

Deutsche Akkreditierungsstelle

Annex to the Partial Accreditation Certificate D-PL-11165-04-01 according to DIN EN ISO/IEC 17025:2018

Valid from: 10.06.2024

Date of issue: 10.06.2024

This annex is a part of the accreditation certificate D-PL-11165-04-00.

Holder of partial accreditation certificate:

**TÜV Rheinland Kraftfahrt GmbH
Am Grauen Stein, 51105 Köln**

with the location

**TÜV Rheinland Kraftfahrt GmbH
Lichttechnisches Labor
Rhinstraße 46, 12681 Berlin**

The testing laboratory meets the requirements of DIN EN ISO/IEC 17025:2018 to carry out the conformity assessment activities listed in this annex. The testing laboratory meets additional legal and normative requirements, if applicable, including those in relevant sectoral schemes, provided that these are explicitly confirmed 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 field of:

Testing of vehicle lighting systems

Within the scope of accreditation marked with *, 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 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

Page 1 of 8

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

Annex to the Partial Accreditation Certificate D-PL-11165-04-01

1. Testing of lighting equipment*

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| <p>UN-R 3 SA 03 2019-10</p> | <p>Uniform provisions concerning the approval of retro-reflecting devices for power-driven vehicles and their trailers</p> <p>Without:</p> <p>Stability of the optical properties of retroreflectors according to Annex 9 (since no test regulations have yet been defined)</p> <p>and</p> <p>Color stability (weathering) according to Annex 11 (since no test regulations have been defined yet)</p> |
| <p>UN-R 4 SA 01 2019-10</p> | <p>Uniform provisions concerning the approval of devices for the illumination of rear registration plates of power-driven vehicles and their trailers</p> |
| <p>UN-R 6 SA 03 2019-10</p> | <p>Uniform provisions concerning the approval of direction indicators for power-driven vehicles and their trailers</p> |
| <p>UN-R 7 SA 03 2019-10</p> | <p>Uniform provisions concerning the approval of front and rear position lamps, stop-lamps and end-outline marker lamps for motor vehicles (with the exception of motorcycles) and their trailers</p> |
| <p>UN-R 19 SA 05 2019-10</p> | <p>Uniform provisions concerning the approval of power-driven vehicle front fog lamps</p> <p>Without:</p> <p>Testing of resistance to atmospheric influences (weathering) according to Annex 6, Section 2.2.1.</p> |
| <p>UN-R 22 SA 06 2021-01</p> | <p>Uniform provisions concerning the approval of protective helmets and their visors for drivers and passengers of motor cycles and mopeds</p> <p>Here:</p> <p>Tests on visors, inner visors and sun visors according to the relevant points in paragraphs 6.15, 6.16, 6.17, 7.8.3, Annex 10, Annex 11 (method (b) only), Annex 15, Annex 16, Annex 18</p> <p>and</p> <p>Colorimetric and photometric tests on reflective parts according to paragraph 6.18.3. and 6.18.4.</p> |
| <p>UN-R 23 SA 01 2019-10</p> | <p>Uniform provisions concerning the approval of reversing and manoeuvring lamps for power-driven vehicles and their trailers</p> |

Valid from: 10.06.2024

Date of issue: 10.06.2024

Annex to the Partial Accreditation Certificate D-PL-11165-04-01

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| <p>UN-R 27 SA 05 2019-10</p> | <p>Uniform provisions concerning the approval of advance warning triangles</p> <p>Without:</p> <ul style="list-style-type: none"> - Wind stability test in accordance with Annex 5, Section 10 - Testing the weather resistance test of the luminance factor and the color of the fluorescent material (weathering) in accordance with Annex 5, Section 12.1. |
| <p>UN-R 37 SA 03 2022-06</p> | <p>Uniform provisions concerning the approval of filament light sources for use in approved lamp units of power-driven vehicles and of their trailers</p> <p>Without:</p> <ul style="list-style-type: none"> - Check the position and dimensions of the luminaires in accordance with paragraph 3.5 |
| <p>UN-R 38 SA 01 2019-10</p> | <p>Uniform provisions concerning the approval of rear fog lamps for power-driven vehicles and their trailers</p> |
| <p>UN-R 45 SA 01 2022-06</p> | <p>Uniform provisions concerning the approval of headlamp cleaners and of power-driven vehicles with regard to headlamp cleaners</p> |
| <p>UN-R 46 SA 05 2022-10</p> | <p>Uniform provisions concerning the approval of devices for indirect vision and of motor vehicles with regard to the installation of these devices</p> <p>Annex 6</p> <p>Test method for determining reflectivity</p> |
| <p>UN-R 48 SA 08 2023-01</p> | <p>Uniform provisions concerning the approval of vehicles with regard to the installation of lighting and light-signalling devices</p> |
| <p>UN-R 50 SA 01 2019-10</p> | <p>Uniform provisions concerning the approval of front position lamps, rear position lamps, stop lamps, direction indicators and rear-registration-plate illuminating devices for vehicles of category L</p> |
| <p>UN-R 65 SA 00 2021-09</p> | <p>Uniform provisions concerning the approval of special warning lamps for power-driven vehicles and their trailers</p> |
| <p>UN-R 69 SA 02 2019-10</p> | <p>Uniform provisions concerning the approval of rear marking plates for slow-moving vehicles (by construction) and their trailers</p> <p>Without:</p> <p>Testing of weather resistance (weathering) according to Annex 8, Section 1.1.</p> |

