

## Beautifully Thin Ceiling Lighting to Love, No Matter What's Above

Be completely shallow. Cast your ceilings in all their beauty. Both never look so good—with Solace.

Amerlux's spec-grade shallow plenum downlight gorgeously solves an ugly pain point: super-tight plenum space. With an extremely low 2 ¼ inches recessed depth (downlight and wall wash) and a recessed adjustable with recessed depth of just under 3 9/16 inches, Solace fits flawlessly in any crowded design. Make clogged plenum an architectural non-factor.

Instantly solve any surprises. Keep projects on deadline and on budget. No dreaded callbacks, no pricy rewiring. Get total peace of mind—not matter what you find behind. Solace is the perfect, must-have downlight for an amazingly uncomplicated design and installation process.

The right fit for any interior commercial application where slender plenum has you in a jam, Solace requires just two inches of plenum space to make your ceilings tower under stunning recessed lighting.



Read more about Solace in the latest [press release](#).

Watch the video: <https://bestlight.amerlux.com/solace/>

## National LED Energy Market Observer:

**1. RESEARCH: NBI Publication: Controlling Comfort and Energy in Offices** - Two of the best investments building owners and corporate tenants can make to improve employee well-being and energy efficiency are (1) high-quality automated shading systems and (2) modern LED lighting with advanced wireless controls, says a new publication by the New Buildings Institute. Advanced lighting systems alone can improve overall lighting energy performance in a typical office by up to 40%. When packaged with window shading and advanced controls, the whole building savings can be over 20%. Given today's evolving work environment, it's an ideal time to consider upgrading lighting and/or shading systems. Post-pandemic workplaces will look different. Building owners and managers who commit to making their interior spaces more attractive will be better positioned to maintain and attract new tenant leases in the years ahead. [NBI Getting -Control-of-Comfort-and-Energy\\_v4.pdf \(newbuildings.org\)](#)



**2. WHITE PAPER: Standardizing Interfaces, Enabling Interoperability by Zhaga** - By standardizing interfaces for interoperable components of LED luminaires, Zhaga is facilitating luminaire design and in-the-field serviceability. Lighting must become connected and serviceable – and that requires standardized interfaces that support interoperable components. However, such components will have a major impact on the business models of many companies along the entire lighting industry value chain. That's why Zhaga, the global lighting-industry organization that aims to standardize the interfaces of LED luminaire components, is working with industry stakeholders to define the best solutions. Zhaga puts the spotlight on interoperability. Its mission is to specify electrical, mechanical, optical, thermal and communication interfaces for interoperable components used in LED luminaires. This will ensure that when a new luminaire is designed, it has many interoperable components – based on standardized interfaces – to work with. [Zhaga - white paper on interoperability - 20201202.pdf \(zhagastandard.org\)](#)

3. **RESEARCH: Strategies for Achieving Smarter, More Efficient Illumination** - Achieving an optimal lighting strategy for your building is no simple task. Numerous variables and requirements must be taken into consideration to achieve the desired effects that smart illumination strategies can deliver. Whether it's setting proper lighting levels, eliminating glare or setting a mood that enables people to experience rich color accurately, all of these conditions help make tasks safer and easier to accomplish for occupants. Additionally, an effective lighting strategy can meet these multiple requirements while using energy more efficiently. This eHandbook is intended to make the process of lighting a space properly more straightforward. Offering up-to-date information from lighting experts and industry reports, this handbook covers a number of important topics. Free download at: [Next Generation Lighting Strategies: eHandbook | BUILDINGS](#)



4. **Energy Conservation Program: Backstop Requirement for General Service Lamps** - The U.S. Department of Energy ("DOE") is re-evaluating its prior determination that the Secretary of Energy ("Secretary") was not required to implement the statutory backstop requirement for general service lamps ("GSLs"). Under the Energy Policy and Conservation Act, as amended, if DOE fails to complete a rulemaking in accordance with certain statutory criteria, or if a final rule for GSLs does not produce savings that are greater than or equal to the savings from a minimum efficacy standard of 45 lumens per watt ("lm/W"), the Secretary must prohibit the sale of any GSL that does not meet a minimum efficacy standard of 45 lm/W. [Federal Register: Energy Conservation Program: Backstop Requirement for General Service Lamps](#)

