

# lighting today

January - March 2020

## Cover Story Coal Drops Yard

Speirs + Major illuminates a former industrial area in King's Cross, creating a unique experience for visitors after dark. **p44**



# guangzhou international lighting exhibition

# 25<sup>th</sup>

**The most influential and comprehensive lighting  
and LED event in Asia**

## 9 – 12 June 2020

China Import and Export Fair Complex  
Guangzhou, China

[www.light.messefrankfurt.com.cn](http://www.light.messefrankfurt.com.cn)

### Contact

Messe Frankfurt (HK) Ltd

Tel: +852 2238 9969

Fax: +852 2519 6079

[light@china.messefrankfurt.com](mailto:light@china.messefrankfurt.com)



光亞 · Guang ya



messe frankfurt

# Sleek

## LED Street Light

### MEET 99% OF ROAD STREET & AREA APPLICATION

EVEN MORE SMART MODULES TO INTERACT CITY



**5G Technology**  
5G base station equipment can be installed on Sleek



**LoRa Technology**  
Long range, low power wireless platform



**Janus Supported**  
Self-developed LED lighting control system



**NEMA Sensor**

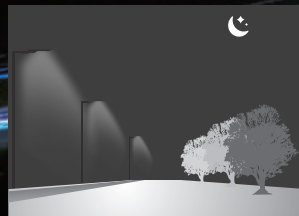


**Zhaga Sensor**



**Daylight Sensor**

According to the ambient illumination, the light would automatically turn on/off, and could reduce 50% brightness at midnight.



**YAHAM**  
Lighting

+86-755-2943 5812 [sales@yahamlighting.com](mailto:sales@yahamlighting.com)

[f](#) / [t](#) / [in](#) : YAHAM Lighting [yahamlighting.com](http://yahamlighting.com)



**ON THE COVER**  
Coal Drops Yard in London, England  
**PHOTO CREDIT**  
Speirs + Major, © John Sturrock

OTHER TITLES BY  
**TRADE LINK MEDIA PTE LTD**  
(www.tradelinkmedia.biz)

**Bathroom + Kitchen Today**  
**Southeast Asia Building**  
**Southeast Asia Construction**  
**Security Solutions Today**

---

**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**

**PUBLISHER**  
**Steven Ooi**  
steven.ooi@tradelinkmedia.com.sg

**EDITOR**  
**Kimberly Tan**  
lighting@tradelinkmedia.com.sg

**GROUP MARKETING MANAGER**  
**Eric Ooi**  
eric.ooi@tradelinkmedia.com.sg

**MARKETING MANAGER**  
**Felix Ooi**  
felix.ooi@tradelinkmedia.com.sg

**HEAD OF GRAPHIC DEPARTMENT/  
ADVERTISEMENT COORDINATOR**  
**Fawzeeah Yamin**  
fawzeeah@tradelinkmedia.com.sg

**GRAPHIC DESIGNER**  
**Siti Nur Aishah**  
siti@tradelinkmedia.com.sg

**CIRCULATIONS EXECUTIVE**  
**Yvonne Ooi**  
yvonne.ooi@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 Refine Printing Pte Ltd  
MCI (P) 095/05/2019  
ISSN 2345-7147 (Print) and ISSN 2345-7155 (E-periodical)

This publication is published four times a year and available on the digital platform.

To download a free digital copy, visit [lt.tradelinkmedia.biz](http://lt.tradelinkmedia.biz).

---

**INTERNATIONAL MEDIA REPRESENTATIVE**

**KOREA**  
MCI  
Room B615, Hanwha Obelisk 2,  
481, World Cup buk-ro,  
Mapo-gu, Seoul,  
Korea 03902  
t. +82 2 730 1234 f. +82 2 732 8899

---

**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 300dpi in .jpeg and .tiff format.

# Dear Readers,

*Happy new year everyone! It is an exciting time for all of us as we enter into a new decade. I hope all of you are feeling refreshed and recharged by the festive season to take on the new year with new plans in store.*

*In this new issue, we have an exciting column by Martin which discusses Women in Lighting, and a few exciting projects featured inside. Our special feature is on the Seminole Hard Rock Hotel & Casino in Hollywood, Florida. It is the world's first guitar-shaped hotel! Check it out.*

*As usual, if you have anything lighting related or a project you would like to submit, do send it to [lighting@tradelinkmedia.com.sg](mailto:lighting@tradelinkmedia.com.sg).*

*Kimberly Tan*  
Kimberly Tan  
Editor

The logo for ASEAN LIGHT features a green square on the left containing a white circle with twelve white dots, resembling the ASEAN flag. To the right of this square, the word "ASEAN" is written in a large, bold, green sans-serif font, and the word "LIGHT" is written below it in a smaller, bold, grey sans-serif font.

Southeast Asia's Premier  
Light Expo & Forum

**23 - 25 JUNE 2020**

MALAYSIA INTERNATIONAL TRADE  
AND EXHIBITION CENTRE (MITEC)  
KUALA LUMPUR

For more information, please contact

**Ms Kelly Fong**

**E : [Kelly.Fong@ubm.com](mailto:Kelly.Fong@ubm.com)**

[www.greenenergy.org.my](http://www.greenenergy.org.my)  
[www.super8asean.com](http://www.super8asean.com)

SUPPORTED BY



HOSTED BY



ENDORSED BY



ORGANISED BY





coal drops yard p44



temple de lutry p40



the shed p50



alila bangsar hotel p58

## contents

### 06 LIGHT TALK BY MARTIN KLAASEN

### 08 LIGHTING IN THE NEWS

### 22 SHOW PREVIEWS

Light + Building 2020  
Architect'20 Expo  
Lightfair 2020  
GILE 2020

### 30 SHOW REVIEWS

Prolight + Sound Shanghai 2019  
Thailand Lighting Fair 2019

### 36 SPECIAL FEATURE

Seminole Hard Rock Hotel & Casino

### 40 SMART LIGHTING

Temple de Lutry

### 44 COVER STORY

Coal Drops Yard

### 50 FACADES AND LANDSCAPES

The Shed  
The Star District

### 58 SPATIAL ENVELOPES

Alila Bangsar Hotel  
Dot Foods, Inc. Headquarters  
eSentire  
Netscout Offices

### 72 illumina PRODUCT SHOWCASE

Indoor Lighting Solution by Yaham Lighting  
Cube Light by Karice

### 75 LIGHTING CONTROLS

SOSEN LED Driver

### 76 EXTERIOR & INTERIOR PRODUCT FOCUS

### 80 EVENTS & EXPOSITIONS / ADVERTISERS INDEX

# SOSEN LED Driver, Your Smart Choice

[www.szsofen.com](http://www.szsofen.com)

## CA Series

- 100-277Vac, 100-300W
- Efficiency > 93%, PF  $\geq$  0.95
- 3-in-1 Isolated Dimming / DALI / Dim-to-off
- IP65, 5 Years Warranty
- 4kV/4kV Surge Protection
- Isolated Auxiliary (+12V)



# Women in Lighting

Gender equality in the lighting industry...

At the start of the new year, when we all sit down, look ahead and write down our resolutions, it seems appropriate to reflect on a subject that has never been one to grace the headlines in our lighting industry. A new initiative from the Light Collective (LC) team of Sharon Stammers and Martin Lupton, Women in Lighting (WIL), has recently put the spot light on gender equality in our lighting industry.

The initiative was sparked by comments following on the public release of their documentary called The Perfect Light, where lighting designers from around the world share their vision about what the “perfect light” would be. Unintentionally it turned out that the lighting designers interviewed were mostly men! Acting on this realisation, the LC team started to research lighting activities and events around the world to see if this was a systematic situation. As it happened this was indeed the case! Reviewing keynote guest speakers at lighting events and fairs around the world over the years (Light Fair, Light & Build, PLDC, etc, etc.), it turned out that speakers were mostly men! Women could be counted with the fingers of one hand! This stunning realisation led to the set up of the WIL initiative with the aim to create awareness and provide women with a platform to “shine”.

Less than a year on, the WIL initiative has gained worldwide traction with WIL events being held and planned in every continent. At the time of writing more than 65 women ambassadors (one per country) have been appointed as local representatives. Women have been given a voice and many men (me included) have come out in support!

The interesting part of the story is that it has (to my knowledge at least) never been perceived as a discriminatory situation, no one really realised it I suppose. It certainly escaped my attention, not in the least because I have an all women team, I am the only male in the office! I have spoken at events around the world and it never struck me as an issue. Many of my male colleagues in the industry reacted in the same way...even many women in the industry did not seem to realise that.

Statistics however shows that our lighting

design industry is pretty evenly balanced with men and women, so why is the industry on the face of it being dominated by men? So, this is the quest that the LC team through their WIL initiative is pursuing. Not necessarily to right something wrong, but to create awareness and provide a platform, a voice for women in our industry.

Part of the WIL activities are interviews with women designers from around the world and it is truly engaging to hear those interviews from all walks of (lighting) life, speak out about their experiences and (sometimes broken) dreams. Recent WIL events at Light Middle East in Dubai and PLDC in Rotterdam had very big turn outs showing that many in the industry acknowledge and support this awareness initiative!

The LC team recently undertook an Asia Pacific tour to interview women in Bangkok, Hong Kong, Singapore and Shanghai. We welcomed them in our office in Singapore and attended the WIL event that saw the local community come in full support.

Gender equality has been a hot topic around the world, whether in sports or at the work place. It is certainly a subject that has affected many women around the world and having a platform for women to share their

experiences (good and bad) is great. The LC team created a dedicated website ([www.womeninlighting.com](http://www.womeninlighting.com)) for the initiative as well.

So, where does that leave the men? I don't believe that in our lighting industry men have deliberately created this situation. While cultural patterns have certainly influenced the situation in many countries, lighting designers in general are pretty easy going and as far as I can see, certainly not discriminative. However admittedly male behaviour can be inconsiderate, insensitive and dominating (controlling) at times which will have contributed to the current situation.

The WIL initiative will very much help to create this awareness and give women who may be or feel un-appreciated better recognition, more exposure and more opportunities in our industry. I am fully supporting the initiative not only in words but also in actually encouraging and supporting my own women team to go out there, be more assertive and be unafraid to speak out, take the lead, take on opportunities and show that they have the skills and experience of being an accomplished lighting designer as much as men have been in the fore front till now!

We look forward to many WIL events and showcases in the coming year!

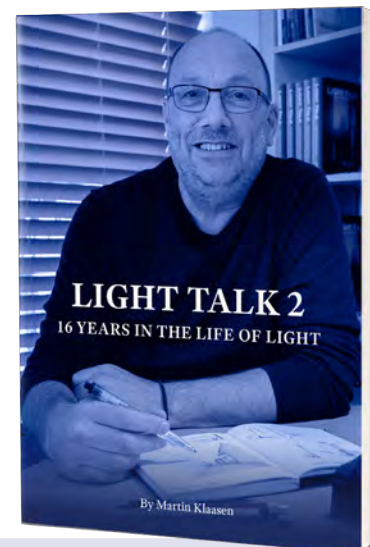
## Light Talk 2: 16 Years in the Life of Light is now available!

*Considered a prequel to Light Talk: A Year In The Life Of Light, this book is a compilation of Martin's more than 16 years of writing in Lighting Today Magazine, a magazine about world actualities in the lighting industry.*

*Light Talk 2: 16 Years In The Life Of Light, offers an incredible insight on how the industry has evolved right from the early days of LED technology making its way into our daily life up to the new smart world we live in today.*

To obtain a copy, email: [lighttalk@kldesign.co](mailto:lighttalk@kldesign.co)

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



**W**ORLDBEX SERVICES INTERNATIONAL

THE 25<sup>th</sup> PHILIPPINE WORLD BUILDING AND CONSTRUCTION EXPOSITION



# WORLD**BEX**



**A LEGACY BUILT**

# MARCH 18-22 2020



[worldbex.com](http://worldbex.com)

## Proteus™ on the rise at Réunion Métis Art Festival



Réunion Island, in the Indian Ocean east of Madagascar, recently premiered a new cultural event, Réunion Métis, a multidisciplinary art festival dedicated to living together. Held from 27 to 29 September 2019 along the seafront in the city of Saint-Paul, and free to all, the experience encompassed music, art, dance, food and light art installations, including a brilliant light show with nighttime sunrise courtesy of local company Stage OI and Elation Proteus Hybrid™ moving heads.

Réunion Métis was a new way of experiencing culture in Réunion with all the senses brought into play. Co-created by PORLWI and Sanjeyann Paleatchy, the festival was an opportunity for local talent to immerse islanders in inspiring art and light. One special light art installation involved a sound and light show at the end of the Saint-Paul landing pier, a light and sound atmosphere with lighting effects from Elation Proteus series moving heads. Mounted on an arch truss structure at the end of the pier, the multi-functional Proteus Hybrid were used in beam mode to create a variety of eye-catching effects including emulating a sun rising from the ocean. Other moving heads, LED Par lights and LED strip lights added to the captivating environment.

Rental and production company Stage OI was in charge of the technical aspects of the installation – lighting, sound, video and power distribution – with lighting design by company Move for Art of Mauritius with the collaboration of Laurent Chapot. Elation's French distributor Best Audio & Lighting recently sold Proteus Hybrid and Proteus Rayzor 760 fixtures to Stage OI, who sub-rented additional Proteus from Dushow for the art installation. "We have been focused on Elation products ever since Best Audio & Lighting took over as an Elation distributor in 2018," stated Stage OI's Ian Henderson, adding that the Proteus Hybrid and Rayzor are their first purchase of Elation products.

"We needed a very powerful light with an IP65 rating to be placed at the end of the dock, just above sea level," explains Henderson, who turned to the 23,000-lumen arc source luminaire for the project. "The Proteus's powerful beam and the power of the colour were key but the IP65 rating was the most important feature, also that it didn't lower the other qualities of the fixture."

The island's humid and sometimes wet climate, not to mention the installation's exposure at the end of the pier, posed no issues for the Proteus Hybrid, arguably the most successful IP65-rated moving head on the market. Yet the award-winning luminaire's IP65 rating means much more than just water protection. Proteus luminaires are sealed against dust ingress and virtually any other contaminant which means they require less cleaning and little maintenance. Add a wealth of design features and they have opened up for creative lighting in environments that previously would have posed a challenge.

"Best Audio have all the background and experience needed to give us great support when we need it and helped us in making this a great event," concluded Henderson. At Réunion Métis, local artists and companies mobilised to represent the richness of Réunion Island to locals and visitors alike, making the inaugural festival a unique and stunning success.

For more information, visit [www.elationlighting.com](http://www.elationlighting.com).

## silentHOUSE chooses Ayrton Khamsins for Jonas Brothers Happiness Begins World Tour

After a nearly 10-year hiatus, the reunited Jonas Brothers have embarked on a new world tour, currently playing 74 dates in North America and 16 in Europe, in support of their fifth studio album. Accompanying the Happiness Begins tour are some 200 Ayrton Khamsin LED profile fixtures.

Burbank's silentHOUSE is providing the lighting design and tour production for the show, which features a curved LED videowall at the back of the stage, an LED floor and a talent walkway to VIP seating. The Jonas Brothers kicked off Happiness Begins in Miami last August and will wrap the tour in Paris this February. The artists have sold more than 17 million albums worldwide.

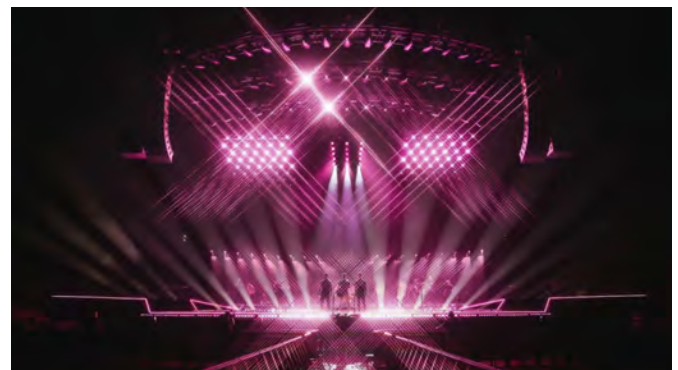
"The show's lighting design works in tandem with the video production," said silentHOUSE CEO and producer, Baz Halpin. "The truss configurations frame the main statement of the LED screens, and there are no trusses downstage of the LED floor. We opted to light all the performers on the stage from the side. The result is that the LED stage sitting at center stage dominates the visuals with no other elements taking away from the show."

The Khamsin profiles are positioned "in the pit and upstage/offstage of the set to give silhouette opportunities, frame the set and expand the whole vision beyond its physical structure," said silentHOUSE partner and lighting designer, Alex Reardon. "The majority of the Khamsin fixtures are mounted on the ground and utilised throughout the show, and the turnout has been wonderful."

The tour marks the first time that Reardon has used Ayrton Khamsin, and he's been very pleased with their performance. "I was seriously impressed with the results," he said. "There are a lot of fixtures out there that make very impressive claims, some of which translate into the real world; with Khamsin, Ayrton has knocked it out of the park. The fixture has a bright, uniform field, great colour and significant effects from the individual macro-control of the LED engine."

Reardon said he's "looking forward to working with Khamsins again. I'm watching to see what Ayrton comes up with over the next few years as the progress in LED lighting has been so meteoric."

For more information, visit [www.ayrton.eu](http://www.ayrton.eu).



Ayrton Khamsin goes on tour with the Jonas Brothers

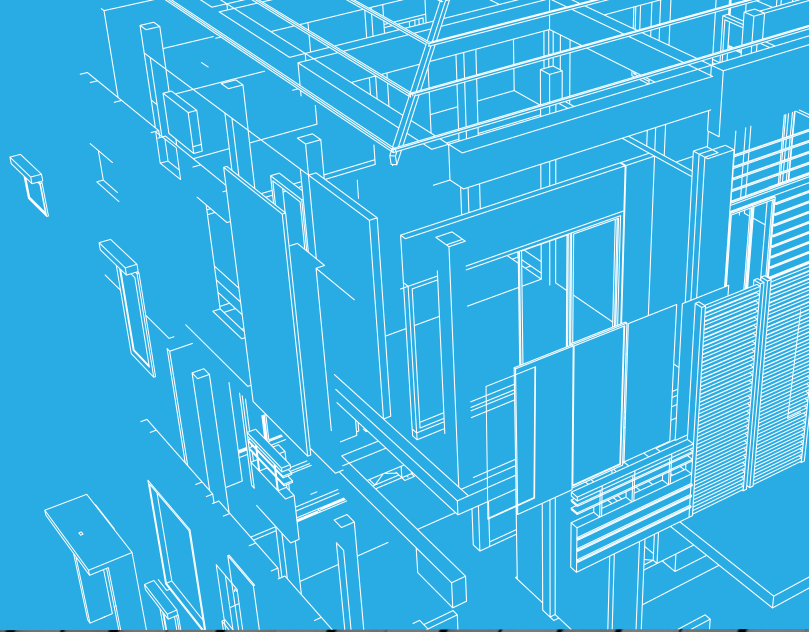
 **MEGABUILD**  
INDONESIA

**2020**

**BE INSPIRED**

**19 - 22 MARCH 2020**

JAKARTA CONVENTION CENTER



**THE 19<sup>TH</sup>  
INDONESIA MOST  
COMPREHENSIVE  
BUILDING MATERIALS,  
DESIGN AND  
ARCHITECTURE EVENT**

ROOF &  
FLOORING

BATHROOM &  
KITCHEN

CONSTRUCTION  
MATERIALS

DOORS &  
WINDOW

BUILDING  
MATERIALS

INTERIOR  
FURNISHING

**PROGRAM & ACTIVITY  
MEGABUILD 2020**

Seminar & Conference | Architecture Gallery | Trade Exhibitions | House of Indonesia Showcase

**BOOK YOUR  
SPACE NOW!**

**CALL OUR  
REPRESENTATIVE**

International Sales Manager

**Ms. Astri Ratnasari**

+62 811 9910 689

[astri.ratnasari@reedpanorama.com](mailto:astri.ratnasari@reedpanorama.com)

## New National Theatre, Tokyo chooses Robert Juliat LED Oz followspots

The New National Theatre, Tokyo (NNTT) has invested in a stock of Robert Juliat's Oz 600W LED followspots for its three performance spaces. The new LED models replace conventional source followspots as part of an upgrade of the lighting inventory for this internationally important arts venue.

New National Theatre, Tokyo is Japan's foremost national theatre and its only one dedicated to the contemporary performing arts of opera, ballet, dance and drama. The NNTT complex comprises the Opera Palace, Playhouse and The Pit, and hosts over 300 performances a year to around 200,000 theatre goers.

Four of Robert Juliat's Oz 7°-14° LED Top Control followspots were supplied by RJ distributor, Sogo Butai, initially for use in the small Pit Theatre, but also with the intention of relocating them to the larger spaces of the Playhouse and Opera Palace as needed. This demonstrates the versatility of this punchy zoom fixture whose 600W cool white LED light source is capable of generating an output equal to 1200W discharge fixtures.

"Because of its silent operation, Oz is extremely suitable for the open space within the smaller Pit Theatre," said Takehito Suzuki, from NNTT's technical department for lighting. "In venues like those of the New National Theatre, where many theatrical shows and contemporary dance performances are presented, we found Oz is the best followspot for lighting the performers at every distance."

Suzuki also stresses that Oz was chosen because, above all others, its quality met the high standards of the New National Theatre, Tokyo; its Top Control option was a prime example of this, enabling the operators to control both the dimming and iris smoothly and easily from the top of the fixture. "Amongst many LED followspots, what makes this fixture most remarkable is the Top Control," said Suzuki. "I find it so finely designed that the operation is a pleasure. I'm impressed by the minimum size of the iris shutter as well; the accuracy of the iris cassette is really incredible - it is great to see how RJ can make a spot so tiny that it seems like a hole pierced by a needle. We can see the real RJ quality in these kinds of details."

NNTT's followspot operators agree and have enjoyed using the new arrivals and commented, "Oz is highly operational with the double function of incredibly smooth dimming and iris control with the top controls. The body is well designed with a good balance of functionality, which makes it an extremely operator-friendly fixture."

NNTT is familiar with Robert Juliat, having invested in Robert Juliat profiles when it first opened its doors in 1997. "Since the beginning we have used Robert Juliat Athos 914SNX and 910SNX profiles," said Suzuki. "At the time these fixtures with discharge lamps were fully appreciated, and loved by every lighting designer who used them. They played important roles in so many performances as a key element of the lighting designs."

"The majority of New National Theatre profiles are still halogen-based, although most manufacturers are stopping production of these models, and we need to find new fixtures with alternative sources before these become outmoded. So we are now interested in LED sources which are powerful enough to match halogen fixtures, and Robert Juliat is already ahead of the game with LED models that perform as well as discharge fixtures."

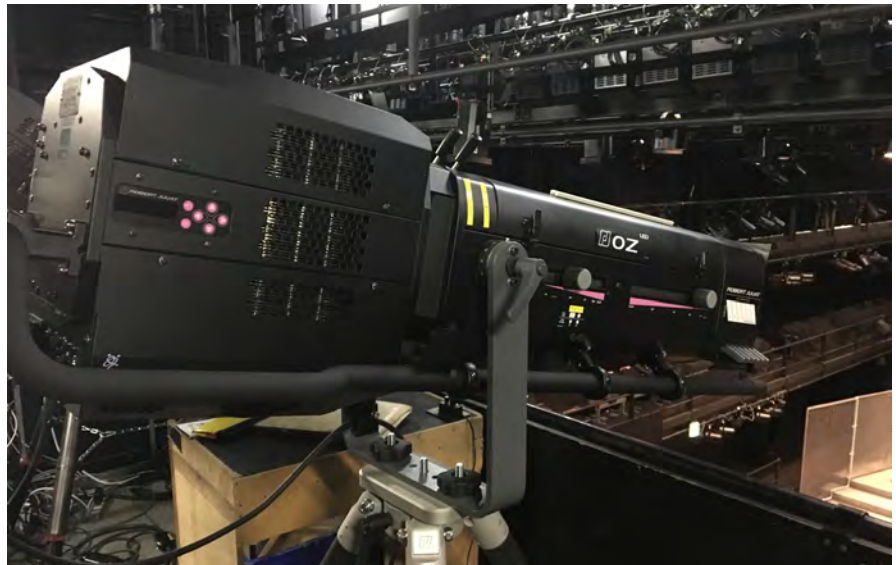
For more information, visit [www.robertjuliat.com](http://www.robertjuliat.com).



