Safety. Science. Transformation.™





Your passport for lighting products Global Market Access



Bring safer products to multiple markets



The IECEE CB Scheme is a vast, international arrangement established by the International Electrotechnical Commission (IEC). Its goal is the mutual acceptance of test reports among participating certification organizations located in more than 50 countries around the world in the field of electrical and electronic products and components. UL Solutions, the global safety science leader, is one of the largest and most active CB Scheme members, and we operate with four National Certification Bodies (NCBs) in different countries and over 50 CB Testing Laboratories (CBTLs) to provide local service with global coverage for our customers.

- CB Scheme benefits

The CB Scheme helps product manufacturers and distributors engage in international trade by providing:

- A single point of product testing for safety, energy efficiency and electromagnetic compatibility (EMC) to access global markets
- Wide acceptance of test reports leading to national certification in CB Scheme member countries
- Unilateral acceptance of test reports in many developing countries that are not yet participating in the CB Scheme

Wherever you go we support your journey

Safety and performance

As the most-recognized lighting certifier in the U.S. and an issuer of CB certificates worldwide, UL Solutions provides you with an important differentiator in a crowded market, helping your customers identify high-quality products at a glance. We will also keep you up to date on the latest market requirements based on where you intend to export your products, for example, safety or performance compliant to:

- IEC Standards (IECEE CB Scheme)
- European EN Standards (ENEC/ENEC+)
- U.S. and Canadian national standards (UL Mark for the U.S. and Canada)
- SASO mark (Saudi Standards, Metrology and Quality Organization)
- ECAS/EQM mark (Emirates Conformity Assessment Scheme/ Emirates Quality Mark)
- NOM mark (Norma Oficial Mexicana)
- DLC (DesignLights Consortium®)
- Other applicable national or regional requirements

EMC, wireless and connected testing

We can help you navigate the EMC and wireless requirements mandatory for new products in many countries. Our team of experts also have the resources to conduct pre-compliance tests that could detect and resolve potential design flaws. Moreover, as lighting systems so often incorporate wireless technologies such as Bluetooth®, Wi-Fi, Li-Fi and cellular connectivity (like 5G), testing that assesses the real-life performance and connectivity of products has become more complex.

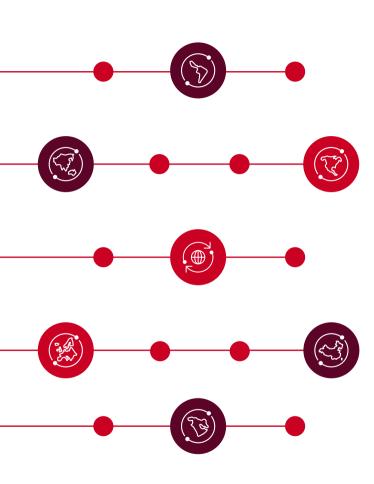
Stay ahead of regulations that are continually evolving and keep pace with rapid advances in technology. The European UL Solutions laboratories have credentials for many Internet of Things (IoT) and wireless standards bodies, such as Bluetooth SIG, Thread Group, Zigbee and DALI Alliance.

Connecting the world

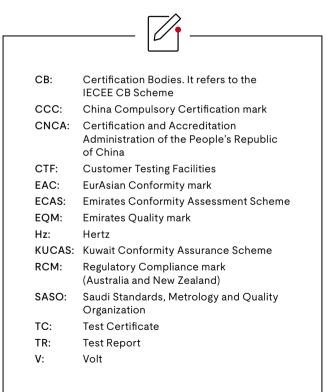
We help engineers, quality managers and compliance professionals deliver safe, smart and efficient lighting products to markets in Europe, North and Latin America, Asia and the Middle East.

The selection of the following regions is based on CB acceptance and / or on the importance of export for the lighting industries.





Technical terminology and abbreviations



Americas



U.S.

