Entertainment Services and Technology Association



American National Standard
E1.36-2007
Model Procedure for Permitting the Use of
Tungsten-Halogen Incandescent Lamps
and Stage and Studio Luminaires in Vendor
Exhibit Booths in Convention and
Trade Show Exhibition Halls

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ANSI E1.36 - 2007

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The ESTA Technical Standards Program

The ESTA Technical Standards Program was created to serve the ESTA membership and the entertainment industry in technical standards related matters. The goal of the Program is to take a leading role regarding technology within the entertainment industry by creating recommended practices and standards, monitoring standards issues around the world on behalf of our members, and improving communications and safety within the industry. ESTA works closely with the technical standards efforts of other organizations within our industry including USITT, PLASA, and VPLT as well as representing the interests of ESTA members to ANSI, UL, and the NFPA. The Technical Standards Program is accredited by the American National Standards Institute as Accredited Standards Committee E1, Safety and Compatibility of Entertainment Technical Equipment and Practices.

The Technical Standards Committee (TSC) was established by ESTA's Board of Directors to oversee and coordinate the Technical Standards Program. Made up of individuals experienced in standards-making work from throughout our industry, the Committee approves all projects undertaken and assigns them to the appropriate working group. The Technical Standards Committee employs a Technical Standards Manager to coordinate the work of the Committee and its working groups as well as maintain a "Standards Watch" on behalf of members. Working groups include: Camera Cranes, Control Protocols, Electrical Power, Floors, Fog and Smoke, Followspot Position, Photometrics, and Rigging.

ESTA encourages active participation in the Technical Standards Program. There are several ways to become involved. If you would like to become a member of an existing working group, as have over two hundred people, you must complete an application which is available from the ESTA office. Your application is subject to approval by the working group and you will be required to actively participate in the work of the group. This includes responding to letter ballots and attending meetings. Membership in ESTA is not a requirement. You can also become involved by requesting that the TSC develop a standard or a recommended practice in an area of concern to you.

The Photometrics Working Group, which authored this standard, consists of a cross section of entertainment industry professionals representing a diversity of interests. ESTA is committed to developing consensus-based standards and recommended practices in an open setting. Future Photometrics Working Group projects will include updating this publication as changes in technology and experience warrant, as well as developing new standards and recommended practices for the benefit of the entertainment industry.

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Foreword

There is no evidence that the property damage or personnel injury rate is higher with tungsten-halogen incandescent lamps compared to other types of lamps in convention centers and trade show exhibition halls. Furthermore, there is no evidence that the property damage or personnel injury rate is higher with stage and studio luminaires compared to other types of luminaires when used in convention centers and trade show exhibition halls. Nevertheless, the management staff of some convention centers and trade show exhibition halls perceive that there are greater risks with tungsten-halogen lamps than there are with other light sources, and that there are greater risks with stage and studio luminaires than there are with other luminaires, and have moved to prohibit or limit the use of tungsten-halogen lamps and stage and studio luminaires by vendors exhibiting their wares in trade show exhibit booths. Management staff also realize that the perceived risks can be mitigated with appropriate procedures, but have had difficulty in defining those procedures. This document has been written to offer a model set of procedures that can be used by convention center and trade show exhibition hall staff to mitigate the risks perceived to be associated with the use of tungsten-halogen lamps and stage and studio luminaires.

The procedures described in this document also could be applied to lamps and to luminaires other than tungsten-halogen lamps and stage and studio luminaires. However, these other light sources and luminaires are not within the scope of this document because convention center and trade show exhibition hall management staff have not identified these light sources or luminaires as having risks associated with their use that warrant special procedures.

1 Scope

This policy applies to all luminaires that use tungsten-halogen lamps and to all stage and studio luminaires being used by vendors to provide illumination or to create effects with light in exhibit booths at convention centers or trade shows.

2 Definitions

- **2.1 Halogen lamp:** A tungsten-halogen lamp.
- **2.2 Labeled:** Equipment is Labeled if there is attached to it a label, symbol, or other identifying mark of a Nationally Recognized Testing Laboratory (a) that makes periodic inspections of the production of such equipment and (b) whose labeling indicates compliance with nationally recognized standards or tests to determine safe use in a specific manner.
- **2.3 Linear halogen lamp:** A tungsten-halogen lamp that uses a tubular envelope with a recessed single-contact base at each end.
- 2.4 Light plot: A scale drawing similar to a floor plan that shows the locations of lighting equipment.
- **2.5 Listed:** Equipment is Listed if it appears on a list that (a) is published by a Nationally Recognized Laboratory that makes periodic inspection of the productions of such equipment, and (b) that states such equipment meets nationally recognized standards or has been tested and found safe for use in a specified manner.
- **2.6 Nationally Recognized Testing Laboratory:** An organization that is recognized by OSHA in accordance with 29 CFR 1910.7 Appendix A, that tests products for safety, and that lists or labels or accepts equipment or materials.