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Torchieres

The Energy Policy and Conservation Act (EPCA), as amended by the Energy Policy Act of 2005 (EPACT 2005), defines a torchiere as a "portable electric lamp with a reflector bowl that directs light upward to give indirect illumination." (42 U.S.C. 6291(42)) Section 325(x)of EPCA requires that torchieres manufactured on or after January 1, 2006, must not consume more than 190 watts. (42 U.S.C. 6295(x)).

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Some of the following documents are available as Adobe Acrobat PDFs. Download Acrobat Reader.

Statutory Authority

EPCA establishes an energy conservation standard for torchieres. (42 U.S.C. 6295(x)) EPCA defines "torchiere" as a "portable electric lamp with a reflector bowl that directs light upward to give indirect illumination." (42 U.S.C. 6291(42)) Click the link below to review the statutory authority:

See Section 135(a)(3) and (c)(4)of EPACT 2005. (PDF 270 KB)

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Information for Manufacturers

As of January 1, 2006, manufacturers are prohibited from distributing into commerce torchieres that are capable of operating with lamps that total more than 190 watts. (42 U.S.C. 6295(x) and 6302) the U.S. Department of Energy (DOE or the Department) indicated in a July 25, 2006 proposed rule that it recognizes that manufacturers may choose to follow one of several possible design pathways to comply with these regulations, including a fuse, circuit breaker or other currentlimiting device. 71 FR 42178,42183.

In the July 25, 2006 proposed rule DOE proposed requirements for manufacturers to report compliance with the Federal standard. 71 FR 42214-16. Although these certification reporting rules have not been finalized, the standard is still effective. Therefore, manufacturers must meet the torchiere standard and

be able to demonstrate compliance, but they are not yet required to report compliance to DOE. 71 FR 71348.

Definition and Standard Documents

	Federal Register Citation	Full Text of Federal Register Notices [Term "torchiere" is highlighted]
Torchiere definitions:	70 FR 60412; 71 FR 71348;	Energy Conservation Standards for Certain Consumer Products and Commercial and Industrial Equipment 70 FR 60407-18. (PDF 144 KB)
		Energy Conservation Program: Test Procedures for Consumer Products and Certain Industrial Equipment; Certification, Compliance, and Enforcement Requirements for
Torchiere design standards:	70 FR 60409; 71 FR 42183-4; 71 FR 71348-9	Consumer Products and For Certain Commercial and Industrial Equipment; Technical Amendment to Energy Conservation Standards for Certain Consumer Products and Commercial and Industrial Equipment 71 FR 42178-219. (PDF 478 KB)
		Energy Conservation Program: Test Procedures for Certain Consumer Products and Certain Industrial Equipment; Technical Amendments to Energy Conservation Standards for Certain Consumer Products and Certain Commercial and Industrial Equipment 71 FR 71340-75. (PDF 417 KB)

Please note: The torchiere design standards were part of a rulemaking process for several products covered in EPACT 2005. It is extremely important that stakeholders read these requirements in the context of the entire rule as there are overarching statements that apply to all products on subjects such as compliance and enforcement. For the full text of the Code of Federal Regulations, Title 10 (10 CFR), see Title 10, Chapter II, Part 430—Energy Conservation Program for Consumer Products and Title 10, Chapter II, Part 431—Energy Efficiency Program for Certain Commercial and Industrial Equipment.

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For Consumers

Torchieres

The torchiere energy conservation standard will save consumers money through energy savings.

Consumers who want to save even more money and energy can purchase an ENERGY STAR qualified torchiere. For more information, visit the ENERGY STAR webpage on energy-efficient light fixtures.

General Lighting Information

The online DOE Consumer Guide to Energy Efficiency and Renewable Energy provides a variety of information about lighting, including tips for improving the efficiency of artificial lighting in your home; background information on types of lighting; and links to product information, professional services and lighting research. For more general information about energy-efficient lighting, visit the Lighting web page, which has information about purchasing energy-efficient lamps and fixtures.

You may also contact the EERE Information Center with questions about EERE's products, services, and technology programs by calling 1-877-EERE-INF (1-877-337-3463) or filling out an information request online.

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Frequently Asked Questions

Torchiere Definition

Question: How does DOE distinguish between a torchiere floor lamp that falls under the EPCA energy conservation standard and a non-torchiere-style floor lamp?

Answer: Whether or not a fixture is a torchiere depends in part on the amount of emitted light that provides indirect versus direct illumination. EPCA defines a torchiere as:

[A] portable electric lamp with a reflector bowl that directs light upward to give indirect illumination.

(42 U.S.C. 6292(42)) DOE incorporated this definition into its regulations at 10 CFR 430.32(t).

EPCA does not provide a definition of "indirect illumination," nor is this term defined in the Code of Federal Regulations. In evaluating whether a light fixture with a reflector bowl that directs light upwards provides indirect illumination, and therefore is a torchiere, DOE would consider the term "indirect illumination" in the way that term is understood by the lighting industry.

