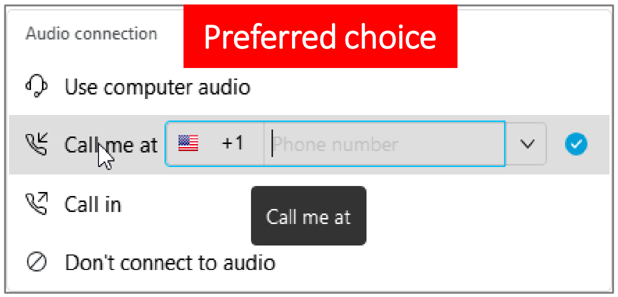
Audio instructions

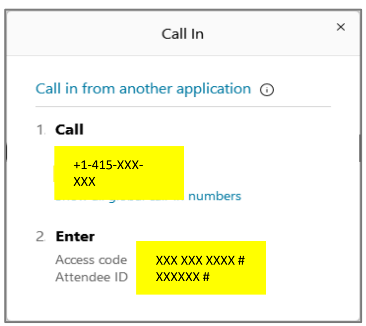
Welcome to BPA's Webex Meeting!

Note: **Your audio is muted upon entry.**



Note: The incoming call may be listed as **POTENTIAL SPAM**.

Second choice: In the example above, instead select **Call in** and use your phone to call into the webinar. A window will pop-up with your meeting **Call in** information.



Last choice: **Use Computer for Audio.** Connect a headset to your computer for best results.

Use to mute and unmute

Use to express emotion

Use to view participant list and chat panel

LightFair 2023 Tradeshow Findings

July 27, 2023

BPA Non-Residential Lighting Market Research Team

Bonneville
POWER ADMINISTRATION

Agenda

1. Review LightFair goals and methodology
2. Key findings from LightFair
3. Findings implications

LightFair Goals and Methodology

Goals for attending LightFair

Most **cost-effective** way to gather large amounts of qualitative data from market experts

Provide context to **sales data** findings

Inform **findings and analysis** in all other BPA lighting research

Provide context for future non-residential lighting **modeling efforts**

Observe **new trends** in the lighting market

Methodology

- Attended **3 days** of LightFair
- Interviewed **20** lighting manufacturers and other industry experts
- Information gathered through booth visits and long form interviews
- Coordinated showroom visits and interviews with NEEA

Image taken by JCB at LightFair

We spoke with a range of lighting industry experts

Reminders

Findings are based on statements from lighting experts interviewed at LightFair

Any numbers and percentages presented are anecdotal, unless otherwise cited.

