

**ANSI/HPS N43.4-2005**

*American National Standard*

# Classification of Radioactive Self-Luminous Light Sources

Approved: 2005

**American National Standards Institute, Inc.**

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**Foreword** (This foreword is not a part of American National Standard Classification of Radioactive Self-Luminous Light Sources, N43.4)

The radiation from radioactive material is used as a source of energy for activating phosphors to produce light in self-luminous watches and clocks, instrument dials, aircraft exit markers, luminous switches, etc. Safety in the design and use of radioactive materials in self-luminous products continues to be of concern to the industry, regulatory bodies and the general public.

In 1967 Committee N43 was organized under the sponsorship of the National Bureau of Standards (now the National Institute of Standards and Technology) to replace Sectional Committee Z54. The scope of the new committee is "standards pertaining to products and equipment, for non-medical scientific, industrial, and educational uses, involving ionizing radiation sources including radioactive materials, accelerators, and x-ray equipment but excluding nuclear reactors."

The responsibility to develop standards for self-luminous sources was assigned to Subcommittee N43-2. In 1975 a standard for classification of radioactive self-luminous light sources was approved by the USA Standards Committee N43-2 Subcommittee and published as American National Standard N-540 (NBS Handbook 116), issued January 1976. This standard was reaffirmed as ANSI 43.2 (R1989). In 1985 Committee N43 was organized under the sponsorship of the Health Physics Society. The N43.4 Subcommittee published ANSI/HPS 43.4-2000 in September 2000. This standard is an elaboration and refinement of ANSI/HPS N43.4 for self-luminous sources. The N43.4 Subcommittee is responsible for preparing this standard.

Realizing that questions may arise from time to time concerning interpretations of this standard, provisions have been made for an Interpretations Committee in order that uniform handling of questionable cases may be provided. It is recommended that anyone using this standard and desiring an interpretation of a questionable case communicate with the Health Physics Society. Suggestions for improvement gained in the use of this standard shall be welcome. They should be sent to the Health Physics Society, 1313 Dolley Madison Blvd., Suite 402, McLean, VA 22101.

An American National Standard implies a consensus of those substantially concerned with its scope and provisions. An American National Standard is intended as a guide to aid the manufacturer, the consumer, and the general public. The existence of an American National Standard does not in any respect preclude anyone, whether that person has approved the standard or not, from manufacturing, marketing, purchasing, or using products, processes, or procedures not conforming to the standard. American National Standards are subject to periodic review and users are cautioned to obtain the latest editions. Producers of goods made in conformity with an American National Standard are encouraged to state in their own advertising, promotional material, and on tags or labels that the goods are produced in conformity with particular American National Standards.

**CAUTION NOTICE:** The American National Standards Institute (ANSI) has established Essential Requirements that apply to activities related to the development of consensus for approvals, revision, reaffirmation, and withdrawal of American National Standards.

Members of Subcommittee N43-4 that had responsibility for the development of ANSI N-540-1975 (NBS Handbook 116) are listed below:

|                             |                    |
|-----------------------------|--------------------|
| Robert F. Barker, Secretary | James C. Malaro    |
| Arthur C. Chandler, Jr.     | Robert C. McMillan |
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| Elmer Hites                 | Darwin Taras       |
| Warren M. Holm              | C.W. Wallhausen    |
| Alphus L. Jones             | Richard N. Walz    |

Members of Subcommittee N43.4 that had responsibility for the development of ANSI/HPS N43.4-2000 are listed below:

David P. Alberth  
Gordon M. Lodde, Chairman  
Frances Szrom

Members of Subcommittee N43.4 that had responsibility for the development of ANSI/HPS N43.4-2004 are listed below:

David P. Alberth  
Gerald A. Falo  
Anthony Kirkwood  
Gordon M. Lodde, Chairman  
Frances Szrom

This standard was consensus balloted and approved by the ANSI-Accredited HPS N43 Committee on July 23, 2004. At the time of balloting, the HPS N43 Committee had the following membership:

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Individual Members

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William Morris

John R. Dukes

Thomas F. Bresnahan

Donald A. Greschaw

William Watt (alt.)

David A. Felinski (alt.)

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Camden Hubbard

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Steven Doremus (alt.)

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Frank Cerra (alt.)

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David Lee

## Table of Contents

|     |                                                                                            |    |
|-----|--------------------------------------------------------------------------------------------|----|
| 1.  | Scope .....                                                                                | 1  |
| 2.  | Definitions .....                                                                          | 1  |
| 3.  | General conditions.....                                                                    | 2  |
| 3.1 | Activity level (Table 1).....                                                              | 2  |
| 3.2 | Self-luminous light source performance tests (Table 2).....                                | 2  |
| 3.3 | Performance standards for classification of self-luminous light sources<br>(Table 3) ..... | 6  |
| 3.4 | Fire and explosion .....                                                                   | 6  |
| 3.5 | Radiotoxicity and solubility .....                                                         | 6  |
| 4.  | Classification and testing .....                                                           | 6  |
| 4.1 | Classification procedures .....                                                            | 6  |
| 4.2 | Testing .....                                                                              | 7  |
| 5.  | Classification designation .....                                                           | 7  |
| 6.  | Product identification .....                                                               | 8  |
| 7.  | Performance testing procedures .....                                                       | 8  |
| 7.1 | General .....                                                                              | 8  |
| 7.2 | Discoloration .....                                                                        | 8  |
| 7.3 | Temperature test .....                                                                     | 8  |
| 7.4 | Thermal shock test.....                                                                    | 8  |
| 7.5 | Pressure (reduced) test.....                                                               | 9  |
| 7.6 | Impact test .....                                                                          | 9  |
| 7.7 | Vibration test.....                                                                        | 9  |
| 7.8 | Immersion test .....                                                                       | 10 |
| 8.  | Evaluation .....                                                                           | 10 |
| 9.  | Additional tests for special uses .....                                                    | 10 |
| 9.1 | Dust resistance .....                                                                      | 10 |
| 10. | References .....                                                                           | 11 |

## Tables

|                                                                                               |   |
|-----------------------------------------------------------------------------------------------|---|
| <b>Table 1.</b> Maximum activity in curies of an individual self-luminous light source .....  | 4 |
| <b>Table 2.</b> Self-luminous light source performance tests .....                            | 4 |
| <b>Table 3.</b> Performance standards for classification of self-luminous light sources ..... | 5 |