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CERTIFICATE OF CALIBRATION

Instrument type:	NR Lite
Serial number:	990352
Reference sensor	FT006
Sensitivity:	14.2 $\mu\text{V}/\text{W}/\text{m}^2$
Date:	10-Oct-2002
Performed by:	G.Lindner

This NR Lite is calibrated against the reference NR Lite by exact interchange in a horizontal parallel beam of light from a Xenonlamp. Full collimation angle of beam is 1.0° . Irradiance is approx. $500 \text{ W}/\text{m}^2$.

Traceability goes back to Davos, World Radiation Center.

The reference NR Lite FT006 has been compared on August 23, 2000, against a pyrhelometer CH1sn980174 with the sun's beam as source during clear sky conditions. The "transfer" CH1sn980174 was calibrated against the reference CH1sn940068, which on his turn was calibrated in Davos against the World Standard Group in summer and autumn 1999.

The reference NR Lite and CH1sn980174 were placed side by side on a tracking platform. The reference NR Lite was built in a box with collimation tube, so having a pyrhelometer's field of view.

During the calibration the instruments received irradiances from $800 - 830 \text{ W}/\text{m}^2$. The instrument temperatures were approx. 20°C .

In the calibration period from 11:50 to 12:40 (civil time, summertime) the airmass ranged from 1.44 to 1.35.

The sensitivity is determined by shading and unshading the NR Lite several times during periods of 2 min and taking into account the "zero-offset" of the NR Lite. Six sensitivities of the reference NR Lite ranged from 13.19 to 13.28 with a mean of $13.24 \mu\text{V}/\text{W}/\text{m}^2$.