



Winners in New LED Next Generation Luminaires™ Design Competition Announced

Strategies in Light, Santa Clara CA - Winners were announced today for the first annual Next Generation Luminaires™ competition recognizing excellence in the design of energy-efficient LED luminaires for general illumination, white light in commercial lighting applications.

Sponsored by the U.S. Department of Energy, the Illuminating Engineering Society of North America, and the International Association of Lighting Designers, the competition was launched at LightFair in May 2008 and attracted 68 entries from 29 lighting companies. Of the 68 entries submitted, 22 were given special recognition in the market ready category and three of these were chosen as “best in class.” In the emerging category, five products were selected as noteworthy.

The Best in Class winners in the market-ready category came from three different manufacturers: GE which was selected for its Immersion™ jewelry case lighting, Journée Lighting with its AZARA track-mounted luminaires, and Winona with its STEP03 indoor/outdoor step lighting.

Winona Lighting also earned one of the 19 “recognized” designations in the market-ready category, for its Winscape LED16 outdoor flood fixture. GE Lighting was also recognized for its Architectural Cove Lighting. Philips Color Kinetics earned recognition for three of its eW Powercore products - a surface-mounted downlight, an undercabinet fixture, and a linear cove light. Downlights were popular with designs by Specialty Lighting Industries, Gallium Lighting LLC, Lightolier, Amerlux Lighting Solutions, and Cree LED Lighting all receiving recognition. MP Lighting and Amerlux both were recognized for track lighting products. Tech Lighting provided an LED pendant fixture with 40 different pendant options. Albeo Technologies Inc. offered an LED alternative to high-intensity discharge high-bay lamps. Cree submitted a noteworthy high-lumen-output 24” square ceiling light and LED-Linear was recognized for an undercabinet luminaire.

The five “emerging” products selected as noteworthy but not yet market-ready included two by GO Lighting Technologies, a 24” round ceiling-mounted fixture and a 4-foot LED linear lamp which could be hung or wall mounted, as well as a down-light by Ledion Lighting, a linear pendant by Beta Lighting, and a submersible linear by Winona Lighting.

Awards were presented at the Strategies in Light conference in Santa Clara, California, February 18-20, 2009. The competition is designed to recognize well-designed, energy-efficient, and attractive commercial solid state lighting that uses a fraction of the electricity of standard incandescent, halogen, and high intensity discharge fixtures. By encouraging new designs and technologies, Next Generation Luminaires™ aims to increase market acceptance and awareness of LEDs for general illumination lighting.



NGL 2008 Winners

Manufacturer	LED Product	Description
Best in Class Market-Ready Fixtures		
GE	Immersion™	jewelry case lighting
Journée Lighting	AZARA	track-mounted luminaires
Winona Lighting	STEP03	indoor/outdoor step lighting
Recognized Market Ready Fixtures		
Albeo Technologies Inc.	C-Series LED High Bay	linear high-bay lamp
Amerlux Lighting Solutions	Evoke 2.9	1.25" diam. round or square downlight
Amerlux Lighting Solutions	Cylindrix II LED	round track lights
Cree LED Lighting	LR24	24" square ceiling light
Cree LED Lighting	LR4	4" round downlight
Cree LED Lighting	LR6	6" round downlight
Gallium Lighting LLC	GS6	6" square downlight
GE Lighting	Architectural Cove Lighting	linear cove lighting
LED-Linear	Xoolux Donar	undercabinet linear
Lightolier	Calculite LED Downlight	4" round or square downlight
MP Lighting	L161	1-ft to 4-ft linear fixture
MP Lighting	LED72	square track lights
Philips Color Kinetics	eW Cove Powercore	linear 6" and 12" for cove, display
Philips Color Kinetics	eW Downlight SM Powercore	square surface-mount downlight
Philips Color Kinetics	eW Profile Powercore	undercabinet linear
Specialty Lighting Industries	1009-LED	4" square downlights
Specialty Lighting Industries	1500-LED	2" round downlight
Tech Lighting	LED Pendant	Pendant lamp, 40 shade options
Winona Lighting	Winscape LED16	outdoor flood fixture
Emerging		
Beta Lighting	LED Pendant	linear pendant or wall mount
GO Lighting Technologies	GO FLL	24" round ceiling mount
GO Lighting Technologies	GO R312N1E1	4-ft linear pendant
Ledion Lighting	TD26	low-profile downlight
Winona Lighting	Subline	submersible linear



Best in Class Market-Ready Fixtures

From the 22 recognized, market-ready products, the judges were asked - at their discretion - to identify any they considered “Best in Class.” To attain this level, a product had to both stand out from the others and score highly in a majority of the evaluation criteria. Three products were selected as best-in-class winners.



