

Putting the spotlight on safety

World-class testing and certification for lights and lighting



The lighting industry has gone through many changes over the years and as the number of LED roll-out projects continues to increase, the market faces new challenges in terms of quality and safety.

Whether your organization specialises in general, automotive, back, signal or medical lighting, the industry continues to change and grow exponentially. It is estimated that by 2020 the general lighting and automotive lighting markets will

be worth 83 and 18 billion EUR respectively. In order to stay competitive, organizations will have to deploy new strategies to help them stand out from the competition and deliver products that are highly efficient and safe to use.

What are the biggest challenges of the lighting industry?

In 2009 the EU announced that all incandescent light bulbs should be phased out, with halogen bulbs to follow by 2016. As a result, many organizations are now investing in large-scale LED projects as these are more energy efficient than their traditional counterparts.

Many businesses also need to do more with less, which means careful planning and spending resources responsibly and intelligently. There is also the ever-increasing need for the development of sustainable lighting practices.

With the significant surge in the production of LED lighting over the past few years, many companies chose to market their products around energy and life. This means the market is flooded with products that are not necessarily meeting quality and safety standards, with no real differentiator to distinguish between brands or outputs. Companies tend to produce their own performance test reports to differentiate themselves from the competition, but these reports are not validated by third parties and value claims are often misleading or unclear. This is a huge concern as around 45% of manufacturing is carried out abroad.

To date, there are no schemes to help customers and consumers choose their products wisely by taking all safety and performance issues into consideration. With a few reported cases of electric shock due to faulty electrical construction or overheating, the safety of several lighting products has been questioned.





BSI: At the forefront of quality and safety testing

Identifying and meeting the legislative requirements for lighting products are not always easy. However, with 50 years' experience in this industry and world-class testing and certification capabilities, we can offer you a one-stop shop for electrical safety and photometrics of lighting products.

Whether you need an individual or integrated solution, our testing facilities are designed to cover lighting products and components, emergency luminaires, street lighting, vehicle mirrors, airfield lighting and portable lamps

What do we test and why?

Safety is and always will be our first concern. We carry out **electrical safety tests on luminaire**s and their respective control gears, as well as lamps to ensure they do not cause harm, fire or overheat when in use.

The **light output from luminaires** is vital as it can affect the safety of the location, as well as atmosphere. Retail outlets in particular understand the value of creating the right, ambient lighting conditions for their customers in-store.

We test **vehicle lights** for their ability to distribute light correctly, safely and evenly to ensure they give off the correct colour and can be seen, but do not blind other road users.

Our sector testing capabilities

Our UKAS accredited photometric, calibration and safety testing facilities carry second generation standard lamps supplied by the National Physical Laboratory to support our calibration service for all types of lighting and colorimetric measuring equipment.

We also do photometric evaluations using two goniophotometers to measure the light output for:

- · vehicle lights and highway furniture
- emergency light fittings and ordinary light type fittings



The value of third party testing and certification

The BSI Kitemark™

The BSI Kitemark is a voluntary, yet distinctive, symbol of quality and trust for a range of gas and electrical products, including cooking, water heating, refrigeration, space heating, leisure and camping. This also includes control and safety devices associated with these appliances. In short, products or services bearing this certification mark show they meet the appropriate standards for quality and safety (these can be British, European, or international standards that are publicly available). These products and services are monitored every year to ensure continued conformance.

The BSI Kitemark has long been considered the UK's premier symbol of product or service quality, bringing real, tangible benefits to license holders:

Today's marketplace develops quickly, so the BSI Kitemark can help manufacturers and suppliers to keep their products at the top of the market and stay ahead of competition. The competitive age we live in also means customers are always looking for differentiators that will help them to choose safe and reliable products. Since the BSI Kitemark has been well recognised for a number of years, it has a big impact on customer decision making.



80% say the BSI Kitemark helped them improve customer satisfaction



75% say the BSI Kitemark certification helped them **attract new customers**



65% say the BSI Kitemark helped increase sales



70% say their processes are **more efficient** with the BSI Kitemark

BS EN 60598 – Luminaire electrical safety

BS EN -61347 – Lamp control gear electrical safety

"67% of consumers are aware of the BSI Kitemark and 60% of them are willing to pay more for a product displaying it."





The value of third party testing and certification

CE marking

The majority of products and appliances sold in the European Union must bear the CE marking – the official sign of compliance to all the relevant EU directives. We offer a comprehensive range of testing and certification services that allow manufacturers to confidently and legally display the CE marking on their products. It's important to keep in mind that the CE marking is a conformity mark, not a quality mark, and should never be interpreted as such

BS EN 12368 – Road traffic signals

BS EN 12966 – Variable message signs

"98% of customers would use BSI testing services again."

Direct testing and other certifications

In addition to the above-mentioned services, BSI also offers:

- ENEC for lighting products to complement the BSI Kitemark or as a stand-alone certification depending on your market requirements.
- A Certificate Board (CB) report and CB certification if your product complies with the requirements of the IEC standard.
- Testing in a vehicle certification accredited photometric laboratory.
- Taiwan vehicle lighting approval.
- AMECA accreditation for US vehicle lighting.

BSI is also a signatory to the CENELEC Certification Agreement.

BS EN 13032-1 – Light and lighting. Measurement and presentation of photometric data of lamps and luminaires. Measurement and file format

ECE Regulations – For road vehicle lighting plus many more

ECE Regulations – For VCA European type approval



We are the business standards company that equips businesses with the right tools and solutions to turn best-practice standards into habits of excellence. With over 3,000 staff worldwide, we help our clients drive performance, manage risk and grow sustainably.

Founded in 1901, we were the world's first National Standards Body. Now over a century later, we're globally recognized as a champion in best practice. We have been and still are responsible for originating many of the world's most commonly used management systems standards and publish nearly 2,700 standards every year. These standards are developed to address the most pressing issues of today, such as clear billing, energy management, disability access, nano-technology and more.

All our standards are underpinned by a collaborative and rigorous approach perfected over decades. We always work closely with industry experts, government bodies, trade associations, businesses of all sizes and consumers to develop standards that drive excellence.

We currently work with over 80,000 clients in 172 countries worldwide to help them adopt and cultivate continuous habits of best practice. We also train all our clients and provide them with practical implementation guidance, as well as a comprehensive suite of compliance tools. And to ensure our clients get the very best service, we're also independently assessed and accredited globally by ANAB (ANSI-ASQ National Accreditation Board) and 26 other accreditation bodies throughout the world, including UKAS (United Kingdom Accreditation Service).

Our reach is global and we play a key role within the International Organization for Standardization (ISO). As one of the founding members, we help make sure international standards developed address today and tomorrow's business and societal needs, while delivering real benefits to an organization and all its stakeholders

To find out how we can help you, contact us today

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