

Evaluation Criteria

Judges will score each entry according to the following criteria:

Energy Efficiency and Greenhouse Gas (GHG) Emissions Reduction	How much energy does the device consume? Does it meet ENERGY STAR or CEE efficiency criteria, if applicable? How does it support energy savings and emissions reduction, and how large are those savings?
Functionality	What amenities are offered to consumers? What added benefits does connected technology provide?
Load Management	What load and energy management capabilities are included (for example, time of use rates or DR capabilities)?
Interoperability	How well does the product integrate with other devices and systems? What is the level of integration? With how many? What is the market share of compatible devices and systems?
Data Sharing	What data is shared with the consumer and authorized third parties? How does that data benefit the consumer?
Reliability	What functionality is maintained with the loss of internet connection? How does the device reconnect after loss of power, internet, or software update?
Value Proposition Messaging	Is the value proposition easily understood?
Ease of Installation, Set Up, and Use	How easy is it to install, set up and use the device for a consumer and contractor, if required?
Quality (Including Appearance and Style)	Judges will use entrant provided performance data as an input when evaluating the in-person appearance of quality with respect to its intended application to inform their scoring. Performance metrics include light distribution, lumen output, diffusion, glare, color temperature, color rendering, and flicker.
Value for Money	Is the price point commensurate with amenity and quality of the device?
Innovation in Design / Form Factor	Is the design unique or innovative? Does it look new and exciting?
Innovation in Engineering	Are there innovative technical elements?

Before awards are presented, winners will be expected to demonstrate cybersecurity measures as part of a final verification process with UL prior to receipt of award.

Bonus Points

The judging panel may award bonus points for entries exhibiting desirable characteristics that go above and beyond general competition requirements, such as resiliency, sustainability, or products for niche applications. Other unique product attributes will be considered on a case-by-case basis.

Judges will determine bonus points ad hoc based on their subjective assessment of products and any information entrants submit outlining how their entry serves a special market need.

2021 Evaluation Criteria

Resiliency

Resiliency is defined as the ability to prepare and plan for, absorb, recover from, and more successfully adapt to adverse events. The rise in extreme weather and climate events in recent decades has spurred significant attention to the importance and potential consumer benefit of resiliency. The LHFT competition seeks connected home products that have been designed to be more rugged and with the ability to continue operating outside normal conditions. Points may be awarded for entries that have considered and incorporated resilient features.

Resilient and durable features and materials may include:

- Battery or solar-powered operation backup operation
- Compatibility with hydrogen/natural gas blends
- “Black start,” or the ability for gas products to start without electric power
- Waterproof or rust-proof components
- Durable components, such as shatter-proof exteriors

Entries may include other features to support recovery from adverse events. Entrants will have the opportunity to highlight these features in the submission form. Evaluation of this criterion will be based on the existence of these features and entrant descriptions.

Future Proofing

With such dynamic market conditions, it is essential that connected home devices, systems, and platforms continue to operate and deliver on their value proposition well into the future.

Manufacturers that display considerable thought to future proofing may be awarded bonus points by the Judging panel. This may include embedded capabilities for enabling updates over time (such as over the air firmware or software updates), indicating which capabilities reside in the device and will still function if the cloud is no longer supported, as well as plans in place to address significant company changes (for example, releasing code to open source).

Field Serviceability

Field serviceability describes the ease with which the entry can be maintained and repaired at the point of use, either by the consumer or by a field technician. Entries that must be discarded upon failure of a single component will not be awarded points for this criterion. Judges will consider the materials used and ability of users or technicians to replace individual components. Entrants can also describe the process for field servicing and availability of technicians.

The evaluation of replaceability and field serviceability will vary by product category. Some products, such as lightbulbs, are not necessarily expected to be field serviceable, while HVAC equipment is expected to be maintained by customers or technicians.

2021 Evaluation Criteria

Accessibility

Judges may award bonus points to products which have relevant accessibility features such as:

- Easy to see and easy to use controls and adjustment devices
- Knobs and switches that can be found and operated by touch
- Clear instructions and product information
- Tolerance for error
- Offer choice of interaction via screen or voice assistant
- Consider text size, and color contrast on screens and printed materials
- Controls that mirror their traditional version, such as an in-app lighting controls that resemble a standard dimmer switch.

For example, accessible connected lighting might include features such as:

- Adjustable shielding to reduce glare
- Options to increase light output or to focus the light on a given area (portable lighting products)
- Products that can be installed and used to enhance visibility at residential trouble spots such as stairways, entrances, bathrooms, and kitchen work areas.

For more information, check out the [Inclusive Design Principles](#).

Niche Applications

The competition is interested in entrants that fill smaller or unique niche market roles, such as products that are designed to serve the growing senior population and their unique needs.

Example: Senior-Friendly Lighting

Senior-friendly lighting is an example of a niche application related to accessibility. Product design and application information about lighting for the elderly and the growing market for lighting products to serve that market can be found in the following materials:

- [Video](#): Senior friendly lighting and the *Lighting for Tomorrow* competition, a predecessor of the Integrated Home Competition
- US Department of Energy and Sacramento Municipal Utility District (SMUD) Program Report: ["Tuning the Light in Senior Care"](#)

Additional Questions?

Check out the FAQ at <https://www.integratedhome.net/competition/> or contact Kim Katz at competition@ceel.org with any questions.