

VIDEO: Amerlux's Commitment to Best-In-Class, US Made Lighting Design Solutions

[Amerlux's Commitment to Best-In-Class, US Made Lighting Design Solutions - YouTube](#)

Amerlux, an award-winning design-and-manufacture lighting company, announced the latest addition to its signature, award-winning [Hornet downlight series](#)—a versatile fixture that caters to retail and commercial applications without compromising on budget or design.

The evolution of the Hornet lighting collection underlines a theme highlighted in Amerlux's new corporate video, which emphasizes the company's transformative technologies in making project design light-years faster and better for architects and lighting designers.

The video features the robust design, engineering and production capabilities of Amerlux's state-of-the-art 200,000-square-foot manufacturing facility in Oakland, N.J. Featured prominently are their multiple-stacking O&C laser-cutting capabilities, advanced photometric labs and the industry's swiftest conveyor powder coat system, as well as their commitment to sustainability, green manufacturing and human-centric building automation.

"Take the Hornet LED downlight collection and our innovative approach to reinventing it to be more efficient and cost-effective," Plageman said. "Our unique blend of in-house technology, experience and know-how empowered us to accomplish both goals. We're not your typical lighting company. We continuously stand apart, a fact that's evident in this video and underscored by our latest product launches and capabilities."

Amerlux's leading role with parent company Delta Electronics and their family of companies in creating sustainable and productive, net-zero carbon spaces is also featured.

To learn more about Amerlux's lighting and building automation solutions, visit [Amerlux.com](#) or call 973.850.4342.

National LED Market Observer

1. **BetterBricks Offers 7 LLLC Video Webinars** - BetterBricks is a program of the Northwest Energy Efficiency Alliance (NEEA). BetterBricks has posted seven Luminaire Level Lighting Controls Webinars on its website, to share lighting experts discussing the benefits of LLLC systems, from innovating the future of commercial lighting to the latest research on energy savings. [Better-Bricks Offers 7 LLLC Video Webinars | LightNOW \(lightnowblog.com\)](#) Webinars cover the following seven topics:

- [LLLC 1:1 Research Study Webinar](#)
- [Mythbusting: Answers to Your Frequently Asked Questions](#)
- [Buildings, Health, & Efficiency: How Lighting Controls Bring it All Together](#)
- [BOMA Oregon Presents: Lighten the Loads with Luminaire Level Lighting Controls](#)
- [Ask the Experts: Energy Savings Potential from LLLC & Network Lighting Controls](#)
- [Selling LLLCs for Retrofits: Making the Business Case](#)
- [Finding LLLC Solutions for Projects](#)

2. **The Growing List of State-Wide Fluorescent Bans - Maine** is set to become (by our count) the sixth US state to implement a ban on most fluorescent lamps, following the path set by **Vermont, California, Colorado, Hawaii** and **Rhode Island**. The law, titled "An Act to Reduce Mercury in the Environment by Phasing Out Certain Fluorescent Light Bulbs," will become effective on January 1, 2026. The ban targets two types of mercury-containing lamps: compact fluorescent mercury-added lamps and linear fluorescent mercury-added lamps. The ban, however, exempts certain lamps designed for specific uses. [The Growing List of State-Wide Fluorescent Bans \(inside.lighting\)](#)

3. **Edge AI Chips & The IoT Create The Complex Edge** - The lighting industry has become comfortable with the idea of internet connected (IoT) lighting that contains a computer chip in a luminaire for control, storing data, and communications. Buckle up, because “the edge” (computing within IoT devices) is about to get more complex with the addition of artificial intelligence (AI) computer chips at the edge. In fact, one leading IoT blogger, Stacey Higginbotham (aka Stacey on IoT) has dubbed the new trend, “The Complex Edge.” The Complex Edge will require a system of computer chips to apply AI decision making (algorithms) within lighting systems. Higginbotham gives the following commercial lighting example in a recent blog post about the Complex Edge at: [Edge AI Chips & The IoT Create The Complex Edge | LightNOW \(lightnowblog.com\)](https://lightnowblog.com)

