

Deutsche Akkreditierungsstelle

Annex to the Accreditation Certificate D-PL-19052-01-00 according to DIN EN ISO/IEC 17025:2018

Valid from: 21.10.2022

Date of issue: 26.10.2022

Holder of accreditation certificate:

Instrument Systems GmbH

with its testing laboratory

Instrument Systems GmbH

Kastenbauerstraße 2, 81677 München

Kaiserin-Augusta-Allee 16-24, 10533 Berlin

The testing laboratory meets the minimal requirements of DIN EN ISO/IEC 17025:2018 and, if applicable, additional legal and normative requirements, including those in relevant sectoral schemes, in order to carry out the conformity assessment activities listed below.

The management system requirements of DIN EN ISO/IEC 17025 are written in the language relevant to the operations of testing laboratories and confirm generally with the principles of DIN EN ISO 9001.

Tests in the fields:

Lighting Technology

The testing laboratory is permitted, without being required to inform and obtain prior approval from DAkkS, to use standards or equivalent testing methods listed here with different issue dates.

The testing laboratory maintains a current list of all testing methods within the flexible scope of accreditation.

This certificate annex is only valid together with the written accreditation certificate and reflects the status as indicated by the date of issue. The current status of any given scope of accreditation can be found in the directory of accredited bodies maintained by Deutsche Akkreditierungsstelle GmbH at <https://www.dakks.de>.

Abbreviations used: see last page

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This document is a translation. The definitive version is the original German annex to the accreditation certificate.

**On site *) testing on DMS Display-measurement-systems and photometers of the company
Instrument Systems GmbH**

Location München

Department	Standard/Inhouse Procedure Issue Date/Version	Title of Standard or Inhouse Procedure	Test Range / Restrictions to the test procedure
Lighting Technology	CIE 63:1984	The spectroradiometric measurement of light sources	- spectral irradiance in the wavelength range of 200 nm to 2500 nm - luminous flux, partial luminous flux and spectral radiant flux in the wavelength range from 350 nm to 1100 nm Also on-site testing*) - luminance and spectral radiance in the wavelength range from 350 nm to 1100 nm
Lighting Technology	ISO 23539:2005	Photometry - The CIE System of Physical Photometry	- luminous flux and spectral radiant flux in the wavelength range from 350 nm to 1100 nm Also on-site testing*) - luminance and spectral radiance in the wavelength range from 350 nm to 1100 nm
	CIE S 010:2004		
Lighting Technology	DIN 5032-1:1999	Photometry – Part 1: Methods of measurement	Also on-site testing*) - luminance and spectral radiance in the wavelength range from 350 nm to 1100 nm

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Department	Standard/Inhouse Procedure Issue Date/Version	Title of Standard or Inhouse Procedure	Test Range / Restrictions to the test procedure
Lighting Technology	DIN EN 13032-1:2012	Light and lighting - Measurement and presentation of photometric data of lamps and luminaires	<ul style="list-style-type: none"> - spectral irradiance in the wavelength range of 200 nm to 2500 nm - luminous flux and spectral radiant flux in the wavelength range from 350 nm to 1100 nm <p>Also on-site testing*)</p> <ul style="list-style-type: none"> - luminance and spectral radiance in the wavelength range from 350 nm to 1100 nm
Lighting Technology	CIE 202:2011	Spectral responsivity measurement of detectors, radiometers and photometers	Testing of the spectral responsivity of photodetectors
Lighting Technology	CIE 84:1989	The measurement of luminous flux	luminous flux
Lighting Technology	CIE 239:2020	Goniospectroradiometry of Optical Radiation Sources	radiant power and luminous flux
Lighting Technology	CIE:127:2007	Measurement of LEDs	- Averaged LED intensity (ILED A and ILED B)
	CIE S025:2015	Test method for LED lamps, LED luminaires and LED modules	- luminous flux and radiant flux of LEDs

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Lighting Technology	ISO 11664-1:2019 DIN EN ISO 11664-1:2020	Colorimetry — Part 1: CIE Standard Colorimetric Observers	Also on-site testing*) Tristimulus values X,Y,Z and derived colorimetric quantities
	CIE S 014-1:2006		
Lighting Technology	ISO 11664-2:2007 DIN EN ISO 11664-2:2011	CIE Standard Illuminants for Colorimetry	Tristimulus values X,Y,Z and derived colorimetric quantities
	CIE S 014-2:2006		
Lighting Technology	ISO 11664-3:2019 DIN EN ISO 11664-3:2020	Colorimetry - Part 3: CIE tristimulus values	Also on-site testing*) Tristimulus values X,Y,Z and derived colorimetric quantities
	CIE S 014-3:2011		
Lighting Technology	ISO/CIE 11664-5:2016 DIN EN ISO 11664-5:2017	Colorimetry — Part 5: CIE 1976 L*u*v* Colour Space and u', v' Uniform Chromaticity Scale Diagram	Also on-site testing*) Tristimulus values X,Y,Z and derived colorimetric quantities

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Location Berlin

Department	Standard/ Inhouse Procedure Issue Date/Version	Title of Standard or Inhouse Procedure	Test Range / Restrictions to the test procedure
Lighting Technology	CIE 63:1984	The spectroradiometric measurement of light sources	Also on-site testing*) - luminance and spectral radiance in the wavelength range from 350 nm to 1100 nm
Lighting Technology	DIN 5032-1:1999	Photometry - Part 1: Methods of measurement	- luminous intensity Also on-site testing*) - illuminance Also on-site testing*) - luminance and spectral radiance in the wavelength range from 350 nm to 1100 nm
Lighting Technology	DIN EN 13032- 1:2012	Light and lighting - Measurement and presentation of photometric data of lamps and luminaires	Also on-site testing*) - illuminance
Lighting Technology	DIN 5032-2:1992	Photometry; operation of electric lamps and measurement of the respective quantities	- luminous intensity Also on-site testing*) - illuminance
Lighting Technology	ISO 23539:2005	Photometry - The CIE System of Physical Photometry	- luminous intensity Also on-site testing*) - illuminance
	CIE S 010:2004		Also on-site testing*) - luminance and spectral radiance in the wavelength range from 350 nm to 1100 nm

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	CIE S 014-1:2006		
Lighting Technology	ISO 11664-2:2007 DIN EN ISO 11664-2:2011	CIE Standard Illuminants for Colorimetry	- illuminance - luminous intensity
	CIE S 014-2:2006		
Lighting Technology	ISO 11664-3:2012 DIN EN ISO 11664-3:2013	Colorimetry - Part 3: CIE tristimulus values	Also on-site testing*) Tristimulus values X,Y,Z and derived colorimetric quantities
	CIE S 014-3:2011		
Lighting Technology	ISO/CIE 11664-5:2016 DIN EN ISO 11664-5:2017	Colorimetry — Part 5: CIE 1976 L*u*v* Colour Space and u', v' Uniform Chromaticity Scale Diagram	Also on-site testing*) Tristimulus values X,Y,Z and derived colorimetric quantities

On site *) testing on DMS Display-measurement-systems and photometers of the company Instrument Systems GmbH.