

lighting today

APRIL - JUNE 2016

INSIDE

Show Previews / Reviews
Lighting for Facades + Landscapes
Lighting for Interior Spaces



COVER STORY

Waldorf Astoria Hotel



Scan to visit
our website

POWER OF LIGHT

Location : Supersports at Central Plaza West Gate, Nonthaburi Province, Thailand
Interior Designer : Zebra, www.zbr.co.uk
Lighting Design & Solution : Lighting & Equipment Public Company Limited (L&E)



Merchandise Display Lighting The lighting design goal for Supersports is reached by bringing to life the distinct and clear features of product presentations in the shop. Besides, the perception and interaction with light have a definitive impact on the shopping experience and especially help to increase customers' propensity to buy.

LED Luminaire

LEDiOC HB α is an energy saving LED highbay light ideal for not only commercial areas but industrial environment where dust and moisture are concern, supported by the IP65 performance



75W

111W

145W

214W

325W

LEDiOC HB α SERIES

High performance LED highbay luminaire

- ✓ Energy efficient : up to 140lm/W
Light output equals up to 1000W metal halide highbay.
- ✓ Reliable IP65 construction
- ✓ 60000 hours long life (L90)
- ✓ Compact and light weight
- ✓ Wide range of models



For detail, please contact your local distributor or EYE Lighting Asia Pacific Pte Ltd - 21, Kaki Bukit Place, Eunos Techpark Singapore 416199 Tel: +65-67423611 Fax: +65-67435202.

Innovative Light, Bright Future



IWASAKI

IWASAKI ELECTRIC CO.,LTD.

6th Floor, Bakurocho-daiichi Bldg., 1-4-16,
Nihonbashi-bakurocho, Chuo-ku,
Tokyo 103-0002, Japan <http://www.eye.co.jp>
Phone: +81-3-5847-8630 Fax: +81-3-5847-8647

Dear Readers,

Hello, you.

With every ending comes a vibrant new beginning. I am Nicole Lee, the new editor for *Lighting Today*. I am stoked to be helping this magazine from this issue on and I hope you continue to enjoy it just as much, if not more.

Our cover story takes you to the landmark Waldorf Astoria Amsterdam Hotel, nestled deep in the heart of Netherlands. This historic building is an architectural powerhouse, having been graced by a plethora of internationally acclaimed designers throughout the years. Take a tour with us as we bring you around some of our favourite spaces of the place.

The next piece to light up the way is the glamorous revamp of Canada's finest, the Lac Leamy casino. The bold theme aquatic theme reflected the geography of the casino, which sits on Montreal's lakeshores and is surrounded by water. Curiously, the chosen standout centrepiece is the staircase, designed in such a way that it is fully visible from any part of the casino.

Heard of Houzz? Of course you have. The leading home design and remodelling platform recently enthroned Lite Tile as top in customer service on the site. They parallel their superb customer service with their dauntless takes on projects too – just take a look at the project! The Splashack project we picked is a daring showcase of singular tones, illuminating every room in varying moods.

Our product showcase features the sleek, the stylish and the stunning. Keeping in a silver theme, we take you through a thematic catalogue of industrial-inspired designs. Lighting can never be underestimated, sometimes a statement piece is all you need to liven and rock a room to its core. Take a look up and take a chance on your light source the next time you're remodelling.

Have a lovely time reading!

Nicole Lee
Nicole Lee
Editor



Industry's highest efficiency

190 lumens/watt



Straight-tube LED lamps released!



T8 Super-High Efficiency R-FAC40MN series

<190 lumens/W>



High Efficiency R-FAC40K series (4-foot T8)

<140 lumens/W>



Straight-tube LED yellow lamps

for semiconductor factories and clean rooms



Cutting wavelengths of 500 nm and lower

Square Lights
600/450 Sq.mm

□ 600 Type



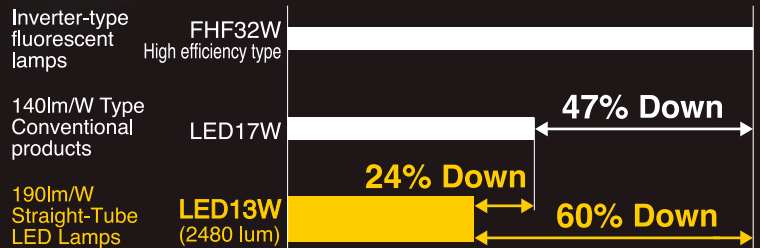
Floodlights IP-56
(95W/60W)

95W Type ; Arm Type w/ Separate Power Supply



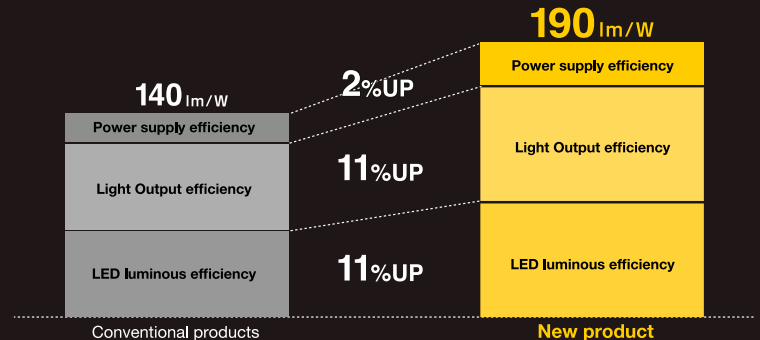
Achieved the 190 lm/W by improving LED efficacy, Light output efficiency and Power supply performance.

Power consumption comparison



Luminous efficiency

Light output efficiency was improved by 11% by optimizing tube transparency and diffusion level as well as by improving LED efficiency by 11%. Power supply performance was improved by 2% for unique design engineering technology. Power savings by 24% compared with conventional LED retro-fit tube, thanks to the 190 lm/W.



ROHM Co.,Ltd. www.rohm.com

Japan(HQ)

Malaysia / Philippines /

Singapore / Thailand / India

+65 6436 5136

inforea@rohm.com.sg



034



038



050



066

Contents

008 Light Talk by Martin Klaasen

010 Lighting in the News

020 Show Preview

- Hong Kong Lighting Fair 2016
- Guangzhou International Lighting Exhibition 2016

028 Show Review

- Shanghai International Lighting Fair 2015
- Lighting Japan

034 Special Feature

Spirit of Ecstasy

038 Cover Story

Waldorf Astoria Hotel, Amsterdam

046 Lighting Spatial Envelopes

- Fort Sam Houston
- Marienplatz Subway and Metro Station
- Supersports at Central Plaza West Gate
- Lac Leamy Casino

062 Lighting Façades and Landscapes

- Yokohama Stadium
- The Casino de Montréal
- Best of Houzz

074 Lighting Controls

- Advanced Lighting Control by Enlighted
- Wireless LED Lighting Solution by GreenPeak Technologies

076 *illumina* Product Showcase

- LED Lighting Solution for Tampines Central Park by HELLA
- LED High Bay Installed in Kuehne + Nagel by Grunzell
- Lighting Solutions by Schreder
- LED Lighting in Crosswater Showroom by Soraa
- LED Industrial Lighting Solutions by YAHAM
- Slim-Line LED Modules and Matching Drivers by Vossloh-Schwabe

088 Product Focus
Interior / Exterior

092 Events & Expositions /
Advertisers Index

guangzhou international lighting exhibition

21st

The most influential and comprehensive lighting
and LED event in Asia

9 – 12 June 2016

China Import and Export Fair Complex
Guangzhou, China

www.light.messefrankfurt.com.cn

Contact

Messe Frankfurt (HK) Ltd

Tel: +852 2238 9969

Fax: +852 2519 6079

light@china.messefrankfurt.com



光亞 · Guang ya



messe frankfurt

lighting today

APRIL - JUNE 2016

INSIDE

Show Previews / Reviews
Lighting for Facades + Landscapes
Lighting for Interior Spaces



COVER STORY Waldorf Astoria Hotel

On the Cover: Waldorf Astoria Hotel
Photo Credits: DvM b.v

OTHER TITLES BY TRADE LINK MEDIA PTE LTD

**Southeast Asia Building
Southeast Asia Construction
Security Solutions Today
Bathroom + Kitchen Today
Lighting Audio Visual Asia**

www.tradelinkmedia.biz

DISCLAIMER!

All advertisers and contributors must ensure all promotional material and editorial information submitted for all our publications, must be free from any infringement on patent rights, copyrights laws in every jurisdiction. Failure of which, they must be fully liable and accountable for legal consequences (if any) that may arise.

The editor reserves all right to omit, amend or alter press releases submitted for publication. The publisher and editor are unable to accept any liability for errors or omissions that may occur in this process, although every effort has been taken to ensure that all information is correct at the time of going to press. Edited articles or stories are returned to contributors for check on facts at the sole discretion of the editor. No portion of this publication may be reproduced in whole or part without written permission of the publisher. The editor reserves all rights to exclude or refuse submissions at any time without prior written or verbal notice if contributing parties do not provide complete text and supporting images at a minimum of 300 dpi in .jpeg and .tiff format.

PUBLISHER

Steven Ooi steven.ooi@tradelinkmedia.com.sg

EDITOR

Nicole Lee lighting@tradelinkmedia.com.sg

GROUP MARKETING MANAGER

Eric Ooi eric.ooi@tradelinkmedia.com.sg

MARKETING MANAGER

Felix Ooi felix.ooi@tradelinkmedia.com.sg

GRAPHIC DESIGNER

Siti Nur Aishah siti@tradelinkmedia.com.sg

HEAD OF GRAPHIC DEPT/ADVERTISEMENT COORDINATOR

Fawzeeah Yamin fawzeeah@tradelinkmedia.com.sg

CIRCULATIONS EXECUTIVE

Yvonne Ooi yvonne.ooi@tradelinkmedia.com.sg

INTERNATIONAL MEDIA REPRESENTATIVES

[CHINA/HONG KONG]

Ms. Judy Wang

General Manager

Worldwide Focus Media Co., Ltd

Unit 04, 7/F Brightway Tower

No. 33 Mong Kok Road

Kowloon, Hong Kong

Phone: +852-3078 0826

Mobile : +86-13810325171

judy@worldwidefocus.hk

[KOREA]

MCI

Room A1012, Hanwha Obelisk,

19, Guryong-gil, Sangam-dong,

Mapo-gu, Seoul,

Korea, 121-270

t. +82 2 730 1234 f. +82 2 732 8899

CALL FOR SUBMISSIONS

Press releases, proposals for stories, and product development literature should be submitted by email to the editor at:

lighting@tradelinkmedia.com.sg

LIGHTING TODAY IS PUBLISHED BY:

TRADE LINK MEDIA PTE LTD

101 Lorong 23, Geylang #06-04

Prosper House Singapore 388399

For interest in advertising and advertorials, please attention your query via:

fax: +65 6842 2581 / +65 6745 9517 or

direct call: +65 6842 2580

Printed by KHL Printing Co Pte Ltd

MCI (P) 038/05/2015

ISSN 2345-7147 (Print) and ISSN 2345-7155 (E-periodical)

This publication is published four times a year and is available at no charge to subscribers in the professional lighting industry who meet the publication's terms of circulations control. For subscribers who do not qualify for free subscription, copies will be made available subject to acceptance by the publisher, for a subscription fee which varies with the requester's country of residence in the following rate for annual subscription.

ANNUAL SUBSCRIPTION BY AIRMAIL

Europe/America – SGD\$130,

Asia Pacific – SGD\$80,

Brunei/Malaysia – SGD\$65,

Middle East – SGD\$130,

Japan/Australia/New Zealand – SGD\$130

ANNUAL SUBSCRIPTION BY SURFACE MAIL

Singapore – SGD\$32 (Incl 7% GST Reg No.: M2-0108708-2)

THAILAND

lighting fair 2016

Smart Lights Smart Life

ASEAN's Leading Trade Fair on Lighting Technology, Design and Solution

1 - 3 September 2016

Hall 101-102

Bangkok International Trade
and Exhibition Center (BITEC)



BOOK NOW !
Receive Special Offers

+66 (0) 2664 6499 Ext. 200, 201, 203, 210

info@thailandlightingfair.com

www.thailandlightingfair.com

Facebook Thailandlightingfair

LINE @thlightingfair



Presented by PEA
Powered by messe frankfurt
Organized by The ExhibiZ

Sponsored by

PHILIPS
Platinum Sponsor
 Acrolux
Silver Sponsor
 NEX

Supported by

กระทรวงพลังงาน
MINISTRY OF ENERGY
 TCEB
 TIA
 SME
 BSA
 T.A.L.A.
 SoA+D

Media Partner

GM

LIGHTING THE “CHINA” WAY

China has come a long way... is a new approach in lighting looming?

When I first set foot in China about 20 years ago, it was with a mix of much excitement but also a lot of apprehension about a country with a rich history, good and bad. The excitement had to do with the fact that I was embarking on my first project (in Shanghai) and entering a much hyped world I had only heard about or seen on TV. I did not speak or understand a word of Chinese (I know a few now...), let alone hear the difference in the different dialects. The country was very much in a period of opening up to the rest of the world. However, this was with China and the West having guarded suspicions about each other's motives—China in regards to becoming part of the world, “Westerners” in regards to entering the huge Chinese market and benefitting from “cheap” production facilities.

The underlying and driving factor in everyone's mind was of course money. China was driven in regards to foreign investment and an influx of western quality and technology. The west was driven in regards to making their products more competitive in price and finding a 1 billion people market that could benefit from their products and knowledge. The balance is always value (read quality) versus money. Historically the west was focussed on quality as the prime motivator for development and innovation, whilst the Chinese mentality was focussed on money and money alone. Everything for a dollar...this has (and still does) often lead to conflict and misunderstanding. The target is the same but the means and execution are different. I recently read an analogy in an economic review about China I can totally relate to, which exactly reflects the different attitudes or interpretations. It goes like this: when a pedestrian wants to cross the road, he generally looks an oncoming driver of the car in the eyes to assure he has been seen. However having locked eyes means different things in China and the West. In China the driver of the car takes this as you have seen him so he can continue driving. In the west however it means the driver has acknowledged your intent and will stop to let you cross!

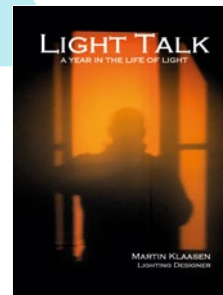
This is pretty much the way things are happening in China, the intents are the same but the methods of execution and approaches are different, sometimes seemingly contradictory. As I write this column, I just came back from China where I attended a project coordination meeting and dealt with local contractors and lighting suppliers involved in the realisation of a lighting installation. Not surprisingly, our lighting specifications were followed the “China way”, in other words by installing copies and look-a-likes, and insisting that the quality and performance were exactly the same as our specifications. While I am pretty sure they know it is not the same, their belief that they have achieved our design intent by using our lighting layout and lighting effect, justifies the approach of price above quality. They generally have this inherent cultural urge to go for what is cheap and do not seem bothered in any way of form about the quality...it looks the same right, what are you on about? Why spend all that money?

However, here is the thing...the Chinese are actually getting better and better in “copying” original good quality products and with a different focus from that of the West. Chinese (and Asians for that matter) are fast learners and have caught on to what

seems to be the main bone international design consultants like myself are picking with them. It is not the looks (well, it still is relevant but not our prime contention), it is the optical quality and performance of a light fitting that concerns us. Hence now we see the appearance of copies, or so-called equivalents, that rival, equal or even upstage the big boys in terms of their optical qualities. In the two mock up rooms that I reviewed during my recent trip, one was equipped with look-alikes costing only about 20% of the price of my originally specified fitting. The second room however was equipped with lights of equivalent performance, and I talk here about light output, beam control and colour quality. I had to measure the colour qualities (colour temperature, binning and rendering) as well as the outputs to convince myself they were not fooling me. Moreover, all that was for only half the price of the original specifications. Interestingly they still wanted to convince or get me to agree that the first room was good enough...it just shows ☺.

The playing field in China and around the world is changing with all these new kids on the block, but specifically with the Chinese manufacturers giving the big boys a run for their money. Some of the copies I have seen recently are so good that for all intents and purposes, may actually come from the same OEM factory where the big boys are getting their products made! It is probably one of the worst kept secrets that many big brands get their light fittings made by Chinese OEM factories. Therefore, it should not come as a big surprise that years of guiding and helping these factories have now resulted in the local manufacturing being able to produce high quality LED light fittings independently, and without the need to copy anymore. It may be fair to assume that sooner rather than later the “copiers” will become the leaders and the leaders relegated to be followers. There is a big change blowing in China...

Follow Martin's daily blog about lighting, Light Talk, at:
<http://lighttalk.via-verlag.com>



Martin's Book, **'Light Talk, A Year in the Life of Light'**
(ISBN: 978-981-07-0120-8),
To order a hard copy →
email: lighttalk@kldesign.co
or log into the website at www.kldesign.co/media/lighttalk
To purchase the book → Kinokuniya bookstore →
Ngee Ann City, Singapore

A soft copy of the book is now available for download
from Martin's blog site.



www.palmexpo.net Wechat: PalmExpoChina

25th Edition
palm
 EXPO 2016
 China

Now Open for RESERVATION!

The Leading Pro Audio, Light, Music & Technology
 Exhibition on China's Most Prestigious Stage



Take Your Pick

1st – 4th Sep 2016

China International Exhibition
 Center (Old CIEC)
 Beijing, China

Make your priority reservation today!

For booking and more information, please contact the following
 representatives from PALM Expo 2016:

Ms Juri Tan
 Exhibitions Director
 Tel: **+65 6411 7708**
 Fax: **+65 6411 7778**
 Email: **juri.tan@informa.com**

Sword Li
 Exhibitions Sales Executive
 Tel: **+86 (0)10 6562 3321**
 Fax: **+86 (0)10 6562 3322**
 Email: **sword.li@informa.com**

Organised by:

informa
 exhibitions
 Formerly IIR Exhibitions Pte Ltd



China Entertainment
 Technology Association
 中国演艺设备技术协会

CEM GLOBAL LIGHTING CHALLENGE LAUNCHED AT COP21 TO DEPLOY 10 BILLION LED BULBS

Clean Energy Ministerial countries and global corporations collaborate to advance efficient lighting

The Clean Energy Ministerial (CEM) announced on the 7th of December, 2015, the formal launch of the Global Lighting Challenge (GLC)—a race to deploy 10 billion high-efficiency, high-quality, and affordable lighting products (such as LED bulbs) as quickly as possible. Lighting currently accounts for 15% of the global electricity consumption—more than the electricity generated by all the nuclear power stations in the world—and 5% of worldwide greenhouse gas emissions. An overnight global transition to highly efficient lighting could avoid more than 800 million metric tons of CO₂ emissions, equivalent to displacing 684 coal-fired power plants for a year.

The GLC was announced by Sweden's Minister of Energy Ibrahim Baylan, along with Ikea's Chief Sustainability Officer Steve Howard and other CEM partners, during an event at the COP21 climate negotiations. Initial commitments to the GLC were also announced, including:

- India: India has a goal to deploy 770 million LED bulbs and 35 million street lights using energy efficient LED bulbs in 3 years' time.
- Ikea: Ikea's goal is to sell over 500 million LED bulbs to Ikea customers over the next 5 years (through the end of 2020).
- China: Will work to achieve the domestic sales of over 5 billion LED bulbs over the next 2 years.

"During the last years we have seen impressive innovations in the field of lighting products and solutions," said Minister Baylan, "New lighting creates new opportunities in our societies and with multiple benefits. Sweden wants to support the transition to universal access of high-efficient and high-quality lighting, which is why we join this race with other CEM partners to realise the efficiency potential that exists in Sweden and the rest of the world."

