

Meet the New Amerlux Linear Game Changer

Quick-Line Linea® 1.5

Quick-Line is designed for extremely easy installation and beautiful ambient lighting. Quick-Line is a game-changing linear LED fixture designed for extremely easy installation and beautiful ambient lighting for indoor commercial space applications, such as general and private offices, conference centers, classrooms, retail spaces and corridors. Quick-Line Linea 1.5" delivers your design scenario seamlessly and on time, every time. Streamlined and flexible, these architectural LED pendants provide the freedom to create truly dynamic spaces in a fraction of the time. The QuickLine family delivers on its promises by the power of disciplined design.

- Product Overview Type:
- Direct/Indirect Power Level:
- Low Power 8W/ft
- High Power 14W/ft Max Lumen Output:
- 6,477 Lm; 1,619 Lm/ft (14W fixture) Color Temp:
- 3000K, 3500K CRI: 83 typ.
- Lens/Distribution: Performance Lens (Direct), Batwing (Indirect)
- Dimming: 0-10V, 1% dimming

<http://www.amerlux.com/>



LED Energy Market Observer:

1. **Where Are the Best Areas for Lighting Rebates?** - Customers with multiple locations, nationwide distributors and contractors all want to focus on those regions with the highest rebates. Unfortunately, it's not an easy question to answer because rebates can vary so much. While there's no clear-cut answer, BriteSwitch can provide some guidance.

- The 3 States with the Highest Populations Have the Worst Rebates
- Generous Northeastern Rebates but With a Catch
- Midwest & Northwest Offer Strong Incentives but Many Variations
- Areas Where Funding Goes Quicker Than Anticipated
- The Type of Product Makes a Big Difference

BriteSwitch's North American Rebate and Incentive Database captures all the factors mentioned above so that you can maximize your rebates dollars. <http://www.briteswitch.com/news/bestrebateareas.html>

2. **IES Lighting Ready Reference App** - The IES Ready Reference App, produced by the Illuminating Engineering Society is now available as a free download. The IES App is compatible with any Android or iOS smart phone or tablet. The App provides:

- Core lighting knowledge, including values from illuminance tables
- General knowledge information, assembled from The Lighting Handbook, 10th Edition and IES standards
- Simple calculator for quick and easy basic lighting and energy and economic calculations
- Search feature allowing you to find the information you want

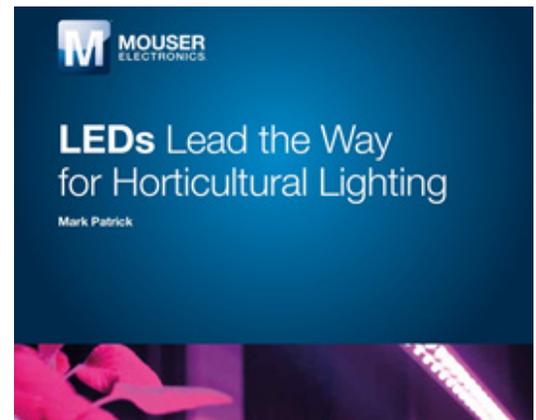
<https://www.ies.org/education/ies-lighting-ready-reference-app/>

3. **2018 ENERGY STAR Products Partner Meeting Presentations** - The 2018 ENERGY STAR Products Partner Meeting for Appliances, Electronics, HVAC, Lighting, Smart Thermostats and Water Heaters was held Wednesday, September 5 – Friday, September 7, 2018, at the Sheraton Grand Phoenix in Phoenix, AZ. The 2018 ESPPM Agenda (PDF, 9.3 MB) and agenda companion (PDF, 700 KB) provide details on the topics covered. For access to all of this year's presentations; <https://www.energystar.gov/2018ESPPMPresentations>

