

**INCH-POUND**

A-A-60006A  
14 January 2010  
SUPERSEDING  
A-A-60006  
5 January 1998

## COMMERCIAL ITEM DESCRIPTION

### LIGHT, EXTENSION, ELECTRICAL

The General Services Administration has authorized the use of this commercial item description for all federal agencies.

1. SCOPE. This commercial item description (CID) covers portable electric incandescent-lamp extension lights, complete with connector plug, cord, lampholder, guard-reflector assemblies, and handle, for light duty and general use. These lights are not for use in hazardous areas. Lamps are not included with the lights.

2. CLASSIFICATION. Extension lights covered by this CID shall be of the following types, classes, and lengths, as specified (see 7.2 (b)):

- Type I - General use with No. 16 American Wire Gage (AWG) (1.31 square millimeters (mm<sup>2</sup>)) style SO, SEO, or STO cord, with switch
- Type II - General use weatherproof with No. 16 AWG (1.31 mm<sup>2</sup>) style SO, SEO, or STO cord, without switch and without receptacle outlet
- Type III - Light duty use, with No. 18 AWG (0.82 mm<sup>2</sup>) style SJO, SJEO, or SJTO cord, with switch
- Type IV - General use with No. 16 AWG (1.31 mm<sup>2</sup>) style SO, SEO, or STO cord, with switch and receptacle outlet

Class 1 - With metallic guard-reflector assembly

Class 2 - With insulated guard-reflector assembly

Length - 25 feet (7.62 meters (m))

Length - 50 feet (15.24 m)

Length - 100 feet (30.48 m)

Beneficial comments, recommendations, additions, deletions, clarifications, etc. and any data that may improve this document should be sent to: [STDZNMGT@dla.mil](mailto:STDZNMGT@dla.mil) or Defense Supply Center Richmond (DSCR), ATTN: DSCR-VEB, 8000 Jefferson Davis Highway, Richmond, VA 23297-5616. Since contact information can change, you may want to verify the currency of this address information using the ASSIST database at <https://assist.daps.dla.mil/>.

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## 3. SALIENT CHARACTERISTICS

3.1 Standard commercial product. The electrical extension light shall, at a minimum, be in accordance with the requirements of this CID and shall be the manufacturer's standard commercial product. Additional or improved features which are not specifically prohibited by this CID, but which are a part of the manufacturer's standard commercial product, shall be included in the electrical extension light being furnished.

3.2 Design. Each extension light shall consist of a connector plug, cord, and handle, equipped with a lampholder and guard-reflector. In addition, the handles for type I, III, and IV extension lights shall be equipped with a snap switch, protected by a channel guard for switch protection. Type IV extension lights shall be equipped with a receptacle outlet. The extension lights shall be designed for 115-volt (V) operation, but shall be capable of functioning at a maximum of 250V. Each extension light shall be capable of withstanding two, 5-foot (152.40 centimeters (cm)) drop impacts on a concrete or hard tile surface. Type II extension lamps shall be capable of resisting the entrance of any moisture when subjected to a water spray of simulated rainfall to the top and sides for one hour.

3.3 Construction. Construction shall be in accordance with UL 153, "Portable Electric Luminaires", and as specified herein. The construction shall be free from any characteristics or defects that may render the extension lights unsuitable or inefficient for the intended use. All injection-molded components (e.g. male plug end) shall be free from flash, blisters, deformities, cracks, sharp fins, sharp edges, lumps, and imbedded foreign matter. The extension lights shall be capable of withstanding the strains, jars, vibration, and other conditions incident to shipping, storage, and service. All parts subject to wear shall be readily accessible for adjustment or repair.

3.3.1 Fastening devices. All screws, pins, bolts, and similar parts shall be installed with adequate means to prevent loss of tightness and maintain adjustability. Parts subject to removal shall not be swaged, peened, or staked.

3.3.2 Electrical connections. Electrical connections shall conform to standard industry practice.

3.3.3 Interchangeability. All units of the same classification, furnished with similar options under a specific contract, shall be identical to the extent necessary to ensure interchangeability of component parts, assemblies, accessories, and spare parts.

