

# lighting today

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Cover Story

## Plato's Coffee & Tea Lounge at Atlantis The Palm, Dubai, UAE

The hotel underwent a refurbishment under the creative eye of HBA Dubai. Preciosa Lighting was closely involved; creating lighting for seven different spaces throughout the large property. **p10**





**ON THE COVER**  
Plato's Coffee & Tea Lounge at Atlantis The Palm, Dubai, UAE

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# Dear Readers,

Welcome back to another issue of *Lighting Today* where we showcase the beauty of lighting in architectural projects around the world. Even with the ongoing pandemic, lighting companies continue to innovate new products and explore their use in different applications. We bring you the latest news and industry developments in this issue.

*Lighting Today* is now on the social media platforms – Facebook, Twitter and Instagram – to increase our presence and to reach out to a wider and greater reader base. We also understand the need of our readers to have more updated information on the fingertips, especially when they are on the move. Do follow us if you are on these platforms and get all the news more quickly than before.

We hope you enjoy this issue as much as we enjoyed putting it together. Take care and stay safe.

*Amita Natverlal*  
Editor

**Volume 3 / Quarter 3 Topics**

**Lighting Project:** Landscaping Lighting, Street Lighting, Tunnel Lighting, Facade Lighting

**Smart Lighting:** Retail & Hotels

**Product Showcase:** Interior, Exterior and Decorative Luminaries

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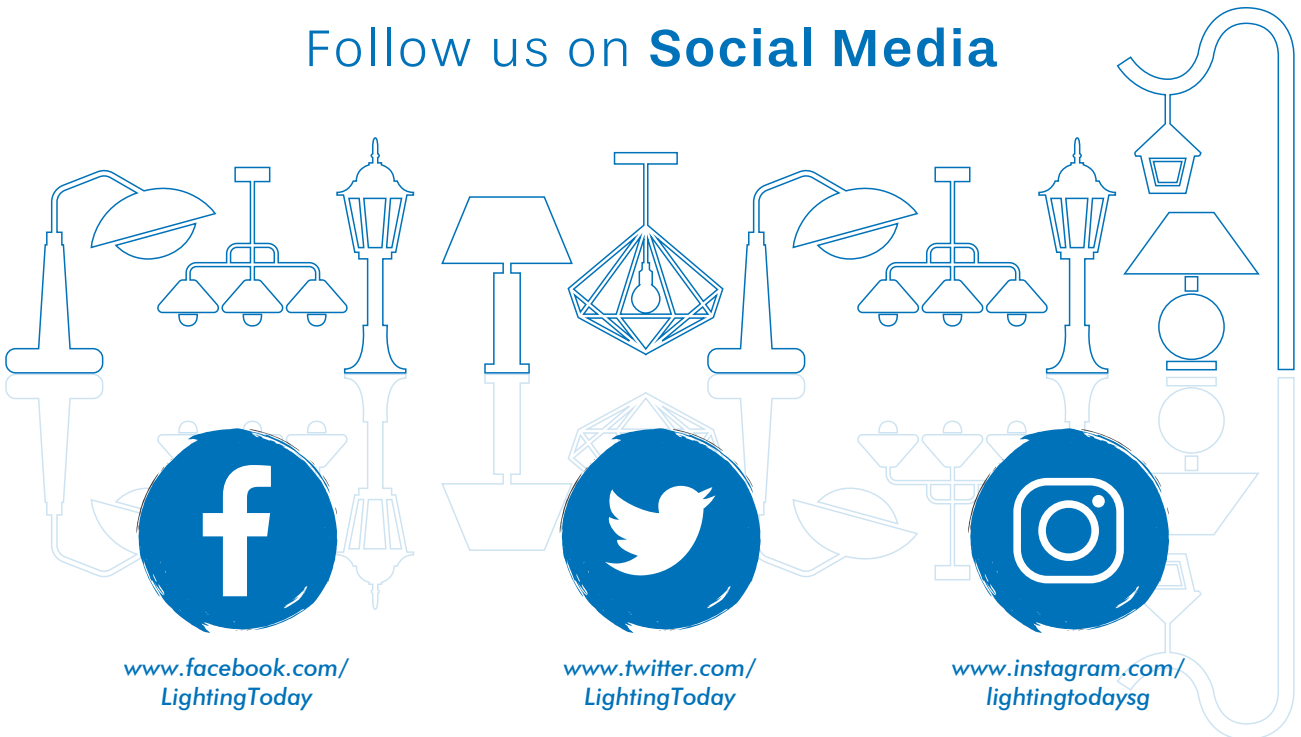
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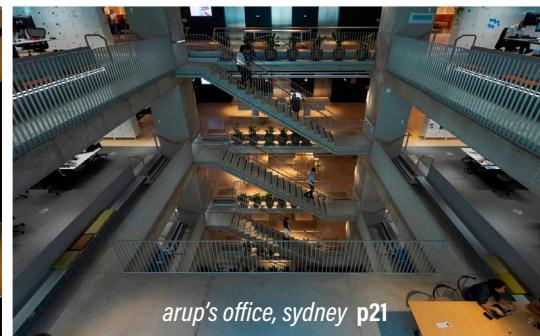
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## AWA is awarded LUXlife UK 2021 LEADING DESIGNERS AWARD

New York, New York, USA – AWA Lighting Designers is a winner of the upcoming LUXlife UK 2021 LEADING DESIGNERS AWARD, being awarded the title “MOST INNOVATIVE CREATIVE LIGHTING DESIGN PRACTICE, 2021 – New York”.

“Through our 19 years of history and growth, we have given priority to innovation and creation- even when we had limited fees on a project. The driver for us has always been the examination of the problem that needed solving, questioning common-place assumptions, and being iconoclasts. Like all journeys, it had its ups and downs (not including the Covid fall-out)... but we are proud that we stayed true to our mission of spreading joy through light in the built environment,” said Abhay Wadhwa, Design Principal and CEO, AWA Lighting Designers.

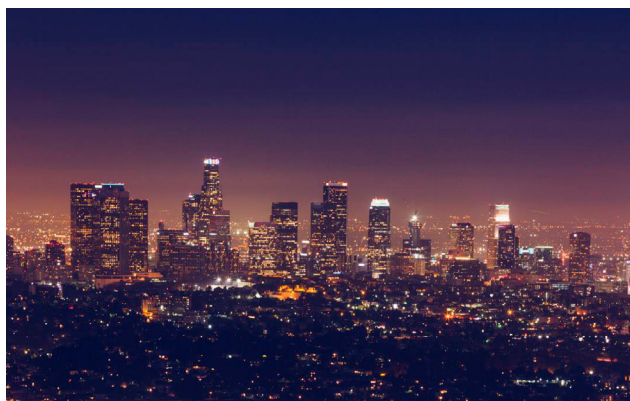


## DesignLights Consortium releases draft technical requirements for light usage for night applications

Medford, Massachusetts, USA – The DesignLights Consortium (DLC) has released for comment the first draft of new product specifications proposed to identify and promote outdoor LED lighting that is both energy efficient and shields the night sky from light pollution.

Announced during the International Dark Sky Week and informed by a Light Usage for Night Applications (LUNA) Advisory Group convened last month, the draft LUNA Technical Requirements are intended to mitigate the negative impacts of lighting at night, while providing appropriate visibility for people and limiting negative environmental impacts. The DLC is requesting and will accept comments on the draft policy through May 21.

“Protecting the night sky can be achieved and is consistent with our mission of increased energy optimisation, with a focus on quality, people and the environment. The DLC is excited to take this first step to distinguish lighting products that lessen the negative impacts of artificial light at night,” DLC Executive Director and CEO Christina Halfpenny said.



