



# *BRIGHT IDEAS*

## **Ledalite Introduces PureFx Micro**

With its petite 1x1 size and refined styling, PureFX™ micro brings subtle luminous accents to any interior space. Combined with the exceptional visual performance it achieves through Ledalite's MesoOptics® technology, PureFX™ micro offers architects and lighting designers a truly unique luminaire for applications in corridors, meeting rooms and private offices, or as accent lighting in boardrooms, reception and other feature areas. PureFX™ micro can be used to bring aesthetic continuity to installations with other PureFX™ products (2x2, 2x4, 1x4 or 6"x4), or may be offered as its own lighting design feature.

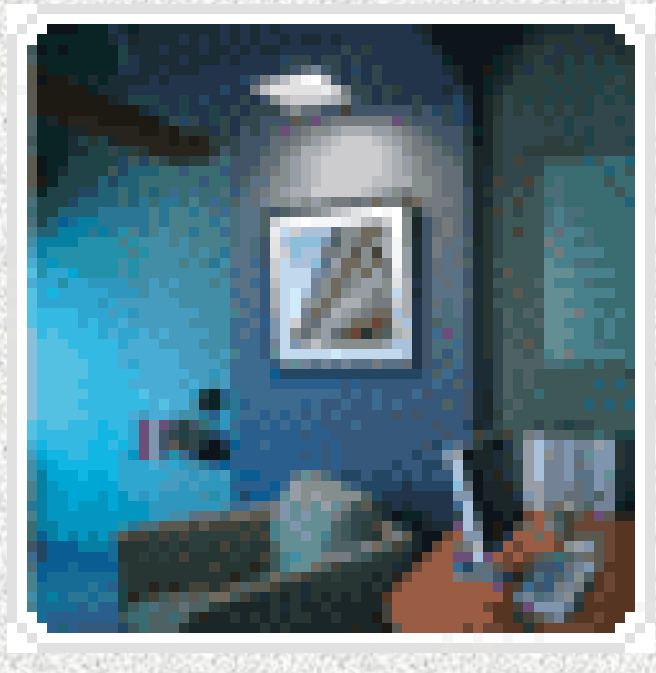
**Unique micro design** – 1x1 recessed luminaire with refined PureFX™ styling.

**Balanced brightness, control + efficiency** – Ledalite's recessed luminaires with MesoOptics® technology offer unique luminous aesthetics and performance characteristics by delivering uniform brightness with exceptional lighting control and efficiency.

**Design flexibility** – suitable for a range of applications; available in two lamping options; integrates with most common T-bar ceiling types and non-accessible ceilings.

**Easy maintenance** – spring-loaded frame provides access to lamp(s) and ballast from below the ceiling for easy installation and maintenance.

**Fast delivery** – standard orders can ship in 9 working days.



## Ledalite Also Introduces Vectra Micro



With its sleek 1x1 size and distinctive styling, Vectra™ micro brings contemporary luminous accents to any interior space. Combined with the exceptional visual performance it achieves through Ledalite's MesoOptics® technology, Vectra micro offers architects and lighting designers a truly unique luminaire for applications in corridors, meeting rooms and private offices, or as accent lighting in boardrooms, reception and other feature areas. Vectra micro can be used to bring aesthetic continuity to installations with other Vectra products (2x2, 2x4, 1x4), or may be offered as its own lighting design feature.

**Unique micro design** – 1x1 recessed luminaire with refined Vectra™ styling.

**Balanced brightness, control + efficiency** – Ledalite's recessed luminaires with MesoOptics® technology offer unique luminous aesthetics and performance characteristics by delivering uniform brightness with exceptional lighting control and efficiency.

**Design flexibility** – suitable for a range of applications; available in two lamping options; integrates with most common T-bar ceiling types and non-accessible ceilings.

**Easy maintenance** – spring-loaded frame provides access to lamp(s) and ballast from below the ceiling for easy installation and maintenance.

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## Louis Poulsen's Answer to Inground Lighting IPR14

Louis Poulsen Lighting introduces the next generation of inground lighting projectors.

Close collaboration with lighting designers on major projects all over the world, has awarded Louis Poulsen Lighting a deep understanding of this demanding discipline. This knowledge is the basis for IPR14.

Louis Poulsen Lighting has designed a product that addresses varying installation issues, such as allowing for flexibility with the type of inground installation surface and the ability to withstand vast climatic changes and weather conditions. IPR14 is approved in four IP classes—IP66, IP66\*, IP67, and IP68 each of which has its own specific requirements.

IPR14's purely functional design makes every part of the mounting process easier by reducing both the time and budget necessary for installation and maintenance. Furthermore, the wide-range of available aimable 'lock-in-place' reflectors allows for an extremely versatile performance-based product.

While function was at the heart of the IPR14 design, Louis Poulsen Lighting has taken into consideration the comfort and safety that must be afforded to the ultimate end user. IPR14 has lowered the operating temperature on the top plate to give designers expanded application possibilities. The highly acclaimed

**louis  
poulsen**



# Illuminations for Reading

Excerpts from LITECONTROL's study on reading. Part four of a five part study.

