

FEATURED ARTICLE

UL Meets Cybersecurity Challenge in Europe Head On

The growth and scope of cybersecurity challenges across almost every aspect of modern business in Europe calls for local solutions. To meet this need and support local industry, UL is announcing a cybersecurity forum to be held in conjunction with the grand opening of its new cybersecurity laboratory in Frankfurt.

The cybersecurity forum will bring together a range of industry stakeholders including brand manufacturers, research leaders and political guests. Key sessions will focus on emerging threats in cybersecurity, such as side channel attacks that have become well-known through the Meltdown and Spectre vulnerabilities and management briefings including demos and discussions. In addition to the forum and lab opening events, participants will have the opportunity to network and exchange information.

"It's absolutely imperative that we — as a global independent safety science organization — address the issue of cybersecurity in our modern, connected world," said Ingo M. Rübenach, vice president for UL's central, eastern and southern European regions. "Our goal is to help our clients succeed in managing risks inherent to connected technologies, digitalization and cybersecurity. This lets us help them protect their brand reputation in a global marketplace."

The IECEE (IEC system for Conformity Assessment Schemes for Electrotechnical Equipment and Components) has officially acknowledged UL's status as an issuing and recognizing National Certification Body, whereby our Frankfurt Cybersecurity Lab performs related cybersecurity services for Europe. In addition to IEC 62443-2-4 recognition, UL is the first certification body worldwide to be acknowledged for the

continued on page 3 >

IN THIS ISSUE

Spotlight: Letter From Roberto Inclinati
Page 2

Upcoming UL Education & Training For The Lighting Industry

Page 2

Top 10 Reasons to Buy a UL Goniophotometer Page 3

Laser Diode Lighting: The Potential Future of High-Efficiency Solid-State Illumination

Page 4

Video Section

Page 4

Standards Corner

Page 5

GLOBAL MARKET ACCESS CORNER

Argentina: New Minimum Energy Efficiency
Class for Lamps

Page 6

China: EMC standard update for Lighting
Products _ GB/T 17743-2017 (CCC Mark)
Page 6

Middle East, UAE: Mandatory ECAS Mark Implementation

Page 7

Singapore: New Energy Efficiency Labeling Requirements for Lamps & Ballasts

Page 7

South Korea: Elimination of Period of
Validity of Foreign Test Reports on Electrical
Appliances (KC Mark)

Page 9

Tradeshows

Page 10



Spotlight: Letter From Roberto



A lighting system is the careful composition of luminaries based on an intelligent network that control all the devices with specific control solutions.

Even if these systems can be installed in different environments, they have the same needs, including interoperability with the evaluation of the protocol used, electromagnetic compatibility, the use of an efficient radio spectrum and data protection.

UL's full service portfolio allows us to assist you with testing and certification that complies with the national regulations for the countries where we would export and install your products.

Get in touch with us to learn more about our connectivity services and how we can deliver the certifications you need for your target markets.

Warm Regards,

Roberto Inclinati Global Business Development Manager

Loludi Rolch



Upcoming UL Education & Training for the Lighting Industry

At UL Knowledge Solutions, our goal is to help you develop safe, useful products that meet and exceed your customers' needs. Here you will find dozens of training courses taught by qualified instructors, both Public Workshops and Online elearning Courses.

Online eLearning Courses

Available Anytime, Anywhere

LED Light Source Design Essentials

LED Equipment, UL 8750

Luminaire, UL 1598

To view a COMPLETE list of our public workshops and online courses, please visit **UL.com/lightingtraining**



Top 10 Reasons to Buy a UL Goniophotometer

We know you need more than just a piece of equipment, so we have arranged our business to add value to yours, beyond what other equipment suppliers offer.



We invest in relationships for the long term, not for a single sale. We believe that making a difference in the world starts with making our customers successful. It is not just our equipment but the combination of our service, knowledge and commitment that enables us to deliver solutions that help make you successful.

