

A photograph of three people—two women and one man—collaborating at a laptop in a dimly lit room at night. The background is filled with out-of-focus city lights, creating a bokeh effect. The woman standing is pointing at the laptop screen, while the other two look on attentively.

L•PRIZE[®]

U.S. Department of Energy

Concept Phase Informational Webinar
June 10, 2021

Housekeeping

- Attendees will be on mute throughout the presentation
- If you have any questions, please type them into the Q&A panel and we will do our best to address each question
- We may be unable to answer some or all technical or teaming questions. If we are unable to answer any questions today, we will record them and post responses in the HeroX Forum: www.herox.com/LPrize/forum

Speakers



Rebecca Bennett

National Renewable
Energy Laboratory



Brian Walker

U.S. Department
of Energy



Gabe Arnold

Pacific Northwest
National Laboratory



Kate Hickcox

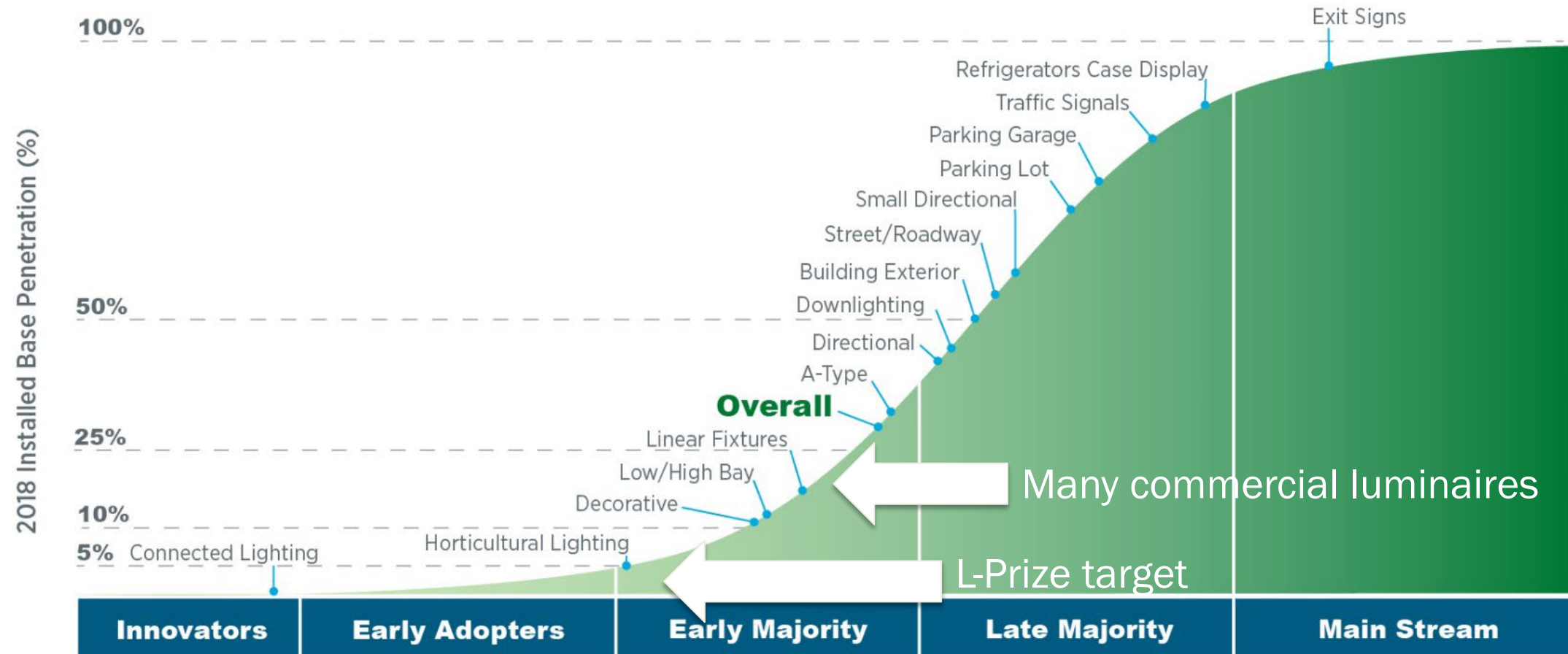
Pacific Northwest
National Laboratory

L-Prize

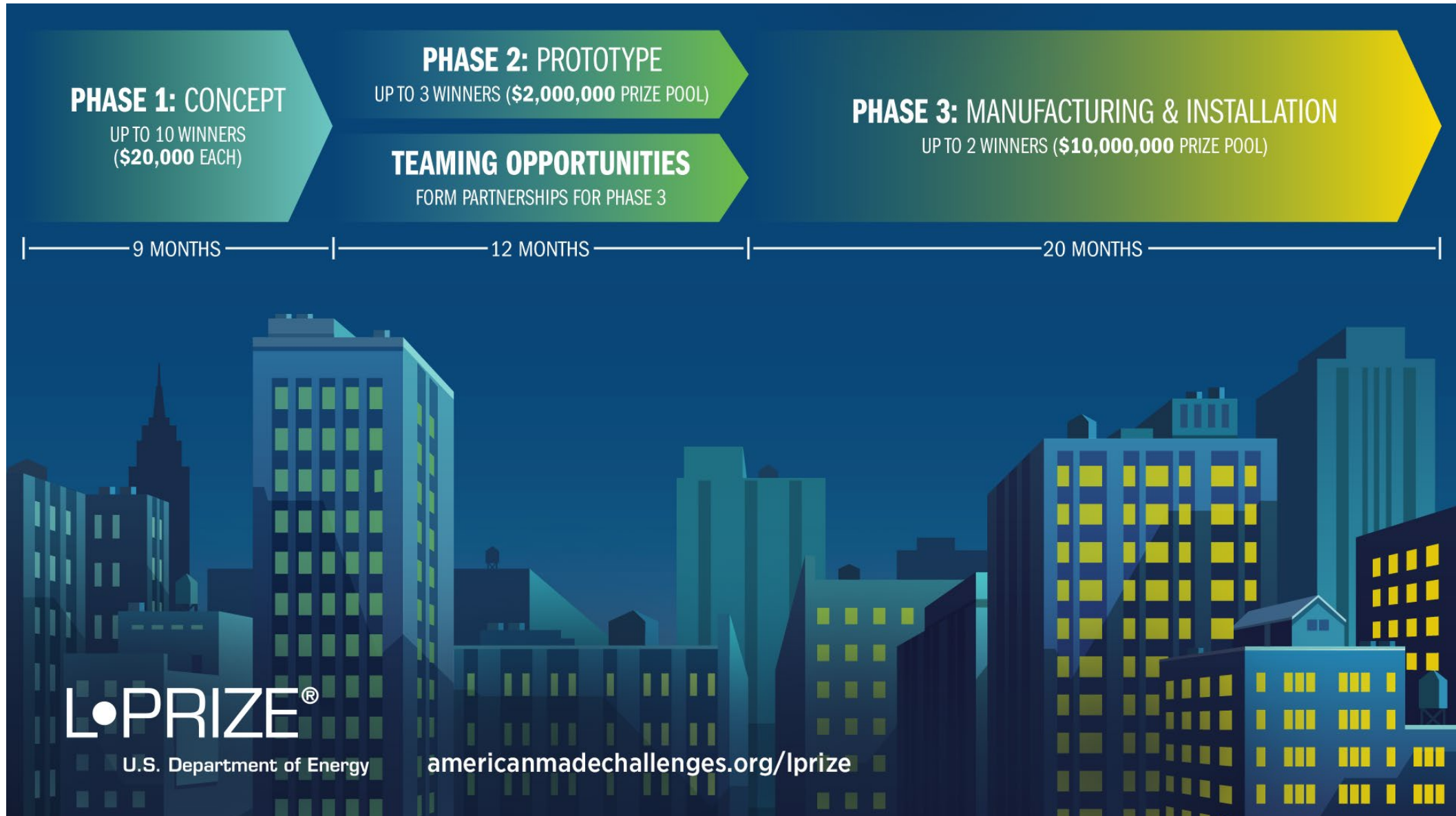
Introduction and Overview

LED Technology Shows Progress and Potential

Adoption of LED products lags in the commercial buildings sector



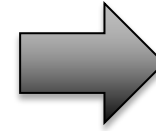
L-Prize Phases and Awards



Innovation Goals and Focus



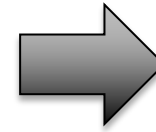
Efficacy



Increase lighting efficacy (lm/W) by 25 to 50% vs. today



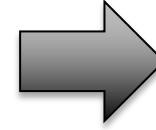
Quality of Light



Encourage highly preferred light, reinforcing health, productivity, and well-being



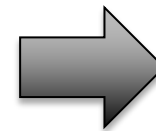
Connectivity



Integrate controls to increase energy savings and performance, enable grid flexibility