Additional commitments and supporting actions have been made by the governments of Australia, Germany, Mexico, Sweden, the United Kingdom, the United States as well as the State of Victoria in Australia. Commitments and supporting statements have also been collected from Cree, Philips, OSRAM, Enervee, and the DesignLights Consortium. The GLC will continue to seek additional commitments until the goal of 10



COP 21 in Paris was the venue for the CEM Global Lighting Challenge Launch

billion bulbs is achieved. All commitments are recognised on the GLC website, globallightingchallenge.org. An update on progress will take place during the seventh Clean Energy Ministerial (CEM7), which will be hosted by the United States in June 2016.

Super-efficient and affordable LEDs have sparked the development of a rapidly growing global commercial market for off-grid solar lighting, putting clean and safe lighting in reach for the 1.2 billion people who lack access to modern energy services around the world.

The GLC was introduced during the sixth Clean Energy Ministerial (CEM6) in May 2015, with 13 CEM member countries and the European Commission providing endorsements. It is designed as a public-private partnership to generate ambitious commitments from national and subnational governments, big and small businesses, retailers, and others to meet the goal of 10 billion bulbs.

About the GLC

The GLC brings together and elevates efforts to promote efficient lighting policies, including the CEM's Super-efficient Equipment and Appliance Deployment (SEAD) initiative and Global Lighting Energy and Access Energy Partnership (Global LEAP), United Nations Environment Programme and Global Environment Facility's *en.lighten* initiative, International Finance Corporation's Lighting Global, International Energy Agency's Energy Efficient End-Use Equipment Solid State Lighting Annex, and The Climate Group. The GLC has been endorsed by Australia, China, France, Germany, India, Indonesia, Korea, Mexico, Russia, South Africa, Sweden, the United Kingdom, the United States, and the European Commission.

About the CEM

The Clean Energy Ministerial is a forum of the world's largest and most forward-leaning countries working together to accelerate the global transition to clean energy. The CEM pairs the high-level engagement of energy ministers with year-round technical initiatives and campaigns to drive faster deployment of clean energy policy and technology. CEM members are Australia, Brazil, Canada, China, Denmark, the European Commission, Finland, France, Germany, India, Indonesia, Italy, Japan, Korea, Mexico, Norway, Russia, Saudi Arabia, South Africa, Spain, Sweden, the United Arab Emirates, the United Kingdom, and the United States. Together, the 23 countries and the European Commission account for about 90% of the world's clean energy investments and 75% of its greenhouse gas emissions.



2015 凌空SOHO
SHANGHAI SKY SOHO

Whether Indoor or Outdoor LED Lightings, LED Control Systems or the latest Smart Lighting System; StrongLED - established since 2002, offers our clients the most comprehensive cost/performance solutions. A proven LED Lightings and Control Systems Solution Provider with a track record of 1500 successful projects world-wide, StrongLED meets the exacting standard and quality our clients



2014 望京SOHO
Beijing Wangjing SOHO



2013 北京银河SOHO
Beijing Galaxy SOHO



BRITISH LIGHTING MANUFACTURER ORIGINAL BTC LAUNCHES NEW COLLECTIONS, A THEMATIC TRIBUTE TO OLD CLASSICS



Established in 1990, Original BTC manufactures relaxed, familiar lighting for domestic and contract interiors. Hand-assembled in Oxford from the finest aluminium, chrome and bone china, the essential collection of table, floor, wall and pendant lights is instantly comfortable, unassumingly elegant and accessibly priced.

One of the forerunners of industrial style, founder Peter Bowles' updated classics and original designs are inspired by traditional factory fittings and iconic 1940s design. Four UK production facilities – all owned by Original BTC – are dedicated to constructing the beautifully unprocessed lights. Aluminium shades and bases are hand-spun from sheet metal in the heart of the country's metal-working industry, glass shades are mouth-blown in Birmingham while bone china shades and ceiling roses are hand-cast in Stoke-on-Trent.

Quality, detail and mix of materials is key: metallic painted, glass or china shades are paired with polished, satin or chromed bases, offset by matching cotton braided flex. Functional and practical, stems can be raised and lowered and shades angled to create the perfect ambience.

Classic ranges include the iconic bone china Hector, available as a table, pendant, wall and floor light. Launched twenty five years ago, the simple yet effective dome-shaped Hector is a British design classic. Further key ranges include the industrial style Titan pendant, available in polished aluminium and a range of powder-coated colours, as well as the Task collection of table, floor, wall and pendant lights. More recently, the Stanley collection of pendants, available in brass, nickel, copper and black nickel, has become one of the brand's most popular designs. The Globe collection of mouth-blown glass pendants marked a new direction for Original BTC. The brand's first in-house manufactured glass collection, Globe pendants are free-blown at its Birmingham-based glassworks using artisanal techniques first developed in the twelfth century. Capturing Original BTC's simple elegance and attention to detail, each pendant features a chrome or brass fitting with a matching chrome or brass wire suspension and bulb holder, plus trademark braided cable.

For more information, visit www.originalbtc.com.



RENOWNED QUANTUM DOT INNOVATOR DR. NATHAN STOTT JOINS QUANTUM MATERIALS CORP

Leading North American quantum dot manufacturer Quantum Materials Corp. (OTCQB:QTMM) announced that Dr. Nathan Stott has joined the Company as Director of Materials

“We are truly excited to have Dr. Stott join our team,” said Company founder and CEO Stephen Squires. “As one of the foremost leaders in research on quantum dots, Nathan brings a wealth of knowledge and proven experience to the Company. His innovative work in chemistry, material science and nanotechnology and its application to consumer electronics is invaluable as we begin commercialising our technologies.”

Dr. Stott had most recently worked on developing quantum dots for the LED lighting industry as Team Lead, Principal Scientist and Senior Lab Manager with Seoul Semiconductor. Prior to that he was Senior Research Scientist and Project Lead for Pacific Light Technologies, responsible for the development of high-quality semiconductor nanomaterial down-convertors for integration into solid-state lighting as well as being project lead for green quantum dot emitters. Dr. Stott has additionally performed research while at the Air Force Research Laboratory at Wright-Patterson Air Force Base, at Samsung and at Cabot Corporation.

Dr. Stott has a Ph.D. in Physical (Nanomaterials) Chemistry from the Massachusetts Institute of Technology and a Bachelor of Science (B.S.) in Chemistry from the University

of Arizona. While at M.I.T., Dr. Stott performed research and served as a teaching assistant in the laboratory of Professor Mounqi G. Bawendi, a leading research lab for the study of quantum dots. Dr. Stott is an inventor on multiple patents primarily focused on development of quantum dots and their use in lighting and displays. He has also published numerous articles on nanotechnology. He speaks, reads and writes Korean with near-native fluency and is a recipient of the Samsung Electro-Mechanics Team Technology Award for Inkjet-Printable Copper Traces and a NASA Space Grant.

“QMC is ramping up production with game-changing technology to support tier-one customer engagements,” said Dr. Nathan Stott, Director of Materials at Quantum Materials Corp. “I am thrilled to be part of a top notch team.”

The use of quantum dots in displays is accelerating and Quantum Materials is engaged in joint development agreements with leading display device and component manufacturers seeking to integrate the Company’s QDXTM quantum dots into their offerings. QDX allows display manufacturers to differentiate their products by enhancing display optics, increasing the color gamut and resolution while reducing overall manufacturing cost. QDX quantum dots offer high-heat resistance and are mass-produced through automated process to assure the highest uniformity, stability and performance available.

Copyright©2016 Edison Opto Corp. All rights reserved.

Street Light Module

Guide your way



- ✓ Easy design-in, fast time to market
- ✓ High quality of light and low glare
- ✓ Uses Edison’s LM-80 certified components
- ✓ L70>50,000 hours and 5-year warranty

▼ We have comprehensive street light solutions for all kinds of light shape and angle demand.



12 in 1 Module



36 in 1 Module



SS Series



Billow Series

EDISON www.edison-opto.com service@edison-opto.com.tw



PLCC LEDs - COB LEDs - Automotive LEDs - **Street Light Module** - Flexible LEDs - LED Module - High Bay

L.A.M.P. RETURNS FOR A 4TH RUN, SEEKS OUTSTANDING ENTRIES FROM DESIGNERS WORLDWIDE



L A M P (Lighting Architecture Movement Project) is preparing for its fourth annual international lighting design competition and is sending out a call for entries to designers worldwide to participate. The design event will be held this November in Vancouver, Canada.

L A M P is offering participants the opportunity to exercise their talents for the chance to be part of a growing must-see exhibition that connects the local community with dynamic design. The competition challenges designers to approach their light fixtures with the guidance of a singular word. This year's theme is Cosmic.

There will be three categories open for submissions, including student, emerging, and established designers. After reviewing all submissions, the esteemed panel of judges will make their decisions based on a set evaluation ranging from aesthetics, marketability, innovation, and unique interpretation of this year's theme word.

L A M P will announce the 2016 Judging panel on April 15th. Last year's judges included: Nancy Bendtsen (Inform Interiors), Omer Arbel (Bocci Design), John Patkau (Patkau Architects), Tom Dixon, Michael Anastassiades, Falken Reynolds, and the team from ANDLIGHT (Lukas Peet, Caine Heintzman and Matt Davis).

For more information, visit www.welovelamp.ca.





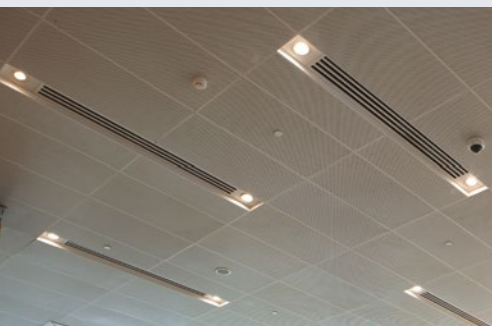
HELLA INDUSTRIES

Innovative, Simple and Sustainable

PROVEN SUCCESS

Track records of substantial iconic and government projects successfully completed.

Exterior Lighting



Interior Lighting



Industrial Lighting



A PASSION FOR LIGHT

With over 100 years of expertise and strong presence at over 100 locations in more than 35 countries, HELLA is a global company that develops and manufactures lighting and electronic components as well as systems for the automotive industry. The HELLA brand is synonymous with proven quality and innovative automotive technology. Riding on its lighting expertise, HELLA applies innovative technology and know-how to segments beyond the automotive sector while maintaining the highest standards of quality and sustainability.

The HELLA Industries segment offers high-performance products for street lighting, lighting for industrial and domestic environments, airport lighting and people counters. HELLA Industries - Innovative, Simple and Sustainable.

THE SKETCH COLLECTION BRINGS OUT THE GLOW WITHIN WHILE ITS SKELETAL CAGE LOOKS ON



Studio beam is a design studio based in Tel Aviv, Israel. The studio designs & manufactures unique high-end lighting fixtures.

They love the challenges of design and hold a very dynamic approach to the design process, each process starts from a different beginning point - technological, material or conceptual, smart design techniques are applied in order to achieve design synergy between material form and technology.

The Sketch collection comprises the yearning for de-clutter from modern noise, pollution and attention deficit disorder into a divine purified experience of pure structural contour. The collection items are a delicate design of luscious curved wires into elegant see through pendants and wall lamps, unique and suitable for home, office and commercial spaces. All collection items are handmade, silver soldered and powder coat paint finished, available in five colors.

For more information, visit www.studio-beam.com/#new-collections.



DR. GREGORY QUARLES NAMED CHIEF SCIENTIST AT THE OPTICAL SOCIETY

A long-time volunteer for The Optical Society, Quarles brings a solid mix of industry, government and technical experience in the Optics and Photonics field

The Optical Society (OSA) has announced that Dr. Gregory Quarles has joined The Optical Society as Chief Scientist. In this position, Dr. Quarles is responsible for the scientific infrastructure of the society. This includes content development for OSA incubators, annual meetings and the establishment of partnerships with research laboratories around the world. Quarles is a globally recognised leader for his strategic partnerships with the federal government, industry and academia, as well as his innovative work in the progression of global materials research, specifically developing new laser devices for medical, military and industrial applications.

“Greg is well-known in the photonics community and has served as a society volunteer and leader for more than 30 years—making him well-suited to lead OSA’s technical programs,” said Elizabeth Rogan, CEO of The Optical Society. “As we prepare to celebrate our 100th anniversary next year, Greg, along with our science advisors and technical programme team, will be working with our members and volunteers to help OSA prepare for the next century of innovation.”

Quarles said, “The growth of the photonics field around the globe highlights the society’s role in disseminating technical content in meetings, exhibits, publications and advocacy. I look forward to expanding upon the vision for the society created one hundred years ago by Perley Nutting and a group of nine scientists spanning from industry to academia. Today, we are a global society and optics and photonics touch mostly every aspect of modern life.”

Prior to The Optical Society, Quarles was a co-founder,

Board member and Managing Partner of EdgeLight Incorporated, a start-up enterprise pioneering wearable light therapy in Tucson, Arizona. He has also managed his own consulting firm, as President and CEO of Opto-Electronic Management Network, since 2013, specialising in the lasers and materials industry, with a primary focus on the defence, aerospace and nanomaterials sectors. Prior to starting this consulting business, Quarles served as the CEO at B.E. Meyers & Co., Inc., a manufacturer of opto-electronic technology-related products used for defence and law enforcement applications.

Quarles has been recognised with a number of honours, including the R&D 100 Award and the Department of the Navy Exceptional Performance Award. Most recently in 2015, he has been recognised with the Memorial D.S. Rozhdestvensky Medal by The Russian Optical Society. Throughout his career, Quarles has been awarded five patents related to his research in solid-state lasers and has published over 100 peer-reviewed and conference publications.

Dr. Quarles earned a Ph.D. and MS in Physics, as well as a dual BS in Math and Physics from Oklahoma State University. He has served as Assistant Editor for Optical Engineering and The IEEE Journal of Quantum Electronics and is a Fellow of both The Optical Society and SPIE.

About The Optical Society

Founded in 1916, The Optical Society (OSA) is the leading professional organisation for scientists, engineers, students and entrepreneurs who fuel discoveries, shape real-life applications and accelerate achievements in the science of light. Through world-renowned publications, meetings and membership initiatives, OSA provides quality research, inspired interactions and dedicated resources for its extensive global network of optics and photonics experts. For more information, visit osa.org/100.

LEDs ATTACHED PROBES SHED LIGHT ON NEURAL PATHWAYS IN THE BRAIN

With the help of light-emitting diodes as small as neurons, University of Michigan researchers are unlocking the secrets of neural pathways in the brain

The researchers have built and tested in mice neural probes that hold what are believed to be the smallest implantable LEDs ever made. The new probes can control and record the activity of many individual neurons, measuring how changes in the activity of a single neuron can affect its neighbours.

The team anticipates that experiments using probes based on their design could lead to breakthroughs in understanding and treating neurological diseases such as Alzheimer’s.

It was recently published as the cover story in the December 16 edition of *Neuron*, one of the most influential and relied upon journals in the field of neuroscience.

“This is a very big step forward,” said Kensall Wise, the William Gould Dow Distinguished University Professor Emeritus, who was involved with the research. “The fact that you can generate these optical signals on the probe, in a living brain, opens up new doors.”

A network of around 100 billion neurons power the human brain, and figuring out how they work together is a monumental and important task, the researchers say.

“Hundreds of millions of people suffer from neurological diseases, but treatment methods and drugs are currently very limited because scientific understanding of the brain is lacking,” said Fan Wu, a postdoctoral researcher in electrical engineering and computer sciences and co-first author on a new paper on the findings published in *Neuron*. “We have developed a tool that is needed to better understand how the brain works—and why it doesn’t work—to try to solve these problems.”

In genetically modified rodents, neurons can be turned on and off with light. Typically, neuroscientists using this “optogenetics” technique shine light on a region of the brain through implanted optical fibers and record the response with a second device. This helps to reveal which regions of the brain are responsible for which behaviors. However, it cannot reveal how the neurons communicate with one another.

The new probes can. Each probe array contains 12 LEDs and 32 electrodes. The micro LEDs are as small as a neuron’s cell body, so they can turn single neurons on and off. Meanwhile, the microelectrodes measure activity at the single-neuron level, reporting how a change in one neuron’s behavior affects the surrounding network.

“Now we can know how a group of cells, both adjacent and farther away, are responding to the activation of a single cell,” Wu said. “This will help us better understand how these cells are communicating with each other.”

While the probes were made at U-M, the experiments to demonstrate them took place at New York University in the lab of György Buzsáki, a leader in experimental neuroscience. Eran Stark, who is currently an assistant professor of neuroscience at Tel Aviv University, used them to measure how signals pass through the brains of mice. He focused on the area of the brain responsible for short- and long-term memory.

“Using micro-LED probes, we may tease out how the signals propagate inside the neural circuitry so that we can understand how memories are formed, retrieved and replaced,” said Euisik Yoon, a professor of electrical engineering and computer science at U-M and project leader.

The proof-of-concept experiment found that superficial and deep neurons in the hippocampus produce different kinds of brain waves when stimulated. Future experiments will explore how these waves are related to memory.

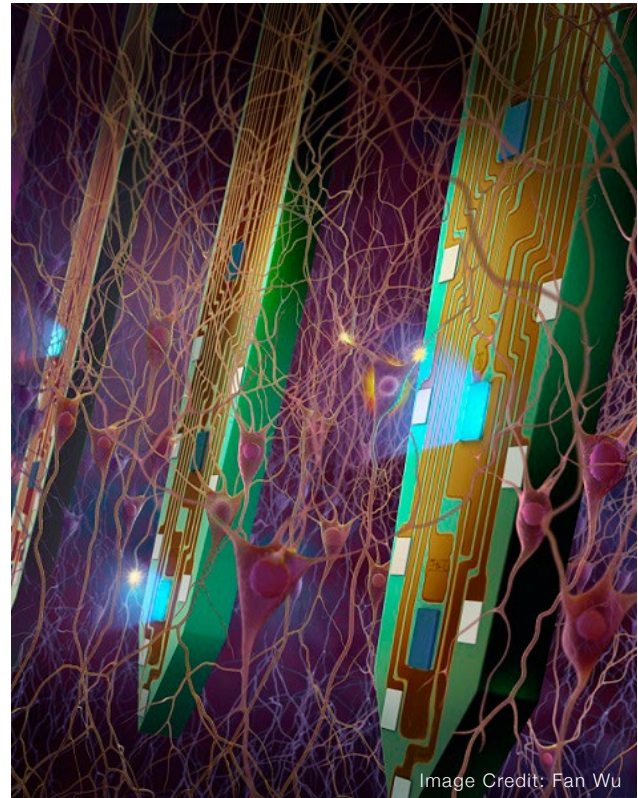


Image Credit: Fan Wu

The tines of the probe are just under a tenth of a millimeter wide. Equipped with minuscule LED lights and electrodes, each tine can stimulate and measure about a hundred individual neurons.

The research is described in the paper, “Monolithically Integrated μ LEDs on Silicon Neural Probes for High-Resolution Optogenetic Studies in Behaving Animals.”. It is available online now. The research was funded by the National Institutes of Health and the National Science Foundation.

QUANTUM MATERIALS CORP TO LAUNCH QUANTUM DOT PRODUCTION IN CHINA, JOINT VENTURE PARTNER GTG COMMITS \$20 MILLION US INVESTMENT

Leading North American quantum dot manufacturer Quantum Materials Corp (OTCQB:QTMM) announced that the company has entered into a joint venture with Guanghui Technology Group (“GTG”) whereas GTG will invest \$20 million US for building out Quantum Materials QDX™ quantum dot production facilities and quantum dots application development in China. Embedding quantum dot production regionally allows Quantum Materials to work closely with clients to customise quantum dot characteristics to optimise manufacturing efficiencies as well as supply chain logistics.

The joint venture will be registered in Hong Kong and operated as Quantum Materials Asia Co., Ltd.. GTG’s investment and Quantum Materials’ patented mass-production quantum dot manufacturing technology will enable Quantum Materials Asia to start supplying quantum dots to clients in the display, lighting and solar energy industries by the third quarter of 2016.

