Press Release

UVC calibration standards with accredited test procedure

Instrument Systems test lab develops traceable UV A/B/C reference sources for the calibration and testing of UV measuring equipment.

Munich, August 2021 – *Instrument Systems has been accredited for tests in the field of lighting technology to DIN EN ISO / IEC 17025 since 2009 and is now offering accredited testing of radiant flux and luminous flux with the "Goniospectroradiometry of optical radiation sources" procedure. This procedure has enabled the development of UVC-LED reference sources with traceable reference values of maximum precision for radiant flux and irradiance. These reference sources are used for monitoring and calibrating UV measuring equipment, e.g. the ISP-PTFE series.*

The accreditation of test labs is extremely important for photometry customers. With it they receive the assurance that their measuring equipment delivers reliable and traceable results. At the same time, the accredited testing of the measuring instruments often used in production guarantees the high quality of the final products and instills a high level of confidence in the final customer. Instrument Systems therefore maintains a test lab accredited to DIN EN ISO / IEC 17025 that offers traceable tests of all relevant photometric and radiometric measurands from UV to the NIR range with numerous measuring procedures and is flexibly and securely positioned for the future.

The highly experienced lighting technology engineers at Instrument Systems developed a test procedure that is conformant with standard CIE 239:2020 and accredited for the production of high-precision UV-LED reference sources. The traceable reference values for radiant flux are determined by the measurement of UV-LED sources with a goniospectroradiometer consisting of a high-precision goniometer of the LGS series and a CAS spectrometer – likewise traceably tested by the test lab – with an irradiance optical probe. Extremely low extended measurement uncertainties (k=2) of reference values of only 4.5% (UVC), 3.5% (UVB) and 2% (UVA) can be achieved with this combination. Details of the procedure have been published in several trade magazines: LpS Digital Conference Proceedings 2021 (EN), ELEKTRONIKPRAXIS 11/2021 (DE), LEDs Magazine, September 2020 (EN).

www.instrumentsystems.com

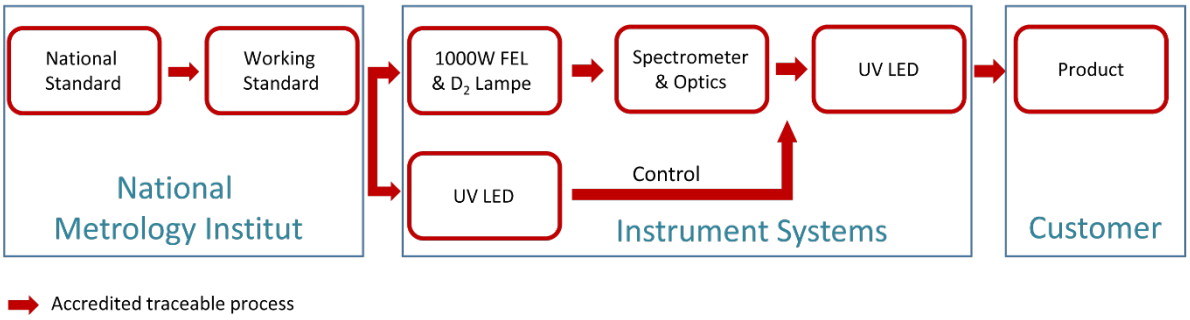

Figure: Metrological traceability at Instrument Systems.

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Company portrait of Instrument Systems GmbH
Instrument Systems GmbH, founded in Munich in 1986, develops, manufactures and markets all-in-one solutions for light measurement applications. Its core products are array spectrometers and imaging colorimeters. The company's main fields of activity are LED/SSL and display metrology, spectral radiometry and photometry, as well as laser/VCSEL characterization where today Instrument Systems is one of the world's leading manufacturers. The Optronik line of products for the automotive industry and traffic technology is developed and marketed at its Berlin facility. Instrument Systems has been a wholly-owned subsidiary of the Konica Minolta Group since 2012.

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