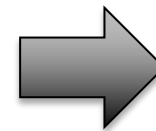
Product Life Cycle



Reduce environmental impact over life cycle with sustainable use and end of life



Innovation and Inclusion



Realize innovation for diversity, equity, and inclusion

Consistent, Challenging Technical Requirements for All Phases

Efficacy	Quality of Light	Connectivity	Product Life Cycle	Innovation and Inclusion
<ul style="list-style-type: none">✓+☐ Luminaire efficacy	<ul style="list-style-type: none">✓ Chromaticity✓ Chromaticity shift✓ Dimming range✓ Glare control✓ Light output✓ Spectral data reporting✓+☐ Color rendition✓+☐ Flicker☐ White-tunable	<ul style="list-style-type: none">✓ Interoperability✓ Addressability✓ Energy reporting✓ Lighting control strategies✓ Luminaire-level lighting control✓+☐ System resilience✓+☐ Fault detection and diagnostics✓+☐ Grid services capable☐ Sensor ready and upgradeable☐ Ease of install and configuration	<ul style="list-style-type: none">✓ Driver lifetime✓+☐ Replaceable components✓+☐ Lumen maintenance☐ Design for disassembly	<ul style="list-style-type: none">☐ Technical innovation☐ Innovation for diversity, equity, and/or inclusion
<p>Key ✓ = Mandatory ✓+☐ = Mandatory + Optional Points ☐ = Optional Points Only</p>				

Manufacturing and Installation Phase

- Retains innovation requirements from prototype
- U.S. energy savings
- U.S. economic benefits
- Innovation in real products



Production



U.S. Content



U.S.
Installations

Participation Opportunities

- All contest phases are open to all innovators (researchers, universities, designers, manufacturers, etc.)
- Competitors may choose to participate in any one or any combination of phases. You are not required to participate in all three phases.
- Teaming Opportunities
 - An RFI will be issued with the Prototype Phase and kept open to identify teaming partners interested in production and installation of winning designs
 - A teaming partner list will be published and regularly updated
 - Manufacturing partners
 - ESCOs
 - Utilities
 - Installation contractors
 - Etc.

L-Prize

Concept Phase and Technical Requirements

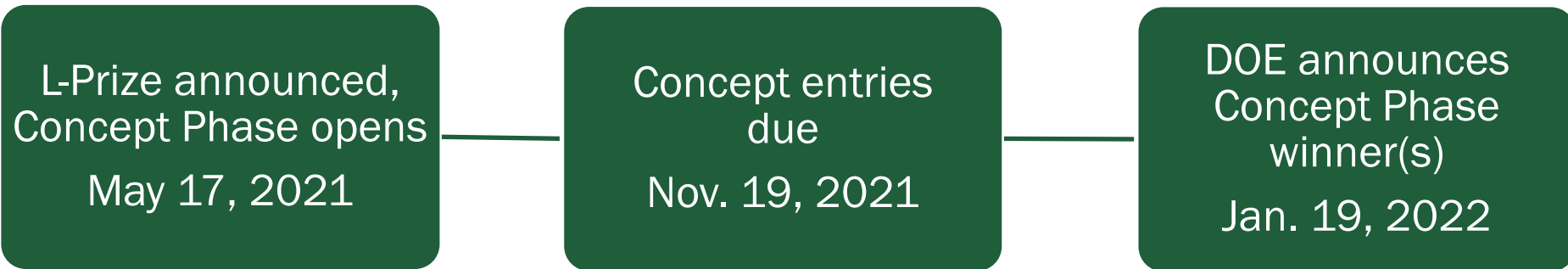
L-Prize Scope and Target Applications

- Light-emitting diode (LED) technology
- Complete lighting system (luminaires, sensors, control devices, interfaces)
- Commercial and institutional sector applications
- Luminaires must be appropriate for ambient lighting in building interiors such as offices, healthcare facilities, educational facilities, and other applications where linear lighting has been predominant
- Luminaires designed or intended for task, accent, display, outdoor, and industrial applications including high/low bay are not eligible
- Specific form factors are not required — innovation is welcomed

Concept Phase Overview

Competitors imagine and document lighting systems of the future

- WHO: Manufacturers, designers, researchers, universities, individuals, etc.



A complete submission package will include:

- Cover page, which may be released to the public by DOE
- PowerPoint summary slide, which may be released to the public by DOE
- Completed Concept Phase Technical Performance and Scoring Form
- Description of key innovations and features
- Concept drawings
- System one-line diagram
- Projected cost estimate and bill of materials (optional)



Consistent, Challenging Technical Requirements for All Phases

Efficacy	Quality of Light	Connectivity	Product Life Cycle	Innovation and Inclusion
<ul style="list-style-type: none">✓+☐ Luminaire efficacy	<ul style="list-style-type: none">✓ Chromaticity✓ Chromaticity shift✓ Dimming range✓ Glare control✓ Light output✓ Spectral data reporting✓+☐ Color rendition✓+☐ Flicker☐ White-tunable	<ul style="list-style-type: none">✓ Interoperability✓ Addressability✓ Energy reporting✓ Lighting control strategies✓ Luminaire-level lighting control✓+☐ System resilience✓+☐ Fault detection and diagnostics✓+☐ Grid services capable☐ Sensor ready and upgradeable☐ Ease of install and configuration	<ul style="list-style-type: none">✓ Driver lifetime✓+☐ Replaceable components✓+☐ Lumen maintenance☐ Design for disassembly	<ul style="list-style-type: none">☐ Technical innovation☐ Innovation for diversity, equity, and/or inclusion
<p>Key ✓ = Mandatory ✓+☐ = Mandatory + Optional Points ☐ = Optional Points Only</p>				