“We have already held serious discussions with a number of potential customers in our region seeking Quantum Dots for diversified applications, including display, lighting and solar. We have established our reputation as a key

financial partner with the governments and industries by raising multiple billions of dollars in funding for projects driven by our customers over the past decade,” stated Mr. Liu Xiao, CEO of Guanghui Technology Group. “This joint venture represents a new role for GTG in that we are not only supporting this project financially to facilitate major market expansion for Quantum Materials, but we will also be deeply involved in driving market penetration among our industry clients seeking to bring their technology and products to the next level.”

“This agreement represents our commitment to provide customers with best-in-class Quantum Dot materials, including Cadmium free quantum dots. Our patented mass production process enables us to rapidly establish locally based manufacturing to meet their volume production demands,” commented Stephen B. Squires, Founder and CEO of Quantum Materials Corp. “Combining our resources and expertise in advanced quantum dot technologies with GTG’s strong financial support and business relationships with top-tier manufacturers of displays, lighting products and solar panels will facilitate generating tremendous business opportunities in both the government and private sectors.”

IALD EDUCATION TRUST WELCOMES NEW PRESIDENT AND BOARD MEMBERS

The IALD Education Trust, a not-for-profit charitable educational organisation that supports academic education in lighting design to foster and ensure the future of the architectural lighting design profession, is pleased to announce the election of Andrea Hartranft, IALD, as the new President of its Board of Directors; Jimalee Beno as Secretary and Treasurer; and Steve Brown, IALD, and Marco Palandella as new Board Members. Andrea, Jimalee, Steve, and Marco will support the board's efforts in raising awareness for the IALD Education Trust's programmes, events and fundraising efforts.

"Becoming President of the IALD Education Trust Board is just one more way to serve this great organisation, and I am thankful for the opportunity," said Andrea. "So many volunteers giving of their time, talent, expertise and energy to support students, educators and lighting programmes surround the Board of Directors. Working with all of them is about as great a gig as I could ever wish for."

For more information on the IALD Education Trust Board Elections, contact IALD Education Trust Coordinator Jill Mulholland, PhD, at jill@iald.org or by calling +1 979 204 3868.

Andrea Hartranft, IALD

IALD Board of Directors, President
Hartranft Lighting Design, LLC
Charlotte, NC USA

Andrea Hartranft, IALD, is principal at Hartranft Lighting Design in Charlotte, NC USA. She recently completed a term as Secretary and Treasurer of the IALD Education Trust Board of Directors and held a Director Board position from 2012-2013. She also served as past Chair of the IALD Awards Committee and the IES Progress Report Committee.



Andrea is Lighting Certified (LC) by the National Council of Qualifications for Lighting Practitioners (NCQLP), and has 29 years of extensive design and project management experience in lighting and controls systems for commercial, institutional and industrial projects. She holds a degree in Architectural Engineering from The Pennsylvania State University in State College, PA USA. Her achievements in the field of lighting design consist of more than 1,000 projects and a number of awards from the International Association of Lighting Designers (IALD) and the Illuminating Engineering Society (IES).

A huge contributor to lighting education, she has taught fundamental/advanced lighting design at the Corcoran College of Art + Design, has spoken on lighting issues at local colleges and Universities, presented at IALD Enlighten conferences, conducted workshops for the IES conferences, and was a workshop head and mentor at the Lights in Alingsås workshop in Alingsås, Sweden in 2015.

YAHAM® Lighting

SHOE BOX LED STREET LIGHT

Wide Angle Optical
Design

Designed for Parking Lot



Shoe Box LED Street Light brings a new solution for area lighting with Optimized Thermal and 110°x150° Wide Angle Optical Design.



www.yahamlighting.com
Tel: +86-755-29435812
E-mail: sales@yahamlighting.com



show preview

HKTDC Hong Kong
International Lighting Fair
(Spring Edition)

6th – 9th April 2016
Hong Kong Convention and Exhibition Centre
Hong Kong



Photo Credit: Hong Kong Trade Development Council

Light Up Your Prospects

The 8th edition of HKTDC Hong Kong International Lighting Fair (Spring Edition) will be staged from 6 to 9 April 2016 at the Hong Kong Convention and Exhibition Centre. Around 1,200 exhibitors are expected to join the fair. The fair offers global buyers a one-stop sourcing platform for all finished products, parts and components. A great variety of merchandise will be showcased at different theme zones which enhance business opportunities for visitors and industry players.

LED Lighting in Demand

HKTDC Research conducted a survey on prospects for the lighting market. Findings indicated that LED and related green lighting products (26%) continue to be viewed as the category with the highest growth potential in 2016, followed by Household Lighting (20%), Smart Lighting & Solution (15%) and Commercial Lighting (14%). About 97% of the surveyed buyers and exhibitors expected that LED lamp price would fall further by as much as 20% within the next 12 months.



The popularity of LED lighting is due to the falling purchase costs, lower power consumption and longer lifetime of LEDs. All these help to widen the scope of lighting applications.

Thematic Zones for Easy Sourcing

LED & Green Lighting continue to be the highlight zone as consumers and businesses adopt energy-efficient lighting. The Chinese mainland market for environmentally-friendly lighting is growing rapidly and the Spring Edition is the ideal platform for trading in both functional and decorative LEDs and Green Lighting.

Hall of Aurora provides an elegant space for branded collections of eye-catching, high quality lighting fixtures. With an increasingly affluent and sophisticated consumer base in emerging markets, such products are seeing growing demand. Interior designers and architects, as well as fashion-forward retailers can find new and trendy lighting products. Leading brands taking part in the zone include Viribright, Forest Lighting, TCL, Jaykal, SKY-LIGHTING, LITE SMART and many more.

Avenue of Chandeliers allows exhibitors to make a major impact as their glittering offerings draw buyers' attention. The chandelier, in both modern and traditional styles, is having a fashion resurgence with interior decorators and stylists.

World of Professional & Industrial Lighting will cover a broad range of products including stage lights, emergency and safety lights, architectural lighting and other situation-specific applications, with LED options.

To help build the reputations of young designers in the market, HKTDC will provide a stage for these up-and-coming talents at the *Avenue of Inspiration* to showcase their original ideas and new concepts.

Other product zones include *Advertising Lighting, Commercial Lighting, Outdoor Lighting and Lighting Accessories, Parts & Components*, etc..

Enlightening Events

Different seminars and buyer forums are organised to keep traders abreast of market information. Co-organised with the Electronics Division of Hong Kong Institution of Engineers and Hong Kong Electronics & Technologies Association, the *Asian Lighting Forum* covers subjects such as global market trends in lighting product development and LED technology advancements and applications. In a range of informative events at the fair, buyers will share market insights at forums on business opportunities in different markets, and industry representatives will give the latest update on lighting design trends in terms of fashion and function.



In order to enhance the quality of Hong Kong lighting products and encourage new ideas, HKTDC has organised the 9th *Hong Kong Lighting Design Competition* as a concurrent event of the Lighting Fair (Spring Edition) 2016. The theme of this year's competition is "Mindful Minimalism", which aims to eliminate all the unnecessary elements and leave only the 'core' essentials of light. Contestants' designs should present purity, functionality and usability to the user in a whole new experience of light.

Trade Growth in Major Markets

In 2015, the total value of Hong Kong's exports of lighting products reached HK\$10.4 billion. Hong Kong's exports of lighting products to USA and Chinese mainland, the major markets of the industry, increased by 13% and 0.5%; exports to India, which is one of the emerging markets, is up 37.6% over the same period last year. The top 5 exporting markets are USA, Chinese mainland, Japan, Germany and France.

In addition to HKTDC Hong Kong International Lighting Fair (Spring Edition), two concurrent fairs will also be held on 13—16 April 2016: HKTDC Hong Kong Electronics Fair (Spring Edition), Asia's largest electronics fair, to showcase the latest consumer electronics, and HKTDC International ICT Expo, which offers the newest enterprise solutions, retail technologies, mobile applications, cloud computing solutions, telecommunications and network products for all businesses.

Reserve Your FREE Admission Badge and Save HK\$100!

For trade visitors, register now for your FREE admission badge through the following channels:

- Mobile Info Site:
hktdc.com/wap/lightse/T119
- Smartphone Info Site: download HKTDC Mobile at iPhone App Store or Google Play
- Website:
www.hktdc.com/ex/hklightingfairse/34



About the HKTDC

A statutory body established in 1966, the Hong Kong Trade Development Council (HKTDC) is the international marketing arm for Hong Kong-based traders, manufacturers and service providers. With more than 40 global offices, including 11 on the Chinese mainland, the HKTDC promotes Hong Kong as a platform for doing business with China and throughout Asia. The HKTDC also organises trade fairs and business missions to connect companies with opportunities in Hong Kong and on the mainland, while providing information via trade publications, research reports and online. For more information, please visit www.hktdc.com.

13–18.3.2016

Frankfurt am Main

light+building

The world's leading trade fair for
lighting and building services technology

Discover trends.
Shape the future.

Creative lighting designs and smart building systems technology: Discover how everything is integrated with everything else and how the trends of tomorrow are being created. Only at Light + Building, the hotspot for inspirations and innovations.

Where modern spaces come to life.

www.light-building.com

info@singapore.messefrankfurt.com

Tel. +65 67 37 17 04



messe frankfurt

show preview

Guangzhou International
Lighting Exhibition 2016

9th – 12th June 2016
China Import and Export Fair Complex
Guangzhou, China



Photo Credits: Messe Frankfurt / Guangzhou International Lighting Exhibition

“THINKLIGHT: A new dimension” theme to be explored at the Guangzhou International Lighting Exhibition 2016

The 21st edition of the Guangzhou International Lighting Exhibition, the most influential and comprehensive lighting and LED event in Asia, is set to take place from 9 – 12 June 2016. Once again, the event will be held at the China Import and Export Fair Complex in Guangzhou, China.

At the fair’s upcoming edition, participants can expect the forward-thinking theme, “THINKLIGHT: A new dimension”, to take centre stage and promote out-of-the-box thinking to manage shifting market dynamics. Presently, lighting is being used for purposes beyond those of basic illumination such as detecting occupancy, adjusting to different moods, conserving energy and optimising operation via remote controls. The functions of lighting greatly increase when combined

with intelligent motion or ambient light sensors and integrated into programmable networks.

Referencing the 2016 show's theme, Ms Lucia Wong, Deputy General Manager of Messe Frankfurt (Shanghai) Ltd, expressed: "In the Internet Plus era, the lighting industry is evolving with opportunities abound. Smart lighting has become a vital element in IoT-enabled homes as lighting plays a larger role in appliances, heating systems and metering. Such advancements in lighting technologies not only serve to enhance functionality and efficiency, but also to enable diversified applications to optimise living comfort. Perseverance, exploration and interaction are key factors to sector development and we must continue to work closely with the lighting community to explore and unveil the next industry breakthrough. The fair continues to be a trusted platform for showcasing innovative technologies and encouraging industry players to think unconventionally from technical, market and design perspectives."

Innovative lighting-related equipment, components, technologies and applications in one integrated platform

The event's extensive product category coverage is unrivalled in terms of depth and breadth. As an integrated platform, the one-stop solutions exhibition facilitates sourcing by not only fostering business collaboration

between exhibitors, but also by consolidating lighting-related equipment, components, technologies and applications into one location for buyers.

Influenced by the Industry 4.0 revolution, industrial lighting and LED plants are adopting increasingly automated manufacturing production processes. As such, more intelligent machinery is in demand. Related solutions to be displayed at the fair include:

Equipment & Component

- Simulation, inspection, measurement, testing and evaluation equipment
- Lighting accessories and electronic components
- Components for LED packages (Wafers, phosphor, sealing materials, substrates)

The fair also aims to help industry players in the LED arena remain competitive in a challenging general lighting market. To do so, they must improve efficacy, reduce costs and increase colour consistency. Related exhibits this year include:

LED Technology

- LED chips
- LED packaging
- Power supply and ICs (LED drivers, driver ICs, converters)
- LED modules and light engines





Furthermore, various lighting solution exhibits will focus on the trending market topics of sustainability, quality of lights and smart controls. Related solutions to be showcased include:

Lighting Application

- Residential lighting
- Commercial lighting (Retail, office, hospitality, industrial)
- Architectural lighting
- Urban lighting
- Transport lighting
- Electric lights

The Guangzhou International Lighting Exhibition, along with the concurrently held Guangzhou Electrical Building Technology, is headed by the biennial Light + Building event, which took place from 13 – 18 March 2016 in Frankfurt, Germany.

Messe Frankfurt also offers a series of other light and building technology events worldwide, including the Shanghai International Lighting Fair, BIEL Light + Building in Argentina, Light Middle East in the United Arab Emirates, Interlight Moscow powered by Light + Building in Russia, Light India, the LED Expo New Delhi, and the LED Expo Mumbai in India.

For more information regarding the shows, please visit www.light.messefrankfurt.com.cn or email light@china.messefrankfurt.com.

For more information on Light + Building shows worldwide, please visit www.light-building.com/brand.



21 22 23
SEPTEMBER 2016

Hall 5, IMPACT Exhibition & Convention Center, Bangkok, Thailand

Why Should You Exhibit?

- **Discover** the world's latest technology that you would never see
- **Update** yourself with latest technology and add it into your business to gain new comparative advantages
- **Establish** new partnerships with exhibitors from leading companies around the world
- **Find** the perfect solutions for your projects and facilities
- **Acquire** valuable knowledge
- **Gain** fascinating information about the industry
- **Expand** your professional circles with over 10,000 trade visitors
- **Get** to know everything you will learn a lifetime in only 3 days



The Power of Exhibitions
Your face-to-face marketing platform
to generate sales leads

www.maintenance-asia.com
www.greenbuilding-asia.com

facebook.com/BMAMExpo
facebook.com/GBRExpo

linkedin.com/in/bmamexpoasia
linkedin.com/in/gbrexpoasia

Youtube: BMAM & GBR Expo Asia



The Asian Construction Week

Organizers

IMPACT Exhibition Management Co., Ltd.

Bangkok Land Building, 10th Floor, 47/569-576, Moo 3, Popular 3 Road, Ban Mai Sub-district, Pakkred District, Nonthaburi 11120

Mr. John Kelvin Esguerra (Overall)

Tel: +66 2833 5358

Fax: +66 2833 5127 to 9

Email: jkesguerra@impact.co.th

Ms. Wong Wing Yan (International)

Tel: +66 2833 5013

Email: wingyanw@impact.co.th



SPHERE Exhibits Pte. Ltd.

Mr. Aaron Ann – Asst. Project Manager, Trade

Tel: +65 6590 3415

Email: aaronann@sph.com.sg



show review

Shanghai International
Lighting Fair

23rd – 25th September 2015
Shanghai New International Expo Centre
Shanghai, China

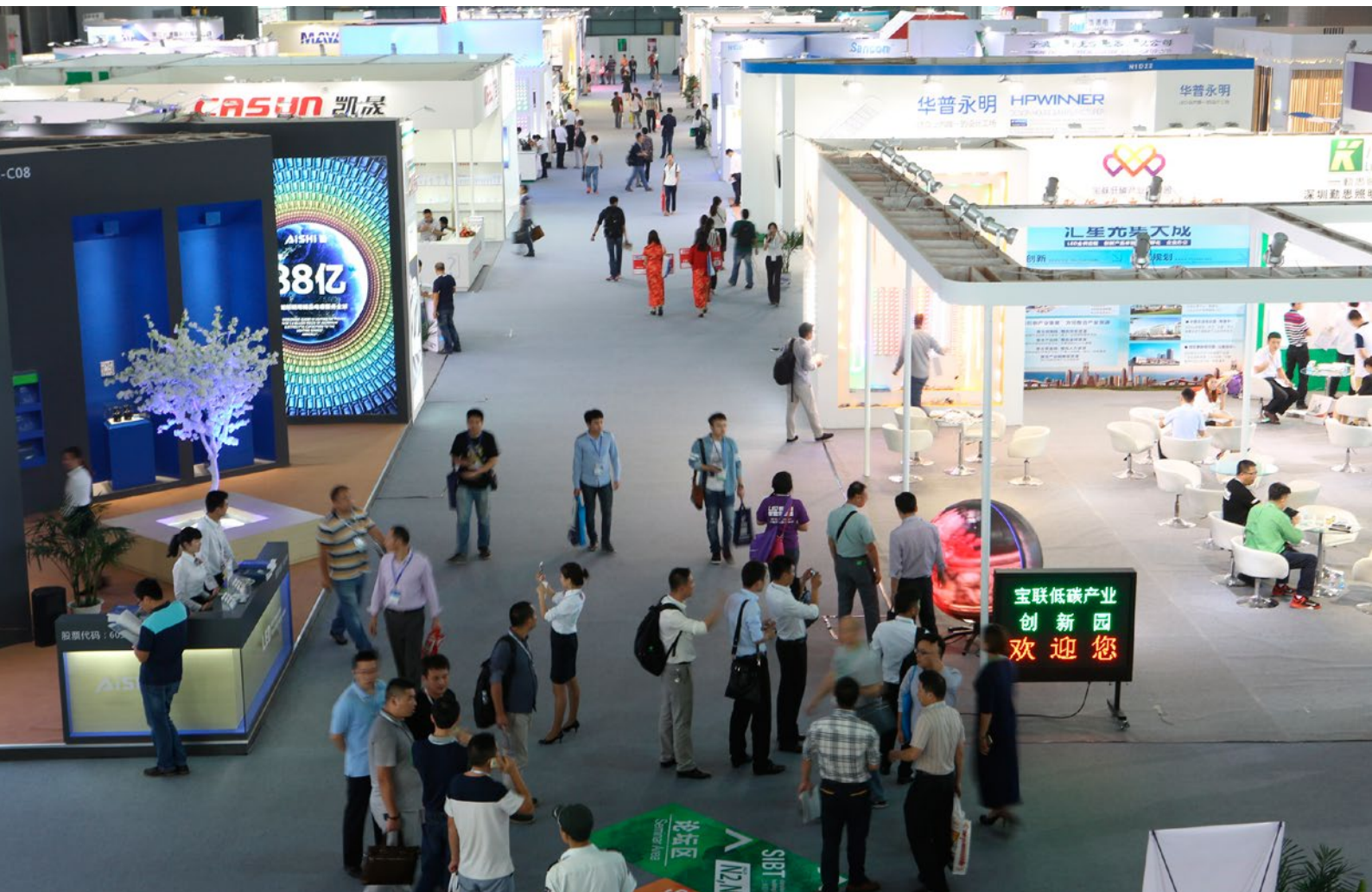


Photo Credits: Messe Frankfurt / Shanghai International Lighting Fair

Second annual Shanghai International Lighting Fair 2015 closes with visitor figures up

For the second year, the Shanghai International Lighting Fair closed with visitor figures seeing an increase. This growth is indicative of the business potential for players in China's lighting industry. The fair, which ran from 23 – 25 September 2015, focused on project-based opportunities and smart lighting solutions available across Central and Eastern China. Over the course of the show, a comprehensive display of the latest lighting technologies for industrial, residential and commercial applications was showcased at the Shanghai New International Expo Centre.

The 298 exhibitors in attendance included notable brands such as Aishi, EASEIC, FSL, Fulham, Geosheen, HEM Lighting, HPWINNER, Mean Well, Nationstar, OML Lighting, Romney, Sozn, Sunpuled and several others. Mr Peter Li, Sales Manager at Fulham Electronic Co Ltd, stated: "Due to strengthened visitor flow and exhibitor quality, I have witnessed an improvement in results from exhibiting and exchanged contacts with professional buyers. As a well-established industry brand, staying up-to-date on market trends is far more important than brand building and promotion for us. The fair helps me gain a deeper understanding of the lighting industry, enabling me to better position my products and brand in the market."

Visitors to the show also represented a diverse pool of 11,676 trade- and project-based experts from 50 countries and regions. First-time visitor from Italy, Mr Raffaele Rea, Manager at Star Deco by Ar Luminarie, established several business leads. He mentioned: "I am searching for new wired LEDs and lamps, and quality and safety are my top concerns. I have exchanged business cards with many local suppliers and there is strong potential for future business collaboration."