4. **Are Smart Cities the Future of Humanity? by Anna Kucirkova** - Digital technology has provided society with hundreds of advances that make life easier and better for everyone. From the personal computer to the internet to the smartphone to the Internet of Things, we are increasingly living in a technologically driven world. But what if those technologies were bound together and used to build a Smart City? What would it take to make such a complex network feasible? And what would it look like to live in a such a city? Are these just the fevered imaginings of science fiction writers or could it be a real possibility? Let's dig a little deeper. It seems that smart cities are fast approaching. As society's technologies become intertwined and upgraded, the options for deploying new systems is unlimited. And while there are certainly drawbacks in creating and maintaining a smart city, it is clear that humankind is looking forward to the next step in societal evolution. <https://www.iqsdirectory.com/resources/are-smart-cities-the-future-of-humanity/>

5. **WHITE PAPER - LEDs Lead the Way for Horticultural Lighting by Mouser Electronics** - Horticultural lighting is one of the fastest growing markets in the LED lighting industry today. Currently estimated at being worth \$690 million dollars annually by LEDInside, this figure is projected to reach billions in the coming years. Download this white paper and learn: <https://www.led-professional.com/>

- The need for horticultural lighting
- Changes to the fundamental technology
- Lighting for Greenhouses
- Lighting for Vertical Farming
- Illuminating the future of food



6. **Michigan State Controlled Environment Lighting Laboratory Explores LEDs for Horticulture** - The Controlled Environment Lighting Laboratory (CELL) at Michigan State University (MSU) has a horticultural lighting system installed across multiple growing areas that is arguably the most complex and capable such solid-state lighting (SSL) system in the world. Osram Innovations and Osram Opto Semiconductors partnered to develop the enhanced version of the Osram Phytofy system, stretching the spectral flexibility with seven dedicated LED channels. The system equips the MSU horticultural department with broad flexibility to test light recipes and to experiment with changing the look and taste/smell of cultivars. The MSU system features five monochromatic channels including an ultraviolet (UV)-C-band channel. <https://www.ledsmagazine.com/> <https://www.youtube.com/watch?v=C6aVcpkYMMk>

7. **Growing Lettuce and Herbs with 100% Philips LED Grow Lights** - Great Lakes Growers in Burton, Ohio is now growing 100% of their lettuce and herbs under Philips LED toplighting. John Bonner, the owner of Great Lakes Growers began trialing LEDs in 2015 and after seeing the success in a small area, expanded the Philips LED toplighting installation in 2016 and again in 2017. www.philips.com/horti <https://www.youtube.com/watch?v=2PKqV7YGSLs>

8. **DLC Surveillance Testing Program** - The DLC Surveillance Testing Program monitors the validity of data submitted to the Solid-State Lighting QPL pre- and post-qualification. This performance verification system was created to protect the integrity and value of the QPL for all stakeholders. An updated version of the Surveillance Testing Policy was published and goes into effect September 10, 2018. <https://www.designlights.org/solid-state-lighting/policy-development/surveillance-testing/>

9. **ASHRAE Launches Online Standards Review Database** - ASHRAE has launched an updated and improved online standards review database that allows members and non-members access to public review drafts for standards, guidelines, and addenda and to submit comments. The new system offers a single sign in feature, keeping the user logged in if already logged into ashrae.org, and a new dashboard to easily access and highlight those items that require attention. The dashboard provides quick links to individual and committee comments, committee responses to comments, continuous maintenance proposals, and outstanding ballots. <https://www.ashrae.org/technical-resources/standards-and-guidelines/public-review-drafts>

10. **How Do Smart Lighting Systems Work for the Home?** - Any smart lighting system for the home should provide certain basics.

- The system should be capable of connecting to existing lighting.
- Control of the lighting system via a smartphone app should be intuitive for the user.
- It should be possible to schedule lighting to turn on or off automatically.
- Lighting should be controllable from inside and outside the premises by more than one person.
- The levels of control (individual, circuit or scene setting) should be easily understandable.
- Smart lighting should be affordable and secure.