Judging Criteria Varies by Phase

Concept Phase

Concept designs –
no physical products

Judging based on:

- Expected technical performance and associated technical justifications
- Technical feasibility
- Technical innovation
- Diversity, equity, and/or inclusion innovation

Prototype Phase

10 physical prototypes

Judging based on:

- Actual technical performance
- Technical innovation
- Diversity, equity, and/or inclusion innovation

Manufacturing and Installation Phase

Real, commercially
available products

Judging based on:

- Actual technical performance
- Technical innovation
- Diversity, equity, and/or inclusion innovation
- U.S. Content, Manufacturing, and Installations

Concept Phase Judging Criteria (Table 4 of Official Rules)

Criteria	Statements — Expert Reviewer Panel will score each statement	Scoring Approach
Technical Feasibility	The proposed concept represents a technically valid concept that is manufacturable and installable and based on reasonable technical assumptions.	<u>Scored 0 to 3</u> 0 = strongly disagree 3 = strongly agree
	The proposed concept is relevant to commercial ambient lighting applications and meets a clear and significant market need with potential for significant market adoption.	<u>Scored 0 to 3</u> 0 = strongly disagree 3 = strongly agree
Technical Performance	The proposed concept meets the minimum technical requirements and has well-supported technical justifications for the proposed performance.	<u>Scored 0 to 5</u> 0 = strongly disagree 5 = strongly agree
	The proposed concept earns points from Table 3 with well-supported technical justifications for those points. Expert Reviewers may reduce scores if they find the credibility of the technical justifications provided by competitors to be lacking.	<u>Scored 0 to 5</u> 0 = 0 points earned 1 = 1–5 points earned 2 = 6–10 points earned 3 = 11–15 points earned 4 = 16–20 points earned 5 = 21+ points earned
Innovation on Technical Performance and Innovation on Diversity, Equity, and Inclusion	The proposed concept includes innovative concepts, features, or approaches that achieve and go beyond the technical requirements in the areas of efficacy, quality of light, connectivity, life cycle impacts, and/or supply chain innovation.	<u>Scored 0 to 5</u> 0 = strongly disagree 5 = strongly agree
	The proposed concept and/or team includes aspects or innovations that address diversity, equity, and/or inclusion.	<u>Scored 0 to 5</u> 0 = strongly disagree 5 = strongly agree

Concept Technical Requirements and Points Summary (Table 3)

Concept Phase – Minimum Technical Requirements and Points Summary See Appendix A for details of each 'Minimum Requirement' and 'Possible Points'				
Category	Topic	Minimum Requirement(s)	Possible Points	Total Possible Points
Efficacy	Luminaire Efficacy	150 lm/W	Up to 10 pts. for higher efficacy performance above 150 lm/W	Up to 10 pts. possible
Quality of Light	Light Output	> 2,000 lm	n/a	Up to 8 pts. possible
	Color Rendition	Preference rating of P2, fidelity rating of F3	2 pts. for improved preference rating of P1	
	Chromaticity	4000 K, Duv between -0.006 and 0.000, chromaticity consistency within 0.0015 radius	n/a	
	White-Tunable	n/a – optional	4 pts. for white-tunable capability	
	Glare Control	UGR ≤ 19	n/a	
	Temporal Light Modulation (Flicker)	Fundamental frequency > 90 Hz, SVM ≤ 0.9	2 pts. for improved flicker performance SVM ≤ 0.4	
	Dimming Range	Dims to 5% or lower	n/a	
	Spectral Power Data (SPD)	SPD data in 5-nm increments	n/a	
Connectivity	Technical Interoperability	Complies with industry standard specification for basic network connectivity	n/a	Up to 11 pts. possible
	Application Interoperability	API required with access to zone, occupancy, faults, energy data	n/a	
	Addressability	All luminaires and devices are addressable	n/a	
	Cybersecurity	n/a – not required for Concept Phase	n/a	
	Energy Reporting	Energy reporting capability required	n/a	
	Lighting Control Strategies	Task, schedule, occupancy, daylight control required	n/a	
	System Resilience	Maintains control after temporary loss of connection to network or power	1 pt. for maintaining control after loss of connection to gateway, or next higher element in topology	
	Fault Detection and Diagnostics (FDD)	Reports basic system faults	Up to 3 pts. for advanced, predictive FDD capabilities	
	Luminaire Level Lighting Control (LLLC)	Sensor per luminaire capability required	n/a	
	Grid Services Capable	OpenADR 2.0a demand response required	Up to 4 pts. for advanced grid services capabilities using OpenADR 2.0b	
	Sensor Ready and Upgradeable	n/a – optional	1 pt. for standards-based upgradeability for advanced sensors	
	Ease of Installation and Configuration	n/a – optional	2 pts. for plug-and-play Class 2 power and data connections	
Product Life Cycle	Lumen Maintenance	$L_{70} \geq 50,000$ hrs	1 pt. for $L_{90} \geq 36,000$ hrs	Up to 7 pts. possible
	Chromaticity Maintenance	≤ 0.002 after 6,000 hrs	n/a	
	Driver Lifetime	≥ 50,000 hrs	n/a	
	Replaceable Components	Replaceable driver or light engine	2 pts. for replaceable LED arrays or modules, if applicable	
	Design for Disassembly (DfD)	n/a – optional	Up to 4 pts. for DfD documentation and time calculation	

