



Bright solutions:

Testing and certification of lamps, luminaires,
light sources and lighting components with TÜV Rheinland

www.tuv.com/light

 **TÜVRheinland**[®]
Precisely Right.

Luminaires, light sources, lighting components - the requirements manufacturers need to consider are as diverse as the products they manufacture. We can help you keep track and demonstrate the compliance and quality of your products. Learn more about our comprehensive services for the testing and certification of luminaires, light sources and lighting components.

Simply convincing: Certifications for safety, quality and international market access

With our test marks, you can communicate with confidence and credibility. Wherever you are in the world, TÜV Rheinland stands for safety and quality from a single source.

Safety & quality

Of course, we offer certifications that enable your products to enter various target markets. However, our service to you goes beyond compliance - below is a selection of certifications you can use to highlight the safety and quality of your lighting products. This can give you a competitive edge in tenders and in the consumer market.

TESTED SAFETY: THE GS MARK

The GS certificate has a high recognition value with consumers on the German and international markets and offers your customers a clear and conclusive decision-making aid. With a GS certification, you can reduce liability risks and gain a competitive advantage.

The issue of a GS mark involves successful product testing, which includes numerous product-specific, national and European directives and regulations. It is also checked whether the instructions for use are correct and complete. The short testing times of GS certification enable you to launch the tested and certified products on the market quickly.



SHOWING COMMITMENT: THE TYPE APPROVED MARK

Voluntary certification of products and components with the type approved mark not only indicates that they meet all relevant safety requirements - the mark also documents their excellent quality.

This makes the mark a valuable decision-making tool for business partners and consumers. Because of its international recognition, the certification also opens up various markets worldwide.



Market approvals worldwide

Certifications are important door openers to new markets worldwide. As a global service provider, we can provide you with professional support in the area of international country approvals.

Below is a selection of our certifications in this area,

Show the world the conformity and high quality of your luminaires, light sources and lighting components:

FOR EUROPE: ENEC 24

ENEC24 is based on the requirements of the European Norms Electrical Certification, which in turn are based on the European Standards applicable to the product. This allows manufacturers to demonstrate that their products actually comply with European requirements. With ENEC, you can secure market access to the EU, EFTA and many Eastern European countries with a single testing and certification procedure.



FOR THE UNITED KINGDOM: UKCA

Brexit has changed many things - including the regulatory framework for placing products on the market in the UK. In order to export lamps, luminaires, light sources or lighting components to the UK, you will need to apply a UKCA mark to your product once the relevant transition period has expired. As a UK Approved Body, TÜV Rheinland can help you with UKCA conformity assessment - so that you can (continue to) successfully market your products in the UK.



FOR USA AND CANADA: cTUVus

The TÜV Rheinland safety mark can be issued for most electronic, electrical, medical and industrial equipment. The cTUVus mark demonstrates compliance with local safety requirements in the U.S. and Canada and gives you access to this lucrative market.



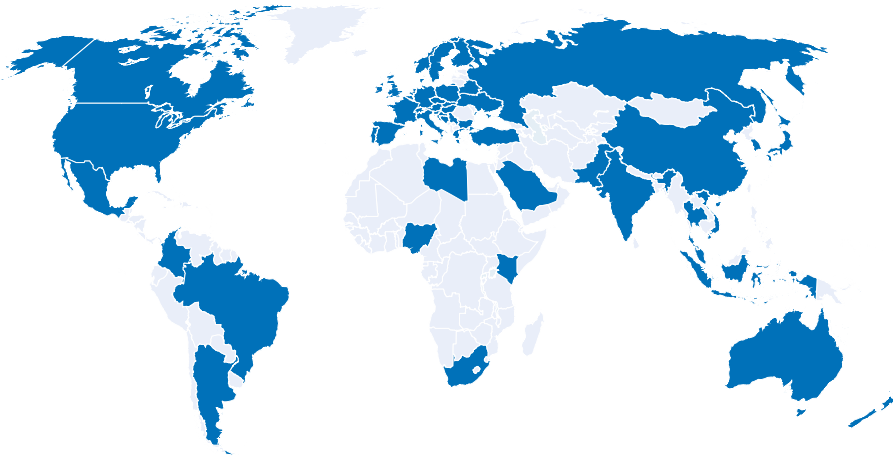
FOR THE UNITED ARAB EMIRATES: UAE CIVIL DEFENSE

TÜV Rheinland LGA Products GmbH is authorized to issue Certificates of Compliance for the product categories „Emergency Lighting“ and „Exit Luminaires and Systems“ for market access in the United Arab Emirates. The required tests are based on the current EN standards.














INTERNATIONAL SUCCESS WITH A SYSTEM: THE CB SCHEME

The [CB scheme](#) is an international system for the mutual recognition of test results and certificates in the field of safety of electrical and electronic components, equipment and products on the basis of a multilateral agreement between participating countries and certification organizations. The procedure makes it easier for manufacturers to market their electrical products internationally: With a CB certificate and the CB test report, test marks can be applied for more quickly in different target markets.



