A MONTHLY NEWSLETTER FROM AMERLUX®

**SEPT 2025** 

# <u>Amerlux - Institutional Lighting, Institutional Lighting Manufacturer-Interior Lighting-Exterior Lighting-Products</u>



#### It's back to school for many.....

Institutions turn to Amerlux for fresh performance lighting that fosters focus and inspires imagination in classrooms, lecture halls, offices and cafeterias. Outside of the classroom, institutions leverage Amerlux's classically styled post-top fixtures and Avista LED light engine to improve campus exterior lighting. The LED upgrades improve perceptions of safety on campus, while also doing double duty to rein in rising utility costs and maintain traditional campus ambience with vintage-styled pedestrian lighting. We understand light is more than mere illumination. It's an investment. If students don't feel safe on campus, they won't come back. The right light translates into positive retention. For good or for bad, lighting has a huge footprint on your organization's bottom line. Switching your campus to LED lighting delivers sizeable savings. Amerlux provides some of the world's most elegant solutions for institutions, and universities. We design top-tier performance-grade products to make campuses safe and productive for everyone.

#### **Market Observer**

- 1. **DOE Announces Data Center Site Selection on Federal Lands** DOE has selected four sites—Idaho National Laboratory, Oak Ridge Reservation, Paducah Gaseous Diffusion Plant and Savannah River Site—to move forward with plans to invite private sector partners to develop cutting edge AI data center and energy generation projects. The announcement supports the Trump administration's goals of utilizing Federal lands to lower energy costs and help power the global AI race. The chosen locations are well-situated for large-scale data centers, new power generation, and other necessary infrastructure. More details regarding project scope, eligibility requirements, and submission guidelines at each site will be available with the site-specific releases. These solicitations are expected to be released in the coming months, and partners could be selected by the end of the year. DOE Announces Data Center Site Selection on Federal Lands electrifiED
- 2. **NEMA Expands Make It American™ Certification to Connected Building Systems and Controls** The National Electrical Manufacturers Association (NEMA) has expanded its <u>Make It American™</u> certification program to include a new product specification for <u>connected building systems and equipment</u>. These integrated hardware and software platforms, such as HVAC, building automation, and security platforms, are essential technologies for optimizing infrastructure resiliency and performance in the built environment. NEMA's Make It American program supports domestic manufacturing by helping companies demonstrate that their manufacturing processes, facilities, and supply chain management systems have undergone rigorous third-party expert audits to meet Build America, Buy America Act (BABA) domestic content rules providing greater certainty and confidence to manufacturers, government agencies, and procurement officials seeking to source materials with enhanced levels of U.S.-manufactured content.

For more information about NEMA's Make It American program and the Make It American BABA Registry of certified companies and products, visit here. NEMA Expands Make It American™ Certification to Connected Building Systems and Controls - NEMA



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- 3. **Trump Sets 100% Chip Tariffs Unless Firms Invest in U.S.** President Trump said he would impose roughly 100% tariffs on all chips coming into the U.S. but exempt tech companies that have promised to manufacture domestically, a big win for Apple and other electronics firms worried about new trade challenges. Trump's announcement came at an event trumpeting a new \$100 billion investment pledge from Apple. The company has increased its commitments in the U.S. but stopped short of moving iPhone production to the U.S. as Trump wants. The company's \$100 billion promise adds to a \$500 billion, four-year commitment Apple made in February that repackaged much of Apple's existing spending plans in the U.S. Nearly every major tech firm has promised to put more into their U.S. operations, resulting in over \$2 trillion in new pledges in the past seven months. f16AjRmObplpmp4xDQAH-WSJNewsPaper-8-7-2025.pdf
- 4. Why Haven't Tariffs Boosted Inflation? This Theory Is Gaining Traction by Konrad Putzier New research suggests the actual tariff rates are well below what economists have suspected. The highest tariffs in almost a century haven't caused inflation to surge. The phenomenon has puzzled economists, some of whom suspect that companies have so far simply been reluctant to pass along the extra costs to their customers. But another argument for the limited impact is gaining traction: that tariffs being paid by importers are lower than advertised. In a new study, Barclays economists went through census data to see what tariffs importers actually paid in May. They found that the weighted-average tariff rate—the average of all tariffs, adjusted for import volume from each country—that month was around 9%. That number is well below the 12% rate that they had previously estimated based on White House announcements, and far less than what some others have estimated. The reason is that more than half of U.S. imports were duty-free and because many U.S. companies and consumers bought less from countries with higher levies, particularly China. Ultimately, Barclays expects weighted-average tariffs to end up at around 15%, up from a current 10% and 2.5% last year. Why Haven't Tariffs Boosted Inflation? This Theory Is Gaining Traction WSJ
- 5. **GM Drove a Chevrolet Silverado EV More Than 1000 Miles on a Single Charge** General Motors just revealed that its employees recently took a 2026 Chevrolet Silverado EV on a ridiculous 1,059.2-mile trek across Metro Detroit without stopping for a battery top-up. That journey has now secured a EV range world record for the brand, besting Lucid's 749-mile journey earlier this year. The truck in question is a Silverado EV in Work Truck spec with the Max Range battery pack, which provides 205 kWh of juice. The automaker says that the truck's hardware and software were entirely untouched and representative of a customer vehicle. GM Drives Chevrolet Silverado EV 1059 Miles On a Single Charge