Opera Palace at New National Theatre, Tokyo. Photo © New National Theatre, Tokyo



The Pit (small theatre) at New National Theatre, Tokyo. Photo © New National Theatre, Tokyo



Robert Juliat's Oz in The Pit at New National Theatre, Tokyo. Photo © Robert Juliat Industry Japan

## Altman Lighting creates a balanced and colourful worship design at Bannockburn Church

Dedicated to creating a welcoming and authentic relationship with their congregation, Bannockburn Church is a sanctuary filled with encouragement and bonded through a common faith. Located near Austin, Texas, the church recently made the decision to renovate their outdated production design behind the worship environment, and they needed a partner to make the design a reality. With preparations of their own already underway for the opening of a new office in Texas, the design and integration specialists at 5 Words Media were ready to take full control with a design utilising Chalice downlights and AP-150 LED Par luminaires from Altman Lighting.

“We were traveling a lot in Texas for a number of projects in the House of Worship market, so we began looking at the possibility of opening a new office,” began Daniel Gourley, CEO of 5 Words Media. “Strategically located in the middle of San Antonio, Dallas and Houston, Austin is a very progressive entertainment environment, making it an ideal expansion possibility. Since we knew Dustin Parker from our work with him at Life Austin Church, we did our best to convince him to join us and it’s been a natural extension for us as we continue to grow year after year.”

“When I first spoke with Daniel, I was doing a lot of in-house projects, but then also working on additional AVL freelance projects with other churches throughout the area,” added Dustin Parker, Sales Engineer of 5 Words Media. “My true passion is to help congregations get the most out of the worship experience, so when I had the opportunity to join 5 Words Media, I really took it and ran with it.”

As discussions began with Bannockburn Church on how they would like to renovate their production design, it became clear that the architecture of the sanctuary was a valued aspect of the worship environment. Wanting to both highlight and accentuate the design characteristics already in place, the team at 5 Words Media would need to completely revamp the antiquated lighting technology.

“When talking to tech director Chase Fullerton, we knew they wanted to maintain the beautiful aesthetics of the space with the wood ceiling and its octagon-shaped, support beam infrastructure,” continued Gourley. “Previously, they were using a lot of flood uplights for the ceiling, and then only a few incandescent lights shining down on the orchestra and seating areas. In the balcony, they were relying on the bounce from the ceiling light, and under the balcony, they were using outdated fluorescent fixtures. We were really dealing with a tale of three different light levels throughout the sanctuary, so we needed to renovate the entire system with one-to-one fixture control and a more balanced lighting design.”

Focused on selecting the most advantageous solutions for the new design, Gourley began to visualise how to create an all-encompassing lighting experience. Understanding how the church struggled with varying colour temperatures in the past, he wanted to make sure to give them a



consistent and even wash of light in the updated sanctuary design.

“When choosing the replacement downlights for the space, it was very important to maintain a consistent colour temperature and also provide one-to-one control, which is why we chose the Altman Chalice luminaires for the space,” admitted Gourley. “The DMX-controlled 150W and 70W luminaires allowed full control of each fixture independently at a 3000K colour temperature, and they also provided multiple mounting options, including recessed and yoke-mount, which were used throughout the space to create a consistent and elegant installation.”

The Chalice LED Series is the most diverse range of downlights available with mounting options that include pendant, recessed, aircraft cable, wall and yoke mount, plus dimming choices ranging from Mains Dimming to DMX. Additionally, with a wide variety of LED colour or white light options, and numerous lens or reflector choices, the Chalice LED Series is the most versatile and easy to integrate downlight solution available today.

With the sanctuary lighting now in place, Gourley and the 5 Words Media design team now wanted to create the accent lighting for the design. Knowing the importance of the architecture of the building, he developed a clear vision of how LED colour-changing could open up a multitude of design possibilities.

“As we started to look at what to use for

the ceiling, we wanted to give them the ability to really tone the room or use a deep colour wash to accentuate what might be happening on stage,” explained Gourley. “Since they love the architecture of the ceiling, we mounted the Altman AP-150 LED PAR luminaires on the peripherals of the wooden beams which gave us the ability to utilise their colour-changing and zoom capabilities to really open them up and wash the entire ceiling. It was great to see that what we wanted to achieve, and what we did achieve, were one in the same.”

The AP-150 PAR is a compact and lightweight, 135-watt RGBW LED wash which produces deep, saturated colours and soft, delicate pastels, while maintaining a smooth, uniform beam throughout the entire motorised zoom range. Weighing only 11 pounds, the AP-150 replicates the soft output of a traditional par wash light with control states from 8 Bit, 16, Bit, RGB, and HSIC. Its factory and custom colour presets allow for the quick selection of the most widely used entertainment colour choices, and it also adds the ability to record colour presets directly to the luminaire for custom colour playback.

“We ended up running DMX all over the building, along with a streaming ACN network to connect the house and stage lighting systems, and then we programmed all the fixtures via RDM,” added Parker. “The RDM settings on all the Altman luminaires were outstanding as we were able to be on the ground and address all the lights in about



2 minutes. The system is now using a theatrical console with DMX e-nodes and architectural wall stations to control the lighting, along with a timeclock using on-off snapshots activated at multiple time schedules. Everyone was very pleased with the new design, and it was great to be able to give them all the control they wanted.”

With the installation now complete, the design at Bannockburn Church is creating an entirely new worship environment while solidifying the reputation of 5 Words Media as a trusted integration partner throughout the area. Operating under a design principle centered on “See, Hear, Feel, Design and Build”, Gourley is extremely pleased with the performance of the technologies that helped bring the renovation together.

“While there are a lot of zoom par and LED downlight luminaires on the market, there are a lot more features in the Altman fixtures, over others I have seen,” concluded Gourley. “With a lot of multi-cell fixtures, you see all the striations and individual light emitters striking a surface, but with the Altman AP-150, the output is very homogenised and the colour we get at 30-feet away is the same we get at 3-feet away. As an integrator, the Altman fixtures give you so many options and it comes from a company with a really good track record for quality and support.”

For more information, visit [www.altmanlighting.com](http://www.altmanlighting.com).

## Elation DARTZ™ makes the cut on Dancing with the Stars

Enjoyed by young and old alike, *Dancing with the Stars* has been a mainstay of American reality television since premiering in 2005. For season 28, which premiered 16 September 2019 on ABC, lighting designer Tom Sutherland is using Elation Professional DARTZ 360™ beam/spot LED moving heads as a principal luminaire in an immersive 360-degree lighting environment. Lighting vendor for *Dancing with the Stars* is Felix Lighting with Nicole Barnes as account manager.

After skipping its standard spring season—there are typically two seasons per year—the Emmy-winning dance competition returned this fall with changes designed to freshen up the format and delight fans in new ways. A new creative director came onboard for the new season, as did Sutherland who worked with set designer Florian Weider on a revamped set.

For the uninitiated, *Dancing with the Stars* features celebrities dancing with professional ballroom dancers as a panel of ballroom experts, along with fans at home, determines who makes the cut each week. Filmed at CBS Television City in Los Angeles, it is a competition that is as much about drama and glitz as dancing, and that’s what has kept fans coming back year after year.

Lead designer at DX7 Design and a Knight of Illumination award winner, Sutherland, who has a wealth of experience lighting other TV reality shows such as *The X-Factor*, *The Four*, *American Idol*, *Britain’s Got Talent*, *The Voice China*, *Love Island* and *La Banda*, embraced the opportunity to create something original and sought a versatile light as his principal source.

“I needed something that was small but also quite bright and punchy that could light the entire room,” he said. “I also needed a light that was cool that I could put close to the audience as they surround the audience in a 360-degree set.”

Sutherland, who is known for creating big looks on broadcast sets, had used the DARTZ 360 on a previous show and was familiar with its tight 3-degree beam and myriad effect options. Safe to use at any distance, the DARTZ, with its 50W RGB LED engine, is an ideal ‘up-close’ luminaire. “It’s also small and compact and can fit into any space,” said Sutherland who positioned 84 of the DARTZ fixtures around the set to frame the underside of the audience balconies. “We also use them to light the edges of the dancefloor as well as in reverse shots.”

The challenge, the designer said, was to create unique looks for each couple’s performance show after show, keeping the look dynamic and interesting for the millions of fans that tuned in each week. That’s where a multifunctional luminaire comes in handy. Used extensively for a variety of effects, Sutherland relied on the DARTZ’s effects package, using everything from a variety of colour shades to prism effects, gobos, rotation and even frost.

Shot in 360 degrees, the DARTZ, which is extremely bright for its wattage and size, are used throughout the show with the 360-degree positioning effectively filling wide shots and expanding the look of the set. “I work with the creative director to come up with a concept for each performance and build around that,” said Sutherland. “We do many performances a week so I use everything in the fixture. They have been great on camera as well with no flicker issues, just very solid,” he continued, and added that matching the other fixtures in the set hadn’t been an issue either.

For more information, visit [www.elationlighting.com](http://www.elationlighting.com).



Photos by Hunter Selby / James Coldicott

## Starlite invests in Ayrton Khamsin fixtures

New Jersey-based Starlite has purchased a complement of Ayrton Khamsin-S, Ayrton's super-compact and highly versatile profile fixture. The company has one of the largest inventories of AV, lighting and control equipment on the East Coast with which to meet the needs of clients in the broadcast, concert touring, corporate, performing arts and educational markets.

The Khamsin-S purchase represents Starlite's first acquisition of Ayrton products. "ACT Lighting (Ayrton's exclusive distributor in North America) demoed the whole Ayrton line for us, and we evaluated the Khamsins in our shop for our rental inventory and use on our own productions," said President and CEO, Dean Danowitz.

"There was a fair amount of debate internally regarding which profile fixture we should invest in next," notes Jason Danowitz, Vice President of Event Technology. "Ultimately, we chose the Khamsin-S because it checked so many boxes for our touring and staging clients, including an 8:1 zoom (7° to 58°), 40,000-lumen output, CMY colour mixing plus fixed colours, variable CTO, two frosts, two rotating gobo wheels, prisms, an animation wheel, rotatable framing shutters and an iris. In addition, they're flicker-free, which is essential for our clients with broadcast applications."

As soon as Starlite took delivery of the fixtures they were quickly dispatched on a broadcast project. "The minute they hit our docks, they were booked for a major televised awards show," said Starlite's Rental Manager, Matt Strickland. "The Khamsins will work for so many applications that they will never be here – which is ultimately my goal!"

Jason Danowitz pointed out that, "the Ayrton brand has a reputation for innovative and well-designed fixtures, and they have amassed a loyal following



Starlite invests in its first consignment of Ayrton Khamsin-S

among designers. Also, we've enjoyed great support from ACT Lighting through the years, so we're happy to embark on this venture with them."

"We're looking for the Khamsins to be a true multi-purpose fixture for us across our client base," concluded Dean Danowitz.

For more information on the extensive portfolio of innovative Ayrton LED fixtures, visit [www.ayrton.eu](http://www.ayrton.eu).

## Obsidian Control Systems to show NX 4™ with DYLOS™ at LDI 2019



Obsidian Control Systems unveiled the powerful NX 4™ lighting controller with DYLOS™ pixel composition engine at LDI 2019 in Las Vegas. Designers, programmers and operators were invited for a look at this powerful console in the intuitive ONYX™ platform and experience the creative possibilities with DYLOS.

The NX 4 is the newest member of the innovative ONYX™ lighting control platform. Equipped with a range of professional features and using the latest in industrial components, the NX 4 is designed to handle even the largest show with ease. With a well-arranged combination of motorised and manual faders, along with an array of playback buttons, the NX 4 offers 44 total playbacks in a compact yet extremely powerful package. Fast boot times, instant operation and the ability to process 64 Universes right inside the console without the

need for costly external processing networks results in unprecedented power in this form factor.

The NX 4 includes a high-brightness, 15.6", full-HD multi-touch screen with support for two external 4K touch displays. Eight assignable parameter encoders, a dedicated Intensity encoder, an assistive mini-touch screen, full keypad and command section, and a dedicated grand master make for an intuitive control surface. Two independent playback sections offer instant access. The main playback with 10 motorised faders plus 10 play-pairs allow for quick page changes while the sub playback with 12 faders and 12 button playbacks means important cues are always at your fingertips.

DYLOS™

Obsidian Control Systems offers DYLOS™ in each NX 4 console, a pixel composer that far exceeds the capabilities of regular pixel-mapping systems. It is the first of many exciting steps for the ONYX™ platform to provide a comprehensive toolset of dynamic fixture animation, exciting content generators and powerful media playback, easily accessible through an elegant and well-thought-out user interface. Following the natural workflow of ONYX, the DYLOS pixel composer seamlessly integrates and is available at a moment's notice to enhance lighting designs. Based on a full 3D environment and powerful DirectX graphics processing, the DYLOS engine has been designed from the ground up for power and performance to manage thousands of fixtures and parameters with ease.

ONYX™

The NX 4 runs innovative ONYX™ lighting control software. ONYX is a powerful yet easy-to-learn lighting control platform designed for both hardware consoles and PC systems. It is a rebranding of the well-established M-Series control platform and is designed for use with all new ONYX and existing M-Series hardware. Obsidian Control Systems products are distributed exclusively by Elation Professional worldwide and are available in various sizes to accommodate any scale and budget.

For more information, visit [www.elationlighting.com](http://www.elationlighting.com).

## Christie's projectors and image processing solutions light up dance concert to commemorate Singapore's Bicentennial

Christie's projection and content management and processing solutions played an instrumental role in delivering a highly engaging dance extravaganza organised by the Institute of Technical Education (ITE) to commemorate 200 years of Singapore's founding.

'Milestones: The ITE Bicentennial Emblazon Edition' was held at the 1,460-seat auditorium in ITE headquarters and involved nearly 400 dancers comprising students from all three ITE colleges. They presented brilliant onstage performances that highlighted the key milestones of Singapore's history and rich heritage, and envisioned what citizens hope the nation to be in the future. The two-hour concert was presented in four chapters that captured the moods and messages of each milestone through dance, music and images.

The performers' slick dance moves were complemented by an array of stunning multimedia projections using a Christie D4K40-RGB pure laser projector, a Christie Crimson WU25 3DLP® laser projector, and four Christie Roadster HD20K-J 3DLP® projectors, while content management and processing was achieved by the Christie Pandoras Box Quad Server and Compact Player. The laser projectors and Pandoras Box systems were provided by Christie Singapore and installed by its local partners Electro-Acoustics Systems and Total Solution Marketing respectively for this event.

"The brief from our management this year was to focus on the Bicentennial narrative; and hence the usage of multimedia and projection was crucial in delivering the stories and messages more clearly to the masses," said Christabel Lim, Producer of ITE Dance Emblazon and Head of Arts Management, Centre for Music and the Arts, ITE. "I'm glad that the projection and multimedia had succeeded in strongly supporting the dancers in their themes, and provided visual aids to era-specific pieces."

Outside the auditorium, the Crimson WU25 displayed bright and dynamic images of the event's titles on the wall above the main entrance, welcoming all guests and heightening their anticipation of the concert. Inside, the D4K40-RGB was deployed for main projections on the huge backdrop, while the double-stacked Roadster HD20K-Js covered the projections on two tall, narrow drapes on each side of the stage. The results were colourful and lifelike visuals that enhanced the overall look and feel of the wide-ranging dance performances and heightened the audience's enjoyment of this concert.

Joshua Chong, Technical Officer, Venue Management, CDE Division, ITE, said, "The Christie D4K40-RGB was simply amazing with its accurate colour reproduction and extremely high output from such a compact enclosure, which allowed it to punch through all the haze and stage lighting while still delivering a vibrant image. The Christie Crimson WU25 also amazed me with its high output and ease of use from such a compact enclosure. Colours were warm and vibrant without the 'coldness' that's commonly seen in other laser projector brands."



Stunning visuals on the backdrop during the "Hallyu" segment of the concert using the Christie D4K40-RGB pure laser projector. Photo by Muhd Asyraf B Muhd Yatim (@minimxlist)



Darker and more muted colours were used for the projections during the "Icon" segment. Photo by Muhd Asyraf B Muhd Yatim (@minimxlist)

The event, which took almost a year to materialise, had been well-received by audiences, who lauded its high artistic standards and production values. "The ITE management and the audience were very impressed on how far the artistic boundaries could be pushed," Lim noted. "Many felt that multimedia was creative and acted as visual aids to understand the dance pieces better."

Bensen Ong, Assistant Sales Manager, Enterprise, Christie Singapore, commented, "We're very pleased to support ITE for this highly anticipated concert in celebration of Singapore's Bicentennial. This is the first time that our D4K40-RGB and Crimson WU25 projectors are used for a major event in Singapore, and we are delighted that all our projection and image processing solutions have captivated the audience with astounding visuals and added more realism and spectacle to the concert."

For more information, visit [www.christiedigital.com](http://www.christiedigital.com).

## TMB's Intelligent Marquee Systems (IMS) on Stray Cats World Tour

“It was definitely a swingin', rockin', and shoutin' of a good time, as the sensational, iconic and legendary band the Stray Cats prowled their way to the Greek Theatre,” wrote The Music Connection's Daniel Seylum of the band's recent Los Angeles appearance. Forty years after their debut album, rockabilly fans worldwide found out why the timeless group has such staying power.

After opening in Europe last June, the Cats' North American leg commenced in Atlantic City, NJ, wrapping up in San Diego, CA. The centerpiece of the set, spanning 24 feet, was an impressive and fun “Stray Cats” marquee sign, designed, built, and installed by Gallagher Staging of La Mirada, CA. Comprised of 202 IMS RGBW LED lamps, as well as other LED ribbon and panel lighting, the colourful and buoyant set piece was the visual signature of the tour.

“Marquees go hand in hand with the genre,” said Gallagher's Special Projects Manager, Joe Golden. “Like rockabilly, marquee lighting is retro yet timeless. We had an existing sign and reworked it to become essentially a blend of makeover and new. On the Brian Stetzer Orchestra tour, we had used incandescent lamps mixed with IMS LEDs, but the warm white in the RGBW IMS lamps looked so much better that, for this tour, LD Michael Duncan opted to replace all the lamps with IMS LEDs. The IMS lamps easily retrofitted into the original E27 sockets, saving us a lot of time.”

Golden continued, “Driving the IMS system were two ProPlex IMS Universe Drive DIN-Rail units built into a custom PSU chassis. The marquee sign was illuminated throughout the show, elegantly programmed by Duncan to capture the moods from song to song, as well as sections within a song. The lights were in continual motion.”

Asked to comment on the IMS marquee, Tour Production Manager, Michael Richter, exclaimed, “Yup, we love it. It's awesome, exactly as I envisioned it, the band and management, everyone loves it!”

For more information, visit [www.tmb.com](http://www.tmb.com).



## Brigham Young University-Idaho invests in Robert Juliat for Performing Arts Theatres



Robert Juliat Lancelot's new home at the versatile BYU-I Center, Idaho.

Brigham Young University-Idaho (BYU-I) has taken delivery of Robert Juliat Lancelot 4000W followspots for its three theatres as part of a complement of lighting fixtures.

BYU-I, formerly known as Ricks College, is located in Rexburg, Idaho and offers programmes in liberal arts, including the sciences, engineering, agriculture, management and the performing arts. The university is owned and operated by The Church of Jesus Christ of Latter-day Saints.

BYU-I's theatres host theatrical productions and concerts staged by students and visiting artists. BYU-I Center, the largest of the theatres, seats 15,000; the Hart Auditorium is a three-quarters arena that seats 3,700; and the Snow Drama Theater, the smallest venue, seats 400.

The new Lancelot fixtures were acquired from Barbizon Light of the Rockies in Denver as part of the lighting replacement cycle, notes lighting designer with BYU-I's AV Productions, Braden Howard. Last year the university invested in Robert Juliat Dalis LED front-edge stage lighting; the one-meter units are used by the Center, Hart Auditorium and Snow Drama Theater. Systems integrator with Barbizon, Peter Maurelli, had worked with the university when it was Ricks College and provided the original fixture package for the Center.

Howard was now in the market to replace the Robert Juliat Cyrano followspots, which reside in the Center. “The Cyranos were great but slightly underpowered for the cameras so we made the jump to the higher output of the Lancelots,” said Howard.

The 4,000W HTI-source Lancelots “ticked all the boxes” for Howard with their high output, super-narrow 2°-5° zoom range and electronic power supply for best on-camera performance. “The trend we're seeing is higher overall brightness on stage. So having a fixture that can cut through all the ambient light and direct the focus of the audience is important,” said Maurelli. The four new Lancelot followspots are dedicated to the Center.

The Lancelot units only recently arrived at BYU-I so they have been deployed only on new student orientation in the Center. Opportunities to use the new fixtures will soon multiply, and rounding out the year will be the annual Christmas concert, featuring 300 student musicians and guest artists, including former Metropolitan Opera star Frederica von Stade and the Sonos handbell ensemble.

Robert Juliat is distributed exclusively in North America by ACT Lighting, Inc. “We appreciate the support that we got from ACT Lighting, regional sales manager Aaron Hubbard and the ACT technical team,” said Maurelli. “We always feel the comfortable knowing that our customers will be well supported by ACT.”

“ACT had been there for us with our previous Robert Juliat purchase,” noted Howard. He added that ACT will help BYU-I's technicians learn to service the new fixtures. “We're in a pretty remote location so we often rely on manufacturer training to help ourselves,” said Howard.

Full details of Lancelot followspots and the full inventory of Robert Juliat LED and conventional source lighting products are available on the Robert Juliat website at [www.robertjuliat.com](http://www.robertjuliat.com).

## Alluring Proteus™ draws a crowd at Life is Beautiful Festival

Life is Beautiful Festival organisers posed a challenge to lighting designer Rob Ross in the run up to the 2019 event in Las Vegas – get more attendees to use an alleyway corridor to travel between stages instead of the over-packed main street thoroughfare. Ross succeeded with a 450-ft long, immersive environment that featured alluring lighting effects from Elation Professional Proteus series luminaires.

Getting festivalgoers to use an alternate path however was no small task as the main street between the festival's main stage and ancillary stages was lined with vendors and art installations, which naturally attracts people, and besides, the alleyway was a longer route, uninteresting and somewhat dimly lit.

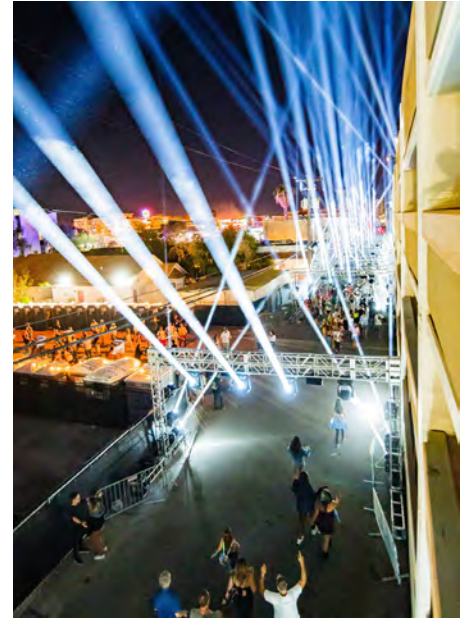
"The festival came to us and asked us to make the alleyway feel cool and more exciting so people would want to walk that way instead of along the overcrowded street," explains Ross, head of Rob Ross Design, a national full service lighting design and production company that handled site and VIP lighting for the 3-day festival as well as the art install project. "They were wonderful and gave us an open invitation to basically do whatever we wanted as long as we came up with something extraordinary that people would be attracted to."

