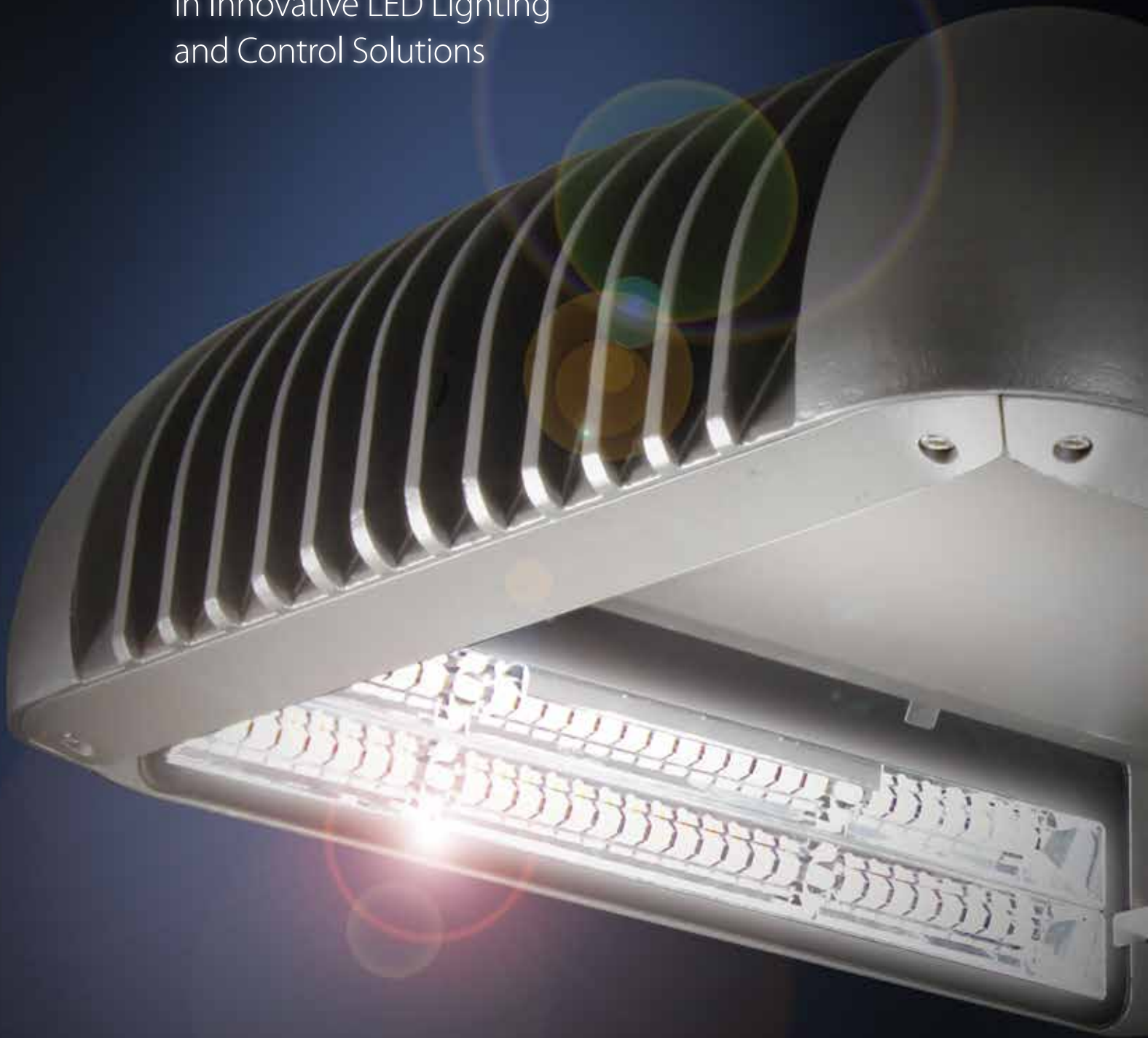# LSi Industries™

Leading the Way
in Innovative LED Lighting
and Control Solutions

Crossover®
LED LIGHTING TECHNOLOGY

Crossover® to LED Lighting with LSI Industries

You have depended upon LSI to deliver *innovative, valued lighting solutions* designed specifically for your needs for almost 40 years. Today through our market-leading Crossover® LED technology platform, we create extraordinary value by providing *reliable LED products* expertly designed to deliver the best possible illumination for the application in terms of see-ability, visual comfort, aesthetics and minimum energy consumption.

In addition, we can provide *sophisticated lighting and energy-management control solutions* to help customers manage their energy costs.

LSI > Experience the *Difference*

We have invested considerable resources to develop the best solid-state lighting and controls technology available to give you reliable LED solutions that deliver the most efficient and effective lighting for the application. As one of the only lighting manufacturers who has integrated design, engineering, manufacturing of LED components, and controls technology within one company building in the U.S., we are uniquely poised to deliver as a single source. It is this integration, coupled with rigorous testing in our ETL/UL-certified lab in addition to testing and listing to UL standards by independent labs, that ensures we deliver the best performance and the most reliable product available. We are so convinced that our experience and expertise will meet your lighting requirements that we prominently display the LSI logo on all of our LED products, giving you peace of mind that comes with knowing that we stand confidently by all of our products.

