

File E523118 Vol 1 Authorization Page 1 Issued: 2021-07-06

Revised: 2021-07-06

# FOLLOW-UP SERVICE PROCEDURE (TYPE R)

# LAMPHOLDERS, CANDELABRA AND MINIATURE (OMFV, OMFV7)

Manufacturer:	SEE ADDENDUM FOR MANUFACTURER LOCATIONS
Applicant:	2645055 (Party Site) Dongguan Nuobaoxin Lighting Technology Co., Ltd No. 69 Guanzhou Industrial Avenue, Wang Niu Dun Town Dongguan Guangdong 523215 CN
Listee/Classified Company:	2645055 (Party Site) SAME AS APPLICANT

# Use of the Mark

This Follow-Up Service Procedure authorizes the above Manufacturer(s) to use the marking specified by UL LLC, or any authorized licensee of UL LLC, including the UL Contracting Party, only on products when constructed, tested and found to be in compliance with the requirements of this Follow-Up Service Procedure and in accordance with the terms of the applicable service agreement with UL Contracting Party. The UL Contracting Party for Follow-Up Services is listed in the addendum to this Follow-Up Service Procedure ("UL Contracting Party"). UL Contracting Party and UL LLC are referred to jointly herein as "UL."

It is the responsibility of the Applicant, Manufacturer(s), and Listee/Classified Company to make sure that only the products meeting the aforementioned requirements bear the authorized Marks of UL LLC, or any authorized licensee of UL LLC.

#### Additional Responsibilities

Additional responsibilities, duties and requirements for the Applicant and Manufacturers are defined under Additional Resources at the following web-site: <a href="http://www.ul.com/fus">http://www.ul.com/fus</a>.

Manufacturers without Internet access may obtain the current version of these documents from their local UL customer service representative or UL field representative. For assistance, or to obtain a paper copy of these documents or the Follow-Up Service Terms referenced below, please contact UL's Customer Service at <a href="http://www.ul.com/aboutul/locations/">http://www.ul.com/aboutul/locations/</a>, select a location and enter your request, or call the number listed for that location.

#### Acceptance of Follow-Up Services

The Applicant and the specified Manufacturer(s) and any Listee/Classified Company in this Follow-Up Service Procedure must agree to receive Follow-Up Services from UL Contracting Party. If your applicable service agreement is a Global Services Agreement ("GSA"), the Applicant, the specified Manufacturer(s), and any Listee/Classified Company will be bound to a Service Agreement for Follow-Up Services upon the earliest by any Subscriber of a) use of the prescribed UL Mark, b) acceptance of the factory inspection, or c) payment of the Follow-Up Service fees. The Service Agreement incorporates such GSA, this Follow-Up Service Procedure and the Follow-Up Service Terms which can be accessed by clicking the following link: <a href="http://services.ul.com/fus-service-terms">http://services.ul.com/fus-service-terms</a>. In all other events, Follow-Up Services will be governed by and incorporate the terms of your applicable service agreement and this Follow-Up Service Procedure.

# Use and Ownership of the Follow-Up Service Procedure

This Follow-Up Service Procedure, and any subsequent revisions, is the property of UL and is not transferable. This Follow-Up Service Procedure contains confidential information for use only by the Applicant, the specified Manufacturer(s), and representatives of UL and is not to be used for any other purpose. It is provided to the Subscribers with the understanding Generated 2021-10-04

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that it is not to be copied, either wholly or in part unless specifically allowed, and that it will be returned to UL, upon request.

#### Definition of Terms

Capitalized terms used but not defined herein have the meanings set forth in the GSA and the applicable Service Terms or any other applicable UL service agreement.

#### No Third Party Liability

UL shall not incur any obligation or liability for any loss, expense or damages, including incidental, consequential or punitive damages arising out of or in connection with the use or reliance upon this Follow-Up Service Procedure to anyone other than the above Manufacturer(s) as provided in the agreement between UL LLC or an authorized licensee of UL LLC, including UL Contracting Party, and the Manufacturer(s).

#### Certification Body

UL LLC has signed below solely in its capacity as the certification body to indicate that this Follow-Up Service Procedure fulfills the requirements for certification documentation issued by the certification body.

Bruce A. Mahrenholz Director Conformity Assessment Programs (CPO) UL LLC

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LOCATION

2645055 (Party Site)

Dongguan Nuobaoxin Lighting Technology Co.,Ltd

No. 69 Guanzhou Industrial Avenue, Wang Niu Dun Town

Dongguan Guangdong 523215 CN

Factory ID: none

UL Contracting Party for above site is: UL GmbH

File E523118 Vol.1 OMFV Page 1 Issued: 2008-06-05 Listing Mark Data Page (LMDP)

(FILE IMMEDIATELY AFTER AUTHORIZATION PAGE)

# LISTING MARK

The Listing Mark consists of four elements placed in close proximity and shall appear on Listed products only. Minimum size is not specified, as long as the Listing Mark is legible. The following is suggested.