3.3.4 Warning label. When specified (see 7.2(c)), a warning label shall be permanently affixed in a conspicuous location on the extension light. The legend on the warning label, shall be in upper case letters not less than 0.125-inches (3.175 millimeters (mm)) in height, and shall read as follows:

"NOT AUTHORIZED FOR SHIPBOARD USE"

3.4 Fire and casualty hazards. The bidder shall submit to the purchasing agency proof that the material proposed for supply under this CID conforms to the standards of UL 20, "General Use

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Snap Switches", UL 62, "Flexible Cords and Cables", UL 153, UL 496, "Lampholders", and UL 498, "Attachment Plugs and Receptacles", as applicable. The UL mark on the product label or a UL listing will be accepted as evidence that the material conforms to this requirement. In lieu of the label or listing, the bidder may submit independent proof satisfactory to the purchasing agency that the material complies with the above requirements, including method of test.

3.5 Connector plugs. Unless otherwise specified (see 7.2(d)), the connector plug shall be a general purpose 15 amperes, 125 V, two-pole, three-wire, grounding type conforming to the requirements of UL 498. Type II lights shall have the plug molded to the cord. Other lights covered by this CID shall be furnished with either the plug molded to the cord or the plug clamped to the cord.

3.6 Cord. The cord shall conform to UL 62. The length of the exposed cord between the plug and the handle assembly shall be not less than the lengths specified in 2. The cord for type I, II, and IV lights shall be style SO, SEO, SJO, or STO, No. 16 AWG (1.31 mm<sup>2</sup>), 3 conductor. The cord for type III lights shall be style SJO, SJEO, or SJTO, No. 18 AWG (0.82 mm<sup>2</sup>), 3 conductor. Insulating compounds and jacketing compounds shall be in conformance with manufacturer's standard practice.

3.7 Handle assembly. The handle assembly shall house a lampholder, a switch, when specified (see 7.2(b)), a receptacle outlet, when specified (see 7.2(b)), and shall provide a suitable groove or other means of support for the guard-reflector assembly. The switch, when provided, shall be protected by a channel guard. The receptacle provided for in type IV extension lights shall be a two-pole three-wire grounding type conforming to UL 498. Handles shall be constructed to allow for the removal and replacement of the switch and all other parts, including sockets and receptacles when provided, all without damage or the use of special tools. The handle shall be made of a suitable material that is resistant to impact, abrasion, heat, and oil. The handle shall be of a size and shape to permit full one-hand grasping. All ferrous metal nuts, bolts, washers, and clamps used in assembly of the handle shall be chromium or zinc-plated. Cord, fitting, and lampholder openings in type II light handles shall be weatherproof with the cord and lamp in place.

3.8 Lampholder. The switch, when provided, and the lampholder shall conform to UL 20 and UL 496, as applicable. The lampholder shall be rolled brass or aluminum and shall accommodate a medium screw-base lamp. The type II lampholder shall be weatherproof and the splice for the socket shall be taped in such a manner as to provide insulation equivalent to that on each conductor.

3.9 Lamp guard-reflector assembly. The extension light guard shall accommodate a 100-watt lamp.

3.9.1 Metallic guard-reflector assembly, class 1. The class 1 guard-reflector assembly shall consist of a metallic guard, with hook, and a metallic reflector. All metal parts of the guard-reflector assembly shall be plated in accordance with the manufacturer's standard practice. Enclosed within the guard-reflector assembly, there shall be a simple and continuous ground

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circuit between the guard-reflector assembly and the grounding contact of the plug using a green lead of a wire gage equal to or larger than that of the wire required for the cord.

3.9.1.1 Guard with hook, class 1. The guard shall be of the closed-end type. There shall be not less than six guard wires spaced circumferentially around the axis of the handle assembly. There shall be not less than two guard wires around the circumference of the cage. The cage shall have a clamping band and be secured using bolts and nuts. The guard shall provide for easy lamp replacement without the use of special tools.

3.9.1.2 Reflector, class 1. The reflector shall conform to the inside shape of the guard and shall cover between 145 and 180 degrees of arc of the inside circumference of the guard.

3.9.2 Insulated guard-reflector assembly, class 2. The class 2 reflector assembly shall consist of an insulated guard and hook of a suitable insulating material and an insulation-backed metallic reflector.

