

File E219277  
Project 01NK30465

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REPORT

on

INTRINSICALLY SAFE EQUIPMENT AND SYSTEMS  
FOR USE IN HAZARDOUS LOCATIONS

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Torrance, CA

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DESCRIPTION

PRODUCT COVERED:

Model 1930 L1 portable illumination device for Class I, Groups A, B, C and D Hazardous Locations.

GENERAL:

The products covered are lighting devices that contain LEDs and are powered by four 1.5 V button cell alkaline batteries.

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

USL indicates investigation to U.S. Standard UL 913, 5<sup>th</sup> Edition.

MARKING:

The following markings are provided on each device. See ILL. 3.

1. Manufacturer's name and model number.
2. The wording "Only as to intrinsic safety for Hazardous Locations, Class I, Groups A, B, C and D".
3. An indication of the specific batteries to be used with the device, by manufacturer and part number.
4. The statement "WARNING - Change batteries only in an area known to be non-hazardous" or equivalent.

MODEL 1930 L1 - FIG. 1  
(Drawing No. 1931-921-110/245)

1. Battery Tray/Switch Assembly - A PCB is located opposite the switch and contains the following LED. The battery tray connects the switch and the PCB. See ILL. 1.

LED - Part No. 1936-350-230 manufactured by Nichia that is white in appearance and shines white, Part No. 1936-350-123, manufactured by Nichia that is white in appearance and shines blue/green, Part No. 1936-350-170, manufactured by GELcore that is white in appearance and shines red, or Part No. 1936-350-138 manufactured by Marktech that is white in appearance and is infrared. See ILL. 4.

2. Body - Polycarbonate. See Fig. 1 for dimensions.
3. Lens - Polycarbonate. Approx 0.085 in. thick and 0.584 in. in diameter. Snaps into shroud.
4. Shroud - Polycarbonate. Screws onto body over reflector. See ILL. 2.
5. Reflector - ABS.