

# AL

architectural lighting

THE MARKET ISSUE

2006

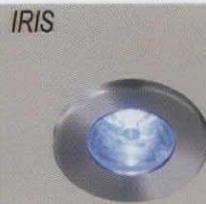
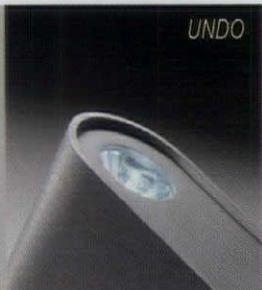
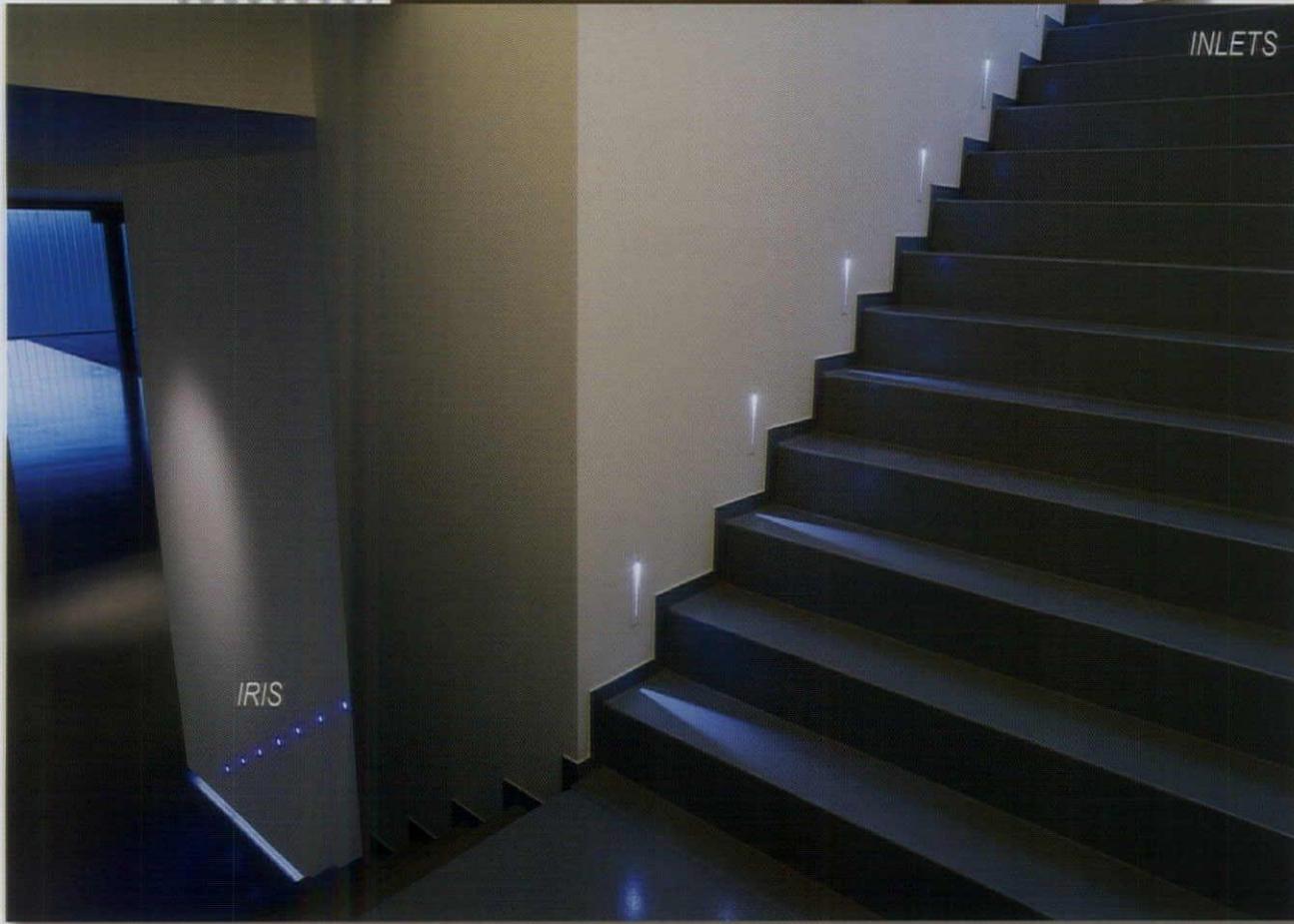
BOLLARDS | BALLASTS | PENDANTS |  
SENSORS | SCONCES | LEDS + MORE

JUNE 2006  
VNU BUSINESS PUBLICATIONS USA  
U.S. \$7.00

AL  
20  
YEARS  
1986-2006



\* Dark Sky - Star light, star bright...



LED  
TECHNOLOGY

# Efficiency

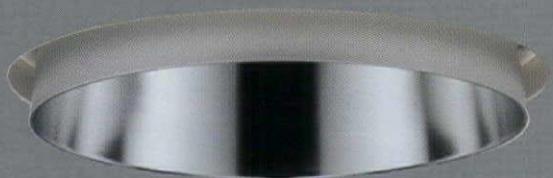


## ModuleX CF

Fluorescent Asymmetric Wall Washer  
7" square trim

# Performance

# Flexibility



## Hoffmeister

CFL Floating Reflector Downlights  
6" and 9" apertures

# Style

## Show-offs.

(Booth 3413, LightFair)

Flaunt your fixtures. Without being flashy.  
Wallwash and downlight with architectural flair  
plus superior performance.

Intelligent lighting from Ardee:  
more options, more impact, more energy saved.



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

ARDEE LIGHTING  A DIVISION OF JJI LIGHTING GROUP, INC.

Circle No. 126 or [www.archlighting.com/productinfo](http://www.archlighting.com/productinfo)

# AL

architectural lighting

JUNE | 06  
VOL 20 | NO 4

### EDITORIAL STAFF

#### GROUP EDITOR-IN-CHIEF

EMILIE W. SOMMERHOFF  
esommerhoff@archlighting.com  
(646) 654-5775

#### SENIOR EDITOR

ELIZABETH DONOFF  
edonoff@archlighting.com  
(646) 654-4482

#### ASSOCIATE EDITOR

SALLIE MOFFAT  
smoffat@archlighting.com  
(646) 654-5318

#### ONLINE EDITOR

JENNIFER BRITE  
jbrite@architecturemag.com  
(646) 654-5772

#### EDITORS AT LARGE

JAMES BENYA, HOWARD BRANDSTON

#### EDITORIAL ADVISORS

GREGG ANDER, FRANCESCA BETTRIDGE,  
ROBERT DAVIS, MARK LOEFFLER

### DESIGN

#### ART DIRECTOR

CASEY MAHER  
cmaher@architecturemag.com  
(646) 654-5778

#### ASSISTANT ART DIRECTOR

CARRIE JULIAN  
cjulian@architecturemag.com  
(646) 654-4587

### SUPPORT

#### PRODUCTION

VINCE HABICK  
fax (646) 654-7317  
(646) 654-7238

#### CIRCULATION

CARRIE EISENHANDLER  
ceisenhandler@comcast.net  
(215) 886-4488

#### LIST RENTAL MANAGER

JOHN LOGIUDICE  
(800) 223-2194

770 Broadway, New York, NY 10003

## WWW.ARCHLIGHTING.COM

### REAL ESTATE AND DESIGN GROUP

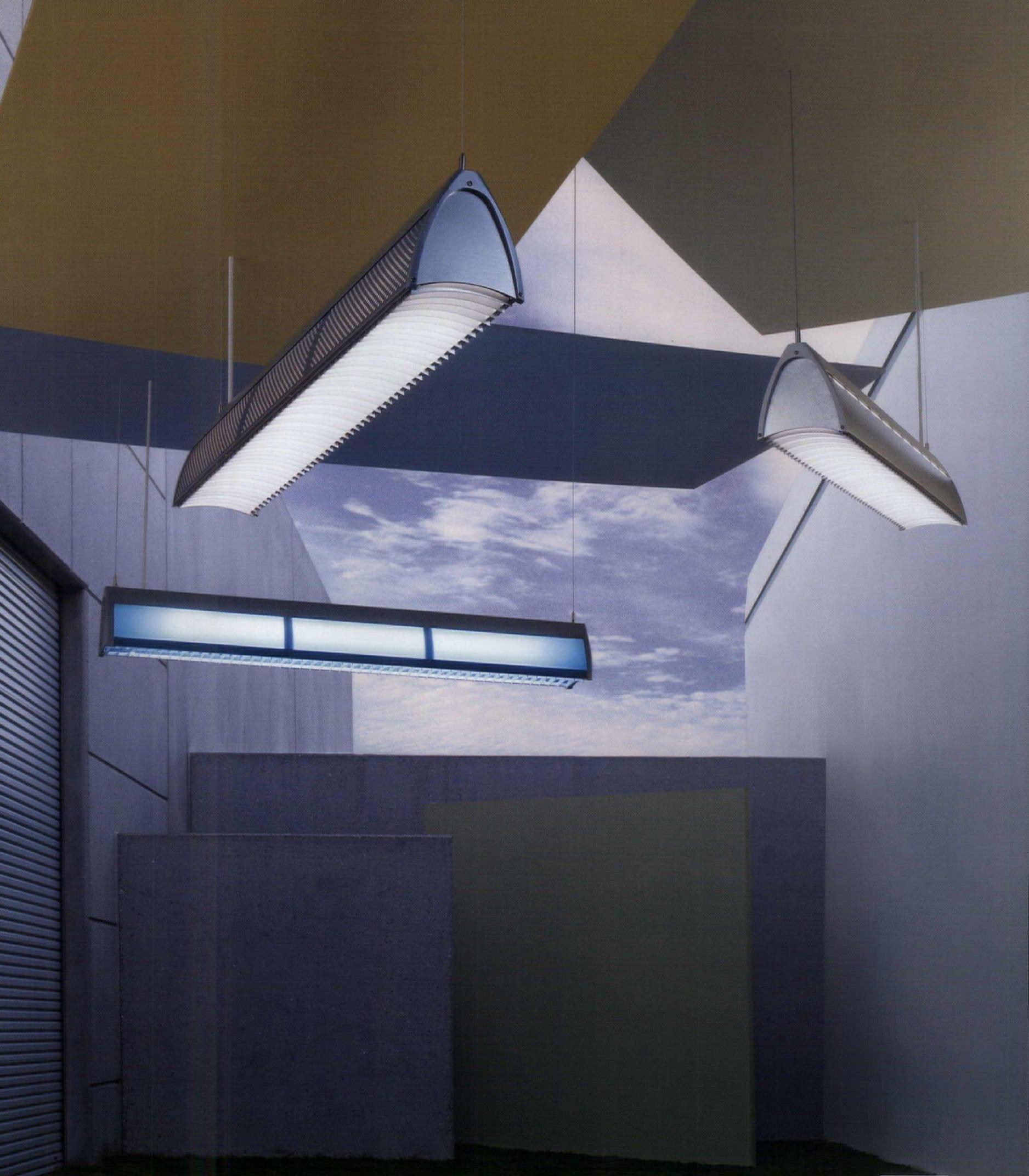
Real Estate and Design Group Publications: Architectural Lighting, Architecture, Commercial Property News, Contract, Hospitality Design, Kitchen & Bath Business, Multi-Housing News Other VNU Business Publications Groups: General and Specialty Retailing; Retail and Food Media; Retail Design; Travel, Performance and Healthcare

#### vnu business publications

President & CEO: Michael Marchesano; Group Presidents: Mark Holdreith (Retail); John Kilcullen (Music & Literary); Richard O'Connor (Travel and Performance); Michael Parker (Marketing/Media & Design); Tony Uphoff (Film & Performing Arts); Editorial Director: Sid Holt; Vice Presidents: John Lerner (e-Media); Karen Palmieri (Manufacturing and Distribution); Joanne Wheatley (Information Marketing)

#### vnu business media

President & CEO: Michael Marchesano; Chief Financial Officer: Derek Irwin; President - VNU Expositions: Greg Farrar; President - eMedia and Information Marketing: Toni Nevitt; Senior Vice President/Human Resources: Michael Alicea; Vice President/Communications: Deborah Patton; Vice President/Licensing and Events: Howard Appelbaum; Director of Business Planning and Development: Jonathan Gordon



**APARIA.**  
**Optimal Optical.**

Introducing the Aperia Linear, the newest architectural lighting design from Prudential Ltg.

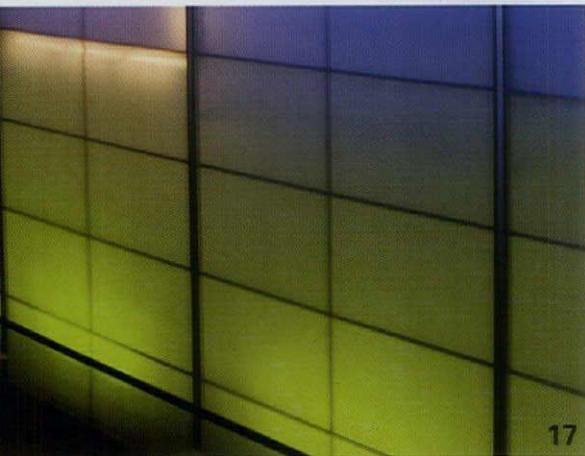
Offered in your choice of translucent acrylic, aluminum, steel or galvanized steel, the Aperia Linear lets you create a powerful

**PRUDENTIAL LTG.**



aesthetic statement without sacrificing optical performance. For more on the Aperia, visit our website: [www.pruelite.com](http://www.pruelite.com)

Light creates life. Create with Prudential Ltg.



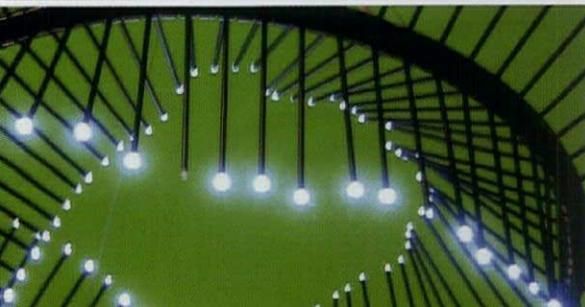
17



39



32



## industry

- 13** **comments**
- 14** **anniversary**
- 17** **briefs** / Light + Building; Lumen Award winners; Acuity's new NY office; and more
- 23** **report** / China's Sustainable Future? 
- 96** **editors' picks** / Products That Do Good 

## products

- 29** **decorative** | BOYD, EUROFASE, LUCEPLAN, RESOLUTE, SHAPER, VIBIA, AND MORE
- 39** **direct/indirect** | DAY-BRITE, FOCAL POINT, PEERLESS, PRUDENTIAL, WINONA, AND MORE
- 43** **downlights** | BETA-CALCO, LIGHTOLIER, PRESCOLITE, RENAISSANCE, W2, AND MORE
- 47** **task** | ALKCO, ESTILUZ, JESCO, LUXO, PLANLICHT, ZUMTOBEL, AND MORE
- 51** **track** | ETC, LIGHTING SERVICES INC, TECH LIGHTING, TIMES SQUARE, AND MORE
- 55** **outdoor** | BEGA, ECLIPSE, ERCO, FORMS + SURFACES, HOLOPHANE, SCHRÉDER, AND MORE
- 61** **emergency** | BODINE, NIGHTSEARCHER, STACO, SURE-LITES, AND MORE
- 63** **controls** | CRESTRON, DYNALITE, HUBBELL, LUTRON, WATT STOPPER, AND MORE
- 67** **lamps/ballasts** | ADVANCE, LITETRONICS, OSRAM SYLVANIA, PHILIPS, VENTURE AND MORE
- 73** **leds** | BARTCO, COLOR KINETICS, LEDTRONICS, SIRIUS, SUPER VISION, AND MORE
- 77** **fiber optics** | FIBERSTARS, OPTO TECHNOLOGY
- 79** **daylighting** | LEVITON, MECHOSHADE, PPG INDUSTRIES, SOLATUBE, AND MORE
- 81** **specialty** | ALANOD, ACRILEX, HUNTER FAN, LIGHTING ANALYSTS, TRANSFORMIT, AND MORE
- MATERIALS**
- FILTERS**
- SOFTWARE**
- FANS**
- 84** **manufacturer index**

## details

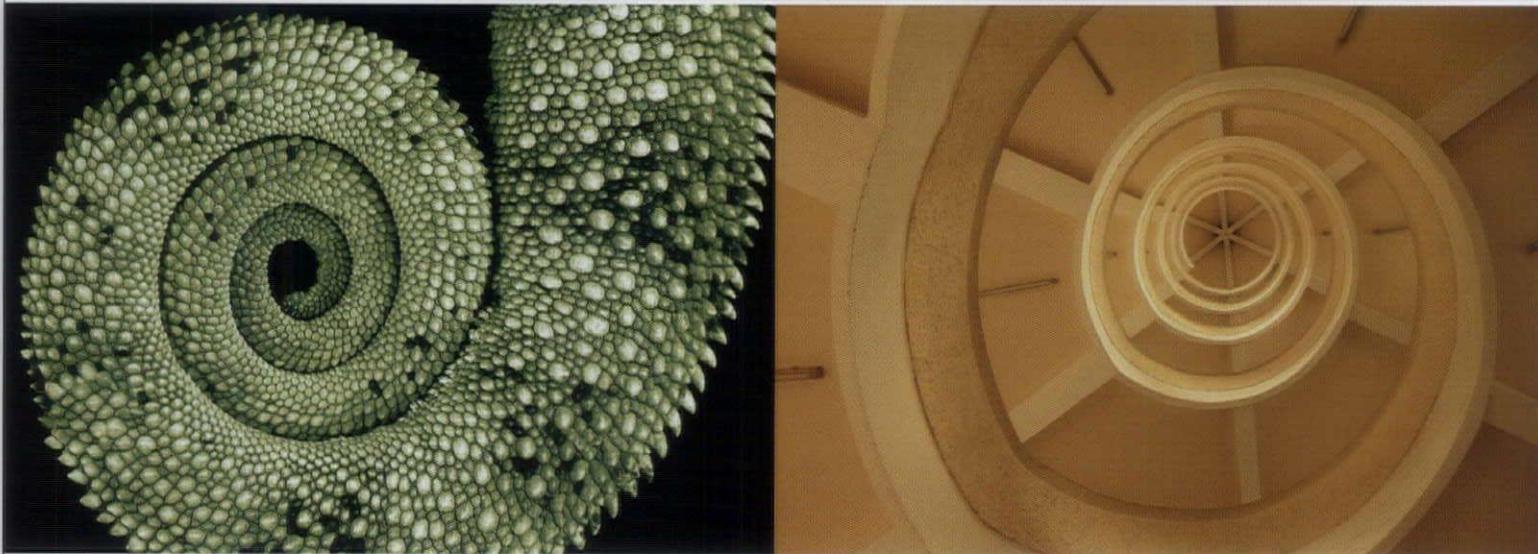
- 87** **method** / Dimming for Dummies: Part One 
- 95** **ad index**

**Cover:** A selection of products from Venture Lighting, Axo Light, Citizen Electronics, Lite Brite Neon, Bover, Kalco Lighting, Lumino Design, Cooper Lighting, Schonbek, Highlites, Mule Lighting, and Rolute (left to right, top to bottom).

**This page:** Sachs Morgan Studio's New World Stages, a 2006 Lumen Award winner; Luxo's Arca Twin; Ivalo Lighting's Inflection TW 751; and Spiralight by Robin Carpenter, student winner of the Lights of the Future 2006 competition at Light + Building (page 17).

# ecOTECTORAL

Architectural lighting for sustainable design.



## INTRODUCING IMAGINATIVE, ENERGY-EFFICIENT, HIGH-PERFORMANCE LIGHTING FROM AMERLUX.

Today's architecture is no longer just about today. Dramatic environments have to be created without dramatically impacting the natural environment.

Enter Amerlux.

After more than 20 years of pioneering energy-efficient lighting solutions, we're introducing architects and lighting designers to EcoTectural—a line of specification-grade luminaires that's making sustainable design beautifully attainable.

**Witness the launch of EcoTectural at LIGHTFAIR, Booth #1848.**



Amerlux, LLC • 23 Daniel Road East, Fairfield NJ 07004 • T: 973.882.5010 F: 973.882.2605 • [www.amerlux.com](http://www.amerlux.com)

Introducing...

## W2 ARCHITECTURAL LIGHTING

# ARCHITECTURAL ELEMENTS

Bridging function and design, W2 introduces specification grade lighting for commercial, hospitality and retail applications. Architectural Elements feature pendants crafted with a sleek, contemporary design and scale for large, challenging spaces. Cased glass shades, accented with colored glass trim, achieve a perfect balance of color and light. Compact fluorescent and incandescent lamping options available. See us at LightFair, Booth #2429.



ARCHITECTURAL  
LIGHTING

A DIVISION OF W•A•C

Tel. 866.788.2100

[W2lighting.com](http://W2lighting.com)

Circle No. 72 or [www.archlighting.com/productinfo](http://www.archlighting.com/productinfo)



## By the Dawn's Early Light

**OUR ART DIRECTOR SAID, AT NEARLY 1:00 A.M. THIS MORNING, AFTER READING A** first version of the editorial, "Don't tell them how tired we are. People like to think things are effortless." It's now 3:00 a.m. (and several unsuccessful rounds of revisions later), and I've

decided to be entirely candid anyway: We're tired.

More than half of our seven yearly issues—four to be exact—have been produced in less than five months, a feat of no small proportion with a group our size, and with a week-long trip to Light+Building and the A|L Residential supplement wedged in there. When this editorial is written, the last page as usual, it will be a sigh of relief heard around the world.

The wonderful—and sustaining—thing is, despite the demands of the last few months, we've still laughed a lot, which actually often does make this feel effortless. And here is the message that must inevitably be contained in these eleventh-hour (or third-hour, as the case may be) hymns: if you're not having a good time, what exactly is the point? A committed staff, with a great sense of humor, goes a long way toward helping one reach seemingly oversized goals. They—Elizabeth, Sallie, Jennifer, Casey, and Carrie—deserve a public thank you for their late-night efforts and enduring levity in the thick of it all.

I'm doubly lucky, however. It is also the community around which A|L revolves that makes this project fun. Put a bunch of lighting practitioners in a room, and in my experience, you inevitably get a party. You also find yourself surrounded by creative energy and interesting conversation—about light obviously, but it often stretches beyond those confines. At a recent event, I found I share years of Latin instruction with the managing director of Erco. Who knew?

A|L genuinely appreciates its relationships with the designers and manufacturers that make up this industry—and not just for the aforementioned good times. It is these essential connections that keep the magazine a relevant resource, and thanks to the genuine good will and accessibility of our friends and contacts in the field, aid significantly in making this effort appear effortless. With the May issue, we have rotated the editorial advisory board, to include four new personalities that we look forward to counting among this network of supporters: Gregg Ander, chief architect of Southern California Edison; Francesca Bettridge, principal of Cline Bettridge Bernstein Lighting Design; Robert Davis, senior instructor at the University of Colorado at Boulder; and Mark Loeffler, the lighting and sustainable design director for environmental management and consulting firm The RETEC Group. Beyond general distinction in the industry, these practitioners represent, in their professional focus, a few of the issues that weigh most on the industry's collective mind: daylighting and sustainability, high design, successful practice management, education, and research. We heartily thank our previous board—James Benya, Howard Brandston, Renee Cooley, Craig DiLouie, and Kenneth Douglas—whom we have come to count as friends. (We are thrilled to have Jim and Howard stay on with us in the capacity of editors at large.)

With that said, I am just a few words away from a short break, before the exhausting but fun-filled days I've come to look forward to each year. See you all at Lightfair.

Sigh.

**EMILIE W. SOMMERHOFF**  
EDITOR-IN-CHIEF

### JUNE/JULY EXCHANGE QUESTION

The dark sky movement has gained momentum in recent years. How do you feel it is impacting the practice of lighting design and manufacturing?

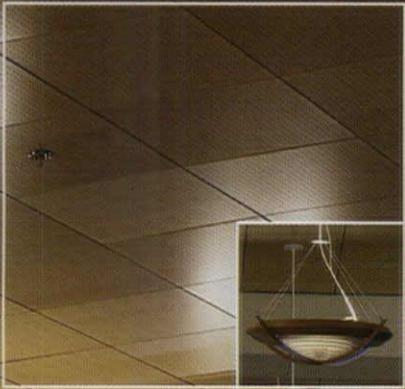
SEND RESPONSES TO [EXCHANGE@ARCHLIGHTING.COM](mailto:EXCHANGE@ARCHLIGHTING.COM)

Although Thomas Alva Edison's incandescent light bulb in 1879 is generally recognized as the "birth" of modern lighting, technological advancements in the industry have been many, and creating a comprehensive timeline is a historical research

project of great proportions. What follows below is A|L's selection of some of the innovations that have helped move lighting forward, and that will provide the foundations for the inventions of tomorrow. **A|L**

1932	<b>LAMPS</b>	The first low-pressure sodium lamps are introduced in Europe by manufacturers Philips, Osram, and GEC.
1936	<b>LAMPS</b>	George E. Inman of General Electric files for a patent for the fluorescent lamp.
1945	<b>BALLASTS</b>	Advance Transformer produces the first fluorescent ballast.
1947	<b>CONTROLS</b>	The first electronic dimmer is introduced.
1962	<b>LEDS</b>	Nick Holonyak Jr. of General Electric develops the first practical visible-spectrum light emitting diode (LED).
1964	<b>LAMPS</b>	Tungsten halogen PAR and metal halide lamps are introduced in New York at the World's Fair.
1975	<b>LAMPS</b>	General Electric Lighting markets an architectural version of a halogen dichroic reflector lamp, calling it the Precise MR16.
1980	<b>LAMPS</b>	Osram and Philips introduce the compact fluorescent lamp. It uses 20 percent of the power of an incandescent lamp, and lasts up to 13 times longer.
1986	<b>CONTROLS</b>	The DMX-512 protocol is first developed by the United States Institute for Theater Technology as a means of controlling dimmers from consoles using a standard digital interface.
1990	<b>LEDS</b>	The first blue LED is introduced by Japanese manufacturer Nichia.
1996/1998	<b>LAMPS</b>	T5 and T5HO lamps are developed.
1997	<b>BALLASTS</b>	Philips Lighting introduces the first dimming ballast for T5 lamps.

Your Vision



is our

Focus

Lighting Systems  
for Architecture

**Nexus jr and Nexus** Bismarck Airport, Bismarck ND  
Architect - Tveng Associates Engineers - Viteig Charles Mayer Photography



LITECONTROL

Litecontrol . . . an employee owned company 100 Hawks Avenue Hanson, MA 02341 781 294 0100 litecontrol.com

Circle No. 69 or [www.archlighting.com/productinfo](http://www.archlighting.com/productinfo)

design with light



Milwaukee Museum of Art \* Calatrava Architects \* Kahler Slater Architect of Record \* Ring & DuChateau Inc. Lighting Design  
Oculus - Illuminating the "Wing"

Three precision instruments designed to address all floodlighting tasks.



Cypher



Oculus



Pivot

For product information, log onto: [www.aal.net/designwithlight.html](http://www.aal.net/designwithlight.html)

Architectural Area Lighting

Circle No. 34 or [www.archlighting.com/productinfo](http://www.archlighting.com/productinfo)



## LIGHT, FRANKFURT STYLE

**THE NUMBERS ARE IN.** THE BIENNIAL FRANKFURT-LOCATED LIGHT+BUILDING, HELD FROM APRIL 23 TO 27, LOGGED a 16 percent increase over its 2004 attendee numbers, from 116,000 visitors two years ago to 134,489 this year. Show manager Messe Frankfurt also reported international participation of 32 percent (up from 27 percent two years ago). While not all of the 119,000 square feet of exhibition space was devoted to lighting (the show also incorporated engineering, home and building automation, and architecture-related systems), there was more than enough on the 15 lighting-devoted floors to keep the ambitious visitor busy for at least five days—and sore for many more following.

Among U.S. attendees, the response was overwhelmingly positive, particularly for first-timers who cannot help but be impressed with the sheer volume, as well as the general quality, of everything from product to booth design. (At least this is the case in the main halls—a few of the pavilions are afflicted with the same familiar trade show schlock.) Attending for the first time, David Clinard, a lighting designer in the exhibition department of New York's American Museum of Natural History, says he was impressed to see manufacturers "spending time and energy on product development, instead of just making adjustments to existing product lines. They are interested in new ways of integrating lighting into architectural spaces." The show, he notes, will definitely be on his 2008 itinerary.

Messe Frankfurt reported a significant increase in U.S. exhibitors for the 2006 show. While the total number was only 22 (versus China's 290, for example), it represented a 37.5 percent increase over 2004's number. Of the countries with the most exhibiting manufacturers, only a few saw a decrease from

2004 to 2006: Switzerland, Taiwan, and Turkey. (See "Top Exhibitors by Country," left.)

In addition to aisle after aisle of product, a number of interesting extracurricular events engaged show goers. The "Lights of the Future" competition honored luminaires that combined energy efficiency with design—among them products from Artemide, Hess Form+Licht, and Reggiani. Young Designer awards were also given: first prize went to Robin Carpenter for her Spiralight, second to Bettina Wassermann for the Luna luminaire, and thirds to both Henning Bögershausen for Blattwerk and Sabrina Catrin Meyer for L!ight-Me.

Outside the fair grounds, the Luminale program offered a series of installations, events, exhibits, and other points of interest around the city and outlying neighborhoods—more than 160 in total. Each project was autonomously funded and organized, but unified in its focus on light. A Luminale city tour was offered (though this was booked long in advance), as well as a nightly bus circuit, to help visitors view the illuminated sites—some permanent, most temporary. The European Lighting Designers' Association also partnered with the IALD to host a "Celebration of Light" at the Frankfurt Opera House. The evening of drinking and dancing featured a presentation by Luc LaFortune from Cirque du Soleil, and a light show in the building's main volume.

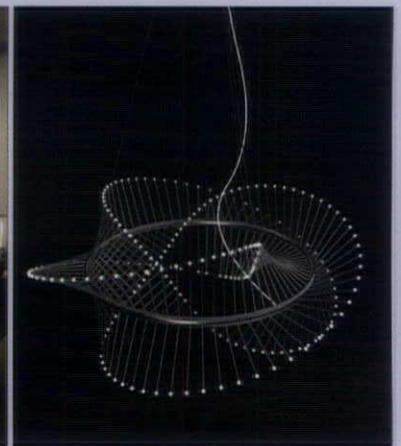
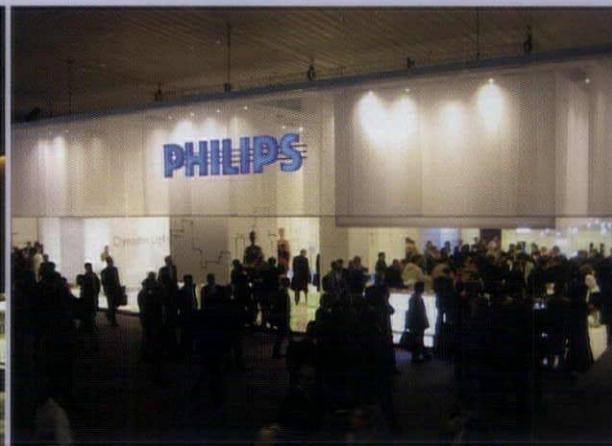
Altogether, from the show floor to the city outside, the Light+Building event is a must for design practitioners that work with light. Mark your calendars now for April 6 to 10, 2006. For more information on the show, visit [light-building.messefrankfurt.com/frankfurt](http://light-building.messefrankfurt.com/frankfurt). **A|L**

(A|L will report on product trends from Light+Building in its July/August 2006 issue.)

**TOP EXHIBITORS BY COUNTRY  
(59 COUNTRIES TOTAL)**

COUNTRY	2006	2004
AUSTRIA	42	40
BELGIUM	34	32
CHINA	290	227
CZECH. REPUBLIC	20	17
FRANCE	39	43
GERMANY	839	819
GREAT BRITAIN	43	33
HONG KONG	57	49
ITALY	220	213
NETHERLANDS	52	42
POLAND	40	21
SPAIN	123	100
SWITZERLAND	25	28
TAIWAN	53	64
TURKEY	40	44
USA	22	16

(A total of 2,100 companies exhibited at Light+Building 2006.)



From left to right: The historic stock exchange, a Luminale stop; the crowded Philips booth; and winner of the "Lights of the Future" Young Designer award, Spiralight by Robin Carpenter.

## AND ON TO LAS VEGAS AND LOS ANGELES ...

**FROM ONE SHOW TO THE NEXT.** With Lightfair and the AIA Convention just a week apart, the spring/summer design conference schedule is packed. For those in need of a break from seminars and product exhibits, here is a sampling of projects worth seeing. **A|L**

### LAS VEGAS

The sounds and sights of Las Vegas change faster than the blink of an eye. Here are some new additions since Lightfair was held two years ago and some old favorites.

- Cirque de Soleil's Ka, MGM Grand
- Fix Restaurant, Bellagio
- Mix, at THEhotel, Mandalay Bay
- Nextel-sponsored Las Vegas Convention Center Monorail Station
- Shibuya Restaurant, MGM Grand
- Water and Light Show, Bellagio Fountain (shown)
- Wynn Las Vegas



### LOS ANGELES

With a wealth of extraordinary architectural sites in and around Los Angeles, the downtown area has several jewels of its own, old and new.

- Biltmore Hotel
- Bradbury Building
- Caltrans 7 District Headquarters
- The Cathedral of Our Lady of the Angeles
- Los Angeles City Hall
- Los Angeles Public Library
- Museum of Contemporary Art (MOCA)
- Walt Disney Concert Hall (shown)



PHOTOS: A|L (CENTER); COURTESY MESSE FRANKFURT (LEFT AND RIGHT)

PHOTOS: COURTESY MGM MIRAGE (LEFT); MUSIC CENTER OF LOS ANGELES COUNTY (RIGHT)

TURN LIGHTING ON ITS HEAD!

# THINK LEDS

**RELAMP WITH BRIGHT, LONG-LASTING ENERGY EFFICIENT DIRECT INCANDESCENT REPLACEMENT LED BULBS AND LAMPS FROM LEDTRONICS.**

- FEATURES**
- ▶ NO HEAT - COOL TO THE TOUCH
  - ▶ USE 70% TO 90% LESS POWER
  - ▶ LEDS LAST UP TO 11 YEARS
  - ▶ SHOCK/VIBRATION RESISTANT
  - ▶ 12 VOLTS DC TO 240 VOLTS AC
  - ▶ IDEAL FOR SOLAR POWER
  - ▶ LED COLORS: WHITE, GREEN, BLUE, RED, YELLOW, AMBER, AND TINTED FROSTED LENSES



▶ S14 DecorLED™ Lamps  
Palace Theatre,  
Albany, NY



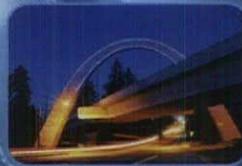
▶ Round, Flexible RopeLED  
Tortilla Jo's,  
Anaheim, CA



▶ Custom-Built LED Lamps  
Vincent Thomas Bridge,  
San Pedro, CA



▶ S14 DecorLED™ Lamps  
Bardavon Theater,  
Poughkeepsie, NY



▶ 4-LED, 9mm Wedge Lamps  
Hillsboro Arch,  
Hillsboro, OR



▶ S6 Candelabra Lamps  
Hyatt Regency,  
Long Beach, CA

**LED**<sup>®</sup>  
**LEDTRONICS, INC.**<sup>®</sup>  
THE FUTURE OF LIGHT<sup>®</sup>

1.800.579.4875  
www.LEDtronics.com

23105 Kashiwa Court, Torrance, CA 90505  
Phone: 310.534.1505 | Fax: 310.534.1424  
Email: webmaster@ledtronics.com

See us at Lightfair Booth #3943

## ACUITY OPENS NEW YORK OFFICE

IN A MOVE THAT WILL PROVIDE DIRECT ACCESS TO ITS CUSTOMER BASE, ACUITY BRANDS LIGHTING, THE PARENT company of Lithonia, Holophane, Gotham, Hydrel, and Peerless, is opening a new sales and marketing office in New York City. "We've elected to open our own office servicing the New York market, rather than go through traditional intermediary distribution methods," says Douglass M. Baillie, vice president of corporate communications. The new office will work with clients in the city's five boroughs, Suffolk and Nassau counties on Long Island, and Westchester, Putnam, and Rockland counties outside the metropolitan area. Spectralume Sales Agency, which previously handled sales representation for Acuity in these locations, will continue its relationship with the company by servicing the northern New Jersey market.

According to the company, this decision reinforces Acuity's commitment to its customer base of architects, lighting designers, and contractors in the New York market whose reach extends well beyond the local scene. It also relays Acuity's confidence in the building and construction markets. The team is presently working out of temporary space, until the fall opening of its new offices in Manhattan's Chelsea neighborhood. The new space will function as a lighting center, similar in approach to Acuity's facility in Conyers, Georgia, with a lineup of events, educational seminars, and a working lab. "We want architects, lighting designers, and all design and building professionals to see this as an extension of their working environment," explains Sero Cardamone, who will direct the New York operations. Mark Rousch, who has joined Acuity and will play a leadership role in the New York office, echoes this sentiment: "The new office will foster greater communication with early adapters and industry leaders." The more robust and direct business model should prove a great resource to the New York design and building communities. The company will issue an announcement when the sales offices and lighting showroom are complete. In the meantime, all inquiries should be addressed to Sero Cardamone at 212-462-0088. **AJL**

## "SOLOS: MATALI CRASSET"

THE WORK OF FRENCH INDUSTRIAL DESIGNER MATALI CRASSET WILL BE THE FOCUS OF THE FOURTH INSTALLMENT of the Solos exhibition series at the Cooper-Hewitt National Design Museum in New York City. The exhibit, which runs from May 19 to September 24, 2006, examines the role of technology in residential settings and includes industrial design products, graphics, theater sets, wallpaper, and furniture.

Light and sound both play an important role in the installations: "Splight" is a floor-to-ceiling lighting fixture constructed of fluorescent micro-tubes and blown glass. "Immersion" is a home-entertainment seating unit that integrates an LCD flat screen and DVD system. "D\_fuse" (below) is an illuminated igloo-like structure with an audio component, designed for meditation and made of translucent cones, while "Sounddrops" also provides an interactive music experience with small speakers and microphones hung from a soft-cell seating unit.

Though this will mark the designer's first solo museum exhibit in the United States, her work is in the permanent collections of the Centre Georges Pompidou in Paris and the Museum of Modern Art in New York. Before forming her own company, Crasset worked with Philippe Starck for five years. She has designed for several companies, including the lighting manufacturer Artemide.

The Solos series was launched in 2003 to explore innovations in the fields of architecture and design. For more information, visit [www.cooperhewitt.org](http://www.cooperhewitt.org). **AJL**



## NATIONAL DESIGN AWARD FINALISTS

THE SMITHSONIAN'S COOPER-HEWITT NATIONAL DESIGN MUSEUM IN NEW YORK CITY HAS ANNOUNCED THE 18 finalists of its 2006 National Design Awards from a pool of nominations submitted by a committee of more than 800 leading designers, educators, journalists, cultural figures, and corporate leaders nationwide.

Now in its seventh year, the awards program began in 2000 as an official project of the White House Millennium Council to honor achievement in the design world, recognize the most outstanding contributions encompassing all areas of design from the past year, and increase awareness of design by educating the public and promoting excellence. While lighting design is not one of the award categories, those such as architecture, interior, landscape, and product design offer an outlet for lighting as an integral component of great projects and ultimately a designer's success.

This year's finalists "consistently challenged the possibilities of design and have demonstrated innovation through their work in various fields," says Cooper-Hewitt director Paul Warwick Thompson. The seven-person jury, chosen by the museum, is made up of Cindy Allen, editor-in-chief of *Interior Design*; Yves Béhar, founder of San Francisco-based design firm fuseproject; Michael Bierut, a partner at New York graphic design firm Pentagram; Roger Mandle, president of the Rhode Island School of Design in Providence, Rhode Island; Enrique Norton, founder of New York- and Mexico City-based architecture firm TEN Arquitectos; Janet Rosenberg, founder of Canadian landscape architecture firm Janet Rosenberg + Associates; and Stefano Tonchi, style editor for the *New York Times Magazine*.

The 18 finalists represented six categories of design: architecture, communications, landscape, interior, product, and fashion. In the architecture design category, Thom Mayne, principal of Morphosis, a Santa Monica, California-based architecture and design firm; Stanley Saitowitz, principal of Natoma Architects in San Francisco; and Bernard Tschumi, principal of Bernard Tschumi Architects, were recognized. Michael Gabellini, principal of Gabellini Sheppard Associates in New York; Annabelle Selldorf, principal of New York-based architecture and design firm Selldorf Architects; and Tsao and McKown Architects, an architecture and interior design practice in New York, were announced as finalists in the interior design category.

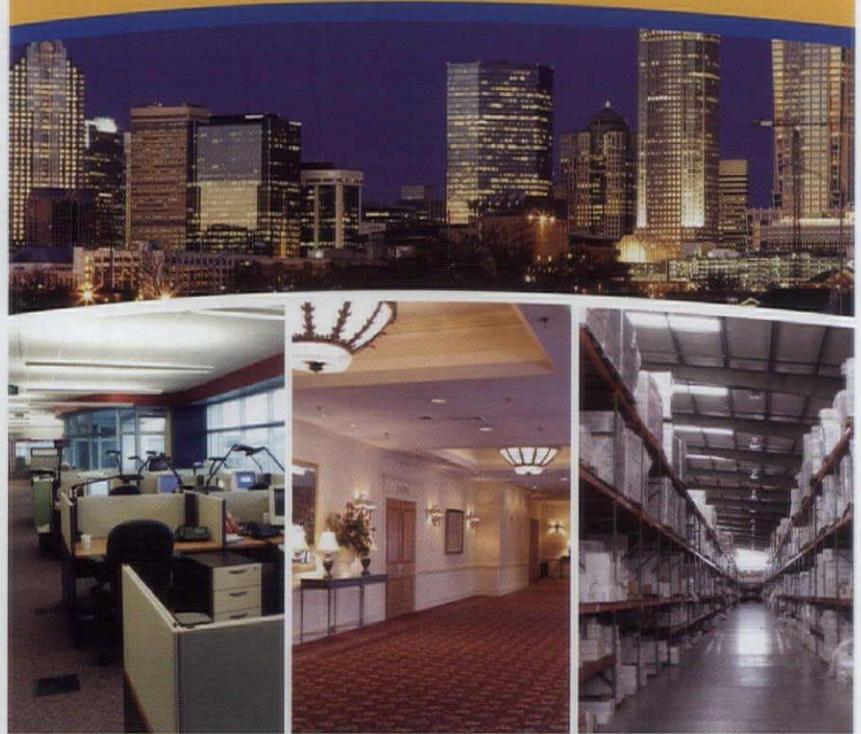
Winners will be chosen from these finalists, and award recipients will be honored at a gala held at Cooper-Hewitt on October 18, 2006. For more information, visit [www.cooperhewitt.org/NDA](http://www.cooperhewitt.org/NDA). AJL

Natoma Architects' Yerba Buena Lofts, San Francisco (left); Bernard Tschumi Architects' Vacheron Constantin watch factory and headquarters, Geneva, Switzerland (right); and Morphosis's Caltrans District 7 Headquarters, Los Angeles (bottom).



IMAGES BOTH PAGES COURTESY OF THE COOPER-HEWITT NATIONAL DESIGN MUSEUM

**Universal**<sup>TM</sup>  
Lighting Technologies



THE MOST  
WORLD'S MOST  
TRUSTED  
FULL LINE  
BALLAST COMPANY

Universal Lighting Technologies offers today's most comprehensive line of products that deliver energy intelligence in lighting. From high lumen fluorescent systems to digital dimming and electronic HID, our vision transcends the ballast business. We also provide the resources and services to help you take lighting to the next level. Universal Lighting. Your one-stop source for energy intelligence.

[www.ultnews.info](http://www.ultnews.info)

Energy Intelligence in Lighting.

Universal Lighting Technologies, Inc.

26 Century Blvd., Suite 500

Nashville, TN 37214-3683 • (615) 316-5100

DESIGNERS AND MANUFACTURERS  
OF ARCHITECTURAL LIGHTING  
SINCE 1974



**BRASS LIGHT GALLERY**  
COMMERCIAL • RESIDENTIAL • VINTAGE

[www.brasslight.com](http://www.brasslight.com)  
Contact: [commercial@brasslight.com](mailto:commercial@brasslight.com)

Milwaukee • 131 South 1st Street • 800.243.9595

**industry | briefs**

**2006 LUMEN AWARDS**

The 2006 Lumen Award winners represent a diverse array of talent. Awards will be presented at the Lumen Gala in New York City on June 14, 2006. For complete information visit [www.iesny.org](http://www.iesny.org).