Below are our top ten reasons to buy a goniophotometer:

1. Fast Delivery

UL ships most orders in just 4 to 6 weeks rather than 6 to 12 months.

2. Robust Warranty

UL offers a comprehensive 2 year, parts and labor warranty with on-site service.

3. UL Manufactures the Products

Some manufacturers use third parties to build their goniophotometers and other lighting equipment. This arrangement can make servicing a challenge. UL's products are designed and manufactured by UL, meaning you know who to call and where to turn with questions or challenges.

4. Unmatched Global Support

Ul's service personnel are knowledgeable not only about the construction and operation intricacies of our products, but also about meeting regulatory requirements. We are committed to assisting our clients with meeting regulatory compliance to access domestic and global markets.

5. Technical Expertise

UL operates respected global photometric

laboratories. The precise equipment used in these laboratories is our own. We manufacture and sell the lighting testing equipment we use every day in our ISO-17025 accredited facilities. Members of UL's technical staff sit on testing procedure committees that write the standards, have participated in ISO-17025 audits and are knowledgeable about photometric testing practices and standards.

6. Hands-on Training

UL technicians typically spend four days training your staff but can stay longer to ensure you are ready to test when we leave. When paired with our step-by-step manuals, UL's goal with this training is to make your staff feel confident in the operation of the goniophotometer.

7. After Warranty Service

UL uses widely recognized instrument brands like Yokogawa, Chroma, Sorensen, Fluke, and Elgar. How does this help?

a. Faster Repair Time - If an instrument fails, it can be repaired quickly. UL works with local service centers to determine the fastest repair options.

continued on page 4 >

(cover story continued)

UL Meets Cybersecurity Challenge in Europe Head On

Industry 4.0 standards IEC 62443-3-3 and IEC 62443-4-1. This means that UL customers can now take advantage of UL's unique, globally recognized cybersecurity testing, advisory and certification services, and take advantage of the most efficient market access in Germany, across Europe and around the globe.

Ul's new cybersecurity facility in Frankfurt offers services to support the connected technologies of today, including the full range of standards-based advisory, testing and certification services. To learn more about Ul's work in advancing cybersecurity, please click here.



(continued)

Top 10 Reasons to Buy a UL Goniophotometer

- b. Familiarity with Calibration Services If your laboratory is pursuing ISO-17025 accreditation, local calibration is much easier.
- c. In-Stock Equipment Most instruments are in stock and typically shipped the next day.

8. Innovation & Customization

UL innovates and customizes to meet new and revised standards and special customer requirements while always pursuing continued improvement.

9. State-of-the-Art System and Software

UL's software package works on a Windows 10, 64-bit computer system and is included with the goniophotometer. LSIGoniophotometer™ controls the goniophotometer and PhotometricSuite™ processes reports, allowing you the freedom to perform these activities separately without interrupting testing.

10. Test Reports Made Simple

PhotometricSuite™ now has Word compatibility which allows you to easily create your own test reports. All the graphs and tables populate into Word easily and quickly.

To learn more, email <u>ULGoni@ul.com</u> or view our video: www.UL.com/lightingvideos

Laser Diode Lighting: The Potential Future of High-Efficiency Solid-State Illumination

For more than a century, incandescent bulbs have been the dominant technology for producing artificial light. Though the efficiency of modern incandescent bulbs has improved, other lighting technologies have been rapidly replacing them in most applications. Fluorescents and CFLs exhibit improvement in efficiency relative to incandescent lighting but, in recent years, have been supplanted by light emitting diode (LED) technologies. This is due to the superior energy efficiency, controllable light spectral output, instanton performance and longevity of LEDs.

Though LED lighting is increasingly dominating lighting applications, it also has shortcomings. Read more by downloading our white paper HERE.

