

WHAT IS CALIBRATION?

Calibration is the reliable and reproducible determination and documentation of a measurement value deviation in comparison to a standard. If the used standard is traceable and the deviation and the measurement uncertainty is determined, the procedure is a traceable calibration. The traceable standard is conducted to the definition of the SI units by an uninterrupted calibration chain.

HOW DOES A CALIBRATION LABORATORY WORK?

A calibration laboratory ensures the performance of examinations and calibrations on good practice under controlled conditions. Therefore the allocation of qualified personnel, appropriate measurement instrumentation and necessary infrastructure is required. Doing UV calibration, different interplays of sources, reference sources, spectrometers, radiometers and reference radiometers are to be analyzed.

OUR SERVICES

The UV calibration work at sglux determines the spectral responsivity of UV irradiance sensors, integral irradiance sensitivity of UV irradiance sensors, spectral emission spectrum of UV sources and transmission. We have done this service since 2010 according to guidance DAkkS-DKD-MB-3, and our calibration laboratory is ISO 9001 certified. Following our goal of continuous improvement, we have since 2010 cooperated with the German PTB (Department of Photometry and Applied Radiometry) in several R&D projects continuing until 2017. For 2018 we seek the ability of being accredited according to DIN 17025. Our mission is to deliver detailed property information along the UV measurement components we produce.

CALIBRATION PROCESS

Calibrations are performed after determination of the customer's requirements, the field of application and the specific environmental conditions while using the UV measurement components. Our calibration laboratory uses different traceable transfer standards for the determination of the spectral responsivity and the integral irradiance sensitivity of sensors at different UV sources. The typical delivery time for a calibration is two weeks after clarification of technical details and, if necessary, the consignment of detectors or emitters.

CALIBRATION 1

Determination of the absolute spectral responsivity of sglux sensors incl. calibration certificate according to guidance DAkkS-DKD-MB-3 and DIN/ISO 17025.

CALIBRATION 2

Irradiance calibration of an sglux UV sensor for measurements at a specific UV source incl. calibration certificate according to DAkkS-DKD-MB-3 and DIN/ISO 17025.