4. **At last: IEEE Approves a Li-Fi Standard** - Li-Fi passed a significant mile marker on its marathon road to mass adoption, as the Institute of Electrical and Electronic Engineers (IEEE) finally approved a standard for its use. Supporters of the IEEE approach hope that the ratification of IEEE 802.11bb will encourage makers of laptops, tablet, and phones to embed Li-Fi chips. Such a move would make it more likely that consumers and business users would then start to use light-based Li-Fi for wireless internet use in a manner similar to today’s ubiquitous radio frequency (RF)–based Wi-Fi, which adheres to the IEEE 802.11 standard. Li-Fi transmits data via modulated lightwaves generated by either LEDs or lasers. The waves can come from the visible light of a room’s luminaires, or they can come from the invisible spectrum, typically from infrared chips that are not part of the illumination scheme. [At last: IEEE approves a Li-Fi standard | LEDs Magazine](https://ledsmagazine.com)

5. **Air Quality from Canadian Wildfires Prompts Industry Response** - The jet stream is carrying smoke and toxic air from recent wildfires in Canada into the United States—particularly the Northeast and Mid-Atlantic states, but also into the Midwest. With more than 630 active wildfires in Canada as of July 4, 2023—over 300 of which are deemed out of control—and more than 8.5 million acres burned, according to the Canadian Interagency Forest Fire Centre, air quality is likely to be a long-term concern. The biggest hazard related to wildfire smoke is exposure to particulate matter. Particles of partially burned material measure less than 2.5 micrometers in diameter and can enter the lungs and the blood stream. They’re capable of causing health problems such as lung, heart or kidney disease. Exposure can also lead to heat stress, as well as eye and respiratory tract irritation. [Air Quality from Canadian Wildfires Prompts Industry Response - Electrical Contractor Magazine \(ecmag.com\)](https://ecmag.com)

6. **US, Mexico Face Major Heat Wave That’s Set to Tax Electric Grid** - Near record heat will spread from the US Southwest across Texas and the Great Plains this week, with temperatures of 100F (38C) or more straining electricity networks. The blistering heat will sear down across the southern US and northern Mexico, challenging local records. Temperatures in Phoenix may reach 109F Sunday and as high as 114F across the region. Residents have been urged to stay indoors and seek air conditioning. An excessive heat warning extends across parts of southern California and Arizona, and heat advisories reach into Texas and Florida, where temperatures in many places may reach or exceed 100F for days, the National Weather Service said. [US, Mexico Face Major Heat Wave That’s Set to Tax Electric Grid \(yahoo.com\)](https://yahoo.com)

7. **New DC2DC Architecture from Acuity Brands** - Acuity Brands, Inc. recently announced the launch of its DC2DC architecture, a distributed low-voltage DC power and digital controls platform. The architecture eliminates the need to convert AC to DC power at the luminaire, resulting in efficiency gains and increased reliability of the lighting system, leading to reduced maintenance and operation costs. The platform relies on Class 2 cabling to provide power and communications to each luminaire, eliminating conduit, junction boxes, and power packs, while providing greater lighting controls design flexibility with individually addressable luminaires. The DC2DC architecture can also facilitate direct connection to renewable energy sources, supporting buildings converting to more carbon-friendly electric systems. The DC2DC architecture is ideal for new construction. [Lighting Controls Association – The Lighting Controls Authority](https://lightingcontrolsauthority.com)

8. **ELECTRICAL CONTRACTOR Magazine Lighting Articles in July** - 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:

<https://www.ecmag.com/topics/lighting>

1. [Lighting: Lighting Retrofits and EVs](#) By Craig DiLouie
2. [Supporting Lighting Ecosystems: Illumination meets IoT and more in retrofits](#) By Claire Swedberg
3. [Responsible Light at Night Restores Connections to Natural World, Cuts Costs and Carbon](#) By Susan DeGrane
4. [Building Lighting Efficiency: ASHRAE standard 90.1-2022 decoded](#) By Craig DiLouie
5. [Creating the Right Look: Low-voltage landscape lighting for homes](#) By Mark C. Ode
6. [Powering Light Switches in Response to 2023 NEC Changes](#) By Jim Romeo