VIDEO SECTION

Strengthening Security in Cyber

With the advent of IoT in connected lighting systems used in residential, commercial and industrial segments, the lighting industry is becoming more connected to suit market needs. This connectivity is driving innovation and with trends increasing exponentially for IoT connected products, the concern around security in these products is something of which manufacturers and vendors are becoming more aware. See how UL is addressing these security concerns and supporting customer innovation in connected lighting systems by visiting: UL.com/cybervideos

ISTA Packaging Testing and More

UL's lab in Allentown, PA has expanded, building upon our core lighting performance business offerings. This includes a wide array of performance testing solutions to service the evolving needs of our clients, including ISTA, IP/IK, Salt Spray/Cyclic Corrosion, Vibration, Thermal Shock and more. See our extended solutions UL can provide by visiting: ul.com/lightingvideos

Standards Corner

Standards information link HERE.

Sign up for "What's New" at HERE by selecting "Join Email List" on the What's New site to receive email notifications twice a month listing the various UL, UL Environment, and ULC Standards documents published during that timeframe.

Standards Update

UL 48 - Electric Signs

Several new proposals were circulated to the STP for preliminary review. One proposal addresses sign constructions employing receptacles providing auxiliary functions separate from the signage application. The other is related to reference standards and requirements for components used in PV signs. The ballot timeframe will be August 24 through October 8, 2018.

UL 153 – Portable Luminaires

A wide-ranging set of 16 proposal topics were balloted in June 2018. All of the proposals reached consensus, and the revisions were published in the standard in July.

UL 1088 – Temporary Lighting Strings

A proposal for an additional exception to the metal lamp guard requirements was circulated for STP ballot closing in April 2018. The proposal did not initially reach consensus but is currently under recirculation in a revised version, with the results due at the end of August.

UL 1598 - Luminaires (Tri-National Standard)

The current revision cycle, which includes 27 proposal topics, is progressing toward completion. Final recirculation of one remaining topic was completed in June 2018. Coordination of final publication by the SDOs is in process and is expected in September.

UL 1993 - Self-Ballasted Lamps and Lamp Adapters

A proposal to add a risk of electric shock re-lamping test to Supplement SC was circulated for STP ballot in June 2018. The proposal reached consensus without comments and was published in the Standard in August.

A series of 20 new proposals are currently under review by the technical harmonization committee in preparation for the revision cycle.

UL 8750 – Light Emitting Diode (LED) Equipment for Use in Lighting Products

A 10-topic proposal ballot closed June 18, 2018, and all topics achieved consensus with comments. The recirculation of responses to comments for topics 1-9 closed August 3, and those topics maintained consensus. Final publication of these changes was completed the week of August 20th. Topic 10 is currently still under resolution of ballot comments and will later be recirculated in CSDS. Link to summary of topics: https://www.shopulstandards.com/ProductDetail.aspx?UniqueKey=34288

Global Market Access Corner:

UL maintains a global presence and a focus on helping customers access markets around the world that matter most to them. With unmatched technical expertise, a worldwide network of CB testing laboratories and localized staff who can offer services and expertise in the local language, we deliver technical assessments and reports that cover the latest editions of applicable international standards.

Our Global Market Access team is prepared to help you achieve compliance with new requirements and works diligently to remain aware of updates and revisions. For more information or to contact our experts, visit our Global Market Access site at ul-certification.com.

Argentina: New Minimum Energy Efficiency Class for Lamps

By: Ariel Amandi - Argentina Regulatory Program Expert

The Argentine Ministry of Energy issued Disposition No. 4/2018, which defines the new minimum energy efficiency (EE) level for lamps to be required starting July 1, 2019.

This EE level corresponds to **Class A** as defined in standards:

- IRAM 62404-1:2014, for halogen lamps
- IRAM 62404-2:2015, for self-ballasted fluorescent lamps, single or double cap.

Starting July 1,2019, less efficient lamps (those with EE Class B, C, D or E) will not be allowed in Argentina.

