

In 2017, *Lighting for Tomorrow* is seeking residential ceiling fans with built-in LED lighting or LED light kits.

About 80 million US households use at least one ceiling fan, and a quarter of all households use four or more ceiling fans¹. Competitiveness in the ceiling fan market has burgeoned in recent years and new federal standards are forthcoming. The utilization of LED lighting in ceiling fans is in full swing, and the unique capabilities afforded by this energy efficient technology are changing the way fans are designed.

Lighting for Tomorrow is including a separate category for ceiling fans at a time when designs are expected to change rapidly. The evaluation of ceiling fan entries will focus predominantly on lighting quality and lighting control attributes rather than the air movement or other fan functionality. For manufacturers interested in submitting to this category, a summary of the requirements has been provided below. Products with connected functionality should be entered in the Connected Lighting category.

Scope: Only ceiling fans with built-in LED lighting or LED light kits are eligible. If you are entering a lighting kit, you must provide a fan in which to demonstrate the product.

Minimum Performance Criteria: *Lighting for Tomorrow* references the [ENERGY STAR® Ceiling Fan Criteria Version 3.1](#) for minimum entry requirements. Products selected as finalists must also meet safety testing and warranty standards.

Minimum Air Flow Efficiency Requirements		
Fan Speed	Minimum Airflow	Minimum Efficiency Requirement
Low	1,250 CFM	155 CFM/watt
Medium	3,000 CFM	100 CFM/watt
High	5,000 CFM	75 CFM/watt

Minimum Lighting Requirements	
<i>ENERGY STAR® Program Requirements, Product Specification for Luminaires</i>	
Color Rendering	$R_a \geq 80$ $R_9 > 0$
Color Temperature	2700-3500 K
Efficacy	≥ 65 lm/W per light engine or retrofit (nondirectional luminaires)

¹ [ACEEE](#)

2017 Residential Ceiling Fans Guidance and Criteria

Judging Criteria

Assuming products meet or are eligible to meet the ENERGY STAR® criteria for airflow and fan efficiency, product evaluation will focus on:

- Light efficiency
- Light quality, color, and distribution
- Overall aesthetics and salability
- Innovation: design and engineering

Potential Bonus Points

- Color tunable
- Controllability - for example, extra points may be possible for products that feature light dimming control
- Additional bonus points may be determined by the 2017 judging panel for other desirable product characteristics

Resources

DOE Standards

In 2015, the US Department of Energy (DOE) issued two rules affecting ceiling fans: a [proposed rule](#) that would establish the first efficiency performance standards for ceiling fans, and a [final rule](#) expected to take effect in early 2020 that improves the efficiency of the lights attached to ceiling fans.

DOE's final rule revising the existing energy efficiency standard for ceiling fan light kits will reduce the amount of energy used by ceiling fan lights by 3.6%. Over the next 30 years, ceiling fan light kits meeting the new standards will reduce national electricity consumption by about 14.4 million kilowatt-hours, equivalent to the annual average electricity consumed by 1.4 million homes. These savings will be worth \$500 - \$660 million to purchasers. (Source: [ACEEE](#))

EPA ENERGY STAR® Program

- [ENERGY STAR® Ceiling Fans Specification Version 3.1](#) and [Luminaires Version 2.0](#)
- [Most Efficient for Ceiling Fans](#)
- [Certified Product Directory](#)