The DLC’s LUNA requirements aim to reduce sky glow from artificial lighting by requiring qualified products to meet uplight, dimming, and CCT thresholds. Photo courtesy of DesignLights Consortium.

“We thank the members of our LUNA Advisory Group for lending their expertise to these draft technical requirements and look forward to continued work with them and other stakeholders as we implement this new policy.”

The draft LUNA Technical Requirements will allow users of the DLC’s Solid-State Lighting Qualified Products List (QPL) to identify qualified products that are also designed to minimise light pollution. Scores of energy efficiency programmes across North America use the QPL as the basis for commercial and industrial lighting product incentives, as well as municipal lighting programmes. The LUNA programme and these draft requirements will establish performance specifications and best practices meant to:

- Set thresholds for light distribution, spectral characteristics and dimming control that decrease light scattered into the atmosphere to reduce sky glow and light trespass and enable more controlled illumination and darker skies to benefit wildlife and stargazers alike;
- Ensure efficient use of lighting energy through additional dimming and control requirements to help efficiency programmes meet savings goals and end users reduce operational costs;
- Enable lighting specifiers to select the right product for each application, ensuring appropriate visibility for people.

LUNA Advisory Group members who helped develop the proposed policy include Pete Strasser of the IDA; Terry McGowan of Lighting Ideas, Inc.; Naomi Miller of Pacific Northwest National Laboratory; Gayathri Unnikrishan of the International WELL Building Institute pbc; Alex Baker of the Illuminating Engineering Society; Kevin Fitzmaurice of Georgia Power, and Jim Benya of Benya Burnett Consultancy.

## Graham Hill joins Elation as Business Development Manager

Los Angeles, California, USA – Elation Professional's European headquarters is pleased to announce that from March 1st longtime lighting professional Graham Hill will be serving as the company's new Business Development Manager.

Graham is a familiar face to many in the industry, having developed a wealth of relationships over his many years in the entertainment lighting and electrical industries, including years as a key customer of Elation.

Graham brings decades of valuable lighting experience to the position and comes to Elation from a position as VP of Business Development at 4Wall Entertainment, where he developed and maintained customer relationships in Europe and the United Kingdom. He is perhaps best known for his many years as Company Director of Static Light Company, the London-based supplier of lighting solutions for exhibitions, corporate events, and motor-shows.

Graham's new role at Elation encompasses building collaborative relationships across the industry internationally, including working closely with lighting designers while

communicating market insight to the Elation product team. He stated, "This year is the 10th anniversary of my relationship with the Elation team globally. My experience with Elation products and support has always been second to none, from the smallest to the largest clients. Over those years, supporting the most creative and demanding of clients meant that Elation was often asked to create specific products to suit the needs of an industry sector. They did not disappoint and some of those products are still in the range today. The very exciting role I am proud to take up will be to continue that legacy of client support internationally for the well-established Elation products. I firmly believe that with the award-winning product families that have launched over the past few years such as the Artiste, Proteus and Fuze ranges, as well as the additions of Obsidian Control Systems and Magmatic effects to the portfolio, it is now by far the most innovative and creative on offer to the industry."

Graham has worn many hats over the years from operational management to directorship and brings a wide



Graham Hill

spectrum of competencies and strong market knowledge with him to support Elation customers. He has experience managing all aspects of business, including building networks and partnerships to coordinate and facilitate projects anywhere in the world. He has supported some of the world's leading design agencies, and worked on projects and collaborated directly with partners around the globe.

## Osram invests in UV LED specialist Bolb Inc.

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

"Osram already has various UV-C light solutions for disinfection, including LED and traditional technologies. The strategic investment in Bolb strengthens our know-how in the UV-C LED field and gives Osram a leading position in the market for disinfection with non-visible light," said Olaf Berlien, CEO of OSRAM Licht AG.

Currently, the majority of UV-C disinfection applications



Photo: © Osram

are based on conventional lighting technologies, usually mercury vapor lamps. Compared to these traditional lamps, UV-C LED technology has the potential to consume significantly less energy, while still providing the high light output required. The collaboration between Osram and Bolb promises to overcome this technological hurdle. Thanks to a unique technological building block for UV-C LEDs, Bolb is already succeeding in achieving outstanding efficiency values that are far ahead of other products available on the market.

## Illuminating Engineering Society partners with National Park Service

New York, New York, USA – The Illuminating Engineering Society (IES) and the National Park Service (NPS) have taken on the challenge to improve outdoor lighting in national parks without affecting night sky viewing, the fastest-growing visitor activity in parks.

“Night sky viewing is incredibly popular, and America’s national parks offer some of the best views of night skies,” said Karen Trevino, the National Park Service’s chief steward of natural sounds and night skies. “Staring at the night sky with the Milky Way streaking overhead is a quintessential experience for many national park visitors. Even national parks near urban centers often serve as night sky sanctuaries for those who live in our most populated cities.”

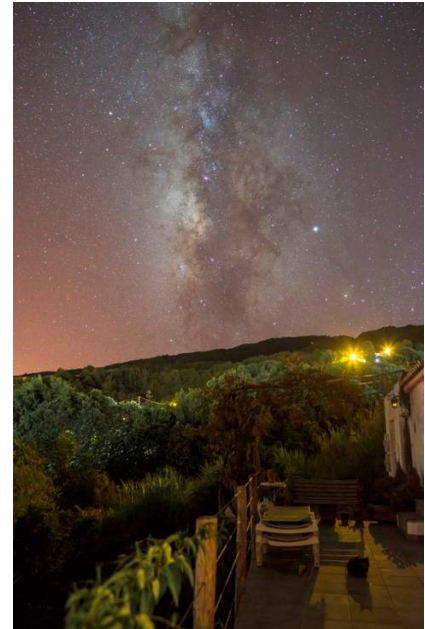
National Park Service staff along with staff and members of the IES will, in the coming months, develop lighting standards and best practices for parks and other protected areas. Those standards will be available to help plan

night sky friendly lighting in future construction projects in parks of the national park system.

American National Standards (ANSI standards) for lighting through the IES will be designed for resource protection and to keep park staff and visitors safe where light is needed. Communities that promote star gazing have these same needs and the standards and best practices developed by the NPS/IES collaboration will be available to those communities, counties, and states.

“This partnership between the National Park Service and IES will promote a shared understanding of the importance of the natural night sky and the effects of light on national park resources and values including wildlife, cultural resources and values, wilderness character, and visitor experience and enjoyment of these same resources,” said Brian Liebel, IES Director of Standards and Research.

The partnership will also promote collaborative research and educational



Nightsapes by Martin Lovekosi.

Photo: © International Dark-Sky Association

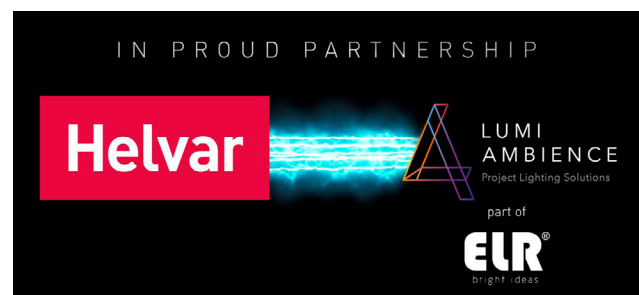
opportunities for park staff and partners, IES members, and the public.

