

Report of Calibration



Model: 4181	Serial No.: xxxxxx	Customer: xxxxxxxxxx Everett, WA 98203
Description: IR Calibrator		
Received Condition: New	Procedure: C1126 - 0	As Left Condition: In Tolerance

The above referenced instrument was calibrated by direct measurement of generated temperatures using the reference standards listed in the "Test Equipment" section of this report. The calibration was performed radiometrically as described in the technical manual with the emissivity set to 0.95. The IR thermometer used has a spectral response of 8 to 14 µm. Thus, this calibration represents this spectral range only. When in use, the uncertainty of the measurement due to the instrument will be different if the spectral response of the IR thermometer under test is other than 8 to 14 µm. Please refer to the technical manual for further guidance. The status designations Pass/Fail/Marginal have been used to denote tolerance status. The designations Pass/Fail are self explanatory, the designation Marginal is used to denote the condition where the instrument was found in tolerance but with an error that exceeded the guard band for that specification. Guard bands are typically set at 75% to 80% of specification. All known uncertainties have been considered. The uncertainties are shown at a coverage factor of 2 (k = 2). This calibration is traceable to NIST, radiometric techniques, or natural physical constants and is in compliance with ISO 17025:2005 and ANSI/NCSS Z540-1. This calibration report applies only to the item described. It shall not be used to claim product endorsement by NVLAP or any agency of the U.S. Government. Calibration reports without signatures are not valid.

NOTE: In accordance with recommended calibration interval policy as described in Hart Scientific Terms and Conditions of Sale, new instrument Reports of Calibration reflect OEM recommended one year calibration interval.

Test Equipment

Instrument	Model	Serial No.	Recall Date
Precision IR Calibrator Test Equipment			
Precision Digital Thermometer	1560	A6A588	NCR
Precision Digital Thermometer	2562-H	A6A790	07/02/2012
Platinum Resistance Thermometer	5608	10016	01/15/2012
Platinum Resistance Thermometer	APER_RTD	007	01/30/2012
Radiation Thermometer	KT19.82	2574	02/03/2012

Environmental Conditions:
Temperature: 23.4°C
Humidity: 26.0% RH
Calibration Date: 10/04/2011
Calibration Due: 10/04/2012
PO Number: 342930
Report Number: A8130072

Performed by: _____
Roman Loftus

Approved by: _____

Report of Calibration

IR Calibrator Data

Model: 4181

Serial No.:

Report No: A8130072

As Found Data

No As Found Data Required

As Left Data

Data ID: A8026122238500

Radiometric Temperature Accuracy

Operational Settings		Set-point °C	Apparent °C	Error °C	Tolerance °C	Uncertainty °C	Pass/Fail
EMISSIVITY	0.95	35.000	35.063	0.063	±0.350	±0.159	P
		100.000	99.928	-0.072	±0.500	±0.207	P
Calibration Constants		200.000	199.944	-0.056	±0.700	±0.267	P
IR CAL 1	(350.000	350.005	0.005	±1.200	±0.444	P
IR CAL 2	(500.000	499.860	-0.140	±1.600	±0.786	P
IR CAL 3	:						
Control Constants							
TEMP PBAND	:						
TEMP INT	:						
TEMP DER	:						

Note: Data represents 8 to 14 µm spectral band as described in the technical manual.

Declaration of Conformity

Declaration de Conformite CE

EG Bescheinigung der Übereinstimmung

Model: 4181

Type of Equipment: Temperature Calibration Equipment

Manufacturer: _____

Fluke Corporation
Hart Scientific Division
799 E Utah Valley Drive
American Fork, UT 84003-9775
United States of America

Manufacturer's Contact: _____

Fluke Corporation
1420 75th St. SW
Everett, WA 98203

Application of Council Directive(s): 89/336, 73/23, 93/68

Standards to which Conformity is Declared:

EMC: EN 61326-1:2006

Safety: EN 61010-1:2001, EN 61010-2-010:2003

I, the undersigned,
hereby declare that the
equipment specified
above, conforms to the
above standard(s).

Je, soussigné, déclare
que le matériel
mentionné ci-dessus est
conforme aux normes
européennes CEM
89/336/CEE.

Ich erkläre, dass der
obengenannte Produkt
der Richtlinie
89/336/EEC entspricht.

Place: American Fork, Utah, USA

Date: 10/04/2011



(Signature)

Paul V. Olson

(Full Name)

V.P. Engineering

(Position)