Understanding the technical requirements and reporting the estimated performance of your Concept

Concept Phase – Minimum Technical Requirements and Points Summary				
See Appendix A for details of each 'Minimum Requirement' and 'Possible Points'				
Category	Topic	Minimum Requirement(s)	Possible Points	Total Possible Points
Efficacy	Luminaire Efficacy	150 <u>lm/W</u>	Up to 10 pts. for higher efficacy performance above 150 <u>lm/W</u>	Up to 10 pts. possible
Quality of Light	Light Output	> 2,000 <u>lm</u>	n/a	Up to 8 pts. possible
	Color Rendition	Preference rating of P2, fidelity rating of F3	2 pts. for improved preference rating of P1	
	Chromaticity	4000 K, <u>Duv</u> between -0.006 and 0.000, chromaticity consistency within 0.0015 radius	n/a	
	White-Tunable	n/a – optional	4 pts. for white-tunable capability	
	Glare Control	UGR ≤ 19	n/a	
	Temporal Light Modulation (Flicker)	Fundamental frequency > 90 Hz, SVM ≤ 0.9	2 pts. for improved flicker performance SVM ≤ 0.4	
	Dimming Range	Dims to 5% or lower	n/a	
	Spectral Power Data (SPD)	SPD data in 5-nm increments	n/a	
Connectivity	Technical Interoperability	Complies with industry standard specification for basic network connectivity	n/a	Up to 11 pts. possible
	Application Interoperability	API required with access to zone, occupancy, faults, energy data	n/a	
	Addressable			
	Cybersecurity			
	Energy Reporting			
	Lighting Strategies			
	System Resilience	Maintains control after temporary loss of connection to network or power	1 pt. for maintaining control after loss of connection to gateway, or next higher element in topology	
	Fault Detection and Diagnostics (FDD)	Reports basic system faults	Up to 3 pts. for advanced, predictive FDD capabilities	
	Luminaire Level Lighting Control (LLC)	Sensor per luminaire capability required	n/a	
	Grid Services Capable	<u>OpenADR</u> 2.0a demand response required	Up to 4 pts. for advanced grid services capabilities using <u>OpenADR</u> 2.0b	
Product Life Cycle	Sensor Ready and Upgradeable	n/a – optional	1 pt. for standards-based upgradeability for advanced sensors	Up to 7 pts. possible
	Ease of Installation and Configuration	n/a – optional	2 pts. for plug-and-play Class 2 power and data connections	
	Lumen Maintenance	$L_{70} \geq 50,000$ <u>hrs</u>	1 pt. for $L_{80} \geq 36,000$ <u>hrs</u>	
	Chromaticity Maintenance	≤ 0.002 after 6,000 <u>hrs</u>	n/a	
	Driver Lifetime	≥ 50,000 <u>hrs</u>	n/a	
	Replaceable Components	Replaceable driver or light engine	2 pts. for replaceable LED arrays or modules, if applicable	
	Design for Disassembly (DfD)	n/a – optional	Up to 4 pts. for <u>DfD</u> documentation and time calculation	

Table 3 from Official Rules



Category	Topic	Minimum Requirement(s)	Possible Points
Efficacy	Luminaire Efficacy	150 <u>lm/W</u>	Up to 10 pts. for higher efficacy performance above 150 <u>lm/W</u>

See Appendix A for details of Minimum Requirement(s) and Possible Points

Luminaire Efficacy	The total emitted luminous flux from the luminaire divided by the total source electrical input power.	
Minimum Requirement(s)	The initial luminous efficacy of each luminaire must be ≥ 150 lumens per watt.	
Possible Points	Two points (+2) will be awarded for each additional increment of 10 lumens per watt above 150 up to a maximum of 10 points. ≥ 160 lumens per watt = 2 additional points ≥ 170 lumens per watt = 4 additional points ≥ 180 lumens per watt = 6 additional points ≥ 190 lumens per watt = 8 additional points ≥ 200 lumens per watt = 10 additional points	

