* Dark Sky - Star light, star bright...
AMERICAN MATTE™

Touchable durability meets jewel-like beauty. Prescolite’s unique American Matte finish provides both.

The matte surface conceals fingerprints and combines the precision control of specular with the soft appearance of semi-specular. American Matte gives new meaning to “finishing touch.”

This patented finish is exclusive to Prescolite and is available with our Architect® downlights and Virtual Source® optics.

To learn more about Prescolite’s premium reflectors, finishes, and luminaires, visit www.prescolite.com or call 888-PRS-4TEC.
Use of the Tinkertoys® building blocks image does not constitute approval or endorsement by Hasbro Inc. of this advertisement or of Lutron's products.
Can a light control system be this simple?

Yes.
Introducing EcoSystem™

Experience revolutionary EcoSystem technology at LIGHTFAIR 2005, Booth 719.
www.lutron.com/LightFair

LUTRON
Lutron controls your light...

© 2005 Lutron Electronics Company, Inc.
Circle No. 9 or www.archlighting.com/productinfo
DELTALIGHT
THE BRIGHT SIDE OF LIGHT

DELTALIGHT AT WORK®

DOT.COM

Climax

WWW.DELTALIGHT.US
HUBBELL IS ON THE RISE

If you've got a commercial project, we've got something for every corner of the building — even if it doesn't have corners. Whether you're lighting a room, hallway, stairwell, garage or building exterior, Hubbell gets the job done — often as no other supplier can.

That's because new product development is in high gear, and the rate is accelerating. And not just for the sake of making introductions. Through our Voice of the Customer program, we're creating real solutions to market needs. And we're doing it all across the Hubbell enterprise. Take a look at what we offer. Talk to your Hubbell distributor. See how Hubbell is combining lighting ingenuity with rock-solid reliability in the commercial marketplace.

hubbell.com/thinkagain

FULL CUTOFF, IN STYLE

Spaulding Cimarron Area Lighting combines unique styling with full cutoff performance and competitive pricing, for an outstanding architectural lighting value. Die-cast aluminum housing accepts straight and upswept arm designs. Available with a choice of colors, lamps and reflectors.

Circle No. 200 or www.archlighting.com/productinfo

DEEP LIGHTING FOR SHALLOW CEILINGS

The Zero Plenum Troffer from Columbia Lighting is only 1 1/2” deep — no deeper than standard T-Bar, and does not intrude into the usable plenum. The unique telescoping housing simplifies installation, providing aesthetics and performance in the tightest of spaces.

Circle No. 204 or www.archlighting.com/productinfo

OPTIMAL AREA LIGHTING, DIRECT OR INDIRECT

The Providence™ offers a choice of IES Full-Cutoff horizontal and vertical reflectors, or a revolutionary indirect, IES Cutoff optical system that provides less than one percent uplight for soft, glare-free illumination. Focused optical systems allow precise aiming of the light, resulting in smooth illumination of the environment — eliminating the uneven pools of light common with other fixtures. Efficient lamp sources and electronic ballast options provide longer lamp life and improved color correction.

Circle No. 207 or www.archlighting.com/productinfo

UNIVERSAL PARKING GARAGE SOLUTION

The PGL5/6 offers a choice of eight field-configurable lighting patterns, with a high-strength, non-yellowing Lexan® SLX refractor, and “up-light” reflectors to avoid cave-effect lighting. Kim Lighting’s Speed Mount provides quick and easy installation by freeing both hands for field wiring. Optics are fully sealed within an IP66 enclosure, protecting the fixture against dust, fumes, insects and moisture.

Circle No. 208 or www.archlighting.com/productinfo

Lexan is a registered trademark of General Electric Company.

OPEN, INTUITIVE LIGHTING CONTROL

The Simplicity LX Series provides advanced lighting control based on LonWorks® open architecture for true interoperability with other building systems. A unique handheld touch screen tablet with a graphical interface allows easy local and remote management of panels and connected devices.

Circle No. 209 or www.archlighting.com/productinfo

Circle No. 207 or www.archlighting.com/productinfo
TOTAL CONTROL

Eliminates
- Magnetic Ballast
- Retrofitting
- Dimmers
- Timers
- Relays
- Control Wires

Industrial

Features
- On Board Diagnostics
- Internet-Ready
- Variable Wattage
- Universal Input
- Most Lamp Types
- Major Lamp Mfrs

Aquarium

Hydroponics

IEPC Corp. 15179 Springdale St., Huntington Beach, CA 92649 • 714-892-4443 • www.vb1000.com • sales@vb1000.com
See us at Lightfair - NYC - Booth 1839 • April 12-14, 2005
Which hallway is costing you more?

From here it's hard to tell which lamp and ballast system is costing you more money. But it's not so hard when you look at your bottom line. The GE UltraMax™ system is more efficient than typical T12 systems, saving property managers and building owners over $70,000* in energy costs per year. Now that's a difference you can see.

For more information, visit www.gelighting.com.

*Annual savings based upon replacement of 7,055 fixtures at a 200,000 sq. ft. facility.
You don’t put limits on your vision. Neither will we.

Introducing Chroma®. The highly efficient, highly customizable area light.

This fall, Chroma will redefine performance and flexibility in site lighting design. The unique Chroma two-part housing gives you unlimited single or two-tone custom color choices… while revolutionary optical performance lets you illuminate your site beautifully with fewer fixtures. Get a special sneak preview and experiment with the possibilities at Lightfair, Booth #1937. You’ll see how Chroma creates lighting without limits.

www.chromavisions.net

© 2005 by Center Group LLC
Circle No. 45 or www.archlighting.com/productinfo
WELCOME TO NEW YORK CITY, A[|L]'S HOMETOWN. GIVEN THE MAGAZINE'S relationship to the design industry, I will assume that most of A[|L]'s readers have at least visited New York, if not spent substantial time here. Those who have not yet experienced the city first-hand will more than likely arrive with one or two well-reviewed travel books and the suggestions of friends. There are an infinite number of ways to thematically approach a few days in New York, and many of them have already been addressed by creative guidebooks. To date, however, I have not found a handbook to interesting lighting sites, of which there are many in New York.

In honor of Lightfair 2005 and all of our out-of-town visitors with an eye for lighting, we would like to provide a few suggested views. Like everything else in Manhattan, there is an excess of good lighting design. This is only a sampling of compelling projects completed since Lightfair was last in New York. Some have been recognized in the media, others not, but all are worth an appreciative look. We hope Lightfair does not leave you too tired to enjoy a few of the following.

**FAO SCHWARTZ, FIFTH AVENUE AND 58TH STREET** Reopened in November 2004, the renovated FAO Schwartz interior is now defined by its expansive ceiling. Nearly 80,000 LEDs stretch across the plane, with the capacity to change color and to create scenes. Visible from outside, the entertaining ceiling detail promises to put FAO Schwartz back on the map as a tourist destination in New York City. *(INTERIOR DESIGN: ROCKWELL GROUP; LIGHTING DESIGN: FOCUS LIGHTING)*

**HUDSON RIVER PARK, SEGMENT 4, PIERS 45 AND 46** Featured in A[|L]s September/October 2004 issue, the redevelopment of several piers on Manhattan's West Side is testament to the role lighting plays in urban revitalization. *(LANDSCAPE ARCHITECT: ABEL BAINNS BOUTZ; LIGHTING DESIGN: DOMINGO GONZALEZ ASSOCIATES)*

**IRISH HUNGER MEMORIAL, BATTERY PARK CITY** Winner of a 2004 A[|L] Light + Architecture award, the memorial is a unique combination of lighting and landscape architecture. *(ARCHITECTURE: 1100 ARCHITECTS; LIGHTING DESIGN: JOHNSON SCHWINGHAMMER LIGHTING DESIGN)*

**MILSTEIN HALL OF OCEAN LIFE, AMERICAN MUSEUM OF NATURAL HISTORY** Anyone with a childhood memory of the massive floating whale in the Hall of Ocean Life will be happy to know that the room seems reborn by renovations completed in May 2003. The highlight of the spruce-up is the theatrically lit laylight, which creates an underwater-like shimmer. The project won a 2004 Lumen Award of Excellence. *(ARCHITECTURE: POLSHEK PARTNERSHIP ARCHITECTS; LIGHTING DESIGN: BRANDSTON PARTNERSHIP, WITH DAVID CLINARD)*

**NOMADIC MUSEUM, PIER 54 AT 13TH STREET** A 45,000-square-foot building designed by Shigeru Ban to house the large-scale photographs of Gregory Colbert, the museum offers a wonderful exhibit through June 6, 2005, as well as a striking architectural lighting statement. Please see page 18 for more on the Nomadic Museum. *(ARCHITECT: SHIGERU BAN; LIGHTING DESIGN: ALESSANDRO ARENA)*

**PORTER HOUSE, NINTH AVENUE AND 15TH STREET** The zinc-paneled façade of the 10-story condo building is punctuated with light boxes. The bar-code effect of the vertical elements is striking at night, when one catches an unexpected view of the structure across 15th Street. *(ARCHITECT AND LIGHTING DESIGN: SHOP ARCHITECTS)*

**SCABARDO & ASSOCIATES ARCHITECTURAL OFFICE, 110 YORK STREET, BROOKLYN** The building would otherwise go unnoticed by the many cars and Q-train riders that pass over the Manhattan Bridge daily, but for the colorful lighting that dramatizes the structure's steel truss roof. From dusk until 2:00 a.m., passersby get the unexpected gift of an LED-illuminated roof that changes color based on the whim of the designers inside. *(ARCHITECTURE AND LIGHTING DESIGN: SCABARDO & ASSOCIATES)*

**TIME WARNER BUILDING, COLUMBUS CIRCLE** While not necessarily a favorite with architectural critics, the Time Warner building designed by Skidmore Owings & Merrill and completed last year houses high-end shopping, eating, and performing arts venues, many of which incorporate well-designed lighting. A lighting effect—somewhat gimmicky, but appropriate for the commercial character the area has acquired—has recently been added to the façade of the building.

EMILIE W. SOMMERHOF
EDITOR-IN-CHIEF
Appears White. Reflects Bright.

Alanod introduces the new pearl white look of MIRO Micro Matt™. The next innovation in reflective technology.

The new "pearl-white look" of MIRO Micro Matt is specifically designed to increase the effectiveness of today's innovative light-reflecting applications by presenting a reflector with a traditional white appearance and virtually the same reflectivity as award-winning MIRO 4®. Yet, MIRO Micro Matt consistently outperforms white painted reflective surfaces, producing 20% more light.

Among US lighting manufacturers designing lighting systems with the lowest energy usage per square foot, MIRO 4 has been the number one choice. Now, with a total reflectivity of 94%, Micro Matt is the bright choice for highly effective lighting systems that require a standard white look.

MIRO Micro Matt will change the way you think about high performance lighting systems that utilize MIRO optical surfaces. And there are no surprises with MIRO: they will outperform all other reflective materials. Bright lights stay bright, year after year. MIRO's consistent, long-term performance is guaranteed - for 25 years. And now our guarantee is available in a new "pearl-white look".

The new "white look" of MIRO Micro Matt produces 20% more light than white painted reflectors. Micro Matt will change the way you think about high performance lighting systems that utilize MIRO.

To see if MIRO is right for your application contact:

David Parkansky
call 512-733-9500
dwparkansky@alanod.com

www.alanod.com

Circle No. 2 or www.archlighting.com/productinfo
LIGHT CONGRESS Recap

LIGHT CONGRESS 2005 brought together a diverse group of lighting industry professionals and practitioners in midtown Manhattan this past February. Three moderated panel sessions focused on current topics within the industry—LEDs, the environment, and lighting design trends that are shaping the future.

Chadwick Moore, of the National Park Service, delivered the keynote address on the subject of the night sky. A physical scientist who has been studying and documenting the loss of this resource, Moore estimates that “dark skies” will be lost in 48 of the 51 states by 2026. As a result, people are turning to the national parks as the last resource for night sky gazing. Yet, even the parks are in danger, and have experienced a noticeable change in their “dark sky” status. But unlike other side effects of development, such as eroded topsoil and species extinction, Moore believes the loss of the night sky is reversible, and that the national parks offer a great venue for exploring new methods and technologies. Working with manufacturers like GE, Musco Lighting, and Oram Sylvania, the National Park Service is implementing a series of initiatives to explore conservation opportunities before it is an absolute requirement. Updates to the Grand Lodge at Yellowstone and the incorporation of LEDs in cave environments to reduce photosynthesis are two of the programs currently underway toward reversing the night sky epidemic.

LRC RESEARCH INITIATIVES

“ASSIST Recommends” Report Proposes LED Industry Guidelines

With the explosive growth of the LED market, especially in the last three years, manufacturers and designers are fast incorporating solid-state lighting components into their products and projects. In a presentation made in October 2004 at the Intertech LED conference, Jagdish Rebeleo, senior industry analyst with iSuppli Corporation, presented extraordinary growth numbers in the high-brightness LED market; in 2003 it grew by 86 percent and in 2004 high-brightness LEDs accounted for $2.8 billion, nearly 60 percent of the total LED market.

Despite the awareness among lighting design professionals of the necessity for a set of LED guidelines, given the rapid growth rate for this technology and its markets, industry and illumination performance standards have been slow to emerge, that is, until now. The Alliance for Solid State Illumination Systems (ASSIST), an LED industry group established by the Lighting Research Center (LRC) at Rensselaer Polytechnic Institute in Troy, New York, has recently published the first generation of recommendations “to define the life of LED components and systems used in general lighting, including methods for measuring life and sample data recording sheets.” The paper is intended for LED component and system manufacturers, and is a giant first step in establishing product and industry standards.

The report, titled “ASSIST Recommends: LED Life for General Lighting,” defines the life of an LED lighting product by the amount of light output degradation and the appropriate light levels for different lighting applications. Because LEDs rarely experience catastrophic failure, the report uses the term “useful life” in its definition to indicate the point at which light output from an LED product has decreased to an unacceptable level for the lighting application. The recommended useful life for general lighting applications is 70 percent lumen maintenance, and 50 percent lumen maintenance for decorative lighting applications.

The recommendations in the ASSIST report are gathered from LED life tests performed at the LRC, and lighting community and LED manufacturer input. In the issued press release, Dr. Nadarajah Narendren, director of research and head of the solid-state lighting program at the LRC explains, “The purpose of ASSIST Recommends is to help manufacturers present information to end users in a consistent manner.” A free download of the report is available at the LRC website at www.lrc.rpi.edu/programs/solidstate/assist/recommendations.asp.

LRC PARTNERS WITH BOEING

The LRC has also recently partnered with Boeing to develop innovative and efficient lighting solutions for commercial aircraft. Specific project collaborations will include evaluation of current aircraft interior lighting designs, and to research new lighting concepts and requirements, with particular focus on Boeing’s super-efficient 787 Dreamliner jet. The collaboration is part of the LRC’s Partner Program, a joint effort between academia, industry, utilities, public benefit organizations, public advocacy groups, and government to “provide leadership and coordinate efforts to advance the effective use of light.” In 2004, the LRC worked with Boeing to evaluate LED and halogen passenger reading lights to understand current fixture performance and recommend new specifications to improve reading light quality.

RIGHT LIGHT 6

FOR THE FIRST TIME IN ITS FOURTEEN-YEAR HISTORY, THE RIGHT LIGHT 6 CONFERENCES PROGRAM WILL be held outside of Western Europe. The venue this year: Shanghai, China. From May 9 to 11, leading experts will present over 100 papers discussing energy-efficient lighting technology, applications, policy, and program design topics. Right Light 6 will be held concurrently with one of China’s largest lighting fairs, the China Association for the Lighting Industry (CALI) annual exposition and trade show (May 11-13). As the conference agenda statement explains, “The change in venue recognizes the fact that Asia has taken on a leading position in driving both the world lighting markets. Further, lighting energy use (and resulting emissions) is growing at a faster rate in Asia, so the conference is being held where the biggest impacts of energy-efficient lighting can be made.”

The conference in China also allows energy-efficient-lighting specialists to meet Chinese manufacturers, regulators, and policy-makers, as the lighting community maps the direction of the industry. Additionally, with the 2008 Summer Olympics being held in Beijing, many of the world’s leading architects and lighting designers are planning to build commissions in China.

One of the distinct aspects of this year’s conference will be a special session to discuss compact fluorescent (CFL) standards for the United States, China, Australia, and Europe. Specifically, the session will cover: 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 Greenlight Regulations; draft proposals for the coordination of Chinese Certification and ELI CFL standards; and draft proposals for the coordination of Australian and Chinese CFL standards. Representatives from each organization will make a presentation regarding the proposed revisions to each standard, and conference attendees will be invited to discuss and offer comments on the proposals in an open-forum session.

Right Light 6 is a collaborative, not-for-profit conference organized by the International Association for Energy Efficient Lighting (IAIEL) and the UNDP/GEF/NBRC-funded China Greenlights Program, in cooperation with the Australian Greenhouse Office, the UK Market Transformation Program, the U.S. Environmental Protection Agency’s STEP (the Swedish National Energy Agency), and the International Finance Corporation.

The first conference was held in Stockholm in 1991 under the name “Right Light Bright Light.” Since then, four conferences have occurred: 1993 in Amstel, Netherlands; 1995 in Newcastle, England; 1997 in Copenhagen, Denmark; and 2002 in Nice, France. Proceedings from the first four Right Light conferences are available on the IAIEL website, www.iaiel.org. Proceedings from Right Light 5 are available at the European Council for an Energy Efficient Economy’s website, www.eece.org.

For additional information about this year’s conference, Right Light 6, go to www.rightlight6.org or contact the conference coordinator, Nils Borg, at info@rightlight6.org.
TWO TO SEE WHILE IN NEW YORK CITY

TWO THOUGHT-PROVOKING EXHIBITS TO CATCH WHILE VISITORS ARE IN TOWN FOR LIGHTFAIR ARE "ASHES AND SNOW" AT THE NOMADIC MUSEUM ON PIER 54 AND "EXTREME TEXTILES: DESIGNING FOR HIGH PERFORMANCE" AT THE COOPER-HEWITT, NATIONAL DESIGN MUSEUM.

"ASHES AND SNOW"

Downtown, on Manhattan's Westside, the Hudson River Park's Pier 54 at West 13th Street plays host to the Nomadic Museum and "Ashes and Snow" exhibit through June 6, 2005. The 45,000-square-foot structure designed by architect Shigeru Ban is the largest temporary exhibition space ever created in New York; even more noteworthy is its construction of shipping containers and paper tubing. The rectangular industrial tent-like structure is an interesting counterpoint to the ephemeral exhibit within—over 200 large-scale photographic works and an accompanying film by artist Gregory Colbert. The images document Colbert's 13-year exploration of the natural interaction between humans and animals, and the extraordinary moments that can occur between the two—from the young boy kneeling before an elephant beside a riverbed to a young girl "dancing" with an eagle among Egyptian temples.

The combination of materials (shipping containers, paper columns, a walkway of scaffolding plank, and beds of river stones that set off the sepia-toned mixed-media photographic works), along with a haunting soundtrack, make for a unique experience that engages all of the senses. For more information, visit www.ashesandsnow.org.

"EXTREME TEXTILES"

Opening April 8 and running through October 30, 2005, "Extreme Textiles" will exhibit over 150 technical textiles—highly engineered materials designed for ultimate performance in extreme conditions. The exhibit explores recent advancements in technical textiles and the structures and techniques used to create them. Applications range from architecture, apparel, medicine, transportation, aerospace, and the environment. Items on display are organized according to their

PRUDENTIAL LTG.

Life, Liberty, and the Pursuit of Happiness.

When you're in pursuit of inspired lighting ideas, you don't want the basics. You want total creative freedom. The kind you'll find on every page of the award-winning catalog of Prudential Ltg. Five striking new product designs join our extensive line of affordable, high-performance fixtures. For more on what's happening at America's most innovative lighting manufacturer, visit prulite.com.

1774 E. 21st St., Los Angeles, CA 90058  T 213.746.0360
high-performance characteristics—stronger, lighter, faster, smarter, and safer.

Smart textiles—which incorporate computer and telecommunications technologies, provide responsive feedback, and allow for interaction between material and user—have emerged as a significant area of study and development. Designers and scientists are also incorporating lighting elements like LEDs into smart textiles and experimenting with thermochromic pigments that change color with heat fluctuation. Some examples on display include a fabric architecture installation titled the Zip Room, which incorporates low-voltage DC power for solid-state lighting, and StitchSwitch, a light switch made from embroidered and woven conductive yarns.

In conjunction with the exhibit, a symposium will be held on May 12, titled "The Space between Science, Technology, and Design" and will address the relationship between science and design in textiles technology. For more information about the exhibit and symposium, go to www.cooperhewitt.org.
A NEW COMPANY ON THE BLOCK: IEPC

IEPC is the lighting industry's runway for new product technology. Manufacturers spend a year tinkering, tuning, and testing behind closed doors, in order to offer something exciting to their customers at this show; sometimes the critics are impressed, sometimes they're not. This year, exhibitor IEPC Var-Ballast believes it has something that will sufficiently wow its audience. IEPC is attempting to bring to market an electronic HID ballast that is capable of running metal halide or high pressure sodium lamps of different wattages (35W to 1650W) and input voltages, and of programmable timing and dimming via a wired or wireless connection. All of the pieces that make this possible—the dimmer, timer, scheduler, and scene-control features—are included in one 4- to 10-pound enclosure. The company will be ready to take orders at Lightfair, after receiving its TUV/UL certification in March.