**2006 LUMEN CITATIONS**

PROJECT The Porter House, New York, NY  
ARCHITECT SHoP Architects

PROJECT Dodger Stages  
(now called New World Stages), New York, NY  
ARCHITECT AND LIGHTING DESIGNER Sachs Morgan Studio

**2006 LUMEN AWARDS OF MERIT**

PROJECT Terminal 1, Lester B Pearson  
International Airport, Toronto, Canada  
LIGHTING DESIGNER Brandston Partnership  
ARCHITECTS Airport Architects Canada with  
Skidmore Owings & Merrill

PROJECT 111 South Wacker Drive, Chicago, IL  
LIGHTING DESIGNER Cosentini Lighting Design  
ARCHITECT The John Buck Company

PROJECT Frisson, San Francisco, CA  
LIGHTING DESIGNER Scott Kester

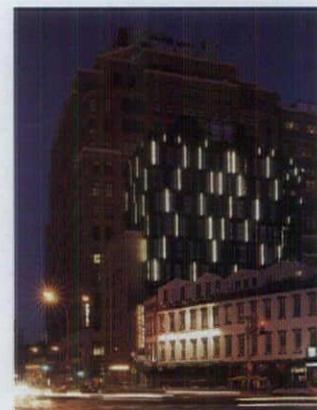
PROJECT Mixed Greens Gallery, New York, NY  
LIGHTING DESIGNER Tillotson Design Associates  
ARCHITECT Leven Betts Studio Architects  
INTERIOR DESIGNER Ghislaine Vinas

PROJECT The National World War II Memorial,  
Washington, DC  
LIGHTING DESIGNER Horton Lees Brogden  
Lighting Design  
PROJECT OWNER National Mall & Memorial Parks  
ARCHITECTS Leo A Daly and  
Friedrich St. Florian Architect  
LANDSCAPE ARCHITECT  
Oehme, van Sweden & Associates

PROJECT Chanel Ginza, Tokyo, Japan  
ARCHITECT Peter Marino + Associates Architects  
LIGHTING DESIGNER Tanteri + Associates

**LUMEN AWARD OF MERIT WITH DISTINCTION FOR CIVIC SERVICE**  
PROJECT Higgins Hall Central Wing, School of  
Architecture, Pratt Institute, Brooklyn, NY  
LIGHTING DESIGNER Arc Light Design  
DESIGN ARCHITECT Steven Holl Architects  
ARCHITECT OF RECORD Rogers Marvel Architects

PROJECT Robin Hood Library Initiative - PS 32,  
Bronx, NY  
LIGHTING DESIGNER Renfro Design Group  
ARCHITECTS Tod Williams Billie Tsien Architects



From top to bottom: SHoP Architects' Porter House; Sachs Morgan Studio's Dodger Stages; Renfro Design Groups' Robin Hood Library Initiative - PS 32; and Arc Light Design's Higgins Hall.

## A WIND FARM FOR THE SOUND

POWER GENERATION HAS REACHED A NEW LEVEL OF IMPORTANCE THESE DAYS. BEYOND WHERE AND HOW IT WILL happen is the question what will it look like? In response to an ongoing public debate about Massachusetts's Cape Wind Associates' proposed development of America's first offshore wind farm, three young Boston designers organized Windscape, an ideas competition envisioning renewable energy for Cape Cod. This Boston Society of Architects-facilitated competition called for project submissions that rethink the environmental and visual issues and impacts of such a development.

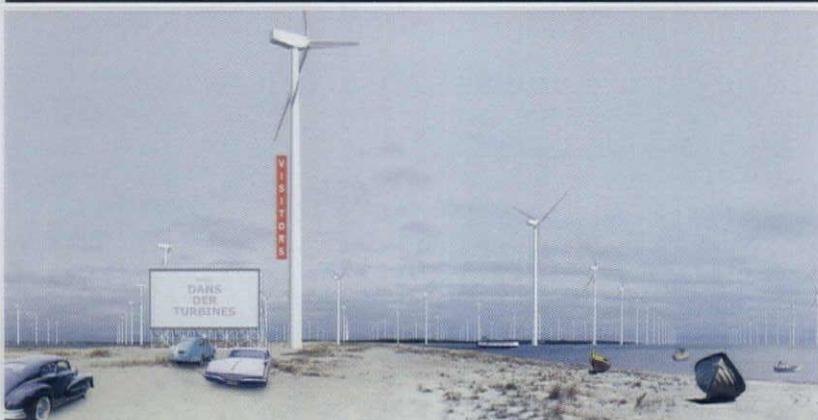
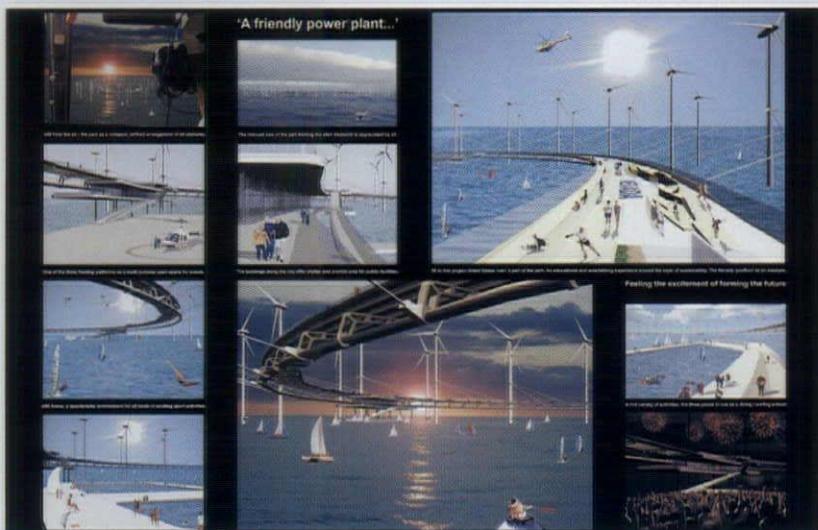
The Cape Wind Associates proposed development employs 130 wind turbines in the Nantucket Sound, intended to supply 70 percent of Cape Cod and surrounding islands with clean and renewable power. The competition required that the Windscape submissions address the addition of the turbines to the physical and cultural landscape, and respond to the following overall challenge: Can a wind farm be more than just a utility to generate electricity? Submission requirements included designing an educational experience to connect public visitors to the wind park, as well as secondary uses, such as recreation, research provisions, tours, and installations. Concepts were judged by a national group of artists, architects, landscape architects, and environmental and renewable energy advocates.

Three winners were chosen from a pool of 65 international submissions. First place and \$5,000 was awarded to Paul Michael Pelken and Markus Hermann of Energy Design Lab in Boston for their submission named "e50\_energy island". The concept, according to the judges, was a deeply integrated, clever solution, addressing the larger issue of energy use, while reducing the number of turbines to 50 and creating an environment to attract local residents and tourists.

The second-place prize of \$2,000 went to "Dan Der Turbines" by Rafal Wamka of Germany, Ton Matton of Germany and the Netherlands, and Albert Jansen of the Netherlands. Their central idea was to place the turbines across the water and onto the land, integrating them into the existing landscape, rather than obscuring them. A Special Citation went to "Martucket Eyeland Resort and Theme Park" by Jay Critchley of Provincetown, Massachusetts, and John Paul Raymond of Leicester, Massachusetts, for their satirical interpretation.

The judges selected five additional submissions to be part of a traveling exhibition. It can be seen at the Massachusetts State House Doric Hall in Boston from June 12 to 30, 2006. For more information, visit [www.architects.org/shaping\\_communities](http://www.architects.org/shaping_communities). AJL

First prize was awarded to "e 50 energy island," which addressed the larger issue of energy use with a deeply integrated and clever solution (top). Second place went to "Dan Der Turbines," which placed the turbines on the landscape (bottom).



IMAGES COURTESY OF THE BOSTON SOCIETY OF ARCHITECTS

- Pendants
- Portables
- Step Lights
- Wall Sconces
- Ceiling Fixtures

## Passion for Style

Venezia collection



T - 2535

A - 2530



**ESTILUZ**®

ESTILUZ, INC.

235 Moonachie Road - MOONACHIE, NJ 07074

Tel. (201) 641 - 19 97 Fax (201) 641 - 20 92

E-mail: [estiluzinc@estiluz.com](mailto:estiluzinc@estiluz.com)

[www.estiluz.com](http://www.estiluz.com) [www.blauet.com](http://www.blauet.com)

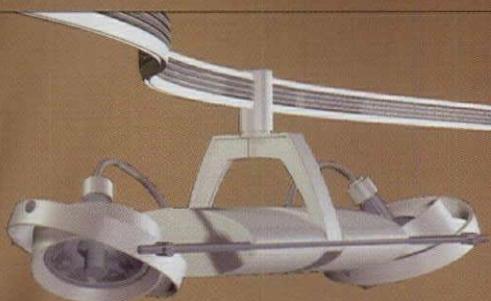
# COOPER Lighting



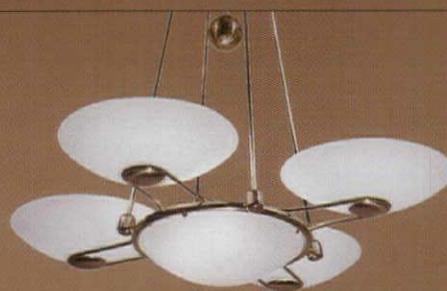
**Invue** Icon



**Corelite** Iridium IQ



**Halo** Architectural Track Systems



**Shaper** Farallon Cloud Pendant



**Neo-Ray** Scala



**Ametrix** Roundel



CONTINUOUS-RUN RECESSED  
LIGHTING & UTILITY SYSTEM

Audio Surveillance HVAC Fire Sprinkler

**RSA** Continuous Channel



**Lumiere** 1235C-RD Step Light

A tradition of excellence is evident in each of Cooper Lighting's versatile and distinctive lighting solutions. Inquire about the industry's most innovative and trend-setting products. Visit our website for limitless lighting solutions.



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

Halo Metalux Lumark Sure-Lites Neo-Ray Corelite Portfolio Iris Shaper  
Lumiere Invue McGraw-Edison Streetworks Fail-Safe MWS DLS RSA Ametrix

## China's Sustainable Future? BY ELIZABETH DONOFF



Efforts like the China Green Lights program and Right Light 6 are steps in a positive direction for a sustainable future, as China attempts to align its rapid growth with long-term resource management.

ASK DESIGNERS AND MANUFACTURERS WORKING IN CHINA TODAY—OR JUST VISITING, for that matter—what their overriding impression of the country is and they'll tell you "construction." China's 1.3 billion inhabitants are experiencing an unprecedented economic and building growth. According to an October 2005 *New York Times* article, "China Builds Its Dreams, and Some Fear a Bubble," Shanghai, a city that already boasts 4,000 skyscrapers (defined by the Chinese as a structure over 18 stories high), plans to build 1,000 more high-rise buildings by the end of this decade. The country is racing to create new housing and office space to make up for an absence of construction that occurred during China's communist rule that began in 1949.

It is not only the amount of new construction that is astonishing, but rather the pace. Development is on a scale beyond even the largest master plans familiar to most U.S. architects and designers. China's current rate of new construction is akin to building multiple Manhattans by 2010. The upcoming 2008 Summer Olympics in Beijing is helping to fuel this construction frenzy, along with the investment of foreign capital in the Chinese real estate market. This building boom will not come without a price. New construction requires materials and resources. China is currently the largest producer and consumer of steel, cement, and coal, and owing to its heavy reliance on the latter, the country is the second largest producer of greenhouse gases after the United States. The excessive demand on these resources has both short- and long-term effects: it drives prices up globally, depletes natural reserves, and otherwise stresses the environment.

It is expected that 75 million farmers will move to cities over the next five years. This loss of farmland to make way for new cities, and the migration of rural residents to urban locations, is another critical problem that goes well beyond infrastructure issues: It speaks to a major shift in the social and cultural structure of the country, the loss of a local agrarian base, and the end of a way of life for a majority of China's population. Further complicating this situation is the destruction of the historic fabric and architectural legacy of major cities like Beijing and Shanghai to make way for new high-rise towers. How China manages its growth will not only impact its internal economic, social, and political infrastructures, but the global community as well.



Old and new collide. The pedestrian scale of China's major cities is being lost as high-rise buildings dominate the skyline. Guangzhou (above and top) is but one example of this trend.

**MAKING CHOICES**

Embracing sustainability and green design is one way in which China is addressing its rapid growth and management of resources. It is also a method of communicating and promoting China as a "modern" forward-thinking country to an international audience. These issues of market growth and environmental sustainability equally impact the Chinese lighting industry. According to a paper presented at last year's Right Light 6, a collaborative, not-for-profit conference organized by an international group of environmental agencies, the country's move to privatization has

introduced new manufacturing relationships, joint ventures, and foreign-owned companies to the Chinese economy. Italian lighting manufacturer Targetti is but one recent example. It opened its first Asian facility, an 86,000-square-foot factory with 150 employees, in June 2005, just outside the city of Guangzhou in an emerging manufacturing district in Guangdong Province. The new facility produces the Targetti collection for Asian consumers, and the company has developed a Mandarin catalog to support this business. Targetti has also established Heshan Targetti, a joint venture between the Italian parent company and Neo Neon, a leading Chinese LED manufacturer with over 15,000 employees.

These types of manufacturing relationships have led to more rapid product development, and along with this growth, an understanding of a systematic approach in how resources are managed. "There is a reasonable understanding among government officials," says Adam Hinge, managing director of Sustainable Energy Partnerships, a company specializing in energy-issue consulting, and one of the co-organizers of the May 2005 Right Light 6 conference, "that the economy can't keep growing at this rate. A number of initiatives are underway to figure out how to create a green GNP, to not just create through depletion."

To this end, China has implemented several international programs for its lighting industry, such as the Green Lights project, which works toward improving the efficiency

Guangzhou street scene at night (below).



**AL**  
architectural | lighting

**THANKS OUR SPONSORS FOR  
THEIR SUPPORT OF  
LIGHTCongress® 2006**



Event Host:



**LIGHTCongress** is the premier lighting symposium held each spring in New York City. It brings together the leaders of the lighting industry to share their knowledge with key media, architects, lighting designers and those related to our community.

For information on attending LIGHTCongress2007, please contact Kevin Marty (Architectural Lighting), kmarty@vnebuspubs.com.

For sponsorship information, contact Gary Gyss (Architectural Lighting), ggyss@vnebuspubs.com, or Jeff Johnston (Greystone Partners) at jeff@greystonepartners.net.



and quality of lighting products. The country is also stepping forward as a conference and venue host for the international community, with the hope that discussing these pressing issues on its own turf will initiate real change that much faster.

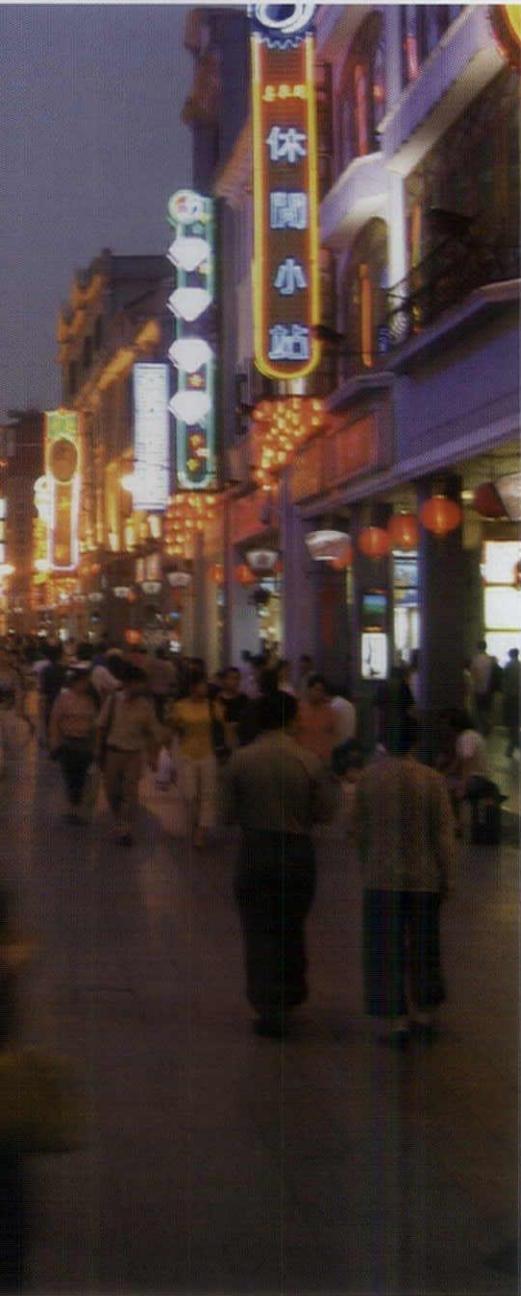
**CHINA GREEN LIGHTS**

One of the most significant projects afoot in the Chinese lighting industry is China Green Lights, a joint initiative of the Chinese government and the United Nations Development Program/Global Environment Facility (UNDP/GEF). The project's purpose is three-fold: to improve the quality of efficient lighting products produced and sold in China, to stimulate demand for these lighting products both nationally and internationally, and to reduce lighting energy use in China by 10 percent by 2010. Planning for the program began in 1996, although it was not implemented until September 2001, and was just completed in December 2005. The final evaluation report states that the program's four immediate aims—to increase the supply of high-quality lighting products; to create demand for energy-efficient lighting products by raising awareness and understanding among key categories of consumers; to provide sustainable financing options for efficient lighting and make quality lighting more affordable; and to evaluate and disseminate widely the project results achieved—were successfully met. During this approximate four-year span, the total lighting energy savings in China was 15.78 billion

kW—the equivalent of \$986 million in electricity cost savings. Estimated emissions related to lighting were reduced by 4.3 million tons of carbon. The summary encourages the Chinese government to find funding to continue the program, and prepare a detailed action plan for the remainder of 2006 and 2007.

**RIGHT LIGHT 6**

For the first time in its 14-year history, the Right Light conferences program was held outside of Western Europe, in Shanghai. Leading experts presented over 100 papers



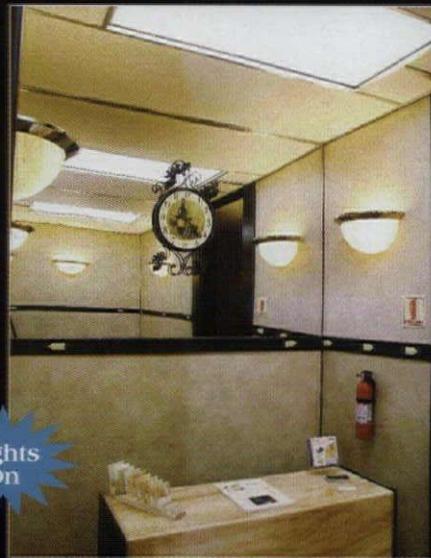
# “Let There Be Light”

-and there was light-



## Acrixlo™ Light emitting acrylic sheet

**Don't assume your present emergency lighting systems will work when you need them... just ask any of the millions of people left in darkness after the August 2003 Northeast Blackout!!**



Lights On



Lights Off

- **New technology in light panels**
  - Requires no electricity or batteries
  - Absorbs light energy, stores it, and releases it over long duration
- **Hours of illumination without power**
  - Panels are charged in 15 minutes by light source
- **Totally Fail Safe – nothing to malfunction**
  - It always works...always!
  - No batteries to check or replace
  - No switches or sensors that can fail
- **Maintenance Free**
  - Never needs checking or replacement
  - Won't fade, discolor, or degrade with time.
- **No Electrical installation required**
  - Uses existing fixtures – turn existing lights into safety lights.
  - Maintenance staff can install or DIY
- **Attractive Blue Glow simulates moonlight**
  - Acts as pathway marking and way guidance

**Available in Faux Marble effects for decorative and architectural lighting.**

Ideal for use in Commercial office buildings, Schools and Universities, Dormitories, Hotel/Motels, Cafeterias, Bathrooms, and any space where building codes do not supply sufficient emergency backup lighting because they aren't required by law.



Acrixlo, Inc. • 230 Culver Ave. • Jersey City • NJ 07305  
 www.acrixlo.com • Info@acrixlo.com  
 800-222-4680 ph • 201-333-1237 fax

discussing energy-efficient lighting technologies, applications, policies, and program design topics. The conference was held concurrently with one of China's largest lighting fairs, the China Association for the Lighting Industry (CALI) annual exposition and trade show. The move across the continent was no surprise. As the agenda stated, "The change in venue recognizes the fact that Asia has taken on a leading position in driving the world lighting markets. Further, lighting energy use (and resulting emissions) is growing most rapidly in East Asia, so the conference is being held where the biggest impacts of energy-efficient lighting can be made." Holding the confer-

ence in China also allowed energy-efficient lighting specialists to meet Chinese manufacturers, regulators, and policymakers.

Today, China has the largest lighting industry in the world. In a presentation at Right Light 6 by Chen Yansheng, president of CALI, figures indicate that there are 5,000 lighting product manufacturers, and 1,000 light source manufacturers in China. At the close of 2004, China's gross lighting exports of products neared \$7 billion, with more than half being sent to the United States. Chinese manufacturers mainly produce ballasts, luminaires, and electrical accessories. In addition to the proliferation of compact fluorescents, metal halide is the second largest lamp type coming out of China.

Given its abundant exportation, the compact fluorescent lamp (CFL) featured heavily in the Right Light 6 conference, namely CFL standards for the United States, China, Australia, and Europe. CFL production in China increased by 26 percent from 1997 to 2003, making this sector and the code regulations attached to it of particular interest to the importing countries. Specifically, the sessions covered recent revisions and pending new changes to the U.S. DOE and EPA Energy Star Specifications for CFLs and fixtures; draft revisions to the European Union's Green Light Regulations; draft proposals for the coordination of Chinese Certification and Efficient Lighting Initiative CFL standards; and draft proposals for the coordination of Australian and Chinese CFL standards.

**QUALITY CONTROL**

Despite Chinese manufacturers' best efforts to enter the international market with their products, the world's perceptions of Chinese quality is proving a major roadblock. Coupled with this concern is the prevalence of cheap imitations. With billions of dollars on the line, manufacturers are aggressively protecting their intellectual and design property, making many still wary of doing business in the Asian market.

Efforts by both Chinese and international companies are now being made to change the negative perception of Chinese-produced products in the minds of international consumers. According to Mike Bauer, president and CEO of Super Vision International, who opened a Hong Kong office in 2003, U.S. and European architects and lighting designers want to know that they are specifying products from brand-name companies, and that the product is produced in a contracted facility with quality assurance. In fact, many of the global companies with production facilities in China, such as Philips and Osram, have separate factories for local and international production. This makes it easier to ensure and enforce quality beyond just marking products with a quality-inspection check. The irony, as Bauer relates, is that Chinese architects and lighting designers prefer to specify U.S. and European manufacturers for the same reasons their western peers do: perceptions of quality.

No doubt China has a way to go, but efforts like Green Lights and Right Light 6 are a step in the right direction. An influx of western design firms, along with a new generation of internationally trained Chinese design professionals, accustomed to U.S. and European methods and returning to practice in China, will surely play a role in the country's transformation and help facilitate the changes that are necessary.

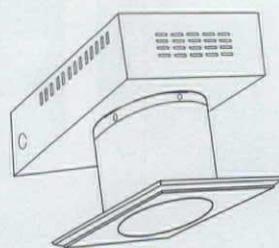
When a hole in your ceiling is *a good thing.*



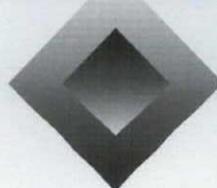
Kenneth Rice Photography — [www.kenricephoto.com](http://www.kenricephoto.com)

Our "Hole in the Ceiling" fixtures are plaster/fiberglass castings. These trimless down lights not only illuminate your space, but become an architectural element to enhance your design. Call us for more information at 626.579.0943 or visit our website today at [www.elplighting.com](http://www.elplighting.com).

See us at Lightfair Booth #1606



**ENGINEERED  
LIGHTING PRODUCTS**

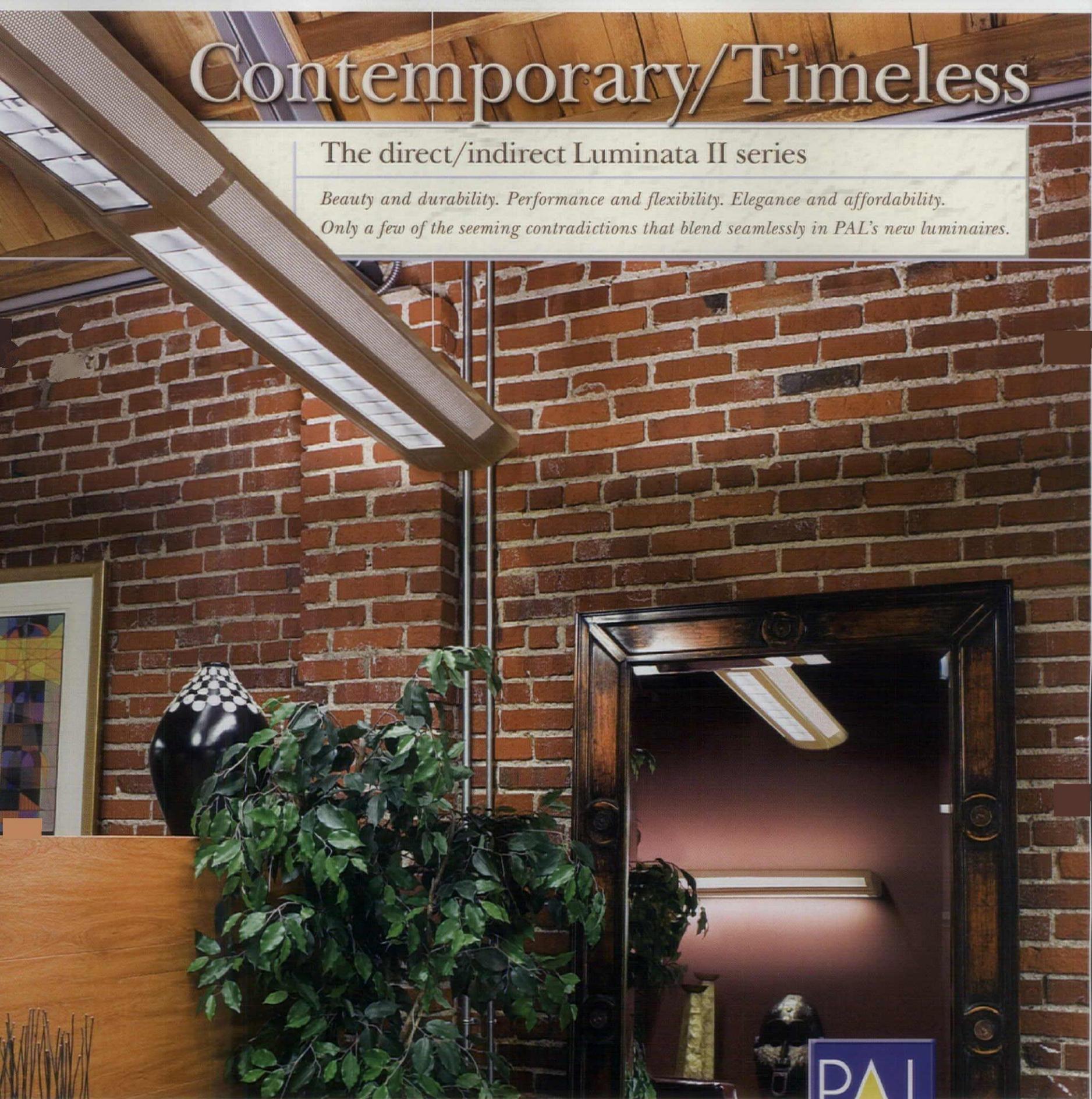


 more information at [ARCHLIGHTING.COM](http://ARCHLIGHTING.COM)

# Contemporary/Timeless

## The direct/indirect Luminata II series

*Beauty and durability. Performance and flexibility. Elegance and affordability.  
Only a few of the seeming contradictions that blend seamlessly in PAL's new luminaires.*



*A specification-grade linear fluorescent series that features suspended and wall-mounted fixtures, Luminata II offers visual impact and performance for a wide range of applications.*

*And eliminates the need to choose between style and substance. For details, contact us or your PAL representative today.*



**Precision  
Architectural  
Lighting**

4830 Timber Creek Drive  
Houston, TX 77017  
p:(713) 946-4343  
f:(713) 946-4441

[www.pal-lighting.com](http://www.pal-lighting.com)

©2006 Precision Architectural Lighting, Inc.



Circle No. 54 or [www.archlighting.com/productinfo](http://www.archlighting.com/productinfo)



**attune**

*unifying light and life*

Attune is designed to unify your lighting with your lifestyle. Each person and space within a building has different lighting demands, from aesthetic preferences to photometric requirements to installation details. Your lighting system must be a FAMILY of products "tuneable" enough to meet these needs while unifying an overall theme and providing comfortable, highly efficient illumination.



 **Day-Brite® Lighting**  
a Genlyte company

776 South Green Street • Tupelo, MS 38804

662.842.7212 • f: 662.841.5501 • [www.daybritelighting.com](http://www.daybritelighting.com)

Circle No. 57 or [www.archlighting.com/productinfo](http://www.archlighting.com/productinfo)

**RESOLUTE | WWW.RESOLUTEUSA.COM**

Product: **Watt**

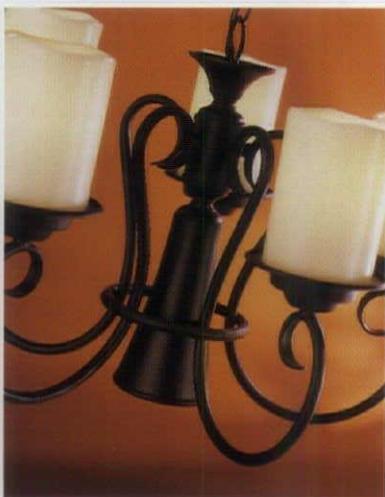
The Watt series is a family of pendant, ceiling, and wall fixtures. The pendant has an 8-inch diameter and measures 6 3/4 inches tall with a drop of up to 6 feet; the ceiling fixture offers the same dimensions, but drops only 8 inches from its ceiling mount; and the wall version (shown) has an overall height of 10 1/2 inches and a depth of 9 inches, and can be installed in up- or down-facing positions. For each fixture, glass color choices include clear crystal, aqua, chartreuse, gold, cobalt blue, and red-orange. CIRCLE 127



**BOYD LIGHTING | WWW.BOYDLIGHTING.COM**

Product: **Parisian**

With its large diameter of almost 32 inches and solid brass structuring, the Parisian pendant offers a unique and modern twist to the traditional pendant. The luminaire comprises textured fabric side panels with a white acrylic bottom diffuser. It is available in finishes of antiqued Boyd brass, blackened brass, and satin nickel. Lamping options include incandescent or compact fluorescent, and multiple heights are offered, from 18 inches to 42 inches. CIRCLE 130



**AMERICAN FLUORESCENT | WWW.AMERICANFLUORESCENT.COM**

Product: **Wellesley**

Offered in a weathered black finish, the Wellesley chandelier has five arms featuring real wax candle diffusers, each containing one energy-efficient 13W triple compact fluorescent. The same lamp is also used in a central downlight. CIRCLE 128

**BEAR CREEK GLASS | WWW.BEARCREEKGLASS.COM**

Product: **Glass Pendants**

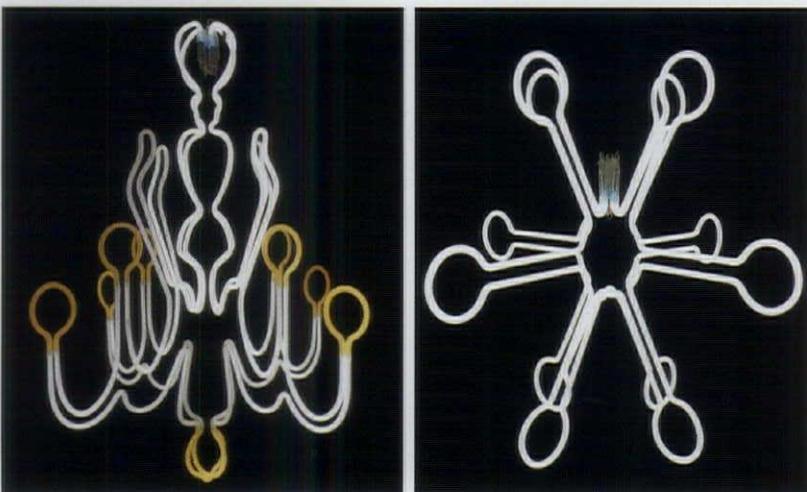
These hand-blown glass pendants containing swirls and speckled patterns are available in solid or frosted tones from ruby, amber, and cobalt to pink and ice blue. Each pendant measures 6 inches high and is up to 4 1/2 inches wide. Hardware colors include black, white, and brushed nickel. CIRCLE 131



**LITE BRITE NEON | WWW.LITEBRITENEON.COM**

Product: **Brookhaven and Astor**

The Brookhaven (left) and Astor (right) neon chandeliers consist of 8-millimeter cold cathode tubes that can be dimmed with existing incandescent dimmers and work off of small electronic power supplies that fit snugly into the fixtures' canopies. They are available in a range of white color temperatures from 2800K to 8500K. Brookhaven measures 24 by 24 by 35 inches, while Astor's dimensions are 24 inches in each direction. Custom sizes can be accommodated. CIRCLE 129



**AXO LIGHT | WWW.AXOLIGHT.IT**

Product: **Koshi**

The Asian-inspired Koshi wall sconce is offered as part of a collection that also includes pendants of varying shapes and sizes, a surface-mounted ceiling fixture, a desktop model, and a floor lamp. It is constructed from slender, horizontally oriented bamboo rods and metal columns that together house a halogen-illuminated blown-glass globe. CIRCLE 132



**BOVER | WWW.BOVER.ES**

Product: **Mei 90**

With its subtle Asian influence and large dimensions, the Mei 90 pendant provides warmth to large spaces. The shades are ribbioned by hand, diffuse three incandescent E27 lamps, have a maximum diameter of approximately 3 feet, and are available in red, cream, or white. Smaller models are also offered for residential applications. Each fixture includes a low diffuser and a transparent electric cable.



Product: **Silantra**

The Silantra collection of hand-ribbioned pendant, wall-, and surface-mounted luminaires is offered in seven sizes and brings warmth and elegance to a variety of environments. Available in white or cream, the fixture's frame is constructed of anodized and polished aluminum, which borders the delicate ribbons on two sides. The wall fixture (shown) is lamped with a halogen source, while other styles use fluorescent.

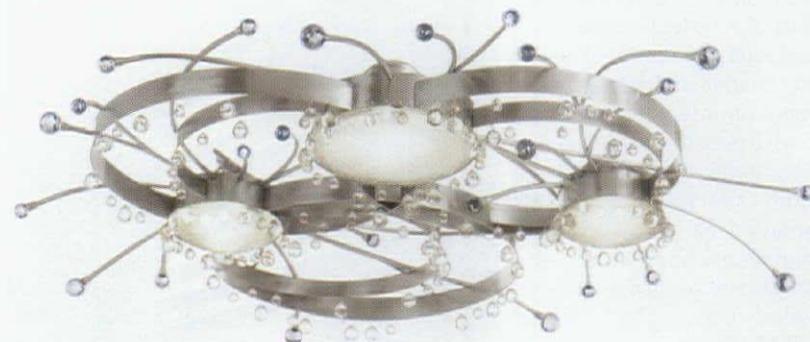


FOR INFORMATION ON BOTH BOVER PRODUCTS, CIRCLE 133

**KALCO LIGHTING | WWW.KALCO.COM**

Product: **Galaxy**

Featuring straps of solid stainless steel or brass that circle around three crystal bowls, the Galaxy collection of semi-flush-mount fixtures includes cables that allow the fixture to be suspended at any distance from 7 inches to 4 feet from the ceiling. The fixture measures 5 inches high by 64 inches in diameter, and incorporates 28 crystal-capped LEDs around the perimeter. CIRCLE 134



**MINITAL LUX | WWW.ARTEDIMURANO.US**

Product: **Soffione**

Inspired by the limbs of a tree, the Soffione collection is constructed of wires that can be molded into any number of configurations. Available in ceiling mount, wall mount, table and floor lamps, each fixture style comes with many different bulb quantities and is offered in a copper or chrome finish. CIRCLE 135



**IN-ES ARTDESIGN | WWW.IN-ES.COM**

Product: **Tre Lune**

The Tre Lune pendant features three round globes that gently diffuse light, while suspended from a single linear housing. Inspired by the moon, each globe has a diameter of just under 10 inches and uses either an E12 or a 40W lamp. Voltage requirements are 120V or 230V. CIRCLE 136

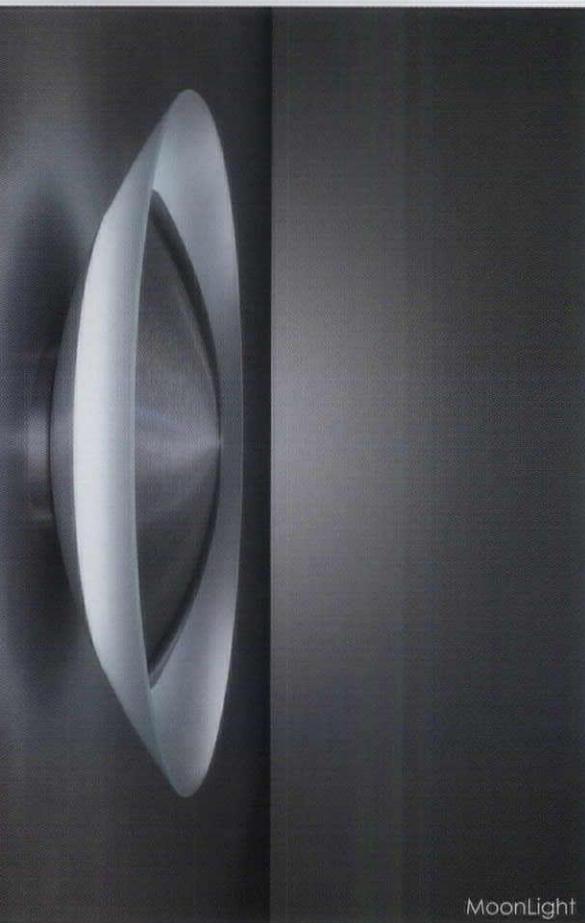


**DEREK MARSHALL LIGHTING | WWW.DEREKMARSHALL.COM**

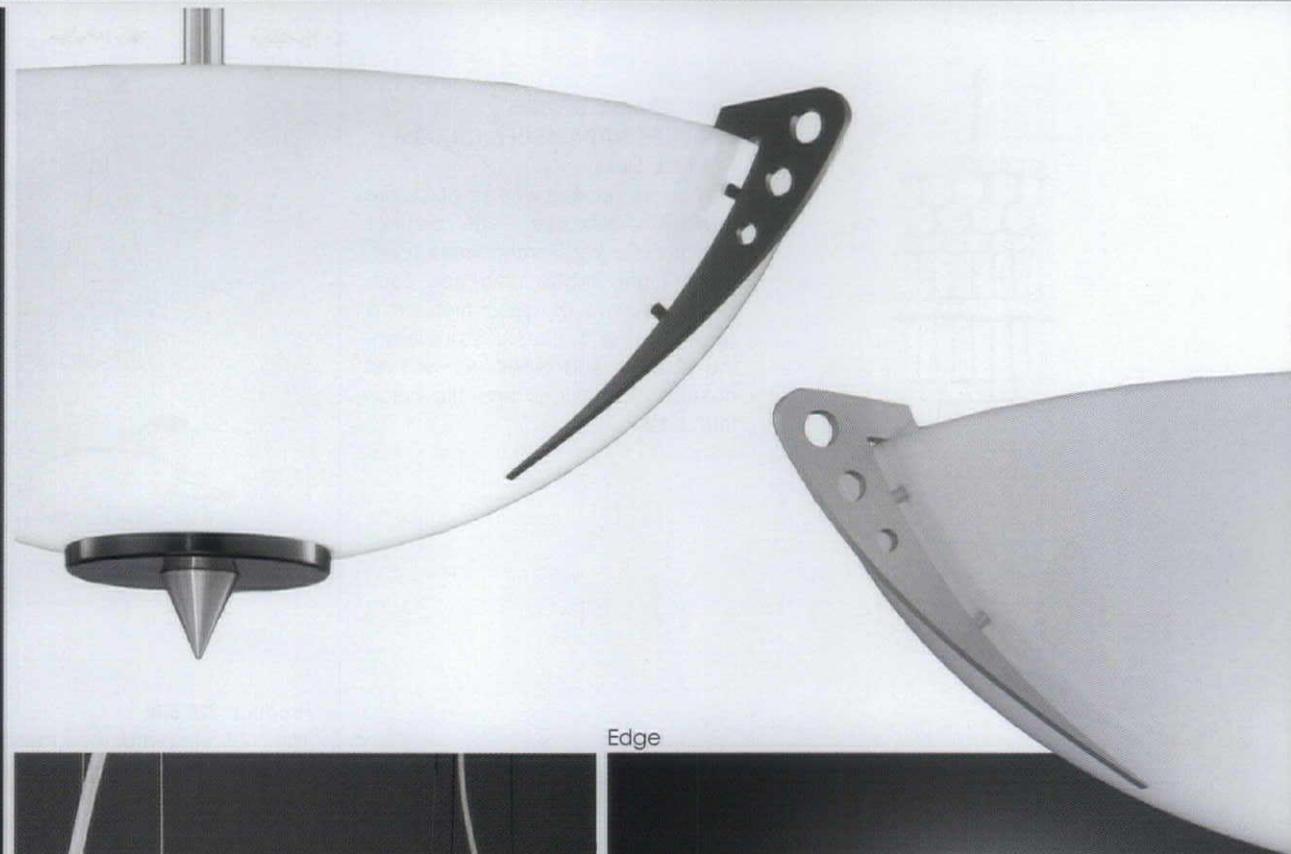
Product: **Marrakesh**

Created using three separate, overlapping kiln-formed petals, the Marrakesh pendant creates an interesting play of light through and around its glass. Two stainless-steel screws fasten each petal together for a strong, yet delicate, sculptural fixture. The luminaire measures 12 inches in height and 8 1/2 inches in diameter, and utilizes one 100W incandescent, halogen, or compact fluorescent lamp. Chords are available in either white or black, and a wide variety of glass colors are offered. CIRCLE 137

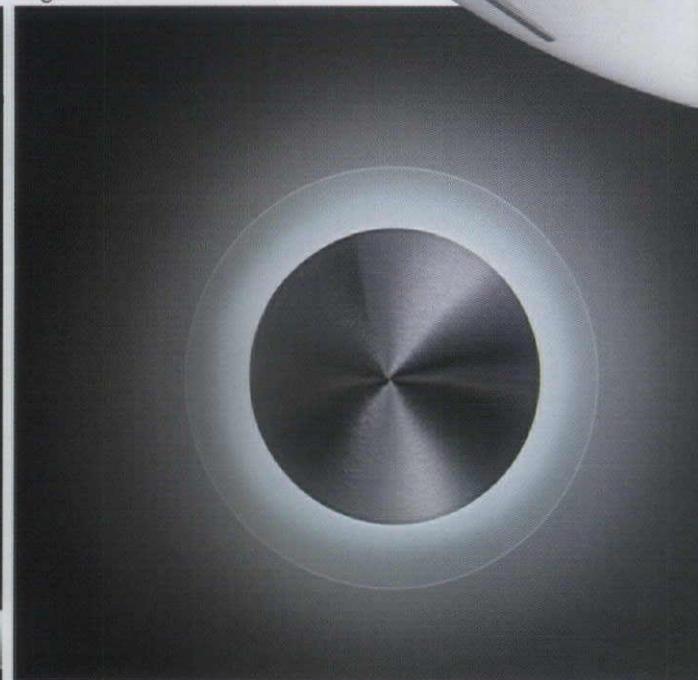
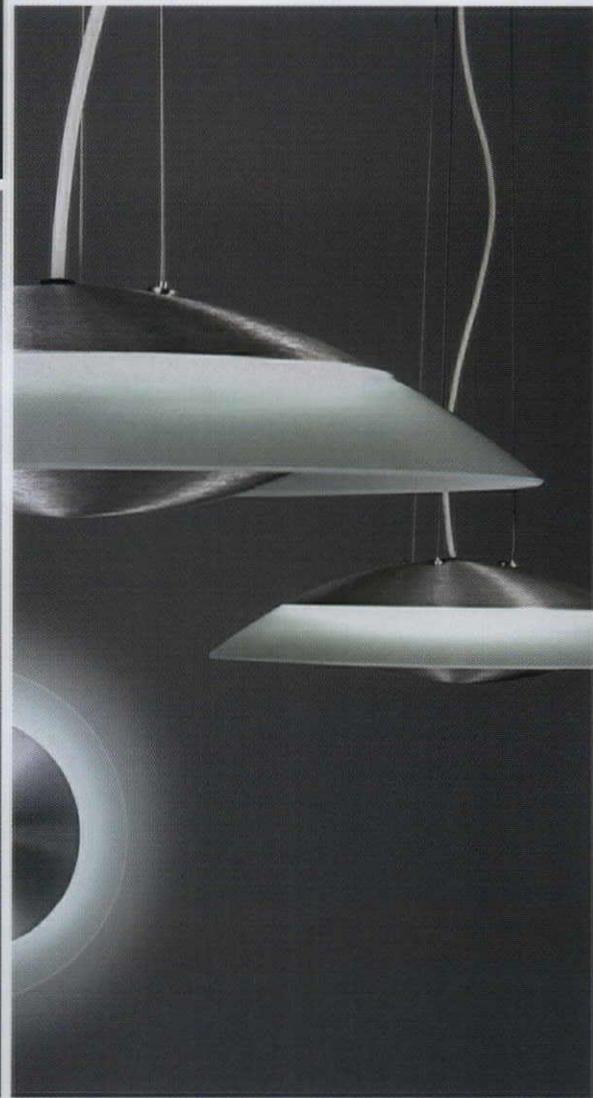
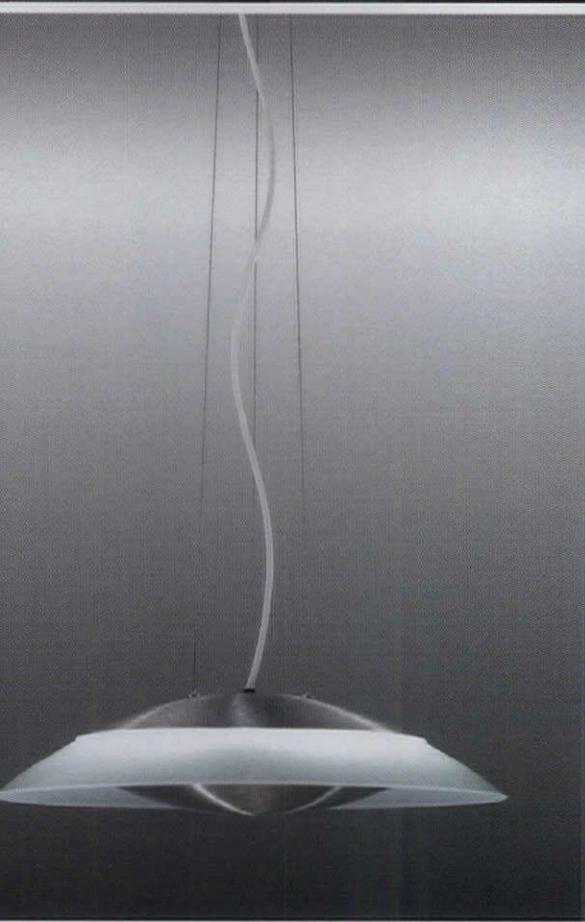




MoonLight



Edge



Discus

OCL is dedicated to innovation. New fixture styles and materials are constantly being introduced. OCL is always searching for new ways to provide quality and inspiration.

