

THE EPPLEY LABORATORY, INC.

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Calibration Certificate

Instrument:

Precision Spectral Pyranometer, Model PSP, Serial Number 29099F3

Procedure:

This pyranometer was compared in Eppley's Integrating Hemisphere according to procedures described in ISO 9847 Section 5.3.1 and Technical Procedure, TP01 of

The Eppley Laboratory, Inc.'s Quality Assurance Manual on Calibrations.

Transfer Standard: Eppley Precision Spectral Pyranometer, Model PSP, Serial Number 21231F3

Results:

Sensitivity:

 $S = 8.03 \, \mu V / Wm^{-2}$

Uncertainty:

 $U_{95} = \pm 0.91\%$ (95% confidence level, k=2)

Resistance:

694 Ω at 23°C

Date of Test:

July 10, 2014

Traceability:

This calibration is traceable to the World Radiation Reference (WRR) through comparisons with Eppley's AHF standard self-calibrating cavity pyrheliometers which participated in the Eleventh International Pyrheliometric Comparisons (IPC XI) at Davos, Switzerland in September-October 2010. Unless otherwise stated in the remarks section below or on the Sales Order, the results of this calibration are

"AS FOUND / AS LEFT".

Due Date:

Eppley recommends a minimum calibration cycle of five (5) years but encourages

annual calibrations for highest measurement accuracy.

Customer:

Oregon State University

Corvallis, OR

Signatures:

Reviewed by:

Eppley SO:

64147

Date of Certificate: July 15, 2014

Remarks:

Sensitivity before Retrofit = $8.10 \mu V / Wm^{-2}$