According to founder and president Ron Flores, IEPC will also start beta testing its product at 50 to 75 sites around the country, including in gyms, parks, and street lights. Interestingly, IEPC will be able to monitor all beta site installation data remotely, thanks to the nature of the product technology.

"I've been around this kind of technology for 30 years," says Flores, who spent most of his career in the aerospace industry, until he realized the potential in the lighting marketplace. "I could see where I could take the knowledge I had gained working with high-technology weapons and implement that in the lighting industry."

Like any enthusiastic inventor, Flores is convinced his product will completely transform lighting specifications. "Let's say you are a big-box retailer, and you have 400-watt lamps up there," he explains. "Let's say you want to go to 320 watts—that is a complete retrofit. They would have to take everything down and put everything back up. With my product, if they wanted to change lamps, they could put the new lamp in there, tell the system, and be done. Do you realize the impact of this?"

Speaking anonymously, an industry executive familiar with the IEPC technology noted that despite the industry's efforts to date, he has "yet to meet an electronic HID ballast that doesn't have an issue." Mimicking the development curve of the electronic fluorescent ballast a few years ago, the electronic HID ballast is at the bottom of the upswing. "But, I would say IEPC is further ahead in terms of trying to combine in an electronic HID ballast the ability to save energy, to provide control without outside apparatus, and to monitor it as a fixture or device in the field."

As the industry continues to veer toward the energy-efficiency angle, products with the capacity for dimming and smart control will have the ear of potential end-users. Its debut at Lightfair will determine whether newbie IEPC Var-Ballast can indeed hold the community's attention.

MORE RESPONSE TO MARCH EXCHANGE QUESTION: THE ROLE OF LIGHTING IN A DESIGN EDUCATION

Lighting is an intangible design field and is much more difficult for the building owner to understand and evaluate quality. The IES and the IALD must make it a top priority to not only educate the designers of lighting but the general population as well.

The power of lighting is in the way it reveals the other design disciplines. Every discipline suffers from part-time outsiders doing their work and for lighting that includes engineers, architects, interior designers and reps. Part-time designers do not have the time to study the issues and give the owner the proper choices, equipment and depth that the full-time professional can. The question for the owner is a matter of how important is it to have a full-time professional designing their project. If there are full-time architects, interior designers and landscape designers on the project, there should be a full-time lighting designer.

No way can the current lighting design firms handle all the lighting design today. However, the other trades, especially reps should be the first to promote full-time lighting professionals and not do-it-themselves.

SCOTT OLDNER
Scott Oldner Lighting Design
Dallas, TX

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

BOROFLOAT® Borosilicate Float Glass

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

SCHOTT North America, Inc.
555 Taxter Road, Elmsford, NY 10523
Phone: 914-831-2251
Fax: 914-831-2353

BOROFLOAT® is a registered trademark of the SCHOTT Group, Germany.
Seductive and powerful, the MT6 Series features an optically precise reflector, simple re-lamping from the rear, and an internal accessory cartridge. Ceramic Metal Halide technology makes this a brighter, and more efficient light to enhance any interior space.

Lighting Services Inc  The premier specialty lighting manufacturer.
The trend toward sustainable design and daylighting has opened new opportunities for the architect and designer. It has also brought to light new challenges, notably the impact of the solar ray to the designed environment.

With over 30 years experience, MechoShade® has established itself as the leading single-source manufacturer of complete integrated solar shading systems, controls and daylighting solutions. Our experience in motorized and manual shading is unsurpassed. We offer a wide variety of control solutions for both commercial and residential applications. From simple line voltage switches to networked, addressable, building-wide controls, MechoShade offers a variety of solutions including integration into 3rd party Lighting, BMS and A/V Systems. And with over 100 visually transparent shade cloths in various weaves, densities and colors, our manual and motorized systems can meet any performance and design requirement.

That's why no matter what the design aesthetic, from the most eclectic interiors to the most dramatic minimalist settings, you'll find MechoShade bringing sustainable design to light.
Daylighting Design Update: One Year Later

A YEAR AGO IN THIS COLUMN, I COINED A PHRASE “21ST CENTURY DAYLIGHTING” TO help differentiate a modern multidisciplinary approach from traditional daylighting designs associated with architectural fashion. Whether or not the title will stick, the practice of daylighting is changing rapidly thanks to significantly increased resources, breakthroughs in design tools and philosophy, and a variety of new products.

EXPANDING RESOURCES

In the last few years, a considerable amount of daylighting research has been funded by the California PIER (Public Interest Energy Efficiency Research) program and through California’s utilities. For instance, the landmark research work by the Heschong Mahone Group that documented improved student test scores in daylighted classrooms was funded by the Daylighting Initiative of Pacific Gas and Electric (PG&E). Since then, additional work in this area and expanded research in other related areas has been undertaken, and the aggregate impact of all of this has placed daylighting on the front burner of energy issues in California. Most recently, a full daylighting lab, classes, and a design assistance program has bloomed at Southern California Edison’s new Southern California Lighting Technology Center in Irwindale, matching services available through PG&E at the Pacific Energy Center and at the California Lighting Technology Center in Davis (near Sacramento).

In the Pacific Northwest, the Better Bricks Daylighting Laboratories have grown and expanded their services to the entire region served by the Northwest Energy Efficiency Alliance (NEEA). Fully equipped and instrumented artificial skies and heliodons are now available for public use in Seattle and Portland, with design assistance from trained experts. Classes are offered throughout the region.

At the Lighting Research Center in Troy, New York, the Daylighting Dividends program was recently created to disseminate design and project-related information about daylighting. Related projects, such as work on photocells and other technical elements, are also being conducted there. Established organizations—including the Energy Center of Wisconsin’s Daylighting Collaborative, the New Buildings Institute, and Lawrence Berkeley Laboratory’s Windows and Daylighting Group—continue to provide free information, tools and publications. Try Googling “daylighting” and be prepared to spend several hours sifting through the results.

DESIGN TOOLS

What has made daylighting design so difficult until now is the lack of specific design tools. While large architectural practices with a full team of consultants can undertake complex daylighting analysis, the everyday school, office, or retail store project has no such budget, and design tools that enable rapid assessments are the only way to go. Development of these products is crucial to the success of daylighting. Some of the most important developments include:

• SkyCalc Historically, the vast majority of skylights have been much too large, causing overly high light levels, localized thermal discomfort, and increased air conditioning energy use. Whether it is a residential kitchen or the world’s busiest airport, poorly designed skylights have turned many energy-efficient projects into energy pigs.

SkyCalc is a Microsoft Excel template, accompanied by climatic data for many of North America’s cities. It is actually a mini-energy analysis program, taking into account data about the building, including the cost of energy, the building type and operating schedule, the lighting and mechanical systems, and the proposed skylight design. SkyCalc produces a graph showing the energy savings as a function of skylight-to-floor ratio (SFR). For anyone with moderate Excel skills, SkyCalc is easy to use and provides an extremely accurate result.

• Latest Lighting Analysis Programs The latest releases of the major independent lighting analysis programs, AGI32 and Lumen Designer (the replacement for Lumen Micro), have incorporated daylighting in a major way. Both programs are capable of fairly (CONTINUE ON PAGE 26)
See SPOT Run: The Sensory Placement and Orientation Tool (SPOT) aids in proper photosensor positioning.

The Sensory Placement and Orientation Tool (SPOT) was developed by the Architectural Energy Corporation under the California Public Interest Energy Efficiency Research (PIER) program. It is designed to assist in quantifying the existing or intended electric lighting and annual daylighting characteristics of a space. SPOT will also find the optimal positioning for photosensors relative to annual performance and annual energy savings. SPOT—a beta version which is available for download at www.archenergy.com—is fairly straightforward: After setting up a project information page and adjusting the program's calculation settings, users define the geometry and electric lighting layout of the space to be analyzed (above left and right).

After the room's geometric information is given, as well as information about site and usage (including location, occupancy, and shade devices), users can view Daylighting Results (above) with daytime workplane illuminances, and Electric Lighting Results (right), which demonstrate lighting levels with electric lighting at 100 percent.

PRECISION SPOTS

For retail and commercial applications where high-performance, fit and finish are critical, W.A.C. Lighting's new "Precision Spots" feature upscale, specification grade die-cast aluminum track heads with a sophisticated, clean style. The luminaires feature precision horizontal aiming, vertical locking capabilities, concealed wiring and abrasion resistant powder coat finishes.

Visit us at LightFair Booth #1441.

In addition to interior renderings of the space from four angles, SPOT allows the user to mix and match the various photosensor scenarios on the Photosensor Analyzer page (above). The Photosensor Generator (not shown) provides photosensor location recommendations.
sophisticated daylighting calculations complete with interior furnishings and renderings. Costs are reasonable, and seminars are offered to accelerate the learning curve.

Of course, for those demanding the highest degrees of accuracy and realism, Radiance remains a powerful option. The few people who have truly mastered this software are capable of providing extraordinary images and renderings of unbuilt structures, complete with any level of detail needed to illustrate the design. Either way, the power of the latest software enables responsible daylighting calculations with a reasonable investment in software and training time.

**Photometric Data for Skylights** The latest skylights use materials that shape and direct light very much like luminaires, such as specular wells and prismatic lenses. While lighting programs do a relatively good job with simple clear or diffuse glazing, complex skylights and other daylighting elements need to be addressed in a more thorough photometric manner.

Considering how skylights are affected by solar elevation and weather, developing a method for creating photometric data presents a unique problem. Under the PIER program, Heschong Mahone Group has developed a methodology for gathering photometric measurements and disseminating the data for use in conventional lighting programs. The results of daylighting calculations are much more accurate than any other method, including scale modeling. Photometric data is already available for some of the latest skylight products.

**SPOT** The Sensor Placement and Orientation Tool (SPOT) is a computer program developed by the Architectural Energy Corporation, also under the PIER program. (See page 24 for SPOT screen shots.) It will quantify the electric and daylighting performance on a project and assist in the optimum location of a photoelectric sensor. SPOT handles both sidelighting (windows and clerestories) and toplighting (skylights). Improper photosensor positioning is one of the principal causes of poor performance of automatic daylighting control systems.

Companies like Solatube are offering a new generation of skylights that bring natural light indoors without the drawbacks historically associated with skylights.
Choosing the right lighting reflects well on you.

Bright. Efficient. Environmentally friendlier. That describes advanced PENTRON® T5 fluorescent systems from SYLVANIA...as well as the people who choose them.

Creating a comfortable, well-lit environment is becoming easier, thanks to slim, 5/8” diameter, high performance PENTRON T5 lamps and ballasts. T5 lamps use less mercury, glass and phosphor than “environmentally friendly” T8 lamps. Teaming up the state-of-the-art phosphor technology of PENTRON T5 lamps with highly efficient QUICKTRONIC® electronic ballasts delivers unparalleled performance. These slender systems drive some of the newest, most innovative luminaire designs—leading to pleasing, energy saving lighting solutions. SYLVANIA, the T5 leader, backs it all up with QUICK 60+, the industry’s most comprehensive system warranty.

Saving energy. Saving resources. Now, doesn’t that reflect well on you?
Where does inspiration come from? Sometimes it is simply a new way of looking at the world around us.

The new Aviator Series from Beta Lighting is exhilarating in its dayform, versatile in its function and exceptional in its performance. While the Aviator’s engaging aesthetics complement and blend with virtually any environment, it is the uncompromising performance and unique engineering for easy installation and maintenance that warrant your interest.

For more detailed information, call us or visit the Beta Lighting website.

(800) 236-6800 • www.beta-lighting.com

© 2004 Beta Lighting Inc.
outputs from SPOT include graphical representations of light levels, and overall electric and natural lighting performance throughout the year. SPOT, which is presently in the final phases of development and testing, is expected to improve the performance of typical daylighting significantly. SPOT output also includes the average lighting power throughout periods of use, part of the determination of daylight autonomy.

**Daylight Autonomy Factor (DAF)** While there is presently a lot of preaching about the virtues of daylighting, there is very little information about what is or how to design the correct amount of daylight. The US Green Buildings Council (USGBC) LEED-NC 2.2 criterion, the best criterion value until now, requires achieving either a minimum daylight factor of 2 percent (excluding all direct sunlight penetrations) or at least 25 footcandles using a computer simulation model in 75% of all regularly occupied areas. Given that daylight varies and that daylight factor is worthless in a sunny or partly sunny climate, there must be a better way.

As part of the California Collaborative for High Performance Schools (CHPS) program, a nonprofit initiative aimed at promoting increased energy-efficiency and sustainable design in California’s schools, a group of daylighting experts has developed a better measure, called the Daylight Autonomy Factor (DAF). Using the SPOT system, all of the relevant factors, including climate, building schedule, room geometry, glazing, electric lighting, and so on, are accounted for, and the percentage of average electric lighting power is determined. The percentage of electric lighting energy saved is the DAF. For example, in a good daylighting design for a school in Boulder, Colorado, the DAF might be as high as 74 percent, but the same design in Seattle can only achieve a DAF of 58 percent owing to climate conditions.

Setting the DAF criterion will be just like addressing any other energy code value. A number of models are already being studied and preliminary criterion values are being proposed for California’s school program. If SPOT and DAF are as smart and useful as they appear to be, they should be adopted quickly by USGBC for the LEED series of standards, and may play an integral role in future energy codes.

Visit us at Lightfair Booth # 1248

**Xelogen 120V Series** - designed specifically for the general lighting industry

The lighting industry has been enjoying the benefits of low-voltage Xelogen lamps for several years, but those looking for line-voltage solutions still had to deal with the various shortcomings of halogen lamps. Now upgrade to the Xelogen 120V series and you can enjoy the same great benefits of low-voltage Xelogen lamps in your line-voltage fixtures. Benefits such as longer lamp life (5,000 hours), less heat output, UV free, & safety (Xelogen gas is low-pressured, meaning there are no worries about explosion, or the need for glass shielding on fixtures) make upgrading a no-brainer.

Xenon technology has come a long way in 18 years. Stay ahead of the competition by choosing Xelogen!
The first hand-bendable line-voltage track lighting system.

The revolutionary design features a satin nickel finish that can be curved in the field to form practically any shape. Complete with powerful and versatile illumination options, including incandescent and ceramic metal halide lamp configurations for heads and a host of decorative pendant designs. Now available in a white finish.

To receive Tech Lighting's latest binder, visit us at: LIGHTFAIR 2005 - Tech Lighting Booth #1719. April 12-14, Javits Center, New York, NY

T-trak — it's track lighting with a twist.
Indirect Lighting

Architectural Area Lighting offers a wide range of highly engineered indirect fixtures for even, glare-free illumination. When considering the quality versus the quantity of light, the indirect optical system is a perfect match for projects requiring a sense of mood as much as a sense of light.

- Traditional and Contemporary Styles
- IES Cutoff Versions Available for Dark-Sky Compliance
- Available in a Wide Range of Energy Efficient Lamp Sources

www.aal.net
Changes to 2005 NEC Impact Metal Halide Systems

Craig DiLouie

Among the many new updates and revisions to the 2005 edition of the National Electrical Code (NEC)—which is on a three-year revision schedule—are two changes that should register with specifiers of lighting systems. Both impact the specification of metal halide fixtures and lamps, and address methods for preventing risk in metal halide applications. Why the change? Although extreme metal halide lamp failure occurs rarely—only about three incidents per year—the NEC has deemed this type of lamp failure serious enough in its potential to injure and create property damage that they have mandated these changes to prevent such hazards.

Metal halide lamps have the possibility of "non-passive" failure at end of life, to use industry parlance. In this event, hot glass can exit the fixture and cause injury or fire. In sports facilities, another problem can occur: The outer bulb of the lamp can break during normal use of the space, resulting in falling glass; in addition, the arc tube may continue operating, resulting in possible overexposure to UV radiation among occupants, which can cause sunburn and a burning sensation around the eyes.

The 2005 NEC, which generally applies to both new construction and renovation projects, addresses both of these problems.

PROTECTED LAMPS

NEC Article 410.73(F)(5), "Metal Halide Lamp Containment," states: "Luminaires (fixtures) that use a metal halide lamp other than a thick-glass parabolic reflector lamp (PAR) shall be provided with a containment barrier that encloses the lamp or shall be provided with a physical means that only allows the use of a lamp that is Type-O."

This means that in states that adopt the 2005 NEC, all indoor open-optic metal halide fixtures must have special sockets that can only operate with ANSI Type-O lamps, which are protected lamps (typical for 175W to 1500W sizes) featuring additional containment around the arc tube. These lamps have a unique mogul base that, when used in conjunction with special sockets, ensures that open-optic metal halide fixtures can only operate protected lamps.

Type-E and Type-S lamps can continue to be used, but only for enclosed fixtures (or in fixtures installed before adoption of the 2005 NEC); thus, for new installations, users can choose between a suitably enclosed fixture or an open fixture that only operates a Type-O protected lamp. Fixtures with thick-glass PAR metal halide lamps are exempt from the "physical means" part of the code.

"This requirement is really not new, since the lighting industry has already been applying it for indoor open metal halide luminaires that operate lamps less than 350W," says Jim Pacocha, manager of HID product development for Lithonia Lighting. "The NEC is now leading the way by requiring this practice for all indoor open metal halide luminaires." He adds, "UL is expected to review this requirement to determine whether it will adopt this as a standard for fixture manufacturers to follow. If that happens, then the requirement will truly become national, since not all states will adopt the 2005 NEC quickly.

Lithonia has responded by communicating this code change to its customers over the past several months, and by building up its stock levels of protected lamps and products with protected sockets. Lighting practitioners can easily specify a protected socket by calling out, for example, 400MPP (P = protected socket), rather than 400M.

"The impact of this change to design practices is rather minimal," says Pacocha. "Architects, lighting designers, and engineers need to be certain that enclosed luminaires are suitably rated for arc tube containment, and open luminaires are provided with a socket that only accepts protected lamps. Most importantly, they will need to change their open luminaire specifications to reflect protected sockets and protected lamps. They don't want to be in a position where they have luminaires with protected sockets and standard lamps that will not operate."

Pacocha adds that in some cases protected lamps provide a higher light output than non-protected lamps, which will impact lighting calculations. "The standard 400W probe-start lamps are typically rated for 36,000 lumens, while some protected versions provide 40,000 lumens," he says. "The same light levels can be achieved with fewer luminaires, which will reduce the initial cost as well as operating costs of their lighting system designs."

REQUIRED ENCLOSURES

Another important NEC code change is NEC Article 410.4(E), which applies specifically to sports facilities and auditoriums. It states: "Luminaires subject to physical damage, using a mercury vapor or metal halide lamp, installed in playing and spectator seating areas of indoor sports, mixed-use, or all-purpose facilities, shall be of the type that protects the lamp with a glass or plastic lens. Such luminaires shall be permitted to have an additional guard.

NEC requires that these lamps be completely enclosed with a glass or plastic lens to protect the lamp from damage. The fixture can contain an additional guard, such as an external screen or cage, but this is not a substitute for the required enclosure.

"The 2005 NEC changes simplify the metal halide systems options available," says Jennifer Gerlock, product manager for Venture Lighting, which manufactures protected lamps with the designations MP and MPI. "They will reduce the potential risks associated with failure to adhere to lamp manufacturers' warnings and instructions in cases where Type-S lamps are specified in open luminaires."

Although the 2005 NEC went into effect January 1, 2005, adoption can vary from state to state. Based on the rate of implementation of the 2002 NEC, several states may adopt the updated code right away with about half of the states adopting it in 2005. Inquiries can be made with local electrical inspectors as to whether or not the updated code is in effect. "Once the code changes are adopted, architects, lighting designers, and engineers working on design projects will be responsible for ensuring that these requirements are met," says Gerlock.

In states that adopt the 2005 NEC, open-optic metal halide fixtures installed in new construction and renovation projects must have special sockets that can only operate with ANSI Type-O lamps, which are protected lamps that feature additional containment around the arc tube.
Now we have even more ways to turn you on.

Are you looking for the most unique lighting products from top European manufacturers? Energie can satisfy in more ways than ever before.

We've expanded our line to bring you the newest, most sought-after products from Multiline, Regent, Trilux, Troll and our newest partner, Castaldi.

Energie's broad line of lighting solutions includes sconces, pendants and linear systems, as well as spots and in-grades to effectively illuminate any architectural environment.

Each fixture is assembled in the U.S. and modified to meet exacting U.L. and C.U.L. standards required in North American lighting. Better still, we're ready to ship in just 4 weeks.