General

House voltage	120 V nominal
Tri-phase voltage	Various 120/208/240V
Frequency	60 Hz
Rating label	English
Plug type(s)	A, B*

Electrical safety

Mandatory safety certification	No
Safety mark	UL (voluntary)
CB certificate and test report accepted?	Not accepted
Sample to be shipped for in- country testing/verification	No
EMC	
Mandatory EMC certification	No
Energy efficiency	
Mandatory scheme	No (except in California with Title 20)

Canada

120 V nominal
Various 120/208/240V
60 Hz
English, French for some regions

Α, Β*

No				
cUL (voluntary)	 	 	 	
Not accepted				

No

No

 Energy efficiency

 Mandatory scheme
 No (except in California with Title 20)
 Yes (for certain product types)

Note: General overview only. Subject to change according local authorities updated requirements. Check out our Global Market Access page: ul.com/gma.

* For home. 2 wire parallel blade or 3 wire grounded type. NEMA sockets.

Americas



	Mexico	Argentina	Brazil	Chile	Colombia
General					
House voltage	127 V	220 V	127 V/220 V	220 V	120 V (household)/ 220 V (industrial only)
Tri-phase voltage	480 V	380 V	220 V/380 V, or 220V /440 V	380 V	208 V
Frequency	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz
Rating label language	Spanish	Spanish	Portuguese	Spanish	Spanish
Plug type(s)	А, В	1	Ν	C, L	А, В
Electrical safety					
Mandatory safety certification	Yes	No	No	Yes	Yes
Safety mark required	NOM mark	S-mark	INMETRO mark	SEC	RETILAP
CB certificate and test report accepted?	Not accepted	Accepted*	Accepted**	Not accepted (will accept MRA lab test report)	Accepted (for some lighting products)
Sample to be shipped for in- country testing/verification	No (in specific cases, samples are needed for local testing)	No* (unless scheme 4 or 7 is chosen)	Yes	No	No
EMC					
Mandatory EMC certification	No	No	Yes	No	No
Energy efficiency					
Mandatory scheme	Yes (for certain product types)	Yes	Yes	Yes	Yes
Note: General overview only. Subject to ch requirements. Check out our Global Marke	nange according local authorities et Access page: ul.com/gma	updated	has signed Mutual Recogniti different UL Locations.	CB certificates, scheme 5 for certific ion Agreements for acceptance of ex	

** Energy efficiency standard must be tested in country.

13

Europe



	EU	UK	Ukraine
General			
House voltage	230 V	230 V	220 V
Tri-phase voltage	400 V	400 V	380 V
Frequency	50 Hz	50 Hz	50 Hz
Rating label language	English	English	Ukrainian or English
Plug type(s)	C, F, G depending on country	G	C, F
Electrical safety			
Mandatory safety certification	Yes	Yes	Yes
Safety mark required	CE	UKCA	Ukr SEPRO
CB certificate and test report accepted?	Accepted	Accepted	Accepted
Sample to be shipped for in- country testing/verification	No	No	No
, 0			
EMC			
	Yes, CE	Yes, UKCA	Yes, Ukr SEPRO

Yes, UKCA

Note: General overview only. Subject to change according local authorities updated requirements. Check out our Global Market Access page: ul.com/gma.

Yes, CE

Mandatory scheme

Yes, Ukr SEPRO

$Middle \; East_{-\; by \; the \; Persian \; Gulf}$



	Saudi Arabia	Jordan	UAE	Qatar	Kuwait
General					
House voltage	220 V/230 V	230 V	230 V	240 V	240 V
Tri-phase voltage	380 V/400 V	400 V	400 V	415 V	415 V
Frequency	60 Hz	50 Hz	50 Hz	50 Hz	50 Hz
Rating label language	Arabic or English (warnings must be in Arabic)	Arabic	Arabic o	r English (warnings must b	pe in Arabic)
Plug type(s)	G*	C, D, F, G, J	G	G	G
Electrical safety					
Mandatory safety certification	Yes	Yes	Yes	No	Yes
Safety mark required	SASO IECEE and SABER mark**	CE marking (with third- party test reports)	ECAS or EQM (third party) mark	No	No mandatory mark on the product.***
CB certificate and test report accepted?	Accepted	Accepted	Accepted	Accepted	Accepted
Sample to be shipped for in-country testing/verification	No	No	No	No	No
EMC					
Mandatory EMC certification	No	Yes	No	No	No
Energy efficiency					
Mandatory scheme	Yes	Yes	Yes	No	No

