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

https://bestlight.amerlux.com/solace/

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 2¼ inches recessed depth (downlight and wall wash) and a recessed adjustable with recessed depth of just under 39/16 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. Read more about Solace in the latest press release. When Coming Up Short Is the Perfect Option. 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.

Features:

- · 3-inch aperture with round and square cast aperture trim
- Field interchangeable feature optics
- · Lensed wall washers
- Recessed adjustables with 40-degree lockable tilt and 360-degree rotation
- More than 1600 lumens
- · New construction, airtight IC and Chicago plenum applications

View our Solace Downlight Family.

LED Energy Market Observer:

1. **Register Now: LEDucation Virtual Conference & Online Marketplace** - The March 16-17, 2021 LEDucation Virtual Conference will take place virtually and offers a variety of accredited webinars covering lighting design, controls, sustainability, and health topics. The 2021 Online Marketplace opens March 16th with advanced NEW Features to enhance the showroom experience for buyers and connect with sales representatives in real time. And in case you need more time, the Marketplace will be available throughout the year until the last day of the in-person Trade Show and Conference to be held later in 2021. LEDucation





2. **LEDucation Virtual Conference and Online Marketplace** - <u>LEDucation</u> March 16 & 17, 2021. (Save the dates for the inperson show on August 17 & 18, 2021)

Lighting Design Highlights:

- Specifying Lighting for Residential Projects, Stephen Bernstein, Principal, Cline Bettridge Bernstein Lighting Design, Tuesday, March 16, 2021 | 10:30am –11:30am EST
- Transforming the Oculus, Bernie Erickson, Executive Vice President, Facility Solutions Group, Inc., Tuesday, March 16, 2021 | 12:00pm 1:00pm EST

3. **Super Bowl LV to Feature ChromaBeams Technology** - Raymond James Stadium is a 65,000-seat stadium that is home to the Tampa Bay Buccaneers and will be hosting Super Bowl LV in 2021. The Tampa Sports Authority and Austin-based technology company Sportsbeams Lighting, Inc. have partnered to provide more than 700 of their Chromabeams LED 900 fixtures at Raymond James Stadium. Chromabeams are the new standard for what sports lighting is capable of, using patented technology that keeps the fixture cool and allows the addition of double the number of LEDs in a regular light while delivering the least glare of any sports fixture available. Housed in full aluminum die-cast body and single-optic tempered glass lens, these are one of the only lights in the entire industry that do not have any plastic in the light path or its housing. Not only that, but the Chromabeams LED 900 also has three levels of active and passive cooling and can deliver up to 85,000 lumens per fixture with intelligent power supply management and controls. <u>Raymond James Stadium | Sportsbeams Lighting, Inc. 2/3 /PRNewswire/</u>

4. **DMX Control for 4,500 Lights at Mammoth Ballroom** - The Caesars Forum conference center on the Las Vegas strip spans a mammoth 550,000 square feet and features 300,000 square feet of flexible meeting space. As part of the cutting-edge technology integrated into the new event space, Caesars Forum is home to one of the largest single installations of DMX controlled tuneable white lights. The Creston building control system installed and commissioned by NTA and Pulse features over 4,500 DMX lighting fixtures from Spectrum Lighting, Moda Light and Signify, with every fixture capable of being individually controlled. This has been made possible by dividing the facility's lighting needs into seven core Pharos DMX systems commanded by the main Crestron control system. DMX control for 4,500 lights at mammoth ballroom - Lux Review



5. **COMMENTARY: SSL Sector Needs to Rebalance Uptake with Innovation** - The sustainability promise of LEDs is in danger of failing due to over-lighting, notes DAVID ELLINGSEN. Will the SSL industry find ways to innovate before saturation and regulation stifle its success? A combination of government policies, steady improvements in light quality, and, above all, their undeniable energy efficiency has seen LEDs take over the lighting industry. At first glance, there doesn't seem to be a downside to LEDification. But is it possible that even as LEDs become more prevalent in the built environment, their use has over-saturated? Perhaps the efficiency gains from LEDs are being pulled back by the infamous Jevon's Paradox or the rebound effect, which holds that reducing the cost of energy leads to increased consumption. It's important to question this, and determine how best to leverage LED lighting capabilities without detriment to future market potential and causing unintended environmental consequences. <u>COMMENTARY: SSL sector needs to rebalance uptake with innovation | LEDs Magazine</u>