Key findings from LightFair

Key findings

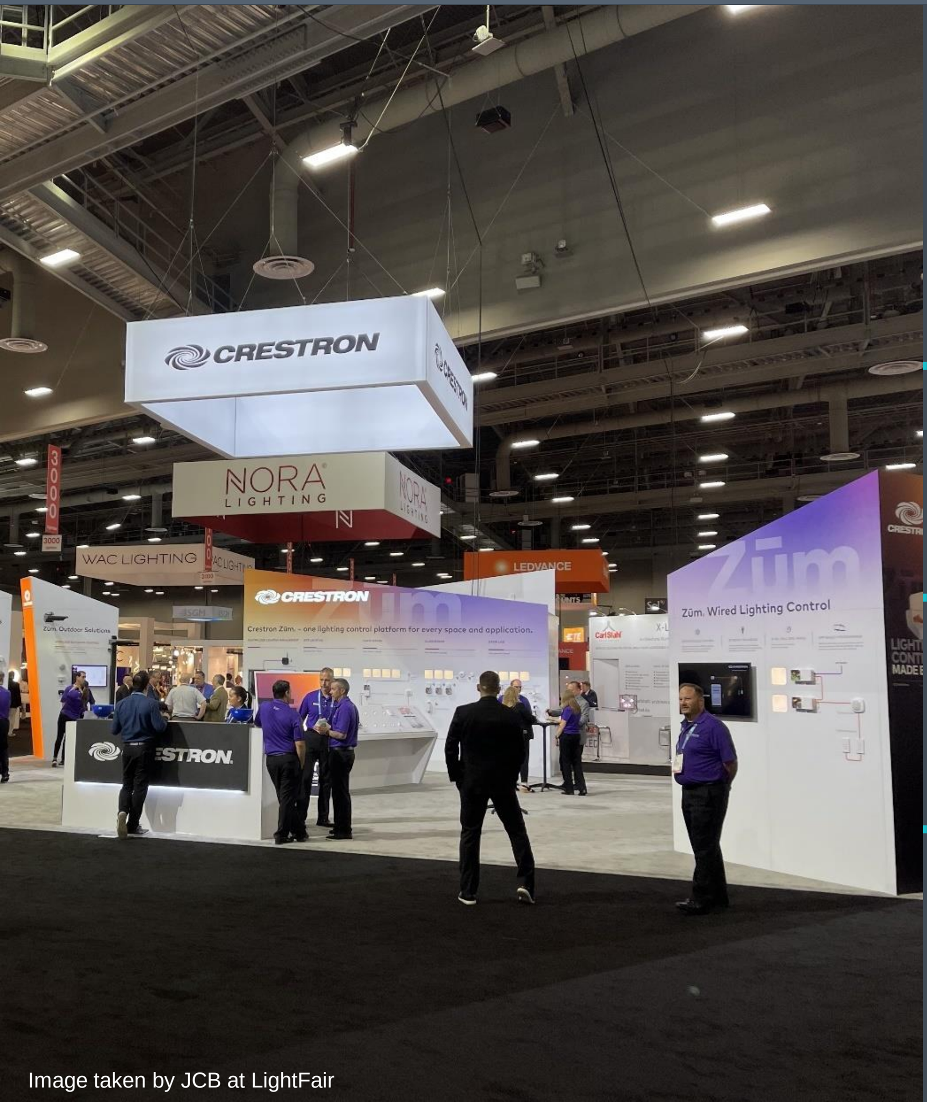


Image taken by JCB at LightFair

Lighting

Controls

Market trends

Lighting Findings

Manufacturers are moving away from legacy products

- Most interviewees make exclusively LED products
- Two large manufacturers are discontinuing their linear fluorescent business
  - One discontinuing linear fluorescent lighting products
  - One discontinuing the production of ballasts
- State policy and federal code are driving non-LED technologies out of the market

But, there’s still demand for legacy products

Key players in the market continue selling legacy (non-LED) products while market demand persists

According to sales data collection, legacy products still make up **33%** of sales in the Northwest

