



SOUTHWEST RESEARCH INSTITUTE™

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Institute Calibration Laboratory
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Certificate of Calibration

Submitted By: DIV20
Address: B189
Contact: CYNTHIA DINWIDDIE
Manufacturer Model: VAISALA HM34C
Description: HUMIDITY/ TEMPERATURE METER
Serial No: X2020010
Asset No: 009456
Procedure: TEMPERATURE/HUMIDITY, MAY/03

Work Order: 444060640
Date Issued: Sep 9, 2004
Calibration Date: Sep 9, 2004
****Calibration Due:** Mar 9, 2005
Calibration Location: Bldg. 64
Environment: Temp. 73.0°F Hum. 40 %RH
***As Found:** IN TOLERANCE
***As Left:** IN TOLERANCE

This certificate documents traceability to the National Institute of Standards and Technology (NIST) and the International System of Units (SI). The Laboratory quality system conforms to ISO/IEC 17025, 1999 and ANSI/NC SL Z540-1-1994 which are equivalent to relevant requirements of the ISO 9000-1994 series of standards. This certificate may not be reproduced, except in full, without the written approval of the Southwest Research Institute Calibration Laboratory. The results of this calibration relate only to the individual instrument described above. This certificate shall not be used to claim product endorsement by the American Association for Laboratory Accreditation (A2LA) or any agency of the U. S. Government.

Uncertainty evaluation includes the item under test and is calculated in accordance with the ISO "Guide to the Expression of Uncertainty in Measurement" (GUM). The uncertainty represents an expanded uncertainty using a coverage factor of k=2 to approximate a 95% confidence level. See Remarks or attached Calibration Report with the same Work Order number for calibration data.

*The client has sole responsibility for determination of in/out of tolerance or compliance/noncompliance. An in/out of tolerance opinion is provided for your convenience based only on the Test Instrument (TI) reading(s) and limits as reported. The reported uncertainty relates only to the results at the time of calibration and does not imply any short or long term stability of the TI.

**Calibration interval is determined by the client and does not assure the instrument will remain within tolerance until this date. Any number of factors may cause the instrument to be out of tolerance before the next calibration date.

Remarks: None

Standards Used

Asset	Manufacturer	Model	Description	Cal Due
006404	THUNDER SCIENTIFIC	2500	HUMIDITY GENERATOR	May 27, 05

Approved by: Walt Hill
Metrology Group Leader
m:\a2la1.rpt Rev date 11, May 04

Measurements by: Bob Trollinger
Metrology Technician

Southwest Research Institute
 Calibration Laboratory
 Calibration Report

Work Order:	444060640	Mfr	Vaisala	Technician	blt
Asset No.	009456	Model	HM34C		
Serial No.	X2020010	Type	Humidity / Temp meter	Cal Date	09-Sep-04

Remarks:
 Temperature test is at 20 Degrees C. per manufacturer. Temperature Spec is rounded up due to resolution

Function/Range	Test Point	TI Reading	Difference	+/-Limit	+/-Uncertainty	Found/Left
Humidity	%RH	%RH	%RH	%RH	%RH	Result
35	35.0	34.8	-0.2	2	0.51	Pass
50	50.1	49.2	-0.9	2	0.51	Pass
75	75.1	75.1	0.0	2	0.51	Pass
Temperature	Deg. C	Deg. C	Deg. C	Deg. C	Deg. C	
50% RH	20.3	20.2	-0.1	0.6	0.15	Pass

END OF REPORT