Proud to be an American Manufacturer

American Innovation

American Made

Leadership. Strength. Innovation. Those are the key values behind the smart vision on which LSI Industries Inc. was built when established in 1976. Today and in the future, we will emphasize our commitment to preserving the foundation of a well-managed, financially strong and creatively unique company with even stronger emphasis on a growing technology base. While many manufacturers have moved their operations overseas to reduce costs, LSI has remained loyal to its U.S. manufacturing roots. LSI is proud to be an American company with an American work force building an American Product.

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The LSI *Difference* is in the Intelligence

As a vertically integrated manufacturer, we design and build our products around our **value-driven design philosophy.** Integrated intelligence combines with components designed, engineered and manufactured by LSI to work in unison to deliver the most reliable, **energy-efficient** and cost-effective LED lighting solutions possible.

SmartTec™ Intelligence -- LSI's proprietary patented intelligence platform utilizes internal and external components for **optimal system efficiency.** Each fixture is designed to perform for a specific lighting application.


The Most Efficient LED Fixtures

With a variety of drive currents, high-performance LEDs and unique heat management, LSI's LED fixtures delivery tremendous performance. Our proprietary driver design delivers the industry's highest efficiency, to achieve our goal of the maximum number of lumens using the minimal number of watts.

Brilliantly Engineered Optics

Intelligent design is about more than just efficiently generating lumens; it is about putting them in the right spot. Tri-Lume™ Optics – The unique combination of a sealed flat optical-grade tempered glass lens, high-efficiency precision reflectors and optimized LEDs translates to outstanding illumination and light placement. The glass lens is five times more impact-resistant than standard glass which protects all electrical components. LSI's IP67 sealed optics provide high color rendering and color consistency.
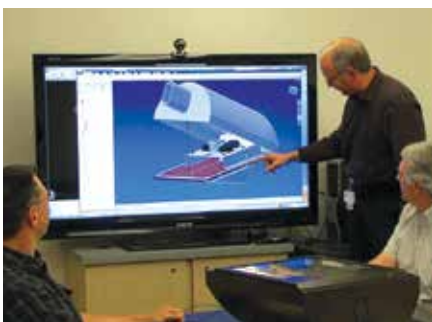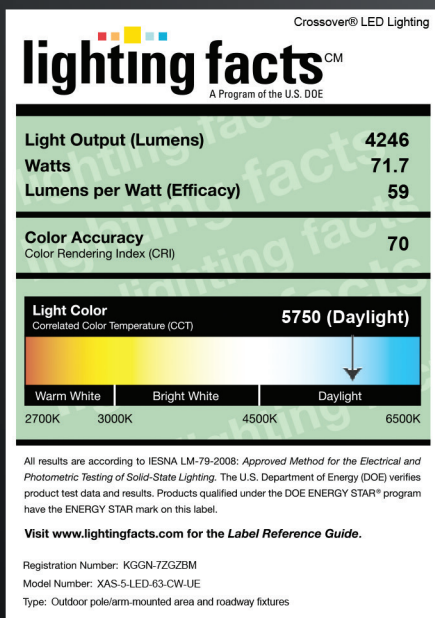

Energy Savings up to 80% (Target Payback of < 3 Years)

Driver & Power Supply — Proprietary self-diagnostic SmartTec Intelligence for highest efficiency plus energy-saving control options. Integral sensors and control intelligence work with motion and daylight control schemes to reduce energy consumption even further, by dimming or turning off unneeded fixtures.

Intelligent Thermal Control

Heat Management – LSI's unique, patented heat-management design provides optimal system efficiency to create the lowest internal operating temperatures possible. If conditions exceed rated levels, the driver automatically lowers drive currents in imperceptible 5% increments until a safe operating temperature is reached, and then restores the output to the original level when the ambient conditions drop back down. Controlling the potential overheating increases the lifespan of the fixture.

Crossover® LED Lighting

lighting facts CM
A Program of the U.S. DOE

Light Output (Lumens)	4246
Watts	71.7
Lumens per Watt (Efficacy)	59

| Color Accuracy | |
| Color Rendering Index (CRI) | 70 |

Light Color
Correlated Color Temperature (CCT)   **5750 (Daylight)**

| Warm White | Bright White | Daylight |
| 2700K   3000K | 4500K | 6500K |

All results are according to IESNA LM-79-2008: *Approved Method for the Electrical and Photometric Testing of Solid-State Lighting.* The U.S. Department of Energy (DOE) verifies product test data and results. Products qualified under the DOE ENERGY STAR® program have the ENERGY STAR mark on this label.

Visit www.lightingfacts.com for the *Label Reference Guide.*

Registration Number: KGGN-7ZGZBM
Model Number: XAS-5-LED-63-CW-UE
Type: Outdoor pole/arm-mounted area and roadway fixtures

The Most Reliable LED Fixtures

LSI's internal design, manufacturing, and testing capabilities ensure fixture reliability through design and modeling software, in-house photometers, sophisticated thermal imaging equipment and a certified test lab. All of LSI's LED fixture testing is verified by independent labs for listing to UL standards. In-house LM-79 photometric results are verified by external labs as well. LSI only uses chip suppliers with an established track record of quality and the LM-80 test capabilities to verify extended life with low lumen depreciation. SmartTec electronics and optics are protected by a unique mechanical design featuring dirt-resistant sealed optics with easily cleaned lenses.