Note: General overview only. Subject to change according local authorities updated requirements. Check out our Global Market Access page: ul.com/gma.

* Complying with SASO 2203/2018.

** SASO IECEE certificate is required.

***KUCAS is required.

Middle East - by the Persian Gulf



	Oman	Bahrain	Israel	Egypt	Lebanon
General					
House voltage	240 V	230 V	230 V	220V	220 V/230 V
Tri-phase voltage	400 V	400 V	400 V	380 V	400 V
Frequency	50 Hz	50 Hz	50 Hz	50 Hz	50 Hz
Rating label language	Arabic or English be in Arabic)	(warnings must	Hebrew or English (warnings must be in Hebrew)	Arabic or English	Arabic, French or English
Plug type(s)	G	G	С, Н, М	C, F	C, D, E, F
Electrical safety					
Mandatory safety certification	No	No	Yes	Yes	No
Safety mark required	No	No	No	No mandatory mark on the product.*	No
CB certificate and test report accepted?	Accepted	Accepted	Accepted	Accepted	Accepted
Sample to be shipped for in- country testing/verification	No	No	Yes	No	No
EMC					
Mandatory EMC certification	No	No	Yes	Yes	No
Energy efficiency					
Mandatory scheme	No	No	Yes***	Yes	Yes

Note: General overview only. Subject to change according local authorities updated requirements. Check out our Global Market Access page: ul.com/gma.

* Pre-shipment certificate of conformity (CoC) is required.

** Product tested by UL does not require in-country testing.

*** Only required for Incandescent bulb and halogen bulb at an output of exceeding 60W



China

General

House voltage	220V	100 V/200 V
Tri-phase voltage	380V	200 V
Frequency	50 Hz	50/60 Hz
Rating label language	Simplified Chinese	Japanese or English
Plug type(s)	A, I	А, В
Electrical safety		
Mandatory safety certification	Yes	Yes
Safety mark required	CCC mark	Diamond PSE certification, Circle PSE self-declaration
CB certificate and test report accepted?	Accepted	Accepted for Diamond PSE, CBTR/TC issued within 3 years, Circle PSE
	Accepted Yes (partial testing)	
accepted? Sample to be shipped for in-		Circle PSE
accepted? Sample to be shipped for in- country testing/verification		Circle PSE
accepted? Sample to be shipped for in- country testing/verification EMC	Yes (partial testing)	Circle PSE No Yes, Diamond PSE certification,

Japan

Note: General overview only. Subject to change according local authorities updated requirements. Check out our Global Market Access page: ul.com/gma.

* EMC compliance is required as a part of the CCC certification.



	South Korea	Singapore	Malaysia
General			
House voltage	220 V	230V	230V
Tri-phase voltage	380 V	400V	400V
Frequency	60 Hz	50 Hz	50 Hz
Rating label language	Korean	English	Bahasa Malaysia or English
Plug type(s)	C, F	C, G, M	C, G, M
Electrical safety			
Mandatory safety certification	Yes	Yes	Yes
Safety mark required	KC Safety	CPSR (Singapore Safety Mark) No, CGSR (supplier self-compliance)	ST COA SIRIM label
CB certificate and test report accepted?	Yes (when the applicable KC standard is harmonized with IEC)	Accepted	Accepted
Sample to be shipped for in- country testing/verification	No (when the applicable KC standard is harmonized with IEC)	No	No
EMC			
Mandatory EMC certification	Yes, KC EMC	No	No
Energy efficiency			
Mandatory scheme	Yes, KC MEPS E-Standby Program	Yes, NEA	Yes

Note: General overview only. Subject to change according local authorities updated

requirements. Check out our Global Market Access page: ul.com/gma.