Life is Beautiful took over Downtown Las Vegas from 20 to 22 September 2019 and featured headline acts Black Keys, Post Malone, Billie Eilish, Portugal. The Man and Chance the Rapper. However, the festival is much more than music. It is also promoted as a culinary, art and learning festival, and focused on uniting people around artistic experiences ranging from music to art and interactive exhibits, that provided a colourful, eclectic background for an urban setting under revitalisation.

Ross worked with New York composer Elisheba Ittoop to create a unique 10-minute soundscape, which was programmed to work with 66 Proteus Beam™ and 34 Proteus Hybrid™ luminaires. All lighting design and programming came through Rob Ross Design. The Design Oasis of Davie, FL, provided the lighting equipment for the project.

The installation consisted of ten arch trusses approximately 45 feet apart from each other along the alley's 450-foot length. Each truss housed nine Proteus lights – Beams in the middle and Hybrids on the edges for gobo projection – along with a pair of haze machines. The 10-minute show looped continuously so the effect was of one never-ending light show with each truss having its own 1-minute theme for a 10-minute walk through the alley.

Ross observed that people's reaction and interaction with the light installation was varied but always positive, interactive and stimulating. "It was interesting to watch people," he said. "Some people stopped and watched the show while others walked on through. One of the fun moments was where we had light beams shooting straight across horizontally and people would limbo underneath them. Others would pretend they were lasers and step over one or under another. Some people would naturally, without even thinking about it, walk right toward a light beam and then step to the side or



Photos by Jorg Photo

around it as if it was a solid column. Many people of course also danced through the alley. For us it was a real fun toy to play with and it was the same for the festival guests."

One of the designer's favourite looks was when all the Proteus lights shot beams up into the sky in all white and then swung through to the backside of the alley. "For me, that's the most powerful moment. You could see them from all over the site. People across the festival would see 90 beams all at once and wonder where they were coming from." A crosshatch look was another of his favorites with guests moving in and around the lights.

Although Ross employed the Proteus' full FX package in creating the variety of looks, the designer was most struck by the sheer power of the luminaires. He commented, "What I was really impressed with was the quality of the beam and the brightness of it. Beam fixtures have come a long way and this is a good example of that. They really cut through the Vegas sky, which is a challenge, as there is a lot of ambient light. The ability of them to cut through the sky was huge."

With rain seldom falling in Las Vegas, one might wonder about the need for an IP65 weatherproof light but for Ross there was no question. "The IP65 rating was actually the leading factor in choosing the Proteus fixtures," he said. "Even though it rarely rains in Vegas I wasn't going to put 100 moving lights exposed on truss without some type of protection! You just never know."

The alleyway light installation was a popular addition to the festival that both dazzled and added value for festival guests. "People are craving this type of light/art installation moment. It's a whole other event space essentially, a whole other activation," Ross said, adding that it was inspired by events like the former Day for Night art and music festival in Houston. "These types of light art installations rarely exist and are still very special at this point." The other thing Ross said it gave was an Instagram-able experience where people could take pictures and instantly share.

The designer said it was great to work with The Design Oasis on the project, a rental house that he often worked with on outdoor events because of their excellent support and the fact that they own a lot of IP65 equipment. He summed up, "We had a lot of fun with this project. The goal of the lighting installation was to increase traffic to this less trafficked area of the festival and we did that. It worked out amazingly well."

For more information, visit [www.elationlighting.com](http://www.elationlighting.com).

## New York's Metropolitan Opera chooses Elation Artiste Monet™



Photos by Ken Howard

The Metropolitan Opera House at Lincoln Center for the Performing Arts in New York City, home to the Metropolitan Opera, recently installed 70 Elation Professional Artiste Monet™ LED profile moving head luminaires with Donald Holder, the first to use the new rig of award-winning lights on *Porgy and Bess*. Lighting supply was by 4Wall Entertainment.

As one of the world's premiere opera companies, the Metropolitan Opera demands exacting specifications with stage facilities that continues to be updated technically. The Met's resident lighting designer, John Froelich, was instrumental in choosing the Artiste Monet and cited three main reasons for its choice. "The output of the LED source was very bright," he said, noting that in testing it was the brightest fixture available. Secondly, "The native colour of the LED engine was the most appealing to me. Most LED profiles that were tested had a slight green bias that was really hard to manage quickly from a creative standpoint. In a large, fast-paced repertory environment like ours it was such a great thing to find a source that was so artistically appealing."

Lastly, the designer said the focus aspect of the Artiste Monet was the best of the units under consideration. "When dealing with LED sources in moving lights all manufacturers have to deal with the reality that multiple tiny sources rather than a single center engine of light, such as an arc source lamp, causes chromatic aberration to any shaping object in the lens train. In our testing, the Artiste Monet lens system had the advantage in minimising this issue."

The Artiste Monet is a 45,000-lumen LED

profile luminaire whose innovative SpectraColor colour mixing system, as well as an unlimited indexing and continuous rotation framing system, has been recognised as exceptional innovation. SpectraColor is unique in that it combines CMY colour mixing with RGB flags and variable CTO to produce colour combinations that have traditionally been hard for LED luminaires to achieve.

"The SpectraColor system opens up a lot of possibilities from a creative standpoint," Froelich stated. "The ability to mix to super saturated colours without having to revert to the use of colour chips is really advantageous. For example, I can shift from a realistic lighting state in one cue and then fade to really saturated theatrical state to emphasise a musical moment, mood or event onstage with the same lighting equipment. This is quite helpful in our repertory environment as we have more wide-ranging access to dramatic shifts without having to hang additional lighting equipment."

"The system also allows me access to subtle reds, blues and greens that are near impossible to mix with the primary Cyan, Magenta, Yellow mixing system. Having access to these types of colours without losing light output due to the heavy amount of coloured glass in the lens assembly is quite a game changer," he continued.

The Monet fixtures, along with a complement of Elation Chorus Line ST™ LED battens, have replaced the entire overhead lighting rig at the Met, everything from a standard tungsten Fresnel to a high output 4KW HMI theatre Fresnel. "It is quite a wide range of lighting equipment and the transition has been fairly smooth," said Froelich. The Chorus Line luminaires were custom made for

the venue with RGBA LEDs for a broader colour spectrum.

The Metropolitan Opera opened its 2019/2020 season on 23 September 2019 with a new production of the Gershwin and Heyward opera *Porgy and Bess*, directed by James Robinson. The first production to use the new Artiste Monet luminaires, lighting is by Tony Award-winning LD Donald Holder, the fifth opera he has designed for the Met since 2004 (*The Magic Flute*, *Two Boys*, *Otello*, *Samson et Dalila*).

Located on the Met's repertory light bridges and at borderlight positions, Holder shared his experience using the Artiste Monet. "It's a very powerful fixture with excellent colour rendering, dimming and optics," he said. "Despite the high colour-temperature native source, we were able to achieve a fairly warm, natural-looking colour palette, certainly evocative of sun, candle and torchlight. The variable light to heavy frost option was extremely helpful when creating continuous backlight washes using several fixtures, or using the Monet for a single special with no apparent hard-edges."

The scenic design for *Porgy and Bess* features a two-story set designed by Michael Yeargan that revolves to eight different positions over the course of 16 scenes. Populated by a cast of 93, who occupy almost every nook and cranny of the massive structure, Holder said, "I needed many fixtures from multiple locations that could carve out specific portions of the set with consistency and accuracy. The Artiste Monet accomplished the bulk of this work, and I was very pleased with the quality and repeatability."



Citing the luminaire's excellent colour-mixing and variable frost as important features for his design, Holder used the Monets continuously in the production, constantly refocusing as the set revolves and changes configuration. He described a special look he created across the set's complex sloped roof structure, located at a relatively short throw distance from the Monet's position on lighting bridges. He said, "Using the wide zoom optics and heavy frost options I was able to simulate a large brushstroke of sunlight glancing across all the rooftops using just one or two Monet fixtures focused from a singular, strategic location."

In another special look that takes place during the funeral of Robbins on a cold, rainy day, Holder created broad swaths of cold wintry backlight that etched the entire space, using the fixtures in open white and again with a wide zoom and heavy frost.

Holder thanked Resident Lighting Designer John Froelich for having the foresight to bring the Artiste Monet fixtures to the Met, as well as his brilliant assistant team of Aaron Sporer and Keri Thibodeau, along with programmers Ben Eells, Salvatore Nicosia and Max Lagonia.

The first production of *Porgy and Bess* at the Met since 1990, the show has proved itself a triumph with critics praising both the cast and production. Performances ran through October 16 2019 with the production returning for seven more performances in early 2020.

For more information, visit [www.elationlighting.com](http://www.elationlighting.com).

## Elation Artiste Picasso™ impresses at Royal Opera House in London



Photo by Bill Cooper

Situated in London's Covent Garden, the Grade 1 listed Royal Opera House (ROH) is one of London's largest theatres. Housing both The Royal Opera and The Royal Ballet, both world-leading companies whose productions feature the very finest national and international talent, the site's rich history dates back to 1732 when the (then) Theatre Royal was opened. The ROH is home to an outstanding technical team, who work with cutting-edge technologies to enhance every aspect of its world-class program of events.

Earlier in 2019, prior to staging The Munich Opera's production of Handel's opera *Agrippina*, directed by Barrie Kosky, the ROH received a specific request from lighting designer Benedikt Zehm for the placement of moving head LED units in the front of house. Historically, similar requests for moving heads have created issues in terms of a lack of space, sound control and certain restrictions placed on the auditorium by English Heritage.

In an effort to meet the designer's wish, the team at the ROH carried out some research into a possible solution and concluded that Elation's Artiste Picasso™ LED moving head met all the criteria they required. Elation's exclusive UK and Ireland distributor Entedi arranged an on-site demonstration, which confirmed that the Artiste Picasso met the requirements for power, beam size, beam image and shuttering. Pivotaly, the units produce minimal ambient noise, which ultimately enabled them to be hung successfully at Grand Tier level in the auditorium.

The Elation Artiste Picasso units were used to great effect in the production, both near the proscenium

on each side, as well as working back into the auditorium. Simon Bennison, Lighting Manager at the ROH commented, "Being near silent, having consistent beam quality, great output and crisp shuttering, the Artiste Picasso units were impressive. Benedikt Zehm, the lighting designer from the Munich Opera, was extremely happy and was able to recreate his opera with great results. The ROH team was also very happy, as the units performed throughout the technical and performance periods with no maintenance issues, no detriment to sight-lines and no increased sound levels. The Elation units couldn't have performed better and represented an encouraging addition to the new generation of moving heads in the current market. We're excited to see how Elation's portfolio develops and to experience further use of different products."

Cally Bacchus, Managing Director at Entedi added, "The team at the ROH is an elite group with exceptional technical knowledge, who maintain incredibly high standards at what is one of the most prestigious theatres in the UK. When they contacted us regarding the Elation units, we were very happy to arrange a demonstration, believing as we do that the Artiste Picasso product is fast becoming an industry standard LED moving light profile fixture. It is exciting to receive such an overwhelmingly positive response from this highly respected establishment."

### About Entedi

Entedi is a technology equipment solutions provider, exclusively representing a number of leading international brands in the UK and Republic of Ireland. Entedi clients typically use its product lines for stage, theatre, events, touring, film & TV production, venue, installation, architectural and education applications. They are also committed to providing high quality technical support and training.

For more information, visit [www.entedi.com](http://www.entedi.com).

## White Light supplies the lighting for Mamma Mia – The Party

Created by ABBA's Björn Ulvaeus, Mamma Mia – The Party transports its audience to the island of Skopelos where taverna owner Nikos and his family present their story in a glorious night of song, dance and feasting. Running for four hours, the show is packed full of ABBA's best-known songs which are performed by actors and musicians around the audience members. The show was first performed in Sweden and has now arrived in London, where it is running at The O2, Greenwich.

The Lighting Designer for the show is the award-winning Patrick Woodroffe. He commented, "For Mamma Mia – The Party, we wanted our audience to truly believe they were in a Greek taverna on Skopelos. Bengt Fröderberg's set design was so authentic and, for the first act, we wanted to mirror that with very realistic dappled lighting that slowly changed colour temperature as dusk falls. As the piece progresses into Act 2, we enter into some of the fantasy scenes and the lighting starts to become more theatrical and abstracted. Finally, in Act 3, we make an unashamed rock/pop concert!"

The show takes place inside a custom-built space within The O2. As a result, Patrick had to create a design that would work within this space. "The main part of the lighting system is rigged from trusses directly over the open floor below. However, we made a deliberate decision to try and hide the lighting rig and fixtures with a lattice of vines and tree foliage to create the sense of it being a real taverna. It did become somewhat complicated to try and hide the lights but we made it work so that it still allowed them to focus through the branches and reach the performers. Other fixtures were rigged from the columns and the balconies that surround the main floor and on which much of our audience is seated," he explained.

To create the specific rig needed, Patrick approached WL to provide the lighting equipment. He stated, "On a practical level, we wanted to have all LED fixtures so maintenance would be easy for the technical crew over the entire run of the show. With this in mind, we used a mixture of GLP S350s, Clay Paky Axcor Wash 300s, GLP X4Ls, GLP X4Ss and GLP KNV Dots. In addition, there were strings of festoon, fairy lighting and a complete fibre optic starcloth that played above everything else; as well as over 50 custom pixel windows".

Unlike a traditional show, Mamma Mia – The Party is a theatrical dining experience, meaning the performance takes place across the whole space, fully immersing its audience members. As such, Patrick had to achieve the correct balance between lighting the performers along with the room itself. He explained, "We made an important choice early in the design process to replace the followspots with a tracking system that would use fixtures from the overhead rig to follow the performers. This was a creative, as well as a budget-driven, decision. The action takes place all throughout the venue – on the main floor, on a mini stage at one end of the room and also on the stairways and balconies. There wasn't a single place where a followspot would have been able to reach all of these positions. We identified the Zaktrack system from Vienna as the most suitable solution for this and, although it took



Photos by Helen Maybanks

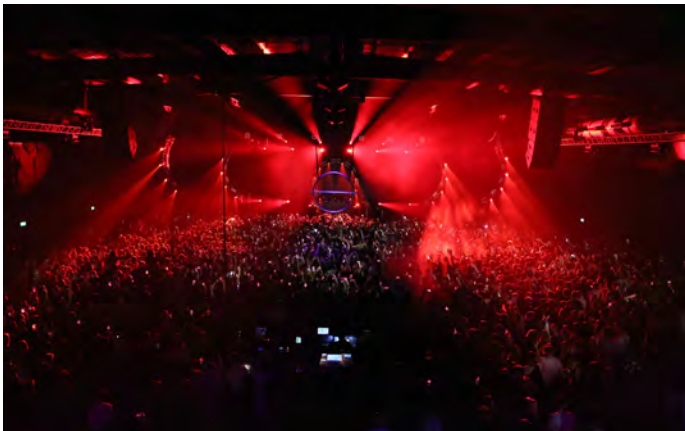
some time to tune the system because of the complexities of the space, the result was very successful. We can follow a performer right across the room, fading out one fixture and bringing in another as the scenery dictates. Not only that but we can do this with up to five performers at a time; something that happens more than once during the show".

Mamma Mia – The Party opened to rave reviews in 2019 with performances available this year.

Patrick concluded, "This was a show that required a lot of rehearsal and programming to achieve the theatrical effects needed but the end result is a completely unique theatrical experience. I'd like to thank Rob Casey, who was my Associate on the show, Chris Hirst who programmed the grandMA and Johanna Jensen, who was our Script Supervisor".

For more information, visit [www.whitelight.ltd.uk](http://www.whitelight.ltd.uk).

## MDG haze solution for prestigious new events space, Magazine London



Michael Bibi Presents: Isolate, 12th October 2019 at Magazine London. Photos © Gemma Parker @GemmaParkerPhotography

Magazine London, the capital's newest, largest, and smartest purpose-built event space in London, opened adjacent to the O2 Arena in Greenwich Peninsula in August 2019.

Its simple architectural form offers clean and functional spaces that provide 'a means for large-scale creative expression' with 3,205sqm of versatile interior space for up to 3,000 people, and the capability of a further 7,000 people across the venue's outdoor showground.

Technical consultant, Simon Jones of SJ-TPM, recommended MDG haze generators for this prestigious new venue knowing MDG's great reputation for reliability and performance. He had no hesitation in supplying two MDG ATMe haze generators, complete with purpose-built touring cases for easy storage and deployment which was essential for this flexible, multipurpose venue.

Jones was brought onboard by Venue Lab to review, recommend and deliver the technical infrastructure, establish and fine tune the requirements and purchase the equipment for this multi-purpose venue. Jones worked on the various phases in collaboration with Vibration Design and Production, which delivered the venue's in-house technical production, to ensure the equipment

installed aligned with the building's innovative principle.

Magazine London has two large internal spaces, each with 8-metre high ceilings, two mezzanines for VIP areas or additional reception/break out spaces, and an outdoor festival square, all of which can be used in various configurations to suit the show or event.

No event is complete without good, fine haze, of course, which plays a major role in showcasing the lighting, lasers and general creation of atmosphere. And in such a versatile venue, the team has to be prepared to cater for everything.

"Haze always has to look perfect on television and camera, and also work well with live events," Jones explained. "It needs to be finely distributed, and quickly dispersed."

"The haze produced by the ATMe is great for the cameras because it is a good, clean haze, it does not reflect, it is not too dense and it is nicely distributed across the whole space with two machines filling the venue quickly and easily. We chose to go with two ATMe's because the venue is so large, and there are always points in an event when you need to fill the room more quickly. With two machines you don't have to run them at full, so

the effect is more subtle without an obvious source. If you want nice clean haze that everyone is going to be happy with, the natural choice is MDG ATMe."

The ATMe generators have been used on every event since the venue opened – five so far, including the launch of the new FIFA20 game, the SAP Annual Conference and the Desperado x Elrow Music Show – with a full schedule booked ahead.

The ATMe generators have been supplied in purpose-built touring cases, which include additional space for haze fluid and two gas cylinders, that can simply be rolled into whichever position or venue required.

"With such a busy and varied programme of events, it's important to have a reliable haze generator and a good quality touring case that can move around without jolting," said Jones. "The ATMe is a good dependable machine that you know will always work well, and with the touring case it's an off-the-shelf, boxed solution with all you need in one package. You just have to plug it in and go. It makes life easy, and we have the MDG reliability and efficiency and all that comes with it – the back up and support that we all know MDG gives. MDG is the premium option at the end of the day."

For more information, visit [www.mdgfog.com](http://www.mdgfog.com).

## Elation gear up to the challenge on Netflix's "Hyperdrive"

In Netflix's new reality TV show "Hyperdrive," car racing meets obstacle course in a type of "American Ninja Warrior" with cars. A dream program for racing enthusiasts, lighting was in the capable hands of two long-time industry pros and "Warrior" lighting veterans, Ed Motts (Lighting Director) and Adam Biggs (Director of Photography).

Motts said it was through their work on "Warrior" that the team was brought onboard to light the new reality competition. "We've really developed a niche reputation for doing outdoor TV shows," he said of the lighting team, referencing their work on "American Ninja Warrior," "Hyperdrive" and a new ABC show called "Holey Moley." "They are all outdoors in the elements, rain, snow, whatever Mother Nature can muster we've been through it. Hence we've gone with Elation gear because the IP rating is tremendous for us."

The inaugural season of "Hyperdrive" was released by Netflix to a worldwide audience on August 21<sup>st</sup>. Executive produced by Academy-Award winner Charlize Theron, the series was filmed at the Eastman Business Park in Rochester, N.Y., an industrial complex where much of the world's film was once produced. The complex was transformed into 10 grueling obstacle racecourses with contestants driving custom cars to maneuver through a series of obstacles. After qualifying, knockout and a final round, a "Hyperdrive" champion is crowned.

Motts, who has used Elation gear on "American Ninja Warrior" for years, used a large package of dynamic lighting to bathe the "Hyperdrive" course and cars in light, colour and effect. Some 200 Elation Cuepix 16 IP™ LED matrix panels, 245 SixPar 100 IP™ LED PAR lights, 145 Platinum Beam 5R Extreme™ narrow-beam moving heads, and 34 Proteus Hybrid™ moving heads, along with other lighting, played a key role in helping to create maximum TV drama. Aspect Lighting out of LA supplied the automated lighting with MBS providing conventional fixtures.

The square-mile "Hyperdrive" set was a huge area to light, necessitating a large number of fixtures spread all over the course from elevated to ground-based positions. "The tricky part for us is to light the course in a way that doesn't get in the drivers' eyes," Motts explained of one of the challenges faced. "So we had to make sure beams weren't hitting drivers in the face. You would hate to see someone get into a crash and have them say that a blinding light caused it." Fixture placement was therefore a challenge made even more so by the fact that the course changed throughout the episodes with, for example, cars driving one way in one episode and the opposite way in the next.

The choice of IP65-rated fixtures was an obvious choice for Motts, who has been an early adopter of weatherproof lighting. "We were one of the clients who asked for more IP rated lighting years ago," he said. "More and more shows are going outside and people are tired of having to use covers. Elation has responded by offering more and more IP65-rated lights and we were glad to have them on Hyperdrive as the weather didn't play



nice. It was pouring down at times and we had to scramble to cover up fixtures that weren't IP rated."

One of the show's many challenging obstacles was called Walk on Water, a 50,000-gallon water hazard where cars followed a marked path through a pool of water. "We asked ourselves how we could add a little flavour to the obstacle, a bit of eye candy," said Motts. "Being so close to the water, we lined the pool with Cuepix 16 IPs which ran effects as the cars raced by. When cars veer off the path, there are big splashes of water and the fixtures get soaked but they've been amazing." The Cuepix 16 IP, a powerful 4x4 matrix LED panel with all-weather protection, were also used to light up some of the buildings around the set.

Large numbers of IP65-rated SixPar 100 IP LED PAR lights coloured the set with Elation's Proteus Hybrid arc source moving heads operating in several areas as a wash light to beef up zones that required more light for camera. The multi-functional Proteus were located on vertical truss and condors that allowed them to boom out over the course so that on camera you couldn't see where the light was coming from. "Even though we only had 34 of these fixtures, they fulfilled a lot of roles and did whatever we needed them to from backlighting the car and host in the main host area to lighting the six-story Leveler to lighting buildings."

Motts said that, when filming and it begins to rain, shooting continues as they scramble to bag as many non-IP fixtures as they can. "We had a lot of Platinum Beam 5R Extremes on the ground and on structures, which isn't an IP65 fixture but it sure seems like one. We tried to bag as many as we could when it rained but they held up regardless although we did have a few along the finish line straightaway get wiped out by cars going 120 mph!"

Creatively filmed with multiple camera angles capturing all the action, including from drones, Motts said they never had any issues with the fixtures including the camera aspect. "No flicker issue, no colour issue, they held up to everything," he said. Lighting was under control of an M6 console running ONYX software by Obsidian Control Systems while Elation Wireless DMX Transceivers were used to facilitate DMX communication with lighting fixtures where hardwired solutions were impractical.

Spread over 10 episodes, "Hyperdrive" was one of the most phenomenal obstacle courses ever designed. Packed full of excitement with a demanding course that is a marvel to look at and superbly lit, it is likely to be a Netflix staple for years to come.

For more information, visit [www.elationlighting.com](http://www.elationlighting.com).

## Light + Building 2020

12<sup>th</sup> – 15<sup>th</sup> March 2020

Frankfurt am Main  
Frankfurt, Germany

# show preview

Under the motto 'Connecting. Pioneering. Fascinating,' Light + Building is celebrating its 20th year as the catalyser of the 21st century for connected lighting and building-services technology. "It has the potential to guarantee efficiency, security, comfort and health for a large proportion of the world's inhabitants. And this will be of particular benefit to rapidly growing urban areas", said Wolfgang Marzin, President and Chief Executive Officer (CEO) of Messe Frankfurt.

Light + Building spotlights both the connection of intelligent building-services systems and the influence of future-oriented light design. Answers to the worldwide demand generated by expanding markets will also be given by the top themes of the world's leading trade fair in Frankfurt am Main from 8 to 13 March 2020.

Nowadays, design is not used exclusively to mean the form or shape of the luminaires. The technical specification is no less important, especially when it comes to connectivity. At Light + Building 2020, 'Functional aesthetics' describes a mega trend that consciously does without ornamentation while concentrating on the lighting requirements of different situations.

