

UL 496

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Edison-Base Lampholders

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UL Standard for Safety for Edison-Base Lampholders, UL 496

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Revisions: This Standard contains revisions through and including April 11, 2000. UL is in the process of converting its Standards for Safety to the Standard Generalized Markup Language (SGML), and implementing an SGML compliant document management and publishing system. SGML - an international standard (ISO 8879-1986) - is a descriptive markup language that describes a document's structure and purpose, rather than its physical appearance on a page. Significant benefits that will result from UL's use of SGML and these new systems include increased productivity, reduced turnaround times, and data and information consistency, reusability, shareability, and portability. However, the fonts, pagination, and general formatting of UL's new electronic publishing system differ from that of UL's previous publishing system. Consequently, when revision pages are issued for a Standard with the new publishing system, these differences may result in the printing of pages on which no requirements have been changed - these additional pages result from relocation of text due to repagination and reformatting of the Standard with the new publishing system.

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The new requirements are substantially in accordance with UL's Bulletin(s) on this subject dated March 15, 1999. The bulletin(s) is now obsolete and may be discarded.

The revisions dated April 11, 2000 include a reprinted title page (page1) for this Standard.

As indicated on the title page (page1), this UL Standard for Safety has been adopted by the Department of Defense.

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New product submittals made prior to a specified future effective date will be judged under all of the requirements in this Standard including those requirements with a specified future effective date, unless the applicant specifically requests that the product be judged under the current requirements. However, if the applicant elects this option, it should be noted that compliance with all the requirements in this Standard will be required as a condition of continued and Follow-Up Services after the effective date, and understanding of this should be signified in writing.

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FOREWORD

A. This Standard contains basic requirements for products covered by Underwriters Laboratories Inc. (UL) under its Follow-Up Service for this category within the limitations given below and in the Scope section of this Standard. These requirements are based upon sound engineering principles, research, records of tests and field experience, and an appreciation of the problems of manufacture, installation, and use derived from consultation with and information obtained from manufacturers, users, inspection authorities, and others having specialized experience. They are subject to revision as further experience and investigation may show is necessary or desirable.

B. The observance of the requirements of this Standard by a manufacturer is one of the conditions of the continued coverage of the manufacturer's product.

C. A product which complies with the text of this Standard will not necessarily be judged to comply with the Standard if, when examined and tested, it is found to have other features which impair the level of safety contemplated by these requirements.

D. A product employing materials or having forms of construction which conflict with specific requirements of the Standard cannot be judged to comply with the Standard. A product employing materials or having forms of construction not addressed by this Standard may be examined and tested according to the intent of the requirements and, if found to meet the intent of this Standard, may be judged to comply with the Standard.

E. UL, in performing its functions in accordance with its objectives, does not assume or undertake to discharge any responsibility of the manufacturer or any other party. The opinions and findings of UL represent its professional judgment given with due consideration to the necessary limitations of practical operation and state of the art at the time the Standard is processed. UL shall not be responsible to anyone for the use of or reliance upon this Standard by anyone. UL shall not incur any obligation or liability for damages, including consequential damages, arising out of or in connection with the use, interpretation of, or reliance upon this Standard.

F. Many tests required by the Standards of UL are inherently hazardous and adequate safeguards for personnel and property shall be employed in conducting such tests.

INTRODUCTION

1 Scope

1.1 These requirements cover Edison-base lampholders to be used in accordance with the National Electrical Code.

1.2 These requirements do not cover non-Edison-screw lampholders for special uses – such as projection lamps, electrode receptacles, and sign lamps.

1.3 These requirements do not cover seasonal-lighting lampholders which are covered by the Standard for Christmas-Tree and Decorative-Lighting Outfits, UL 588.

1.3 revised August 5, 1998

1.4 To differentiate between similar devices, an Edison-base lampholder to be mounted directly on an outlet box is considered to be a surface-type lampholder, whereas such a device requiring a cross-bar, mounting strap, or other mounting means is considered to be a fixture and is not covered by these requirements.