Beauty to Complement the Intelligence

Sleek contemporary and traditional housing designs represent the ultimate blend of design sophistication and technological innovation in an aesthetically pleasing fixture. With clean lines and architectural styling, LSI's fixtures are sure to complement any site.

DuraGrip® Finishing Process

Committed to excellence in all its products, LSI Industries applies the same high-quality standards to our finishing process as we do the fabrication of our products. Each LSI fixture is finished with our patented DuraGrip polyester powder coat finishing process. The DuraGrip finish withstands extreme weather changes without cracking or peeling and is guaranteed for a full five years.

DESIGNLIGHTS CONSORTIUM

RoHS

ida APPROVED Dark-sky Friendly Fixture www.darksky.org

c UL® us LISTED

CE

FC

INTERTEK ETL LISTED us

LM79

LM80

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Venabled – Lighting Control at Your Fingertips

In yesterday's world…

- Turning ALL of your outdoor lights on for 12 hours a night was OK…
- Not knowing if your lights were on, off or burned out was OK…
- Having bright spots and dark spots was OK…
- Wasted energy and money was OK…

Today – none of these are acceptable. And up until now, you had to find wireless controls and stellar LED fixtures from separate vendors.

LED fixtures designed and manufactured with integrated controls, installed at the factory.

LSI Industries introduced the world's first and only LED fixtures with *wireless controls.*

Wireless controls allow remote access to the fixture, from anywhere in the world, at anytime. Think about the savings, the peace of mind, and the real-time data at your fingertips. Wireless controls may even support cash-back or incentive programs from your local utility company. LSI is transforming the LED lighting market with the next generation of functionality, performance, information and accessibility.

So why add LSI Virticus Controls? In addition to the more than 60% energy savings, most LSI customers see a radical improvement in the look and feel of the light. They are able to "tune" the environment in ways that were never available before like reducing light after business hours or adding motion sensors to control the lights for optimal safety levels. *With LSI Virticus, take control of your light – put it where you want it, when you want it.*

LSI Controls + LSI LED Luminaires

- Designed, produced and delivered as an integrated system
- Tested as a system to ensure component compatibility
- Certified as a system to ensure safety and reliability
- Assembled and delivered with speed controls installed at the LSI factory to reduce on-site installation and variable costs

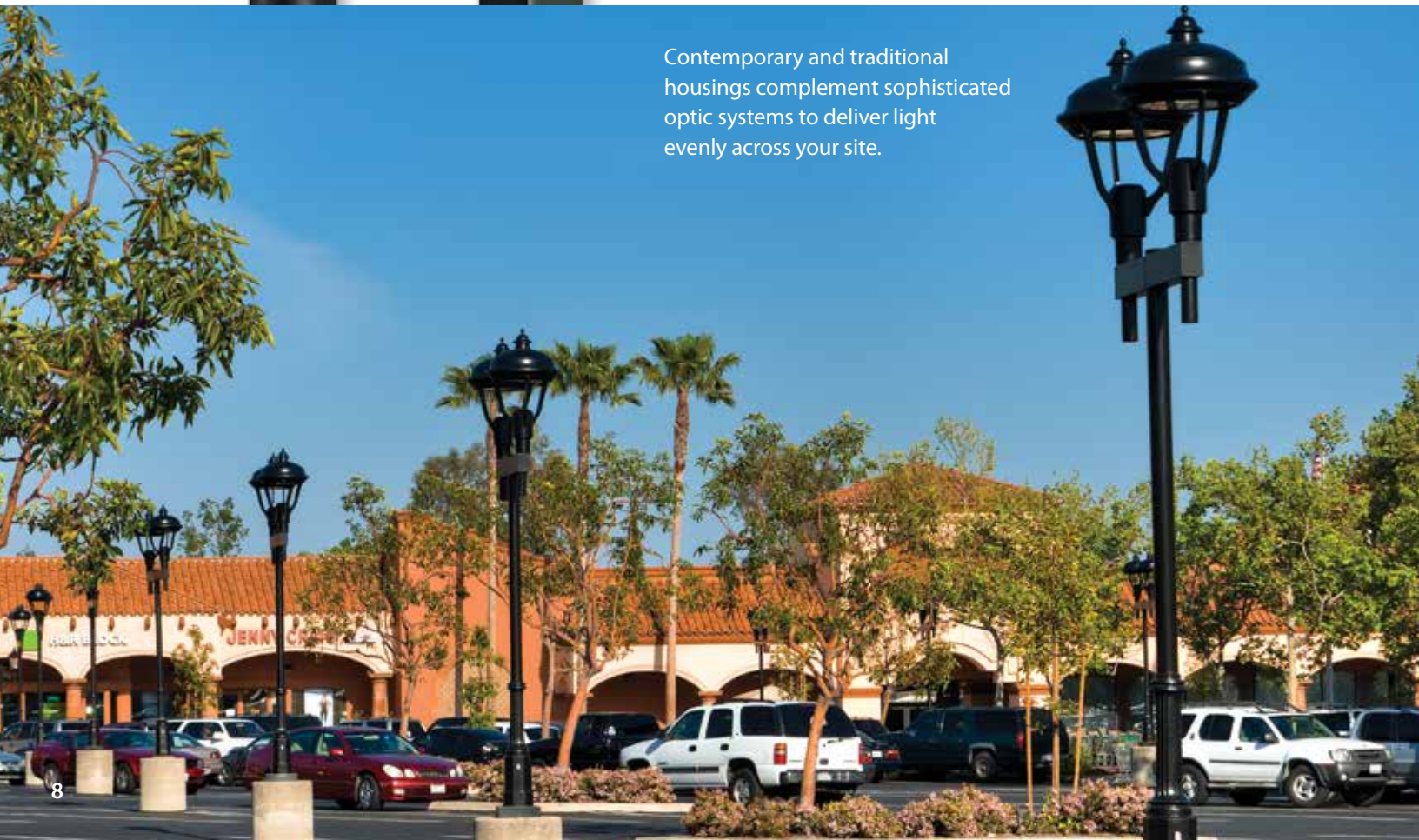*LSI – One Source for Value, Reliability and Efficiency*

