

LUMINOUS SPEC

WINTER 2017

“Now is a really good time to get into lighting design.”

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FEATURED PROFILE

Jill Klores

Essentially, enhancing the ‘wow’ of light



Sheraton Dallas North, Dallas, TX
above and left, photos by Jill Klores

Jill Klores originally envisioned a career in physics, yet with her skill in optics, knack for creative artistry, and some insightful advice, she became intrigued by lighting design. And with David DiLaura instilling his own passion and knowledge in lighting design as one of her instructors at the University of Colorado, Jill became hooked on lighting. Her well-rounded career included working as an Applications Manager at Ledalite and an Architectural Lighting Consultant for British Columbia (BC) Hydro, both in the area of Vancouver, British Columbia, and then two lighting design firms before founding Essential Light Design Studio in 2005.

What do you feel are the differences between day lighting and electric lighting, in terms of how it impacts those in the space?

There's really no comparison; daylight is magic. We can strive to emulate or mimic it, but we'll never replace the magic of sunbeams coming through a window. When clients ask me to do that, I'm inclined to tell them that I don't want to compete with Mother Nature, I just want to enhance what she's doing. It's interesting; when a sunbeam comes into a room, some people close the shades, and some don't, but if electric light is glarey, they will complain. We want to create "wow" with light, where people are drawn to it and not unnerved by it. With that being said, there's so much we can do now with electric light that we couldn't do just a few short years ago, like tunable light and intelligent control systems to change light intensity or color over the course of a day, and not just in a uniform fashion. The answer still starts with bringing as much daylight into the environment as is appropriate, then we supplement and balance, sometimes with tunable electric light. This way, we're not forced to live in static lighting environments. Humans are just meant to thrive via the dynamic light of day.

Are you incorporating tunable white into your designs?

We do have clients that are embracing tunable white, especially in healthcare. Children's hospitals were really at the forefront of using changing color as a feature for their patients, and that's opened the door for other facilities to consider other dynamic lighting like tunable white. It's something that folks want to talk about. But with every project, cost is a consideration. The studies and data haven't settled on how to measure the benefits of such systems, making it hard for

clients to balance the additional cost with a quantifiable benefit. Everybody knows that bringing daylight into a space is beneficial, and this is one step removed from that. We did it in a neonatal intensive care unit recently – we called it lighting for circadian benefit. The rooms all have some window exposure because of building codes, but some windows face another part of the building, or are in shadow, and it's not ideal. So, tunable white helps us to mimic the natural time-clock; what's happening outside that day. We have a senior living facility that may be interested in tunable white, too. Sundowning syndrome, where Alzheimer's or dementia patients become agitated, confused, and anxious in late afternoon or evening, is a prevalent issue in these facilities. We are being asked to provide a tool to try to alleviate symptoms. Treatment through light therapy is still being researched, and implementing these technologies must be accompanied by staff education to use these tools to best benefit the residents.

How have advances in controls, smart building technologies, and the Internet of Things, impacted your designs?

They have definitely impacted the way we think about a design solution. We have so much flexibility now. We're working on a project for a financial institution where the lighting controls have really interesting triggers. The lights can change based on weather, sports scores, or even stock market swings. The ability to have lighting as both a gatherer and distributor of information is exciting and we are beginning to have some very interesting conversations. I really look forward to where this is heading.

What motivates your clients? Is price still a predominant factor?

One would think, if they hired a lighting designer, that they care about more than just price. We, as the lighting designer, need to determine what motivated them to seek us out; what are they looking for? Since the recession, clients have been price-driven, however, I think I see a break in this. We recently did a project with a lot of linear feet of suspended, direct/indirect luminaires in an open office. We presented four different luminaire options that would work well for the job. We provided performance (including lighting, connectivity, maintenance), aesthetic and price comparisons. It was refreshing in that the conversation centered around the performance and aesthetics. They chose a solution that was not near the lowest cost. We always want to include the options and functionality that they're looking for, but sometimes that means a higher price. A reasonable percentage of the time, they take this under consideration, but sometimes the decision-makers don't understand the value, so don't go for it. And when the rest of the project team gets involved, sometimes there's a lot of respect for what the lighting can bring, and sometimes it's about meeting or beating a budget. That's a normal aspect of the challenge. It's trying to take all the requirements and create the best lighting solution possible.