3.9.2.1 Guard and hook, class 2. The guard shall conform to 3.9.1.1. In addition, all metal parts of the guard and hook shall be covered with a permanent coating of an insulating material. If the hook rotates, provisions shall be made to prevent chafing of the hook coating in turning. The guard and hook may be constructed completely of a suitable insulating material.

3.9.2.2 Reflector, class 2. The reflector shall conform to 3.9.1.2 except all metal surfaces shall be covered with a permanent coating of an insulating material. The reflecting surface shall be either uncoated by the insulating material, or the insulating material shall be coated to provide a reflectance factor of not less than 50 percent.

3.10 Grounding. The extension light grounding shall conform to UL 153, Part I: Electrical Construction - General, Polarization and Identification; and Portable Hand Lights - Supplementary, Construction - Electrical, General.

3.11 Identification data. The manufacturer's name or trademark shall be permanently inscribed on or attached to the extension light.

#### 4. REGULATORY REQUIREMENTS

4.1 Recovered materials. The offeror/contractor is encouraged to use recovered materials to the maximum extent practicable, in accordance with paragraph 23.403 of the Federal Acquisition Regulation (FAR). Unless otherwise specified herein, all equipment, material, and articles incorporated in the work covered by this CID are to be new and fabricated using materials produced from recovered materials to the maximum extent possible without jeopardizing the intended use. The term "recovered materials" means materials that have been collected or recovered from solid waste and reprocessed to become a source of raw materials, as opposed to virgin raw materials. Unless otherwise specified, none of the above shall be interpreted to mean that the use of used or rebuilt products is allowed under this CID.

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4.2 Metric products. Products manufactured to metric dimensions will be considered on an equal basis with those manufactured using inch-pound units, provided they fall within specified tolerances using conversion tables contained in the latest version of IEEE/ASTM SI-10, "American National Standard for Use of the International System of Units (SI): The Modern Metric System", and all other requirements of this CID including form, fit and function are met. If a product is manufactured to metric dimensions and those dimensions exceed the tolerances specified in the inch-pound units, a request should be made to the contracting officer to determine if the product is acceptable. The contracting officer has the option of accepting or rejecting the product.

## 5. PRODUCT CONFORMANCE PROVISIONS

5.1 Product conformance. The products provided shall meet the salient characteristics of this CID, conform to the producer's own drawings, specifications, standards, and quality assurance practices, and be the same product offered for sale in the commercial marketplace. The government reserves the right to require proof of such conformance.

5.2 Market acceptability. The product offered must have been previously sold either to the government or on the commercial market.

## 6. PACKAGING

6.1 Preservation, packing, and marking. Preservation, packing, and marking shall be as specified in the acquisition order (see 7.2(e)).

## 7. NOTES

### 7.1 Sources of documents.

7.1.1 FAR. The FAR may be obtained from the Superintendent of Documents, P.O. Box 371954, Pittsburgh, PA 15250-7954. Electronic copies of FAR documents may be obtained from <http://www.arnet.gov/far/>.

7.1.2 ASTM standards. Copies of ASTM standards may be obtained from ASTM International, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959. Electronic copies of ASTM standards may be obtained from <http://www.astm.org/>.

7.1.3 IEEE standards. Copies of IEEE standards may be obtained from the Institute of Electrical and Electronics Engineers, Inc., 445 Hoes Lane, Piscataway, NJ 08854-1331. Electronic copies of IEEE standards may be obtained from <http://www.ieee.org/>.