## Helvar pursues growth with new partner, Lumi Ambience

Singapore – Helvar and Lumi Ambience are pleased to announce their exciting new partnership, merging forces to expand further into the Malaysian market. Lumi Ambience (part of the ELR group) are a fast-growing project lighting specialist located in Kuala Lumpur and Melbourne. The team works closely with Architects, Interior Designers and Lighting Designers. Through these relationships, Lumi Ambience deliver full end-to-end lighting solutions. The team showcase a wide range of high profile commercial and residential references throughout south-east Asia and Australasia.

This new Partnership looks to explore exciting new opportunities within the Malaysian market. It brings together over 30 years of technical and commercial experience gained by the Lumi Ambience team with the wide Helvar portfolio of intelligent lighting solutions that combines modern innovation with true lighting control specialism and heritage. This synergy promises to deliver state-of-the-art, future-proof lighting control systems across an array of intelligent smart spaces across Malaysia.

Lars Biese – Head of Channel Sales: Helvar commented: “It’s exciting to see such promising growth potential in Malaysia with Lumi Ambience. The team demonstrate a very forward-thinking approach. They have clear expertise as full solution lighting specialists. This is coupled with ambitious expansion plans which are perfectly aligned with



Helvar’s Partner growth strategy. We’re looking forward to a prosperous partnership with the team as we head into 2021 and beyond!”

Stanley Ong, CEO ELR Group continues: “Helvar’s solutions focus on creating a human-centric experience gives us valuable knowledge and the opportunity to work seamlessly with our luminaire selections. Combined with the forward-thinking strategy of wireless, predictive AI and digital services, Helvar’s solutions are the best fit for future-proof and continuous improvement smart buildings. The brand history and reliability of Helvar provide a greater level of confidence for our clientele to implement into their premises. We are looking forward to turning everyday spaces into brighter spaces with Helvar.”

## “Best of the Best”: another triple win for Zumtobel at the Red Dot Awards 2021

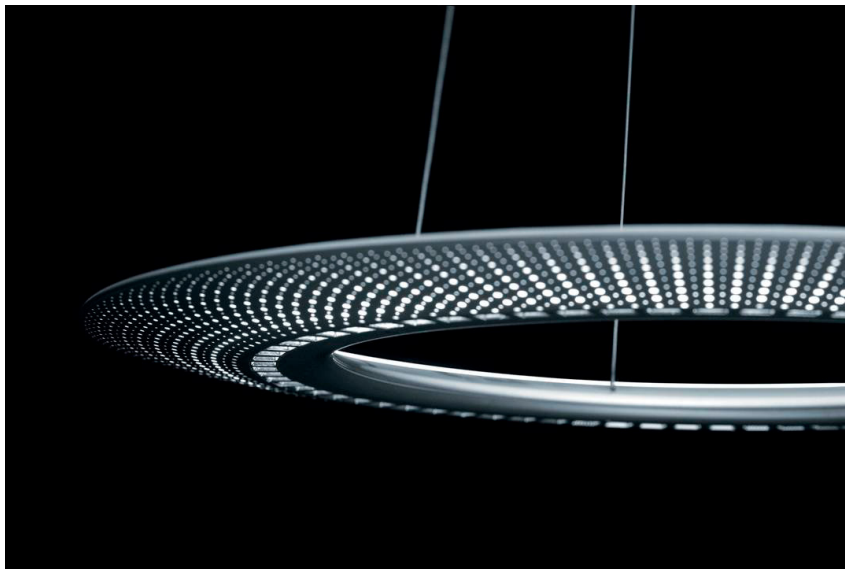
Dornbirn, Austria – Zumtobel shines once again this year at the Red Dot Awards: the international design luminaries of the specialist jury have again recognised three different Zumtobel lighting solutions for their exceptional achievements in design – a multifunctional high-tech luminaire developed in collaboration with renowned Austrian design studio EOOS, the latest variant of an extremely precise and flexible spotlight series, and a ring luminaire for offices with balanced light distribution of almost 360 degrees.

### Setting new standards for shop and retail lighting in a minimalist design language: VIVO II

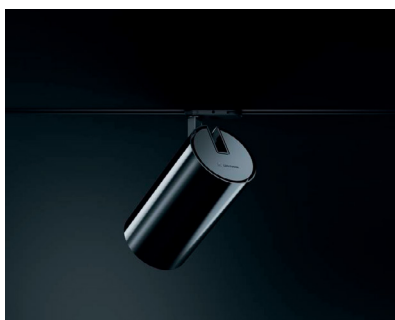
The new VIVO II product family is Zumtobel’s equivalent of a Swiss army knife. Extremely versatile and available with a whole host of accessories, the second VIVO generation meets all the demands of today’s retail world. Because retail concepts are changing, moving from being a “point-of-sale” to a “point-of-experience”. And having the right light is crucial to the success of these emotional worlds of experience. This requires adaptive lighting that enables brands, products and spaces to be presented in a way that is tailored to the specific target group and application. Zumtobel has worked with EOOS to develop the next generation of the successful VIVO product family. The chief attraction here is that for the first time, the electronics are fully integrated into the housing or track. With VIVO II, you can therefore effectively meet the requirements of any lighting application or room architecture with ceiling heights of up to ten metres with just a single, powerful, ultra-flexible series of luminaires – and a consistent design language.

### Intelligent zoom focus that draws the eye to the essentials

A visit to a museum can be an unforgettable experience if the exhibition design, architecture and lighting are perfectly aligned. Only then can artworks be appreciated in their purest form. Designed by David Chipperfield, the third generation of the ARCOS spotlight family allows Zumtobel to offer absolute



AMBITUS, design by Yorgo Lykouri. Photo: © Zumtobel



VIVO II, design by EOOS. Photo: © Zumtobel



ARCOS III, design by David Chipperfield. Photo: © Zumtobel

freedom in terms of presentation and dramaturgy. For the first time, an innovative zoom focus function enables each individual work to be lit differently in order to bring out its unique character. In addition, high-quality, multi-channel tunableWhite technology combines high colour rendering with balanced light distribution, for beautiful contrasts and striking details – and a perfect visual experience of the art.

### “Best of the Best”: the first truly impressive round office luminaire

Where linear lighting systems often create a visual break in geometrically complex architecture, the round pendant luminaire AMBITUS radiates calm. With this ring luminaire – designed by Yorgo Lykouria from RAINLIGHT STUDIO – the light follows a predefined

shape but can still change direction. The omnidirectional light source acts like a small sun – with light distribution of almost 360 degrees. Light has a visual, emotional and biological effect on us and our environment. Thanks to tunableWhite technology, AMBITUS delivers direct and indirect light with a light temperature that can be adapted easily to diurnal rhythms. The luminaire can be controlled and the colour temperature adjusted via a simple switch or from a smartphone. AMBITUS is a balanced synergy of design and technical sophistication – its true skill lies hidden inside. In an office for two people, which would normally require two linear lighting solutions, one ring luminaire is all it takes to ensure sufficiently high-quality light at the workstations, making AMBITUS the most impressive round office luminaire currently on the market.

## IALD reschedules Enlighten Americas 2021 to 2023

Chicago, Illinois, USA – The International Association of Lighting Designers (IALD) is rescheduling the Enlighten Americas 2021 conference to 2 to 4 November 2023, in the same scenic mountain destination of Banff, AB Canada. IALD's decision comes as a result of the continued uncertainty in Canada around the pandemic, including Canadian travel restrictions and the country's rules about in-person events.

"The Enlighten conferences have always focused on bringing our lighting communities together in one place. Although we're disappointed not to be able to bring everyone together as soon as we hoped, rescheduling our conference in Canada is the best action to take as responsible leaders," said IALD President Douglas Leonard, IALD.