Ms Lucia Wong, Deputy General Manager of Messe Frankfurt (Shanghai) Co Ltd, commented: "We are delighted to witness the Shanghai International Lighting Fair 2015 maintaining momentum from its inaugural launch last year. We certainly plan to continue growing organically with the industry. It was an honour to welcome lighting manufacturers, trade- and project-based visitors, leading industry associations, and the media in one location to explore the green lighting sector. Market opportunities abound, we continue to strive to help the industry capture new business."

Multifunctional platform continues to serve various business needs

Intelligent and energy-efficient lighting solutions have become a driving force behind industry growth. Recognising this, fair organisers aimed to create a platform that serves the various agendas of lighting and LED businesses.

Mr Jin Guochang, a representative of China Energy Management Contract Net, visited the fair to gain a better understanding of the lighting market. He

explained: "With the amount of attention the Shanghai Government is placing on energy efficiency, I came here especially to learn more about the lighting market, specifically the development regarding street lights and sensor lights. The products on display here are diverse and the fair is well organised. I plan to attend again next year."

For new exhibitor Mr Long Cheng Li, representative from Para Light Nanjing Electronics Co Ltd of Taiwan, gaining market intelligence was key. He said: "Understanding more about industry trends through the fair allows us to re-examine our market positioning in China. This enables us to launch appropriate products to better meet customer demand."

Sharing the same sentiment in regards to using the fair to gain industry insight was Mr Qingzhou Wang, Engineer at Anhui Tuodian Lighting Co Ltd. He commented: "The Shanghai International Lighting Fair caters to our sourcing needs better than others. I have met several companies here that offer high-quality and cost-effective products. Many suppliers are now actively developing intelligent and smart lighting technologies of higher quality to cater to the market's needs. This is an eye-opening visit for me. Not only does it help me reach more LED manufacturers, but it also helps me get a better understanding of the industry."

Increased seminar offerings and concurrent fairs keep participants abreast of new market developments

Aside from the exhibition's ability to provide wide-ranging solutions, an event programme consisting





of over 50 sessions of high-level seminars, forums and product presentations was also on offer. Such a programme enabled attendees to stay informed about the latest lighting market developments surrounding design, technology and market channels.

Sharing his positive experience was attendee Mr Frank Yan, Sales Manager at By Rydén's (China) Co Ltd of Sweden. He said: "The fair's seminar programme is very informative and the speakers are very professional."

Seminar speaker and professor at Tsinghua University's School of Architecture, Mr Xin Zhang, who delivered an introduction to photometry from a design and research perspective, stated: "The concurrent events gather experts to exchange ideas and effectively promote the development of the lighting industry. Ordinary visitors do not participate in this trade fair; only those who own original ideas and understand the industry attend."

The show was held concurrently with four other regional technical events, including ISH Shanghai & CIHE, Shanghai Intelligent Building Technology, Shanghai Smart Home Technology, and Building Solar China. Collectively known as the "Intelligent Green Building – IGB" exhibition platform, the five events spanned 40,000 sqm and four halls. The holistic platform provides solutions for the building efficiency, sustainable development, and intelligent and green building industries. This strategic integration of technologies optimises synergies between industries and a diverse group of professionals in the lighting solution, HVAC, smart home and integrated solar building businesses to facilitate partnerships.

Benefiting from the platform was Mr Steven Zhao, Assistant Business Development Manager of Advanced Technologies – OLED at Merck Chemicals (Shanghai) Co Ltd of Germany. He commented: "With a number of other fairs taking place at the same time, it makes it easier for me to observe the trends and creative applications of lighting technologies throughout various markets. I also observed a handful of useful demonstrations and impressive LED panel lights on display here."

The next edition of the Shanghai International Lighting Fair will be held from 31 August – 2 September 2016 at the Shanghai New International Expo Centre. The Shanghai International Lighting Fair and Guangzhou International Lighting Exhibition are sister events focusing on comprehensive lighting and LED technologies in Asia. Both fairs are headed by the biennial Light + Building event, which took place from 13 – 18 March 2016 in Frankfurt, Germany.

Messe Frankfurt also offers a series of other light and building technology events worldwide, including Guangzhou Electrical Building Technology in China, BIEL Light + Building in Argentina, Light Middle East in the United Arab Emirates, Interlight Moscow powered by Light + Building in Russia, Light India, the LED Expo New Delhi, and the LED Expo Mumbai in India.

For more information regarding the shows, please visit www.light.messefrankfurt.com.cn or email to light@china.messefrankfurt.com.

For more information on Light + Building shows worldwide, please visit www.light-building.com/brand.

**International
Construction Week** **ICW**
2016

ecobuild
southeast asia 2016

11-15 April 2016 Five-day Construction Conferences

12-14 April 2016 Ecobuild SEA Three-day Exhibition

Driving Productivity in Construction

Kuala Lumpur Convention Centre

For more info, contact:

+603 2176 8788

ecobuild-sea@ubm.com

www.ecobuildsea.com

Hosted by:

Featuring:

Organised by:



show review

Lighting Japan

13th – 15th January 2016

Tokyo Big Sight
Tokyo, Japan

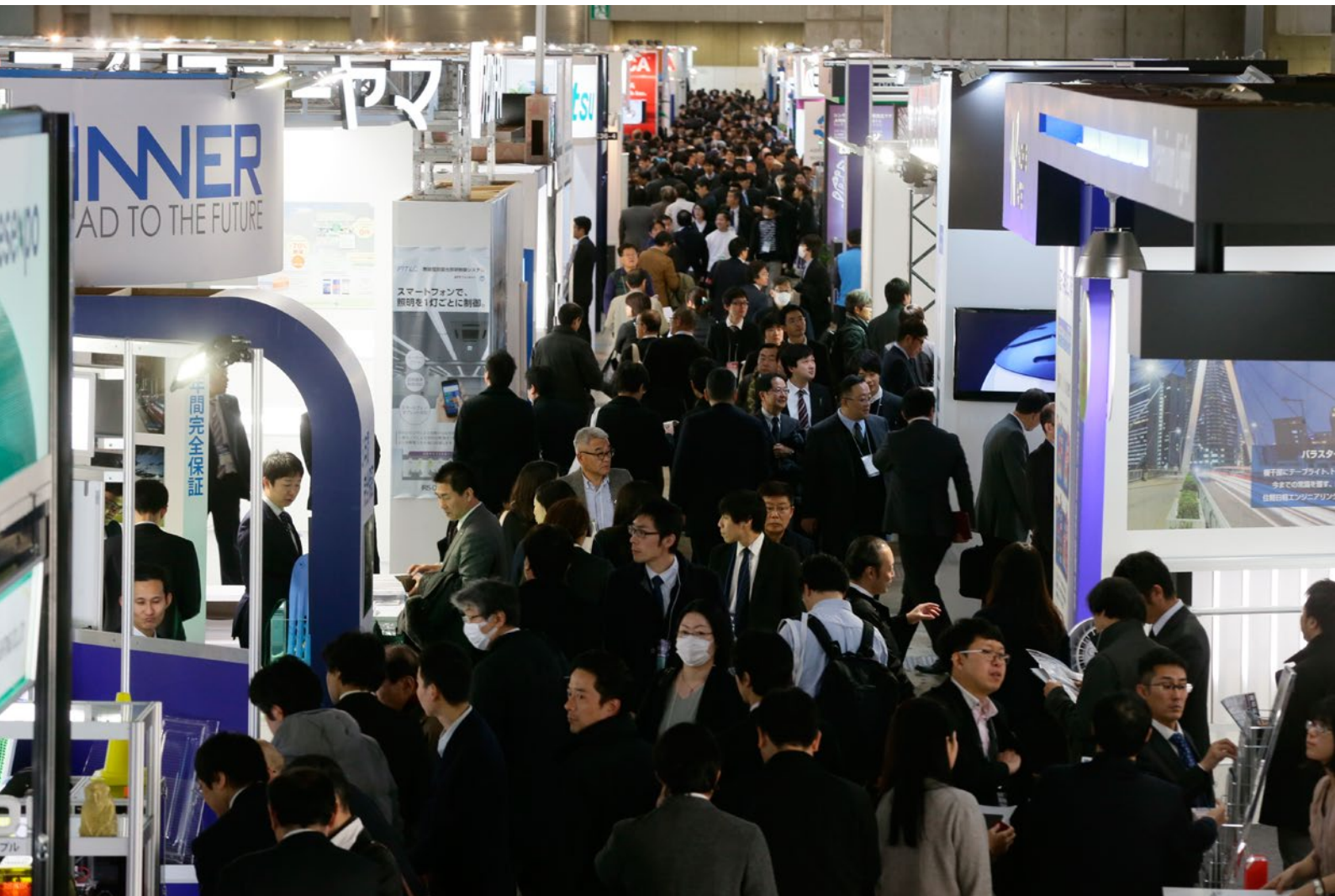


Photo Credits: Reed Exhibitions Japan Ltd

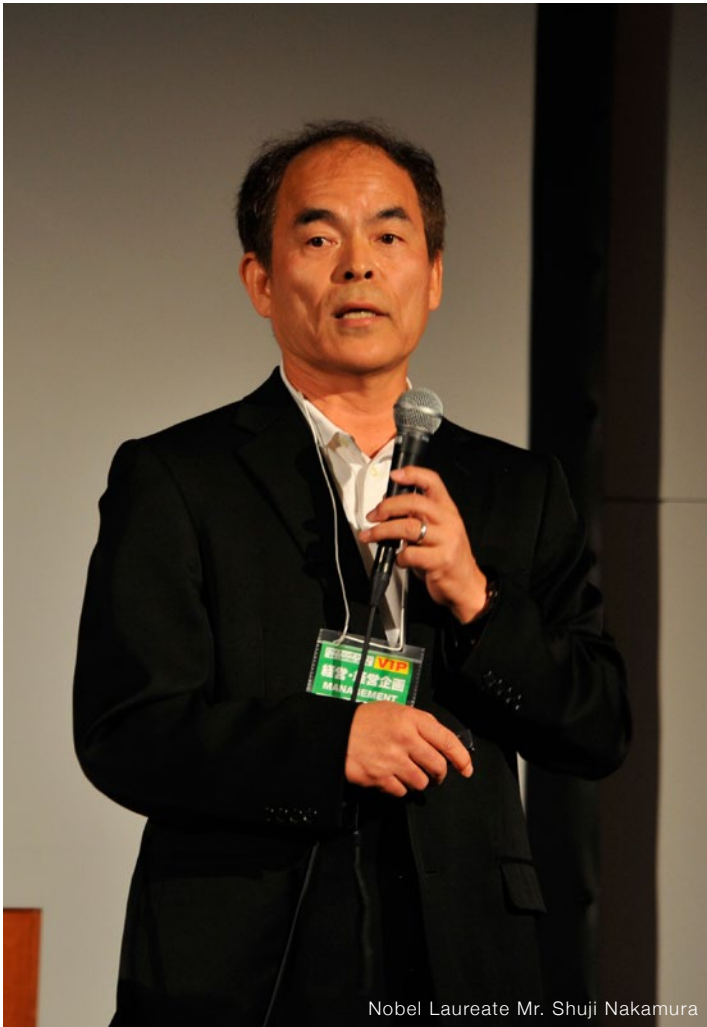
Lighting devices and technology play a big part in our lives as they are used everywhere such as homes, offices, shops and other indoor/outdoor facilities. Today LED/OLED is used more as a solution in the automotive industry, plant factories and beyond.

Lighting Japan has well established its presence as an exhibition that provides the latest technology and products to cover all these needs. It is the hub for LED/OLED lighting, design lighting and smart lighting. Exhibitors gather from all over the world, which attracts many visitors to the show to see lighting products and technology.

Lighting Japan 2016 consisted of two specialised shows, Light-Tech Expo and Int'l Lighting Fixture Expo.

Light-Tech Expo is an exhibition where all kinds of technologies for LED/OLED development and application gather. LED/OLED is now getting applied to various sectors. It exhibited components for LED packaging, components for OLED, power supply and IC, processing technology, and simulation/inspection/measurement/test/evaluation equipment.

At Int'l Lighting Fixture Expo, all kinds of lighting fixtures gather. It had exhibitors for indoor/outdoor



Nobel Laureate Mr. Shuji Nakamura

LED/OLED lighting, lighting control systems and other lighting. There were many lighting fixtures for energy-saving as well as smart lighting (IT technology and sensors etc.).

There were 250 exhibitors. Also, there were 83,557 visitors (including those who went to concurrent shows).

Next to the exhibition halls, 60 speeches were delivered by industry leaders. The topics covered all lighting issues such as the latest lighting technology, lighting control, advanced automotive lighting, new markets for LED, to lighting design for hotels and educational facilities, lighting design in urban development and projection mapping.

Including concurrent shows, 19,137 visitors attended the conference during the three show periods.

Out of all the seminars held for Lighting Japan, the keynote session attracted the most attention. Nobel laureate, Mr. Shuji Nakamura and the Business Unit Digital System CEO of leading lighting manufacturer OSRAM GmbH, Mr. Geert van der Meer, gave their thoughts on how new technology changes lighting.

The next edition of Lighting Japan is scheduled to take place from 18 – 20 June 2017.

To find out more information about the show, please visit www.lightingjapan.jp/en/Home/ or email light@reedexpo.co.jp.





Inside Rolls-Royce

Spirit of Ecstasy

Client: Rolls-Royce
Creative Agency: Imagination
Production: Cinimod Studio
Music Composition: North v South/Cinimod Studio
Photo Credit: Cinimod Studio Ltd



Cinimod Studio was commissioned by London agency Imagination to produce unique and engaging artworks for the "Inside Rolls-Royce" exhibition held at the Saatchi Gallery.

For this project the public was invited to transform themselves into the brand's iconic Spirit of Ecstasy via a light particle animation and video wall. Using cutting edge software, the dormant state of the angelic figure was dynamically transformed into a live interactive performance as the visitor took his place in front of the screen. Amidst a shower of golden sparkles echoing the participant's silhouette, the Spirit of Ecstasy was brought alive in a stunning real-time visual performance in which an interactive soundscape further enhanced the immersive experience.

The interactive installations produced by Cinimod Studio were extremely innovative, and it was through the close collaboration with Imagination and Rolls-Royce that they became such a successful embodiment of the Rolls-Royce brand.

#insiderollsroyce





A photograph of the Waldorf Astoria Hotel in Amsterdam at dusk. The building is a grand, multi-story structure with a dark facade and white architectural details. The windows are illuminated from within, casting a warm glow. A large tree stands in the foreground on the left, partially obscuring the building. A canal is visible in the foreground, with the building's lights reflecting on the water. A small boat is docked at the canal. A blue flag with the Waldorf Astoria logo is flying from the building. The sky is a deep blue, and the overall atmosphere is serene and elegant.

Waldorf Astoria Hotel

Amsterdam, Netherlands



Designer: *dpa lighting consultants*

Client: *DvM b.v*

Interior Designer: *G.A. Design*

Electrical Contractor: *Hirdes Elektro Techniek*

Lighting Controls / Programming: *Emenem Building Automation*

Architect: *Oeverzaaijer Architectuur en Stedebouw*

M&E Consultant: *HE Adviseurs*

Cost Consultant: *Interplan Bouwsupport*

Decorative Lighting Supplier: *Heathfield & Co.*

Architectural Lighting Suppliers: *Lucent Lighting, Light Graphix, Mike*

Stoane Lighting, Osram, Aldabra, Zumtobel, Linealight, Atomis

Photo Credit: *DvM b.v*

The Waldorf Astoria Amsterdam Hotel is a collection of six monumental 17th Century Canal Palaces, situated on the Herengracht canal in the heart of Amsterdam, which underwent a sensitive refurbishment orchestrated by owners DvM b.v. It won the 'Best Hotel Interior Europe' award in the International Property Awards 2015.

The buildings, once owned by Netherlands Overzee Bank, feature a unique grand staircase built by the architect of Louis XIV, Daniel Marot. The interiors were delicately redesigned by G.A Design which resonate Amsterdam elegance and understated quality throughout, whilst retaining the original historic elements.

The lighting design echoes this simplicity visually but uses the latest technology to achieve appropriately scaled architectural luminaires, which were carefully integrated within the historic fabric to subtly highlight features new and old to expose their beauty. The dramatic grand staircase provides an incredible vertical connection to the upper levels, where lighting was discretely integrated to reveal the depth of decorative surfaces. Throughout the project respect for the buildings was sensitively merged with contemporary elements, and the lighting emphasises this approach.









To save energy and create different atmospheres throughout the day and night, all lighting is connected to an intelligent lighting control system that provides simple, instinctive, one touch actions to create different moods and provide flexibility. The system also includes a time clock, which changes the lighting scenes automatically yet imperceptibly in the more sensitive public areas.





Challenges Faced

As with any historic project, the main challenges involved restrictions in the placement and fixing of luminaires. Dpa lighting consultants worked with the Historic Committee to get luminaire appearances and locations approved throughout the monumental spaces. In some cases dpa lighting consultants were not allowed to introduce any new lighting positions and had to work with existing locations or indeed luminaires.

On the 3rd floor there was very little or no recess depth in ceilings, as the guestrooms at this level are amongst the exposed structural beams; this challenge actually presented new lighting opportunities, which give these rooms a different character.

In the monumental spaces, dpa lighting consultants sought to minimise the impact of lighting equipment and kept luminaires as small as possible or completely concealed, within furniture or architectural details, allowing the architecture and materials be the focus. Through a series of lighting trails they were able to determine the scale and output of luminaires that were the most appropriate.

A combination of LED and low voltage tungsten halogen light sources were used throughout the hotel, with the most intimate areas using tungsten for its warmth and quality in low light scenarios, whereas LED was used in circulation spaces where the spaces and materials were more receptive to solid state lighting. Having these two light sources in adjacent areas presented a challenging task when programming the lighting scenarios for the evenings, as dpa lighting consultants sought to keep a suitable balance and comfortable ambiance for guests moving from one space to the next.