Valid from: 10.06.2024

Date of issue: 10.06.2024

Annex to the Partial Accreditation Certificate D-PL-11165-04-01

| | |
|--------------------------------------|---|
| <p>UN-R 70 SA 02 2019-10</p> | <p>Uniform provisions concerning the approval of rear marking plates for heavy and long vehicles</p> <p>Without:</p> <p>Testing of weather resistance (weathering) according to Annex 8, Section 1.1.</p> |
| <p>UN-R 77 SA 01 2019-10</p> | <p>Uniform provisions concerning the approval of parking lamps for power-driven vehicles</p> |
| <p>UN-R 81 SA 00 2007-06</p> | <p>Uniform provisions concerning the approval of seats of rear-view mirrors to two-wheeled power-driven vehicles with or without side car, with regard to the mounting of rear-view mirrors on handlebars</p> <p>Appendix 5</p> <p>Test method for determining the degree of reflectance according to paragraph 7.2.4</p> |
| <p>UN-R 87 SA 01 2019-10</p> | <p>Uniform provisions concerning the approval of daytime running lamps for power-driven vehicles</p> |
| <p>UN-R 88 SA 00 2007-06</p> | <p>Uniform provisions concerning the approval of retro-reflective tyres for two-wheeled vehicles</p> |
| <p>UN-R 91 SA 01 2019-10</p> | <p>Uniform provisions concerning the approval of side-marker lamps for motor vehicles and their trailers</p> |
| <p>UN-R 98 SA 02 2021-09</p> | <p>Uniform provisions concerning the approval of motor vehicle headlamps equipped with gas-discharge light sources</p> <p>Without:</p> <p>Appendix 5, Testing resistance to atmospheric influences (weathering), Section 2.2.1.</p> |
| <p>UN-R 99 SA 00 2019-05</p> | <p>Uniform provisions concerning the approval of gas-discharge light sources for use in approved lamps of power-driven vehicles (Annex 4 and 5)</p> <p>Without:</p> <ul style="list-style-type: none"> - Check the position and dimensions of the electrodes, the arc and the shielding strips according to paragraph 3.5 - Ignition, starting and warm start properties according to paragraph 3.6 |

Valid from: 10.06.2024

Date of issue: 10.06.2024

Annex to the Partial Accreditation Certificate D-PL-11165-04-01

| | |
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| <p>UN-R 104 SA 01 2019-10</p> | <p>Uniform provisions concerning the approval of retro-reflective markings for vehicles of category M, N and O</p> <p>Without: Appendix 8, Section 1.1. Testing resistance to weather</p> |
| <p>UN-R 112 SA 02 2020-05</p> | <p>Uniform provisions concerning the approval of motor vehicle headlamps emitting an asymmetrical passing-beam or a driving-beam or both and equipped with filament lamps and/or light-emitting diode (LED) modules</p> <p>Without: Appendix 6, Section 2.2.1. Testing resistance to atmospheric influences (weathering)</p> |
| <p>UN-R 113 SA 03 2021-09</p> | <p>Uniform provisions concerning the approval of motor vehicle headlamps emitting a symmetrical passing beam or a driving beam or both and equipped with filament, gas-discharge light sources or LED modules</p> <p>Without: Appendix 6, Section 2.2.1. Testing resistance to atmospheric influences (weathering)</p> |
| <p>UN-R 119 SA 02 2019-10</p> | <p>Uniform provisions concerning the approval of cornering lamps for power-driven vehicles</p> |
| <p>UN-R 123 SA 02 2021-09</p> | <p>Uniform provisions concerning the approval of adaptive front-lighting systems (AFS) for motor vehicles</p> <p>Without: Appendix 6, Section 2.2.1. Testing resistance to atmospheric influences (weathering)</p> |
| <p>UN-R 128 SA 00 2022-06</p> | <p>Uniform provisions concerning the approval of light emitting diode (LED) light sources for use in approved lamp units on power-driven vehicles and their trailers</p> <p>Here:</p> <ul style="list-style-type: none"> - Testing luminous flux according to paragraph 3.5, appendix 4, paragraph 1 - Color test according to paragraph 3.6, appendix 4, paragraph 3 - Testing UV radiation according to paragraph 3.7 - Testing power consumption according to Annex 4, paragraph 4 |
| <p>UN-R 148 SA 01 2023-01</p> | <p>UN Regulation on uniform provisions concerning the approval of light-signalling devices (lamps) for power-driven vehicles and their trailers</p> |