5. **Florida Passes New Bill Allowing Virtual Inspections** - Government entities agree virtual inspections are inexpensive and require minimal equipment. The Florida Building Codes Act defines "virtual inspection" as an inspection that uses visual or electronic aids to allow a building official or inspector to perform an inspection without having to be physically present at the job site during the inspection. The bill also requires local building code enforcement agencies to allow requests for inspections to be submitted to the local agency electronically via e-mail, electronic form, or mobile application. Inspected is designed specifically for inspectors to connect with onsite personnel to help achieve a safe alternative to in-person inspections. When signed by the Governor, the bill will go into effect on July 1, 2021. Visit the company's website at: [Home - Inspected](#)

6. **ULTRA Germicidal Smart Ceiling Fan** - The ULTRA Germicidal\* Smart Fan by Modern Forms is a smart ceiling fan that helps create a safer sanctuary for residential, hospitality, and commercial settings. ULTRA uses a patent pending system, which combines a germicidal Ultraviolet-C (UV-C) LED module that irradiates the air, with a ceiling fan that circulates the air from the occupied spaces to the unoccupied upper reaches of an area. This combination can help reduce the concentration of viral pathogens, including the SARS COV-2 virus, in the air of the room where it is installed and operated. The lab tests showed a 99.99% reduction of collectable active pathogens in the air, and that the active SARS-CoV-2 virus was not detectable in the breathable air after just 30 minutes of operation of the ULTRA in the room. [Ultra Germicidal - Modern Forms](#)

7. **AEE World Energy Conference & Expo on Energy Efficiency & Sustainability** - Join the Association of Energy Engineers and your peers to discuss energy management, efficiency, automation, data analytics, policy, supply, procurement, resiliency, sustainability, and more. **New Orleans, LA | October 20-22, 2021!** [AEE World Conference | Energy Conference & Expo | Home](#)

8. **LD+A Focus on Roadway/Street Lighting This Month** - 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. July is about Roadway/Street lighting:

- **Chicago Style by Steve Taggart** - In its quest to transform its street lighting, the Windy City also found ways to create jobs and heighten safety. [Chicago Style – Illuminating Engineering Society \(ies.org\)](#)
- **Electric Avenue by Paul Tarricone** - Safety, style and splashes of color mark the journey on a roadway in China. Electric Avenue – [Illuminating Engineering Society \(ies.org\)](#)
- **Step by Step by Norma Isahakian** - An update on the quest for smart-city streetlights in Los Angeles. [Step by Step – Illuminating Engineering Society \(ies.org\)](#)
- **SSL: The Rigors of Testing by Ruth Taylor** - An unfiltered look at connected parking lot lighting systems. SSL: [The Rigors of Testing – Illuminating Engineering Society \(ies.org\)](#)  
[Trending Articles – Illuminating Engineering Society \(ies.org\)](#)

9. **Infrastructure Plan Could Lead to a Boom in the Electrical Contracting Industry by Susan Bloom** - The proposed \$2 trillion American Jobs Plan could have a profound impact on the economy, especially with construction accounting for half of the total spend, including \$621 billion for transportation initiatives involving roads, bridges, electric vehicle charging stations and airports. Another \$698 billion is earmarked to upgrade the electrical grid, water systems, broadband, school systems and more. The infrastructure plan aims to modernize 20,000 miles of roads and highways and repair the nation's 10 largest and most economically significant bridges that are no longer safe, as well as 10,000 smaller bridges in desperate need of upgrade, in addition to a long list of other much-needed infrastructural enhancements. Richard Branch, Dodge Data & Analytics' chief economist, warned that the American Jobs Plan "is far from a sure thing".....he suggested that there are many unknowns about how the plan will shake out over the coming months, and that it will certainly face significant push-back in the Senate that will likely lead to its being scaled back. Blueprint to Rebuild America: [Infrastructure plan could lead to a boom in the electrical contracting industry | Electrical Contractor Magazine \(ecmag.com\)](#)