6. **Keeping Players Cool: The Critical Role of Shade Structures in Pickleball's Rise** - Pickleball is more than just a fleeting trend. According to the Sports and Fitness Industry Association, pickleball participation increased by 51.8% from 2022 to 2023 and by 223.5% over the last three years, with increased participation from every age group. As a result, the demand for new courts is skyrocketing, with cities, park systems, and private developers working to build facilities catering to both recreational players and elite competitors. However, one major factor is essential to these outdoor

and safer designs. aces' long-term success and usability: protection from extreme heat. Shade Structures Play A Oritical Role In The Rise Of Pickleball

spaces' long-term success and usability: protection from extreme heat. The trend of courts with shade structures reflects an industry-wide shift toward more innovative





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- 7. **GM Raided Silicon Valley to Build Its New AI Team. Here's What It's Doing** In the last eight months, GM has made nearly a dozen hires from top tech companies—from Google to Meta to AWS—with the aim of building a small but elite AI center of excellence, much of it based in Mountain View, CA. For many companies, the challenge posed by artificial intelligence rests in how to make practical use of it in operations. For many companies, the challenge posed by artificial intelligence rests in how to make practical use of it in operations. For a company like GM, that could mean incorporating AI into back-office workflows, but also into future fleets of autonomous vehicles, manufacturing robots and even motor sports. Using robots and other tech to make manufacturing more efficient—a goal GM has worked on for decades—will be even more critical as the company looks to bump up U.S. production and mitigate the cost of President Trump's tariffs. GM Raided Silicon Valley to Build Its New AI Team. Here's What It's Doing. WSJ
- 8. **GE Appliances to Invest More Than \$3 Billion in US Operations, Including Kentucky** GE Appliances announced it will invest more than \$3 billion over the next five years in its U.S. operations. With its global headquarters in Louisville, GE Appliances said Wednesday the first phase of investments will begin at plants in Kentucky, Alabama, Georgia, Tennessee and South Carolina. As part of the investment, the company plans to expand its air conditioning and water heating portfolio, increase product production and "further modernize" 11 manufacturing plants in the U.S. That is expected to create 800 new jobs. <u>GE Appliances to invest more than \$3 billion in US operations, including Kentucky</u>
- 9. **Hitachi Energy Invests \$106 Million in Its US Transformer Supply Chain** Hitachi Energy plans to invest \$106 million to expand its manufacturing operation in Alamo, Tenn., creating 100 jobs to become the second-largest employer in Crockett County. The expansion will expand the company's capacity to produce transformer components, supporting energy infrastructure and grid modernization, says Steve McKinney, head of transformers for Hitachi Energy in North America. <u>Hitachi Energy invests \$106 million in its US transformer supply chain | Latitude Media</u>
- 10. **US Open Set Up for Dark Sky-Friendly Outdoor Lights by Adithi Ramakrishnan** When the court lights flicker on at the U.S. Open, tennis stars shine under illumination designed to cut light pollution. The U.S. Tennis Association swapped metal halide bulbs for shielded wedge-shaped LED lights. The complex's 17 tournament courts and five practice courts were approved as dark sky-friendly last year. Most arenas make the change during scheduled maintenance and renovation, working with sports lighting company Musco. The company lights over 3,000 venues a year including college football stadiums, tennis courts and rail yards. <u>US Open Set Up for Dark Sky-Friendly Outdoor Lights tEDmag</u>