How do you approach historic projects versus new construction?

For historic projects, we typically ask about the ability to change or update the glazing from a visible light transmittance or percentage of diffusion point of view, so we can take best advantage of daylight if windows or skylights are present. Or we may investigate a film or frit to help us bounce light into the space, or look at interior options to help push light further into the space. Then, we look at electric light enhancements. Typically, you walk into those projects before you start working on them, and they feel dark and dingy. I'm not convinced that's the way they felt when they were originally completed. Somewhere along the way, a window was covered, or the twinkle of an incandescent filament was swapped out for a flat compact fluorescent. It's our job to investigate the original intent, and add back that sparkle and play of brilliance rather than just "pumping up the volume", although that is often necessary as well.

What advice do you have for students who might consider lighting design?

Now is a really good time to get into lighting design. We've been in this fast-paced, lighting technology boom for a number of years now, but I think we still have many years to go on this wave. Newcomers are un-hindered by lighting definitions and practices of the past, so they can take the tools we have now and run with them. I highly recommend internships. We had an intern – she could only be with us for five weeks instead of twelve, but it was still worth the effort for both of us. Going over how to check for flicker using a spin top, or the differences between Type II, III, IV and V distributions for exterior luminaires; it's so rewarding to see her grasp a concept and get excited about it. Even if an internship doesn't pay a phenomenal

amount, the amount of on-the-job experience and education they receive is invaluable, and they can immediately apply almost everything they learn. On top of that, I think it's so helpful for recent grads to get involved in other aspects of the lighting industry, like working for a manufacturer. Then, you understand exactly how products are manufactured, how materials and components work together, and what's possible or limiting.

What can lighting manufacturers offer to facilitate your lighting projects or outcomes, or just otherwise make it easier for you to do your job?

I think embracing the technologies that are available: providing ever-improving LEDs, or maybe OLEDs, and marrying them creatively with easy-to-program intelligent controls, to give us powerful tools in small or well-designed form factors. I think with LEDs, we took a hiccup when manufacturers tried to cram that technology into old form factors. Granted, we needed to have something that eased the marketplace into the new technology. Now, a lot of clients are getting excited about things that are truly LED technology, in the form factor that they should be. Architects are getting creative with ceiling designs, or the trend now with open-structure. I love it when a lighting manufacturer embraces the opportunities and combines building needs such as acoustical dampening with aesthetically interesting lighting, in some cases having great lighting performance and aesthetics! Or suspended linear fixtures that provide lighting, speakers, WiFi housing, cameras, and even the possibility of sprinklers or air distribution. There's a lot of possibilities out there, and I'm excited when reps stop by to show us these kinds of products, because we think immediately of applications for them.