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LED LIGHTING TECHNOLOGY

7

LED Area & Pedestrian-Scale Lighting

Brilliant, *high lumen outputs*, uniform distributions and solid backlight control provide glare-free, *comfortable illumination* to pedestrian and parking areas.

Contemporary and traditional housings complement sophisticated optic systems to deliver light evenly across your site.

Advanced technology and design translates into purposely positioned optic assemblies that deliver light specifically where it is needed with wide distributions and tremendous lumen packages.

Wireless control and information management systems let you take control of energy and maintenance costs, resulting in significant reductions.

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LED LIGHTING TECHNOLOGY
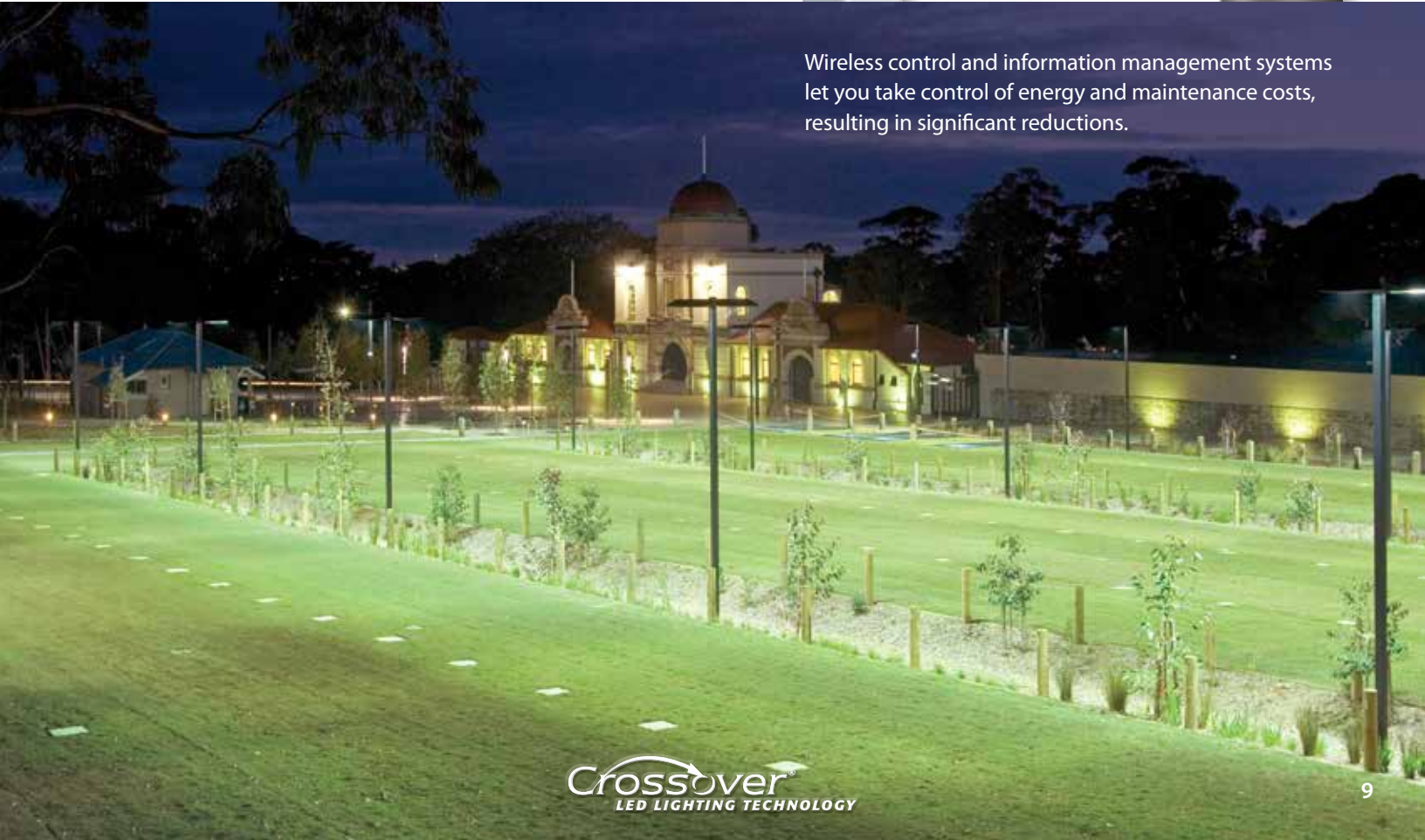
LED Landscape & Architectural Feature Lighting

With its unique dual-aperture housing and *patented dual-array optical system,* LSI's LED XHYP3 bollard delivers incredibly uniform illumination in either 180° or 360° distributions.