10. **Administration Moves Toward Outcomes-Based Contracting** - Executive Order (EO) 14005, Ensuring the Future Is Made in All of America by All of America's Workers, The EO requires the Federal Acquisition Regulatory Council (Council) FAR to identify domestic end products where domestic content is "measured by the value that is added to the product through U.S.-based production or U.S. job-supporting economic activity..." The proposal would also include an increase in the "price preferences for domestic end products and domestic construction materials." This shift in focus from emphasizing value over price considerations marks a clear move toward outcomes-based contracting. The purpose of an outcome-based contract (OBC) is to obtain better value, better performance, and lower costs. Because OBC ties compensation to a contractor's ability to meet, or exceed, defined program outcomes in a meaningful and measurable way, it incentivizes the contractors to devise the most effective and efficient way to perform the work for which they are hired. NEMA has promoted OBC and recently published an issue paper on the subject. [Administration Moves Toward Outcomes-Based Contracting \(nema.org\)](#)

11. **Offices After Covid-19 by Joe Knisley** - These new spaces must consider social interaction, collaboration, and relationship building — with a greater emphasis on technology. Looking ahead, electrical system design and installation methods are poised to support a greater variety of lighting systems and low-voltage data/information systems that offer more features, such as AV services, security, digital signage, and way-finding systems. Lighting systems with integrated sensors will provide emerging capabilities like asset tracking, optimized space usage, building integration along with HVAC optimization, CO2 monitoring, and safety features. With LEDs becoming the dominant source of illumination, versatile lighting control systems that allow reconfiguration of space via software eliminate the need for rewiring when a workspace has to support a new function. Today's control systems allow the occupant to implement features such as warm dimming, tunable white, full-spectrum control, and circadian-effective light. [Offices After Covid-19 | EC&M \(ecmweb.com\)](#)

12. **North American Carmaker Picks Visteon's MicroZone Tech as OLED Alternative** - The award is for a multi-display system that will be featured in multiple premium and performance vehicles expected to launch in 2024. MicroZone technology is a first of its kind in the industry and is an innovative choice beyond organic light-emitting diode (OLED) for automotive applications. Visteon developed microZone to address the industry demand for a high-quality display that delivers a premium experience, while meeting stringent automotive-specific requirements. MicroZone offers OEMs a high-dynamic range display solution with a longer lifespan and low-power consumption and lower cost than OLED systems. Based on mature LCD technology, microZone is considered the first automotive display to achieve superior optical performance without sacrificing vehicle reliability, having passed rigorous automotive qualification requirements. Built to deliver lifelike imaging equal to consumer mobile devices. The microZone business was among \$1.8 billion in new business wins for Visteon during the first quarter of 2021. <https://www.ledinside.com/node/32105>

13. **BTO Announces \$8.6 Million in CRADA Call Awards** - The U.S. DOE Building Technologies Office (BTO) has awarded \$8.6 million to accelerate the commercialization of 20 research projects through a recent lab cooperative research and development agreement (CRADA) call. LBNL and Legrand were awarded Grid-Interactive, Resilient Lighting and Plug Load Management System Using Direct Current Power. Legrand and LBNL will develop forward-looking direct current (DC) power distribution standards with integrated data and power communications and flexible storage architecture. Through market analysis, storage architecture analysis, development of use cases, prototyping, testing, and validation, this project will pursue one of only a few viable options to fully integrate lighting and plug loads with control systems and grid flexibility. A full list of the awards announced today can be found [here](#).