6. **NLB Releases Virtual Panel on UV Lighting** - The National Lighting Bureau (NLB) recently released a video panel discussion on ultraviolet (UV) light and its recent boom in popularity as part of its NLB Annual Lighting Forum. Moderated by Executive Director Randy Reid, the panel featured Jim Colantoni, Puro Lighting; Kevin Matthews, Signify; and Robert Soler, BIOS Lighting. The panel started off with specifying the difference between UV-A, UV-B and UV-C. UV-C is where there are the most germicidal effects, the leading reason why UV lighting has become so popular. The risks and danger of utilizing UV-C is discussed in detail amongst the experts as the proper design and use of UV light is vital in order for it to be a good disinfectant solution. Watch the video: 2020 The Year of Artificial Sunlight UV - YouTube



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7. DOE Integrated Lighting Campaign Looking for Great Projects to Recognize - The U.S. Department of Energy's Integrated Lighting Campaign is looking for excellent projects to recognize as exemplary examples of building systems integration. The deadline for submissions is March 15, 2021. Recognition Categories: Integrated Lighting Campaign Looking for Great Projects to Recognize (lightingcontrolsassociation.org)

- Advanced Use of Sensors and Controls for Lighting
- Integrated Controls for Plug Loads and Lighting Systems
- Integrated Controls for HVAC and Lighting Systems
- Other Integrated Systems and Lighting
- Supporter Recognition

8. Registration Is Now Open for Strategies in Light - Strategies in Light connects technology, lighting, and the built environ-

ment, providing a unique 360-degree platform for information exchange, collaboration and networking. Begin Registration: <u>Strategies in Light 2021</u>

- 60+ industry thought leaders speaking on the latest hot topics
- Topics ranging from emerging technologies, design and development, manufacturing, applications, operations and more
- Pre-conference workshops designed to provide in-depth insights into cutting-edge topics
- Keynote sessions
- 100+ Exhibitors showcasing the latest in products, technologies and services
- Networking events designed to turn initial introductions into long-term
 business relationships
- The annual Sapphire Awards recognizing the best of the best in innovation, technology and design.

9. **Mount Sinai Health System Launches Center for Light and Health Research** - The Icahn School of Medicine at Mount Sinai has launched a new center for research into light's impact on health. The Mount Sinai Center for Light and Health Research in the Department of Population Health Science and Policy will expand on Mount Sinai's research into light's influence on mental and physical health, including burgeoning areas such as ultraviolet technology disinfection. The clinical research conducted through the Center will investigate how to use light to improve people's lives by stabilizing their circadian rhythms, the natural internal clock that regulates the body's sleep-wake cycle. Researchers will study how light, either from daylight or electric indoor light, affects circadian rhythms in various populations, from the very young to the very old, including patients with COVID-19, cancer, Alzheimer's disease, depression, and other illnesses. The goal is to help abate symptoms and improve their sleep, mental health, and cognition. Mariana Figueiro, PhD, has been recruited from Rensselaer Polytechnic Institute (RPI) to create and serve as Director of the Center. <u>Mount Sinai Health System Launches Center for Light and Health Research - EdisonReport</u>

10. Are More Stringent Lighting Codes Adversely Affecting Building Security? by Sean Ahrens and Ferdinand Martija -

The evolution of energy codes over the past two decades has challenged engineers, architects, and lighting designers to reconsider traditional mindsets and technologies regarding lighting and lighting controls. Recently, lighting designs have centered on innovative approaches necessary to comply with increasingly stringent energy code requirements. If improperly planned, meeting new requirements of energy codes for lighting and lighting controls may have a detrimental effect on premise security. The primary goal of energy codes is to reduce building energy, and one of the biggest energy consumers is lighting wattage. Lighting and lighting control design addresses the requirements to meet energy codes while also addressing the concerns of security focused stakeholders. To achieve satisfaction of these twin pillars, it is critical to understand the evolution of energy codes, and the nuances of lighting and lighting control technology. Are More Stringent Lighting Codes Adversely Affecting Building Security? - Facilities Management Insights (facilitiesnet.com)





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11. **LIGHTFAIR Now Accepting Submissions for 2021 LIGHTFAIR Innovation Awards** - LIGHTFAIR exhibitors are invited to submit their most innovative new products for the 32nd annual LightFair Innovation Awards. Winners in 14 categories and the "Best of Category," the "Technical Award," the "Design Excellence Award" and the "Most Innovative Product of the Year" will be announced at LightFair 2021, October 27-29, 2021 in New York. Interested LightFair exhibitors can submit new products launched between the previously scheduled LightFair 2020 (May 7, 2020) and LightFair 2021. Submissions must be received by March 12, 2021 at: LightFair Innovation Award Submissions | LightFair Commercial Lighting Tradeshow

12. Submit Your Project for The Design Excellence in Networked Lighting Control Award - The Lighting Controls Association is sponsoring a series of design awards produced by the Strategies in Light conference and LEDs Magazine, which has expanded its popular SAPPHIRE Awards focusing on LED products to now include design projects. Submit your project by March 1 for an early bird discount and by April 1 to be considered. Winning projects will be published in LEDs Magazine, EC&M, ELECTRI-CAL WHOLESALING, and the Lighting Controls Association's website. <u>Click here</u> to learn more and submit a project.