Find the European fixture that's perfect for your project. Visit us today at www.energielighting.com.
OGGETTI LUCE | WWW.OGGETTICOM

Product: Mosaic
Additions to the Mosaic collection include Small Fry (right), a narrower 14-inch-high version of the squatier Big Ben (below), which is 17 inches high and 14 inches in diameter. Handmade from resin, the pendants operate on line voltage and take 75W (Big Ben) or 60W (Small Fry) lamps. All visible parts are nickel plated. CIRCLE 100

Product: Mondo (bottom)
Handmade of fused and slumped Murano glass and signed by artists Trevisan e Beroncelli, Mondo sconces operate on line voltage and take a 60W light source. CIRCLE 101

LOUIS POUlsen | WWW.LOUISPOULSEN.COM

Product: PH Artichoke
The famous PH Artichoke pendant designed by Louis Poulsen almost 50 years ago is now available in a smaller size, better suited to tighter spaces and residential applications. With a diameter of less than 19 inches, the mini Artichoke is available in three finishes: brushed copper, brushed stainless steel, and white painted steel. The 72 leaves that surround the pendant effectively shield the light source, eliminating glare from almost any angle. The fixture is also available in three other diameters up to 33 inches. CIRCLE 103

RESOLUTE | WWW.RESOLUTEUSA.COM

Product: Aura
The Aura Pendant, designed by Brent Markee, takes both an incandescent (60W) or a fluorescent (18W double biax compact) light source, and features a printed polycarbonate diffuser. The pendant shade, which is 11 inches tall, has a drop up to 8 feet. CIRCLE 102

Product: Birzi
The Birzi table lamp, designed by Carlo Forcolini and Giancarlo Fassina, is made of pressed silicone, a soft and ductile material that is also sturdy and durable. It is designed to be reshaped by the user. With a height of over 10 inches and a lower-base diameter of 4 1/2 inches, the lamp comes in white, orange, and green. Birzi uses 60W incandescent bulbs. Appropriate for bars, restaurants, shops, and hotel rooms. CIRCLE 105

LUCEPLAN | WWW.LUCEPLAN.COM

Product: Lightdisc
The circular T5 fluorescent Lightdisc comes in two sizes, 12 and 16 inches in diameter. Designed by Alberto Meda and Paolo Rizzatto, the fixture consists of two polycarbonate shells: the outer shell acts as a diffuser; the inner shell integrates the reflecting parabolas with the housing system. With a depth of only 2 or 2 1/2 inches, the fixture appears to merge with the wall on which it hangs. Chrome plating increases reflectivity and brightness for installation in large spaces. CIRCLE 104
LAMPA | WWW.LAMPA.COM
Product: Clover
The curvaceous wood veneer Clover pendant from Lampa features maple, cherry, zebra-wood veneer, or white linen. Ready to hang with a white ceiling canopy and an adjustable cord, the pendant has a dimension of 17 inches by 12 inches, and takes a 75W to 150W light source.
CIRCLE 106

LEUCOS | WWW.LEUCOS.COM
Product: Loop
Celebrating the circular form, Loop is an inverted, triple-tier blown-glass diffuser. Designed by R. Toso and N. Massari & Associates, the pendant features a nickel-plated brushed metal canopy. A wall sconce, which casts light both up and down, and a ceiling fixture are also available.
CIRCLE 109

Product: Metropolitan Chandelier
With mercury glass, the Metropolitan Chandelier's arms dip down in silver powder-coated steel and hand-blown glass with a series of nickel-plated threaded balls, providing 300W of light. The chandelier measures 27 inches by 27 inches by 16 inches. The Metropolitan Chandelier uses five 60W candelabra bulbs. The standard stem length is 30 inches, but custom stem lengths are available. The fixture comes in red, purple, and mirror silver.
CIRCLE 107

EM COLLECTION | WWW.EMCOLLECTION.COM
Product: Serius
Available as a table lamp and pendant, the Serius line from Collaborative Studio emCollection is made from translucent polyester resin with a plated base and rod. The fixture takes a 25W or 40W incandescent. The pendant is 6 1/4 inches tall by 5 1/4 inches in diameter with an adjustable suspension. The table lamp stands 12, 14, or 16 inches tall. A variety of color combinations are possible from a palette of 24 colors.
CIRCLE 108

Product: Junko
The newest collection from Andromeda International is DesignAlive, of which Junko is a part. Inspired by the floating rush of a Venetian lagoon, Junko features amber-colored chains covered with slender, hand-blown glass tubes and rings. Created by Marin & Chiaramonte, the piece is available in various color options, including embedded gold leaf. It can be used as a room divider or stair wall, and comes in the following configurations: wall bracket, large hanging lamp, small hanging lamp, and tall column.
CIRCLE 110

Product: Brio
Andromeda's DesignAlive collection also includes Brio. Designed by Giusto Toso, Brio features a hand-spun glass disk floating on a stainless-steel plate. The disks are clear Venetian crystal, vivid red and dramatic black glass. The sconce is available alone or clustered in patterns.
CIRCLE 111
SPARK LIGHTING | WWW.SPARKLIGHTS.COM

Product: Copper (right)
A pendant fixture made of a Plexiglass outer cylinder and a copper mesh diffuser. Copper measures 12 inches in diameter and 25 1/2 inches in height. The cord is adjustable and table and floor versions are available. The medium base socket accommodates up to a 100W incandescent or screw-in fluorescent lamp. Handmade in Italy, custom sizes are available. CIRCLE 112

Product: Eclissi (left)
In mesh or maple wood, the Eclissi pendant fixture comes in one- or two-drum shapes. All metal parts are made of polished stainless steel. Lamp measures 12 inches in diameter and 6 3/4 inches in height and has an adjustable cord. Table, floor, and wall versions are available, as are custom sizes. Hand-made in Italy, the fixture uses a 100W incandescent or PAR lamp. CIRCLE 113

ORIGINAL CAST LIGHTING | WWW.THEOCL.COM

Product: Westport
A decorative pendant, the Westport comes in silver metallic, steel gray, matte white, satin black, red, blue, and natural aluminum finishes, with a prismatic diffuser in clear, frosted, red, amber, green, blue, frost green, and frost blue. The ballast is housed in a canopy that has a 45-degree swivel. The maximum stem length is 12 inches. Options include dimming, fused, and emergency ballasts. CIRCLE 114

EUREKA | WWW.EUREKALIGHTING.COM

Product: Moderne
The Moderne family of decorative fixtures includes a floor lamp (right), a sconce, and a table lamp. Both the floor and table lamps are height adjustable. The floor lamp stands 46 to 59 inches high. The table lamp stands 29 to 36 inches in height. Both have a shade diameter of 15 inches. Options include polished or satin metal detailing, and a card or linen shade. The sconce, which comes with a parchment shade, is 10 inches high by 5 inches wide, and has a depth of less than 4 inches. CIRCLE 115

Product: Satay
The Satay floor lamp features polished or satin metal detailing, with a card, parchment or linen shade. The floor lamp stands 90 inches high with a 30-inch diameter shade. CIRCLE 116

ESTILUZ | WWW.ESTILUZ.COM

Product: A-2306
This halogen ADA-compliant wall sconce, designed by Leonardo Marelli, comes with a glass diffuser on top and bottom. The glass is white satin. Using one or two 75W G9 halogen bulbs, depending on the model, this Spanish import is available in two lengths. The U.S. version features a square flat plate to cover a standard junction box. CIRCLE 117

ITRE | WWW.ITREUSA.COM

Product: Cast
With a curved glass diffuser, the Cast wall fixture cuts an especially elegant figure. Colors include satin finish or silk-screened glass in white. The construction features steel mounting and an anodized aluminum reflector. Also available as a ceiling fixture. Cast takes a halogen or fluorescent lamp, and has an electronic ballast. CIRCLE 118
Yes, there is a luminaire in this ceiling.

Zero interference...
 Zero hassles...

ZERO PLENUM

See us at LightFair Booth 2401
3808 N Sullivan Rd, Bldg 29 • Spokane WA 99216-1615
Tel 509 924-7000 • Fax 509 921-7560
www.columbialighting.com/ZPT

Patent Pending

Columbia Lighting
Hubbell Lighting, Inc.
Products

Terzani | www.terzani.com

Product: Bobino (left)
The Bobino wall sconce (shown) measures over 4 inches in depth and 21 inches in height. The shade itself measures 3 1/2 inches in diameter. The wire spool shape of Bobino is also available with a 25 inch diameter, for applications as a large hanging lamp. The fixture was designed by Jean-Francois Crochet. CIRCLE 119

Product: Petite Arene (below left)
A wall sconce or ceiling lamp, the Petite Arene has a structure color of chrome and a glass color of either white or amber. Designed by Jean-Francois Crochet, the Petite Arene fixture has two sizes: 3 inches deep by 10 1/4 inches in diameter, or 4 1/4 inches by 15 1/4 inches. It takes a 100W bulb. CIRCLE 120

Product: Kristal-Diam (below right)
The Kristal-Diam pendant, also designed by Jean-Francois Crochet, has chrome metal detailing and a clear glass diffuser. Taking a 60W halogen, the low-voltage fixture measures almost 6 3/4 inches in diameter. CIRCLE 121

Boyd Lighting | www.boydlighting.com

Product: Iwall
Ideal for bathrooms, reception areas or dressing rooms, the Iwall sconce provides flattering sidelighting from an attractive, low-profile fixture. Designed by Doyle Crosby, Iwall can be mounted directly on a mirror without backplates or on a wall with decorative backplates. Using a T5 fluorescent in a 1 1/2-inch-diameter fluted-glass diffuser, the sconce is ADA compliant. The fixture is available in 2-, 4- and 6-foot lengths. CIRCLE 123

Exceline | www.exceline.com

Product: Kaleidoshade / Kaleidoscope
An indoor/outdoor luminaire, this product from ExceLine is available in bright, saturated colors, as well as polished or brushed metal. Offered in a range of ceiling, pendant, sign and wall-mounting options with or without vandal guards. Kaleidoscope accommodates incandescent, LED, HID, and compact fluorescent lamps. The construction is precision die-cast aluminum with a corrosion-resistant Duraplex II polyester powder-coat finish. CIRCLE 124

Hampstead | www.hampsteadlighting.com

Product: Zero
A pendant fixture constructed of die-cast aluminum, Zero has a diameter of 14 1/2 inches and an overall height of 104 inches. Color options include blue, red, and silver, with metal accents in pearl beige or satin nickel. Providing direct lighting, the fixture uses a wedge-based halogen, but is also offered with a blue LED lamp for special lighting effects. CIRCLE 125
Light for all seasons

Changing much more than colour

Martin Architectural presents light in its most dramatic state to create expressive and flexible environments. If you would like to find out how, please contact us on the phone number below, or visit our website.

Circle No. 48 or www.archlighting.com/productinfo

www.martin-architectural.com
Tel. 954 858 1800
PROGRESS LIGHTING | WWW.PROGRESSLIGHTING.COM
Product: Mini Pendant
A low-voltage MR16 mini-pendant with blue glass surrounded by clear glass, the fixture comes with a brushed nickel finish. Part of the Illuma-Flex family of lighting, the mini-pendant measures 4 1/2 inches in diameter, and almost 5 inches in height; the overall fixture height, with the cord, is 72 inches. It uses one T4 lamp, 50W maximum; the halogen bi-pin base is included. The pendant is also available with white glass surrounded by clear glass. CIRCLE 149

ROTALIANA | WWW.ROTALIANA.IT
Product: Honey (left)
A system of diffusing light elements built around a lamp and a metal base, Honey is a modular structure with a theoretically unlimited number of extensions. The polycarbonate, honeycomb-like triangle shades clip together to facilitate transformation without tools. Pendant, ceiling-mounted, floor, and table lamp versions can be created from the components. CIRCLE 150

Product: Drink (below)
Producing an indirect halogen light, Drink is made entirely of metal, suggesting a long-stemmed chalice. A dimming switch is built into the stem. The floor lamp is available in chrome, white, black, cream, light blue, and metallized gray. CIRCLE 151

Ritorno/Beverly Hills
Selux offers innovative and gracefully inspired solutions to urban street renewal projects. This is a completely integrated cityscape system, with full street and indirect, non-glare pedestrian luminaires, including pole-mounted traffic signals.


In collaboration with its international partners, SELUX interior and exterior architectural lighting systems enhance urban life-style with creative lighting solutions. Our ever-expanding manufacturing facility in New York provides the support to our global perspective with the strength of American manufacturing and service.
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.
Do Semper Fi Remote Transformers Really Make a Difference?

Only The Best Will Do!

[See the Difference. Hear the Difference. Experience the Difference.]

Only Semper Fi addresses all of low voltage lighting's pitfalls and then provides the flexibility to overcome these issues in the field. Everything required for a proper installation is in a single enclosure that blends into any environment. Our 25 year warranty assures maintenance is never an issue. Our remote transformers are not the cheapest solution, Only the Best.


LED (Light Emitting Diode) Lighting Products designed to be driven for a long, long time... By Gemini One Five Luminaires. Proudly made in the USA with a Five Year warranty, we manufacture our own Integral and Remote Power Modules, the heart of every LED system.

We eliminate the mystery of LEDs and reduce it to three simple questions:

What voltage do you want to supply?
What color LED (Light output) do you want?
What finish do you want?

Please call to discuss your application, view our diverse selection, or contact a representative.

www.GeminiOneFive.com
800.660.2320

Gemini One Five Luminaires
a Semper Fi Power Supply partner

www.SEMPERFiPowerSupply.com
603.656.9729

PRODUCTS

NEO-RAY/COOPER LIGHTING | WWW.COOPERLIGHTING.COM
Product: Scala
The Scala T5 pendant luminaire consists of two T5 or T5HO lamps. The 1/2-inch-tall, 9-inch-wide unit comes in housing lengths of 4 and 8 feet. The ribbed semi-transparent/translucent diffusing media provides edge glow with some direct light (95.6 percent indirect/4.5 percent direct). Housing is cold-rolled steel; end caps are precision die-cast aluminum; and luminaires are prewired with quick wire connectors and use electronic ballasts. Decorative finishes include polished chrome and brushed satin chrome. CIRCLE 126

METALUX/COOPER LIGHTING | WWW.COOPERLIGHTING.COM
Product: E-Fixtures
E-Fixtures feature five optically enhanced specification-grade fixtures. In order, top to bottom: A recessed direct/indirect luminaire, the EFIX-3R combines a matte white indirect reflector and perforated direct lamp shield for brightness control. The EFIX-2W Series wrap-around uses a clear, low-brightness, extruded acrylic refractor, and a heavy-gauge-steel end plate. The EFIX-3S Series multi-purpose wide-strip family employs various mounting methods. The EFIX-3A lensed troffer series uses T8 lamp and micro-electronic ballast technology. The EFIX-3P luminaire incorporates a 3-inch-deep precision cell louver into a 5 1/2-inch-deep para-contoured fixture housing for a high-performance parabolic optic. CIRCLE 127

LITHONIA LIGHTING | WWW.LITHONIA.COM
Product: RT5 Volumetric Recessed Lighting
The RT5 product from Lithonia uniformly illuminates a space using a two-piece refractor system that employs a combination of diffusing film and precisely extruded prisms. The fixture has a unique lamp/ballast combination—a T5 lamp and a ballast that has end-of-lamp-life sensing and a stepped-switching bi-level output, which means up to 100 lumens per watt. Available in 2-foot-by-4-foot, 2-foot-square, and 1-foot-by-4-foot configurations, the fixture uses up to 33 percent less energy than the industry standard for office lighting, according to the company. CIRCLE 128

VISA LIGHTING | WWW.VISALIGHTING.COM
Product: Ether
Available in a wall or ceiling mount, Ether has a low-profile linear design, die-cast end caps and extruded-aluminum housing, and oven-cured low-VOC lacquer paint. It mounts to a 2-foot-by-4-foot electrical junction box, with hardware included. As with 75 percent of the Visa product line, Ether is available with 10-day shipping from date of order, with no minimum or maximum order restrictions. CIRCLE 129

Product: Summit Wave
The Summit series of semi-recessed pendants have a low-profile fabricated housing with shaped heavy-gauge wave and solid metal accents. Summit uses oven-cured EPR-compliant, low-VOC lacquer on trim components and semi-gloss white thermoset acrylic powder-coat finish on the reflector surface. With a recessed ballast tray secured by toolless captive fasteners, the product also features toolless fluorescent relamping. The pendants can be installed in a 2-foot-square ceiling grid. The product is available for 10-day express shipment, with no minimum or maximum order restrictions. CIRCLE 130

Focal Point
Product: Twelve
Suspended only a foot from the ceiling, Twelve is a 30 percent direct/70 percent indirect solution using T5 or T5HO fluorescent lamps. Available with a parallel blade louver with a linear patterned acrylic. Twelve is available in 4-foot and 8-foot lengths. It features Focal Point’s Ceiling Uniformity Filter and 115-degree low-beam optic, which enables high-quality light within the 12-inch suspension length. Two finishes are available: matte satin white and titanium silver. Options include emergency circuit and battery pack. CIRCLE 131
**ECLIPSE LIGHTING | WWW.ECLIPSELIGHTINGINC.COM**

**Product:** Par 5 Series

Measuring 3 inches wide, 14 inches long, and 2 1/4 inches deep, the Par 5 Series uses T5 fluorescent lamps with a 16,000 hour lifespan. The housing is extruded aluminum and comes in four finish choices plus custom. The larger version, the Parabol, measures 4 inches wide and 3 3/4 inches deep, with lengths up to 12 feet. Made of similar components, the Parabol provides higher light output and directional light with an asymmetrical reflector. Both are appropriate for libraries, offices, public buildings, facades, and kiosks and come in a variety of mounting options. CIRCLE 132

---

**PRUDENTIAL | WWW.PRULITE.COM**

**Product:** Mini Olympic

A compact linear direct/semi-direct lighting system, Mini Olympic's semi-specular parabolic louver measures 1 1/2 inches high and 2 3/8 inches on center, and provides 34-inch longitudinal shielding. Optional slotted top housing offers a semi-direct distribution for illuminating ceilings when stem or cable hung. Finish end plates can be removed for continuous-row installation. Fixtures are aligned and secured by bolting through alignment holes in end plates. The housing, available in 4- or 8-foot lengths, is formed of 20-gauge steel. Finish plates are 18-gauge steel. CIRCLE 133

---

**MARTIN ARCHITECTURAL | WWW.MARTIN-ARCHITECTURAL.COM**

**Product:** Cyclo Directional

Martin has added directional track-mount and surface-mount options to its Cyclo line of fixtures. Offering color mixing within the main reflector with RGB technology, Cyclo Directional allows the fixture to be positioned close to the illuminated object without casting a rainbow effect. Available with and without mounting arms, Cyclo Directional comes in titanium and white and is dimmable from 0 to 100 percent. Three 54W T5 tubes create the output necessary to cut through high ambient light levels. Track-mount versions clip directly to any standard Type 3 track from all major track manufacturers. CIRCLE 134

---

**ELLIPTIPAR | WWW.ELLIPTIPAR.COM**

**Product:** Style F144

A small, enclosed, semi-elliptical uplight, Style 144 is designed for wall-mounted uplighting of low, narrow spaces where sightlines are limited. Using T5/T5HO lamps for long life, good color, and low energy, Style 144 includes an integral electronic ballast with programmed start. It can be mounted in a continuous row or individually and offers through-wiring with an optional quick connect. Dimming and emergency battery options are available upon request. Its shallow profile is ADA compliant. CIRCLE 135

---

**LITECONTROL | WWW.LITECONTROL.COM**

**Product:** LC82

Designed for school classrooms, labs, and open offices, the LC82 features a small-scale extruded-aluminum housing. The fixture works in spaces with ceilings as low as 8 1/2 feet and with a suspension length of as little as 9 inches. The rectilinear shape also has grooved edge detailing. CIRCLE 136

---

**LEDALITE | WWW.LEDALITE.COM**

**Product:** PureFX

Employing the company's award-winning MesoOptics technology, the PureFX recessed lighting system offers controlled brightness and significant energy savings. According to the company, the fixture uses 36 percent less energy than standard recessed fixtures. A range of lamping options include T8, T5, and T5HO, with 2-foot-square, 2-foot-by-4-foot, 1-foot-by-4-foot, and 6-foot-by-4-foot size options. CIRCLE 137
**BARTCO** | [WWW.BARTC0LIGHTING.COM](http://WWW.BARTC0LIGHTING.COM)

**Product:** BAM625 Series Arm Mount Kit

For use with Bartco Lighting’s T5 and T8 remote-ballast display models. BAM625 Series Arms allow for remote-ballast luminaires to project away from a wall, ceiling, or other vertical surface. Arms mount to fixture end caps and allow rotation of the housing for aiming; there are three mounting options, depending on the mounting surface. Components come in anodized polished chrome, satin aluminum, and polished brass finish. Custom finishes are available. [CIRCLE 138](#)

---

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

**Product:** Oyster

Designed by Massimo Roj, Oyster is an uplight intended for use with 250W and 400W metal halide lamps. The contemporary-styled fixture is suitable for large areas like shopping centers, entrance halls, and auditoriums. The body and wall bracket are cast aluminum and finished in aluminum gray. Oyster is available with or without a reflector, which is finished in white powder-coat. [CIRCLE 139](#)

---

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

**Product:** Echo Reflections

Delivering asymmetric lighting distribution, the fixture is designed for use with T6 ceramic metal halide lamps and electronic ballasts. Three distinct reflector designs, available in a single housing, allow the designer to select the appropriate light distribution for the application while maintaining a uniform appearance. Tungsten halogen lamps are also available, as are single- and dual-lamp versions. The luminaire is constructed of extruded aluminum, and includes cast-aluminum end caps. [CIRCLE 140](#)

---

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

**Product:** F7000 Lighting System

The F7000 Lighting System contains a series of seven slim fluorescent modules, each providing different indirect lighting distributions and luminous textures. The modules use T5 or T5HO lamps with a full range of electrical options, dimming, and switching controls. Ambient fluorescent lighting elements can be suspended individually, arrayed in linear runs, configured in patterns, or spaced variably using in-line connectors of different lengths. Finishes include powder-coated, baked enamel, white, or aluminum. Point source modules with adjustable accent lights can be integrated into any run or pattern or used independently. The system accepts the company’s iGen technology with supplemental two-wire controls. [CIRCLE 141](#)