"IALD will continue to host Enlighten conferences in 2022 and 2023 and use this opportunity to explore a reimagined Enlighten moving forward." "Rescheduling Enlighten Americas was a clear decision because of the uncertainty around travel and in-person events in Canada due to the pandemic," stated IALD CEO Marsha L. Turner, CAE. "As a global organization that is built around community and connection – both locally and globally – we will continue to connect, learn and celebrate through our online activities and events," added Marsha.

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# Plato's Coffee & Tea Lounge at Atlantis The Palm, Dubai, UAE

*One of Preciosa Lighting additions to this well-known Dubai property is its custom-designed spiralling seashell.*

Atlantis, The Palm is one of the icons of Dubai's hotel scene. Ideally located on the Arabian Gulf and with views to the Dubai skyline, guests also enjoy exclusive guest rooms, world-class dining and an adventure aqua park. The hotel underwent a refurbishment under the creative eye of HBA Dubai. Preciosa Lighting was closely involved; creating lighting for seven different spaces throughout the large property.

Definitely the most unmissable installation is the spiralling shell located in Plato's Coffee & Tea Lounge. Inspiration came from the sea for this installation, designed by Preciosa designer Petr Kořínek in collaboration with HBA Dubai. The chandelier is comprised of approximately 35,000 cut beads in three shades of blue. To create the illusion of being underwater, about 4500 almond trimmings on 180 hanging points float around the shell.

In the Ossiano Underwater Bar & Restaurant, a variety of original Preciosa creations enlighten the space. Welcoming diners is a sparkling violet and crystal Stardust wall that is more than seven metres long. With a nod to unique underwater sea creatures, the main chandelier is two metres across and consists of crystal glass tubes in shades ranging from honey to clear. The installation is brought together with a gold and bronze metal finish.

In a private dining room, guests linger under nearly four metres of hand-made crystal spheres. Preciosa designer Anežka Závadová created three large installations for a public corridor from honey and clear hand-blown crystal leaves. Setting the right first impression was also important to designers when guests enter Imperial Club & Bar. The lighting installation features a mix of optical glass and cracked glass in shades of champagne and amber. The gold and bronze metal finish adds to the warmth of the light.





Artist's impression of Mina on Palm Jumeirah. Photo: © Azizi Developments

# Azizi Developments inks deal with Light Concept to beautify its Dubai projects

Dubai, UAE – Azizi Developments, a leading private developer in the UAE, has appointed Light Concept, a reputable lighting consultant, to incorporate façade lighting as a distinct feature for Aura, Mina, Royal Bay, Aliyah, and Berton. The artistic lighting will emphasise the stunning architecture of the developments, elevating their aesthetic presence and giving them a distinctive look.

The six-digit contract comprises lighting concepts that aim to complement the surrounding environment, illuminate the buildings' exceptional architectural features, and provide striking projections that make it beautifully unique to both see and reside in. Mr Mohamed Ragheb Hussein, Chief Development Officer at Azizi Developments, said: "We are delighted to have contracted Light Concept, the very reputable, high-calibre lighting



consultant, who will now support us in adding state-of-the-art, awe-inspiring façade lighting to our prized developments. Light Concept has consistently maintained the highest standards in quality lighting and has worked on several world-renowned projects. We look forward to the upcoming beautifications, which will add further touches of prestige to our already-spectacular developments.”

“The visual impact that tailor-made, artistic and well-thought-out façade lighting can have should not be underestimated – it is what sets a development apart from others and contributes significantly to making the building and its design more noticeable, memorable and iconic. This benefits owners, as well as investors who want to attract tenants,” he added. Spanning nearly 38,500 square metres of built-up area, Mina, one of the iconic Palm Jumeirah’s most architecturally interesting, luxurious developments, features 178 units, comprising 120 one- and 54 two-bedroom residences, as well as four spacious, lavishly designed penthouses. The project also comprises several retail units across 1,847 square metres, and over 69 percent of its total area is allocated for lifestyle-enhancing amenities, including a children’s play area, a jogging track, and green outdoor spaces, private beach access, two swimming pools, a fully equipped gym and a comprehensive health club. Immaculately designed to leverage its waterfront location and overlooking the Arabian Gulf with stunning views of the city’s spectacular skyline, Mina offers residents seaside serenity at its finest.

Berton, another building that will benefit from the new lighting consultancy contract, brings together masterful craftsmanship and interior artistry with gracefully furnished homes that come with high-end parquet flooring, state-of-the-art décor, and generous spaces. The property offers customers the opportunity to live in one of the most up-and-coming locations in the emirate – situated in Al Furjan, near Sheikh Mohammed bin Zayed Road, Sheikh Zayed Road, and the new Expo 2020 Route metro line, Berton is remarkably well-connected to the entirety of Dubai’s major points of interest. With its ease of access to the vibrant Expo 2020 site as well as the Al Maktoum International Airport, the development is at the forefront of global interconnectedness.



Artist's impression of Berton. Photo: © Azizi Developments



# Calgary's Arts Commons expands lighting inventory with Ayrton and Robert Juliat fixtures

**A** multi-venue arts centre in downtown Calgary, Alberta, Canada, Arts Commons (formerly EPCOR Centre for the Performing Arts) has invested in a complement of Ayrton lighting fixtures and Robert Juliat followspots from Sapphire Sound.

Arts Commons is located in Calgary's downtown Cultural District and is one of the three largest arts centres in Canada. Its five theatres and concert hall are home to six resident companies and host a wide array of guest performers annually. While Arts Commons is currently closed due to the COVID-19 pandemic, the centre has been busy upgrading and expanding its lighting inventory in anticipation of reopening.

According to Kris Ladd, Head of Lighting at Arts Commons, 16 Ayrton Huracan-X and four Ayrton Diablo-S fixtures were purchased for the Jack Singer Concert Hall, the permanent home of the Calgary Philharmonic Orchestra and the largest venue in the centre. It seats 1,800 and boasts the 6,040-pipe Carthy Organ.



Three Ayrton Mistral-TCs have been installed in the Engineered Air Theatre, a 185-seat space used for concerts, films, plays, weddings, receptions and galas, while a pair of Robert Juliat 800W LED Arthur followspots have been added to the 750-seat Max Bell Theatre, home to Theatre Calgary.

Brian Cloutier, in sales and design for lighting at Sapphire Sound, worked with Ladd during the upgrade process, providing equipment for demos and shootouts and furnishing the fixtures selected for the three venues. “Kris knows what he wants, which makes it very easy for me,” he noted. “I’ve also had a long relationship with ACT Lighting, and they give us amazing support for everything we purchase.”

Ayrton’s versatile, high-performance Huracan-X fixtures have become the main profiles for the Jack Singer Concert Hall. “Our current fixtures, bought when LED moving lights were a new thing, are RGBW lights that produce excellent colours but not very bright white,” said Kris Ladd. “White sources, on the other hand, tend to lose intensity on colours, and most can’t make red. I wanted something that was a lot brighter in the white and enabled me to mix a red. A lot of our orchestra shows call for us to fade colours, so I need to be able to mix to that colour.”

“With Huracán-X I can get a nice red and very bright white. I can even use a whole bunch of colour flags, multiple

layers of gobos and animation wheels and still get good intensity that really punches through,” he reported. The new Huracáns allow Ladd to get full stage washes of gobos, too. All 16 fixtures are mounted on several trusses on dollies so they are “ready to go” for concerts.

Ladd also added Diablo-S fixtures to the concert hall. “They are the smallest, full-featured LED profiles I could find,” he explained. “I will tuck them into the canopy for specials, especially with the orchestra.”