14. **DEADLINE EXTENDED: Comment Period Closes August 13 for L-Prize** - The deadline has been extended by DOE Building Technologies Office (BTO) to submit feedback on the draft requirements and timeline for the upcoming L-Prize phases—Prototype and Manufacturing and Installation—and to share any hurdles to your participation. The deadline to complete the [Comment Form](#) and send to [LPrize@nrel.gov](mailto:LPrize@nrel.gov) is now August 13, 2021. The L-Prize will advance the state of the art in LED lighting, encouraging innovators and researchers to develop advanced lighting systems that significantly raise the bar for efficiency, quality of light, connectivity, and overall environmental footprint, and offering incentives for domestic manufacturing that create opportunities for jobs and economic impact. [Visit the L-Prize website to learn more.](#)

15. **August Lighting Shows: IES Annual Conference, LEDucation and Strategies in Light** - During a 17-day stretch in August, three popular lighting industry conferences will be delivering a variety of programs, events, panel discussions and award ceremonies to hundreds of virtual attendees. They will once again be 100% virtual events.

- IES Annual Conference [Program – Illuminating Engineering Society \(ies.org\)](#) August 9-13
- LEDucation [2021 August Conference – LEDucation](#) August 17-18
- Strategies in Light [Strategies in Light 2021 - New insights. New ideas. Hear from the experts on the very latest on the advancements in lighting.](#) August 24-25

16. **Silent Light: Improving Acoustic Comfort with Revolutionary Luminaires by Craig DiLouie** - The trend toward lower or no partitions in open offices, intended as a way to foster collaboration, has a price: more exposure to noise. To address it, there are a range of options, from surface materials to noise-reducing shades to sound-absorbing panels. Recognizing that luminaires are installed throughout most occupied spaces, generally above the line of sight, manufacturers such as Eureka Lighting, Focal Point and Signify developed another option: acoustic luminaires. While still relatively new and emerging among a limited number of suppliers, manufacturers believe the market will grow. Acoustic luminaires are sound-absorbers aimed at reducing reverberation, or the continuation of sound after its source has stopped. [Silent Light: Improving acoustic comfort with revolutionary luminaires | Electrical Contractor Magazine \(ecmag.com\)](#)

17. **TRAINING: LHRC Announces Online Educational Offerings for September 2021** - The Icahn School of Medicine at Mount Sinai's Light and Health Research Center (LHRC) is running two concurrent online educational programs starting in September 2021.

- The 10-week Professional Certificate Course in Lighting Design provides the knowledge and skills needed to help lighting and related professionals begin or improve their practice in lighting design. The course will begin on September 14, 2021 and run through November 16, 2021. Classes will meet each Tuesday during this period from 1 – 3PM ET. Click here to learn more and register for this class.
- The eight-week Certificate Course in Light and Human Health instructs participants on how to use the power of light to improve health and well-being in schools, offices, hospitals, homes, and other settings. The seminar will begin on September 22, 2021 and run through November 10, 2021. Classes will meet each Wednesday during this period from 1 – 3PM ET. [Click here](#) to learn more and register for this class.

18. **CASE STUDY: Lighting Strategies for Occupant Health at Windward** - Circadian rhythms, dimming, and color were all essential features in the lighting design at this new office space. Windward Engineers and Consultants' new office workspace caters to different work styles with huddle rooms, phone booths, flexible furniture and outdoor space. Above all, however, the facility focuses on employee health and wellbeing. Windward worked with NELSON Worldwide to include a lighting strategy that addresses mental health. Circadian rhythms, dimming and color were all essential features in the lighting design. For example, when in the wellness room, users have full control of the lighting and can switch between cool and warm lighting to meet their desired light intensity. [Lighting Strategies For Occupant Health - Facilities Management Insights \(facilitiesnet.com\)](#)

19. **WHITEPAPER: EC&M 2021 Industry Insights** - After the unprecedented blows last year delivered to so many people personally and professionally, we enter this new year with cautious optimism of what the new normal could look like in a post-pandemic world for electrical professionals. From adapting to changing asset lifecycle responsibility demands, prefab/supply chain demand trends, and new applications for emerging technologies, this ebook has something for everyone. Download this ebook to gain insight on items that will shape 2021 in construction and buildings. [2021 Industry Insights | EC&M \(ecmweb.com\)](#)