13. Lighting Controls Association Announces Update to Dimming Course - The Lighting Controls Association (LCA) has updated EE103: Dimming Controls, Section 1 Part 2: Dimming Controls and Systems, a popular learning module in its Education Express program. Authored by Steve Mesh and Craig DiLouie, this learning module describes equipment used for dimming in commercial buildings, starting with simple wallbox dimmers and working up to more complex systems. The new and improved course recognizes major changes in dimming systems resulting from technological advances including the widespread adoption of LED lighting. Education Express I (aboutlightingcontrols.org)

14. **NEEA Study Reveals Cost Adder of Clever and Smart Connected SSL** - The Northwest Energy Efficiency Alliance (NEEA) recently released research conducted by Energy Solutions that examined the true cost of adding connectivity and controls to an LED-based luminaire at the individual luminaire level. The report entitled "2020 Luminaire Level Lighting Controls Incremental Cost Study" was based on input from 16 solid-state lighting (SSL) manufacturers or representatives focused on clever or smart lighting in 19 typical project scenarios. The cost adder can vary \$50-\$100 per fixture based on the level of intelligence in a product, but that premium has dropped 15–30% relative to research conducted four years ago. Northwest Energy Efficiency Alliance (NEEA) | 2020 Luminaire Level...

15. **DLC Seeks Method for Quantifying the Financial Value of Building Controls** - The DesignLights Consortium (DLC) this week issued a Request for Proposals (RFP) seeking consultant services to develop a method for quantifying the financial value of non-energy benefits of advanced building controls. The deadline for RFP responses is March 1 and the DLC expects to award a contract for the work by March 12. The DLC envisions that energy efficiency (EE) programs would incorporate the methodology resulting from this project into their incentive program evaluation methods. The DLC plans to promote the methodology to its member organizations (electric utilities and EE programs across the US) and to facility owners and managers to encourage investment in advanced controls. Complete details of the proposed study, its scope, timelines and RFP response requirements are on the DLC website. The DLC will accept questions on the RFP via email to dpaton@designlights.org

16. **2021 Lighting R&D Workshop Presentations Posted** - Thanks to all who participated in the 18th Annual U.S. Department of Energy Lighting R&D Workshop, co-sponsored by the Illuminating Engineering Society. From February 1-4, 2021, top lighting scientists and industry leaders shared progress, challenges, ideas, and solutions to shape the future of lighting. The virtual format allowed for a wider cross-section of participants, and the gathering of nearly 900 workshop attendees reflected a depth of knowledge and expertise that resulted in dynamic discussions, fresh perspectives, and valuable input. Visit the DOE website to view the <u>workshop presentations</u>.



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17. **4 Crucial Lighting Design Considerations for a Post-COVID World by Avraham Mor** - While the widespread shutdowns that have accompanied the current pandemic have changed our thinking about what offices should be and will be in the post-pandemic future, throwing widespread uncertainty over the design of offices, several overarching areas of focus have emerged — and each is impacted by lighting. Creating a healthier, more inclusive and smarter workplace has never been easier — and lighting design has a big role to play in pointing the way. <u>4 Crucial Lighting Design Considerations for a post-COVID world - Facilities Management Insights (facilitiesnet.com)</u>

- 1. Versatility
- 2. Individual Choice
- 3. Health and Wellness
- 4. Safety

18. **Apple in Talks to Buy Self-Driving Sensors, Key Step in Car Plan** - Apple Inc. is in discussions with multiple suppliers of self-driving car sensors known as lidar, according to people familiar with the matter, a key milestone toward development of its first passenger vehicle. The Cupertino, California-based technology giant is in active talks with a number of potential suppliers for these laser-based sensors that allow a car's computer to "see" its surroundings, said the people, who asked not to be identified due to the private nature of the discussions. The company has been working on a driverless vehicle project for several years and has developed on its own most of the necessary software, underlying processors and artificial intelligence algorithms needed for such a sophisticated system. Apple in Talks to Buy Self-Driving Sensors, Key Step in Car Plan - LEDinside