A large laminated spruce-wood acoustical canopy is suspended over the stage; it can be raised or lowered to tune the hall according to the specific needs of each performer. “Before, if the orchestra did a pop show with lead singers there was no way to highlight the singers, to make them separate out from the orchestra without adding ugly truss,” said Ladd. “Now, with Diablos in the canopy, we can give them a full wash.” Both the Huracan-X and Diablo-S fixtures are “extremely quiet in silent mode, which is very important for the orchestra,” he added.

The Engineered Air Theatre, which has no permanent company and hosts a variety of shows year-round, has hung the Ayrton Mistral-TCs from the grid above the stage. “We needed a fixture to add more interest and jazz up a show,” said Ladd. “Given the small size of the theatre these lights are as big as I could go, but they are still a full-featured LED

in a small and lightweight package. Three Mistrals will easily fill the whole stage.

“I looked at cheaper options, but everything else that size typically did not have enough features, but the Mistrals had everything.”

The Arthur LED long-throw followspots from Robert Juliat replace followspots installed in the FOH cove in the Max Bell Theatre for its opening in 1985. Prior to the closing of Arts Commons due to the COVID-19 pandemic, Ladd demo’d Robert Juliat’s 600W Oz followspot in search of a medium- or long-throw spot for greater intensity.

“Oz was tempting; it was brighter than what we had, but we felt we needed a little more intensity and wanted an LED instead of an arc source,” Ladd recalled.

“We were fortunate that Arthur, an 800W LED, came out soon after and was everything we needed!”

A long-time ACT Lighting customer, Arts Commons is eager to reopen and put its new fixtures to work. “ACT gives us quick and efficient service,” said Ladd. “They are always ready to respond right away when we need them.” Ryan Hindinger, Director of Sales Logistics at ACT Lighting, facilitated the Arts Commons sale.

ACT Lighting, Inc. is the exclusive distributor of Ayrton and Robert Juliat in North America.



# High school lighting design blends modern aesthetic with historic campus origins

## PROJECT DATA

**Project Name:** Herbert Hoover High School  
**Location:** San Diego, California, USA  
**Architect:** AVR Studio  
**Lighting Design:** Turpin & Rattan Engineering, Inc.  
**Project Completion:** August 2020  
**Photography:** Emil Kara

Hoover High School, originally constructed in 1929 in the Spanish Revival style, embarked on a revitalizing project. The San Diego school introduced an administration/classroom building and theater and re-designed the entry site landscaping and connections to the main campus. Over the years, buildings had been demolished, and new structures were introduced, but gone were the original buildings' gravitas and the campus' connection to the surrounding neighbourhood. San Diego Unified School District approached AVR Studio to lead the transformation. In turn, AVR Studio worked with Turpin & Rattan Engineering, Inc. on many facets of the project, including lighting. Karen Ortega, project manager at Turpin & Rattan, spearheaded the lighting design and selected Luminis products for several exterior and interior applications.

Connecting the new project to the greater campus and the adjacent community was a driving force for the design. Broad, sweeping paths lead from the street to the new buildings and onto the main campus. Luminis' Eclipse EC613 luminaires provide the area lighting and wayfinding for the entrance pathways, with the 29 pole-mounted fixtures leading up to the campus entries. "Randy Robbins, Architect at AVR Studio, had seen the Eclipse fixtures in one of my other projects downtown," said Ortega. "We both agreed Eclipse EC613, with its superior optics and stylish design, was an excellent fit for Hoover." The new classroom/administration facade's main entrance echoes that of the original 1929 building, with a grand entry arch edged with pre-cast concrete. To maintain synergy with the pathway lighting, and in a nod to the 1920s, Eclipse EC613 wall-mounted luminaires flank this arch and illuminate the metal building entry signage. Additional wall-mounted fixtures line an exterior staircase, maintaining the aesthetic of the nearby pole-mounted versions and providing additional security for individuals utilising the stairs at night.



Luminis' Syrios SY800 wall-mounted cylinders provide high performance LED perimeter lighting around the exterior of the 500-seat theatre and classroom/administration buildings. The unique integral tilting mechanism in the SY800 allows the optic to be positioned to push light away from the building, illuminating the pathways and entrances. Staff and students can pass safely by the structure, or through a doorway, in the evening and the 37 fixtures anchor the more contemporary aspects of the project's design. "Both the Eclipse and Syrios luminaires provide seamless blends between the historic campus origins and the modern aesthetic of the new buildings," said Robbins.

Beyond design, durability was a concern for the exterior lighting, with the potential for inclement weather. Housing for Eclipse and Syrios is manufactured with a cast aluminum, and the EC613 has a high impact acrylic diffuser. Both luminaires will stand up to the elements over the long term. Fixtures also provide full cut-off to ensure no light trespass to nearby school windows or community buildings. "One of the appeals of working with Luminis is the depth of their lines," Ortega said. "I was able to carry the exterior design aesthetic indoors with fixtures from the same product family."

To that end, Ortega selected three Eclipse EC613 pendants to hang in a stairwell of the classroom/administration building. These are visible through the upper windows when viewed from the main walkway, providing a cohesive lighting design from outdoors in. The Syrios aesthetic also transitions well into the theater building. Six Syrios SY310 surface-mounted cylinders are located inside the theater lobby to provide illumination to visitors passing through. These are complemented by six Syrios SY610 cylinders, which are mounted in window mullions to light up the same lobby's interior staircase.

"Herbert Hoover High School has a strong presence along the neighbourhood's main thoroughfare," said Robbins. "And community response has been overwhelmingly positive to the new buildings and landscaping. They are thrilled to see the



campus emerge in recognition of the past yet positioned to take on the future." "My job as lighting designer is to accentuate what the architect has designed so that the lighting blends seamlessly into the architecture," Ortega said. "With Luminis' help, I believe the architect's vision has been accomplished."



# Xicato and Legrand Smart Controls collaboration at Kreon's Tech-Forward Headquarters

Xicato, Legrand and Kreon combined their expertise to design a highly flexible, energy efficient smart building with the ability to create personalized spaces for their employees. Freed from traditional rigid wired and centralized controls systems, the Xicato Bluetooth Mesh controls system including Xicato's intelligent drivers afforded the flexibility needed for Legrand's Vantage system to create an environment for employees that delivered customized spaces with the utmost ease of use. Located in Belgium and exhibiting the finest in light fixtures, Kreon's headquarters and showroom elicit the ultimate in design and personal comfort.

