

# DOE Ceiling Fan and Light Kit Standards

- New Ceiling Fan Light Kit Standards:
  - Updated Test Procedure went into effect Jan 2016
  - ALA and Fan Industry worked with DOE to develop new standards
  - Effective date: Jan 2019
  - Incandescent lamps will not meet new standards, light kits currently shipped with incandescent lamps must include CFL or LED lamps beginning in 2019.
  - Example CFLK efficiency levels
    - 800 lumen lamp efficiency = 66.5 Lm/W based on DOE test procedure for CFL or LED lamps
    - 1600 lumen integrated LED efficiency = 72.1 Lm/W based on DOE test procedure for CFLK
  - No more limiter!

TABLE I.1—ENERGY CONSERVATION STANDARDS FOR CEILING FAN LIGHT KITS

[Compliance starting January 7, 2019]

Product type	Lumens <sup>1</sup>	Minimum efficacy (lm/W)
All CFLKs .....	<120	50
	≥120	74.0 – $29.42 \times 0.9983$ lumens

<sup>1</sup> Use the lumen output for each basic model of lamp packaged with the basic model of CFLK or each basic model of integrated SSL in the CFLK basic model to determine the applicable standard.

# DOE Ceiling Fan and Light Kit Standards

- New Ceiling Fan Standards

- DOE revised ceiling fan definition: ALL ceiling fans are now regulated by DOE.  
(exemption for hugger and industrial models ended January 2017)
- Updated Test Procedure went into effect Jan 2017
- ALA and Fan Industry worked with DOE to develop new standards
- Product Classes: Standard, Hugger, Very Small Diameter, High Speed Small Diameter, & Large Diameter.
- Multi Mount fans must meet standard for both Hugger and Standard
- Effective date: Jan 2020 (light kits included with fan must comply w/ CFLK standards in 2019)



Table I.1 - Energy Conservation Standards for Ceiling Fans  
(Compliance Starting January 21, 2020)

Product Class	Minimum Efficiency Equation <u>CFM/W*</u>
Very Small-Diameter (VSD)	$D \leq 12 \text{ in.: } 21$ $D > 12 \text{ in.: } 3.16 D - 17.04$
Standard	$0.65 D + 38.03$
Hugger	$0.29 D + 34.46$
High-Speed Small-Diameter (HSSD)	$4.16 D + 0.02$
Large Diameter	$0.91 D - 30.00$

\* D is the ceiling fan's blade span, in inches, as determined in Appendix U.



# DOE Test Procedures, Certification, and Enforcement

New Test Procedures for ceiling fans and light kits.

- Link to Ceiling Fan Test Procedure: Effective Jan 2017
  - [www.regulations.gov/document?D=EERE-2013-BT-TP-0050-0020](http://www.regulations.gov/document?D=EERE-2013-BT-TP-0050-0020)
- Link to Ceiling Fan Light Kit Test Procedure Page: Effective Jan 2016
  - [www.regulations.gov/document?D=EERE-2014-BT-TP-0007-0009](http://www.regulations.gov/document?D=EERE-2014-BT-TP-0007-0009)

All ceiling fans and light kits **must** be certified to DOE in Compliance Certification Management System (CCMS) prior to distribution in commerce and annually as long as the product is being sold in the market.

- Link to CCMS main page:
  - [www.regulations.doe.gov/ccms/registration-and-authorization-forms/registration-and-forms](http://www.regulations.doe.gov/ccms/registration-and-authorization-forms/registration-and-forms)

Enforcement: NOTE – this applies to ALL regulated products (not just fans 😊)

- DOE may take enforcement action against manufacturers for distributing in commerce products which do not meet standards AND can also penalize companies who fail to certify covered products in CCMS.