These products are in the scope of Disposition No. 86/07, which enforces the Energy Efficiency Certification requirements specified in Resolution No. 319/99 for general lighting lamps.

How UL can help

by the local government to act as a Certification Organization for the Argentina Energy Efficiency certification scheme to issue local EE Certificates for these lamps. UL can also work along with local third-party testing laboratories to conduct the evaluation of products.

China: EMC standard update for Lighting Products GB/T 17743-2017 (CCC Mark)

By: Daniel Chen, Greater China Program Manager

The applicable EMC standards for Lighting CCC Approvals, GB/T17743-2017: Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment (IDT CISPR 15:2015), was officially released on December 29, 2017, with an effective date of July 1, 2018. This replaces the previous edition: GB/T 17743-2007.

- 1. Starting from the effective date of July 1, 2018, GB/T 17743-2017 officially started to replace GB/T 17743-2007;
- 2. There are differences between GB/T 17743-2007 and GB/T 17743-2017. There is no deadline for certificates already issued to be updated. The new standard will be used when the following conditions are met:
 - a. New applications with full testing, or
 - b. Modification applications with test items related to the standard differences,
 - 1. EMC tests per GB/T 17743-2017 are required to issue of new certificates.
 - 2. For applications using existing certification results to expand, the applicant may select the certificates directly issued per the old standard (GB/T 17743-2007) or the certificates issued after the tests per the new standard (GB/T17743-2017).
 - 3. The follow-up factory inspections will be conducted according to the standard information indicated on the certificates.

How UL can help

Designated Certification Organizations and Designated Testing Organizations for CCC Scheme, and over 15 years of experience handling CCC agency services, UL provides a one-stop solution for testing and agency services for lighting customers to access the China market.

Global Market Access Corner

Middle East, UAE: Mandatory ECAS Mark Implementation

By: Elena Andreula – EMEA Regulatory Program Expert

The Emirates Authority for Standardization and Metrology (ESMA) has introduced a mandatory implementation of the ECAS mark.

As per ESMA board of Director Decision Number 78 of 2017, all ECAS certified products shall bear the ECAS Mark of Conformity indicating conformity of the products to the UAE Product Certification Scheme.

Exceptions are:

- Perfumes
- Tobacco products
- · Energy drinks
- Products carrying other acceptable marks for the UAE market (for example G-Mark or EQM mark)

Deadline implementation for LVE product category:

- » September 1, 2018 for incoming products (separate label or part of nameplate/main product label)
- » January 1, 2019 for existing in the Market (separate label or part of nameplate/main product label
- » January 1, 2020 for all products, incoming and existing (part of nameplate/main product label, no ECAS logo printed as separate adhesive label permitted)

After obtaining the Certificate of Conformity (CoC), the ECAS Mark of Conformity will be transferred electronically by Notified Bodies to companies after the signing of the usage policy for the ECAS Mark of Conformity.Copies of label artwork should be stamped by Notified Bodies with the corresponding CoC number for traceability.

The mark shall be placed conspicuously at the front of the product or at the bottom left away from other marks.



(NB-000x)

For more information on the Regulated Products List, please visit the ESMA website or contact our experts.

How UL can help

UL is an approved body to issue the UAE's Conformity Assessment Scheme (ECAS) with ESMA, and can assess your products for compliance with both ECAS and the Emirates Quality Mark (EQM) Certification Scheme.

These updates are for information purposes only and are not intended to convey legal or other professional advice.