---

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

**Product:** Atrium Multichrome

Atrium Multichrome uplights for wall installations provide indirect general lighting. With three separately switchable, compact fluorescent lamps in red, green, and blue, the luminaire produces primary colors, as well as three secondary pastels and a shade of white. Mounted above eye level, the fixture offers optional flush-fitting wall installation. A horizontal diffuser acts as safety glass and the dark light reflectors eliminate glare. The wide light distribution enables the spacing between luminaires to be increased three times the ceiling offset. [CIRCLE 142](#)

---

**Product:** Axis Walklight

Installed in stairways or walls, the walklight features a flat, wide beam to illuminate paths and steps. An LED module, the light source is hidden from view for optimum visual comfort. The multiple powder-coated housing offers protection and the LED technology means efficient, long life. RGB technology is also available with the product for a range of color options. Control is carried out individually or as a group via separate analog control gear. [CIRCLE 143](#)
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

© 2005 Genlyte Group LLC. All rights reserved.  www.lightolier.com
LSI INDUSTRIES | WWW.LSI-INDUSTRIES.COM

Product: Industrial High-Bay Series
The Industrial High-Bay Series for warehouses, retail, and light industrial applications features the company's new universal quick-mounting plate for hands-free hanging during wiring; a redesigned ballast housing featuring easy access; and a choice of 17 optical assemblies with LSI's newly designed mounting collar with a locking tab system. The fixture also has multiple mounting positions for a broad range of photometric spacing criteria. CIRCLE 155

LUCIFER | WWW.LUCIFERLIGHTING.COM

Product: Mirage Square
The Mirage Square wallwasher from Lucifer features a highly-polished internal kick reflector with a frosted lens, which eliminates scallops and hot spots. The 4-1/4-inch-square fixture features a 2-inch-square aperture, and provides for tuneable lighting effects. It can hold ultraviolet or color-correction lenses; and can be flush mounted or flanged and installed in recessed non-insulated or insulated housings. Lamp options include 50W MR16s or 39HID metal halide. CIRCLE 156

PORTFOLIO/COOPER LIGHTING | WWW.COOPERLIGHTING.COM

Product: Gradient Kicker
The Gradient Kicker open wallwash reflector system combines light from a bare lamp, downlight cone, and kicker reflector for vertical illumination that is free from striations and flash back. It fits 13W, 18W, 26W, 32W, and 42W compact fluorescent lamps in 4-, 6-, 7-, and 8-inch nominal aperture housings. It comes in single, double, and corner wallwash versions, and includes a low-iridescent finish on all reflectors. Medium and wide beam, lensed, and open wallwash trims are interchangeable within the same housing. CIRCLE 157

JUNO | WWW.MODULIGHT-JUNO.COM

Product: ModuLight Emergency Lighting
ModuLight's new emergency lighting system provides one- or two-lamp T8 operation, 1100 to 1400 lumens, and 90 minutes of operation time. A power-delivery lighting system that can reduce installation costs by 20 to 40 percent according to Juno, ModuLight's power converter is mounted separately from the lighting fixture, eliminating the need for electrical components like conduits, wiring, and J-boxes. The product employs modular connectors and flexible cables, allowing for easy relocation of the equipment. CIRCLE 158

Product: Decorative Trims
Below are two of eleven recently introduced styles of decorative trims for Juno's line-voltage and low-voltage housings. Designed to add decorative accents to a variety of residential and commercial settings, the selection ranges from beveled die-cast trim rings in designer finishes to all-glass shower trims to more colorful glass accents. CIRCLE 158
<table>
<thead>
<tr>
<th>COMPANY</th>
<th>WEBSITE</th>
<th>PRODUCT</th>
<th>FEATURES</th>
</tr>
</thead>
<tbody>
<tr>
<td>W.A.C. LIGHTING</td>
<td><a href="http://WWW.WACLIGHTING.COM">WWW.WACLIGHTING.COM</a></td>
<td>Spec-Grade Downlight</td>
<td>These low-voltage recessed downlights are crafted of die-cast aluminum and available with 3-inch and 4-inch apertures. A variety of decorative, adjustable accent, and wet-location fixtures are available, with brushed nickel, black, white, and polished brass finishes. Options in glass, which include glass cylinder and glass ring configurations, are cobalt blue, amber and white. CIRCLE 160</td>
</tr>
<tr>
<td>PRESCOLITE</td>
<td><a href="http://WWW.PRESCOLITE.COM">WWW.PRESCOLITE.COM</a></td>
<td>Firelight</td>
<td>These fire-resistant downlights are approved for one-hour and two-hour fire-rated ceiling assemblies, including wood joist, steel, concrete, suspended, or sheetrocked. Ready to install out of the box, the fixture’s features include: a 5/8-inch pre-assembled sheetrock enclosed housing and a 1/4-inch fire-retardant gasket on the bottom for protection to the downlight and upper floors. Decorative elements are also available. CIRCLE 161</td>
</tr>
<tr>
<td>D’AC LIGHTING</td>
<td><a href="http://WWW.DACLIGHTING.COM">WWW.DACLIGHTING.COM</a></td>
<td>Strato Rectangle</td>
<td>Providing even, glare-free interior downlighting, Strato has a stacked, crisp-edged design that adds visual interest to the ceiling plane. The “sandwich” panels are perforated to create an interesting light pattern. Also available as an ADA-compliant wall-mounted fixture, the product features an aluminum body with a sand-blasted opal glass lens. Lamp choices include four-pin linear T5HO or bi-pin compact U-shaped fluorescent lamps. CIRCLE 162</td>
</tr>
</tbody>
</table>

**Achieve beautiful and dramatic lighting effects.**

Whether you’re seeking to sculpt a landscape with light or make an outdoor space useable at night, *The Landscape Lighting Book, Second Edition* shares all the technical and creative insights you’ll need to beautify your landscaping projects and consistently win client approval. Hundreds of illustrations along with prizewinning projects provide insight into new and creative ways that lighting can transform landscapes.

©WILEY
Now you know.
wiley.com
ALKCO | WWW.ALKC0.COM

Product: Tabbi
Ideal for under-cabinet, workstation, and display applications, where cool operating temperatures are required. This luminaire can be installed both horizontally and vertically. Tabby measures less than 2 inches high and 2 1/4 inches deep, uses an 11W or 13W T2 linear fluorescent lamp, and has an integral ballast. The linear light shield is rotatable through 120 degrees. The housing is fabricated from extruded aluminum with knockout end caps in a standard white polyester-resin powder-coat finish. Anodized-aluminum and chrome-plated finishes may also be ordered. UL and CUL listed for direct-wired and portable plug-in installations. CIRCLE 164

LAMPA | WWW.LAMPA.COM

Product: ILD Table Lamp
A contemporary table lamp suited for hospitality, retail, residential, and office applications, the luminaire features a high-gloss powder-coat finish, a three-way touch dimmer, and is available in the six standard Lampa colors: clay, canary, lichen, watermelon, orange, and white. The lamp stands 18 inches high, has a diameter of 7 inches, and uses a 100W bulb. CIRCLE 167

LUXO | WWW.LUXOUS.COM

Product: Arketto LED
The award-winning Arketto task light now incorporates three 3W LEDs with a lens that spreads the light over a large work area; according to the company, the design places more light on a desk than a 40W halogen, without the radiant heat. Arketto’s arm, which is covered in a woven textile material, is over 37 inches long and is available in four colors. The standard edge clamp can be replaced with a weighted base for desktop mounting. CIRCLE 165

HINSON & COMPANY | 718-482-1100

Product: Libra
Libra from Barcelona-based lighting manufacturer Metalarte, and offered in the United States as part of the Hinson Lighting Collection, offers a contemporary interpretation of a traditional reading lamp. The balanced design enables the lamp to tilt up and down and side to side. It also adjusts in height from 42 to 60 inches, and the arm extension reaches to a maximum of 39 inches. The base diameter is 11 1/4 inches. The shade, available in two color options (black or white), has a diameter of 10 1/2 inches. The available finishes include matte nickel or polished brass. For use with a 100W incandescent bulb. CIRCLE 169
ARDEE | WWW.ARDEE.COM
Product: Retail Rod
This self-illuminated aluminum rod system provides direct, cool-to-the-touch, glare-free fluorescent illumination. The underside of the rod has a flush-mounted prismatic lens fabricated from extruded acrylic or polycarbonate that snaps into place for relamping. Light is evenly distributed from a choice of either a full-spectrum compact T2 or T5 lamp. Available in lengths up to 5 feet, the luminaire can be specified for wall- or surface-suspended mounting applications. Lengths of up to 12 feet and mounting options may be special ordered. CIRCLE 170

ELECTRI-CABLE ASSEMBLIES | WWW.ELECTRI-CABLE.COM
Product: Dimmer Light
The Dimmer Light uses energy-efficient T8 fluorescents, with class-P-rated thermally protected ballasts that automatically turn off in the event of overheating. Housings are made of 20-gauge cold-rolled electro-galvanized sheet metal with baked enamel finishes in a range of colors from matte black, putty, and gray to custom-matched tones. Clear acrylic prismatic lenses and a full reflector offer light control and reduce veiling reflections. Fixtures have keyhole slots for mounting on wood; metal shelf mounts are also available. CIRCLE 172

MEYDA TIFFANY | WWW.MEYDA.COM
Product: Swing Arm Art Glass Lamp
Handcrafted of authentic art glass using Louis Comfort Tiffany's copperfoil construction process, this task luminaire features a geometric cone-shape shade with a beige art glass background and a red and yellow flag-shaped accent motif. The lamp stands 23 inches tall, 6 1/2 inches wide, and 23 inches deep. The shade diameter is 4 1/2 inches. For use with a 40W bulb. CIRCLE 171

YOU SEE:
OUTSTANDING STYLES
THE RIGHT TECHNOLOGY,
EXCEPTIONAL PERFORMANCE,
VISUAL HARMONY.

YOUR CLIENT SEES:
A WELL-LIT WORK PLACE,
A DRAMATIC ENTRYWAY,
A KILLER RECEPTION AREA,
A GORGEOUS KITCHEN...

When it comes to your creative vision, the right design tools make all the difference in the world. Con-Tech brings you a vast array of styles and finishes, plus the highest standards of performance, all wrapped in the customer service your vision deserves. Visit us at Lightfair booth #511 and see for yourself.
Product: Fantasia Jewel
This table lamp line from Oggetti Luce features mouthblown Venetian glass shades, in 12 different designs (Golden Braid shown above). The fixture shades are signed by the artist Hans Peter Niedhart. The base and stand are finished in satin nickel plate. A range of recommended bulbs can be used. CIRCLE 173

Product: Solutions
Most bathroom mirrors are illuminated by light fixtures mounted above the mirror, resulting in an unflattering light that creates shadows around the eyes and beneath the nose, lips, and chin. The Solutions Lighting line lowers the optic, thereby improving the approach angle, which provides a more attractive wash of light on the face. The product family offers a range of styles from contemporary to decorative. Model number F4831-08 (shown top) has a more traditional floral motif with a torch silver finish and etched white opal glass shades. The overall dimensions are 33 1/2 inches wide by 27 1/2 inches high by 9 inches deep. Model number F4820-68 (shown bottom) has a deep bronze finish and contemporary white bubble glass shades. Its overall dimensions are 32 1/2 inches wide by 27 1/2 inches high by 8 1/2 inches deep. Both fixtures require three 75W bulbs, and can also incorporate a dimmer. CIRCLE 174

WINDIRECT™
the new catalog
Softcover Design
168 full color pages
Over 100 New Products
New PS Profile, New Mounting Styles, New Lamp Choices, New Options
Beautiful Color Photography
Windirect installations including Modified Standard and Custom luminaires
Comprehensive Technical Section
Full photometric data with sample point-by-point graphs for each report
Call Your Rep or Request Online!

Winona Lighting
www.winonalinighting.com
800-328-5291

Circle No. 70 or www.archlighting.com/productinfo
hidden beauty: not just another pretty fixture.

The artistry behind Lucifer's new downlights has created function that is as beautiful as the form. Accepting HID, CFL, and IR lamps, these low profile fixtures make energy efficiency a creative opportunity with louvers, lenses, and baffles that allow light to be tuned for a variety of effects. Lucifer downlights: beautifully designed, elegantly engineered, and exceptionally efficient.

LUCIFER LIGHTING COMPANY

800.879.9797
luciferlighting.com
HALO/COOPER LIGHTING | WWW.COOPERLIGHTING.COM
Product: Architectural Flexible Track System
A three-circuit hand-bendable track system combining two 120V circuits and one 12V circuit, the Architectural Flexible Track System is offered with five fixture families, handmade glass pendants (in juicy colors like Blueberry Swirl, Cherries Jubilee, and Butterscotch Twist), and a variable track connector hub. Lampholders accommodate incandescent, low-voltage, metal halide, and T5 fluorescent lamps, in wattages from 40W to 75W. Several of the lampholders work with existing Halo track systems. CIRCLE 175

CON-TECH LIGHTING | WWW.CON-TECHLIGHTING.COM
Product: Mini AroTech Slimstyle
The AroTech Slimstyle Series, with a 39W mini electronic metal halide ballast, takes a ceramic metal halide 39PAR20 lamp, which provides excellent color rendition (up to 85CRI), long lamp life (average 9,300 hours), and spot and flood beam spreads. A cast-aluminum gimbal enables the fixture to rotate 358 degrees in the horizontal plane to facilitate precise aiming. The small-size ballast weighs only 9 ounces, and is accessible through a backplate. CIRCLE 176

TIMES SQUARE LIGHTING | WWW.TSLIGHTING.COM
Product: C16 Series
The C16 Series consists of three miniature fixtures (C16H, C16W, and C16P) that accept low-voltage MR16 lamps from 20W to 75W in a variety of beam spreads. The pattern projector comes with built-in, four-way adjustable framing shutters and pattern holder, allowing the projection of logos and other visuals. Accessories, mounting, and dimmer options are available for each fixture. CIRCLE 177

ERCO | WWW.ERCO.COM
Product: Optec Spotlight
The Optec line of fixtures from Erco now includes a family of spotlights, which like other products in the line, separates the lamp head from the control gear housing. The fixture includes a Softec lens to optimize the light quality. The system allows for various low-voltage reflector lamps up to 100W, and a variety of structural shapes house the different sizes of the electronic transformers. The luminaire is intended to light retail spaces, restaurants, and galleries. CIRCLE 178

LIGHTING SERVICES INC | WWW.LIGHTINGSERVICESINC.COM
Product: TPM111 Series
The TPM111 Series Spotlight accepts the most recent addition to the Philips CDM family of lamps—the 35W ceramic metal halide CDM-R111. Constructed of heavy-duty extruded and cast aluminum, the TPM111 Series includes an internal accessory cartridge that accepts color filters, spread lenses, light-blocking screens, and louvers. Finishes include graphite, platinum, silver, black, and white, with a variety of mounting options. The fixture is appropriate for applications where a high-intensity spotlight is needed. CIRCLE 179

NORA LIGHTING | WWW.NORALIGHTING.COM
Product: MiniTrack Collection
Intended for small coves, display cases, and other constrained areas that demand vibrant and precise lighting effects, the MiniTrack fixtures are available as halogen spots, miniature cove/cabinet illuminators and pendant cord fixtures for directional illumination or indirect accents. CIRCLE 180
TECH LIGHTING | WWW.TECHLIGHTING.COM
Product: T-trak
The hand-bendable line-voltage T-trak system now includes a white finish option for components, providing designers with an opportunity to capitalize on T-trak’s versatility while blending with a white ceiling. Available options include incandescent and ceramic metal halide lamp configurations for heads and a host of decorative pendants. CIRCLE 181

ALFA/JUNO LIGHTING | WWW.ALFALIGHTING.COM
Product: Vintage Bronze Collection
The Vintage Bronze Collection is available in a variety of low-voltage mono-track systems from Alfa. The comparatively small size of Alfa’s systems and the comprehensive line of installation hardware allow the system to be installed in many environments. CIRCLE 182

BRUCK LIGHTING | WWW.BRUCKLIGHTINGSYSTEMS.COM
Product: Bling
Bling is comprised of draped strands of Italian glass molded into a clean pendant shape. Available in Amber or Clear, the glass reflects and refracts light for a sparkle effect. Available in two sizes as a pendant that can be attached to a canopy or to any of Bruck’s line of track systems, including the Boa, Enzis, and Flex Line. Cable length can be field-cut or specified during ordering. CIRCLE 183

LIGHTOLIER | WWW.LIGHTOLIER.COM
Product: Alcyon
Alcyon luminaires feature a visually wireless design, a thin blade-like stem that virtually disappears in profile creating a floating head effect, and 360 degrees of horizontal rotation. Alcyon uses MR16, fluorescent T4, and PAR halogen sources, and unique options including cylinders, rings, wall-washers, and decorative glass units. The Alcyon low-voltage units feature a front cartridge that is hinged and captive and comes standard with a stainless-steel ring that holds up to two accessories. The series also includes companion line-voltage accent fixtures. CIRCLE 184

Sentry Exterior Lighting
LUMINAIRES
POLES
BOULIARDS
ACCESSORIES

For more information, call Sentry Electric, LLC at 516.379.4660, or visit us at www.sentrylighting.com.
Visit us at LIGHTFAIR 2005, Booth # 504

Sentry Electric, LLC
135 Buffalo Avenue
Freeport, New York, 11520
www.sentrylighting.com
Let VS light up your life.

As one of the world’s leading manufacturers of lighting components, Vossloh-Schwabe offers its international customers a comprehensive and practically unrivalled range of lighting products.

Vossloh-Schwabe has been putting quality first for 85 years. Today, as part of the Matsushita Electric Works Group, we are upholding this tradition as the basis of both the excellent reputation and high profile of the VS brand.

At the beginning of 2005, VS U.S. will be launching a completely new line of T5 and T8 sockets that are tailored to suit the needs of our U.S. Customers. Please ask for your personal sample display including poster and CAD files.

The extended five-year product warranty on all VS component systems is further proof of Vossloh-Schwabe’s high quality standards.

Vossloh-Schwabe: A New Lighting Experience
Inspired by Light

www.seegreatshapes1.com
**VISIO LIGHTING | WWW.BEACONPRODUCTS.COM**

**Product: Fiaccola**

Recently launched in the United States by Visio Lighting, Fiaccola, Italian for "torch," is a high-performance linear pipe-light system for outdoor area, site, and landscape illumination, and selected indoor ambient applications. Available as a building-mounted, pole-mounted, or above-ground luminaire, the fixtures provide energy-efficient, glare-free illumination using compact U-shaped PL fluorescent and linear T5 fluorescent lamps. Specified in lengths from 2 to 6 feet, and in 12-inch increments for larger multi-luminaire applications, the illuminated portion of the fixture can be specified to cast light in a 90-, 120-, 160- or dual-sided 90-degree distribution pattern. Several window fascia options are also available. The cylindrical housings are fabricated from high-grade stainless steel. The lens is constructed from frosted or clear polycarbonate. The nested pipe design allows for front- or top-end removal when re-lamping is necessary. CIRCLE 238

**MARTIN ARCHITECTURAL | WWW.MARTIN-ARCHITECTURAL.COM**

**Product: Inground 200 Series**

A durable range of IP 65/67-rated inground fixtures, the Inground 200 Series is a series of programmable uplights for the illumination of façades, columns, landscapes, and interior applications. Three color systems are available: single color, six colors, and full-spectrum. An adjustable lamp frame allows for 360-degree rotation, to compensate for variations in terrain and to allow for precise optical aiming. Inground 200 is designed to withstand loads of five metric tons and can be sleeve-mounted and installed in concrete for drive-over applications. Options include custom colors and dimmers. CIRCLE 239

**ARCHITECTURAL AREA LIGHTING | WWW.AAL.NET**

**Product: Arts & Crafts**

Available in round and square versions, the Arts & Crafts luminaire provides full cutoff optics, and symmetric and asymmetric light pattern. Mounting configurations include post top, wall and pendant mount. Using full cutoff optics, the Arts & Crafts emits no light above 90 degrees horizontal. Five lamping options include: CF, PLH, OL, metal halide ED17, and T6. Hood finish options are stainless steel, copper, opal acrylic, mica, and painted aluminum. Fixture has an IP rating of 55. CIRCLE 240

**Product: Universe Bollard**

A modular fixture system, the Universe Bollard offers a refractor optical system with IES cutoff options for Dark Sky compliance. Options include House Side Shields and Battery Backup systems for egress lighting applications. Hoods come in straight and flared shades; users can choose from among 11 colors and two hood finish options: stainless steel and natural copper. CIRCLE 240

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

**Product: DS-13/18**

This low-glare wall-mounted downlight suits parking garages and other outdoor building-mounted area lighting. The luminaire emits directional forward-throw downward illumination. The smooth-edged, semi-cylindrical housing mounts flush to wall surfaces, and is available in two lengths: 13 or 18 inches. Each luminaire has a one-piece asymmetric anodized metal reflector which provides precise beam control, and a tempered glass lens to minimize uplight and light scatter. Lamp options include metal halide and high and low pressure sodium in different wattages. The luminaire meets or exceeds all ASTM requirements, including 1,000-hour salt-spray endurance testing. CIRCLE 241
**BETA | WWW.BETA-LIGHTING.COM**

**Product: Aviator**

In airfoil shape, the Aviator is available in segmented Type III and Type IV optics and meets full IESNA cutoff classification. Made of one-piece die-cast aluminum, the Aviator has a removable electrical component tray, a toolless quick-release lens frame, and two optical system choices. The fixture’s ballast is heat sunk on two sides and passes UL’s 40 degrees C ambient temperature rating test. Five mounting choices are available. **CIRCLE 242**