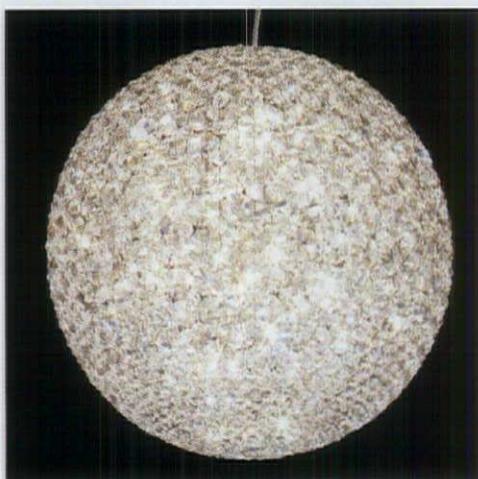


**ERIN ADAMS DESIGN |**  
**WWW.ERINADAMSDESIGN.COM**

Product: **Lume**  
The Lume product line of glass tile pendants features four distinct designs: Basket Border, Hatch Flair, Hatch Light, and Soldierstack. Each is constructed of glass tiles on a glass form, and offers custom lamping sources and types, as well as custom dimensions and tile color. **CIRCLE 138**

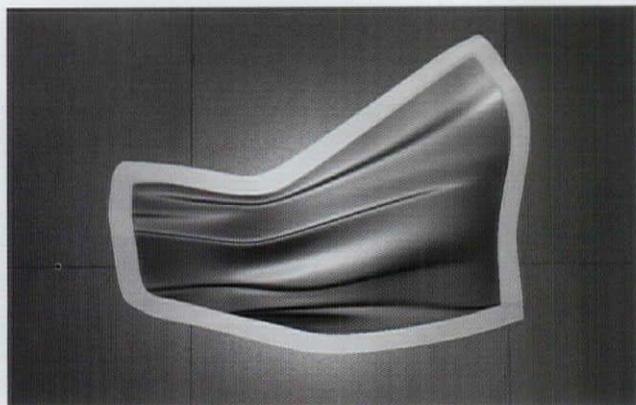
**SCHONBEK |**  
**WWW.SCHONBEK.COM**

Product: **Da Vinci**  
Composed of thousands of precisely positioned crystal octagons of different sizes, the Da Vinci crystal chandelier is perfectly round. Available in 10-, 12-, 18-, and 24-inch diameters, the chandelier utilizes bi-pin G9 halogen capsules and is comprised of Swarovski Strass crystal and an invisible stainless-steel frame. **CIRCLE 139**



**IVALO LIGHTING | WWW.IVALOLIGHTING.COM**

Product: **Inflection TW 751**  
The Inflection TW 751 wall sconce has a three-dimensional form of folds. Depending on scale and intensity, the fixture may be used alone or in sculptural combination to produce a single ripple or to cover the wall's entire surface. Designed with a non-dimmable compact lamp, the luminaire measures 23 inches wide. **CIRCLE 140**



**SHAPER LIGHTING |**  
**WWW.SHAPERLIGHTING.COM**

Product: **308 Cloud**  
The 308 Cloud interior pendant features individually crafted glass pieces, fired and finished with a hand-applied scratch-resistant vitreous enamel coating and offered in 20 glass colors and texture options. Its luminous center glass bowl is surrounded by four perched glass bowls. It accepts T5 (mini-can), xenogen, and halogen lamps. The luminaire takes six lamps and measures 48 inches in height and 40 inches in width. It has a minimum hang height of 30 inches.

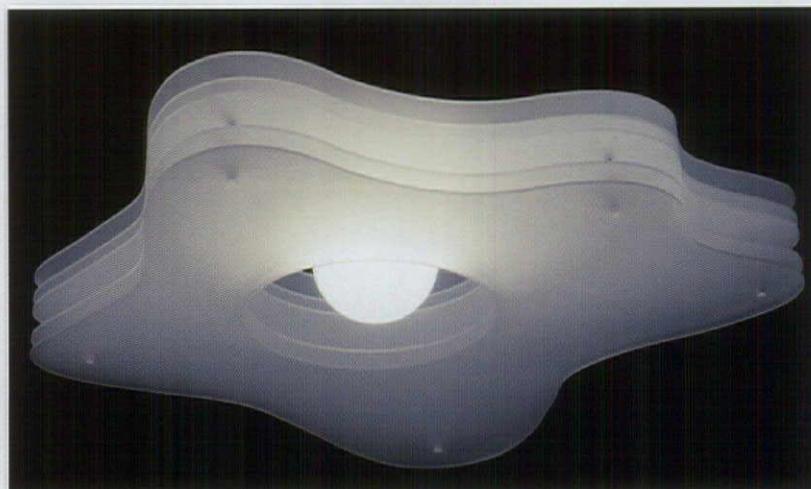
Product: **329 Silk**  
The 329 Silk pendant is made of a curved triangular glass plate in gold, silver, or copper leaf that offers an indirect illumination from three 75W A19 incandescent lamps. Compact fluorescent options are also available. Various sizes are offered: a 24-inch diameter with a 24-inch hang height, a 30-inch diameter with a 32-inch hang height, and a 36-inch diameter with a 42-inch hang height. Minimum hang height is 18 inches, and the luminaire is available in 15 fixture finishes, as well as custom options.



FOR INFORMATION ON BOTH SHAPER LIGHTING PRODUCTS, **CIRCLE 141**

**ROTALIANA | WWW.ROTALIANA.IT**

Product: **Cloud**  
Designed by Japanese architect Toyo Ito, Cloud is a contemporary, free-form pendant that provides softly diffused, direct downlighting in a multidimensional aesthetic. Composed of five stacked laser-cut sheets of ultra-thin white translucent acrylic, the fixture is offered in two sizes: just under 21 1/2 inches or 32 1/2 inches in circumference. Illumination is provided by a single 40W or 60W incandescent globe lamp that is partially visible from the round aperture in the center of the fixture. **CIRCLE 142**





## elevations™

So refined. So versatile. So expressive.

Now you have more ways than ever to tailor the look and the lighting effect. Add discreet decorative touches. Choose Bounding Ray™ reflectors or glowing glass shades to complement other innovative Gotham luminaires. Minimal, subtly enhanced, or playful and edgy. Pendant, ceiling- or wall-mount. Incandescent, HID or compact fluorescent. However you specify Elevations, Gotham assures extraordinary performance in downlighting.

gotham®

WWW.GOTHAMLIGHTING.COM  
An **Acuity** Brands Company

Circle No. 121 or [www.archlighting.com/productinfo](http://www.archlighting.com/productinfo)



**ELEEK | WWW.ELEEKINC.COM**

Product: **Piolet**

The Piolet pendant is constructed of brushed stainless steel and glass blocks, and measures 7 inches wide and 18 inches high. Offered with incandescent or fluorescent lamping, the fixture is ideal for general room lighting, mood lighting, and retail/hospitality applications. **CIRCLE 143**

**LUCEPLAN | WWW.LUCEPLAN.COM**

Product: **SxG**

Designed by Diego Rossi and Raffaele Tedesco, the SxG pendants allow for manual regulation of light. By sliding the reflector up, a concentrated downward light is obtained, and by lowering the reflector, the light is homogeneously directed upward. The luminaires feature an anodized- or enameled-



aluminum reflector in lacquered white, black, or burgundy that measures just under 13 inches high and 15 inches in diameter. One 150W incandescent or halogen lamp is required. **CIRCLE 145**

**D'AC LIGHTING | WWW.DACLIGHTING.COM**

Product: **Sfumato**

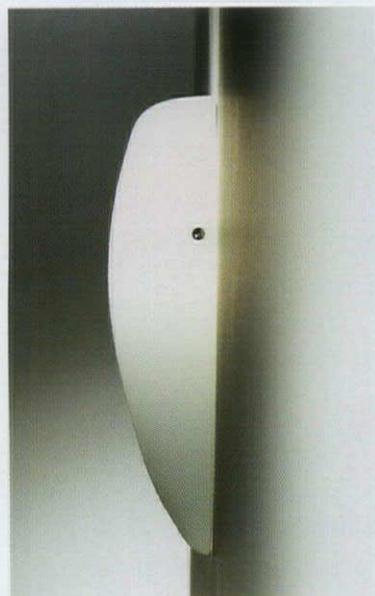
The slender, tapered inverted-vase-like design of the Sfumato hand-blown Italian glass pendant casts focused light down through clear glass at the fixture's bottom, while emitting broader patterns of ambient illumination through white opal glass at the top. The luminaire is suspended from a 5-inch-diameter polished-aluminum canopy and can be lamped with incandescent, halogen, or fluorescent sources. The glass shade measures 17 1/2 inches high and 5 inches in diameter. Optional canopy finishes are available.



**BLAUET | WWW.BLAUET.COM**

Product: **Baikal**

Constructed of a single piece of glass held in place by two minimal brackets, the Baikal wall sconce is suitable for bath, corridor, or foyer applications. Two different fixture lengths are available—24 5/8 inches or 36 3/8 inches; however, each measures 4 3/8 inches wide by 3 1/2 inches deep. The luminaire takes either a 40W G9 or a T5HO lamp, with quantity and type dependent on fixture size. The decorative wall bracket is offered in a grey metallic or chrome finish. **CIRCLE 146**



Product: **Adamo**

The Adamo wall sconce is constructed of a hand-blown Italian glass shade—with an open top for wallwashing—with polished chrome screws on each side. The fixture measures 15 3/4 inches high and has an overall width of 7 inches. Lamping options include incandescent, halogen, and fluorescent, offered with 120V or 277V. The glass finish shown is white sandblasted, though special orders can be accommodated.

FOR INFORMATION ON BOTH D'AC LIGHTING PRODUCTS, **CIRCLE 144**



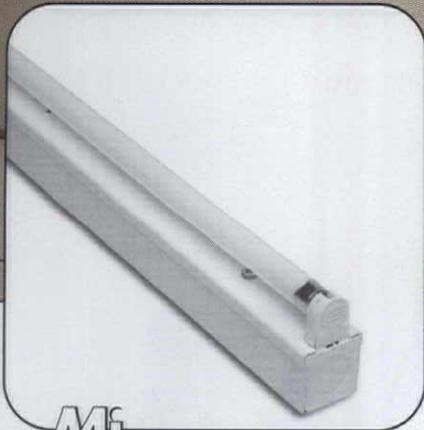
**VIBIA | WWW.VIBIA.ES**

Product: **Jazz**

With a design based on organic forms, Jazz offers a contemporary feel to the classic table lamp. At a height of nearly 3 feet, the luminaire's base is composed of polyester resin, while the shade is stainless steel. Each lamp is fully lacquered in a single shade of white, red, or black, and illumination is achieved by four 60W E27 lamps. **CIRCLE 147**

YOUR VISION. YOUR PROJECT. YOUR **LIGHTING SOLUTION.**

Bartco Lighting. The solution for your **LIGHTING** needs.



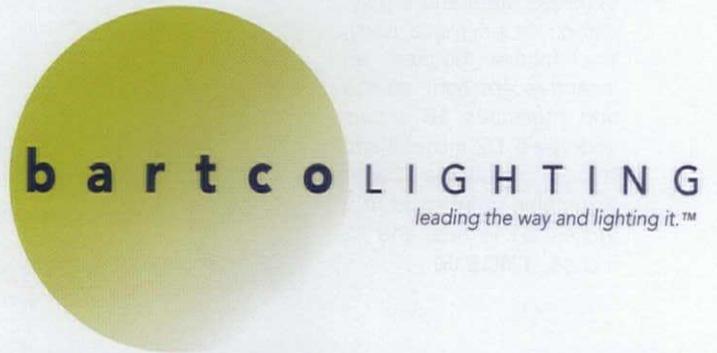
**MiT5** patent no. US 6,652,119 B1

architect: Leven Betts Studio lighting design: Tillotson Design Associates photography: Michael Moran Photography, Inc.

retail | commercial | institutional | hospitality | residential . . . . .

**MiT5**

**IALD** Education Trust Fund Silver Sponsor  
23rd Annual IALD Lighting Design Awards 2006



[bartcoLIGHTING.com](http://bartcoLIGHTING.com)  
tel 714.230.3200 fax 714.230.3222

Visit us at **LIGHTFAIR** booth number **1318**  
manufacturers of quality lighting products

Circle No. 49 or [www.archlighting.com/productinfo](http://www.archlighting.com/productinfo)

**PROGRESS LIGHTING | WWW.PROGRESSLIGHTING.COM**

Product: **Contemporary**  
 Featuring clear glass with an etched glass diffuser, the brushed-nickel stem-hung Contemporary mini-pendant has an overall height of 63 inches. The fixture measures 7 1/8 inches high by 12 1/4 inches in diameter and illumination is provided by one 75W medium-base lamp. **CIRCLE 148**



**EUROFASE | WWW.EUROFASE.COM**

Product: **Salome**  
 One luminaire in a whimsical collection that includes wall sconces and chandeliers, the Salome floor fixture features glass stems in two color options: blue-black or crystal. The polished chrome frame accepts 10 G4 bi-pin lamps and the overall height is 71 inches with a width of 15 3/4 inches. **CIRCLE 151**



**LIGHTOLIER | WWW.LIGHTOLIER.COM**

Product: **Vetro**  
 The Vetro pendant series incorporates metal finishes and various decorative hand-blown polished glass options in an assortment of styles: a slim pendant, which is just under 2 1/2 inches in diameter and 14 inches in height; a medium pendant, which is 4 3/4 inches in diameter and 14 inches in height; and a selection of conical shades. Illumination is provided by a 13W to 32W triple twin-tube fluorescent with an energy-efficient commercial-grade ballast. **CIRCLE 149**



**ESTILUZ | WWW.ESTILUZ.COM**

Product: **Eclipse**  
 Featuring a minimalist aesthetic, the Eclipse flush-mounted wall sconce was inspired by the lunar eclipse. Available as a wall sconce or flush mount, the fixture comes in two sizes: 12 1/8 inches wide, with a 3 1/4-inch projection from the wall (taking one 150W halogen lamp); and 15 1/2 inches wide, with a 4-inch projection (taking one 200W halogen or fluorescent lamp). Finish options include nickel or satin gold. **CIRCLE 152**



**LUMINO DESIGN | WWW.LUMINODESIGN.COM**

Product: **Loop P36**  
 Characterized by its unique shade structure, the Loop P36 is a stem-suspended luminaire that provides ambient illumination. Constructed of brushed stainless steel and a polycarbonate prismatic body, the fixture houses an incandescent light source and measures 18 inches wide by 6 1/2 inches high. It is available with adjustable stem sizes of 9 inches, 21 inches, and 42 inches. **CIRCLE 150**



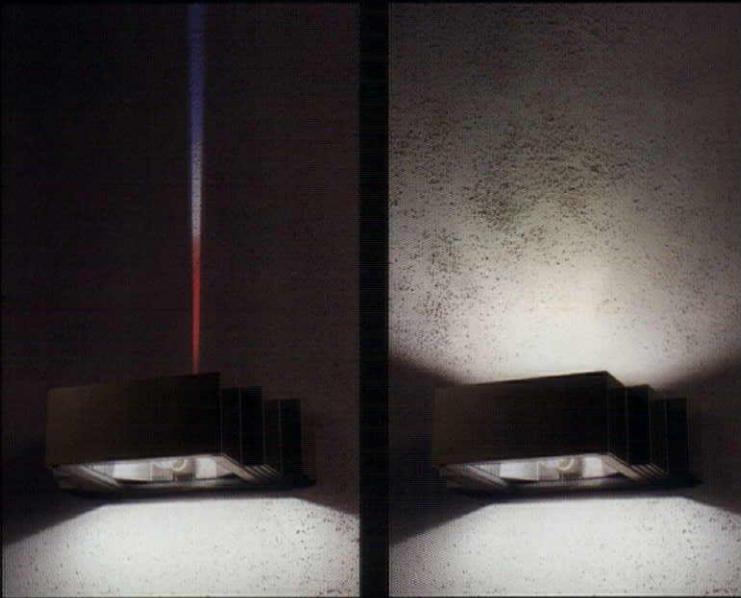
**OMEGA LIGHTING | WWW.OMEGALIGHTING.COM**

Product: **Origins**  
 The Origins family has expanded to include Italian glass elements. Featuring architectural pendants and wall sconces in hand-blown frit- and cased-glass designs, as well as hybrid pendants made of hand-formed piastra glass, the fixtures house a variety of lamp sources, including compact fluorescent, incandescent, and HID. Additionally, the family is offered in a collection of unique styles and finishes, with luminaires available in two sizes: 19 5/8 inches high by 12 5/8 inches wide, and 21 5/8 inches high by 15 3/4 inches wide. **CIRCLE 153**



Command Performance!

The **Wall Commander™**  
from Kim Lighting  
offers a dramatic range of  
up, down, and up/down  
configurations utilizing  
a single lamp source.



**KIM LIGHTING**

16555 East Gale Avenue  
City of Industry, CA 91745  
626/968-5666

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



Made in America

ISO 9001:2000



# MIRO<sup>®</sup>

## UP TO 98% REFLECTIVE

# First choice among lighting professionals

### THE SUCCESS OF MIRO ▶

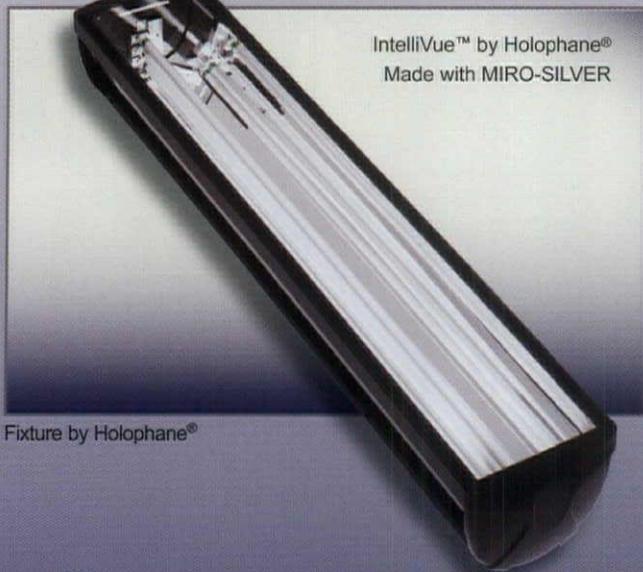
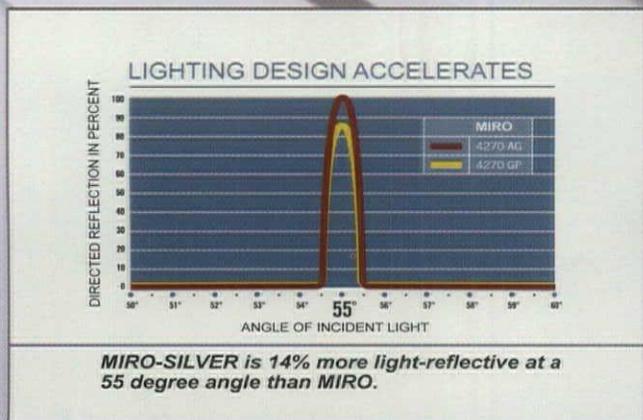
**MIRO optical surfaces** are fast replacing anodized aluminum in luminaire design, world-wide. **MIRO** has a total reflectivity of 95%, and **MIRO-SILVER<sup>®</sup>** 98%, making them today's first choice for OEM lighting manufacturers.

In major facilities that have traditional discharge lighting solutions, such as big-box retailers and distribution centers, installing modern fluorescent high-bays made with **MIRO** surfaces could cut lighting electricity by up to fifty percent, when the fixtures also include modern T5 or T8 lamps and the newest ballasts.

### ENERGY EFFICIENT LIGHTING ▶

**MIRO-SILVER** is especially effective in saving energy. In commercial-office lighting, combining louvres made with **MIRO-SILVER** plus T5 lamps can achieve a remarkable 85 lumens per watt. **MIRO-SILVER** permits designers maximum design flexibility. Lamp positions can be moved to the center of the louvre cavity without light loss. And, no longer do multiple bounces penalize efficiency. With **MIRO-SILVER's** 98% reflectivity, even after five bounces, 90% of the lamp-light exits the luminaire. Whereas after five reflections off an 87% efficient anodized surface the light is reduced to just 50%.

For outdoor HID lighting, architectural street lighting and area lighting use **MIRO** for segmented and parabolic reflectors to add up to 20% efficiency to a reflector system. And full-cut-off luminaires can comply with dark skies legislation without efficiency penalties, to meet light pollution guidelines.



[WWW.ALANOD.COM/OPTICALDATA](http://WWW.ALANOD.COM/OPTICALDATA)

TO SEE IF **MIRO** IS RIGHT FOR YOUR APPLICATION, CONTACT:

**DAVID PARKANSKY** [DWPARKANSKY@ALANOD.COM] OR 512-733-9500

Circle No. 2 or [www.archlighting.com/productinfo](http://www.archlighting.com/productinfo)



alanod

LAM LIGHTING | WWW.LAMLIGHTING.COM

Product: **Luxxtra FL**

The Luxxtra FL indirect fixture features a choice of uplight only, downlight only, or combination uplight/downlight. Its disc-shaped housing, unadorned frame, and conical lens create a subtle design statement. The slender stem is also available in various lengths. Constructed of cold-rolled steel in a textured baked-enamel finish, the fixture's illumination is provided by eight biaxial or three 120W compact fluorescent lamps. CIRCLE 154



LIGHTLIGHT BY BUSCHFELD | WWW.INTER-LUX.COM

Product: **Sky and SKYframeLESS**

Keeping construction depth, weight, and materials to a minimum, and maximizing size, light, and architectural presence, Sky and SKYframeLESS can be used as pendant, surface-mounted, or recess-mounted fixtures. Sky is constructed using self-supporting, seamlessly connected, extruded-aluminum profiles, while SKYframeLESS is flat and available in fixed dimensions. Options for both include T8 or T5 fluorescent lamps, digital or analog controls, and adjustable color temperatures of 2700K to 6500K. CIRCLE 155



BRAVE DESIGN | WWW.BRAVEDESIGN.CA

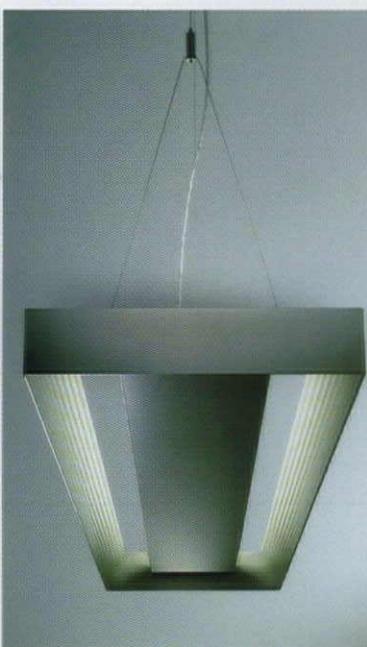
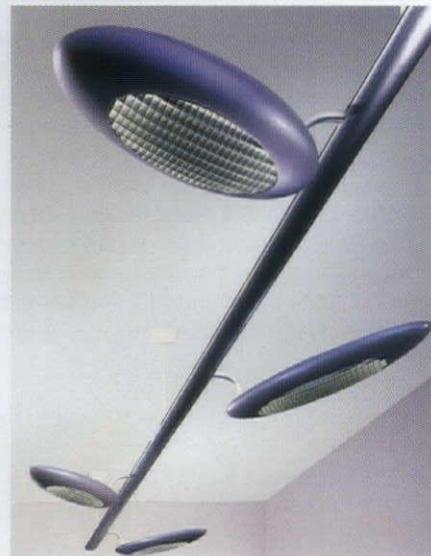
Product: **Scalar**

This series of linear and asymmetrical fixtures allows for both direct and indirect office lighting, while achieving low glare and various high-quality distribution patterns. The angled, perforated aluminum "wings" can be tilted, and, when seen from different angles, the perforations overlap for a variety of views. T5 and biax lamps, as well as dimmable electronic ballasts are used. The luminaire is finished in a dye-anodized aluminum. CIRCLE 156

LUXO | WWW.LUXOUS.COM

Product: **Arca Twin**

The Arca Twin is a versatile luminaire with a podlike head that softly diffuses light. A pivoting steel attachment allows for individual positioning at any interval and the creation of symmetric and asymmetric lighting schemes. Lamping options include two 36W or two 55W 2G11 HO fluorescents. The body of the fixture is metallic grey and the elliptical polypropylene cover comes in transparent or iridescent colors.



Product: **Trimlight**

The Trimlight pendant offers a simple design that provides even uplighting and partial downlighting. Steps line the internal edges of the head, progressing inward toward the center to evenly diffuse the light. Lamping options include two or four 39W or 54W T5HO fluorescents. The luminaire measures 14 inches wide by 3 inches high and has length options of 35, 47, or 59 inches. Extruded-aluminum components have an embossed white powder coat.

FOR INFORMATION ON BOTH LUXO PRODUCTS, CIRCLE 157

DAY-BRITE LIGHTING | WWW.DAYBRITELIGHTING.COM

Product: **Attune**

Offering photometric performance in standard- and wide-distribution curves, the Attune family of fixtures can be tailored to the space. Easy to install and maintain, the luminaires are available in 1-by-4-, 2-by-2-, and 2-by-4-foot housings with grid, flange, screw slot, or z-spline ceiling models. Lamp options include T8, T5, T5HO, or compact fluorescent, and diffused, round perforated, slotted perforated, or radial louver shieldings are offered. CIRCLE 158



**DIRECT/INDIRECT**

**PEERLESS LIGHTING | WWW.PEERLESS-LIGHTING.COM**

Product: **Lightfoil 2 and 3**

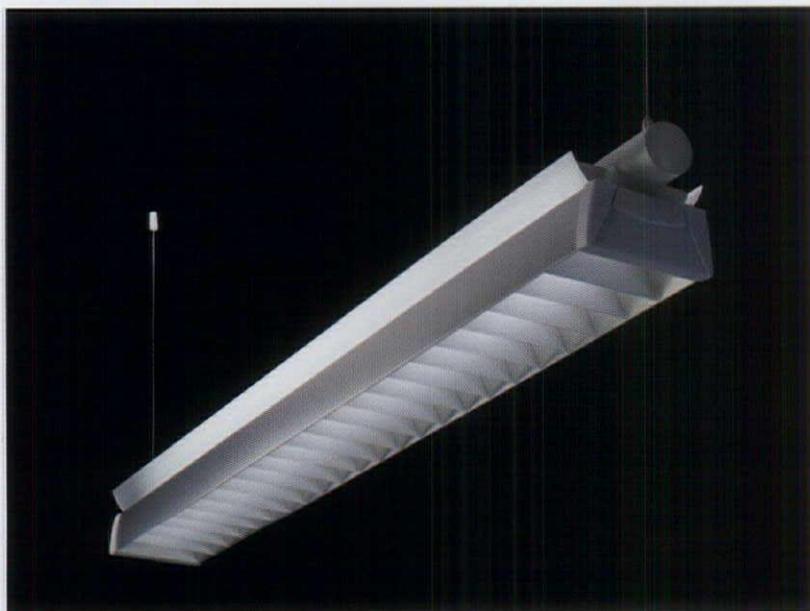
The Lightfoil family delivers abundant, even light for contemporary large-scale environments. Each throws light forward above the horizontal plane and eliminates high-angle glare, while also redirecting a small portion down the wall to soften brightness and contrast, and add visual interest. Both families can be ordered in 1-, 2-, 3-, 4-, or 5-foot lengths, each with a gently curved wing of lightweight composite material to conceal the extruded-aluminum housing, electrical components, and faceted optics. The Lightfoil 2 has a total height of almost 5 inches and a projection of almost 12 inches, while the Lightfoil 3 measures just over 6 inches high with a projection of just over 14 inches. A range of fluorescent and HID sources are available. Uniform ceiling coverage is achieved with luminaire intervals of up to 15 feet on center. **CIRCLE 159**



**NEO-RAY | WWW.NEORAY-LIGHTING.COM**

Product: **Symbio**

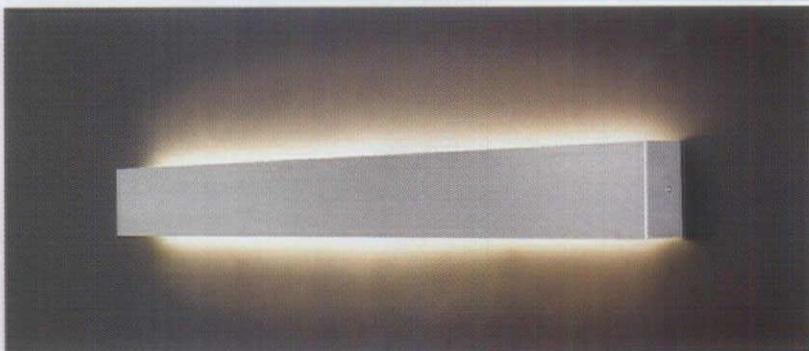
The Symbio pendant offers glare-free illumination via three components—a T5 fluorescent lamp, a detailed louver assembly, and an optically precise reflector. A convex UV-stable extruded lens is designed to expand horizontal and vertical illumination. Multi-circuited row configurations can be obtained by connecting sections of the modular extruded-aluminum raceway. **CIRCLE 160**



**OCL | WWW.OCL.COM**

Product: **Illusion**

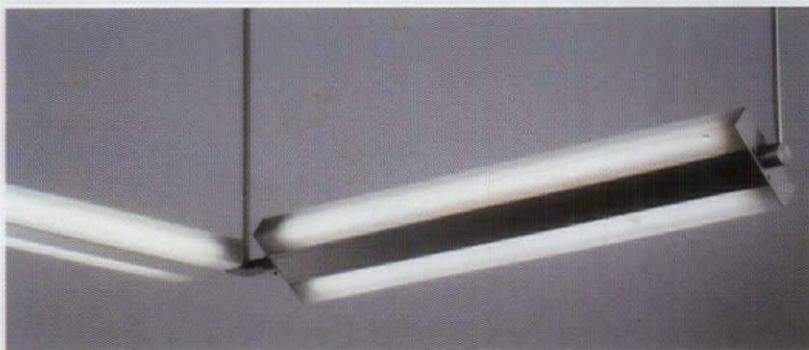
Radiating an elegant glow from both sides of its sleek, unobtrusive housing, Illusion is an ultra-low-profile sconce that can be mounted either horizontally or vertically. Using two T5 or T5HO lamps, light is spread evenly along the length of the fixture, which measures 4 1/4 inches high by 23 or 47 inches in length, and has a shallow 2-inch projection. The luminaire can be finished in natural brushed aluminum or any of OCL's powder-coat paints. **CIRCLE 161**



**SCHMITZ | WWW.INTER-LUX.COM**

Product: **Turn**

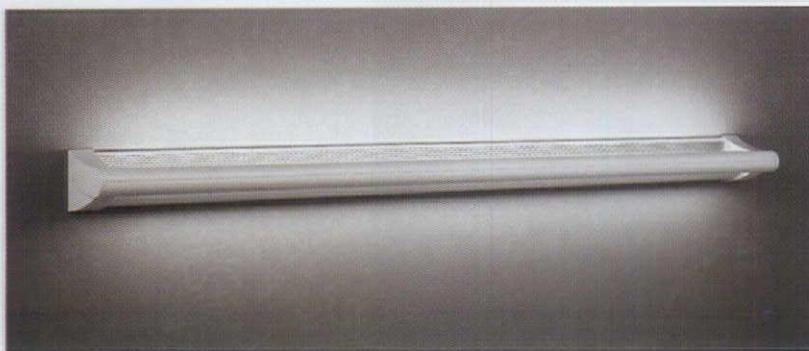
Turn offers a variety of configurations thanks to its available system components, such as 90-degree connectors, line connectors, middle feeders, feeder rods, and endcaps. Each anodized-aluminum fixture has a satin acrylic finish, is rotatable, and features rod suspension and lengths from approximately 3 to 5 feet. **CIRCLE 162**



**VISA LIGHTING | WWW.VISALIGHTING.COM**

Product: **Ether Uplight Wash**

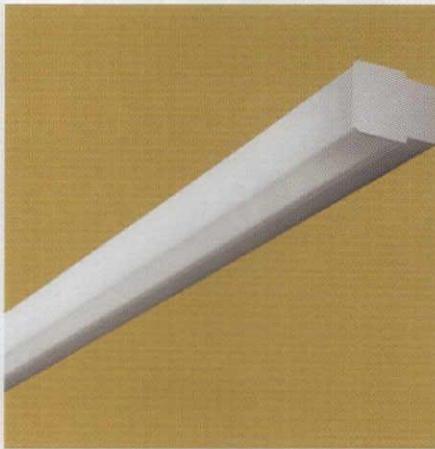
With a height of 3 inches, projection of 4 inches, and lengths from 23 1/4 inches to 92 7/8 inches, the Ether Uplight Wash luminaire features a low-profile linear design with die-cast endcaps and an extruded-aluminum housing. The luminaire can be mounted horizontally or vertically over a 2-by-4-foot electrical junction box. Painted finishes are available. Fluorescent lamp sources vary depending on the length of the fixture. **CIRCLE 163**



**PRUDENTIAL LIGHTING | WWW.PRULITE.COM**

Product: **Snap**

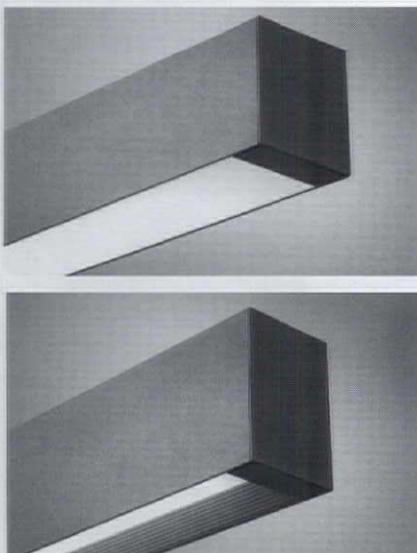
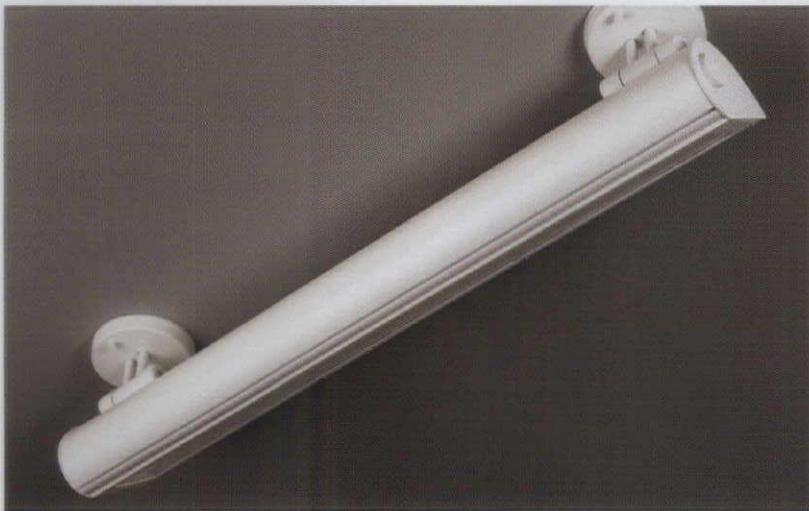
Snap is a low-profile striplight with a white extruded-acrylic lens that stays in place without hardware or fasteners. The lens terminates at a spring-fastened aluminum endplate, and row-mounted runs have a single intermediate plate between modules. Available with a single T8, T5, or T5HO lamp, or with two T5 lamps with an optional integral emergency battery and dimming ballast, the fixture offers standard housing lengths of 2, 3, 4, 6, and 8 feet. It can be surface mounted or suspended. CIRCLE 164



**WINONA LIGHTING | WWW.WINONALIGHTING.COM**

Product: **Linear Fluorescent**

Useful for indoor or outdoor applications, the rugged T5 small integral-ballast linear fluorescent creates a compact, sleek, self-contained luminaire with the electronic ballast concealed within an extruded-aluminum housing. The unique hinge-lock mechanism assures watertight dependability. The fixture can be cantilever mounted, pendant mounted, or linear surface mounted, and has a cross-section dimension of 4 1/2 inches by 6 inches. Finish options include semi-gloss white, semi-gloss black, aluminum paint (matte finish), light gold iridescent (gloss finish), or pale bronze paint (gloss finish). CIRCLE 165



**FOCAL POINT | WWW.FOCALPOINTLIGHTS.COM**

Product: **Avenue C and D**

With their extruded-aluminum rectilinear housings suspended below the ceiling, Avenue C (top) and Avenue D (bottom) offer clean lines and a crisp aesthetic. The 3 3/4-inch-high Avenue C provides either direct or indirect illumination, while Avenue D creates bi-directional illumination with its two-lamp optics in a 4 1/2-inch height. Multiple lengths are available. Both Avenue C and Avenue D take either T5 or T5HO lamps (Avenue D also features an MR16 option), and can be fitted with shields. CIRCLE 166



**Triangular Column**

Stately and prestigious, the Triangular Column combines innovative light column attributes with high quality design engineering. Spec features that were demanded at the above installation at the University of California at Merced include high-impact-resistant flush glass, frame with no visible hardware, high-pressure die castings, and the patented MTR refractor system for glare free lighting.

Light. Ideas. Systems.

**se'lux**

www.selux.com/usa | 800.735.8927  
Circle No. 85 or www.archlighting.com/productinfo

# HELPING YOU LIGHT THE WORLD

## THERMAL MANAGEMENT SOLUTIONS FOR LED LIGHT ENGINE TECHNOLOGY

### ASSEMBLY SERVICES

Heatron offers complete turn-key light engine assemblies manufactured to your specifications. Our application knowledge and access to an array of component level LEDs will reduce your design time and simplify your supply chain.

### PRINTED CIRCUIT BOARDS FOR LEDs

Heatron offers you a wider range of printed circuit board technologies than any other source in the LED industry. Heat destroys LEDs. Longer life, higher luminous efficacy, and lower failure rates all result from a good thermal design for your end product. Our metal core printed circuit boards provide the heat dissipation you need to solve the toughest thermal management challenges.

### DESIGN AND INTEGRATION SERVICES

Creating the optimal solution for your LED application requires a balance between several critical disciplines that make up your innovative product:

- power sources or drivers
- LED emitters
- thermal management
- secondary optics
- housings or enclosures

### EXPERTISE AND COMMITMENT. . .

The High Power LED market is new, fast moving, and dynamic. Capitalizing on the benefits of a high growth market means staying ahead of the technology curve. Heatron is dedicated to being your primary source of expertise and information on developing LED products from concept to design to prototype and final production.

See us at Lightfair Booth #2545



# HEATRON

LEADERS IN THERMAL INNOVATION

1-800-475-4420 ext. 273 • [www.heatron.com](http://www.heatron.com)

Circle No. 90 or [www.archlighting.com/productinfo](http://www.archlighting.com/productinfo)

**BETA-CALCO | WWW.BETACALCO.COM**

Product: **Decore III**

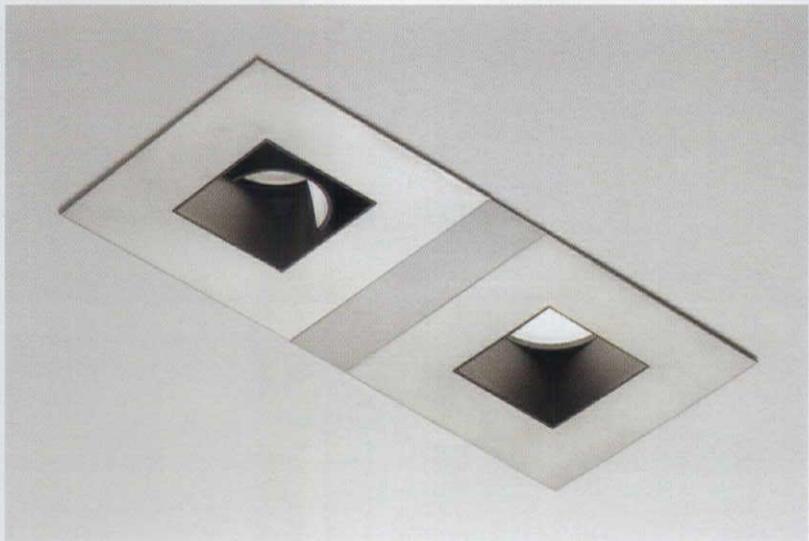
The Decore III recessed downlight is constructed of a galvanized-steel housing and an etched glass or suspended spun metal ring, which creates a soft halo of light on the ceiling. Providing elegance to architectural interiors, the fixture can be used with compact fluorescent, HID, and halogen lamps. **CIRCLE 167**



**LUCIFER LIGHTING | WWW.LUCIFERLIGHTING.COM**

Product: **Mirage Modular**

Three recessed fixtures are available in this series: Square Fixed has a square aperture; Square Adjustable can rotate within its housing and adjust 40 degrees; and Square Wallwasher incorporates a kick reflector engineered to provide a smooth, wide wash of light. All can be flush mounted for zero sight line or flanged and installed in the recessed ceiling housing. **CIRCLE 168**



**LIGHTOLIER | WWW.LIGHTOLIER.COM**

Product: **Lytecaster Frame-In Kit**

Meeting the efficiency and environmental standards of the Energy Star program, the Lytecaster Energy Star-rated downlight frame-in kit for commercial and residential applications provides general illumination and wallwashing. The frame-in kits are available in 5- and 6 3/4-inch apertures and, according to the manufacturer, are easy to install. **CIRCLE 169**



**HALO | WWW.HALOLTG.COM**

Product: **H3**

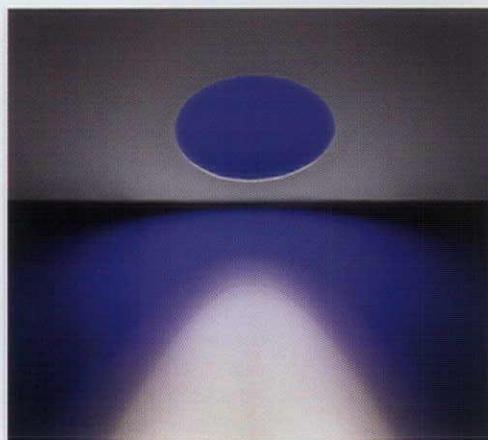
The H3 family of small-aperture recessed downlights offers a minimal ceiling presence, but delivers high light output. Compatible with existing trim selections from Halo's family of 4-, 5-, and 6-inch trims, the series features nine trim styles in multiple finishes, including satin nickel, antique copper, and tuscan bronze. Housings are available for multiple types of installation, including the latest code requirements. Each trim is dual listed for low-voltage 50W MR16s and line-voltage 50W GU10s. **CIRCLE 170**



**PURE LIGHTING | WWW.PURELIGHTING.COM**

Product: **Aurora**

The Aurora Accent Round Pure Edge 3.3 RGB recessed fixture features a hemispherical, spun aluminum dome interior that is illuminated by LEDs, while white light is projected down. With its trimless edge, the aperture completely disappears. LED technology offers color-changing capabilities. The fixture takes one 75W MR16



lamp and 18 LEDs. The recessed housing measures just under 6 inches high by 10 1/2 inches wide by 13 inches long. **CIRCLE 171**

**W2 ARCHITECTURAL LIGHTING | WWW.W2LIGHTING.COM**

Product: **Precision Modules**

The Precision Modules are specification-grade recessed spotlights. Featuring multiple lamps within a singular housing that is flush mounted to the ceiling or wall, the luminaires are offered in both low- and line-voltage systems and are available in square and rectangular styles that include one-, two-, three-, four-, and six-light configurations. Lamping options include halogen MR16, AR111, PAR30, PAR36, PAR38, HID metal halide, and T6. **CIRCLE 172**

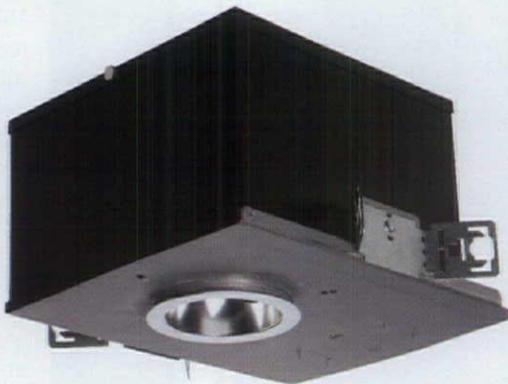


DOWNLIGHTS

**PRESCOLITE | WWW.PRESCOLITE.COM**

Product: **Architektur A4**

The A4 series of 4-inch aperture adjustable accent downlights provides specifiers with a fully aimable luminaire, featuring 0- to 45-degree vertical and 362-degree horizontal adjustment, hot aiming, center-beam optics, and no visible hardware from below the ceiling. The fixture includes multiple lamp options ranging from MR16 to incandescent, low- and line-voltage, and trim choices in a variety of finishes.



Product: **Architektur D4**

The D4 collection of 4 1/2-inch aperture specification-grade downlights incorporates a twist lock socket mechanism that ensures a consistent lamp position. Using patented optical technology that produces equal cutoff at a 45-degree viewing angle in all lateral planes, the luminaire accepts compact fluorescent and incandescent lamps. D4 is offered in an assortment of trims, finishes, and colors.