Singapore: New Energy Efficiency Labeling Requirements for Lamps & Ballasts

By: Chian Haw YONG, ASEAN Global Market Access Lead

Singapore National Environmental Agency (NEA) announced the following new requirements:

1) Raise MEPS for non-directional incandescent lamps (25-200W)

Current MEPS	MEPS effective 1 Aug 2019
$P = 0.8 \times (0.88 \sqrt{$+0.049$})$	$P = 0.24\sqrt{$ + 0.0103$}$

Where P is power consumption,\$ is light output in lumen

continued on page 8 >

Global Market Access Corner

(continued)

Singapore: New Energy Efficiency Labeling Requirements for Lamps & Ballasts

2) In addition to Tungsten filament, Tungsten halogen, CFL with integrated ballast (CFLi in NEA) and LED, which are lamps currently regulated, starting August 1, 2019, NEA will additionally regulate CFL without ballasts (CFLni in NEA) and linear fluorescent lamps. These lamp products are to:

- · Be registered;
- · Be labelled with an Energy Label, and
- Meet lamp survival and lumen maintenance requirements as follows:

Lamp Types	CFLni [Lamp cap: G24d]	Linear Fluorescent Lamp [T8 Lamp cap: G13]	LED direct replacement [for both G24d lamp bulb and T8 linear lamp]	
Lamp survival	90% at 2,000h		95% at 1,000h (Measured) 90% at 6,000h (Declared)	
Lumen maintenance	80% at 2,000h		85% at 1,000h (Measured) 80% at 6,000h (Declared)	
Evaluation standards				
Lumen Measurement Standard	CIE 84		CIE S 025	
Test standards	IEC 60901	IEC 60081	Relevant clauses of IEC 62612	

- 3) From August 1, 2019, fluorescent lamp ballasts (HS code 8504 1000) supplied or for sale in Singapore must:
- · Be registered; and
- Meet Energy Efficiency Index (EEI) class B1 (Magnetic ballasts with very low losses)

EEI Class	Description
A1	Dimmable electronic ballasts
A2	Electronic ballasts with reduced losses
A3	Electronic ballasts
B1	Magnetic ballasts with very low losses
B2	Magnetic ballasts with low losses
С	Magnetic ballasts with moderate losses
D	Magnetic ballasts with very high losses

^{*}Lamp ballasts are also safety regulated products and require the Singapore Safety Mark based on IEC 61347-2-3/8





How UL can help

UL is an accredited certification body for Singapore Safety Mark in Singapore and also provide MEPS registration services to the NEA database. We provide a one-stop solution covering testing, certification and registration services for lighting products manufacturers looking for market access to Singapore.

Global Market Access Corner

South Korea: Elimination of Period of Validity of Foreign Test Reports on Electrical Appliances (KC Mark)

By: Jane Kim- South Korea Regulatory Program Expert

Based on Notification No. 2018-193 from the National Institute of Standards and Technology,

• The period of validity for foreign test reports (previously 3 years for CB Test Reports and Certificates) has been eliminated for electrical appliances.

The effective date of this notification was July 1, 2018.

The South Korea KC standards have harmonized with IEC standards, and the deletion of the validity period of foreign test reports has been reflected in the KC operation guide. Previously, if the CB Test Report and Certificate had an issue date less than 3 years old, the KC certificate could be issued by the Memorandum of Understanding (MoU.) Now, submission of the CB Test Report and Certificate can be accepted by the Certification Body regardless of the issuance date.

How UL can help

UL continues to be one of the top issuers of CB Certificates. We also have staff located in South Korea who can work in the loca language and are experts in the KC certification processes and requirements to facilitate compliance and access to the South Korean market.

2018 Tradeshows

Contact UL industry experts at **LightingInfo@ul.com** if you would like to set up an in-person meeting at any of the listed tradeshows or if you have any general questions. We're here to help!

Canton Fair

October 15-16, 2018 Import and Export Fair Complex Guangzhou, CN

LightShow West

October 17-18, 2018 Las Vegas Convention Center Las Vegas, NV

MJBizCon

November 14, 2018 Las Vegas Convention Center Las Vegas, NV



LUMEN INSIGHTS®





Like UL on Facebook



Tweet UL @ULDialogue



Connect With UL Lumen Insights



UL Videos on YouTube

Share your Insights: Lumen.Insights@ul.com

Sign up at: connect.ul.com/lumeninsights

Find more: UL.com/Lighting