---

**LOUIS POULSEN | WWW.LOUISPOULSEN.COM**

**Product: LP Icon**

This new family of full-cutoff and cutoff luminaires is available in post-top, cable-mounted and wall-mounted versions. The fixture is offered in Mini (15 1/2 inches by 18 3/4 inches) and Maxi (21 1/4 inches by 26 inches) scales, in both Type III and Type V Square distributions. An additional Type V distribution is available with the Mini. The housing is die-cast aluminum with a natural painted aluminum or charcoal grey powder-coated finish. Four heavy-duty latches allow for toolless access. Lamp options include high pressure sodium or metal halide. **CIRCLE 243**

---

**HANOVER LANTERN | WWW.HANOVERLANTERN.COM**

**Product: Indian Wells Series**

The mission-styled Indian Wells Series is constructed of cast aluminum and opalescent honey glass panels, and comes in two sizes: small (11 3/4 inches by 8 1/8 inches) and large (18 5/8 inches by 14 inches). The housing is available in 25 finish selections, including five new choices: Ironstone, Landscape Brown, Vintage Copper, Granite, and Dark Bronze. Several mounting options are available including: wall bracket, ceiling suspended, or post top. Posts are not included. **CIRCLE 244**

---

**ORIGINAL CAST LIGHTING | WWW.THE0CL.COM**

**Product: Regency**

This new outdoor series of sconces from OCL is available with four face designs and eight finish colors; it requires no recessed mounting and has five lamping options (13W QD, 27W BX, 39W BX, and 60W T10). The cylinder housing is constructed from F1-rated 3/16-inch-thick 100 percent virgin white acrylic. Compact fluorescent fixtures are provided with electronic ballasts. Dimming and emergency ballasts are also available. The back box is painted to match fixture finish. **CIRCLE 245**

---

**ALLSCAPE | WWW.ALLLIGHTING.COM**

**Product: SL-43**

The SL-43’s housing is constructed of rugged, impact-resistant, compression-molded RhinoLite composite material and structurally reinforced with glass fibers. A matte black housing is standard, and custom colors are available. In-ground and above-ground options available. ETI and CETL listed for wet locations, direct burial and concrete pour. Meets IES7 requirements. **CIRCLE 246**
**BEAG/US | WWW.BEGA-US.COM**

**Product: Pole Mounted Luminaire**
For illumination and delineation of interior or exterior spaces such as landscape areas, pedestrian squares, plazas, and building entrances, the Linear Pole Top Luminaire is made of a one-piece die-cast aluminum housing. The integral cast transition fitter slip fits a 3- or 3-1/2-inch pole top or tenon. The luminaire comes with a white translucent acrylic cylinder with a die-cast aluminum top and is fully gasketed for weather-tight operation. **CIRCLE 247**

**Product: Low-Surface-Temp Floodlight**
This ground-mounted low-surface-temperature floodlight (8754) uses ceramic metal halide light sources. Constructed of copper-free die-cast aluminum alloy, the floodlights are suited for general illumination of trees, walls, signage, and other surfaces. Two adjustable models meet low-temperature requirements. The floodlights come with light distribution from either an anodized aluminum or a dichroic pressed glass reflector. Convex tempered glass is 1/4 inch thick. **CIRCLE 247**

**LSI INDUSTRIES | WWW.LSI-INDUSTRIES.COM**

**Product: Hilton Wall Sconce**
The latest addition to LSI’s Hilton Series, this wall sconce comes in three configurations: as an uplight/downlight combination, a downlight, and an uplight. Featuring a contoured half-cylinder housing, the luminaire has lamping options up to 250W. There is also a compact fluorescent dimming option. **CIRCLE 248**

**SELUX | WWW.SELUX.COM/USA**

The Saturn Cutoff is available in both a cutoff or a full-cutoff version. The luminaire is constructed from die-cast aluminum, and the pole and base from either stainless steel or aluminum. Features include three mounting options: single, double, and wall. Other options include a sealed aluminum reflector with Type II and Type V distribution; and four standard finish choices. Custom colors can be specified. The Saturn Cutoff uses T6 ceramic-base metal halide lamps from 35W to 150W and has a lamp color of 3000K. **CIRCLE 249**

**RSL | WWW.RSLLIGHTING.COM**

**Product: RSL Mini Underwater Lighting**
This collection of miniaturized, low-voltage submersible luminaires fits unobtrusively into man-made or natural shallow ponds, pools, wells, or fountains. Three models are available: The UW30P is a bullet-shaped dual-purpose fixture with a head depth of 6 inches and a lens aperture of 3 inches, and a rotatable base. It uses a 20W MR16 halogen lamp. The fixture can be tray-mounted underwater or stake-mounted above ground. The UW32P is an ultra-compact, rotatable disc-shaped fixture with a U-shaped weighted magnetic-base mounting and uses a 10W MR11 halogen lamp. The UW31S has a miniature puck-shaped housing and uses a 10W T3 lamp. **CIRCLE 250**

**SPAULDING | WWW.SPAUL0INGLIGHTING.COM**

**Product: Cimarron**
The Cimarron combines contemporary design and efficient flat-glass full-cutoff optic performance. The die-cast aluminum housing is engineered for installation with one of four IES light distributions (Type II, III, IV, and V) and a wide range of lamp sources including 175W to 400W metal halide or super metal halide, 100W to 400W pulse-start or 100W to 400W high pressure sodium lamps. Mounting options include upswept or straight arms for pole or wall installation. The five standard colors are bronze, black, white, grey platinum silver or two premium colors (red and forest green). **CIRCLE 223**
Masque™
Enlighten the Outdoors

Introducing Masque™ -
A single family of exterior lighting products to accentuate architectural details, building facades and canopy lighting. Four scaled luminaire sizes, ten distinct optical systems and forty different lamp choices to accomplish a wide variety of application requirements.

Illuminated Fascias -
Imagine the ability to personalize the lighting task by incorporating distinct architectural features or corporate logos onto the illuminated fascia of a Masque light fixture.

Insight Lighting - There is no substitute for integrity

Insight
505.345.0888
www.insightlighting.com
Circle No. 30 or www.archlighting.com/productinfo
PRODUCTS
NAVILITE/JUNO | WWW.JUNOLIGHTING.COM
Product: N1 Series
Available in white or black, this adjustable emergency fixture features a lead calcium battery, powers two 5.4W incandescent wedge-base lamps, and can be mounted on the wall or ceiling. Optional high-output modules can power 16.5W for 90 minutes. The fixture is 16 inches wide (from lamp to lamp) and 5 inches tall, with a depth of 5 inches. CIRCLE 216

Product: Edge-lit Exit Signs
Illuminated with LEDs, these edge-lit signs have three mounting options: top, side and back. Other features include an extruded-aluminum housing, a UV-stabilized clear acrylic panel, and a lead calcium rechargeable battery. The field-applied chevron directional indicators simplify specification and installation. The sign is 13 3/4 inches wide with the aluminum mounting platform, and 12 inches tall. The mounting platform is 1 3/4 inches wide. CIRCLE 216

ORIGINAL CAST LIGHTING | WWW.THEOCL.COM
Product: Shadow (left)
Part of a new series of ADA-compliant integral emergency sconces, Shadow is available with a variety of drop-in panels that softly diffuse the light. The luminaire requires no recessed mounting and comes with a perforated metal, lattice, or basket-weave inner face and with nine outer face finishes. Measuring 12 inches square, the luminaire is available with dimming ballast and is UL damp listed. CIRCLE 217

Product: Icon (right)
Available in two sizes and two lamping options, the Icon emergency sconce requires no recessed mounting. Specifiers can choose between two cylinder materials and two finishes. In emergency mode, the rectangular-shaped Icon uses two lamps and is available with integral dimming ballast. CIRCLE 217

ACRILEX | WWW.ACRILEX.COM
Product: Acriglo
Providing illumination without a back-up power source during loss of electricity, Acriglo is charged by the light emitted during normal operation. The glow lasts for several hours with a lighting capacity equivalent to moonlight. Acriglo can be charged and discharged indefinitely without degradation of the acrylic. The sheets are offered in several colors, textures, and thicknesses. CIRCLE 218

CHLORIDE SYSTEMS | WWW.CHLORIDESYS.COM
Product: SV16
An attractive emergency lighting solution for harsh, vandal-prone environments, the SV16 employs MR16 lamps. The housing, back plate, and electronics shell are molded from high-impact polycarbonate and meet UL's flame-retardant standard for emergency lighting products. Appropriate for wet locations, the SV16 is fully gasketed to prevent water entry and functions in temperatures ranging from 5 to 104 degrees Fahrenheit—a capability achieved through the use of an optional battery heater. CIRCLE 219

Product: Tuff-Act Harsh Environment Exit
The Tuff Act wet-location exit sign utilizes die-cast aluminum housing with impact-resistant injection-molded polycarbonate covers. Exposed hardware is vandal-resistant and anti-corrosion coated, making the sign appropriate for weather-exposed areas like parking garages and courtyards. The fixture promises 120 minutes of emergency power with a nickel cadmium battery; LEDs provide an estimated service life of 10 years. CIRCLE 219

MAXLITE | WWW.MAXLITE.COM
Product: Decorative Emergency Fixture
After a power failure, this circular emergency fixture maintains 25 percent lumens for up to 90 minutes. With a ceiling fixture aesthetic, the luminaire is appropriate for hotels, restaurants, and other public places. It has a test button for the fire marshal, as well as a low-battery light and is available in an 18W Energy Star ceiling fixture. MaxLite maintains an extensive inventory of SKUs, for timely delivery. CIRCLE 220

ARCHITECTURAL LIGHTING
THOUSANDS OF INTERIOR PRODUCTS & RESOURCES, THREE DAYS, ONE LOCATION – THE MERCHANDISE MART, CHICAGO

June 13-15, 2005

NeoCon®
World’s Trade Fair

SOLUTIONS FOR THE DESIGN & MANAGEMENT OF THE BUILT ENVIRONMENT

WWW.MERCHANDISEMART.COM • (800) 677-6278

Circle No. 87 or www.archlighting.com/productinfo
PRODUCTS

LAMPS/BALLASTS

PHILIPS LIGHTING | WWW.PHILOS.COM

Product: MasterColor Integrated
The 25W MasterColor Integrated is an all-in-one lamp and ballast in a PAR38 reflector. It can replace up to a 90W standard halogen lamp and, according to the company, provide more light output with three times the life and energy savings of a standard halogen. The crisp white light source provides 87 CRI, an average rated life of 9,000 hours, and comes in 10-, 25-, and 40-degree beam spreads. The ceramic metal halide lamp is appropriate for retail settings. CIRCLE 201

Product: Mini MasterColor
The smallest ceramic metal halide on the market, according to the company, the 20W Mini MasterColor is 50 percent smaller than competitive products. Jointly introduced with Advance Transformer, the product was launched on the tenth anniversary of the MasterColor technology. The 20W lamps light output is equivalent to 60W to 75W halogen lamps. CIRCLE 201

VENTURE LIGHTING | WWW.VENTURELIGHTING.COM

Product: Uni-Form Natural White
The MP Uni-Form Natural White pulse-start metal halide lamp is now available in 310W and 375W versions. The line of lamps offers 90+CRI and a color temperature of 5000K. UV Shield technology prevents yellowing of polycarbonate lenses and enhances white light output. The lamp’s ANSI Type-O rating allows for continuous operation of lamps without weekly shutdowns and complies with 2006 NEC standards. Appropriate for retail, parking garages, and roadways, the average rated lamp life is more than 20,000 hours. CIRCLE 203

Product: Horizontal Tubular Pulse Start
The Uni-Form H75 Pulse-Start System is designed for horizontal operation without the need of a position-oriented socket, owing to the Venture’s patented arc tube technology. The lamp is available in several versions with respective initial and mean lumens and hours of lamp life: 200W (19,000 initial lumens, 15,000 mean lumens); 300W (28,000 initial, 22,000 mean, and 20,000+ hours of lamp life); 320W (30,000 initial, 23,000 mean, and 20,000 hours); and 350W (33,000 initial, 25,000 mean, and 20,000+ hours). CIRCLE 203

LUTRON | WWW.LUTRON.COM

Product: EcoSystem Ballast
The EcoSystem ballast is the basic building block of the EcoSystem fluorescent lighting control products. The ballast connects directly to photocells, infrared (IR) receivers, occupant sensors, and wall stations without interfaces, power packs, or controllers. The ballast interprets data collected by the sensors and wall stations, adjusts light levels, and transfers the information to other ballasts. The structure and versatility remain intact as the system grows from one ballast to the next, with a maximum of 64 ballasts, which can in turn be linked to additional 64-ballast loops. The system can be integrated with other building management systems with the Lutron Grafik 7000. CIRCLE 202

LITETRONICS INTERNATIONAL | WWW.LITETRONICS.COM

Product: Micro-Brite PAR 38
Suitable for indoor or outdoor use, Micro-Brite PAR 38 is an 8W lamp with a life rating of 18,000 hours and a two-year warranty. These cold cathode compact fluorescent lamps replace incandescent bulbs up to 65W and are instant-on, waterproof, unaffected by extreme temperatures, and fully dimmable and flashable. Appropriate for landscaping and architectural lighting, as well as restaurant mood lighting, Micro-Brite is available in 2700K and 4000K white as well as red, green, blue, yellow, and pink. CIRCLE 205
**BULBRITE | WWW.BULBRITE.COM**

**Product: Line-voltage R111**

The R111 halogen reflector is suitable for fixtures where the lamp is part of the fixture’s appearance. With a line-voltage equivalent to AR111 lamps, the lamp gives highly accurate and precisely defined beam spreads. Its GU10 base provides a secure twist and lock system. The glass lens cover has a frosted glare shield. Lamp options include 50W, 75W, and 100W versions, as well as flood and wide flood, and have a 2,000-hour rated lamp life. **CIRCLE 206**

**Product: Dark Sky Lamp**

An energy-efficient nighttime bulb, the Dark Sky bulb has been approved by the International Dark Sky Association. The patent-pending Dark Sky avoids glare and light trespass, and shines only where light is needed: lighting is efficiently targeted and does not make a direct contribution to uplighting. The Dark Sky lamp works in both base-up and base-down fixtures and uses Energy Star-approved 15W compact fluorescent bulbs. **CIRCLE 206**

**Product: Purify 02**

This compact fluorescent bulb safely breaks down odors while providing energy-efficient light. Energy Star approved, the bulbs have a special TiO2 (titanium dioxide) coating that helps purify the air and eliminate odor. Great for gyms, hotels, restaurants, and homes with pets. **CIRCLE 206**

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

**Product: Soft White Dulux EL Family**

Osram Sylvania has expanded its Soft White Dulux EL family with the addition of several Energy Star-rated products. This line of screw-base compact fluorescents allows for most standard incandescent bulbs to be replaced with a long-life alternative solution. The newest products include: the energy-saving 28/19/12W 3-way twist; a 30W twist, at 2000 lumens, for applications that require increased light output; the 4W flame-shape medium and candelabra base; and a 7W torpedo medium and candelabra base. **CIRCLE 210**

**Product: Daylight Family**

The company’s expanded Daylight family includes two new categories, Daylight Plus and Daylight Extra. The Plus products are for outdoor lighting applications. Sylvania’s halogen PAR lamps are made with special neodymium lenses that make their light whiter than standard halogen lamps. New product offerings include a 50W PAR 20 and 50 lamp, a 75W PAR 30, 50, and 60 lamp, and a 75W PAR 38 floodlight with patented SPL optics. The 60W PAR38 Daylight Plus lamps have an average rated life of 2000 hours. The Extra products include a 13W self-ballasted compact fluorescent lamp with a color temperature of 3500K, and an average rated life of over 8000 hours that can replace a 60W incandescent. **CIRCLE 210**
**PRODUCTS**

**LAMPS/BALLASTS**

**ADVANCE TRANSFORMER | WWW.ADVANCETRANSFORMER.COM**

**Product: Optanium**
The Optanium Instant-Start Electronic Ballast uses T8 fluorescent lamps in multiple sizes, including 17W, 25W, 32W, and 40W, and feature IntelViVolt multiple-voltage technology, as well as cold-start capability down to -20 degrees. The ballasts operate between one and four lamps and come with a standard light output and a low-wattage design. The lamps operate at a frequency between 42 and 52 kHz to eliminate visible flicker and avoid interference with infrared devices and surveillance systems. They also incorporate anti-striation circuitry, auto-restrike capability, 20-foot remote mounting, and independent lamp operation to insure the fixture remains partially lit when the lamp burns out. CIRCLE 211

**Product: e-Vision Electronic HID Ballasts**
Advance has added 70W and 100W models to its e-Vision line of electronic ballasts. A full 26 percent smaller than their predecessors, both models share the 2x42W SmartMate ballasts' footprint, offering fixture manufacturers, specifiers, and end users a heightened degree of design flexibility. CIRCLE 211

**Product: Gentium 347/480V 4-Lamp T5HO Electronic Ballasts**
Compact, lightweight, and highly versatile, Advance's exclusive 4-lamp Gentium electronic ballasts with IntelliVolt-Hi technology for 54W T5HO applications are ideal for general office lighting and board/conference rooms, as well as industrial applications that utilize a 480V AC system. CIRCLE 211

**GE | WWW.GEULTING.COM**

**Product: High-Watt Electronic HID Ballast**
Geared to commercial and industrial end-users, the High-Watt 250-400 Electronic HID Ballast operates multiple lamps from 250W to 400W. They can deliver 23 percent energy savings when paired with 350W or 320W CMH lamps instead of standard 400W metal halide lamps. They provide up to 10 percent improvement in lamp lumen depreciation when powering quartz metal halide lamps and a 5 percent improvement for ceramic metal halide lamps. HID ballasts come in their own housing for optimal thermal management. CIRCLE 214

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

**Product: 320W Metalarc Powerball Ceramic**
Available in clear or coated versions, the 320W Metalarc Powerball Ceramic Lamp offers an energy-efficient alternative to 300W and 400W ceramic metal halide lamps for new installations. The arc tube design improves color and lamp performance, and is applicable for color-critical retail applications. CIRCLE 210
WANT 70,000 PEERS* TO SEE YOUR PROJECT?
Submit it to Architectural Lighting's Second Annual
Light + Architecture Design Awards competition.

A|L LIGHT & ARCHITECTURE
DESIGN AWARDS

Winners will be featured in the July/August 2005 issue of Architectural Lighting, as well as posted on the archlighting.com home page for three months. That means 70,000 readers and site visitors will see your project!

WWW.ARCHLIGHTING.COM
For this year's entry form, SEE PAGE 86 or visit ARCHLIGHTING.com.

* Includes circulation, pass-along readership, and archlighting.com visitors.

Ceralume™
Custom Ceramic Foam Light Diffusion Media from SELEE Corporation

SELEE Corporation offers Ceralume™ as a new multi-functional Light Diffusion Media for all types of lighting applications.

The porous structure of Ceralume™ allows subtle and creative application of light to any number of projects. Custom shapes and sizes provide limitless opportunity in design, from large panels to small single bulb fixtures or panels.

Ceralume™ has superior mechanical and thermal characteristics, which make it ideally suited for a variety of demanding Architectural Lighting projects.

Ceralume™ is available in a wide range of pore sizes, colors, and shapes.

For information on how Ceralume™ can benefit your custom lighting application, please contact SELEE Corporation.