Meanwhile, 'classic authenticity' triggers emotions with regard to, inter alia, different epochs. A link between the past and the future is created by the 'historical ascendancy' category, which revolves around modern citations of archetypical design in the past. Modern lifestyles and modes of operation are the subject of the 'futuristic focus' thematic block, which throws the right light on subjects such as the breakfast table or co-working office – where flexible lighting concepts can be of great help.

### Illuminating: Focusing on The Future

A new generation of luminaires is creating light settings for all circumstances. The key is digitalisation, which is the driving force for synchronous functions, new application options and designs in innovative spheres. Light + Building in Frankfurt am Main from 8 to 13 March 2020 will focus on lighting trends and developments. And, in combination with progressive building services, the international exhibitors taking part will offer an impressive show of tomorrow's technologies.

Working calls for maximum agility nowadays while leisure is permeated by a powerful desire for flexibility. Thus, all aspects of life are subject to continuous change. Variable or dynamic systems can give support by providing assistance for completely different situations and places. The most influential aid: light, which impacts on the entire human organism.

### Futuristic Focus

More and more new concepts demand the use of wireless technology. At the same time, LED systems are required to provide more light from more compact forms and, at the same time, consume less energy. Thus, the new dynamism is becoming the DNA of design. Playfully, form and function are integrated into the interior. The copper wires that carry the electrical current of luminaires can be, for example, woven into fabric sails – either fully visible or hidden from sight to suit all requirements.

Photos by Messe Frankfurt Exhibition GmbH / Pietro Sutura





### Illuminating Adaptability

Light + Building 2020 shows: there are no limits on luminaire design – they take the form of poetic statements, of opulent, elegant or filigree requisites at home or at work. Regardless of whether switched on or off. Always characterised by top performance and dynamism. It is also the age of materials normally not associated with luminaires, e.g., leather, textiles, net-like and ultra-light fabrics, paper, cardboard, cork and rubber. Even porcelain, and recycled fabrics are finding their way into the world of luminaire design – including astonishing surfaces and previously unknown processing structures.

### Efficiency Produces Sustainability

This variability makes it possible to use sustainable materials for the luminaires. The lighting sector is also committed to sustainability in the field of energy consumption. Smart supplementary functions and highly efficient LEDs mean it is possible to incorporate numerous functions in one and the same luminaire. Light ranging from cold to warm, from perfect working light to atmospheric candlelight, is possible with just one luminaire. Touch-sensitive panels for dimming are elegantly integrated into the design – with greater convenience guaranteed. For example, the same applies to the innovative 'warmDim' technology that automatically adapts the colour temperature of the luminaire to that of the prevailing natural light.

Furthermore, regulating the light intensity in accordance with the time of day allows for automatic low electricity consumption. Equally, some luminaires are already comparable to multimedia devices for its efficiency and lasting attributes. Instead of producing a new model, software updates can be used to bring the old product into line with the latest standards, resulting in an enormous reduction in the quantity of materials used.

### Digital is More Than Just 0 and 1

The digitalisation of lighting technology is the key to a high degree of connectivity via Bluetooth, Wi-Fi or LAN. Accordingly, 'connectivity' is one of the top themes at the coming anniversary edition of Light + Building. International exhibitors can take advantage of the world's leading trade fair in Frankfurt am Main to present their product innovations and connectivity solutions to international visitors.

In line with this, the claim of the 2020 edition of the fair is 'Connecting.Pioneering.Fascinating.'

whereby the latter part of the claim, 'fascinating', promotes product hybrids: it is not only the detachment from conventional materials that fascinate but in particular the new functions and properties of the luminaires. In many cases, they can also be detached stylistically from the familiar context.

### Shaping The Future

An astonishing design spectrum is also possible thanks to the ever-diminishing format of modern luminaires. Today, the tiny size of the LEDs makes it possible to combine the light source with other functions or products, e.g., luminaires made of acoustic fabrics are ideal for absorbing noise in open-plan offices. Additionally, luminaires can be incorporated into control elements or designed to look and function like a vase.

### The Way to Go

The spectrum of lighting technology and decorative luminaires to be seen at Light + Building is huge. Orientation is the key to success at the fair. The designers of Stilbüro bora.herke.palmsano, the creators of the Trend Show 2020 in Hall 6.2 will offer their help at the world's leading trade fair. Visitors will be able to see state-of-the-art home trends in selected settings. Each article exhibited on show will be labeled with the name of the manufacturer and – in the case of decorative light – their location at the fair, thus ensuring easy navigation for all visitors wanting further information about any products.

Light + Building has much of interest to all trade-visitor groups, from architects, designers, retailers and artisans to the industry, engineers, interior architects and planners.

At the 2018 edition of the world's leading trade fair for lighting and connected building-services technology, 2,719 exhibitors and 220,864 visitors came together to cultivate and establish contacts, discover the latest innovations and discuss perspectives. International companies presented around 70 percent of the products on show, while 52 percent of visitors came from outside Germany. The biggest visitor nations after Germany were China, Italy, the Netherlands, France, the United Kingdom, Switzerland and Belgium.

A shining example will also be set on the occasion of the anniversary of Light + Building by Luminale, the festival of light from 12 to 15 March. With around 250,000 visitors, it ranks among the biggest events held in the Rhine-Main region of Germany. Luminale, founded by Messe Frankfurt in 2002, has since enjoyed comprehensive support from the City of Frankfurt. Luminale is the biennale for lighting art and urban design. Its aim is to generate an impulse for positioning the city as an attractive, future-oriented location and creative hub at the interface of art, technology and urbanity.

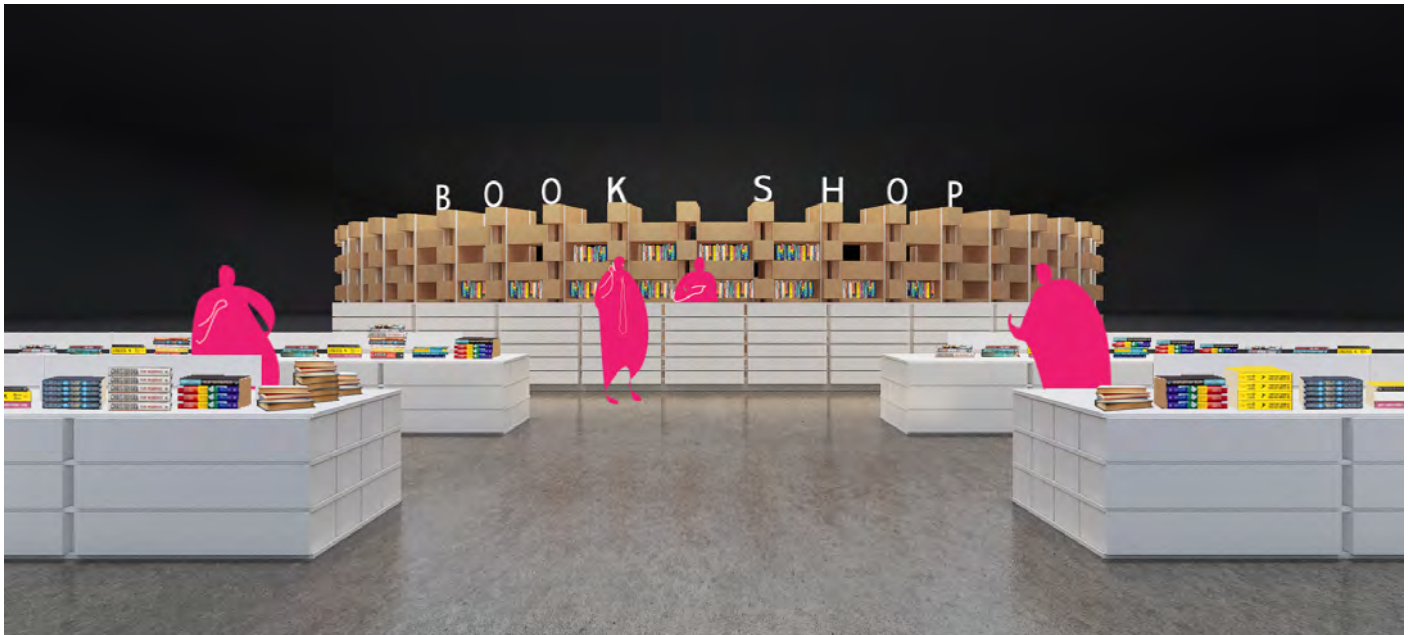
Light + Building will be held in Frankfurt am Main from 8 to 13 March 2020. For more information, visit [www.light-building.messefrankfurt.com](http://www.light-building.messefrankfurt.com).

## Architect'20 Expo

28<sup>th</sup> April – 3<sup>rd</sup> May 2020

IMPACT Exhibition Center  
Bangkok, Thailand

# show preview



### ASA and NEO to hold Architect'20 “Refocus Heritage”, ASEAN’s largest building exposition to promote new approach on architectural heritage and conservation

The Association of Siamese Architects Under the Royal Patronage (ASA) and N.C.C. Exhibition Organizer Co., Ltd. (NEO) held a press conference to launch the 34th edition of Architect Exposition, ASEAN’s Largest Building Technology Exposition. Titled ‘Architect’20, “Refocus Heritage”, this edition will focus on architectural heritage and its conservation. The exposition is set to take place between 28 April - 3 May 2020, at Challenger Halls 1-3, IMPACT Arena, Exhibition & Convention Center, Muang Thong Thani.

Ajaphol Dusitanond, President of ASA, commented on the organisation of the event and said, “ASA held its first edition of the Expo in 1986 and has maintained it over 3 decades. The Expo has evolved and expanded over the years and became the largest exhibition for architecture, materials, and construction technology in the ASEAN to date. The original goal of the Expo still remains; to showcase the potential and performance of architects in the society.”

“As for the theme of this edition, it has been chosen to bring back the architectural heritage from the past, as well as the conservation and maintenance of heritage sites for the next generations. Seeing conservation

of architecture being the mission of the association, the Expo adopted the title of ‘Refocus Heritage’ for its 2020 edition.”

As for the details of the event, Dr. Vasu Poshyanandana, the chairperson of the Architect’20 committee said, “‘Architect’20 - Refocus Heritage’ aims to raise public awareness and understanding on the concept of ‘heritage’ in several dimensions. Many might suppose that conservation and maintenance of heritage sites is limited to government officers or conservators, and therefore is not relevant to them.”

“However, it is present in everyday life and concerns everyone regardless of the jobs and roles that we hold. The owner of an old house in need of maintenance, for example, will need information on the right materials and construction to use, as well as the cost incurred. Similarly, the renovation of an old building to create new business opportunity, can generate value added for the community and society, as we can see from the several creative communities that arose from the old quarters throughout the country.”

Architect’20 will span the space of 75,000 square metres and divided into 2 sections. The first section will house exhibitions from over 850 international exhibitors. The second section will display ‘Thematic Exhibitions’ by ASA, covering the space of 5,000 square metres. The latter will be constructed with environment-friendly materials and adopt a contemporary design, representing the forms of the past. Visitors will enjoy the different exhibitions, including:

The Workmanship and Heritage Exhibition will display rare traditional materials and technology in construction. Curious architectural knowledge from the past centuries will also be on exhibition in this section. Visitors can stop by the Film Screenings section to enjoy 63 heritage short films from 63 interviewees on the topic of heritage site conservation. The screenings will take place in a theatre made from bamboo - a local savoir-faire of the past.

The Heritage Crisis on Online Platform Exhibition will deal with the hot topics on social media including the dismantling of heritage sites, uninformed maintenance or renovation of temples etc. It aims to raise awareness and invite the public to question the current heritage events, as well as provide relevant professional information.

The annual Architecture Competition for this event will be promoted to the National Architecture Competition, under the theme of 'Everyday Heritage'. The organisers aim to include every sector of the public, especially school students with creative ideas, and for the competition to serve as a platform for further development.

Other exhibitions in the event will include the 2020 ASA Award Exhibition, where works of ASA-award recipients will be displayed; Art and Architectural Conservation Award Exhibition, whose criteria this time has been developed to align with the UNESCO Asia-Pacific Awards, and Heritage in Danger Exhibition, where local architecture students are given space to exhibit their ideas on the recovery and maintenance of existing heritage buildings in the neighbouring areas of their schools.

Other activities include ASA Clinic (Mobaan ASA), where architects, engineers and other professionals will be available for advice and information on design and construction; ASA Place, an activity area for the public, where talks and workshops will be available in rotation throughout the 5-day event. Demonstrations on the latest technology for conservation including 3-D object scan will also be available.

The visitors, especially architects, can join ASA Forum, for talks on the newest happenings in the international architecture scene. ASA Club will return as always for ASA members to gather and mingle. ASA shop and ASA Book Club will also return with the newest titles from all over the world, as well as book launches.

The theme "Refocus Heritage" invites the public to look back on the heritage, as well as sharpen the vision and awareness on the topic. The theme also deals with the flexibility of the coexistence between societies and heritage sites, in order to preserve the values of the old buildings and the vivacity of their contemporary counterparts.

The Expo aims to widen the public's focus on architecture and lend dimensions to the vision of the visitors of various age and background, encouraging them to re-consider their ownership of the heritage, and their



contribution in the conservation and legacy of these valuable heritage of the future.

Sakchai Pattarapreechakul, President of NEO and one of Architect'20's committee members, revealed, "This year, NEO has been able to strategically promote the event into the status of international exhibition for architecture, material and construction technology. We are managing up to 75,000 square metres of exhibition space. Presently, we have improved our insurance and IT Solution offers to support both international and local exhibitors. We have exhibitors from the Europe, USA, Australia, Russia, South Korea, Taiwan, Hong Kong, Japan, India, China and the ASEAN; accounting for 850 companies."

"70% of our space has already been reserved at present by the leading international and local companies, including At East Design, Bangkok Road Lighting, Ceramique, Champaca, CNP Plastic Industries, Cristina VRH, Cotto, DP

Ceramic, Delta, DOS, Duragres, EDL, EE&C, Epson, Formica, Hafele, Hi-Kool, HP, Lamina Films, Jorakay, Kohler, Lamptitude (PEMCO), LED On Home, Leowood, Ligman Lighting, Mitsubishi Electric Kang Yong Watana, Opplé, Panasonic, Polymer Master, SATS, SCG, Seacon Home, Siam Yamato Steel, TAK, TPI Polene, TS-Teak, Utthayan, Wattana, WDC, etc."

The event will also include Inno-talks panels, where gurus will make an appearance to discuss the latest technology in architecture and construction. Visitors can also join the Buyer Program and meet with the exhibitors to learn more about business opportunities and become the local distributors for international suppliers in the expanding market of Asia.

Visit Architect'20 to learn more about the world's heritage, the latest technology and innovation in architecture, and enjoy interesting activities at this annual event.

For more information, visit [www.asa.or.th](http://www.asa.or.th).

## LightFair International 2020

5<sup>th</sup> – 7<sup>th</sup> May 2020

Las Vegas Convention Center  
Las Vegas, USA

# show preview

Lighting designers, specifiers, architects and engineers from around the world will discover an interactive, inspirational and efficient conference and tradeshow when they converge for LightFair 2020 from 3 to 7 May 2020, at the Las Vegas Convention Center. New programming and amenities plus a reimagined tradeshow layout and streamlined conference invigorate the 31<sup>st</sup> staging of the world's largest annual architectural and commercial lighting tradeshow and conference.

"In 2020, LightFair is focused on innovation, from the new approach to educational programming in the conference and the overall design of the tradeshow, to the product introductions showcased by the top manufacturers in the industry," said Timothy Licitra, executive director of the Illuminating Engineering Society (IES). "We look forward to gather with IES members and the global lighting and design community in Las Vegas to explore the next big ideas in illumination."

"The 2020 updates to LightFair make the annual event even more valuable for the lighting design community," added Marsha L. Turner, chief executive officer of the International Association of Lighting Designers (IALD). "The new educational programming, improved discoverability of products and the ability to connect with likeminded designers while exploring the tradeshow floor make it a must-attend event for IALD members and the lighting design community as a whole."

Driving the updates to the experience is the new LightFair Attendee Advisory Board comprised of designers and specifiers from across the lighting industry and chaired by Lea Tranakos, LightFair attendee relations director. Tranakos, a tradeshow and lighting industry expert, joined LightFair in early 2019 in the new role.

"The attendee experience at LightFair 2020 is set to impress," said Dan Darby, show director. "In planning for 2020, we looked at the attendee experience as a whole and identified opportunities to present a show like no one else in the industry. The result is a design-driven experience that connects attendees with the products, innovations and knowledge they need for success."

The LightFair tradeshow floor receives a makeover for the 2020 staging. New pathways make the more

than 500 exhibitors easier to navigate while new lounges encourage networking. The new floor design better showcases LightFair's four product pavilions – The Design Pavilion, The Outdoor Pavilion (formerly Exterior and Roadway), The Smart Pavilion (combination of IoT and Intelligent Lighting) and The New Exhibitor Pavilion – helping attendees to quickly find the products they need. The Loyalty Lounge features seating, charging stations and refreshments for VIP designers, association partners and most frequent attendees, while the LightFair Innovations Award Lounge features the Innovations Bar, a high-end watering hole and meeting place for attendees and exhibitors.

Returning in 2020 is the LightFair News Center, which will present live interviews and podcasts with top designers and notable industry leaders. Attendees can follow along throughout the tradeshow or access the content afterwards for continuing education and inspiration throughout the year.

LightFair taps lighting designers to provide actionable trainings throughout the tradeshow. Curated tours of the show floor introduce attendees to the right manufacturers for their projects and the new Design Theater, located within the Design Pavilion, presents relevant educational programming right on the show floor.

The LightFair Conference also adopts a new organisation in 2020. Conference programming will run for five full days with new industry-specific educational tracks. Planned for 2020 is a leading edge custom curriculum developed by lighting, technology and design experts serving on the select LightFair Conference Advisory Committee. The full LightFair Conference programming will be announced at a later date. Registration for LightFair 2020 will open early this year.

### About LightFair

The world's largest annual architectural and commercial lighting trade show and conference, is owned by the International Association of Lighting Designers (IALD) and the Illuminating Engineering Society (IES). The event is produced and managed by International Market Centers.

For more information, visit [www.lightfair.com](http://www.lightfair.com).

# 1 - 4 KLCC

JULY 2020  
10AM - 7PM

KUALA LUMPUR  
CONVENTION  
CENTRE, MALAYSIA

An Event Of:

**KLAF2020**  
KUALA LUMPUR ARCHITECTURE FESTIVAL



# ARCHIDEX®

THE 21ST INTERNATIONAL ARCHITECTURE, INTERIOR  
DESIGN & BUILDING EXHIBITION 2020, MALAYSIA

## BUILDING BEYOND TOMORROW

THE REGION'S LEADING  
ARCHITECTURE BUSINESS EVENT

SCAN HERE to  
PRE-REGISTER  
to visit



Featuring:



Concurrent Exhibitions:



[www.ARCHIDEX.com.my](http://www.ARCHIDEX.com.my)



Jointly Organised By:



## Guangzhou International Lighting Exhibition 2020

9<sup>th</sup> – 12<sup>th</sup> June 2020

China Import and Export Fair Complex  
Guangzhou, China

# show preview



Photos by Messe Frankfurt Exhibition GmbH

25 years onwards, the Guangzhou International Lighting Exhibition (GILE) has evolved into Asia's most distinguished lighting fair. While GILE debuted with a humble 96 Chinese exhibitors in 1996, its last edition in 2019 demonstrated the fair's considerable growth over the years with over 2,600 exhibitors from 22 countries and regions.

2020 marks the 25th edition of the Guangzhou International Lighting Exhibition, which will be held from 9 – 12 June 2020 at the China Import and Export Fair Complex in Guangzhou. The past 25 years not only symbolises the history of lighting, but also its constant evolution. Invented to illuminate, artificial lighting has evolved into sophisticated devices capable of gathering infinite data and becoming beacons of communication, including energy-saving LEDs and the Internet of Lights. These innovations are made possible by the

strength and perseverance of the lighting community.

On the evolution of lights, Ms Lucia Wong, Deputy General Manager of Messe Frankfurt (HK) Ltd, commented, "It is never easy to keep growing in the industry, as the formula for success requires courage, endeavour, open-mindedness and vision. Exponential growth in multiple technologies including Bluetooth mesh, real-time data, Internet of Things and LiFi are bringing rapid transformation and new values to the industry. GILE aspires to emphasise the value of lighting by encouraging the community to thrive with perseverance and embrace innovations across all facets of human life – use light to instil people with positive feelings and so help to improve health and well-being."

Ms Wong shared her vision for GILE 2020 and said, "Digital with humans' is the concept that we want to advocate this edition.

To better equip the lighting industry for the future, enterprises need to understand digital technologies, and more importantly how humans interact with the digital world to express, connect, create and experience."

### THINKLIGHT – Empower The Next

The 2019 edition of GILE revolved around the progress and innovation in the lighting industry. Moving forward to 2020, the 25th edition will embrace the new show theme 'THINKLIGHT – Empower the next' which discusses elements that empower the future lighting community. This is achieved through the fair's cross-sector event programmes, training activities, as well as cutting-edge technology showcases to encourage the industry, while at the same time preserving the core value of quality lights to literally 'think outside of the box' for opportunities that are presented by digital disruption.



In various panels throughout the four-day fair, worldwide experts will share their insights on the current market dynamics, including the following topics:

#### **Smart Cities – In The Age of 5G and IoT**

As 3G, 4G and ultimately 5G data networks revolutionise connectivity, street light poles transform into smart city data gatherers and multi-functional IoT nodes. The evolution of the humble streetlight into a key component for delivering smart city services is a prime example of the smart city of the future coming into fruition. This session will discuss: 'How will innovations in lighting lower the energy demands of cities whilst also shaping our urban spaces in future years?'

#### **Urban Media – Real-Time Interactive Architectural Visualisation**

Media facades on iconic buildings and infrastructure now spread across city skylines. Such installations can better visualise a city's value and culture while real-time interactive elements can bring people and architecture closer together. Yet, extensively used, these can result in information overload. By examining two topics: 'Finding balance in beauty and elegance' and 'Information and visual disruption – How to bring art and commerce under one roof', the event aims to create a better experience for all citizens.

#### **'Retailtainment' – The Convergence of Retail, Leisure and Entertainment**

In recent years, retail landlords and tenants have increasingly realised that surviving e-commerce expansion requires something other than just offering more products. More landlords are transforming their malls into retail destinations to create more engaging consumer experiences and build retention. The

LED industry is now fully entwined with the retail sector, providing high quality lighting and innovative controls, while the digital lighting revolution has been creating new marketing opportunities through VLC and BLE. In this session, speakers will examine how lighting and control technologies may influence the retail experience, and how smart lighting in retail can leverage brand identity.

#### **Biophilic Design – Connecting People with Nature**

With the global demand for healthy cities and urban sustainability high, biophilic (love of nature) design concepts have come into focus as a means to connect nature with man-made spaces. This trend has emerged within innovative organisations, who aim to enhance the overall wellbeing and wellness of people through carefully designed spaces and products. Light has proven to be a key aspect of biophilic theories to date. Artificial sunlight-mimicking, human-centric lighting systems have been developed and introduced by the lighting industry to imitate natural sunlight that is usually created by skylights or proximity to windows – an essential concept of biophilic theories. This session will discuss the application of Human Centric Lighting (HCL), commercialisation, technology support and the utilisation of technology to create positive biological effects to increase wellbeing.

#### **Digital Twins – Smart Buildings**

Whilst not a new concept, the digital twins idea is set to transform the future for building owners and operators and the ways in which they maintain, construct and analyse the uses of assets and occupants in their buildings. The future looks to introduce digital asset tracking, predictive maintenance and management of

lighting products as light plans are set to become part of a building's digital twin. In this session, the panel will discuss how digital twins could help make buildings more human-centric, and how to facilitate lighting data to be integrated into digital twins throughout the building environment.