1.5 These requirements and the Standard for Attachment Plugs and Receptacles, UL 498, cover current taps having a lamp screw shell or screw base.

1.6 A product that contains features, characteristics, components, materials, or systems new or different from those covered by the requirements in this standard, and that involves a risk of fire or of electric shock or injury to persons shall be evaluated using appropriate additional component and end-product requirements to maintain the level of safety as originally anticipated by the intent of this standard. A product whose features, characteristics, components, materials, or systems conflict with specific requirements or provisions of this standard does not comply with this standard. Revision of requirements shall be proposed and adopted in conformance with the methods employed for development, revision, and implementation of this standard.

1.6 revised April 11, 2000

2 Glossary

2.1 For the purposes of this Standard, the following definitions apply.

2.2 **TERMINAL, INSULATION PIERCING (PIN-TYPE)** – A terminal having a contact pin that punctures the conductor insulation and penetrates between the conductor strands. This does not include insulation displacement terminals where the conductor is positioned between the pins of the terminal.

2.3 **LAMPHOLDER, SEASONAL LIGHTING** – A lampholder that is restricted for use with Christmas-tree and decorative-lighting outfits and which by its construction and application is not suitable for general use.

2.4 **LAMPHOLDER, SKELETON-TYPE** – An Edison-screw lampholder that does not use conductive screw shell threads to make electrical contact with the lamp screw base. Electrical contact with the lamp screw base is made with one or more separate contacts in the side wall of the lamp cavity or a ring contact in the bottom of the lamp cavity.

3 Components

3.1 Except as indicated in 3.2, a component of a product covered by this Standard shall comply with the requirements for that component.

3.2 A component need not comply with a specific requirement that:

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

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

3.4 Specific components are recognized as being 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 for which they have been recognized.

4 Units of Measurement

4.1 If a value for measurement is followed by a value in other units in parentheses, the second value may be only approximate. The first stated value is the requirement.

5 References

5.1 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

GENERAL

6 General

6.1 Any screw provided with a lampholder for use in mounting the device to an outlet box or other enclosure shall not project more than 7/8 inch (22.2 mm) beyond the strap or cover and shall have a flat or blunt end. The end of the screw may have thread-cleaning slots or grooves but shall not have any burrs, fins, or other sharp edges that can damage wiring.

7 Enclosure

7.1 General

7.1.1 An Edison-base lampholder, other than the surface-cleat type, shall be provided with an enclosure that prevents unintentional contact with all uninsulated live parts of the device, except the screw shell and center contact in the lamp cavity, while the lampholder is completely assembled and installed as intended.

7.1.2 A metal base in the form of an outlet-box cover shall comply with the Standard for Metallic Outlet Boxes, UL 514A.

7.2 Supporting base

7.2.1 Means shall be provided for securely attaching the body of a lampholder to the supporting base. While attached to the supporting base, the body shall not be capable of turning with respect to the base.

7.2.2 A supporting base on which uninsulated live parts are mounted shall be of porcelain, cold-molded or phenolic composition, or other insulating material that is acceptable for the particular application. A supporting base for surface mounting shall be provided with two or more holes for mounting screws.

7.2.3 Vulcanized fiber may be used for insulating washers, separators, and barriers but not as the sole support for uninsulated live parts.

7.2.4 Live screw heads or nuts on the underside of a base designed for surface mounting shall be countersunk not less than 1/8 inch (3.2 mm) in the clear, and then covered with a waterproof, insulating, sealing compound that does not soften at a temperature of 100°C (212°F); except that, if such parts are staked, upset, or otherwise secured so they cannot loosen, they may be insulated from the mounting surface by material other than sealing compound or by 1/2 inch (12.7 mm) or more air separation from the mounting surface.

7.3 Sealing compound

7.3.1 The depth or thickness of sealing compound over a live nut or screw head shall not be less than 1/16 inch (1.6 mm). If the underside of the base is not recessed and if it may be in contact with the surface upon which the lampholder is mounted, the depth or thickness of the sealing compound shall not be less than 1/8 inch (3.2 mm).

