



UL 482

STANDARD FOR SAFETY

Portable Sun/Heat Lamps

UL Standard for Safety for Portable Sun/Heat Lamps, UL 482

Ninth Edition, Dated September 2, 2005

Summary of Topics

This reaffirmation of ANSI/UL 482 dated June 4, 2025 is being issued to update the title page to reflect the most recent designation as a Reaffirmed American National Standard (ANS). No technical changes have been made.

Text that has been changed in any manner or impacted by ULSE's electronic publishing system is marked with a vertical line in the margin.

The requirements are substantially in accordance with Proposal(s) on this subject dated March 21, 2025.

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UL 482

Standard for Portable Sun/Heat Lamps

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Ninth Edition

September 2, 2005

This ANSI/UL Standard for Safety consists of the Ninth edition including revisions through June 4, 2025.

The most recent designation of ANSI/UL 482 as a Reaffirmed American National Standard (ANS) occurred on June 4, 2025. 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 the Collaborative Standards Development System (CSDS) at <https://csds.ul.com>.

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INTRODUCTION

1 Scope

1.1 This Standard covers sun lamps, heat lamps and combination sun and heat lamps rated at not more than 125 V. A sun lamp is intended for production of ultraviolet radiation for skin tanning. A heat lamp is intended for production of infrared radiation. A combination sun and heat lamp is intended for production of both ultraviolet and infrared radiation. In the text of this Standard, the term sun/heat lamp is intended to cover all types.

1.2 This Standard covers portable sun/heat lamps intended for use by nontechnically qualified persons in homes, sports facilities, health spas and similar establishments and intended for connection to a power-supply circuit by a flexible cord for use in accordance with the National Electrical Code, ANSI/NFPA 70.

1.3 This Standard does not cover lamps intended primarily to provide illumination (although some visible radiation may be produced during the operation of a sun/heat lamp).

1.4 This Standard does not cover sun or heat lamps intended for professional use. Professional use lamps are those for use by technically qualified persons in hospitals, nursing homes, medical care centers, clinics, medical offices, laboratories, and similar establishments for therapeutic purposes. The therapeutic lamps are covered by the requirements for medical and dental equipment.

1.5 Ultraviolet lamps intended for high intensity, short duration – 2 minute maximum first exposure time for most sensitive skin – operation will be subject to an appropriate investigation for any additional requirements as are applicable to a lamp with this feature.

1.6 This Standard does not cover bulbs alone but complete appliances.

2 Components

2.1 Except as indicated in [2.2](#), a component of a product covered by this Standard shall comply with the requirements for that component. See Appendix [A](#) for a list of standards covering components generally used in the products covered by this Standard.

2.2 A component is not required to comply with a specific requirement that:

- a) Involves a feature or characteristic not required in the application of the component in the product covered by this standard, or
- b) Is superseded by a requirement in this standard.

2.3 A component shall be used in accordance with its rating established for the intended conditions of use.

2.4 Specific components are incomplete in construction features or restricted in performance capabilities. Such components are intended for use only under limited conditions, such as certain temperatures not exceeding specified limits, and shall be used only under those specific conditions.

3 Units of Measurement

3.1 Values stated without parentheses are the requirement. Values in parentheses are explanatory or approximate information.

3.2 Unless indicated otherwise all voltage and current values mentioned in this Standard are root-mean-square (rms).

4 References

4.1 Any undated reference to a code or standard appearing in the requirements of this standard shall be interpreted as referring to the latest edition of that code or standard.

CONSTRUCTION

5 General

5.1 Portable sun lamps are subject to the Radiation Control for Health and Safety Act of 1968, and the Federal Food, Drug and Cosmetic Act, as amended by the Safe Medical Act of 1990 and the Medical Device Amendments of 1992.

6 Frame and Enclosure

6.1 A sun/heat lamp shall be so formed and assembled that it has the strength and rigidity necessary to resist the abuses to which it is likely to be subjected without increasing its risk of fire, electric shock, or injury to persons due to total or partial collapse with resulting reduction of spacings, loosening or displacement of parts, or other serious defects.

6.2 A sun/heat lamp shall have an enclosure of metal or of noncombustible, nonabsorptive insulating material such as glass, marble, phenolic composition, or of a material determined to be acceptable for the application.

6.3 Among the factors taken into consideration when determining the acceptability of a nonmetallic enclosure are:

- a) The mechanical strength,
- b) Resistance to impact,
- c) Moisture-absorptive properties,
- d) Combustibility and resistance to ignition from electrical sources,
- e) Dielectric strength, insulation resistance, and resistance to arc tracking, and
- f) Resistance to distortion and creeping at temperatures to which the material may be subjected under conditions of intended or abnormal usage.

The material is not to display a loss of these properties beyond the minimum acceptable level as a result of aging. See the requirements in the Standard for Polymeric Materials – Use in Electrical Equipment Evaluations, UL 746C.

6.4 The continuity of the grounding system shall not rely on the dimensional integrity of the nonmetallic material.

6.5 Electrical parts of a sun/heat lamp shall be so located or enclosed that protection against unintentional contact with uninsulated live parts, other than the contacts of a lampholder, is provided.

6.6 An opening in an enclosure that contains live or current-carrying parts shall prevent entrance of a 1 inch (25.4 mm) diameter rod and is acceptable if a probe as illustrated in [Figure 6.1](#), inserted through the