XXXX = The control number assigned by UL, E523118.

The minimum height of the registered trademark symbol \$ shall be 3/64 of an inch. When the overall diameter of the UL Mark is less than 3/8 of an inch, the trademark symbol may be omitted if it is not legible to the naked eye.

The product identity is: "LAMPHOLDER", "MINIATURE LAMPHOLDER" or "CANDELABRA LAMPHOLDER."

The product identity may be omitted if the Mark is directly and permanently applied to the product by stamping, molding, ink-stamping, silk screening or similar process. The product identity may appear elsewhere on the product if the other three elements are part of the nameplate which includes the rating or the catalog or model designation.

Separable Listing Mark (not part of a nameplate and in the form of decals, stickers or labels) will always include the four elements.

The complete four-element Listing Mark will appear on the smallest unit container in which the product is packaged when the product is of such a size that only the UL Symbol can be applied to the product or when the product size, shape, material or surface texture makes it impossible to apply any legible marking to the product.

The manufacturer may reproduce the Mark or obtain it from a UL authorized supplier. The list of UL authorized label suppliers can be found on UL's online directory at www.ul.com.

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(FILE IMMEDIATELY AFTER AUTHORIZATION PAGE)

# LISTING MARK

The Listing Mark consists of four elements placed in close proximity and shall appear on Listed products only. Minimum size is not specified, as long as the Listing Mark is legible. The following is suggested. (If only Canadian coverage is authorized, use only the C-UL Symbol).

UL Symbol to the left and the C-UL Symbol to the right.







Alternatively, the Canadian/US Mark may be used. The UL Symbol with "C" to the left and "US" to the right.



XXXX = The control number assigned by UL, E523118.

The minimum height of the registered trademark symbol \$ shall be 3/64 of an inch. When the overall diameter of the UL Mark is less than 3/8 of an inch, the trademark symbol may be omitted if it is not legible to the naked eye.

The product identity is: "LAMPHOLDER", "MINIATURE LAMPHOLDER", or "CANDELABRA LAMPHOLDER".

The product identity may be omitted if the Mark is directly and permanently applied to the product by stamping, molding, ink-stamping, silk screening or similar process. The product identity may appear elsewhere on the product if the other three elements are part of the nameplate which includes the rating or the catalog or model designation.

Separable Listing Mark (not part of a nameplate and in the form of decals, stickers or labels) will always include the four elements.

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(FILE IMMEDIATELY AFTER AUTHORIZATION PAGE)

# LISTING MARK

All elements of the Listing Mark will appear on the smallest unit container in which the product is packaged when the product is of such a size that only the Symbol(s) can be applied to the product or when the product size, shape, material or surface texture makes it impossible to apply any legible marking to the product.

The manufacturer may reproduce the Mark or obtain it from a UL authorized supplier.

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# INDEX

SECTION	PRODUCT COVERED	USL	CNL
1	Candelabra Lampholders, Models	X	Х
	NBX-12A, NBX-12B, NBX-12C		

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GENERAL

PRODUCT COVERED

Lampholders, Candelabra and Miniature Base.

FACTORY LOCATION AND IDENTIFICATION:

Factory Location		Identification
Reserved 1	for future	e use

If the Applicant manufactures the products in this Follow-Up Services Procedure at more than one location, a distinctive identification (which may be in code) shall be provided to identify the device as the product of a particular factory.

# LISTING MARK:

See Listing Mark Data Page.

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#### MARKINGS:

#### General -

The Listee's name, catalog number, factory identification and electrical ratings on the lampholder. See Table 1.

All markings shall be permanent and molded, die-stamped, paint-stenciled, stamped, or etched metal that is permanently secured or indelibly stamped lettering on a R/C (PGDQ2) pressure-sensitive label suitable for 150C minimum and for the surface adhered to.

If the catalog number is not marked on the device, it shall appear on the carton or other container in which the device is packaged.

For a lampholder that has an integral flush plate or outlet box cover of insulating material, all markings may be on the inside of plate or cover. For a surface-type lampholder, markings may be on the inside of insulating cover or on the side of base that is exposed when the cover is removed.

The rating on a glazed porcelain lampholder shall be located such that it can be made visible after installation by removing the body or shell without disconnecting any wires; if practical, the rating marking shall be visible after installation without disassembling any parts of the device.