Report estimated performance and technical justification of your Concept using Technical Performance and Scoring Form

Luminaire Efficacy	The total emitted luminous flux from the luminaire divided by the total source electrical input power; expressed in lumens per watt (lm/W)	
Enter the expected <u>lm/w</u> that would be delivered by your concept:		
How many efficacy points would be earned based on this <u>lm/W</u> ? (Enter 0, 2, 4, 6, 8, or 10)		
Provide a written technical justification for the expected <u>lm/w</u> performance.		
<i>Your written justification should demonstrate to the Expert Reviewer Panel that you understand the requirement(s), you understand the technical challenges and trade-offs you would face in developing a real product that would achieve the expected performance, and that you have proposed a technically valid solution. As applicable, you should reference any analysis or engineering approach you took (e.g. performance modeling, simulation results) to achieve the expected level of performance. Your answer should be concise and must fit within the provided space.</i>		

Report estimated technical performance and justifications using Concept Phase Technical Performance and Scoring Form

Luminaire Efficacy	The total emitted luminous flux from the luminaire divided by the total source electrical input power, expressed in lumens per watt (lm/W).
Minimum Requirement(s) The initial luminous efficacy of each luminaire must be ≥ 150 lumens per watt.	Possible Point(s) Two points (+2) will be awarded for each additional increment of 10 lumens per watt above 150 up to a maximum of ten points. ≥ 160 lumens per watt = 2 additional points ≥ 170 lumens per watt = 4 additional points ≥ 180 lumens per watt = 6 additional points ≥ 190 lumens per watt = 8 additional points ≥ 200 lumens per watt = 10 additional points
Enter the expected lm/W that would be delivered by your concept:	
How many efficacy points would be earned based on this lm/W? (Enter 0, 2, 4, 6, 8, or 10)	
Provide a written technical justification for the expected lm/W performance. <i>Your written justification should demonstrate to the Expert Reviewer Panel that you:</i> <ul style="list-style-type: none"> understand the requirement(s) understand the technical challenges and trade-offs you would face in developing a real product that would achieve the expected performance have proposed a technically valid solution <i>As applicable, you should reference any analysis or engineering approach (e.g., performance modeling, simulation results) used to estimate the expected level of performance. Your answer should be concise and must fit within the provided space.</i>	

Excerpted from "Concept Phase Technical Performance and Scoring Form" available at www.herox.com/LPrize/resources

Concept Phase Submission Package Should Include

- Cover page (may be released to the public by DOE)
- PowerPoint summary slide (may be released to the public by DOE)
- Completed Concept Phase Technical Performance and Scoring Form
- Description of key innovations and features
- Concept drawings
- System one-line diagram
- Projected cost estimate and bill of materials (optional)



See pages
14–15 of the
Official Rules
for more
detailed
descriptions

Background and Goals for Efficacy

Up to 10 points possible

Efficacy

✓+☐ Luminaire efficacy

Increase lighting efficacy by 25–50% vs. today, combined with excellent quality of light and connectivity

- Current commercial linear LED products average 120 lm/W
- Technical potential of LED is 200+ lm/W
- L-Prize seeks innovation to address historical trade-offs between efficacy, quality of light, and connectivity
- Winning submissions will be high-efficacy with excellent color quality, glare control, flicker control, and advanced connectivity

Key

✓ = Mandatory

✓+☐ = Mandatory + Optional Points

☐ = Optional Points Only

Please see Appendix A of Official Rules for all Concept Phase requirement details: www.herox.com/LPrize/resources

Background and Goals for Quality of Light

Up to 8 points possible

Quality of Light

- ✓ Chromaticity
- ✓ Chromaticity shift
- ✓ Dimming range
- ✓ Glare control
- ✓ Light output
- ✓ Spectral data reporting
- ✓+☐ Color rendition
- ✓+☐ Flicker
- ☐ White-tunable

Quality of Light impacts health, productivity, and well-being

- L-Prize will harness quality of light benefits of LED technology
- Increase the value of efficient, connected lighting
- Demonstrate that high efficacy and quality of light can go hand-in-hand
- Winning submissions will have excellent color quality, glare control, and flicker control, and provide the spectral data to support future light and health applications

Key

✓ = Mandatory

✓+☐ = Mandatory + Optional Points

☐ = Optional Points Only

Please see Appendix A of Official Rules for all Concept Phase requirement details: www.herox.com/LPrize/resources