20. **The First Net Zero Energy Restaurant in the Quick-Service Industry** - Newly opened in Orlando, Florida, on Walt Disney World property is the new net zero energy-designed McDonald's—the first of its kind amongst the fast food giant's 40,000-plus restaurants. Easy on both the eyes and energy consumption, the global flagship restaurant combines modern architecture and design with technology to create enough renewable energy on-site to cover its energy needs on a net annual basis. Under a shed clad in [solar panels](#), the 8,024-square-foot restaurant, designed by Ross Barney Architects, energy consumption is reduced by optimizing building and kitchen systems. Energy is generated on site by the following strategies: [The First Net Zero Energy Restaurant in the Quick-Service Industry | Buildings](#)

- 18,727 square feet of photovoltaic panels
- 4,809 square feet of glazing integrated photovoltaic panels (BiPV)
- 25 off-the-grid parking lot lights



21. **Six Disruptive Trends in Architectural Lighting for the Next Decade by Brad Koerner** - The past decade saw incredible transformation in architectural lighting. With the turn of a new decade, the industry finds itself once again facing a disruptive wave of innovation, yet this time building upon mature LED and digital communications technologies. The luminous '20s indeed look to be a brilliant decade for innovation in architectural lighting systems. Let's look at how six disruptive trends will change how we conceive of architectural lighting. [Welcome to the Luminous '20s – Illuminating Engineering Society \(ies.org\)](#)

1. **LUMINOUS SURFACES** - Embedded lighting and digital signage become fundamental elements of contemporary buildings.
2. **DATA-DRIVEN EXPERIENCES** - Architecture will become a portal to the virtual world.
3. **INTERACTIVE SPACES** - The right light, at the right time, at the right place.
4. **DIGITAL TWIN COMMISSIONING** - Live simulations in BIM will reduce on-site commissioning costs.
5. **CIRCULAR ECONOMY** - New value streams will be realized by cleaning up our act.
6. **DC POWER & NET-ZERO ENERGY** - Buildings will increasingly go off-grid.

22. **Live Design International, Las Vegas NV Nov. 15-21, 2021** - LDI features an immersive, action-packed Exhibit Hall filled with the latest gear in lighting, projection/video, audio, special effects, staging, trussing, rigging, automation, software, and soft goods, from hundreds leading industry suppliers and distributors. Discover new and trusted brands exhibiting live demos and featuring cutting-edge gear debuted exclusively to LDI. [Exhibit Hall | Ldishow](#)

23. **ENERGY STAR Just Ask the Experts** - Check out Ask the Experts on [ENERGYSTAR.gov/ask-the-experts](#) for the latest advice on saving energy at home. ENERGY STAR® is the government-backed symbol for energy efficiency, providing simple, credible, and unbiased information that consumers and businesses rely on to make well-informed decisions. Thousands of industrial, commercial, utility, state, and local organizations—including nearly 40% of the Fortune 500®—partner with the U.S. Environmental Protection Agency (EPA) to deliver cost-saving energy efficiency solutions that protect the climate while improving air quality and protecting public health. Americans purchased more than 300 million ENERGY STAR certified products in 2019 and more than 300 million ENERGY STAR certified light bulbs, with a market value of more than \$100 billion. [ENERGY STAR Ask the Experts | Products | ENERGY STAR](#)