A lampholder for use in a luminaire canopy shall be marked such that the rating marking will be readily visible upon removing the canopy.

For a screw lampholder, the electrical rating and other markings of the lampholder shall not appear on the extension plaster ears, whether separate pieces or integral with the mounting means, unless the marking and ratings also appear elsewhere on the device.

Damp and Wet Locations -

A lampholder that complies with the Damp Location requirements of Sec Gen shall be marked "FOR USE IN DRY OR DAMP LOCATIONS".

A lampholder that is identified in the individual reports as suitable for Wet Locations and also complies with the Damp Location requirements of Sec Gen shall be marked "FOR USE IN DRY, DAMP OR WET LOCATIONS".

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#### Metal-Shell Lampholder -

A metal-shell lampholder with an insulating liner shall be provided with wiring and assembly instructions. These instructions shall include (1) the appropriate conductor sizes, (2) proper preparation of leads (including strip gauge), (3) method of securing conductors to terminals, (4) assembly of outer shell to cap, and (5) other information necessary to make a proper assembly. The instructions shall be provided in one of the following locations:

- A. On an individual package or blister-package device.
- B. On a sheet, the number of which is equal to the number of devices in the carton, for over-the-counter sales.

Exception - This marking is not required for devices bulk-packaged for factory assembly.

#### Push-in Terminals -

A lampholder provided with push-in terminals shall be plainly and permanently marked with the proper strip length of conductors.

A lampholder provided with push-in terminals shall contain the following information on each carton:

- A. "For factory assembly into portable lamps and luminaries";
- B. the appropriate conductor sizes and types;
- C. the proper strip length of conductors; and
- D. "Use copper conductors only".

# Solder Terminals -

A lampholder provided with solder terminals that are intended for factory assembly into overall equipment shall contain the following information on each carton:

- A. "For factory assembly into portable lamps or appliances only";
- B. the appropriate conductor sizes; and
- C. the proper strip length of conductors.

Outlet box mounted -

All ceiling outlet-box lampholders shall be marked "Min 90°C supply conductors" on the device or the smallest unit package.

The following marking requirement applies only to outlet box mounted, medium-screw lampholders, rated 660 W or less, intended for installation in a branch circuit (copper wire only), and that employ one or more of the following means for wire securement:

- Α. wire-binding screws;
- back-wired pressure plates; or
- push-in terminals.

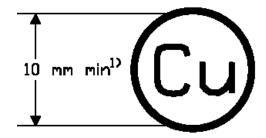
Note - this marking does not apply to lampholders intended for copper and aluminum connections and identified as "CO/ALR" in the individual reports.

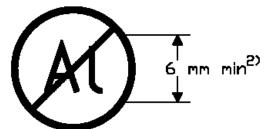
The device shall be marked with one of the following, or its equivalent:

- "Notice Use only copper or copper-clad wire with this device"; Α.
  - "Notice Use only devices marked CO/ALR with aluminum wire"; or
  - the symbols illustrated in the following figure. C.

# Terminal marking symbols

(Clause 7.4.3)





(10 mm = 0.39 inches)

(6 mm = 0.24 inches)

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The marking shall be located as follows:

- A. For individually packaged devices, the marking shall appear on one of the following:
  - 1) the device;
  - 2) a stuffer sheet; or
  - 3) the device carton.
- B. For devices intended for factory assembly, the marking shall be on the device.

If the lampholder marking appears on the device, one of the abbreviated markings shown below may be used to indicate that the lampholder is for use with either copper or copper-clad wire.

The marking shall be legible, with letters at least 1.6 mm (1/16 in) high:

- A. "Use copper wire only";
- B. "Cu wire only";
- C. "Use copper or copper-clad wire only"; or
- D. "Cu and Cu-clad wire only".

# Mogul Base

A mogul-screw lampholder rated  $1500~\mathrm{W}$  and employing leads having an ampacity of 8 A shall be marked "Not For Use With Incandescent Lamps" or an equivalent wording.

# Pulse Rated

A lampholder that is identified in the individual reports as pulserated shall be marked with the statement "Pulse Rating  $\_$  KV" or equivalent, where the numeric pulse rating of the device, in kilovolts, is filled in.

#### RATINGS

Lampholder Ratings - Lampholders shall be rated in accordance with Table 1 below.