FOR INFORMATION ON BOTH PRESCOLITE PRODUCTS, CIRCLE 173

**USA ILLUMINATION | WWW.USAILLUMINATION.COM**

Product: **Bevel**

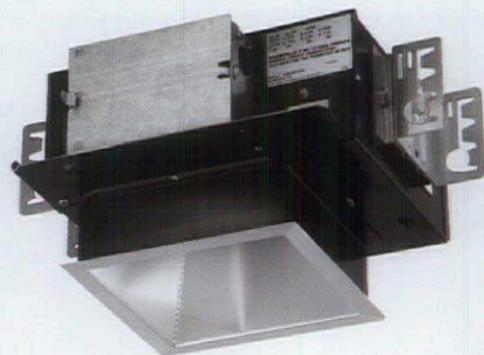
A low-voltage MR16 square downlight with beveled edges, this luminaire features sloping 1-inch regress peaks with white frosted glass to produce a subtle, evenly illuminated ceiling plane. Its die-formed galvanized-steel housing accepts either low-voltage, compact fluorescent, or metal halide lamps, with trim finishes of brushed aluminum, white, black, or metalized grey. Visible interior dimensions of the fixture are 8 3/16 inches square, while the overall housing dimension is 11 15/16 inches by 11 1/2 inches. CIRCLE 174



**KRAMER LIGHTING | WWW.KRAMERLIGHTING.COM**

Product: **Square and Rectangular Series**

This series of recessed luminaires offers photometric efficiencies, reduced housing size, and a diverse selection of cone finishes and textures. Available with compact fluorescent, HID, and incandescent sources, optical configurations include lensed and non-lensed downlight, wallwash, cross baffle, and adjustables. Aperture sizes of 4, 6, and 8 inches are offered for square luminaires, while rectangular fixtures come in two sizes: 4 inches by 8 inches, and 6 inches by 12 inches. CIRCLE 175



**RENAISSANCE LIGHTING | WWW.RENAISSANCELIGHTING.COM**

Product: **Evo**

Providing LED-generated light for ambient and tasklighting applications, the recessed Evo luminaire uses proprietary optics to blend its light output, creating a highly uniform light. Over 16 million color combinations can be achieved, including a range of white color temperatures. The power supply and LED driver card are integrated into the fixture's aluminum housing, which calls for a ceiling cut-out of 7 1/2 inches. CIRCLE 176

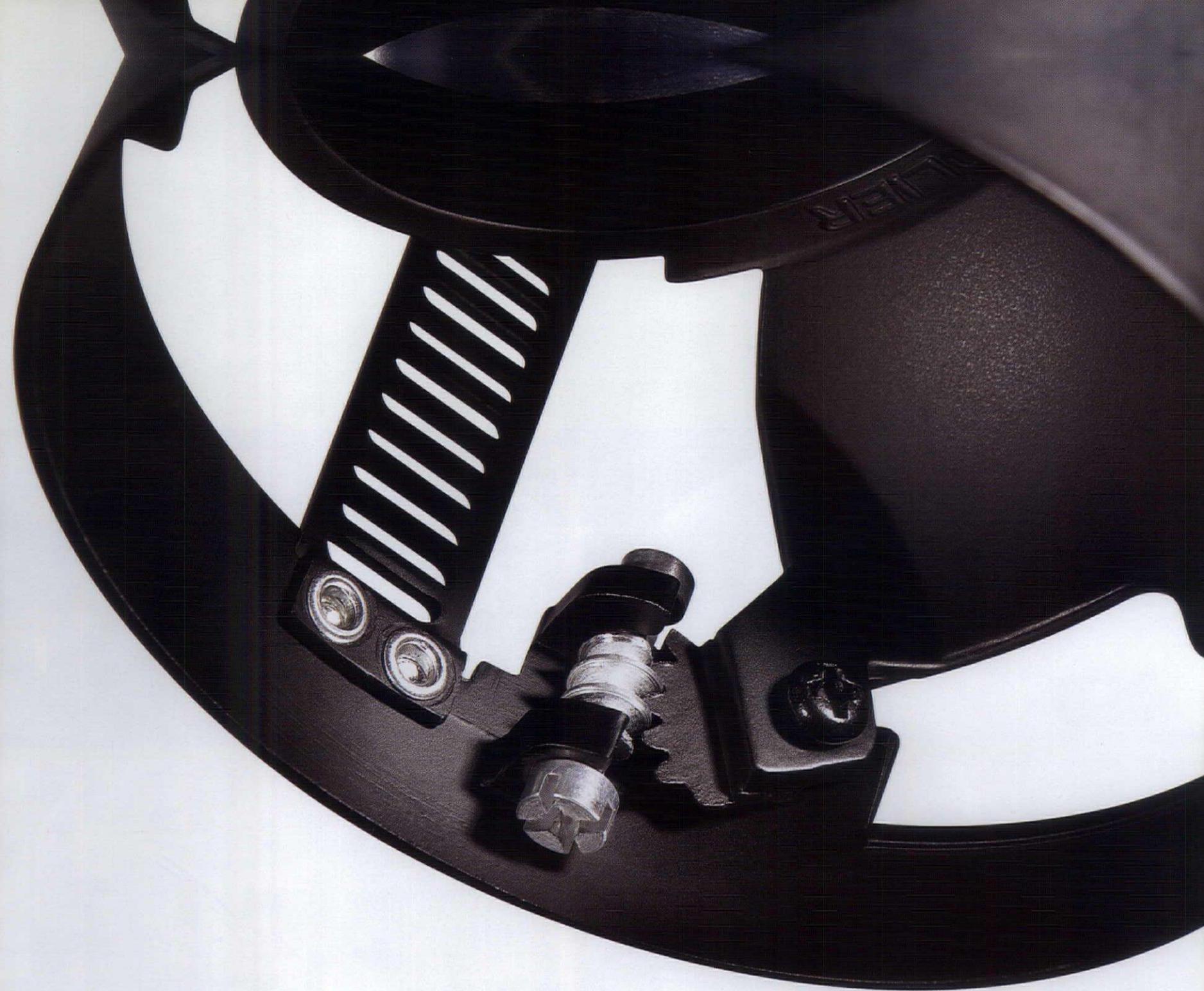


**XENON ARCHITECTURAL LIGHTING | WWW.XAL.COM**

Product: **Retro Mini**

With a single-lamp housing that measures 7 1/16 inches deep by 5 9/16 inches square, the Retro Mini is suitable for ceilings with a thickness from 3/8 inches to 9/16 inches. The gimbal, which requires no tools for installation because of its snap-in ball-catch system, is made of aluminum, can rotate fully through 360 degrees, and is tiltable up to 45 degrees. Lamping options include one 65W MR16 or two 50W MR16s. CIRCLE 177





## THREE INCH. THE NEXT EVOLUTION.

Delivering the optical performance, mechanical precision and visual comfort you have come to expect from Evolution downlights. All from an aperture less than 3" in diameter.

Be sure to visit us at Lightfair, Booth #1937

© 2006 Genlyte Group LLC. All rights reserved. [www.lightolier.com](http://www.lightolier.com)

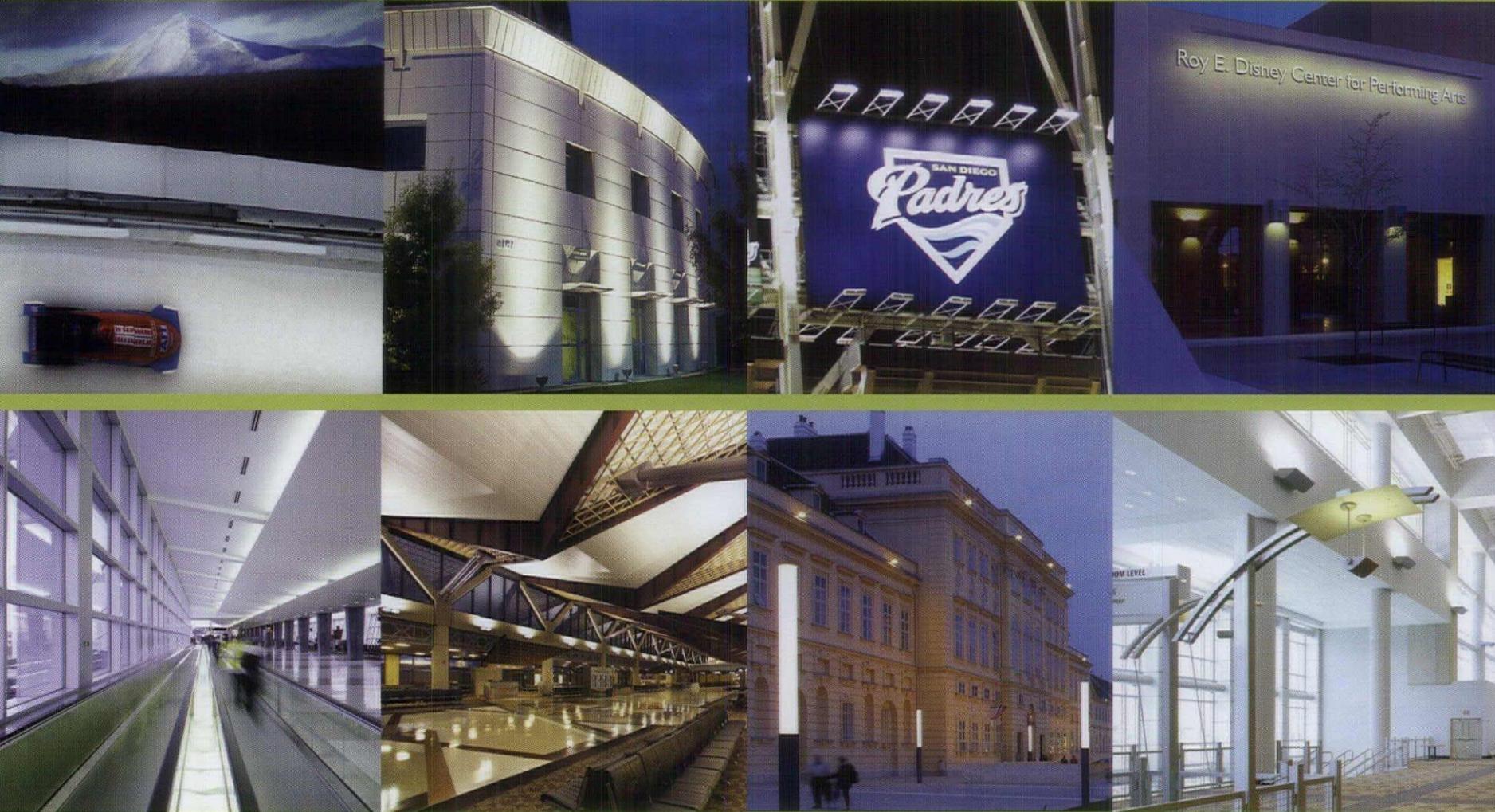
Circle No. 37 or [www.archlighting.com/productinfo](http://www.archlighting.com/productinfo)

LIGHTOLIER®

I N S I G H T



INNOVATIVE SOLUTIONS TO LIGHTING CHALLENGES



INSIGHT LIGHTING MANUFACTURES A MYRIAD OF HIGH PERFORMANCE ARCHITECTURAL LIGHTING PRODUCTS FOR INTERIOR AND EXTERIOR, INDIRECT AND DIRECT, PUBLIC LIGHTING VENUES. AN ARRAY OF INSTRUMENTS INCLUDING LINEAR LUMINOUS LIGHTING; ILLUSIONS, EXTERIOR FACADE; MASQUE, AND DECORATIVE HIGH PERFORMANCE INDIRECT; VAS, ARE BUT A FEW OF THE PRODUCTS OFFERED.

ATTENTION TO DETAIL AND INTEGRITY OF DESIGN ARE BENCHMARKS BY WHICH WE PRODUCE PRODUCTS OF EXCEPTIONAL VALUE AND LONGEVITY FOR AIRPORTS, EDUCATIONAL FACILITIES, INDOOR POOLS, MALLS AND PROFESSIONAL SPORTING FACILITIES. INNOVATION AND A COMMITMENT TO QUALITY AND SERVICE ARE TENETS THAT HAVE NOT BEEN COMPROMISED IN OUR 15 YEAR TENURE.

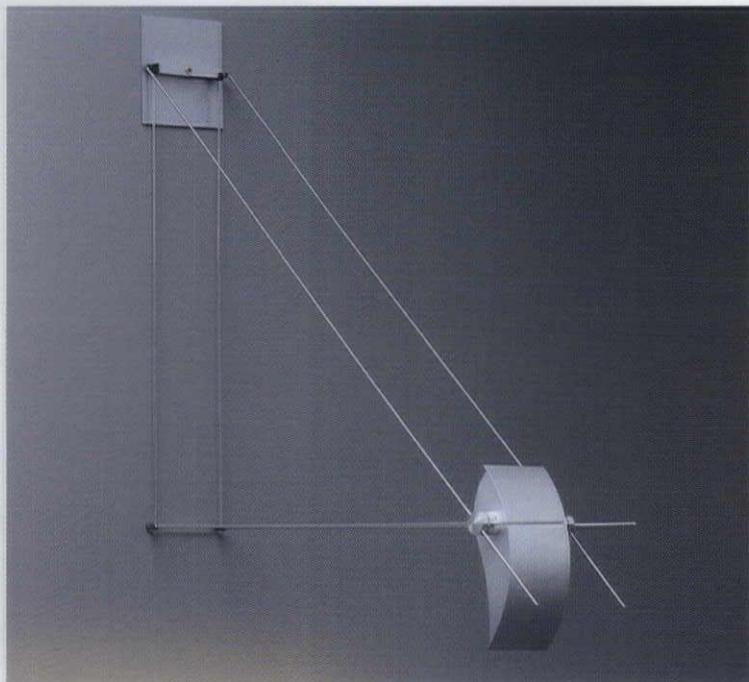
INSIGHT LIGHTING - THERE IS NO SUBSTITUTE FOR INTEGRITY

I N S I G H T

505.345.0888

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

Circle No. 74 or [www.archlighting.com/productinfo](http://www.archlighting.com/productinfo)



**LIGHTLIGHT BY BUSCHFELD | WWW.INTER-LUX.COM**

Product: **ART**

This wall-mounted luminaire offers a wide-angle uniform illumination for artwork formatted up to 60 inches square. To accommodate museum lighting requirements, the sleek and minimal fixture can be adjusted for precise cut-off. For optimum results, a distance from the luminaire to the wall of approximately 21 3/4 inches should be maintained. **CIRCLE 178**

**ALKCO | WWW.ALKCO.COM**

Product: **Little Inch Xtra**

Little Inch Xtra is a versatile, undercabinet linear tasklighting option for a variety of commercial, institutional, and residential applications. Its sleek, smooth, rectangular housing is made of heavy-duty extruded aluminum and maintains a minimal profile. Smooth die-cast endcaps facilitate end-to-end connections, and reflected glare is virtually eliminated with a textured lens that softens emitted light. Four finishes are available—white polyester-resin powder-coated paint (standard), aluminum, black, and bronze. Lamp choices include LED, low-voltage halogen, low-voltage xenon, and fluorescent. **CIRCLE 179**



**ESTILUZ | WWW.ESTILUZ.COM**

Product: **Tovier**

The Tovier table lamp, finished in nickel, is a compact and attractive solution for tasklighting. The lamp is constructed of a single-formed frame and a square glass shade, giving the impression that the glass is floating. Measuring 13 5/8 inches high and 4 3/4 inches wide, the fixture uses a single 100W incandescent lamp. **CIRCLE 180**



**LUXO | WWW.LUXOUS.COM**

Product: **Patientlite**

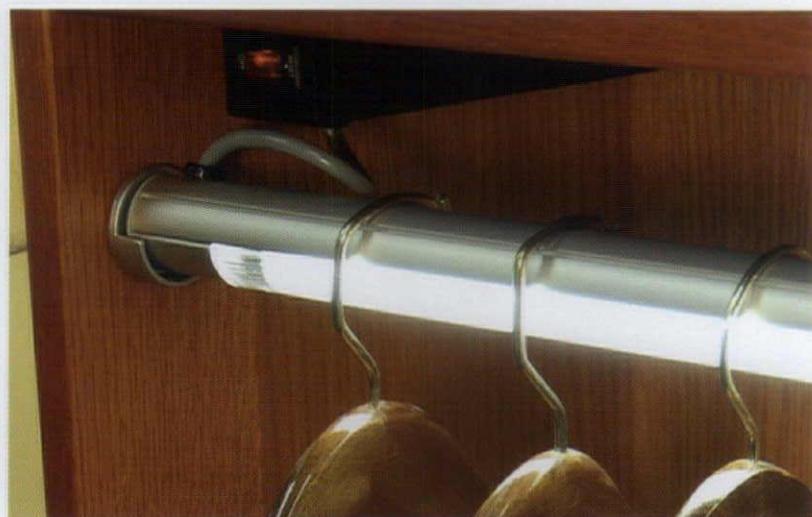
Meeting three lighting conditions for patient rooms—general, practitioner, and night lighting—the Patientlite offers a modern design that virtually eliminates dust-traps. Two quick-connect systems are available, including terminal block or plug-in, for easy installation. The fixture has an extruded aluminum housing with a polycarbonate cover, and is offered with a powder-coat finish. **CIRCLE 181**

ation. The fixture has an extruded aluminum housing with a polycarbonate cover, and is offered with a powder-coat finish. **CIRCLE 181**

**SPECIALTY LIGHTING | WWW.SPECIALTYLIGHTING.COM**

Product: **Apparel Light**

Apparel Light is appropriate for closets, wardrobes, and retail displays that require unobstructed, economical linear illumination directly on or around garments. The fixture also serves as a closet rod capable of supporting up to 100 pounds of evenly distributed weight, and includes a remotely mounted electronic ballast to insure reliable, instant-on lighting, while maintaining an uncluttered presence. The fixture, available in 2- or 3-foot lengths, is offered in a choice of satin aluminum or satin gold finishes. Its clear prismatic acrylic lens snaps easily into place for quick and simple relamping. **CIRCLE 182**

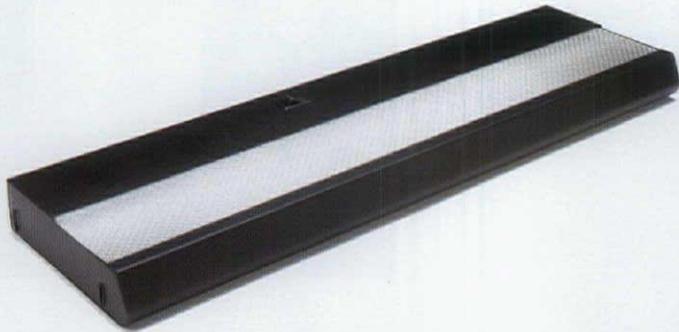


TASK

**ELECTRI-CABLE ASSEMBLIES | WWW.ELECTRI-CABLE.COM**

Product: **Dyna-Lite**

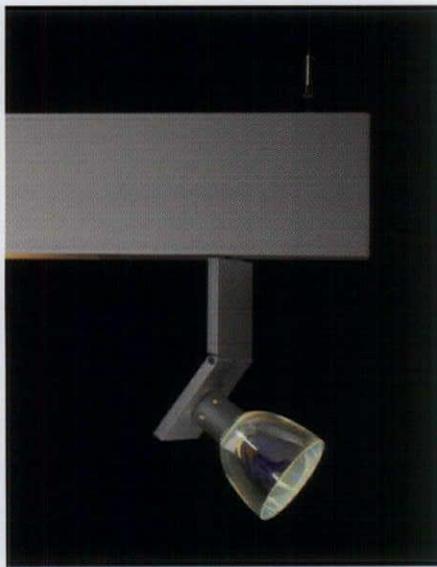
Suitable for work-surface lighting, and available in lengths from 21 1/2 inches to 57 1/2 inches, the Dyna-Lite features a slim-profile and sleek aesthetic. Supplied with energy-efficient 4100K T8 lamps and a thermally protected Class-P ballast, even light dispersion is created with the use of a clear, prismatic lens and internal white reflector. **CIRCLE 183**



**JESCO LIGHTING GROUP | WWW.JESCOLIGHTING.COM**

Product: **Sleek Plus Adjustable**

Providing user-adjustable display and accent lighting, the Sleek Plus Adjustable is designed for use in merchandise display cases requiring a low-profile solution and minimum heat emission. The compact, easy-to-install linkable housing allows the reflector to rotate 360 degrees. Finished with anodized silver or white enamel paint, and specified in lengths from 9 inches to 5 feet, up to 10 units may be joined end-to-end and are mountable horizontally or vertically. Each fixture is 3/4 inches wide by 1 1/2 inches deep. **CIRCLE 186**



**PLANLICHT | WWW.PLANLICHT.COM**

Product: **Pureplus**

Pureplus is a swivel spotlight that can be used alone or in groups for multiple interior design solutions. The luminaire system includes a variety of extruded anodized-aluminum profiles and a complete fixture, comprised of the casing, swivel joint, polished reflectors, base, and endcaps. **CIRCLE 184**



**STENG LIGHT | WWW.INTER-LUX.COM**

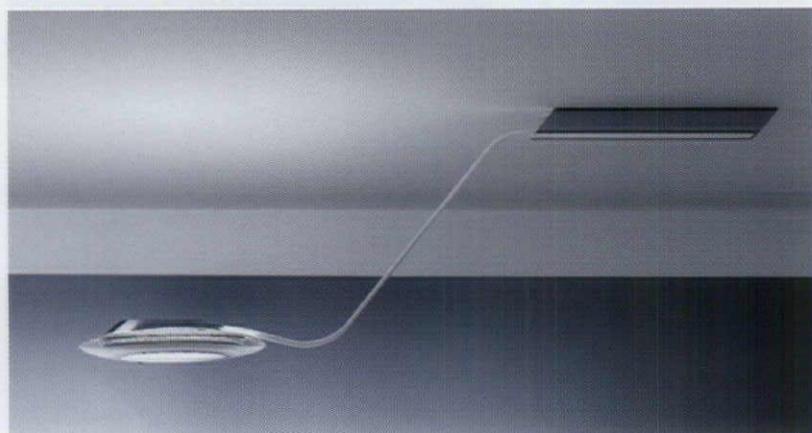
Product: **Optimal-Kane 230**

Constructed from aluminum, the Optimal pendant offers a sleek, minimal profile, only 3 1/2 inches in length. All of the luminaire's interchangeable reflectors provide uniform light distribution. Lamped with a high-voltage G9 halogen source, the fixture is equipped with an easy-to-use adjustor and a 79-inch coaxial cable. Custom lengths are available.

**ZUMTOBEL | WWW.ZUMTOBEL.COM**

Product: **Heliodisc**

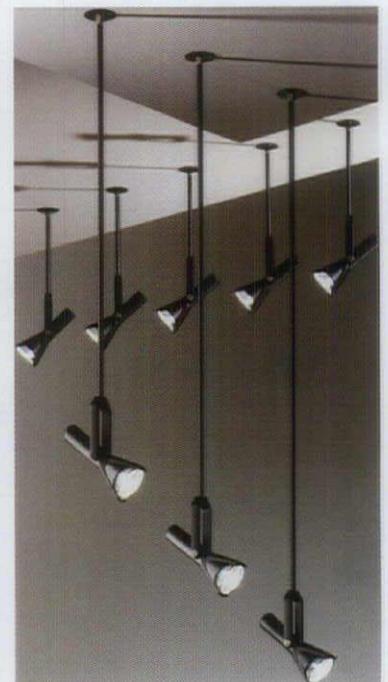
Offered as a ceiling fixture or as a free-standing luminaire, the Heliodisc's distinctive appearance comes from a flat head resembling a disc, and a curving bracket. The diameter of the head is just under 21 1/2 inches and can house four different light sources—compact fluorescent, T16 circular, LED, and metal halide. With the transparent luminaire housing, diffused light is radiated upward while direct light is thrown downward. **CIRCLE 185**



Product: **Rovo and Rovo-Head**

The Rovo and Rovo-Head, made from cast aluminum, are rigid stem luminaires with heads that pivot horizontally approximately 300 degrees and vertically through 360 degrees. The Rovo stems are available in standard lengths of 2 inches, 4 inches, 8 inches, and 16 inches, with specialty lengths available up to 55 inches. The Rovo-Head offers the same design as the Rovo; however, its jack is located directly on the fixture's head.

FOR INFORMATION ON BOTH STENG LIGHT PRODUCTS, **CIRCLE 187**



Bright Ideas, Bold Innovations



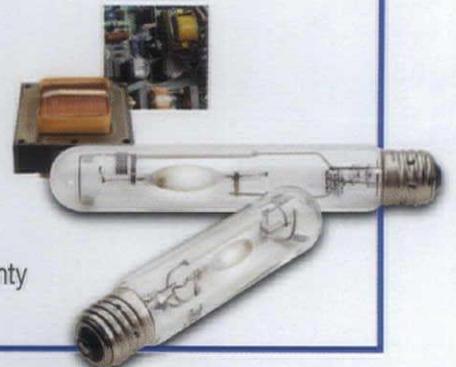
# UNI-FORM<sup>®</sup>

PULSE START METAL HALIDE LIGHTING SYSTEMS

## The Leader Always Shines Bright

Venture's Uni-Form<sup>®</sup> pulse start metal halide lamp and ballast systems:

- 25% more mean lumens on average than competitive pulse start products
- Maximum light output
- Longer lamp life with **improved** lumen maintenance
- Hot restart in less than half the time of standard metal halide systems and **50% faster** warm-up
- Exclusive **formed body arc tube** with "tipless" design is shaped to follow the curve of the arc stream
- Shrouded open fixture protection - Meets NEC requirements and ANSI criteria for open fixture use
- **Continuous operation**, no shut-off required
- UV Shield<sup>®</sup> technology blocks nearly all ultraviolet light, **reducing UV damage** to merchandise and signage
- Less breakage during shipping due to **stronger** weldless mount construction
- Double your warranty on lamp/ballast systems with the "One Call" limited warranty



For more information:

**800-451-2606**

FAX: 800-451-2605 E-MAIL: [venture@adlt.com](mailto:venture@adlt.com)

**[venturelighting.com](http://venturelighting.com)**

From



**VENTURE<sup>®</sup>**  
**LIGHTING**

An Advanced Lighting Technologies Company

# T~trak™

Track Lighting with a Twist

## The first true two-circuit, hand-bendable line-voltage track system.

Presenting Two-Circuit T~trak from Tech Lighting. Track lighting with yet another twist!

Two-Circuit T~trak offers the smallest profile of any line-voltage two-circuit system today. Because it is a true two-circuit system, each circuit has its own dedicated neutral for two separately switchable 20 amp circuits. Control, aesthetics, flexibility and performance – all from one system.

All T~trak systems incorporate a wide selection of architectural heads and pendants – and an extensive range of illumination options including incandescent, CMH and fluorescent configurations. Available in both Satin Nickel and White.

**Come see this system plus much more at Lightfair 2006!**

Tech Lighting Booth #1643

May 30 – June 1, 2006, Las Vegas Convention Center



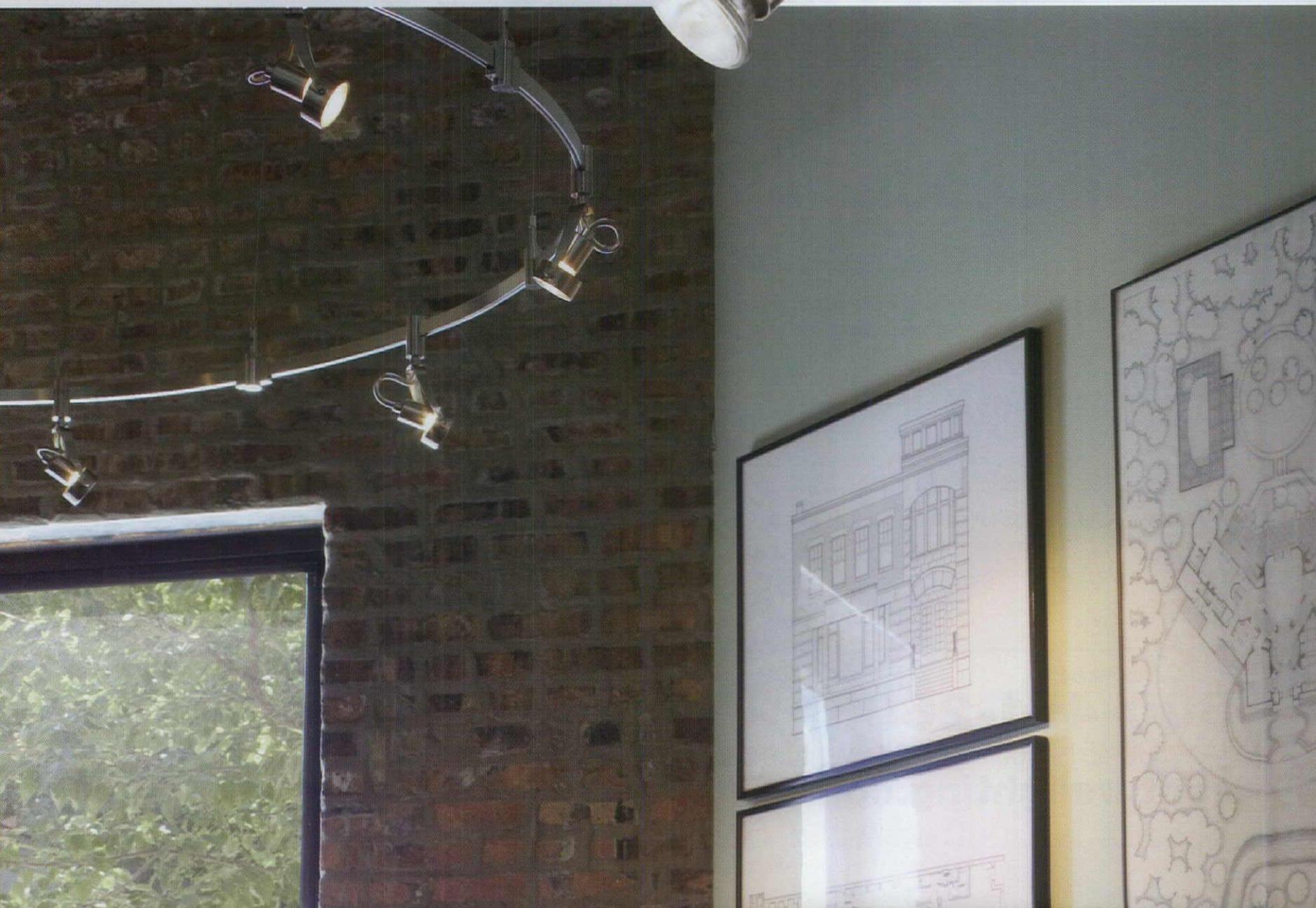
## TECH LIGHTING®

Circle No. 8 or [www.archlighting.com/productinfo](http://www.archlighting.com/productinfo)

techlighting.com



Two-Circuit T~trak shown with Soma and Tweak CMH Heads



**TRANSLITE SONOMA | WWW.TRANSLITESONOMA.COM**

Product: **Almande Shades**

Offering various shapes, sizes, colors, and fabrics, the Almande shades merge the minimal lines of modern tracklighting with the warmth, tone, and texture of classical designs. The shades, cut from silk and sheer fabric materials, easily connect to a track or monopoint system, and can be easily removed for tool-free lamp replacement.

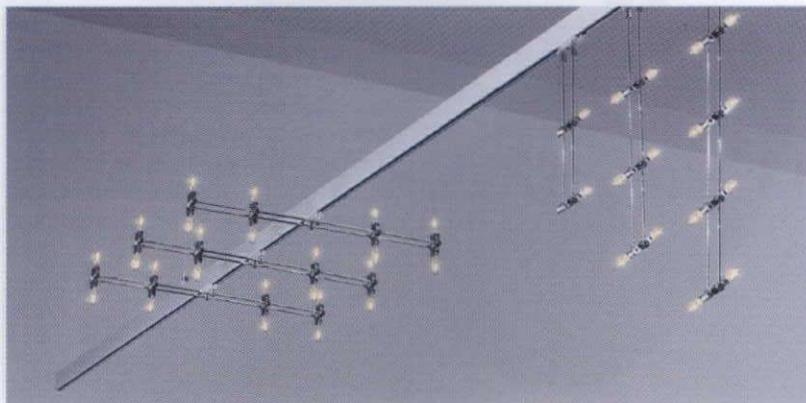
CIRCLE 188



**LIGHTLIGHT BY BUSCHFELD | WWW.INTER-LUX.COM**

Product: **Star and Crown**

The Star and Crown lighting systems feature decorative chandelier elements with a shiny chrome finish and exposed low-voltage halogen lamps. The Star system hangs vertically and can be used with ceiling-mounted track, whereas the Crown system is oriented horizontally and is not suitable for ceiling-mounted track. Both systems can be rotated 360 degrees.



Product: **Triangle**

One of two Triangle tracklighting systems, the suspended version (shown) is suitable for table and conference room illumination. It is approximately 19 3/4 inches wide, and each head takes one 20W, 35W, or 50W MR16 lamp. The system has an attractive aesthetic when applied in groups.

FOR INFORMATION ON BOTH LIGHTLIGHT BY BUSCHFELD PRODUCTS, CIRCLE 191



**W2 ARCHITECTURAL LIGHTING | WWW.W2LIGHTING.COM**

Product: **Flexrail2**

Flexrail2 is a two-circuit, line-voltage bendable rail system for use in commercial applications where a multitude of fixtures and a high volume of light are required. The system offers a contemporary aesthetic, accepts a wide variety of fixtures that can be placed anywhere on the rail, is offered in platinum and bronze finishes, and can be custom configured.

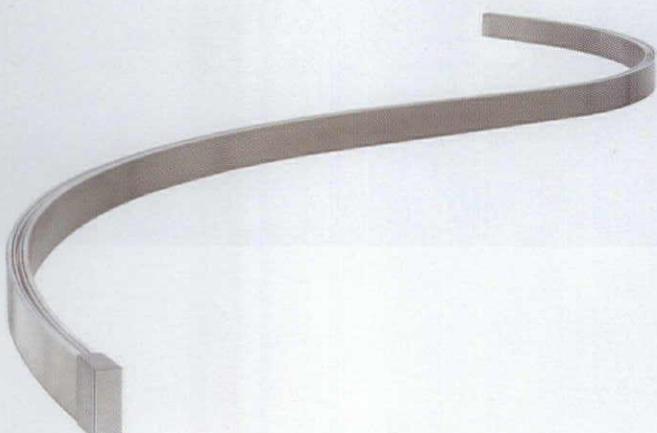
CIRCLE 189

**TECH LIGHTING | WWW.TECHLIGHTING.COM**

Product: **Two-Circuit T-trak**

The Two-Circuit T-trak is a line-voltage system with an extremely small profile—under 1 inch. Each circuit has its own dedicated neutral for two separately switchable 20-amp circuits. Available in lengths of 48 inches or 96 inches, the system bends horizontally by hand to a radius as small as 36 inches, can be field cut, and is offered in satin nickel and white finishes.

CIRCLE 190



**NORA LIGHTING | WWW.NORALIGHTING.COM**

Product: **Nepro Wall Wash**

The Nepro Wall Wash fixture uses a 300W R7S halogen lamp for even illumination. Suitable for wallwashing or covering wide areas with ambient light, the line-voltage fixture has full rotation for ease of aiming and is available in a silver or bronze finish.

CIRCLE 192



TRACK



**LIGHTING SERVICES INC |**  
**WWW.LIGHTINGSERVICESINC.COM**

Product: **LumeLEX**  
The LumeLEX combines breakthroughs in thermal design, optics, and feedback to provide precise color-temperature control and dimming. The compact and sleek track design is ideal for interior spaces where quality white light is critical, such as high-end retail, museum, and gallery applications. The self-locking, adjustable units are available in five standard finishes—black, white, silver, graphite, and platinum.

Product: **GR16**  
Made from cast aluminum, the GR16 series spotlight is minimal and sleek—ideal for high-design solutions. Its low-profile-fitting extension houses the transformer, while the lamp ring opens easily to accept an entire range of accessories, such as color and UV-blocking filters. The unit accommodates all energy-efficient tungsten halogen MR16 lamps from 20W to 75W, and is also available in standard finishes.

FOR INFORMATION ON BOTH LIGHTING SERVICES INC PRODUCTS, CIRCLE 193



**WYBRON | WWW.WYBRON.COM**

Product: **Nexera LX**  
The Nexera LX compact zoom profile luminaire uses a built-in CMY dichroic color-mixing system to produce a virtually unlimited color palette. For superior light output and beam uniformity, the fixture utilizes a high-output, compact tungsten 575W source to produce hard-edge illumination in an adjustable field, from 19 degrees to 26 degrees with a dual lens system. Ideal for applications where colors need to be adjusted quickly, another benefit is the luminaire's minimal noise, owing to its convection cooling. CIRCLE 194

**TIMES SQUARE LIGHTING |**  
**WWW.TSLIGHT.COM**

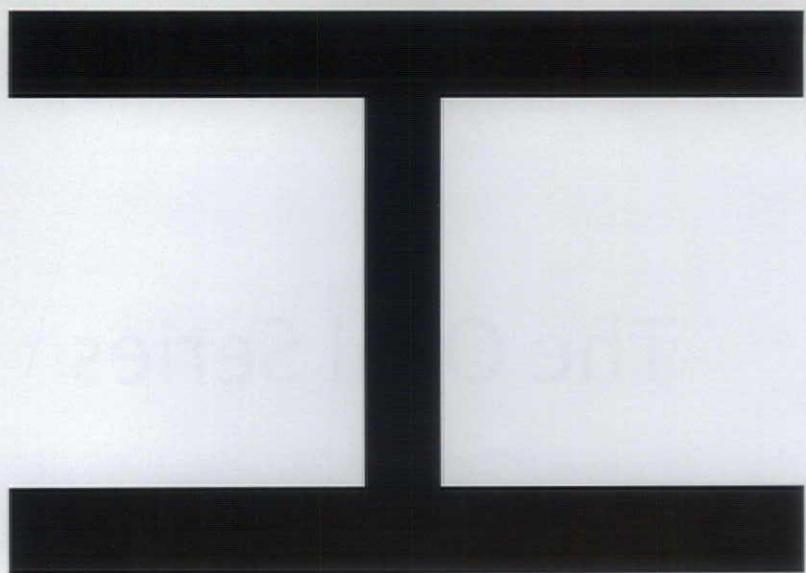
Product: **A39T6H**  
Appropriate for commercial and retail wallwash applications, A39T6H units utilize a high-performance, long-lasting, 39W T6 metal halide lamp with a textured reflector. Available in 120V and 277V, the luminaire features a hinged front for easy relamping and tool-free accessory changes. Measuring 5 3/8 inches wide by 4 1/4 inches deep by 8 3/4 inches high, the fixture is offered in standard black, white, and silver finishes, with custom colors available upon request. CIRCLE 195

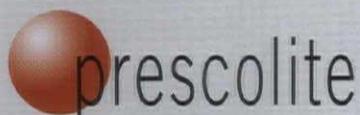


**ETC | WWW.ETCCONNECT.COM**

Product: **Source Four 14 degrees, 70 degrees, and 90 degrees**  
With the functionality, ruggedness, and optical power of the Source Four brand, the new 14-, 70-, and 90-degree field-angle spotlights offer added flexibility for lighting designers and technicians. The 14-degree spotlight works for 40- to 60-foot distances, while the 70- and 90-degree units are optimal for ultra-short-throw challenges, such as restricted trim heights, scenic washes, and pattern projections from close distances. The standard finish is black, but white, silver, and custom colors are also available. CIRCLE 196

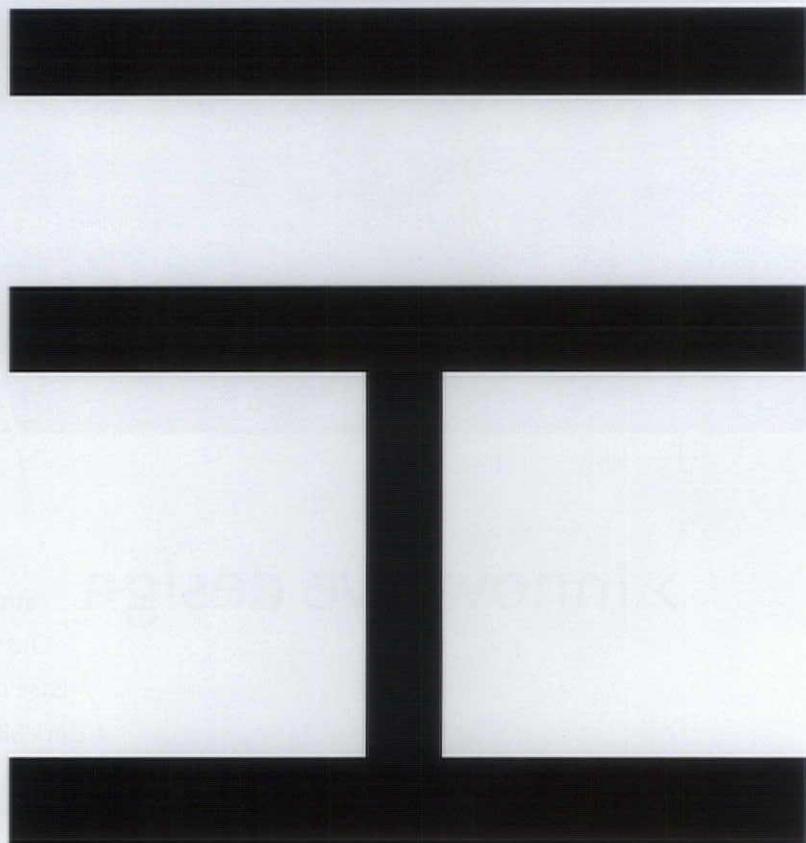




prescolite  
 ABOVE & BEYOND



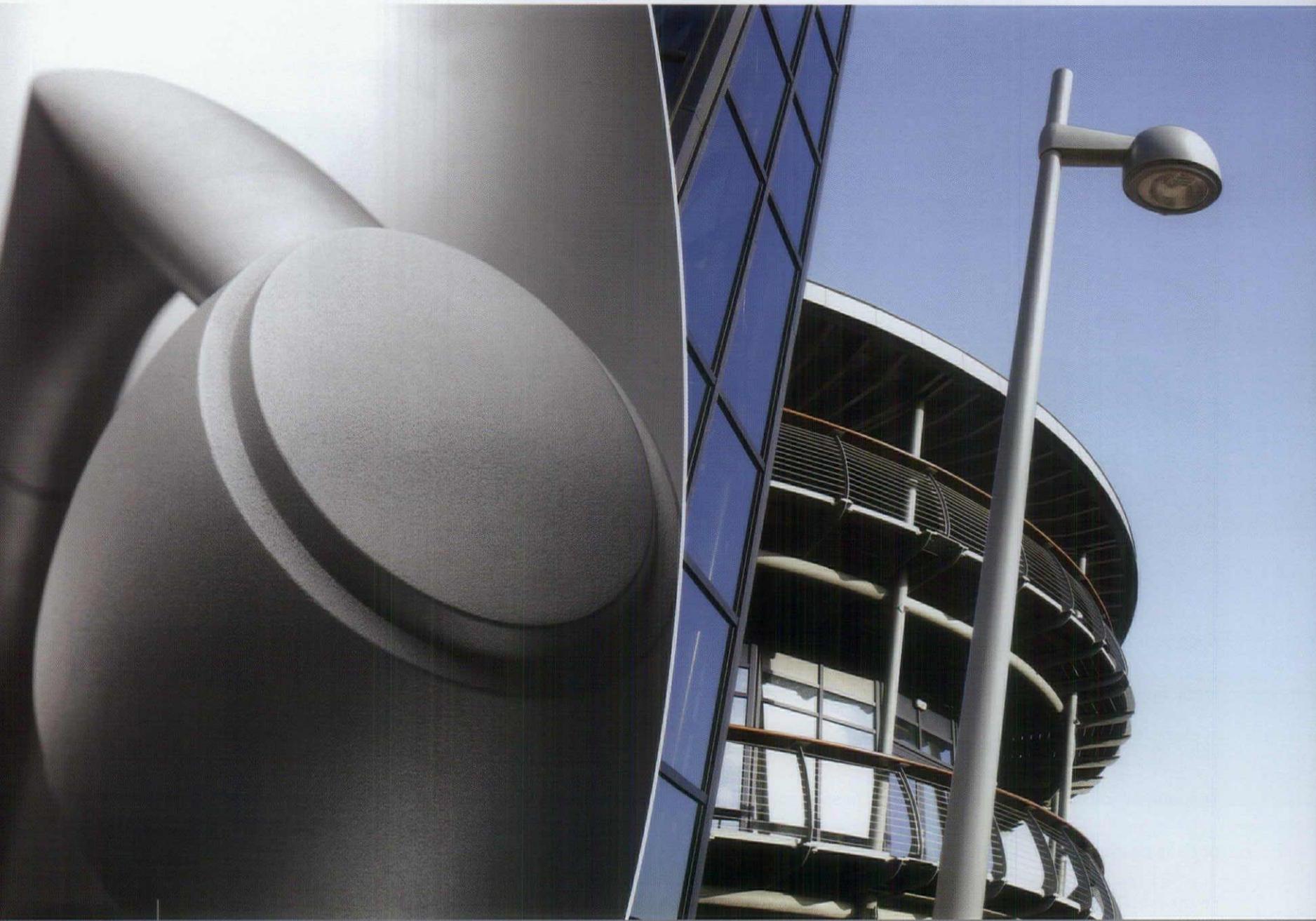
Keep your expectations high. Prescolite's new Architectür T6 metal halide downlights are the smart choice for a variety of high ceiling and other architectural applications. Architectür T6 metal halide downlights can be ordered in spot, medium, or flood beam spreads eliminating any need for adjustment on the job. Prescolite's patented Virtual Source® Optics are standard, providing high efficiency and excellent glare control to the T6 ceramic metal halide bi-pin lamp with its long lamp life, great color, and high efficacy. To learn more about Prescolite's Architectür T6 downlights, visit [www.prescolite.com](http://www.prescolite.com) or call 888-PRS-4TEC.