The two separate LED arrays result in *superior fixture spacing* with unmatched lighting uniformity while eliminating the large area surrounding typical LED bollards, providing *enhanced security* and improved way-finding.

Optional internal Doppler motion sensors activate switching of bollard light levels. Upon inactivity, light level is gradually ramped down to low level to allow eyes time to adjust and significantly reduce energy consumption.

Optimized beam control – acrylic optic lens collects and redistributes 90+ percent of generated light into the desired beam pattern.

Superior thermal management and inherently cool beam with Cool-Touch lens.

LED Wall-Mount Lighting

LSI's full-cutoff LED wall lights *deliver even lighting* to create a *brighter environment* at lower light levels, with no uplight or glare – ideal for entrance, egress and security lighting.

Optional integral controls ensure the maximum energy efficiency.

Choose from a variety of housing styles and sizes to complement your building's architectural lines.

LED Soffit Lighting

Designed with *symmetric distribution* for smooth, *uniform illumination* with full cutoff, LSI's LED soffit fixture is ideal for soffits, commercial canopies and drive-thrus.

High-efficiency LED design provides dramatic savings over inefficient traditional fixtures, with energy savings in excess of 70%.

Clean, low-profile design facilitates ease of installation and maximum clearance. Specially designed thermal protector is standard – making it perfect for applications with insulated spaces.
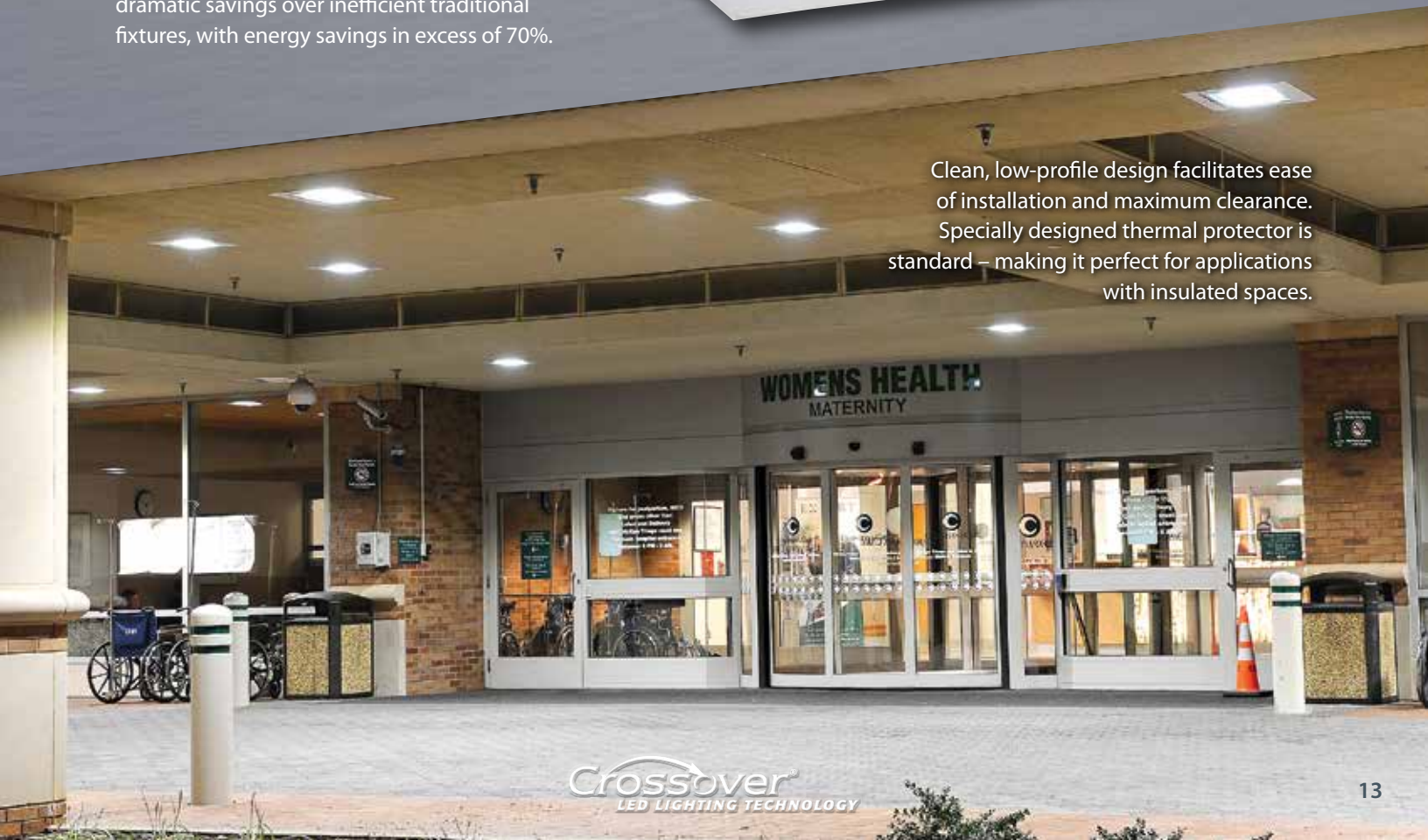
LED Parking Garage Lighting

Designed for enclosed
and open-sided structures.
Meets IES PR-20.