## The challenge and solution

Kreon and Legrand's Vantage team have worked together before so they were up to the challenge of finding a technical solution that could deliver upon the project specifications. Kreon saw light control as a key requirement for their new headquarters and showroom. The light control system had to offer their employees the ability to personalize their environments as well as provide flexibility and reliability at the same time for the showroom to quickly adapt to new configurations. The customization and adaptability requirements brought them to Xicato, well-known for their quality solutions in both lighting and advanced controls. Leveraging Xicato's gateway (XIG) with open API and Bluetooth mesh wireless controls, Legrand developed a software driver to pass commands to Xicato's XIM smart light modules and smart drivers (XID) and allow light management through touch screen control from Legrand



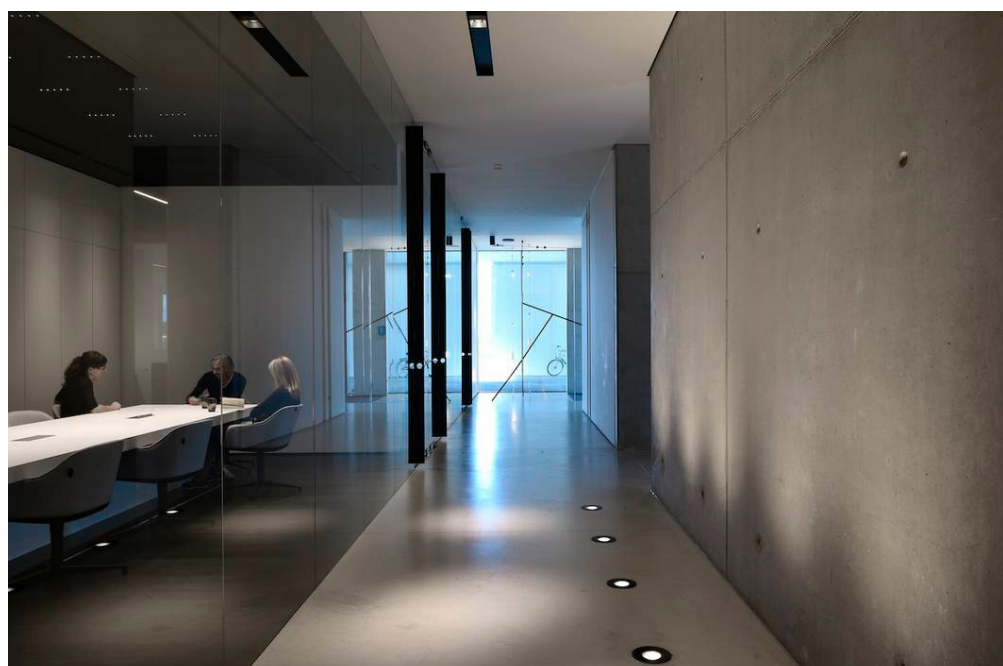
**Xicato’s controls provides ease of integration**

As the smart building industry has evolved so has the concept of the smart office space. The primary benefits are that it gives employers a competitive advantage by increasing productivity and satisfaction of employees while offering smarter energy management capabilities. A barrier to the smart office space is often the complexity involved due to the integration requirements between many building systems. The Kreon project did not have this issue. Despite the sophisticated light and controls environment requested by Kreon, the project took just over two days to complete due to the flexibility and ease of integration between Legrand Vantage and Xicato’s Bluetooth mesh system, along with other third-party building systems. Overall, the collaboration between the three organizations resulted in a personalized, healthy, reconfigurable building environment with a pleasing aesthetic design that Kreon employees enjoy every day while providing energy savings for years to come.

Equinox displays within each office. The Xicato gateway communicates the commands to the Xicato XIMs, a smart light module with outstanding light quality, and XIDs, wirelessly thru Bluetooth mesh, to drive various light sources from both Xicato and 3rd party vendors per individual luminaire requirements.

interface that offers a feature set they are used to.

Xicato’s Bluetooth mesh scalability also meant there was no practical limit to meet the requirements of the installation now or in future should the need for reconfiguration and expansion arise. With a combination of sensors to detect light and movement, set schedules and personal choices, employees can now choose various light levels, music volumes, temperatures, and shade levels that meet their individual needs. Additionally, the showroom requirements are easily met with ease of reconfiguration to add or change products, create custom scenes with reliable controls – all with a user



## Christie Crimson Series laser projectors illuminate cultural show in Furong Ancient Town with spectacular visuals



Photos: © Zhongqing Yingye Group (Left & below)

Titled “Revelry of the Blooming Hibiscus”, the nighttime spectacular celebrates the rich culture of Tujia people, one of the country’s largest ethnic minority groups known for their remarkable singing, dancing and songwriting abilities. Meticulously choreographed by famous theatre directors featuring elaborate indoor and outdoor stage designs, lighting effects and a riveting storyline, this highly anticipated cultural performance is a key highlight of the annual Sheba Festival, an important occasion for Tujia people to revel, socialize and pay tribute to ancestors.

The show made its official debut in May 2020 as part of China’s recovery efforts from the COVID-19 pandemic. In a move to enhance the audience experience and augment the storytelling process, producers of “Revelry of the Blooming Hibiscus” decided to include digital projections for both indoor and outdoor segments of the show in its second season, which kicked off in late 2020. The projections were accomplished by Christie’s partner Zhongqing Yingye Group using three Christie Crimson WU31 laser projectors installed across the stage area to deliver bright, bold visuals.

A spokesperson for Zhongqing Yingye Group said, “We are proud to be involved in this extensive cultural performance in Furong Ancient Town that celebrates the history, culture and accomplishments of the Tujia people. The Christie Crimson WU31 is our top choice for this project as bright, vibrant images are required to drive the storytelling and complement live performers onstage in both indoor and outdoor environments. With an IP5X-sealed, solid-state laser light source in a rugged and compact chassis, the Crimson WU31 is well suited for large-scale events like this.”

The spokesperson added that the two Crimson WU31 projectors deployed for the indoor performance are warped and edge-blended to display a slew of exciting images on a



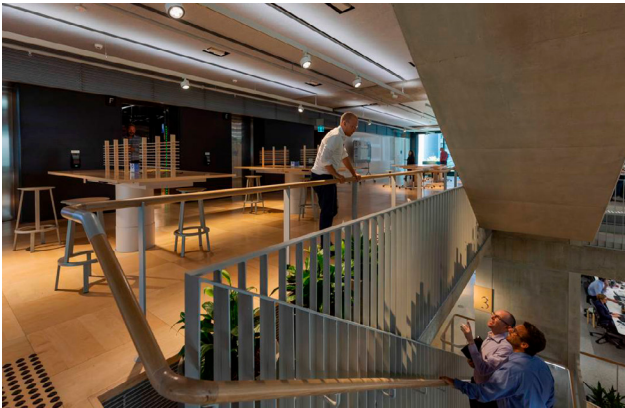
14-metre-wide (45-feet-wide), 6-metre-high (19-feet-high) backdrop. A third Crimson WU31 is used outdoors where visuals are presented on a projection canvas measuring 23 metres (75 feet) in length and 7 metres (23 feet) in height. This projector is housed in a weatherproof enclosure to protect it from moisture and inclement weather.

April Qin, Sales Director for China, Enterprise, Christie, commented, “We are delighted that Zhongqing Yingye Group has accomplished this amazing project in Furong Ancient Town that demonstrates the capabilities of Christie’s high-brightness Crimson Series laser projectors. Built tough and always ready to deliver big, bright and intensely colorful images, the Crimson Series has become the 3DLP® projector of choice for large venues and staging events due to its excellent track record in terms of performance, reliability and service support.”

