

LD+A

LIGHTING DESIGN and APPLICATION

Innovation in a Post-LED World
Under a Rainforest Roof
2026 Lighting Jobs Outlook

JANUARY 2026

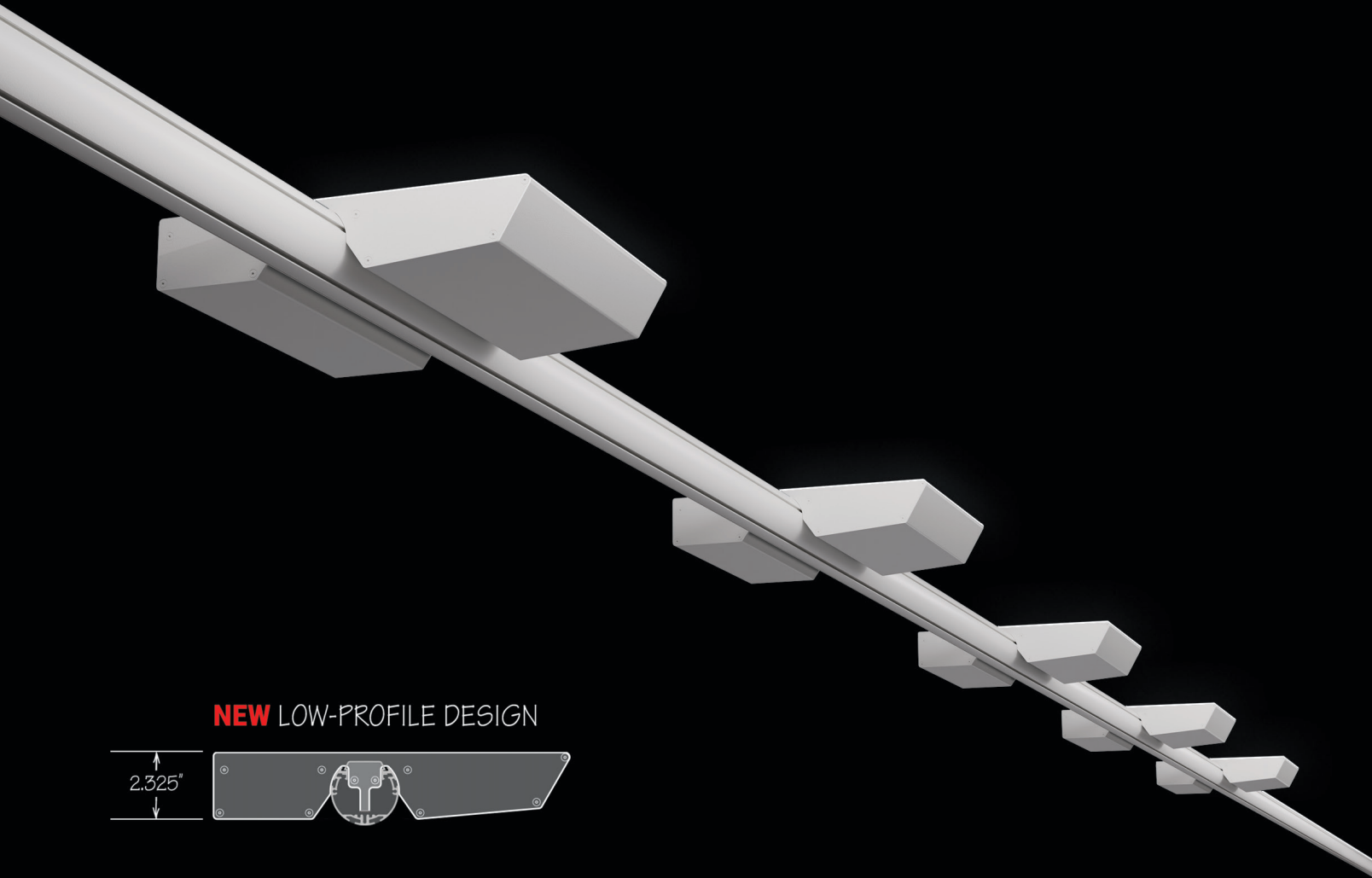
RETAIL OR NOT, HERE WE COME

The riverside reverie of Clarke Quay

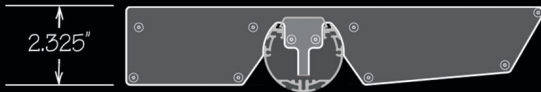


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Illuminated fabric shelters create a unique nighttime scene along the Singapore River. Photo: Nipek

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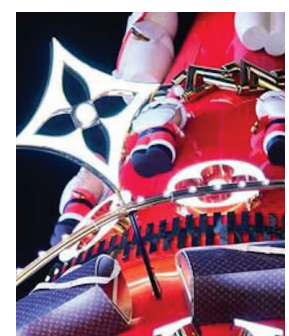
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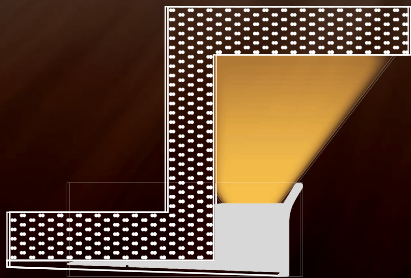


PROJECT IN PICTURES: TOY STORY

An illuminated Louis Vuitton holiday display pays homage to a 1930s toy store

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Muhammad Annum Khan

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LD+A

LIGHTING DESIGN and APPLICATION

Share Your Voice

The flagship publication of the Illuminating Engineering Society, *LD+A* is an award-winning magazine for professionals involved in the art, science, study, manufacture, teaching and implementation of lighting. In an effort to continue to provide diverse voices in *LD+A*, we are looking for **industry professionals** who are interested in telling their stories, including work on unique lighting projects, their experiences in the profession, and opinions on current hot topics in the world of illumination.

If you are interested in publishing an article in *LD+A*, please reach out to Editor-in-Chief Craig Causer at Craig.Causer@sagepub.com to discuss further.





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EDITOR'S NOTE

That New Car Smell

As the calendar flips to 2026, we're ringing in the new year with a refreshed and redesigned *LD+A*. It's good practice to periodically consider a makeover for oneself (except those late-1980s Zubaz pants that looked like a dazzle of zebras stormed through a Benjamin Moore paint manufacturing facility), and publications are no different. Our goal is to provide a clean and modern design that is fitting of the innovation and creativity on display in the lighting industry. Kudos to Sam Fontanez, creative manager, Commercial Publishing, for his artful eye and the long hours spent in spearheading this effort.

This iteration of *LD+A* is also a result of what the editorial staff has been building toward over the last couple of years—a collection of voices that are more representative of the global lighting industry. If you've been reading the publication for some time, you may recall the now-retired, annual *LD+A International*: a single issue that succinctly highlighted a handful of design projects across the globe. It was coverage that was separate but not equal, resulting in the move to increase the exposure of global projects and designers in the core magazine.

Stepping outside of the North America bubble, buzzworthy industry events are being held across Europe, the Middle East, and Asia, to name a few. As these events grow, *LD+A* evolves with them. Beginning in 2026, we are rolling out a new column, "Crossing Beams," that will provide insight into markets outside of North America. Thank you to Katia Kolovea, founder and creative director of Archifos, a boutique multidisciplinary agency based in London, who will serve as our inaugural international columnist.

It's no secret that the IES has undergone some seismic shifts in how it operates—modernizing processes, expanding its reach, and rethinking how it delivers value to its members. These changes have sparked curiosity from readers who want a clearer picture of where the organization is headed. To meet that need, we're introducing the column "Inside HQ." Written by IES Executive Director Colleen Harper, it will appear three times a year and offer candid insights into strategic priorities, upcoming initiatives, and the vision shaping the future of the IES. Consider it your direct line to the heart of the organization.

And there's more to come. *LD+A* isn't just turning the page—it's breaking out a fresh playbook. We're shedding our previous skin and stepping into a future that's global, dynamic, and innovative. New voices, new perspectives, and new ideas are here to guide the way forward. The next chapter of *LD+A* starts now. Let us know what you think.

Craig Causer

Editor-in-Chief

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THE MAGAZINE OF THE
ILLUMINATING ENGINEERING
SOCIETY



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Media, and Editor-in-Chief,
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LD+A is a magazine for professionals involved in the art, science, study, manufacture, teaching, and implementation of lighting. *LD+A* is designed to enhance and improve the practice of lighting. Every issue of *LD+A* includes feature articles on design projects, technical articles on the science of illumination, new product developments, industry trends, news of the Illuminating Engineering Society, and vital information about the illuminating profession. Statements and opinions expressed in articles and editorials in *LD+A* are the expressions of contributors and do not necessarily represent the policies or opinions of the Illuminating Engineering Society. Advertisements appearing in this publication are the sole responsibility of the advertiser.

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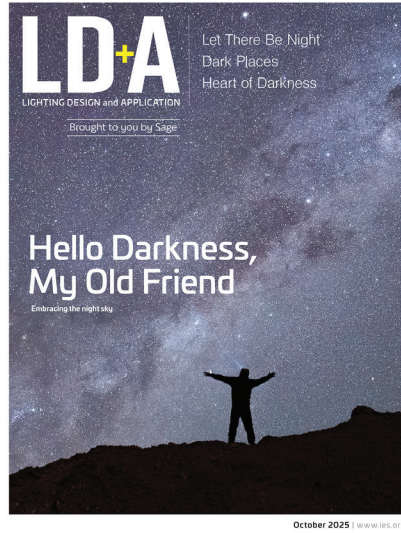
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READERS WRITE

THE MAGAZINE OF THE ILLUMINATING ENGINEERING SOCIETY



Missing the Mark on the Dark

The *LD+A*, October 2025 “Embracing Darkness” issue missed the chance to emphasize the dark-sky theme in that the “Insights” description (page 9) did not indicate what, if any, dark-sky measures were associated with the high-lighted project. This should be a part of all featured projects going forward.

About the only thing I missed in the dark-sky articles was a discussion of the impact of architecture and landscaping on fixture design and light pollution. For instance, a residential uplight can be dark-sky friendly if it is mounted under a roof overhang that captures the uplight while providing a visual signal to the side. Light reflecting off any vertical façade will have a significant upward and near horizontal component. Unobstructed near-horizontal light traverses much

more atmosphere before escaping, so that even red light is heavily scattered, as can be easily seen at sunset and sunrise. At the same time, light pollution from this almost-horizontal light can often be reduced by nearby vegetation, fences, or nearby buildings. Lighted windows are another source of light pollution. It can be reduced by curtains, blinds, tinting or even just by reducing or turning off the lights late at night.

We are the lighting people, but we can do a better job if we educate and collaborate with our architectural and landscape colleagues as well as the general public.

Robert Clear
Member IES



PRESIDENT'S PERSPECTIVE

Jared Smith

CBCL

AS I SIT TO WRITE MY FIRST "President's Perspective," I can't help but reflect on my journey with the IES. In 2013, I was invited to join the planning committee for the IES Maritime Regional Conference with my local Section in Halifax, Nova Scotia, Canada. This was my first look at the power our friends and colleagues have in our various industries and the great work that our Society performs daily across the globe. Watching how we blend the technical expertise of the lighting community with our emphasis on networking and education inspired me to get more involved.

Then, I served as a Section president, district vice-chair, and chair; once I was the Northeast regional director, I knew I was really in this for the long haul. It was then, as a Member of our Board of Directors, that I started to truly understand the energy, passion, and curiosity that is exemplified by our leadership every day.

After serving four years on the Board, most recently as vice president, I am honored to step into this role as president of the Society in 2026. I am committed to supporting our vision: to become the leading global lighting organization dedicated to communicating the value of lighting quality to its members, allied professional organizations, and the public.

I see nothing but boundless opportunity as we continue establishing ourselves

as the foremost experts in lighting and illumination. However, the future of lighting isn't going to shape itself—it needs more

"The Society needs people who are willing to push beyond what's known today and redefine what's possible tomorrow."

of you. It needs your colleagues and friends—that promising young engineer

who just started in your office. The Society needs people who are willing to push beyond what's known today and redefine what's possible tomorrow. Lighting isn't just about brightness, it's about impact.

That impact includes recognizing our members. To thank them for their many and varied contributions to the Society and the broader lighting industry. Whether that's via the Marks Award, the Medals Award, or the Distinguished Service Award, we need you to help recognize your peers so that they can be viewed as visionaries by the rest of our industry.

Finally, I want to thank each of you for your continued support. It is because of you that the IES is trusted with the responsibility of helping ensure the public can cross a street at night without fear, to land safely when flying home for Christmas, to have their doctors perform life-saving surgeries, and their children's teachers inspire the next generation in well-lit classrooms. We cannot do it without your trust and dedication. I look forward to continuing our journey together through 2026.

Looking for your next opportunity?

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careercenter.ies.org





Photo: magalindaphoto

High Tech on the High Road Tour

Follow-Me technology aids lighting on a nationwide music event

Country Music Star Kane Brown took his “High Road Tour” across the U.S. in 2025, accompanied by a non-traditional lighting rig: a Follow-Me 3-D tracking system was key to the show’s lighting automation. Production/Lighting Designer Chase Hall said, “I was determined to make a country show look progressive and cool. So, I intentionally abandoned the typical country tropes: wood textures, cars on stage, bar neon, straight truss sticks smattered with a blinder wash.” Instead, the spectacle embraced concentric circles and sticks that could form 28 sculptures throughout the concert aided by lights on four fixed trusses, with hundreds of other lighting elements integrated into the Follow-Me system. Hall explained, “We need[ed] multiple fixtures tethered for long-throw color output. We need[ed] excellent tracking backlighting on each target. And photometrically, we need[ed] the spot system adjusting intensities for broadcast cameras at every point along our large arena thrust.” The system allowed for maximum creative freedom, with any light able to actively track targets as they moved across the stage.

