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An American National Standard

Standard Specification for Searchlights on Motor Lifeboats[1]

This standard is issued under the fixed designation F1003; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

ε[1] NOTE—Reapproved with editorial changes in October 2012.

1. Scope

1.1 This specification covers searchlights for motor lifeboats.

1.2 The values stated in inch-pound units are to be regarded as the standard. The values given in parentheses are for information only.

1.3 The following precautionary caveat pertains only to the test method portion, Section 7, of this specification: *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety, health and environmental practices and determine the applicability of regulatory limitations prior to use.*

1.4 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

2. Referenced Documents

2.1 *ASTM Standards:*[2]

B117 Practice for Operating Salt Spray (Fog) Apparatus

2.2 *Military Standard:*[3]

MIL-STD-105D Sampling Procedures and Tables for Inspection by Attributes

3. Descriptions of Terms Specific to This Standard

3.1 *lot*—a manufacturer's production run for a specific type of searchlight.

3.2 *order batch*—size of a specific contract or purchase order taken from the lot.

3.3 *production testing*—testing performed during a lot run of specific searchlights.

4. Materials and Manufacture

4.1 *Material:*

4.1.1 All materials used in the construction of these searchlights shall be of a quality suitable for the purpose intended and shall conform to the requirements of this specification.

4.1.2 The searchlight shall be constructed of brass, copper-alloy, an equivalent corrosion-resistant material, or a material that when tested in accordance with Practice B117 for 200 h, does not show signs of pitting, cracking, or deterioration.

4.1.3 Plastic, when used, shall be of a suitable thermoplastic or thermosetting material so molded as to produce a dense solid structure, uniform in texture, finish, and mechanical properties.

5. Requirements

5.1 The height of the searchlight from the base to the top of the light shall not exceed 19 in. (483 mm).

5.2 The housing of the searchlight shall be capable of free movement of at least 60° above and 45° below the horizontal, and be able to rotate 360° in the horizontal plane. There shall be a means provided to lock the searchlight in any desired position without the use of tools (vertically and horizontally).

5.3 The searchlight shall be capable of illuminating a light colored object at night at 55 ft (16.8 m). The searchlight shall project a beam of light of not less than 5.5 ft (1.68 m) in diameter at a distance of 55 ft from the light source. The edge of the beam shall be a point where the intensity of the light is 10 % of the maximum intensity. The light source shall have a candlepower rating of no less than 350,000 cd.

5.4 The searchlight shall be capable of being operated for not less than 3 h of continuous use and 6 h of intermittent use.

5.5 The lamp used in the searchlight shall be of the incandescent, quartz, or other type which would allow for instant start. The lamps shall be rated for 12 V.

5.6 Each searchlight shall be watertight. The searchlight shall show no leakage of water following the test method prescribed in 7.1.

[1] This specification is under the jurisdiction of ASTM Committee F25 on Ships and Marine Technology and is the direct responsibility of Subcommittee F25.10 on Electrical.

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[2] For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

[3] Available from DLA Document Services, Building 4/D, 700 Robbins Ave., Philadelphia, PA 19111-5094, http://quicksearch.dla.mil.