

## Competition Requirements Set the Bar High

The L Prize™ competition is designed to spur development of high-quality solid-state lighting products capable of replacing today’s most widely used and inefficient products: 60W incandescent lamps and PAR 38 halogen lamps. The Energy Independence and Security Act of 2007 directed the U.S. Department of Energy (DOE) to establish the competition and outlined general competition requirements. To draw on lessons learned from past lighting market introduction experiences, DOE worked with several California utilities to tap their expertise in developing a comprehensive technology competition program.

The L Prize technical specifications comply with the general requirements outlined in the legislation, with additional details specified for quality, performance, and mass manufacturing. The competition requirements are designed to ensure that the winning products deliver excellent lighting quality. To view the complete competition requirements, see [www.lightingprize.org](http://www.lightingprize.org).

### Why Compete?

- Opportunities to be recognized as the best of the best
- Immediate market potential for sales
- Program partner promotions, incentives, marketing
- Intense media spotlight
- Automatic ENERGY STAR® qualification
- Cash prize (first winner in each category)

Requirement	60-Watt Incandescent Replacement	PAR 38 Halogen Replacement
<b>Efficacy</b>	More than 90 lm/W	More than 123 lm/W
<b>Light Output</b>	More than 900 lumens	More than 1,350 lumens
<b>Wattage</b>	Less than 10 watts	Less than 11 watts
<b>Lifetime</b>	More than 25,000 hour life	
<b>Color Rendering Index (CRI)</b>	More than 90	
<b>Correlated Color Temperature (CCT)</b>	2700–3000 K	
<b>Form Factor</b>	Same lamp form factor as incumbent technology	
<b>Beam Distribution</b>	Beam characteristics equivalent to incumbent technology	
<b>Dimming</b>	Products must be compatible with at least three widely available residential dimmers and must be continuously dimmable to at least 20% of maximum light output	

## Competition Process



- **Intent to Submit.** To participate in the L Prize competition, interested manufacturers must provide a letter of intent to submit.
- **Entry Package.** Manufacturers must then submit a complete entry package that includes the required **technical information**, **product samples**, and a **commercial manufacturing plan** describing their capability for mass production and distribution of proposed products.
- **Evaluation Part 1.** Samples of proposed products will undergo **performance testing** at independent laboratories such as those participating in the DOE CALiPER program.
- **Evaluation Part 2.** The L Prize technical review committee will assess the provided technical information, test results, and **manufacturing capabilities**.
  - Products that meet the competition requirements will then undergo at least 6,000 hours of **lifetime testing**.
  - At the same time, DOE and program partners will coordinate **field assessments** using criteria established through the DOE GATEWAY demonstration program to evaluate energy use, lighting system performance, reliability, customer acceptance, and cost effectiveness.
  - DOE and partners will also conduct **stress testing**, subjecting products to extreme conditions such as high temperatures, humidity, frequent switching, voltage fluctuation, and electromagnetic interference.
- At key stages in the process, DOE may request additional information or follow up with submitters regarding the product or information provided.

## Selection of Winners

Entries will be accepted for each product category until a winner is declared, or until 24 months have elapsed since the first award in that category, whichever comes first. In each category, the first entrant to successfully meet the full competition requirements will receive all prizes. Up to two additional entrants may be eligible for program partner promotions.

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**For more information** on L Prize, see [www.lightingprize.org](http://www.lightingprize.org). Learn more about the DOE SSL ENERGY STAR, CALiPER, and GATEWAY programs at [www.ssl.energy.gov](http://www.ssl.energy.gov).

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