MERGERS & MORE:

- **ANP Lighting** has launched a new website with improved navigation, updated spec sheets and technical resource pages, and Revit files added daily.
- **Creston Electronics**, a global leader in workplace and smart home technology, has opened an Experience Center in Mechelen, Belgium.
- **DMF Lighting’s** Artafex Linera and PhaseX lighting solutions won Best New Hardware at the CEDIA 2025 Smart Home Awards.
- **Lucent Lighting’s** Mix luminaire range won the GREEN award in the Lighting category at the 2025 Build Back Better Awards.
- **The TALQ Consortium** has 82 members and 74 certified products as of the last quarter of 2025.

\$92.14 BILLION

The projected worth of the commercial lighting market by 2033.
Source: Research and Markets



Illustration: istock / FNiko

LEDVANCE Secures UMSUG Codes for Streetlights

Leading global lighting provider LEDVANCE has secured Unmetered Supply User Group (UMSUG) charge codes for various streetlighting lamps, enabling unmetered supplies operators and meter administrators to more accurately calculate electricity usage for individual luminaires. Not only does this improve operation efficiency and maintenance, the UMSUG codes also reduce the risk of over/under payments for electricity used. LEDVANCE Managing Director Nelo Neves said, “By adopting UMSUG codes for a wide range of our streetlights, we are simplifying billing for many of our clients.” Local authorities, councils, and others with responsibility for town planning particularly benefit from the ease introduced by the addition of the 13-digit codes.

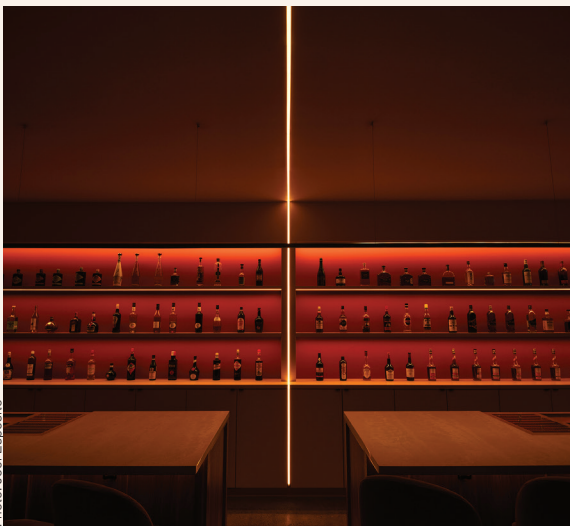


Photo: Joel Esposito

Suite 115, a bar and lounge in Toronto, Canada, features a unique lighting design by Atelier Sun: a slim linear pendant spans the length of the red-shelfed room and splits the bar in two, creating a mirror-like illusion.



Photo: Samuel Fontanez

Seen by Staff
Gaia—an illuminated, rotating, 3-D globe installation on display at Trinity College in Dublin, Ireland. The globe, by British artist Luke Jerram, is 23 ft in diameter and features 120 dpi NASA imagery.

**JAN
10-13**

Lightovation, North America's largest residential lighting show, will take place at the Dallas Market Center. Attendees can explore the latest trends in indoor and outdoor, decorative and architectural, smart systems, and more in home lighting.
www.dallasmarketcenter.com

**FEB
5-6**

Illuminate 2026, the Association of Outdoor Lighting Professionals' annual conference and expo, will be held at the Westin Carlsbad Resort & Spa in California. The event will include hands-on education sessions, new products and technologies, and the AOLP Lighting Awards.
<https://aolponline.org>

**MAR
5**

The IES Detroit Section Product show will be held at Laurel Manor in Livonia, MI. Featuring more than 100 exhibitors, the event allows attendees to experience the latest technology in lighting and electrical innovation.
<http://www.ies.org/section/detroit>

**MAR
8-13**

Light + Building will be held in Frankfurt, Germany. The 2026 show's tagline is “Be Electrified—Electrifying Places. Illuminating Spaces.”
<https://light-building.messefrankfurt.com>

**JUN
25**

The IES San Francisco Section's Light! Design Expo returns to Pier 27 on San Francisco's Embarcadero. This annual event showcases the latest in architectural lighting products and attracts a wide range of exhibitors and design professionals.
<https://lightdesignexpo.com>

Ask An

EMERGING PROFESSIONAL



This graduate student at Parsons School of Design at The New School is in his second year in the MFA Lighting Design program.

What is your current role in the lighting industry and what do your day-to-day tasks look like?

On any given day, you might find me exploring the city, gathering inspiration for project mood boards, engaging in thoughtful discussions with my professors about technical and conceptual ideas, or working on detailed AGI lighting models. My internship at Cline Bettridge Bernstein Lighting Design keeps me hands-on—building CAD layouts, testing fixtures, and refining designs to bridge creativity with technical precision.

What is the best part of your studies?

One of the most rewarding parts of being both a student and an intern is engaging in discussions and developing ideas about how people experience space—not just as brick-and-mortar spaces, but as living, breathing systems designed to support their work and enhance their lives.

How did you find the lighting industry?

During my bachelor's studies, I became deeply interested in product design and even began freelancing while still in school. During that time, I designed a set of lamps and a custom lighting installation for a hotel, which was very well received. Through their reference, I was

contacted by a custom lighting design firm, Lumen Studio in Ahmedabad, India, which marked the start of my professional journey in lighting design. After gaining 2.5 years of experience in the field, I decided to continue my education to deepen my understanding of architectural lighting and expand my design approach.

What is the most surprising part of your studies?

The most surprising discovery was the power of color and how even the smallest change can profoundly influence human psychology and daily functioning, often without people noticing.

What is something people in other industries don't understand about light?

People outside the industry have trouble understanding how the quality and design of light can change the perspective and use of space by the inhabitants, as well as how the architecture gets its true meaning once it is properly illuminated.

Do you have a dream project?

My dream project would be working with Heatherwick Studio. The organic geometry and design concept is something that inspires me.

Is there a project that you have not worked on but find inspiring? Why?

The 9/11 light memorial by Fisher Marantz Stone inspires me, as it shows how simple but effective design can provide hope and meaning to so many people.

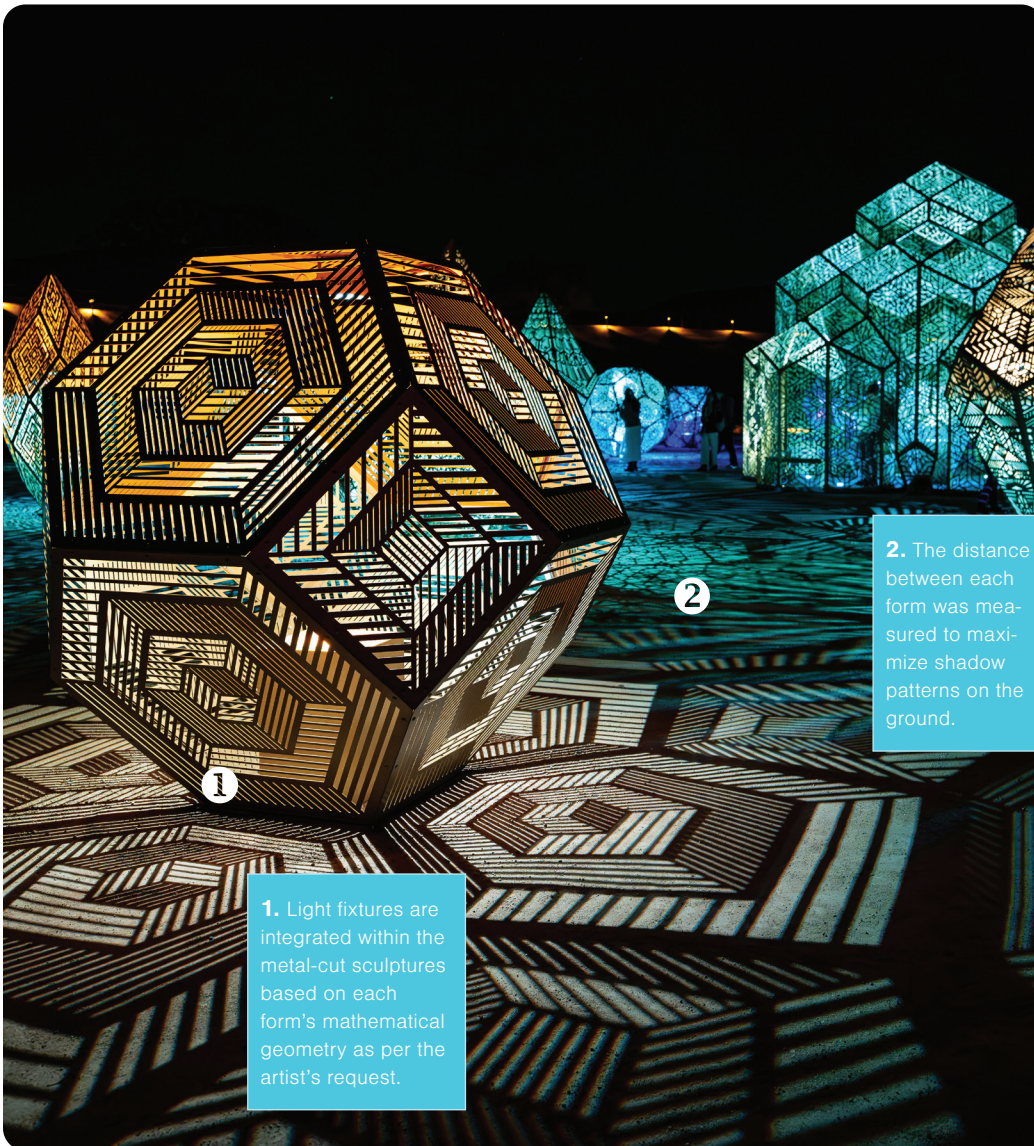
Is there a current lighting designer and/or design firm that you particularly admire? If so, who and why?

From the very beginning of my journey in lighting, Focus Lighting has been a source of admiration and inspiration. Its approach to architecture, materiality, and fixtures feels pioneering—not merely solving design challenges but transforming them into opportunities for innovation, creating new products, and using light itself as a material to reimagine space.

What is one piece of advice you would give to someone considering a career in the lighting industry?

Many people shy away from the technical side of lighting, but I believe it holds incredible potential. With an open mind and a passion for design, merging creativity with technology can lead to extraordinary results.

HOW
THEY DID IT



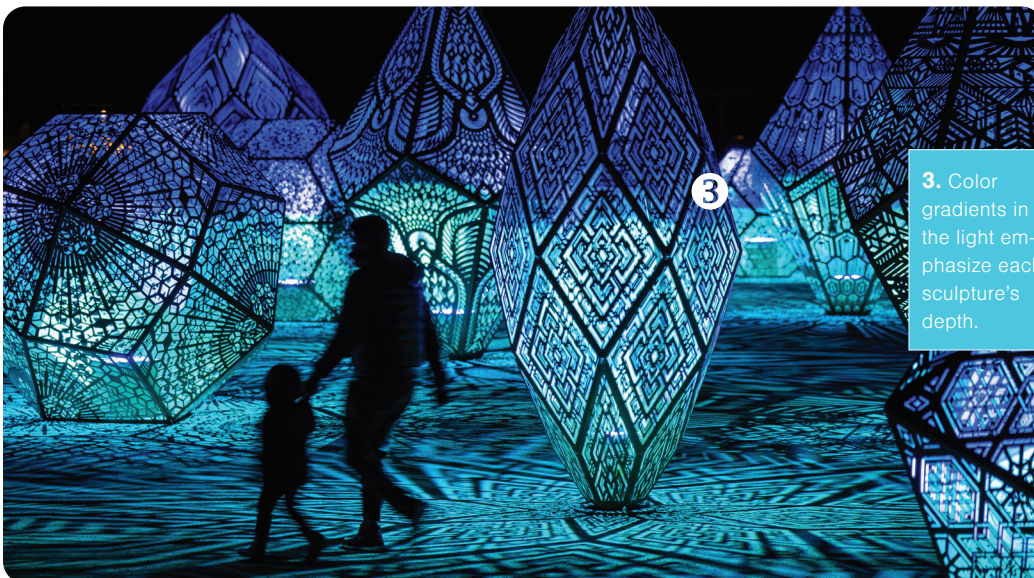
Photos: Jennifer "Z" Zornow (Zlightdesign@me.com)

1. Light fixtures are integrated within the metal-cut sculptures based on each form's mathematical geometry as per the artist's request.

2. The distance between each form was measured to maximize shadow patterns on the ground.

"DIMENSIONS' BY HYBYCOZO"

Part of a larger art installation in Paso Robles, CA, the metal sculpture experience, "Dimensions" by artist Hybycozo, is internally illuminated with careful design by **Lightswitch**. The structures change color according to a 33-minute soundtrack playing Asian, electronic, western, and world music, and explore the relationship between light and shadow.



3. Color gradients in the light emphasize each sculpture's depth.

Muhammad Annum Khan

“The single most transformative development in railway lighting in recent decades has been the move to solid-state, LED-based lighting systems.”