7.3.2 Sealing compound shall be insulating and shall not soften at a temperature of 100°C (212°F). See the Sealing Compound Test, Section 39.

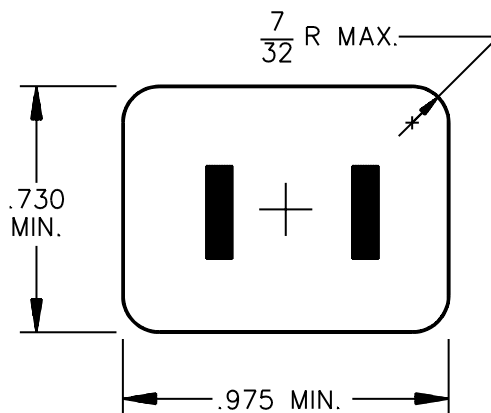
7.3.3 Sulfur is not acceptable as a sealant.

8 Lampholders With Male Blades

8.1 Lampholder fittings, lampholder adapters, miscellaneous lampholders, and other similar devices, each employing parallel blades for connection to the line, shall be constructed as shown in Figure 8.1.

Exception: A device may employ a smaller face size if the probe shown in Figure 8.2 does not make contact with the line blades when applied at any point on the circumference of the device face. The surface "Z-W" is to be applied against the outside edge of the device face with the surface "Y-W" perpendicular to the blades.

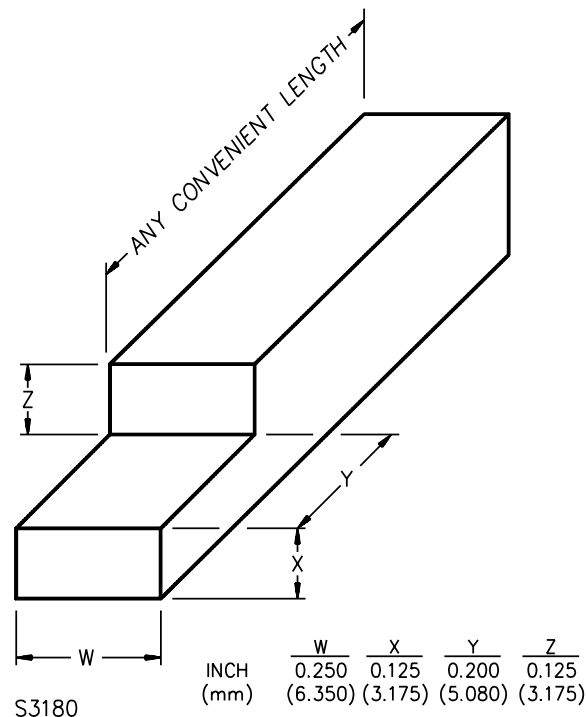
Figure 8.1
Minimum face dimensions



BLADES CENTERED
SA1945

inch	$\frac{7}{32}$	0.730	0.975
(mm)	(5.6)	(18.5)	(24.8)

Figure 8.2
Minimum face size probe



9 Flush-Type Lampholders

9.1 General

9.1.1 A flush-type lampholder shall be provided with means for mounting in a standard flush-device box or on a standard outlet-box cover. A yoke, strap, or mounting ears shall be of metal not less than inch (1.02 mm) thick and, if of steel, shall be protected against corrosion or otherwise coated. If a nonferrous metal is used, it shall be of a thickness to provide mechanical strength and rigidity not less than that of 0.040 inch (1.02 mm) thick steel.

9.1.2 The yoke, strap, or mounting ears may be provided with extension plaster ears which may be scored or perforated so that they can be broken off when not needed. See 43.2.

9.2 Grounding

9.2.1 A flush-type lampholder with which a metal flush plate may be used shall be constructed so that the metal flush plate is bonded to the outlet box (if of metal) while the lampholder is installed in the intended manner.

