

STANDARD INFORMATION

Standard: UL 1598C

Standard ID: Light-Emitting Diode (LED) Retrofit Luminaire Conversion Kits [UL 1598C:2023 Ed.2]

Previous Standard ID: Light-Emitting Diode (LED) Retrofit Luminaire Conversion Kits [UL 1598C:2014 Ed.1+R:12Jul2017]

EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

Effective Date: **September 8, 2025**

IMPACT, OVERVIEW, AND ACTION REQUIRED

Impact Statement: Per our accreditation, Intertek is required to review reports against the standard revisions to confirm compliance. Once compliance is confirmed, the standard reference in the report is updated to show continued compliance to the technical requirements of the standard. Reports not updated to this version by the effective date above will be withdrawn.

Overview of Changes:

- 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

Specific details of new/revise requirements are found in table below

Current Listings Not Active? – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records. We will do this at no charge as long as Intertek is notified in writing prior to the review of your reports.



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CLAUSE	VERDICT	COMMENT
		<i>Additions to existing requirements are <u>underlined</u> and deletions are shown lined-out below.</i>
11	Info	Grounding
11.1		Except as noted in 11.2 and 11.3, or in an Annex of this standard, <u>non-current-carrying metal parts and metallized polymeric parts that are accessible including user maintenance or component replacement without the use of tools and that can involve the risk of shock shall be bonded to ground or double insulated to comply with the applicable host luminaire standard (See 1.3).</u>
		<i>New clause added;</i>
11.3		For non-current-carrying metal parts of the LED components that are independent from the host luminaire or lamp(s), the need for grounding or double insulation shall be determined by the requirements for double insulated LED equipment in UL 8750.
	Info	MARKING AND INSTRUCTIONS
16	Info	General
		<i>New clause added;</i>
16.3		No supplemental or revised electrical input ratings or environmental location rating or markings shall be applied or affixed to any component of the retrofit kit that is already provided with its own ratings.
17	Info	Identification
17.1		A retrofit kit shall be marked with the <u>retrofit kit's catalog number or model designation, and the retrofit kit manufacturer's name, trademark, or other descriptive marking in accordance with Table 16.1, Item 2.1:</u> <u>a) On at least one of the components of a retrofit kit; or</u> <u>b) On a separate pressure-sensitive label intended to be applied to the retrofitted host luminaire after installation of the retrofit kit.</u>



CLAUSE	VERDICT	COMMENT
19	Info	Installation Instructions
19.1	Info	General requirements for all luminaire conversions
		<i>New clause added;</i>
19.1.2		In lieu of providing all requirements of this section in printed form, a simplified instruction sheet may be provided in combination with a publicly accessible website containing all of the requirements of this section if the simplified instruction sheet as well as either the equipment or equipment packaging is marked in accordance with Table 16.1, Item 2.2. The simplified instruction sheet shall contain all the applicable markings that are in format L5 in Table 16.1 in addition to the requirements of 19.1.5 and 19.1.16.
		<i>New clause added;</i>
19.1.15		If the retrofit kit is for use with tubular LED lamps, the installation instructions shall include text and/ or diagrams showing how the supply connections are to be made to the lampholders, see Table 16.1, Item 1.15. This is to facilitate correct connections to the tubular LED lamp when it is installed or replaced.
		<i>New clause added;</i>
19.1.16		Installation instructions shall include the input ratings of the overall kit or provide sufficient guidance to determine the kit's overall input ratings, see Table 16.1, Item 1.10. This is to assure that the input current and power for the retrofit kit will not exceed the marked ratings of the host luminaire, regardless of any field selectable configurations for the kit per the installation instructions.
		<i>New clause added;</i>
19.1.17		The suitability of a retrofit kit for installation in a damp or wet location shall be identified in the installation instructions in accordance with the markings in Table 16.1, Items 1.11 and 1.12. Also see 16.3.
		<i>New clause added;</i>
19.1.18		If retrofit kits are intended for specific luminaire models, as defined in 1.2(a), the smallest unit package or carton and installation instructions shall provide with instructions sufficient for identifying the manufacturer and model designation(s) of the host luminaires for which they are intended in accordance with the markings in Table 16.1, Item 1.16.
		<i>New clause added;</i>
19.1.19		If retrofit kits are intended for one or more generic type luminaires as defined in 1.2(b), installation instructions shall provide with instructions sufficient for identifying the luminaire types and features that establish compatibility of the kit with the host luminaire. Refer to Table 16.1, items 1.17 to 1.22 as applicable.



CLAUSE	VERDICT	COMMENT
		<i>New annex added;</i>
		ADDITIONAL REQUIREMENTS FOR LED RETROFIT CONVERSION KITS FOR LUMINAIRES
Annex C		<p>These requirements apply to retrofit kits intended for luminaires covered by the scope of UL 1598.</p> <p>All requirements in the main body of this standard also apply to these retrofit kits unless specifically superseded by a requirement in this Annex.</p> <p>See standard for details.</p>
		<i>New annex added;</i>
		ADDITIONAL REQUIREMENTS FOR LED RETROFIT CONVERSION KITS FOR LOW VOLTAGE LUMINAIRES
Annex D		<p>These requirements apply to retrofit kits intended for luminaires covered by the scope of UL 2108.</p> <p>All requirements in the main body of this standard also apply to these retrofit kits unless specifically superseded by a requirement in this Annex.</p> <p>See standard for details.</p>
		<i>New annex added;</i>
		ADDITIONAL REQUIREMENTS FOR LED RETROFIT CONVERSION KITS FOR COMMERCIAL REFRIGERATORS AND FREEZERS
Annex E		<p>These requirements apply to LED retrofit kits intended for field installation in equipment covered by the scope of UL 471, or UL 60335-1 and UL 60335-2-89 with the intent that only the luminaire portion of these products would be targeted for conversion and that no parts other than the integral luminaire and related hardware would be affected by any conversion.</p> <p>See standard for details.</p>