24. **LiDAR - Lighting the Path from IoT to AoT (Autonomy of Things)** - IoT or the Internet of Things has been widely deployed in the past decade as sensors became smarter, machine learning proliferated and advanced, access to WiFi, Bluetooth and other wireless communications became prevalent, and cloud storage and computing technologies matured. In general, IoT achieved intelligent networking of "things" that were typically static or stationary, through movement of data. The ongoing and imminent revolution is in the Autonomy of Things or AoT - which for purposes of this article is defined as autonomous movement of "things" or robots, either in public (mostly uncontrolled), semi-public (somewhat controlled, includes outer space) or private (highly controlled) spaces. The most publicized examples of AoT are autonomous vehicles and trucks (AVs), and the role and necessity of LiDAR for enabling this application in public spaces. The focus of the current article is to examine how LiDAR impacts AoT in other applications like construction, logistics, mining, manufacturing, agriculture, medicine and gaming. [LiDAR - Lighting The Path From IoT To AoT \(Autonomy Of Things\) \(forbes.com\)](#)

25. **Electrical Contractor July 2021 Issue** - This week's e-newsletter features some of the innovative and useful products seen in the July issue of ELECTRICAL CONTRACTOR. This issue includes a focus on Lamps, Ballasts and Drivers, and a "Cool Tools" article focused on portable power. [July 2021 | Electrical Contractor Magazine \(ecmag.com\)](#)

26. **Win-Win Outdoor Lighting for People and Environment** - The Design Lights Consortium (DLC) is working on standards and specifications for outdoor lighting that both protects the night sky and saves electricity. Against this multi-layered backdrop, the DLC recently released the initial draft of new solid-state (i.e., LED) lighting specifications for stakeholder comment. The specification builds on DLC's energy efficiency, quality and controllability thresholds to identify and promote outdoor lighting that is both energy efficient and shields the night sky from light pollution. Once implemented, these new product specifications will allow cities and towns, commercial energy efficiency programs, facility managers, lighting specifiers, and others to easily identify and select outdoor lighting products designed to maximize energy savings while mitigating three main categories of light pollution: Sky Glow – Light Trespass – Short Wavelength. Expected to go through a second comment round before taking effect late this year. [Win-Win Outdoor Lighting for People and Environment - Facilities Management Insights \(facilitiesnet.com\)](#)

27. **Energy Department Releases Spawn of EnergyPlus** - Control of HVAC, lighting, and other building systems plays a significant role in building energy performance. Advanced control algorithms have been shown to reduce annual energy use by over 30%. Spawn-of-EnergyPlus (Spawn) is a next-generation engine intended to bridge the worlds of BEM and control workflows. The intent is for Spawn and EnergyPlus to live side-by-side, with the OpenStudio software development kit providing access to both and, to the extent possible, insulating users and client vendors from implementation differences. Spawn reuses the EnergyPlus modules for lighting, building envelope, and loads but re-implements the HVAC and controls modules in the equation-based modeling language [Modelica](#). [Spawn-of-EnergyPlus \(Spawn\) | Department of Energy](#)

28. **EC&M eBook: Lighting the Way Toward a Cleaner Future** - With the COVID-19 pandemic came research and development (and ultimately deployment) of technologies designed to fight the SARS-CoV-2 virus and keep people safe and healthy in the environments where they live, work, and play. While not new, one such technology is germicidal ultraviolet (UV) disinfection. This EC&M eBook will help you understand the ins and outs of germicidal UV disinfection technology. [Ebook: Lighting the Way Toward a Cleaner Future | EC&M \(ecmweb.com\)](#)

29. **GE Current, a Daintree company, Introduces New Daintree® Controls Software for Better Building Management** - Built to meet the needs of today and tomorrow, this web-based application empowers users to monitor, troubleshoot and report on the energy performance of indoor, outdoor and industrial spaces from a single application. DCS is built on Current's three pillars of building management: It is simple, scalable and flexible. Whether they are managing a single unit or a vast portfolio of spaces, building managers can adjust scheduling or lighting parameters based on hours of operation, seasonality, evolving energy codes or business energy requirements. With real-time visibility of what's happening in specific zones, an entire building or a network of buildings, those same managers can identify issues when they arise, preventing costly oversights. [Daintree Controls Software | Current \(gecurrent.com\)](#)

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## Global LED Energy Market Observer:

