



DATA SHEET: LIGHT EMITTING DIODE (LED) Light Assembly Upgrade to U.S. Navy Battle Lanterns

1. **Background:** The advent of Light Emitting Diode (LED) emitters as a source of high level illumination with a relatively low current draw has brought about a significant upgrade to the US Navy Battle Lantern. The Office of Naval Research, Tech Solutions, in response to Fleet requests, funded a project to develop qualification requirements, test, and deck-plate evaluate LED Rechargeable Battle Lantern as the desired variant of the "Solid State" Battle Lantern.

2. **Modification Details:** An LED Light Assembly is substituted in place of the incandescent sealed beam lamp. A 4' diameter clear Lens Plate is placed in front of the Light Assembly and made waterproof with the neoprene gasket. The LED Light Assembly will consist of four white or two red electronically balanced emitters, providing evenly distributed light IAW manufacturer's specifications. Luminance must be equal to or greater than that described in Figure 23 of MIL-DTL-16377/53C.

3. **Certification:**

A. As per Naval Ship Systems Engineering Station Itr Ser 9342/032 of 3 May 2004: "NAVSEA Philadelphia Code 934 (Electric Power Life Cycle Manager) authorizes the use of qualified LED Battle Lanterns for shipboard emergency and damage control fighting applications."

B. Based in part on the successful March 2003 testing of the SEACOAST supplied full modified LED/Rechargeable Battle Lanterns on board USS MCFAUL (DDG-74), Naval Sea Systems Command updated the electrical/electronic, material, and performance requirements for the legacy Battle Lantern in the newly revised MILSPEC, MIL-DTL-16377/53C of 27 September 2005. It revises the specifications for the rechargeable components and incorporates the use of high output solid state Light Emitting Diode (LED) emitters as a source of illumination for the lanterns.

C. NSWC SSES PHIL message: IN SERVICE ENGINEERING ADVISORY 026-05 R141828Z OCT 05 re-affirmed Seacoast Development Group, Inc. (SDG) as qualified vendor for *all variations* of the Battle Lantern Battery re-charging and LED emitter Conversion/Upgrade/Retrofit Kits.

4. **Availability:** These modification kits are available for open purchase procurement from SEACOAST DEVELOPMENT GROUP, INC. Phone: (800) 645-4832, CAGE Code 0RK00. Sales@NavyLanterns.com or SDG@High-Performance.com.

Part Number/NSN

Nomenclature

BL-LED-UK4W
6230-01-531-7844

Battle Lantern, White LED Light Assembly **Upgrade Kit**
To upgrade SYM 100 and/or SYM 101 series lanterns
(Replaces incandescent lamp)
Upgrade Kit includes: LED Light Assembly with
4 White LED emitters and emitter controller
4" Lens Plate, and Brass mounting screws

BL-LED-UK2R
6230-01-531-7845

Battle Lantern, Red LED Light Assembly **Upgrade Kit**
To upgrade SYM 100 and/or SYM 101 series lanterns
(Replaces incandescent lamp)
Upgrade Kit includes: LED Light Assembly with
2 Red LED emitters and emitter controller
4" Lens Plate, and Brass mounting screws

5. Telephone calls are encouraged should additional information be required regarding installation or for the purchase of Kits or spare batteries. **NOTE:** Government credit cards accepted. Anticipated delivery date: 30 days or less after receipt of order.