LSI's LED *parking garage* luminaires deliver excellent overall lighting with high *vertical illumination*, full cutoff and low glare for *maximum 'see-ability'* for drivers and pedestrians. Meets IES RP-20-98.

Optional controls such as integral motion sensor and battery backup are available for additional energy savings.

LED Roadway Lighting

LSI's roadway fixtures are designed for quick, easy installation and accept a range of mast arms for mounting on most roadway or utility poles. LSI offers a complete system for roadway lighting – LED fixture, mast arm and tenon pole, or just the fixture.

Innovative optic and control technology translate to outstanding illumination with trespass control in LSI's *LED roadway luminaires.* They are designed to comply with the illumination guidelines set by IESNA RP-8.

Energy-saving control options include dimming, bi-level switching and LSI Virticus wireless-control and information systems.

LED High-Bay Lighting

Designed for industrial, retail and commercial interiors demanding a *rugged fixture*, LSI's LED high bay offers the perfect combination of *low energy consumption* and *high lumen* output.

High performance reflectors provide exceptional uniformity and vertical illumination without glare – providing a brighter environment at lower light levels, for both rack aisles and open manufacturing areas.
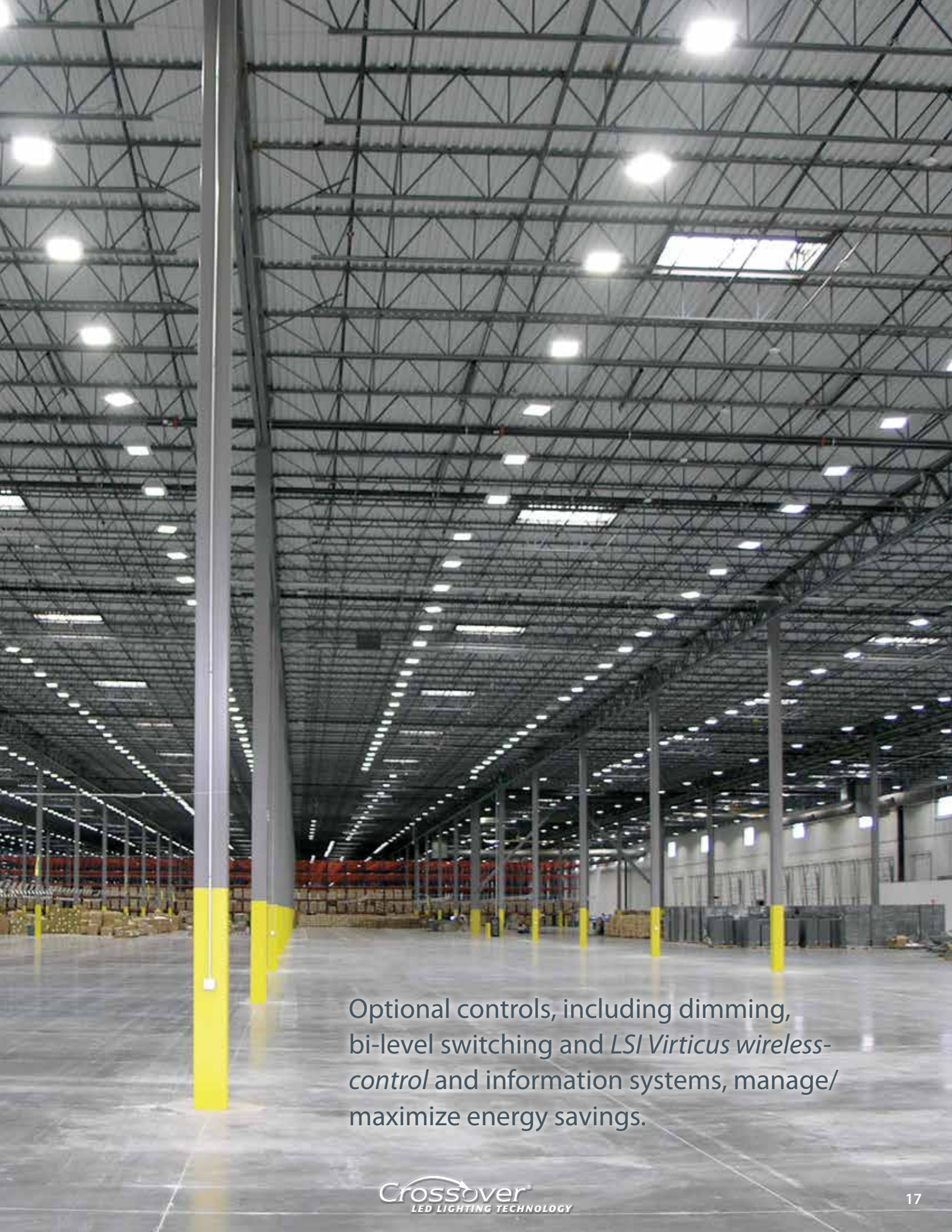
Optional controls, including dimming, bi-level switching and *LSI Virticus wireless-control* and information systems, manage/maximize energy savings.