Circle No. 28 or [www.archlighting.com/productinfo](http://www.archlighting.com/productinfo)



# The Oval Series | DARING TO BE DIFFERENT



| Exclusivity from Lumec

> Innovative design : Superior photometric performances  
Outstanding durability  
Ease of maintenance  
Dark Sky compliant

[www.lumec.com](http://www.lumec.com) | T.: 450.430.7040 | A Genlyte Company



| Inspired by light



**BETA LIGHTING |**  
**WWW.BETA-LIGHTING.COM**

Product: **Aviator**

The large Aviator, part of the Aviator series of architectural area luminaires, is available with Type III, Type IV, and Type V optics, which meet IESNA full-cutoff classifications. The fixture's die-cast aluminum housing measures 25 inches wide by approximately 14 1/2 inches deep, and can accommodate 250W to 1000W metal halide, pulse-start metal halide, and high-pressure sodium lamps. Options include a side-arm mount for a square or round pole, or a round-tube center-direct post-top mount, with finishes in standard or platinum bronze, black, white, or silver. **CIRCLE 197**

**BOYD LIGHTING |**  
**WWW.BOYDLIGHTING.COM**

Product: **Lantern**

Suitable for use in areas that require a UL-listing for wet locations, such as patios, walkways, or colonnades, the Lantern series is offered with an incandescent source, or with compact fluorescent and a cold-weather ballast. Constructed from 1/4-inch-thick solid copper or aluminum with an etched-glass diffuser, the fixtures are available in antiqued copper, satin nickel, satin copper, and painted aluminum finishes, with three different fin styles (the Futura is shown). Diameters vary, but each measures 14 inches high. **CIRCLE 198**



**VALMONT INDUSTRIES |**  
**WWW.VALMONT.COM**

Product: **Xtreme**

The Xtreme series of new bases for traffic and light poles is resistant to cracking, salt spray, chemical decay, rotting, and pitting. The series is made of a high-strength polyurethane and consists of two standard models, the Washington and the Huntington. Both feature a clam-shell design and are scalable to match any size pedestrian street and traffic poles. The series will also be available as a retrofit to existing poles. **CIRCLE 199**

**ELEEK | WWW.ELEEKINC.COM**

Product: **Gatsby**

Featuring Art Deco instincts, the Gatsby sconce measures 34 inches high by 27 inches wide with a diameter of 34 inches. The Gatsby is available in a standard tumbled aluminum finish, clear or colored powder coats, and optional patinas. The fixture is made of 100 percent-recycled cast aluminum and ivory polycarbonate. It takes a fluorescent, and operates on a voltage of 120V to 277V. **CIRCLE 200**



**HOLOPHANE | WWW.HOLOPHANE.COM**

Product: **GranVille Mini**

The GranVille Mini is offered in two distinct housings. The Leaf housing (shown) features a raised oak leaf pattern, while the Simple style is less ornate. Multiple mounting and pole options are available for this fixture, which is offered with incandescent or compact fluorescent lamping between 120V and 347V. The decorative band and finial are optional, and both asymmetric and symmetric optics are available. The Leaf housing is approximately 25 inches tall, while Simple measures approximately 22 inches tall. Both styles have an overall width of 9 3/4 inches. **CIRCLE 201**

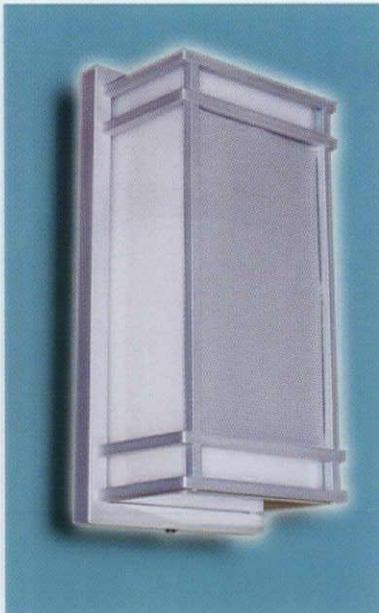


**MEYDA TIFFANY | WWW.MEYDA.COM**

Product: **Handkerchief Art Glass**

This new line of landscape luminaires features colorful shapes and styles with 9-inch-diameter shades. Handcrafted in the United States, each pendant has an overall height of 25 inches, but can be customized. Lamping options include 20W bi-pin low-wattage halogen and line-voltage incandescent. Eight color options are available, while metal finish options include vintage copper, verdesgris, and craftsman brown. **CIRCLE 202**

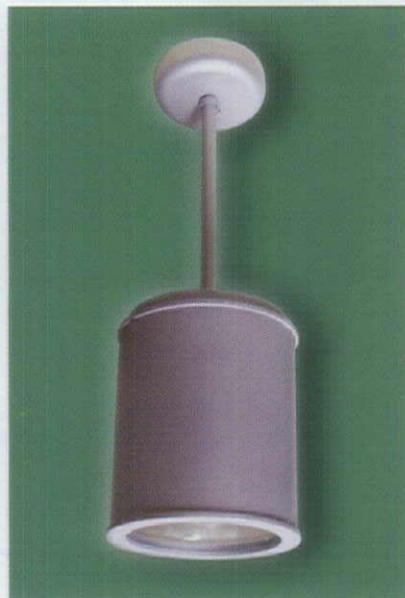




**ECLIPSE LIGHTING |**  
**WWW.ECLIPSELIGHTINGINC.COM**

Product: **Aquarius**  
Featuring a square diffuser and perforated insert, the Aquarius series of decorative wall sconces is appropriate for illuminating both outdoor and indoor locations. The sconce is available in six sizes, from 8 1/4 inches wide by 11 1/8 inches high by 4 inches deep, to 14 inches wide by 41 inches high by 8 1/2 inches deep. Lamping options include incandescent, fluorescent, high-pressure sodium, and metal halide. Two corrosion- and weather-resistant finish options are offered: pre-treated oven-baked polyester powder or brushed aluminum.

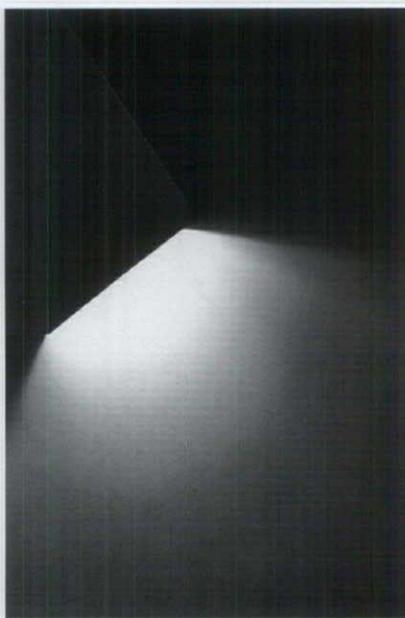
Product: **Troy**  
Offered in wall-, surface-, or ceiling-mounted styles, the Troy series of compact cylindrical fixtures is suitable for canopy applications. Adding a decorative touch to a functional application, the fixture's 6 3/4-inch-diameter heavy-gauge aluminum housing is finished in a powder coat applied over a pre-treated surface. Lamping options include double or triple twin-tube compact fluorescent, and PAR20 and T6 metal halide.



FOR INFORMATION ON BOTH ECLIPSE PRODUCTS, CIRCLE 203

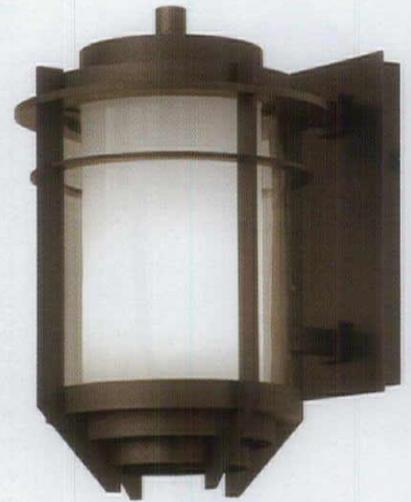
**BEGA | WWW.BEGA-US.COM**

Product: **Wall Luminaire**  
This wall-mounted luminaire with cutoff optics is appropriate for security and building egress illumination, and for direct or indirect lighting in both interior or damp location applications. The fixture meets LEED cutoff criteria for lighting zones LZ2, LZ3, and LZ4, with lamping options that include fluorescent, metal halide, incandescent, and LEDs. Five standard colors are offered, including black, white, bronze, silver, and Eurocoat. CIRCLE 204



**KALCO LIGHTING |**  
**WWW.KALCO.COM**

Product: **Louver**  
Offering a contemporary twist on traditional outdoor fixtures, the Louver collection features cylindrical glass encased in thin rectangular tubing, and includes a wall bracket (shown), a hanging lantern, and a post-mount fixture. The luminaires take one 100W medium-base lamp and housing dimensions measure 12 1/2 inches wide by 18 3/4 inches high by 15 1/4 inches long. The fixture is available in an iron finish. CIRCLE 205



**ERCO | WWW.ERCO.COM**

Product: **Grasshopper**  
With its multi-layer powder-coated aluminum housing, lockable hinge joint, and versatile mounting possibilities, the Grasshopper low-power-rating outdoor spotlights provide flexible accent lighting solutions. Various reflectors and lamp options are available, including metal halide and high-performance LEDs. The mounting plate is rotatable through 360 degrees and the fixture measures 9 1/4 inches tall by 9 11/16 inches wide. The Grasshopper is suitable for wet locations, and is dust-proof and water-jet-proof. CIRCLE 206



**FORMS + SURFACES |**  
**WWW.FORMS-SURFACES.COM**

Product: **Knight**  
Constructed of rust-proof aluminum, the Knight bollard and pedestrian lighting fixtures feature a geometric design with a head casting that positions the compact fluorescent or HID light source above the four quadrants for a symmetrical lighting pattern. One or more of the four frosted glass lenses may be replaced with opaque shields to create asymmetrical lighting. The standard height of the 8-inch-square bollard is 43 inches; however, custom heights down to 33 inches are available. At a standard height of 128 inches, the pedestrian lighting fixture measures 6 inches square with rounded corners; custom heights are available. Three durable powder-coat finishes include black, slate, and silver. CIRCLE 207



Architectural Style.  
Design Versatility.  
Superior Performance.

**AERIS**<sup>™</sup>  
Architectural Outdoor Illumination



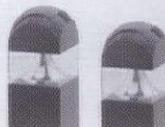
Area & Roadway (AS)



Wall Mounted (ASW)



Flood (ASF)



Ballards (ASB)



Lithonia Lighting Outdoor products are as versatile as they are reliable, and with the Aeris Architectural Outdoor family, innovative and inspirational designs create your complete outdoor lighting solution.

For more information, visit [www.lithonia.com/aeris](http://www.lithonia.com/aeris)  
Circle No. 77 or [www.archlighting.com/productinfo](http://www.archlighting.com/productinfo)



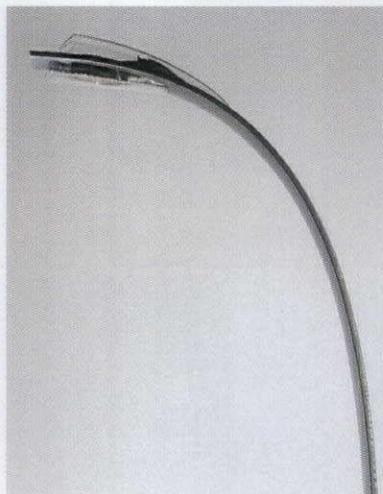
**LITHONIA LIGHTING**<sup>™</sup>  
An AcuityBrands Company



**SCHRÉDER |**  
**WWW.SCHREDER.COM**

Product: **Thylia**  
Thylia urban street lighting has a range of configurations, finishes, and heights (up to 26 feet). One, two, and four poles can be mounted on a base. Four types of bases—two in cast iron and two in steel—and a steel wall bracket are available. The luminaire is equipped with a micro-reflector, allowing for a small head (5 inches high). The fixture has been specifically developed for metal halide lamps with a ceramic arc tube.

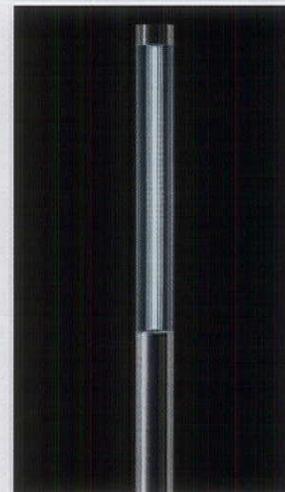
Product: **Francesca**  
Francesca features an arched aluminum profile and an embellished cast-aluminum mast base. Three versions are available: one with a mast of 14 3/4 feet, another with a mast of just under 19 3/4 feet, and a wall bracket. The luminaire is equipped with a micro-reflector that offers the same photometric performance as standard-size reflectors, and has been specifically developed for metal halide lamps with a ceramic arc tube.



FOR INFORMATION ON BOTH SCHRÉDER PRODUCTS, CIRCLE 208

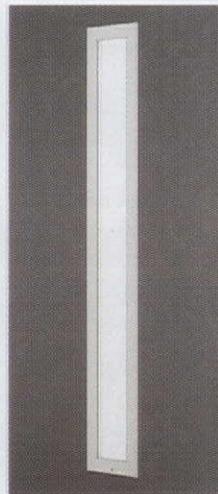
**IP44 | WWW.INTER-LUX.COM**

Product: **Slim**  
With a diameter measuring only 2 3/4 inches, Slim is constructed of stainless steel and clear matte acrylic glass, providing a contemporary outdoor lighting option. Lamping involves one 13W T2 fluorescent lamp with optional color filters available in red, blue, and anthracite. The height of the fixture is just over 4 feet; special heights are available on request. CIRCLE 209



**VISA LIGHTING | WWW.VISALIGHTING.COM**

Product: **Visage Outdoor**  
Mountable to the ceiling or wall in both horizontal and vertical orientations, the ADA-compliant Visage outdoor luminaire features an extruded aluminum frame. Components of the 6 1/8-inch-wide fixture include a 1-inch door frame that attaches to a 3 1/4-inch recessed housing. Heights vary from 25 1/2 inches to 61 inches. Standard T5 fluorescent lamping is used, with T8 and T5HO fluorescent options available. Finishes are thermoset acrylic powder coat. CIRCLE 210

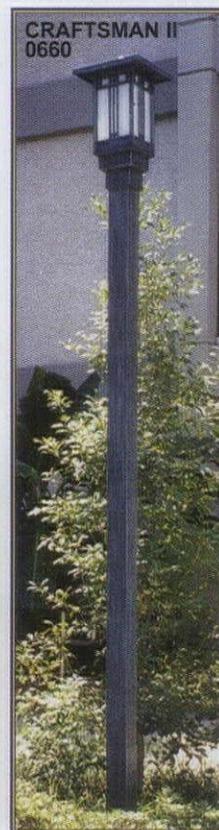
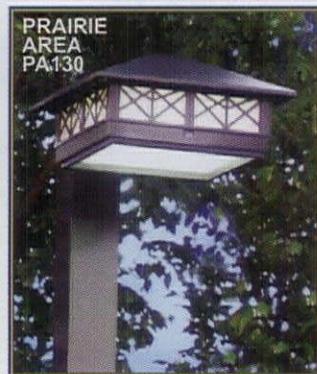
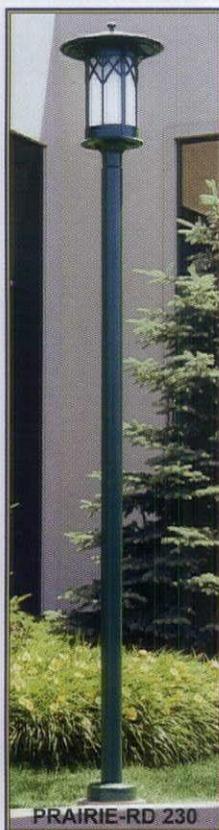
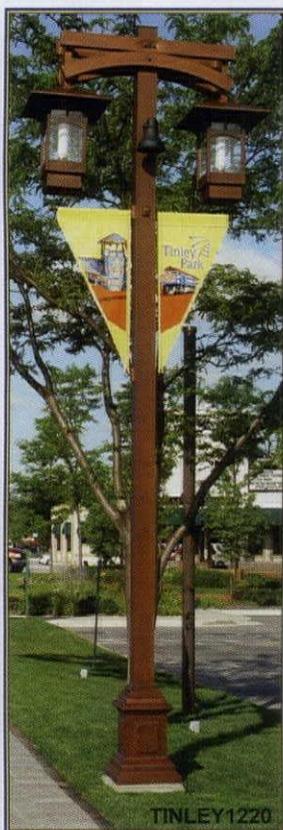


## STERNBERG OFFERS A VARIETY OF STYLES AND SIZES TO MEET ANY SPECIFICATION

### PRAIRIE\* FAMILY LIGHTING

The Prairie Family design of luminaires is in the style and tradition of the Frank Lloyd Wright, Arts / Crafts and Mission period. Whether it is the tree style motif or linear look with stylized grilles, these distinct fixtures are available in four different sizes to complete any streetscape or landscape. All of the models are available with energy efficient lamping and larger sizes with the optional NIGHTSKY™ STAR-SHIELD and OPTI-SHIELD, roof or louver optical systems. Refractors, frosted chimneys and house side shields may be added.

\*Sternberg proprietary designs are protected by copyright.



Traditional and Architectural Lighting, Luminaires, Poles, Bollards, Site Amenities and Landscape Furnishings

Call, Fax, Email or Write for our Free New 2005 - 2007 Catalog

# STERNBERG LIGHTING

555 Lawrence Ave. Roselle, IL 60172  
800-621-3376 • Fax 847-588-3440  
www.sternberglighting.com  
Email: info@sternberglighting.com



**QUALITY LIGHTING |**  
**WWW.QUALITYLIGHTING.COM**

Product: **ZLV-24**  
This post-top lighting fixture for area and site lighting is suitable for a broad range of applications where glare-free pedestrian-level illumination is desired. The fixture consists of a 24-inch-diameter vandal-resistant cast-aluminum housing and a broad saucer-shaped canopy made of die-cast aluminum. Lamping options include high-pressure sodium, metal halide, and compact fluorescent, and post heights are available from 8 feet to 14 feet. CIRCLE 211

**DREAMSCAPE LIGHTING |**  
**WWW.DREAMSCAPELIGHTING.COM**

Product: **Nalu**  
Providing general accent illumination to high-light landscape vegetation or hardscape, the Nalu sculptural luminaire utilizes a halogen or LED light source. Constructed of powder-coated steel or solid brass, standard finishes include black iron (for steel) or sunset bronze (for solid brass), and custom finishes are available. The fixture measures 30 inches high by 3 1/2 inches wide and features a 20-inch extension. CIRCLE 212



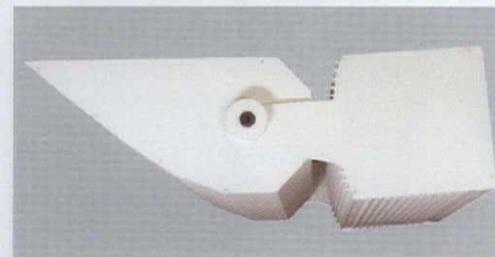
**LITHONIA LIGHTING |**  
**WWW.LITHONIA.COM**

Product: **Aeris**  
This family of outdoor luminaires comes in several styles: flood, wall-mounted, site, and area. Cutoff and full-cutoff lamping options include metal halide, high-pressure sodium, fluorescent, and induction. The fixture is available in standard and textured finish selections, and is UL listed for wet location in lens-down orientation. Accessories such as wire and vandal guards are available. CIRCLE 119

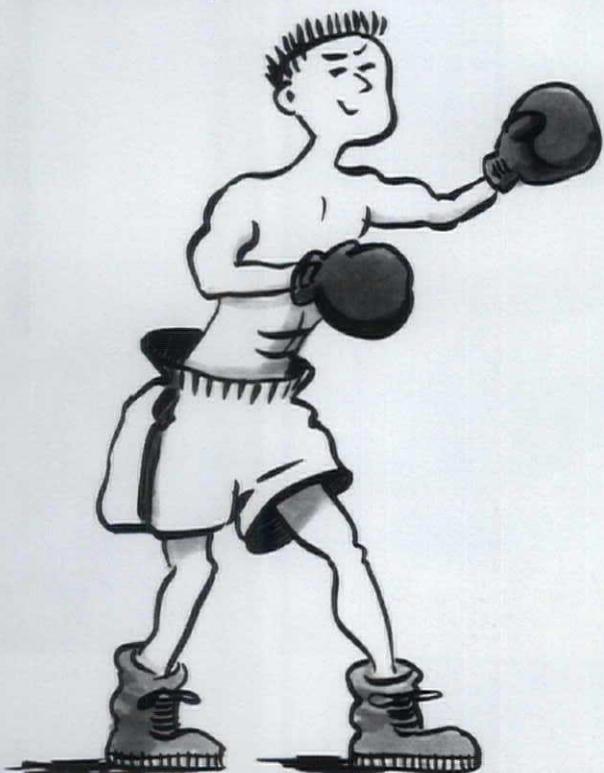


**ENGINEERED LIGHTING PRODUCTS |** **WWW.ELPLIGHTING.COM**

Product: **Aileron A15**  
Providing an asymmetric light distribution for large areas, Aileron A15 extruded aluminum floodlights tilt to allow for precise aiming. Producing unscalped illumination without glare, the high-purity aluminum reflector also offers lamp shielding. The surface-mounted, 7 1/4-inch profile extends from the wall 25 5/8 inches and, depending on lamp option, varies in width from 14 inches to 28 inches. It is available in one- or two-lamp configurations with metal halide, high-pressure sodium, or fluorescent options. CIRCLE 213



**Glass as light as a featherweight.  
And just as tough.**



**BOROFLOAT®**

B o r o s i l i c a t e F l o a t G l a s s

Borofloat® weighs in 11% lighter than conventional glass, yet it still packs a powerful punch against thermal shock. We made it crystal clear for exceptional light transmission. And optional coatings can filter out harmful UV rays without blocking visual light. What a knockout.

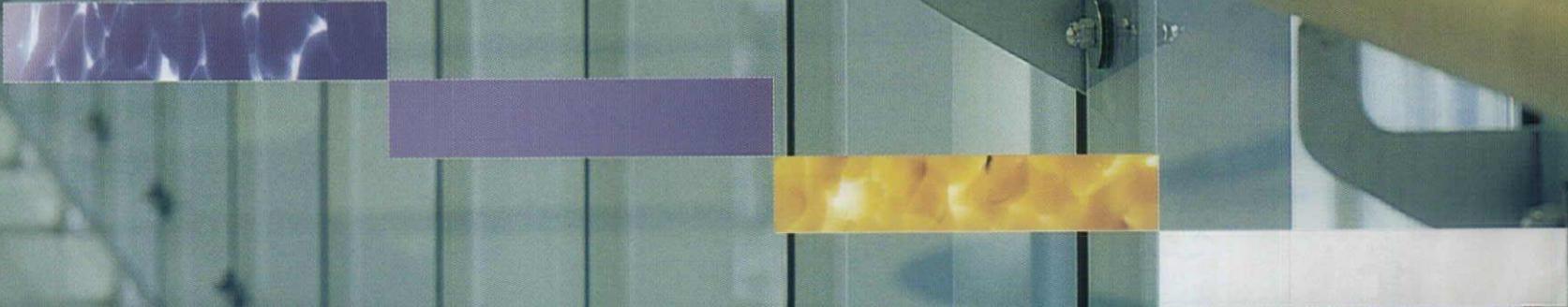
Borofloat®. Easy to .com by: [www.us.schott.com](http://www.us.schott.com)

Home Tech  
**SCHOTT North America, Inc.**  
5530 Shepherdsville Road  
Louisville, KY 40228  
Phone: 502-657-4413  
Fax: 502-966-4976  
E-mail: [borofloat@us.schott.com](mailto:borofloat@us.schott.com)  
[www.us.schott.com](http://www.us.schott.com)

**SCHOTT**  
glass made of ideas

origins  translucent

THE UNIQUENESS  
THAT DEFINES  
YOUR DESIGN SIGNATURE



omega  
LIGHTING

precision optical instruments FOR ARCHITECTURAL LIGHTING

800.234.1890

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

Circle No. 120 or [www.archlighting.com/productinfo](http://www.archlighting.com/productinfo)

**BODINE | WWW.BODINE.COM**

Product: **REDiTEST LP600STU**

This low-profile, fluorescent emergency ballast features universal input and high lumen output, and operates for up to 90 minutes with a number of lamp types and wattages including: 14W to 54W standard T5 or T5HOs; 17W to 55W standard 8 or T8HOs; or 36W to 55W 4-pin compact fluorescents. The ballast automatically performs monthly and annual code-required testing, measures 22 1/4 inches long by 1 inch wide by 1 inch high, and is suitable for damp locations. **CIRCLE 214**



**HIGHLITES | WWW.HIGHLITESLIGHTING.COM**

Product: **Euro ES**

The Euro ES series provides unobtrusive emergency lighting in a contemporary design for commercial, institutional, and industrial environments. By recessing the fixture into accessible ceilings or walls, only the trim plate and two yoke-mounted, multi-directional halogen lamp heads (rotatable through 180 degrees) are visible. The housing is constructed from 22-gauge steel and is finished with corrosion-resistant white powder-coat paint. **CIRCLE 215**



**SURE-LITES | WWW.SURELITES-LIGHTING.COM**

Product: **Architectural Emergency Light**

Designed as a sconce, this emergency luminaire blends with decorative interiors to offer an attractive alternative to standard emergency lighting. The housing is constructed of die-cast aluminum with an integral refractive polycarbonate lens, which supports three 6V, 6W high-output Xenon lamps. Measuring 10 7/8 inches wide by 7 inches tall by 3 7/8 inches deep, the fixture includes a maintenance-free, sealed nickel-cadmium battery that fully recharges in 24 hours. **CIRCLE 216**



**NIGHTSEARCHER | WWW.NIGHTSEARCHER.COM**

Product: **Maxi 2000**

This rechargeable portable floodlight, for use indoors and out, provides emergency lighting for up to 10 hours from a single charge. Powered by a 42W compact fluorescent, the newly designed reflector produces a brilliant white light that is the approximate equivalent of a 300W lamp. The fixture has no trailing cables and no halogen heat risk. A rapid response unit is also available.



Product: **Starlite 12**

This triple-tube fluorescent floodlight switches between high- and low-power modes, while offering cool-running, silent operation. Using a 12V power pack, it illuminates for 3 hours on full power and 10 hours on low power. The aluminum tripod can be extended in height from 5 feet to 10 1/2 feet, providing maximum flexibility for all types of applications.

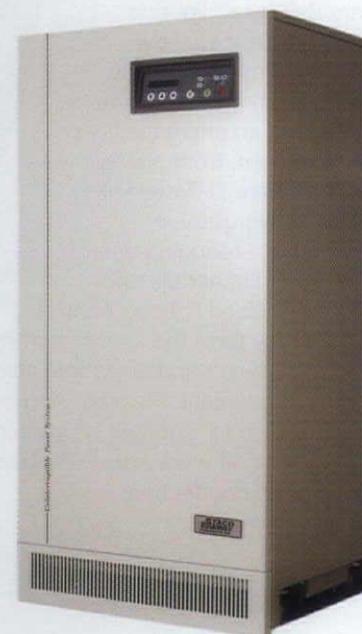


FOR INFORMATION ON BOTH NIGHTSEARCHER PRODUCTS, **CIRCLE 217**

**STACO ENERGY PRODUCTS | WWW.STACOENERGY.COM**

Product: **Trestar 924**

The Trestar 924 is a three-phase uninterruptible power supply for central emergency lighting systems that provides a 90-minute backup during blackouts. The valve-regulated, lead-acid battery has a 10-year design-life at 77 degrees, and fully recharges in less than 72 hours. Accessed from the front and top, dimensions vary based on capacity, which ranges from 10 to 75 kW. **CIRCLE 218**



*Square D® lighting control*  
The connection between  
style and stability.



Saturn™ DLT  
Keypad



Powerlink® G3  
Control Center

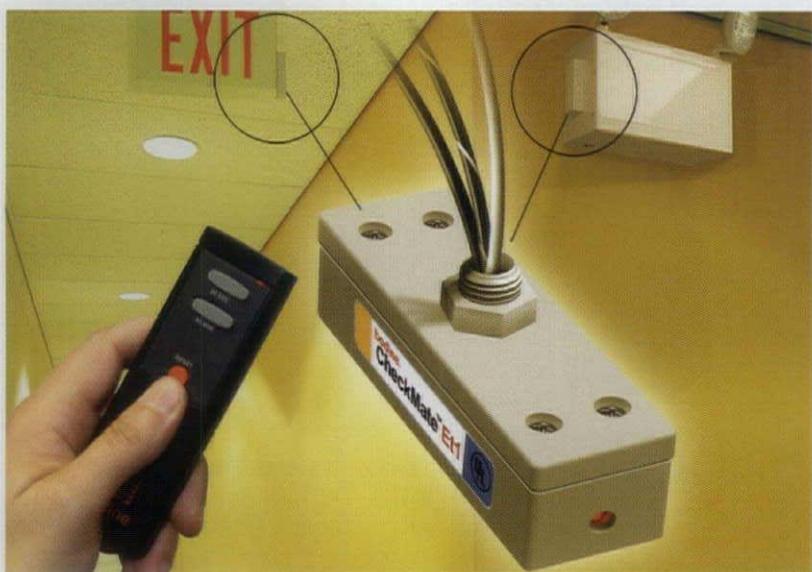
There are two sides to every building. Now you can count on the Square D® brand to bring them together. Square D Clipsal® lighting controls introduce a new level of style and ambience to any environment. Dim the lights across an entire facility or the family room, from a single keypad. Square D Powerlink® systems deliver proven performance – reducing energy costs through schedule and occupancy-based lighting control. Together, they form the kind of complete solution you won't find anywhere else. Reliable. Convenient. Flexible. And seamlessly integrated. See for yourself where elegance meets engineering. Visit [www.squaredlightingcontrol.com](http://www.squaredlightingcontrol.com) and make the connection.



**BODINE | WWW.BODINE.COM**

Product: **CheckMate ET1**

Remote-control testing of existing exit signs and emergency lighting wall packs is available with the use of CheckMate ET1. From up to 32 feet away, users can test both 30-second and 90-minute options to satisfy building safety codes. The unit attaches directly to existing signs and wall packs, and measures approximately 4 inches long by 1 1/4 inches wide by 1 inch high. **CIRCLE 219**



**CRESTRON | WWW.CRESTRON.COM**

Product: **infiNET**

Part of a complete line of wireless lighting controls that includes single- and four-button switches and wireless gateways, the infiNET dimmer uses technology that eliminates the need for physical control wiring. Its dynamic frequency allocation ensures a fast, stable, and reliable system, and real-time analysis can be conducted remotely from any computer. **CIRCLE 222**



**DYNALITE | WWW.DYNALITEEUROPE.COM**

Product: **Revolution**

Incorporating a clip-on cover-fastening system for design flexibility, the Revolution series of control panels incorporates a button-depth adjustment facility to accommodate flat surfaces up to 1/4 inch deep. The panels offer smooth-action buttons with LED indicators and are available in a variety of configurations, from single column—allowing for one to eight buttons—through double- or triple-column designs with up to 24 buttons. A wide range of panel materials are offered, including wood, stone, metal, plastic, vinyl, and glass. **CIRCLE 223**



**COOPER WIRING DEVICES | WWW.COOPERWIRINGDEVICES.COM**

Product: **Aspire RF**

The Aspire RF line of wireless control products incorporates Z-Wave technology that uses sensing and random back-off to reduce interference. The system includes Aspire's signature curve motif and contrasting matte and low-gloss finishes, which are offered in three two-toned color combinations: desert sand, white satin, and silver granite. In addition, switches, receptacles, dimmers, controllers, accessories, and screwless wallplates are available. **CIRCLE 220**

**HUBBELL | WWW.HUBBELL-AUTOMATION.COM**

Product: **LightHawk**

LightHawk, a wall-switch occupancy sensor product line, is available in a variety of models—passive infrared, ultrasonic, and multi-technology—for occupancy detection and false trip immunity. The devices feature selectable operating modes, including automatic on/off or manual on/automatic off, and a built-in photosensor for automatic daylight harvesting. All sensor models come in both single- and dual-circuit versions with no minimum load requirements and can be used to replace existing wall switches. **CIRCLE 221**

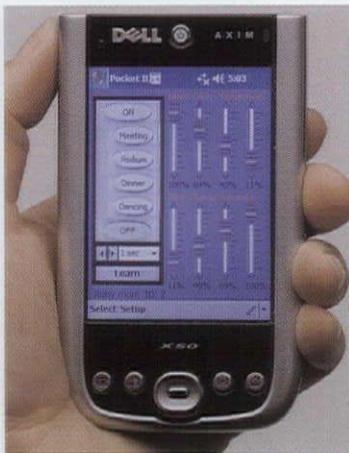


**COOPER LIGHTING | WWW.COOPERLIGHTING.COM**

Product: **LumaWatt Hi-Lo**

Designed for commercial and industrial applications, the LumaWatt Hi-Lo is a wireless mesh-networked motion sensors and photosensor that operates incandescent, compact fluorescent, linear fluorescent, and HID light sources. It can switch electronic- or magnetic-ballasted luminaires for high-low functionality, dim electronic-ballasted luminaires using 0V to 10V dimming, and switch any electrical load up to 30 amps. Capable of detecting motion up to 40 feet away, the sensor features a free-rotating universally adjustable wall- or ceiling-mounting mechanism. **CIRCLE 224**



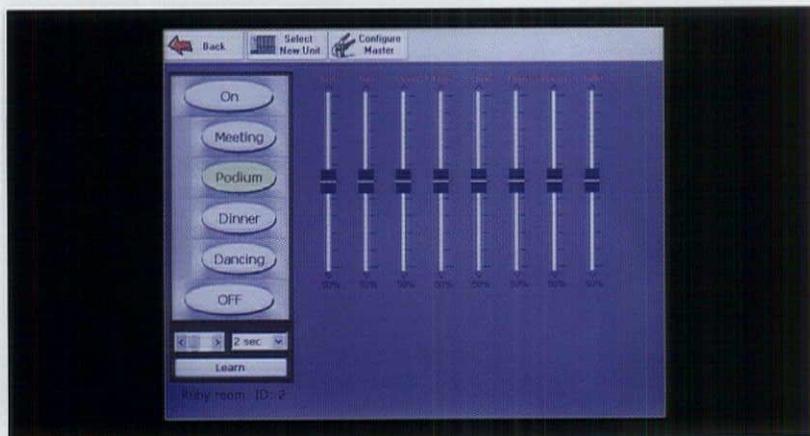


**LIGHTOLIER CONTROLS | WWW.LOLCONTROLS.COM**

**Product: LYTEmode**  
 Measuring under 5 inches long and approximately 3/4 inches thick, and featuring a brilliant 3 1/2-inch color display, the LYTEmode wireless unit provides real-time individual channel control of 12 scenes and adjustable fade times, graphic representation of channel intensities, and lighting control status. Utilizing wireless technology, reliable and secure connections are obtained over a range of 30 feet. Power is supplied through a lithium-ion removable battery, and a rechargeable AC adapter comes standard.

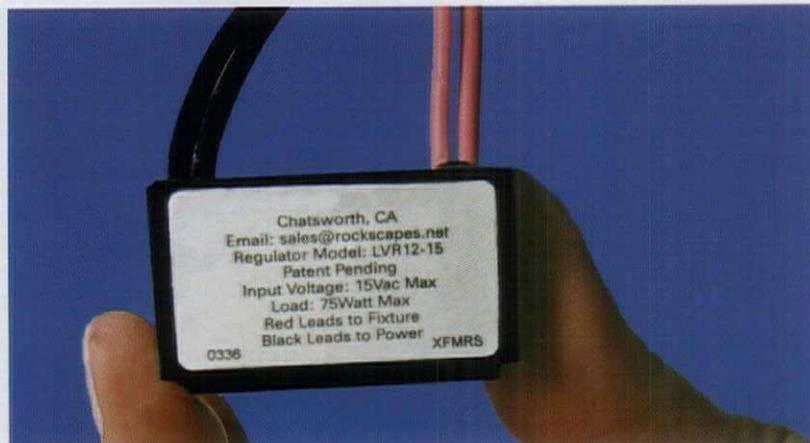
**Product: LyteScene**  
 The LyteScene touch screen captures and simulates the control panel functions of any LYTEmode network master station or remote in real time through a contemporary colorful, graphic interface. System adjustments can be easily made with the system's software on the approximately 6 1/2-inch screen, which features a high-performance backlight, optional custom background logos, standard wiring for connection to the network, low power consumption, fanless operation, and an IP65-rated front bezel.

FOR INFORMATION ON BOTH LIGHTOLIER CONTROLS PRODUCTS, CIRCLE 225



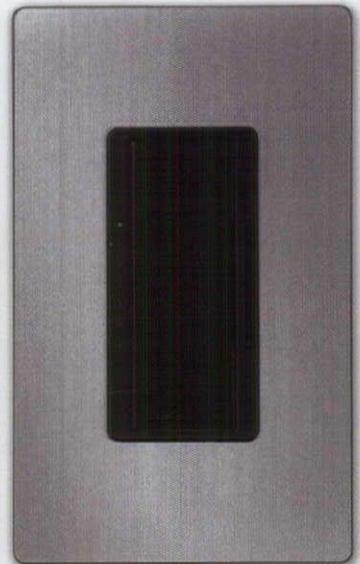
**RSL | WWW.RSLLIGHTING.COM**

**Product: Regulator**  
 With the ability to regulate the voltage from transformer to fixture to 11.6V, the tiny Regulator is fully contained in its own housing for direct burial or installation in a mounting stake. Measuring only 1 inch by 1 inch by 1 1/2 inches, the device is used for landscape lighting projects and features a guide chart that simplifies layout. CIRCLE 226



**LUTRON | WWW.LUTRON.COM**

**Product: Stainless Steel Wallplates**  
 To coordinate with stainless-steel home appliances, Lutron has added stainless-steel wallplates to its product range. Complementary to black dimmers, switches, and accessories, the wallplates feature rounded edges and have no visible screws for a clean aesthetic. One-, two-, three-, four-, five-, and six-opening wallplates are available, and each is comprised of a stainless-steel frame over a black base.



**Product: Sivoia QED Roman Shades**  
 Sivoia QED Designer Roman Shades offer Lutron's Quiet Electronic Drive technology to provide quiet and precise movement and control. A variety of classic and contemporary fabrics are available in multiple colors and textures, including natural woven grasses, reeds, and bamboos, as well as designer fabrics. Shades range between 24 inches and 138 inches in width, and 36 inches and 156 inches in length, and can be integrated into the company's lighting control systems.

FOR INFORMATION ON BOTH LUTRON PRODUCTS, CIRCLE 227

**LIGHTOLIER | WWW.LIGHTOLIER.COM**

**Product: PowerTrip**  
 A current-limiting device for line-voltage tracklighting, the PowerTrip enables users to tailor installation to a specific required wattage. Designed for use with Lytespan Radius and Basic and Advent track systems, it is easy to install and replaces both standard Live-End and In-Line track power feeds. The tamperproof device is available in black or white. CIRCLE 228



**ENCELIUM TECHNOLOGIES | WWW.ENCELIUM.COM**

Product: **Energy Control System**

To assist with energy savings in commercial and public buildings, the Energy Control System is a fully scalable, integrated hardware and software system that allows light fixtures, occupancy sensors and photosensors, and wall dimmers to be individually addressed via a rack- or wall-mounted processor. Sensor power is supplied over the network, eliminating the need for separate power supplies and wiring. **CIRCLE 229**



**WATT STOPPER | WWW.WATTSTOPPER.COM**

Product: **Automation Appliance**

Used with the Lighting Integrator control panel, the Automation Appliance is a web-based interface that connects users to the network via an Internet, intranet, or LAN connection. Through a standard web browser, multiple users can access all lighting control functions and scheduling capabilities, ideal for applications where remote access is desired or access from multiple locations is necessary. **CIRCLE 230**

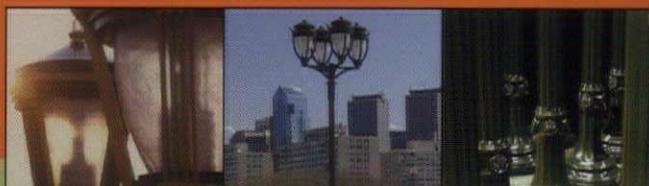


# Sentry

Exterior Lighting

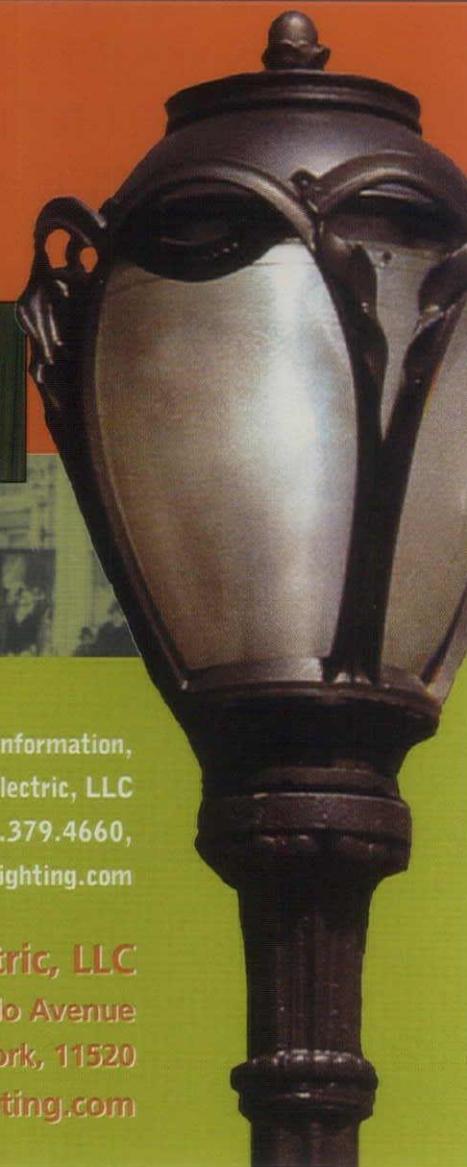
LUMINAIRES

POLES



BOLLARDS

ACCESSORIES



For more information,  
call Sentry Electric, LLC  
at 516.379.4660,  
or visit us at [www.sentrylighting.com](http://www.sentrylighting.com)

**Sentry Electric, LLC**  
185 Buffalo Avenue  
Freeport, New York, 11520  
[www.sentrylighting.com](http://www.sentrylighting.com)

THERE'S LIGHTING.



AND THEN THERE'S  
LET'S-MAKE-THIS-LIGHTING  
BETTER,  
SMARTER,  
EASIER-TO-GET,  
FASTER-SHIPPING-FOR-EVERYONE  
LIGHTING.

(LOOKS LIKE AN EASY CHOICE TO US.)

We're a lighting company that takes the initiative to jump on trends, ship quickly, and make a good product into an even better one. Shouldn't you be using Con-Tech? Call us today at 1-800-728-0312.



*makes it better.*

RECESSED

TRACK

RAIL

DECORATIVE GLASS

SCONCES

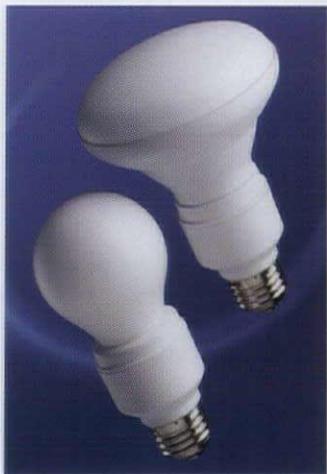
EMERGENCY



**OSRAM SYLVANIA |**  
[WWW.SYLVANIA.COM](http://WWW.SYLVANIA.COM)

Product: **aluPAR**  
With an aluminum reflector—rather than the glass reflectors used in previous models—the PAR56 lamps in the aluPAR family are lighter and brighter than conventional stage and show PAR halogen lamps, and offer enhanced lighting performance. Different voltages and beam angles are also available.

Product: **Dura-One**  
Serving as a replacement for medium-base incandescent and compact fluorescent lamps, Dura-One uses advanced magnetic induction technology, eliminating the need for coils that eventually wear out. With a rated life of 15,000 hours, high light output is delivered over a wide temperature range—90 percent of its rated light output is from 25 to 150 degrees Fahrenheit. Additional benefits include flicker-free, instant-on starting.



Product: **Pentron C T5HO**  
Using amalgam technology, the Pentron C T5HO lamp can deliver constant light output over a wide temperature range, from 40 to 165 degrees Fahrenheit. Suitable for use in a variety of applications, including warehouse and industrial lighting, indirect office lighting, indoor and outdoor signage, parking structure, and gas station and convenience store canopies, it is available in 2-, 3-, 4-, and 5-foot lengths.



Product: **Quicktronic Powersense T8**  
The Quicktronic Powersense T8 dimming ballast works on low-voltage or power-line dimming controls. By combining control technologies, it can be installed on any line voltage—from 120V to 277V—and with any standard fluorescent dimming control. It is compatible with Octron lamps from 17W to 32W.