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Table 1
Rating for screw lampholders

Trade Size Of	Ratings Of Lampholders With A Switching Mechanism		Rating Of Switchless Lampholders	
Lampholder	Watts	Volts	Watts	Volts
E39 Mogul	1500	250	1500	600 a
	750	250	1500	250
E29 Admedium	_	_	660	600
	_	-	660	250
E26 Medium	660	250	660	600 b
	250	250	660	250
E17 Intermediate	75	125	75	250
E12 Candelabra	75	125	75	125
E11 Miniature	75	125	75	125

 $<sup>^{\</sup>rm a}$  Lampholders intended for use with pulse-rated lamps also have a 4 or 5 kV starting pulse-rating

#### GENERAL CONSTRUCTION:

If provided and unless otherwise described in the individual Report, the following paragraphs apply to all units included in this Procedure. Additional requirements for other components and material are as specified in the individual Procedure.

# Canadian References -

In the report, "CN" denotes that the component is C-UL or CSA Certified. If the unit does not bear the C-UL Mark, the "CN" reference should be disregarded. co

# Abbreviation:

Sec. Gen. Section General
R/C Recognized Component
USL United States Standard, Listed

CNL Canadian National Standard, Listed

 $<sup>^{\</sup>rm b}$  Lampholders intended for use with pulse-rated lamps also have a 4 kV starting pulse-rating

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#### Electrical Spacing -

The spacing between uninsulated live parts of opposite polarity and between an uninsulated live part and a dead-metal part (including a metal surface on which the holder is mounted) that is likely to be grounded or exposed to contact when the device is installed in the intended manner shall not be less than those shown in Table 2 below. A dead-metal part is not considered to be exposed to contact if it is recessed not less than 4.8 mm (3/16 in.) in the clear, in a hole not more than 7.1 mm (9/32 in.) in diameter.

In measuring a spacing, an isolated dead-metal part interposed between live parts of opposite polarity or between a live part and a grounded or exposed dead-metal part is to be considered as reducing the spacing by the dimension of the interposed non-current-carrying metal parts.

Table 2
Minimum acceptable spacing in mm (inches)

	Holder for wet location use			Holder	for dry an	-	location	
Ratings of	At wi	lring inals	than	nts other wiring ninals		iring inals	than	ts other wiring inals
holder in volts	Throug h air	Over surfac e	Throug h air	Over surface	Through air	Over surface	Throug h air	Over surface
250	9.5 (0.375 )	12.7 (0.50)	9.5 (0.375 )	12.7 (0.50)	6.4 (0.25)	6.4 (0.25)	1.2 (0.046	1.2 (0.046)
600	9.5 (0.375 )	12.7	9.5 (0.375 )	12.7	6.4 (0.25)	6.4 (0.25)	3.2 (0.125 )	3.2 (0.125)

Exception: At a point other than a wiring terminal, the spacing between an uninsulated live part and a dead-metal part that is exposed to contact, but is not likely to be grounded when the lampholder is installed may be less than indicated in Table 2, providing the specified value from Table 1 is 3.2 mm (0.125 inch) or more, then the required spacing in question may be half that of the specified value, or 2.4 mm (0.094 inch), whichever is larger.

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Current-Carrying Parts -

Current-carrying parts shall be made of:

- a) copper, copper alloy;
- b) other corrosion-resistant metal having equivalent conductivity and mechanical strength;
- c) corrosion-resistant (stainless steel) alloy for current-carrying parts that are not subjected to arcing. The center contact shall not be considered to be an arcing part; or
  - d) plated steel when used for wire-binding nuts and screws.

Plated or unplated steel may be used for current-carrying parts exposed to temperatures exceeding 218°C where described in the individual Report.

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

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

Positive electrical contact shall be maintained at any point at which a connection is made between current-carrying metal parts.

Solder Connections -

A soldered connection shall be made mechanically and electrically secure before soldering  $% \left( 1\right) =\left( 1\right) +\left( 1\right) +$ 

Screw Shells -

Screw shells shall have right hand threads. Screw shells have threads or their mechanical equivalent, which engage at least two full threads of a standard male lamp base. The minimum thickness of the female screwshell and the material shall be in accordance with Table 1.

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Table 3
Thickness of screwshell

		Minimum thickness of screwshell material++, mm (inches)	
Trade size of lampholder	Nominal diameter mm (in.)	Copper or copper alloy	Aluminum or aluminum alloy+
Mogul	38.1 (1-1/2)	0.51 (0.020)	0.51 (0.020)
Admedium	28.6 (1-1/8)	0.30 (0.012)	0.30 (0.012)
Medium	25.4 (1)	0.30 (0.012)	0.38 (0.015)
Intermediate	16.7 (21/32)	0.25 (0.010)	0.33 (0.013)
Candelabra	12.7 (1/2)	0.25 (0.010)	0.33 (0.013)
Miniature	9.5 (3/8)	0.20 (0.008)	0.28 (0.011)

- + An aluminum alloy is acceptable for the screw shells of lampholders except the weatherproof type and those marked for damp and wet locations. An aluminum alloy for use in a screw shell is required to be wrought alloy employing manganese and/or magnesium as the principal alloying material (with the possible addition of chromium), and not containing more than 1.5 percent of iron and silicon combined and not more than 1 percent of all other usual impurities of aluminum (including a maximum if 0.25 percent of copper).
- ++ Corrosion resistance steel (stainless) is acceptable if the material is described in the individual Report.