## ERCO Project: Arup Office, Sydney

### PROJECT DATA

**Client:** Arup, Sydney / Australia  
**Electrical Planning:** Arup, Sydney / Australia  
**Lighting Design:** Arup, Sydney / Australia  
**Channel Partner:** Jadcross Lighting, Sydney / Australia  
**Photography:** Jackie Chan, Sydney / Australia



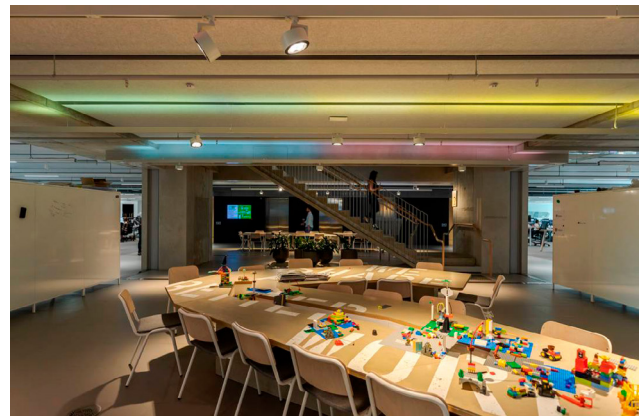
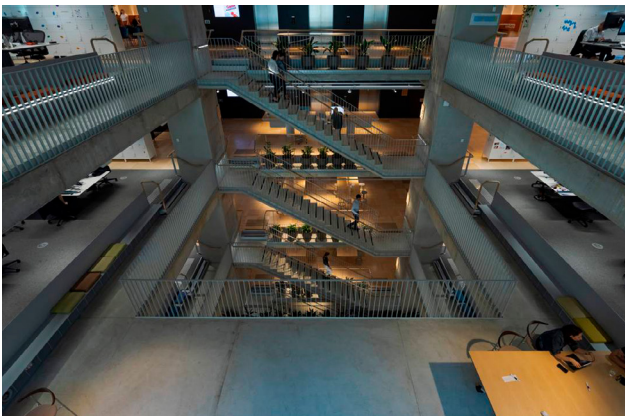
Working from home has become the standard – at least for now. Yet the days of “classic” office work are not over. Human nature calls for interaction, communication and collaboration. Rooms and spaces have to function, people need freedom of movement, and surroundings that welcome and inspire them.

Jadcross, ERCO Lighting Channel Partner in Sydney Australia, was given the brief to make the shared spaces in Arup’s regional office ‘work’. Ambient lighting is introduced via wallwashing, bringing out the warm wood panel tones and reflecting light into the space. Minimum light delivers maximum benefit by placing the focus squarely where eyes are levelled. The space is bright, and free of glare and shadows.

Strong accents draw attention to key spaces. Uplighting from hi-trac tracks adds to the ambient backdrop, whilst Parscan, Pantrac and Oseris in-track luminaires are focused toward work surfaces, artwork, plants and dedicated collaborative zones. A final touch? Recessed Compar



luminaires make practical sense in corridors: oval flood beams keep costs down because the fittings can be optimally spaced. Back to work? Yes please!



## MEGAMAN® redefines outdoor floodlight with TITO Series

**H**ong Kong – In January 2021, MEGAMAN® launched TITO Outdoor Floodlight for a wide range of outdoor applications where visibility and safety are important. Designed to perfectly replace HID (high intensity discharge) floodlights, TITO provides instant flicker-free light, with a high luminous efficacy up to 164 lumen per watt. TITO outdoor floodlights are artificial lights most suitable for illuminating sports facilities, stadiums, industrial areas, facade and billboards.

The high power energy-efficient MEGAMAN® TITO floodlight series illuminates a vast outdoor area including carparks, gardens, parks and sports centres. The die-cast aluminum body is robust but slim and compact, creating a pleasing appearance while delivering high-performance lighting. With an operating temperature ranging from -30°C to +50°C, TITO's all-weather nature and high heat dissipation capability make TITO floodlights extremely durable and suitable for a



Photo: © MEGAMAN®

vast majority of outdoor applications.

Best of all, the TITO series lowers total cost of ownership (TCO) and can deliver fast payback because of its high energy efficiency and minimum maintenance costs. TCO is the purchase price of an asset, plus operating costs over the asset's lifespan. When choosing among alternatives in purchasing LED lightings, a buyer should not only look at the short term price (or purchase price), but also its long-term price, which is its TCO. The item with the lower TCO usually has the better value

in the long run. Outdoor locations such as billboards may operate 24 hours per day, managing energy costs is critical for facility manager and owners. The new TITO series delivers energy savings up to 50 percent compared to the outdated metal halide fixtures. Its ultra-long lifetime of up to 50,000 hours also implies low maintenance or replacement costs.

The TITO series has high surge protection up to 6kV (L/N-PE) and 4kV (L-N) which prevents costly outages, time-consuming repair work and expensive replacement of the luminaires. Rated IP66, the TITO series has fully waterproof enclosure and rated IK08 for high impact resistance, making it a perfect luminaire for outdoor lighting.

With low initial cost and zero maintenance expenses, the TITO series is the ideal choice to transform any poorly illuminated outdoor locations to an inviting, well-lit and pleasing environment.

## NICHIA's new UV-C LED disinfection efficacy proven to combat viruses

**N**ICHIA's newest deep UV LED, the NCSU334B, is confirmed to eliminate up to 99.99 percent of SARS-CoV-2 virus by an independent research conducted by Tokushima University. At a peak wavelength of 280 nm, NICHIA's deep UV LED outperforms other commercially available UV-C LEDs, regardless of wavelength, output, efficiency and lifetime.

Experiments conducted by the university's Biomedical Sciences department confirmed that irradiating SARS-CoV-2 with NICHIA'S NCSU334B for 30 seconds, with 51mJ/cm<sup>2</sup>, exhibited 99.99 percent inactivation (as can be seen in Figure 1 below), a key activation log to achieve. Additionally, the experiment was operated based of the NCSU334B's binned input power and conditions of 1.7mJ/cm<sup>2</sup> and 5 cm distance. There remains adequate room to reduce the time or increase the dosage depending on the conditions or the design of its working distance, the number of LEDs or the input power. For example, when designing with half the working distance, the performance increases four times.

Reflecting its leadership team's commitment to serve global markets, NICHIA has scaled up its investment in R&D and manufacturing capacity for its UV LED solutions. Now in

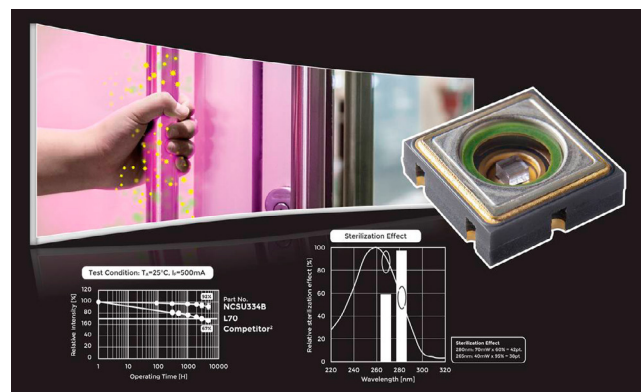


Image courtesy of NICHIA.

mass production, NICHIA's NCSU334B at 280 nm achieves industry-leading output, efficiency and lifetime. It delivers a typical irradiance of 70mW with a wall-plug efficiency (also known as radiance efficiency) of 3.6 percent, an improvement of 27 percent compared to its predecessor. With a hermetic seal, the solution also provides long lifetime performance,

especially at peak temperatures and humidity levels.

While traditional UV-C technologies, such as low-pressure mercury vapor lamps, are limited to a 254 nm peak, the most efficient wavelength to disinfect bacteria and viruses is known to be 260 nm due to the peak absorption spectrum of the DNA/RNA. However, NICHIA has demonstrated that 280 nm delivers the highest virucidal power as it has a very strong irradiance, wall-plug efficiency and lifetime, all at practical operating conditions vs. many other unreasonable claims in the market. Indeed, data highlights that the virucidal power of the 280 nm LED is approximately 1.3 times (127 percent) that of 265 nm LEDs. The 280 nm LED also delivers a lifetime 10 times longer than a 265 nm LED.

UV-C light is making a significant contribution to combatting viruses and bacteria, simplifying traditional methods. For example, to obtain a high viricidal effect (i.e. 4-log) when using an alcohol solution for disinfection (containing 77–81 percent ethanol), surfaces need to be sufficiently wetted with the substance or require significant effort and time, often times beyond 30 seconds. Used in conjunction with such measures, NICHIA's 280 nm deep UV LED can offer a high viricidal effect while saving time and effort.