RAILWAY LIGHTING, THOUGH OFTEN TAKEN for granted by modern travelers, is a foundational element in the history and continued advancement of rail transport. From the flicker of oil lanterns to the current revolution in LED and smart-lighting systems, the evolution of railway lighting captures the intersecting stories of technology, safety, engineering, and human ingenuity. Its significance spans not only technological milestones but also the influence of critical figures, shifting regulatory landscapes, and contemporary demands for sustainability and passenger-centric experiences.

In the earliest days of railways, lighting was synonymous with open-flame sources. Rail workers and operations depended on oil lamps and lanterns—technologies rooted in centuries-old traditions of illumination. Vital for both practical and safety purposes, lanterns enabled night-time communication, hand signaling, and route marking. The color-coded globe system, with red, green, blue, yellow, and clear lenses, played a crucial role in train operation and signaling, defining a language of light still echoed in modern systems.

Kerosene lamps surged in popularity from the late 19th into the early 20th century, providing more reliable, longer-lasting flames than tallow or whale oil. These lamps illuminated remote stations, sidings, and switch stands well into the mid-20th century, especially in regions where electrification lagged.¹

At the industrial and municipal scale, the 19th century witnessed the rise of coal gas for lighting. William Murdoch's experiments with gas in the 1790s paved the way for its adoption in city streetlighting and later in rail stations, yards, and workshops. By the 1850s, gas lighting was standard in many railway environments, especially for large urban stations and external areas.

Arc and Early Electric Lighting

The quest for brighter, safer, and more reliable illumination led to a string of electric lighting innovations in the 19th century. Sir Humphry Davy's demonstration of the arc lamp in 1808 heralded a new era—capable of producing intense light from an electric arc between two carbon rods. Initially, arc lamps were cumbersome and costly, limited to grand venues and light-houses. However, as technology matured and steam-powered dynamos replaced batteries as power sources, arc lamps reached railway stations, yards, and major urban crossings by the late 19th century.

The Yablochkov candle, developed in 1876 by Pavel Yablochkov, was especially significant for railways, providing practicable, mass-producible arc lighting that was quickly adopted across Europe and the U.S. in key railway applications. Meanwhile, Charles Brush advanced the American arc lamp, using electromagnets and mechanical regulators to produce street and railway lighting systems that spread rapidly during the same period.²

Despite their intense brightness, arc lamps were noisy, generated significant heat, and required specialized maintenance. The need for consistent, practical



On April 1, 1865, semaphore signals (left) were introduced at Paddington Station in London.

illumination within carriages—and for general station use—drove further innovation toward incandescent, and later fluorescent, technologies.

The Incandescent and Gas Mantle Era

The invention and improvement of incandescent lightbulbs in the late 19th and early 20th centuries marked a turning point for railway lighting. The efforts of inventors Thomas Edison and Joseph Swan in patenting carbon-thread incandescent lamps in 1879, and the subsequent introduction of tungsten filaments by Alexander Just and Franz Hanaman in 1904, made electric lighting vastly more accessible and practical for rolling stock and stations.

Incandescent bulbs rapidly replaced oil and gas lamps in passenger coaches and eventually in most station applications, offering smoother and safer light for both passengers and operators. The introduction of the gas mantle by Carl Auer von Welsbach in 1885 further extended the utility and brightness of gas lighting during the transition period, temporarily maintaining gas's relevance before electricity's ultimate dominance.³

Fluorescent, Halogen, and High-Intensity Discharge

World War II and the subsequent boom in railway infrastructure led to a new wave of lighting technology. The fluorescent lamp, first patented by Edmund Germer in 1926, entered widespread railway use by the mid-20th century, particularly in station lighting and large coach interiors.

Fluorescent lighting dramatically extended lamp life, improved energy efficiency, and provided more uniform lighting than earlier options. It was especially favored in high-traffic, large-scale terminals and urban subway systems. However, limitations such as flicker, cold start performance, and the presence of mercury inspired the search for better solutions.⁴

The introduction of halogen lamps by Elmer Fridrich in 1953 marked an important step for railway exterior and



Photo: Wikimedia Commons/Sean Lamb

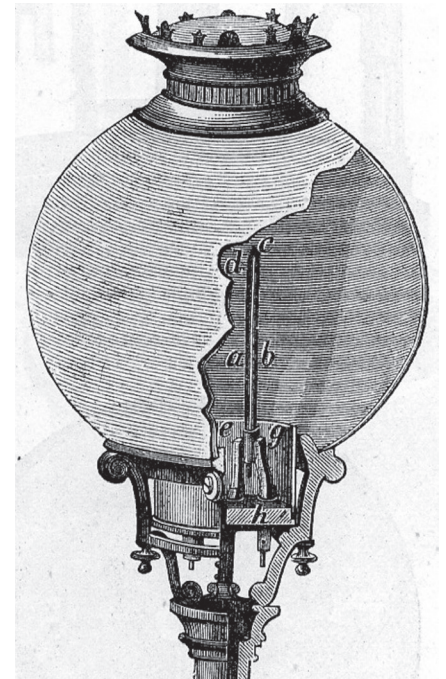
A brakeman's kerosene lantern from the Chicago and Northwestern Railway.

signaling lighting. With their brighter, whiter light and resistance to environmental elements, halogens became standard in headlights, taillights, and many exterior applications, offering improved visibility and safety, especially in adverse weather.

Halogen technology also found use in signaling, complementing color light systems that had largely replaced semaphores and oil-lamp-based signals. By the late 20th century, high-intensity discharge lamps—including sodium and metal halide—became increasingly common in exterior yard and station area lighting, valued for their output and efficiency over earlier options.⁵

Moving into the Modern Era

The single most transformative development in railway lighting in recent decades has been the move to solid-state, LED-based lighting systems. White LED technology, commercialized on a large scale after Shuji Nakamura's advances in



The Yablochkov candle consists of two parallel carbon rods separated by a layer of Plaster of Paris.

the 1990s, offered the rail sector efficiency, flexibility, and reliability unmatched by previous technologies.

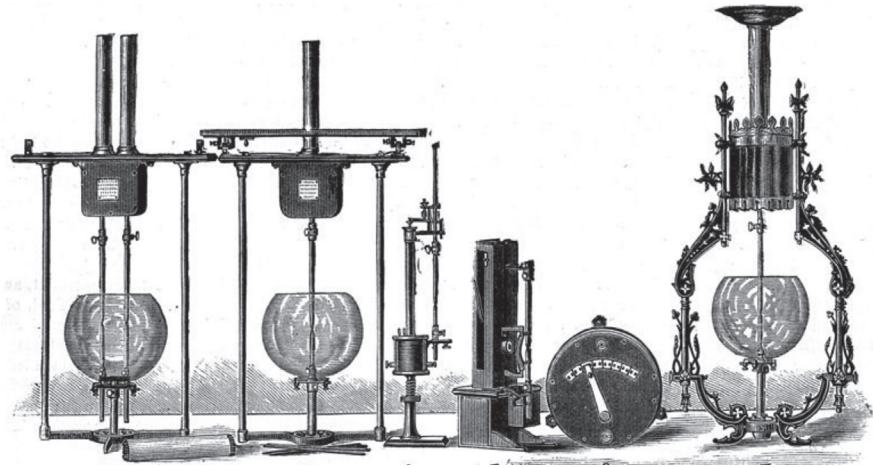
LEDs outperform even the best fluorescents in both energy savings (up to 75% reduction) and operational lifespan, with figures regularly exceeding 50,000 or even 100,000 hours in well-designed applications. The shift has been so significant that many regions have legislated the phase-out of legacy fluorescent lamps in favor of LED alternatives, accelerating the "LED revolution" at rail stations and along carriage lines.⁶

Smart controls, powered by IoT and advanced sensors, now enable railway lighting to adapt in real-time to passenger volumes, train movements, time of day, weather, and emergencies. These adaptive systems, combined with remote monitoring and self-reporting maintenance platforms, mark the arrival of intelligent, data-driven railway infrastructure.⁷

The Evolution of Railway Signals

Railway signaling has evolved in parallel with general illumination. It was initially conducted via handheld lanterns and colored lenses progressing through oil-lit signals, mechanical semaphores with embedded oil, or later gas lamps, to electrically controlled signal lights.

The arrival of color-light signals, powered by electric bulbs, and now LEDs, increased standardization and delivered dramatic improvements in safety and reliability. Red, yellow (amber), and green became the international colors for stop, caution, and proceed, replacing previous ambiguous systems. LEDs continue to supplant incandescent signal lights, offering instant-on, high brightness, resistance to vibration, and significantly reduced maintenance intervals. Safety lighting also encompasses emergency lighting and behavioral cues, such as platform edge strips, step illumination, and public address synchronizations—all designed to prevent accidents and facilitate rapid, safe evacuation.



Six Brush electric lamp types and a machine attachment, circa the late 1800s.

The intersection between lighting and train control is sharpening with modern signaling. Lighting systems are increasingly linked to centralized train management (SCADA—Supervisory Control and Data Acquisition, CTC—Centralized Traffic Control, PTC—Positive Train Control), allowing dynamic responses to train positions, environmental cues (e.g., weather, occupancy), and system-wide emergencies.⁸

The Future of Railway Lighting

The global railway lighting market was valued between \$1.47 billion and \$2.5 billion in 2024 and is projected to reach \$2.15 billion to \$4.1 billion by 2033, reflecting a robust CAGR of 4.3 to 6.1% depending on the reporting source.^{9,10} Key growth drivers include the modernization of legacy infrastructure; expansion of high-speed and urban rail networks; mandated upgrades for sustainability and energy savings; increased emphasis on passenger safety and comfort; integration of smart, adaptive, and IoT-driven lighting; and governmental and regulatory support for sustainable, efficient technologies.

Advanced LED lighting, responsible for most upgrades, offers significant energy savings compared to previous technologies and reduces carbon emissions and operational costs proportionately. Market surveys indicate that more than 64% of railway operators are upgrading to advanced, automated, or sensor-driven lighting, with solar and smart-city integration featured in many new projects.¹¹

The future of railway lighting is inevitably linked to smart, sustainable approaches. Emerging trends include:

- **IoT-enabled smart lighting:** adaptive control by passenger numbers, train movement, time of day, and environmental sensors. Platforms allow for real-time monitoring, predictive maintenance, and integration with communications, surveillance, and building-management systems.
- **Human-centric lighting:** tunable-white light, circadian-responsive

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regimes, mood/adaptive coloring, and dynamic patterning for enhanced well-being and wayfinding.

• **Circular design and modularity:**

extended life, rapid upgradability, and recyclable materials as standard practice, supporting long-term sustainability and carbon reduction goals.

• **Integration with smart cities:** lighting systems that contribute data to broader smart-city initiatives, driving greater overall efficiencies in energy use, security, and operations.

Challenges remain, such as securing financing for capital-intensive upgrades, ensuring backward compatibility with legacy infrastructures, and meeting diverse international regulatory regimes. Yet the direction is clear: railway lighting will not merely illuminate—it will sense, adapt,

signal, communicate, and contribute directly to sustainable urban mobility.¹¹

All Aboard

From the humble lamp-lit first carriages to the data-driven, energy-efficient marvels of today, railway lighting's history mirrors the broader arc of industrial and technological progress. The layering of innovation—incandescent, fluorescent, halogen, LED, and now smart and sustainable systems—has continuously raised standards not just for illumination, but for safety, passenger comfort, and integrated design.

Guided by the vision and expertise of inventors, engineers, and designers, and regulated by evolving standards and public expectations, railway lighting remains an indispensable element

of modern transportation. The industry today stands on the threshold of a new era: one in which lighting, in tandem with digital technology, will be intelligent, connected, environmentally responsible, and aesthetically enriching.

 Muhammad Annum Khan is a lighting control specialist, project manager, and team lead at Omnilumen Technical Products in Richmond Hill, Ontario, Canada.

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Katherine Stekr and Jamie Devenger

“Our industry needs to retrain itself to value incremental improvements.”



IF YOU WERE IN THE LIGHTING INDUSTRY in the early 2000s, you lived through some significant changes including the 2008 recession and the industry-wide transformation brought upon by LEDs. This new light source delivered unprecedented efficiency and opened the door to new possibilities in form and function, and we all became comfortable standing on the bleeding edge of technology. With LED sources now ubiquitous, the question becomes: What’s next? Across the industry, there’s a growing refrain that innovation just feels slower today. Often we hear many attendees leaving trade shows saying they didn’t see anything exciting or new; how is this possible? The disruptive leaps of the LED revolution are behind us, and today’s changes are harder to spot at first glance, especially when everyone has become so accustomed to big changes in our design tools. That perception misses an important part of the story: the initial arrival of LEDs was transformative, but there is just as much innovation happening today at a more micro, steady pace.

Until about 2010, designers worked within the constraints of fluorescent trofers, halogen lamps, and ballast-lamp combinations. LEDs broke the mold, wiping out old product categories and some companies that couldn’t adapt fast enough. Specifiers were forced to learn an entirely new technology. That jolt of change set expectations high—perhaps unrealistically so—for what future innovation should look like.

For a time, the industry was thrilled at efficiency gains, but many applications simply swapped LEDs into old housings. One of the truly new breakthroughs was tape light, which transformed how

designers could illuminate spaces. Efficacy gains in this product category allow for so much more sophistication and precision in lighting designs. Beyond that initial big-bang effect, innovation became less apparent over time. All the major “paintbrushes” are already available, so many new advances are often micro-level tweaks that specifiers may not recognize as groundbreaking.

