



## **ANSI E1.36 – 2007 (R2012)**

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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This document was accepted as an American National Standard by the ANSI Board of Standards Review on 4 October 2012.

This standard was originally published when the Entertainment Services and Technology Association was operating under the name of PLASA North America.

ESTA has reverted to its original name, and this document has been rebranded with the current corporate name and logo. No changes have been made to the contents of the standard.

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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 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.

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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.

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**Interest category codes:**

CP = custom-market producer	DE = designer
DR = dealer rental company	G = general interest
MP = mass-market producer	U = user

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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.

**2.7 Track lighting fixture:** A luminaire that is designed to be easily mounted anywhere along a track that serves as both the mounting system and the means of supplying electrical power to the luminaire. If the track were permanently mounted, the luminaire and track would be within the scope of UL 1574.

**2.8 Tungsten-halogen lamp:** An incandescent lamp that has a compact transparent envelope ("bulb") enclosing the filament and that uses a halogen gas inside the envelope to reduce blackening and to extend lamp life.

**2.9 Safety Coordinator:** A person designated by the management of a convention center or trade show hall, or by the owner of one of these venues, to be in charge of maintaining a reasonably safe environment for workers and the visiting public.

**2.10 Stem-mounted lighting fixture:** A luminaire with a swiveling or pivoting lamp housing mounted on the end of an arm that extends outward from a mounting mechanism that attaches to a trade show booth wall or to some other relatively fixed object.

**2.11 Stage and studio luminaire:** A luminaire that is designed for lighting scenery and performers on theatre stages or for lighting settings and performers in television and motion picture studios, and falling within the scope of UL 1573.

**2.12 Unshielded halogen lamp:** A lamp that has only one envelope (no second outer glass envelope encompassing one around the filament) and that is being used in a luminaire that does not have a lens, screen, or other protective covering that would contain fragments if the lamp shatters or explodes.