*In the twenty-first century, we enter what could be called the age of information technology. In a time of instantaneous access and processing of information, we must keep current with changing computer-based technologies to meet the ever-growing demand for instant communications. This also means changes in the way we research information and carry out actual reading tasks*

The library, whether it is a university, school, or public facility, remains the primary source for information storage and retrieval. Also, the library often serves as a campus, school, or community symbol as well as a centralized gathering place. The *architectural design* for a library typically includes a unifying and welcoming element, such as a central lobby or atrium. This clarifies the spatial organization to orient users. Today, library designs must be increasingly attractive, comfortable, more efficient and userfriendly in terms of access to resources and information in order to serve its intended public functions. The *lighting design* for a library must serve to reinforce the functions and enable it to fulfill its responsibilities. The lighting should enable library users to complete visual tasks without distractions such as glare. The lighting should also be architecturally compatible with the building design and the entire building design should be energy efficient to minimize annual operating expenditures. No longer a place for simply reading books, a library must accommodate a multitude of tasks and spaces. It has become a multimedia resource where activities may include reading books and magazines, watching videos and CDs, viewing microfilm or microfiche, working on computer terminals for research and the internet, viewing prints and old or rare books, viewing exhibitions of art, examining maps, examining and repairing resource material, and handling general staff and administrative work. The lighting for each task must be examined and designed independently.

## Reflectances

A library serves as an attractive community or institutional symbol. Interior designs and lighting designs come together to mutually enhance each other. The use of light-colored surface finishes is important because they improve visual comfort (See **Note A**) and they reduce the amount of light that must be supplied to the room, which in turn, impacts the cost of the lighting system and long-term energy consumption (See **Note B**). Dark surfaces increase the feeling

of contrast and the perceived brightness of lighting fixtures and windows. That is why indirect lighting systems utilizing high-reflectance surface finishes are so popular, especially near windows, vertical surfaces, and ceilings.

**Note A** The job of the eye-brain combination is to see, in part, by sensing contrast. If there is too much contrast the brain becomes overloaded and somewhat disabled. In extreme cases, the brain experiences discomfort (pain).

To stay in the comfort zone, finishes of 40 - 60% reflectance on walls and furniture are typical. Ceilings are generally white to moderate the brightness difference between the direct portion of a lighting fixture and the ceiling. Floors of 20% reflectance (dark) are used to hide the dirt. The presence of windows has a lot to do with reflectance considerations since they, in a broad sense, appear white.

**Note B** Dark colors can be used but an ongoing energy price is paid. Light colors such as white, off-white, light gray, pastels and tan, bounce more light back into the room than do dark colors. As a result, desired light levels can be achieved with the initial installation of fewer fixtures and lamps. Also, energy consumption (and cost) will be reduced over time.

## Summary

The library continues to serve an important function in communities, schools, and universities as a gathering place and as a source of information and knowledge. The lighting design is of primary importance if the library is to fulfill its mission. It provides an added aesthetic presence that complements the architectural design. But, it must also do much more. It must provide appropriate light levels in a variety of tasks; it must create a warm, friendly atmosphere while minimizing visual discomfort; and it must effectively minimize energy consumption and maintenance costs.

## Klopfenstein's Lighting Inc.

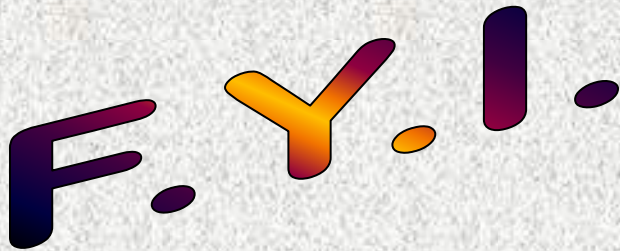
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KLI is known as the premiere lighting manufacturer's representative in Hawaii since 1976. In general, we promote our lighting manufacturers through Architects, Engineers and Designers and distribute through wholesale electrical houses.

KLI was originally incorporated in 1976 under the name KLOPFENSTEIN'S and operated out of a house in Hawaii Kai. In December of 1987 we moved our operations into our present location on Nuuanu Ave in Downtown Honolulu. In 1997 we reincorporated as KLOPFENSTEIN'S LIGHTING INC (KLI).

Our primary purpose is to provide the best product for your application with efficient service for all your needs.



F.Y.I.

1. Upcoming Rep Visit(s)
  - 7-9 August USA ILLUMINATION—Neil Rettig
  - 15-18 August PROGRESS LIGHTING—Mike Domokos
2. Lithonia Introduces their Omero series featured at LightFair.
3. Hydrel Introduces their 4590 series Border lights.
4. Lighting Systems Industries (LSI) announces the acquisition of SACO Technologies Inc.
5. Lighting Control & Design introduces their new [SnapLink™ 30 amp Latching Relay](#).