# Center contact -

The center contact of a spring type of lampholder intended for use with single-filament lamps shall have a width at the lamp-contact end to provide a circular area, located centrally in the well of the lampholder, when the contact is fully depressed, of at least the diameter shown in Table 4. This circular area may be in the form of an annulus provided that the diameter of the central hole is not greater than 50 percent of the width of the contact at this point. Contacts other than the spring type shall have a circular area of at least the diameter shown in Table 4.

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Table 4

Dimensions of center contacts of lampholders

Trade size of lampholder	Minimum diameter of area at tip of center contact, mm (inches)
E39 Mogul	12.7 (1/2)
E29 Admedium	5.4 (7/32)
E26 Medium	5.4 (7/32)
E17 Intermediate	4.0 (5/32)
E12 Candelabra	3.2 (1/8)
E10 Miniature	3.2 (1/8)

Damp and Wet Locations -

A screwshell of lampholder marked for damp or wet locations shall be made from:

- a) copper, or a copper alloy with a minimum 80 percent copper;
- b) nickel alloy; or
- c) stainless steel.

Lamp Cavity -

Unless otherwise indicated in individual Report, the depth of the lamp cavity of lampholder shall be in accordance with Table 5

Table 5

Depth of lamp cavity

	Depth of lamp cavity, mm (inches)		
Trade size of lampholder	Minimum	Maximum	
E39 Mogul	41.3 (1-5/8)	42.9 (1-11/6)	
E29 Admedium	28.6 (1-1/8)	30.2 (1-3/16)	
E26 Medium	23.8 (15/16)	25.4 (1)	
E17 Intermediate	19.8 (25/32)	21.4 (27/32)	
E12 Candelabra	15.9 (5/8)	17.5 (11/16)	
E10 Miniature	11.9 (15/32)	13.5 (17/32)	

The depth of the lamp cavity is to be measured from the plane of the depressed center contact to the plane of the rim (1) of the insulating lining, or (2) of the lampholder body if the body is of insulating material.

Exception: The maximum depth requirement does not apply if the insulating material outer shell is flared and extends beyond the specified limit to provide further protection against contact with live parts.

When the method of mounting a lampholder affects the depth of the lamp cavity, the determination is to be made with the device mounted as intended.

Corrosion Protection -

All iron and steel parts are to be protected against corrosion.

Polarity -

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.

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.

If the terminal that would be plated white to comply with the above polarity requirement 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.

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 if all the lineterminal binding screws are of the same color.

If, instead of wiring terminals, wire leads or flexible cord are provided with a lampholder, the identification of the leads shall be in accordance with Table 6 or 7:

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Table 6
Polarity identification of single-conductor lampholder leads

	Acceptable combinations			
	Wire connected to screw			
Identification	shells of lampholders			
obtained by	(identified wire)	All other wires		
		White or grey with tracer		
Color of braid	A. Solid white or grey	in braid or solid color		
COIOI OI DIAIG	(without tracer)	other than white, grey,		
		or green (without tracer)		
	B. Color other than	Solid color other than		
	white, grey, or green	white, grey, or green		
	(with tracer in braid)	(without tracer)		
	C. White or grey			
	stripe on contrasting	Solid color other than		
Color of insulationa	color other than green or	white, grey, or green		
	solid white or grey (with	miles, grej, er green		
	no stripe)			
Color of separator <sup>a</sup>	D. Solid white or	Solid color other than		
COTOT OF Separator	grey	white, grey, or green		
Metal coating on	E. Tin or other	No tin or other metal on		
conductor <sup>a</sup>	acceptable metal on all	the strands of the		
Conductor	strands of the conductor	conductor		
<sup>a</sup> If color of bra	a If color of braid, insulation, or separator is used for			

<sup>&</sup>lt;sup>a</sup> 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.

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Table 7

Polarity identification of flexible-cord lampholder leads

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

Only for Types SPT-1 and SPT-2 cords.

File E523118 Project 4789978132

> June 30, 2021 REPORT

> > On

# LAMPHOLDERS, CANDELABRA AND MINIATURE

Dongguan Nuobaoxin Lighting Technology Co., Ltd. Guangdong, China

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#### DESCRIPTION

# PRODUCT COVERED:

USL, CNL - Candelabra base lampholders, Models refer to ELECTRICAL RATINGS table.