Check out more evolved systems at: <http://luxreview.com/article/2018/09/how-do-smart-lighting-systems-work-for-the-home->

11. **Wegmans Features OLED Lighting Technology** - Rochester-based OLEDWorks LLC contributed its Organic Light Emitting Diode (OLED) lighting installations in select Wegmans stores and worksites, thereby enhancing the Wegmans experience. OLED lighting provides naturally diffused light with unrivaled light quality. OLED Works says OLED lighting produces an atmosphere that promotes well-being from healthy light without glare. For the Wegmans installations, Acuity Brands Lighting produces the Olessence OLED lighting fixtures in the vestibules of Pittsford and Henrietta stores. Wegmans has also remodeled certain areas of their Rochester headquarters with a focus on employee meeting and dining areas. Fixtures for these spaces include the Petal and Limit from Visa Lighting of Milwaukee and the Trilia from Acuity Brands Lighting. <http://www.solidstatelightingdesign.com/>

12. **Luminus Devices Announces New Horticultural COB LED Targeting Legal Cannabis** - Luminus Devices has announced its Horticultural COB portfolio — chip-on-board (COB) LEDs in two form factors and two spectra options. The initial products primarily target legal cannabis growing operations in indoor settings where the growing community has typically used high-pressure sodium (HPS) fixtures to illuminate relatively small square footprints that accommodate a number of plants. The COB LEDs will enable solid-state lighting (SSL) fixture designs that could operate in a configuration essentially identical to the HPS legacy lighting, topics such as cannabis and vegetable cultivation, LED light recipes, different growing configurations, SSL return on investment, and more will be the focus of our Horticultural Lighting Conference <http://horticulturelightingconference.com/usa/> scheduled for Oct. 9 in Portland, OR. <https://www.ledsmagazine.com/>

13. **Famous Gas Monkey Garage Chooses Dialight LED Lighting** - Gas Monkey Garage (GMG) is a Dallas, Texas, automotive garage known to TV viewers of the “Fast N’ Loud” reality style series for restoration and fabrication work on rare cars and unique hot rod creations. Inspired by the tremendous demand for its superior work, GMG recently began expanding its shop to make room for more builds and other efforts to support the Gas Monkey brand. Lighting is critical for GMG’s business that demands precision work, excellent aesthetics, and edgy design. GMG chose Dialight a maker of industrial LED lighting, to supply new LED fixtures for its workshop, new lounge area, merchandise warehouse, paint booth, and exterior. The brightness of the luminaires allowed GMG to use fewer fixtures while producing brighter light with more lumens throughout for a clearer and safer environment for the mechanics and technicians. <http://www.solidstatelightingdesign.com> Watch the video: https://www.youtube.com/watch?time_continue=3&v=OqD3_z812dQ

14. **The Synergy of Light in Life at LIGHTFAIR® International 2019** - The 30th-annual staging of LIGHTFAIR® International in Philadelphia next May will reveal the synergy of light in life with the newest solutions in lighting, connectivity, design and integration presented in a trade show and conference driven by innovation. LIGHTFAIR's 2019 return to the Pennsylvania Convention Center May 19 – 23 (Pre-Conference LIGHTFAIR Institute®: May 19 – 20; Trade Show & Conference: May 21 – 23) marks its third Philadelphia staging since 2011 with more than 500 exhibitors and 40 product categories filling the Center's six exhibit halls. The 2019 trade show floor—highlighted by the forward-looking IoT and Intelligent Lighting Pavilions—will be its largest yet, and the accompanying Conference program will feature dominant thought leaders from many sectors that will inform and inspire attendees with leading-edge knowledge. The global lighting, technology and design community will have the opportunity to connect with industry professionals from across the globe. <https://www.lightfair.com/>

15. **Capitalize on the Intersection of Commercial Lighting and IoT by Chuck Piccirillo, Osram Digital Systems** - Lighting is ubiquitous — it's in every space within a building. It is the perfect conduit for collecting information on what is happening in a building at any given time, because it is ideally located in the space and is connected to a power source. Sensors embedded in luminaires transform light points into data nodes on the lighting network, creating the enabling technology infrastructure for smart building applications and the IoT. As more emphasis is placed on connected spaces, an increasing number of use cases become possible. This opportunity spawns several questions. What is driving the adoption of smart lighting and IoT? What will the ecosystem look like that moves this market forward? What factors should be considered when choosing a networked lighting control system, and what are the first steps to get started? <https://www.ledsmagazine.com>

