

STANDARD INFORMATION

Standard: CSA C22.2 No. 37

Standard ID: Decorative Lighting Products [CSA C22.2#37:2025 Ed.8]

Previous Standard ID: Decorative Lighting Products [CSA C22.2#37:2020 Ed.7+E1]

EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

Effective Date: **February 1, 2027**

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 Reports not updated to this version by the effective date above will be withdrawn.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

- Addition of non-replaceable lampholders for series-connected decorative lighting strings
- Expanding the requirements for products with batteries
- The wiring used in low-voltage low-energy (LVLE) circuit not exceeding 15 w
- Addition of input current measurements for low-voltage products
- Revision to products employing load fittings or special connectors
- Addressing mechanical securement
- Marking for products employing lamps with glass envelopes
- Addition of instructions for power adaptors

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

Note: If the listing references a Canadian standard, per the Canadian Electrical Code (CSA C22.2#0) Section titled Language of markings, Caution and Warning Markings shall be in English and French.

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 – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records.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
		<i>Additions to existing requirements are <u>underlined</u> and deletions are shown lined-out below.</i>
5	Info	General requirements
5.1	Info	Mechanical construction
5.1.4	Info	Enclosures
5.1.4.3	Info	Polymeric enclosures
		<i>New clause added;</i>
		Non-replaceable lampholders shall consist of one of the following constructions:
5.1.4.3.8		a) moulded type — a polymeric material shall be moulded over lamp contacts, wires, and a portion of the lamp; or b) non-moulded type — tubing shall be applied over the lamp contacts, wires, and a portion of the lamp and provided with an insulator between uninsulated lamp leads to prevent short circuit. In addition, a polymeric material shall enclose the tubing and wires and shall be secured so that it does not slide out of position.
5.2	Info	Electrical construction
5.2.5	Info	Flexible cords and conductors
		<i>New clause added;</i>
5.2.5.5		Wire employed in a Class 2 or LVLE circuit with a maximum available power of 15 W may be less than 26 AWG, may be provided with less than 0.4 mm thick insulation, and is not required to be rated for wet locations.
5.2.10	Info	Splices
		<i>New clause added;</i>
5.2.10.3		A soldered connection not located in an LVLE circuit shall be made mechanically secure before soldering in accordance with Clause 5.2.10.2. A construction that prohibits one of the methods of Clause 5.2.10.2 shall be held in place by a means that limits the stress on the connection during or after the manufacturing process, and the construction shall comply with the lampholder strain relief tests of Clause 6.4.3.
5.2.11	Info	LVLE circuits
		<i>New clause added;</i>
5.2.11.3		An LVLE circuit with a maximum available power of 15 W as referenced in Clause 5.2.5.4 shall comply with the circuit power limit measurement test of Clause 5.8.15.



CLAUSE	VERDICT	COMMENT
		<i>New section added;</i>
		Products with batteries
5.7		The requirements in Clause 5.7 are supplementary to other applicable requirements in this Standard and apply to products provided with non-rechargeable and rechargeable batteries. The batteries may be replaceable by the user or non-replaceable. The use of the word “batteries” in Clause 5.7 refers to one or more batteries, or cells. See standard for details.
5.8	Info	Tests for all products excluding ornaments and rope lighting systems
5.8.4	Info	Test voltage and input rating
		<i>New section added;</i>
		Low-voltage input current measurement
5.8.4.2		The input amps of the electrical portion of a product connected to the output of an LVLE supply shall: See standard for details.
5.8.5	Info	Temperature test
		<i>New clause added;</i>
5.8.5.14		Products powered by an LVLE supply, USB supply, or batteries and provided with an end connector or special load fitting (connectable sets) shall be tested with the maximum marked number of sets to be connected end to end as determined in Clause 5.17.4.4. For battery-powered products, the test shall be performed with a new set of alkaline batteries with an open circuit voltage of at least 1.6 V. For all products, the product shall be set to the mode that has the highest current draw.
5.8.5.21		<u>As the winding usually needs to be de-energized before measuring RH, the value of RH at shutdown shall be determined by taking several resistance measurements at short intervals, beginning immediately following shutdown.</u> A curve of the resistive values and time shall be plotted and extrapolated to give the value of RH at the end of the test.
		<i>New clause added;</i>
5.8.5.24		A product with rechargeable batteries shall be operated through two cycles of charging and discharging. During the discharge cycle, the product shall be operated while disconnected from any power source until the light source is no longer illuminated. The product shall then be connected to the intended source of supply and allowed to charge until the maximum nominal battery voltage is reached and a minimum of 7 h has elapsed. The surface temperature of the battery shall not exceed the battery manufacturer’s specification or the maximum temperature of any materials in contact with the battery.