From a manufacturing perspective, it is important to now focus our innovation on details. In the push to become more efficient and smaller, we occasionally lost sight of critical performance factors such as glare control and clean execution into architecture. Those new priorities can make innovation harder to see for specifiers, since the progress is buried in details rather than splashy new form factors.

Designing products for easier installation and maintenance is a critical advance. Those efficiencies save time and labor on job sites, which frees up the budget for higher-quality lighting. The result is fewer compromises on performance just to meet cost constraints. These shifts highlight how the industry has moved from broad leaps to subtler, detail-driven advances—and why those details may prove even more impactful in the long run.

So, where could we look for larger and more “splashy” innovations? Tunable white, perhaps. Newer technology can enable narrower beams and strong color mixing, making the effect more precise



Image: iStockphoto/bubaone

and useful in architectural applications. The real opportunity is in tunable systems that deliver consistent color and strong optics without sacrificing ease of use. If designers can trust that a narrow beam will stay clean and color accurate across different applications, that's a big step forward.

Tunable lighting often gets cut for cost reasons, even though it creates more inviting spaces. These systems can add a subtle sense of the passage of time, softening mornings and evenings and making offices or classrooms feel more comfortable and dynamic. Easier to power and wire products could reduce labor costs and make these products more viable in project budgets.

Finding Balance

Within all this technical innovation, there is still real importance in balancing technological capability with the human experience. As companies compete to get people back into offices, lighting that mimics the comfort of home will be in demand. It's difficult to pull someone out of a cozy house with task lamps, warm colors, and daylight into a gray office with flat overhead lights. If companies want people to be happier about returning, they'll need to invest in well-thought-out, layered lighting that is comfortable.

We can't forget the fundamentals of lighting. Spaces need contrast, balance, and daylight integration, not just raw lumen output. These fundamentals remain vital even with new technology. The opportunity now is for lighting designers and manufacturers to let go of traditional fixture forms and fully embrace the possibilities of LEDs. Too often we see fixtures that push as many lumens as possible without considering glare or occupant comfort. Just because we can provide 2,000 lumens from a 1/2-in. aperture does not mean we should.

The LEDs of today are far superior, allowing for precise beam control and compact footprints that were impossible

with fluorescent or halogen. This not only means fewer fixtures are required but also that designers can rethink layouts entirely, using LEDs to achieve effects that were previously impractical. We have the opportunity to move past old rules of thumb and unlock fundamentally new design approaches, if designers are willing to adapt.

Sustainability expectations are also shaping design and manufacturing. Many clients are asking teams to follow sustainable best practices similar to LEED, even if they aren't pursuing official certification. That expectation is helping push the industry to treat sustainability as the baseline, not an add-on.

Sustainability starts with materials—protecting human health and reducing carbon consumption—but extends to maintainability. Reducing embodied carbon in materials such as aluminum is important, but so is designing fixtures that can be upfitted over time. Creating systems with interchangeable parts that can extend lifespans and reduce waste is true innovation, even if it doesn't look flashy on a trade show floor. Efficiency gains remain possible. Advances in power electronics and light engines can deliver more output in the same footprint and reduce voltage drop challenges. These improvements may not feel as dramatic as the early LED revolution, but they continue to push performance forward.

Acknowledge Gradual Gains

Our industry needs to retrain itself to value incremental improvements. LEDs forced the industry to move extraordinarily fast during their initial adoption, chasing efficiency gains and rushing products to market. Now there is time to circle back and fine-tune the things that were missed in that rush. A quick-connect detail that makes a cove install seamless may be just as innovative as an entirely new fixture.

As we previously noted, people often leave trade shows saying they didn't

see anything new. Yet, much of today's innovation is in details that don't grab headlines—connectors, optics, controls, sustainability measures—but are precisely the things that determine long-term performance.

The next leap likely won't be about making LEDs smaller. It will be freeing ourselves from legacy forms and thinking about light delivery in entirely new ways. For too long we've been retrofitting LEDs into older lighting profiles. That made sense at first, but now that LEDs are mainstream, we have the chance to abandon designs based on what's always been done and instead start with the LED itself and build outward from there. The real opportunity is to erase the memory of old forms and use the technology as a blank canvas for new tools, rather than continuing to force LEDs into yesterday's categories.

The best lighting is the kind you don't notice; it's in harmony with the space. That's where innovation should take us. When lighting is seamless with architecture and occupant comfort, it achieves what the early rush of LED adoption sometimes overlooked. The period of fine-tuning we are in now creates space for deeper innovation—albeit quieter; look for more thoughtful solutions at the next trade show and recognize how they are going to be the innovations that lead lighting technology into the next era.

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Glow with the Flow

The interplay of warmth, texture, and color at the Clarke Quay mall

The CQ @ Clarke Quay in Singapore isn't your mother's shopping center. Situated alongside the picturesque Singapore River, a historic site that dates back to the 1800s, the commercial center comprises several blocks of brick warehouses and multiple-story shophouses hosting various eateries with local delicacies and international cuisines as well as shopping and unique finds like a canine swimming club, a dance hall, and a GX-5 extreme swing that sends guests soaring over the river at 100 kilometers per hour (~62 miles per hour). Warehouses are marked with



gable-end façades, peaked roofs, and timber shutter windows, while shophouses feature columns, clay-tile roofs, and ornamentation specific to the buildings. Interior streets, nestled beneath ethylene tetrafluoroethylene (ETFE) canopies, weave between the blocks. An additional stand-out feature of the entertainment hub is the alfresco dining area, replete with illuminated fabric “shelters” that create a visually distinct setting.

A partial retrofit of the lighting design at CQ @ Clarke Quay provided the space with consistent lighting language, allowing for the mall to easily transition from a

once-nightlife-focused space to a venue that appeals to a wider range of guests throughout the day, while highlighting the area’s historic elements. The renovated project opened to the public in April 2024 and earned the design firm a 2025 IES Illumination Award of Merit.

Before and After

Conservation of the riverside quay in the 1990s turned the space into an open-air shopping and entertainment location, but ad-hoc illumination left much to be desired. For example, inconsistent façade lights created glare, and historical architectural

features were lost amid color-changing uplights within canopies. To address the issues and introduce modern solutions to the site, project owners called in Nipek, an award-winning design firm whose work they were familiar with.

The design team implemented a combination of wall-mounted, long-shoot spotlights and slim, diffused, concealed linear lights (10-millimeter by 10-millimeter dotless LED strips) to light heritage façades and provide comfortable vertical illumination, limiting the need for additional streetlighting and keeping attention focused on decorative architectural



Fabric Bluebell-shaped structures above alfresco dining feature retrofitted warm-white luminaires.

Photos: Nipek

Glow with the Flow

Left: A “before” image from the POV of an interior street of the mall depicting ad-hoc illumination that hid decorative details beneath overwhelming canopy illumination.

Top Right: Warm-white light in ETFE canopies varies in color temperature throughout the mall’s opening hours to reflect the movement of river water.

Bottom Right: Ornamental details are consistently highlighted across buildings to celebrate the historic architecture.



elements. Fixtures with a 2700K color temperature were chosen to complement the warmth, materiality, and vibrant hues of the various façades.

Consistent lighting focused on decorative details was vital to the project’s success. Nipek Project Lighting Designer Letitia Liaw explained the strategy, “Only key architectural features are highlighted. These include columns, cornices, and unique ornamentation. Mainly two types of façade fixtures are installed for cohesion, ease of maintenance, and execution. The

choice of a 43-deg beam for spotlights proved versatile across varying façade types, with 9-deg beam lighting at a select few taller elevation features for punchier accents. Linear lights concealed in color-matched channels blend into the façade, highlighting ornamental details.” The team also added long-snooted landscape spotlights set to 3500K with either short or adjustable spikes to enhance selected greenery throughout winding interior streets.

Below the Canopy

The project features two types of canopies under which guests find shelter from the elements: the ETFE canopy above the brick shops and fabric Bluebell-shaped canopies above the outside dining area. Each type required its own distinctive illumination tactics. “Clarke Quay’s ETFE canopy is illuminated by existing Martin lights mounted two-to-three stories up on ‘angel’ structures,” said Liaw. “Custom-made visors are attached upside down on selected fixtures to minimize the visibility



of the light source while maintaining the spread of light.” Illumination under the ETFE shifts throughout the day from 2400K to 3200K, mimicking the undulations of the nearby water. An even warmer light scheme ranging from 2000K to 3000K begins after 9 p.m. Though white light is the standard at the mall, vibrant color scenes can be set by the project owners for special evening events.

Liaw cited the lighting retrofit of the unique Bluebell dining canopies as the team’s favorite part of the project: “The soft glow transforms the waterfront into an iconic nighttime scene, enhancing one of Singapore’s most beloved tourist destinations.” The inviting effect was achieved using tunable-white linear lights from ENDO Lighting’s Synca collection that range in color temperature from 1800K to 3000K inside the shelters. The fixtures produce comfortable light levels ranging between 9 to 14 footcandles (100 to 150 lux) at full output, but flexibility of design allows CQ @ Clarke Quay to choose a preset light scene using a remote control.

Here Comes the Rain Again

The updated lighting design at CQ @ Clarke Quay not only caters to a broader range of visitors but also thoughtfully integrates with the riverfront’s natural surroundings. For example, linear lights highlighting the roof of the mall are sequestered to only one side where illumination provides the largest impact, thus, minimizing light pollution in other areas of the project. Additionally, as Singapore is known for its plentiful rainfall, all lighting fixtures are either IP65 or IP67 rated and have weatherproof connectors. Liaw specified that due to the high rainfall, the design includes mounting channels detailed with weepholes at heritage façades for rainwater drainage. Ultimately, the design earned a Green Mark Gold Award from Singapore’s Building Construction Authority for its contemporary, eco-conscious approach. **S**

The roof is highlighted with linear fixtures along the riverfront to provide maximum impact for end users while limiting light pollution throughout the mall.

THE DESIGNERS

Letitia Liaw is a project lighting designer at Nipek.

Shigeki Fujii is principal and co-founder of Nipek.

Weldy Cia was formerly an associate with Nipek.

Ali Irhami was formerly a project lighting designer with Nipek.

Under a Rainforest Roof

Retail ecosystems thrive at The Grand Outlet of East Jakarta

Spanning more than 17,000 islands along the equator, Indonesia's tropical climate features lush rainforests, coral-rich seas, and volcanic mountains. This abundance of natural light, color, and texture is so reflected in Indonesian daily life that when it came time to develop the country's first outlet mall, The Grand Outlet of East Jakarta, Chief Architectural Executive Kentaro Mabe of Mitsubishi Jisho Design Asia (MJDA) recognized that the design needed to honor that culture.

He also understood that lighting would play an important role in this nature-inspired design. PT Lumina Group Associate Aulia M. Ihrom worked with Mabe and local architect PT Airmas Asri to craft a lighting concept that immerses shoppers in this uniquely Indonesian experience.

The Rainforest Canopy

Rising four stories above the main Galleria of Forest Square, a vast glass canopy, one of the largest in the country, mirrors the "protective and nurturing qualities" of a rainforest canopy by providing shelter, regulating climate, and offering cover to the vibrant space below. As Mabe explained, this feature creates "a semi-outdoor environment where the boundary between interior and exterior becomes fluid." Constructed with high-performance glass and separated from the building to allow airflow, the canopy integrates both passive and active environmental control systems to maintain a comfortable microclimate for year-round shopping.

As visitors enter beneath this canopy into Forest Square, the largest of four retail shopping zones, they are enveloped by a play of light and shadow that evokes



The “Komorebi” effect evokes the feeling of gazing up in a forest while blending with architecture to create a vibrant “streetpark.”



Photos: Mario Wilbowo Photography

Under a Rainforest Roof

The reflective roof in Water Square mirrors the ripples in the water feature, enhancing the ambiance with dynamic reflections and visual depth.



In Bamboo Square, bamboo stalks are illuminated from within to increase visitor wayfinding while ensuring minimal glare.



the feeling of moving through a rainforest. During the day, printed patterns on the glass above cast patterned shadows onto the floor below, while at night, canopy lighting inspired by the Japanese “Komorebi” (which translates to “sunlight leaking through trees”) effect makes visitors feel as if they are walking through nature under a night sky. “Much like the experience of walking in a forest where the sky is visible only above one’s head, luminaires were gathered toward the central axis of the canopy and arranged in a random, organic pattern,” explained Mabe. As day turns to night, these tunable RGB + warm-white LED lighting strips by DURALED shift from warm sunset hues

to cooler evening tones, while spotlights simulate sunrays filtering through trees.