30. **TrendForce 2020-2021 Global Automotive LED Product Trend** - According to TrendForce, the automotive LED market demand steadily increase by advanced technologies, such as intelligent headlamp, central tunnel taillights, HDR automotive display, ambient light, etc. TrendForce analyze automotive LED market development by five directions, including automotive lighting and display product trend, automotive lamp player revenue and development strategies, LED player revenue performance and product price, in order to provide readers with a comprehensive understanding of automotive LED market trend. According to TrendForce Analysis the automotive LED player revenue ranking of 2020, OSRAM Opto Semiconductors, Nichia, and Lumileds remained the top three largest automotive LED suppliers, respectively, with a combined market share of 71%. OSRAM has accounted for 34.8% of global automotive LED market share in 2020. <https://www.ledinside.com/node/32076>

31. **LightingEurope Advocates for All Building Renovations to Include an Upgrade of Lighting Installations** - With its Renovation Wave Initiative (RWI), the European Union (EU) intends to at least double the rate of building renovations in Europe over the next 10 years. LightingEurope sees the revision of the Energy Performance of Buildings Directive (EPBD) as an excellent opportunity to accelerate the uptake of innovative, LED-based intelligent lighting systems. Lighting accounts for around 20 % of the total cost-effective electrical energy savings potential in non-residential buildings. LightingEurope also recommends adding lighting inspection requirements to the EPBD. Important inspection parameters and questions include how the building space is being utilised, whether the lighting system and application are still suitable (i.e., whether the light levels are sufficient to provide good quality lighting), and whether the controls are still optimised for the way the space is used. <https://www.led-professional.com/>

32. **LG Innotek Sells 114 Korean LED Patents to Chinese Firm Suzhou LEKIN Semiconductor** - The deal follows that of LG InnoTek's selling of its 1,968 patents in the US related to LED to the same Chinese company. In total, LG has handed over 1,977 US patents to LEKIN. Last year in October, LG InnoTek has made it official that it plans to exit the LED business. The company had already decided a year prior to that that it plans to end the business. However, the pandemic has caused selling of related assets to be delayed. LG InnoTek is however planning to continue parts of the LED business for automobile lighting. [LG InnoTek sells 114 Korean LED patents to Chinese firm - LEDinside](#)

33. **Tons Lightology Sees Brisk Orders from Europe** - LED lighting maker Tons Lightology has disclosed order visibility from Europe has extended to over three months. However, Tons said shipments may be delayed due to transportation issues, which could increase Tons' inventory level. As Europe is a major market, Tons has developed indoor LED lighting products for DIY retail sales and outdoor LED lighting for the non-retail segment. For own-brand shipments, Tons focuses on the China and Taiwan markets. While demand in Taiwan has rebounded since first-quarter 2021, the China market remains weak currently but will rebound in second-half 2021, it said. LED penetration of lighting in the global market is forecast to keep rising from about 50% at present to over 70% in 2025, according to industry sources. [Tons Lightology sees brisk orders from Europe \(digitimes.com\)](#)

34. **NICHIA Introduces High-Power 1800K LED as Industry's Only True Alternative to HPS Lamps** - NICHIA announces its 219F series of high-power LEDs, uniquely positioned as a true alternative to HPS. Global efforts to phase-out the use of HPS continue to be met with a resistance to using white LED replacements. Due to this lack of a viable and sustainable alternative, HPS have remained exempt from the list of banned products under the Minamata Convention on Mercury, meaning HPS remains ubiquitous. With the introduction of the 219F, NICHIA becomes the first LED manufacturer to provide that alternative. NVSW219F eradicates mercury but increases efficiency and lifetime, with a low (1800K) correlated color temperature output that works with HPS to retain the element of 'nostalgic landscape' lighting, making it a true alternative. <https://www.led-professional.com/>

