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# UL 1576

## STANDARD FOR SAFETY

### Flashlights and Lanterns

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UL Standard for Safety for Flashlights and Lanterns, UL 1576

Second Edition, Dated May 13, 2022

### **Summary of Topics**

***This is the Second edition of ANSI/UL 1576, Standard for Flashlights and Lanterns dated May 13, 2022. This standard is being co-published with CSA Group as a Bi-National Standard.***

The new requirements are substantially in accordance with Proposal(s) on this subject dated December 17, 2022.

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CSA Group  
CSA C22.2 No. 250.5:22  
First Edition



Underwriters Laboratories Inc.  
UL 1576  
Second Edition

## Flashlights and Lanterns

May 13, 2022

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ANSI/UL 1576-2022



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**ISBN 978-1-4883-4183-0 © 2022 Canadian Standards Association**

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This ANSI/UL Standard for Safety consists of the Second edition. The most recent designation of ANSI/UL 1576 as an American National Standard (ANSI) occurred on May 13, 2022. ANSI approval for a standard does not include the Cover Page, Transmittal Pages, Title Page (front and back), or the Preface.

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## ANNEX A (CAN) FRENCH TRANSLATIONS

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## Preface

This is the harmonized CSA Group and UL Standard for Flashlights and Lanterns. It is the first edition of CSA C22.2 No. 250.5 and the second edition of UL 1576. This edition of UL 1576 supersedes the previous edition published in 2018.

This harmonized standard was prepared by CSA Group and Underwriters Laboratories Inc. (UL). The effort and support of the Technical Harmonization Group on Flashlights and Lanterns are gratefully acknowledged.

This Standard is considered suitable for use for conformity assessment within the stated scope of the Standard.

This Standard was reviewed by the CSA Integrated Committee on Lighting Products (ICLP), under the jurisdiction of the CSA Technical Committee on Consumer and Commercial Products and the CSA Strategic Steering Committee on Requirements for Electrical Safety, and has been formally approved by the Technical Committee. This Standard has been developed in compliance with Standards Council of Canada requirements for National Standards of Canada. It has been published as a National Standard of Canada by CSA Group.

## Application of Standard

Where reference is made to a specific number of samples to be tested, the specified number is to be considered a minimum quantity.

Note: Although the intended primary application of this standard is stated in its scope, it is important to note that it remains the responsibility of the users of the standard to judge its suitability for their particular purpose.

## Level of Harmonization

This Standard is published as an identical standard for CSA Group and UL.

An identical standard is a standard that is exactly the same in technical content except for national differences resulting from conflicts in codes and governmental regulations. Presentation is word for word except for editorial changes.

## Reasons for differences from IEC

This standard provides requirements for flashlights and lanterns for use in accordance with the electrical installation codes of Canada and the United States. This standard does not employ any IEC standard for base requirements.

## Interpretations

The interpretation by the standards development organization of an identical or equivalent standard is based on the literal text to determine compliance with the standard in accordance with the procedural rules of the standards development organization. If more than one interpretation of the literal text has been identified, a revision is to be proposed as soon as possible to each of the standards development organizations to more accurately reflect the intent.

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## 1 Scope

1.1 This standard applies to flashlights and lanterns powered by secondary (rechargeable) batteries and general purpose primary (non-rechargeable) batteries with a maximum voltage of 75 V d.c. The terms flashlights and lanterns as used within this standard refer to products that are battery-powered.

1.2 Flashlights and lanterns that are battery-powered and also powered from a line-voltage supply are also covered within this standard, in accordance with CSA C22.1, Canadian Electrical Code (CE Code), Part I and the National Electrical Code (NEC), ANSI/NFPA 70, on circuits having a nominal voltage not exceeding 250 V.

1.3 These requirements also apply to automatic flashlights and lanterns which are normally connected to a line voltage supply and, upon loss of the line voltage supply, will turn on the lamp.

1.4 This standard is not used in conjunction with CSA C22.2 No. 250.0.

1.5 These requirements do not apply to:

- a) Stand-alone battery chargers;
- b) Cord and plug connected work lights and hand lights without batteries that are within the scope of UL 153 and CSA C22.2 No. 250.4;
- c) Cord and plug connected portable luminaires other than work lights and hand lights, with or without batteries, that are within the scope of UL 153 and CSA C22.2 No. 250.4;
- d) Aquarium lighting that is within the scope of UL 1018 and CSA C22.2 No. 250.4;
- e) Emergency lighting that is within the scope of UL 924 and CSA C22.2 No. 141;
- f) Products with ultraviolet (UV) radiation sources greater than “Exempt Group” as specified in IEC 62471 and CSA C22.2 No. 62471; and
- g) Products intended for hazardous locations.

1.6 This standard alone is not intended to apply to permanently installed lighting that is capable of being battery powered, since it will not be sufficient to ensure that all hazards are considered for these products.

1.7 Most requirements for battery operation and charging are incorporated by reference to CSA C22.2 No. 0.23 and UL 2595 and are subject to the limitations of voltage in that standard.

Note: Products operating at voltages in excess of those specified in CSA C22.2 No. 0.23 and UL 2595 may require additional considerations.

