SOUTHWEST RESEARCH INSTITUTE
CALIBRATION LABORATORY
MEMORANDUM

November 28, 2006

To: DON BANNON DIV20 B57

From: Institute Calibration Laboratory

Subject: Status of Calibration Supplier

Manufacturer/Model: OHIO SEMITRONICS PC5-103D
Description: AC WATT TRANSDUCER
Serial Number: 03080277
Asset Number: 010470
Work Order Number: 303071533
Date Calibrated: November 2, 2006
Supplier: CMI, CENTERVILLE GA - A2LA - 800 525-0408
Remarks:

(✓) Supplier is on the Approved Suppliers List (ASL).

( ) Supplier is not on the Approved Suppliers List.

(✓) Calibration is ISO 17025 accredited.

( ) Calibration is not ISO 17025 accredited.

( ) There is no known supplier to meet ISO 17025 accreditation at this time.

Please contact the Institute Calibration Laboratory, extension 5215, if you have any questions about the condition of this equipment or calibration documentation.

Attachment(s) 2

Metrology Service

ACCREDITED
Certificate # 1297.01

Certificate of Calibration

1000214211

Customer Information

Southwest Research Institute
6220 Culebra Rd
San Antonio, TX 78238

PO #: 787060J
Reference #: 07002812
Account #: SO1043
SO #: 60463

Instrument Identification

Instrument Id: **03080277**

Noun: AC Watt Transducer
Serial #: 03080277
Mfr: Ohio Semitronics
Model: PC5-103D
Accuracy: ± 0.5% of Full Scale
Expanded Measurement Uncertainty at K=2: ± 0.1% of Full Scale

Certification Information

Reason For Service: Calibration
Type Of Calibration: Normal
As Found Condition: In Tolerance
As Left Condition: Left As Found
Procedure: Mfr Manual :
Quality Remarks: Calibration complies with ISO/IEC 17025 & ANSI/NCSL Z540 requirements.

Technician: Scott McLeod
Cal Date: 02 NOV 06
Cal Due: 02 NOV 07
Temperature: 24.0 °C
Humidity: 42.0 %

This instrument has been calibrated using standards with accuracies traceable to the National Institute of Standards and Technology, derived from natural physical constants, derived from ratio measurements, or compared to consensus standards.

Reported uncertainties and/or "test uncertainty ratios" (TUR's) are expressed as expanded uncertainty values at approximately the 95% confidence level using a coverage factor of K=2. A TUR of 4:1 is routinely observed unless otherwise noted on the Certificate. Statements of compliance, where applicable, are based on test results falling within specified limits with no reduction by the uncertainty of the measurement.

Certified Measurements, Inc.'s Quality System complies with the applicable requirements of ANSI/NCSL Z540-1 and ISO/IEC 17025.

The results contained herein relate only to the item calibrated. Calibration due dates appearing on the Certificate of Calibration and label are determined by the client for administrative purposes and do not imply continued conformance to specification.

Deborah J. Nazimiec, Technical Manager

Robert S. Lamb, President

CERTIFIED MEASUREMENTS, INC.
Raising the Calibration Standard...

510 North Houston Lake Blvd.
Centerville, Georgia 31028
Tel: 478.953.5171
Fax: 478.953.2688

Metrology Service

Certificate of Calibration

1000214211

✓In Tolerance ✗Out of Tolerance

Calibration Data

Range	Nominal	As Found		As Left		Min	Max
Watt transducer, output in volts dc							
20 W	2.00	2.002	✓	Left as Found	■	1.95	2.05
40 W	4.00	3.993	✓	Left as Found	■	3.95	4.05
60 W	6.00	5.997	✓	Left as Found	■	5.95	6.05
80 W	8.00	8.005	✓	Left as Found	■	7.95	8.05
100 W	10.00	10.012	✓	Left as Found	■	9.95	10.05

End of Datasheet

Calibration Standards

NIST Traceable #	Instrument ID#	Description	Model	Calibration Date	Date Due
1000206177	22956	Calibrator	811A	15 JUN 2006	30 JUN 2008
1000212690	27504	Multimeter	1271	10 OCT 2006	30 APR 2007

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