9. **Register Now for the ArchLight Summit, SEPTEMBER 19-20, 2023 at Dallas Market Center** - ArchLIGHT Summit is a **new commercial and architectural lighting event** dedicated to delivering a dynamic, interactive, inclusive and collaborative experience for lighting designers and specifiers, interior designers and architects. Created and hosted by Dallas Market Center, ArchLIGHT Summit will showcase **new products from leading commercial brands** reflecting the **latest lighting trends and technologies**, combined with a full slate of accredited educational and hands-on experiential sessions facilitated by the sharpest minds in design and lighting. [ArchLIGHT Summit 2023](#)

10. **LDI Early Bird Registration** - LDI is the place to be for live entertainment professionals seeking inspiration, professional development, and valuable connections. Don't miss this exclusive opportunity to preview and demo the newest gear while networking with the live entertainment community. [LDI Conference and Tradeshow 2023 \(xpressreg.net\)](#)

Las Vegas Convention Center - West Hall; Conference - November 29 - December 5, 2023

11. **Dallas Fort Worth International Airport Installs UV Resources Equipment** - Dallas Fort Worth International (DFW) Airport installed Ultraviolet-C (UV-C) disinfection equipment from UV Resources as part of its multilayered-infection control strategy designed to reduce passenger exposure to the SARS-CoV-2 virus. The \$7.5 million air disinfection initiative will improve the air quality in DFW's Terminals A, B, C, D and E, as well as its Rental Car Center. Recently germicidal UV-C disinfection fixtures were installed in 614 HVAC air handling units (AHU) that serve the airport's six passenger terminals and all public and nonpublic spaces, including TSA security checkpoints, ticket counters, gate areas and food courts. The upgrade also required more than 3,600 UV-C lamps.



[Dallas Fort Worth International Airport Installs UV Resources Equipment - Facility Management Lighting Quick Read \(facilitiesnet.com\)](#)

12. **CASE STUDY: Chase wraps up \$200 million overhaul of McCoy Center at Polaris** - JPMorgan Chase recently revealed a renovation of its 2 million-square-foot facility in Columbus, Ohio, that is the workplace for more than 12,000 employees. The redesign took the company six years to complete and involved 300 construction workers daily and 90 different vendors.

- More than 17,000 LED lighting fixtures and 2,600 occupancy sensors, cutting lighting energy consumption in half.
- Smart lighting control systems allowing for automatic dimming to incorporate daylight harvesting and individual fixture lighting controls into operations.

[Chase wraps up \\$200 million overhaul of McCoy Center at Polaris - see what's inside\(msn.com\)](#)

13. **US Electric Vehicle Goals Will Require Up To \$127B to Install 28M Chargers by 2030: NREL** - There will be 30 million to 42 million electric vehicles on U.S. roads in 2030, requiring a rapid, widespread buildout of charging infrastructure that will be focused on homes and multi-family residences, according to a new report from the National Renewable Energy Laboratory. A cumulative national capital investment between \$53 billion and \$127 billion will be needed to construct sufficient charging infrastructure by 2030. [US electric vehicle goals will require up to \\$127B to install 28M chargers by 2030: NREL | Smart Cities Dive](#)

14. **On The Way: Automated Fault Detection and Diagnostics for LED Street Lighting Systems** - Many of the benefits of LED streetlights are proven and accepted, and cities and electric utilities are replacing their aged installed base of high-pressure sodium (HPS) and metal halide (MH) with LED. However, in many instances, the benefits of these new lighting systems are compromised by aging electrical distribution systems, extreme weather, and the possibility that some LED streetlights may not be designed to function as intended during non-ideal circumstances. Connected lighting systems (CLS) that offer remote monitoring and promise sophisticated lighting control strategies and improved maintenance efficiency have been on the market for many years, but their deployment remains limited. https://www.ies.org/lda-magazine/featured-content/technology/?zs=jUiDd&_zl=gWFg3

15. **Centralized and Connected** - Wireless streetlight systems offer benefits not only to utilities and cities, but to the citizens who use the roads every day. Municipal smart street lighting is revolutionizing the way public lighting systems are controlled and managed by a Central Management System (CMS). This approach wirelessly connects streetlights, enabling municipalities and utilities to save money, reduce energy consumption, and create safer, more livable environments. What follows are some of the benefits of these systems—for both government and the “person on the street.” The possibilities are vast and the benefits of adopting smart street lighting are clear—improved energy efficiency, reduced costs, enhanced safety, and the foundation for a connected, sustainable future. [Centralized and Connected - Illuminating Engineering Society % \(ies.org\)](#)