Limitless color capability
A wide range of pore sizes for custom applications
Increased airflow reduces thermal stresses from high temperature light sources
High strength yet low mass maximizes potential application utilization
Custom complex geometry available to

Mark Heamon
Market Manager-New Products
SELEE Corporation
700 Shepherd Street
Hendersonville, NC 28792
Tel: (828) 694-3469
Cell: (770) 329-5373
Email: mheamon@selee.com
www.selee.com

- Smooth or Textured Surface
- Excellent Thermal Properties
- Panel Sizes up to 24"x24"
- Media Thickness: 1/4", 2 1/2"
- Available in 10, 15, 20, 25, 30 Pores/in.
- Easily Machineable

Circle No. 89 or www.archlighting.com/productinfo
**CRESTRON | WWW.CRESTRON.COM**

**Product: CLW-SW1 Keypad Controller**
A full-function, single-button keypad controller, the CLW-SW1 is a 1000W electronic light switch designed to mount in a standard electrical gang box. It supports incandescent and electronic low-voltage loads up to 1000W or magnetic low-voltage and neon/cold cathode loads up to 1000VA/750W. Fluorescent ballasts, HID lighting, and general-purpose fans can also be switched. Although functional as a stand-alone switch, the CLW-SW1 also works as part of an automated system. CIRCLE 185

**Product: MT-1000C MiniTouch**
The MT-1000C MiniTouch wireless controller works a range of systems, including lighting, HVAC, and AC. Its lightweight, ergonomic design makes the product easy to handle. An integrated movement sensor automatically turns on the touchpanel backlight. CIRCLE 186

---

**HUNT DIMMING | WWW.HUNTDIMMING.COM**

**Product: Demand Response Dimming**
Demand Response capabilities have been added to the Simplicity Series Digital Dimming Systems. This allows end-users to take advantage of favorable utility rates by offering variable load-shedding strategies for interior building lighting. This feature helps large energy users avoid peak rates, and participate in utility-sponsored rate-reduction programs offered in exchange for load-shedding commitments. Proprietary software is incorporated into the dimming panels where load-shedding is administered directly by the utility; maintained on site by the facility owner; remotely initiated by a centralized office with local override options; or integrated into an ancillary building management system to provide the desired load-shedding for lighting while being incorporated into entire building strategies. CIRCLE 187

**Product: Scalable Dimming**
Scalability has also been added to the Simplicity Series Digital Dimming Systems. This allows the dimming installation to grow cost effectively and adapt to the future needs of the end-user, minimizing future material and labor costs to the equipment owner. Dimming panels, in circuit increments of 6 or 12, can be added to or deleted from the original layout. The system is designed in a modular fashion and utilizes a plug-and-play concept that allows for later building additions to leverage the existing dimming equipment. Each panel contains 12 individually addressable outputs, and each circuit is rated at 20A and is capable of being dimmed or switched. CIRCLE 188

**LEVITON | WWW.LEVITON.COM**

**Product: Acenti**
Developed in partnership with IDEO, the internationally recognized innovation and design firm, the Acenti Collection of dimmers, switches, and receptacles, reimagines residential electrical devices. An uncluttered control surface and a contoured wall plate creates a clean transition to wall surfaces. Features include: lighting controls with a one-touch Dim/Bright bar that allows users to set precise light levels and remembers settings; control from multiple locations; an electronic ON/OFF switch with a return-to-neutral position; a blue LED indicator light; a ground fault circuit interrupter; and a surge-protected receptacle with an audible status indicator. The design also eliminates the use of dividers between each device in multiganged applications, and the innovative triplex receptacle (below left) adds an extra duplex configuration and reverses the orientation of the top and bottom outlets so that transformers do not block the receptacle. CIRCLE 189

**ZUMTOBEL STAFF | WWW.ZUMTOBELSTAFF.COM**

**Product: Integral Daylight/Occupancy Sensor (IDOS)**
Zumtobel has added the Integral Daylight/Occupancy Sensor (IDOS) to its line of ETHOS and SPHEROS T5 fluorescent luminaires. The 2-inch-diameter sensor is connected to a DALI ballast, which provides individual control of the luminaires. The pre-programmed Plug-and-Play unit senses and responds to light levels in a room, and includes a remote control that can independently operate luminaires. In addition to monitoring illumination, the IDOS detects motion in a room and turns lights on or off correspondingly. CIRCLE 190
**Universal Lighting Technologies | www.universallighting.com**

**Product:** DaliPro

DaliPro is a user-friendly, dimmable ballast designed for use with DALI compatible controls. It can be programmed to perform multiple commands on cue from the push of a button or by computer control. Commands include on/off, light level control, and scene recall; ballasts can be controlled individually, in groups, by room, or by area. For automated control systems, DaliPro can communicate lamp ballast status back to a central network. Available for T5, T5HO, and T8 fluorescents as well as 18W to 42W compact fluorescent and 40W twin-tube lamps. DaliPro offers continuous dimming capabilities for compact fluorescent lamps from 100 to 3 percent. DaliPro includes Programmed Rapid Start technology to maintain lamp life in frequent starting conditions. **CIRCLE 191**

**Lighttronics | www.lighttronics.com**

**Product:** AS Series Software

Creating one software package for the seven compact dimmers in the company’s AS Series, the AS Series receives DMX or LMX, runs its internal built-in chaser, auto detects 50Hz or 60Hz power, automatically adjusts to which phase of power it is connected to, and utilizes a watchdog circuit to safeguard against power glitches. **CIRCLE 192**

**Watt Stopper | www.wattstopper.com**

**Product:** Low-Profile 360-Degree Occupancy Sensor

Available in both line- and low-voltage models, the UT-300, CI-300, and DT-300 series of occupancy sensors feature 360-degree coverage, advanced detection technology, and a low-profile design. The UT-300 incorporates ultrasonic sensing technology; the CI-300 employs passive infrared (PIR) technology for occupancy detection; the DT-300 relies on both ultrasonic and PIR technologies. SmartSet technology automatically adjusts time delay and sensitivity settings based on occupancy activity and space characteristics. Walkthrough mode turns lights off automatically after brief visits. **CIRCLE 193**

**Sensor Switch | www.sensorswitch.com**

**Product:** SensorLite

A motion sensor that becomes a nightlight, SensorLite turns off lights when a room is vacant, then converts the control button into an illuminated night light. Click the lighted control button and the overhead lights come on; a second click turns the lights out and the night light returns. Time delay is 30 seconds to two hours. **CIRCLE 194**

**Product:** High-Bay Fixture Sensor

Designed for T5 high-bay fixture control, the CMRB-50 provides individual control of fluorescents. The sensor detects changes in the infrared energy given off by occupants as they move within its field of view. CMRB-50 features a variety of control capabilities such as low temperature/high humidity and photocell for daylight override. The sensor mounts off the end of the fixture, and once mounted, directional viewing may be altered north or south or east and west by rotating the lens turret. **CIRCLE 195**

**Leviton | www.leviton.com**

**Product:** 2-Max Lighting Control Relay System

This new line of lighting control relay systems combines energy management features with extended service life, and offers commercial facilities a solution for complying with the United States Department of Energy’s ASHRAE 90.1-1999 standard. Z-Max’s exclusive circuitry switches full capacity loads at the zero crossing point, providing true air-gap switching without leakage. It also eliminates arc shower pitting at the contacts, and extends the electrical life of the relay to 10,000,000 switching cycles. The control module includes a built-in astronomical time clock that is Title 24 compliant. The system also provides keypad programming with LCD panels and on-screen instructions. Z-Max Relays are available in 8-, 24-, and 48-cabinet modules that accept input from momentary, maintained, or toggle switches, and occupancy and optical sensors. **CIRCLE 196**
MODULAR WIRING SYSTEMS/COOPER LIGHTING
WWW.COOPERLIGHTING.COM
Product: Modular Wiring System
MWS has introduced wiring systems that employ the latest in plastic and contact technology for the quick, versatile, and low-cost installation of branch circuit wiring for lighting and power. Rather than hardwiring, a system can be plugged together, saving a substantial amount of time. Since it is installed late in the construction process, at the same time the light fixtures are installed, the product allows for flexibility and the avoidance of costly delays when design changes occur. In addition to a standard five-wire configuration, an isolated six-wire configuration for convenience outlets and raised-access computer floors is available. CIRCLE 197

E-LITE TECHNOLOGIES
WWW.E-LIGHT.COM
Product: CMD-001 Control Module
The CMD-001 dimming module input, which is fully isolated, accepts a 0 to 10 VDC signal from any lighting system and takes the lamp from off to full brightness. There is no inherent delay, and the dimming module and lamp system accepts pulse type flashing commands mixed with dimming commands. Such instantaneous control allows for laser-like effects. CMD-001 uses a wide variety of external operating systems. CIRCLE 198

Q-TRAN www.Q-TRAN.COM
Product: Q6 Six-Plane Mounting Unit
Unlike other industry transformers, which are UL-listed to be mounted in a vertical position, the Q6 unit is UL-listed to be mounted in six positions. It offers multi taps to compensate for voltage drop, a standard choke for noise reduction, and in-rush current. A secondary circuit protection provides safety while a terminal block provides a safe, easy method for connecting leads. CIRCLE 199

MAXIMIZE YOUR DESIGN OPTIONS...
Think Acriglas® - Cast Acrylic Sheets for Lighting
• More Perfect Than Nature With Greater Variety Than Glass
• Combine Colors, Texture and Patterns for Unlimited Design Flexibility
• Durability, Ease of Manufacturing and UV Light Stability
• Turn Ordinary into Something Extraordinary with This Cost Effective Lighting Solution

Marble
Granite
Frosted
Textured
Tel: 800.222.4680 I Fax: 201.333.1237
www.acrilex.com

Think Acriglas® For Lighting

Circle No. 84 or www.archlighting.com/productinfo
Now you have a choice.

OCL now has integral emergency sconces! Available in nine different decorative fixtures. They mount to a standard junction box and require no recessed mounting.

Did we mention they are ADA!
WESTINGHOUSE | WWW.WESTINGHOUSELIGHTING.COM

Product: NanoLux
Using a patented polymer lensing technology, NanoLux LEDs provide even light distribution for a variety of applications. Ranging from 1.3W to 3W, these lamps are intended to replace 15W to 25W incandescents. They have a shatterproof shell and are UL-listed for wet locations. NanoLux LEDs are available in blue, green, red, amber, and white, in both S11 and G19 lamps styles. CIRCLE 224

COLOR KINETICS | WWW.COLORKINETICS.COM

Product: iW MR
Combining advanced high-brightness white LEDs with digital control, the IntelliWhite series currently includes four products: MR, Blast, Profile, and Cast. The iW MR is a compact lamp designed to replace standard MR16 fixtures. Employing four LEDs that consume 4W, the lamps are available in three color temperatures: 3000K, 3500K, and 6500K. CIRCLE 225

Product: iW Profile
The iW Profile is a low-voltage, low-profile system for interior display, exhibit, under-cabinet, and task and accent lighting. Featuring a color temperature range of 3000K to 6500K, the product has two beam angle options and end-to-end locking connectors capable of making 180-degree turns. CIRCLE 225

Product: iW Cast
An interior and exterior system for wall-washing and lighting architectural details, iW Cast has end-to-end locking connectors capable of making 180 degree turns and two-point mounting plates for easy connection. The fixture has a color-temperature range of 3000K to 6500K. CIRCLE 225

INVUE/COOPER LIGHTING | WWW.INVUELIGHTING.COM

Product: Architectural Step Lights
Offered in a variety of sources including LED, Invue Architectural Step Lights are suitable for indoor and outdoor environments. With die-cast aluminum housing available in two light distributions (flush and scoop), the 12-1/2-inch-square Step Light comes in several metallic finishes. The optical system is 96 percent reflective anodized aluminum sheet and optical segments are mounted inside a heavy aluminum housing. CIRCLE 226

COLOR KINETICS | WWW.COLORKINETICS.COM

Product: iW MR
Combining advanced high-brightness white LEDs with digital control, the IntelliWhite series currently includes four products: MR, Blast, Profile, and Cast. The iW MR is a compact lamp designed to replace standard MR16 fixtures. Employing four LEDs that consume 4W, the lamps are available in three color temperatures: 3000K, 3500K, and 6500K. CIRCLE 225

Product: iW Blast
The iW Blast features variable color temperatures for interior/exterior wall-washing and grazing applications. The fixture has a color temperature range of 3000K to 6500K, which can be manipulated using Color Kinetics’ line of iW controllers, including iW Scene Controller. The fixture has a 21-degree beam angle. CIRCLE 225

SUPER VISION | WWW.SVISION.COM

Product: SaVi Spot
A high-power water-submersible LED lighting fixture, SaVi Spot is appropriate for indoor and outdoor applications that require full color-mixing capabilities, such as fountains, pools, landscape lighting, and theme parks. SaVi Spot, which is suitable for submersion up to 15 feet underwater, uses a proprietary triple waterproofing technology. Available in various beam angles, including 10, 25, 45, 60, and 90 degrees, the light fixture can be controlled by a DMX controller. CIRCLE 228

GELCORE | WWW.GELCORE.COM

Product: Tetra Power White LED
Geared to retail, restaurant, convenience store, grocery, and hospitality chains, the Tetra Power White LED Lighting System offers a bright, low-voltage alternative to white neon tubes. Made to last up to 50,000 hours, Tetra has an integral heat sink to draw heat away from the LEDs and parallel circuitry that ensures an outage of one LED does not affect the rest of the system. Tetra is available with two or three LEDs per foot. Typical power usage is 2.4W per foot (with two LEDs) or 3.6W per foot (with three LEDs). CIRCLE 227

ARCHITECTURAL LIGHTING
MAXLITE | WWW.MAXLITE.COM
Product: Par 5 Series
A collaboration between MaxLite and Toshiba Lighting has produced an LED with a color temperature of 2700K, which lasts 50,000 hours, according to MaxLite. Employing RGB technology, the light can be diffused to produce a 360-degree glow. The 1W to 3W decorative bulbs (candle, globe, and R20) are available with an Edison or a candelabra screw-in base and produce up to 25 lumens per watt. CIRCLE 229

TRAXON | WWW.MOOD-LIGHT.COM
Product: Mood Light Aurora Tile
A highly pixilated, outdoor-rated, DMX-controlled LED product, the Mood Light Aurora Tile has 64 individually addressable sections. The 19-1/2-inch-square panels integrate ultra-bright LEDs with millions of RGB colors of variable intensity. The flat, frameless Aurora Tile components can be used to create detailed color compositions or moving sequences to incorporate pictures and video on multiple panels. CIRCLE 230

COTTO | WWW.COTTO.COM
Product: Dorado
Dorado features an exposed pad design that improves thermal performance and helps with heat dissipation, and therefore providing a longer life span. The product has a molded lens package that decreases vibration and shock failures. It is also designed for implementation to SMT assembly equipment, enabling greater adaptability, according to the company. CIRCLE 232

OSRAM SYLVANIA | WWW.SYLVANIA.COM
Product: DRAGONtape
Packaged in an extremely flat module, DRAGONtape features a flexible adhesive backing, and can be used to illuminate a range of spaces. The thin profile enables the design of sleeker, smaller luminaires. The product will be available in three whites: 4700K, 54000K and 65000K. CIRCLE 231

LEDTRONICS | WWW.LEDTRONICS.COM
Product: GardenLED GDL001
The GardenLED GDL001 is a direct replacement for 7W T5 wedge-base incandescent lamps, commonly used in the Malibu-style landscape fixtures. Sixteen white LEDs on a double-sided PCB draw 1.3W of power; this combined with its low-voltage system makes the light source appropriate for solar and other alternative power-generating systems. The solid-state design makes the light source impervious to electrical and mechanical shocks, vibration, frequent switching, and environmental extremes; it also performs well in applications subject to voltage dips or surges. CIRCLE 233

Product: GardenLED GDL002 Flood
Featuring 198 warm white LEDs, a rugged metal housing and a sturdy base, the GDL002 floodlight is compact in size (under 9 inches long, 3 1/4 inches wide, and 7 1/4 inches tall) making it easy to conceal among shrubs or under stairs. Able to light walkways, small signs landscaping and building exits, the floodlight operates on 12 volts. CIRCLE 233
MS: Earlier Lightfair interviews have talked about presentation - making things look beautiful with full-spectrum, color-balanced light and the wonderful control of fiber optic lighting. We've talked about preservation - how removing all the UV and IR from light extends the life of everything from art to groceries. We've even talked about conservation. The energy savings of getting 32 fiber optic lights from a single light bulb add up. Those savings can pay for a project in just a few years.

But let me ask a hard question. If fiber optics is so superior, why are so few designers and architects using it? REM: There is always a learning curve with new technology. Some people just won't tackle new things. They're working too hard making a living, they don't have the time.

MS: Too busy to do things right?

REM: Really too busy to do things differently. That's why you see the same lighting designs over and over again. They find a formula they think works and stick with it.

New technology requires new techniques. Again, there's a learning curve. A lot of designers, architects and conservators are using NoUVIR products. We've been growing steadily for fourteen years. They've discovered what's possible with fiber optic lighting. They've read our 32-page catalog, which not only has all of the technical details like size, shape, focus and intensity for everything we sell, but half of which is about lighting design and application. How many catalogs have you seen that describe the three basic designs for case lighting? Show design details? Or describe key scientific theories like Reflected Energy Matching? These people have invested the time so they can do new, exciting things. They're cutting edge. Plus, I think there's more going on out there than you see.

MS: I see a lot of fiber optic decorations. Wal-Mart must have sold a million fiber optic Christmas trees last year. But I don't see fiber replacing track or case lighting.

REM: You just haven't noticed, and lighting you don't notice is a breakthrough itself. Fiber optics are small! The fiber is an eighth of an inch across. Spotlights with 15° to 50° adjustable beams are only one-half of an inch in diameter. Flush-mount eyeball spots are just an inch and a quarter. But all these tiny lights project bright, useable beams.

NoUVIR's lights can even reach across a room.

The best lighting designs are unobtrusive. All you are aware of is how good what is on display looks or how comfortable the room is. You think "Wow, this is great!" and never see the lighting. I had one designer that had to turn the lighting off before his board of directors understood what he had done. They noticed everything but the light sources. That's a good lighting design.

I'm founder and president of a lighting company. I'll focus on the lighting in a store, a gallery or a museum. Normal people shouldn't. If they do, if the lighting draws attention from the contents or merchandise, the artwork or the architecture, then someone has missed the boat.

MS: Isn't that 180 degrees out from the industry today? REM: It probably is. Really new technology is pretty rare. It is also patented protection. So very few people sell bona fide new products. Everyone else focuses on appearance or cost. They shave a few cents off of the price; or try to make it look "different" so it sells as trendy. Walk around Lightfair and you'll see just what I am talking about.

But any lighting source that draws your attention is really a source of glare. Look at a light. Then look back at me. See what I mean? It irritates. It competes. It wipes out vision. People shouldn't have to look at the lights, ever!

MS: That's a different attitude for a lighting manufacturer.

REM: Maybe it is, but that doesn't make it less true. And, that's not the only way NoUVIR's focus is different. (Pardon the pun.) We're not about skyscrapers, store fronts, convention halls, or hanging lamps over every dining room table in suburbia. From day one we set out to save our national heritage.

Most conventional sources are only 5% to maybe 20 or 25% visible light. The rest doesn't help you see, it just causes damage. We remove all of that. No UV, no IR... NoUVIR. Zero. Nada. Zip. None. So things last 4 to 20 times longer.

Our light is also balanced. I'm not talking about "good" color balance the way it's used in the lighting industry. I'm talking about a scientific, 100% accurate balance. Perfect 100% CRI with less than 10% deviation from solar spectrum. This is light where you can see the difference between the blue-black of ivory black and the warmer brown-black of mars black. Light where every color is represented in exactly the right proportions with no spikes or missing portions. Light quality you can't get anywhere else.

MS: Doesn't everyone want the best quality light they can buy?

REM: Of course not. It depends on what you are doing. Warehouses need cheap, bright, long-lasting lighting. As long as you can read a label, you're happy. It's usually the same thing when you light the exterior of a building. Or, you might have the kind of store where you don't want a customer to be able to see the difference between a blue-white and a champagne diamond.

But most people want good color. The Nature of Diamonds Exhibit, the most expensive traveling collection ever, had NoUVIR lighting built into the cases, so anyone could see the cut, color and clarity of each diamond. When it's represented in exactly the right proportions with no spikes or missing portions. Light quality you can't get anywhere else. MS: So, I've always wondered why someone would spend more money (usually a lot more) to fight skimpy product information and get marginal performance... all in order to wait 8 to 12 weeks for a product with a 90-day warranty information and get marginal performance... all in order to wait 8 to 12 weeks for a product with a 90-day warranty information and get marginal performance... all in order to wait 8 to 12 weeks for a product with a 90-day warranty.