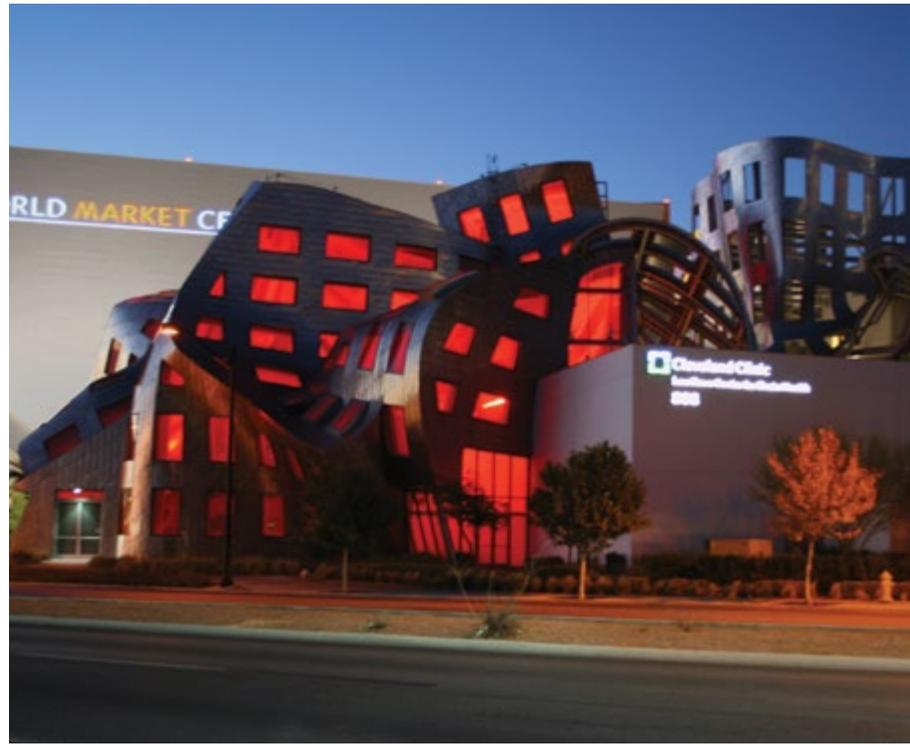
— CityPlace Station Square, Dallas, TX, above and left, photos by James Wilson

PROJECT SPOTLIGHT

LIGHT CELEBRATES LIFE AND CREATES MEMORABLE MOMENTS

The Lou Ruvo Center for Brain Health in Las Vegas, Nevada, offers state-of-the-art care for people with brain and cognitive disorders as well as support services for their families. The ultra-modern venue, designed by world-renowned architect, Frank Gehry, captivates those inside and outside the space while bringing attention to its clinic, research center, and Keep Memory Alive foundation. The building's breathtaking architecture, including the distinct, sloping steel façade, is complemented with Philips Color Kinetics ColorBlast PowerCore luminaires. Color-changing LED light teems through windows and plays across the exterior metal, while the luminaires themselves are discretely tucked around beam structures, the building's main truss, and lighting pipes. Clear and frosted lenses add texture and depth to the design, while the lighting system is controlled using a Philips Color Kinetics iPlayer 3 DMX lighting controller and additional third-party controllers. Dynamic lighting schemes can be remotely selected or created to beautify and enhance event atmospheres, holidays or other special occasions.