For use in dry or damp location.

# ELECTRICAL RATINGS:

Model	Rating
NBX-12A	125 V, 75 W
NBX-12B	
NBX-12C	

# ENGINEERING CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVE USE):

 ${\tt USL}$  - Products designated  ${\tt USL}$  have been investigated using  ${\tt US}$  requirements as noted in the  ${\tt Test}$  Record.

 ${\tt CNL}$  - Products designated CNL have been investigated using Canadian requirements as noted in the Test Record.

Lampholder Models NBX-12A, NBX-12B, NBX-12C have molded plastic body with integral molded screwshell and contacts made of copper alloy and stainless steel. They are keyless and unswitched.

#### CONSTRUCTION DETAILS:

Spacing - See Sec. Gen.

Current-Carrying Parts - See Sec. Gen.

Corrosion Protection - See Sec. Gen.

Depth of Cavity - See Sec. Gen.

# Markings:

All Models provided with push-in terminals shall contain the following information on each carton:

- a) "For factory assembly into portable luminaires";
- b) No. 18 AWG, soldered stranded conductors;
- c) 9.4 mm stripped length; and
- d) "Use copper conductors only".

In addition to the requirements in the Sec. Gen, a lampholder shall also be plainly and permanently marked with:

- a) Company name; or if described in Section General, trade name or trademark;
- b) Catalog number, may be provided on the carton or other container in which the device is packaged;
- b) Electrical rating
- d) "FOR USE IN DRY OR DAMP LOCATIONS"

Illustrations - The following illustrations are included in this Report:

ILL.	Description (dimension in mm)
No.	
1	Dimensional Drawing of Model NBX-12A
2	Dimensional Drawing of Model NBX-12B
3	Dimensional Drawing of Model NBX-12C

General - The general design, shape and arrangement shall be as illustrated in the following figures, except where variations are specifically described.

CANDELABRA BASE LAMPHOLDER, MODEL NBX-12A - FIGS. 1-4

General - Figs. 1-3 show the Assembly and disassembly views of Model NBX-12A.

Body - R/C QMFZ2, model 130FR(+)(f1)(t7), BASF CORP (E36632), min 1 mm thick, rated V-0,  $155\,^{\circ}$ C. Shape as shown. Overall 25.8 mm diameter by 33.2 mm long. Provided with two 2.8 mm diameter holes for Lead Wires. See ILL. Table for detailed dimensions.

Body Cover - R/C QMFZ2, model 130FR(+)(f1)(t7), BASF CORP (E36632), min 0.9mm thick, rated V-0,  $155\,^{\circ}$ C. Shape as shown. Overall 26 mm diameter by 31 mm long. Provided with 8 mm center hole for mounting, with min. five threads. See ILL. Table for detailed dimensions.

Side Contact (integral with push-in terminal) - Consisted of two parts, one is made of Stainless steel, and another is made of Copper or Copper Alloy, shape as shown. Overall 5.4 mm wide by 19 mm long by 0.5 mm thick. Secured inside Body by physical fit. See ILL. Table and F-4 for detailed dimensions for details.

Center Contact (integral with push-in terminal) - Consisted of two parts, one is made of Stainless steel, and another is made of Copper or Copper Alloy, shape as shown. Overall 5.4 mm wide by 15 mm long by 0.5 mm thick. Secured inside Body by physical fit. See ILL. Table and F-4 for detailed dimensions for details.

Center Contact supporter - R/C QMFZ2, model 130FR(+)(f1)(t7), BASF CORP (E36632), rated V-0, 155 $^{\circ}$ C. Shape as shown. Overall 5.0 mm wide by 12.5 mm long by 1.45 mm high, 1.45 mm thick. Secured to Body by press-fit.

Lead Wires - Optional. Two provided. R/C AVLV2/8, 18 AWG, solid dipped stranded copper conductors, rated 600 V,  $105^{\circ}$ C. Secured to contacts by pushing into the terminals. White leads connect to Side Contact.

Alternate - Same as above except R/C AVLV2/8, 18 AWG, solid dipped stranded copper conductors, rated min. 300 V,  $105^{\circ}C$  with braid covering.

Alternate - Same as above except one Listed flexible cord ZJCZ/7, 18 AWG/2C, solid dipped stranded copper conductors, rated min. 300 V,  $105^{\circ}C$ .