Background and Goals for Connectivity

Up to 11 points possible

Connectivity
<div>✓ Interoperability</div> <div>✓ Addressability</div> <div>✓ Energy reporting</div> <div>✓ Lighting control strategies</div> <div>✓ Luminaire-level lighting control</div> <div>✓+<input type="checkbox"/> System resilience</div> <div>✓+<input type="checkbox"/> Fault detection and diagnostics</div> <div>✓+<input type="checkbox"/> Grid services capable</div> <div><input type="checkbox"/> Sensor ready and upgradeable</div> <div><input type="checkbox"/> Ease of install and configuration</div>

Connectivity unlocks additional energy savings and value; enables smart buildings

- Requires interoperability, addressability, and energy reporting that are essential building blocks of smart buildings
- Advanced capabilities for lighting control
- Granular occupancy data for building system optimization
- Fault detection and diagnostics for operation and maintenance savings
- Next level grid service capabilities to realize Grid-interactive Efficient Buildings (GEBs)
- Incentivizes futureproof upgradeability, and simplified plug-and-play installation

Key

- ✓ = Mandatory
- ✓+☐ = Mandatory + Optional Points
- ☐ = Optional Points Only

Please see Appendix A of Official Rules for all Concept Phase requirement details: www.herox.com/LPrize/resources

Background and Goals for Life Cycle Requirements

Up to 7 points possible

Product Life Cycle

✓ Driver lifetime

✓+☐ Replaceable components

✓+☐ Lumen maintenance

☐ Design for disassembly

The circular economy is essential to supporting a low carbon and resource efficient economy

- Product life cycle improvements (e.g., replaceable components, safe end-of-life strategies) have the potential to decrease negative life cycle impacts from lighting products and systems
- Examples where luminaire prototype and product designers can make impactful choices that will benefit the environment and our economy:
 - Increase lighting energy efficiency and allow for additional efficiency increases over time
 - Increase useable installed lifetime of the luminaire
 - Reduce the use of materials with high environmental impact (such as aluminum and e-waste)
- Modular design approach supports:
 - Increase of efficacy and lifetime
 - Decrease impact from more harmful components

Key

✓ = Mandatory

✓+☐ = Mandatory + Optional Points

☐ = Optional Points Only

Please see Appendix A of Official Rules for all Concept Phase requirement details: www.herox.com/LPrize/resources

Background and Goals for Innovation and Inclusion

Up to 10 points possible

Innovation and Inclusion

☐ Technical innovation

☐ Innovation for diversity, equity, and/or inclusion

- **Examples of technical innovation include but are not limited to:**
 - Achieve excellent optical control and distribution of light while achieving high efficacy
 - Improve ease of installation, commissioning, and use of the system
 - Use of recycled, bioderived, or low-toxicity materials
- **Examples of innovation for diversity, equity, and inclusion include but are not limited to:**
 - Teams led by minority-owned businesses
 - Teams from Minority-Serving Institutions (MSIs) including Historically Black Colleges and Universities (HBCUs)/Other Minority Institutions (OMIs)
 - Teams from Opportunity Zones
- **We are looking to you for both technical innovations and innovations for diversity, equity and/or inclusion in your design or process**

Key

✓ = Mandatory

✓+☐ = Mandatory + Optional Points

☐ = Optional Points Only

Please see Appendix A of Official Rules for all Concept Phase requirement details: www.herox.com/LPrize/resources

L-Prize

HeroX Overview



L•PRIZE®

U.S. Department of Energy

Official Rules of the
L-Prize are available online

https://americanmadechallenges.org/lprize/docs/L-Prize_Official_Rules.pdf

L•PRIZE®

U.S. Department of Energy

Lighting Prize (L-Prize)

OFFICIAL RULES

The L-Prize® will advance the state of the art in light-emitting diode (LED) lighting, encouraging technology developers and researchers to engage in advanced lighting system development leading to groundbreaking designs, products, and impact.

Follow or Compete at www.herox.com/LPrize

Edit



American-Made Challenges

1,602

Share

Following (45)



Lighting Prize (L-Prize)

The L-Prize will advance the state-of-the-art in LED lighting.

Energy, Environment & Resources

Government

Stage:
Comment Period Opens

Prize:
\$12.2 Million Total Prize Pool

BEGIN ENTRY

MY TEAM

- Overview
- Guidelines
- Timeline
- Forum2
- Teams40
- Resources
- FAQ

Challenge Overview

The Lighting Prize (L-Prize) is designed to advance the U.S. clean energy economy for next-generation LED lighting.

Submitting Your Concept

Submission Form Preview

Title *

Give your submission a catchy title that describes the idea and gets people interested.

Characters left: 50

Short description

Provide a brief description of your idea. Be clear and concise.

Characters left: 140

Image

 **UPLOAD IMAGE**

Tip: An Image boosts your message by illustrating your solution. For best results, ensure your image contains the following items: an actor(ess) (person), artifact (tool they're holding), action (what they're doing), and atmosphere (setting where they are). Ensure your image is at least 650 pixels wide by 366 pixels tall for clarity.