16. **Li-Fi Vs. Li-Fi: Signify Comes Out Swinging Against the New IEEE Standard** - Li-Fi watchers could well be asking following the news last week that, at long last, the [Institute of Electrical and Electronics Engineers \(IEEE\) has ratified a standard for the technology](#). While such a result could indeed prove to be the case, not everyone regards the newly approved IEEE 802.11bb as a tipping point. Signify, with its TruLiFi brand, adheres to a different standard, ITU-T G.9991 (sometimes referred to as ITU-T G.vlc) ratified by the United Nation’s International Telecommunication Union in March 2019. Neither the ITU approach nor the IEEE approach has yet led to mass adoption of Li-Fi. Li-Fi vendors hope to eventually establish the technology as a popular alternative to Wi-Fi. They envision the technologies as coexisting. [Li-Fi vs. Li-Fi: Signify comes out swinging against the new IEEE standard | LEDs Magazine](#)

17. **SPIE Optics + Photonics 2023 Conference on 3D Printing for Lighting** - In August, the Lighting Research Center (LRC) at Rensselaer Polytechnic Institute will kick off the first conference to explore the opportunities and challenges of 3D printing for the lighting industry. The conference will set the stage for discussions about the future of 3D printing for lighting components and systems through more than 30 research and state-of-the-technology presentations, as well as discussion and networking events. The 3D Printing for Lighting conference, to be held as part of SPIE Optics + Photonics 2023, the leading multidisciplinary optical sciences and technology meeting, will take place **August 22-23, 2023, at the San Diego Convention Center**. <https://www.lrc.rpi.edu/programs/solidstate/news/SPIEEvents.asp>

18. **Samsung Unveils Cutting-Edge 89-Inch Micro LED TV** - Samsung Electronics announced on the launch of its latest 89-inch micro light-emitting diode (LED) model priced at US\$100,980. Samsung is committed to expanding its Micro LED lineup further. In the pipeline are models in various sizes, including 76, 101, and 114 inches, providing consumers with an extended range of ultra-premium TV options. https://www.ledinside.com/news/2023/7/2023_07_25_03

Global LED Energy Market Observer:

19. RESEARCH: Global Interior Lighting Market Worth \$121.5B by 2032 - [Custom Market Insights has published a new research report](#) titled "Interior Lighting Market Size, Trends and Insights. Interior Lighting Market: Growth Factors and Dynamics

- Advanced Lighting Technologies
- Energy Efficiency and Sustainability
- Integration of Smart Lighting
- Emphasis on Human-centric Lighting
- Urbanization and Infrastructure Development
- Growing Demand for Automotive Interior Lighting
- E-commerce and Online Distribution Channels

[Request For Free Sample - Custom Market Insights](#)

20. Seoul Semiconductor: Korea's Optical Semiconductor Company, Reaffirms its Third Ranking in the Global Market

- While the top five manufacturers in the global LED market have been large in scale since their predecessors, Seoul Semiconductor started as a venture company by Founder Lee Chung-hoon. According to [TrendForce's "2022 Global LED Lighting Market Analysis"](#) and the database released by [Omdia, Seoul Semiconductor Co., Ltd.](#) has ranked third in the global market and first in Korea.

For over three decades since its establishment, Seoul Semiconductor solely focused on optical semiconductors, developing over 18,000 patented technologies and competing against major LED lighting manufactures to reach the current position of third in the world.

