

# CERTIFICATE OF CALIBRATION

**Issued By** UK Test Instruments Limited

**Date of Issue** 05 January 2017

Certificate Number  
IH335739

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Century Road  
High Carr Business Park  
Newcastle-Under-Lyme  
Staffordshire  
ST5 7UG

Approved Signatory

C Hand     M. Porritt     S Godridge     T Boardman     D Napier

**Customer :** UK Test Instruments Limited  
Unit 3 & 4, Century Road, High Carr Business Park  
Newcastle Under Lyme ST5 7UG

**Date Received :** 05 January 2017

<b>Instrument -</b>	System ID :	SID21179	Job Number :	j719832-1
	Description :	Multimeter	Ref. Number :	ASCL248
	Manufacturer :	Fluke		
	Model Number :	115		
	Serial Number :	21480043	Last Certificate Number :	IH313408
Procedure Version :	V1.0	Last Calibration Date :	01/02/2016	

## Environmental Conditions

Temperature : 20°C +/- 2°C  
Relative Humidity : 40% +/- 20%

Mains Voltage : 240V +/- 10V  
Mains Frequency : 50Hz +/- 1Hz

## Comments

No adjustment was made unless stated.

## Traceability Information

<i>Instrument description</i>	<i>Serial number</i>	<i>Certificate number</i>	<i>Cal. Date</i>	<i>Cal. Period</i>
3050A Precision Multi-Product Calibrator	K1170F13	31689	05/09/2016	52

**Calibrated By :** S Godridge

**Date of Calibration :** 05 January 2017

This certificate provides traceability of measurement to recognised National Standards, and to the units of measurement realised at the National Physical Laboratory or other recognised National Standards laboratories.

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Test Title	Tolerance	Applied Value	Reading	Pass/Fail
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## General Operation Tests

General Condition	---	---	Pass
Continuity Bleeper	---	---	Pass
Diode Test	---	---	Pass
LCD Display	---	---	Pass

## D.C. Voltage Measurements

### D.C. Millivolts (0 - 600mV)

600mV D.C. Range	1.7mV	300.0mV	299.8mV	Pass
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### D.C. Volts (0 - 600V)

6V D.C. Range	27mV	5.000V	4.998V	Pass
60V D.C. Range	270mV	50.00V	49.98V	Pass
600V D.C. Range	1.7V	300.0V	299.9V	Pass
600V D.C. Range	3.2V	600.0V	599.8V	Pass

## A.C. Voltage Measurements @ 50Hz

### A.C. Volts (0 - 600V)

6V A.C. Range	53mV	5.000V	5.000V	Pass
60V A.C. Range	530mV	50.00V	50.02V	Pass
600V A.C. Range	3.3V	300.0V	299.9V	Pass
600V A.C. Range	6.3V	600.0V	600.0V	Pass

### A.C. Millivolts (0 - 600mV)

600mV A.C. Range	3.3mV	300.0mV	299.8mV	Pass
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## D.C. Current Measurements

6A D.C. Range	63mA	6.000A	5.992A	Pass
10A D.C. Range	130mA	10.00A	9.98A	Pass

## A.C. Current Measurements @ 50Hz

6A A.C. Range	93mA	6.000A	5.992A	Pass
10A A.C. Range	180mA	10.00A	9.99A	Pass

## Uncertainties

D.C. Voltage	0 to 1000V: 0.002% ± 1digit
A.C. Voltage	0 to 1000V: 0.01% ± 1digit
D.C. Current	0 to 10A: 0.008% ± 1digit
A.C. Current	0 to 10A: 0.02% ± 2digit
Resistance	0 to 10MR 0.005% ± 1digit: 10MR to 1GR 0.4% ± 1 digit
Capacitance	10pF to 10000uF 0.1% ±1.5pF ± 1 digit
Frequency	0.1ppM ± 1digit

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Test Title	Tolerance	Applied Value	Reading	Pass/Fail
<b>Resistance Measurements</b>				
600Ω Range	1.1Ω	100.2Ω	100.3Ω	Pass
6kΩ Range	10Ω	1.000kΩ	1.000kΩ	Pass
60kΩ Range	100Ω	10.00kΩ	10.00kΩ	Pass
600kΩ Range	1kΩ	100.0kΩ	100.0kΩ	Pass
6MΩ Range	10kΩ	1.000MΩ	1.001MΩ	Pass
60MΩ Range	170kΩ	10.00MΩ	10.00MΩ	Pass
<b>Capacitance Measurements</b>				
1000nF Range	2.2nF	9.822nF	10nF	Pass
10uF Range	39nF	1.003uF	1.00uF	Pass
<b>Frequency Measurements</b>				
99.99Hz Range	70mHz	50.00Hz	50.00Hz	Pass
999.9Hz Range	300mHz	100.0Hz	100.0Hz	Pass
9.999kHz Range	3Hz	1.000kHz	1.000kHz	Pass
50kHz Range	30Hz	10.00kHz	10.00kHz	Pass

## Uncertainties

D.C. Voltage	0 to 1000V: 0.002% ± 1digit
A.C. Voltage	0 to 1000V: 0.01% ± 1digit
D.C. Current	0 to 10A: 0.008% ± 1digit
A.C. Current	0 to 10A: 0.02% ± 2digit
Resistance	0 to 10MR 0.005% ± 1digit: 10MR to 1GR 0.4% ± 1 digit
Capacitance	10pF to 10000uF 0.1% ±1.5pF ± 1 digit
Frequency	0.1ppM ± 1digit