

File E184884
Project 98NK16439

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REPORT

on

FLASHLIGHTS AND LANTERNS, FOR USE IN
HAZARDOUS LOCATIONS

Pelican Products Inc.
Torrance, CA

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DESCRIPTION

PRODUCT COVERED:

USL - Flashlight, Model Pelilite 1800 for use in Class I, Division 2, Group D Hazardous Locations.

GENERAL:

The flashlight noted above is not provided with a lamp disconnect mechanism.

ENGINEERING CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVE'S USE):

USL, indicates investigation to United States Standard UL 783, Sixth Edition.

MARKING:

The following marking is molded on the external surface of the flashlight case.

- * 1. Listee's name.
2. Catalog number.
3. Designation of the Hazardous Locations as shown in "Product Covered."
4. The designation of the lamp bulb to be used and the number, type and size of batteries to be employed.
5. Temperature Code T3.
6. The word "WARNING" and the following or equivalent statement:
 "Risk of ignition - Do not open in a hazardous area."

ASSEMBLY AND CONSTRUCTION DETAILS:

The general assembly of the device is shown on Figs. 1 and 2. Certain other subassemblies are shown on additional illustrations. All dimensions are approximate unless otherwise stated.

Assembled device is shown in Fig. 1.

FLASHLIGHT MODEL SUPER PELILITE 1800 - FIG. 1 (N98-9375)

Fig. 1 shows a picture of the device fully assembled. For use with two size "C" dry cell alkaline batteries and Cat. No. 1804, Carley Xenon lamp module.

FLASHLIGHT MODEL SUPER PELILITE 1800 - FIG. 2

1. Shroud - ABS, shape and dimensions as shown in ILL. 2.

Alternate - Thermoplastic rubber, material name Rimflex, Compound No. A/AG38B, manufactured by Rimpact International Inc. Shape and dimension as shown in ILL. 2A.

Alternate - Thermoplastic rubber, material name Rimflex, Type A/OM55TPE manufactured by Rimpact International Inc.

Alternate - Thermoplastic rubber, shape and dimensions as shown in ILL. 2B.
2. Lens - Bayer Mobay, Makrolon 2500. A 1.14 in. deep cup with minimum thickness of not less than 0.15 in. and an internal diameter of 1.495 in. Lens fits into shroud with snap in motion. See ILL. 3.

Alternate - Same as above, except GE, Lexan HF1130, ILL. 3A.

Alternate - GE Lexan HF1130. A 0.93 in. deep cup with minimum wall thickness of not less than 0.17 in. and an internal diameter of 1.48 in. Lens fit into shroud with snap in motion. See ILL. 3B
3. Lamp Module - Cat. No. 1804, machined aluminum reflector with smooth aluminized surface with Xenon bulb rated 2.5 V, 0.74 A, secured in the reflector with ceramic Saeveisen No. 8 cement. Lamp module comes fully assembled from vendor, manufactured by Carley Lamp Inc. See ILL. 4.

Alternate - Manufactured by Illumination Technology Industries, with polycarbonate reflector with mirror finish, with Xenon bulb rated 2.6 V, 0.74 A. See ILL. 4A.
4. Battery Retainer - 302 Stainless steel. Shape and dimensions as shown. See ILL. 5.
5. Spring (Battery Contact) - 302 Stainless steel. Spot welded to the battery retainer. See ILL. 6.
6. **Foam Pad - Placed around the battery contact spring. See ILL. 7.**
7. Body - ABS. Shape and dimension as shown in ILL. 8.
8. End Cap - ABS, fits on the bottom of the body. Shape and dimension as shown in ILL. 9.