Learn more at bit.ly/Lou_Ruvo



Photos by Jack Valencia

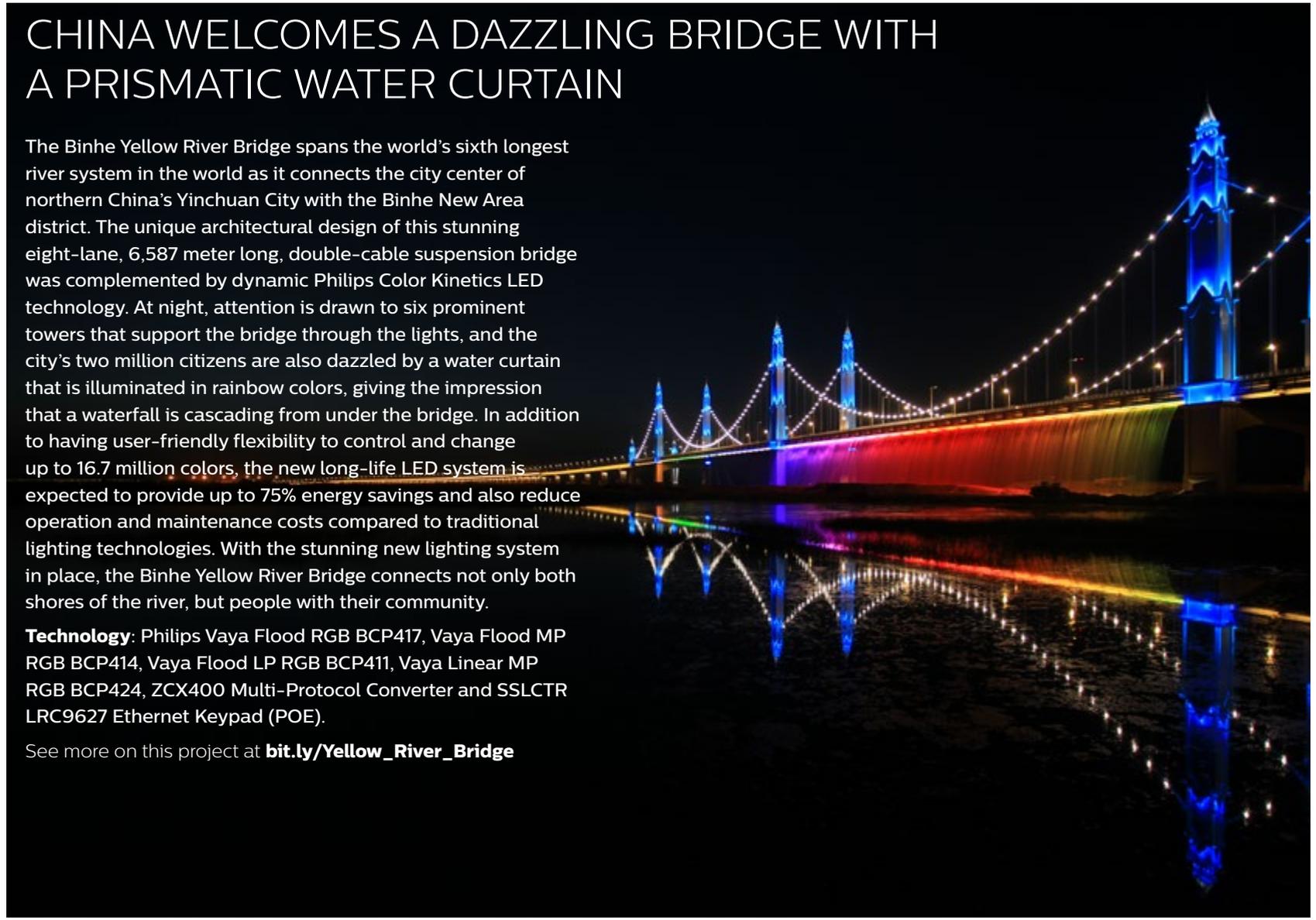


CHINA WELCOMES A DAZZLING BRIDGE WITH A PRISMATIC WATER CURTAIN

The Binhe Yellow River Bridge spans the world's sixth longest river system in the world as it connects the city center of northern China's Yinchuan City with the Binhe New Area district. The unique architectural design of this stunning eight-lane, 6,587 meter long, double-cable suspension bridge was complemented by dynamic Philips Color Kinetics LED technology. At night, attention is drawn to six prominent towers that support the bridge through the lights, and the city's two million citizens are also dazzled by a water curtain that is illuminated in rainbow colors, giving the impression that a waterfall is cascading from under the bridge. In addition to having user-friendly flexibility to control and change up to 16.7 million colors, the new long-life LED system is expected to provide up to 75% energy savings and also reduce operation and maintenance costs compared to traditional lighting technologies. With the stunning new lighting system in place, the Binhe Yellow River Bridge connects not only both shores of the river, but people with their community.

Technology: Philips Vaya Flood RGB BCP417, Vaya Flood MP RGB BCP414, Vaya Flood LP RGB BCP411, Vaya Linear MP RGB BCP424, ZCX400 Multi-Protocol Converter and SSLCTR LRC9627 Ethernet Keypad (POE).