Global LED Energy Market Observer:

19. **2021 Global LED Lighting Market Outlook and Opportunities vs. Challenges Analysis** - According to the latest Trend-Force's report, the global LED lighting market is more optimistic than previous estimates, it is estimated with an opportunity to grow 5.1% in 2021. TrendForce estimates that it will reach US\$44.3 billion in 2025. In the short term, due to the rapid spread of COVID-19 around the world, the demand and consumption of LED lighting has been suppressed to some extent. In the medium and long term, there still exist uncertainties to each industry under the impact of pandemic. However, in order to alleviate the negative effects on economic growth, governments around the world take actions to spur economic by fiscal stimulus and monetary easing policies. It is expected to recover extensively. Thus, the lighting industry will benefit from government policies as downstream LED lighting demand is highly correlated with macroeconomic development. <u>https://www.ledinside.com/node/31818</u>

20. **Top 10 Companies in Smart Lighting Focus on Innovation** - The top 10 companies in the market occupied 52.26% of the market share in the global smart lighting market. Major players in the smart lighting system market include Schneider Electric SA, Cisco Systems Inc., Honeywell Inc., Signify Holding (Philips), and Eaton. The global smart lighting market reached a value of nearly \$11.06 billion in 2020, having increased at a compound annual growth rate (CAGR) of 12.1% since 2015. The market is expected to grow from \$11.06 billion in 2020 to \$22.57 billion in 2025 at a rate of 15.3%. The smart lighting market growth is then expected to be at a CAGR of 14.3% from 2025 and reach \$43.97 billion in 2030. The Business Research Company's report titled Smart Lighting Global Market Report 2021: COVID-19 Implications And Growth To 2030 covers major smart lighting companies, smart lighting market share by company, smart lighting manufacturers, smart lighting market size, and smart lighting market forecasts. The report also covers the global smart lighting market and its segments. <u>Global Smart Lighting Market Data And Industry Growth Analysis Sample (thebusinessresearch company.com)</u>

21. **IALD Signs Friendship Agreement with Norske Lydesignere** - The International Association of Lighting Designers (IALD) today announced a friendship agreement with the Norwegian lighting organization, Norske Lydesignere, based in Oslo, Norway. The two organizations will work together to jointly promote the interests of independent lighting designers and to raise awareness of the profession and further its development locally and internationally. <u>DOWNLOAD THE PRESS RELEASE AS A PDF</u>



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22. London River Project to Unveil Five More Bridges – This Spring, the lighting of an additional five bridges over the Thames in London in the Illuminated River artwork is set to create the world's longest public art commission. Blackfriars Road, Waterloo, Golden Jubilee, Westminster and Lambeth Bridges will be illuminated by New York-based artist Leo Villareal's display of slowly moving light sequences, joining the four bridges already lit in 2019. The project team says the ambitious scheme will be delivered on time and on budget. The installation is the result of a collaborative initiative bringing together US lighting designer Leo Villareal, UK architecture practice Lifschutz Davidson Sandilands, consulting engineers Atelier Ten, Signify and a further 17 specialist teams. London river project to unveil five more bridges - Lux Review

23. Hyundai Introduces Hidden Headlamp Concept - Its "Hidden Lighting Lamp" technology integrates light sources that

appear to be a chrome material when switched off and then become brilliantly illuminated when turned on. The metallic appearance was created by covering the lens with a thin layer of aluminum and drilling numerous tiny holes in it to allow light through. A great deal of effort was made to create a futuristic look by experimenting with lens angles, hole shapes and patterns, and analyzing light characteristics and quality. Other directions include using cameras to detect car headlamps and streetlights and automatically turns off the car's high beams; compact lensing; lights that welcome drivers to their vehicles; project images and text onto the road; and more. <u>The Story of Hidden Lighting Technology (hyundaimotorgroup.com)</u>



24. **Osram Opto Debuts Cost-Effective LED for Outdoor SSL Applications** - The CSP-like device borrows mid-power packaging technology but will enable high-power-like lumen packages and reliability for demanding outdoor applications. Osram Opto Semiconductors has announced a new high-power packaged LED family for outdoor applications that is cost optimized for outdoor luminaires where high flux output and high reliability are required. Osram calls the Osconiq C 2424 chip-scale package (CSP) LEDs, but in fact the devices utilize evolved mid-power package technology and high-power chips. Still, like CSP LEDs, the new Osram products can be densely packed in arrays to deliver uniform beam patterns. <u>Osram Opto debuts cost-effective LED for outdoor SSL applications | LEDs Magazine</u>