Fort Sam Houston BRAC Student Activity Center

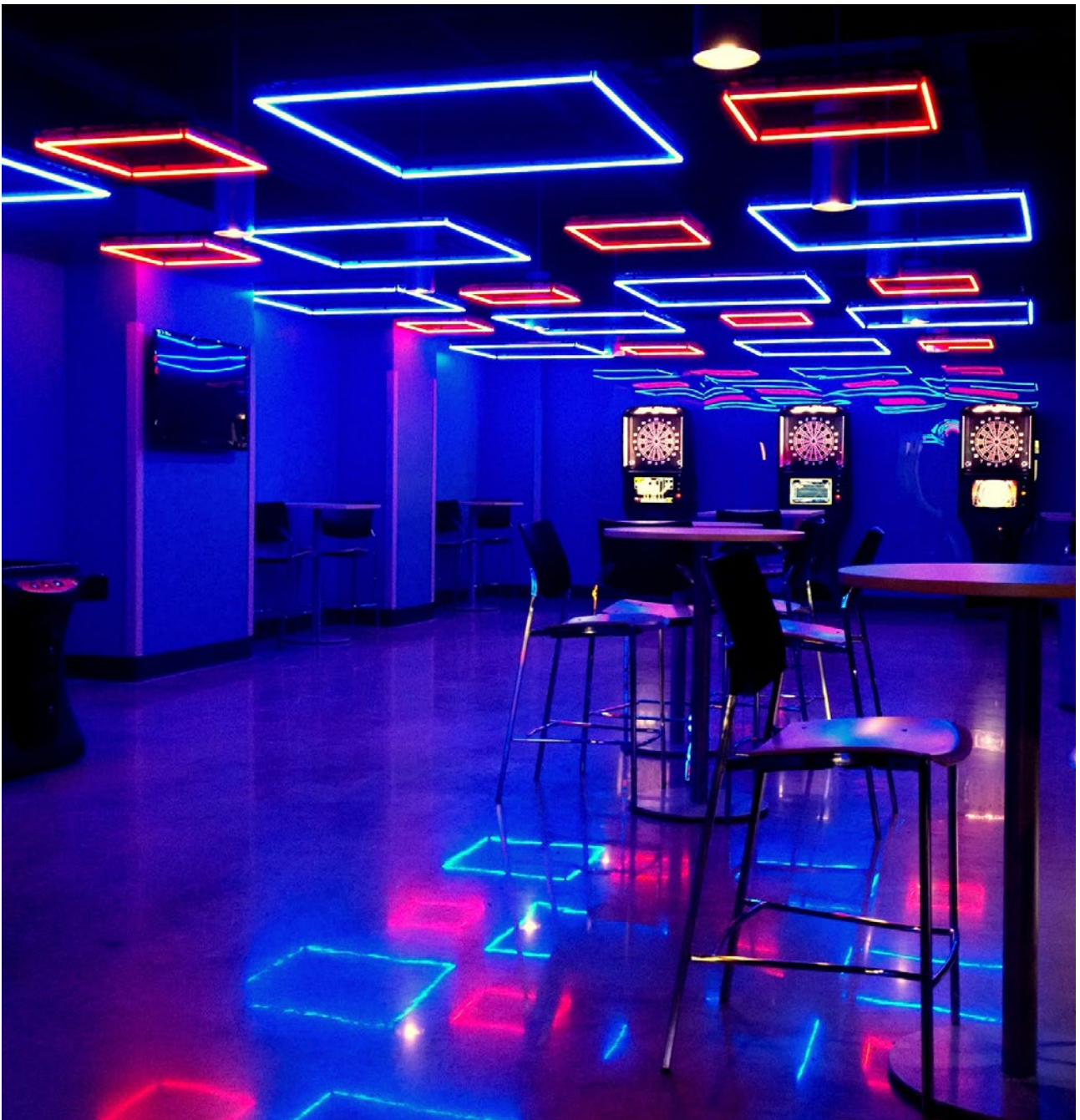
Texas, USA

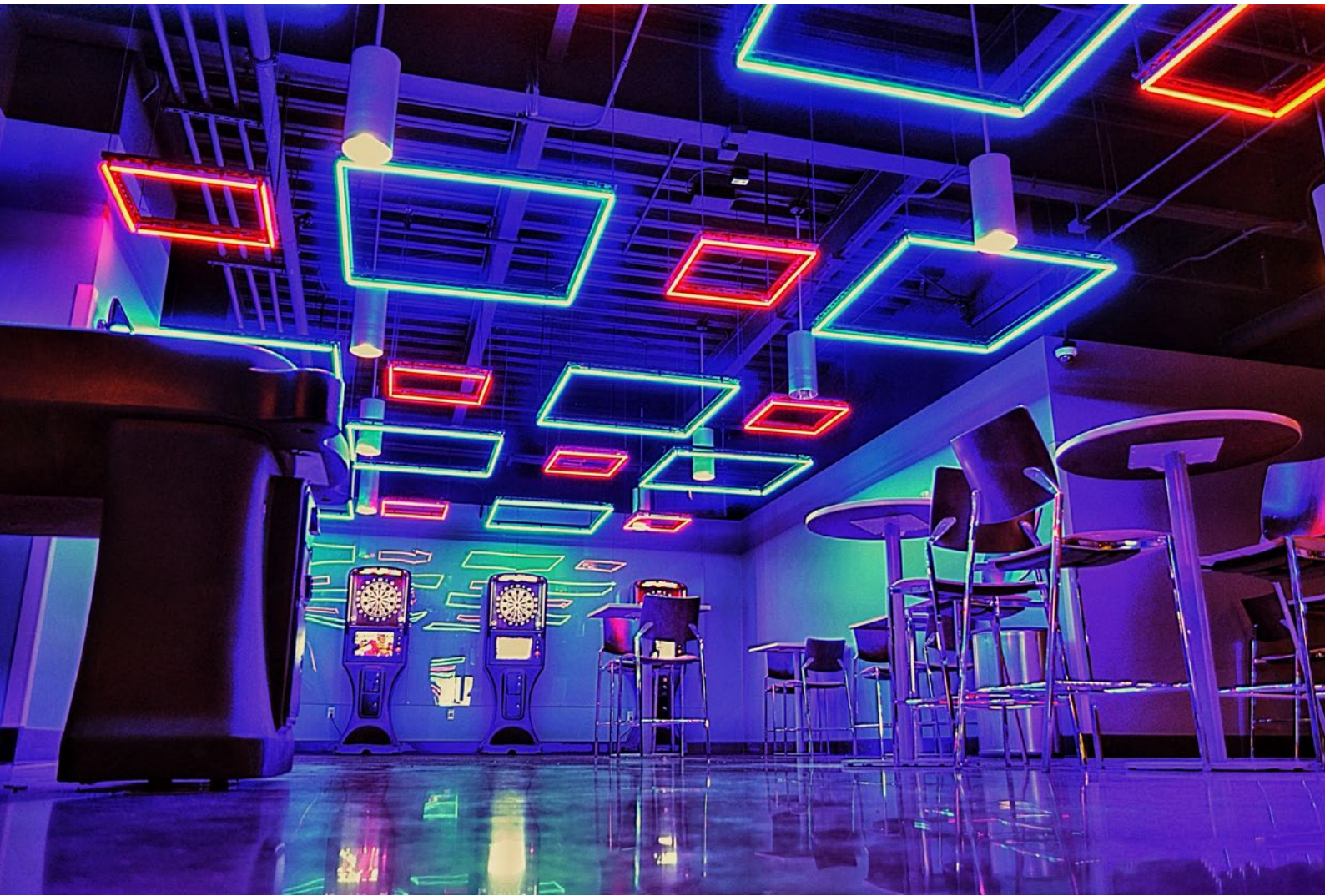
Architect: RVK Architects

Landscape Architect: RVK Architects

Interior Design: RVK Architects

Photo Credit: iLight Technologies





A Place of Their Own

Plexineon Adds Atmosphere Inside Rec Center for Military Students

With its rich legacy of military history and operations, San Antonio, Texas is known as “Military City USA”. In the heart of San Antonio is Fort Sam Houston, a historic military installation that is home to the largest healthcare training center in the world.

Students taking classes on the Medical Education and Training Campus (METC) now enjoy a new three-story, LEED-certified building that houses the Fort Sam Houston BRAC Student Activity Center. Nicknamed “The Club”, it is a place where trainees can relax and take a break from their training and studies. The space also reflects the building’s overall architectural vision: an artful blend of tradition with technology. Creative use of iLight Plexineon Blue and Plexineon Orange fixtures extends that intent.

The Design Challenge

With low ceilings and no natural light in the lower-level space, lighting was a key consideration for Annette Guerrero, Interior Designer at San Antonio-based RVK Architects. Budget was also an issue, and so were the

Eyes are drawn upwards to the random pattern of rectangles outlined in Plexineon Blue and Plexineon Orange fixtures.





many visual elements in the 62,000-square-foot space—from TVs, a dance floor and DJ booth to a soda bar, dartboards, pool tables, and an ATM.

"It was challenging to add more for decorative purposes when we had so much going on visually for recreational purposes," Guerrero said. However, once she learned about Plexineon, Guerrero was inspired. "I knew I could do anything with the Plexineon fixtures," she said.

The centerpiece of Guerrero's subsequent design became blue and orange rectangles outlined in Plexineon and suspended against a black painted ceiling. Guerrero said, "It was an exciting piece to present" to her client—and one that was met with approval.

The Plexineon Advantage

From there, the process was smooth. Guerrero said "installation was fantastic", and the final effect provides just the right aesthetic, with the light reflecting off multiple surfaces and creating an exciting vibe.

"The Plexineon helps define the space and adds a festive feel," Guerrero said. "It definitely transforms and brightens, but it's an opaque light—not blinding. It's unobtrusive and didn't need a lot of power. It came out looking just the way we wanted." ■

Marienplatz Subway and Metro Station

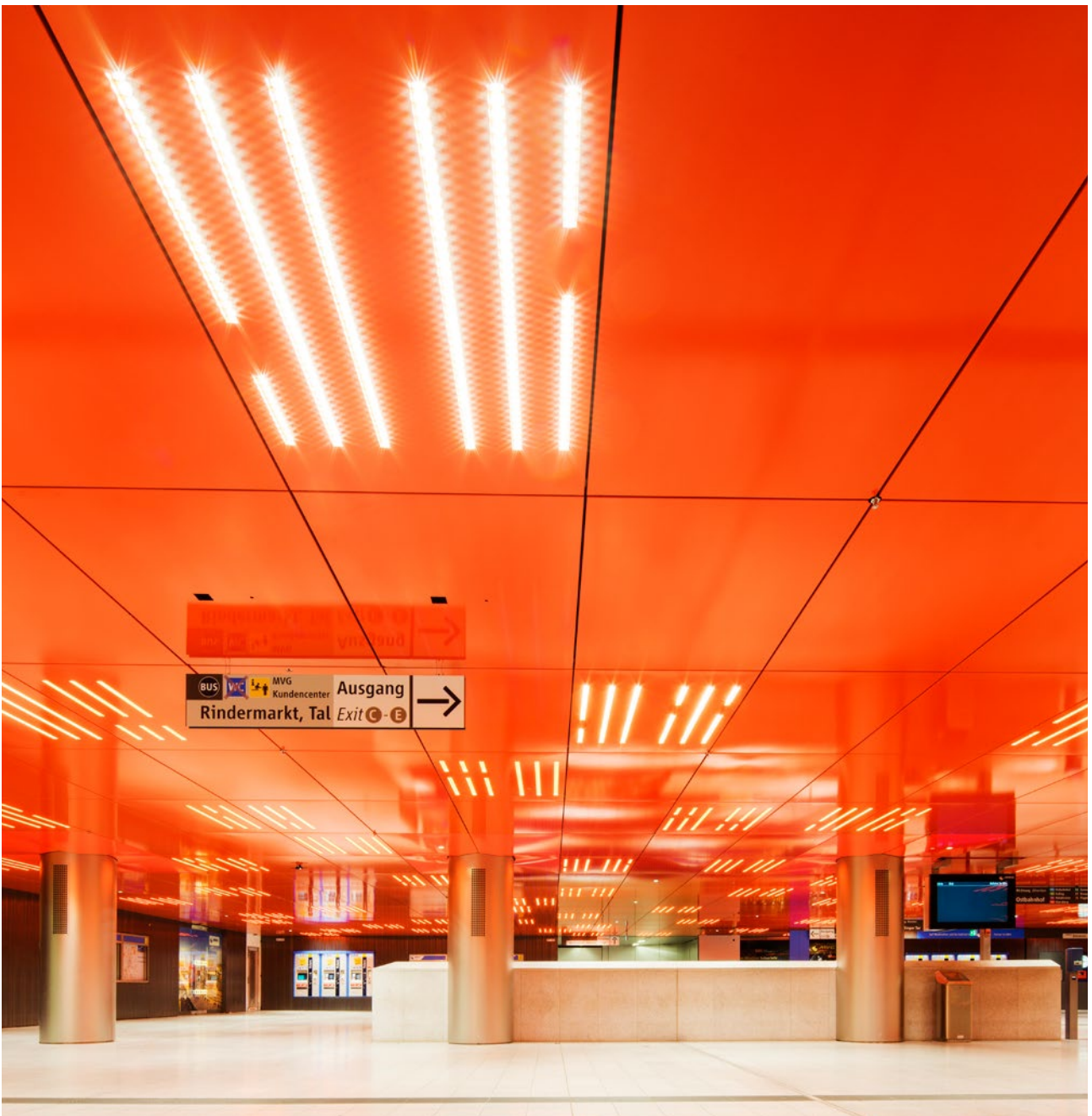
Munich, Germany

Client: Stadtwerke München, MVG Münchner Verkehrsgesellschaft mbH

Architect: Allmann Sattler Wappner

Lighting Design: Ingo Maurer

Photo Credit: Osram



Osram supplied an innovative LED solution for a renovated mezzanine floor at Marienplatz

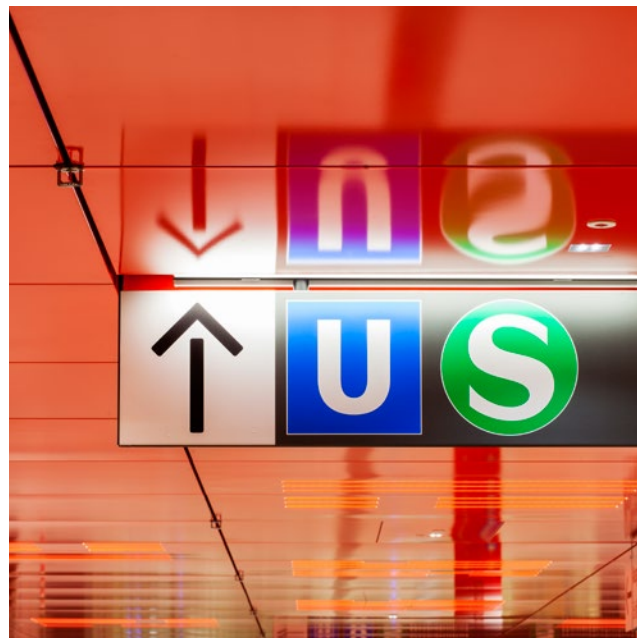
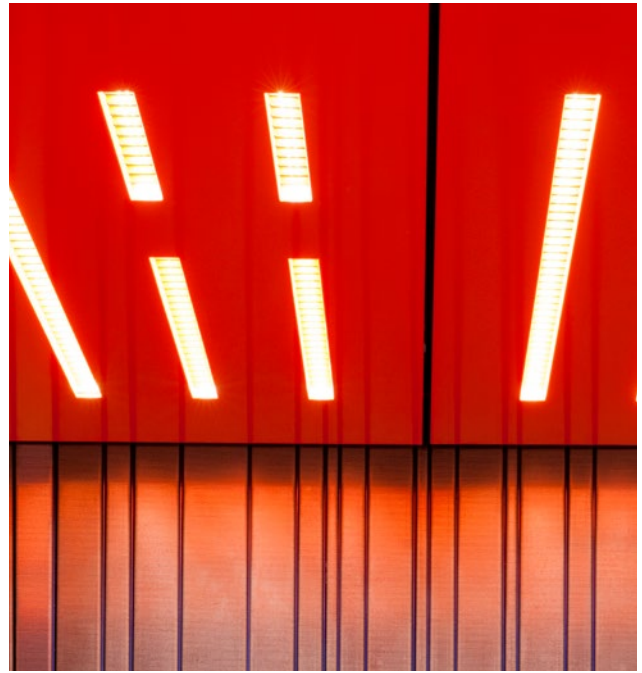
The Marienplatz subway and metro station in Munich, Germany has a newly designed intermediate storey. The concept drawn up by the architects Allmann Sattler Wappner and the lighting designer Ingo Maurer gives the subterranean mezzanine a bright, clearly arranged and customer-friendly appearance following a construction period of three and a half years. Up to 200,000 passengers enter this traffic node daily, following modernisation by the Munich municipal authorities (SWM) and the Munich transport company (MVG). An essential element of the design is the orange-red light ceiling installed in the central ticket hall, where more than 1,000 Osram light lines have been installed for illumination.

The ceiling in the central area of the mezzanine level has been clad in orange-red, lightly reflective ceiling plates that give the complete space a larger appearance. 1,062 specially developed LED light lines in various lengths and configurations have been flush-installed into the ceiling to illuminate the space, creating highly diverse patterning and a pleasant atmosphere. In addition, more than 100 planar spots (wallwashers) with LED technology provide uniform lighting for the signage.





The lighting concept designed by Ingo Maurer features a generously dimensioned light ceiling with 1,062 LED light lines from Osram.



"The upgrade has created a modern and very distinctive space in the heart of the city – we're very pleased indeed to have carried out Ingo Maurer's lighting concept using our innovative LED solutions," stated Dr. Eladia Pulido, CEO of Osram Lighting Solutions.

Marienplatz is one of the central squares in the Bavarian provincial capital, located in the centre of the pedestrian zone. As a stop for up to 200,000 passengers boarding or leaving trains every day as well as up to 750 subway trains and more than 900 suburban trains, the square is one of the most important connecting stations in Munich's public traffic system. The mezzanine, with a floor area of more than 4,200 m², is the uppermost of four subterranean levels and provides access to the subjacent subway and district platforms. In addition, the location now also accommodates various shops and service facilities, including the customer centres of the MVG, the SWM and the telecommunication provider M-net. ■

Supersports at Central Plaza West Gate

Nonthaburi Province, Thailand

Owner: Central Retail Group

Interior Designer: Zebra

Lighting Design and Solution: Lighting & Equipment Public Company Limited (L&E)

Writer: Sudrak Prichanond

Photo Credit: Lighting & Equipment Public Company Limited





Among the well-known sports wear and sports equipment stores in Thailand, the name of Supersports has been in the top rank for decades. Supersports is a big sport distributor and retailer, one of the affiliated businesses belonging to Central Group. They have more than 60 branches in Thailand and Southeast Asia. Most retail stores are in large scale integrated in Central and Robinson Department Stores, and some stores are stand-alone.

The interior theme of Supersports has been keeping up-to-date from time to time. One of the new branches with a new design in 2015 is at Central Plaza West Gate. This design was prepared to be the prototype design for other new branches such as Central Plaza Rayong and Central Festival East Ville. Interior design was done by Zebra, the international retail design and project management specialists from London. The design concept from Zebra was to create the mood of a sports stadium using the lighting design and some special lighting features as sports symbols and parts of store identity.

The first impression when entering the store is about the distinctive interior features. The colourful continuous light lines, inspired by the pattern of stadium tracks, lead and invite people into the space. These features are very outstanding and became the gimmick of the place. They come from RGB LED fixtures suspended from the ceiling. White, green and magenta lights are selected using a dmx controller to represent the brand colours. Another feature, RGB light line set in green, is buried and flushed with the floor to indicate the boundary of each shop.

Product displays are highlighted by 32-watt LED tracklight fixtures put in lighting tracks suspended from the bare ceiling and arranged to aim to display. Using a tracklight system is flexible for any future changes of displays. Luminaire housings are in black to blend with the dark-tone surroundings. Consider the mostly colourful selling sports items when enhanced by light, they obviously stand out from the dark surroundings. The brighter than usual ambient light is needed since dark surfaces absorb light and rarely reflect light to the eyes. Thus, Supersports requires about 650 lux

in average, at least 1000 lux for accented displays, and 300 lux for ambiance. The contrast between accent light and ambiance should be at least 3 times difference to allow the eyes to detect. Also, 4000K is the right choice to create the energetic mood of the sports store because its neutral colour tone can enhance all colour ranges properly.

Walking further to the next zone, there are sports stadiums preparing for football and basketball. At the centre of the football area, a 100-watt LED high-bay fixture is suspended, playing a main role to create a stadium image. Some other surface accent downlights were added around to enhance the zone. Another appearance of 32-watt LED tracklights in the basketball area differentiates playing basketball as a special activity. Moreover, special attention must be paid to



the counters and bars. Hence some rounded shape decorative pendants were hung above them.

The lighting design goal for Supersports was reached by bringing to life the distinct and clear features of product presentation in the shop. Besides, the perception and interaction with light have a definitive impact on the shopping experience and especially help to increase customers' propensity to buy. ■

ABOUT L&E

L&E is a lighting equipment manufacturer and lighting solution provider based in Bangkok, Thailand. We have been a specialist in lighting and involved in many prominent projects in Thailand and Asian countries for more than 20 years. For more information, please visit www.lighting.co.th.



Lac Leamy Casino

Montreal, Canada

Text and Photos: www.sidleearchitecture.com





The Sid Lee Architecture & FCSD architecture + design consortium signs the revitalization of Casino du Lac-Leamy

Wishing to reinvigorate its image and position itself as an essential actor on the entertainment scene, Société des casinos du Québec mandated the Sid Lee Architecture & FCSD architecture + design consortium to lead an intervention strategy at Casino du Lac-Leamy in Gatineau.