# CANDELABRA BASE LAMPHOLDER, MODEL NBX-12B - FIGS. 5-7

General - Figs. 4-6 show the Assembly and disassembly views of Model NBX-12B. Model NBX-12B is similar construction to NBX-12A except item below:

Body - R/C QMFZ2, model 130FR(+)(f1)(t7), BASF CORP (E36632), min. 1 mm thick, rated V-0,  $155\,^{\circ}$ C. Shape as shown. Overall 28 mm diameter by 33.2 mm long. Provided with two 3.9 mm diameter holes for Lead Wires. Provided with threads on the outside of whole Body. See ILL. Table for detailed dimensions.

Ring - R/C QMFZ2, model 130FR(+)(f1)(t7), BASF CORP (E36632), min. 1.1 mm thick, rated V-0, 155 $^{\circ}$ C. Shape as shown. Overall 43 mm OD by 26.7 mm ID by 8.5 mm high, min. 1.2 mm thick. Secured to the threads of Body. See ILL. Table for detailed dimensions.

# CANDELABRA BASE LAMPHOLDER, MODEL NBX-12C - FIGS. 8-10

General - Figs. 7-9 show the Assembly and disassembly views of Model NBX-12C. Model NBX-12C is similar construction to NBX-12A except item below:

Body - QMFZ2 model 130FR(+)(f1)(t7), BASF CORP (E36632), min. 1 mm thick, rated V-0,  $155^{\circ}$ C. Shape as shown. Overall 32.5 mm diameter by 33.2 mm long. Provided with two 3.9 mm diameter holes for Lead Wires. Provided with threads on the outside of Body. See ILL. Table for detailed dimensions.

Ring - QMFZ2 model 130FR(+)(f1)(t7), BASF CORP (E36632), min. 1.1 mm thick, rated V-0,  $155\,^{\circ}$ C. Shape as shown. Overall 43 mm OD by 26.7 mm ID by 8.5 mm high, min. 1.2 mm thick. Secured to the threads of Body. See ILL. Table for detailed dimensions.