NoUVIR may be a small company, but we're big where it counts, in service and performance. We're changing lighting, doing new things. Most important is the difference we're making to our customers.
OPTILED | WWW.OPTILED.BIZ
Product: Designer Dimmable LED
With outer dimensions identical to a halogen MR16, the Designer Dimmable offers lighting intensity and distribution control, with a dimming capability from 10 volts down to 3 volts. At full power, the unit uses less than 2W. Featuring a polycarbonate face and base, and an anodized-aluminum housing, the Designer Dimmable has nine diffuser options including its standard 4-degree diffuser. CIRCLE 235

FIBERSTARS | WWW.FIBERSTARS.COM
Product: Low-Profile Side Entry (LPSE)
This high-output fiber optic accent downlight requires only three inches of clearance. There is no heat, UV, or electricity at the fixture. It is available in 25- and 60-degree beam options for both T-bar grid and hard ceiling mounting. The LPSE uses the fanless Fiberstars EFO illuminators, and one illuminator can drive four to eight LPSE fixtures. Trim profiles are available in white and black. CIRCLE 237

OPTILED | WWW.OPTILED.BIZ
Product: Designer Dimmable LED
Product: HIVE
Offering three times as much light as the typical "high-power" LEDs according to the company HIVE (high intensity vorticular enclosure) allows users to rapidly create larger arrays of units. Using a hexagonal design, each HIVE module interconnects and passes power and data to other units in the Optical Array. With a slot-in design between modules the array can be built to virtually any size or shape. The first product to feature the HIVE module is the Modular Optical Array S-1, which can be used in fully submersible applications. CIRCLE 235

FIBERSTARS | WWW.FIBERSTARS.COM
Product: Span
This flexible system is constructed from high-grade extruded aluminum and stainless steel. Span is finished with an anodized and sputter coating. The product is available with or without support legs, and with one, two, or three rows of fiber, each with a maximum of 12 fibers per inch and a combined maximum of 20 fibers per inch. Span mounts over a 1-1/8-inch opening, with hardware included. Finish colors include clear satin, and black, as well as custom. CIRCLE 237

TIR SYSTEMS | WWW.TIRSYS.COM
Product: Destiny SL
Destiny SL provides an intense rectangular beam of lighting for long-throw projection. Using 180 Luxeon high-flux LEDs, the product has a set-back distance of 8 to 15 feet. With a choice of optics for narrow or wide beam angle, facilitating high-lighting or silhouetting of a surface or a structure, the product has color control and DMX compatibility, and is available in three standard finishes: black, silver, and white. CIRCLE 236

Product: Destiny LP
Destiny LP is a decorative color-changing linear element, up to 30 feet in length. Combining light pipe technology with 31 Luxeon high-flux LEDs, Destiny LP is low-maintenance illumination for installation-challenged areas. Available in black, silver or white finishes, the product has four light emitting configurations: 90, 120, 180, and 240 degrees. CIRCLE 236
DIFFUSERS, FILTERS, REFLECTORS

ACRILEX | WWW.ACRILEX.COM
Product: Acriglas Pastel Panels
The Acriglas Acrylic Panels now include the Pastel Frost line of acrylic sheets. Adding to the 11 shades that already exist, the 12 additional pastel colors can be creatively incorporated into architectural applications, as a backlight detail for example. Available in a variety of sizes and translucencies, this series is ideal for use when tempered glass is not practical. Panels range from 1/8 to 3/8 inches thick. CIRCLE 159

FAIL-SAFE/COOPER LIGHTING | WWW.COOPERLIGHTING.COM
Product: Harmony VR
Harmony VR custom faceplate and color-lensing options are appropriate for wayfinding lighting in schools, hospitals, parking garages, and other locations. Cast, extra-heavy aluminum walls of the front/back housings offer rugged durability and efficient heat dissipation. A five-stage paint finish further protects the housing. A liquid-injection-molded silicone gasket provides a water- and dust-tight seal between the fixture's housing and front-lens assembly. CIRCLE 221

APOLLO DESIGN TECHNOLOGY | WWW.INTERNETAPOLLO.COM
Product: Smart Color
The Smart Color line of color changers offers continuous bi-directional scrollers with variable speeds. Units come with a pre-installed mounting plate and gel shield, pre-loaded with gel string. Constructed of lightweight aluminum, Smart Color uses precision motor bearings for quiet operation and comes with 5-1/4-inch, 7-1/4-inch, and 10-inch apertures. CIRCLE 222

DAYLIGHTING

KALWALL | WWW.KALWALL.COM
Product: Nanogel
Kalwall with Nanogel translucent aerogel combines R-20 insulation with 20 percent light transmission; doubles light transmission and thermal insulation over current technologies; and is resistant to condensation, mold, and mildew. The 2-3/4-inch-thick fiberglass-reinforced polyester panels yield constant insulating properties over time and offer improved acoustical properties. Nanogel is a light, highly porous form of silica aerogel that is 97 percent air, treated to make it hydrophobic; it insulates while transmitting diffused light. CIRCLE 90

LUTRON ELECTRONICS | WWW.LUTRON.COM
Product: Sivoia QED Roller 64
Sivoia QED (Quiet Electronic Drive) shade system is now available in a smaller size. A compact version of the electronic drive fits into a 1 1/2-inch-diameter tube, which is 40 percent smaller than the Sivoia QED 100. The product uses the same low-voltage wiring and programming as its "big-brother" product, ensuring that roller shades will raise and lower in uniform speed and stop at preset positions, even though they use different diameter roller tubes. They can be controlled and programmed using hand-held infrared remote controls or wall-mounted keypads. It controls up to 64 square feet of fabric. CIRCLE 92

MECHOSHADE | WWW.MECHOSHADE.COM
Product: EcoVeil
EcoVeil by MechoShade was developed over six years with green architect Michael McDonough and chemist Michael Braungart. Constructed of a thermoplastic olefin-based yarn called EarthTex, EcoVeil is more than PVC-free and does not have any hazardous chemical components. Through a "take-back" program, the product is also recyclable into new shadecloth fabrics or other materials without degradation. CIRCLE 93
**Ceiling Fans**

**Hunter**

**WWW.HUNTERFAN.COM**

Product: Ashland

The black and cherry body of the Americana-style Ashland fan from Hunter adds a classic aesthetic to any interior. The fan has a 54-inch blade span and a three-speed reversible motor. **CIRCLE 94**

Product: Zoe

Featuring a Danish-modern form and several lighting configurations, Zoe comes with a blonde beech bent wood blade, with a 56-inch span. The metal details are brushed nickel. **CIRCLE 94**

**Fanimation**

**WWW.FANIMATION.COM**

Product: Centaurus

Available in two body finish colors (satin nickel and black) and blade finish options (maple, cherry, and mahogany), the Centaurus has a 60-inch blade sweep and a 20-degree blade pitch. It takes three 60W candelabra bulbs, and has three-speed reversing remote control. **CIRCLE 97**

Product: Draco

Available in chrome and glossy black, the 40-pound Draco has a 60-inch blade sweep and a 15-degree blade pitch. Suspended 6 inches from the ceiling, the fan includes a remote controller. The built-in downlight requires three 60W candelabra bulbs. **CIRCLE 97**
Architectural Lighting announces the second annual A|L LIGHT & ARCHITECTURE DESIGN AWARDS honoring projects in the field of architectural lighting. The A|L DESIGN AWARDS first recognize and reward excellent design within the unique criteria of a specific category. Then, for exceptional accomplishments, A|L will award the A|L Virtuous Achievement (ALVA) awards to acknowledge projects that achieve the best lighting design on a budget; the best design in a LEED-rated building; the best incorporation of daylight; and the best use of color. Winners will be featured in the July/August 2005 issue of A|L and on the web at www.archlighting.com.

CATEGORIES

- Corporate/Institutional
- Entertainment/Cultural
- Healthcare
- Hospitality
- Outdoor
- Residential
- Retail
- Transportation

A|L VIRTUOUS ACHIEVEMENT

- Best Lighting Design on a Budget
- Best Lighting Design in a LEED-Rated Building
- Best Incorporation of Daylight
- Best Use of Color

DEADLINE: MONDAY, MAY 17, 2005
**A|L LIGHT & ARCHITECTURE DESIGN AWARDS**

Architectural Lighting announces the second annual A|L LIGHT & ARCHITECTURE DESIGN AWARDS honoring projects in the field of architectural lighting. Unlike other programs, the A|L DESIGN AWARDS first recognize and reward excellent designs within the unique criteria of a specific category. Then, for exceptional accomplishments, A|L will award the A|L VIRTUOUS ACHIEVEMENT (AVLA) AWARDS to acknowledge projects that achieve the best lighting design on a budget; the best design in a LEED-rated building, the best incorporation of daylight, and the best use of color. A|L believes these final four categories are increasingly important considerations for its readers, and therefore hopes to identify and showcase successful examples. All winning projects will be published in the July/August 2005 issue of A|L, and will be featured on archlighting.com for three months.

**Deadline:** Monday, May 17, 2005

**Categories for the A|L LIGHT & ARCHITECTURE DESIGN AWARDS** (must check one):

- Corporate/Institutional
- Entertainment/Cultural
- Healthcare
- Hospitality
- Outdoor
- Residential
- Retail
- Transportation

Projects may also be submitted for the A|L VIRTUOUS ACHIEVEMENT AWARDS (check all for which you would like this project considered):

- Best Lighting Design on a Budget
- Best Lighting Design in a LEED-Rated Building
- Best Incorporation of Daylight
- Best Use of Color

**ELIGIBILITY**

1. Design professionals practicing in the United States, Canada, or Mexico may enter one or more submissions. Projects must not be located in those countries, however.

2. Projects must be completed after July 2004

**SUBMISSION REQUIREMENTS**

1. All entry materials must be contained in one large envelope per project, with the submission form and project name printed on the outside of the envelope. Include in the envelope one photocopy set of all entry materials, as well as prints of the digital images. (Photocopies and prints must be black and white.)

2. Each submission must be accompanied by a signed entry form and a check covering the entry fee (see Entry Fees below). The form may be photocopied. Both the form and check should be included in the project envelope.

3. A project fact sheet must also be contained in each envelope. It should include (a) the project name, location, and date of completion; (b) the project category; and (c) whether the submission should be considered for any number of the four AVLA Awards (see Categories above). Describe project size in square feet; (d) lights per square foot; and (e) lighting installation cost.

4. Include a second page with a brief written description (no more than 350 words) of the client's goals, the challenges posed by the project, the design solutions applied, and the complexity of the design. Entrants must include an explanation (no more than 350 words) clarifying how the project integrates daylighting with electric lighting. In addition, entrants must include ASHRAE 90.1 or LEED documentation indicating that daylighting provides consistent on-site energy savings.

5. Images must be in digital format. Additional image submission requirements:
   - (a) One CD per project; (b) either TIF or PSD file format; (c) 300 dots-per-inch resolution; (d) minimum of 1200 x 1200 pixels (either the height or width should be a minimum of 1200 pixels); (e) no fewer than 7 and no more than 12 images. Label the image files using a consistent naming protocol, including the project name and numbers that correspond to the written descriptions.

6. Please avoid the use of fill light when photographing the project. Fill light is unworkable, identify which shots include fill light.

7. To maintain anonymity during the judging process, no names of entrants or collaborating parties may appear on any part of the submission except for the signed entry form and on the project envelope.

**CATEGORIES**

1. Identify each submission on its entry form and on the project fact sheet as one of the following eight categories. A|L reserves the right to change the category of a submission.
   - Corporate/Institutional
   - Hospitality
   - Entertainment/Cultural
   - Retail
   - Residential
   - Outdoor
   - Transportation

2. Projects will not be judged against each other, but rather as superior examples of a lighting design solution within each category. Therefore, each category may have more than one winner or no winner at all; likewise, the number of entrants within the category will not impact whether there is a winner or how many.

3. Appropriate submissions may also be considered for any of the four A|L Virtuous Achievement (AVLA) Awards. Entrants must indicate that a project should be considered for these awards on the entry form and on the project fact sheet. These awards require the following additional information:

   **Best Lighting Design on a Budget**
   - Entrants must include an explanation (no more than 350 words) clarifying how the project integrates daylighting with electric lighting. In addition, entrants must include ASHRAE 90.1 or LEED documentation indicating that daylighting provides consistent on-site energy savings.

   **Best Incorporation of Daylight**
   - Entrants must include an explanation (no more than 350 words) clarifying how the project integrates daylighting with electric lighting. In addition, entrants must include ASHRAE 90.1 or LEED documentation indicating that daylighting provides consistent on-site energy savings.

   **Best Use of Color**
   - Entrants must include an explanation (no more than 350 words) clarifying how the project integrates daylighting with electric lighting. In addition, entrants must include ASHRAE 90.1 or LEED documentation indicating that daylighting provides consistent on-site energy savings.

   **LEED-Rated Building**
   - Entrants must include an explanation (no more than 350 words) clarifying how the project integrates daylighting with electric lighting. In addition, entrants must include ASHRAE 90.1 or LEED documentation indicating that daylighting provides consistent on-site energy savings.

   **PUBLICATION**

   Entrants may also be considered for any of the four AVLA Awards.

**ENTRY FEES**

- Fee $130 (first entry)
- $95 (subsequent entries)

**SEND ENTRIES TO:**

A|L LIGHT & ARCHITECTURE DESIGN AWARDS
770 Broadway, 4th Floor, New York, NY 10003

A|L reserves the right to reject any entry and to terminate the competition at any time. Any disputes relating to the competition shall be resolved exclusively by A|L, and the panel of judges. This contest is governed by New York laws without regard to its conflict of laws principles. All entrants and clients submit themselves to the exclusive jurisdiction of courts in the southern district of New York.
Seven Innovations, One Decade

ONE SOMETIMES HEARS DESIGNERS SAY ABOUT THE LIGHTING INDUSTRY'S PRODUCT OFFERINGS AROUND this time of year, "Not much new!" And yet when one looks back over a decade, all the baby steps add up to big leaps in technology and changes in design practice. Below is a sampling of seven innovations, listed in no particular order, that either have had a significant impact on lighting design or represent a significant technological advancement over the past decade.

1. **T5 & T5HO LAMPS**
   Many innovations in the lighting industry seem to start with new light sources, followed by new ballasts and fixtures. T5 and their high-output versions, T5HO lamps, appeared in North America in 1996 and 1998 respectively, and today are popular in lighting fixtures such as linear fluorescent, direct/indirect, recessed baskets, soffits, valences, cove, wall-mount, and high-bay fixtures. Thinner in diameter than T8 and T12 lamps and with high lumen packages available, T5 lamps enabled more compact fixtures, continuing a trend in lighting towards a smaller profile. "T5 lamps currently comprise less than 10 percent of the linear fluorescent lamp market, but they are the fastest growing lamp in the linear fluorescent family," says Ted Simpson, senior manager of field marketing for the Professional Lighting Organization of Phillips.

2. **WHITE LEDS**
   In the mid 1990s, the first true white light LED was offered, achieved through the use of blue indium gallium nitride (InGaN) material with a phosphor. The phosphor converted some of the light emission into yellow, resulting in a cool bluish-white light. This opened the door for LEDs into a much broader range of architectural lighting applications and has gotten energy experts excited over the potential of this light source as a future competitor to fluorescent, halogen and HID lighting in general applications. Some predict that this goal will be accomplished in five to ten years. Why are energy experts excited? Theoretically LEDs have the potential to more than double the efficiency of general lighting systems, thereby saving enough energy over the next 20 years to power the states of Arizona, Colorado and Mississippi and reducing the nation’s electric bill by $98 billion, according to the U.S. Department of Energy.

   According to market research firm Strategies Unlimited, white LEDs accounted for half of the total 2004 world market for LEDs, which the company estimates at $3.7 billion. Strategies Unlimited has forecasted the world market for LEDs to be more than $7 billion in four years—more than half of what the Economic Census considers the entire U.S. lighting fixtures market to be today.

3. **EXPLOSIVE GROWTH IN T8S**
   T8 lamps have a remarkable history. About 10 years ago, T12 lamps held about 95 percent of the linear fluorescent market. T8 lamps had made a small penetration of about 5 percent, and T5 lamps weren't even on the radar screen, according to lamp manufacturer Osram Sylvania. Today, according to the National Electrical Manufacturers Association, T12 lamps now make up about 65 percent, while T8 lamps have 33 percent and T5 and T5HO lamps now comprise the remaining 2 percent. This market share can only be expected to grow, as currently more than 30 states have begun complying with a U.S. Department of Energy requirement to adopt energy codes at least as stringent as ASHRAE/IES 90.1-1999, which is twice as restrictive as the 1989 version.

   As T8 lamps become more popular, manufacturers are now offering new energy-saving and high-output models, including 28W, 30W, and "Super T8" lamps. Super T8 lamps produce more than 3100 lumens compared to standard T8 lamps (which provide 2800 to 2900 lumens), and have a slightly higher lumen maintenance. This means Super T8 lamps can be used to provide higher light levels or to reach required light levels with potentially fewer fixtures (estimated 16 percent energy savings), T8s can also be specified in combination with low-output electronic ballasts to maximize energy savings (about 14 percent) with the same number of fixtures that would be used with a standard T8 system.

4. **MESO-OPTICS**
   Ledalite’s MesoOptics technology was first introduced in 2001, when it won the best new product award at Lightfair. It has since been applied to a growing number of the company’s products, most recently its PureFX line of recessed systems.

   MesoOptics, produced in a manner similar to the holograms that appear on most credit cards, is based on tiny microstructures no greater than five microns in size, which are applied to a common fixture material such as acrylic, polycarbonate, or glass. According to the company, the first inspiration for MesoOptics came from observing how the multicolored wings of butterflies become pure white at certain angles. With MesoOptics acting as a medium between the light source and the
viewer, the fixture material gains extraordinary capability to control light.

In particular, MesoOptics removes striations and hot spots from light sources, allows 95 percent of the light that enters to pass through, and can constrain and disperse light for optimum control and uniformity—allowing for the creation of highly controlled beam patterns and the ability to redirect light into desired angles.

MesoOptics offers potential for daylighting, translucent wall and other architectural elements, roadway and exterior floodlighting, and theatrical and film lighting.

PULSE-START LAMPS

Low-wattage pulse-start lamps first appeared on the lighting scene in the 1980s, with medium-wattage lamps introduced around 1996. In recent years, they have expanded into very low wattages (down to 20W) and high wattages (up to 1000W).

Today, pulse-start lamps have gained significant share of the metal halide lamp market (about 25 percent, according to one estimate), a trend that will grow as manufacturers continue to add wattages and new lamp and ballasting options.

Pulse-start systems can provide higher lumen maintenance, efficiency, longer service life, and faster warmup and restrike times than standard metal halide systems in new construction projects. The economics can also make pulse-start systems practical for retrofit in a range of situations, from replacement of existing standard metal halide systems in high-bay applications to replacement of halogen and incandescent track heads and downlights.

"Pulse-start systems represent superior technology and are not just a trend, they're here for the long term," says John Cummings, director of HID product management for Advance. Pulse-start systems are currently popular in applications such as warehouses, gas station canopies, industrial and manufacturing spaces, parking lots and facilities, big box and smaller retail, grocery stores, and public spaces.

Ceramic metal halide lamps were first introduced in 1994 after Philips engineers essentially borrowed a ceramic arc tube from a sodium lamp and put it in a metal halide lamp to create something entirely new. The final result was a lamp that produces a crisp, white light and provides superior color appearance and color control qualities than standard metal halide lamps. These qualities have made ceramic lamps ideal for color critical areas in commercial applications where a high-efficiency, long-life alternative to incandescent and halogen lamps is desired.

HID ELECTRONIC DIMMING BALLASTS

Electronic dimming ballasts for HID lamps are now available in new fixtures to achieve continuous dimming. In addition to dimming, these ballasts are designed to operate at a higher efficacy, improved color control, less stroboscopic effect, and harmonic distortion under 20 percent.

While generally not cost-effective for retrofit, electronic HID ballasts can yield significant energy savings in a new fixture. They are interoperable with occupancy sensors, photocells, and time-programmable systems. The signal can be transmitted along the power circuit or low-voltage wires. Ideal applications include anywhere it is advantageous to adapt the lighting system to a wide range of light levels to meet various space uses, such as airports, lobbies, classrooms, industrial facilities, sporting arenas, gymnasiums and auditoriums.

With the exception of industrial buildings, metal halide lamps are typically used for most of these types of applications. Continuous dimming is also ideal for daylight harvesting by enabling the HID lamp output to be tuned to maintain a constant light level in the space.

"The big trend is more control," says A. J. Glaser, president of HUNT Dimming. "Sophistication in job design necessitates having the ability to vary the environment in precise increments. Continuous, variable control down to 50 percent provides this."
Traditional dimming ballasts are analog ballasts that operate using a three-wire, 0-10VDC, two-wire, or wireless method. Digital ballasts offer a greater variety of capabilities. In essence, they enable users to connect all of the fixtures in a room, zone, or a building to a centralized point of control. From there, users can program individual fixtures or groups of fixtures to dim or shut off according to a schedule or based on external input, such as occupant preferences or available daylight. The communication path is two-way, meaning not only can users send commands to fixtures, but they can receive information back from the fixtures upon request that is useful for energy management and maintenance.

The advantage of this type of system is that it offers a high degree of granularity of control capability, enables feedback from ballasts, allows users control of a wide variety of zones and scenes, and can easily accommodate changes over time. These advantages boil down to two primary desirable benefits: Digital lighting systems are flexible for current and future lighting needs, and offer an effective energy management tool.

Advance Transformer’s Dynavision is a new microprocessor-based electronic ballast for the operation of pulse-start metal halide lamps.

Universal Lighting Technologies’ Dimmable DaliPro ballasts, designed for use with Dali-based controls, can be programmed to perform multiple commands on cue from the push of a button or by computer control.

Craig DiLouie, principal of ZING Communications, Inc. (www.zinginc.com), is a consultant, analyst and reporter specializing in the lighting and electrical industries.
Now in its 4th year, *Architectural Lighting*’s ACE.al Awards have become the mark of distinction and dependability.

**4th ANNUAL ACE.al AWARDS BALLOT**

**ARCHITECT’S CHOICE FOR EXCELLENCE**
**CHOOSEN BY LIGHTING DESIGNERS & ARCHITECTS**
**AWARDED BY ARCHITECTURAL LIGHTING**

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

**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 8, 2005.

**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 and May/June issues of *Architectural Lighting*, each reaching the complete 25,000+ nationwide circulation. In addition, e-mail 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 2005 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.