#### **Sustainability – Low-Carbon Economy**

Energy-saving technology has allowed LEDs to be more energy-efficient and offer higher lumens per watt (lm/W), which is an important element in a low-carbon economy. The fair will invite experts to share their views on balancing lighting and sustainability, as well as some of the biggest challenges in the lighting industry.

A series of Tech and Business Forums will also be arranged at GILE 2020 to discuss practical technical issues and business models in the evolving lighting industry. Topics include quality of light, colour tuning, miniaturisation, packaging technologies, drivers and control, heat dissipation, connected lighting and IoT technologies, and new paths to profitability.

The Guangzhou International Lighting Exhibition is a part of Messe Frankfurt's Light + Building Technology fairs headed by the biennial Light + Building event. Messe Frankfurt also offers a series of other light and building technology events worldwide, including the Shanghai International Lighting Fair, Thailand Lighting Fair, BIEL Light + Building in Argentina, Light Middle East in the United Arab Emirates, Interlight Russia as well as Light India, the LED Expo New Delhi and the LED Expo Mumbai in India.

For more information, visit [www.light.messefrankfurt.com.cn](http://www.light.messefrankfurt.com.cn).

## Prolight + Sound Shanghai 2019

10<sup>th</sup> – 13<sup>th</sup> October 2019

Shanghai New International Expo Centre  
Shanghai, China

# show review

With 30,011 visitors from around the world gathering at the Shanghai New International Expo Centre, the 17th edition of Prolight + Sound Shanghai (PLSS) positioned the show as a crucial event for the professional light and sound entertainment sector in Asia. PLSS took place from 10 to 13 October 2019 and had over 600 participating brands and companies from 22 countries and regions filling up its booths. The fair closed its doors after four successful days, receiving positive feedback from different corners of the entertainment industry. The organisers strategically put a major focus on technology and innovation: besides the increased number of exhibitors showcasing their products and technologies, the fringe programme gave visitors an elaborate overview of the latest industry trends, with the IMSTA Audio Software Zone and A3E Summit @ Prolight + Sound Shanghai as absolute highlights.

With a product range covering the full industry supply chain across four exhibition halls, PLSS offered more exhibition content than ever before. The show had something in store for every professional and amateur interested in production, performance, staging, software, hardware, pro light and audio, engineering and other related topics. Some of the leading brands this year included AVID, Audiocenter, Boray, Choseal, Fane, Greatwall, Harman International, IK-Multimedia, ITC, Kling & Freitag, Laserworld, Lightlink, Midas, Minuit Une, Mode, Plustruss, Omarte, Ruisheng, RME, Rupert Neve, SAE, Sennheiser, Showtex, Shure, Soundking, Superlux, Waves, Wincomm, Yamaha and many more.

Technological advancements have always had a major influence on the market and they will continue to do so. And while those innovations bring about a great deal of opportunities, they also pose challenges for many companies and brands. PLSS provided its audience with the opportunity to immerse itself in the latest technologies, while connecting to industry professionals from different areas of expertise.

Technology and innovation went hand in hand during the many fringe programme events and the organisers' efforts were acknowledged, because the overall atmosphere and general feedback were positive across the board. The fringe programme reflected the most current topics and trends in the entertainment industry. Visitors showed great interest in the A3E Summit @ Prolight + Sound Shanghai and many audio production professionals checked out the IMSTA Audio Software Zone to connect with industry peers and participating brands. Professionals, hobbyists and amateurs lined up to find out more about the latest tools for mixing/mastering and tracking, audio production and processing and audio analysis, but also to discover the latest developments in hard- and software. Brands like Krotos and Native Instruments gave in-depth insight into vocal effects, digital music creation, postproduction and other industry related topics, and visitors had ample choice between workshops covering different fields of expertise.

Photos by Messe Frankfurt / Prolight + Sound Shanghai





The China Culture and Tourism Innovation Development Summit was dedicated to a topic that will boost the industry in the upcoming years. The summit was co-organised by PLSS and the China Institute of Stage Design and gave participants a clear vision on how the Chinese government is supporting the industry by bringing together the cultural and technological sectors.

Ms Judy Cheung, Deputy General Manager of Messe Frankfurt (HK) Ltd, elaborates: “Our industry will benefit immensely from the government support that we are receiving, and especially from the guidelines that aim to bring the technology and cultural tourism sectors closer together. We already see a clear increase in the number of big events that require a professional light and audio installation and production, and I expect this segment to grow even more in the near future. Next to that, there’s an increase in demand for flexible and portable outdoor line array systems for medium and small size events. And these types of productions, big or small, all have one thing in common: they want to offer their audience the best possible experience. That’s why our sector is looking into new ways to captivate and engage the people that attend entertainment shows. PLSS wants its exhibiting brands and fringe programme events to reflect this industry trend. By doing so, we can contribute in bringing the technology and culture sectors closer together, in favour of the whole industry.”

The Concert Sound Arena was the ideal opportunity to discover the importance of a professional production for touring and installations. This CSA was built up at the outdoor area of the fairground, and had 17 domestic and international brands showcasing their line array systems under realistic conditions. Visitors were able to see and hear how an increased sound quality influences the overall experience of the audience.

#### Comments from exhibitors:

“It’s our first time at the IMSTA Audio Software Zone and we’re taking this opportunity to promote licensed software. China is an emerging market and there’s still a lot of work to do when it comes to copyright awareness. We hope that by being here, we can make people understand the value behind purchasing licensed software and why it’s so important. We’ve met professionals, students and music lovers at the booth, and each and every one of them showed interest in what we have to offer. We also benefit from the many potential customers from China that come and talk to us. We will return next year, for sure!”

- Mr Johnson Han, Marketing Manager of China, Native Instruments

“We value this platform and also chose to hold a press conference with the international renowned software brand Waves to announce our cooperation. In the future, the application range of audio and video will become wider and wider, and customers will tend to choose products and systems with a higher cost performance. Therefore, software will impact the hardware market. On the other hand, there will be more excellent software carriers. It will be a major trend in the future development of the industry. The show can help us to strengthen our corporate image and build a new network of new and old customers.”

- Mr John Feng, Vice Chairman of Longjoin Group



“We’re an emerging holographic and equipment company and produce related products for scene application. We came here to attract customers and let more relevant groups know about this industry and our brand. I think this show is the most important lighting and audio exhibition in Eastern China, with a leading industry position in terms of professionalism and internationalism. We reach the right people here and you can see that our booth is constantly welcoming visitors. The prospects we talk to are mainly from the United States, Singapore and other countries, as well as Jiangsu, Zhejiang and Shanghai regions. PLSS is definitely on top of the industry trends.”

- Mr Xuanqi Zhu, Chief Marketing Officer of Nanjing Dsee.Lab Digital Technology Co Ltd

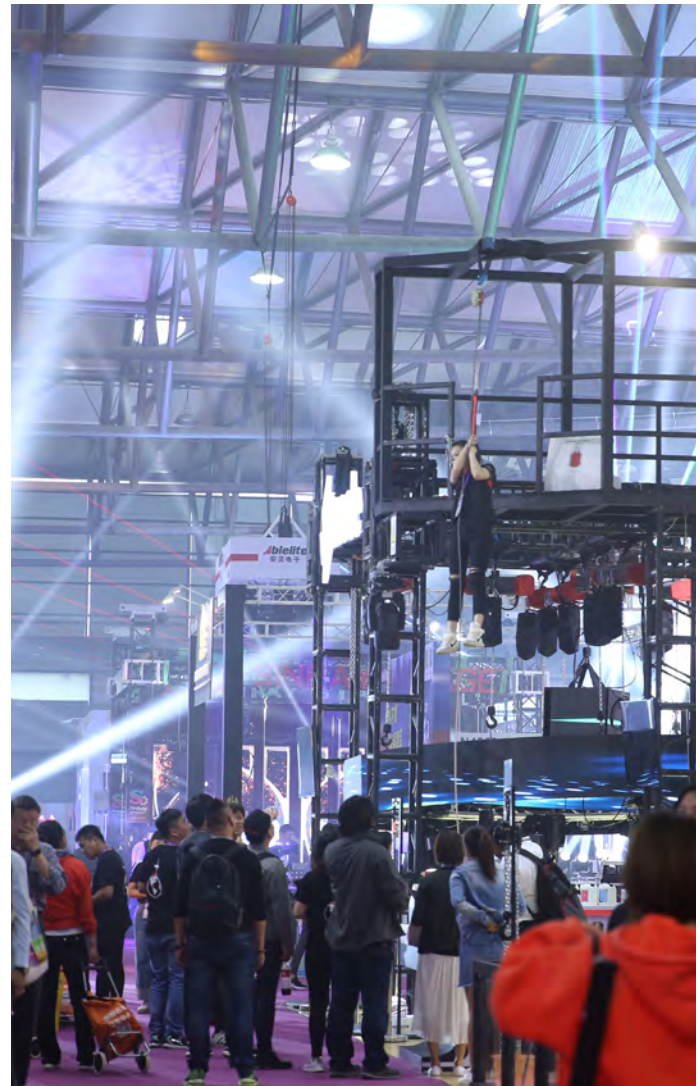
#### Feedback from fringe speakers:

“Prolight + Sound Shanghai brings together all the crucial elements that define the industry and gathers the right people to facilitate a convergence like this. The panel discussion was interesting and there was great chemistry between the different companies. Having this kind of summit at the show is important, because it allows us to show the audience our perspective and how we’ve done things in the US. But it also gives us the opportunity to learn from local experts. This is what truly makes Prolight + Sound Shanghai a platform to exchange information and facilitate industry growth.”

- Mr Doug DeAngelis, Conference Chair of A3E

“The China Culture and Tourism Innovation Development Summit focused on the core content of cultural tourism, which is content creation. But we also discussed the relevant policies in China. The cultural tourism and entertainment industries are interrelated, and entertainment can use art to increase its value. In my opinion, the future entertainment industry will have a lot of room for development, and it will certainly drive the common development of the literary and creative work. We witnessed the continuous upgrade of stage machinery technology and hardware equipment, which is more conducive to the promotion of cultural tourism.”

- Mr Lin Cao, President of China Institute of Stage Design



Prolight + Sound Shanghai brings together all the crucial elements that define the industry and gathers the right people to facilitate a convergence like this. The panel discussion was interesting and there was great chemistry between the different companies. Having this kind of summit at the show is important, because it allows us to show the audience our perspective and how we've done things in the US. But it also gives us the opportunity to learn from local experts. This is what truly makes Prolight + Sound Shanghai a platform to exchange information and facilitate industry growth.

- Mr Doug DeAngelis, Conference Chair of A3E



"It was an honour to address the 10th National Music Mixing Contest Award and the 11th National Music Mixing Contest. Our association aims at providing education, training, new product launches, academic exchanges and other services for the industry. We've been working with the organisers for ten years. I'm happy to tell you the results are good, and we've received unanimous recognition. The public is no longer satisfied with 'just' a visual experience. Sound quality and an audio-visual integration can really lift its experience to the next level. The major industry challenge is how to improve the artistic literacy and maximise artistic creation performance. The industry will also start developing relevant standards, as to encourage objective appreciation."

- Mr Hongmin Wang, Director General China Association of Recording Engineers



#### Feedback from visitors:

"We are a manufacturer's representative based in the Pacific Northwest. I am interested in importing products, particularly speakers and lasers. This is my second time at the fair and you can see that the product categories have expanded, and the quality of the exhibitors has gone up. Being here gives me the opportunity to find out what is new in the market, and the show is a great platform to connect to other industry professionals. I found a few good suppliers already and they are all local brands. More and more products are made in China nowadays, although they belong to overseas brands. That is also why I come here: to explore the origin of those products."

- Mr Michael Smith, President of Goldsmith



"We specialise in outdoor events, including concerts and music festivals. The equipment and concepts in our industry are constantly changing, so I have to come here every year to get an update. Of course, Prolight + Sound Shanghai is well-known in the industry and the scale is also one of the things that attracts me. The China Culture and Tourism Innovation Development Summit gave me a lot of inspiration. The speaker impressed me a lot and his creative explanation of the concept of culture has brought me new ideas to our equipment manufacturers and will help me stay creative."

- Mr Shoujin Hou, Manager of Hui Gu Niang Chuan Mei

The next edition of Prolight + Sound Shanghai will take place from 28 to 30 October 2020.

For more information, visit [www.messefrankfurt.com](http://www.messefrankfurt.com).

## Thailand Lighting Fair / Thailand Building Fair 2019

28<sup>th</sup> – 31<sup>st</sup> October 2019

Bangkok International  
Trade & Exhibition Centre  
Bangkok, Thailand

# show review

The 2019 editions of Thailand Lighting Fair (THLF) and the Thailand Building Fair (THBF) were held successfully from 28 to 31 October at the Bangkok International Trade & Exhibition Centre. Together with the concurrently held Secutech Thailand, the three trade fairs debuted the Smart City Solutions with the goal of introducing fairgoers to business opportunities and business networks across the entire smart city ecosystem.

Over the four-day fair period, THLF, THBF, and Secutech Thailand together presented 300 exhibitors and brands from 12 countries and regions from around the world in gross 11,000sqm of exhibition space. Meanwhile, visitor numbers for THLF and THBF reached over 5,000. Led by the new show theme 'City + IoT – a sustainable and liveable future', THLF and THBF are comprehensive industry platforms

servicing the growing demands for advanced smart city solutions and technologies in the ASEAN regions, offering insightful concurrent events, business matching opportunities, and other incentives for exhibitors and fairgoers alike.

Concluding the two fairs, Mr Hubert Duh, Chairman and Managing Director of Messe Frankfurt New Era Business Media Ltd stated, "Being quick to pick up the new smart city concept empowered by the latest IoT and smart city innovations, Thailand and other ASEAN cities are a booming market for advanced lighting and building technologies. Messe Frankfurt will continue to grow with the two fairs, striving to provide an ideal platform which takes full advantage of the vast opportunities in the region. This year, we are again honoured to welcome global exhibitors and visitors, and we are grateful for their long-standing support."

As a lighting manufacturer for energy-saving products based in China, we have previously established connections with buyers from Thailand, and our visit has allowed us to meet them face-to-face while encountering new potential business opportunities on-site.

- Ms Connie Chen, Sales Manager,  
Kambo, China

Photos by Messe Frankfurt New Era Business Media Ltd



**Comments from exhibitors:**

“THLF and THBF offered an excellent opportunity for us to target consultants and designers, as well as promoting our wide range of solutions in different domains to specific industry audiences. We welcomed over 100 visitors on the first day alone.”

- Mr Pongwut Sangprasert, Deputy Director, Developer Solution Center, Panasonic Management (Thailand), Japan

“We are quite satisfied with the business matching, focus groups and other events offered by THLF and THBF, which distinguished the two fairs from the other similar trade fairs. This is why we chose to exhibit here for the second consecutive year.”

- Mr Kaj Miyake, General Manager, Business Development Group, Parking System Dept., IHI ASIA PACIFIC (Thailand), Japan

“THLF and THBF are very important to the industry, and this year’s seminar is great success with the hall full of attendees. Through the seminar, we can introduce and promote our solutions to distributors and end-users in Thailand, and the demonstration makes it easier for the attendees to understand the KNX standard. Our booth has also allowed us to make contact with many potential partners, such as the Thai Chamber of Commerce.”

- Mr Benoit Guillerey, Secretary Delegate & KNX Tutor, KNX National Group (Thailand) Association, Belgium

**Comments from visitors:**

“Well-known companies such as NEX and Panasonic have introduced interesting IoT lighting and integrated smart home solutions to the fairs, and global exhibitors have brought leading technologies from around the world. The fairs also provided an excellent opportunity for us to have a comprehensive view of lighting, building, security, and other related sectors, creating rooms for cross-industry collaboration.”

- Mr Nutrapun Yasintorn, Marketing Executive, Aston International, Thailand



“As a lighting manufacturer for energy-saving products based in China, we have previously established connections with buyers from Thailand, and our visit has allowed us to meet them face-to-face while encountering new potential business opportunities on-site.”

- Ms Connie Chen, Sales Manager, Kambo, China

“My main goal at the THLF and THBF is to learn about new technologies and innovations which are not yet present in my country, Malaysia. I have noticed a lot of solar-related lighting products and hope to find advanced industrial, office, and smart lighting technologies. The concurrently held trade fairs also broadened my perspectives on IoT technology, which we plan on incorporating into our own products. Given the opportunity, I would definitely come back next year.”

- Mr Wong Yong Xiang, Product Development Engineer, Sales and Marketing, Opulent Solutions Sdn Bhd, Malaysia

“We have been coming to THLF and THBF since the fairs launched five years ago, and it is a great place to update ourselves with the latest innovations that we can adopt as a developer. The seminar speaker has taken the audience members’ backgrounds into consideration and provided useful information in a clear manner.”

- Ms Boonsri Srilertchaipanij, Ratchaburi Housing & Development, Thailand



Messe Frankfurt also offers a series of other light and building technology events worldwide, including the Guangzhou International Lighting Exhibition, 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 as well as Light India, the LED Expo New Delhi and the LED Expo Mumbai in India.

For more information on Light + Building shows worldwide, please visit [www.brand.light-building.com](http://www.brand.light-building.com). For more information regarding Thailand Lighting Fair, please visit [www.thailandlightingfair.com](http://www.thailandlightingfair.com).

# Seminole Hard Rock Hotel & Casino

| Hollywood, Florida

## ARCHITECT

Klai Juba Wald Architecture + Interiors

## LIGHTING INTEGRATOR

DCL (Design Communications Ltd.)

## INTERACTIVE CONTENT STUDIO

Float4

## LIGHT CONTENT MANAGEMENT SERVER

RealMotion

## INTEGRATED SCHEDULING AND AUTOMATION CONTROL

Smart Monkeys, Inc.

## LED PRODUCTS AND POWER SYSTEMS

SACO Technologies Inc.

## PHOTOGRAPHY

DCL (Design Communications Ltd.)

**A single RealMotion Gold Series server delivers a variety of generative and sound-reactive visual spectacles across more than 2.3 million LED light “pixels” on world’s first guitar-shaped hotel**

RealMotion™, the pioneering designer of content management and creation software and hardware, recently brought its expertise to the launch of the world’s first guitar-shaped hotel, the Seminole Hard Rock Hotel & Casino in Hollywood, Florida.

Powered by a single RealMotion 4 Karat Gold Series server, the entire facade of the 400-foot-tall, \$1.5 billion hotel is now one of the world’s most unique digital sculptures, capable of presenting a multitude of dazzling visual effects and presentations that utilise 2.3 million LED lights, video mapping and lasers - a project that was managed, directed, engineered and installed by Boston-based custom fabricator DCL (Design Communications Ltd.).

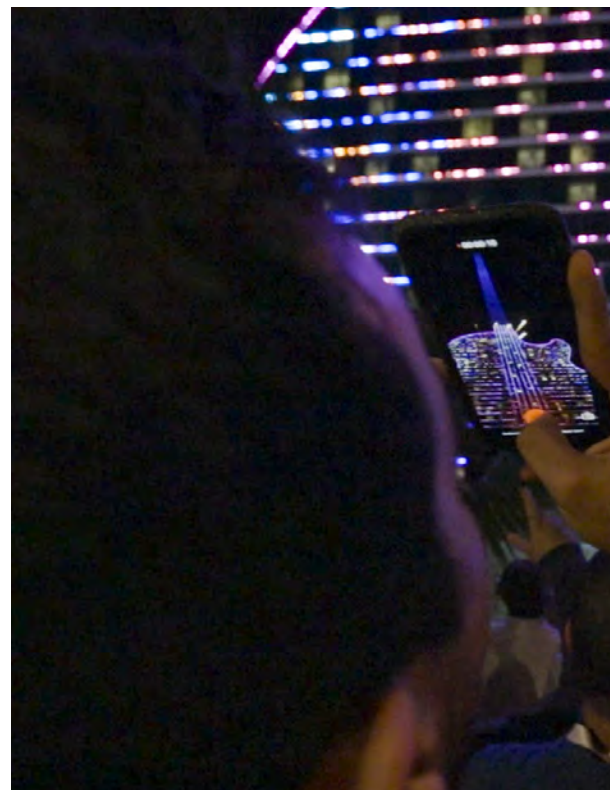
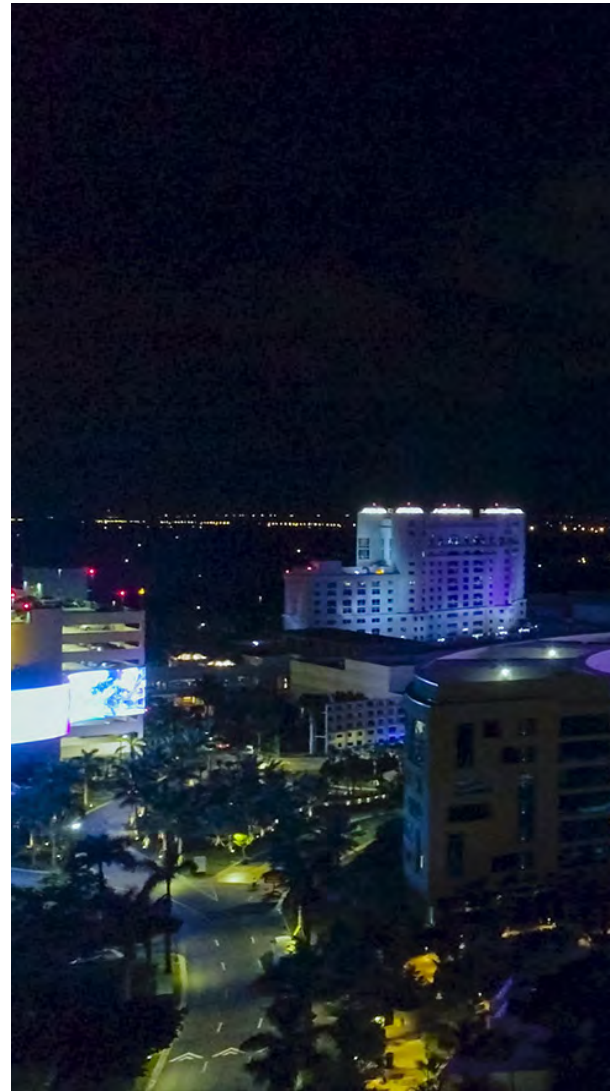
“The front facade of the hotel is both a media system and a dynamic sculpture,” said Geoffrey Platt, Director of RealMotion. “Lined with LED products and power systems provided by SACO, the front will serve as a screen and stage to daily musical showcases. The shows will be a testament to how music has been instrumental in defining Hard Rock hotels, restaurants and entertainment properties around the world.”

At the hotel’s recent grand opening celebration, the capabilities of its LED facade

were on full display, with generative and sound reactive content created by Float4 delivering hours of vibrant visuals unlike any other display system in the world. The event featured a grand reveal of what the guitar can do, establishing the guitar as the static architecture icon.

As the crowd ambiance built through the early evening, the official guitar SMASH experience marked the beginning of a custom drum sequence, triggering a bold guitar activation. The show then journeyed through different decades, musical styles and energies, presenting audio-driven dynamics, intricate line compositions, cascading waterfalls of light and energy as transitions, and a full 3D guitar effect, complete with lasers extending into the sky to represent guitar strings. Managing all of this content and pixel mapping for 2.3 million individual LEDs put the RealMotion server to the test.

“The 4 Karat server plays a huge role in the technical management of the show itself,” said Geoff Platt, Director of RealMotion. “We used ISAAC, an integrated scheduling and automation control platform created by Smart Monkeys, to develop a system to ingest content into the 4 Karat Server to manage and







synchronise the millions of content elements of the show. RealMotion's reliability ensures that the Guitar Hotel's shows will run long-term. What DCL has put together is a huge feat in digital signage, architecture, and entertainment. We couldn't be prouder to have been brought onto this project, and to know that a 4 Karat RealMotion Server can manage a spectacle such as this."