Figure-1 Page-1



Figure-2 Page-1



Figure-3 Page-1

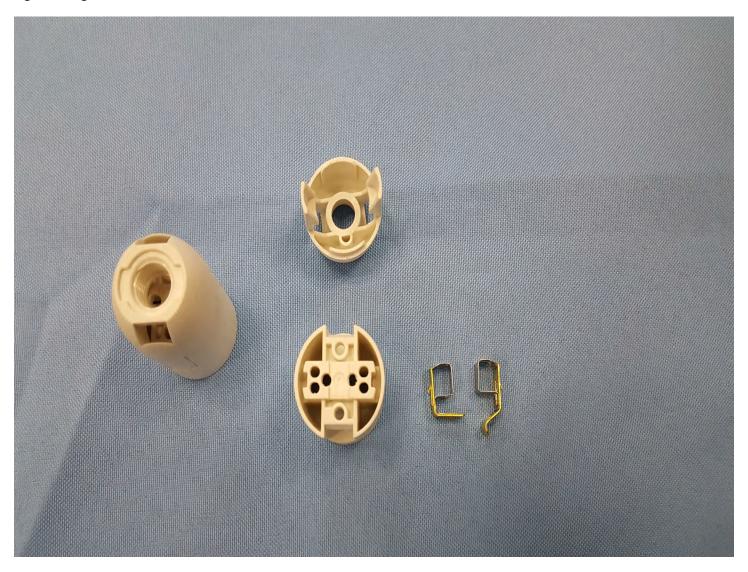


Figure-4 Page-1

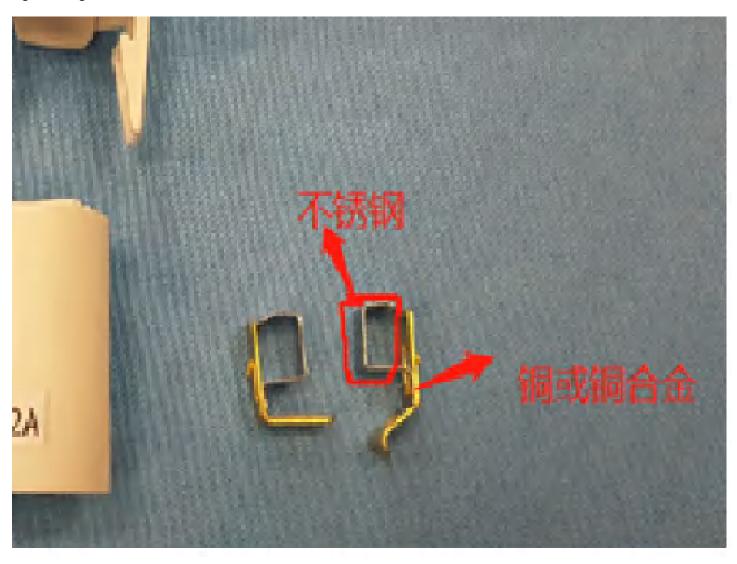


Figure-5 Page-1

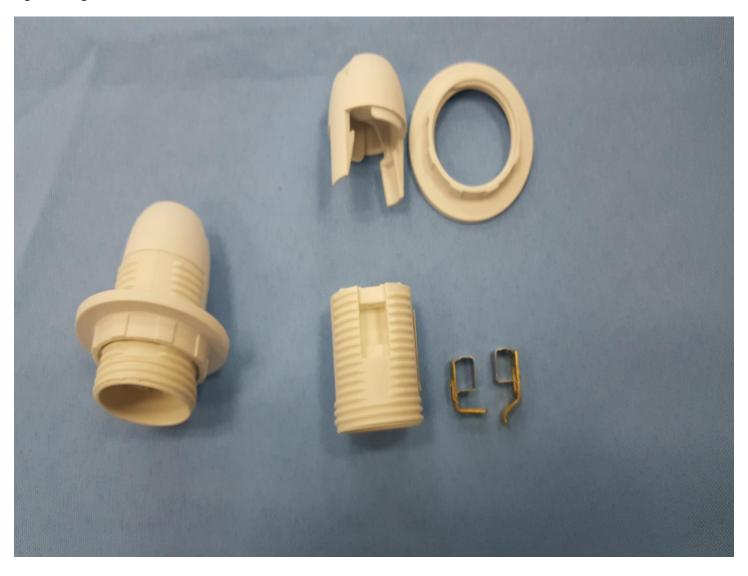


Figure-6 Page-1

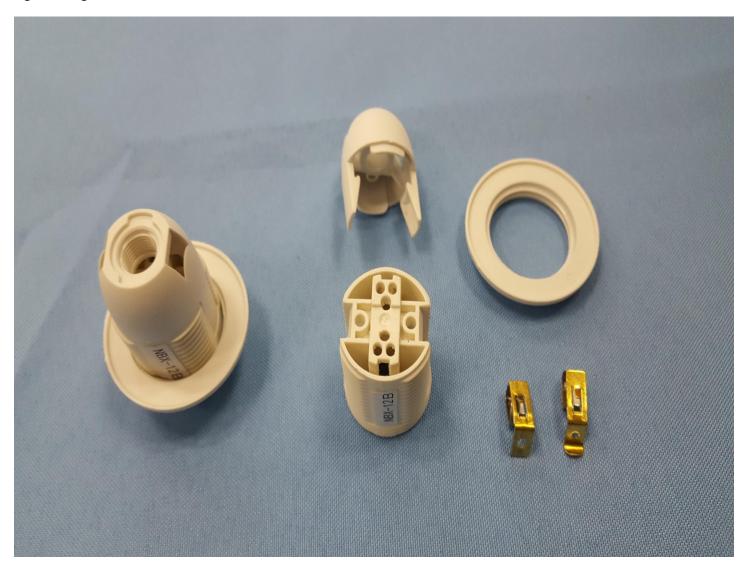


Figure-7 Page-1



Figure-8 Page-1

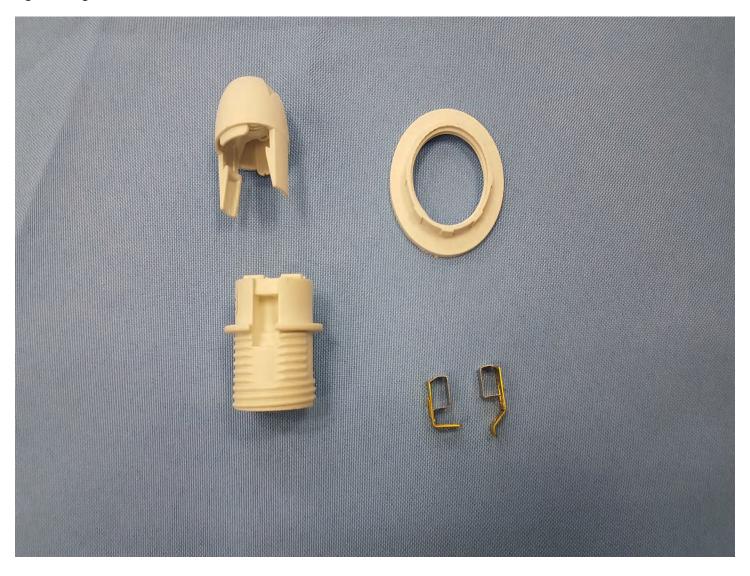


Figure-9 Page-1