How did you hear about this challenge?

Characters left: 100

Eligibility Acknowledgement

I confirm that I am submitting as either (select one): *

Please confirm that your submission meets the eligibility requirements stated in the official rules

I am providing this submission package as part of my participation in this prize. I understand that by providing this submission to the federal government, I certify under penalty of perjury that the named competitor meets the eligibility requirements for this prize competition and complies with all other rules contained in the Official Rules

Important! You must select “I agree” on the eligibility questions and complete all eligibility questions to proceed with your submission.

Team

Let us know who's on the team! This allows us to know who is part of each team and give credit to each member.

You use the HeroX Community to create a team and have all team members join (and we recommend that you do this), but we would also like to know more about the innovative people working together.

In the field below, please provide details for each team member on separate lines. Refer to the example below for help.

Official Team Name *

What is your official team name? If you're selected, we'll use this name on various outreach materials.

Characters left: 3000

Team Members *

Please provide the following details for each team member, in the format below. Use a new line for each.

first name, last name, location (city/state/zip), contact email, phone number, LinkedIn profile URL (if applicable)

Characters left: 5000

9 Digit Zip Code (Official Team Location) *

Submission Package

Cover Page (to be made public) *

Browse... No file selected.

List basic information about your submission

Summary Slide (to be made public) *

Browse... No file selected.

Create a public-facing one-slide submission summary that contains technically specific details but can be understood by a nontechnical audience.

Completed Concept Phase Technical Performance and Scoring Form *

Browse... No file selected.

Competitors must complete the provided 'Concept Phase Technical Performance Scoring Form' located in Resources.

Description of Key Innovations and Features *

Browse... No file selected.

Competitors should provide a one-page document describing key innovations and features of their concept they would like to highlight for the Expert Reviewer Panel. These innovations should include technical innovation and any innovations for diversity, equity, and inclusion.

Concept Drawing(s) *

Browse... No file selected.

Competitors should provide detailed drawing(s) showing luminaire dimensions, construction, concept material choices, and components. Drawings of control system components external to the luminaire are not required. Please submit as one document.

System One-Line Diagram *

Browse... No file selected.

Competitors should provide a system one-line diagram conceptualizing how a typical system would be laid out for a one-story small office building including required connected lighting system components.

Projected Cost Estimate and Bill of Materials (optional)

Browse... No file selected.

Competitors may submit a projected cost estimate and bill of materials (BOM) to support the feasibility of their concept. The cost estimate and BOM is not required.

Comments on Rules — Due July 16, 2021

- DOE invites comments on the subsequent:
 - Prototype Phase and Manufacturing and Installation Phase
 - Requirements and timelines
- Any revisions to requirements or timelines of subsequent phases will be announced with the opening of the subsequent phase
- Download the Comment Form at www.heriox.com/LPrize/resources

L-Prize®		Comment Form
Rules Document Location: https://americanmadechallenges.org/lprize/docs/L-Prize_Official_Rules.pdf		
Version: Version 1, released May 17, 2021		
Comments Due: July 16, 2021		
Instructions and Background:		<p>DOE invites comments on the L-Prize requirements and timelines. DOE will accept comments at the beginning of the Concept Phase and reserves the right to revise subsequent phase requirements and timelines based on the input received. Any changes to requirements and timelines will be announced with the opening of the subsequent phase.</p> <p>Please follow these steps to ensure your comments are received and considered by the L-Prize Team:</p> <ol style="list-style-type: none">1. Enter your Organization, Name, Email Address, and Phone Number in Row 8 of this worksheet.2. After your review of the Rules Document, please consider each Key Question in Columns B and C and submit your answer in Column D.3. Detailed comments are encouraged and should be added beginning in Row 18 of the worksheet. Please enter the section and page number of the Rules Document you are commenting on.4. Enter your comment in Column D "Comment and Rationale". If applicable, please provide alternate approaches and data to support your comment.5. Save this Excel file with your comments and include your organization name appended to the end of the filename (for example: "L-Prize_Comments_YourOrganizationName.xlsx").6. Email the file to Lprize@NREL.gov by close of business, July 16, 2021.
Reviewer Organization	Reviewer Name	Reviewer Email Address
#	Key Questions	Answers to Key Questions
1	Are the timelines feasible for the Prototype and Manufacturing and Installation Phases?	
2	Are there any hurdles that are preventing you from participating? Is there something DOE should consider, change, or include that would encourage you to participate?	
3	Are there other aspects that should be considered to encourage diversity, equity, and inclusion?	
	Are the proposed U.S. Content and Assembly requirements for...	



L•PRIZE[®]

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QUESTIONS?

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