



UL 1598C

STANDARD FOR SAFETY

Light-Emitting Diode (LED) Retrofit
Luminaire Conversion Kits

UL Standard for Safety for Light-Emitting Diode (LED) Retrofit Luminaire Conversion Kits, UL 1598C

Second Edition, Dated September 8, 2023

Summary of Topics

This new edition of ANSI/UL 1598C dated September 8, 2023, includes the following changes in requirements:

- Scope expansion and restructuring of requirements; New Annex for LED retrofit kits for low voltage luminaires; New Annex for LED retrofit kits for commercial refrigerators and freezers; New and revised retrofit kit markings and instructions, and;***
- Enhanced delivery of installer information.***

The new and revised requirements are substantially in accordance with Proposal(s) on this subject dated February 17, 2023 and June 30, 2023.

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SEPTEMBER 8, 2023



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UL 1598C

Standard for Light-Emitting Diode (LED) Retrofit Luminaire Conversion Kits

First Edition – January, 2014

Second Edition

September 8, 2023

This ANSI/UL Standard for Safety consists of the Second Edition.

The most recent designation of ANSI/UL 1598C as an American National Standard (ANSI) occurred on September 8, 2023. ANSI approval for a standard does not include the Cover Page, Transmittal Pages, and Title Page.

Comments or proposals for revisions on any part of the Standard may be submitted to ULSE at any time. Proposals should be submitted via a Proposal Request in ULSE's Collaborative Standards Development System (CSDS) at <https://csds.ul.com>.

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INTRODUCTION

1 Scope

1.1 These requirements apply to light-emitting diode (LED) retrofit kits that are intended to retrofit existing light sources or other components in previously installed luminaires that already comply with one of the standards in [1.3](#).

1.2 These kits are intended for use with:

- a) Luminaires where specific luminaire models or part numbers as identified in the kit installation instructions; or
- b) One or more generic type luminaires that meet specific criteria identified in the kit installation instructions.

1.3 These kits are intended to retrofit the products covered by the following standards:

- a) UL 1598A, Standard for Marine Luminaires,
- b) UL 1573, Standard for Stage and Studio Luminaires,
- c) UL 1598, Standard for Luminaires,
- d) UL 2108, Standard for Low Voltage Lighting Systems,
- e) UL 471, Standard for Commercial Refrigerators and Freezers, or
- f) UL 60335-1, Standard for Household and similar electrical appliances – Safety – Part 1: General requirements, and UL 60335-2-89, Standard for Household and Similar Electrical Appliances – Safety – Part 2-89: Particular Requirements for Commercial Refrigerating Appliances and Ice-Makers with an Incorporated or Remote Refrigerant Unit or Motor-Compressor.

1.4 This standard does not cover luminaire reflector kits covered by the Standard for Supplemental Requirements for Luminaire Reflector Kits for Installation on Previously Installed Fluorescent Luminaires, UL 1598B.

1.5 The host luminaire is expected to have been designed and manufactured per the applicable standards for safety (See [1.3](#)). The host luminaire is also expected to have been appropriately installed per manufacturer instructions and applicable installation codes.

1.6 Components of LED retrofit kits can include, but are not limited to, LED lamps, LED arrays, LED controllers, LED drivers, power supplies, wiring, lampholders, brackets, wire connectors, reflectors, diffusers, and other associated mechanical, electrical, or optical devices.

1.7 In this standard the installation instructions is considered a component of retrofit kits. The information provided in the installation instructions is considered critical for appropriate selection and proper installation of retrofit kits.

1.8 This standard does not cover luminaire conversion lamps that are intended to replace existing lamps without any modification, rewiring, or component replacement in the luminaire other than direct replacement of the lamp using the existing lampholder. Requirements for these direct replacement lamps are specified in the Standard for Self-Ballasted Lamps and Lamp Adapters, UL 1993.