More than 50 countries currently take part in the CB scheme, including Austria, Belarus, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Saudi Arabia, Kenya, South Africa, India, China, South Korea, Singapore, Thailand, Japan, Canada, USA, Mexico and Argentina.

Which certification is the right one for which product category?

| |  LUMINAIRE |  LIGHT SOURCE |  CONTROL GEAR |  EMERGENCY POWER SUPPLY UNIT |  LIGHT COMPONENT |
|--|--|---|---|--|--|
| GS mark (Tested Safety)  | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> * | <input checked="" type="checkbox"/> * | | |
| Type Approved Mark  | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| CoC UAE  | <input checked="" type="checkbox"/> * | | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | |
| ENEC / ENEC +  | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | |
| cTUVus  | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | | |
| CB  | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | | <input checked="" type="checkbox"/> |

* only partially certifiable

A SOLID FOUNDATION: CRITICAL COMPONENT CERTIFICATION

Critical components are the essential parts of a product, such as LED modules, power connectors, or circuit board material. When the final product is tested, the safety of critical components is tested in conjunction with all other components. Therefore, they cannot simply be replaced by comparable products from other manufacturers as part of ongoing certification.

Of course, we can also test and certify your critical components, providing you with a complete one-stop service.

From electrical safety to climate resistance – we test it for you!

SAFETY

We test your lighting products in accordance with the requirements of the EN 61347 series of standards for control gear and the EN 60598 series of standards for luminaires, among others. Product testing covers areas such as mechanical safety, markings, clearance and creepage distances, heating measurement, high voltage and insulation testing.



ECODESIGN REQUIREMENTS

We test your product for these aspects according to current standards and regulations: Energy efficiency class, labeling, lifetime, color rendering index, flicker, stroboscopic effect.



EMC, EMF AND RADIO REQUIREMENTS

To ensure interference-free operation of your product, we test it for electromagnetic requirements in accordance with applicable standards and regulations. Test aspects include interference emission, interference immunity, electromagnetic fields and radio.



ENVIRONMENTAL SIMULATION

Early, application-oriented and comprehensive testing of your products for mechanical and climatic stress provides important insights during the development phase that have a decisive impact on the quality of series products. We test for IP and IK protection, ball impact resistance, vibration resistance, and corrosion resistance to verify durability in demanding environments.



CHEMICAL SAFETY

To avoid adverse effects on the environment or human health, we test your product for chemical aspects in accordance with applicable standards and directives. Our portfolio includes, among others, RoHS, REACH/SVHC and PAH testing.



SMART HOME UND SMART LIGHTING

As technology advances, intelligent lighting systems are finding their way into commercial and residential environments. To seamlessly integrate your smart light into a home automation network, you need to consider the applicable standards of various wireless technologies. Our experts support you with extensive product testing and certification for the latest technologies such as KNX, IP500, Bluetooth, ZigBee and WiFi. Of course, we have others in our portfolio as well.





Sustainable success – with our tests and certifications

Sustainability means, for example, minimizing CO₂ emissions, conserving resources and minimizing the use of finite raw materials. As awareness of sustainability increases, it is also a good sales argument. Our testing services help lighting manufacturers demonstrate their commitment to sustainability.

GREEN PRODUCT MARK

The voluntary Green Product Mark makes the sustainability of your product visible.

Certification is based on a number of criteria, including environmental aspects such as recycled content and product durability, as well as the company's social responsibility.

The Green Product Mark can be issued for various product groups, including:

- Indoor and outdoor lighting
- LED lamps and tubes
- LED electronics
- Lighting electronics



REPAIRABILITY TESTING

By designing products that are easy to repair and therefore last longer, you can make an important contribution to conserving natural resources. We analyze the repairability of your lighting products. With the help of a repair index, you can clearly identify areas for improvement and take further steps towards sustainability.

PRODUCT CARBON FOOTPRINT

How much greenhouse gas is your product responsible for? We look at every step of the life cycle to identify environmental impacts and opportunities for improvement. With Product Carbon Footprint certification, you can build consumer and business partner confidence in the sustainability of your product.

Global success – with our Market Access Services

Different countries, different rules: TÜV Rheinland can help you introduce your products to new markets around the world. Our services include research for regulatory approval, review of the necessary application documents, and testing and certification of your products in accordance with the regulatory requirements of the target market. Our experts are available in more than 500 locations around the world, making it safe and easy for your products to enter international markets.

TÜV Rheinland: the bright choice

As one of the world's leading providers of testing and certification services for electrical products, TÜV Rheinland has been supporting its customers for more than 150 years. We stand for safety, quality and efficiency in the interaction between people, technology and the environment.

Our experts test and certify with comprehensive know-how. In doing so, we always act neutrally and we take into account not only normative and regulatory requirements, but also usage characteristics and the needs of consumers.


We work with you to analyze your needs and goals and support your product development from prototype to market launch.

You benefit from reduced development costs and returns, new target groups, improved customer loyalty, increased sales and faster access to international markets.

We also offer comprehensive services and complete industry solutions with dedicated teams and points of contact.



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