For example, DOE notes that The Illuminating Engineering Society of North America (IESNA) has published a lighting classification system based on the proportion of upward and downward light. The IESNA's classification system is based on

that of the global lighting standards body, the International Commission on Illumination. IESNA does not define "indirect illumination," but it does classify "indirect lighting" as follows:

Lighting systems classified as indirect emit 90 to 100 percent of the light upward to the ceiling and upper walls. (The IESNA Lighting Handbook: Reference & Application Ninth Edition (p. 7-7)

In evaluating a product, DOE would consider, in addition to the relevant physical characteristics of the lamp, as defined in EPCA (42 U.S.C. 6292(42)), the degree of light emitted that is indirect (consistent with values provided in existing industry classifications and test procedures, such as those provided by IESNA).

Reflector Bowl Material

Question: Does the torchiere definition only apply to reflector bowls made of certain materials?

Answer: No. The torchiere definition does not distinguish between torchieres and floor lamps based on the material of the reflector bowl. However, the material the bowl is made of affects how much direct versus indirect lighting the bowl reflects which in part, determines whether the lamp is considered a torchiere. Manufacturers should consider the amount of emitted light that provides indirect illumination as discussed above.

Current-Limiting Devices

Question: How much time may elapse before a current-limiting device must halt operation of a lamp that consumes more than 190 watts in order for the torchiere to comply with the energy conservation standard? Has DOE designated specific current limiting technologies that manufacturers must use?

Answer: The torchiere standard does not specify the use of any one technology. Manufacturers may choose to rely on any technology so long as the requirements of the standards are met, including, but not limited to, a fuse, circuit breaker or other current-limiting device. 71 FR 42183.

Current-limiting devices may vary in how quickly they respond, with some responding virtually instantaneously to cut off all current when 190 watts is exceeded or to prevent more than 190 watts from being consumed. Other current-limiting devices may take an extended period of time before preventing or limiting more than 190 watts of power consumption. From a practical perspective, there may be a short lag between the time that a torchiere is turned on and when the current-limiting device has performed its function. In acknowledging these technological limitations and a desire to not be unnecessarily design-restrictive. DOE believes that allowing a brief time period for the currentlimiting device to perform its function is consistent with the energy-saving purpose of the relevant provision of EPACT 2005, whose principle benefits will be provided during normal use (i.e., the total time the torchiere is illuminated). (We note that the EPACT 2005 requirements, as implemented by DOE, only address the energy efficiency requirements for torchieres and do not

displace or modify other relevant legal requirements, including ones related to product safety.)

As stated above, a torchiere shall not be capable of operating with lamps that consume more than 190 watts. (42 U.S.C. 6295) (x)) At issue is how much time is required for a current-limiting device to serve its function before a torchiere is considered "capable of operating with lamps that consume more than 190 watts." The statute does not discuss what time period is acceptable for the operation of a current-limiting device for torchieres. Irrespective of the current-limiting device employed by a manufacturer, DOE believes that device should provide the required result within a short period of time (i.e., in a few minutes) to be considered rendering a torchiere incapable of "operating" for the purpose of meeting the torchiere 190 watt energy conservation standard. For example, it would be clear to DOE that any device that effectively limited the total wattage by a lamp to not more than 190 watts within one minute would qualify. In contrast, a current-limiting device that fails to operate for an extended period of time would not meet the requirements of the standard, because it would allow that lamp to "operate" at a consumption level of more than 190 watts.

Additionally, DOE would be concerned with any current-limiting device that could easily be replaced with a substitute device or modified in such a way that the current-limiting function of the device would be disabled (*i.e.*, it would allow a torchiere to operate with lamps that consume more than 190 watts). If the current-limiting function could be easily circumvented, DOE would not consider torchieres incorporating those devices to be incapable of operating with lamps that consume more than 190 watts.

Standard Enforcement and Application

Question: Does the 190-watt limit apply to the entire torchiere floor lamp?

Answer: The 190-watt limit applies only to the lamp(s) in the reflector bowl. Other incidental lighting features (e.g., task lighting arms and special effects for lava lamps) are not counted as part of the limit.

Question: When will DOE enforce the standard? When are manufacturers required to certify that their product is in compliance?

Answer: Compliance with the standard was required as of January 1, 2006, and has been enforceable since then. Therefore, manufacturers must meet the torchiere requirements and be able to demonstrate compliance. However, manufacturers are not yet required to submit compliance certification reports. The process for submitting compliance certification reports is being developed in an on-going rulemaking.

Question: Does the standard apply to torchieres manufactured in the United States and abroad?

Answer: The energy conservation standard applies to both domestic and imported torchieres.