FOR INFORMATION ON THESE OSRAM SYLVANIA PRODUCTS, CIRCLE 231

**OPTO TECHNOLOGY |** [WWW.OPTOTECH.COM](http://WWW.OPTOTECH.COM)

Product: **Endura Bright MR-16**  
The Endura Bright MR16 lamp is a replacement for existing halogen lamps. Appropriate for applications such as trade shows, museums, display cases, transportation, and industrial lighting, it contains a high-output LED that offers up to 120 lumens of light, and provides over 2,200 candela of light output with a beam spread of 10 degrees. The lamp is available in white, warm white, red, amber, green, cyan, blue, and royal blue. CIRCLE 232



**LIGHTWAVES |**  
[WWW.LIGHTWAVESCONCEPT.COM](http://WWW.LIGHTWAVESCONCEPT.COM)

Product: **LED 3W MR16**  
Intended as a replacement for the standard dichroic MR16, the LED 3W MR16 uses 90 percent less energy than an incandescent MR16 and offers near-zero heat output and an eight-year lifespan. Producing 80 lumens, the lamp is offered in white, warm white, red, green, blue, and amber. CIRCLE 233



**INFINILUX |** [WWW.INFINILUX.COM](http://WWW.INFINILUX.COM)

Product: **MR16 Based LED Lamps**  
These 1W and 3W MR16 solid-state lamps feature standard bi-pin bases and integrated constant-current drivers that can accept variable inputs from 8V to 16V in either an alternating current or a direct current. Built around Cree's Xlamp LED technology, each lamp has an operating life of over 25,000 hours and is housed in a standard white housing made from UL-rated materials. Additionally, lamps are available in two output power configurations, 45 lumens and 80 lumens, in seven colors: white, amber, blue, cyan, green, orange, and red. CIRCLE 234





**LITETRONICS |**  
**WWW.LITETRONICS.COM**

Product: **SPLP PAR38**  
Offering the versatility of a standard incandescent PAR lamp, but lasting four times longer, the SPLP PAR38 compact fluorescent lamp is effective for both indoor and outdoor applications, including tracklighting and recessed can lighting. Available in 2700K and 4000K color temperatures, the spiral reflector allows for higher lumens per watt than ordinary fluorescent lamps and has an 8,000-hour life. The minimum length of the lamp is 5 7/8 inches.

Product: **Micro-Brite Candelabra**

The Micro-Brite Candelabra is a 3W or 4W dimmable cold cathode fluorescent lamp that can operate indoor or out in extreme temperatures. It has a 25,000-hour life and offers 80 percent energy savings over incandescent lighting. With a minimum length of 4 1/4 inches, the lamp is ideal for chandeliers, wall sconces, and floor and table fixtures.



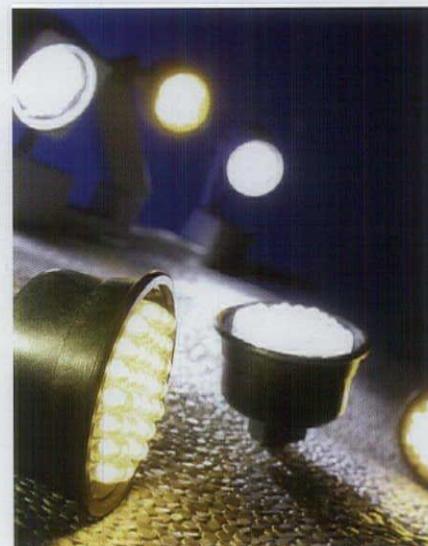
Product: **Micro-Brite BR30**

The Micro-Brite BR30 is an 8W compact fluorescent that can replace incandescent lamps. Designed with the hospitality industry in mind, it is suitable for indoor or outdoor use in table lamps, recessed cans, general area lighting, and signage. Cold cathode technology provides full dimming, while delivering brighter, higher color temperatures and reduced energy consumption. The lamp has a minimum length of 5 3/8 inches and an 18,000-hour life.

FOR INFORMATION ON THESE LITETRONICS PRODUCTS, CIRCLE 235

**LEDTRONICS |**  
**WWW.LEDTRONICS.COM**

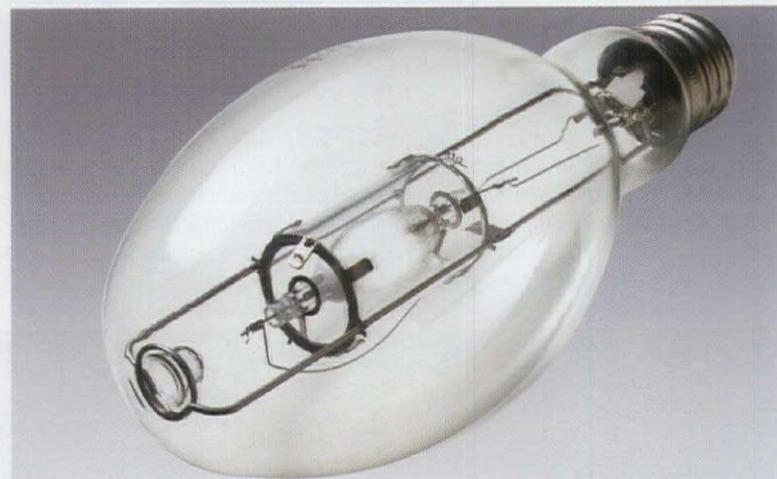
Product: **White MR16 TrackLED**  
Offering solutions for maintenance-intensive and low-voltage applications, this high-powered MR16 LED drop-in replacement lamp has a 2-pin base, draws just 2.5 watts, features 42 LEDs, and is available in cool and warm white color temperatures. The lamp is offered in four beam angles: narrow (15 to 20 degrees), standard (25 to 30 degrees), medium (40 to 50 degrees), and wide (100 to 120 degrees). CIRCLE 236



**VENTURE LIGHTING |** **WWW.VENTURELIGHTING.COM**

Product: **E-Lamp**

The E-Lamp family of products are available in 320W, 350W, 400W, and 450W. Each has an average rated life of more than 20,000 hours, features a color temperature of 4000K, provides a color-rendering index of 65, and offers uniform light output. CIRCLE 237



**PHILIPS |** **WWW.PHILIPS.COM**

Product: **T8 Extra Long Life Alto**

Providing up to 40,000 hours of continuous light, the T8 Extra Long Life Alto lamp is suitable for both new construction and retrofit applications. The lamp will operate on all existing T8 ballasts. CIRCLE 238



Visit Intense Lighting at  
Lightfair 2006, Booth #1529

# Soft Glow High Performance Wall Wash

## The ultimate in visual comfort



OFFSET VERTICAL LAMP  
TO ACHIEVE OPTIMAL  
WALLWASH PERFORMANCE

SOFT GLOW MATTE FINISH  
PROVIDES GLARE CONTROL  
ACHIEVING SUPERIOR VISUAL COMFORT

UNIQUE ALZAK REFLECTOR  
PROVIDES EXCELLENT UNIFORMITY  
AND HIGH ILLUMINATION LEVELS

### Accentuate your Walls with Complete Uniformity

Intense Lighting introduces the newest addition to the high performance architectural Arista™ series, the patent pending "Soft Glow Wallwash" Alzak® reflector. This revolutionary new recessed wallwash utilizes an off-set compact fluorescent lamp configuration providing superior, even vertical illumination. To virtually eliminate all visual glare, Intense has developed a "soft glow" Alzak® reflector finish where performance and visual comfort is maximized.

In addition, the wallwash downlight appears as an open reflector, inconspicuously doing the job. In a sense, the "Soft Glow Wallwash" looks like a downlight, but acts like a high-performing lighting instrument.

**ARISTA**  
BY INTENSE LIGHTING

▶▶ For more information on the "Soft Glow Wallwash" or the high performance architectural Arista series, please call (800) 961-5321 or visit [www.intenselighting.com/al](http://www.intenselighting.com/al).

Intense Lighting Anaheim, CA

p. (800) 961.5321 f. (800) 961.5322

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



**INTENSE**  
LIGHTING  
Where Creativity and Performance Meet

LAMPS/BALLASTS

**ADVANCE** | [WWW.ADVANCETRANSFORMER.COM](http://WWW.ADVANCETRANSFORMER.COM)

Product: **Optanium 2.0**

The Optanium 2.0 family of low-profile, lightweight, and high-efficiency electronic ballasts is compatible with T8 lamps, including standard 40W, 32W, 25W, and 17W, as well as 4-foot 30W, 28W, and 25W energy-saving models. Ballasts are offered in two versions—a standard light output design and a low-watt design—from 108V to 305V. Available with a complete range of both instant-start and programmed-start options, they are physically interchangeable with standard electromagnetic and electronic ballasts.



Product: **e-Vision Mini**

The e-Vision Mini electronic ballast for 39W ceramic metal halide lamps operates on a line voltage of 120V. Its compact and lightweight housing measures approximately 4 1/2 inches by 1 1/4 inches by 1 1/4 inches, 30 percent smaller than comparable 20W products. The ballast features lamp wattage regulation to optimize color quality and reduce lamp-to-lamp variations, and prevents lamp thermal stress with automatic lamp power control and monitoring.

FOR INFORMATION ON BOTH ADVANCE PRODUCTS, CIRCLE 239



**DURALED** | [WWW.DURALED.COM](http://WWW.DURALED.COM)

Product: **DNC-MR16-XX-6W**

Containing a single high-power LED, Duraled's MR16 replacement lamp has the equivalent output of a 50W MR16 lamp. Offering a long operating life—40,000-hour average—the lamp produces no UV or thermal radiation. It measures approximately 1 1/2 inches in diameter and available colors include cool white, warm white, red, magenta, green, light blue, and blue. CIRCLE 240



**UNIVERSAL LIGHTING TECHNOLOGIES** | [WWW.UNIVERSALBALLAST.COM](http://WWW.UNIVERSALBALLAST.COM)

Product: **E-tensity**

Offering improvements to traditional magnetic HID lighting, the E-tensity electronic HID ballast has a grade-A sound rating with a fixture efficiency greater than 90 percent. Suitable for lamps ranging from 20W to 400W, it provides instant-on starting and produces high light levels. The ballast also has dimming options for energy management control and an end-of-life shut-down circuit.



Product: **Basic-12 B260120M-A**

Designed to replace traditional magnetic T12 ballasts, the B260120M-A ballast is smaller and lighter. The ballast offers an instant start and measures 9 1/2 inches long by approximately 1 3/4 inches wide by just over 1 inch high. It features parallel lamp operation, so if one lamp fails, the others remain lit.

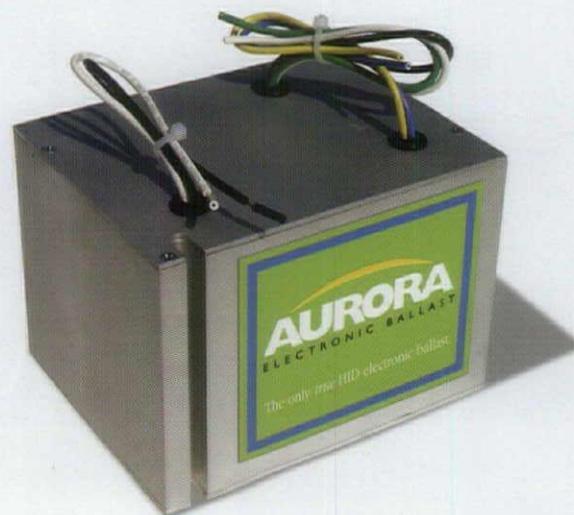
FOR INFORMATION ON BOTH UNIVERSAL LIGHTING TECHNOLOGIES PRODUCTS, CIRCLE 241



**AURORA LIGHTING** | [WWW.AURORABALLAST.COM](http://WWW.AURORABALLAST.COM)

Product: **WattControl**

The WattControl HID electronic ballast for 400W HID fixtures is compact and lightweight, functioning at temperatures 50 to 80 percent cooler than traditional magnetic ballasts. The ballast operates at an input voltage from 208V to 277V, and has a continuous dimming capability. CIRCLE 242





# Fascia Plates

Part sconce, part architecture, part decoration and part identity system, Fascia Plates are completely unlike any exterior lighting system ever invented. These are luminaires which recess neatly into building facades to perform a myriad of practical, architectural and decorative duties. And because the system is engineered by Gardco, one finds luminaires that offer limitless flexibility of configuration, are durably engineered and then constructed to be considerate of first installation and long-term service needs.

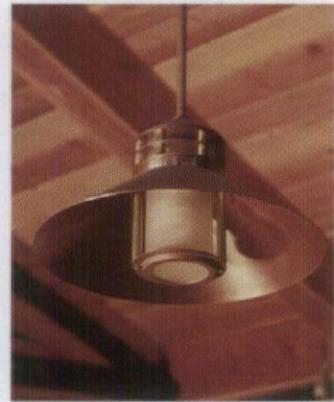
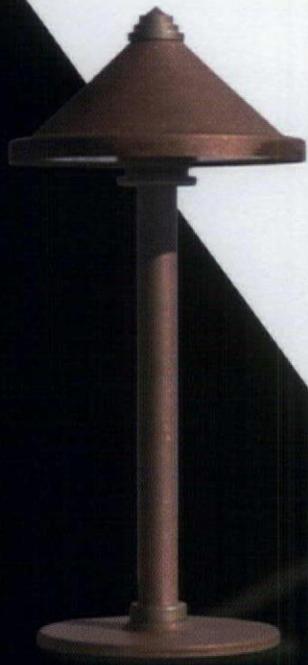


GARDCO  
LIGHTING

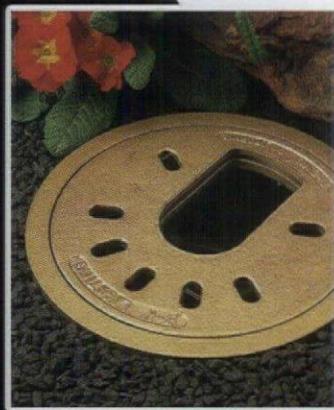


For more information contact your Gardco representative, or [www.sitelighting.com](http://www.sitelighting.com)

Circle No. 98 or [www.archlighting.com/productinfo](http://www.archlighting.com/productinfo)



FORM MEETS FUNCTION



Come see us at LIGHTFAIR • Booth 1618

**B-K**  
LIGHTING



**TEKA**  
ILLUMINATION

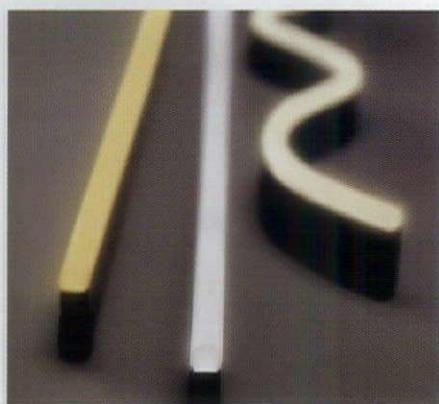
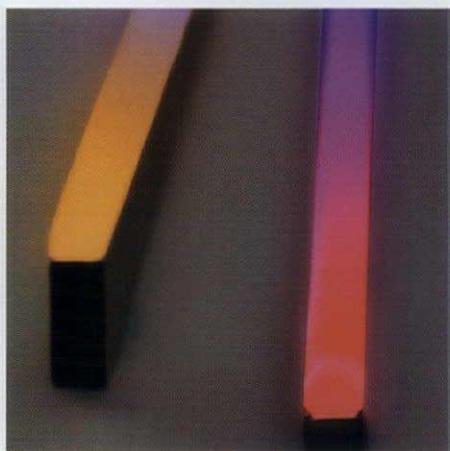
[www.bklighting.com](http://www.bklighting.com) • 559.438.5800 • [www.teka-illumination.com](http://www.teka-illumination.com)

Circle No. 7 or [www.archlighting.com/productinfo](http://www.archlighting.com/productinfo)

**ILIGHT TECHNOLOGIES | WWW.ILIGHT.TECH.COM**

Product: **Plexineon RGB**

The Plexineon RGB series is a programmable color-changing linear LED lighting system that can be used in both exterior or interior accent lighting and cove-lighting applications. Standard straight lengths are available in measurements of 2, 4, 6, and 8 feet. The series can interface with any standard DMX controller, and is addressable in 12-inch increments.



Product: **Plexineon White 2X**

Using higher-intensity blue LEDs than the previous White series, the 2X line utilizes a patented light conversion system in the diffuser to provide white light that is twice as bright. With standard available lengths, as well as custom lengths to the nearest inch, the series is intended for use in exterior or interior accent lighting, cove-lighting, and stage lighting. For signage applications, the product can be factory-bent.

FOR INFORMATION ON BOTH ILLIGHT TECHNOLOGIES PRODUCTS, CIRCLE 243

**LEDTRONICS | WWW.LEDTRONICS.COM**

Product: **StringLED STP301S**

This series of super-intensity backlight LED modules may be used alone or in quantities of up to 100 units. To produce vivid illumination, each module contains four sealed super-bright, wide-angle SpiderLEDs, which are offered in green, white, blue, yellow, and red. Module dimensions are approximately 1 inch long by 1 inch wide by 1/2 inch high. CIRCLE 244



**SUPER VISION | WWW.SVISION.COM**

Product: **SaVi SHO**

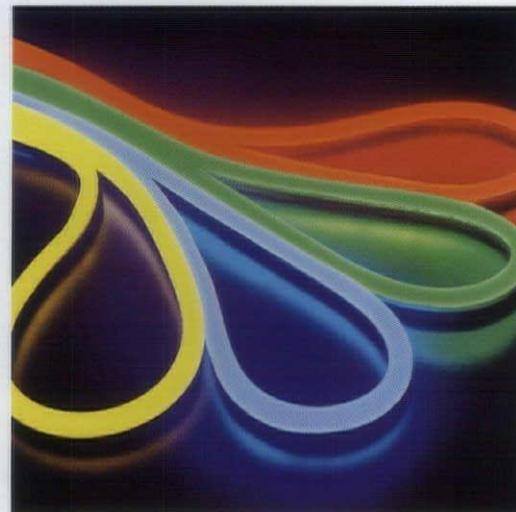
With a sealed housing constructed of cast-aluminum alloy, the SaVi SHO is a high-output, full-spectrum RGB LED floodlight offering 16 million colors, fully controllable with DMX. Effects include static colors, cross-fading, chasing, and single-color rotation through optic angles of 15, 30, and 45 degrees, and fixture spacing of 20 feet. The luminaire can be mounted on the wall, ceiling, or pad-footings with an easy-to-install back-mounting plate. CIRCLE 245



**MULE LIGHTING | WWW.MULELIGHTING.COM**

Product: **LED-ColorFLEX**

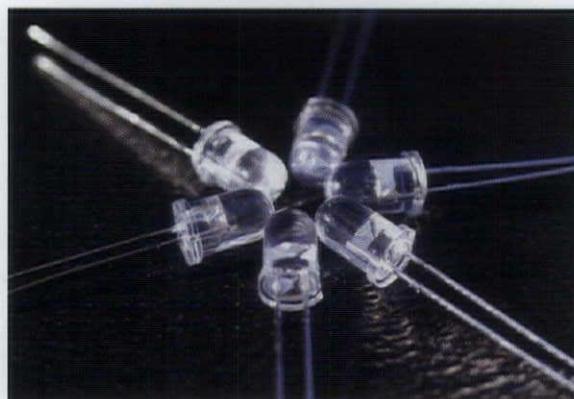
LED-ColorFLEX is a system of durable UV-protected tubes lined with LEDs that contain dyes to enhance color brightness in red, blue, green, yellow, and orange. Flexible enough to bend up to 180 degrees, the system offers a user-friendly alternative to delicate, glass-based neon lamps. Interior and exterior applications include architectural borders on buildings, signage, casinos, step and path lighting, and display cases. CIRCLE 246



**COTCO | WWW.COTCO.COM**

Product: **TSB True Blue**

Emitting the 463 nanometer blue wavelength required for certain medical applications employing LED technology, such as light therapy, the total light emission of the TSB True Blue LED is maximized using indium gallium nitride (InGaN) and silicon carbide (SiC) substrates in a geometrically enhanced vertical chip structure. Available in 3 and 5 millimeter packages with 15 and 25 percent viewing angles, the device has a luminous intensity of up to 8200 millicandela. CIRCLE 247



LEDS

**LAMINA CERAMICS | WWW.LAMINACERAMICS.COM**

Product: **BL-4000 Warm White**  
 Marketed as an alternative to halogen and incandescent lamps with its warm 3000K glow, the BL-4000 Warm White LED delivers 95 lumens (almost as much as a 10W halogen bulb), while consuming 5.3 watts of electricity. The BL-4000 is smaller than a U.S. nickel. **CIRCLE 248**



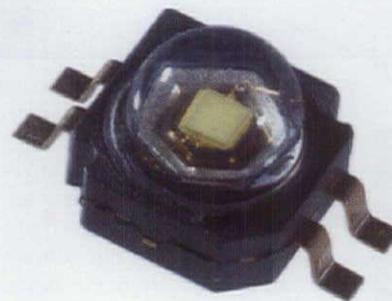
**CITIZEN ELECTRONICS | WWW.CECOL.COM**

Product: **CL-652 Series**  
 This series of white LEDs produces light via eight LED junctions tightly packed around a common reflector and high-efficiency lens within the device. Each junction can be individually powered so the array can run in a series or in parallel configurations. Offering a luminous flux of 89 lumens, the LED is ideal for general illumination, appliances, backlighting, projection, and accent lighting. Measuring 14 by 14 by 5 1/2 millimeters, the white LED has a 5000K color temperature. **CIRCLE 249**



**LUMILEDS | WWW.LUMILEDS.COM**

Product: **PWT1**  
 Designed for flashlights and other portable lighting applications, the PWT1 features an emitter that generates 26 lumens at 350mA from a package size of only 2.0 by 1.6 by 0.7 millimeters. Lumiled's patented conformal coating process produces uniform white light with a 2,000-hour life expectancy.

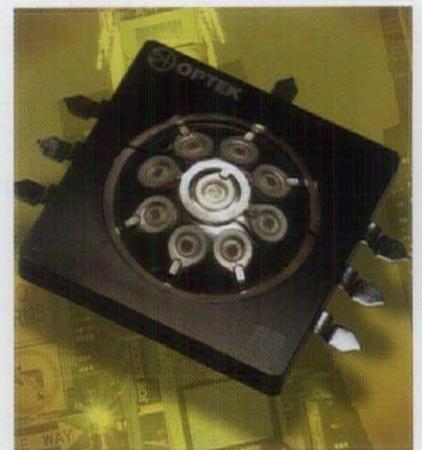


Product: **Luxeon K2**  
 With its white light output of 140 or more lumens, a high temperature tolerance, and a drive current of 1500mA, the Luxeon K2 emitter enables the development of solid-state lighting applications with more usable light, reduced thermal management engineering, and lower cost.

FOR INFORMATION ON BOTH LUMILEDS PRODUCTS, CIRCLE 001

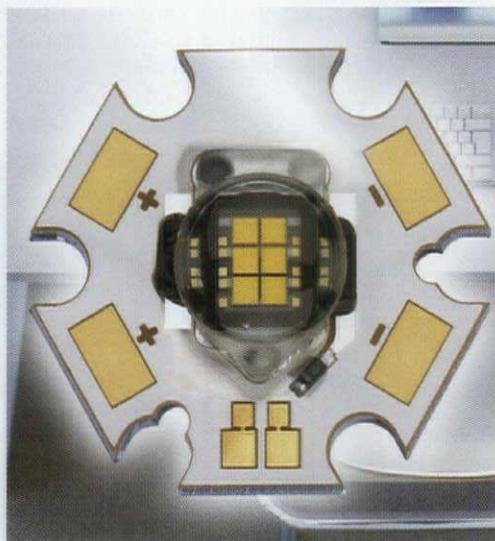
**OPTEK TECHNOLOGY | WWW.OPTEKINC.COM**

Product: **Lednium**  
 Featuring a 10W package that offers a full 120-degree viewing angle for its array of amber, blue, green, red, or white LEDs, the Lednium series can achieve an output of up to 330 lumens with nine 1W LEDs mounted in anodized aluminum. Measuring approximately 1 1/4 inches square, the package has a board-mounted profile of less than 1/2 inch. Additionally, the maximum allowable junction temperature is 130 degrees Celsius, and the operating temperature range for the device is -50 degrees Celsius to 80 degrees Celsius. **CIRCLE 005**



**OSRAM OPTO SEMICONDUCTORS | WWW.OSRAM-OS.COM**

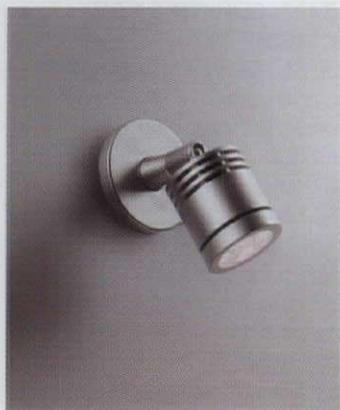
Product: **Ostar**  
 Offering 30 percent more luminous efficacy, according to the company, than previous product generations, the Ostar is a compact, high-power LED that has a four or six series-connected chip design. Suitable for a wide variety of general lighting applications, including task lighting and specialty flashlights, this LED can provide 420 lumens with its six-chip design, and 280 lumens with its four-chip design. The LED is encased in a hexagonal shape for space-saving, high-intensity packages. **CIRCLE 250**



**ROYAL PHILIPS ELECTRONICS AND ADVANCE TRANSFORMER | WWW.ADVANCETRANSFORMER.COM**

Product: **LED Modules**  
 These LED modules are versatile, with applications including cove-lighting, wallwashing, and outdoor architectural lighting. Their self-contained system—operating on a Xitanium 40W driver from Advance—enables innovative LED-based lighting configurations through a flexible connection system, and features full optical, thermal, and mechanical optimization. The modules are available in warm white, cool white, and a variety of colors. **CIRCLE 006**



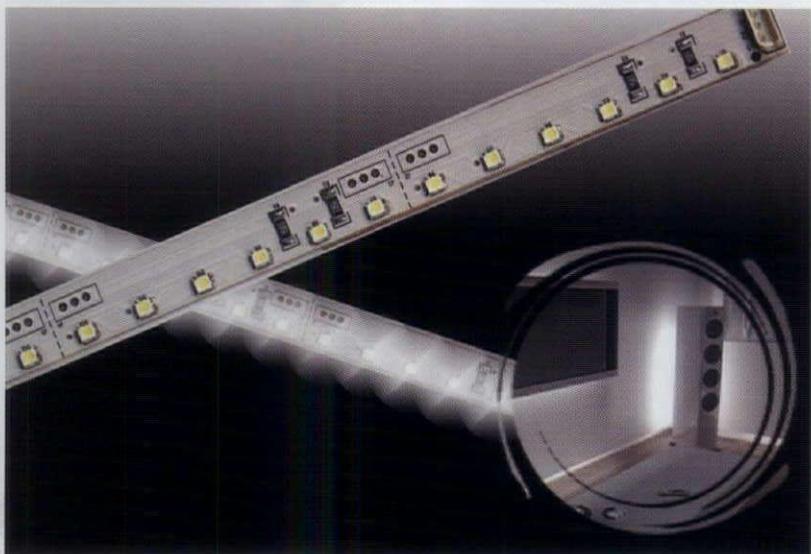


**SIRIUS LIGHTING |**  
**WWW.SIRIUSLIGHTING.COM**

Product: **Sirius MSP555716**  
This high-output LED fixture uses Lumileds' Luxeon product and has a diameter of only 1 inch. With a long LED life of 50,000 hours (depending on the surrounding temperatures), this fixture produces no UV or IR radiation. The luminaire is offered in several color temperatures and is available in polished chrome, polished gold, matte gold, and platinum finishes. **CIRCLE 009**

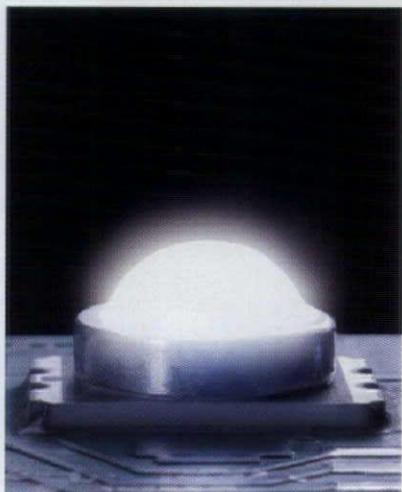
**INFINILUX | WWW.INFINILUX.COM**

Product: **ISL**  
Designed to replace fluorescent and halogen lighting systems in undercabinet, accent, task, and decorative lighting applications, the ISL striplighting family of products is made up of low-voltage, self-adhesive, and self-contained luminaires that provide 70 lumens per linear foot of cool (6500K) or warm (3500K) white light output. Additionally, each 21-inch LED strip can be easily trimmed along 3-inch increments to allow for do-it-yourself installations and custom fittings. **CIRCLE 010**



**CREE | WWW.CREE.COM**

Product: **Xlamp 7090**  
The Xlamp 7090 features surface-mount technology, a reflow solderable design for ease of use, and an integrated lens with a small footprint of 7 by 9 millimeters. It is available in a variety of colors including white, royal blue, blue, cyan, green, amber, red-orange, and red. **CIRCLE 011**



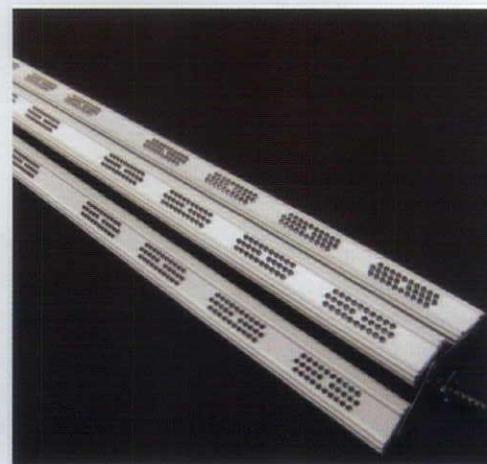
**TRAXON | WWW.TRAXON-USA.COM**

Product: **LED Wallwasher**  
Rated for outdoor use and mountable on walls and ceilings, this LED wallwasher swathes surfaces in an array of colors. To achieve optimal light output, the base of the fixture allows for a full 180-degree-angled beam and a full 360-degree horizontal rotation. DMX control capabilities can create specific sequences and arrangements. **CIRCLE 013**



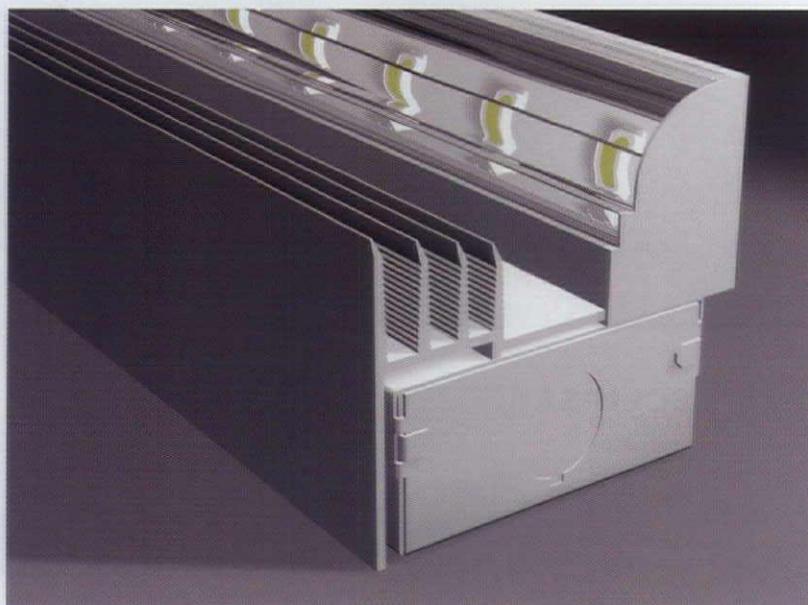
**ALBEO TECHNOLOGIES |**  
**WWW.ALBEO TECH.COM**

Product: **Repleo**  
Designed as an alternative to fluorescent lighting in environments that require minimum maintenance and maximum durability, the Repleo white-LED luminaire features a trio of adjustable lighting elements that do not use glass or filaments. The fixture is available in lengths of 3 feet and 4 feet, with color temperatures of 4000K, 5000K, and 5500K. **CIRCLE 014**



**IO LIGHTING | WWW.IOLIGHTING.COM**

Product: **Raye**  
Used for interior cove and perimeter wall-slot applications, Raye's optical assembly is designed to illuminate cove surfaces uniformly, while offering a precise asymmetric beam projection. Ideal for applications where spatial conditions are limited but functional light is required, the fixture can deliver light at low angles in shallow conditions. Additionally, individual units may be placed end to end without socket shadows. **CIRCLE 015**



LEDs

**RENAISSANCE LIGHTING | WWW.RENAISSANCELIGHTING.COM**

Product: **Evo**  
 Providing high-quality LED light for ambient and tasklighting applications, the recessed Evo luminaire uses proprietary optics to blend its light output, creating a uniform illumination. Over 16 million color combinations can be achieved, including a range of white color temperatures. The power supply and LED driver card are integrated into the fixture's aluminum housing, which calls for a ceiling cut-out of 7 1/2 inches. **CIRCLE 017**



**OSRAM SYLVANIA | WWW.SYLVANIA.COM**

Product: **DOT-it**  
 With its adhesive backing, the round, pocket-sized DOT-it can be stuck and re-stuck almost anywhere. Three AAA batteries (included) provide about 100 hours of light from three white LEDs for portable lighting available in six metallic colors: silver, purple, red, orange, lime green, and black. Simply push the center to turn the device on and off. **CIRCLE 231**



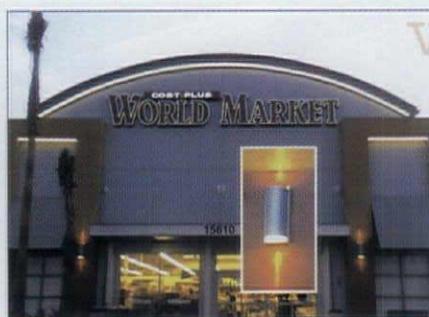
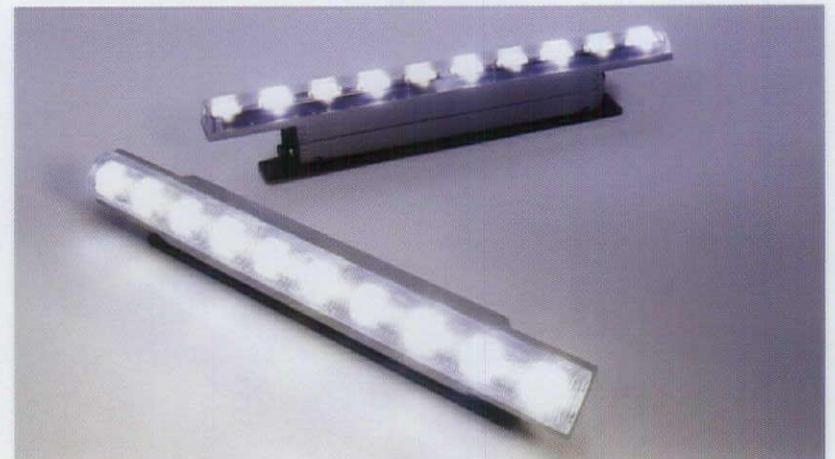
**BARTCO LIGHTING | WWW.BARTCOLIGHTING.COM**

Product: **XLS290**  
 Based on 11 1/2-inch modules, this fixture is appropriate for display-case applications. Incorporating six or eight high-output LEDs, each module integrates a dedicated 9W driver that produces 35 lumens per watt, while minimizing heat generation and prolonging lamp life. Quick-connects allow up to 12 modules to be joined together and mounted inside a 1 3/8-inch diameter aluminum extrusion. A clear acrylic lens redirects light from the LEDs to maximize distribution. Fixture housings are offered in a variety of anodized and powder-coat finishes. **CIRCLE 018**



**COLOR KINETICS | WWW.COLORKINETICS.COM**

Product: **iW Cove Powercore**  
 Designed for interior alcoves, this high-intensity linear system offers a rotatable housing, providing a compact and versatile solution for wide-ranging architectural and accent applications. Incorporating Powercore technology for simplified installation, the 12-inch units may be used in a continuous run, while navigating bends and curves with end-to-end connectors. The housing is available in die-cast aluminum, and three beam angles are offered. **CIRCLE 019**



Comet with up/down lighting in California



**ECLIPSE LIGHTING**  
 1986 - 2006  
 Celebrating Twenty Years in Lighting

9245 W. Ivanhoe St.  
 Schiller Park, IL 60176  
 Tel: (647) 260-0838 | Fax: (647) 260-0544  
 www.eclipselighting.com  
 info@eclipselighting.com

see us this year at:  
 Lightfair 2006 Las Vegas, NV  
 5.30 - 6.1 (booth #3418)  
 AIA 2006 Los Angeles, CA  
 6.8 - 6.10 (booth #710)



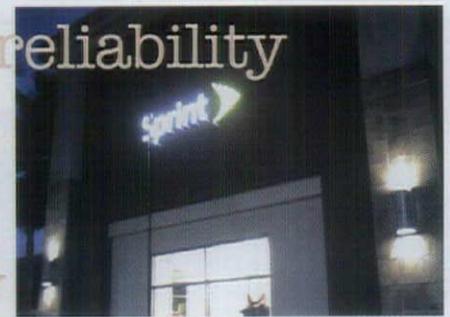
Circle No. 51 or [www.archlighting.com/productinfo](http://www.archlighting.com/productinfo)

versatility



new Eco-Friendly "GREEN" ceiling, pendant & sconce.  
 1 to 5: G4130 (G-CM), G4840 (G-PEND), G3311 (G-WM)

reliability



Custom Comet with up/down lighting

quality



rows of Par 5 in Berkeley, California library



Custom Gravura option



Eco-Friendly Vienna  
 Dark-Sky & Full Cut-Off

FIBERSTARS | [WWW.FIBERSTARS.COM](http://WWW.FIBERSTARS.COM)

Product: **EFO 3+3 PLUS**

Designed to connect to six downlights, the EFO 3+3 Plus illuminator increases energy efficiency with a patented Cloverleaf optics system. The device replaces six 75W MR16 fixtures and delivers 50 lumens per watt. EFO systems are available with warm white (3500K) or cool white (4500K) HID metal halide lamps. The illuminator measures 15 by 14 by 6 1/2 inches.



Product: **EFO-ICE**

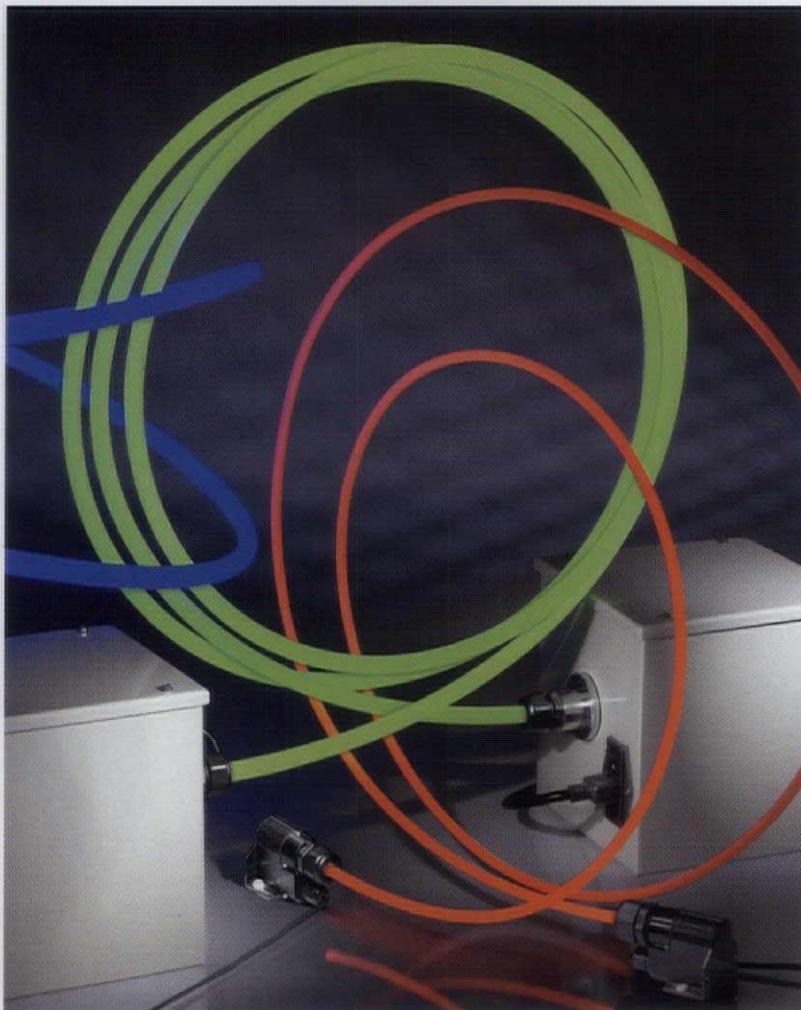
The EFO-ICE product line is specifically geared toward use in frozen and refrigerated display cases. (The acronym stands for efficient fiber optics illuminating cold environments.) Applying the benefits of optical fiber, heat is removed before routing light into the case. Full brightness is maintained even in the most frigid temperatures. For use with metal halide lamps, EFO-ICE illuminators contain no glass and measure 15 inches wide by 14 inches long by 7 inches high. Mounted to the display case doorframe, a single unit will illuminate products in a display area three-doors wide.

FOR INFORMATION ON BOTH FIBERSTARS PRODUCTS, CIRCLE 020

OPTO TECHNOLOGY | [WWW.OPTOTECH.COM](http://WWW.OPTOTECH.COM)

Product: **Endura Light**

This LED-based fiber optic illuminator incorporates solid-state technology to provide a mechanically flexible alternative to neon, fluorescent, halogen, and HID light sources, by transmitting light through solid core or stranded fiber optic cable. Two series are available: the Endura Light 100, which provides uniform light for runs up to 20 feet; and the Endura 700, for runs up to 80 feet. Both models can be used in wet or dry locations, are available in eight color schemes, and have a 50,000-hour life expectancy. CIRCLE 021



*ARCHLIGHTING.COM'S*  
**NEW PRODUCT SECTION**

VISIT A|L's EXPANDED ONLINE LIGHTING PRODUCTS RESOURCE AT  
[WWW.ARCHLIGHTING.COM/PRODUCTS](http://WWW.ARCHLIGHTING.COM/PRODUCTS)

» THE NEW SECTION FEATURES «

- More than 150 product listings with photos
- 12 Luminaire Categories
- Improved Search Capabilities
- Direct Links to Manufacturer Websites
- Weekly Updates
- NO REGISTRATION REQUIRED**

Design  
with Light.

*The West Midtown Intermodal Ferry Terminal, NYC, NY  
Architect: William Nicholas Bodouva & Associates  
50 Monumental Shades: 25' high*

**A New Vision:**  
WindowManagement™ Solutions  
Daylighting Controls  
[www.mechoshade.com](http://www.mechoshade.com)

**Visit us at LightFair Booth #2137**



**MechoShade®**

The Architect's Choice.™

MechoShade Systems, Inc.  
718-729-2020 • [www.mechoshade.com](http://www.mechoshade.com)



**MBDC**

**GreenSpec**

© 2006, MechoShade Systems, Inc. All Rights Reserved.  
Photography: Jim Roof Creative, Inc.



**PPG INDUSTRIES |**  
**WWW.PPGIDEASCAPES.COM**

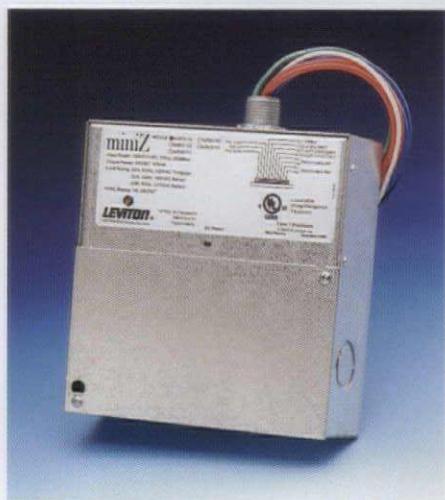
Product: **Vistacool Azuria**

A color-enriched architectural glass that imparts a luminous aqua-blue appearance, Vistacool Azuria is subtly reflective, while transmitting high levels of daylight. The aqua-blue sheen is a direct result of the Vistacool coating that amplifies and enriches the tint of the glass substrate underneath. The soft reflectivity of the glass makes it optimal for harmonizing vision glass with non-vision spandrel glass. **CIRCLE 022**

**LEVITON |** **WWW.LEVITON.COM**

Product: **miniZ**

Available in an easy-to-install package, the miniZ intelligent daylight management system combines occupancy sensing, daylight harvesting, and flexible lighting control functionality. Meeting a wide variety of commercial lighting needs, from basic switching to multi-zone daylight harvesting, the system's proprietary technology features automated photocell calibration to achieve maximum light output levels. **CIRCLE 023**



**MECHOSHADE |** **WWW.MECHOSHADE.COM**

Product: **WhisperTrak**

WhisperTrak is a family of motorized drapery products characterized by a clean, monochromatic design that is whisper quiet and can bend to a radius of 8 inches. Three motor drive options—all on 24-volt operation—provide capacity for loads up to 220 pounds and 58 feet of drapery. Track lengths are available from 3 to 59 feet. **CIRCLE 025**



**NATURALITE SKYLIGHT SYSTEMS |** **WWW.NATURALITE.COM**

Product: **BMS-3000**

The BMS-3000 structural skylight system holds both glass and plastic glazing materials in clear, tinted, and coated varieties. It is available in an assortment of finishes, including anodized, baked enamel, and Kyanar. Featuring a patented glazing clip to provide a thermal break and positive stop to prevent glass breakage, the system supports conventional, two-sided structural silicon and four-sided structural or flush glazing techniques. Flush integral gutters are 2 1/2 inches wide and provide clean sight lines. **CIRCLE 027**



**GE-PLASTICS |** **WWW.GE.COM**

Product: **Lexan Thermoclear**

**Multiwall Polycarbonate Sheet**

This pre-assembled roofing system employs Lexan Thermoclear multiwall polycarbonate sheeting filled with Nanogel translucent aerogel from Cabot Corporation. In addition to its UV resistance, the product provides sound insulation, as well as the ability to withstand wind loads of up to 140 miles per hour. **CIRCLE 029**

**SOLATUBE |**  
**WWW.SOLATUBE.COM**

Product: **Zero-to-90 Degree Extension Tube**

The Zero-to-90 Degree extension tube for the Solatube skylight allows for installation in almost any location without compromising lighting efficiency. Made of three built-in 30-degree-angle adapters, the tubing is able to bypass attic obstructions, jog across rafters, or hide installation on an opposite roofline. **CIRCLE 030**



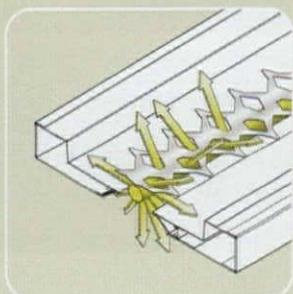


twelve™

Law Firm: Chicago, Illinois. Architecture: Solomon Cordwell Buenz. Photographer: Steve Hall, Hedrich Blessing.