9.3 Flush plates

9.3.1 A flush plate provided with a lampholder or as an integral part thereof shall be of 0.030 inch (0.76 mm) or thicker ferrous metal, of 0.040 inch (1.02 mm) or thicker nonferrous metal, or of 0.10 inch (2.5 mm) or thicker nonconductive noncombustible material.

9.3.2 A flush plate of insulating material may be thinner than 0.10 inch (2.5 mm) at a break-off line and at a restricted area involving decorative lines or the like, provided that the strength of the plate as a whole is not adversely affected.

9.4 Cap

9.4.1 Means shall be provided for securely attaching the cap of a lampholder to the body or outer shell. The cap shall be prevented from turning with respect to the body or outer shell after assembly.

9.4.2 The thickness of metal of the lampholder cap shall be as indicated in Table 9.1.

Table 9.1
Minimum thickness of metal in inches (mm)

Table 9.1 revised April 11, 2000

Size of lampholder	Sheet brass	Sheet aluminum	Other metal
Mogul	0.025 (0.64)	0.032 (0.81)	Mechanical strength and rigidity not less than brass
Admedium or smaller	0.013 (0.33)	0.018 (0.46)	

9.4.3 The female nipple integral with the lampholder cap shall have no fewer than five full clean-cut threads of standard pitch as indicated in Table 9.2.

Table 9.2
Pitch of threads

Pipe size in inches	Threads per inch (25.4 mm)
1/8	27
1/4	18
3/8	18
1/2	14
3/4	14

9.4.4 A nipple that is not integral with the cap shall be fastened:

- a) So that it cannot be turned relative to the cap, and
- b) To provide mechanical strength at least equivalent to that of a unit piece.

9.4.5 The female nipple in a mogul-, admedium-, or medium-base lampholder cap or support shall be provided with a No. 8 – 40 setscrew.

Exception No. 1: The setscrew may be omitted in the nipple of a cap if the nipple is of the 1/2-inch trade size pipe or larger, has a tapered thread, and is designed to be tightened with a wrench.

Exception No. 2: The setscrew may be omitted in the nipple on the support of a candle-type lampholder.

Exception No. 3: The setscrew may be omitted in the nipple of the cap of a lampholder that is intended for use only in an electric fixture or portable lamp, provided that such caps without setscrews are shipped directly to the manufacturers of fixtures or portable lamps.

9.4.6 A No. 5 – 40 setscrew may be employed in the nipple or the support of a lampholder of the intermediate-base or smaller size.

9.4.7 A No. 8 – 32 setscrew may be employed in a nipple of nonmetallic material.

9.4.8 A cap with a threaded nipple for attachment to rigid metal conduit of the 1/2-inch or larger trade size shall be provided with a positive end stop for the conduit and a bushing or equivalent smooth, well-rounded surface to prevent damage to insulated wires entering the cap from the conduit.

9.4.9 The cap of a pendant-type lampholder shall have provision for strain relief so that a pull exerted on the flexible cord cannot be transmitted directly to the wiring terminals. If space is provided in the cap for a strain-relief knot, all surfaces of the cap that a knot can touch shall be smooth and well insulated.

9.4.10 The cord-inlet hole in a metal pendant cap shall be provided with a bushing of porcelain, phenolic or cold-molded composition, or other insulating material that is acceptable for the purpose. An insulating bushing shall not soften at a temperature of 90°C (194°F). Hot-molded shellac or tar composition shall not be used in an insulating bushing.

9.4.11 Hard fiber is acceptable as the insulating material employed if the bushing is not less than 3/64 inch (1.2 mm) thick and if it is so formed and secured in place that it cannot be affected by conditions of ordinary moisture.

9.4.12 A threaded, insulating bushing shall not be used in a threaded nipple to form a pendant cap if the pipe size of the nipple is smaller than 3/8 inch (9.5 mm).

9.4.13 A metal eyelet or grommet may be used as a side outlet for flexible cord in a metal cap, provided that all edges against which the cord may bear are smooth and well rounded, and provided that the eyelet is insulated from the metal of the cap at all points by fiber or other acceptable insulating material not less than 1/32 inch (0.8 mm) thick.