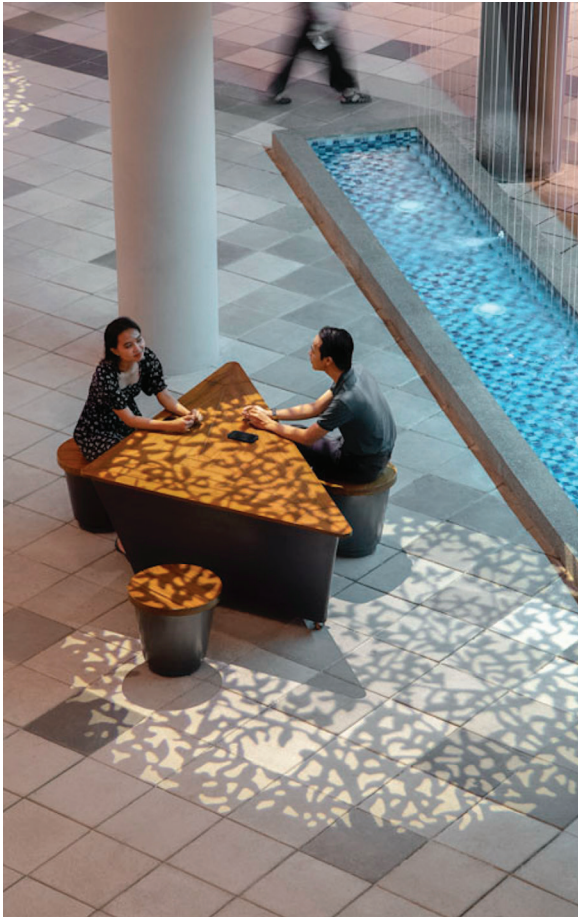
As visitors walk beneath the long canopy, they are guided to an open space called the Greenhub. This central event plaza and “core” of the mall offers a large area designed to “provide a cozy atmosphere for visitors to gather,” complete with flexible seating and sweeping staircases embedded with monochrome white LED strips by UNISTAR. Customizable gobo projectors, from the same manufacturer, use lenses etched with leaf patterns to cast circles of light onto the floor, creating the dappled effect of swaying trees. These projectors are controlled by a simple on/off timer.

Extending from this central hub are three more thematic retail zones, each embodying a distinctive Indonesian ecosystem. Moving along each of these nodes, visitors find themselves crossing through Water Square, Flower Park, and Bamboo Garden.

In designing atmospheric lighting for these retail areas, Ihrom said, “The main idea was to recreate as much as we could of the natural lighting that occurs in Indonesia.” The lighting was carefully designed to mimic the natural phenomena in each zone, including rainforest mushrooms that glow a light green and bioluminescent algae that emit soft, blue light along Indonesian shores.

In Flower Park, for example, glowing orbs mixed within flowers accentuate blooms after dark. These fiber-optic lights by UNISTAR change color based on preset dynamic movements and are fitted with circular end caps. “During the daytime,” Ihrom explained, “visitors see the colorful flowers, and then at night they see the glowing color-changing circular shapes in the flower beds, representing the glowing natural features of Indonesia.”

In Bamboo Garden, stalks are illuminated from within to cast a soft light. Water Square, Ihrom added, features “gobo projectors that emit watery effects,” creating the sensation of flowing water that then also shimmers upon the reflective ceiling.



Left: Light projections engage visitors with interactive visuals.

Right: The illumination at Flower Park creates a relaxing oasis.

Simplicity and Stability

The project's main lighting considerations were simplicity and operational stability. The control system was designed with preset lighting scenes, and staff can easily switch color tones or ambience with a remote control.

"The lighting fixtures were streamlined to a minimal number of types, utilizing high-efficiency, high-CRI LED sources that achieve both energy efficiency and long lifespan," said Mabe. "Fixtures were carefully selected for color stability, reliability, and ease of maintenance, ensuring a sustainable lighting environment for long-term use."

The design team selected these general LED fixtures from Chinese manufacturer SUPLINC, and it optimized energy use in the project's lighting plan by calculating the power densities to see how the team could make them lower than the standard requirements. The lighting design maintains a power density of 10.6 watts per sq meter, with target illuminance levels of 100 lux at shop fronts and 75 lux in the main circulation areas. All specifications are

in full compliance with ASHRAE/IESNA 90.1, reflecting current best practices for energy-efficient lighting.

The glass canopy presented many challenges. Since its design was unprecedented, along with the extensive discussions and iterative studies conducted to create the final lighting configuration, a full-scale visual mock-up was created that allowed the team to "examine fixture visibility, brightness balance, and the overall ambience under real conditions," added Mabe.

Minimizing visible light sources while also ensuring the desired luminous effect and transitioning from sunlight into nighttime light required careful detail and on-site coordination, through which, Mabe noted, "the team succeeded in creating a seamless continuity between the daytime dappled light and the nighttime luminous phenomenon."

Nature Walk

The project "reimagines the act of shopping as an experience immersed in nature," said Mabe. The goal, he added, "was not only to harmonize with the surrounding lush landscapes but

also to differentiate the facility through architectural expression, establishing a distinct identity and lasting appeal." The lighting design guides visitors throughout the mall, encouraging visitors to linger. It also creates a multifunctional space in the Greenhub through multi-colored lighting that can be adjusted for events ranging from exercise classes to concerts. Altogether, the mall, which is situated in an industrial area void of public spaces, has become a dynamic hub for the community.

While outlet malls often focus on economy and efficiency, this project treats lighting as an experiential layer. The natural details bring a sensory dimension to the shopping experience, and visitors are drawn to the approximately 150 retail stores as well as the site's ambience, evoking a cultural identity that transcends traditional shopping experiences. **S**

THE AUTHOR

Katianne Williams, co-author of the STEM guide *Count Girls In*, enjoys writing about innovative projects and inspirational people.



James Highgate, LC, Member IES, is a senior business development manager with Red Sky Lighting and the creator of The LED Show conference and trade show. He has served as the chair of the IES Retail Lighting Committee.



Alyssa Humphries Stewart is a senior lighting designer with Essential Light Design Studio, LLC and the director of the Center for Lighting Education at Texas Christian University.



Archit Jain, Member IES, has been a professional lighting designer since 1998. He is a principal of Oculus Light Studio based in Los Angeles and Seattle.



Amy Laughead-Riese, Member IES, is the president and principal lighting designer of 37 Volts Light Studio, bringing decades of experience and a unique blend of artistic, scientific, and budget-conscious insight to the transformative power of architectural lighting.



Scarlett Taylor is one of Latin America's leading lighting designers with projects ranging from retail to high-end residential, hospitality, mixed-use towers, and rollouts, across the world. She simultaneously manages Lux Populi's UK team.

Retail Revisited

New and familiar voices weigh in on trends in the retail lighting market sector

Roughly six years out from the height of the COVID-19 pandemic that changed the way we work, socialize, learn, dine, and shop, *LD+A* is checking in again with experts on the state of the retail lighting industry and how it continues to influence branding in brick-and-mortar locations. We are delighted to speak with James Highgate, Amy Laughead-Riese, and Archit Jain from "Retail Reset" (*LD+A*, April 2022), as well as welcome Alyssa Humphries Stewart and Scarlett Taylor to the conversation. Their responses delve into how retail lighting has changed and remained the same since 2022, whether certain design elements have succeeded in the wake of global shift or fallen by the wayside, and how recent geopolitical developments may be steering the sector in new directions.

Retail Revisited

How would you describe the current state of the retail lighting design market?

James Highgate: Mostly, the chatter is from tariff-related increases. It should be noted that was implemented to increase the American production of U.S. goods. It is probably painful for importers in the short term.

Archit Jain: Retail has stabilized, and there is less hybrid activity (such as buying online and picking up in-store). From when we last spoke, the focus on creating lighting that is not only functional but also speaks to the overall identity [remains] important, but cost has become the biggest concern for all our clients. For many rollouts (stores designed based on a prototypical design), clients are looking for a way to reduce costs—whether with less expensive luminaires or with a simplified design.

A substantial increase in video screens and digital media has also significantly impacted the overall lighting environment. New stores feature several innovative digital touchpoints. For example, Innvictus includes an in-store innovation center, mobile point-of-sale, and digital customization labs; ABC Mart integrates digital mannequins and fitting rooms with user-controlled lighting and smart mirrors; Home Court offers interactive experiences like “The Clinic Digital Experience,” a vertical jump challenge to test sneaker performance; and Amazon Fresh Store incorporates fiducial tracking (tracking of products selected via one of hundreds of cameras in store), aisle screens, and a grab-and-go cashier-less checkout system.

Amy Laughead-Riese: There were supply chain issues in 2022. To some degree, this is still a challenge even though the reason behind those delays has evolved post-pandemic. We’ve recently received calls from clients with pre-determined specifications, helping them pivot to alternative products and keep their installations on schedule.

[Additionally,] retail projects constantly

face pressure to minimize upfront capital expenditure while maintaining strict brand aesthetic and performance requirements. Even with recent market outcomes of new tariffs, we’re still able to craft affordable lighting solutions thanks to the combined talents of design, industry relationships, and innovative factories. The continued adoption of manufacturers making IES TM-30 data readily available to specifiers has made it easier to find and recommend better products to our clients.

Alyssa Humphries Stewart: There is a heightened interest in merging the physical and digital consumer experiences: “phygital.” Brands want their stores’ design, atmosphere, and vibe to align with their online user experience and vice versa. For lighting design, that means identifying elements of the brand, including their online presence, and translating that to the appropriate lighting color temperatures, textures, and contrast to the physical spaces.

Scarlett Taylor: I would describe [the current state of the lighting sector] as excessive, colder, sometimes flat, and lacking contrast. One of the things that I believe has impacted the retail market, for good and bad, is the variety of products at lower cost as LEDs have evolved. Bad in the way that lighting is being used carelessly—lacking control in the quality of light, glare, optics—and without consistency in color temperature through the retail space.

Last time some of us chatted, the multi-use complex cropped up as a point for growth in the retail lighting sector from multiple panelist responses. Is the market still trending toward mixed-use spaces? If so, why? If not, are there other subsets (big-box, high-end, specialty boutiques, pop-up, etc.) poised for increased growth?

Taylor: I do see that mixed-use spaces are increasing, from big resorts combining residential and “wellness” spaces, to high-end office buildings bringing in hospitality and retail. People increasingly want to have everything in one place—less movement, less time. Retailers want to be where the market is.

Highgate: Big brands are repositioning themselves and targeting niche market sectors.

Laughead-Riese: Developers are increasingly stacking retail with residential and commercial uses—not just due to rising land costs and urbanization but also shifting work patterns. Co-working and flexible office spaces help activate buildings throughout the day, complementing the daily rhythm of retail and residential use. This continues to be trending due to increased needs for housing, and allowing people to live, eat, and play without a significant daily commute.

Big-box retailers continue to re-evaluate square footage; leasing select areas within their footprint for store-in-store partnerships with smaller brands or food and beverage. They also continue to be highly focused on buy online, pick-up in-store systems. Alternatively, luxury and high-end brands continue to grow by focusing on curated customer experiences that cannot be felt virtually online.

Jain: We have not seen mixed-use spaces growing. There seems to be less activity in pop-up stores, too. In contrast, we’re seeing growth in specialty stores that reinforce the retailer’s brand identity, as well as essential formats like grocery stores. These functional spaces are increasingly designed to reflect brand values while prioritizing efficient, cost-effective lighting solutions.

Making projects “Instagrammable” was gaining importance in 2022 according to panelist responses. How important is lighting design for retail success? How do you translate a brand’s identity into a lighting concept?

Humphries Stewart: The prominence of “Instagrammable” design features seems to be fading, while there has been an increase in high-end boutiques aiming to offer more unique one-on-one customizable retail experiences—for example, [inviting customers] into a store to customize a pair of shoes or piece of jewelry while working directly with a sales associate. These experience-driven environments are often technology focused, and lighting

has become a pivotal part of that with architecturally integrated lighting such as backlit features, strategically placed millwork lighting, color-tunable mirrors in dressing rooms, and interactive screens that echo the digital brand presence.

Taylor: Lighting design is a major element for retail success. The brand identity is driven by the different elements in the retail space—using the light is one of the main factors. Illumination can [create] contrast, accent, task light, reveal texture, and bring attention to details, including how the person is feeling in the space. Designers need to think about where they are trying to make the store “Instagrammable” versus spaces where retailers want the products to look great in photos.

Jain: Spaces with user experiences are critical to being camera friendly. These [spaces] can be on any type of social media, including online reviews, so this [element of design] is always important.

Laughead-Riese: Lighting plays a key role in creating and enhancing focal points within a broader design concept. It can communicate accessibility, inclusiveness, value, and the quality of merchandise. We collaborate closely with retailers to understand the details that matter—such as how to choose the right color temperature in combination with high color-rendering properties. These lighting characteristics significantly shape the perception of finishes, the appearance of merchandise, and even how our skin tones are seen.

How are sustainability goals influencing lighting design in retail? What innovations are helping retailers reduce energy consumption without compromising aesthetics?

Jain: In our experience, retailers want to light the products and the spaces to the light levels needed and then determine the most efficient way to get there in a budget-friendly way. We evaluate high-performing LEDs—especially those with strong CRI and R9 values—as key criteria in delivering quality and cost-effective lighting solutions.

Taylor: Sustainability should be an opportunity to be more assertive in lighting design, but I see a lack of understanding of [sustainability], and [the result often] becomes a grid of downlights as the most powerful light source without attention paid to the quality of light, amount of light, glare, etc. On the other hand, there are more products out there that have been focused on delivering good efficacy.

Highgate: LEDs have contributed to sustainability in retail design. But, they have plateaued with energy savings as a

“Brands are also seeking ways to become more sustainable by incorporating energy-efficient lighting...” – Humphries Stewart

one-to-one replacement. The trend now is functionality and micro-incremental savings. Better optics or more digital controls allow LEDs to be considered “energy saving” in 2026. Also, adding or combining features to fixtures (temperature, motion, CCT tuning, etc.) may lend products to be considered green.