16. **Lighting the Way to a Cleaner, Healthier, Smarter Future by Christina Halfpenny, DLC** - According to the DOE most recent report on LED adoption in the US, a relative novelty less than ten years ago, LEDs now dominate the residential lighting market and are making steady progress in commercial and industrial applications — with commercial market penetration increasing from less than 1% in 2012 to just under 13% today. By 2035, the DOE predicts LED lamps and luminaires will constitute 86% of all lighting products in the US. Even as we look at the need to replace some first-generation LEDs, there are myriad businesses and institutions across the country that haven't yet adopted the technology at all. The industry has made much progress bringing high-performance lighting to market, but LED saturation in the commercial and industrial sector is still far off. At less than 13% market penetration, the commercial lighting market remains ripe with opportunity for energy savings — particularly in indoor lighting — and opportunities abound to incentivize greater adoption. <https://www.ledsmagazine.com>

17. **California Lighting Technology Center, UC Davis (CLTC) is Hiring** - Interested in working at a dynamic university research lab specializing in energy efficiency? Join us and actively participate as a team member with CLTC professors, professional researchers, engineers, and others working on energy-efficient lighting and daylighting research projects. We are looking for R&D Engineers. Interested in learning more? Apply here: https://www.employment.ucdavis.edu/applicants/jsp/shared/position/Job-Details_css.jsp

18. **The Light of Your Life: Building the Case for Circadian Lighting by Craig DiLouie** - As interest in circadian lighting grows, the lighting industry is developing metrics and products while validating approaches. This article provides a refresher on circadian lighting and focuses on three recent studies pointing to potential benefits.

- 1) Healthcare project - In August 2017, the U.S. Department of Energy (DOE) published a Gateway evaluation of a circadian lighting project at a hospital. The report documents the strategy and resulting circadian stimulus (CS) measurements.
- 2) Office study - The Lighting Research Center (LRC) at Rensselaer Polytechnic Institute in Troy, N.Y., recently published the results of a major study demonstrating that office workers receiving high levels of circadian-effective light can experience better sleep and lower levels of depression and stress.
- 3) Circadian task lighting study - In response to the GSA study findings, the LRC theorized supplemental task lighting could be used to ensure office workers receive enough CS during the day.

<https://www.ecmag.com/section/lighting/light-your-life-building-case-circadian-lighting>

19. **Cree Launches Industry's Highest Efficacy 90 CRI Chip-on-Board LEDs** - Cree, Inc. announces the XLamp® eTone™ LEDs, a breakthrough set of chip-on-board (COB) LEDs that delivers beautiful 90 color rendering index (CRI) light quality at the same efficacy as today's standard 80 CRI LEDs. Delivering up to 155 lumens per watt (LPW) at 3000K CCT, 85°C, Cree's new eTone COB LEDs provide the highest efficacy available in the industry compared to competing COB LEDs of the same size and color. The enhanced performance of these new LEDs can radically transform the output, efficacy and size of LED luminaires in applications that need high quality light, including retail, museum, high-end commercial and medical. <https://finance.yahoo.com/news/cree-launches-industry-highest-efficacy-130000294.html>

20. **Lighting Science Introduces Air Sanitizing Luminaire** - Lighting Science of West Warwick, RI, launched a new LED luminaire that is said to reduce the airborne pathogens responsible for numerous illnesses. According to Lighting Science, the easy-to-install Cleanse™ is an air-sanitizing luminaire that decreases the levels of airborne particles, including microorganisms. Such health concerns are widely felt in healthcare, schools, gymnasiums and a multitude of public spaces. Cleanse uses an efficient, multi-stage, air circulation and sanitation system. Activated carbon and HEPA filters capture particulates, and UV LEDs (A+C) further clean and deodorize the air. The company says that the process achieves a greater than 99.9% elimination rate among the most common airborne pathogens. Lighting Science says that this elimination results in reduced contamination, less illness, and a lower risk of infection, particularly for immuno-compromised individuals. <http://www.solidstatelightingdesign.com/lighting-science-introduces-air-sanitizing-luminaire/>