9.4.14 A metal cord-grip may be provided on a pendant lampholder designed for use with a jacketed type of flexible cord such as Type S or SJ.

9.4.15 The cap of an Edison-plug-type lampholder shall provide electrical connection through the device from screw shell to screw shell and from center contact to center contact. If wire leads are supplied as a part of the cap for attachment to the wiring terminals of the body, the identification of the leads shall be in accordance with 11.3.17.

9.5 Outer shell

9.5.1 The thickness of metal of the outer shell shall be as indicated in Table 9.3.

Table 9.3
Minimum thickness of metal in inches (mm)

Size of lampholder	Sheet brass	Sheet aluminum	Other metal
Mogul	0.025 (0.64)	0.032 (0.81)	Mechanical strength and rigidity not less than brass
Admedium or smaller	0.013 (0.33)	0.018 (0.46)	

9.5.2 To determine if an outer shell complies with the requirement in 9.5.1, measurements are to be made with round-nose micrometer calipers. The average is to be taken of four measurements, 90 degrees apart, around the shell where its diameter is greatest and the surface cylindrical.

9.5.3 Rubber shall not be employed for the outer shell or body of a lampholder, except for a molded-rubber, pendant, weatherproof lampholder, as indicated in 21.1. The rubber compound shall comply with the requirement in 38.2.1. See also the Insulation Resistance Test, Section 36.

9.6 Corrosion protection

9.6.1 Caps and outer shells of ferrous metal shall be protected against corrosion by enameling, lacquering, galvanizing, plating, or other equivalent means.

10 Lining

10.1 General

10.1.1 The inside of a metal shell and cap shall be lined completely with insulating material such that the metal cannot become a part of the circuit, even though the wires inside the lampholder become loosened or detached from their positions under the terminal screws. The lining shall not extend beyond the shell more than 1/8 inch (3.2 mm), and shall be located so that any uninsulated live part of a lamp base cannot become exposed while the lamp is in place. The lining of a metal cap shall be secured in place.

10.1.2 In a lampholder of conventional form, a removable ring of any material inserted between the outer shell and the screw shell for insulating purposes is not acceptable. This does not apply to the use of rings in a lamp cluster or in a device in which the outer shell is of porcelain or acceptable molded composition, if such rings serve to hold the several porcelain or composition parts together and thus are a necessary part of the complete device.

10.1.3 A lining for a medium-base lampholder shall comply with the Lining Tests, Section 29.

10.2 Form

10.2.1 The lining shall be in one piece and shall not be slit, notched, or cut, except as may be necessary for the operation or assembly of the device.

10.2.2 The requirement in 10.2.1 does not necessitate a cap lining being integral with a lining for an outer shell.

10.3 Thickness

10.3.1 The thickness of a lampholder lining, as measured by means of round-nose micrometer calipers, shall not be less than 1/32 inch (0.8 mm).

11 Interior

11.1 Base

11.1.1 A base on which uninsulated live parts are mounted (parts such as a wiring terminal, switching mechanism, center contact, or screw shell) shall be of porcelain, cold-molded or phenolic composition, or other insulating material acceptable for the particular application.

11.1.2 Vulcanized fiber may be used for insulating washers, separators, and barriers, but not as the sole support for uninsulated live parts.

Exception: Vulcanized fiber may be used for the ratchet wheel of a pull-type switching mechanism.

11.2 Current-carrying parts

11.2.1 Iron or steel, plain or plated, shall not be used for parts that are depended upon to carry current.

Exception: A corrosion-resistant (stainless-steel) alloy may be used for wire-binding nuts and screws and also for current-carrying parts that are not subjected to arcing.

11.2.2 Steel that is protected against corrosion by cadmium plating, zinc plating, or equivalently protective coating may be used for wire-binding nuts and screws that are not depended upon to carry current.

11.2.3 A current-carrying part shall be secured such that it cannot be turned relative to the surface on which it is mounted.