Laughead-Riese: Many indoor mall retailers, convenience stores, and even a few luxury retail clients of ours come to the table with the request for light levels that are anywhere from 60 footcandles (fc) to 120 fc as a target average illuminance. The higher illuminances are usually inclusive of the accent lighting. With the onset of LED technology, achieving these targets is a breeze, as the LEDs are so efficient. We’re also employing the use of track systems that allow for integration with linear lighting so that the general and accent lighting utilize the same power system.

Humphries Stewart: Each year, lighting designers work toward complying with more-stringent energy codes. Fortunately, brands are seeking ways to become more sustainable by incorporating energy-efficient lighting to reduce their environmental footprint to demonstrate to consumers their commitment to responsible practices.

How has the role of lighting in retail evolved in the post-COVID world the past few years? Are there any emerging technologies that are reshaping how lighting is used in brick-and-mortar stores?

Humphries Stewart: I wouldn’t say that the lighting in retail spaces has evolved as much as it is being refined. We are getting better at integrating into these curated immersive environments that include lighting, sound, scents, and tactile experiences. Our collaborators are

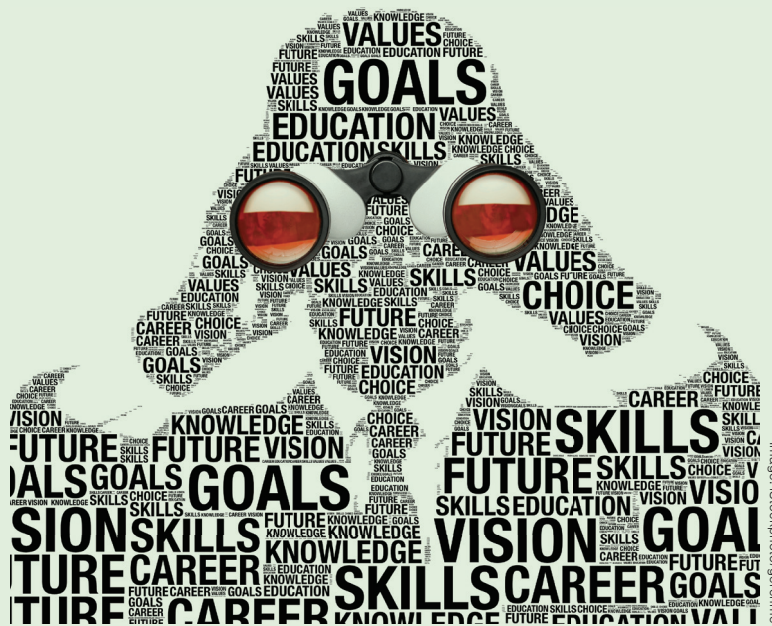
also more open to ways that lighting and controls can support their project goals.

Highgate: We are still feeling the deletion of two years in technology.

Jain: What we have noticed is that there are numerous video screens in many of our projects. The lighting needs to work around them. While I would like to say that tunable-white, color-changing, and enhanced lighting controls are used in all our projects, the reality is that this happens in limited areas within a small number of retail stores.

Laughead-Riese: More retailers are choosing to invest strategically in specific areas of the store where lighting can have the greatest impact—particularly in fitting rooms. These spaces are evolving into larger, more personalized environments, often used in collaboration with private shoppers. Here, lighting is tunable and dimmable, giving both guests and sales associates the ability to adjust color temperature and intensity to create the most flattering and customized experience. Layers of light include a cove light, decorative ceiling light, as well as downlight and integrated lighting within the mirrors. **S**

2026 Lighting Jobs Outlook



You can call 2025 many things, but “boring” would not be one of them. What will 2026 bring? Once again, we turn to a group of esteemed lighting executives for their takes on what the lighting job market and workplace will look like this year. Participating are lighting professionals from manufacturing, lighting design, and the independent representative world. Our panelists include **Logan Gerhard**, president, Kirlin Lighting; **David Komonosky**, LEED AP, executive vice president of Sales, Above All Lighting; **Anne Kustner-Haser**, CLD, Member IES, IALD, LEED AP, president, AKLD Lighting Design; **Paula Martinez-Nobles**, Member IES, IALD, NOMA LEED BD C, president, Fisher Marantz Stone; and **John Palk**, president and CEO, SESCO Lighting, Inc.

Paul Pompeo: Which positions will be in most demand and will any see a reduction in demand?

Logan Gerhard: Engineering, production assembly, and marketing will be areas of growth for us this year. We don’t see any specific departments that would see a reduction in demand if it’s an existing role that’s important to us.

John Palk: Technical opportunities such as lighting controls applications and field service roles are areas for us that will continue to grow. We all serve our clients, and just to define “customer service” as being in high demand is too generic. The only reduction in demand that I can foresee are roles that don’t align with an organization’s core values or purpose. “Speculative” roles and ventures may see a decrease in demand as

economic pressures and fluctuations in business flow are both likely in 2026.

Anne Kustner-Haser: Mid-level designers will be the most in demand. These are designers that are very knowledgeable, self-driven, anticipate what is needed, and know the details that will be required for different projects. I don’t see reduction in demand because more people see the need for lighting designers. Lighting has become so technical—it is so easy to mess it up! And more sustainable design and certifications require a lighting designer.

David Komonosky: I anticipate more demand for expertise in digital marketing and social media. When I started my first rep agency, I would proudly present my new outside sales employees with a collapsible luggage hand truck so

they could nimbly transport the legions of binders from our line card and fight for shelf space at a specifier’s library.

We’re still fighting for space today—but it’s virtual space—and knowing the right cadence and content of communication is crucial to being successful.

Paula Martinez-Nobles: For a design office like ours that works on a range of project types and schedules, designers that have a high level of technical, creative, and communications skills will always be in high demand.

Pompeo: In 2026, do you expect AI adoption to increase or decrease your company’s headcount overall—and in which types of roles?

Kustner-Haser: I see AI assisting and helping [in a way] that may allow us to



Logan Gerhard



David Komonosky



Anne Kustner-Haser



Paula Martinez-Nobles



John Palk

turn projects around more quickly. Our capacity may be able to increase, but I do not see a decrease in headcount. The tasks I see in the future are help with drafting, creating custom fixture design, and other writing tasks—and I hope in reviewing submittals!

Komonosky: I don't see headcount decreasing. While AI adoption is increasing exponentially and streamlining many rote tasks like photometric calcs and material takeoffs, AI-generated results are oftentimes glaringly inaccurate. When used for the aesthetic look-and-feel of an idea, results are visually apparent and simply discard unusable output. But when used for something as important as calculating life-safety illumination levels in a path-of-egress, results must be correct. Until we have some type of guardrails to verify output, headcount will not decrease significantly, at least not yet, and we need to maintain a "trust but verify" approach that still requires substantial human time.

Palk: We utilize AI to streamline processes that were once labor intensive. Does that increase or decrease overall headcount? Not at this time. We have chosen a path when we engage in an AI opportunity to allow our teams to use that technology to create efficiency of time. This allows those teams to use their analytical skills to create better outcomes. I see this initially in finance and accounting and leading to engagements with AI and machine learning in customer service.

Martinez-Nobles: As an industry, architecture is just starting to dabble in AI adoption. The responsible use of AI technology to improve efficiency will be a hot topic this year, but I don't believe that the technology alone can replace the collaborative dialogue and inspiration that happens when design teams come together. I think that AI is one of many tools that may enhance a company's capacity, but it's still too early to really know.

Gerhard: AI will not directly influence our headcount in 2026. Our engineering team uses AI to assist in product development and technology integration while marketing and other departments have been using it for research and script development.

Pompeo: When evaluating candidates, how much weight does your company place on a four-year degree compared to proven experience, certifications, AI-based training, or past results?

Palk: A four-year degree is nice to have in certain roles. Today, we have roles that require a certain expertise that is often gained through a degree plus experience. However, in most cases, experience wins. Degrees show potential while experience usually shows a track record of results. While it's role dependent, a combination of the two has created a high-performing and diverse culture for our organization.

Komonosky: My personal motto is "Learn by doing." The building blocks of a relevant degree are important but when combined with experiential learning, the scales are easily tipped in favor of those candidates.

Martinez-Nobles: Having graduates with a formal education in architecture, engineering, industrial design, theater, and even English and photography has been essential to the evolution of our firm. Diversity of knowledge and experience enriches a team, encouraging creativity, communication, and critical thinking. Curiosity, initiative, and a certain amount of fearlessness fosters excellence. We look at all of these things when evaluating candidates.

Gerhard: It is department dependent—engineering, for one, requires formal training. In general, candidates' experiences, technical skills, and a proven ability to implement soft skills often has a greater impact on a teammate's success than meeting specific academic requirements.

Kustner-Haser: A four-year degree in design/architecture is helpful to understand the built environment, but there are a number of intangibles that a designer needs that cannot be taught. We look for smart, creative, passionate people that have a comprehension of lighting. With this, you can teach designers to fully understand our craft better. Depending on what their proven experience is, real-life practice is priceless.

Komonosky: I combined a degree in architectural engineering with an internship at a prominent MEP firm in New York City [Syska & Hennessy]. Those two things galvanized my passion for our industry early on with laser focus. Another example is the IES Orange County Observership Program, where selected interns rotate through a lighting designer, electrical engineer, lighting rep, lighting manufacturer, and electrical wholesaler. I participated in this program many times as an employer and the experience was extraordinarily positive.

Pompeo: What is your current in-office/remote-work model and do you see that changing in 2026?

Martinez-Nobles: Design is more efficient and creative in person but having some remote flexibility and developing trust in our employees builds dedication, camaraderie, and self-drive. Participation with mock-ups and samples are always in-person—design charettes vary based on the needs of the client.

Gerhard: Most of our employees are in the office except for some sales and marketing team members that are located throughout North America. All other positions are located at our HQ.

Komonosky: Depending on the role, I predict more time will be spent in the field. While remote working certainly has its advantages and will continue to exist at some level, there is no substitute for in-person interaction. My post-pandemic personal interactions seem to have become more purposeful, structured, and efficient than in the past.

Kustner-Haser: We have full-time, part-time, hybrid, and remote employees; I don't see us changing anytime soon, either.

Palk: In-office is preferred but talent

and technology are more scalable today for businesses than ever. I don't see our position changing in the year ahead.

Pompeo: What types of contract/consultant/fractional employees will be most needed in 2026?

Komonosky: I think roles that are of a finite task, such as assistance with your presence at trade shows or consultant reviews of new products and concepts.

Martinez-Nobles: Though the industry is still slow to recover from COVID-19, it continues to move in waves with periods of high activity followed by stretches of uncertainty. We try to remain agile while holding true to our core values. We believe in riding those waves intact and supplementing our team with collaborators when needed and without compromising design excellence and integrity.

Gerhard: We typically hire full-time employees for open roles. For project-specific work, we will hire consultants, typically for engineering or marketing support, but that is the exception.

Palk: Technology consultants will be most needed in 2026.

Kustner-Haser: We have had, and have, all types of working arrangements with our team. I foresee contract employees will help in non-design positions, such as marketing, accounting, operations, and other administrative roles.

Pompeo: What will be the biggest factors in retaining top lighting and controls talent in 2026—compensation, culture, flexibility, career path, or something else?

Kustner-Haser: The biggest factor is flexibility. Compensation used to be number one, and still is for many people, but the culture is changing.

Every team member has different ideals for what "quality of life" means to them. I heard of a designer that asked to have more vacation days to travel over a salary increase for their compensation. As I see it, a happy and satisfied team member will be a more creative and contributing one.

Gerhard: Culture. It drives all other attributable factors to employee retention and fulfillment.

Palk: It's a combination of all these variables. Culture and organizational sustainability in challenging economic conditions usually wins out.

Komonosky: All these factors related to retention will always be important, but based on my frequent interactions with specifiers and lighting rep groups, flexibility for at least partial work-at-home time will become more important as it carries added leverage for both employer and employee. Second to that, I've always offered generous continuing education opportunities for employees and that usually appeals to everyone regardless of what point they are in their career trajectory.

Martinez-Nobles: This is a tough one. Today's workforce is interested in having a blend of all things: healthy compensation, positive culture, flexibility, clear career-path options, and mentorship. Being inspirational and modeling excitement in your own career as a leader is key to inspiring the next generation of lighting designers. **S**

THE AUTHOR

Paul Pompeo is president of Pompeo Group (www.pompeo.com), an executive recruitment consultancy in lighting, electrical, and controls.

