STANDARDS UPDATE NOTICE (SUN)
ISSUED: January 10, 2025

STANDARD INFORMATION

Standard: UL 676
Standard ID: Underwater Luminaires and Submersible Junction Boxes [UL 676:2015 Ed.9+R:09Apr2024]
Previous Standard ID: Underwater Luminaires and Submersible Junction Boxes [UL 676:2015 Ed.9+R:22Oct2019]

EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

Effective Date: **April 9, 2026**

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 Reports not updated to this version by the effective date above will be withdrawn.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:

- Non-metallic housings
- Flexible cords
- Integral overheating protection
- Temperature Test
- Dielectric Withstand Test
- Markings and instructions

Specific details of new/revised 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 – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records.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.

STANDARD INFORMATION

CLAUSE	VERDICT	COMMENT
		Additions to existing requirements are <u>underlined</u> and deletions are shown ~~lined out~~ below.
7A		***New section added;*** **Polymeric Enclosures**
7A.1		An enclosure of polymeric material where all live parts are insulated or permanently spaced more than 0.8 mm (0.032 in) from the enclosure shall comply with (a) – (e) below, as applicable. For (a) and (c) (flammability and impact resistance), a polymeric enclosure material continuously or frequently exposed to water shall additionally comply after water immersion conditioning in accordance with UL 746C clause 58.1. a) 5VA flammability rating or comply with the five-inch flame test of UL 746C, except for a lens in contact with the water which is permitted to have an HB flammability rating; Exception: An HB rating is permitted for an enclosure of a low voltage luminaire that complies with 11.4. b) Relative thermal index (in accordance with UL 746B) no less than its maximum operating temperature in the product; c) Comply with the impact test of UL 746C if the part is exposed to impact after installation, except for a lens subject to the Swimmer Impact Test of Section 40; d) Comply with the mold stress-relief distortion test of UL 746C if of molded or formed thermoplastic material; and e) Comply with the UV resistance test of UL 746C if, after installation, the material is exposed to the sun.
7A.2		An enclosure of polymeric material where any uninsulated live parts are located within 0.8 mm (0.032 in) of the enclosure shall additionally have a minimum hot-wire ignition (HWI) performance level characteristic of 4 or better (less), in accordance with UL 746A or the alternative test programs of UL 746C.

CLAUSE	VERDICT	COMMENT
10	Info	**Flexible Cord and Connectors**
10.3		Flexible cord that is immersed in or frequently exposed to water, or exposed to sunlight, shall have a "W" suffix and be suitable for: a) Hard usage (such as Type SJW, SJTW, or SJTOW) and not smaller than 3.3 mm2 (12 AWG); b) Extra-hard usage (such as Type SOW, STW, or STOW); or c) Equivalent to the type specified in (a) or (b). A grounding conductor shall not be smaller than the circuit conductors and, for flexible cords suitable for extra-hard usage, shall not be smaller than 1.3 mm2 (16 AWG).
28	Info	**Integral Overheating Protection**
28.2		~~The integral protection against overheating shall be of the automatic react type.~~ If the integral protection against overheating is a one-time device (such as a thermal cutoff), it shall be tamperproof and the instructions shall include the information specified in 44.6
33	Info	**Temperature Test**
33.1A		***New clause added;*** If provided with a screwshell lampholder and marked (per 44.3A) for a self-ballasted LED lamp, this test shall be performed with the next highest wattage standard incandescent lamp (i.e., 40, 60, 75 or 100 W) adjusted to dissipate 10% (±2%) more than the marked wattage. Note: For example, a luminaire marked for use with 15 Watt LED lamps shall be fitted with 40 W incandescent test lamps and the input voltage adjusted so they dissipate 16.5 ±0.3 Watts during the temperature test.

CLAUSE	VERDICT	COMMENT
36	Info	**Dielectric Voltage-Withstand Test**

New table added;

Dielectric Voltage Withstand Potential

Table 36.1

Test potential, V ac[1]	Circuit location
2V + 1000	Between primary circuits and accessible dead or grounded conductive parts Between secondary circuits operating at greater than 70 V peak and accessible dead or grounded conductive parts Between the primary and secondary windings of an isolating transformer Between isolated circuits operating at different potentials, one or more of which exceed 70 V peak
500 V	Between a secondary circuit operating above 15 Vac or 30 Vdc, up to 70 V peak and accessible dead or grounded conductive parts
500 V	Between two secondary circuits, one or more of which exceeds 15 Vac or 30 Vdc up to 70 V peak
500 V	Between the input leads of a low voltage luminaire and any conductive (metallic) parts of the luminaire intended to be exposed after installation
[1] The test may be conducted using a DC potential at 1.414 times the AC potential.	

MARKINGS AND INSTRUCTIONS

44

Section 44 has been completely re-written.

See standard for details.