SM Light Fiber
Acrylic
Advance
Alcan Aluminum
Alera Lighting
Akco
A.L.P. Lighting
ALS - Architectural Lighting Systems
Alfa Lighting
Ambiance Lighting Systems
American Glass Light
Amerlux
Araflite International
ANP Lighting
Anton
Architectural Area Lighting
Architectural Landscape Lighting
Ardee
Aromat Corp.
Arroyo Craftsman
Arremide
AVR USA
B-Light
Baldinger
Bartco Lighting
Beacon Products, Inc.
Bega Lighting
BegHELL
Beta-Casco
Betta Lighting
Birchwood Lighting
B-K Lighting
B-Light
Boca Flasher
Boyd Lighting
Bruck Lighting Systems
C.W. Cole & Co.
Charles Loomis
Charleston Gas Light
Color Kinetics
Columbia Lighting
Conant Custom Brass, Inc.
Cor.Daz Lighting
Cor-Tech Lighting
Contract Lighting
Cooper Lighting
Cotelle
Creston
Cyclone Lighting Inc.
D-ac
Davis/Muller Lighting
Day-Brite Lighting
Delay Lighting
Derek Marshall Lighting
Demler & Hamlyn
Designplan Lighting, Inc.
Dielle
Donovan Lighting
Dreamscape Lighting
Eclipse Lighting Inc.
Edison Price
Elko Ltd.
Electro
Electronic Theatre Controls (ETC)

Lam Lighting
Labs
Lares
Lexel
Lexco USA
Lexicon
Lextron
Lextron Controls
Libtronics
Lightech
Lighting Analysts
Lissoni
Lumina
Lumicenter
Luxo Corporation
Luxo Italia
Lyvcon
Mainspring
Mark Lighting
Marklin Architectural
MaxLite
McGraw Edison
Medusa Lighting
Mercury Marine
Metalux
Metalmaven
Miller Architectural Lighting
Moebe
Morte Systems
Necco
Nessen
Newmark USA
New Metal Crafts
New Star Lighting
Nicla Lighting
Nordic Aluminium
Nordic American Light
North American Lighting
Notor Lightbox Research
Oggetti Luce
O-Luce
Oriental Lighting
Orbit North America
The Original Cast Lighting
Osram Sylvania
Pathway Lighting
PCI
Peerless
Pennsylvania Globe
Philips Lighting
Philips Advance
Transformer
Phoenix Products Co.
Planlicht
Prescolite Lighting
Praetor Architectural Lighting
Pragmatic Lighting
Pradial Lighting
Q-Tran
Quality Lighting
Renewal Lighting Systems Inc.
Rockscapes
Roxo Laboratories, Inc.
Rotarieni
RSA
Schonbek Worldwide Lighting Inc.
Schott-Fostek LLC
Schott North America
Sea U.S.
Sea Golf Lighting
Sepron
Semper Fi Power Supply Inc.
Sentry Electric Corporation
Shiner
Serralunga
Shaper Lighting
Sfe
Sims
Solaris Lighting
Solitude Borealis Lighting
Space Lighting
Spark Lighting
Special FX Lighting Inc.
Speciality Lighting
Spero Lighting
Spring City Electrical
Star Brite
Starfield Lighting
Starlight Lighting
Starlight Lighting
Stop Work
Storm Lighting
Storm Lighting
Strahman Lighting
Studio Due s.r.l
STUDIO Italia Design USA
Super Vision International
Sunsight
Targhetti North America, Inc.
Tech Lighting LLC
Tekalumination Inc.
Terzani
THHC Lighting
Thomas Daybrite
Timberline
TIR Systems
Tivoli, LLC
Tracman
Translume Sonoma
Traxon USA
Trend Lighting Co., Inc.
Tridonic Inc.
Trilux Lighting Limited
Tiny-SSLighting
Unilight Ltd.
Universal Lighting Technologies
Vetro America
Valmont Industries, Inc.
Vantage
Vintage
Vista Lighting
Vista Lighting
Vista Lighting
Viviar
Vsaltiluzni
Wac Lighting
Walle Lighting
Wallace Lighting
The Watt Stopper
Weaver & Ducie
WE-EE Lighting USA
Wendelighting Inc.
Willa Lighting
Winona
Xler Air
Zane Lighting
Zotlan
Zumtobel Staff

NEW FOR 2005
Of the companies you have selected, which in your opinion is the most innovative?

Most RESPECTED

Most SPECIFIED

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

Your Name
Title
Company
City/State

DEADLINE FOR ENTRIES: JULY 8, 2005
**Architectural Area Lighting**

The new Providence from AAL offers legendary lighting performance in a traditional form. Optical systems reflectors, as well as a cutoff, indirect version for even, glare-free illumination. Available up to 175W, the Providence can be ordered with T6 metal halide lamps, electronic, and pulse-start ballast options. For more information, visit [www.aal.net/providence](http://www.aal.net/providence).

**C.W. Cole Lighting**

C.W. Cole Lighting introduces the T141 Steplite. A low-profile fixture for a variety of interior uses where low light levels are desired. The fixture utilizes low-wattage, long-life incandescent lamps, which fulfill the lighting requirement. Typical applications include theaters, auditoriums, restaurants, and lecture halls where sharp light cutoff is desired. For more information, visit [www.colelighting.com](http://www.colelighting.com). CIRCLE 020

**Acrilex**

Acrilex custom acrylic sheets for lighting in faux finishes are designed to emulate the colors and textures of natural stone, patterned and frosted glass, mother of pearl, and metal. Easy to fabricate and thermoform, this material is also specially formulated to withstand exterior conditions, UV exposure and impact. CIRCLE 010

**Con-Tech Lighting**

Quatro is an exciting new indirect pendant that features energy-efficient fluorescent lamps and exquisite faux alabaster diffusers. The diffuser is available in 10 different finishes and colors to match any décor. The unique "X" shape offers a more uniform light distribution than simple linear fixtures. For more information, visit [www.contechlighting.com](http://www.contechlighting.com). CIRCLE 021

**Alanod**

Alanod Aluminum's MIRO Micro-Matt is the first enhanced reflective aluminum that joins the traditional look of white painted metal with the reflective capability of Micro, the world's most widely used specular material. Alanod Micro-Matt is another enhancement in the MIRO line of reflectors for high-bay fluorescent lighting. CIRCLE 013

**B-K Lighting**

Introducing specification-grade architectural louvered fixtures for MR16 lamps by B-K Lighting. The louvered fixtures include solid faceplates (aluminum or brass); fixed or adjustable lamp positions; straight or 30-degree angled louvers; round or rectangular louver patterns on square, round, or rectangular faceplates; and junction box or core drill mounted. CIRCLE 014

**Bartco Lighting**

BAM! One more reason to use Bartco Lighting. Uplighting, wallwashing, and task lighting is now possible with Bartco Lighting's new BAM series arm-mount kits. Three mounting systems are available for several of our remote ballast display luminaires (BFL290 shown). In addition, individual fixtures can be ganged together for continuous runs. For more information, see us at Lightfair booth #1767, or visit our website at [www.bartcolighting.com](http://www.bartcolighting.com). CIRCLE 017

**Beta Lighting**

Beta Lighting's Aviator provides excellent performance in an elegant, versatile form. Aviator is available in a segmented Type III and Type IV optic and meets full IESNA cutoff classification. It is offered in a 400W version (16.5 inches by 19.6 inches) and a 175W version (12 inches by 14 inches). CIRCLE 018

**Erco**

Erco introduces the new Panorama bollard luminaire with Dark Sky technology. Like our interior luminaires, the Panorama complies fully with the strict requirements regarding light quality and anti-glare protection. In addition, their individual visual comfort goes hand in hand with the responsibility of protecting the evening sky from uncontrollable, superfluous spill light. CIRCLE 029

**Estiluz**

Hotel by Blauet: A harmoniously balanced wall sconce with a brilliant white polycarbonate shade that swings out from the movable arm. Available in gray metallic and nickel. Designed by Jordi Mallorqui and Jordi Aymerich exclusively for Blauet. CIRCLE 037
**GE Consumer and Industrial Lighting**

GE Lighting products can lighten up your bottom line. In fact, you can cut your energy costs by 44 percent when you replace T12 technology with the F28 UltraMax system. And that's just the beginning. To see the full line of GE lighting products, visit www.genlighting.com. CIRCLE 041

**Lighting Services Inc**

The new TPM111 Series Spotlight is the perfect fixture for any lighting project that requires a blend of theatrical styling and architectural function. Designed specifically for the most recent addition to the Philips CDM family of lamps, the TPM111 Series allows for the ultimate control, consistent light quality, long life, and tremendous punch that the compact 35W ceramic metal halide CDM-R111 lamp offers. For more information, visit www.lightingservicesinc.com. CIRCLE 053

**Hadco**

HADCO introduces Chroma, the new highly efficient, customizable area light. A unique two-part housing design offers unlimited single or two-tone custom color combinations. Optical performance allows a full-cutoff horizontal-mounted lamp to attain a 6:1 spacing to mounting height ratio, while maintaining a uniformity ratio of 3:1 in typical applications. Toolless entry doorframe and quick-disconnect wiring for ease of maintenance. See lighting without limits at www.chromavisions.com. CIRCLE 042

**Hampstead**

Zero by Lucitalia is a pendant light fixture durably constructed in die-cast aluminum. Its unique design offers direct lighting suitable for a variety of residential and commercial settings. Exclusively available from Hampstead Lighting. For information, visit www.hampsteadlighting.com or call toll free: (888) 935-4448. Lightfair booth #2437. CIRCLE 043

**IEPC**

Vari-Ballast VB400: IEPC brings 21st century lighting control technology to HID. Electronic ballast with integrated lighting controls—scheduling, dimming, monitoring, Network-ready for PC and Internet control. Variable for 150W to 430W, MH, HPS, MV, 100 to 277 volts input. The Vari-Ballast Lighting Control System gives you TOTAL CONTROL in lighting management. CIRCLE 046

**Kim Lighting**

Kim Lighting proudly announces the introduction of the Era Collection of luminaires, poles, and support arms. All components utilize Kim's 70 years of design excellence to produce performance-oriented lighting systems that withstand the abusive and destructive elements of the outdoor environment. For more information on the Kim Lighting Era Collection, please contact your local Hubbell Lighting Sales Representative or visit our website at www.kimlighting.com. CIRCLE 051

**Lumec**

Inspired by classical and contemporary elements, the Callisto Series casts a timeless light on any environment. Intended to preserve the dark skies, the combination of two lighting technologies provides for maximum light control while contributing to the spirit of its settings. The Callisto Series: Helping to shape a new era. CIRCLE 054

**Lutron Electronics**

Lutron Electronics introduces the new fixture-mountable daylight sensor. Small and unobtrusive, this architecturally elegant daylight sensor is compatible with all Lutron lighting control systems to implement daylight harvesting. It allows the lighting control system to automatically dim the lights when available daylight is high, and brighten the lights when available daylight is low, maintaining a specific light level throughout a space. CIRCLE 057

**Martin Architectural**

Martin Architectural Inground 200 Series: For the first time, the benefits of dynamic light and discrete buried installation are combined in an easy-to-use system of programmable 150W luminaires. Designed for all terrains and weather conditions, the Inground 200 Series from Martin Architectural offers high-performance tools for dynamic upright illumination of facades, landscapes, and interior applications. CIRCLE 059

**Metalumen**

The new TPM111 Series Spotlight is the perfect fixture for any lighting project that requires a blend of theatrical styling and architectural function. Designed specifically for the most recent addition to the Philips CDM family of lamps, the TPM111 Series allows for the ultimate control, consistent light quality, long life, and tremendous punch that the compact 35W ceramic metal halide CDM-R111 lamp offers. For more information, visit www.lightingservicesinc.com. CIRCLE 053

**MechoShade**

AAC SolarTrac System is a solution provides maximum functional and aesthetic performance for buildings. A number of certified LEED projects utilize SolarTrac, an automated energy-efficient system that automatically adjusts the position of shades in accordance with position and intensity of solar rays on window, micro-climatic sky conditions, solar gain in BTUs, geometry and solar penetration, window-wall luminous values, ambient illumination, and other definable options. CIRCLE 060

**Lightotlier**

Metalumen's new F7000 Lighting System includes seven series of fluorescent modules, each specifiable in different lighting distributions and luminous textures. Carefully scaled for today's interior spaces, F7000 provides a wide range of lighting effects, including ambient illumination from pendant or wall mountings; indirect, direct, and modulated light distribution; and accent lighting from either MR16 or Ceramic Metal Halide sources. CIRCLE 052

**Lutron Electronics**

Lutron Electronics introduces the new fixture-mountable daylight sensor. Small and unobtrusive, this architecturally elegant daylight sensor is compatible with all Lutron lighting control systems to implement daylight harvesting. It allows the lighting control system to automatically dim the lights when available daylight is high, and brighten the lights when available daylight is low, maintaining a specific light level throughout a space. CIRCLE 057

**Hampstead**

Zero by Lucitalia is a pendant light fixture durably constructed in die-cast aluminum. Its unique design offers direct lighting suitable for a variety of residential and commercial settings. Exclusively available from Hampstead Lighting. For information, visit www.hampsteadlighting.com or call toll free: (888) 935-4448. Lightfair booth #2437. CIRCLE 043

**IEPC**

Vari-Ballast VB400: IEPC brings 21st century lighting control technology to HID. Electronic ballast with integrated lighting controls—scheduling, dimming, monitoring, Network-ready for PC and Internet control. Variable for 150W to 430W, MH, HPS, MV, 100 to 277 volts input. The Vari-Ballast Lighting Control System gives you TOTAL CONTROL in lighting management. CIRCLE 046

**Kim Lighting**

Kim Lighting proudly announces the introduction of the Era Collection of luminaires, poles, and support arms. All components utilize Kim's 70 years of design excellence to produce performance-oriented lighting systems that withstand the abusive and destructive elements of the outdoor environment. For more information on the Kim Lighting Era Collection, please contact your local Hubbell Lighting Sales Representative or visit our website at www.kimlighting.com. CIRCLE 051

**Lumec**

Inspired by classical and contemporary elements, the Callisto Series casts a timeless light on any environment. Intended to preserve the dark skies, the combination of two lighting technologies provides for maximum light control while contributing to the spirit of its settings. The Callisto Series: Helping to shape a new era. CIRCLE 054

**Lutron Electronics**

Lutron Electronics introduces the new fixture-mountable daylight sensor. Small and unobtrusive, this architecturally elegant daylight sensor is compatible with all Lutron lighting control systems to implement daylight harvesting. It allows the lighting control system to automatically dim the lights when available daylight is high, and brighten the lights when available daylight is low, maintaining a specific light level throughout a space. CIRCLE 057

**Martin Architectural**

Martin Architectural Inground 200 Series: For the first time, the benefits of dynamic light and discrete buried installation are combined in an easy-to-use system of programmable 150W luminaires. Designed for all terrains and weather conditions, the Inground 200 Series from Martin Architectural offers high-performance tools for dynamic upright illumination of facades, landscapes, and interior applications. CIRCLE 059

**Metalumen**

The new TPM111 Series Spotlight is the perfect fixture for any lighting project that requires a blend of theatrical styling and architectural function. Designed specifically for the most recent addition to the Philips CDM family of lamps, the TPM111 Series allows for the ultimate control, consistent light quality, long life, and tremendous punch that the compact 35W ceramic metal halide CDM-R111 lamp offers. For more information, visit www.lightingservicesinc.com. CIRCLE 053
Mills Architectural Lighting

Mills Architectural Lighting specializes in the design and manufacturing of architectural lighting fixtures. Pendant lanterns feature all-cast aluminum or steel frames with glass panels. Our lanterns are available with many lamping options, including a built-in prismatic reflector downlight component. All built site specific. Please visit www.millslighting.com for details and specifications. Call (905) 643-1066 or (800) 268-1526, or email results@millslighting.com. CIRCLE 068

Sentry Electric

Sentry offers a comprehensive line of luminaires from classic designs to contemporary and modern. Sentry also 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 079

NoUVIR Research

Power 32 eyeballs from one fiber-optic lighting projector. No UV, No IR... NoUVIR!
- Stone-cold, pure-white light
- Perfect color
- Awesome control—zooms 50 to 5 degrees
- Beautiful beam—Aims 30 degrees off-axis
- Locks • Sealed • Absolutely no UV and no IR.
Call (302) 628-9933 CIRCLE 069

Tech Lighting

Tech Lighting Antique Bronze MonoRail: integrate a modern system into a traditional interior. Design a system with your own personal style in mind by selecting from a vast range of product options. Available fixtures include decorative pendants and architectural heads, each one available with a host of colors, or with accessory options. (847) 410-4400. www.techlighting.com. Visit us at Lightfair booth #1719. CIRCLE 080

OCL

The Westport is a new decorative pendent from OCL. It is available with a number of painted finishes, as well as colored prismatic diffusers. The Westport adds a contemporary flare to the classic high-bay fixture. Perfect for schools, offices, retail stores, and restaurants. CIRCLE 074

Prudential Lighting

Powerful and affordable, the Mega Cove eliminates the need for supplemental light sources, especially when your challenge is to light an expansive vaulted space. Two lamps featuring dual high-performance cove optics are staggered to create a full 6-inch overlap, virtually eliminating socket shadows. For more on how Mega Cove performance can satisfy your requirements, visit www.prudential.com. CIRCLE 075

Selux

SILL Power Spot Floodlights: This extremely compact floodlight was designed around 1000/2000W TS double-ended tubular metal halide lamps, which offer excellent directional light with little scatter and precise color rendering. The Power Spot 003 is appropriate for any outdoor or indoor large-area lighting situations. Also comes configured with integral snoot shade (Power Spot 005) for glare-free illumination of buildings and other tall vertical structures. CIRCLE 076

Semper-Fi

Semper Fi Power Supply manufactures UL-listed indoor and outdoor remote transformers that ensure no noise, no maintenance, and full light output. Indoor units can be recessed into an insulated wall with up to eight transformers in an enclosure. Outdoor transformers include above-grade stainless or DIRECT burial. CIRCLE 077

THHC Lighting

The new 120V Xelogen Series line-voltage lamps in E11 mini-candelabra, E12 candelabra, and BA15D double-contact bayonet bases provide compact appearance without the requirement of a low-voltage transformer. Available in 35W, 50W, and 75W with clear and frosted finishes. Lamp color temperature is 2900K with an average life of 5,000 hours. 120V Xelogen do not emit UV rays, and can be utilized in open fixtures. Visit www.xelogen.com or call 877-Xelogen. Find us at Lightfair booth #1248. CIRCLE 081

Traxon

Traxon USA presents Mood Light, an award-winning line featuring the latest products and concepts in visually exciting, color-changing LED lighting solutions. Mood Light is ideal for commercial design applications in hospitality, entertainment, display healthcare, and residential projects, wherever attractive, exciting, or calming lighting is desired. CIRCLE 083

Vossloh-Schwabe

The new CFL electronic ballasts from Vossloh-Schwabe offer the versatility to operate multiple lamp types of various wattages: 26W, 32W, 42W, 57W, and 70W. These multi-ballast models can also vary the number of lamps operated (i.e. one or two lamps), reducing the required amount of ballast types. CIRCLE 086

W.A.C. Lighting

Designed to deliver high performance in a small package, W.A.C. Lighting introduces Precision Downlights, Specification Grade 3- and 4-inch low-voltage recessed fixtures. They are crafted of die-cast aluminum, available for both IC and non-IC applications, and feature decorative, adjustable, and wet location trims. Call (800) 526-2588, or visit www.waclighting.com. CIRCLE 088
WHERE ELSE CAN YOU FIND HOT NEW PRODUCT INTRODUCTIONS, THE LATEST LIGHTING NEWS BRIEFS AND COMPANY BUZZ, A PRESSING INDUSTRY QUESTION BEGGING FOR YOUR OPINION, AND DESIGN COMPETITION UPDATES?

ARCHLIGHTING.COM
THE SUPER SITE FOR LIGHTING SPECIFIERS

THE WEB ICON ATTACHED TO PRINT ARTICLES INDICATES EXPANDED WEB CONTENT.

VISIT ARCHLIGHTING.COM

LIGHTING INDUSTRY PROFESSIONAL SEeks CHALLENGING POSITION IN THE INDUSTRY.
Experience and skills include: managing National Sales, Marketing and Support in a business-to-business lighting company; setting up and maintaining work relationships with designers, architects, specifiers. dealers and manufacturers' reps; successful track record of exceptional communication and organizational skills; official design degree and thorough knowledge of the lighting and design industry; computer skills include: Office, Internet, Act!, Powerpoint, Photoshop, Autocad. For further information please contact via e-mail: lightmarchew@yahoo.com

THE WEB ICON ATTACHED TO PRINT ARTICLES INDICATES EXPANDED WEB CONTENT.

VISIT ARCHLIGHTING.COM
Trendy Luminaires

Architectural Lighting magazine is in a unique position to monitor trends in the industry. With the volume of new product releases that travel across our desks (more than 250 were submitted for this product issue alone), with the variety of trade shows we attend both nationally and internationally, and given the industry communication in which we are privileged to be included, the A|L editors have, if not a scientific, at least an intuitive sense of where R&D energy is being directed. Here is a sampling of a few product development themes that caught our eye over the last year.

TOPPING OFF: OUTDOOR LUMINAIRES GET FANCY

In six months, the number of new pole-top luminaires that combine design aesthetics with energy efficiency and dark skies awareness has been notable. The fixtures are likely a response to stringent code requirements regarding light spill and dark skies legislation. Top to bottom: pole-mounted luminaire from Bega/US (page 67) and Selux's Ritorno fixture for the Beverly Hills Business Triangle.

BEND ME, SHAPE ME

Decorative luminaires—like the pressed silicone Birzi table lamp from Luceplan (page 36) and Rotatiana's Honey with reconfigurable polycarbonate shade (page 44)—are featuring new materials that enable a user to interact with his or her fixture and to adapt the luminaire to décor changes.

LEDS RELATE TO THE MAJSES

LEDs flooded Lightfair last year. (Of the 222 New Product Showcase entries, 50 were LED-related products.) This year, LED-based products seem to be reaching out to the populous, in forms and with capabilities that even the layman can understand and find a use for. New options in white LEDs, and in shapes we are all comforted by—the MR16, the R20, the G19—are sure to bring LED technology down to everyone's level. Top to bottom: Color Kinetics iW MR (page 79) and Maxlite PAR series (page 80).

CONTROL FREAKS

The quest for increased control over our environment, as well as the impact daylighting promises to have on design, has significantly influenced manufacturers' approach to new lighting systems. Companies like Zumtobel are incorporating increased control into their product lines. Its Ethos and Spheros luminaires now have an integral daylight/occupancy sensor option (page 75).
30+ footcandles vertical @ 30"
tailor-made.
ONE MORE ADVANTAGE OF USING BARTCO LIGHTING.

Your vision. Your project. Your light.

- retail
- hospitality
- commercial
- institutional
- residential

bartcoLIGHTING
leading the way and lighting it.™

bartcoLIGHTING.com
+714 949-0999  •  +714 949-6842

manufacturers of quality lighting