SKU consolidation win for supply chain, energy impact unclear

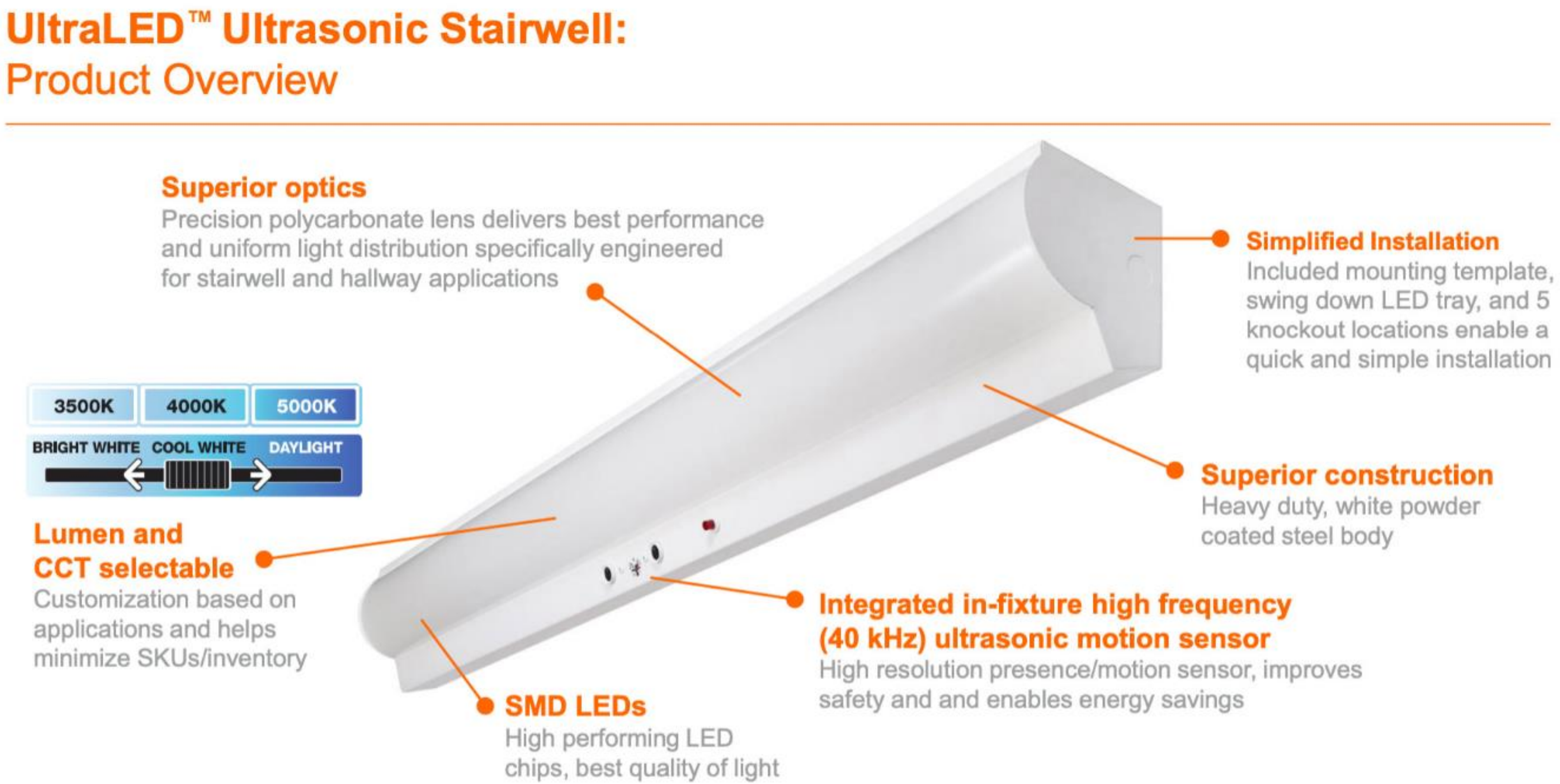


Image from marvellighting.com

Replacement drivers extend LED lifetimes

- Simple retrofit (no lamp or fixture replacement)
- Extends the lifetime of old(er) LEDs
  - Can strand the opportunity to add controls

Image from marvellighting.com

Controls Findings

LLLC poised to grow

NLC CONFIGURATION

1 sensor : many fixtures

1 load controller : many fixtures

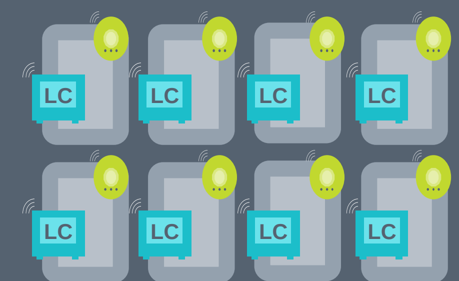
INDIVIDUALLY ADDRESSABLE

1 sensor: many fixtures

1 load controller : 1 fixture

LLLC

1 sensor : 1 fixture



1 load controller : 1 fixture

Manufacturers are partnering on controls

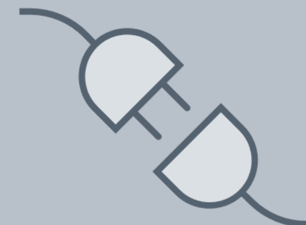
Lighting manufacturers featured self-branded controls systems, sometimes via OEM partnerships

Controls manufacturers emphasized their flexibility and willingness to partner with others on a variety of controls solutions

Manufacturers promoted wireless, but there is still a market for wired

WIRELESS

- Ease of installation and commissioning
- Reduction of labor and maintenance cost
- Lower materials cost (no wiring)



WIRED

- Established technology with high comfort level among installers, end users, etc.
- Alleviates security concerns*

Codes and rebates are driving most controls activity

- Without significant economic incentive, building code drives adoption
- Rebates can help push customers towards controls solutions above code requirements

"No one puts in lighting controls because they're cool"

Lighting and Controls Manufacturer

"Treat controls savings as your rebate"

Lighting and Controls Manufacturer

Market Trends

A post-pandemic normal is emerging

Most manufacturers were eager to say that COVID impacts were behind them

- Sales volumes have bounced back (or were never impacted)
- Supply chain stabilized
- No lingering changes to prices from supply chain issues or inflation

Other Manufacturers were less optimistic

- Sales volumes have not bounced back
- New normal is uncertain
- Supply chain has “stabilized” to a place where “things take longer and it’s erratic”

“Illumageddon” is here – now what?

Manufacturers foresee declining lighting revenue as LEDs are adopted broadly

Diversifying offerings, including controls, EV charging products

No indication that lighting as a service models are common strategy

The future of LightFair is uncertain

Image from lightfair.com

Findings Implications

Next phase in lighting market: goodbye linear fluorescents

- Manufacturers clearly anticipating linear fluorescent sales to diminish rapidly
  - Some making moves that may speed the transition
- Monitoring the next phase of the shift away from linear fluorescent lamps:
  - State policies (bans on mercury-containing products, energy codes)
  - Federal standards

Controls adoption growing: how to maximize the opportunity?

Several market factors are leading to a likely increase in controls adoption

- Manufacturers’ increasing emphasis on controls offerings
- Energy code and utility programs encouraging further adoption

Utilities can maximize this opportunity with a strategic approach

- How well do we understand energy impacts of controls systems as installed and used?
- Are utility incentives aligned with best practices for energy savings?
- Could demand response capability become valuable in the future?

Unknown energy impacts of product innovations

Example: replacement drivers

› Drivers aren't currently accounted for in data collection, and their impact is unknown

  • Drivers could strand the opportunity to replace old LEDs with newer LEDs and/or controls

  • Or, drivers could add controllability

Field-adjustable products present challenges for utility programs and quantifying market-level energy impacts

Findings summary

Manufacturer interest in legacy products is waning

Lighting controls and system adoptions will likely surge in coming years

Manufacturer innovations may present energy saving opportunities or challenges

Image from lightfairblog.com

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