25. **Osram Starts Divesting Digital Lighting** - The long-anticipated dismantling of Osram's smart lighting operations appears to have begun, as outgoing CEO Olaf Berlien said the company is selling a portion of its Digital division and indicated that a broader sale could follow as Osram focuses increasingly on chip-level operations under new owner ams. The divestiture could eventually include Lightelligence, the once-ballyhooed centerpiece of Osram's fading Internet of Things (IoT) lighting initiative, which never quite seemed to find its legs and which has struggled even more with the pandemic-related downturn in the commercial office market. Whatever happens, though, Osram looks intent on retaining horticultural lighting, which Berlien described as being in good shape led by the profitable Fluence by Osram, based in Austin, TX. In addition to IoT and horticulture, Digital includes entertainment lighting and architectural lighting. <u>Osram starts divesting digital lighting I LEDs Magazine</u>

26. **Osram Invests in UV LED Specialist Bolb Inc.** - With its investment in the California-based UV-C LED specialist Bolb Inc., Osram is further expanding its technological know-how of disinfection applications with UV-C light. The future cooperation between the two companies in the field of research will accelerate the industrialization of highly efficient and high-performance UV-C LEDs. Unlike previous solutions, LED-based disinfection systems require very little space and can be installed directly at the point of use – such as in water taps, washing machines or ventilation systems. Space-saving disinfection solutions make an important contribution to combating the coronavirus. According to Allied Market Research, the market for UV disinfection solutions is currently worth around one billion euros. This figure is expected to quadruple by 2027. Market researchers also expect the share of UV-C LED solutions to grow steadily. <u>OSRAM Americas I OSRAM SYLVANIA Homepage</u>



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27. Seoul Viosys Begins Mass Production of 25Gbps VCSELs for 5G Communication Applications - VCSEL is a laser diode technology that converts electrical signals into optical signals. It has recently attracted attention as a light-based communication technology that achieves ultra-high-speed data communication in 5G environments. This technology is necessary for AR/VR, 3D sensing and the camera-applied ToF (Time of Flight) for smartphones, and automotive LiDAR. Seoul Viosys' VCSELs for sensor applications have already received customers' approval and will be mass-produced within the first quarter of 2021, and the LiDAR technology is also undergoing the approval process to be supplied to an automotive system solution provider. According to the Yolé Developpement, a leading compound semiconductor research firm, the global VCSEL market is expected to grow 18.4% annually from \$1.1B in 2020 to \$2.7B in 2025. https://www.ledinside.com/node/31810

Monthly Feature:

NEMA 2021 Electrical Standards and Products Guide Now Available - The National Electrical Manufacturers Association (NEMA) published the 2021 Electrical Standards & Products Guide (ESPG), a comprehensive guide that includes nearly 800 NEMA publications for electrical and medical imaging industries, as well as product categories and NEMA Member manufacturers of those products.

The 2021 ESPG now includes nearly 800 documents from the NEMA technical library, as well as 60 new original documents that were published in 2020. ESPG is used by buyers, specifiers, contractors, and distributors. In addition to listing all NEMA publications, ESPG provides sales contact information, by product type, for hundreds of electrical manufacturers. "NEMA has a long history of publishing electrical product Standards that are relied upon by specifiers, installers, and end-use customers throughout the industry," said Christel Hunter, chair of the NEMA Codes & Standards Committee, and vice president of engineering at Cerrowire.



"The latest version of ESPG provides an updated resource for accessing valuable NEMA Standards, product information, and manufacturers. This is a key resource for electrical industry

information. "NEMA Standards are used by military, government, and private buyers who work in architecture, construction, lighting, medical imaging, motors, industrial controls, electric power transmission and distribution, transportation, and other industries that specify and use electrical equipment. NEMA Members always receive a 20 percent discount on Standards.

ESPG is the guide to electrical products and is read by buyers, specifiers, contractors, and distributors—your client base. Each year, ESPG lists all NEMA Standards and other publications, as well as sales contact information, by product type, for hundreds of electrical manufacturers.

Electrical Standards & Products Guide (ESPG) (nema.org)

To reach this market in next year's guide, please contact Heather Macaluso from The YGS Group at 717.430.2224 or heather.macaluso@theygsgroup.com.

Download | 2021 Electrical Standards & Products Guide