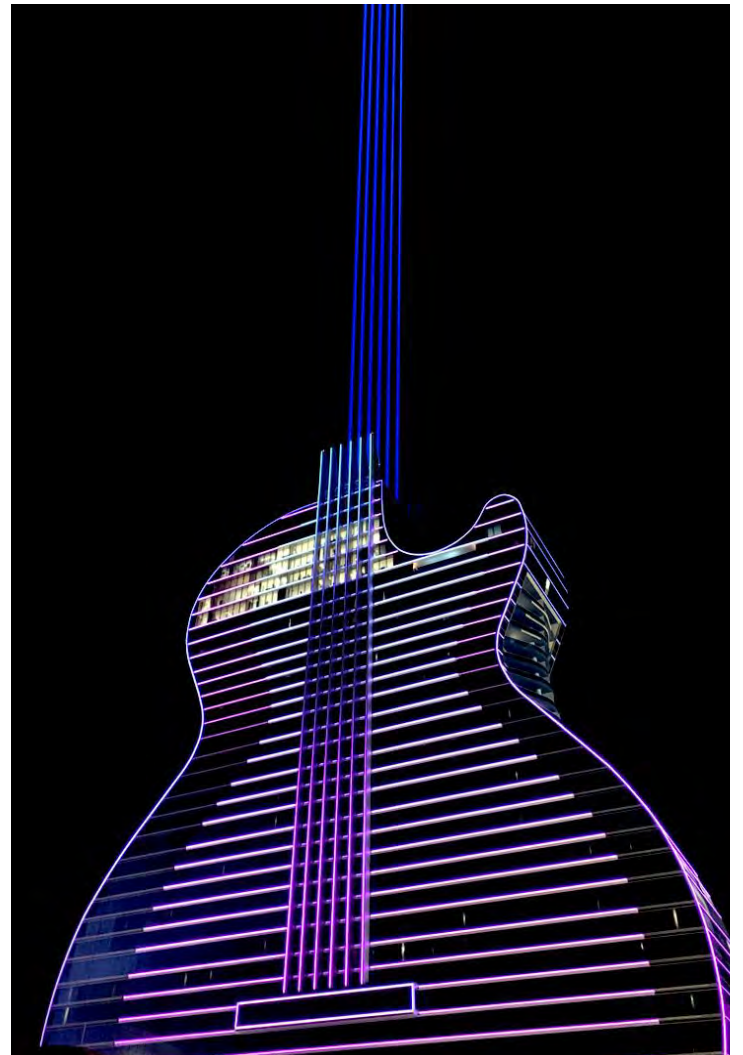
The facade has five core elements that can each be used for specific effects. The Front & Back are the main sections on which dynamic content can be video mapped. The Outline delineates the edges of the guitar shape, and content plays with this aspect by hiding and revealing the guitar's contours. The Sides enhance the illusion of depth for visual effects, while The Strings, which utilise lasers instead of LEDs, are used to show vertical motion and effects such as fountains, chord strums and string plucks. Lastly, The Spandrel Glass section is ideal for expanding content from the face and body to create the illusion of another level of content.

While the grand opening was indeed a major celebration, the full goal of this project was to enable a long-term digital sculpture installation that can display new content and themes as the owners' desire.

"We needed a media server for a permanent architecture setting, that could be integrated into a larger network," said Jeff Grantz, Director of Creative Technologies at DCL. "The 4 Karat server from RealMotion's Gold series has a robust architecture setting and required minimum project-based customisation. We're well-informed of the server's dexterity for generative content and knew it would be an intuitive tool to pass on to our client for when they begin to facilitate their own programming. As always, it's a great experience to work with RealMotion and the RealMotion team."

RealMotion took special care to build the content system in such a way that Hard Rock would be able to make relatively quick adjustments that could otherwise take hours of video rendering to complete. To achieve this, RealMotion used image sequencing instead of video, so that any changes would only require replacing or editing images within the sequence, eliminating the need for a new video file to be rendered.

Under DCL's direction, Float4 also developed two additional content pieces. The "Sunset Ceremony" sets a festive tone for every evening with visual imagery of a scenic sunset and a guitar playing spirit with audio-reactive elements. The "Smooth" piece is a homage to the end of the





classic rock era as it transitioned to contemporary music, based on the collaboration by Matchbox Twenty frontman Rob Thomas and Latin-Rock band Santana, and includes psychedelic artwork, a silhouette of a Latina dancer, 'electric energy' and 'festive' patterns, and creative transitions such as a river of light and flocking simulations. Ambient content plays when none of the major shows are scheduled, so there is always something to see.

To see it in person, it can be hard to believe that a single media server is running real-time generative content on a custom-shaped canvas with millions of pixels - that's the power of RealMotion.

#### About Seminole Hard Rock Hotel & Casino Tampa

Owned and operated by the Seminole Tribe of Florida, Seminole Hard Rock Hotel & Casino Tampa is one of the largest and most successful casinos in the world offering award-winning gaming, hospitality and entertainment. The casino features nearly 5,000 of the hottest slot machines, 179 table games and a state-of-the-art Poker Room featuring 46 tables. Additionally, the property offers a smoke-free Mezzanine Level Casino. The hotel is AAA Four Diamond rated and the property proudly offers seven award-winning restaurants, including the upscale dining venues Council Oak Steaks & Seafood and The Rez Grill, as well as the new elegant Italian restaurant, Cipresso.

#### About Hard Rock®

With venues in 75 countries spanning 259 locations that include owned/licensed or managed Hotels, Casinos, Rock Shops® and Cafes – Hard Rock International (HRI) is one of the most globally recognised companies. Beginning with an Eric Clapton guitar, Hard Rock owns the world's most valuable collection of music memorabilia at more than 83,000 pieces, which are displayed at its locations around the globe. In 2018, Hard Rock International was recognised as a Forbes Magazine Top Employer for Women and Land Operator of the Year at the Global Gaming Awards. In 2019, Hard Rock International was honoured as one of Forbes Magazine's America's Best Large Employers, Forbes Magazine's Top Employers for Women and No. 1 in J.D. Power's 2019 North America Hotel Guest Satisfaction Study among Upper Upscale Hotel Chains. Hard Rock destinations are located in the world's greatest international gateway cities, including its two most successful flagship properties in Florida and home to the world's first Guitar Hotel® in South Florida, where its headquarters are located. The brand is owned by HRI parent entity The Seminole Tribe of Florida.

For more information, visit [www.hardrock.com](http://www.hardrock.com).

#### About DCL - Design Communications Ltd.

Headquartered in Boston, MA, DCL (Design Communications Ltd.) is an award-winning provider of integrated digital media, architectural specialties, and custom signage for the built environment. Since 1984, DCL has been partnering with architects and designers to engineer, build, and install innovative solutions for industries worldwide. Commitment to a client's vision, the design process, and consistently delivering an unparalleled product and experience is the company's greatest success.

To learn more about DCL's custom manufacturing, fabrication and installation services, visit [www.dclboston.com](http://www.dclboston.com).

#### About RealMotion

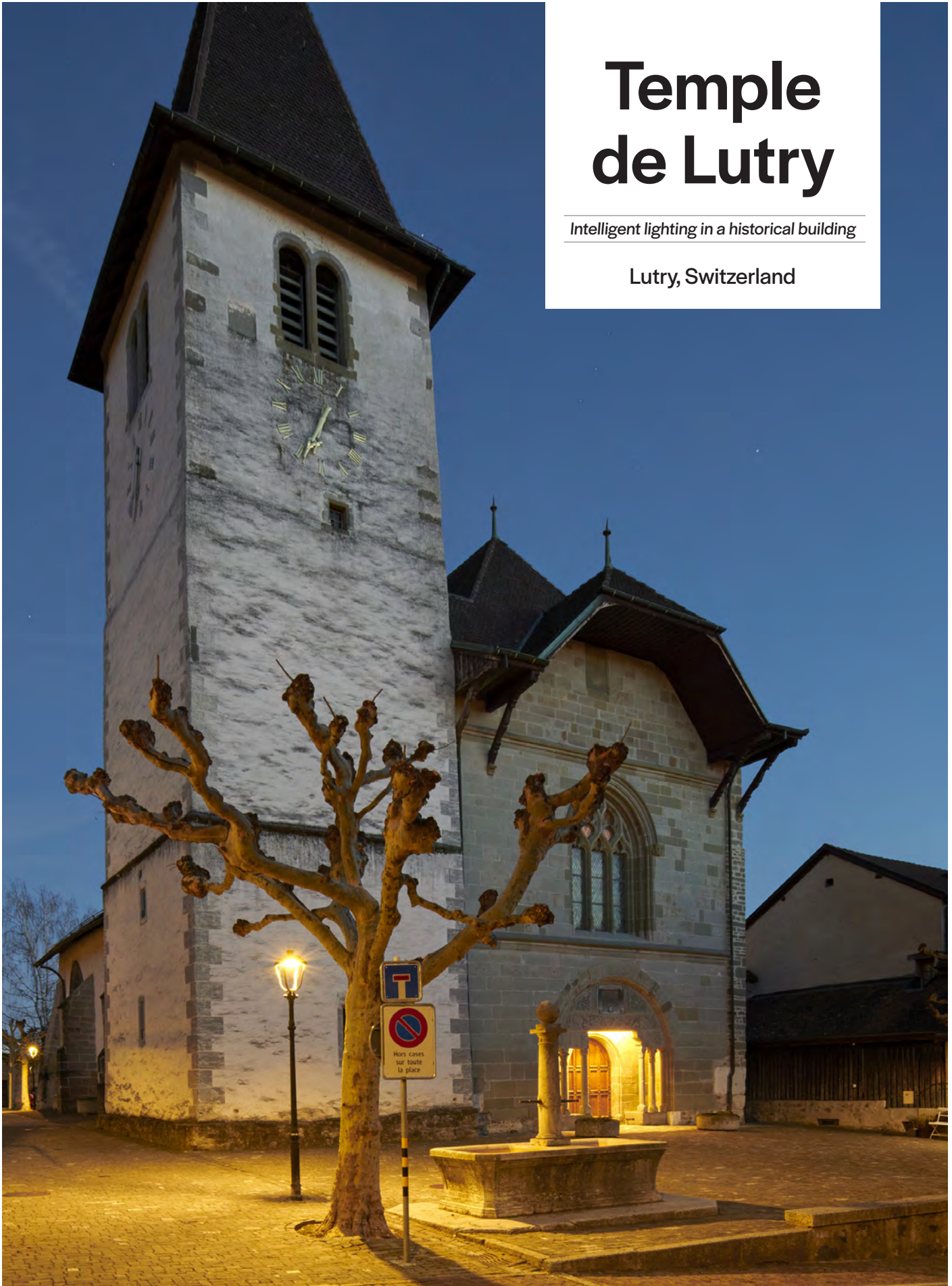
RealMotion specialises in the development of real-time content creation and integration technology. Headquartered in Montreal, QC, Canada, their mission is to provide a superior real-time platform and hardware, empowering innovation through prototyping, execution, and monitoring of next generation immersive and interactive environments. RealMotion products are used to power both temporary and fixed installations over a multitude of complexity levels, and are designed to be intuitive and reliable for AV industry-needs.

For more information, visit [www.realmotion.com](http://www.realmotion.com).

# Temple de Lutry

*Intelligent lighting in a historical building*

Lutry, Switzerland





## Bluetooth lighting control provides demand-based lighting scenes in the Temple de Lutry

Its beginnings date back to the 11th century and it is a cultural asset of national importance. Therefore, anyone who carries out construction work or technical installations in the Temple de Lutry in the heart of the old town of Lutry has to meet stringent requirements. In the recent upgrade of the lighting to LED technology, the existing wiring had to be used as far as possible. Even so, a modern lighting control system could be implemented thanks to wireless technology from Tridonic.

### 1000 years of architecture

The Swiss municipality of Lutry on the shores of Lake Geneva is a picturesque little town. Set amongst vineyards, there is a castle from the 14th century, a promenade with an old port and a listed town centre, inviting tourists to explore. An important landmark is the Temple de Lutry, the reformed parish church of Saint Martin in the centre of the old town. Originally built as a church for a Benedictine priory in the 11th century, it can look back on 1000 years of history. Numerous alterations and extensions have been made over the centuries:

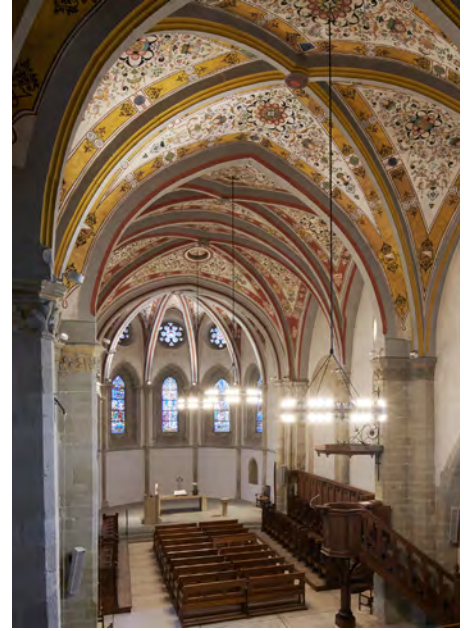
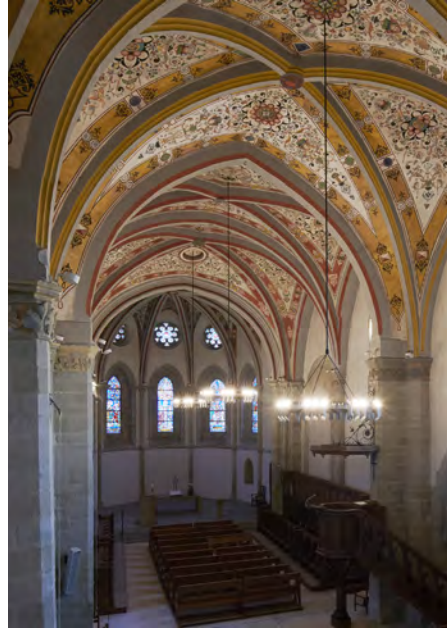


the polygonal choir dates back to 1260, the nave was refurbished after a fire in 1344, and the northern side chapels were added in the 14th and 15th centuries.

There were further changes after the Reformation. Today's tower was built in 1544, and from 1569 to 1578 the Renaissance portal was constructed. Reformation could also have given a decisive impetus to the decorative paintings inspired by Mannerism and Renaissance in the vaults of the nave. It is said that the municipality made a promise to follow the Reformation in return for these works. This is not historically documented, but it has been proven that the paintings date back to the 16th century and were created by artist Humbert Mareschet.

### Energy-efficient and intelligent control

Since the autumn of 2018, not only the precious paintings but also all the other architecturally interesting details of the church have appeared in all their splendour, because Saint Martin has been equipped with a modern lighting solution. The people in charge at Lutry's Department of Land Planning and Buildings above all expected significant energy savings and reduced maintenance costs from the upgrade of the existing halogen lighting to LED lighting. In addition, they wanted to have a control system that would make it easier to adjust the lighting to the different uses of the church.



To put these requirements into practice, Senseco — the lighting design office from Lausanne commissioned to carry out the work — had to overcome a difficult challenge. “Under no circumstances were we allowed to interfere with the historical structure of the church,” explained Yannick Le Moigne from Senseco. “Laying additional power or data cables was taboo so we solved the problem with a wireless lighting control system.”

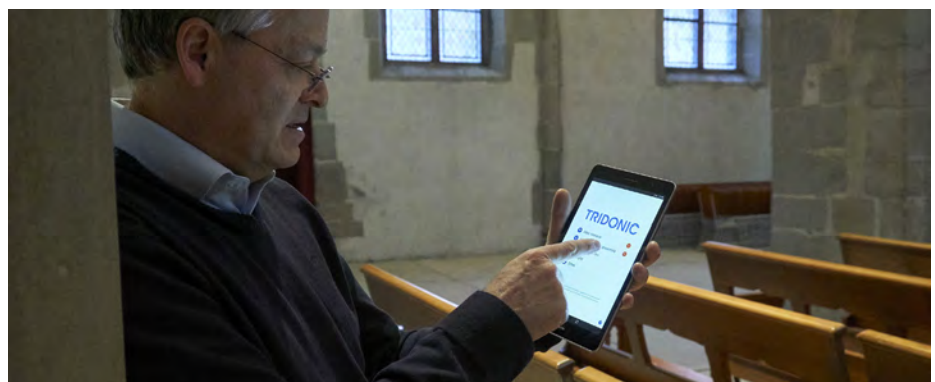
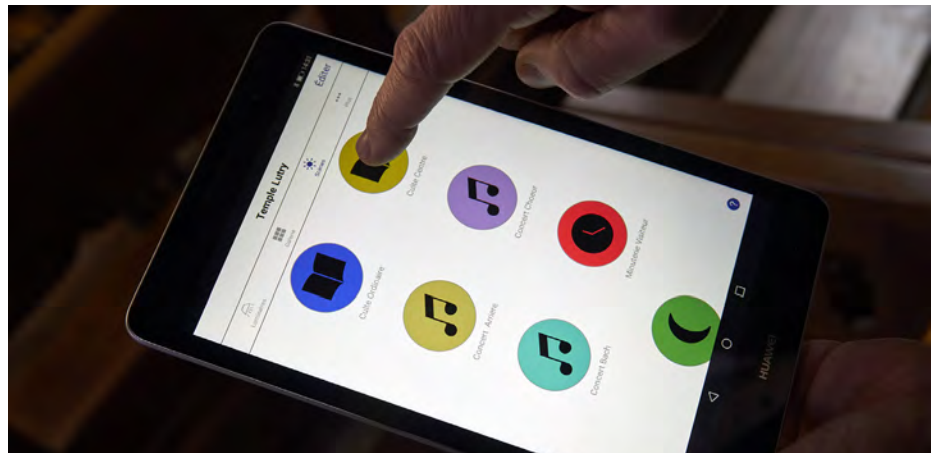
Each light point is now equipped with a basicDIM Wireless control module from Tridonic, acting as a node in a Bluetooth network with a mesh structure.

#### All-in-one solution for installers and users

Thanks to the compact 50 x 26 x 33 mm Casambi Ready basicDIM Wireless modules, setting up a light management system is very easy. Once connected with the LED drivers of the luminaires to be controlled, they automatically establish a network with up to 127 light points in which they then communicate switching and dimming commands. The modules come with a configurable 1 10 V interface and a DALI interface as well as a switchable relay contact. Optional sensors can be integrated. The networked luminaires can also be grouped together and scenes can be created.

#### Tailored lighting scenes

The church is equipped with various lighting components. In the nave, there are large circular luminaires featuring separately switchable direct and indirect lighting. On the cornices of the pillars, compact spotlights were placed illuminating the severies with wide beams or tracing the contours of ribs and arches as narrow-beam strip lighting. There are also a number of single luminaires around the organ, the choir, the altar, the side aisles, the pulpit and the entrance area. Senseco project manager, Nadine Le Moigne, highlighted the benefits, “Thanks to the light management system, all these light points can now be set up in any combination and





with individually preset parameters to create different lighting scenes and can be tailored precisely to the relevant application.”

The Tridonic 4remote BT app which runs on smartphones and tablets with Android or iOS operating systems can be used for configuration. On an intuitive, graphical interface, luminaire groups, on/off switching and dimming of individual luminaires or whole luminaire groups can be defined, and – if appropriate LED modules have been installed – RGB colour values or Tunable White colour temperatures of individual luminaires or whole luminaire groups can be set.

These configurations can then simply be saved as a lighting scene. In the church there are scenes for services, for musical and literary events in the choir or the nave, and for the popular Bach concerts. One tap of a finger in the app is enough to retrieve the desired scene. There is also the battery-powered basicDIM Wireless User Interface. This low-profile device in a switch format can be used to store four scenes and fade luminaires up and down.

#### Clever logical connection

An elegant solution could also be found for a very special switch – when visitors want to visit the church, they can turn on the lights themselves with a pushbutton in the entrance area and start their tour. An approximately eight-minute lighting scene is programmed which illuminates the church and the ceiling paintings and slowly dims down at the end. To avoid interfering with services or events, it was important to

ensure that the “tour” scene could only be activated if no other lighting scenes were active in the church.

This was achieved through the DALI-RM/S actuator from Tridonic in which a DALI signal controls a relay contact. “We have wired a basicDIM Wireless module to the DALI input of the actuator which is integrated in all the lighting scenes in the church. The visitor button is connected to the relay output of the actuator via another basicDIM Wireless module,” said Maurizio Cucciniello from Tridonic and added, “Whenever a lighting scene is active for church services, the basicDIM Wireless of the visitor button is disconnected from the network via the DALI RM/S. So if the button is pushed now, the switching command cannot be passed on and nothing happens. Only when the “tour” lighting scene is once again activated with the user interface or tablet can it be accessed again using the button at the entrance.”

Without interfering with the historical structure, a light management system could be implemented in the Temple de Lutry using basicDIM Wireless. The lighting control which communicates via Bluetooth was remarkably straightforward to programme and put into operation. Both the pastor and sacristan, as well as all the other users such as the organisers of concerts and readings, are happy about this significant increase in convenience, because with the tap of a finger they can now select lighting scenes for the entire church or adjust individual luminaires or luminaire groups to suit their requirements. Thanks to the button at the entrance, visitors can enjoy the church with its impressive ceiling paintings in a bright light even when there are no events.

#### About Tridonic

Tridonic is a world-leading supplier of lighting technology, supporting its customers with intelligent hardware and software and offering the highest level of quality, reliability and energy savings. As a global driver of innovation in the field of lighting-based network technology, Tridonic develops scalable, future-oriented solutions that enable new business models for lighting manufacturers, building managers, systems integrators, planners and many other types of customer.

To promote the vision of the “Internet of Light”, Tridonic relies on partnerships with other specialists. The goal is the joint development of innovative technological solutions that convert lighting systems into intelligent networks and thereby enable associated services. Its profound, technical industry expertise makes Tridonic an ideal partner for established brands and for newcomers to the market.

For more information, visit [www.tridonic.com](http://www.tridonic.com).



The lighting concept for Coal Drops Yard celebrates the rich heritage of this historic area, expressing the rhythmic and textural nature of the architecture

# Coal Drops Yard

London, England

**CLIENT** Argent

**ARCHITECTS** Heatherwick Studio

**LIGHTING DESIGN** Speirs + Major Team - Mark Major, Hiroto Toyoda, Andrew Howis, Ting Ji, Jaime Fuentes McGreevy

**WAYFINDING + GRAPHICS** Holmes Wood

**M&E ENGINEER** Hoare Lea

**CONTRACTOR** BAM

**KEY MANUFACTURERS** iGuzzini, Original BTC, Wila, We-ef, Simes, Hoffmeister, Phillips ColorKinetics, Spectral

**PHOTO CREDITS** Speirs + Major, © John Sturrock

One year on from its opening, Speirs + Major revisit their collaboration with Heatherwick Studio on the lighting design for Coal Drops Yard, the innovative retail and leisure experience in King's Cross, London.

The unique historical character of Coal Drops Yard required an equally individual approach to the illumination. Rich in shadow play, contrast, and texture, the lighting sensitively re-interprets the heritage of the listed former goods yard buildings, contributing to a unique experience for visitors after dark.





Brightness at the peripheries and entry thresholds draws shoppers in, with levels tailing off in the central courtyard to allow the shop fronts the context in which to glow enticingly

**Architectural lighting should focus on celebrating the heritage of this former industrial area.**

- Mark Major, Principal at Speirs + Major



“Our starting point on this project was to refer back to the King’s Cross Masterplan we developed and have overseen on behalf of our client, Argent, over the last 13 years. One of its central tenets was that any architectural lighting should focus on celebrating the heritage of this former industrial area. Our masterplan also seeks to be highly sustainable by using lower levels of illumination to save energy and minimise the risk of over-illumination and light pollution in this mixed used district. At Coal Drops Yard, we had a fantastic opportunity to use light to express the rhythmic, repetitive nature of the railway architecture and the textural qualities of the fine brickwork,” commented Mark Major, Principal at Speirs + Major.

“We were fortunate to have very early involvement and a highly collaborative relationship with Heatherwick which allowed us to integrate the light fully within the design approach. The previous completion of the lighting designs for the adjacent Granary Building, Gasholders London, and Gasholder Park gave us the unique perspective of designing the light for Coal Drops Yard as an important part of a wider lit composition and visitor experience. We also developed the scheme to minimise the impact of such a major retail development after dark for local residents.”

