Banner Humidity Sensor Calibration Statement

Method of Calibration

This is to certify that Banner humidity sensors are carefully manufactured in accordance with a quality management system. Each sensor is individually calibrated and tested for accuracy using dedicated equipment.

Sensors are calibrated in a humidity and temperature-controlled chamber and verified at multiple humidity checkpoints against a Rotronic Hygroclip humidity sensor. Temperature is maintained at a constant 25° C for the duration of the test.

Statement of NIST Traceability

Calibration of Banner humidity sensors is traceable to NIST standards by the following chain. Banner sensors are calibrated in a chamber that receives annual calibration from Thunder Scientific Corporation. Thunder Scientific performs the calibration using laboratory standards either directly traceable to NIST or traceable through intermediate laboratories, as detailed below.

At regular intervals, the entire Banner humidity chamber, sensor, and control system is calibrated by Thunder Scientific Corporation using a Thunder Scientific Model 2500 Two-Pressure Humidity Generator. The generator is calibrated in compliance with ISO/IEC 17025:2005 and ANSI/NCSL Z540-1-1994; Part 1 using applicable Thunder Scientific procedures.

Our chosen calibration provider, Thunder Scientific Corporation, is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP), (NVLAP Lab Code 200582-0). Thunder has established traceability to NIST of their equipment via the following reports:

Physical Quantity	Testing Body	Report Numbers
Pressure	GE Infrastructure Testing	05061816360, 050603-211, and 050602V-300
Temperature	Hart Scientific	A6616078 and A6609051
Humidity	NIST	277620A

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