Philippines

General

House voltage	230V
Tri-phase voltage	400 V/460 V
Frequency	60 Hz
Rating label language	English
Plug type(s)	A, B, C

Electrical safety

Mandatory safety certification	Yes
Safety mark required	PS mark
CB certificate and test report accepted?	Not accepted
Sample to be shipped for in- country testing/verification	Νο
EMC	
Mandatory EMC certification	No
Energy efficiency	
Mandatory scheme	Yes

Vietnam

230V			
400V			
50 Hz	 	 	
Vietnamese	 	 	
A. C. F	 	 	

CR mark	
Not accepted	

Yes

ing/verification		
MC certification	No	Yes
iency		
cheme	Yes	Yes

Note: General overview only. Subject to change according local authorities updated requirements. Check out our Global Market Access page: ul.com/gma.

Oceania



Australia

New Zealand	

General		
House voltage	230 V	230 V
Tri-phase voltage	400 V	400 V
Frequency	50 Hz	50 Hz
Rating label language	English	English
Plug type(s)		1
Electrical safety		
Mandatory safety certification	Yes	Yes
Safety mark required	RCM*	RCM**
CB certificate and test report accepted?	Accepted	Accepted
Sample to be shipped for in- country testing/verification	Νο	No
EMC		
Mandatory EMC certification	Yes	Yes
Energy efficiency		
Mandatory scheme	Yes	Yes

Note: General overview only. Subject to change according local authorities updated requirements. Check out our Global Market Access page: ul.com/gma.

* Product approval marking required for New South Wales (NSW) declared articles.

** Marking only required for high-risk articles as declared by New Zealand.

We facilitate global market readiness

With a complete portfolio of local services

SUSTAINABLE

DEVELOPMENT

UL Solutions is a trusted, single-source provider for the entire lighting supply chain. From the design stage where the design of your product or prototype need to match the applicable requirements right through the point it reaches your customer, we support you in meeting the constantly evolving needs of the lighting marketplace.



UL Solutions is committed to contributing to United Nations'

the consumer IoT industry.

Sustainable Development Goals for

a safer, more sustainable planet.

With innovative offers like UL Solutions Turbo Carbon™ software, you can easily calculate your carbon footprint. If you like to run a successful sustainability program without the guess work, our 360 Sustainability Essentials software provides you the right starting point.

Global Market Access

Simplifying the challenges of expanding into new markets

Reliable testing, inspection and certification means working with a company that has an extensive network of global testing laboratories and relationships with regulatory and customs agencies across the globe to accelerate market access.

Review our Global Market Access Configurator to get an overview of some of the certifications that we can help you obtain.

UL-Certification.com

We offer a variety of Global Market Access knowledge solutions, including customized research project services if you need to:

- Perform comprehensive, in-depth regulatory analysis.
- Develop direct experience with access to foreign countries.
- Adapt products according to local-specific national conditions and requirements.



For general inquiries, please contact us:

In the Americas: LightingInfo@UL.com In Europe: AppliancesLighting.EU@UL.com In GC: GC.LightingSales@UL.com In ANZ: CustomerService.ANZ@UL.com In ASEAN: UL.ASEAN.AHLSales@UL.com In Japan: ULJ.AHL@ul.com In South Korea: Sales.KR@UL.com In MEA: UL.MEA@UL.com In South Asia: Sales.IN@UL.com



Scan the QR code or <u>click here</u> for Global Market Access inquiries and get in touch with us.



UL.com/Lighting

© 2023 UL LLC. All rights reserved.