date is the responsibility of the end user).

Standards and test-equipment used for this calibration

Manufacturer Model Description	Asset No.	Due Date
FLUKE / 5560A/SC1100 / Multifunktionskalibrator	1249202	2029-02-10

SAMPLE

Calibration procedure: Fluke 179: (1 yr) CAL VER
/5560 Rev:

Found/Left

Test Description	Supplied Value	Measured Value	Error	Unc	Spec	Status
AC VOLTS						
600 mV Range						
	300,00 mV	300,1 mV	0,10 mV		0,003301 V	Pass
6 V Range						
	5,0000 V	4,997 V	-0,0030 V		0,05297 V	Pass
	5,0000 V	4,958 V	-0,0420 V		0,10216 V	Pass
60 V Range						
	50,000 V	49,96 V	-0,040 V		0,5296 V	Pass
	50,000 V	50,08 V	0,080 V		1,0316 V	Pass
600 V Range						
	300,00 V	300,0 V	0,00 V		3,30 V	Pass
	500,00 V	500,7 V	0,70 V		5,307 V	Pass
	500,00 V	500,7 V	0,70 V		10,314 V	Pass
1000 V Range						
	1000,0 V	997 V	-3,0 V		12,97 V	Pass
AC VOLTS FREQUENCY						
	45,000 Hz	45,00 Hz	0,000 Hz		0,055 Hz	Pass
	50,000 kHz	50,00 kHz	0,000 kHz		60 Hz	Pass
DC VOLTAGE						
6 V Range						
	5,0000 V	5,000 V	0,0000 V		0,0065 V	Pass
600 V Range						
	300,00 V	300,0 V	0,00 V		0,47 V	Pass
1000 V Range						
	1000,0 V	1000 V	0,0 V		3,5 V	Pass
	-1000,0 V	-1000 V	0,0 V		3,5 V	Pass
DC VOLTS FREQUENCY						
	45,000 Hz	45,00 Hz	0,000 Hz		0,055 Hz	Pass
	50,000 kHz	50,00 kHz	0,000 kHz		60 Hz	Pass
DC MILLIVOLTS						
	30,00 mV	30,0 mV	0,00 mV		0,000227 V	Pass
	-300,00 mV	-299,9 mV	0,10 mV		0,00046991 V	Pass
	600,00 mV	599,9 mV	-0,10 mV		0,00073991 V	Pass
TEMPERATURE						
	0,00 °C	1,0 °C	1,00 °C		1,01 °C	Pass

Test Description	Supplied Value	Measured Value	Error	Unc	Spec	Status
	-40,00 °C	-39,0 °C	1,00 °C		1,39 °C	Pass
	400,00 °C	400,7 °C	0,70 °C		5,007 °C	Pass
OHMS						
600 Ohm Range	19,00 Ohm	19,0 Ohm	0,00 Ohm		0,371 Ohm	Pass
50 MOhm Range	19,000 MOhm	19,00 MOhm	0,000 MOhm		315000 Ohm	Pass
CAPACITANCE						
1000 nF Range	900,0 nF	900 nF	0,0 nF		0,0000000128 F	Pass
CONTINUITY						
0 Ohms: Beeper On						Pass
190 Ohms: Beeper Off						Pass
DIODE TEST						
	2,0000 V	1,999 V	-0,0010 V		0,02199 V	Pass
AC MILLIAMPS						
60 mA Range	3,000 mA	3,02 mA	0,020 mA		0,000075 A	Pass
	50,000 mA	49,99 mA	-0,010 mA		0,00077985 A	Pass
400 mA Range	400,00 mA	399,5 mA	-0,50 mA		0,0062925 A	Pass
AC AMPS						
6 A Range	4,0000 A	4,001 A	0,0010 A		0,063015 A	Pass
10A Range	9,000 A	9,00 A	0,000 A		0,165 A	Pass
DC MILLIAMPS						
60 mA Range	3,000 mA	3,01 mA	0,010 mA		0,000060 A	Pass
	50,000 mA	50,00 mA	0,000 mA		0,000530 A	Pass
400 mA Range	-400,00 mA	-400,1 mA	-0,10 mA		0,004301 A	Pass
DC AMPS						

SAMPLE

Test Description	Supplied Value	Measured Value	Error	Unc	Spec	Status
6 A Range						
	4,0000 A	4,001 A	0,0010 A		0,04301 A	Pass
10 A Range						
	-9,000 A	-9,00 A	0,000 A		0,120 A	Pass

*** End of certificate ***

SAMPLE