

Deutsche Akkreditierungsstelle GmbH

Annex to the Accreditation Certificate D-PL-17776-01-00 according to DIN EN ISO/IEC 17025:2005

Period of validity: 27.01.2017 to 26.01.2022

Date of issue: 27.01.2017

Holder of certificate:

Heraeus Noblelight GmbH
Messlabor
Heraeusstraße 12 – 14, 63450 Hanau

Tests in the fields:

Optical measurements (irradiance, radiance, radiant flux), goniometric measurements

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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 standards/equivalent procedures within the flexible scope of accreditation.

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Within the given testing field marked with *), the testing laboratory is permitted, without being required to inform and obtain prior approval from DAkkS, the following:

- 1) the free choice of standard or equivalent testing methods.**
- 2) the modification, development and refinement of testing methods.**

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

flexible scope for the categorie III

Subject area	Standard / internal method / version	Title of the standard or internal procedure (specify deviations from / modifications of standard procedures)	Testing area / restrictions
Photobiological safety			
Optics	IEC 62471:2006	Photobiological safety of lamps and lamp systems	Photobiological safety of lamps
Optics	IEC 62471 2006-07	Photobiological safety of lamps and lamp systems	Photobiological safety of lamps
Optics	IEC/TR 62471-2:2009	Photobiological safety of lamps and lamp systems Part 2: Guidance on manufacturing requirements relating to non-laser optical radiation safety	Photobiological safety of lamps
Optics	DIN EN 14255-1 2005-06	Measurement and assessment of personal exposures to incoherent optical radiation - Part 1: Ultraviolet radiation emitted by artificial sources in the workplace; German version EN 14255-1:2005	Personal exposure to the workplace due to emitted ultraviolet radiation
Optics	DIN EN 14255-2 2006-03	Measurement and assessment of personal exposures to incoherent optical radiation - Part 2: Visible and infrared radiation emitted by artificial sources in the workplace; German version EN 14255-2:2005	Personal exposure to the workplace through visible and infrared radiation
Optics	DIN EN 12198-1 2008-11	Safety of machinery - Assessment and reduction of risks arising from radiation emitted by machinery - Part 1: General principles; German version EN 12198-1:2000+A1:2008	Safety of optical radiation machines
Optics	DIN EN 12198-2 2008-11	Safety of machinery - Assessment and reduction of risks arising from radiation emitted by machinery - Part 2: Radiation emission measurement procedure; German version EN 12198-2:2002+A1:2008	Safety of optical radiation machines
Optics	DIN EN 12198-3 2008-11	Safety of machinery - Assessment and reduction of risks arising from radiation emitted by machinery - Part 3: Reduction of radiation by attenuation or screening; German version EN 12198-3:2002+A1:2008	Excluding section 6.8

Subject area	Standard / internal method/ version	Title of the standard or internal procedure (specify deviations from/ modifications of standard procedures)	Testing area/ restrictions
Irradiance			
Optics	DIN EN 61228 2008-08	Fluorescent ultraviolet lamps used for tanning - Measurement and specification method	Determination of UV radiation from UV lamps
Optics	IEC 61228 2008-01	Fluorescent ultraviolet lamps used for tanning - Measurement and specification method	Determination of UV radiation from UV lamps
Optics	DIN EN 60335-2-27:2014-06 VDE 0700-27:2014-06	Household and similar electrical appliances – Safety - Part 2-27: Particular requirements for appliances for skin exposure to ultraviolet and infrared radiation (IEC 60335-2-27:2009, modified); German version EN 60335-2-27:2013	Limited to radiometric measurement and evaluation
Optics	IEC 60335-2-27:2009-12	Particular requirements of appliances for skin exposure to ultraviolet and infrared radiation.	Limited to radiometric measurement and evaluation
Optics	EN 60335-2-27:2013-12	Household and similar electrical appliances - Safety - Part 2-27: Particular requirements for appliances for skin exposure to ultraviolet and infrared radiation (IEC 60335-2-27:2009, modified)	Limited to radiometric measurement and evaluation

not flexible

Subject area	Standard / internal method/ version	Title of the standard or internal procedure (specify deviations from/ modifications of standard procedures)	Testing area/ restrictions
Optics	CIE 63 1984	The spectroradiometric measurement of light sources	Irradiance, Radiance
Optics	CIE 70 1987	The measurement of absolute luminous intensity distributions	Goniometrie

Subject area	Standard / internal method / version	Title of the standard or internal procedure (specify deviations from / modifications of standard procedures)	Testing area / restrictions
Optics	CIE 84 1989	The measurement of luminous flux	Radiation flux, Goniometrie
Optics	CIE 121 1996	The photometry and goniophotometry of luminaires	Goniometrie
Optics	CIE 127 2007	Measurement of LEDs	Goniometrie

Withdrawn standards (not flexible)

Subject area	Standard / internal method / version	Title of the standard or internal procedure (specify deviations from / modifications of standard procedures)	Testing area / restrictions
Irradiance			
Optics	DIN 5050-1 2010-01	Solariums and domestic sun lamps; measurement methods, type classification, identification	Limited to radiometric measurement and evaluation
Optics	DIN 5050-2 1998-06	Solariums and domestic sun lamps, Part 2: Applications and operation	Limited to radiometric measurement and assessment, treatment plans

House procedure* (flexible scope for the categorie II)

Subject area	Standard / internal method/ version	Title of the standard or internal procedure (specify deviations from/ modifications of standard procedures)	Testing area/ restrictions
Optics	VAML12 2012-02	Measurement radiance	radiance
Optics	AAML DTM 6 Measurement 2013-08	Standard measurement on the DTM, irradiance	irradiance
Optics	AAML DMC 6 Measurement 2016-08	Measurement DMc in general, irradiance	irradiance
Optics	AAML Sphere 6 Measurement 2013-08	Standard measurement in the integrating sphere, radiation flux	radiant flux
Optics	AAML Gonio 6 phot 2013-11	Goniophotometric measurement, goniometry	luminous flux
Optics	AAML Gonio 6 rad 2013-11	Gonioradiometric measurement, goniometry	radiant flux
Optics	AAML Raysphere exam 2016-08	Raysphere exam, irradiance	irradiance
Optics	AAML Roper 6 E external	Irradiance Roper external, irradiance	irradiance
Optics	AAML UVC 6 Measurement 2015-04	Standard measurement at the UVC measuring station, irradiance	irradiance

Type of test	Measurand	Measuring range	Characteristic test procedure
Radio- geometry Photo- spectro- metry	spectral and integral radiation flux	250 - 1100 nm	CIE 84-1989
	spectral and integral luminous flux	380 - 780 nm	CIE 84-1989
	irradiance	200 - 1700 nm	CIE 63-1984; review of sunbeds after DIN EN 60335-2-27
	illuminance	380 - 780 nm	CIE 63-1984; CIE 121-1996
	radiance	200 - 1700 nm	CIE 63-1984
	luminance	380 - 780 nm	CIE 63-1985
Gonio- metrie Exams	luminous flux	380 - 780 nm	Goniometric determination according to CIE 84-1989; CIE 121-1996; standards
	radiant flux	250 - 1100 nm	Goniometric determination according to CIE 84-1989; CIE 121-1996; standards
	Calibration status of spectroradiometer	200-1700 nm	CIE 63-1985; AAML Raysphere exam