

### **CSA Group Update**

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## **Agenda**



- 1. CSA Group Overview
- 2. CSA Group Standards
  - Governance
  - CSA Components of Standards Development
  - Standardization Activities EE & other activities in Lighting

3. CSA Group Lighting Lab Offerings

## **Overview of CSA Group**





## **Overview of CSA Group**



- Private, not-for-profit, membership-based association since 1919
- Mission of public safety and sustainability
   -88,000 customers globally
- Accredited Standards Development Organization in Canada and U.S.
- Largest and most diversified Standards Development Organization in Canada
  - 8,500 expert Committee Members
  - Over 3,000 standards and codes
- One billion products worldwide bear a CSA product safety mark













































### **CSA Standards Governance Structure**

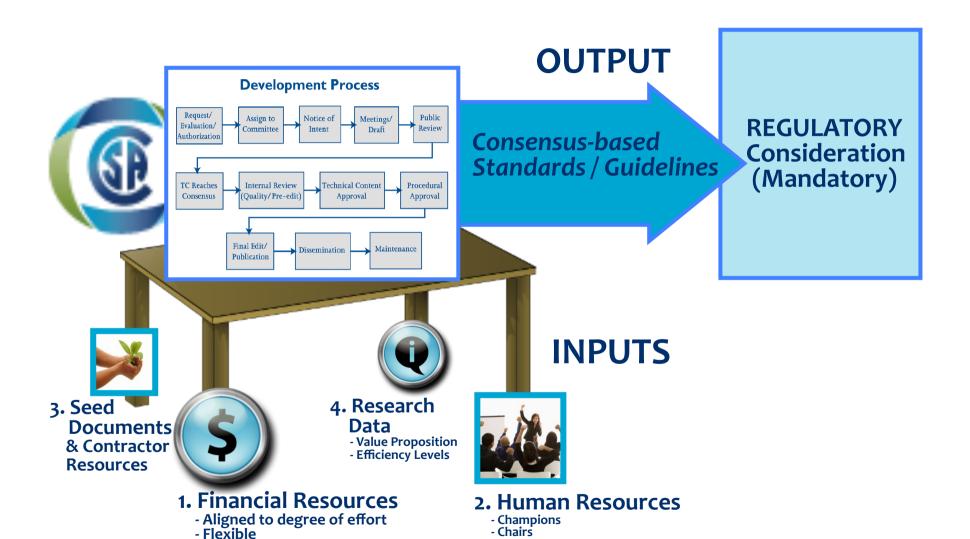




# **CSA Components of Standards Development**

- Sustained and Timely





- Committee Members



### TC on Performance of Lighting Products (TC 419)

#### Scope

Develop and maintain performance and energy efficient standards for lighting products and systems.



#### **Key Activities of TC**

- Approves initiation of standards development activities and approves content at end
- Lighting Performance Strategic Plan Approved in April 2012
- Identifies standards needs for emerging technologies.
- Monitor the development of standards in area of Energy Efficiency and Performance of lighting products and systems
- Harmonization, where possible/practical with regional and international standards.



#### Standards recently published

CSA C866-12 – Performances of LED Luminaries

(February 2012)

CSA C860.11 Am – Performance of Exit Signs

(January 2012)

CSA C870-12 – General Services Lamps

(September 2012)

CSA C862-12 – Incandescent Reflector Lamps

(October 2012)



### **Active Projects**

Designation	Title	Туре	Publication
C653	Roadway Lighting	NE	September 2013
C654	Fluorescent Ballasts	NE	January 2014
C811	High Mast Luminaires	NE	February 2014
C871	LED Retrofit Lamps	NS	December 2013
C869	Building Automation Integration	NS	March 2013
C873	Building Energy Estimation Methodology –Part 4: Lighting	NS	Spring 2013
C875	General Service Directional Lamps	NS	November 2014

For membership and info please contact <a href="mailto:namat.elkouche@CSAGroup.org">namat.elkouche@CSAGroup.org</a>



# ICLP – Integrated Committee on Lighting Products Scope (C234)

Scope - develop and maintain safety standards related to lighting products.

Integrated with Canadian Subcommittee at IEC (CSC IEC 34) and therefore its key objectives are:

- Provide input and participate in IEC TC 34 activities;
- The adoption/adaptation of subject related international ISO/IEC lighting products standards into National Standards of Canada.



