Calibration Report: Pyranometer

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Calibration date: 2014 July 26.
Next calibration: 2016 July 26.
Application period 2014 July 01 through 2016 July 01.
Reference standard: AHF-31041

Several radiometers were calibrated at the NASA Langley Chemistry and Physics Atmospheric Boundary Layer Experiment (CAPABLE) site The results of these Calibrations are included in this box. Calibration history is available on request. The sensitivity factors and their associated uncertainties (95%) are as follows:

Sensor	S ($\mu V/(W/m^2)$) ± U95%			Method
CM22-040100	9.10	±	2.14%	shade/unshade
CM31-000507	10.83	±	1.07%	shade/unshade

Application

$$I = (\mu V \text{ output})/S \pm \text{sqrt}(2)*U95\%$$

Where: I = the irradiance measured by the pyranometer
(μV output) = microvolt output of the pyranometer
S = calibration coefficient of the pyranometer
U95% = the 95 % confidence level

A more complete discussion is available on request in the following document.
Pyranometer_calibration_20140730_private.doc