Valid from: 10.06.2024

Date of issue: 10.06.2024

Annex to the Partial Accreditation Certificate D-PL-11165-04-01

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| UN-R 149 SA 01 2023-01 | UN Regulation on uniform provisions concerning the approval of road illumination devices (lamps) and systems for power-driven vehicles Without: Annex 8, Section 3.2.1 Testing resistance to atmospheric influences (weathering) |
| UN-R 150 SA 01 2023-01 | UN Regulation on uniform provisions concerning the approval of retro-reflective devices and markings for power-driven vehicles and their trailers Without: Appendix 6, Part 6 - Testing resistance to weathering And Appendix 9, Section 5- Wind stability test |
| StVZO TA 6 29.02.1980 | Lightbulbs Without: Check the position and dimensions of the luminaires |
| StVZO TA 7 27.07.1992 | Headlights for high beam and symmetrical low beam |
| StVZO TA 7a 23.02.1994 | Headlight with gas discharge lamp |
| StVZO TA 8 27.07.1992 | Headlights for bicycles with auxiliary motors and mopeds up to and including 50 km/h |
| StVZO TA 8a 29.02.1980 | Reversing lights |
| StVZO TA 9 02.01.1974 | Marker lights |
| StVZO TA 10 02.01.1974 | Lane keeping lights |
| StVZO TA 11 08.12.1983 | Parking lights |
| StVZO TA 12 02.01.1974 | Fog lights |
| StVZO TA 13 27.07.1992 | Beacons for blue and yellow flashing lights (with rotating light) |
| StVZO TA 13a 27.07.1992 | Beacons for blue flashing lights (with only one main beam direction (flashing headlights)) |
| StVZO TA 13b 21.07.2006 | Beacons for red flashing lights Flashing lights (with only one main beam direction (flashing headlights)) |

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Date of issue: 10.06.2024

Annex to the Partial Accreditation Certificate D-PL-11165-04-01

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| StVZO TA 14 27.07.1992 | rear lights |
| StVZO TA 14a 05.11.2003 | Tail lights for motor vehicles and their trailers |
| StVZO TA 14b 05.11.2003 | Tail lights for bicycles and their trailers |
| StVZO TA 14c 05.11.2003 | Marker lights for hospital elevators with a design-related maximum speed of no more than 6 km/h and for bicycle trailers |
| StVZO TA 15 02.01.1974 | Rear fog lights |
| StVZO TA 16 02.01.1974 | Lights to secure protruding loads |
| StVZO TA 16a 23.02.1994 | Portable flashing lights and red and white warning clothing to secure tail lifts |
| StVZO TA 17 02.01.1974 | brake-lights |
| StVZO TA 18 23.02.1994 | Reflector |
| StVZO TA 18a 08.12.1983 | Reflective strips on bicycle tires |
| StVZO TA 18b 27.07.1992 | Park warning signs |
| StVZO TA 19 08.12.1983 | Warning triangles and warning lights Without: Testing the stability of the warning devices in accordance with paragraph (10) |
| StVZO TA 20 27.07.1992 | Additional warning lights |
| StVZO TA 21 27.07.1992 | Direction indicators |
| StVZO TA 22 02.01.1974 | Lighting devices for official license plates |
| StVZO TA 22a 21.07.2006 | Lighting devices for transparent official license plates |

Valid from: 10.06.2024

Date of issue: 10.06.2024

Annex to the Partial Accreditation Certificate D-PL-11165-04-01

| | |
|----------------------------|--|
| StVZO TA 22b 31.01.2021 | Stability of the warning devices Here: - the photometric and colorimetric tests according to paragraphs (5), (6) and (7) - the tests for protection against the ingress of water and solid foreign bodies in accordance with paragraph (13) |
| StVZO TA 23 05.11.2003 | Headlights for bicycles |
| StVZO TA 24 15.11.2003 | Bicycle alternators |

Abbreviations used:

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| DIN | Deutsches Institut für Normung e.V. (German institut for standardisation) |
| EN | European Standard |
| ISO | International Organization for Standardisation |
| IEC | International Electrotechnical Commission |
| UNECE | Economic Commission for Europe of the United Nations |
| StVZO | Road traffic registration regulations (Straßenverkehrs-Zulassungsordnung) |

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