Utilizing the IECEE CB scheme for lighting

Coordinating safety test reports and certificates for product manufacturers to streamline acceptance in the global marketplace
Help ensure better safety, quality and consistency in the lighting market

Navigating the regulatory landscape of global markets outside of North America can add complexity to doing business in the lighting industry. In North America, the UL Mark is the most recognized certification mark, but for the rest of the world, each country or region has its own rules and regulations that dictate not only what requirements may apply to specific products, but also how to demonstrate product compliance.

A key to success is a clear understanding of the specific characteristics of each compliance system and the practical interpretation and implementation of the rules as they apply to your products.

UL Solutions can help manufacturers of lighting products and components with compliance. As a leading issuer of IECEE CB test certificates worldwide and a single-source provider for global market access, we offer services for safety testing, interoperability, energy efficiency, electromagnetic compatibility (EMC) testing, advisory and more.

What is the IECEE CB scheme?

“Operated by the IEC System of Conformity Assessment Schemes for Electrotechnical Equipment and Components (IECEE), the IECEE Certification Body scheme is an international system for mutual acceptance of test reports and certificates dealing with the safety of electrical and electronic components, equipment and products.

It is a multilateral agreement among participating countries and certification organizations, which aims to facilitate trade by promoting harmonization of national standards with International Standards and cooperation among accepted national certification bodies (NCBs) worldwide.”

Source: www.ieee.org
Understanding what is required

One main advantage of the IECEE CB scheme is that it is not country-specific. Knowing national differences ahead of time can be important because mutual acceptance of and testing to a single set of requirements helps reduce the cost of multiple certifications with a single report and test for multiple countries simultaneously. More than 50 countries worldwide participate in the CB scheme.

In addition to the complexity of specifications, changing regulations represent a pain point when planning product launches for market access. Using your target country list and product specifications, we can help you determine which regulations apply, including:

- Mature or new regulatory requirements
- Complete regulations or safety-only requirements
- Self-declared compliance or third-party requirements
- CB report or in-country testing
- In-country representative requirement

Common CB scheme terminology

**CB scheme**: Certification Body scheme
**CBTL**: Certification Body testing laboratory (strictly defined scopes)
**CBTR/TC**: Certified Body test report and test certificate (top-tier IEC report controlled by the CB scheme)
**CTF**: Customer testing facilities
**CTL**: Committee of Testing Laboratories (working groups that steer consistency and decisions)
**IECEE**: International Electrotechnical Committee for Electrical Equipment
**ITR**: Informative test report (second-tier IEC report that may lack accreditation backing)
**NCB**: National Certification Body (responsible for issuing and recognizing CBTLs)
**ODs**: Operational documents (the rules of the CB scheme)
Designing for IEC compliance

Engaging with our experts early in the product design process can help speed your time to market, avoid redesign costs and improve return on investment with shared parts across platforms. The earlier in the design process you can define your markets and products, the easier it will be to determine which products are in scope and which regulations may have country-specific deviations, shared schemes or even no regulations for certain products.

Specific product types also have different IEC requirements, so it’s important to clearly state the specifics of the product(s). For example:

- Is your product a luminaire or a component?
- Is it portable or fixed?
- What lighting technology does your product use — LED or incandescent?
- Is it for commercial or residential use?
- What are its rating specifics?
- Does it contain wireless features?

In short, discussing the markets you plan to enter with a knowledgeable UL Solutions lighting engineer can help you incorporate the necessary testing and compliance plans into your design road map.
Why UL Solutions?

We provide global compliance expertise with the convenience of local service. We have accredited CBs and laboratories throughout North America, Latin America, Europe and Asia, so you can work with our experts close to you.

• We are the leading issuer of LITE CBTCs and a top issuer across all industries.*
• Our recognized laboratories and regulatory expertise offer lighting customers a complete resource.
• Our experts can help you navigate the testing, certification and submission process.
• Online tools like our Global Market Access Configurator, Regulatory Intelligence online knowledge database and Global Compliance Management platform help keep you updated and empower you to keep track of customized information.

*Official IECCE Source: [https://www.ieCEE.org/certification/cbtc-statistics](https://www.ieCEE.org/certification/cbtc-statistics)