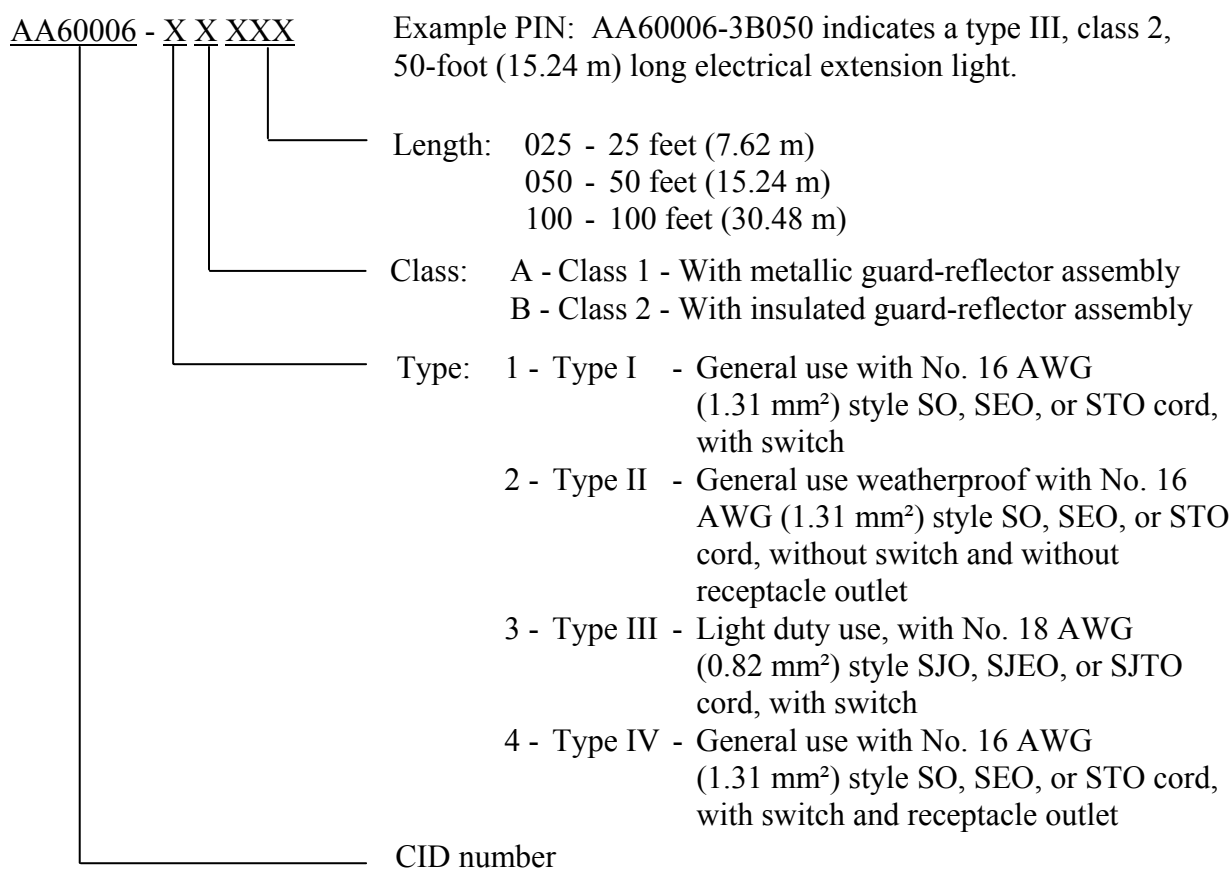
7.1.4 UL standards. Copies of UL standards may be obtained from Underwriter Laboratories Inc., 333 Pfingsten Road, Northbrook, IL 60062-2096. Electronic copies of UL standards may be obtained from <http://www.ul.com/>.

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7.2 Ordering data. The acquisition order should specify the following information:

- a. CID document number, revision, and CID PIN.
- b. Type, class, and length required (see 2).
- c. When warning label is required (see 3.3.4).
- d. When connector plugs other than specified (see 3.5).
- e. Preservation, packing, and marking (see 6.1).

7.3 Part or identification number (PIN). The following PIN procedure is for government purposes and does not constitute a requirement for the contractor.



7.4 Classification cross-reference. Classifications used in this CID (see 2) are identical to those found in the superseded Federal Specification W-L-661E, "Light, Extension, Electrical".

7.5 Metric units. The values stated in either inch-pound units or SI units are to be regarded separately as standard. Within the text, the SI units are shown in brackets. The values stated in each system are not exact equivalents; therefore, each system should be used independently of the other. Combining values from the two systems may result in non-conformance with the standard.

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7.6 Subject term (key word) listing.

Guard-reflector  
Lamp, incandescent, portable  
Lampholder  
Trouble lamp

MILITARY INTERESTS:

Custodians:

Army - MI  
Navy - YD  
Air Force - 99  
DLA - GS

Review Activities:

Army - GL  
Navy - MC  
DLA - IS

CIVIL AGENCY  
COORDINATING ACTIVITY:

GSA - FAS

Preparing Activity:

DLA - GS2

(Project 6230-2010-002)

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST database at <https://assist.daps.dla.mil/>.