21. **Lumecon Introduces Detroit Series of LED Lights for Municipal and Commercial Applications** - Lumecon of Farmington Hills, Michigan, a maker of LED lighting, announced the release of its "Detroit Series," an all-encompassing LED lighting series that the company created with the Motor City in mind. The new line of lighting will come in the form of area lights, wall packs, and floods, as well as decorative luminaires. The product is built for cities, municipalities and commercial end users that want reliable lighting. The Detroit Series features 20,000-Amp surge suppression built standard into every fixture. The company says that the surge suppression and high reliability make the Detroit Series perfect for lighting parking lots, entryways, and general pedestrian applications. <https://lumecon.com/>

Global LED Energy Market Observer:

22. **LED Lighting Has to Meet Consumer Needs, Says TLLIA Executive** - It is already difficult to make a profit from the competitive general LED lighting market where there is little room for hiking luminous efficiency and prices have dropped to rock-bottom levels. But innovative smart LED lighting that allows personalization and lighting ambience adjustments offers a "blue ocean," according to Hsiao Horng-ching, secretary general for Taiwan LED Lighting Industry Association (TLLIA). Currently, 99% of so-called smart lighting products focus on smart control without addressing the fundamental concept of smart lighting. Smart lighting is both about control and health, the former referring to use of sensors to automatically adjust lighting and the latter to how to brightness adjustments can make it most comfortable and healthful for human eyes. Therefore, smart lighting should be able to create the most comfortable and healthful lighting ambience via automatic adjustment based on users' activities, Hsiao explained. <https://www.digitimes.com/news/a20180903PD201.html>

23. **The Growth Potential of LED Fine Pitch Display Applications** - The latest research report of LEDinside "2019 Global LED Video Wall Market Outlook - Cinema, Rental Market and Price Trend," indicated that the market scale of global LED display is expected to reach US\$ 9.349 billion by 2022 with a CAGR of 12% during 2018 to 2022. Meanwhile, the market scale of indoor fine pitch display is forecasted to reach up to US\$ 1.997 billion with a YoY growth of 39%. The continuous escalation of LED fine pitch display application can be found in six major categories including broadcasting rooms, security and control rooms, corporate and education applications, retail applications, public areas and transport, and hospitality, entertainment and theater applications. Among these categories, retail and hospitality, entertainment and theater applications are anticipated to grow significantly. <https://www.ledinside.com/>

24. **Scottish School Trials Li-Fi** - The Kyle Academy secondary school in Ayr has become one of the first in the world to use visible light from LED luminaires as a medium to connect to the web. The pupils insert a special memory-stick sized dongle into their devices whose photoreceptor receives the data embedded in the modulated visible light. The upload link is via an infra-red transmitter on the dongle. The trial of so-called Li-Fi (Wi-Fi using high-frequency modulated visible light) is being conducted in conjunction with The University of Edinburgh and is being overseen by Scottish Futures Trust, which supports the Scottish Government's Digital Strategy. <http://luxreview.com/article/2018/08/scottish-school-trials-li-fi>

25. **Helsinki Rolls Out Color-Tuning Street Lights** - Forty five luminaires – whose colour temperature changes from a cool 5000K to warm 3000K - were switched on along a 2 kilometre section of road in the suburb of Kruunuvuorenranta this week. If the planned next wave of 1,000 luminaires goes ahead over the next 12 months it's believed the project will become the largest colour-tuning street lighting deployment in the world. The idea behind the installation – which includes a complex dimming regime – is to help alleviate the effects of the long winter nights on the moods of residents. In the early afternoon, the lights are set to a cool 5000K shifting to a warm 3000K in the early evening. In the late evening it becomes cooler - 4000K - and at 11pm it shifts to 5000K for the night. <http://luxreview.com/article/2018/09/helsinki-rolls-out-colour-tuning-street-lights>