The casino presented major organizational challenges: Its interior spaces were cluttered and undistinguished, producing a confusing and unwelcoming result, devoid of hierarchy or landmarks. The architectural intervention therefore aimed to bring coherence to the space; open perspectives to better connect the spaces and identify their functions; and rework the vertical lines offered by the building.

An aquatic theme was naturally chosen to develop a unique identity for the casino, located on the shores





of a lake and surrounded by water. "The main staircase was brought to the middle of the central space, among the game tables and machines it connects to the restaurants and discotheques on the upper floors.

Designed as a beacon visible from all around the casino, the stairs are dressed with a unique carapace composed of 595 backlit metal scales declined into 94 different models, reminiscent of fish skin and its changing reflections. An iconic architectural element, it centralizes all visual perspectives and asserts the space's identity", explains Martin Leblanc, Architect and Partner at Sid Lee Architecture.

Supported by the existing structure, the strategy developed seeks to establish targeted and efficient actions. The result is striking: A veritable ambience has been created, radically renewing the public's experience and attracting a larger and more diversified clientele, in a unique space offering a multitude of entertainment possibilities.

The project was carried out in close collaboration with Lightemotion for an immersive lighting installation as well with Trizart-Alliance for the multimedia segment. ■

Yokohama Stadium

Yokohama City, Kanagawa Prefecture, Japan

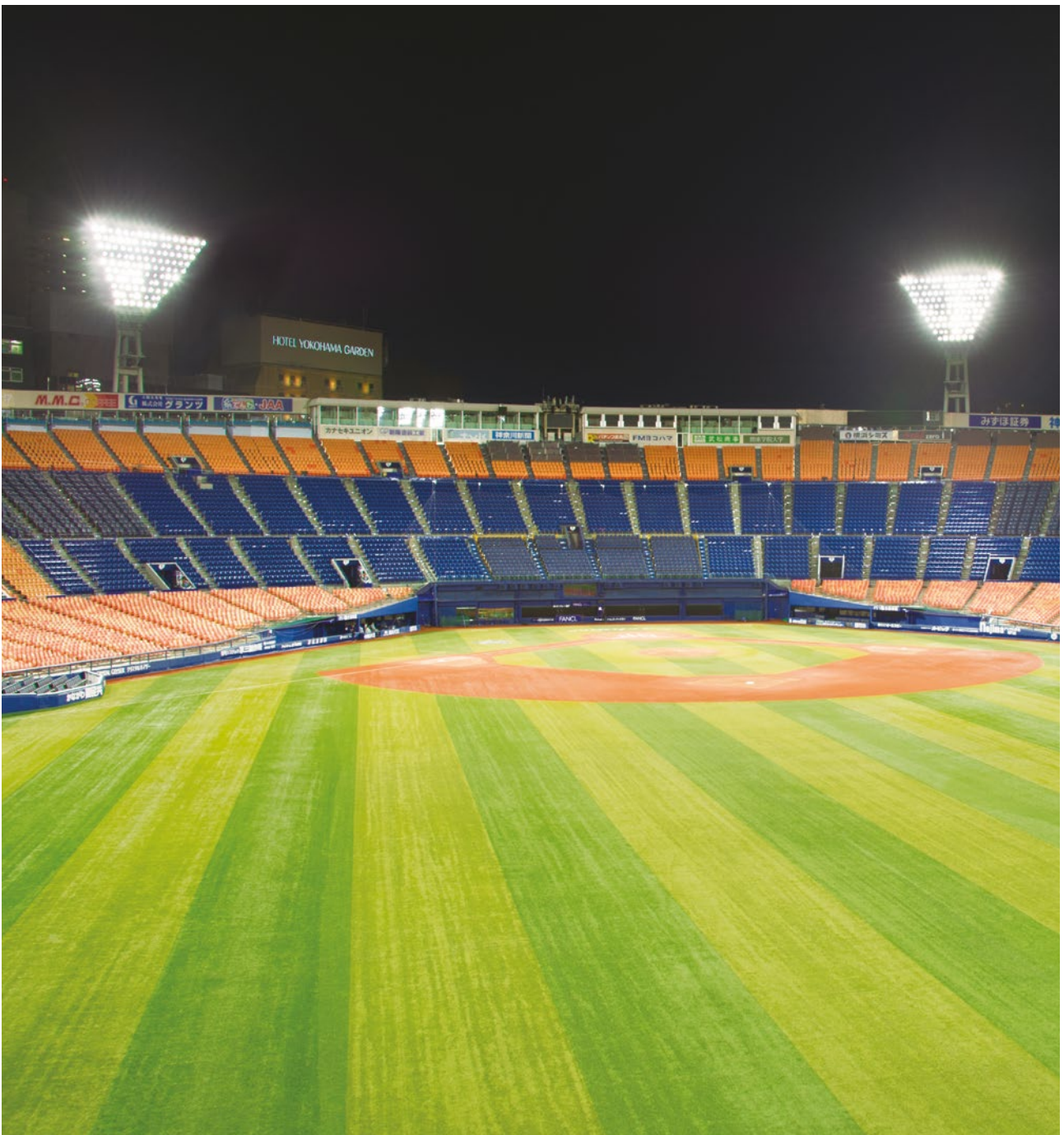
Client/Owner: Yokohama Stadium

Lighting Design: Iwasaki Electric Co Ltd, Japan

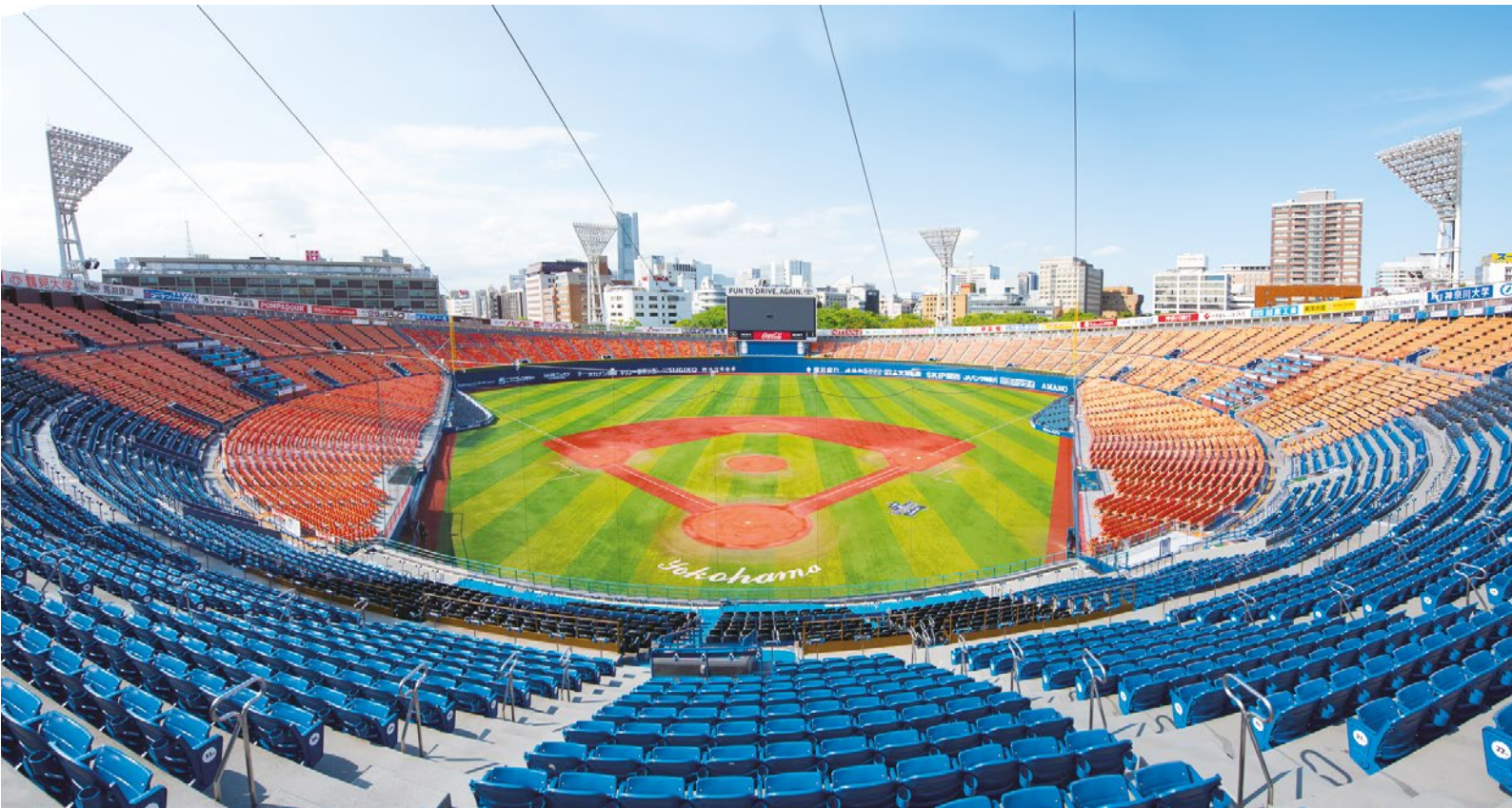
Lighting Manufacturer: Iwasaki Electric Co Ltd, Japan

Photo Credit: Iwasaki Electric Co Ltd, Japan

Contractor: Iwasaki Electric Co Ltd, Japan



Looking towards the home plate from center-field



Looking in the direction of center-field from behind the back nets



LEDioc FLOOD DUELL LED floodlights with three kinds of light distribution—medium/wide/super-wide-angle—have been installed on the lighting towers.

Japan's first total-field change to LED for lighting equipment for professional baseball outdoor night games

The first professional baseball game held at night in Japan was held in 1948, at Yokohama Park Baseball Field (Yokohama Park Peace Baseball Field), which was the predecessor of Yokohama Stadium. On the location where that baseball field once stood, the current Yokohama Stadium, home field of the Yokohama DeNA BayStars professional baseball team, was built in 1978. In 2015, the lighting equipment for the entire field for professional baseball outdoor night games was changed to LED lighting, with the introduction of Iwasaki Electric LED floodlights and lighting systems. It was the first time in Japan that the lighting equipment for professional baseball outdoor night games for the entire field was changed from HID to LED lighting, and enabled the realisation of great power conservation along with a simultaneous improvement in the lighting environment.



A view of Yokohama stadium from a distance



Left: The installed LEDioc FLOOD DUELL LED floodlights have been painted white to match the color of the lighting towers. Furthermore, 80W LEDioc FLOOD BLITZ have been installed on the lowest level of the lighting towers for event lighting.

Below: A panoramic night-time view of Yokohama Stadium, which boasts the capacity to seat roughly 30,000 people in its combined inner and outer seating

The change to LED consisted of renovations involving the replacement of the existing 708 1500W metal halide lamps with 660 high-performance and high-color-rendering LEDioc FLOOD DUELL LED floodlights (111.8 μ m/W inherent energy consumption performance), reducing overall power consumption by roughly 56%. The number of fixtures used has been reduced, while the brightness required for holding professional baseball matches has been guaranteed at a level greater than the previous one, and the design brightness is maintained at a fixed level from the time of initial installation until the end of the lighting's operating life with an initial brightness compensation function. At the same time, a reduction in the amount of power used initially has been made possible. The use of separately installed LED power supplies that enable a wiring length of 50m between the LED fixtures and the relevant LED power supply has made it possible to install the power supplies at the base of the steel pylons, reducing the load for each of the pylons. ■



The Casino de Montréal

Montreal, Quebec, Canada

Architects: Menkès Shooner Dagenais Letourneau (MSDL) and Provencher Roy

Client: Montreal Casino

Lighting Manufacturer: Lumenpulse

Lighting Design: Ombrages

Photographer: Sebastien Racicot

Photo Credit: Sebastien Racicot



Offering five floors of gaming, the Casino de Montréal is the largest casino in Canada, and one of the largest in the world. Housed in two former Expo 67 pavilions—facilities that were never designed for their current usage—it had, however, struggled to compete with US casinos.

Seeking a change in fortune, the casino recently completed a four-year, \$300 million renovation project, which included the construction of an all-new entrance and lobby. Designers Ombrages were engaged to give the new-look complex a striking night-time presence.

“We wanted to do more than just provide light for the entrance—we wanted to make the building sparkle, like a diamond shining in the distance,” said Mehdi Laieb, principal at Ombrages. “The basic principle was therefore to make it seem like light was coming through transparent walls, with no apparent light sources or fixtures,” he said.

To accomplish this, the firm used Lumenpulse LED technology. “Lumenpulse is an LED leader, and after testing several products, we found that the Lumenpulse fixtures had the integration, performance and control that we needed,” Laieb said.





“ *Lumempulse is an LED leader, and after testing several products, we found that the Lumempulse fixtures had the integration, performance and control that we needed.* ”

- Mehdi Laieb, Ombrages







Working with the architects, Ombrages artfully backlit the golden, micro-perforated panels of the entrance and canopy, making the entire structure shimmer in light. The firm placed warm 2700K Lumenfacade luminaires—which fluctuate gently in intensity—at various angles behind the panels, giving the building a scintillating, jewel-like appearance. Playfully deceptive, the design leaves visitors wondering where the light comes from.

To illuminate the floor plane, Ombrages used a range of Lumenbeam Medium fixtures recessed in the canopy.

“The Lumenbeam fixtures pin spot the ground floor and complement the light coming from the walls. This illuminates the entrance, but without ever making the fixtures apparent,” Laieb said.

The end result has provided the casino with a dramatic new entrance, captivating visitors upon arrival and guiding them inwards.

“Everything is coordinated now, from the entrance to the interior,” Laieb said, describing the unique entrance and canopy. “There’s nothing like it in the world; it’s become the signature of the Casino de Montréal.” ■

Equipment Specified

- 10 x Lumenbeam Medium (40°, 2700K)
- 16 x Lumenbeam Medium (10°, 2700K)
- 6 x Lumenbeam Medium (6°, 2700K)
- 83 x Lumenfacade Interior HO (2’, 2700K, 10 x 60)
- 56 x Lumenfacade HO (3’, 2700K, 10 x 60)
- 87 x Lumenfacade Interior HO (3’, 2700K, 10 x 60)

Best of Houzz

Somerset, United Kingdom

Text and Photos: www.sidleearchitecture.com



LiteTile Ltd of Rooksbridge, Somerset wins "Best Of Customer Service" on Houzz, the leading platform for home renovation and design.

The LED lighting company was chosen by the more than 35 million monthly unique users that comprise the Houzz community from among more than one million active home building, renovating and design industry professionals.

The Best Of Houzz is awarded annually in three categories: Design, Customer Service and Photography and the Customer Service awards are based on several factors, including the number and quality of client reviews a professional received in 2015.

LiteTile Ltd design, manufacture and install bespoke

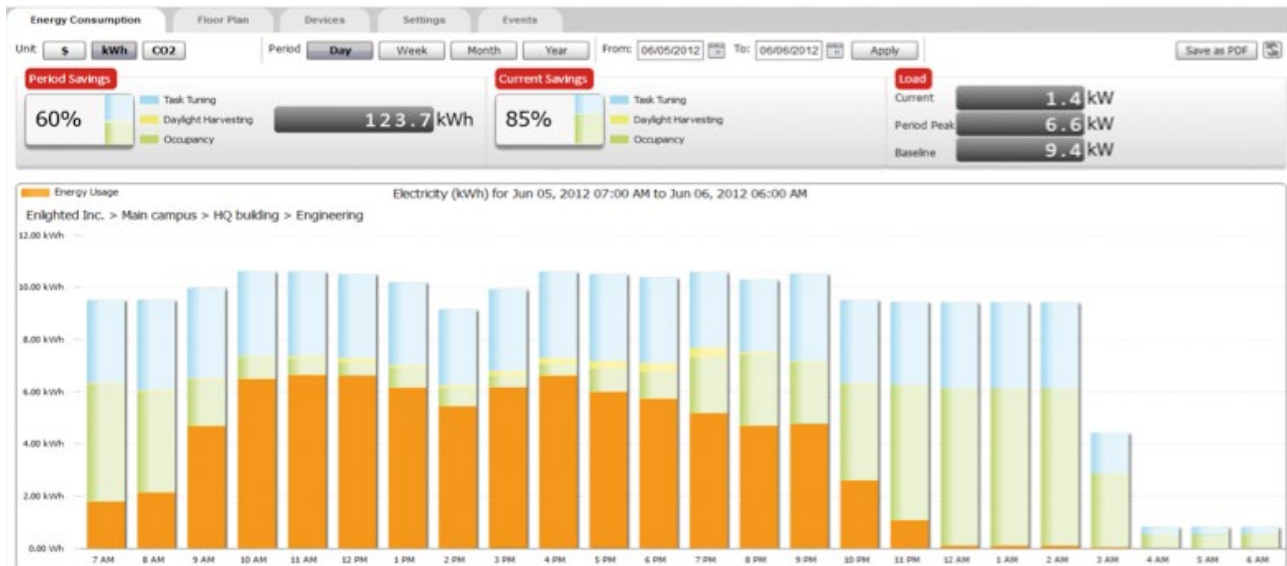
color changing LED illuminated glass splash backs and Director, Sonja Francis, says "We are delighted to receive this award and to be recognized for our customer service by our clients". She went on to explain, "Our splash backs are the ideal way of combining excellent task lighting with a unique decorative feature and the user can control the splash back very easily and can increase and decrease the brightness of the splash back and the speed at which it changes color".

"Anyone building, renovating or decorating looks to Houzz for the most talented and service-oriented professionals" said Andrew Small, Managing Director of Houzz UK. "We're so pleased to recognize LiteTile Ltd, voted one of our "Best Of Houzz" professionals by our enormous community of homeowners and design enthusiasts actively renovating and decorating their homes." ■



Advanced Lighting Control

By Enlighted
www.enlightedinc.com



Enlighted builds the world's most advanced sensor networks for commercial buildings. Its first application—advanced lighting control, built on the Enlighted sensor and analytics platform—saves companies between 50% and 70% in lighting energy costs, while tuning individual workspaces for the comfort and efficiency of the people who work in them.

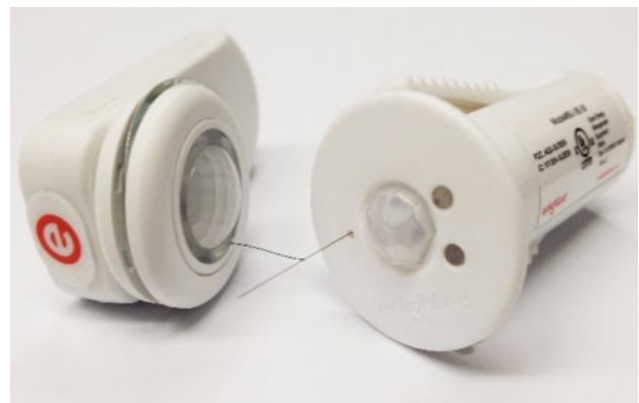
In addition to this, its elegant sensors sit on a facility's lighting network and ping the internal environment 65 times a minute to cache real-time information on temperature and occupancy. The structured analytics derived from these data streams directly relate to energy and space use, employee productivity and security, enabling organisations to drive decisions that directly impact the bottom line.

Enlighted can help buildings reduce their lighting power consumption by 50-70%. The sensors can determine how to optimally light a space while taking advantage of natural light. Occupancy and vacancy sensors monitor when an area is unoccupied, helping ensure that lighting is only present when necessary. Daylight harvesting sensors determine the amount of natural sunlight entering a space and adjust artificial light levels accordingly. Finally, task tuning allows employees to adjust the lighting in a space to meet their needs.

This new responsiveness helps ensure light levels are optimised, which could mean huge gains in terms of energy savings. AT&T, for example, recently upgraded lighting systems using Enlighted technology in its largest energy-consuming sites. The result was a savings of \$8 million in annual lighting energy costs.

About Enlighted

Enlighted is a US-based company backed by investors such as Intel Capital and EDBI (Singapore Economic Development Board corporate investment arm). For more information on Enlighted, please visit www.enlightedinc.com or e-mail Aakash Parekh at ap@esspl.com.sg.