See more on this project at bit.ly/Yellow_River_Bridge



TECHNICALLY SPEAKING



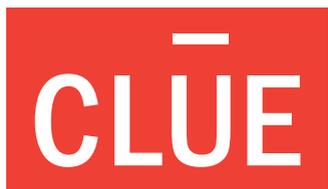
Specification management simplified

A continued dialog with Donna Gafford, LC, MIES, CM-BIM

The time and effort necessary to manually piece together a project specification often works in opposition to tightened deadlines, and transcription errors or overlooked items can potentially compound these issues. SpecLink™-E software from Building System Design (BSD) automates specification writing, management and production tasks to improve efficiency and reduce the risk of errors when organizing information into a single submittal package. SpecLink-E conforms to Construction Specifications Institute (CSI) formats, with opt-in text rather than opt-out text to reduce editing time. The master database pulls and stores product requirements and links to all major manufacturers, spanning all building disciplines, including Philips Lighting. Context-sensitive notes and reminders can be added to any paragraph without cluttering the screen or final printed document. SpecLink-E is downloadable for single users and network licenses, and is also available as a cloud-based application. Don't waste another moment buried in a specification, take the reins and make the process more efficient and stress-free.

For more information, visit their website at www.bssoftlink.com

INDUSTRY NEWS



Light and the Senses



Spread the word: Young professionals enter and get noticed!

Are you a student or young professional with five years or less of lighting design experience? Do you know someone who fits this description? The 4th annual CLUE international lighting design competition is intended to help young professionals build their reputations while shaping the future of lighting design. Individuals and multi-disciplinary teams are invited to submit lighting designs using this year's CLUE theme, Light and the Senses, until January 31, 2018. Winners will be selected by a jury of international lighting and design professionals, and will receive one of three grants totaling \$8,500, as well as a trip to Chicago for LIGHTFAIR® International 2018.

Spread the word and help to shape a career. Gain inspiration from last year's winning proposals at bit.ly/clue_winners or visit www.cluecompetition.com to register today.

EDUCATION

Webinars



The Design of Integration: Pitfalls and Possibilities

DATE: **LIVE** December 14, 2017 - 10 am EDT

From city streets, to university lecture halls, lighting is the core electrical system in almost every space in the built environment. As lighting designers, we must integrate the vision of architecture with the medium of light effectively, efficiently and beautifully. As such, it is our responsibility to reach beyond photons and reflective materials to other building systems. As we become more holistic integrators within the built environment, we help our industry to evolve.

Attend this webinar to explore the role lighting designers play in the integrated design process, from working with industry trade partners to expanding their traditional scope within project teams, and how you can leverage this knowledge to grow as a thought leader and innovator on current and future projects.

REGISTER: philips.com/lightingwebinars

EDUCATION

Lighting Application Center

Light shapes what we see, do, and feel. The best way to learn about light and lighting is to experience it in three-dimensions, in full scale, and with dynamic, hands-on engagement. That is what happens at the Lighting Application Center, located at the Philips Lighting Company North American headquarters in Somerset, New Jersey.

Here, visitors experience how lighting impacts people and spaces through over 20,000 square feet of indoor interactive and demonstrative areas, and outdoor demonstrations. Independent lighting professionals provide practical information on the latest in lighting technology – solid state, lighting systems and services, daylight control, and energy-efficient display sources, as well as application techniques. Skills and knowledge gained here will help to improve project outcomes and support successful enterprises.

Experience light your way

For added convenience, visit our applications center in Markham, Ontario, Canada, or take advantage of distance learning via our online e-learning tools and webinars.

Visit education.lighting.philips.com for onsite class schedules and online courses/elearning/e-videos.



Continuing education credits

Upon completion of each workshop, participants receive a certificate with professional development hours that may be self-reported for possible Continuing Education credit. Some programs offer AIA Learning Units. See program agendas or announcements for specifics.

Specifier Seminar

Lighting trends & technology update

SYNOPSIS: This two and a half day seminar will focus on lighting trends, as well as the latest technologies for both outdoor and indoor applications. With a variety of topics, attendees will earn over 7 hours of Continuing Educational Units (CEU) and AIA Learning Units. Program includes a private viewing of the Times Square Ball in New York City, where Philips has been a sponsor for over 18 years.