26. **Global Lamps Market Update and Forecast 2018** - The global lamp market has undergone tremendous changes over the last several years. Government regulations, declining packaged LED and other component prices, and technological advancements have all played a major role in the continued penetration of LED into the overall market. It is clear that LED lamps are the future of lighting, but in order to thrive in this rapidly changing market, it is imperative to know where, when, how quickly and what technology they will be replacing more readily. The Global Lamps Market update will provide market numbers in the form of unit shipments, revenues, and average selling prices of the global lamp market, broken out by region and with a forecast through 2023. The report will contain a detailed breakout of the most widely used lamp shapes (A, reflector, Tube and MR) and technologies (Incandescent, Halogen, CFL, Fluorescent and LED) that are in use in the global market today. <https://www.strategies-u.com/index.html>

27. **Driver Monitoring System Embeds Osram's IR LED for Semi-Autonomous Driving** - Osram Opto Semiconductors has provided its IR LED and LED components to Joyson Safety Systems, a U.S. based mobile safety system provider, on its steering wheel to develop a semi-autonomous system to the new Cadillac CT6. The steering wheel equipped with the IR LED can monitor a driver's behavior to ensure safety. Joyson Safety Systems worked with Osram to design a steering wheel with an embedded infrared camera that tracks the driver's head position and gaze to confirm the driver's eyes are on the road at all times. The new system, named Super Cruise, is claimed to be the first hands-free driving technology for the highway. The system will send alerts when it detects that the driver has looked away from the road for too long. For extreme conditions such as when a driver becomes unresponsive, the Cadillac CT6 would utilize the full capability of onboard driver assistance technologies to bring the car to a controlled stop. <https://www.ledinside.com>

28. **LED Business Not Very Profitable in Past Fiscal Year; IoT is the One Bright Spot** - With the beginning of September comes the start of the new fiscal year for the LED business. Unfortunately, the report card for most LED makers and LED lighting makers has not been good. In recent years the LED lighting industry has become more and more like the conventional lighting industry with only a handful of very large manufacturers. The major LED makers are taking over the vast majority of LED production. At the same time severe price competition from Asian suppliers has reduced much of the profitability of these companies. The recently instituted tariffs on trade goods from China has only hurt U.S. LED producers. We should probably expect industry consolidation and the buying of small LED lighting firms at bargain prices. One way to continue getting profits from Lighting is to essentially lease the controlled and monitored lighting as a service. <http://www.solidstatelightingdesign.com/>

29. **Nestlé's Lighting Checks Air, Heat, Noise And More** - The ground-breaking pilot project at the company's Swiss headquarters in Vevey is said to lower operating costs by up to 20 per cent. The luminaires have been specially equipped with sensors that monitor the way the office is being used and measure the quality of the air, including factors such as ambient temperature. These metrics can then be used to improve the working environment and optimize space utilization. Company chiefs want to assess how to improve the work environment, especially in relation to flexible desk management and improved air quality and reduced operating costs. Zumtobel Group Services installed 15 customized free-standing luminaires for the pilot, where each fitting is designed to illuminate a double workstation. <http://luxreview.com/>

30. **Cannabis Pharm Orders Heliospectra LED Grow Lights and HelioCORE Light Control Software** - Heliospectra AB, a Swedish-based producer of intelligent lighting technology for greenhouse and controlled plant growth environments is setting up a new high-tech production facility in Randers, Denmark. Heliospectra says that the ELIXIA LED grow light creates clear business benefits for cultivation teams and researchers. Cannabis Pharm will couple the fully adjustable LED lighting solution with Heliospectra's HelioCORE™ light control software, to ensure that indoor crops receive perfect light all year. <http://www.solid-statelightingdesign.com/250091-2/>

31. **Horticulture Lighting Market by Technology Published by MarketsandMarkets™** - The overall horticulture lighting market was valued at USD 2.08 billion in 2017 and is expected to reach USD 6.21 billion by 2023, at a CAGR of 20.61% from 2018 to 2023. APAC is expected to be the fastest-growing market for horticulture lighting. Growing urbanization in the developing countries of this region positively affects the growth of the horticulture lighting market owing to the rapid population growth and availability of limited agricultural land. APAC constitutes thriving economies, such as Japan, China, India, and Australia, which are expected to register high growth rates in the horticulture lighting market. <https://www.marketsandmarkets.com/>