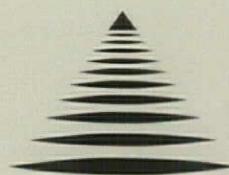
## TWELVE INCH SUSPENSION IN LOW CEILING APPLICATIONS IS UNTHINKABLE WITH TRADITIONAL LINEAR LIGHTING SYSTEMS.

twelve™ from Focal Point, with its breakthrough optical design, provides designers with the answer to attaining superior performance in low ceiling applications. Suspended merely 12" from the ceiling, with rows floating 12' apart, twelve™ achieves unparalleled ceiling uniformity. In addition, twelve™ delivers low wattage per square foot to meet today's demanding energy requirements. All this designed in the clean, timeless aesthetic you expect from Focal Point.



12" suspension is possible through the use of Focal Point's specially designed Ceiling Uniformity Filter (CU Filter™) and low beam optic.

The CU Filter™ disperses and redirects a portion of the excessive candlepower directly above the luminaire. Redirecting, not reducing, the light results in efficiencies up to 90%.



FOCAL POINT®

THE  
ART OF  
LIGHT®

Visit [focalpointlights.com](http://focalpointlights.com) for specifications and other details on twelve.

MATERIALS

**TRANSFORMIT |**  
**WWW.TRANSFORMITDESIGN.COM**

Product: **Tension Fabric**

Transformit's collection of tension fabric products offer sophisticated walls and screens that can be used to create and define space on a permanent or temporary basis. Freestanding and hanging options are available, incorporating lightweight aluminum frame construction and skins that come in a variety of fabrics, colors, and patterns. The fabrics are available in different weights from 1 ounce per square yard to 8 ounces per square yard, and widths from almost 4 1/2 feet to 16 feet. Front and rear projection and backlighting are available with specialty fabrics. CIRCLE 032



**GKD | WWW.GKD.DE**

Product: **Mediamesh**

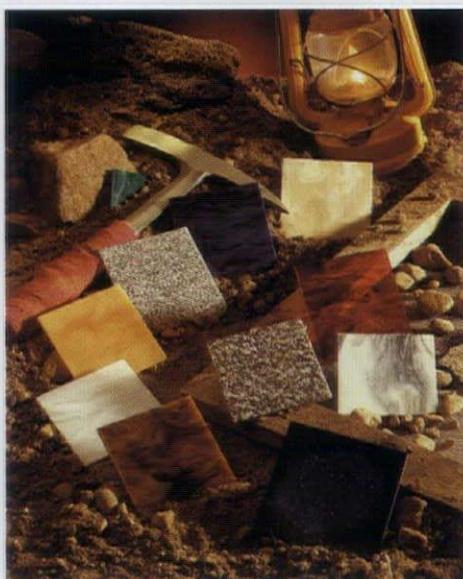
This wire mesh with embedded LEDs makes it possible to display electronic images on metal façades. Non-flammable and corrosive-resistant, the mesh is woven to a specified width and length, and then outfitted with LEDs and cabling. LED resolution can be varied based on requirements. Mesh arrives in rolls. CIRCLE 033



**ACRILEX |**  
**WWW.ACRILEX.COM**

Product: **Acriglas Marble/Granite Acrylic Sheets**

Suitable for applications that require complex formed or fabricated shapes, these acrylic sheets are available in an assortment of 12 standard colors and custom selections that resemble a natural stone palette. Lighter in weight and easier to fabricate than stone or glass, the sheets are durable, and come in a variety of sizes. Thicknesses range from 1/8 inch to 1/2 inch. CIRCLE 038



**ALANOD | WWW.ALANOD.COM**

Product: **Miro Micro Matt**

Appropriate for lighting systems that require a standard white look, the Miro Micro Matt is a reflective aluminum product that controls light direction and produces up to 20 percent more illumination than a light fixture with a white-paint reflector. CIRCLE 039



**MB WELLINGTON STUDIO | WWW.LIGHTBLOCKS.COM**

Product: **Lightblocks**

Scratch resistant with a soothing glow when illuminated, Lightblocks is a 100 percent-recyclable translucent plastic stronger than glass. Customizable for many interior or exterior architectural uses, including lighting fixtures, furniture, doors, ceilings, walls, flooring, or sculptures, the panels can be made in any transparency and any thickness. Lightblocks can also be custom textured or carved with graphic lettering. CIRCLE 040



**CEELITE | WWW.CEELITE.COM**

Product: **7501 Panel**

Enabling 99 percent uniform backlighting, the CeeLite 7501 panel is paper-thin, lightweight, and flexible. Panels can be used indoors or out, on floors, walls, and surfaces, and around columns and pillars. Available in sizes up to 3 feet by 6 feet, the panel is illuminated by Osram Sylvania's light-emitting phosphors sandwiched between a series of electrodes. An advanced inverter enables users to alter the brightness. Packaging options on multiple substrates (film, glass, and plastic injection molding) are also available. CIRCLE 043



MATERIALS CONT.



**3FORM | WWW.3-FORM.COM**

Product: **Full Circle**

Full Circle is a compelling collection of five architectural resin panels that utilizes renewable indigenous resources, provides new economic bases in emerging markets, and connects designers with a diverse set of artisan communities in Columbia, Indonesia, and Africa. Among the five products, for example, Ithemba is made by African women affected by HIV and AIDS, and River Rock (shown) incorporates stones collected by poor communities in Indonesia. **CIRCLE 045**

**USG | WWW.USG.COM**

Product: **Wireworks**

The four Wireworks products (Weave, Ripple, Small Wave, and Big Wave) add a high-tech aesthetic to open-cell ceiling designs. And combined with light, the options are endless. Manufactured from 3/16-inch-thick curved steel wire, 2-foot-square lay-in panels form a three-dimensional shape, and can be used to create intricate ceiling patterns. The panels are available in a variety of high-gloss, powder-coat finishes, and custom colors. **CIRCLE 046**



FILTERS

**OCEAN OPTICS | WWW.OCEANOPTICS.COM**

Product: **SeaChanger**

Using the patented xG "Extreme Green" dichroic color filters, the SeaChanger color engine produces hues previously unattainable, according to the company, with standard CMY options. The device installs easily into ETC Source Four ellipsoids and provides smooth color transitions across a wide spectrum, offering white-to-full saturation color in just one second. Weighing 12 pounds, the housing measures 7 inches by 11 1/2 inches. **CIRCLE 048**

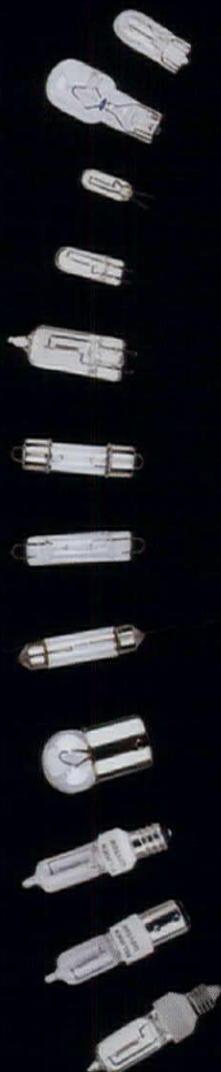
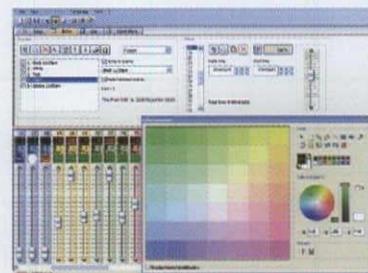


SOFTWARE

**SUNLITE | WWW.NICOLAUDIE.COM**

Product: **Easy Stand Alone 2006**

The Easy Stand Alone 2006 lighting control software takes less than two minutes to set up, according to the company. DMX interfaces can be connected to the computer through USB or IP/Ethernet. If the latter is utilized, lighting fixtures can be controlled remotely from any computer within a network, or over the Internet. Controlling RGB fixtures—including LEDs—this software simplifies importing scrolling text, images, video, and color effects. Minimum system requirements include Windows XP, a 500MHz processor, 64MB RAM, 32MB Video, and at least one USB port. **CIRCLE 050**



*It lasts up to 20,000 hrs*

*It doesn't emit UV rays*

*It burns cooler*

*It's safer*

Most importantly, it will save you a bundle on maintenance cost!

Visit us at Lightfair  
Booth 2145



800.468.8442  
www.xelogen.com

Circle No. 62 or www.archlighting.com/productinfo

# Xelogen





**DASLIGHT | WWW.DASLIGHT.COM**

**Product: DVC 2**

DVC 2 includes new arrangements of functions, buttons, and windows. Providing a more intuitive user interface, which reduces programming time, the new tools include: group window, ordering fixtures and scenes, preset pallets, global multi-section, powerful LIVE control, and DMX universe management, to name a few. DVC 2 works only with the new USB to DMX interfaces. **CIRCLE 052**

**LIGHTING ANALYSTS | WWW.AGI32.COM**

**Product: AGi32 Version 1.9**

Based on user feedback, AGi32 Version 1.9 implements additional functionality, including: multi-scene animations from project renderings; luminaire aiming by visualizing light distribution with a new 3D photometric web; understanding electric light's interaction with interior glass; and enhanced photo-real renderings. Additional CAD functionality makes the software faster and easier to navigate. The radiosity solution file size has also been reduced by 60 percent, and write time by 90 percent, improving the ability to save rendered environments for later without recalculation. **CIRCLE 053**

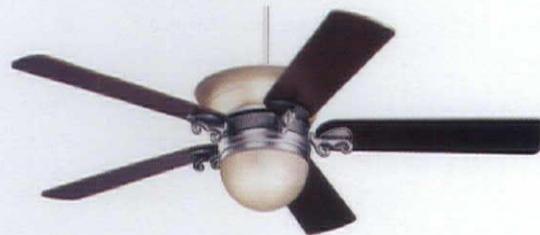


**FANS**

**EMERSON | WWW.EMERSONFANS.COM**

**Product: Banff**

Featuring integrated uplighting from four 15W candelabra lamps and a dome that takes two 60W medium-base lamps, the Banff ceiling fan has a 52-inch blade span, 13-degree blade pitch, and three fan speeds. Dimming is modulated via an included wall control. The housing finish is pewter and the five blades are offered in a reversible dark cherry/mahogany finish. **CIRCLE 059**



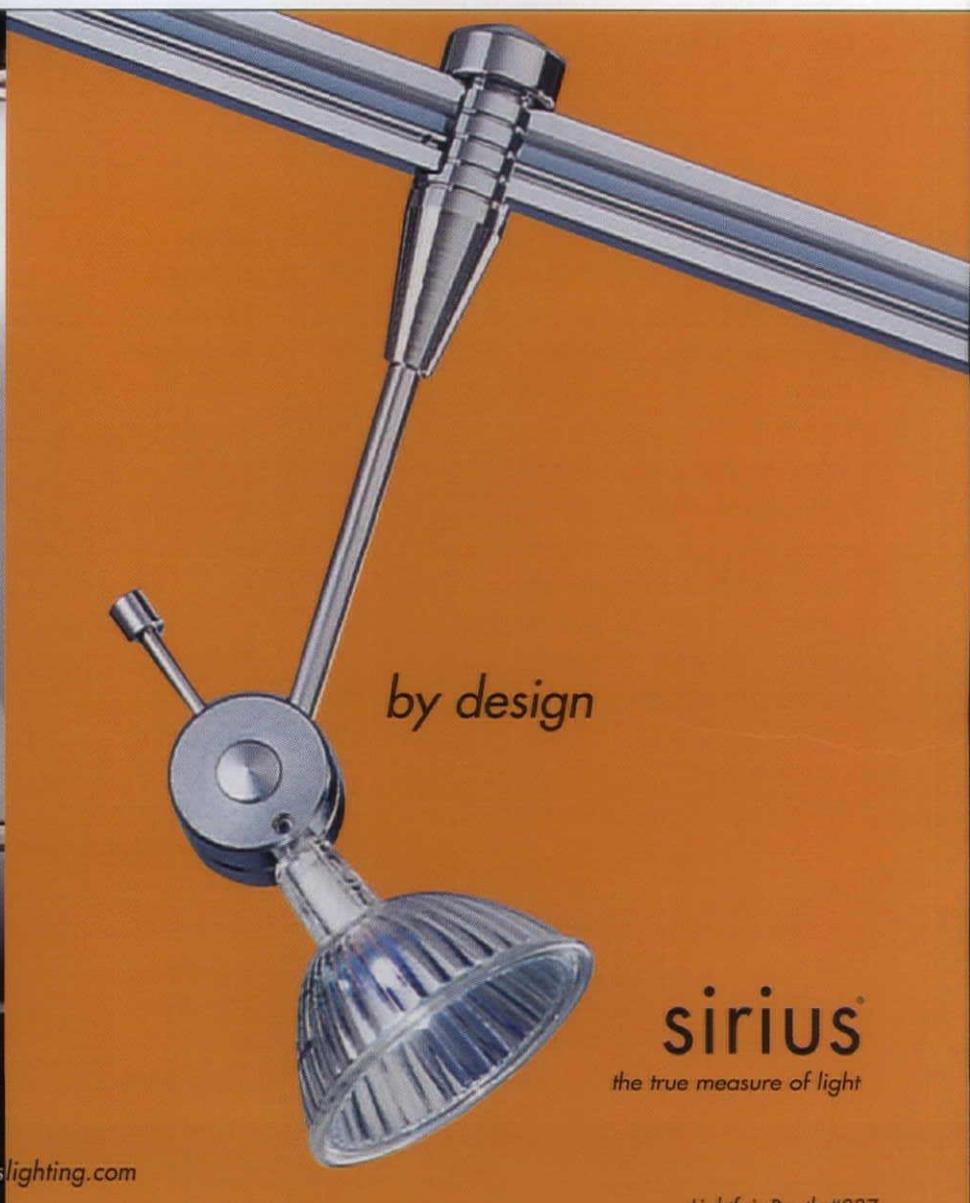
**HUNTER FAN COMPANY | WWW.HUNTERFAN.COM**

**Product: Zoe**

The Zoe 52-inch-wide ceiling fan features four square-edged wooden-vener blades and a glass shade that covers one 100W lamp. Finishes include a bronze patina housing with coffee beech blades, brushed nickel housing with blonde beech blades, and either an amber-cased glass shade or an angled amber-linen glass shade. The fan comes with remote control, a high-output motor, and Hunter's EZ Hang hanging system. **CIRCLE 060**



the best



by design

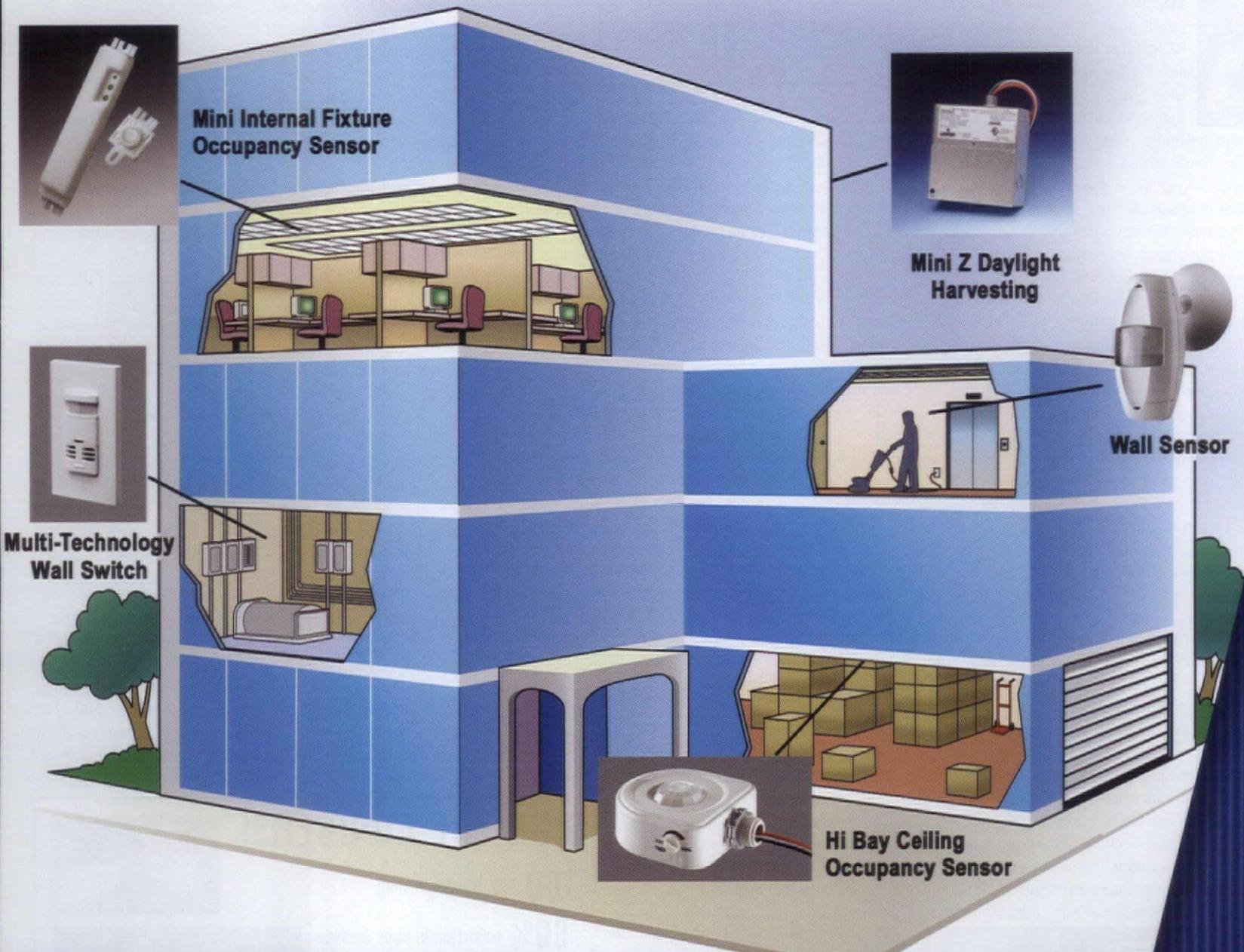
**sirius**

the true measure of light

MANUFACTURER INDEX

Manufacturer	Category	Page	Manufacturer	Category	Page	Manufacturer	Category	Page
3Form	Specialty – Materials	82	GKD	Specialty – Materials	81	Optek Technology	LEDs	74
Acrylic	Specialty – Materials	81	Halo	Downlights	43	Opto Technology	Fiber Optics	77
Advance	Lamps/Ballasts	70	Highlites	Emergency	61		Lamps/Ballasts	67
	LEDs	74	Holophane	Outdoor	55	Osram Opto Semi.	LEDs	74
Alanod	Specialty – Materials	81	Hubbell	Controls	63	Osram Sylvania	Lamps/Ballasts	67
AlbEO	LEDs	75	Hunter Fan Company	Specialty – Fans	83		LEDs	76
Alkco	Task	47	iLight Technologies	LEDs	73	Peerless Lighting	Direct/Indirect	40
American Fluorescent	Decorative	29	in-es artdesign	Decorative	30	Philips	Lamps/Ballasts	68
Aurora Lighting	Lamps/Ballasts	70	Infinilux	Lamps/Ballasts	67		LEDs	74
Axo Light	Decorative	29		LEDs	75	Planlicht	Task	48
Bartco Lighting	LEDs	76	io Lighting	LEDs	75	PPG Industries	Daylighting	79
Bear Creek Glass	Decorative	29	IP44	Outdoor	58	Prescolite	Downlights	44
Bega	Outdoor	56	Ivalo Lighting	Decorative	32	Progress Lighting	Decorative	36
Beta Lighting	Outdoor	55	Jesco Lighting Group	Task	48	Prudential Lighting	Direct/Indirect	41
Beta-Calco	Downlights	43	Kalco Lighting	Decorative	30	Pure Lighting	Downlights	43
Blauet	Decorative	34		Outdoor	56	Quality Lighting	Outdoor	59
Bodine	Controls	63	Kramer Lighting	Downlights	44	Renaissance Lighting	Downlights	44
	Emergency	61	Lam Lighting	Direct/Indirect	39		LEDs	76
Bover	Decorative	30	Lamina Ceramics	LEDs	74	Resolute	Decorative	29
Boyd Lighting	Decorative	29	LEDtronics	Lamps/Ballasts	68	Rotaliana	Decorative	32
	Outdoor	55		LEDs	73	RSL	Controls	64
Brave Design	Direct/Indirect	39	Leviton	Daylighting	79	Schmitz	Direct/Indirect	40
CeeLite	Specialty – Materials	81	Lighting Analysts	Specialty – Software	83	Schonbek	Decorative	32
Citizen Electronics	LEDs	74	Lighting Services Inc	Track	52	Shréder	Outdoor	58
Color Kinetics	LEDs	76	Lightlight by Buschfeld	Direct/Indirect	39	Shaper Lighting	Decorative	32
Cooper Lighting	Controls	63		Task	47	Sirius Lighting	LEDs	75
Cooper Wiring Devices	Controls	63		Track	51	Solatube	Daylighting	79
Cotco	LEDs	73	Lightlier	Controls	64	Specialty Lighting	Task	47
Cree	LEDs	75		Decorative	36	Staco Energy Products	Emergency	61
Crestron	Controls	63		Downlights	43	Steng Light	Task	48
d'ac Lighting	Decorative	34	Lightlier Controls	Controls	64	Sunlite	Specialty – Software	82
Daslight	Specialty – Software	83	LightWaves	Lamps/Ballasts	67	Super Vision	LEDs	73
Day-Brite Lighting	Direct/Indirect	39	Lite Brite Neon	Decorative	29	Sure-Lites	Emergency	61
Derek Marshall Lighting	Decorative	30	Litronics	Lamps/Ballasts	68	Tech Lighting	Track	51
Dreamscape Lighting	Outdoor	59	Lithonia Lighting	Outdoor	59	Times Square Lighting	Track	52
Duraled	Lamps/Ballasts	70	Luceplan	Decorative	34	Transformit	Specialty – Materials	81
Dynalite	Controls	63	Lucifer Lighting	Downlights	43	Translite Sonoma	Track	51
Eclipse Lighting	Outdoor	56	Lumileds	LEDs	74	Traxon	LEDs	75
Electri-Cable Assemblies	Task	48	Lumino Design	Decorative	36	Universal Lighting Tech.	Lamps/Ballasts	70
eLeek	Decorative	34	Lutron	Controls	64	USA Illumination	Downlights	44
	Outdoor	55	Luxo	Direct/Indirect	39	USG	Specialty – Materials	82
Emerson	Specialty – Fans	83		Task	47	Valmont Industries	Outdoor	55
Encelium Technologies	Controls	65	MB Wellington Studio	Specialty – Materials	81	Venture Lighting	Lamps/Ballasts	68
Engineered Ltg. Products	Outdoor	59	MechoShade	Daylighting	79	Vibia	Decorative	34
Erco	Outdoor	56	Meyda Tiffany	Outdoor	55	Visa Lighting	Direct/Indirect	40
Erin Adams Design	Decorative	32	Minital Lux	Decorative	30		Outdoor	58
Estiluz	Decorative	36	Mule Lighting	LEDs	73	W2 Architectural Lighting	Downlights	43
	Task	47	Naturalite Skylight Systems	Daylighting	79		Track	51
ETC	Track	52	Neo-Ray	Direct/Indirect	40	Watt Stopper	Controls	65
Eurofase	Decorative	36	Nightsearcher	Emergency	61	Winona Lighting	Direct/Indirect	41
Fiberstars	Fiber Optics	77	Nora Lighting	Track	51	Wybron	Track	52
Focal Point	Direct/Indirect	41	Ocean Optics	Specialty – Filters	82	Xenon Architectural Ltg.	Downlights	44
Forms + Surfaces	Outdoor	56	OCL	Direct/Indirect	40	Zumtobel	Task	48
GE-Plastics	Daylighting	79	Omega Lighting	Decorative	36			

**Leviton occupancy sensors. Putting energy management to work, whenever, however you need it.**



Whether your energy management need is OEM, commercial or industrial, look to Leviton for solutions. Leviton PIR, Ultrasonic and Multi-Technology, wall and ceiling mount sensors give you the code compliance edge as well as optimum energy savings in the broadest range of applications. ■ Now, Leviton's occupancy sensor technology can be built into fluorescent fixtures so that OEMs, commercial and industrial buildings can add energy management to every fixture. Leviton's microprocessor-based digital architecture enables you to have a trouble-free "install and forget" solution. For more information about OEM application solutions, call 1-800-833-3532; for lighting management systems, call 1-800-323-8920.

# Don't Be LED Down The Garden Path !

Terrific new technology may not be everything it's claimed!

Ruth Ellen Miller, DE Business Person of the Year 2000, is Pres. of NoUVIR Research. NoUVIR Research was featured on PBS television and recently given a National Chamber of Commerce 2006 Blue Ribbon award. Ruth Ellen continues her Lightfair tradition, with some practical advice on what you should look for and what you should look out for in the lighting industry. - Matthew Scott



MS: We've been doing this for six years now. Can you believe it?

REM: If we put all of these Lightfair articles together into a booklet we'd have quite a textbook on light and lighting, especially fiber optic lighting.

MS: So, where are things going in 2006?

REM: Energy conservation is going to be really big. Businesses and institutions in my area are facing 60% to 100% increases in electrical costs. Everyone is interested in lighting systems that save energy. Companies are pushing new technologies as meeting that interest. Lots of claims are being made. Some of them aren't accurate.

MS: Conservation, that's one place NoUVIR excels.

REM: It certainly is. I have utility studies to prove it. You know that NoUVIR Fiber Optic Systems can give you 32 individual spot lights with a single 150-watt lamp. The L. A. Department of Water and Power certified 70% overall energy savings in galleries using NoUVIR.

As another example, one museum took 600,000 watts off line while doubling exhibit light levels by replacing 700 halogen framing projectors with 40 NoUVIR systems. The installation paid for itself in two years. Savings are now funding the same renovation in a new gallery.

This year an HVAC company provided up-front funding to replace MR-16 and Par lamp track lighting at a large sports hall of fame with NoUVIR lighting. Again, pay back will come from reduced utility bills. The estimates give a three year R.O.I., including interest.

At that point they will still have perfect color, perfect control, energy savings and seven years of full replacement warranty left. With no UV and no IR they will reduce light damage to their collection, carpets, case linings, etc. by a factor of five. That's NoUVIR in action! MS: Don't tri-stimulus fluorescents, HID's and now LEDs give you similar increased efficiency?

REM: All these sources are metameric. They are really RGB sources that fake your eye into thinking it is seeing white light. They have colors missing. They have colors over-represented. If you have ever put an HID or a fluorescent source side by side with a halogen lamp,



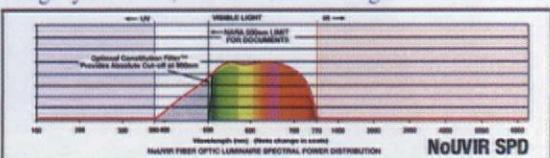
the color problems are obvious.

They are fine for parking lots, industrial spaces, assembly areas, outdoor lighting and even office spaces. We use fluorescent lighting for these things. But they are lousy for art or in places where color is important.

They can also be quite dangerous where preservation is important. They all have a significant UV output. This makes them unsuitable for museum and archive use.

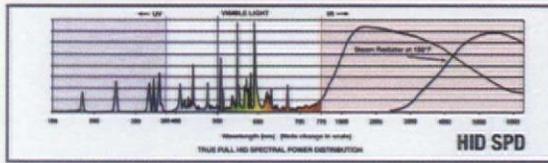
MS: O.K., you don't like the color. How do they do in terms of energy efficiency, particularly the new LEDs?

REM: Fluorescent and HID sources are efficient when compared to incandescents. An incandescent lamp is roughly 94% IR, 1% UV and 5% light. We filter out



everything but visible light and shape that.

Fluorescents and HID's are 70% IR, 6-8% UV and 22%-23% light. That's over four times the light output of an incandescent. You trade full spectrum color for efficiency. You also have to calculate the inefficiency of



the ballast or power supply. That's where LEDs fail.

LEDs are more sensitive to current than voltage. LEDs, especially in multi-LED arrays, require sophisticated control circuits. These control circuits can be very inefficient.

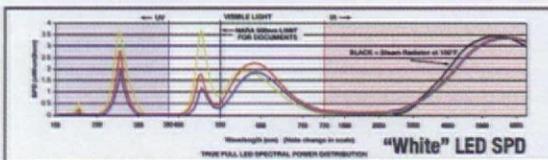
I don't want to name names, but the published data for a "white" 30-LED fixture from one major U.S. lighting company shows 371 lumens output at 48-watts. That's an efficacy of 7.7 lumens per watt. A standard soft-white 60-watt light bulb will give 840 lumens. That's 14 lumens/watt. So these new, "white" LED fixtures have roughly half the energy efficiency of an incandescent light bulb. They don't advertise that!

MS: I guess not, but LEDs are no-heat sources, right?

REM: Not exactly, their fixtures stabilize somewhere about 40°F above ambient temperature. You try building a row of 120° heaters into a display case and see how it works. IR free sources do not radiate heat! Pretending that IR radiation from the head is somehow different from IR radiation from a beam is either incredibly stupid or incredibly dishonest. Either way it's unconscionable.

MS: So LEDs aren't no UV, no IR?

REM: They claim to be a "no UV, no IR" source. This



flat isn't true. In fact, their literature says you can ignore

UVC because it is, "absorbed in the atmosphere" and "not observed in nature". Again, not true. UV in sunlight runs from about 260 nm to 380nm. "White" LEDs are doped to filter UVA, but they emit as much UVB and UVC as they do visible blue light, almost four microwatts per square centimeter.

Filtering UV just in the range of the average museum UV meter (300 to 400 nanometers) is not the same as having no UV. And the UV output they ignore is dangerous. Plank proved short wave UV penetrates deeper. Harrison showed it does more damage. Use these LED's in an art gallery, museum, or an archive and you can destroy your collection.

MS: You sound angry.

REM: I guess I am. NoUVIR is a true no UV source. I've spent millions of dollars developing lighting systems to protect our art and heritage. I've written books and papers on photochemical damage. My theories and products are in use around the world. We have 24 issued patents, all focused on preservation lighting.

These people have a well made, good quality product. I bought it. I tested it. It's in my lab. Why deliberately misrepresent data to sell it for applications where it is not suited and will cause harm? Market it for what it does well. What really frustrates me is that they are going to end up responsible for the loss of things that are irreplaceable.

MS: You don't like LEDs.

REM: That's not true. I recommend them fairly often. What I don't like are people who misrepresent products and mislead customers. LEDs have some really terrific applications. They have incredibly long lives. RPI data indicates that they lose about 40% of their intensity over the first 4,000 hours, but after that they easily run 40,000 to 50,000 hours. RGB LED arrays can operate twice that long and are elegant solutions for effects applications where you need adjustable or changing colors.

MS: You're going to spend some of your advertising space here promoting LEDs?

REM: Listen. NoUVIR fiber optic lighting is the best museum lighting system in the world. It's hugely energy efficient. It gives control over aim and focus that nothing else can. Nothing! In terms of performance we don't have any competitors. NoUVIR extends exhibit life by a factor of five. It has the best guarantee in the lighting world. But, it isn't for every application. We didn't design it to be. I don't expect it to be.

Because we offer free conceptual design help, I do a lot of lighting design. The day I don't want a client to get the best advice, the best design and the best products for their particular application, is the day I'll quit. Often the best solution is fiber optics. But, sometimes it's track, or LEDs, or fluorescents. There are always choices and tradeoffs. I don't mind giving competitor's phone numbers. There will be other applications and satisfied customers come back.

We've got wonderful products, complete data, ship in a matter of days and give a 10-year warranty on our optical hardware and our fiber. We've got one price list, bound into our free catalog. We're changing lighting. NoUVIR may not be a huge company, but we're big where it counts, in service and performance. Most important to me is the big difference we make to our customers.

## RUN THE NUMBERS!

100 CRI (Perfect Color)

80% reduction in light damage

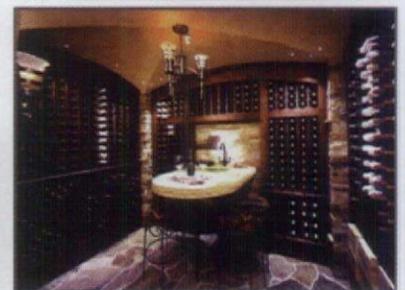
75% reduction in energy costs

50 different luminaires

10 - year warranty

5 - day order turn around

0 problems



Pure-white, stone-cold, fiber-optic lighting with no UV and no IR... NoUVIR!

**NoUVIR Research® 302.628.9933**  
learn more at [www.nouvir.com](http://www.nouvir.com)

# State-of-the-Art Dimming for Dummies: Part One

BY JAMES BENYA

## UNDERSTANDING THE TECHNICAL INS AND OUTS OF AVAILABLE DIMMING SYSTEMS

IN JUST ABOUT EVERY LIGHTING DESIGN, THE FINAL DETAIL IS THE ability to tune the light. If the lighting scheme permits adjustments, such as lenses or color, applying them is a fine art in skilled hands. But dimming can also create the perfect scene. To many, the concept may seem quite simple: to dim the lights, add a "dimmer." In reality, while a dimmer can be as straightforward as a wall-switch replacement, it can also be as complex as a multi-channel scene controller, a theatrical dimming system, or a programmable facility management system. Add to that the latest generations of dimming ballasts, and modern-day dimming is no longer an easy bet.

### BASIC DIMMING

An incandescent lamp is dimmed when it operates at a lower voltage than that for which it was designed. As voltage decreases, lamp power and lumens also decrease accordingly. Many people who understand basic electric circuits think incandescent dimmers are rheostats, a type of variable resistor. Not true—in fact, the modern incandescent dimmer is actually a solid-state switching device that turns the light on and off 120 times per second. The combined thermal mass and persistence of the filament smoothes out the pulses of power so they are imperceptible. The human eye sees a brighter or dimmer light, depending on the proportion of "on" to "off" time. In other words, although the actual voltage is still 120, the average voltage is reduced. This is called phase-cut dimming. There are two primary types:

- **FORWARD PHASE-CUT DIMMING**, in which the lamp is energized only during the last portion of each power-line half cycle (See illustrations in "Matching the Dimmer to the Load," page 88). Forward phase-cut dimming is cheap, uses robust electronics, and is suitable for most loads, including regular incandescent lamps and magnetic transformers, as well as neon, cold cathode, and some types of fluorescent dimming ballasts and LED power supplies.

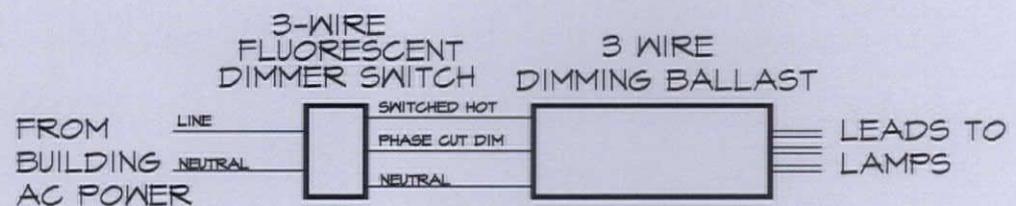
- **REVERSE PHASE-CUT DIMMING**, in which the lamp is energized during the initial portion of each power-line half cycle. Reverse phase-cut dimming is more expensive because it uses more complex electronics, but some loads, especially electronic transformers, operate better and make less audible noise when this type of dimmer is used.

In either case, the actual lighting load operates at the power-line frequency (60 hertz in North America and Japan, 50 hertz in most of the rest of the world). Sometimes noise-reduction devices, such as debuzzing coils, are needed to eliminate the hum that these systems generate.

### DIMMING HIGH-TECH SOURCES

Electronic dimming ballasts, on the other hand, convert the alternating-current power line (50 to 60 hertz) to direct current, and then to a different frequency (usually over 30,000 hertz) to operate the lamp. During the conversion process, it is relatively easy to regulate the power to each lamp, but in order to signal the ballast to dim the lamps to a particular level, several protocols have evolved:

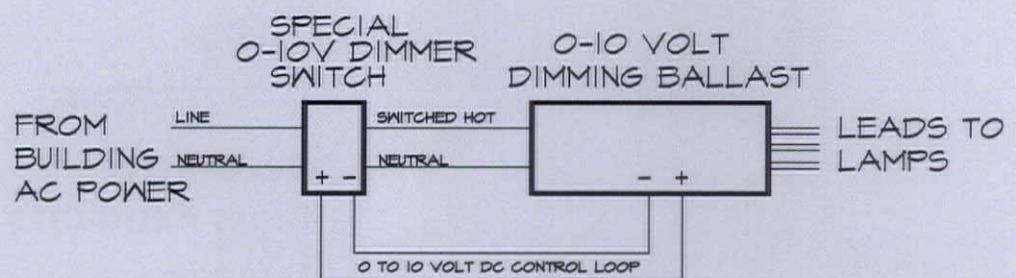
#### THREE-WIRE ANALOG POWER DIMMING



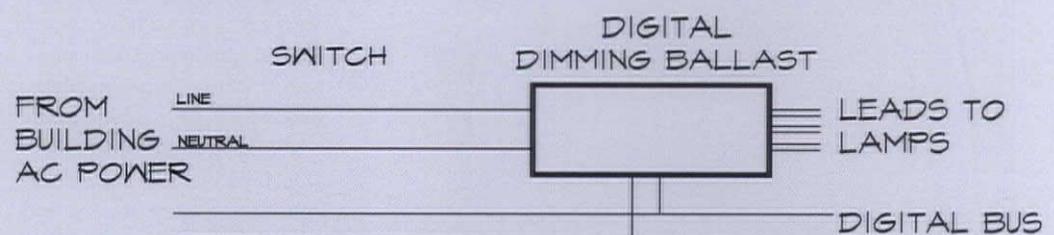
#### TWO-WIRE ANALOG POWER DIMMING



#### FOUR-WIRE 10V ANALOG SIGNAL DIMMING



#### DALI DIGITAL SIGNAL DIMMING



### DIMMING HIGH-TECH SOURCES: THE FOUR PRIMARY CIRCUIT SCENARIOS

Understanding the technical ins and outs of dimming is no easy task—but it is critical to the successful specification of an appropriate system. The drawings above represent the four primary circuit structures available for today's dimming scenarios. It is important to note that none of the dimming approaches above is fully compatible with any of the others, so it is important to research, choose wisely, and avoid substitutions.

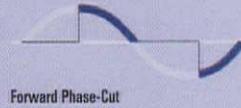
## MATCHING THE DIMMER TO THE LOAD

A variety of lighting sources exist on the market. These sources have individual characteristics that require special types of dimmers. It is important to use a dimmer that is designed, tested, and UL-listed for the specific lighting source.

### INCANDESCENT

Line-voltage tungsten filament lamps, including halogen

**ELECTRICAL CHARACTERISTIC** Resistive **SPECIAL REQUIREMENTS** Rated for cold filament inrush (positive and negative periods may not be equal, resulting in a net DC voltage; do not use on MLV).

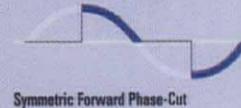


Forward Phase-Cut

### MAGNETIC LOW VOLTAGE (MLV)

Magnetic (core and coil, toroidal) transformer-supplied low-voltage lighting

**ELECTRICAL CHARACTERISTIC** Inductive **SPECIAL REQUIREMENTS** Symmetric cycles ( $VDC \leq 2$ ), smooth turn-off (positive and negative periods are equal for safe MLV transformer operation).



Symmetric Forward Phase-Cut

### ELECTRONIC LOW VOLTAGE (ELV)

Electronic (solid-state) transformer-supplied low-voltage lighting

**ELECTRICAL CHARACTERISTIC** Capacitive **SPECIAL REQUIREMENTS** Smooth turn-on at zero voltage (reverse phase-cut for no damaging current spikes), neutral wire connection.



Reverse Phase-Cut

### NEON/COLD CATHODE

Highly inductive boost transformer for neon/cold cathode lighting

**ELECTRICAL CHARACTERISTIC** Highly inductive **SPECIAL REQUIREMENTS** Very smooth turn-off (positive and negative periods are equal for safe magnetic transformer operation), symmetric cycles ( $VDC \leq 2$ ), neutral wire connection.

### FLUORESCENT

Electronic fluorescent dimming ballast

Special dimmers are designed and UL-listed to send power and control signals to each type of electronic fluorescent dimming ballast: 3-wire, 2-wire, and 0V-10V.

TEXT AND DIAGRAMS COURTESY OF LUTRON ELECTRONICS

• **THREE-WIRE ANALOG POWER DIMMING** These circuits incorporate a special type of forward phase-cut dimmer with three wires (dimmed hot, switched hot, and neutral) to control specific three-wire electronic dimming ballasts. Both Lutron and Lightolier make fluorescent ballasts and controls using three-wire circuits. Three-wire ballasts connect to a wide range of dimmers, such as wall-switch and architectural dimming systems; however, specific dimmers for three-wire ballasts must be used. The three-wire system is the oldest protocol and offers some of the best dimming ballast performance. (See diagrams on page 87 for visual clarification of this and the following three scenarios.)

• **TWO-WIRE ANALOG POWER DIMMING** A few ballasts have been cleverly designed to use forward phase-cut two-wire incandescent dimming circuits, principally the Advance Mark X and Lutron Tu-Wire fluorescent ballasts. This system is handy because it employs relatively inexpensive dimmers and is wired using a conventional switched lighting circuit with two wires.

• **FOUR-WIRE 10V ANALOG SIGNAL DIMMING** The most common dimming ballasts have two power wires (switched hot and neutral) and two wires that connect to a low-voltage circuit. This is probably the most universal ballast protocol available today for U.S. and European fluorescent lamp ballasts, as well as for some of the latest HID electronic ballasts. For wall-switch dimming, special dimmers or interfaces must be used, but simple interfaces are available for most architectural and theatrical dimming systems, and for a wide range of daylight sensors. Note that these ballasts cannot turn themselves on and off like DALI ballasts, so in addition to the low-voltage-level control circuit, there must be a line-voltage switch as well.

• **DALI DIGITAL SIGNAL DIMMING** European ballast companies recently joined together to develop a digital protocol called the Digital Addressable Lighting Interface (DALI). In a DALI system, the ballast connects only to power and to the DALI bus; on/off switching, as well as light-level control, occurs in the ballast. There are DALI-controlled conventional dimmers and low-voltage electronic transformers as well, essentially eliminating wall-switch dimmers and dimming cabinets as we know them. Control-initiating devices are also digital, allowing the use of everything from pushbuttons and touch switches to daylight sensors and LCD control stations.

• **OTHER DIGITAL DIMMING SYSTEMS** Several other digital dimming systems can be found in the marketplace. For example, Universal Ballast offers the AddressPro dimming system, also sold as the Cooper DLS system. In Europe, several companies make products using the Digital Serial Interface (DSI) system. Some products work on both DSI and DALI. Like DALI, these systems include dimming ballasts, conventional dimmers, dimming electronic transformers, and sending devices.

In addition, there are communications systems and protocols to which lighting systems connect. These range from general-purpose

**Solerio**  
Decorative Lighting

## Decorative Glass Pendants

Solerio decorative glass pendants feature a frosted glass shade and are available in a variety of functional models. Lamp choices include compact fluorescent, metal halide and incandescent. Mounting is available via a field adjustable aircraft cable or pendant stem. Options include patterned or colored glass shades and dimmable and emergency ballast on fluorescent models.

See us at Light Fair  
in space 2629.

For more information on Pathway's complete product line, contact your local sales representative.

Phone: 1.800.342.0592  
www.pathwaylighting.com  
e-mail: sales@pathwaylighting.com

**PATHWAY**  
the Lighting Source

communications systems like TCP/IP Ethernet and IEEE 485, to theatrical lighting controls using DMX-512 and building-technology-specific controls like the European Installation Bus (EIB) and BacNET, the U.S. equivalent. (These will be discussed in more detail in Part Two of this series.)

#### COMPATIBILITY: A CRITICAL QUESTION

The lighting specifier is fundamentally responsible for ensuring that lighting loads and dimming ballasts are compatible with the intended control system—no easy task considering the many complex options available today.

This point is critical: NONE of the dimming approaches listed above is fully compatible with ANY of the others. If you carelessly specify "dimming ballast" these days, be prepared for an unhappy situation. For instance, the two-wire dimming ballast and respective dimmer is often the least expensive. But I don't know of a single daylight sensor that can be connected directly to this type of ballast without first being processed by some type of architectural dimming system. Similarly, the generic 10V dimming ballast cannot operate on a standard wall-switch dimmer, but instead requires a specific and harder-to-find dimmer or an interface box. Contractors usually do not spot these problems until installation time, which then involves a rush to get new parts and perhaps some rewiring. But these are the ballasts that are needed to interface to most daylighting photosensors.

As a basic rule, decide at the beginning of the project which dimming approaches will be used. If the design employs control devices from multiple manufacturers, especially automated daylight sensors, it is best to use the 10V analog system, as there is reasonable compatibility among ballasts and control devices. However, if the design involves a basic manual dimming system using wall-switch devices, or if it is based around an architectural dimming system consisting of multiple dimmer cabinets or a digital system of any kind, specify ballasts and dimmers as recommended by the control system manufacturer to ensure compatibility, and do not allow substitutions. Note that to help alleviate this problem, some companies make dimming ballasts that can be connected in two or three different ways. For example, there is at least one ballast that can be connected to a 0V–10V analog or two-wire dimming circuit, making it compatible with most analog circuits.