#### Standards recently published

- C22.2 No. 250.13 LED equipment for lighting applications
  - Based on UL 8750

#### **Key activities**

- Proposal to amend Canadian Electrical Code Section 16 (Class 1 and Class 2 circuits) – increase the Class 2 voltage from 42.4 V DC to 60 V DC
- Proposal to amend Canadian Electrical Code Section 30
   (Installation of lighting equipment) add the RVLE control gear and RVLE lighting System (Reduced Voltage Low Energy)



#### Key activities – cont'd

- C22.2 No. 250.14 on safety of OLED panels (Organic LEDs)
- C22.2 No. 1993 on Self ballasted lamps and lamp adapters
- C22.2 No. 184 Solid-State Lighting Controls
- C22.2 No.184.1 Solid-State Dimming Controls



### **Current and Active Projects**

Designation	Title	Туре	Comment	Publication
C22.2 No. 250.0	Luminaires	Amt.	Trinational	Sept 2012
C22.2 No. 256	Direct Plug-in Nightlights	Amt.	Binational	Aug 2012
C22.2 No. 43	Lampholders	Amt.	Binational	July 2012
C22.2 No. 166	Stage and Studio Luminaires	NE		Sept 2013
C22.2 No. 250.570	Track Lighting	NS		March 2013
C22.2 No. 206	Lighting Poles	NS		Nov 2012
C22.2 No. 74-1	Discharge Lamp Control Devices	NS	Trinational	Dec 2012
C22.2 No. 37	Christmas Tree and Other Decorative Lighting Outfits	NE		Aug 2013
C22.2 No. 250.4	Portable Luminaires	NS		Dec 2013
C22.2 No. 89	Submersible Luminaires	NE		Sept 2013

For membership and info please contact <u>Julian.Mereuta@CSAGroup.org</u>



#### **IEC** adoptions

To support the ongoing effective deployment of LED products in the marketplace and facilitate international trade, CSA is also adopting the following 5 IEC standards:

<u>Designation</u>	<u>Title</u>	<u>Publication</u>
IEC 62031	LED modules	Sep. 2012
IEC 62560	Self-ballasted LED-lamps	Sep. 2012
IEC 60838-2-2	Connectors for LED-modules	Sep. 2012
IEC 61347-2-13	D.C. or A.C. electronic controlgear for LED modules	Sep. 2012
IEC 62471	Photobiological Safety of Lamps and Lamp Systems	Sep. 2012

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## **Sustainability of Lighting Products**



#### **Current Activity on Lighting**

- CSA's sustainability standards are developed using a life-cycle assessment to quantify requirements for 5 basic product specific attributes (energy consumption, performance, manufacturing and operations, materials of concern and end-of-life).
- CSA has initiated a standardization project on Sustainable Lighting (CSA Z820).
  - Stakeholder meeting is being planned for next year.

#### **Objectives**

- Use standards-based approach to measure and communicate accurate, verified information on the environmental aspects of lighting products;
- Identify products that cause comparatively less stress on the environment;
- Encourage the demand for and supply of environmentally preferable products;
- Support suppliers, consumers and institutional purchasers

## **Sustainability of Lighting Products**



#### **CSA Sustainable Mark**

The CSA sustainable mark is a new labelling program that tells retailers, regulators, and consumers that a product has met environmental performance requirements for product specific sustainability standards.



Meeting Criteria and attributes such as:

- Materials of concern
- Material efficiency
- Energy consumption during use
- Manufacturing
- Product performance
- •End of Life management

## **Sustainability of Lighting Products**



#### **Expertise**







#### For Immediate Release

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#### AHAM Announces Partnership with CSA Standards and UL Environment to Develop Sustainability Standard for Home Appliances

WASHINGTON, DC (August 10, 2010) - The Association of Home Appliance Manufacturers (AHAM) today announced that it has partnered with two leading standards organizations, CSA Standards and UL Environment, to jointly develop voluntary sustainability standards for home appliances. The new standards will take a life cycle approach and are intended to be used by governments, retailers, and other initiatives to identify environmentally responsible products.

## **Newly expanded CSA Lighting Lab**



- Lab in Alpharetta
- 3 Goniophotometers (2 Type C and 1 Type A-Automotive Applications)
  - Second Rotating Mirror Type C Goniophotometer Coming Soon
- 3 Integrating Spheres (1 65in-1.5m and 2 72in-2.0m)
  - 1 3.0m Integrating Sphere Coming soon
- 3,120 Elevated Ambient Life-holders
- 2, 640 Non-elevated Ambient Life-holders
- 2 Rain Chambers
- Additional expansion is planned (total 40,000sq ft)

NOTE: CSA Group has two additional lab locations in Shanghai and Guangzhou. Both have a Type C Goniophotometer and Integrating Sphere.

## **CSA Lighting Lab**



- Fully accredited for Energy Star for Lighting Products
  - V1.1Product Specification for Luminaires (Light Fixtures)
  - V1.4 Program Requirements for Integral LED Lamps
- Full Photometric Testing Capabilities (LM-79 and Others)
- CSA Group tests and certifies lighting products to meet all CSA Standards, including UL standards, and others providing global access



## Thank You