LED Interior Ambient Lighting

Utilizing leading lensing systems, LSI offers a *progressive* line of high-performance *recessed LED solutions* that balance high lumen output with reduced source brightness to provide excellent illumination, *excellent visual comfort* and high light levels.

For utility, back room and cooler applications, select LSI's LED EG3. Its rugged, vapor-tight design provides high lumen output with soft reduced brightness to light these spaces.

Choose from a variety of sizes, lumen outputs and designs to deliver balanced lighting throughout the interior room cavity while hitting high on walls and vertical surfaces. Ideal for interior commercial and retail spaces.

LED Sign & Wall-Wash Lighting

A *well-balanced* interior LED lighting system is achieved by layering the light – uniform ambient lighting *complemented by highlighting* select vertical surfaces. With the correct color temperature and *lumen output*, graphics, textures and colors come alive to create a welcoming environment and profitable traffic.

Wall mount. Recessed. Ceiling mount. Choose from a broad offering of LED accent, sign and wall-wash lighting fixtures.
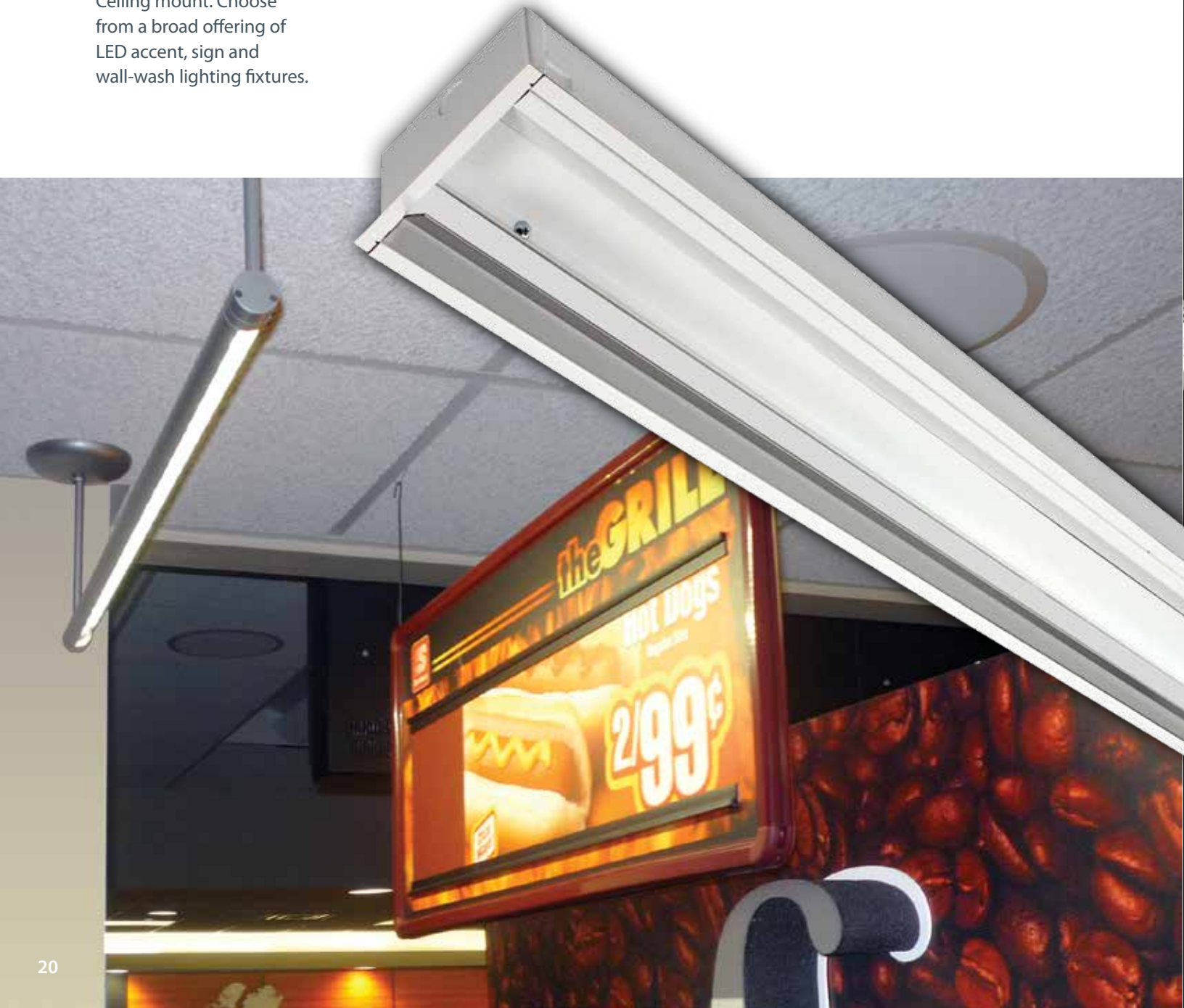
LED Linear Display & Strip Lighting

Brilliant, distributed points of LED light add *sparkle, amplify* depth and eliminate the "flat" look of fluorescent lights. *Easy adjustment* allows the fixtures to be aimed to best advantage. Ideal for cove, display case, accent, under-cabinet and shelf lighting.