Further information about the Tokushima University research and NICHIA's NCSU334B 280 nm UV-C LED solution is available from the NICHIA website.

## UNStudio and Delta Light join forces to create Soliscape – a versatile light and soundscape system designed to create optimum conditions for wellbeing

**A**msterdam, The Netherlands – UNStudio and Delta Light have joined forces to endeavour to improve the wellbeing of people in our rapidly changing work environments, where human health has become a primary focus for employers.

Together, they are developing Soliscape, an extremely versatile and flexible system, specifically designed to create human-centric environments. Soliscape is a flexible system that allows for the personalisation and customisation of light and acoustic conditions in individual workplaces.

Ben van Berkel, UNStudio: “The way we work, live and relax is changing. This new hybrid world is causing architects and designers to rethink how we design our cities and buildings, so that we can create places that encourage health and wellbeing. Lighting is a very crucial element in helping us to create such places.”

In a given location and from focused work to group presentations, the Soliscape (sound and light-scape) system makes possible activity-based illumination, alongside acoustic qualities. A sensor-based environment understands what kind of activity is taking place and adjusts to provide the optimum conditions. As such, digitally enhanced environments can be created where technology supports in the creation of sensorial adaptive environments in which the user is central. The Soliscape system is however not limited to work



Photo: © Delta Light & UNStudio

spaces alone. Due to its adaptable configuration possibilities, the system has a broad range of applications and can also be used in hotels, hospitality, retail and public spaces. The system can be configured to best suit the daily needs and programming of each location.

More than ever before, today's spaces are evolving to operate with hybrid functions; the home and office are blending, hospitality spaces are becoming meeting places. The possibility to adapt lighting and acoustic landscapes for dual or multi-purpose use is thus an added quality for many of these spaces.

Peter Ameloot, Delta Light: “Looking at lighting as just a basic necessity is an outdated approach. Work environments in particular require extra attention, where user-centric lighting has proven to considerably boost productivity and wellbeing. With Soliscape we even take it to the next level, not just by adding acoustic elements, but even more so by using behavioural parameters to further upgrade comfort.”

### Toolbox

The Soliscape system is a toolbox of flexible components and modules for architects and designers that will

enable them to create workable and liveable solutions for their projects; a system that combines lighting with acoustics and connected sensing, into an aesthetically appealing solution that can easily connect to any building management system. The system is also flexible and future-proof, as it allows for new materials and functions to be added in the future. The Soliscape system comes with spot, direct and indirect linear lighting elements, featuring Delta Light's Melanopic Light Technology® (MLT), combining high-efficient reflectors with human-centric LED technology. The high-quality LEDs help control the circadian rhythm by providing a very natural white colour with a higher amount of energy in cyan, helping to encourage activity during the day and sleep at night. The reflector is designed to perfectly embrace every individual LED module in order to boost the efficiency of the complete luminaire, while maintaining a high level of visual comfort, as every LED dot is shielded.

#### Adaptive design

The intention is to create flexible lightscapes that are responsive to the

user's ever-changing needs and activities, where design is no longer imposed by the designers, but guided by the user, resulting in responsive and adaptive design. The Soliscape system combines miniaturisation and personalisation, in a unique design language.

#### Sensorial responsive

UNStudio and Delta Light aim to create sensor-based environments that respond, learn and adjust to people's daily activities, taking smart buildings towards responsive architecture through a system that allows people intuitive control and personalisation of space. Soliscape offers different sensing options enabling the creation of human-centric spaces: light in service to wellbeing.

#### Humanising spaces

Humanising spaces involves investigating behavioural science. Soliscape influences the productivity and wellbeing of users by allowing more intuitive control of their spaces in a scenario-based development. The system enables the user to adapt the lighting and surrounding factors in order to optimise working conditions.

The Soliscape system is about optimising visual performance with visual comfort and the quality of the environment. It responds to multiple contextual variables and activity based actions, thereby upgrading the overall sense of space.

#### Comprehensive

Soliscape combines individual functions into one all-encompassing system, offering a more affordable and efficient tool to work with. Aside from the affordability of the single component, affordability is created through the scalability of the system, where products couple with services.

#### Sustainability

Soliscape has basic framing elements, but allows for a variety of complementary circular materials to expand its look and feel. More than 60% of the material in the acoustic panels comes from recycled PET bottles, however different materials can be used within the system to facilitate specific functionalities, from acoustic to decorative to atmospheric. Furthermore, controlled and smart lighting contributes to the overall energy efficiency of the building.

## Tivoli Lighting introduces Litesphere True RGB+W LED Strand Light for precise colour control for architectural applications

Irvine, California, USA – With more than 50 years of innovation and linear lighting leadership, Tivoli Lighting introduces its revolutionary Litesphere True RGB+W LED strand light that offers proprietary algorithm controls for superior colour saturation and TRUE white performance for commercial and architectural lighting applications.

The unique commercial grade, outdoor rated, low voltage LED with its exceptional colour and colour changing RGB+W capability eliminates the need for a fourth channel from the standard RGBW DMX setup. As a result, the use of three channels reduces data consumption and speeds up the setup time with self-auto addressed pixel/globes.

With its audio enhanced with MADRIX 5 software and DMX512 protocol, Litesphere True RGB+W provides individual control of each globe for a unique and personal environment, delivering more than 16 million combinations of pure and precise colour tones. Each globe is auto-addressed for fast and efficient set-up and connection.

Litesphere True RGB+W is cULus listed and IP67-rated for wet locations with its proprietary Tivoli design that provides an all-new receptacle eliminating water penetration with a screw-on design and double O-ring for a secure fit on

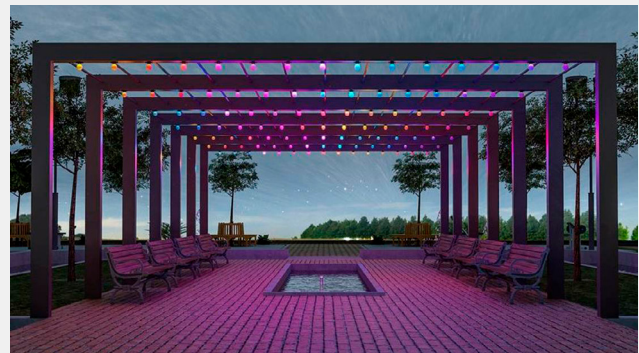


Photo courtesy of Tivoli Lighting

every globe. Its unique design delivers high-level performance and easy replacement. Upgraded mounting hardware is available for suspended or surface applications to ensure perfect installation for every demanding project.

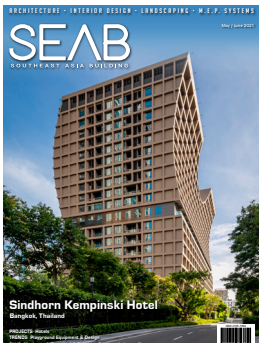
Litesphere True RGB+W operates on a low voltage 24-volt DC power for long runs. Litesphere True RGB+W LED strand light will perform in temperatures of -4° to 122°F and comes with a three-year limited warranty.

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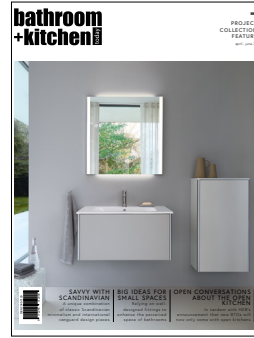
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