[Seoul Semiconductor: Korea's Optical Semiconductor Company, Reaffirms its Third Ranking in the Global Market | LEDs Magazine](#)

Packaged LED market shares (all LED types)

Revenues (millions of dollars)

Rank	Country	Company Name
1	JP	Nichia
2	DE	ams Osram
3	KR	Seoul Semiconductor
4	US	Lumileds
5	KR	Samsung Electronics

Source: Omdia

21. **McKinsey Adds to Warnings of Metals Shortages for Clean Energy** - McKinsey & Co. joined the growing chorus warning that metals considered key to the clean-energy transition face shortages in coming years, potentially suppressing the adoption of electric cars, wind turbines and solar panels. These deficits likely will slow global decarbonization efforts by raising supply-chain costs and, consequently, the prices of lower-carbon products. The number of the approximately 500 cobalt, copper, lithium and nickel mines operating today will need to increase by as much as 76% to almost 900 in order to meet demand for batteries. Metals worth \$6 trillion are needed for a global energy transition. The report found that the looming metals shortage could also derail the world's ability to slash greenhouse gas emissions, making it difficult to meet the goals of the Paris Agreement. [McKinsey Adds to Warnings of Metals Shortages for Clean Energy - BNN Bloomberg](#)

22. **Bolb's 295nm UV-B LEDs Cross the 10% WPE Threshold** - UV-B light, specifically targeted to 295nm, plays an essential role in human, animal, and plant health. Now, thanks to advances from Bolb, UV-B LED wall plug efficiency has surpassed 10%. At this level of performance, UV-B application efficiency is far better than what can be achieved with mercury lamps. <https://www.led-professional.com/>

23. **HD Matrix Headlamp: Car Lighting Technology at the Highest Level** - Hella, the automotive supplier operating under the umbrella brand FORVIA, and the luxury car manufacturer Porsche, have, in close cooperation with other partners, launched the world's first high-resolution headlamp based on matrix LED technology. With over 32,000 individually controllable pixels per headlamp, it raises automotive lighting technology to a new level. The digital headlamp system SSL | HD is now available for the first time in the new Porsche Cayenne as optional extra equipment. Hella's SSL | HD technology is an evolutionary further development and significant miniaturisation of matrix LED systems. Compared to conventional headlamps, the space required for the light module has been reduced by up to 75%. [HD Matrix Headlamp: Car Lighting Technology at the Highest Level - LEDinside](#)



24. **Amazon to Deploy 300 Rivian Delivery Vans in Europe** - The electric vans will be used to deliver packages across major cities including Munich, Berlin and Dusseldorf. In Europe, Amazon and Rivian specially designed a shorter, thinner van than what's used in the United States to better fit in Europe's cities. Since its partnership with Amazon was first announced in 2019, Amazon has been delivering packages with the Rivian Electric Delivery Van in over 500 U.S. cities. So far, it has purchased and is using more than 3,000 vans. Amazon aims to have 100,000 electric delivery vehicles from Rivian on the road globally by 2030. [Amazon to Deploy 300 Rivian Delivery Vans in Europe | Electrical Wholesaling \(ewweb.com\)](#)

25. **RESEARCH: Smart Lighting Market Forecast 2023-2028** - The global smart lighting market size reached US\$ 13.5 Billion in 2022. Looking forward, IMARC Group expects the market to reach US\$ 41.2 Billion by 2028, exhibiting a growth rate (CAGR) of 20.1% during 2023-2028. Smart-lighting is a technology designed for efficient use of light resources with power saving fixtures and automated controls. This enables the user to adjust ambient lighting depending upon the occupancy or daylight availability. The lightings are also accessible through a smartphone application, making them easily controllable. IMARC Group provides an analysis of the key trends in each sub-segment of the global smart lighting market report, along with forecasts at the global, regional and country level from 2023-2028. [Smart Lighting Market Size, Share and Forecast 2023-2028 \(imarcgroup.com\)](#)

26. **SSL Report Finds Ongoing Opportunity in Energy Savings** - The goal of the ISA Global SSL Industry Quarterly Report is to share comprehensive data about the state of the industry. More specifically, this quarter's report indicates that SSL companies should double down on their efforts to save more energy and spur greater LED adoption. One of the goals of this report is to discuss how the momentous events of 2022 are impacting the development and adoption of solid-state lighting (SSL). The most significant events include:

- The Russia-Ukraine conflict
- Continued impact of the COVID pandemic
- Limited success of COP27 in combatting global warming

<https://isa-world.org/Uploads/ueditor/file/20230428/644b36e3e54a3.pdf>

Monthly Feature:

Understanding Build America Buy America: Implications for the Lighting Industry

What is Build America Buy America?