CLAUSE	VERDICT	COMMENT
		<i>New clause added;</i>
		Circuit power limit measurement test
5.8.15		The available power of the circuit containing the wire noted in Clause 5.2.5.4 shall be determined in accordance with the circuit power limit measurement test of Clause 9.6 of CSA C22.2 No. 250.13. The power limit (PLIMIT) shall be 15 W. An additional evaluation for overheating components is not required if the evaluation is performed as part of another test.
		<i>New section added;</i>
		Battery power source test
5.8.16		Batteries other than those indicated in Table 5.9 shall be subjected to this test. Rechargeable batteries shall be fully charged for this test. Non-rechargeable batteries shall be unused and shall measure at least 1.6 V per cell for alkaline- or carbon-zinc-type cells and 1.8 V for non-rechargeable lithium cells. See standard for details.
		<i>New section added;</i>
		Tests for rechargeable batteries
5.8.17		A product with batteries shall be allowed to fully discharge while disconnected from any supply source, after which the product shall be connected to the maximum rated supply source provided by the manufacturer and the charging current through the batteries shall be monitored. See standard for details.
5.17	Info	Markings
5.17.4	Info	Cord tag markings
5.17.4.4	Info	Products employing load fittings or special connectors
		For LVLE products employing a special connector, the product shall be marked within 76 mm of the face of the load fitting with the following: “CAUTION — Do not overload. <u>Connect up to _____ of the same exact product end to end. Do not connect different products together.</u> ”
5.17.4.4.4		<u>Blank 1 shall be filled in with the total number of sets that can be connected end to end based on dividing the output current rating of the LVLE supply by the low-voltage input current of the electrical portion connected to the LVLE supply (see Clause 5.8.4.2). The total number shall be rounded down to the lowest whole number.</u>



CLAUSE	VERDICT	COMMENT
		<p><u>In no case shall the total current when connecting multiple sets end to end exceed the current determined as per the following:</u></p> <p>a) <u>the smallest wire ampacity rating if not protected by an overcurrent protective device;</u> b) <u>80% of the overcurrent protective device rating, if provided; or</u> c) <u>the output current rating of the LVLE device.</u></p> <p><u>LVLE products employing a special end connector shall additionally be tested in accordance with Clause 5.8.5.14.</u></p>
		<p>For USB products employing a special connector, the product shall be marked within 76 mm of the face of the load fitting with the following:</p> <p><u>“CAUTION — Do not overload. Connect up to ____ of the same exact product end to end. Do not connect different products together.”</u></p> <p><u>The blank shall be filled in with the total number of sets that can be connected end to end based on dividing 500 mA by the input current of product (see Clause 5.8.4.2.2). The total number shall be rounded down to the lowest whole number.</u></p>
5.17.4.4.5		<p><u>In no case shall the total current when connecting multiple sets end to end exceed the current determined as per the following:</u></p> <p>a) <u>the smallest wire ampacity rating in amps if not protected by an overcurrent protected device; or</u> b) <u>80% of the overcurrent protective device rating in amps, if provided.</u></p> <p><u>In either Item a) or b), the maximum current shall not exceed 500 mA.</u></p> <p><u>USB products employing a special end connector shall additionally be tested in accordance with Clause 5.8.5.14.</u></p>
		<p><i>New clause added;</i></p> <p>For battery-operated products employing a special connector, the product shall be marked within 76 mm of the face of the load fitting with the following:</p> <p><u>“CAUTION — Do not overload. Connect up to ____ of the same exact product end to end. Do not connect different products together.”</u></p>
5.17.4.4.6		<p>The blank shall be filled in with the total number of sets that can be connected end to end based on not exceeding Item a), b), or c) when measuring the input current of a product with multiple sets connected end to end (see Clause 5.8.4.2.3). The total number shall be rounded down to the lowest whole number.</p> <p>In no case shall the total current when connecting multiple sets end to end exceed the current determined as per the following:</p>



CLAUSE	VERDICT	COMMENT
		a) the smallest wire ampacity rating if not protected by an overcurrent protected device; b) 80% of the overcurrent protective device rating in amps, if provided; or c) the results of the temperature test (see Clause 5.8.5.14).
		<i>New section added;</i>
		Product employing batteries
5.17.4.10		A product employing replaceable batteries shall be plainly marked where visible during battery replacement to indicate the correct orientation and polarity of the batteries. The marking shall be: See standard for details.
5.18	Info	Instruction manual
5.18.4	Info	User servicing instructions
		<i>New clause added;</i>
		Instructions for power adaptor
5.18.4.4		A product utilizing a direct plug-in unit shall provide the following cautionary markings in the instruction manual: “CAUTION: Risk of fire, personal injury, or electric shock. 1) Use this product only with the included AC power adaptor. 2) If the AC power adaptor is broken or cracked, discard product.”
		<i>New section added;</i>
		Instructions for products employing batteries
5.18.4.5		A product with replaceable batteries shall provide in the instructions the following information: See standard for details.