Journée Lighting - AZARA LED Luminaire.

The AZARA LED, by Journée Lighting, features a bold aesthetic design and innovative features, providing an attractive and efficient alternative to traditional track lighting sources. AZARA’s housing is sculpted to appeal to the eye while it performs as an active heat sink. Journée’s new patent-pending Sprocket LED Light Engine gives users the ability to upgrade or replace the LED engine as LED technology advances. The lamp comes in three color temperatures and two beam angles (12°, 27°).



Winona LED™ STEP03

Winona LED™ has developed a step light with great lateral distribution, integral drivers, and a concealed optic. The STEP03 step light comes in three styles, is available in 3-, 6-, 9-, or 12-inch-wide apertures and eight color choices, in light color temperatures ranging from warm white (3000K) to cool white (6500K).



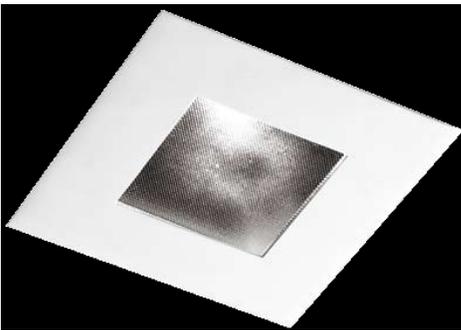
GE Immersion™ LED Jewelry Display Case Lighting

The GE Immersion™ LED Jewelry Display Case Lighting provides cases with bright, uniform light that brings out dramatically more sparkle than competing fluorescent systems. Combined with the added benefits of long life, advanced thermal management, worry-free maintenance, and GE reliability, this efficient LED system will continue to dazzle customers for many years to come.



Market-Ready Recognized Fixtures

Products submitted under the market-ready category were those entries claimed by their manufacturers to be in or near production and ready for specification -- that is, all performance and construction parameters were known and fixed. Samples and independent photometry were required in support of each submission. To be recognized in this category, a product needed to attain at least the judges' minimum evaluation in all performance categories and to meet or exceed ENERGY STAR criteria, where applicable. Twenty-two of the 68 submitted products were recognized by the judges as market-ready, including the three described above as best-in-class. These products include downlights, spotlights, display case and cove lighting, pendants, ceiling-mounted fixtures, and under-cabinet lighting from 13 different manufacturers.



Specialty Lighting Industries - 1009-LED

The 1009-LED recessed downlight and adjustable accent light comes in a 4" round or 4" square trim and features a 10-watt LED array. The accent light offers 45-degree adjustability and a locking yoke. Diecast and machined aluminum trims are available in flanged and flangeless versions and will hold an optional lens at the aperture. The airtight insulated (IC) housings are suitable for all ceilings including wet shower locations. Multiple lamp units are also available.



Albeo Technologies Inc. - C-Series LED High Bay

Albeo Technologies' C-Series LED High Bay luminaire is a low-maintenance, energy-efficient alternative to traditional high-intensity discharge or high-intensity fluorescent light fixtures. Using TEMPR™ thermal management technology, the C-Series delivers efficiency, long lifetime, and cost effectiveness for industrial and commercial customers.



Amerlux Lighting Solutions - Cylindrix II LED

The Cylindrix II Vertical LED provides track-mounted accent and display lighting. This compact architecturally styled luminaire utilizes tightly binned high output, warm white (2585K - 2875K CCT) LEDs and produces 600 net lumens in a range of beam spread options.



Amerlux Lighting Solutions – Evoke 2.9

The Evoke 2.9 LED, available in round or square aperture, features a field serviceable seven-diode cluster measuring just 1¼” in diameter that produces uniform light in a 60° beam spread with negligible heat and UV output. Tightly binned LEDs ensure excellent fixture-to-fixture consistency. A highly engineered heat sink draws, reduces, and radiates damaging heat away from the LEDs.



Cree LED Lighting - LR24

The LR24, 2 foot by 2 foot architectural lay-in ceiling fixture provides a whopping 3237 lumens of light output making it an excellent choice for offices, schools, hospitals, and retail environments. The LR24 will reduce energy consumption when compared to most linear fluorescent fixtures, while reducing maintenance costs, and improving lighting quality. The LR24 comes in 3200K, 3500K, and 3800K CCT.