The Buy America, Buy America Act was originally established by the Surface Transportation Assistance Act of 1982, which was a transportation funding and policy act created under the Reagan administration. The Buy America Act was intended to give preference for the use of domestically produced materials on any procurements funded at least in part by the federal government. On November 15, 2021 President Biden signed into law the Infrastructure Investment and Jobs Act (IIJA) which includes the Build America, Buy America Act, which strengthened the previous laws. The Act provides statutory authority for the Made in America Office, within the Office of Management and Budget to maximize and enforce compliance.

A clarification was issued by the Made in America Office on April 18, 2022, states:

"By May 14, 2022 [Federal] agencies MUST ensure that all applicable programs comply with... the Act, including the incorporation of a Buy America preference in the terms and conditions of each award with an infrastructure project."

What is an Infrastructure Project?

The U.S. Infrastructure Investment & Jobs Act of 2021 (IIJA) provides \$284 Billion in new spending for transportation infrastructure in the United States of America. Infrastructure projects supported by federal funds under the IIJA are defined:

"The IIJA's definition of 'infrastructure' encompasses public infrastructure projects. Thus, the term 'infrastructure' includes, at minimum, the structure, equipment, and facilities for, in the United States, roads, highways, and bridges; public transportation; dams, ports, harbors, and other maritime facilities; intercity passenger and freight railroads; freight and intermodal facilities; airports; water systems, including drinking water and wastewater systems; electrical transmission facilities and systems; utilities; broadband infrastructure; and buildings and real property."

Further:

“When determining if a program has infrastructure expenditures, Federal agencies should interpret the term ‘infrastructure’ broadly...”

What does compliance require?

Products utilized for projects falling under the BABA requirements from IJA are all required to be “100% manufactured in the United States”; but for further definition these products can fall under three categories:

1. Iron and steel
2. Manufactured Products
3. Construction Materials

For the iron and steel category, which would include steel lighting standards (poles), the requirement is “mined, melted, manufactured, and coated” in the United States. Although all of the US Architectural poles are manufactured in the United States, the iron is sourced outside of the US. Consequently, at the moment, no US Architectural steel poles are compliant.

The Manufactured Products category includes all the luminaires, as well as arms, aluminum poles and bases. The requirements were specified by the Final Rule determined by the Federal Acquisition Regulatory Council (FAR Council) on March 7, 2022. Manufactured products must meet the Cost of Components test based on domestic content thresholds that escalate. The cost of components is determined by the ratio of the cost of domestically sourced components divided by the cost of components from outside the US. This explicitly omits the cost of the final assembly. The domestic content thresholds are:

- 55% threshold for items delivered until October 25, 2022
- 60% threshold for items delivered 2022-2023
- 65% threshold for items delivered 2024-2028
- 75% threshold for items delivered starting in 2028

What does Build America Buy America mean to the lighting industry?

So, you're asking yourself, why is this difficult for lighting manufacturers, they almost all have assembly facilities in the United States? The Made in the US part of the requirement is fairly easy for most US manufacturers. The hard part of the equation is the Cost of Components test (COCT). If you realize that virtually all luminaires these days are LED and that most recognized brand name LED chips and recognized LED power supplies are produced off-shore, then the situation starts to come into focus. The only domestic manufacturers that can meet the escalating COCT at 60% this year are those that source virtually every other part other than the LEDs and power supplies all domestically.

Remember that the final assembly is not part of the equation in the COCT. Consequently, BABA compliance with the 60% threshold can be accomplished by a very select group of manufacturers, many offering only a select subset of their total portfolio. This is forcing some manufacturers to start to segment their products with both offshore and BA compliant fixtures, many with a price differential. Some manufacturers have been ignoring the requirements, hoping that they will not be enforced, but we are seeing broad acceptance, with some states educating their inspectors to look carefully at BABA compliance where appropriate.

It was the federal government's explicit intention to use their infrastructure funds to “bolster America's industrial base, protect national security, and support high-paying jobs.” The Buy America preference is certainly causing luminaire manufacturers to reexamine their supply chains, reconsider their manufacturing strategies, and to begin to restore their manufacturing capabilities in response to this market shift.

George Preston, CEO of US Pole Company can be reached at georgep@usaltg.com and (661) 233-2000.