35. **YUJILEDS Introduces AP Series Full-Spectrum LEDs** - Full-spectrum technology enters a new era. YUJILEDS releases the AP Series full spectrum LEDs powered by the company's advanced phosphor and packaging technologies. The new product features an ultra-homogeneous spectrum achieving the closest match with the spectrum of natural sunlight in the industry. This full-spectrum technology is a significant development in LED lighting as YUJILEDS focuses on high-performance, value-added LED technologies and solutions. <https://www.led-professional.com/>

36. **Use of UV-C LED Disinfection in Home Appliances Rising** - Samsung Electronics, LG Electronics, Haier, Hisense and other vendors have adopted UV-C LED disinfection for air conditioners, refrigerators, laundry machines and air purifiers to add value to these products for higher sales prices. According to TrendForce, the global market value for UV-A, -B, -C together will keep growing to US\$2.396 billion in 2025 at a CAGR of 51% during 2020-2025. [Use of UV-C LED disinfection in home appliances rising \(digitimes.com\)](#)

**37. TALQ OpenAPI Specification Protocol Goes Public** - After nine years developing its software protocol to enable interoperability of smart street lighting systems and other smart city applications from multiple vendors, the TALQ Consortium announced it is sharing with the smart city community the detail of the TALQ OpenAPI Specification in the public domain. The TALQ protocol (both the data model and API definitions) can now be found openly and free-of-charge on GitHub <https://github.com/> This provides cities and other municipal authorities, commentators, consultants and potential members with the opportunity to view the details of the specification and to understand the advantages it brings. <https://www.talq-consortium.org/2-why-talq/specification/>

**38. Premium Lighting Redefined** – ams OSRAM Presents New Quantum Dot LED - Quantum Dots (QDs) are special semiconductor particles that emit light in different wavelengths depending on their size when blue light hits them. Their unique properties allow very precise adjustment of the desired color temperature and outstanding efficiency values in the warm white color spectrum. Manufacturers such as ams OSRAM have dedicated themselves to developing LEDs that meet this requirement. The Osconiq E 2835 CRI90 (QD) pushes efficiency values to new heights, even at very high color rendering indices and warm light colors. The special 2835 package offers further system benefits for luminaire manufacturers. [Premium Lighting Redefined – ams OSRAM Presents New Quantum Dot LED - LEDinside](#)



**Monthly Feature:**

U.S. Regular Gasoline Prices (dollars per gallon ) [full history XLS](#) - Clearly we are seeing signs of inflation across many sectors of our economy. Many electrical and lighting manufacturers have announced price increases two, even three times already this year. Here is a familiar quote: Due to increasing cost pressures felt throughout the global supply chain, many businesses, industries, and suppliers continue to feel the impact of shortages, logistics capacity issues (ocean, rail, air and truck), and significant cost pressure on electronics, steel, copper, aluminum, oil, plastics and transportation...YES, transportation. The cost of transportation affects everything, so the cost of gasoline is worth watching. California is at 4.165 a gallon. The Feds say inflation / stagflation is transitory....let's hope they are right. [Gasoline and Diesel Fuel Update – U.S. Energy Information Administration \(EIA\)](#)

				Change from	
	06/28/21	07/05/21	07/12/21	week ago	year ago
U.S.	3.091	3.122	3.133	0.011	0.938
East Coast	2.978	3.008	3.013	0.005	0.901
New England	3.011	3.039	3.050	0.011	0.936
Central Atlantic	3.111	3.133	3.143	0.010	0.891
Lower Atlantic	2.887	2.924	2.924	0.000	0.901
Midwest	2.990	3.026	3.023	-0.003	0.898
Gulf Coast	2.776	2.796	2.826	0.030	0.956
Rocky Mt	3.356	3.434	3.486	0.052	1.160
West Coast	3.811	3.842	3.867	0.025	1.067
WC less CA	3.445	3.495	3.521	0.026	0.987

What we pay for in a gallon of: Regular Gasoline - May 2021 Retail Price: \$2.99/gallon

- 16% Taxes
- 14% Distribution & Marketing
- 19% Refining
- 52% Crude Oil

[Brent crude oil price forecast to average \\$72 per barrel in the second half of 2021](#)