Cree LED Lighting – LR4

Cree LED Lighting’s 4” architectural recessed downlight provides 563 lumens of warm or neutral white light at 10.9 watts. The 4” round fixture comes in two shielding angles and a variety of trim colors. The LR4 consumes 80% less energy than incandescent and 50% less than CFL, while its long life reduces maintenance costs and lamp waste.



Cree LED Lighting – LR6

The LR6, 6” recessed downlight comes with an Edison (E26) or GU24 base. This unique luminaire can serve as a direct incandescent replacement in existing recessed can fixtures. The luminaire provides 685 lumens of warm or neutral white light at 11.7 watts.



Release Date: February 19, 2009
Next Generation Luminaires™ www.ngldc.org
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Gallium Lighting, LLC – GS6

Gallium's GS6 LED downlight delivers more than 1000 lumens of light output from its 6" square aperture for point source and general illumination lighting. The LEDs are available in four color temperatures ranging from a warm 2700K to a bright 5000K. Specially designed optical systems provide a full 45° shielding to eliminate distracting glare.



GE Lighting – Architectural Cove Lighting

The GE LED Cove provides 558 lumens of light output from 12.7 watts of power and can be installed at three mounting track angles: 0°, 15°, or 30°. This reliable system provides excellent brightness and uniformity.



LED-Linear - Xoolux Donar

The Xoolux Donar is a low-profile IP 54-protected LED luminaire that is ideal for undercabinet, task, and display case lighting as well as a variety of outdoor and indoor flood, wash, and feature illumination applications. Its 0.94" high x 1.49" cross section is easy to conceal in cabinetry and casework. With an external 12V driver, Xoolux Donar can be connected directly to line voltage. Jumper cables and mounting clips further simplify system installation. The fixture comes in three installation lengths: 8", 21", and 42" and is available in 6°, 14°, 30°, 66° and oval (12°x48°) beam angle distributions.



Lightolier (Philips) – Calculite LED Downlight

Lightolier's solid-state downlight provides 1032 lumens of light output from a 6" round or square aperture. Lightolier's proprietary remote phosphor technology provides excellent glare control and consistent, uniform color at two color temperature options.



MP Lighting – LED72

The 12 x 1.2 watt LED72 provides flexible accent lighting and general directional illumination. It mounts to a standard j-box or MP Lighting rail system with a remote driver. The LED72 is dimmable with a remote driver. The luminaire is available in four color temperatures and three beam spreads.



MP Lighting L161

This linear LED fixture designed for jewelry and display case illumination features a linear pivoting head in lengths of 1 to 4 feet and standoffs from 1 to 24 inches long. The L161 can also be wall or ceiling mounted for up and down illumination of pictures and wall washing. The LEDs are spaced at 2 inches on center and come in four different color temperatures.



Philips Color Kinetics – eW Cove Powercore

The eW® Cove Powercore is a compact linear fixture that provides an energy-saving alternative to traditional cove lighting. This high-performance fixture comes in two lengths (6" and 12") and is designed to accommodate various applications, such as interior cove, accent, and display lighting; light boxes; and other tight spaces in retail, exhibit, hospitality, and architectural settings.



Philips Color Kinetics – eW Downlight SM Powercore

The eW® Downlight SM Powercore is a low-profile, surface-mounted downlight providing basic white illumination. Unlike typically larger, surface-mounted downlights using conventional sources, its low-profile housing allows for easy and unobtrusive installation in wide-ranging interior environments. The square fixture comes in two beam angles and white, black, and brushed metal trim tones.



Philips Color Kinetics – eW Profile Powercore

The eW® Profile Powercore is a low-profile, linear fixture for undershelf, under-cabinet, task lighting, and display case applications. It comes in 11-, 21-, and 41-inch lengths, warm and cool color temperatures; white, black, and brushed metal housing colors; and direct hard-wire or wall plug power feed options; with multiple jumper cable configurations. It can support a run of up to 50 feet on a single circuit.



Specialty Lighting Industries - 1500-LED

The 1500 is a minimal aperture low-brightness accent downlight using a 10-watt LED array. Available in flanged and flangeless trims, the fixture may be serviced through its small 2” aperture. The beam spread of the fixture can be easily tailored to the application with a series of interchangeable lenses. The IC airtight housing is suitable for installation in a wide variety of ceiling materials.