(Top) Enlighted Lighting Energy Savings Dashboard
(Bottom) Enlighted Compact Sensor
Image Credit: Enlighted

GreenPeak Launches Next Generation Wireless LED Lighting Solution

By GreenPeak Technologies
www.greenpeak.com

GreenPeak's low-cost lighting solution is future-proof for multiple communication protocols

GreenPeak Technologies, the world leading low power RF semiconductor company for Smart Home and IoT applications, has launched its wireless LED Lighting solution, a low-cost ambient lighting application based on the new GreenPeak GP651 communication chip that can support various ZigBee and IEEE 802.15.4 communication protocols.

GreenPeak's wireless lighting solution can combine LED lights with smart ambient applications, giving residents the creative freedom to create lighting scenes that match mood and function. The solution supports 1-, 2- or 4-channel LED bulbs, allowing bulb manufacturers to build products which will give residents the ability to dim a bright LED bulb into warm white or to create a more vivid colorful scene. Settings and time schedules can be controlled by a Smart Home system, a smart phone or even a basic wireless switch.

Controlling your home with a wireless LED Lighting solution makes it smarter, more secure, more comfortable and even more fun. Lights can intensify gradually when waking up or can gracefully dim in the evenings. Light can be bright at the dining table when working from home and can be switched to create a more relaxed and cozy atmosphere during dinner. The wireless LED Lighting solution will help support the body's biorhythm and help to focus on work, study and reading. For security, while on vacation, the system can switch lights on and off, giving the impression of residents being home while nobody is there.



Photo Credit: GreenPeak Technologies

GreenPeak's wireless LED Lighting solution is built on the GP651 chip, supporting the IEEE 802.15.4 ZigBee wireless communication standards. "The GP651 chip enables the support of multiple protocols making it a future-proof and protocol-agnostic solution," says Cees Links, founder and CEO of GreenPeak Technologies. "GreenPeak's wireless LED Lighting solution will seamlessly fit existing Smart Home systems, originating from different sources. The GP651 silicon, in combination with our partner's LED driver that controls the power, will allow the LED light bulb manufacturers to produce light bulbs at very low cost, which will move the controlled LED lighting market into a new era of mass adoption."

The GP651 is a low-cost, small footprint (QFN32), single chip solution. Additional cost savings can be achieved because of its 125°C (257°F) specification, reducing the size of a heat sink, enabling a compact and creative product design, and reducing the complexity of manufacturing resulting in a low total BOM.

HELLA LED Lighting Solution for Tampines Central Park Project

Located in the east of Singapore, Tampines Central Park is a spacious leisure park that offers a wide array of amenities such as playgrounds, basketball courts, fitness corners and more. The running trail has become a well-received route for avid joggers as well.

In view of their rising popularity, Tampines Central Park recently converted from conventional lamps to HELLA Lighting Solutions. After much meticulous planning and product sample reviews, HT Architects Pte Ltd specified HELLA Eco LED Streetline Square for the project, with the products supplied through Product Design Pte Ltd. The project was successfully completed in 2015.

“ We have absolute trust in HELLA lighting products, backed by our past experiences from other successful projects. For the Tampines Central Park project, the HELLA Eco LED Streetline Square was chosen due to its impressive product performance as well as its elegant and futuristic aesthetical design. ”

- Sebastian Lim, Project Manager,
Product Design Pte Ltd

The sleek HELLA Eco LED Streetline Square lamps lends an ultra-modern touch to Tampines Central Park, brilliantly lighting up the area



As a supplier for the project, Product Design Pte Ltd worked closely with the architect and the lighting principal to ensure all lighting parameters and requirements are met according to the project specifications.

The HELLA Eco Streetline LED Square is a LED Post-Top Luminaire of the Eco StreetLine family with four self-sufficient LED modules, tailored to light classes S1 - S4 or ME3 - ME6.

In the area of sustainability, HELLA lighting solution boasts these two hallmarks:

1. They are environmentally-friendly
2. They keep CO₂ consumption in check and offer a service life of at least 12 years, ensuring an impressively high degree of energy efficiency.



HELLA Eco LED Streetline Square lamps - elegant and yet powerful in performance



The HELLA Eco LED Streetline Square lamps require a low level of power consumption. It delivers significant energy savings of approximately 70% as compared to the conventional lamps. The impressive energy saving advantage of HELLA Eco LED Streetline Square has made it a much sought-after product in the market.

Advantages of HELLA Eco LED Streetline Square lamps:

- A German-made product
- Offers a good optic system, which helps to optimize lux distribution
- Elegant and futuristic aesthetic design
- Average lifetime of 50,000 hours
- 80 % after 50,000 operating hours (according to IES LM80 & TM21)
- Dimming by 50%
- Maintenance-optimized design
- Modular LED system with integrated electronics
- Technology warranty
- 5-year warranty on LED modules
- Modular light distribution
- Built-in overheating protection
- Completely pre-fitted, with supply cables and modules

For more information, email Singapore@hella.com or visit www.hellaasia.com.

*Tampines Central Park
Project Supplier: Product Design Pte Ltd
Project Architect: HT Architects Pte Ltd*



Slim-Line LED Modules and Matching Drivers with Selectable Output Current

By Vossloh-Schwabe
www.vossloh-schwabe.com

*Lighting Manufacturer: Vossloh-Schwabe
 Photo Credits: Vossloh-Schwabe, Shutterstock*

Vossloh-Schwabe's slim-line SMD PCBs—only 20 mm in width—are available in three different lengths of 140 mm, 280 mm and 560 mm, and with ZHAGA-compliant fixing hole spacing.

By combining modules with different lumen packages ranging from approximately 600 to 2200 lm (over a length of only 280 mm), it is therefore possible to create homogeneous lighting strips of almost any length. SMD modules come with a service life of up to 50,000 hours (L80/B10).

Matching linear LED drivers are available in output classes of 27.5 W to 85 W in a range of currents from 125 mA to 700 mA. Best of all, each of these drivers allows you to choose among three different output currents. As each pole or push-in output terminal constitutes a separate output current, selection is easily performed during wiring.

- Further advantages of the driver series:
- low ripple value
 - integrated soft-start function
 - high efficiency
 - long service life of up to 100,000 hours



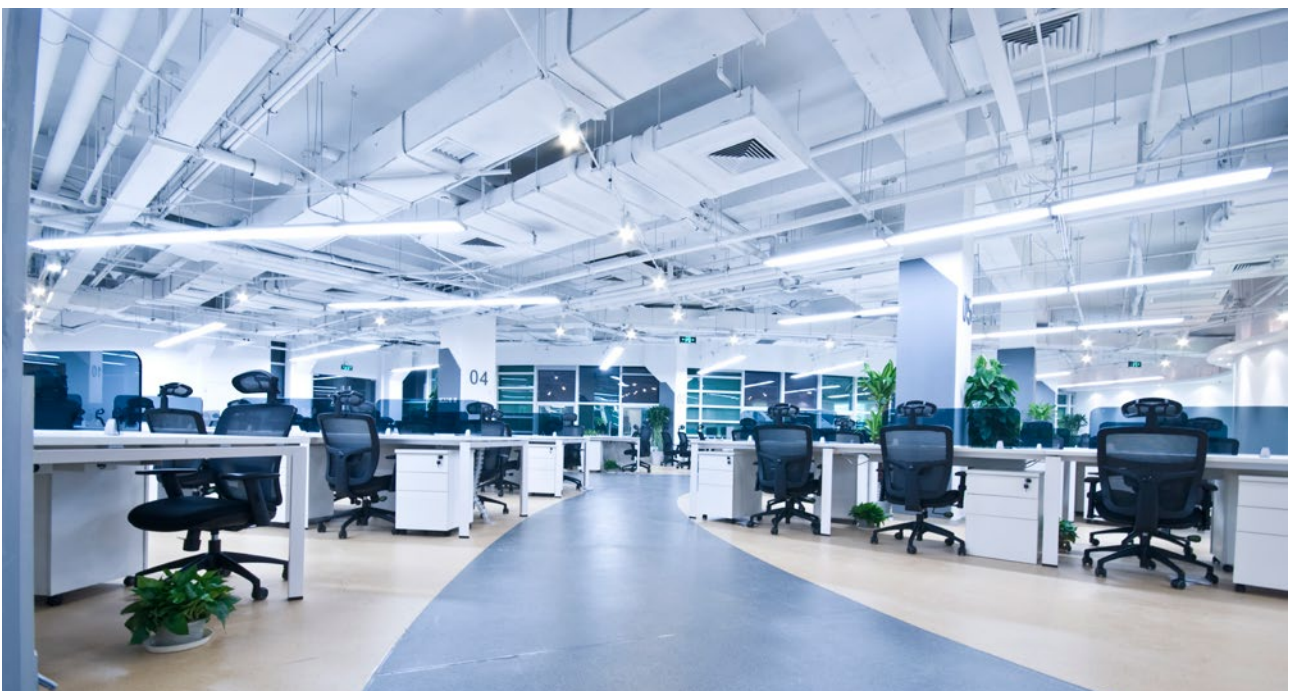
Linear LED Modules L14/28/56

- Selectable current: 350 / 500 / 700 mA
- Colour temperatures: 3000 K, 4000 K, 5000 K, 6500 K
- CRI: $R_a > 80$



Linear LED Drivers with Selectable Output Current

- Selectable current: 125 to 700 mA (type-dependent)
- Power factor: > 0.9
- Short-circuit protection
- Overload and overheating protection



Grunzell's Lumos LED High Bay Installed in Kuehne + Nagel's New State-of-the-Art Logistics Centre in Singapore

By Grunzell
www.grunzell.com



Photo Credit: Forms & Moulds (M) Sdn. Bhd.

Client: Kuehne + Nagel
Product: Grunzell 180W Lumos LED High Bay

Kuehne + Nagel, one of the world's leading global logistic providers, has recently completed the construction of a build-to-suit centre in Singapore. The new 46,000sqm state-of-the-art facility, which will be one of its largest outside Europe, also has a cold storage zone to manage temperature-sensitive goods.

Aiming to achieve Green Mark Platinum and LEED Gold awards, Kuehne + Nagel are using Grunzell's Lumos LED high bay designed with the latest performance COB technology for the warehouse and cold storage areas.

Chosen for its high lumen per watt efficiency, thermal management, design and build quality, Grunzell supplied over 620 units of its IP20 and IP65 Lumos high bay through Gruppe Lighting Pte, the main contract supplier for the lighting of this facility.



Photo Credit: Grunzell



Photo Credit: Forms & Moulds (M) Sdn. Bhd.

Grunzell's LED Lumos and other LED high bay luminaires have been installed in a number of key sites across Asia and the Pacific region.

Designed and engineered without compromise, the Grunzell Lumos is an IP65 LED High Bay designed for all industrial lighting and wide area lighting applications and is available in a range of power options.

For more information on Grunzell's LED products or the Kuhne + Nagel installation, please visit www.grunzell.com.

Schreder Lighting Solutions

By Schreder

www.schreder.com



Gardens by the Bay | Product: POLO Maxi

An Expert in Outdoor Lighting

Schreder, established in 1907 in Belgium, is a professional outdoor lighting solution provider with over a century's history. Especially in Road & Urban, and Tunnel lighting, Schreder ranks No. 2 in Europe. Till today, Schreder has 45 branch offices across the world. Over 2600 professionals are dedicated to offering cost-effective lighting solutions for safe, comfortable and sustainable environments, not only by its rich product portfolio in segments such as road and urban, tunnel, ambiance and campus, sport, transit and illumination, but together with other value-added products or services such as control systems, photometry analysis, TCO analysis as well as energy-saving calculation, commission and installation. Besides, its illumination solutions, street furniture and noise protection systems make it a real integral solution provider, and trustworthy partner beyond lighting.



Punggol Waterway, Singapore | Product: Alura

Photo Credits: Schreder



Beyond Light Partner

Let smart lighting become the smart choice for those who manage the public environment, to create a smart lifestyle for those living in it. In an age becoming ever smarter and digitalised, Schreder, a company with more than a 100 years of history, is not satisfied with the traditional lighting products, but breaks through the boundaries. Schreder developed a brand new concept—Beyond Light concept. Lighting connects people with their social environments.

Shuffle is the key product that embodies this avant-garde concept. It is not just a luminaire, but an integrated system, a cross-boundary product offering social service functions. Lighting is not the only purpose anymore, but connecting people with their social infrastructure, to create an interactive and enjoyable lifestyle and put amenities and fun into outdoor spaces.

The Shuffle was crowned Finalist for the Innovation Prize in the Urban Lighting category by the 2015 Fair for Mayors and Local Authorities in France at a ceremony in January 2016.

This award distinguishes products and services that provide a real solution to the problems faced by local authorities. Much more than a lighting column, the Shuffle can integrate control systems, loudspeakers, surveillance cameras, WiFi, EV chargers and other features to provide better services and infrastructure for councils and their citizens.

An overview of Shuffle's key functionalities:

- **Light**
State-of-the-art LED technology and a wide range of photometries adapted to various applications, such as those for roads, streets, squares, pedestrian crossings, footpaths and architecture, ensure all lighting requirements are met in one column.
- **Control Systems**
Achieve energy savings of up to 85% thanks to Schreder's lighting and control systems. The systems are for autonomous or interoperable networks (managing, monitoring, controlling and metering) with or without detection scenarios (PIR sensor). One controller can command all the lighting modules of a Shuffle and propose different scenarios per module.
- **Light Ring**
A touch of colour creates identity and a vivid ambiance. It can also be a useful tool to manage living spaces. For example, in flashing mode, it can guide people in the right direction in an emergency situation. It can also indicate if the EV charger is being used.
- **Wlan**
Two wireless internet versions are available: campus scale (for shopping centres or business complexes) as an extension of an existing network or urban scale (for city applications) so multiple users can connect at the same time. The bandwidth can be divided to assign a part to city operators with the remaining WiFi offered to the public so people can stay connected.

- **CCTV Cameras**

A superior compact CCTV camera with perfect night vision efficiency, high brightness compensation and advanced event detections helps reduce crime and increase public safety.

- **Loudspeakers**

An integrated sound system can be used for advertisements, public service announcements, as well as to broadcast music or a local radio for specific events and simply for convivial open spaces.

- **EV Charger**

As electric vehicles become more affordable, this advanced AC charging station offers an integrated solution for E-Mobility. With more charging points available, mobility will become greener and the air in the city purer.

Discover the multiple services that the Shuffle could provide for your environment by building your Shuffle on their dedicated website: www.schreder.com/shuffle.

Their Local Presence in ASEAN

Schreder Singapore was founded in 2009 to establish a closer presence to their customers. Schreder has been providing high-quality lighting solutions to Singapore for more than 20 years, working on projects such as Orchard Road and the KPE tunnel, to name a few. Schreder not only flourished in Singapore, but also has extended its business to Southeast Asia including Malaysia, Philippines, Indonesia and Thailand, where close partnership has been established to ensure the quick response to the local needs.

High technical quality and aesthetic design are at the heart of their philosophy and this, coupled with their customer focused work ethic, has led Schreder Singapore to develop the most cost effective, energy efficient exterior lighting innovations on the market today. They will implement the solution best suited to your market and needs.

Schreder Singapore is also presenting in China (including Hong Kong) and Vietnam. To find out more, visit www.schreder.com.

Contact them at:
SCHREDER SINGAPORE
 Focus One - 1 Ubi View - #04-21
 Singapore 408555
 Tel: + 65 6848 9322
 Fax: + 65 6848 9583

Soraa's LED Lighting Perfectly Illuminates Crosswater Showroom

By Soraa
www.soraa.com



Image Credit: Soraa

Lighting Design Credit: *Lightplan, London*
Architecture Design Credit: *Coppin Dockray, London*

Soraa, the world leader in GaN on GaTM LED technology, announced that its LED lamps have been installed at the new Crosswater UK showroom, one of the largest bathroom showrooms in Europe. Investing in a new headquarters with a beautifully-appointed showroom gallery in Dartford, Kent, Crosswater wanted lighting to enhance a memorable experience for visitors.

To create drama while not overwhelming guests, the lighting needed to create a sense of space, curate visitor traffic flow, and perfectly illuminate the 32 beautifully designed bathroom vignettes in the showroom. Architects Coppin Dockray and lighting designers from Lightplan chose Soraa LED lamps because of their unique ability to deliver narrow beams and perfect rendering of colours and whiteness. Specifically, Lightplan chose 635 of Soraa's MR16 LED lamps mounted within Prospex® Spot Midi 2100-MR-SP fixtures from Lucent®.

"Soraa lighting makes the journey through the showroom a sensory experience for visitors. Because Soraa



Photo Credit: Brotherton-Lock

LED lamps provide a high intensity beam from a small source, we were able to create perfect, focused lighting on the fixtures and objects on display in each of the 32 uniquely appointed bathroom display areas. The snap on attachments, spreader lenses, are great tools to shape the light beam for a particular object preventing any spillage,” said Baris Gursen, lighting designer with Lightplan in London.

The porcelain, tiles, textiles and wallpaper throughout Crosswater’s perfectly-designed bathroom interior displays also needed Soraa’s perfect lighting. With Soraa’s Violet-Emission 3-Phosphor (VP3) LED lamp technology, Lightplan was also able to beautifully illuminate very specific architectural objects and fixtures with truer colours and varying light intensities. Utilising every colour

in the rainbow, especially deep red emission, Soraa’s lamps render warm tones beautifully and accurately with a colour-rendering index (CRI) of 95 and deep red (R9) rendering of 95. And unlike blue-based white LEDs without any violet emission, Soraa’s lamps have violet emissions to properly excite fluorescing brightening agents found in elements, such as white fixtures and tiles.

“Perfect design requires perfect lighting. Soraa lamps helped us illuminate our Crosswater products and display rooms as art. Every visitor to our showroom is stunned by the beauty of the space and our designs,” said Nico de Beer, Director, Crosswater UK.

For more information on Soraa’s LED lamps, please visit: www.soraa.com.

Compact II Series LED Industrial Lighting Solutions

By YAHAM Optoelectronics Co., Ltd
www.yahamlighting.com

As a professional LED industrial light manufacturer, YAHAM lighting is always devoted to researching and developing more competitive products. The latest Compact II series has been warmly welcomed by customers after being launched. Its features are:

- Integrated pure aluminum cold-forging heat sink, higher thermal conductivity for better heat dissipation
- 130lm/W ultra high efficiency, less power consumption and higher brightness
- Various options of beam angle (60, 90, 120), fits more lighting places
- CE, ETL, DLC, PSE approved
- Smaller size: 220mm diameter for 100W/120W, 280mm diameter for 150W/180W
- IP65, and 5 years guarantee

Besides, YAHAM extends the Compact II to more applications with various installation methods.

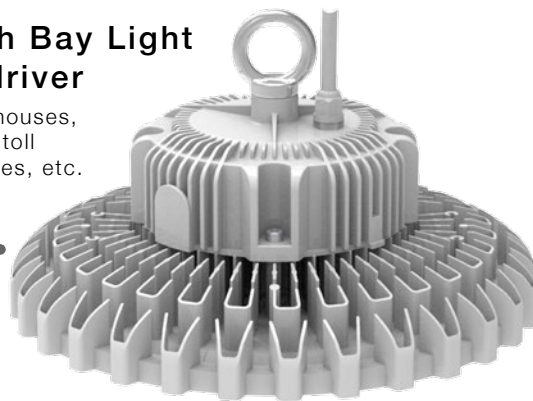
Pole Mounted High Bay Light with Lampshade

Specially applicable for supermarkets, shopping malls, exhibition halls, etc.



Hook Mounted High Bay Light with MEAN WELL driver

Suitable for workshops, warehouses, exhibition halls, gymnasiums, toll stations, supermarkets, garages, etc.