The design balances light with shadow to create visual depth and enrich the pedestrian and shopper experience after dark. Understated wall-mounted lighting details do not compete for attention with the retail



The design balances the need for the retail shop fronts to shine with the drive to avoid over-illumination and minimise impact on local residents



Wall-mounted details reveal the texture of the fine brickwork and keep the lines of the architecture and landscape clear.  
*Note: The interior lighting for the Samsung KX anchor store visible in the image is designed by Nulty+*

units, but rather contribute atmosphere by defining the periphery of the open spaces and revealing the texture of the façade materials. Light lifts the large soffit under the main anchor store, softening the transition from the open space. The underside of Heatherwick's unique flowing roof structure is clearly defined, helping to shape a strong visual identity for the development when seen from a distance.

Design Associate, Hiroto Toyoda, explained, "Retail design tends to prioritise uniformity and high levels of consistency, but we felt that the character of Coal Drops Yard needed to be more flexible yet harmonious – more 'urban'. Our design embraces this, while remaining mindful of the commercial requirements of safety, security, legibility, and attractiveness for the retail and leisure outlets. One of the bolder design decisions we made was not to attempt to over-light the facades but to internally illuminate the entry thresholds to help draw people into the scheme."

He continued, "The perimeter of the central courtyard is well lit, with the levels towards the centre of the space falling away to provide a context against which the illuminated archways of the retail units glow, animated by the silhouettes of people circulating at the periphery. Changes of level are lit positively to aid safety and way-finding. We also worked hard to keep to a refined palette of materials and lighting details – avoiding adding any clutter that would interfere with the lines of the listed architecture or the open landscape."

The lighting design also included a set of non-prescriptive tenant guidelines to help ensure that the lighting in the retail units have a positive impact on the scheme as a whole.

#### About Speirs + Major

Speirs + Major are an independent, award-winning international design practice that uses light and darkness to enhance the experience of the visual environment. The practice's work is wide-ranging in type and scale encompassing lighting for architecture and urban design. Speirs + Major collaborate closely with clients, architects and other design partners using light to reveal the core principles of the design, often creating a strong visual narrative while becoming an integral part of the final built form. This approach combines creativity with pragmatism, ensuring solutions are both sustainable and easy to manage.

For more information, visit [www.speirsandmajor.com](http://www.speirsandmajor.com).







# The Shed

New York, USA

## ARCHITECTURE

Diller Scofidio + Renfro, New York (Lead Architect)  
Rockwell Group (Collaborating Architect)

## LIGHTING DESIGN

Tillotson Design Associates, New York

## ERCO PRODUCTS

Grasshopper  
Kona

## PHOTOGRAPHY

© ERCO GmbH, [www.ercoco.com](http://www.ercoco.com)  
Timothy Schenck

### *The shape-shifting Shed: ERCO lights New York's latest cutting-edge cultural space*

**T**he Shed, an extraordinary new shape-shifting cultural space in Hudson Yards on the West Side of Manhattan, has been one of the most talked about buildings of 2019. Designed by Diller Scofidio + Renfro in collaboration with Rockwell Group, The Shed is connected to the High Line on 30th Street, and aims to bring performances and art to New York's newest neighbourhood.

Listed by ArchDaily as one of the most important new architecture projects in 2019, The Shed has been described by its chief executive and artistic director Alex Poots as a new-model cultural institution, 'a place for invention, for curiosity, for risk-taking'. The eight-level base building – with two large gallery spaces, a 500-seat theater, rehearsal space, artists' lab and skylit event space – features a 37-metre telescopic shell that can extend out to create space for larger performances.

A steel structure clad in ethylene tetrafluoroethylene (ETFE) cushions, the outer shell deploys from over the base building, gliding along rails on to an adjoining plaza to double the building's footprint. Known as the McCourt, the space can be used for large-scale performances, installations and events, accommodating a seated audience of 1,250, or more than 2,000 standing.

### Unusual challenges

The nature of the structure posed a series of unusual challenges and requirements for the lighting, in terms of the translucency of the material, the mobility of the structure (in that the fixture had to withstand the outdoor environment) and the importance of sight lines and glare in a space that can be reconfigured in several ways. Ease of installation, operation and maintenance in such a large structure were also crucial considerations. ERCO worked with Tillotson Design Associates to create a solution that met all the criteria.

The answer to a luminaire that could provide the right intensity and uniformity to illuminate the 'skin' from either end of the section was the ERCO Grasshopper projector. These 18W fittings – just under 750 in all – are mounted within all the corners of the beams in the moveable outer shell.

In line with ERCO's concept of individual service, all of them were customised with a remote driver box, necessitated by the location of the fixtures within the cramped corner spaces. The fixture heads had to be installed as close as possible to the mounting surface, so a special mounting bracket was created and the driver positioned remotely to reduce the space occupied by the fitting. A 5000K colour temperature conveys a contemporary, literally cool aesthetic.

### Exceptional light output

The Grasshopper has exceptional light output, high visual comfort, easy aimability – it



can be tilted and rotated in any direction – and, with its compact physical size, emerged as the ideal choice after an early mock-up. A highly versatile exterior range, with precise photometrics to prevent spill light, it can be used for accent lighting, floodlighting and wallwashing.

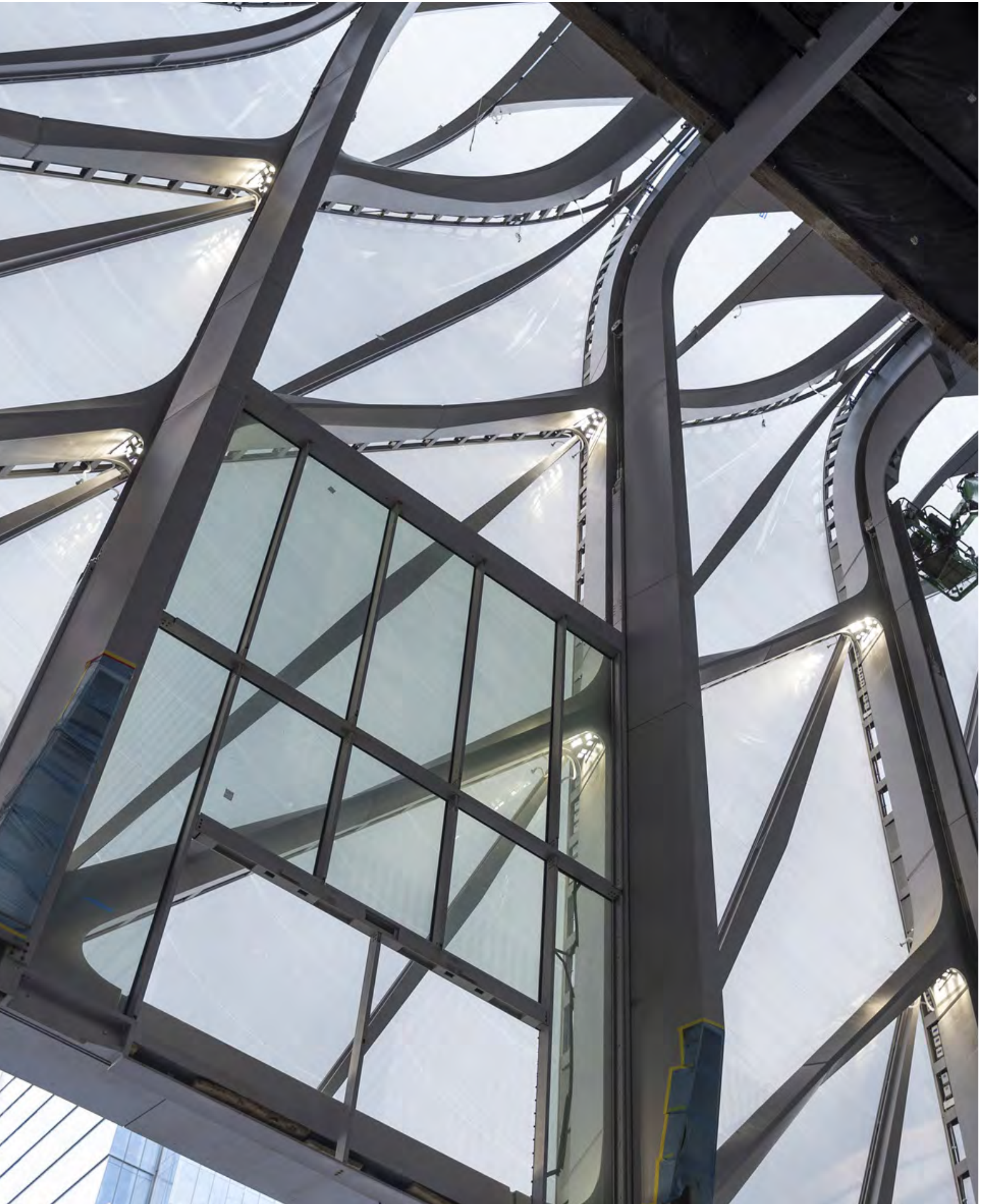
Lighting the East Facade are round-shaped Kona 48W projectors, a total of 66, specified in the same 5000K colour temperature. The range also comprises projectors, floodlights and wallwashers, and was developed to deliver high luminous flux with maximum visual comfort. The powerful output allows the fitting to be spaced further apart. Like Grasshopper, the fitting can be customised.

In addition to The Shed, ERCO has recently worked with Tillotson Design Associates on a range of US schemes in New York and beyond, including the Museum of Modern Art (MoMA), Ruby City, the Seignouret-Brulatour Mansion and Rhode Island School of Design (RISD).

#### About ERCO

The ERCO Light Factory in the German town of Lüdenscheid is a leading international specialist in architectural lighting using LED technology. The family business, founded in 1934, now operates as a global player with independent sales organisations and partners in 55 countries worldwide. Since 2015 ERCO's portfolio has been 100% LED. With this in mind, ERCO in Lüdenscheid develops, designs and produces digital luminaires with focus on photometrics, electronics and design. Working closely with architects, lighting designers and engineers, ERCO develops lighting tools used primarily for applications in the following fields: Work, Shop, Culture, Community, Hospitality, Living, Public and Contemplation. ERCO understands digital light as the fourth dimension of architecture – providing highly precise and efficient lighting solutions to support creative designers in turning their visions into reality.

For more information, visit [www.erco.com](http://www.erco.com). ◇







# The Star District

Frisco, Texas

## ARCHITECT

O'Brien Architects Dallas

## LIGHTING DESIGNER

Henderson Engineers

## PROJECT COMPLETION

April 2019

## A-LIGHT LIGHTING AGENT

ALA

## PHOTOGRAPHY

Parrish Ruiz de Valasco

### *Dramatic overhead lighting pays homage to Dallas Cowboys' Ring of Honor at The Star District*

With 35 restaurants, shops, and adjacent parking garages on two-levels, The Star District is a sophisticated Dallas Cowboys-themed retail complex. The district is located on the campus that houses the NFL team's headquarters in Frisco, Texas. It is comprised of two buildings that flank the main drive leading to the Ford Center, an indoor athletics venue.

O'Brien Architects Dallas developed the overall master plan for The Star and specifically designed the entertainment district and parking garages. The architects brought in Henderson Engineers to work on the lighting scheme.

"We took cues from the District's layout and building design to create an upscale modern lighting experience," said Kim Ilhardt, senior architectural lighting designer at Henderson Engineers.

The plaza in front of the District was a particular challenge. The street opens up at this juncture into what is known as the "Ring of Honor." The Dallas Cowboys Football Club pays tribute to its outstanding former members in this striking architectural feature, so effectively lighting the signature space and busy traffic hub was vital.

Large sweeping roof canopies reach out over the Ring of Honor, adjacent sidewalk and street, creating a shelter above the plaza area. The architects challenged the lighting team to source overhead fixtures that appeared "unseen and quiet."

The distinct architectural lines of the dramatic canopies inspired Ilhardt to select A-Light's Accolade D3 linear lighting.

"Accolade D3 was about the width of the canopy's articulated reveal, enabling multiple linear fixtures to neatly fit within the canopy and appear as a simple continuous line," said Ilhardt. "During the day the fixtures blend in with the silver canopy, and by night they present

themselves as sleek lines of light that enhance the architectural importance of the district.”

Each of the structural lines in the canopies is unique with respect to length and angle at the forward portion as it tilts upward over the plaza. A-Light’s Design Assist team customised the Accolade D3 luminaires to meet the lengths and angles required while maintaining the continuity of the linear illumination. Field coordination was also necessary to ensure that the fixtures fit perfectly.

Visitors naturally congregate at the Ring of Honor, after walking out from the perimeter parking garages. Ilhardt therefore sought an ambient light source to deliver widespread general illumination from the high canopies.

Accolade D3 provides a high-performance direct distribution of light using A-Light’s patented HE Tech™ lens. Light is pushed down to the sidewalks and retail entrances below, providing effective illumination for passersby. The fixtures also serve as an essential security feature, highlighting pedestrians crossing the main thoroughfare.

Breezeways in each building continue the lighting design aesthetic with additional Accolade D3 installations. In this case, the linear fixtures are ceiling-mounted in a custom pattern over each escalator. They provide a wayfinding element, visually pulling people into the breezeway from the street.

The breezeways by design are partially covered and exposed to limited daylight. Certain light levels are required throughout the day and evening, though, to provide safe passage for retail visitors. A-Light integrated daylight sensors into the Accolade D3 luminaires so lighting can be increased, dimmed, or turned off as necessary.

Moments of history and homages to the Dallas Cowboys successfully blend with upscale dining and shopping experiences at The Star District. From swooping lines to architectural accents, lighting contributes to a unique and memorable visit.

“A-Light’s customisation and great service were key to achieving our vision for this project,” said Ilhardt. ◊







# Alila Bangsar Hotel

Kuala Lumpur, Malaysia

## ARCHITECTURAL AND INTERIOR DESIGN

Neri&Hu Design and Research Office

## LIGHTING DESIGN

Klaasen Lighting Design

## PHOTOGRAPHY

All Is Amazing Photography, Pedro Pegenaute



### *A new hotel experience has arrived in Kuala Lumpur*

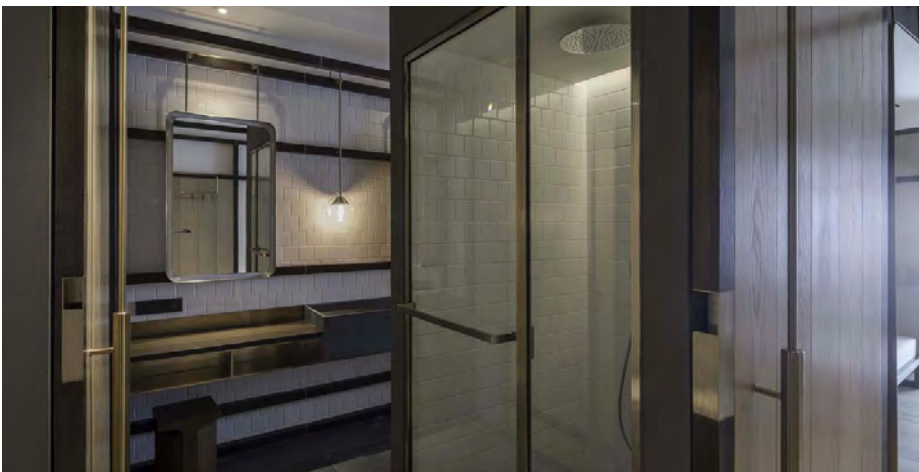
Recently the Alila Bangsar Hotel opened its doors to the public in Kuala Lumpur, Malaysia. The interior design, by the world renowned and award winning team of Neri & Hu, brings to town a new eclectic style and elegant purity that is setting new standards in the industry. A must see and stay hotel, conveniently located in downtown KL, is already making waves in the industry with great reviews by both leisure and business guests. Klaasen Lighting Design was fortunate to be part of this award-winning team to provide the lighting design for this ambitious project.

The grand opening was a great event that saw the industry players converge in the hotel and experience that famous Alila service and personal attention. The opening events started around the lobby and the feature swimming pool and pool bar then gradually moved to the restaurant and lounge areas to end up at the

rooftop terrace with its stunning views after visiting one of the guestroom suites on the way up. Guests were invited to stay overnight to complete the experience. Here's another great hotel and feather in the Alila cap that is now part of the Hyatt hotel group portfolio.

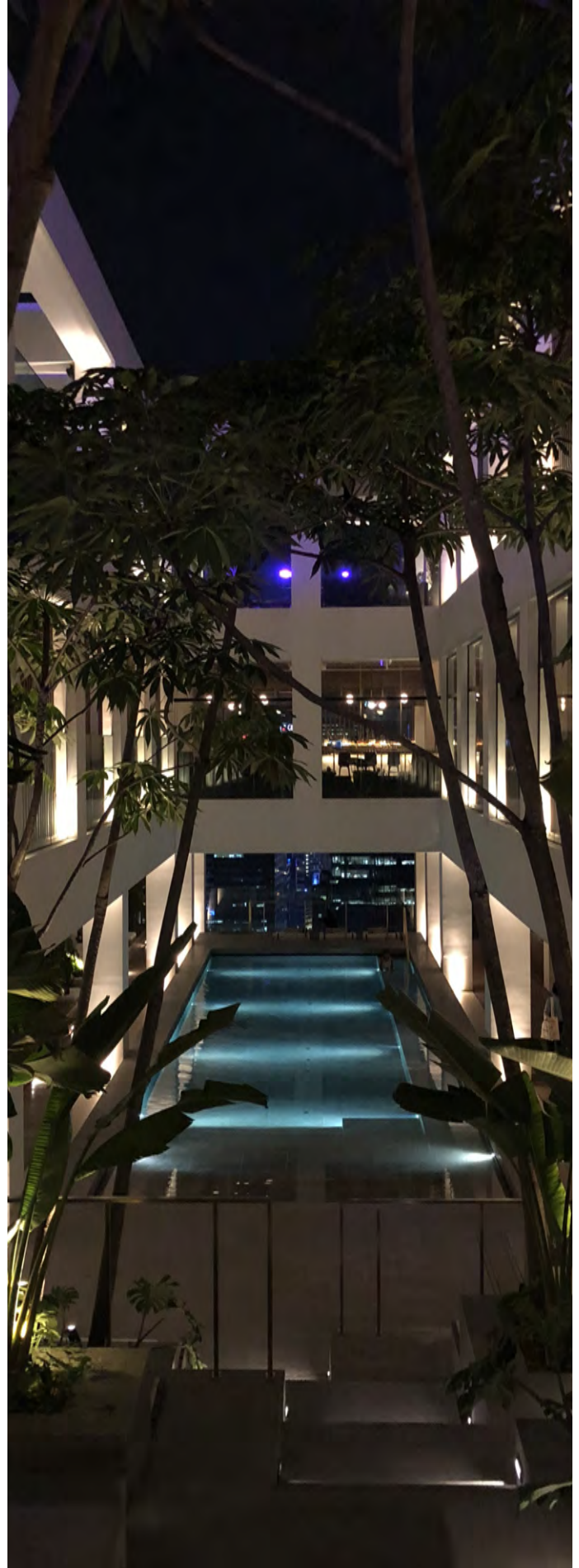
The Alila brand always stands for a special experience and this hotel is no different. Located at the top end of a 42-storey building – one of the highest buildings in KL – it offers a stunning uninterrupted 360-degree view of the city. The dominant feature is its open air swimming pool with theatre style steps leading down from the reception and architectural colonnades on each side. The lighting of this area creates a nice contrast between day and night, accentuating the architecture but at the same time balanced to enjoy the “stars” at night.

The Neri & Hu style is rather minimalistic with strong architectural detailing which can be found back in the feature lighting elements providing mood ambient lighting and the harmoniously integrated lighting that enhances the architectural features of the spaces. With the



open-air spaces and a significant amount of greenery, there is a distinct modernity to the spaces emphasising the green and sustainable approach. Key to the lighting design approach was to integrate the lighting as much as possible into the architecture to let the interior design, materials and finishes speak for itself rather than being prominent architectural fixtures. Where lighting is visible they have been designed as feature elements in space.

The guestrooms are spacious and “light” with the design elements one would expect in an Alila hotel. The luxury is expressed by the Neri & Hu architecture that radiates a warmth and comfort both by day and by night. The large windows provide a large amount of natural daylight during the day, with KLD’s lighting design complementing the architecture of the room and creating a feeling of cosiness at night. The warm light was specifically selected for that purpose. Pre-programmed lighting scenes allow guests to select the mood they want, from a bright setting for activities to mood setting for an in-room dinner or just to enjoy undisturbed views at night. ◇







# Dot Foods, Inc. Headquarters

Illinois, USA

## ARCHITECT

Grace Corbin, Christner, Inc.

## EUREKA AGENT

Lighting Associates

## PROJECT COMPLETION

April 2019

## PHOTOGRAPHY

Ben Romang

## Lobby illumination highlights the brand at food redistributor headquarters

Whether sitting in a second-floor meeting space, or entering the lobby, it's impossible not to notice the playful lighting fixtures at Dot Foods, Inc. At night, even passers-by can enjoy the circular fixtures that are visible through the two-story pane glass windows of its Mt. Sterling, Illinois location.

Dot Foods is the largest food industry redistributor in the US and has been undertaking expansion and renovation throughout its headquarters over a couple of years. The main lobby area is the latest to get an upgrade, and as the first point of contact for many entering the facility, it had to leave an instant impression.

Christner, Inc., out of St Louis, Missouri, was the architect firm entrusted with reimagining the space for functionality and for visual

impact. Christner was challenged to plan to accommodate more staff and organize the public areas around the lobby. The firm was also asked to extend the color palette from a previously completed extension into the remodeled lobby, while developing an updated aesthetic for the future.

The architect's design concept was to incorporate the Dot Foods branding into the experience using the company's oval blue logo shape on the carpet.

Then came the lighting. With two stories of glass from floor to ceiling filling the lobby with daylight, the lighting presented its own challenges. Shades were chosen to help with glare control from the natural light, black metal grids across the ceilings were removed to make the space feel more vaulted, and old linear sconces mounted high on the round pilasters were removed. And a decision was made to move from lighting the space from the perimeter surfaces of the room, to making the lighting a centerpiece.

Eureka Lighting's Cycle luminaires were chosen as that centerpiece. A total of nine Cycle fixtures were used to illuminate the lobby. A circular luminaire, Cycle was chosen in three different sizes (36", 54" and 72" diameters) and with a mix of white matte and black finishes to produce a dynamic feel.

"We wanted to tie the lighting design into the brand in this tight semi-circular area. The various sizes and finishes of Cycle enabled us to make the scheme more compelling," said Grace Corbin, senior associate with Christner.

Cycle can be mounted straight or angled and Corbin and the Christner team decided to suspend the fixtures at varying angles across the upper space – a deliberate move to tie in with the Dot Foods brand.

"The fixtures of varying sizes, finishes, and angles were carefully "scattered" over the large inset blue oval carpet," said Corbin. "Looking up they all appear as ovals since they're placed at varying angles. It enlivens the lobby."

The final effect is both playful and powerful. The outer reflector of each Cycle fixture provides perfectly diffused direct/indirect illumination to create luminous halos that make a strong statement across the upper expanse.

The lighting design aesthetic is carried through to other areas of the building. Surface-mount 72" Cycle fixtures are installed in the three upper floor meeting rooms that overlook the lobby and can be seen from the ground below. There are also additional Cycle luminaires in a soft seating area and in a special main floor meeting space.

Beyond aesthetics, the luminaires are built for functionality. The custom designed and manufactured light engine in Cycle features a high-performance, discreet LED that ensures a long life and low maintenance for the Dot Foods facilities team.