11.3 Terminals

11.3.1 If a lampholder is intended for the connection of conductors, wiring terminals or leads shall be provided. The setscrew form of wiring terminal shall not be used.

Exception No. 1: Lampholders intended for factory assembly into portable lamps or appliances may employ solder terminals when provided with the marking required in 43.9. These solder terminals may be in the form of a terminal plate with a hole, an eyelet connected to the screw shell and/or center contact, or other such termination.

Exception No. 2: The setscrew form of wiring terminal may be used if it is acceptable for the particular application considering appropriate conductor sizes, proper preparation of leads, method of securing conductors to terminals, and other features necessary to make a proper connection.

11.3.2 A terminal plate having a tapped hole for a wire-binding screw shall be of metal not less than 0.030 inch (0.76 mm) thick and shall have no fewer than two full threads in the metal.

11.3.3 For a binding screw having 32 or more threads per inch, a terminal plate formed from stock not less than 0.030 inch (0.76 mm) thick may have the metal extruded at the screw hole to provide two full threads for the binding screw.

11.3.4 With reference to the requirement in 11.3.2, metal having a thickness of not less than 0.060 inch (1.52 mm) is considered to be acceptable for a tapped hole for a screw having 32 threads per inch (25.4 mm).

11.3.5 A terminal employing a wire-binding screw shall be provided with upturned lugs or the equivalent to hold a wire under the head of the screw.

11.3.6 A wire-binding screw shall thread into metal.

11.3.7 The minimum size and the maximum number of threads per inch of wire-binding screws shall be as indicated in Table 11.1, except that the wire-binding screws of an intermediate-base lampholder for use in electric signs shall not be smaller than No. 5.

Table 11.1
Minimum screw size and maximum pitch

Size of lampholder	Minimum acceptable size of screw	Maximum acceptable number of threads per inch (25.4 mm)
Mogul	8	32
Admedium	6	36
Medium	6	36
Intermediate	4	40
Candelabra	3	48
Miniature	3	48

11.3.8 The wiring terminals of a lampholder designed for mounting in an outlet box shall be so located or protected that upon installation they are not forced against the wiring in the box.

11.3.9 With reference to the requirement in 11.3.8, a lampholder is not acceptable if it does not include a clearance that would provide the minimum required spacing between each terminal and the metal of a standard box of the type in which it is intended to be installed.

11.3.10 The terminals of a lampholder designed for open wiring or for use in electric signs, and the circuit wires connected to such a lampholder, shall not be less than 1/2 inch (12.7 mm) from the surface wired over if the device is rated at 250 V or less, and shall not be less than 1 inch (25.4 mm) from the surface wired over if the device is rated at more than 250 V.

11.3.11 The terminal parts of a cleat-type lampholder shall not overhang the supporting base and shall be spaced at least 1/4 inch (6.4 mm) from any mounting screw.

11.3.12 The terminal connected to the screw shell of a lampholder, when visible, shall be identified by means of a metal coating substantially white in color, or the terminal may be made of material substantially white in color. The terminal connected to the center contact shall be of a readily distinguishable, different color.

Exception: The terminal associated with the screw shell of a lampholder intended only to be factory wired and permanently secured on flexible cord or on wire need not be identified where polarity of the lampholder can be determined by visual examination.

11.3.13 A white head of a wire-binding screw that is not readily removable from its terminal plate and that does not appear to relate to parts other than the screw shell, may serve as the terminal identification specified by 11.3.12.

11.3.14 If the terminal that would be plated white to comply with the requirement in 11.3.12 is not visible, the wire-entrance hole for the connection to that terminal shall be marked with the word "white" or colored white directly adjacent to the hole.

11.3.15 A white terminal plate of a binding-screw terminal that is plainly visible after wiring and that does not appear to relate to the center contact of the lampholder may serve as the terminal identification specified in 11.3.12 if all the line-terminal binding screws are of the same color.