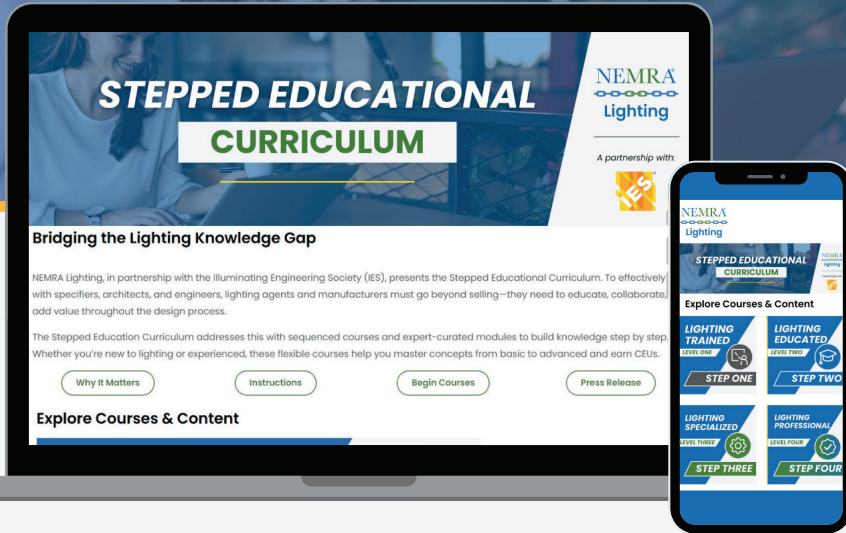
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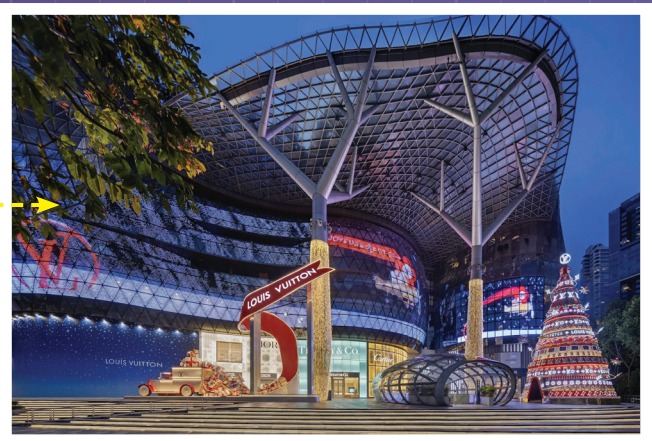
PROJECT IN PICTURES Toy Story

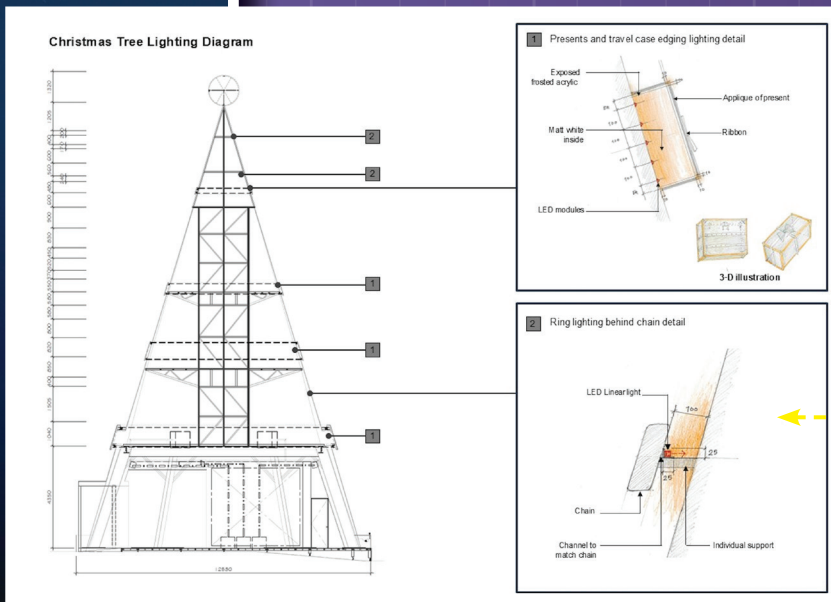
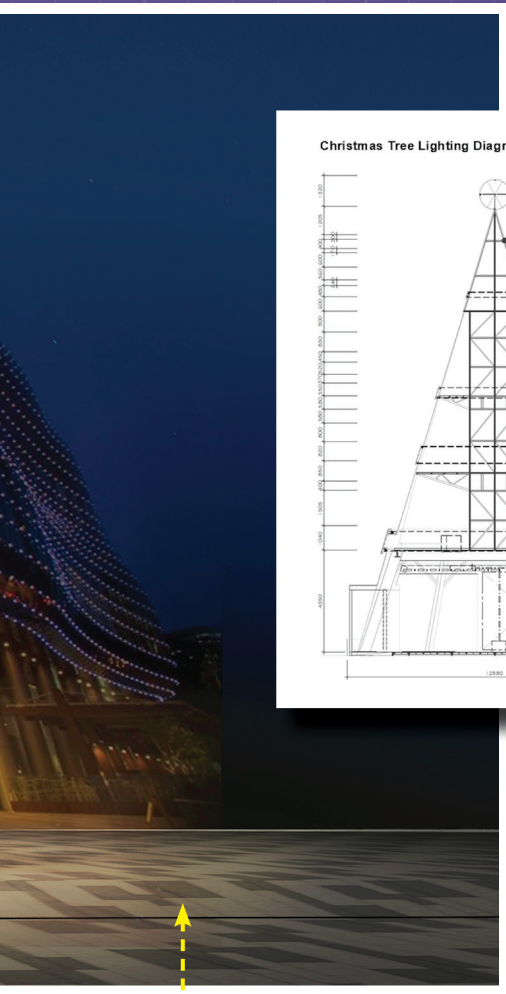
Auxilio Studio LLP / Glint Lighting Design Pte Ltd | All images courtesy of Louis Vuitton/Kaneswaran Photography

As the saying goes, “Every tree tells a story” and Louis Vuitton’s 21-meter (~69-ft)-tall **holiday tree at ION Orchard** shopping mall in Singapore is no different, as it paid tribute to the first Salon du Jouet (Toy Salon) of 1935, where the grandson of the brand’s founder crafted wooden toys and dolls. Adorned in red and gold, the tree featured over 900 handcrafted ornaments, showcasing the brand’s mascots and iconic luxury handbag designs. The lighting design, by **Auxilio Studio LLP** and **Glint Lighting Design Pte Ltd**, highlighted the project’s craftsmanship and amplified the visual spectacle by creating a chain of chasing LED lights spiraling up the tree. The illumination attracted substantial foot traffic and social media attention, resulting in increased visitor engagement and sales during the holiday season.



The tree stood out against the backdrop of various LED screens while providing a glare-free, comfortable viewing experience.





Sketches highlight details such as the crisp backlit outlines of gift boxes and accentuating gold chain details.

The design blends backlighting and indirect lighting, with CCTs of 4000K for logos and monograms as well as 3000K to enhance red and gold materials.



Lighting details were hidden, and reflective materials were managed to prevent lamp imaging and ensure a refined, unobtrusive aesthetic.



Image: Messe Frankfurt

New Light + Intelligent Building Show to Debut in North America

A new event is gearing up to reshape the conversation around lighting and building technology. Light + Intelligent Building North America will launch March 15 to 18, 2027 at the Las Vegas Convention Center, bringing together architectural lighting, connected controls, software, and integrated building systems under one roof. The show is organized by Messe Frankfurt Inc., the IES, and the IALD—the same partners behind LightFair. The organizers expressed that the new event is not a rebrand of LightFair but rather a next-generation platform that builds on LightFair's legacy while expanding into interoperability, secure controls, commissioning, and real-world performance.

“This launch advances the IES mission to improve the lighted environment by bringing standards, research, and education together with live, systems-level demonstrations,” said Colleen Harper, CEO and executive director of the IES. “From controls narratives and code compliance to measurable outcomes in comfort, safety, and energy, attendees will find CEU-eligible content and practical tools they can apply on day one.”

The event targets lighting professionals—architects, engineers, designers, agents, and specifiers—while welcoming system integrators, facility operators, IT/OT teams, developers, and utilities seeking high-performance, secure, and sustainable outcomes. The show floor intends to feature three zones for easy navigation:

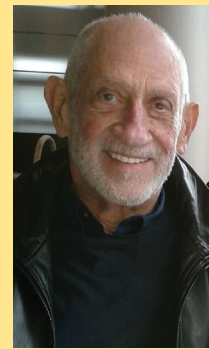
- **Lighting:** decorative, architectural, exterior, and specialty luminaires
- **Building Technology:** networked lighting controls, automation, and adaptive systems
- **Accessories:** drivers, optics, sensors, LEDs, and installation solutions.

The conference program will deliver CEU-eligible education across lighting design, codes and standards, health and wellness, and building technology topics such as cybersecurity, commissioning, decarbonization, and digital twins.

Exhibitor sales open this month, with early pricing through March 16, 2026. Registration for attendees begins October 2026. For updates and exhibitor intent forms, visit <https://lightintelligentbuildingna.us.messefrankfurt.com>.

Correction

In *LD+A*, November 2025, our staff published errors in the recollection of Michael S. Janoff in the “In Memoriam” section. We apologize for the inaccuracies, and out of respect for the Janoff family and Mr. Janoff’s accomplishments, a revised version is included below.



IN MEMORIAM Michael S. Janoff

Michael S. Janoff passed away August 21, 2025, at the age of 85. Janoff was a Fellow of the IES and Member

of the Roadway Lighting Committee. His work contributed significantly to the IES publication Recommended Practice (RP8) for Roadway Lighting.

He will be remembered mainly for his research in visibility. Janoff authored numerous white papers that were presented at various IES national conferences with 12 papers being published in the *Journal of the IES* along with other articles and reports. These publications directly influenced many IES Roadway Lighting Committee (RLC) Members to advance the research in roadway lighting.

Janoff is considered a legend in roadway lighting, and at RLC meetings, he always made time to personally mentor members, contributed to spirited conversation, and was respected by his peers. He also was called numerous times to be an expert witness for court cases.



Photo: Glen Keune

Honoring Excellence: IES Awards Nominations Open

Volunteers and members have played a pivotal role in advancing the IES mission through technical innovation, educational programs, and global outreach. To recognize these contributions, the IES presents four distinguished awards that honor exceptional service and technical achievement. What follows is an overview of these honors and the impact of those who receive them.

Three recipients of 2025 IES Fellow Designations.
From left: Paul Gregory, Kimberly Mercier, and Matthew Hartley.

Outstanding Service of a Non-technical Nature

While the IES is a distinguished technical and educational non-profit organization devoted to illumination, its growth and success would not be possible without numerous volunteers who serve in non-technical roles. Event organization, membership engagement, program development, and committee leadership represent only part of these volunteers' contributions.

Louis B. Marks Award

Named after the first president of the IES, the Louis B. Marks Award is the highest honor bestowed by the IES for exceptional non-technical service to the Society. In any given year, no more than one Marks Award is presented. Typically, nominees for this award have previously received the Distinguished Service Award. Marks Award recipients have generously shared their time, expertise, and leadership over many decades of service. The following are examples of the recipients' possible contributions: serving on the IES Board of Directors, including as president; developing new programs or initiatives that benefited all IES Sections and Regions; chairing committees; promoting the mission of the Society to outside organizations; improving engagement within the Society; creating strategies to address ongoing challenges; and mentoring the next generation of lighting professionals.

Distinguished Service Award (DSA)

Established in 1967, the DSA recognizes dedicated non-technical service of at least 15 years that has meaningfully advanced the IES mission. Recipients of this award typically contribute through various programs and activities at both the regional and Society levels. There is no limit on the number of DSAs presented each year. Eligible candidates are evaluated on merit rather than in competition with one another. Their achievements span a wide range of contributions, from chairing award committees and leading conferences or event planning to helping establish local sections and expanding the Society's global reach.

Significant Technical Contributions

Translating technical lighting knowledge for the public's benefit is at the heart of the Society. The IES currently has

approximately 40 technical committees; a peer-reviewed journal, *LEUKOS*; Research Forum; and standards library as well as offers numerous educational opportunities. The Society presents two prestigious awards recognizing technical achievements.

The IES Medal

Since 1944, the IES Medal has been given in recognition of meritorious lifetime technical achievements that have conspicuously furthered the profession, art, or knowledge of illuminating engineering. This includes achievements in the fields of engineering, design, applied illumination, optics, ophthalmology, and lighting research or education. This is the highest technical honor of the IES, and only one recipient is recognized annually. The recipients of the IES Medal have published numerous influential peer-reviewed articles, made noteworthy contributions to writing standards and other technical documents, authored patents, established new metrics, authored chapters and books on illumination engineering, created lighting courses, led numerous technical committees, served as lighting educators, and made scientific discoveries and technological innovations.

The IES Fellow Designation

The IES Fellow Designation is awarded to a Member for their valuable continuous contributions to the technical activities of the Society, to the art or science of illumination, or to related scientific or engineering fields. The contributions are as diverse as the backgrounds of these recipients. Examples of such contributions include standardizing the measurement of lighting products, advocating for the inclusion of lighting practices for seniors in government codes and regulations, creating the U.S. Department of Energy Solid-State Lighting Program, establishing a new lighting program at a university, developing UV lighting standards in response to COVID-19, and much more.

If you know individuals worthy of these awards, please consider nominating them. For further details and the requirements for each award, visit <https://ies.org/about/society-awards/>.