Tech Lighting – LED Pendant

Tech Lighting has introduced over 40 decorative pendants that utilize a proprietary 5.8-watt LED module jointly developed with Lighting Science Group. The pendant shades are available in multiple materials, shapes, colors, and finishes making this one of the largest LED offerings in the market today. The LED module is easy to replace, while the heat sink remains with the fixture.



Winona Lighting – Winscape LED16

The Winscape LED16 is a high-output LED spotlight with an adjustable mount to provide spot lighting for indoor and outdoor architectural lighting and landscape lighting. The fixture comes in three beam spreads. The unit combines the LED and integral low-voltage AC driver into one unit.



Emerging LED Based Fixtures

The Emerging Products category was incorporated into the competition to encourage new, innovative ideas for application of white LEDs to solve lighting design problems. The category was open to products that were not yet market-ready, but working prototypes were required. Luminaires as well as LED systems designed for integration into furniture, equipment, or architectural or structural elements were encouraged but no entries of this nature were received this year. Judges highlighted five products they considered noteworthy in this category.



Beta Lighting: LED Pendant

The LED linear cable-supported and wall-mounted pendant luminaire series for direct and indirect lighting applications is designed to replace traditional incandescent, fluorescent, and HID luminaires used in similar lighting environments.



GO Lighting Technologies: GO FLL

The GO Flat LED Lighting (GO FLL) two-foot round luminaire has remote-controlled dimming, color temperature adjustment, and it is networkable. The GO FLL will operate in any orientation. Like other LEDs, it does not produce UV, EMI, or ballast noise.



GO Lighting Technologies: GO R312N1E1

The four-foot, edge-lit LED pendant has a sleek profile, wide beam angle, and even light distribution. The luminaire is available with dimming and multi-unit installation options with a single controller. It also incorporates color temperature control from 3500K to approximately 8500K.



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Ledion Lighting: TD26

Utilizing six high power LEDs, the TD26 recessed downlight is low profile for use in tight spaces. The downlights come in 25°, 40°, 60° and 140° beam angles. The proprietary optical element is fully integrated into the heat sink body for a total thickness of 26mm.



Winona Lighting: SubLine

This new linear LED product from Winona Lighting is fabricated with marine-grade stainless steel, UV-resistant clear PVC tubing, and housing materials that are resistant to chemicals, making this luminaire especially hardy for outdoor architectural and landscape applications. In fact it is submersible.



General Information About Next Generation Luminaires™

The Next Generation Luminaires™ Solid State Lighting Design Competition was created to recognize and promote excellence in the design of energy-efficient LED commercial lighting luminaires. The competition highlights innovative, energy-efficient products that provide high lighting quality and consistency, good glare control and lumen maintenance, and attractive design as determined by a judging panel for professional lighting designs. The competition aims to demonstrate the diversity of SSL products ready for specification in the commercial sector.

Sponsored by DOE, IALD, and IESNA, the first competition was launched at LightFair in May 2008. Lighting manufacturers were invited to submit LED-based luminaires capable of meeting the technical requirements set forth in the ENERGY STAR Solid State Lighting (SSL) criteria: under-cabinet shelf-mounted lights, portable desk/task lights, and recessed downlights. Luminaires for other general illumination applications were also welcome; these applications included but were not limited to cove lighting, valence lighting, pendants, wall washers, wall sconces, accent lighting, refrigerated and non-refrigerated retail display case lighting, exterior architectural lights, facade lighting, street and area lighting, and pedestrian pathway lighting. Entries were due in October 2008.

A panel of 14 judges drawn from the architectural lighting design community convened at Underwriters Laboratory in Research Triangle Park, North Carolina, November 6-7, 2008, to evaluate the products by assessing their lighted performance, appearance, construction, and submitted photometric data. If photometric data were lacking, a product was sent to an independent testing laboratory for testing through DOE's CALiPER testing program, then re-evaluated by the judges using the testing data. Ultimately, twenty-two products were designated as market ready; three of these were selected as best-in-class. Five products were recognized in the emerging category.

More information about the competition is available at www.ngldc.org

The U.S. Department of Energy (DOE) administers federal investment in SSL research and development to advance the technology and realize its projected energy efficiency, lighting service, and economic benefits. DOE has developed a comprehensive program to support the effective commercialization of SSL in the general illumination market. This program includes technology demonstrations, product testing, development of industry performance standards and test procedures, information dissemination, and design competitions to reward excellence in this emerging technology.