LSI's LED linear lighting is designed to deliver long-lasting, consistent radiance and luster wherever it's needed – for a variety of applications.

Wide range of fixture lengths to fit any cabinet or cove, three output levels and three color temperatures to address a variety of applications – new construction or retrofits.
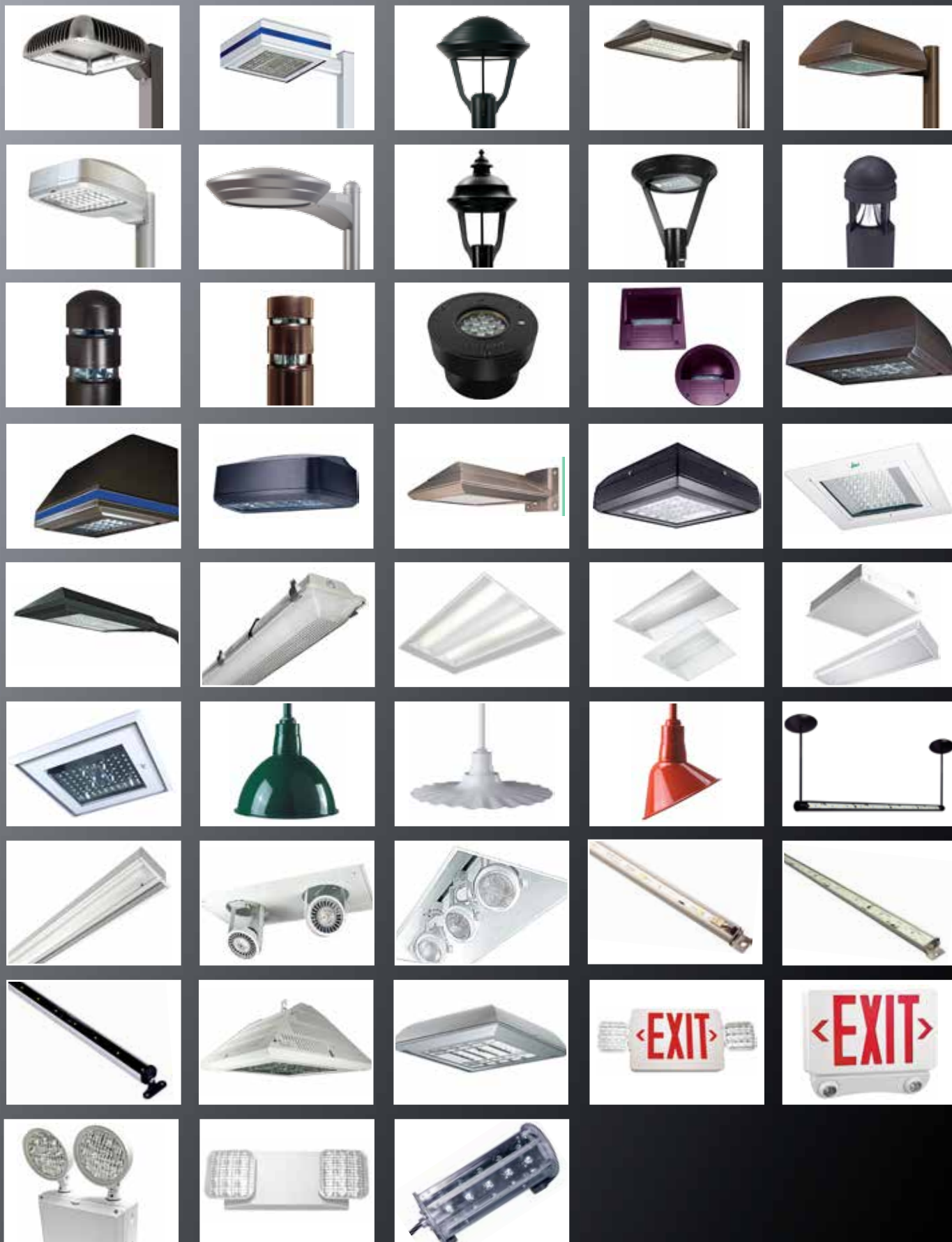
LSI > Experience the *Difference*

LSI is a technology company in the lighting and graphics industries. We are a vertically integrated manufacturer who combines assimilated technology, design and manufacturing to produce the most efficient, high quality lighting and graphics products possible. In addition, we can provide sophisticated lighting and energy management control solutions to help customers manage their energy performance. Further, we offer design support, engineering, installation and project management for custom graphics rollout programs for today's retail environment. LSI is a U.S. manufacturer with marketing/sales efforts throughout the world with concentration currently on North American, South American, Australian, New Zealand, Asian and European markets. LSI's major markets are the commercial/industrial lighting, petroleum/convenience store, multi-site retail (including automobile dealerships, restaurants and national retail accounts), sports and entertainment markets. The Company's common shares are traded on the NASDAQ Global Select Market under the symbol LYTS.

LSi Industries™
American Innovation Through Technology

A SmartVision® for the Future

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