#### **Industry Resources**

11. **DesignLights Consortium Opens Comment Period for Second Draft of Technical Requirements for LED Lighting: SSL V6.0 & LUNA V2.0** - The <u>DesignLights Consortium (DLC)</u> today released the <u>second draft</u> of major updates to its Solid-State Lighting (SSL) technical requirements for indoor and outdoor non-residential LED lighting, as well as revisions to LUNA, a dark sky solution. Draft 2 will have a six-week comment period through September 5. Reviewers can provide feedback via email to <u>comments@designlights.org</u> using the comment form. The final policy will be released in early November. Other changes in Draft 2 reflect feedback the DLC received from stakeholders relative to clarifying various aspects of the technical requirements. These changes are meant to streamline the qualification process for manufacturers while advancing the essential goals of SSL V6.0 and LUNA V2.0. Full details of all proposed revisions are available on the <u>DLC's website</u>.



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12. What Is an LED and How It Works | Complete Guide to Light Emitting Diodes - Have you ever wondered how a tiny LED light can produce such brilliant illumination with almost no heat and very little energy? In this video, we dive deep into the fascinating world of Light Emitting Diodes (LEDs). You'll discover how LEDs work at the atomic level, the science behind electroluminescence, and what makes LEDs so energy-efficient compared to traditional light bulbs. Whether you're a student, engineer, or just a curious mind, this detailed explanation will give you a clear understanding of the LED's working principle. We'll cover everything from how electrons move through semiconductor materials to how different colors of light are produced. You'll also learn the advantages of using LEDs in modern electronics, home lighting, automotive applications, and even in cutting-edge display technologies. Watch to see a visual breakdown of the LED's internal structure and why these small components are revolutionizing how we light up the world. Ideal for tech enthusiasts, educators, and anyone interested in understanding one of the most important innovations in modern electronics. If you're curious about how everyday technology works, this is the perfect video to start with. Let's uncover the secrets behind LED lighting and learn why it's powering the future of illumination. What Is an LED and How It Works | Complete Guide to Light Emitting Diodes | Watch

13. Scaling Intelligence: The Exponential Growth of Al's Power Needs - The rapid advancement of artificial intelligence (AI)—particularly the training of large-scale "frontier models"—is driving renewed growth in electricity demand. This report analyzes the technical drivers of AI power consumption, projects future demand trajectories for individual training sites and broader AI needs, and highlights energy sector implications. Their analysis found not only that the power demands of AI have increased steadily, but also that they will keep increasing. While training large, advanced AI models currently requires between 100 and 150 megawatts each, they are projected to require more than four gigawatts apiece by 2030. This Product is publicly available at Electric Power Research Institute (EPRI): Scaling Intelligence: The Exponential Growth of AI's Power Needs



14. Powering the Future: Insights on the Growing Electrification Market - As electricity demand continues to grow, the

electrical distribution industry is uniquely positioned to help lead the transformation of the energy landscape with the services, materials, and solutions needed to support its customers and drive progress. To help members navigate this shift, NAED's Education & Research Foundation, in partnership with Ducker Carlisle, presents the research study: Electrification Drivers, Disruptors, and Scaling Your Business.

This study delivers valuable insight into:

- What's driving electrification—and what may disrupt it
- The most promising project areas for distributors
- How to strategically scale and prepare your team

NAED Electrification Research



15. **NEMRA Lighting and IES Partner to Launch Lighting Educational Curriculum** - NEMRA Lighting and IES say this new virtual learning pathway bridges the lighting knowledge gap. To meet the growing demand for comprehensive lighting education and skills development, the platform builds on lighting and controls expertise while preparing participants for broader industry certifications.