LOCATION/DATE: Somerset, NJ, December 5-7, 2017
(Keynote speaker: Mr. Gary Gordon from Gary Gordon Architectural Lighting and author of Interior Lighting for Designers)

Participants must register by contacting your sales representative or inquiring at bit.ly/PhilipsUniversity

Note: By invitation only.

Workshops

Philips Lighting – Lighting, energy and beyond

SYNOPSIS: Overview of Philips Lighting Portfolio and focus on trending lighting options. Content will change according to new product introductions and innovations added throughout.

LOCATION/DATE: Somerset, NJ, November 29-30, 2017

Connected lighting

SYNOPSIS: Advanced networked control systems for interior and exterior applications. Will include AIA credits.

LOCATION/DATE: Somerset, NJ, December 13-14, 2017



Lighting Academy

A comprehensive range of educational resources for people to expand their lighting knowledge.

Visit philips.com/lightingacademy

EVENT NEWS

IALD Enlighten Americas Conference

With record-breaking attendance, more than 450 lighting professionals attended the 17th annual IALD Enlighten Americas conference held in Denver, Colorado on October 12-14, 2017. As one of the premier industry venues for architectural lighting designers, the Enlighten Americas conference facilitated networking among emerging and established professionals, and provided peer-led



educational seminars and workshops on a wide range of technical, application-based, inspirational and business topics relevant to lighting design.

The conference opened with keynote speaker and cinematographer, Roberto Schaefer, ASC/AIC, who spoke about the connection between light and film throughout his career, and "writing with light". Later, electronic artist Rafael Lozano-Hemmer closed the conference with a keynote address that explored the intersections between experiential, theoretical and political perspectives through his electronic and performance art projects.

Philips Lighting sponsored the Saturday evening reception at the Downtown Aquarium Restaurant in Denver. Here, attendees enjoyed a unique underwater dining experience meal while networking and relaxing. Underwater exhibits featuring ecosystems from around the world, including over 500 diverse species, captivated attendees, while the venue's observation deck offered breathtaking views of the city. Additionally, a private exhibit tour rounded out the memorable night.

The next annual IALD Enlighten Americas conference will be held in Seattle, Washington on October 11-13, 2018.



PRODUCT NEWS



Gain more with less

Design your lighting applications around the Philips Color Kinetics **ColorBlast IntelliHue Powercore Forward Throw Asymmetric (FTA)** gen4 luminaire, and gain more with less. Design

using fewer luminaires at a reduced setback with little to no wasted light. Double the illuminance on a surface as compared to symmetrical beams with uniformity ratios of 5:1 or better. Truly experience high color quality with high beam quality.

Visit colorkinetics.com/Blast-Powercore-gen4/ to learn more.



Colors as you intended

A robust portfolio of spotlights, allowing customization of any space, **ExpertColor** offers 93.9% close to halogen light color, consumes less energy and lasts longer, without compromising color maintenance over time. With CRI 90-95, GAI 100 to render strikingly rich, true colors across the entire spectrum from whites to reds, ExpertColor delivers superior performance and quality.

Visit philips.com/expertcolor to learn more.



Making LED maintenance operations quick and easy

The Philips **Service tag**, a unique QR based identification system placed on products, poles and boxes they are delivered in,

makes LED maintenance operations quick and easy. Simply scan the Service tag sticker from the app to register the product and Philips will provide maintenance support throughout the lifetime of the product.

Visit philips.com/Servicetag to learn more.



Connected 95W driver for outdoor and industrial

Philips **Xitanium SR** (Sensor Ready) 95W LED Driver is now available for the outdoor and industrial high-bay applications. This

driver is ideal for luminaires that requires fixture-based wireless lighting control. And it provides an optional auxiliary power supply.

Visit philips.com/xitaniumsr/na to learn more.