— Yulia Tyukhova, Ph.D., LC, 2025 IES Marks Award chair

PRODUCTS



NIGHTINGALE

debuts the Attend sconce for healthcare environments. Inspired by hospitality design, Attend considers the needs of patients, caregivers, and nighttime staff by providing task lighting and integrated local controls. Fixtures are available in various finishes such as antimicrobial white, black, brushed metal, and wood grain options (pictured) as well as in single or double lengths; luminaires comply with ADA guidelines and patient room cleanability standards. www.nightingalelighting.com



ALPHABET LIGHTING

introduces the NU3 Pro 3-in. Tamper Resistant Downlight to the Tamper Resistant series. Available in 3-, 4-, and 6-in. apertures in round (pictured) or square profiles, the downlight is designed with anti-ligature protection and has an IK10 rating for durability. Luminaires are compliant with the New York State Office of Mental Health standards. <https://alphabetlighting.com>



ETC

unveils three brighter display fixtures for museums, retail environments, and lobbies: the Irideon Framing Projector Zoom (FPZ) Plus, Irideon Wash Light Zoom (WLZ) Plus, and Source Four Mini LED Plus. The Irideon FPZ delivers up to 1,600 lumens and offers a 25- to 50-deg beam spread. The Irideon WLZ delivers up to 2,600 lumens and provides 9- to 78-deg beam angles. Lastly, the Source Four Mini LED fixture features superior optics and clear image projection for an even field of light. All three luminaires are brighter than their predecessors, available in four color temperatures, and have the ability to mount to the brand's fixtures on 230-V track using the DALI protocol and adapters compatible with OneTrack by EUTRAC. www.etconnect.com



nLIGHT,

a brand within Acuity's portfolio, announces the Animate Controller, Powered by Pathway. A solution for indoor and outdoor spaces that allows for the addition of color, effects, and movement without the need for a separate DMX system, Animate connects DMX lighting to the nLight networked controls system. Companion software allows for real-time simulations while a touchscreen provides local control and calendar-based scheduling for various lighting scenes. www.nLightControls.com



LEGRAND

unveils the Kitchen Countertop Outlet for modern kitchen islands and peninsulas in residential and hospitality spaces. Designed to meet the 2023 NEC Section 210.52(C)(3) updates, the device allows for fast installation and durability while taking up 40% less space than traditional pop-up models. The corrosion- and tamper-resistant, minimal-profile device is UL 498 rated and passes the UL half-gallon spill test. Outlets are available in matte black and white, while cast-metal lids are available in black, champagne bronze, stainless steel (pictured), and white finishes. www.legrand.us



Optique Lighting

introduces the Perifina KnifeEdge 4-in. for vanishing cove effects without framing or drywalling. Surface-mounted fixtures feature grooved undersides to allow for easy plaster-over and painting. With the ability to navigate corners without light gaps, Perifina KnifeEdge is offered in numerous color temperatures as well as 1-in. increments up to 96 in. or for infinite lengths using multiple luminaires. <http://optique-lighting.com>



LUXXBOX

unveils Kurtain Stratum, a two-tiered pendant that builds on the existing Kurtain lighting series. Made with Camira Blazer wool and offered in 77 colors with the option to mix and match hues, the acoustic solution is available in three sizes and color temperatures and has height-adjustable suspension cables for exact positioning. www.luxxbox.com



SMART VISION LIGHTS

announces the Configurable LSR300 linear light with three OptiCard lens modifiers for narrow, medium, and wide beam angles, and three optic windows (clear, diffused, and polarized) for on-site customization. Fixtures are IP50 rated and feature an endcap to allow for easy swapping of components as well as a working distance range of 200 to 2,000 nm. www.smartvisionlights.com

PRODUCTS



SCHONBEK

debuts Camellia, a series of chandeliers and coordinating wall sconces inspired by flower blossoms and leaves. Amidst crystal bobeches and candelabra slips, the brand's Radiance Crystals fall from metallic arms.

www.schonbek.com

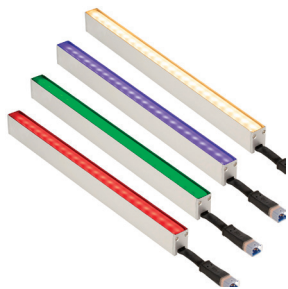


EARTHTRONICS

announces the 1x4 LED Back Light Panel for schools, healthcare facilities, and commercial spaces.

Engineered to deliver uniform, glare-free illumination, fixtures feature 0-10-V dimming, a PMMA defusing lens, and CCT selectability. The panel is compatible with EarthConnect Bluetooth mesh network lighting controls and operates in temperatures ranging from -40 to 104 deg Fahrenheit.

www.earthtronics.com



AMERICAN LIGHTING

unveils the Rein Low-Voltage Wall Grazer, a rigid linear LED fixture optimizing the metrics of a performance luminaire for indirect and accent lighting in commercial, residential, and specialty projects. With an output up to 1,100 lumens, and available in RGBW and 3000K static-white options, Rein is offered in 1-ft and 4-ft lengths with adjustable aiming brackets and quick connectors for easy linking.

www.americanlighting.com



LEDVANCE

introduces its first hazardous location LED luminaire portfolio including floodlights, high bays, jelly jars, and linear fixtures. The collection is designed for durability in extreme conditions and is IP66 rated, as well as UL844 and CSA 22.2 certified. Available now across North America, fixtures deliver up to 45,000 lumens and have 100,000-hour lifespans.

www.ledvance.com



YAMAGIWA

launches TWILIGHT, a collection of pendants and table lamps for hospitality or residential spaces. Inspired by the sky at dusk, luminaires with glass fiber shades and acrylic diffusers project lattice patterns of illumination onto nearby walls. Pendants and table lamps are available in two sizes.

<https://en.yamagiwa.co.jp>



Call for

NOMINATIONS

LD+A and the IES to Award Student and Emerging Professional Memberships

The IES seeks to improve the lighted environment by bringing together those with lighting knowledge and by translating that knowledge into actions that benefit the public. To foster growth in the next generation of lighting designers, *LD+A* and the IES have partnered to offer students and EPs the opportunity to win a one-year IES Membership. Throughout 2026, one person will be selected each month to receive an award, with a total of six Student and six EP Memberships distributed. Winners will be notified and announced in future *LD+A* e-newsletters.

Applications are currently welcome and will be accepted on a rolling basis through September 30, 2026. Interested students and EPs must be nominated to be considered for this award. To apply, please submit the following to *LD+A* Editor-in-Chief Craig Causer at craig.causer@sagepub.com:

- A description of the type of membership for which you are applying (Student or EP) and why you are interested in becoming an IES Member.
- A 500-word letter of nomination describing why you are a suitable candidate for this award. Nominators may include supervisors, colleagues, mentors, professors, or advisors.
- Contact information including name, address, and mailing address.

To confirm eligibility for IES Membership, if selected, students will be required to submit an official school transcript while EPs must provide their resume and/or a letter from a current IES Member.

IES Student and EP Memberships offer a wealth of benefits including meaningful networking opportunities with colleagues and industry leaders, educational opportunities, and leadership development. Apply now to become a part of the IES, the recognized technical and educational authority on illumination.

Disclaimer: By applying, entrants grant LD+A and the IES the right to publish and distribute their name, image, and entry materials in print and electronic media, including social media, worldwide, in perpetuity, without further authorization from or compensation to the entrant.



SUSTAINING MEMBERS

The following companies have elected to support the Society as Sustaining Members, which allows the IES to fund programs that benefit all segments of membership and pursue new endeavors, including education projects, lighting research, and recommended practices.*

DIAMOND



PLATINUM

Current

GOLD

HLB Lighting Design
LUMA Lighting Design/
PAE Engineers
Lutron Electronics
Musco Lighting
P2S, Inc.
Rosendin Electric, Inc.
Stantec (Toronto)
SOSEN USA, Inc.
USAI, LLC

SILVER

Acclaim Lighting
Affiniti Studios
A.L.P.
Albert Chong Associates
BK Lighting

BR&A Consulting Engineers
Cannon Design
ConTech Lighting
Cree Lighting
DLR Group
ETC, Inc.
Evluma
Fisher Marantz Stone, Inc.
GE Lighting, a Savant Company
Hapco
H.E. Williams, Inc.
HP Engineering
iGuzzini Lighting USA
IMEG Corp
Integrated Design Solutions
Kenall Mfg. Co.
Kurtzon Lighting
Landscape Forms
Legrand
Leotek Electronics, LLC
Lighting Services, Inc.

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Québec
naturalLED
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*Bronze Sustaining Members are listed at www.ies.org.



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LD+A

LIGHTING DESIGN and APPLICATION

Share Your Voice

The flagship publication of the Illuminating Engineering Society, *LD+A* is an award-winning magazine for professionals involved in the art, science, study, manufacture, teaching and implementation of lighting. In an effort to continue to provide diverse voices in *LD+A*, we are looking for **industry professionals** who are interested in telling their stories, including work on unique lighting projects, their experiences in the profession, and opinions on current hot topics in the world of illumination.



EVERY ISSUE of *LD+A* includes feature articles on design projects, technical articles on the science of illumination, new product developments, industry trends, news of the Illuminating Engineering Society, and vital information about the illuminating profession.



EACH MONTHLY issue features a unique theme such as sustainable design, retail lighting, roadway lighting, industrial lighting, hospitality lighting, or office and commercial lighting.



ROTATING COLUMNS cover topics including energy, green design, career issues, technology, regulations and legislation, research, and education—written by a veritable who's who of industry experts.

If you are interested in publishing an article in *LD+A*, please reach out to Editor-in-Chief Craig Causer at craig.causer@sagepub.com to discuss further.



IES ILLUMINATION AWARDS

2026 CALENDAR

DEC 1-21 | EARLY SUBMISSION

Deadline 11:59pm EST (Early bird submission fee: Members \$265 / Non-Members \$365)

DEC 21-JAN 30 | REGULAR SUBMISSION

Deadline 11:59pm EST (Regular submission fee: Members \$320 / Non-Members \$420)

FEB 4-18 | SECTION IA CHAIR PROCESSING

- Section IA Chairs will review submissions for compliance of rules and guidelines
- Projects that comply with the rules of the program will move onto Merit Judging

MAR 4-APR 5 | ONLINE MERIT JUDGING

- Eligible projects receiving sufficient scores during online judging receive an Award of Merit
- Projects receiving exceptionally high scores will move to final, society level judging

MID-APRIL | LIVE FINAL ROUND JUDGING

- Eligible projects passing the online phase are judged during live, society level final judging
- Final judging determines the highest level of Society awards including Special Citation, Award of Excellence, or Award of Distinction
- If projects do not score high enough at this level, they retain their Award of Merit

MAY/JUNE | AWARD RECIPIENT NOTIFICATION

Local Section Judging will be conducted at the discretion of Section IA Chair timeline.



ILLUMINATION
AWARDS

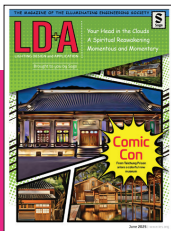
AD INDEX

The companies listed below would like to tell you more about their products and services. To learn more, access the websites listed here.

COMPANY	WEBSITE	PAGE #
ALUZ Lighting	www.ALUZ.lighting	3
Elemental LED	www.elementalled.com	1, 5
Landscape Forms, Inc.	www.landscapeforms.com	7
Meteor Illumination Technologies, Inc.	www.meteor-lighting.com	Cover 4
Quanta Light	www.quantalight.com	16
SPI Lighting, Inc.	www.spilighting.com	Cover 2

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Last Look | Disco Star

“Stella” is a stellated icosahedron structure with integrated lighting hovering over the three-story atrium of the Kiewit Luminarium in Omaha, NE. Once darkness falls, light from static and dynamic fixtures reflect and refract off the structure

and cast disco-ball-like effects around the museum for evening events. The unique entryway by HDR earned a 2024 IES Illumination Award of Merit.



Photo: Dan Schwalm, HDR Inc.

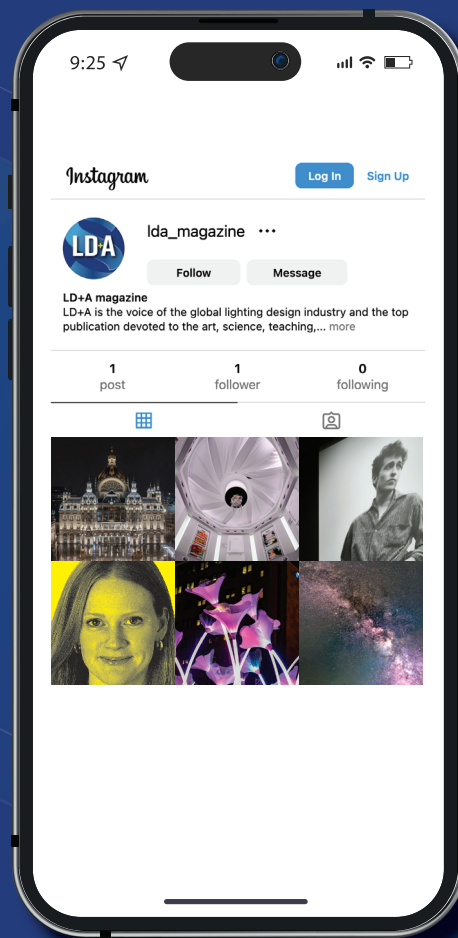
Introducing **LD+A** on Instagram!



Follow @lda_magazine for the latest updates, behind-the-scenes content, and insights into the world of lighting design and application. Whether you're a **professional in the industry** or simply passionate about innovative lighting solutions, our Instagram account is the perfect place to stay inspired and informed.

What to Expect:

- Stunning project showcases
- Expert tips and tutorials
- Industry news and trends
- Exclusive sneak peeks



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exteria

externalighting.com



HueCraft Floodlight



HueCraft Linear

Exteria is a outdoor lighting brand, debuting with HueCraft to bring specular performance to façades, with more landscape solutions to follow.



Archi-Color®
RGBL Quad Chip



8,700 lm, 180W
5" 7" 10" 12" Apertures



6° Narrow Beam
Discreet Cluster



Weather Proof
IP67, IK10, 3G