32. **Horticultural Lighting: Market Analysis & Forecast 2018** - The horticulture lighting market is one of the most exciting potential markets for LED technologies to have a massive impact. Incumbent lighting technologies, including high pressure sodium, metal halide and fluorescent to name a few, are beginning to be replaced with LED. While energy efficiency continues to be the main factor behind the adoption of LED technologies in the horticultural illumination market, additional benefits, including their low heat, tunability and controllability will all accelerate their acceptance into the growing horticulture market. Strategies Unlimited has forecasted that the horticultural lighting market will grow more than 180% in the next five years, with LED comprising the majority of this growth. <https://www.strategies-u.com/index.html>

33. **Breakthrough Set to Bring OLED Back from the Dead** - Scientists at Brunel University London is set to slash the costs of OLED by 92 per cent, potentially bringing the technology back from the brink in the architectural lighting market. Organic light emitting diodes have struggled to compete with standard LED panels for lighting in buildings, as their extra slimness can't justify their much higher price. Instead OLEDs have been used in electronic devices such as mobile phones and televisions. But now a three-year EU-funded study – whose backers include Marks & Spencer and Tata Steel – has discovered that a much simpler manufacturing method can cut production costs to just a tenth of current costs, enough to match LEDs. It's hoped that the research of the Flexlighting programme, which will be made available to European manufacturers, will help herald a new era of low-cost, high-efficiency lighting products. <http://luxreview.com/>

34. **Osram Doubles Down on Lasers, This Time for Facial Recognition and Medical Imaging** - Osram continued to widen its technology net beyond general lighting and LEDs, making two moves in the last week to embrace lasers, one aimed at facial recognition and the other at medical imaging. The Munich company introduced a new vertical-cavity surface emitting laser (VCSEL), which it said will serve as an infrared light source that mobile phones can use to identify faces and unlock access to the phone. The technology comes from Osram's recently acquired Vixar operations, based in Plymouth, MN. Osram said the chip, called the Bidos PLPVQ 940A, marks the launch of "a new product family." The Bidos VCSEL, with its 3D sensing, provides a higher-end option over Osram Opto's existing IR LED-based facial recognition technology — what Osram also calls IREDs. <https://www.ledsmagazine.com/>

Monthly Feature: 30 Ways IoT Lighting Can Solve Everyday Problems by Ray Molony -

<http://luxreview.com/article/2017/10/30-ways-iot-lighting-can-solve-everyday-problems>

The next revolution in lighting is luminaires connected to the 'Internet of Things'. So what are the benefits? Here is LuxReview's top 30 killer capabilities of IoT lights from the real world...

Retail

1. IoT lights can find products in supermarkets
2. IoT lights can deliver unique promotions to shoppers
3. IoT lights can turn grudge shopping into a game
4. IoT lights can track customers in stores
5. IoT lights can make your food shop faster

Healthcare

6. IoT lights can find high-value equipment in hospitals
7. IoT lights can detect the build-up of queues
8. IoT lights can help monitor the elderly
9. IoT lights can help wayfinding in a hospital
10. IoT lights can reduce theft in hospitals

Offices

11. IoT lights can tell facilities chiefs if space is well used
12. IoT lights can prioritize cleaning
13. IoT lights can help manage meeting rooms
14. IoT lights can help employees personalize their lighting
15. IoT lights can deliver the internet securely

Transport

16. IoT lights can find wheelchairs in airports
17. IoT lights can find parking spaces
18. IoT lights can detect suspicious cars
19. IoT lights can manage traffic
20. IoT lights can detect when aircraft passengers disembark

Outdoor

21. IoT lights can monitor air quality
22. IoT lights can alert police to gunfire
23. IoT lights can help with planning for bad weather
24. IoT lights can predict when a street lamp or driver is about to fail
25. IoT lights can assist with refuse collection

Hospitality and Leisure

26. IoT lights can automatically test the emergency lighting
27. IoT lights can deliver information in museums and galleries
28. IoT lights can personalize and automate guest rooms
29. IoT lights can encourage hotel guests to buy more
30. IoT lights can cut costs in hotels and resorts