#### **KEY TAKEAWAYS**

- The curriculum features four progressive levels, from basic lighting fundamentals to advanced system design and integration.
- Courses one and two are free for NEMRA Lighting members, with higher levels requiring additional memberships and offering CEUs and industry recognition.
- Partnership with IES ensures high-quality, accredited content that supports professional growth and industry credibility.
- Participants gain certificates, CEUs and LinkedIn verifications, enhancing their professional profiles.

For more information, visit NEMRA Lighting Division

NEMRA Lighting and IES Partner to Launch Lighting Educational Curriculum | Electrical Wholesaling



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16. **Decoding California's Title 24, Part 6** - Commercial building energy codes regulate the design of nonresidential buildings to minimize energy consumption. While the majority of U.S. states adopt model codes and standards, the State of California developed its own code: Title 24, Part 6 of the state's Building Standards Code. The latest version was released in 2025 and will take effect January 1, 2026. Title 24, Part 6 covers residential, nonresidential, high-rise residential, and hotel/motel buildings. Title 24, Part 6 contains robust, detailed lighting and control requirements. It requires a broad range of controls to ensure general lighting is turned Off or reduced when not needed. For lighting, a number of changes have been made, mostly adjustments and clarifications. Decoding California's Title 24, Part 6



#### **Articles of Interest**

17. Is Waymo Ahead of the Curve? by Sam Klebanov- The Alphabet-owned company (Goggle) has 1,500 robotaxis ferrying passengers around Phoenix, San Francisco, Los Angeles, Austin, and Atlanta, with plans to roll into new locales. It quietly ramped up to provide over 250,000 weekly paid trips in the US, and beat Lyft's market share in San Francisco, making it the clear front-runner in the quest to scale rides without a driver. Several companies have hit potholes while chasing the driverless taxi prize. Uber abandoned its internal efforts to develop an autonomous vehicle in 2020 and partnered with Waymo in 2024. Amazon has yet to launch a paid service, but it is testing a couple dozen of its Zoox futuristic driverless cabs—described by some riders as a "toaster on wheels."



It plans to start giving rides to the public in Las Vegas later this year. Tesla launched a robotaxi pilot service in Austin last month and one in San Francisco this weekend. Meanwhile, abroad...the roads are getting dominated by Chinese startups like Pony. ai and tech behemoth Baidu, which are operating or testing driverless taxis in China, the Middle East, and Europe. The stakes are high: The global rideshare market will nearly quadruple from \$123 billion in 2024 to \$480 billion in 2032, Fortune Business Insights projects. Is Waymo ahead of the curve?

18. Lighting Trends in the Health Care Space by Patricia Rizzo - Contractors must track emerging technologies if they want to thrive in this market. Health care environments are complex. The requirements for lighting a patient room, an operating room, an MRI suite, or a behavioral health dayroom vary significantly. Across all disciplines, however, lighting dedicated to the health and well-being of those occupying and working in each of these spaces is paramount. A growing understanding of the effects of light on human biology, as well as the importance of lighting to create healing environments, has fostered interest in lighting systems that provide choices beyond static, traditional white light. With a focus on both patient and staff wellness, the architecture, engineering, and construction (AEC) industry and health care facility managers are looking for easy-to-install and maintain lighting systems



that promote healing, while balancing visual and circadian needs. By better understanding the nuances of the healthcare lighting market and its related technologies, contractors position themselves as true solutions providers. Lighting Trends in the Health Care Space | EC&M