"Cycle animates the space and Dot Foods' employees see the luminaires as a special design feature in their new lobby," Corbin said. "It is a joyful experience seeing the playful fixtures against the clerestory windows and the graphic timeline of the company's history around the soffit. At night, the Cycle fixtures can be seen in the windows from the road." ◇





ROBERT AND DOROTHY TRACY

**OUR MISSION IS TO POSITIVELY AND SIGNIFICANTLY CONTRIBUTE TO THE SUCCESS OF OUR BUSINESS PARTNERS.**







# eSentire

Ontario, Canada

**CATEGORY**  
Interior Lighting

**SPECIFIER**  
DFY Studio

**PROJECT COMPLETION**  
June 2019

**LUMINIS AGENT**  
GS Lighting Group

**PHOTOGRAPHY**  
INDUSTRIOUS Photography

## *Lighting makes a statement in converted industrial office*

When eSentire moved to its new corporate headquarters in Factory Square (Waterloo, Ontario), it took over two units of an existing industrial facility with tall ceilings and concrete floors. The fast-growing cybersecurity firm hired DFY Studio to transform the 65,000 square feet expanse into an office building with large common areas and a café.

DFY Studio worked with the concept of a cyber highway and its interconnectivity to create a dynamic space with visual connections. These visual connections were achieved by highlighting elements in the open ceilings, exposed conduit to the lighting, and graphic wayfinding throughout the space.

“The lighting had a significant role in our concept for the overall look,” said Tahani Gunal, senior designer at DFY Studio. “We used it to connect our spaces visually and to enhance different zones on the floor plan.”

With ceilings over 20 feet, the design team sought lighting that would be powerful enough to illuminate the office environment, but not feel overly industrial. Gunal selected Luminis’ Prisma PR1682 as the primary luminaire for all open office areas. The pendant is suspended with an aircraft cable to bring the fixture below the exposed beams, pipes and ductwork. Its design is modern and streamlined, but a large 16” diameter ensures its scale is well suited to the high ceilings.

“With the black trim detail, the fixture has a beautiful sleek look that adds enough presence and illumination for the tall space,” Gunal said. “It holds its own and becomes a feature within the space, rather than disappearing.”

Prisma’s extruded aluminum housing is designed to optimise the functionality of the LED driver and solid-state components. Its diffused acrylic prismatic refractor with a linear peripheral pattern provides efficient down lighting to the workstations below.

Most of the luminaires in the office are standard 3500K colour temperature, ensuring a well-lit and comfortable working environment for the employees. However, one of the eSentire departments is located in an area with no natural light and necessitated a unique solution.

Prisma luminaires in this space have a tunable white LED driver, and the colour temperature is managed by a clock in an external lighting control. It is programmed to transform throughout the day between 2200K and 6500K, simulating the natural change of light in a day.

An employee in this space then has a sense of the exterior environment, so their circadian rhythm still follows what they would experience if they had access to natural light. There is also an option to manually override the system as required.

Low maintenance of more than 150 of these light fixtures was also a consideration for the client, and Prisma will deliver with a lifetime beyond 150,000 hours. ◇



# NETSCOUT Offices

Texas, USA

**CLIENT**  
NETSCOUT

**DESIGNER/SPECIFIER**  
Corgan

**EUREKA AGENT**  
ALA

**PROJECT COMPLETION**  
2018

**PHOTOGRAPHY**  
Kurt Griesbach



When a company's mission is to be "guardians of the connected world," you know its office environment will be something special. Netscout, a digital and smart data company, moved into new offices in Allen, Texas, with a look and feel that reflects its connected culture.

The three-storey 145,000 square foot space presents Netscout's re-energised brand and an employee-centric design. Connectivity is the watchword here, with a focus on spaces that encourage teamwork, consultation, and brainstorming to drive the company's innovation. Statement lighting fixtures from Eureka Lighting characterise these areas.

Eureka's award-winning Sail luminaire was selected for the break rooms on each floor. An elegant fixture constructed of ultra-thin folded metal with a white powder-coated finish, it is suspended in groups of three over counter-style conference tables. Sail's ultra-thin state-of-the-art OLED module enables innovative design that invokes a sense of weightlessness. Its light source creates a natural and glare-free illumination for employees working or chatting at the counter top below.

"Sail is a very artistic and structural fixture," said Jill Ibison, Interior Design Project Manager and Vice President at Corgan. "It is a beautiful accent to the exposed ceilings and techy features that highlight the break rooms."

A common area referred to as the "front porches" features several Mute fixtures, also from Eureka Lighting. Mute is a sound-absorbing pendant with a soft LED downlight surrounded by twelve felt-like acoustic panels. The charcoal panels are made from recycled PET bottles and are recyclable.





Mute features a reflector and frosted acrylic lens that offers superior light uniformity and output down to the meeting tables and casual seating below.

The front porches are adjacent to open-office employee workstations, so the acoustics were a concern.

Mute is ideal for reducing reverberated noise and controlling the echo of background sounds amplified by exposed ceilings, large windows and the sheer expanse of the space. The luminaire's shape is carefully designed to expose as much absorption surface as possible. It also has the ability to trap sound between the reflective ceiling and the sound absorbing material of the fixture itself. The overall effect is improved acoustics and enhanced workplace wellbeing.

"Mute is a great large-scale fixture that provides additional acoustic value to the space," Ibison said.

Exposed ceilings make a statement in Netscout's hallways, and 288 Voxel pendant fixtures illuminate the airy corridors on each floor. The fixture's clean, minimalist shape incorporates design features that ensure incredible LED performance in the small high output projector. An integrated heat sink facilitates effective thermal management, and a ventilated housing top ensures the heat sink works at full power to optimise LED lifetime.

"Voxel was a perfect pairing to the industrial space," said Ibison. "It's a petite fixture that does not distract from the architecture around it. And it has good lumen delivery with low wattage."

Lighting efficiency was vital for the project. Corgan is committed to sustainable design, so using LED and OLED luminaires from Eureka Lighting enabled lighting goals to be achieved. Luminaire choices will help save energy, reduce glare, and make the office more comfortable for Netscout employees. ◇

# Zoe LED Tri-proof light, the best-performing indoor lighting solution

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



Photo credits: YAHAM Lighting

**T**ired of having lousy and costly indoor garage lighting fixtures in parking spaces? Struggling to find a better and more convenient lighting system for commercial space? If so, Zoe LED Tri-proof light produced by Yaham Lighting is the solution. Thanks to Zoe's stunning design, unrivaled durability, impressive strength, and high luminous flux, the Zoe offers a great lighting solution for spaces like gymnasiums, industrial & warehouse, education facilities, health care centers, parking lots and other public spaces. As LED luminaries becomes a worldwide trend, it may be the best time to switch as these lights offer a more convenient, cost-effective, high-performance, and brighter lighting solution. Below are some of the advantages that makes the Zoe LED Tri-proof Light the best.

#### Energy-saving

In today's world, energy efficiency is always a vital consideration when it comes to finding a great lighting solution. To save costs on lighting expenses, Zoe's energy-efficient 140lm/w (120lm/w optional) can ease the burden by

providing more light at a low power consumption rate, which saves up to 80% of energy compared to traditional fluorescent tubes. This will mean savings on maintenance and replacements, which is more than enough illumination for any commercial or residential space.

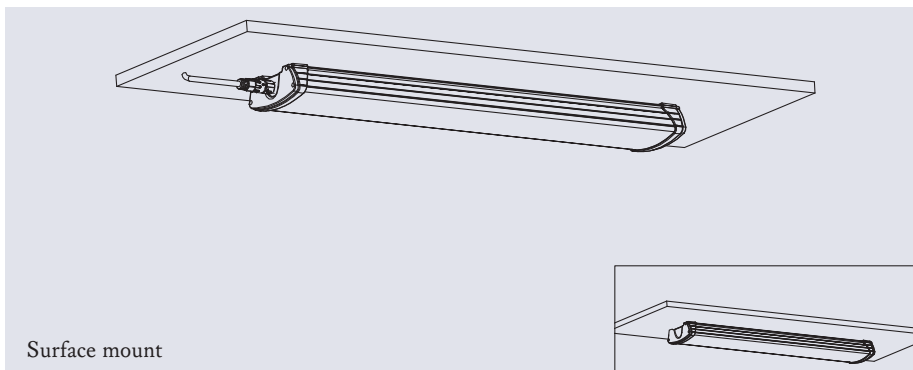
#### Durable and Stable

The Zoe LED Tri-proof light is designed to withstand severe environments and comes with an IP66 and IK10 protection rating which means it is waterproof, vapour-proof, dust-proof and impervious to corrosion and impact. These LED Tri-proof lights are manufactured using the best and strongest materials including plastic containing anti-aging ingredients and PC covers to effectively combat the effects of aging and corrosion.

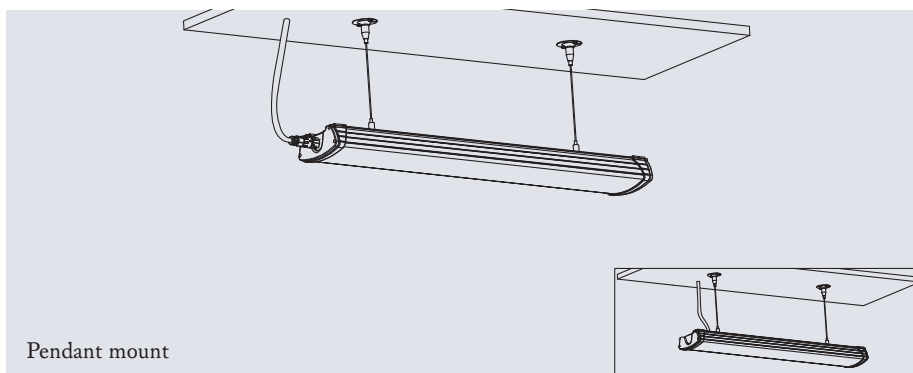
Simultaneously, its connectors and plugs have double insulation to ensure safety and reliability making it best suited in conditions with high humidity and corrosion. These qualities not only increase the fixture's durability but also minimise the chances of damages or repair needs.

**Multiple installation methods**

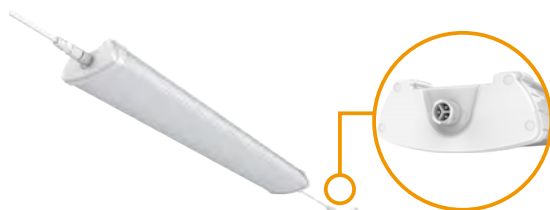
The Zoe LED Tri-proof light's plug-and-play design allows the flexibility to mount it anywhere. This consists of a surface mount installation or a pendant mount installation to suit any lighting needs and design preferences. This installation flexibility makes the light more user-friendly given the wider range of application areas.



Surface mount



Pendant mount



- Three-core easy plug design
- Dimming remote control
- CCT-adjustable remote control
- Emergency power supply
- Microwave motion sensor



- CCT-adjustable by dial switch



- 0-10V dimming
- Dali dimming

Rated Wattage	20W/40W/60W
Rated Voltage	AC100-240V, 50/60Hz
Power Factor	>0.95
Efficacy	140lm/W (120lm/W Optional)
CCT	5000k (3000k/4000k Optional)
CRI	75Ra (≥85Ra Optional)
Beam Angle	120°

**Best Performance**

Generally, when using a high-performance or a bright light fixture, it is normal to anticipate heating problems. With Zoe, it will not be a problem as it can comfortably operate at extreme temperatures of up to 50°C or as low as -20°C. Therefore, making these lights almost ideal for harsh environments. Finally, the Zoe is equipped with a few intelligent solutions including microwave induction, CCT-adjustable by dial switch, dimming as well as an emergency version with 25% brightness for up to 90 minutes.

With it being highly efficient and of high quality, the durable Zoe is a lighting solution with a performance that is trustworthy. The future is brighter with YAHAM Lighting!

# Cube Light

by **Karice**  
[www.karice.com](http://www.karice.com)

After designing and building the internationally award-winning 'DaVinci Lighting Collection, Maurice Dery of Karice felt challenged to go back to a project he began envisioning in 2016. The CUBE light is inspired by the Rubik's Cube, a universally renowned puzzle, and the fun and joy of watching his grandchildren play and build with carefree abandon.

Maurice wanted to create a light that was bright and playful in colour and also in form. CUBE is very relatable — its pure and simple design. The cube is the essential building block of structural learning and experimental design which begins at a very young age and stays with us through all our lifelong journeys.

This Karice signature design is based on a simple concept, yet it is executed with exquisite craftsmanship, locally in Vancouver, British Columbia, Canada.

CUBE is an artful piece of design and craftsmanship that would captivate from the gallery to the boardroom — and every punctuated space in between.

CUBE is available as a pendant, or table lamp. The light can be configured in infinite combinations. Matching End Tables were also designed to accompany the incredible sofas from Montauk Sofa in Vancouver. A black version of the light is suspended over the Valcucine Kitchen island, also available at Montauk Sofa Vancouver.

Karice designs, develops and manufactures custom premium lighting, focusing on a modern aesthetic enhanced by the latest technological innovations. Their vast portfolio reflects a diverse international client base and includes many award-winning signature Karice luminaires. A strong segment of their collection also consists of custom, client-oriented collaborations — from art pieces to larger production runs. Karice has the capacity and creativity to produce the most challenging concepts with true craftsmanship, efficiency and design excellence.



# SOSEN LED Driver

By Shenzhen SOSEN Electronics Co., Ltd  
[www.szsoesen.com](http://www.szsoesen.com)

## VA series

An entirely new family of Class P-certified LED driver with a constant power range of 30-240W and wide output voltage of 22-56V. The driver is also equipped with a 3-in-1 isolated dimming. VA series presents a more flexible, reliable and high-efficiency performance driver.

- 100-277Vac, 22-56Vdc, 30-240W
- 10kV/6kV surge protection
- 3-in-1 isolated dimming
- THD<10%
- Flicker-free
- IP67, 5 years warranty
- UL listed/Class P/Class 2



## VB series

This series of LED driver is specially designed for use in LED public lighting and LED industrial lighting situations. With an IP67 and 10kV/6kV surge protection, it is also programmable and operates from 100-277Vac. All series have a UL-listed mark with a rated Class P/ENEC05/CE/CB/RCM/Type HL.

- 100-277Vac; 50-240W
- UL/Class P/ENEC05/CE/CB/RCM certified
- 10kV/6kV surge protection
- 3-in-1 isolated dimming
- IP67, 5 years warranty
- Programmable, CLO, ELA, SSA





## LED Shoebox Area Lights

by LEDtronics  
www.ledtronics.com

The SBX00xT series shoeboxes come in a sleek, modern blade-style design, and are offered with a varied choice of sensor accessories. The LED units are lightweight and feature adjustable brackets, yokes or trunnions, allowing for fast and easy installation. The high light output and various available sensor and mounting options on this new area light series make it ideal for applications such as parking lots, street lighting, building security floodlights, tennis courts, stadiums, walkway lighting, as well as construction lighting, and many others.

## Claypaky Sharpy Plus Aqua

by Clay Paky S.p.A  
www.claypaky.it

Designed in the spirit of the award-winning Sharpy Plus platform, the Sharpy Plus Aqua luminaire is an IP65-rated moving head fixture perfect for outdoor events, touring, permanent installations, cruise ships, and much more. This new fixture maintains the same performance features of its predecessor, the Sharpy Plus luminaire, in a new weather-resistant package; giving you greater flexibility in a single luminaire. At a price point every rental company will appreciate, this light offers a truly excellent performance and can be used in a wide range of environments and entertainment venues.



## Northwick Solar Wall Light

by Garden Trading  
www.gardentrading.co.uk

The Northwick Solar Wall Light is produced with a grey matte Powder Coated Aluminium frame. It comes with a built-in LED encased by a frosted Polycarbonate diffuser, with a lifespan of 100,000 hours. This outdoor wall light is designed to automatically turn on once it gets dark outside and turn off once the morning arrives. It also has a built-in motion sensor that brightens when movement is detected.



## Curling LED High Bay Light

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

The Curling LED High Bay Light is a professional food processing luminaire certified by NSF (National Sanitation Foundation). It ensures the food processing products used meet strict standards for public health protection. Curling uses non-toxic materials to ensure the health and safety of the production process.

Curling adopts a beautiful curve design that is simple and fashionable. It also has the practicality of easy washing. Curling's IP69K rating protects it from dust, grease, smoke, or high pressure water jets, suitable for poultry processing areas, beverage processing facilities, food processing industrial applications / facilities and sanitation areas.

It provides clean, efficient and long-lasting lighting for any food factory.

## ECOOS II

by Zumtobel  
www.zumtobel.com

The ECOOS II is a 360° radiant light with a timeless design. It is a minimalist, linear luminaire for the perfect, extensive illumination of offices and schools. This is the new slim version for a light and modern look, proven original in a classic design. It comes with a wide range of installation options.



## BULB057 (1957, Edition 2019)

by Flos  
www.flos.com

Bulbo was designed by Achille and Pier Giacomo Castiglioni for an installation at the XI Triennale in Milan in 1957. The 2019 edition by Flos reproduces the classic filament in tungsten with an LED source, preserving the same colour and intensity of the light as in the original. This lamp is a synthesis of redesign and ready-made: a large industrial bulb without its screw cap and with a shortened neck to take the shape of a bubble. The classic filament inside becomes its distinguishing feature, both decorative and illuminating. The light source itself highlights the technical design that characterises this lamp, and also makes it work.



Secure  
your stand



CONNECTED  
**LIGHTING**  
For a Better Life  
[www.ledexpo thailand.com](http://www.ledexpo thailand.com)

ASEAN's Show on LED Technology & Lighting Solutions  
**Let's gain access to the lucrative of lighting  
& LED market in ASEAN**

THAILAND  
**LED**  
EXPO 2020

+  **LIGHT  
ASEAN**

**24 - 26 JUNE 2020**  
**HALL 5-6**

IMPACT EXHIBITION CENTER BANGKOK THAILAND

☎ 02 833 5347

f in t v LED Expo Thailand

@ledexpo

✉ Wishjanondv@impact.co.th

# SUBSCRIPTION FORM

Fax your order to +65 6842 2581 or email us at [info@tradelinkmedia.com.sg](mailto:info@tradelinkmedia.com.sg)

Please (✓) tick in the boxes.



Southeast Asia Building  
Since 1974



Southeast Asia Construction  
Since 1994



Security Solutions Today  
Since 1992

**1 year (6 issues)  
per magazine**

Singapore	SGD\$60.00
Malaysia / Brunei	SGD\$105.00
Asia	SGD\$155.00
America, Europe	SGD\$185.00
Japan, Australia, New Zealand	SGD\$185.00
Middle East	SGD\$185.00



Bathroom + Kitchen Today  
Since 2001

**1 year (4 issues)**

Singapore	SGD\$32.00
Malaysia / Brunei	SGD\$70.00
Asia	SGD\$85.00
America, Europe	SGD\$135.00
Japan, Australia, New Zealand	SGD\$135.00
Middle East	SGD\$135.00



Lighting Today  
Since 2002

**Lighting Today** is available on digital platform. To download free PDF copy please visit:

<http://lt.tradelinkmedia.biz>

Personal Particulars

Name: \_\_\_\_\_  
 Position: \_\_\_\_\_  
 Company: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 \_\_\_\_\_  
 Tel: \_\_\_\_\_ Fax: \_\_\_\_\_  
 E-Mail: \_\_\_\_\_

## IMPORTANT

Please commence my subscription in \_\_\_\_\_ (month/year)

Professionals (choose one):

- |   |  |  |  |
|---|--|--|--|
| <input type="checkbox"/> Architect        | <input type="checkbox"/> Landscape Architect   | <input type="checkbox"/> Interior Designer | <input type="checkbox"/> Developer/Owner |
| <input type="checkbox"/> Property Manager | <input type="checkbox"/> Manufacturer/Supplier | <input type="checkbox"/> Engineer          | <input type="checkbox"/> 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**  
 Co. Reg. 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: \_\_\_\_\_

## March 2020

Worldbex 2020 📅 7

March 18 – 22

SMX Convention Center

Manila, Philippines

Email: [inquire@worldbexevents.com](mailto:inquire@worldbexevents.com)

Website: [www.worldbex.com](http://www.worldbex.com)

Megabuild Indonesia 2020 📅 9

March 19 – 22

Jakarta Convention Center

Jakarta, Indonesia

Email: [astri.ratnasari@reedpanorama.com](mailto:astri.ratnasari@reedpanorama.com)

Website: [www.megabuild.co.id](http://www.megabuild.co.id)

## April 2020

Architect'20 Expo 📅 IBC

April 28 – May 3

IMPACT Exhibition Center

Bangkok, Thailand

Email: [asa.ratirat@gmail.com](mailto:asa.ratirat@gmail.com)

Website: [www.asa.or.th/architectexpo](http://www.asa.or.th/architectexpo)

## June 2020

Guangzhou International Lighting Exhibition 📅 IFC

June 9 – 12

China Import and Export Fair Complex

Guangzhou, China

Email: [light@china.messefrankfurt.com](mailto:light@china.messefrankfurt.com)

Website: [www.light.messefrankfurt.com.cn](http://www.light.messefrankfurt.com.cn)

ASEAN Light 2020 📅 3

June 23 – 25

Malaysia International Trade & Exhibition Centre (MITEC)

Kuala Lumpur, Malaysia

Email: [kelly.fong@ubm.com](mailto:kelly.fong@ubm.com)

Website: [www.super8asean.com](http://www.super8asean.com)

Thailand LED Expo 2020 📅 78

June 24 – 26

IMPACT Exhibition Center

Bangkok, Thailand

Email: [wishjanondv@impact.co.th](mailto:wishjanondv@impact.co.th)

Website: [www.ledexpothailand.com](http://www.ledexpothailand.com)

## July 2020

Archidex 2020 📅 27

July 1 – 4

Kuala Lumpur Convention Centre

Kuala Lumpur, Malaysia

Email: [info@archidex.com.my](mailto:info@archidex.com.my)

Website: [www.archidex.com.my](http://www.archidex.com.my)



**LEDVANCE Pte Ltd** 📅 OBC

Singapore

+65 6375 4078

[enquiry.asean@ledvance.com](mailto:enquiry.asean@ledvance.com)

[www.ledvance.asia](http://www.ledvance.asia)

**Shenzhen SOSEN Electronics Co., Ltd** 📅 5

China

+86 755 2315 0729

[info@szsosen.com](mailto:info@szsosen.com)

[www.szsosen.com](http://www.szsosen.com)

**Yaham Optoelectronic Co., Ltd** 📅 1

China

+86 755 2950 3560

[sales@yahamlighting.com](mailto:sales@yahamlighting.com)

[www.yahamlighting.com](http://www.yahamlighting.com)

# architect'20

# REFOCUS HERITAGE

มองเก่า ให้ใหม่



28 APR -  
3 MAY 2020

**IMPACT**

Challenger Hall 1-3  
BANGKOK, THAILAND

Tel: (+66) 2 203 4279  
[www.asa.or.th/architectexpo](http://www.asa.or.th/architectexpo)



**asa**



# BAD LIGHT CAN RUIN YOUR WORKFLOW. BETTER SWITCH TO LEDVANCE LUMINAIRES.

As a trusted partner for general lighting, all our actions are directed at the fight against bad light. At LEDVANCE we combine traditional and modern, future-oriented lighting technologies, building on long-standing customer relationships and a powerful distribution network.

LEDVANCE offers a wide range of LED luminaires that is strongly geared to the special requirements in various areas of application – office, shops, hospitality, healthcare, industry, outdoor and logistics.

## LEDVANCE LUMINAIRES FOR BETTER PRODUCTIVITY

Good light can prevent you from losing concentration and increase performance on your tasks. With our LED luminaires, we can optimize your working area, providing an excellent illumination to improve quality, productivity and safety while reducing energy and maintenance costs.



## PRODUCT HIGHLIGHTS



### LEDVANCE® LED PERFORMANCE DOWNLIGHT

- System efficacy of up to 120lm/W
- High luminous flux of up to 2,520lm
- Long lifetime of 50,000 hours



### LEDVANCE® PANEL

- Homogenous light distribution
- Easy and quick installation
- Elegant design with slim housing and matt white frame



### LEDVANCE® CEILING

- LED protected for safe installation
- Homogenous light distribution
- Versions with sensor or IK10 available