Interpretative Guidance

Interpretative Guidance Letter: Torchiere No. 1

RE: Torchiere definition concerning "indirect illumination"

The Department has received inquiries seeking clarification on how to determine whether a light fixture is a "torchiere" for the purpose of the energy conservation standard established under the Energy Policy Act of 2005 (Pub. L. 109-58; EPACT 2005). As discussed below, whether or not a fixture is a torchiere depends in part on the amount of emitted light that provides indirect versus direct illumination.

The Energy Policy Act of 2005 defines a torchiere as:

[A] portable electric lamp with a reflector bowl that directs light upward to give indirect illumination.

(42 U.S.C. 6292(42))

EPACT 2005 does not provide a definition of "indirect illumination," nor is this term defined in the Code of Federal Regulations. In evaluating whether a light fixture with a reflector bowl that directs light upwards provides indirect illumination, and therefore is a torchiere, the Department of Energy would consider the term "indirect illumination" as that term is understood by the lighting industry.

For example, DOE notes that the IESNA has published a lighting classification system based on the proportion of upward and downward directed light. The IESNA's classification system is based on that of the global lighting standards body, the International Commission on Illumination. IESNA does not define "indirect illumination," but it does classify "indirect lighting" as follows:

Indirect Lighting - Lighting systems classified as indirect emit 90 to 100 percent of the light upward to the ceiling and upper walls.

The IESNA Lighting Handbook: *Reference & Application* Ninth Edition (p. 7-7).

In evaluating a product, DOE would consider, in addition to the relevant physical characteristics of the lamp, as defined in EPCA (42 U.S.C. 6292(42)), the degree of light emitted that is indirect (consistent with values provided in existing industry classifications and test procedures, such as those provided by IESNA).

Interpretative Guidance Letter: Torchiere No. 2

RE: Allowable time elapse for current-limiting devices

The Department has received inquiries seeking clarification on whether any time may elapse before a current-limiting device

prevents a torchiere from consuming more than 190 watts.

The Energy Policy Act of 2005 established a requirement that all torchieres manufactured on or after January 1, 2006, shall not consume more than 190 watts of power and shall not be capable of operating with lamps that consume more than 190 watts. (42 U.S.C 6295(x)) These statutory requirements further the Act's purpose of achieving energy savings during the course of the normal operation of torchiere lamps. Manufacturers may choose to follow one of several possible design pathways to comply with this energy conservation design standard, including, but not limited to, a fuse, circuit breaker or other current-limiting device. 71 FR 42183.

Current-limiting devices may vary in how quickly they respond, with some responding virtually instantaneously to cut off all current when 190 watts is exceeded or to prevent more than 190 watts from being consumed. Other current-limiting devices may take an extended period of time before preventing or limiting more than 190 watts of power consumption. From a practical perspective, there may be a short lag between the time that a torchiere is turned on and when the current-limiting device has performed its function. In acknowledging these technological limitations and a desire to not be unnecessarily design-restrictive, DOE believes that permitting a brief time period for the currentlimiting device to perform its function is consistent with the energy-saving purpose of the relevant provision of EPACT 2005, whose principle benefits will be provided during normal use (i.e., the total time the torchiere is illuminated). (We note that the EPACT 2005 requirements, as implemented by DOE, only address the energy efficiency requirements for torchieres and do not displace or modify other relevant legal requirements, including ones related to product safety.)

As stated above, a torchiere shall not be capable of operating with lamps that consume more than 190 watts. (42 U.S.C. 6295 (x)) At issue is how much time is required for a current-limiting device to serve its function before a torchiere is considered "capable of operating with lamps that consume more than 190 watts." The statute does not discuss what time period is acceptable for the operation of a current-limiting device for torchieres. Irrespective of the current-limiting device employed by a manufacturer, DOE believes that device should provide the required result within a short period of time (i.e., in a few minutes) to be considered rendering a torchiere incapable of "operating" for the purpose of meeting the torchiere 190 watt energy conservation standard. For example, it would be clear to DOE that any device that effectively limited the total wattage by a lamp to not more than 190 watts within one minute would qualify. In contrast, a current-limiting device that fails to operate for an extended period of time would not meet the requirements of the standard, because it would allow that lamp to "operate" at a consumption level of more than 190 watts.

Additionally, DOE would be concerned with any current-limiting device that could easily be replaced with a substitute device or modified in such a way that the current-limiting function of the device would be disabled (*i.e.*, it would allow a torchiere to operate with lamps that consume more than 190 watts). If the current-limiting function could be easily circumvented, DOE would not consider torchieres incorporating those devices to be

incapable of operating with lamps that consume more than 190 watts.

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Stakeholder Inquiries and DOE Responses

Still have questions? You can contact DOE for further information about torchiere design standards electronically or by mail. See below for contact information.

Future Rulemakings

On July 25, 2006, DOE proposed rules for how manufacturers could certify compliance with the federal standard. 71 FR 42214-16. The reporting rules have not been finalized. The notice of proposed rulemaking is listed on this webpage under "Definitions and Standards Documents."

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