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- 19. The Digital Nervous System: The Internet of Things Is Becoming the Internet of Everything by Jeff Beavers When we think of the internet of things (IoT), it's easy to picture smart buildings, energy-efficient thermostats and intelligent lighting systems. But IoT is so much more than that. From connected power grids to emergency services, transportation and water infrastructure, IoT is becoming the digital nervous system of the real world. The number of IoT devices is projected to reach 32.1 billion globally by 2030. This is almost double the number of devices in 2023, which was 15.9 billion. Some reports also suggest a slightly higher figure of 40 billion by 2030. The "things" in the internet of things include the devices in our personal area network (watches, smart thermoses, tablets and phones), the devices in our homes (computers, smart TVs, streaming devices, Wi-Fi-enabled pet feeders, smart appliances), those in our buildings (IT and OT) and outside (cameras, intelligent traffic control systems, planes, trains and automobiles)—any device, object or person that uses sensors or devices and communication technologies to collect, transmit and manage data. These are the "things." IoT is rapidly being redefined as the "internet of everything." The only questions that remain are which objects will be connected and what the rate of adoption of new technologies will be. The Digital Nervous System: The internet of things is becoming the internet of everything Electrical Contractor Magazine
- 20. **ELECTRICAL CONTRACTOR Magazine Recent Published Articles on Lighting** Lighting is a top money-maker for electrical contractors, and ELECTRICAL CONTRACTOR Magazine has you covered with news and monthly articles on lighting innovations and technology, LEDs, lighting design, lighting control, indoor and outdoor lamps and luminaires, new products and more. Recent articles on lighting are available online:
  - 1) 2025 Rebate Outlook: Helpful information needed to be successful By Craig DiLouie
  - 2) DLC Introduces Toolkit to Facilitate Integration of NLOs and HVAOs By Susan DeGrane
  - 3) Best-in-Class Efficiency: Tunable-white lighting offers nonenergy-related benefits in schools By Craig DiLouie
  - 4) Study Identifies Six Opportunities for Energy Savings From Commercial Lighting By Lori Lovely
  - 5) Four Simple Steps: Best practices for networked lighting controls By Craig DiLouie
  - 6) <u>Coordination Among Trades Can Prevent Damage to PEX Pipes from Lighting</u> By Katie Kuehner-Hebert <u>Subscription Electrical Contractor Magazine</u>
- 21. Implementing AI in Electrical Applications— Part 2 by Michael Morris From the EC&M e-books library: How the industry is responding to data center challenges, influx in electrical grid demand, and artificial intelligence. For this e-book, we've collected a selection of articles that further explores different ways artificial intelligence (AI) is impacting the electrical industry. This article looks at how new technology, specifically AI, will increase demands on data centers and how electrical engineers are working to ensure data centers can meet these demands. Building off that theme, the next articles look at the relationship between data centers, AI, and the electrical grid. Implementing AI in Electrical Applications— Part 2 | EC&M | Part 1: Implementing AI in Electrical Applications— Part 1 | EC&M |



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#### **Monthly Feature**

Domo Arigato Mr. Roboto: Integrating Robots and Reality Capture By Jared Christman - Integration of robotics into reality capture has arrived in the construction industry. You can see it on projects where it is either walking on four legs or rolling around printing layout. Robotics is the next step in the construction technology revolution—SLAM and deck printing are a couple examples out there today. Take the robot called "Spot." The Waltham, Mass.-based company has teamed up with Trimble, Westminster, Colo., to introduce the quadruped robot. Outfitted with a LiDAR scanner, Spot uses SLAM to autonomously navigate active job sites, capturing 3D data while avoiding obstacles in real time. According to reporting by Geo Week News, several contractors are using Spot for routine site documentation, progress tracking and as-built verification. This in turn is freeing up field staff for higher-value tasks. On a large social media tech campus project, Spot reduced manual photo documentation time by 60% and flagged several floor boxes that were misplaced compared to the model before slab pour, saving thousands in rework. Then there's SitePrint by HP, Palo Alto, Calif. SitePrint is a robotic layout printer that uses SLAM to align with digital models and contract documents that accurately prints layout directly on the deck. Electrical contractors have begun using it for conduit paths, box locations, layout points and wall stub-outs. By combining SLAM-enabled robotics with BIM data, electrical contractors are simplifying the jump from design to field layout. Rather than replacing skilled labor, this technology streamlines it, which in turn frees up electricians to focus on running crews, installation, quality control and high-value tasks. Domo Arigato Mr. Roboto: Integrating Robots and Reality Capture - Electrical Contractor Magazine

https://www.youtube.com/shorts/-w36LP4pfJw?feature=share