11.3.16 Pin-type terminals shall be constructed to make a permanent and secure connection with circuit conductors when installed.

11.3.17 If, instead of wiring terminals, wire leads or flexible-cord leads are provided with a lampholder, the identification of the leads shall be in accordance with Table 11.2 or 11.3.

Table 11.2
Polarity identification of single-conductor lampholder leads

Identification obtained by	Acceptable combinations	
	Wire connected to the screw shells of lampholders (identified wire)	All other wires
Color of braid	A. Solid white or natural grey (without tracer)	White or natural grey with tracer in braid or solid color other than white, natural grey, or green (without tracer)
Color of insulation ^a	B. Color other than white, natural grey, or green (with tracer in braid)	Solid color other than white, natural grey, or green (without tracer)
Color of separator ^a	C. White or natural grey stripe on contrasting color other than green or solid white or natural grey (with no stripe)	Solid color other than white, natural grey, or green
Metal coating on conductor ^b	D. Solid white or natural grey	Solid color other than white, natural grey, or green
	E. Tin or other acceptable metal on all strands of the conductor	No tin or other metal on the strands of the conductor
^a If color of braid, insulation, or separator is used for identification, all conductors are to be either acceptably metal-coated or not metal-coated.		
^b If an acceptable metal coating is used for identification, all braids and/or insulation are to have the same color and shape.		

11.3.18 Wire leads supplied as a part of a lampholder for the connection of the device to the line conductors of the supply circuit shall not be less than 4 inches (102 mm) in length measured from the outside of the lampholder body. A grounding lead, if provided, shall not be less than 6 inches (152 mm) long and shall have an outer identification of a green color with or without one or more yellow stripes.

Exception No. 1: The length is not specified for wire leads of a lampholder intended for mounting on an appliance.

Exception No. 2: Wire leads supplied as part of weatherproof or molded-rubber pendant type lampholders shall be as described in 20.3 and 21.4.

Table 11.3
Polarity identification of flexible-cord lampholder leads

Identification obtained by	Acceptable combinations	
	Wire connected to the screw shells of lampholders (identified wire)	All other wires
Color of braids on individual conductors	A. Solid white or natural grey (without tracer) B. Solid white or natural grey (without tracer) ^a C. Color other than white, natural grey, or green (with tracer in braid) D. Solid white or natural grey ^b	Solid color other than white, natural grey, or green (without tracer) White or natural grey with tracer in braid ^a Solid color other than white, natural grey, or green (without tracer)
Color of insulation on individual conductors	E. White or natural grey ^c	Solid color other than white, natural grey, or green ^b
Color of separators on individual conductors	F. Tin or other acceptable metal on all strands of the conductor ^d G. A stripe, ridge or groove on the exterior surface of the cord ^c	Color other than white, natural grey, or green ^c No tin or other white metal on the strands of the conductor ^d
Other means		
^a Only for Types C and PD cords. ^b Only for cords (other than Types SP-1, SP-2, SPT-1 and SPT-2) having no braid on any individual conductor. ^c Only for Types SP-1, SP-2, SPT-1 and SPT-2 cords. ^d Only for Types SPT-1 and SPT-2 cords.		

11.3.19 Use may be made of any wire in which the conductor is stranded and not smaller than No. 18 AWG (0.82 mm²) if:

- a) The wire is acceptable for use in electric fixtures, or
- b) The insulation is acceptable for use at a maximum potential (at least 300 V) and at a temperature required for the application. If the insulation is thermoplastic, the wire must have an overall braid unless the wire is acceptable for use at 600 V or higher potential. If the insulation is of rubber, the wire must have an overall braid regardless of its potential rating.

11.3.20 For a mogul-base lampholder that is intended only for use in a fixture or portable lamp, leads having an ampacity of 6 A or more are acceptable on a 750-W lampholder, and leads having an ampacity of 12 A or more are acceptable on a 1500-W lampholder.

Exception: Mogul-base lampholders rated 1500 W and marked in accordance with 43.21 may employ leads having an ampacity of 8 A or more.