The Illuminating Engineering Society of North America (IESNA) is the recognized technical authority on illumination. For over 100 years, its objective has been to communicate information on all aspects of good lighting practice to its members, to the lighting community, and to consumers, through a variety of programs, publications, and services.

The International Association of Lighting Designers (IALD) is an international organization supporting a network of architectural lighting design professionals who satisfy its rigorous qualification process, are distinguished by a unique blend of aesthetic and technical expertise, and operate at the highest level of integrity to create a better world through leadership and excellence in lighting design.



Steering Committee

- Dan Blitzer**, LC, representing IESNA
principal of Contract Marketing, a consulting agency to the lighting industry.
- Nancy Clanton**, PE, FIES, LC, IALD, LEED AP, representing IESNA
president of Clanton & Associates, a lighting design firm
- Avraham Mendall Mor**, IALD, IESNA, LEED AP, representing IALD
architectural and theatrical lighting designer
- Melanie Taylor**, IALD, LEED AP, representing IALD
lead designer at Lighting Design Studio for WSP Flack + Kurtz, Seattle
- Melissa Hertel**, LC, LEED AP, representing IALD
senior marketing manager of energy and sustainability for Lightolier
- Ruth Taylor**, PNNL, representing DOE
research scientist, DOE's Pacific Northwest National Laboratory

Judges

- Nancy Clanton**, president of Clanton & Associates, a lighting design firm
- Avraham Mendall Mor**, architectural and theatrical lighting designer
- Melanie Taylor**, lead designer at Lighting Design Studio for WSP Flack + Kurtz, Seattle
- Charles K. Thompson**, founder of ARCHILLUME
- Frank A. Florentine**, designer, Smithsonian Institution National Air and Space Museum,
Washington, DC.
- Michael Hennes**, senior associate and project director, Cline Bettridge Bernstein Lighting
Design Inc., New York
- Gregg D. Ander**, chief architect, Southern California Edison
- Naomi Johnson Miller**, Principal, Lighting Design in Troy, New York
- Jeff McCullough**, senior research engineer, DOE's Pacific Northwest National Laboratory
- Samantha LaFleur**, associate, Atelier Ten, an environmental design consulting firm
- Ronald D. Kurtz**, senior lighting designer with Randy Burkett Lighting Design
- Stefan R. Graf**, founder, Illuminart, a commercial lighting design firm
- John Gebbie**, manager, NY Systems Division, Barbizon Lighting Company
- Michael Grather**, president, Luminaire Testing Laboratory, Inc., Allentown, Pennsylvania



Evaluation Criteria

Color appearance - Evaluation of this criterion was based on the judging panel's evaluation of the color appearance of the installed luminaire. Manufacturer data about CCT of the LED sources was provided.

Color rendering - Evaluation of this criterion was based on the judging panel's evaluation of the color appearance of objects illuminated by the installed luminaire. Manufacturer data about CRI of the LED sources was provided.

Appropriate illuminance - Horizontal and/or vertical illuminance for the application must be appropriate according to accepted lighting practice. Evaluation of this criterion was based on the judging panel's evaluation of the light levels and distribution (uniformity and contrast) provided by the luminaire, and included measurement of light levels using a standard illuminance meter.

Appropriate luminance - This criterion addresses luminance of the luminaire surface. Judges evaluated luminaire brightness in conditions as similar as possible to the intended application to assess glare and contrast.

Application efficiency - The luminaire must deliver appropriate light levels to the task with lower wattage than comparable traditional light sources for that task. Evaluation of this criterion was based on assessment by the NGL judging panel.

Aesthetic appearance and style - Evaluation of this criterion was based on the judging panel's subjective evaluation of the aesthetic appearance of the installed luminaires.

Serviceability and replacement - Entries were required to demonstrate attention to specifier and user concerns about follow-on service and replacement in the event of component failure.

Bonus Points

The judging panel also awarded bonus points for entries exhibiting the following desirable characteristics:

No off-state power use - Luminaire designs that do not draw power when the luminaire is turned off.

Dark-sky friendly - Outdoor luminaires that are shielded to limit upward light emission and minimize sky glow and light trespass.

Adjustability/Flexibility - Products that demonstrate CCT and beam spread adjustability.