



Certificate of Calibration

Report #: 030403-U3030041 RMA #: 95-34633
Model #: HMP45AC

Calibration Date: 3-04-2003
Serial #: U3030041

Instrument Range: 0 to 100%RH

Calibration Procedure: 11603100
Recommended Calibration Due Date: 3-03-2004

Customer: UNIVERSITY OF CALIFORNIA, BERKELEY
City, State: BERKELRY, CA

This unit was calibrated by adjusting its reading at 0% against dry nitrogen and at 75% against reference humidity and temperature instrument, Vaisala model HMP233. Additional instrument verification checkpoints were made against HMP233 reference at 11%RH and 33%RH. Calibration and instrument verification sequences utilize dry nitrogen and a set of controlled aqueous salt solutions Vaisala model HMK13B. Laboratory ambient conditions are maintained at a temperature of 22 °C ± 1 °C with relative humidity level of 50%RH ± 5%RH. The calibration uncertainty is presented at 95% confidence level, k=2. The calibration uncertainty is ± 0.6%RH.

Calibration Data (As Found)			
Out of Tolerance: No			
Temperature Calibration, °C			
Reference	Unit Under Test	Error	± Tolerance, °C
22.10	22.30	0.20	0.20
Humidity Calibration, %RH			
Reference	Unit Under Test	Error	± Tolerance, %
0.10	0.90	0.80	2.00
11.30	11.40	0.10	2.00
32.60	31.40	-1.20	2.00
75.50	74.70	-0.80	2.00
Calibration Data (As Left)			
Temperature Calibration, °C			
Reference	Unit Under Test	Error	± Tolerance, °C
22.16	22.21	0.05	0.20
Humidity Calibration, %RH			
Reference	Unit Under Test	Error	± Tolerance, %
0.10	0.10	0.00	2.00
11.30	10.94	-0.36	2.00
32.60	31.30	-1.30	2.00
75.50	75.50	0.00	2.00

The results of this calibration are traceable to the National Institute of Standards and Technology through NIST Test Report Number TN267908-03, dated Oct. 22, 2003. Vaisala's calibration system has been established to meet the requirements of ANSI/NCSL Z540-1-1994. This certificate can not be reproduced, except in full, without the expressed written consent of Vaisala. ISO 9002 certified.

Calibration Equipment Used: Workstation 1			
Model	Serial #	Calibrate Date	Due Date
Power Supply	TW14949	11-25-2002	11-25-2004
Fluke 45	6565014	8-16-2002	8-16-2003
HMK13B	T472	9-27-2002	3-27-2003
HMP233	V4210035	2-25-2003	5-25-2003

Ambient Conditions	
Temperature:	22.90 °C
Humidity:	46.70 %RH

Technical Operator
Chang Pyun

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