Perhaps a bigger question is which type of control system to use for each project. The new digital generation of lighting controls makes the choice of dimming system that much more difficult. Part Two of this series will examine the applicability and performance of these different dimming systems, including some critical issues professional designers must address when implementing them.

*James Benya is a professional lighting designer and principal of Benya Lighting Design in West Linn, Oregon. He is an editor-at-large for AJL.*

 more information at [ARCHLIGHTING.COM](http://ARCHLIGHTING.COM)

PART TWO WILL APPEAR IN THE SEPT/OCT 2006 ISSUE.

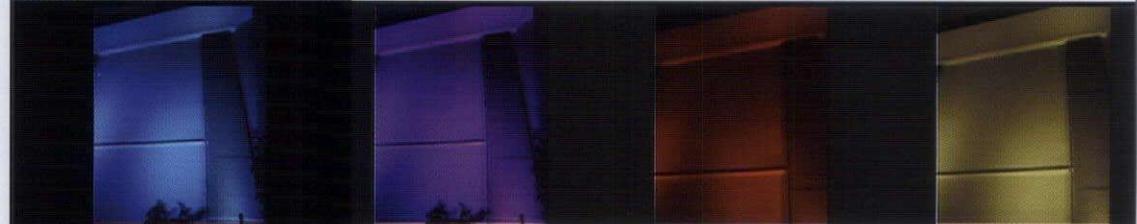
#### DIMMING FOR LEDs

If you think dimming fluorescent lamps is complicated, buckle your seat belt for LEDs. Each LED operates at very low voltage (2 to 4 volts, typically), and the power to each LED is regulated by a power supply or driver. The driver usually converts line power to direct current (DC), then the DC power is chopped, regulated, and sent to the LED. "Chopped" generally means turned on and off very rapidly, but as with fluorescent lighting, at 30 kHz or greater to prevent visible flicker. The longer the "on" time, the brighter the LED. But this is not universal: the LED flicker can be annoying, and a new generation of analog variable-voltage LED dimming has recently been announced.

Because LEDs are new and rapidly evolving, there are many different drivers and circuits, and almost no standards exist. The more sophisticated LED manufacturers, such as Color Kinetics and TIR, have designed their systems to interface with industry standard control systems, such as DMX-512 or 10V. But for the vast majority of simple LED products, the proper dimming approach may be difficult to determine.

For more about LED dimming, see the Lighting Controls Association website at [www.aboutlightingcontrols.org/education/papers/controlLED.shtml](http://www.aboutlightingcontrols.org/education/papers/controlLED.shtml).

**SaVi**<sup>TM</sup>  
architectural LED lighting



#### SaVi SHO<sup>TM</sup>

a new architectural Super High Output full spectrum (RGB) LED floodlight. Featuring the world's brightest RGB LED lighting system for unmatched performance.



#### SUPER VISION INTERNATIONAL

Headquarters - USA  
8210 Presidents Drive  
Orlando, FL 32809  
USA  
407.857.9900

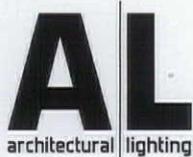
Asia Office  
Unit 3, 7 Floor Ricky Centre  
36 Chong Yip Street, Kwun Tong  
Kowloon, Hong Kong  
Tel: +852.2578.9303



SUPER VISION  
INTERNATIONAL  
[www.svision.com](http://www.svision.com)



SaVi SHO<sup>TM</sup>  
commercial grade  
architectural LED luminaire



# 5<sup>th</sup> ANNUAL ACE.al AWARDS BALLOT

ARCHITECT'S CHOICE  
FOR EXCELLENCE

CHOSEN BY  
LIGHTING DESIGNERS & ARCHITECTS

AWARDED BY  
ARCHITECTURAL  
LIGHTING

Recognizing  
exceptional  
product  
durability,  
customer  
service,  
value and  
design.

Now in its 5th year,  
*Architectural Lighting's*  
ACE.al Awards have  
become the mark of  
distinction and  
dependability.

## HOW THE PROGRAM WORKS

1. Take a few minutes to review the list of manufacturers.
2. Circle the manufacturers that meet or exceed your standards, as indicated in voting criteria.
3. Of the companies you've selected, indicate your choices for Most Innovative, Most Respected, and Most Specified.
4. Fax your ballot page to 646-654-5816 no later than July 7, 2006.

## VOTING CRITERIA

Select the manufacturers who have provided you and your projects with:

- Product Durability
- Exceptional Customer Service
- Superior Value
- Advanced Designs

## METHODOLOGY

The ACE.al ballot and manufacturers list runs in the April/May and June issues of *Architectural Lighting*, each reaching the complete 25,000+ nationwide circulation. In addition, direct marketing campaigns are conducted to ensure the broadest base of response. Ballots are provided and collected at Lightfair and other industry conferences. *Architectural Lighting* also does random sampling, consults with industry experts, and the list of nominated manufacturers is subject to review by an in-house publishing team.

Results will be announced in the November/December 2006 issue.

**CAST YOUR VOTES AND LET THE INDUSTRY KNOW WHO YOU TRUST AND DEPEND ON! FAX TO: 646-654-5816**

Circle the manufacturers that meet or exceed your standards, as indicated in voting criteria.

Please cut out and fax

- |                              |                            |                              |                              |                              |
|------------------------------|----------------------------|------------------------------|------------------------------|------------------------------|
| 3M Light Fiber               | Elliptipar                 | LEDtronics Inc.              | Philips Advance Transf.      | Studio Due s.r.l             |
| Aamsco Lighting              | Energie                    | Legion Lighting              | Phoenix Products Co.         | Studio Italia Design USA     |
| Acrylic                      | Engineered Lighting Prod.  | Leola                        | Phoster Lighting             | Super Vision International   |
| Advance                      | ERCO Lighting USA, Inc.    | Leucos USA                   | Planlicht                    | Sure-lites                   |
| Alanod Aluminum              | ESTILUZ, INC.              | Leviton                      | Precision Arch. Lighting     | Targetti North America, Inc. |
| Alera Lighting               | Eureka                     | LexaLite International       | Prescolite                   | Tech Lighting, LLC           |
| Alkco Lighting               | Eurofase, Inc.             | Light Craft Manufacturing    | Primelite                    | Teka Illumination, Inc.      |
| A.L.P. Lighting              | ExceLine                   | Lightech                     | Prisma Arch. Lighting        | Terzani                      |
| ALS - Arch. Lighting Systems | Fabbian USA                | LightIdeas                   | Progress Lighting            | THHC Lighting                |
| Altman Lighting              | FAD Lighting               | Lighting Analysts            | Prudential Lighting          | Thomas Daybrite              |
| Ambiance Lighting Systems    | FC Lighting                | Lighting Services, Inc.      | Q-Tran Inc.                  | Thomas Lighting Canada       |
| American Florescent          | Fiberstars                 | Lightolier                   | Quality Lighting             | Thomas Research Products     |
| American Glass Light         | Fine Art Lamps             | Lightolier Controls          | Reggiani Lighting USA        | Times Square Lighting        |
| Amerlux                      | Finelite                   | Light-Project International  | Renaissance Lighting         | TIR Systems                  |
| Anafol International         | FLOS                       | Linear Lighting              | Renova Lighting Systems      | Tivoli, LLC                  |
| ANP Lighting                 | Focal Point                | Litecontrol                  | Rockscapes                   | Tracoman                     |
| Antron                       | Forecast                   | Liteakers                    | Rosco Laboratories, Inc.     | Translite Sonoma             |
| Architectural Area Lighting  | Foscarini                  | Lithonia Lighting            | Rotaliani                    | Traxon USA                   |
| Arch. Landscape Lighting     | Framburg Lighting          | Lithonia Controls            | RSA                          | Trend Lighting Co., Inc.     |
| Ardee                        | Gamma 3 Luce               | Liton                        | Schonbek Worldwide Light.    | Tridonic, Inc.               |
| Arroyo Craftsman             | Gardco Lighting            | Louis Poulsen Lighting       | Schott-Fostec LLC            | Trilux Lighting Limited      |
| Artemide                     | GE Cons. & Ind. Lighting   | Luceplan USA, Inc.           | Schott North America         | Troy-CSL Lighting            |
| AVR USA                      | Ginger                     | Lucien Gau                   | Schreder                     | Unilight Ltd.                |
| B-Light                      | Gotham Arch. Downlighting  | Lucifer Lighting             | Se'lux U.S.                  | Universal Lighting Tech.     |
| Baldinger                    | Guth Lighting              | Lumca                        | Sea Gull Lighting            | Ushio America                |
| Bartco Lighting              | H.E. Williams              | Lumec                        | Selecon                      | Valmont Industries, Inc.     |
| Beacon Products, Inc.        | HADCO                      | Lumiere                      | Selee                        | Vantage                      |
| Bega Lighting                | Halo                       | Luminis                      | Semper Fi Power Supply       | Van Teal                     |
| Beghelli                     | Hampstead Lighting         | Luraline Products Co.        | Sentry Electric Corporation  | Varon Lighting               |
| Beta-Calco                   | Hatch Transformers         | Lutrex                       | Serien                       | Venture Lighting             |
| Beta Lighting                | Hemera, Inc.               | Lutron                       | Serralunga                   | Viabizzuno                   |
| Birchwood Lighting           | Hessamerica                | Luxo Corporation             | Shaper Lighting              | Visa Lighting                |
| B-K Lighting                 | Hex Architectural Lighting | Luxo Italiana                | Sill                         | Visio Lighting               |
| B-Light                      | High End                   | Lyric Lighting (Seagull)     | Sirius Lighting              | Vista Lighting               |
| Boca Flasher                 | Highlights                 | Manning Lighting             | Sistemalux                   | Vistawall                    |
| Boyd Lighting                | Holophane                  | Mark Lighting                | Sirmos                       | Vossloh-Schwabe / Aromat     |
| Bruck Lighting Systems       | Hubbell                    | Martin Architectural         | Solara Lighting              | W.A.C. Lighting              |
| C.W. Cole & Co.              | Hubbell Building Autom.    | MaxLite                      | Solatube International, Inc. | W2                           |
| Charles Loomis               | HUNT Dimming               | McGraw Edison                | Space Lighting               | Waldmann                     |
| Charleston Gas Light         | Hunter Douglas Contract,   | MechoShade Systems, Inc.     | Spark Lighting               | The Watt Stopper             |
| Color Kinetics               | Solar Control by Nysan     | Mercury                      | Special FX Lighting, Inc.    | Weaver & Ducre               |
| Columbia Lighting            | Hydrel                     | Metalumen                    | Specialty Lighting Ind.      | WE-EF Lighting USA           |
| Conant Custom Brass, Inc.    | Icon International         | Metalux                      | Spero Lighting               | Wendelighting, Inc.          |
| Con.Daz Lighting             | IEPC Corp.                 | Metrolux                     | SPI Lighting                 | Wila Lighting                |
| Con-Tech Lighting            | IL America Inc.            | Meyda Lighting               | Spring City Elec. Manuf.     | Wilshire Manufacturing Co.   |
| Contrast Lighting            | ILEX                       | Mills Architectural Lighting | Square D Clipsal             | Winona                       |
| Cooper Lighting              | iLight Technologies        | James R. Moder Crystal       | Starfield                    | Xilver BV                    |
| Corelite                     | Illuminating Experiences   | Chandelier                   | Starfire Lighting            | Zaneen Lighting              |
| Cree                         | Illumination Lighting      | Morlite Systems              | Sternberg                    | Zoltan                       |
| Crestron                     | Induction Lighting         | Neoray                       | Stingray Lighting            | Zumbobel Staff               |
| Cyclone Lighting Inc.        | Industry + Design Light    | Nessen                       |                              |                              |
| D'ac                         | Indy Lighting              | Newmat USA                   |                              |                              |
| Davis/Muller Lighting        | Insight Lighting           | New Metal Crafts             |                              |                              |
| Day-Brite Lighting           | IO Lighting                | New Star Lighting            |                              |                              |
| Delray Lighting              | IRIS                       | Nora Lighting                |                              |                              |
| Delta Light USA              | Ivalo Lighting             | Nordic Aluminum              |                              |                              |
| Derek Marshall Lighting      | JJI Lighting Group         | N. American Light Spectrum   |                              |                              |
| Dernier & Hamlyn             | Juno Lighting              | NoUVIR Research              |                              |                              |
| Designplan Lighting, Inc.    | Kenall                     | Osgetti Luce                 |                              |                              |
| Dialite                      | Kichler                    | O Luce                       |                              |                              |
| Donovan Lighting             | KIM Lighting               | Orbit North America          |                              |                              |
| Dreamscape Lighting          | Kingbright                 | OCL-Original Cast Lighting   |                              |                              |
| Eclipse Lighting Inc.        | Kramer Lighting            | Osram Sylvania               |                              |                              |
| Edison Price                 | Kurt Versen                | Pathway Lighting             |                              |                              |
| Eiko Ltd.                    | Lam Lighting               | PCI                          |                              |                              |
| Electrix                     | Lamar                      | Peerless                     |                              |                              |
| Elec. Theatre Controls (ETC) | LBL                        | Pennsylvania Globe           |                              |                              |
| Elite Bohemia/Bar Del Int'l. | Ledalite                   | Philips Lighting             |                              |                              |

Of the lighting industry manufacturers you have selected, which in your opinion is the:

Most INNOVATIVE \_\_\_\_\_

Most RESPECTED \_\_\_\_\_

Most SPECIFIED \_\_\_\_\_

I would also like to nominate the following lighting industry manufacturers (not listed):

\_\_\_\_\_

\_\_\_\_\_

Your Name \_\_\_\_\_

Title \_\_\_\_\_

Company \_\_\_\_\_

City/State \_\_\_\_\_

**DEADLINE FOR ENTRIES: JULY 7, 2006**

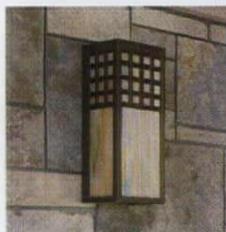
## Beta Lighting

Beta Lighting has added a Large Aviator to its architectural area light series. It is available in a segmented Type III, IV, or V optic and meets IESNA Full Cutoff Classification (except 1000W HPS). The 25-inch-wide-by-14.4-inch-deep housing accommodates 250W to 1000W metal halide, pulse-start metal halide, and high-pressure sodium lamps. **CIRCLE 061**



## Brass Light Gallery

ADA-compliant wall sconce, available in both incandescent and compact fluorescent, from Brass Light Gallery. Designers and manufacturers of architectural lighting since 1974. Academic institutions, hotels/resorts, clubs, hospitals, assisted-living facilities, restaurants, and offices. Superior construction and quality finish options. Made in the USA. Visit [www.brasslight.com](http://www.brasslight.com), call 800.243.9595, or contact [commercial@brasslight.com](mailto:commercial@brasslight.com). **CIRCLE 064**



## Con-Tech Lighting

Con-Tech Lighting introduces the AroTech 39W CDM-R111 ceramic metal halide track fixture, featuring the energy-efficient, long-life CDM-R111 lamp. This fixture provides 358-degree horizontal rotation, 190-degree vertical rotation, and precise beam control for maximum flexibility. This fixture also features the Aromat miniSlim electronic ballast and an integral on/off switch for convenient power. **CIRCLE 065**



## Cree

Cree XLamp 7090 LEDs deliver the industry's highest-performance power LEDs in a rugged, reflow-solderable surface-mount package optimized for design flexibility, ease of use, and thermal efficiency. To register to be considered for Cree XLamp LED samples, visit [www.cree.com/xlamp](http://www.cree.com/xlamp), or call 800.533.2583. **CIRCLE 066**



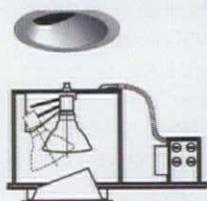
## Day-Brite Lighting

Day-Brite's Attune family forms a stylized architectural package providing highly efficient illumination with excellent visual comfort. Any space can be customized using multiple ceiling options, photometric distributions, lamp types (T8 and T5), and shielding options. A single captive enclosure with easy lamp and ballast access from below provides unparalleled ease of maintenance. **CIRCLE 067**



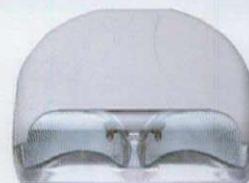
## Delray Lighting

Presented in 6-, 8-, and 9-inch apertures, plus a 9-inch adjustable PAR with Translating Center Optical feature, the new High-Performance Ceramic Metal Halide Downlights are available in 39W, 70W, 100W, and 150W for medium-base lamps rated for open enclosures. Offering high output, high comfort, no glare, and no distortion, all fixtures have fuse and re-strike options. For more information, contact your local Delray representative or visit [www.delraylighting.com](http://www.delraylighting.com). **CIRCLE 068**



## Dual-Lite

LiteScape's patented SurePath technology eliminates the tedious guesswork in developing optimum interior egress lighting path layouts. Raising the industry standard for performance and safety, LiteScape delivers 100 percent NFPA 101 code-compliant high-performance halogen lamp illumination. LiteScape is also easy to install, conveniently paintable, and fully guaranteed—an industry first. **CIRCLE 070**



## Elliptipar

Elliptipar's 30-30 Stack Light generates 30 vertical footcandles at 30 inches, exceeds IESNA recommended light levels, and complies with ASHRAE/IESNA Energy Standards and California's Title 24. Using one 28W T5 lamp, the 30-30 is an energy-efficient, high-performance solution to stack lighting. **CIRCLE 071**



## ERCO

ERCO introduces the new Grasshopper projector for outdoor use. The Grasshopper will utilize the new 20W metal halide lamp technology, as well as newly refined 1W high-powered LEDs. The Grasshopper is ideal for lighting signage, building facades, and outdoor foliage. Available now. **CIRCLE 075**



## Estiluz

COMO is a retro-style table lamp with an opal glass shade. This unique luminaire is a conversation piece for any space and is available in two different sizes: 10 inches in diameter by 6 1/2 inches in height (B1355), and 13 1/2 inches in diameter by 8 1/2 inches in height (B1356). **CIRCLE 076**



## Focal Point

Meet Apollo from Focal Point. A light that does double duty as a patient's best friend and the medical team's right hand. Apollo combines a recessed bed light, an exam light, and a reading light in one. Its satisfying light levels deliver optimal illumination that gives everybody what they need. **CIRCLE 078**



## Gotham Lighting

Elevations blends elegance, design versatility, and superior performance into today's ultimate architectural pendant. Its sleek, understated lines can be embellished with decorative touches. Glowing glass shades in blue, amber, or white in 4-inch Elevations match expressive Candeo and Ice aperture treatments in 8-inch luminaires. Pendant, ceiling, and wall-mount versions satisfy varying needs. Visit [www.gothamlighting.com](http://www.gothamlighting.com). **CIRCLE 079**



## Halo Lighting

Offering a minimal ceiling presence but delivering high light output, the petite size of the new H3 Series complements the existing Halo family of 4-, 5-, and 6-inch trims for a cohesive appearance. Nine trim styles are available in multiple finishes, including new high-quality designer metallic finishes of Satin Nickel, Antique Copper, and Tuscan Bronze. For more information, visit [www.cooperlighting.com](http://www.cooperlighting.com), call 770.486.4800, or e-mail [talktous@cooperlighting.com](mailto:talktous@cooperlighting.com). **CIRCLE 080**



## Lithonia Lighting

The OMERO Architectural Outdoor Family of area, wall-mounted, and bollard luminaires takes outdoor lighting to the forefront. Their distinctive designs, signature accents, and uncompromising performance complement any environment, and versatile mounting options, multiple performance optics, and an entire family of cohesively designed products provide another choice from Lithonia Lighting. Visit [www.lithonia.com/omero](http://www.lithonia.com/omero) or call 800.279.8041. **CIRCLE 091**



## Heatron

Heatron's Elpor Steel Metal Core Printed Circuit Boards utilize a porcelain ceramic coating to provide primary electrical insulation between the printed circuit and the steel core. This high-temperature coating helps resist moisture and corrosion and allows board designs with greater resistance to mechanical shock, excellent heat dissipation, and zero water absorption. For more information, contact Jason L. Martin at [jasonm@heatron.com](mailto:jasonm@heatron.com), or 913.651.4420. **CIRCLE 081**



## Lumec

The asymmetrical shape of the Oval Series represents a new era in architectural design. Its elliptical profile offers a bold alternative in a world of circular and rectilinear products. Softly contoured, the Oval has undeniable appeal and a distinctive presence that enhances the architectural environment. Meet us at AIA 2006, booth #1827. **CIRCLE 092**



## Kim Lighting

The Wall Commander is a new rectilinear wall luminaire series with full-reflector optical systems available in downlight only, uplight only, and up/down configurations. Available in two sizes, the Wall Commander provides high-output illumination for use in area lighting, and striking accent effects, such as the dramatic multi-color ray. StarView-compliant versions for use in dark-sky projects are also available. **CIRCLE 082**



## MechoShade

The ultimate in motorized drapery systems—WhisperTrak. Whisper-quiet operation and clean monochromatic design. Available in either straight or curved lengths up to 59 feet. A 15-channel IR remote offers five preset stop positions and group control settings. Integrates with home and building automation systems. Five-year warranty. Visit [www.mechoshade.com](http://www.mechoshade.com), or call 718.729.2020. **CIRCLE 094**



## Lighting Services Inc

The GR16 Series from Lighting Services Inc complements any architectural space with a sleek, minimal style. The recessed, inline transformer allows the GR16 to accommodate all energy-efficient MR16 lamps from 20W to 75W. Lighting Services Inc, 2 Kay Fries Drive, Stony Point, NY 10980; 800.999.9574 (phone); 845.942.2177 (fax); [www.LightingServicesInc.com](http://www.LightingServicesInc.com). **CIRCLE 086**



## NoUVIR Research

NoUVIR Penta-Fol fiber-optic spotlight. Heatless equivalent to 25W halogen. Adjustable focus. Easy 14-foot throws. Flush or bracket mount. Optional mirror for 45- to 90-degree off-axis aim. Six Penta-Fol or 32 single-fiber luminaires from one projector. Pure-white, stone-cold fiber-optic lighting with no UV, no IR ... from NoUVIR Research. Call 302.628.9933 for details. **CIRCLE 096**



## Lightolier

Energy Star Recessed Lytecaster compact fluorescent fixtures satisfy increasing demand for energy-efficient and code-compliant downlighting. Energy Star- and Title 24-rated high-performance Lytecaster trims meet general illumination, wet location, and decorative application needs. Commercial, residential, new construction, and remodeler versions are available with dimming options. Residential models feature Flicker-Free, Instant-On Ballasts. Visit [www.Lightolier.com](http://www.Lightolier.com). **CIRCLE 087**



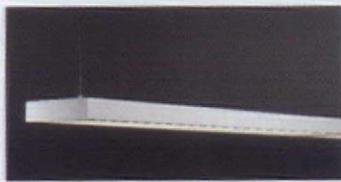
## OCL

The new MoonLight series from OCL will bring sophisticated styling and a soft mellow glow to any architectural setting. MoonLight comes standard in natural brushed aluminum with a softly green-tinted, sandblasted lens. It hangs gracefully as a cable-suspended pendant, and makes a strong statement as a sconce or ceiling fixture. For more information, visit [www.OCL.com](http://www.OCL.com). **CIRCLE 097**



## Litecontrol

The Mod<sup>2</sup> Family is the latest generation of an "industry standard" Mod fixture design from Litecontrol. Mod<sup>2</sup> represents an evolution in design and performance. Mods are now available in a small fixture cross-section for suspended, surface, and wall applications. For more information, visit [www.litecontrol.com](http://www.litecontrol.com), or call 781.294.0100. Litecontrol is an employee-owned company located at 100 Hawks Avenue, Hanson, MA 02341. **CIRCLE 088**



## Pathway Lighting

PATHWAY the Lighting Source announces Ovela Architectural Suspended Accent Light. It features an ultra-compact housing and a unique adjustable suspension height, which makes it ideal for areas with high ceilings, such as retail stores, displays, museums, lobbies, restaurants, and more. Pathway Lighting Products, Inc., Old Saybrook, CT 06475-0591; 800.342.0592; [www.pathwaylighting.com](http://www.pathwaylighting.com). **CIRCLE 099**



## Precision Architectural Lighting

A contemporary, specification-grade aluminum fixture available in perimeter and suspended configurations, P.A.L.'s new Luminata II linear fluorescent series enhances the appearance of offices, libraries, schools, and hospitals. Offered in two-, three-, or four-lamp profiles, the luminaire takes T8 or T5HO lamps and has an optional isolation reflector that yields up to 43 percent downlight. **CIRCLE 101**



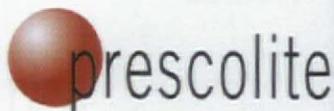
## Super Vision International

SaVi SHO is a new architectural Super High Output, full spectrum (RGB) LED floodlight. It features the world's brightest RGB LED lighting system for unmatched performance. It is capable of 16 million colors and is fully controllable by DMX. Color effects include static colors, cross fading, and single-color rotation. For more information, visit [www.svision.com](http://www.svision.com), or call 407.857.9900. **CIRCLE 112**



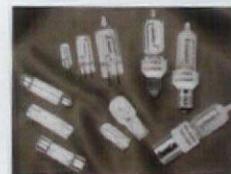
## Prescolite

Prescolite has been designing solutions for the lighting industry throughout its 60-year history. A division of Hubbell Lighting, Prescolite designs and manufactures high-performance downlighting, track, and surface lighting products. Literature, detailed specifications, and pricing information are available online at [www.prescolite.com](http://www.prescolite.com), or by calling 888-PRS-4TEC. **CIRCLE 102**



## THHC Lighting

THHC Lighting is the leading manufacturer of low-voltage and line-voltage low-pressured xenon lamps for a variety of general and specialty illumination applications, including landscape, showcase, decorative, and architectural designs. THHC offers the most complete line of xenon lamps in the industry, including: wedge base, festoon, rigid loop, cartridge, G4 bi-pin, GY6.35 bi-pin, E11, E12, and BA15D. Call 877.Xelogen or visit [www.xelogen.com](http://www.xelogen.com) for more information. **CIRCLE 113**



## Selux

Extruded aluminum, precision fixtures in suspended, surface-mount, recessed, wall-mount, and new wall-washer configurations. Design flexibility and user-friendly specification with the new 2006 Specification booklet available from SELUX, or downloadable from our website. For clean linear fixtures with many standard and custom options, SELUX M-Series. SELUX Corporation; 800.735.8927; [www.selux.com/usa](http://www.selux.com/usa). **CIRCLE 103**



## Times Square Lighting

The MC202 is available in 120V or 277V and utilizes a 20W PAR20 ceramic metal halide lamp that lasts two to three times longer than a standard incandescent or halogen PAR lamp and has a rated average life of 7,500 hours. Each fixture features an electronic vertical ballast with an adjustable self-locking head and hinged front. An internal accessory ring accommodates louvers, glass filters, barndoors, and hoods. Visit [www.tsilight.com](http://www.tsilight.com), or call 845.947.3034. **CIRCLE 114**



## Sentry Electric

Sentry offers a comprehensive line of luminaires from classic designs to contemporary and modern. Sentry offers a wide selection of matching poles in a full range of heights. Matching bollards are available as unlit or lighted models. Sentry offers a wide selection of wall brackets, cross arms, and accessories. **CIRCLE 106**



## Universal Lighting

The E-tensity electronic HID ballasts from Universal Lighting offer 30 percent energy savings over magnetic HID in high ceiling applications. Its sound rating earns an "A," while fixture efficiency is over 90 percent. From 20W lamps to a 400W pulse-start lamp, the lights switch on instantly with no warm-up delay. For more information, visit [www.universalballast.com](http://www.universalballast.com). **CIRCLE 115**



## Sirius Lighting

From Sirius Lighting comes the latest in LED fixtures. The M Beta DS is a 1W rail-mounted fixture that is fully aimable. Perfect for casework, jewelry, and even chocolate applications, it is available in cool and warm color temperatures and generates very little heat. **CIRCLE 110**



## Venture Lighting

Venture Uni-Form Natural White pulse-start metal halide lamp and ballast systems produce wide, full-spectrum lighting over indoor or outdoor areas. They mimic the high color rendition of natural sunlight, enhancing any commercial, industrial, or institutional space, grounds, or roadway. E-mail [venture@adlt.com](mailto:venture@adlt.com) or visit [www.venturelighting.com](http://www.venturelighting.com). **CIRCLE 117**



## Square D Clipsal

The Square D Clipsal Saturn keypads are crafted from glass and available in two-, four- and six-key switch gangs. Each silver push button is capable of being programmed to perform on/off, dimming, timer, and custom functions, and features configurable blue and orange LED switch indicators that provide illumination and status feedback. Remote control functionality is also available. Call 1-888-SQUARED, or visit [www.squaredlightingcontrol.com](http://www.squaredlightingcontrol.com). **CIRCLE 111**



## W2 Architectural Lighting

W2 ARCHITECTURAL LIGHTING, a new division of W.A.C. Lighting, introduces Flexrail2, a two-circuit, line-voltage bendable rail system with a contemporary look and complete palette of lighting tools, including line- and low-voltage spots, floods, wall-washers, pendants, and accent lights. The system can be custom designed and is offered in platinum and bronze finishes. Visit [www.w2lighting.com](http://www.w2lighting.com), call 866.788.2100, or fax 516.393.3084. **CIRCLE 118**



PAGE	ADVERTISER	CIRCLE NO.
25	Acrilex	84
38	Alanod	2
11	Amerlux	108
16	Architectural Area Lighting	34
8	Ardee Lighting	126
35	Bartco Lighting	49
92	Beta Lighting	61
72	B-K Lighting	7
20, 92	Brass Light Gallery	109, 64
60	Capri Omega Lighting	120
66, 92	Con-Tech Lighting	73, 65
22	Cooper Lighting	41
2-3, 92	Cree	107, 66
28, 92	Day-Brite Lighting	57, 67
92	Delray Lighting	68
92	Dual-Lite	70
76	Eclipse Lighting	51
92	Elliptipar	71
26	Engineered Lighting Products	42
C2-1, 92	Erco Lighting	31, 75
21, 92	Estiluz	100, 76
6-7	FAD Lighting	95
80, 92	Focal Point	93, 78
33, 92	Gotham Lighting	121, 79
93	Halo Lighting	80
42, 93	Heatron	90, 81
71	Gardco	98
4-5	Hubbell	105
46	Insight Lighting	74
69	Intense Lighting	122
37, 93	Kim Lighting	12, 82
18	Ledtronics	83
85	Leviton (OEM)	63
24	Light Congress	
93	Lighting Services Inc	86
45, 93	Lightolier	37, 87
C4	Lightolier Controls	35
15, 93	Litecontrol	69, 88
57, 93	Lithonia Lighting	77, 91
54, 93	Lumec	36, 92
95	Luraline	26
78, 93	MechoShade	44, 94
95	Nicolaudie	123
86, 93	NoUVIR Research	24, 96
31, 93	Original Cast Lighting (OCL)	4, 97
88, 93	Pathway Lighting	16, 99
27, 94	Precision Architectural Lighting	54, 101
53, 94	Prescolite	28, 102
C3	Prisma	124
9	Prudential Lighting	47
59	Schott	55
41, 94	Selux	85, 103
65, 94	Sentry Electric	56, 106
83, 94	Sirius	58, 110
62, 94	Square D	89, 111
58	Sternberg Lighting	125
89, 94	Super Vision International	116, 112
50	Tech Lighting	8
82, 94	THHC Lighting	62, 113
94	Times Square Lighting	114
19, 94	Universal Lighting	3, 115
49, 94	Venture Lighting	104, 117
12, 94	W.A.C. Lighting	72, 118

Publisher is not liable for errors or omissions.

ALL architectural lighting (Vol. 20, No. 4 USPS 000-846, ISSN 0894-0436) is published seven times per year (bimonthly, except monthly in March and June) by VNU Business Media, Inc., 770 Broadway, New York, NY 10003-9595 and is distributed free of charge to individuals or firms engaged in the specification of lighting products in the US and territories. Per year, all other subscriptions in the US and territories: \$48; Canada, payable in US dollars, \$60; and foreign: \$96. Canada Post Publications Mail Agreement No. 40031729. Return undeliverable Canadian addresses to: Deutsche Post Global Mail, 4960-2 Walker Road, Windsor, ON N9A 6J3. Periodicals Postage Paid at New York, NY and additional mailing offices. Printed in the USA. For address changes, single-copy sales (\$7 in the US, \$7 + postage outside the US, payable in advance) and subscription inquiries, write to Architectural Lighting, PO Box 1061, Skokie, IL 60076-8061 or call Customer Service at (847) 647-7987 outside the US. POSTMASTER: Send changes of address to Architectural Lighting, PO Box 1061, Skokie, IL 60076-8061.

ALL architectural lighting is a trademark owned exclusively by VNU Business Media, Inc. Copyright 2006 VNU Business Media, Inc. All rights reserved. Reproduction of this magazine, in whole or in part, is prohibited unless authorized by the publisher. Editorial and advertising offices: 770 Broadway, New York, NY 10003. Phone (646) 654-4500.

BPA WORLDWIDE  
Copyright © 2006 by VNU Business Media, Inc. All rights reserved.

**Helos**

**LURALINE**  
www.luraline.com

2388 NW 150 Street • Opa Locka, FL 33054 • 800.940.6588 • Fax: 305.685.6500

Circle No. 26 or www.archlighting.com/productinfo

Your idea, your project, your lighting, your controller, ...

**SUNLITE**  
**EASY STAND ALONE**  
DMX Lighting Control Software

your choice...

USB or IP/Ethernet  
DMX playback  
100s of scenes/shows  
Only 4oz/120gr

**sonlite**  
computerized lighting controller

**NICOLAUDIE AMERICA**  
2632 Ellen Ave  
Kissimmee, FL 34744  
Tel +1 786 543 7225  
Fax +1 407 846 7702  
info@nicolaudieamerica.com

**NICOLAUDIE EUROPE**  
838 rue de L'Aiguelongue  
34090 Montpellier France  
Tel +33 (0) 467 661 041  
Fax +33 (0) 467 603 152  
info@nicolaudie.com

www.nicolaudie.com

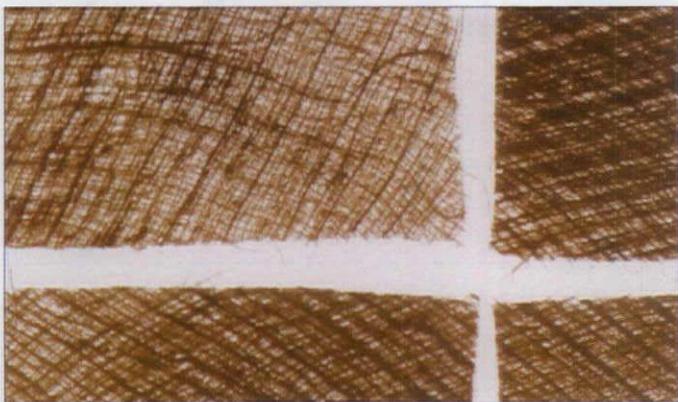
**LIGHTFAIR 2006, Las Vegas, Booth #102**

Circle No. 123 or www.archlighting.com/productinfo

## Products That Do Good

THIS YEAR, ARCHITECTURAL LIGHTING'S EDITORS WERE COMPELLED BY THE GOOD INTENTIONS OF SEVERAL manufacturers to make the world a better place—with products that give a nod to the ideas of reuse and recycling, or that offer a hand to struggling communities in places such as Columbia, Indonesia, and Africa. While not an overwhelming trend, it is a rustling in the bushes that deserves attention. We also

recognized the ever-intensifying industry attention to products that embrace the notion of daylight as an essential design tool. Lastly, we were very interested to learn of a new ballast, designed to aid the overburdened power grid—and in the process, save energy—currently being developed by the Lighting Research Center. Three cheers from all of us to these efforts! **AJL**



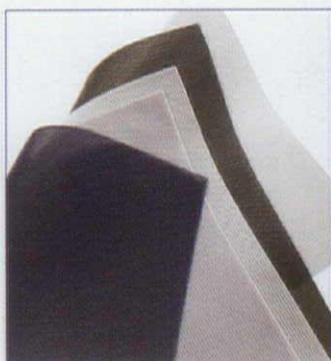
### COMMUNITY COMMITMENT

Besides being downright beautiful when artfully combined with light, 3form's products have achieved a new level of responsibility with the Full Circle line. Including five options, the collection utilizes renewable resources provided by communities from developing countries. River Rock (top) incorporates stones collected by Indonesian villages adversely affected by the tsunami. Palau (above) includes bark, gathered and processed by indigenous peoples in rural Columbia, from the coconut palm. Another, Ithemba, featuring woven wire mesh, utilizes the efforts of African women artisans afflicted with AIDS or HIV. (For a circle number, see page 82.)



### RECYCLED AND RECYCLABLE

A few manufacturers are recognizing the importance of reuse. Though not a full-on trend in the lighting industry (unlike carpeting manufacturers, who have been onto recycling for years), it is worthy of note. Eleek, a company in Portland, Oregon, has created its entire product line around the concept, with items such as the Spoon sconce (above left) and the Pod, Starlight, and Normandy pendants (above) all fabricated from recycled metals. (See other Eleek products on pages 34 and 55.) Meanwhile, MBWellington Studio addresses the issue from the opposite direction: its plastic Lightblocks products (top) are fully recyclable (page 81).



### BRAND NEW DAY ... LIGHT

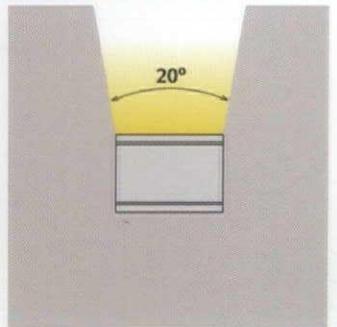
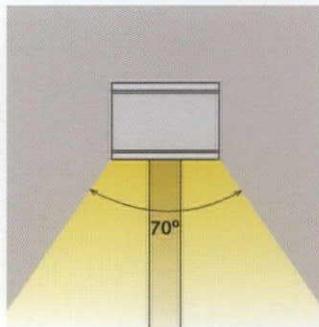
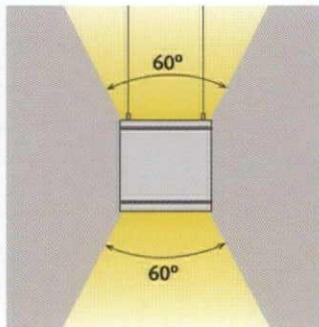
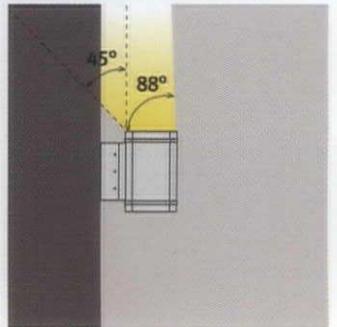
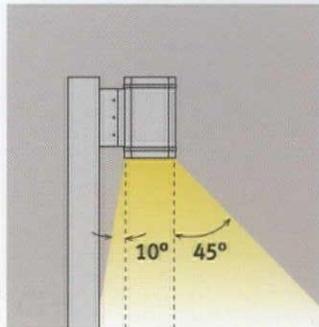
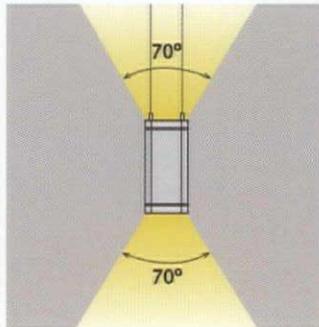
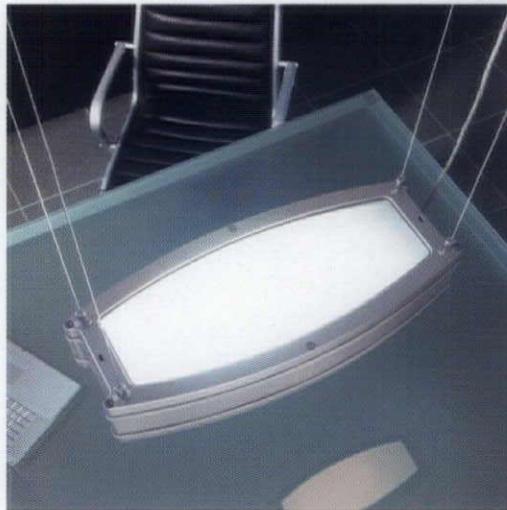
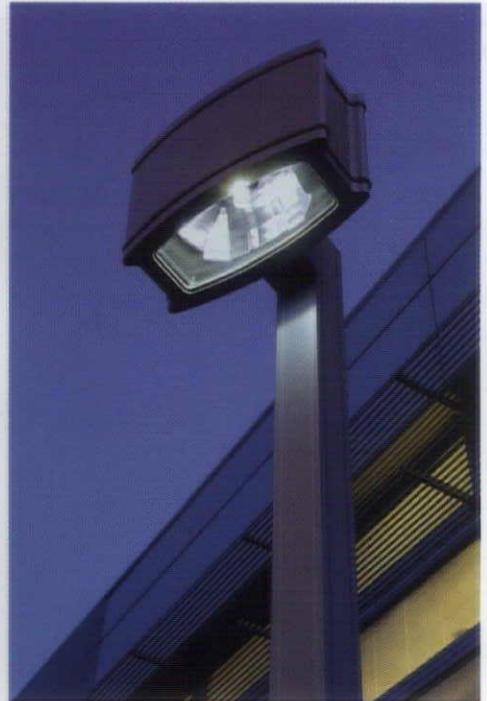
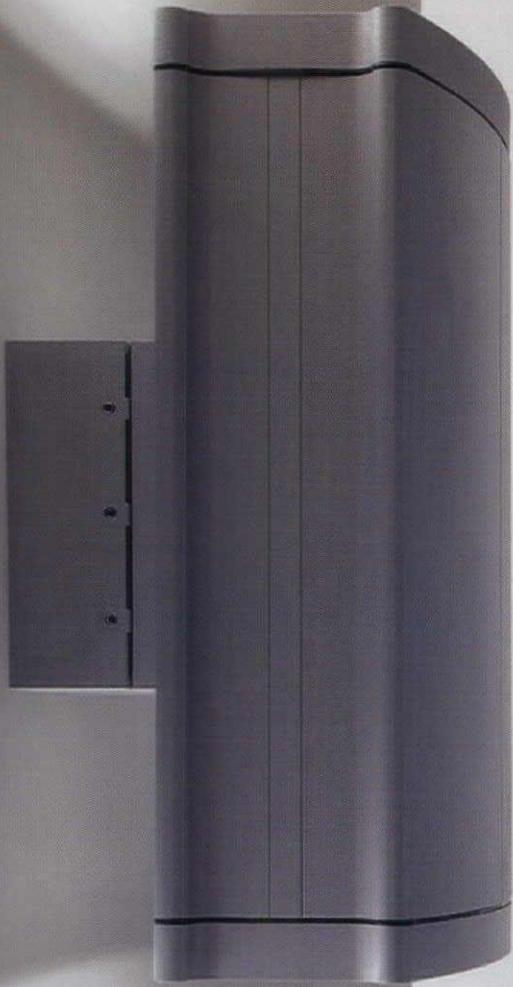
Solar-control products abound; indeed, this year they earned their own page. From glass, to shading systems, to controls, the category is expanding. Pictured center, PPG's architectural glass product Vistacool Azuria, when combined with Solarban 60 low-E glass, provides a light-to-solar-gain ratio of 1.63 (page 79). (The company's impressive Solarban 70XL actually maintains a ratio of 2.33. See "The Light Stuff," Nov/Dec 2005.) Nysan's GreenScreen Eco (left)—also featured in "The Light Stuff"—is just one of a growing number of attractive solar-aware shading options, while products, including the LightHawk from Hubbell (right), incorporate daylight sensors (page 63).

### THE AMAZING LOAD-SHEDDING BALLAST

Electricity is a hot topic—particularly how to save it—since the costs have risen sharply. Concerns about the nation's stressed power grid are also growing, for good reason as anyone in New York City or California knows. An exciting product recently developed by the Lighting Research Center (LRC) is offering a solution: though it looks like any other ballast, the mechanism will help shed the electric load within a building's fluorescent lighting matrix by dimming the fixtures via an electronic signal from the power company or a facility management system. A transmitter, after receiving the signal, communicates with the ballast via a power line carrier. One transmitter can control 100 load-shedding ballasts. The LRC has found that building occupants will accept 50 percent dimming, if they know it is for a reason. The product, which is currently being tested in a Northeast Con Edison facility, will be manufactured by Osram Sylvania.

# DiLUME

ROBERTO FIORATO DESIGNER



## PERFORMANCE IN LIGHTING

3 controlled Optics  
6 sizes

IP65

**PRISMA**<sup>®</sup>  
ARCHITECTURAL LIGHTING

Prisma North America, Inc.  
300 Petty Road, Suite C  
Lawrenceville, GA 30043 - USA  
Voice 770.822.2115  
Fax 770.822.9925  
web [www.prismalighting.com](http://www.prismalighting.com)  
e-mail [info@prismalighting.com](mailto:info@prismalighting.com)

# Color FX

## Color Mixing Downlights

What do you get when you cross a downlight with a theatrical light?

**16 million colors, plus simple white light.**



- Patented VARI\*LITE® color mixing system as seen on Broadway
- 8,500 lumens of beautiful 3,000° K white light
- Low cost, 10,000 hour lamp
- Standard DMX512 control
- Available through an authorized Entertainment Technology Dealer or Lightolier Distributor

1.214.647.7880

1.800.223.9477

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



**Entertainment Technology**

A N O T H E R   B R I G H T   I D E A   F R O M   E T

Circle No. 35 or [www.archlighting.com/productinfo](http://www.archlighting.com/productinfo)