1.8 Requirements for all battery-operated flashlights and lanterns are specified in Part I. Additional requirements for battery operated flashlights and lanterns that may also be connected to line-voltage supply for any purpose are specified in Part II.

1.9 The terms flashlights and lanterns are considered to be interchangeable and can be referred to as products within this Standard.

## 2 Reference publications

2.1 For undated references to Standards, such reference shall be considered to refer to the latest edition and all revisions to that edition up to the time when this Standard was approved. For dated references to

Standards, such reference shall be considered to refer to the dated edition and all revisions published to that edition up to the time the Standard was approved.

### **CSA Standards**

CSA C22.1:21, *Canadian Electrical Code, Part I*

CSA C22.2 No. 0:20, *Canadian Electrical Code, Part II, General Requirements*

CSA C22.2 No. 0.1:19, *General Requirements for Double-Insulated Equipment*

CSA C22.2 No. 0.2:16 (R2020), *Insulation Coordination*

CSA C22.2 No. 0.15-16, *Adhesive Labels*

CAN/CSA C22.2 No. 0.17-00 (R1018), *Evaluation of Properties of Polymeric Materials*

CSA C22.2 No. 0.23:15 (R2010), *General Requirements for Battery Powered Appliances*

CSA C22.2 No. 5-16, *Molded-Case Circuit Breakers, Molded-Case Switches, and Circuit-Breaker Enclosures*

CSA C22.2 No. 18.1-13 (R2018), *Metallic Outlet Boxes*

CSA C22.2 No. 18.2-06 (R2016), *Nonmetallic Outlet Boxes*

CSA C22.2 No. 18.3-12 (R2017), *Conduit, Tubing and Cable Fittings*

CSA C22.2 No. 18.5-13 (R2020), *Positioning Devices*

CSA C22.2 No. 21-18, *Cord Sets and Power-Supply Cords*

CSA C22.2 No. 38-18, *Thermoset-Insulated Wires And Cables*

CSA C22.2 No. 42-1-13 (R2020), *General Use Receptacles, Attachment Plugs, And Similar Wiring Devices*

CSA C22.2 No. 43-17, *Lampholders*

CSA C22.2 No. 49-18, *Flexible Cords and Cables*

CSA C22.2 No. 62.2:21, *Low Voltage Transformers – Part 2: General Purpose Transformers*

CSA C22.2 No. 65-18, *Wire Connectors*

CSA C22.2 No. 66.1-06 (R2020), *Low Voltage Transformers – Part 1: General Requirements*

CSA C22.2 No. 66.2, *Low Voltage Transformers – Part 2: General Purpose Transformers*

CSA C22.2 No. 66.3-06 (R2020), *Low Voltage Transformers – Part 3: Class 2 and Class 3 Transformers*

CSA C22.2 No. 68-18, *Motor-Operated Appliances (Household And Commercial)*

CSA C22.2 No. 74-16 (R2020), *Equipment For Use With Electric Discharge Lamps*

CSA C22.2 No. 75-17, *Thermoplastic-Insulated Wires And Cables*

CSA C22.2 No. 111-18, *General-Use Snap Switches*

CSA C22.2 No. 141-15 (R2020), *Emergency Lighting Equipment*

CSA C22.2 No. 144.1-16 (R2020), *Ground-Fault Circuit Interrupters*

CSA C22.2 No. 153-14 (R2020), *Electrical Quick-Connect Terminals*

CSA C22.2 No. 158-10 (R2019), *Terminal Blocks*

CSA C22.2 No. 177-13 (R2018), *Clock-operated switches*

CSA C22.2 No. 188-18, *Splicing Wire Connectors*

C22.2 No. 197-M83 (R2018), *PV Insulating Tape*

CSA C22.2 No. 198.1-06 (R2020), *Extruded Insulating Tubing*

CSA C22.2 No. 198.3:05 (R2019), *Coated Electrical Sleeving*

CSA C22.2 No. 210:15 (R2020), *Appliance Wiring Material Products*

CSA C22.2 No. 223:15 (R2020), *Power Supplies With Extra-Low-Voltage Class 2 Outputs*

CSA C22.2 No. 235-04 (R2017), *Supplementary Protectors*

CSA C22.2 No. 248 (series of standards), *Low-Voltage Fuses*

CSA C22.2 No. 248.1-11 (R2020), *Low-Voltage Fuses – Part 1: General Requirements*

CSA C22.2 No. 248.5:00 (R2019), *Low-Voltage Fuses – Part 5: Class G Fuses*

CSA C22.2 No. 248.14:00 (R2019), *Low-Voltage Fuses – Part 14: Supplemental Fuses*

CSA C22.2 No. 250.0-18, *Luminaires*

CSA C22.2 No. 250.4:20, *Portable Luminaires*

CSA C22.2 No. 256-14 (R2019), *Direct Plug-In Nightlights*

CSA C22.2 No. 270-16, *Arc Fault Protective Devices*

C22.2 No. 284-16 (R2020), *Nonindustrial photoelectric switches for lighting control*

CSA C22.2 No. 308-18, *Cord Reels And Multi-Outlet Assemblies*

CSA C22.2 No. 2459-08 (R2018), *Insulated Multi-Pole Splicing Wire Connectors*