

UNDERWRITERS LABORATORIES INC. CERTIFICATION REQUIREMENT DECISION

This Certification Requirement Decision is prepared by UL LLC. It is normative for the applicable UL Product Certification Program(s); however, it is currently not part of the UL Standard(s) referenced below.

Product Category (CCN): OOLZ

Standard Number: UL 1993

Standard Title: Standard for Safety for Self-Ballasted Lamps and Lamp Adapters

Edition Date: January 27, 2017

Edition Number: 5

Section / Paragraph Reference: Supplement SE (NEW)

Subject: Special Use Lamps

DECISION:**SUPPLEMENT SE - Special Use Lamps****SE1 Scope**

SE1.1 These requirements apply to self-ballasted lamps intended for tasks other than general illumination, such as horticultural or germicidal lamps. Such lamps usually emit electromagnetic energy outside the 400 - 700 nm range.

~~SE1.2 Lamps classified as Risk Group 3 by CAN/CSA-C22.2 No. 62471 or UL 8800 are not addressed by this document.~~

~~SE1.23~~ These requirements do not cover:

~~a) Sun or heat lamps; or~~

~~b) coherent light sources (e.g.: laser sources).~~

SE1.34 In this supplement, the CSA standard reference applies to products intended for use in Canada, while the UL standard reference applies to products intended for use in the United States. Combined references are commonly separated by a slash (" / ").

SE2 Reference Publications

SE2.1 In addition to those in the main body of this standard, the following normative references apply:

International Electrotechnical Commission (IEC)

IEC/TR 62471-2

Photobiological Safety of Lamps and Lamp Systems - Part 2: Guidance on Manufacturing Requirements Relating to Non-Laser Optical Radiation Safety

CSA (Canadian Standards Association)

CAN/CSA-C22.2 No. 62471

Photobiological safety of lamps and lamp systems

NEMA (National Electrical Manufacturers Association)

UL COPYRIGHTED MATERIAL –
NOT AUTHORIZED FOR FURTHER REPRODUCTION OR
DISTRIBUTION WITHOUT PERMISSION FROM UL



Documents

Document Sharing Hub

ANSI/NEMA C78.389
Standard for electric lamps - High Intensity Discharge - Methods of Measuring Characteristics

UL (Underwriters Laboratories)

UL 8800
Horticultural Lighting Equipment

SE3 Definitions

SE3.1 Horticultural lamp - A lamp designed to emit electromagnetic energy (light) at wavelengths intended to promote plant growth. These are sometimes called “grow lamps” or “plant lights”.

SE3.2 Germicidal lamp - A lamp designed to emit electromagnetic energy (light) at wavelengths and intensities intended to kill microorganisms or produce ozone, typically for the purposes of surface sterilization or water purification.

SE3.3 UV generating lamp - A lamp that generates light at wavelengths below 400 nm.

SE4 General Requirements

SE4.1 Lamps shall comply with all relevant construction and test requirements in the main body of this Standard for either damp or wet location use, and be marked accordingly. Compliance only with dry location requirements is not sufficient.

~~SE4.2 In Canada, lamps shall be investigated to determine their risk group classification in accordance with CAN/CSA-C22.2 No. 62471, at a distance of 200 mm. In the United States, lamps shall be investigated to determine their risk group classification in accordance with IEC 62471 at a distance of 200mm.~~ The Photobiological Safety Assessment in UL 8800, the Outline of Investigation for Horticultural Lighting Equipment.

SE4.3 The polymeric enclosures of UV generating lamps shall comply with the ultraviolet light exposure test specified in CAN/CSA-C22.2 No. 0.17 / UL 746C.

SE4.4 Lamps incorporating metal halide light sources shall:

- a) Incorporate an integral lens or barrier compliant with the requirements for lamp containment barriers for metal halide lamps in CSA C22.2 No. 1598 / UL 1598, The Standard for Luminaires; or
- b) Comply with the applicable containment testing procedure for metal halide lamps in ANSI/NEMA C78.389, Standard for electric lamps - High Intensity Discharge - Methods of Measuring Characteristics.

NOTE: There are separate test procedures for quartz and ceramic arc tubes.

SE5 Markings and Instructions

SE5.1 With regard to SE4.2, lamps shall be provided with all the applicable markings in SE5 unless the lamps are classified as:

- a) Risk Group 1 or 0 for both Retinal Blue Light spectral bands; and
- b) Risk Group 0 for the remaining spectral bands.