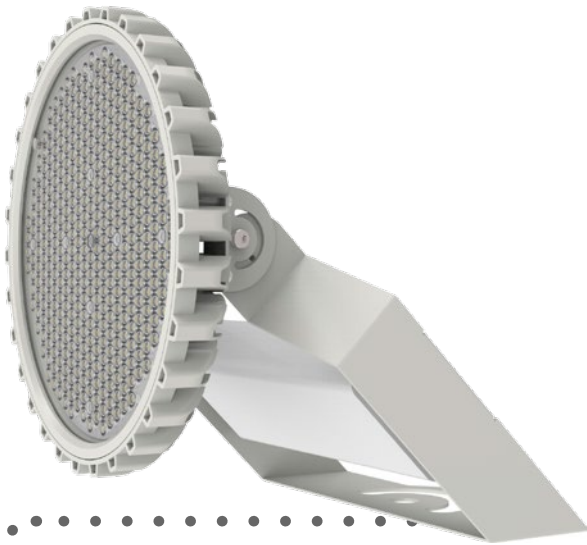
E39/40 Joints Mounted High Bay Light

Extremely lighter and smaller, only 1.2kg for 100W/120W, 1.8kg for 150W/180W.

Suitable for workshops, warehouses, exhibition halls, shopping malls, garages, etc.



Photo Credits: YAHAM Lighting



Bracket Mounted Flood Light

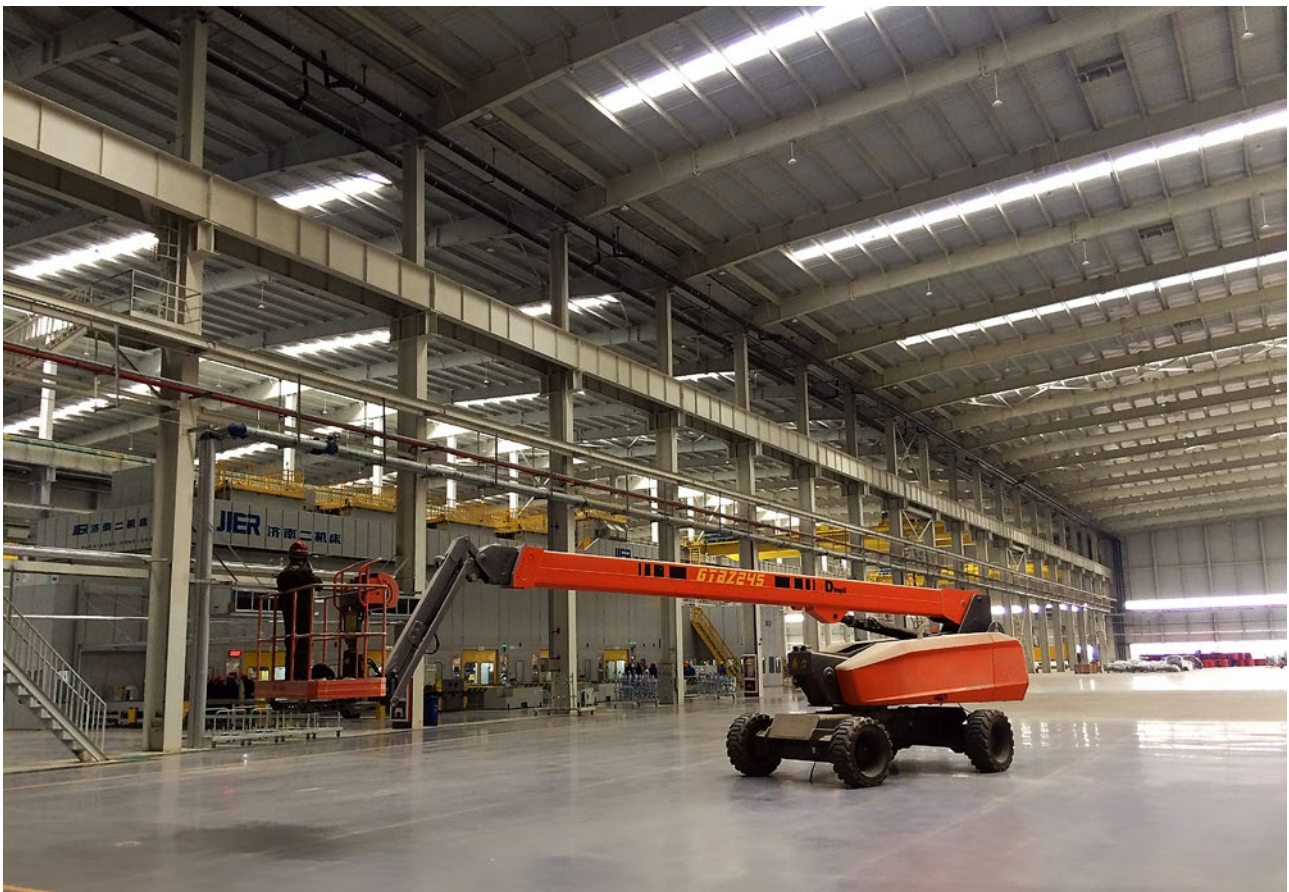
Adjustable angle mounting bracket combined with various beam angles can be adapted to more lighting requirements.

Suitable for workshops, warehouses, exhibition halls, gymnasiums, supermarkets, toll stations, garages, construction sites, parking lots, courtyards, etc.

Hook Mounted High Bay Light

Affordable and good quality.

Suitable for workshops, warehouses, exhibition halls, toll stations, supermarkets, shopping malls, garages, etc.



ACCADIA **LED IN-GROUND** **LUMINAIRES**

By Hess GmbH Licht + Form
www.hess.eu

ACCADIA is a revolutionary and highly innovative LED in-ground luminaire product family. Available in discreet black, the centrepiece of the versatile products is special Bartenbach-designed reflectors. In the asymmetric versions, they provide indirect light with no glare and excellent light distribution—which is currently unique among ground luminaires. The reflector technology guarantees outstanding light results as they provide very uniform light distribution in conjunction with the Hess LED technology.

For precise direction of light on the surface to be illuminated, the reflector unit is adjusted to the local conditions at the factory. If there is nevertheless the need for optimisation on-site, the reflectors can be easily adjusted. A precise edge on the upper end of the illuminated surface allows light pollution to be virtually eliminated. With ACCADIA you have light precisely and exactly where it is needed.

ACCADIA effectively accentuates and stages building facades and architectural features. It is available in two housing types for different application scenarios and lighting effects.



© Hess GmbH Licht + Form

TYF HB001 SERIES **INDUSTRIAL LED** **HIGH BAY LIGHT**

By Shenzhen TongYiFang Optoelectronic
Technology Co., LTD.
www.tyf-led.com

- Imported original Bridgelux/Cree chip, authorised by the company
- Hi-tech phase change AL die-casting radiator, small size but in bigger power, with good heat dissipation
- Patented design (private mould) high purity aluminum reflector with 60°/90°/120° aluminum or PC reflector for options
- Toughened optical glass lens, with high transmission of light, strong resistance to corrosion and never turns yellow
- Meanwell driver for all LED high bay light fixtures (UL China brand driver for options)
- 72 hours aging test, each lamp will be checked strictly by QC before packing



ZEUS SERIES **LED DRIVER**

By Aeon Lighting Technology Inc.
www.aeonlighting.com

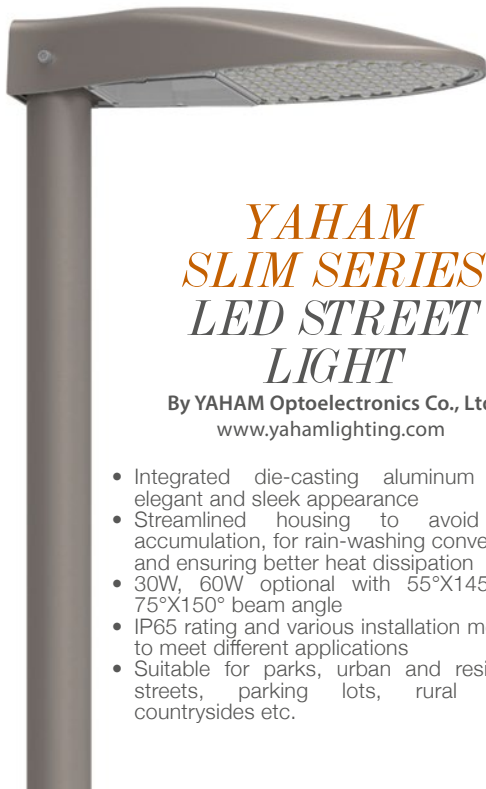
Zeus series 100 watts to 500 watts dimmable LED drivers are equipped with a surge protective device and DALI dimming control. A driver incorporates double-stage circuitry and military-grade components, which improve the stability of light source, smooth dimming, and achieve no light flicker. It integrates a 1 to 10V/ PWM dimming function and time management. Each driver is compatible with dimmable and non-dimmable lighting, so lighting companies can buy one to provide versatile lighting, while reducing inventory.

Additionally, a driver features 20KV surge protection to prevent damage by lightning, and its waterproof level is IP68. Certified with CE and ETL, the drivers achieve more than 92% power efficiency. They are perfect for outdoor and streetlight applications.

STRONGLED CP3 SERIES NARROW BEAM HIGH-PERFORMANCE FLOODLIGHTS

By Grand Canyon LED Lighting Systems (Suzhou) Co.,Ltd.
www.strongled.com

- Compact rectangular form-factor outdoor high-power floodlights, wall wash and graze for architectural and landscape lighting
- Cree or LUMILEDS LEDs in wide range of whites, tunable whites, mono-colour, RGB and RGB+W
- Wide power outputs selectable from 40W-200W
- Narrow 30 beam with projection ≥ 120 lux @ 150m
- Elegant and solid build quality with highly efficient heat dissipation fins, protective vent and hardened clear glass diffuser
- Easy and flexible installation with adjustable 600 tilt and swivel mounting base
- Direct or DMX control, DC 36V or AC110V-220V drive and rated IP66



YAHAM SLIM SERIES LED STREET LIGHT

By YAHAM Optoelectronics Co., Ltd
www.yahamlighting.com

- Integrated die-casting aluminum body, elegant and sleek appearance
- Streamlined housing to avoid dust accumulation, for rain-washing convenience and ensuring better heat dissipation
- 30W, 60W optional with 55°X145° and 75°X150° beam angle
- IP65 rating and various installation methods to meet different applications
- Suitable for parks, urban and residential streets, parking lots, rural roads, countrysides etc.

dot-spot®
Akzente setzen!

The Original
MADE IN GERMANY

UNIQUE LED UPLIGHTS

10 Watt / 20 Watt brilliance



- only 100 mm Ø
- stainless steel 316L
- pivoting lamp with an innovative rotating ball mechanism
- IP 68 protection class
- dimmable
- THERMOPROTECT avoids overheating
- drivable up to 3 tonnes
- beam angles 10°, 20° and 35°
- 10 Watt - height 75 mm
- 20 Watt - height 163 mm

**high quality product
Made in Germany**

Headquarters Germany

dot-spot GmbH & Co. KG
info@dot-spot.de
www.dot-spot.de
Tel +49 (0) 9128 / 7222170

Distributor Singapore

Relex Illumination Pte Ltd
info@relex.com.sg
www.relex.com.sg
Tel. +65-62853633
Tel. +65-83804777



effect with brilliance 10 Watt





Photo Credit: Tech Lighting

MELROSE II GRANDE PENDANT LIGHT

By Tech Lighting
www.techlighting.com

The unexpectedly large contemporary glass shade of the Melrose II Grande pendant light is made of beautifully transparent glass. Available in Antique Bronze, Black, Satin Nickel and White finishes, it features a graceful shape with a conical inner diffuser, both of significant stature for a dramatic impact. It is available as a 120 volt 53 watt, medium base halogen A19 lamp or 9.5 watt, 800 delivered lumen, 2700K medium base LED A21 lamp. It is shipped with 12 feet of field-cutable cable. The incandescent version is dimmable with a standard incandescent dimmer, while the LED version is dimmable with an LED compatible dimmer.

ÉTOILE CEILING/WALL LIGHT

By Slamp
www.slamp.com

Étoile hovers lightly in the air with sublime elegance like a dancing star. Light is the accomplice of matter: together they start from the centre and reach the outermost surfaces, propagating in the environment an explosion of energy and theatricality. The undisputed star of the scene, a perfect balance of asymmetrical forms, is now also with a ceiling version with an ad hoc LED circuit.



LUMINATION™ RX SERIES LED DOWNLIGHT

By GE Lighting
www.gelighting.com

The Lumination™ RX Series LED downlights are the ideal solution for traditional 1 or 2-lamp CFL downlights. Designed for quick installation, the downlights easily install into most 6-inch and 8-inch CFL rough-in frames, bringing a fresh look to the space. Concerns about maintenance or compatibility issues with existing ballasts are eliminated with 50,000 hours life rating and a new power supply.



Subscription Form

Fax your order today
+65 6842 2581

(Please tick in the boxes)

Southeast Asia Building

SINCE 1974

1 year (6 issues)

Singapore	S\$45.00
Malaysia / Brunei	S\$90.00
Asia	S\$140.00
America, Europe	S\$170.00
Japan, Australia, New Zealand	S\$170.00
Middle East	S\$170.00

Bathroom + Kitchen Today

SINCE 2001

1 year (4 issues)

Singapore	S\$32.00
Malaysia / Brunei	S\$65.00
Asia	S\$80.00
America, Europe	S\$130.00
Japan, Australia, New Zealand	S\$130.00
Middle East	S\$130.00

Southeast Asia Construction

SINCE 1994

1 year (6 issues)

Singapore	S\$45.00
Malaysia / Brunei	S\$90.00
Asia	S\$140.00
America, Europe	S\$170.00
Japan, Australia, New Zealand	S\$170.00
Middle East	S\$170.00

Lighting Today

SINCE 2002

1 year (4 issues)

Singapore	S\$32.00
Malaysia / Brunei	S\$65.00
Asia	S\$80.00
America, Europe	S\$130.00
Japan, Australia, New Zealand	S\$130.00
Middle East	S\$130.00

Security Solutions Today

SINCE 1992

1 year (6 issues)

Singapore	S\$45.00
Malaysia / Brunei	S\$90.00
Asia	S\$140.00
America, Europe	S\$170.00
Japan, Australia, New Zealand	S\$170.00
Middle East	S\$170.00

Lighting Audio Visual Asia

SINCE 2013

1 year (4 issues)

Singapore	S\$32.00
Malaysia / Brunei	S\$65.00
Asia	S\$80.00
America, Europe	S\$130.00
Japan, Australia, New Zealand	S\$130.00
Middle East	S\$130.00

IMPORTANT Please commence my subscription in _____ (month/year)

Personal Particulars

NAME: _____

POSITION: _____

COMPANY: _____

ADDRESS: _____

TEL: _____ FAX: _____

E-MAIL: _____

Professionals (choose one):

Architect Landscape Architect Interior Designer Developer/Owner

Property Manager Manufacturer/Supplier Engineer Others

I am sending a cheque/bank draft payable to:
Trade Link Media Pte Ltd, 101 Lorong 23, Geylang, #06-04, Prosper House, Singapore 388399
 RCB Registration no: 199204277K * GST inclusive (GST Reg. No: M2-0108708-2)

Please charge my credit card (circle one): Amex / Diner's Club

Card Number: _____ Expiry Date: _____

Name of Card Holder: _____ Signature: _____

Events & Expositions 2016

March

STRATEGIES IN LIGHT

MARCH 1 – 3

Santa Clara Convention Centre, Santa Clara, CA, USA
www.strategiesinlight.com

MAISON&OBJET ASIA

MARCH 8 – 11

Marina Bay Sands Expo and Convention Centre, Singapore
Tel: +65 6336 7786
Maison-objet-asia@badgeonline.net
www.maison-objet.com/en/asia

INTERNATIONAL FURNITURE FAIR SINGAPORE

MARCH 10 – 13

Singapore EXPO, Singapore
Tel: +65 6569 6988
Fax: +65 6569 9939
Email: enquiry@iffs.com.sg
www.iffs.com.sg

LIGHT+BUILDING

MARCH 13 – 18

Frankfurt am Main, Germany
Tel: +49 69 75 75-0
Fax: +49 69 75 75-64 33
Email: light-building@messefrankfurt.com
www.light-building.messefrankfurt.com

WORLDBEX 2016

MARCH 16 – 20

World Trade Centre Metro Manila, Philippines
Tel: (632) 656 9239
Fax: (632) 477 1899
Email: info.worldbex@gmail.com
www.worldbex.com

MEGABUILD INDONESIA

MARCH 17 – 20

Jakarta Convention Centre, Jakarta, Indonesia
Tel: +62 2556 5006
Email: hilda.satyadi@reedpanorama.com
www.megabuild.co.id

April

ECOBUILD SOUTHEAST ASIA

APRIL 12 – 14

Kuala Lumpur Convention Centre, Kuala Lumpur, Malaysia
Tel: 603-21768788
Email: ecobuild-sea@ubm.com
www.ecobuildsea.com

TAIWAN INTERNATIONAL LIGHTING SHOW

APRIL 13 – 16

Taipei Nangang Exhibition Centre, Hall 1, Taiwan
Email: tils@taira.org.tw
www.tils.com.tw

ARCHITECT THAILAND

APRIL 26 – MAY 1

IMPACT, Muang Thong Thani, Challenger Hall 1-3
Email: info@TTFintl.com
www.architectexpo.com

June

CAMBODIA ARCHITECT AND DECOR

JUNE 9 – 11

Diamond Island Convention & Exhibition Center, Phnom Penh, Cambodia
Tel: +66 2-713-3033
Email: info@icvex.com
www.cambodiaarchitectdecor.com

GUANGZHOU INTERNATIONAL LIGHTING EXHIBITION

JUNE 9 – 12

China Import and Export Fair Complex, Guangzhou, China
Tel: +852 2238 9969
Email: light@china.messefrankfurt.com
www.light.messefrankfurt.com.cn

September

THAILAND LIGHTING FAIR 2016

SEPTEMBER 1 – 3

Bangkok International Trade and Exhibition Center, Bangkok, Thailand
Tel: +66 (0) 2 641 5483
Email: info@thailandlightingfair.com
www.thailandlightingfair.com

PALM EXPO CHINA 2016

SEPTEMBER 1 – 4

China International Exhibition Centre, Beijing, China
Tel: +65 6411 7777
Email: palmexpo@informa.com
www.palmexpo.net

Index Of Advertisers

BMAM / GBR EXPO ASIA 2016	27
DOT-SPOT	89
ECOBUILD SEA 2016	31
EDISON OPTO	13
EYE LIGHTING	1
GILE 2016	5
GRAND CANYON	11
HELLA	15
LIGHT + BUILDING 2016	23
LIGHTING & EQUIPMENT PUBLIC	IFC
PALM 2016	9
ROHM SEMICONDUCTOR	3
SCHREDER	IBC
THAILAND LIGHTING FAIR 2016	7
VOSSLOH-SCHWABE	OBC
YAHAM OPTOELECTRONICS	19

Shuffle

Living together in a challenging world



Lumière + Contrôle



WLAN



Caméra
CCTV



Haut-parleur



Borne de
recharge EV

CONNECTING PEOPLE TO THEIR SOCIAL ENVIRONMENTS

More efficient. Smarter. Interactive. Connected. The digital revolution is here to serve people in a more and more challenging world. The shuffle is much more than a lighting column. It connects people to their environment. Always.



YOUR PARTNER BEYOND LIGHT



LiCS – Lighting Control System for Outdoor Applications

Vossloh-Schwabe's light management systems enable centralised control of individual luminaires with the advantage of a constant online link and the ability to monitor the lighting system. These intelligent, multifunctional VS controllers provide the same savings potential and high flexibility even without online connectivity.

Typical Applications include general lighting in public spaces, lighting in the vicinity of buildings, lighting in tunnels, for lighting at sports' venues and industrial lighting.

For more information, please call +65 7275 753.

iMCU – intelligent Multifunctional Controller Unit



For use with LED drivers, electronic ballasts and even conventional magnetic ballasts

iLC – intelligent Luminaire Controller



Independent control unit using power line communication