

# Mock-Ups

Did you know that the Lighting Design Lab has a mock-up facility in Seattle's SODO neighborhood?



A lighting mock-up is a full-scale evaluation using real fixtures. This allows the design team to see the effect that the fixture is going to have when installed. This kind of evaluation goes beyond what is possible in a table top evaluation or a computer model. Being able to have direct perception of the fixture, and the environment, to see the actual effects on surfaces is a real benefit to the design team. It can also be a great way to get user groups comfortable with a new design or fixture type.

Whether you are working on a new building or retrofitting an existing one, a mock-up is an opportunity to see the proposed fixture(s) in action. Some mock-ups are evaluations of one light against other similar ones, other mock-ups are verifying a design concept. You can even explore and refine your design ideas in a workshop kind of process.

Our trained staff will assist you in our 1,200 sq. ft. mock-up space. It is equipped with 2 ~20'x20' movable ceilings and theatrical walls. Just get the fixtures to us and tell us what you want the mock-up to look like, and we will do the rest. Mock-ups can be simple or elaborate depending on your needs. You can bring in furniture, shelving, carpet or we can even paint the walls. With over 25 years of building mock-ups we can also assist you in refining the installation so that you can make the most of your experience.

To get started or see some pictures of past mock-ups just go to our web site (www.lightingdesignlab.com) and click on the *mock-ups* button. Or you can call us, and we will be happy to assist you.



#### lighting desi≋gn lab® Í

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## Message from the Director

It's been an exciting year so far at LDL! Following on a busy spring season of workshops and courses, we've spent the summer developing new content and have new classes scheduled throughout the fall; we've been engaging with our utility stakeholders and industry partners; and we're hitting the ground running for new programming this fall. We've got courses on Fundamentals of Lighting Controls, Retrofits and Audits, Big Box Retail, and 2-day and 1-day workshops on Advanced Lighting Controls—make sure to register today!

As the year draws to a close, I hope to see you all at LDL's Annual Open House on December 6. Please join us at this fun event to reconnect with familiar colleagues, make new connections, and learn about what 2019 will have in store. Announcements and invitations will be going out shortly, so keep an eye out for them in your inbox.

Join us at LDL's Annual Open House!

December 6th

## Fall 2018 Classes

### Join the Lighting Design Lab for Fall Classes

#### REGISTER: www.lightingdesignlab.com/education

#### **Fundamentals of Lighting Controls**

1-3pm | \$30 | Register Here

OCT 9 at LDL, Seattle OCT 23 at SnoPUD NOV 1 at Tacoma Public Utilities

This course will provide technology solution updates which simplify both design and installation while providing attendees with the confidence needed to include controls in their next project.

#### **Advanced Lighting Controls**

8am-4pm | \$120 | Register Here

#### OCT 18-19 at LDL, Seattle

This 2-day class is an interactive, hands-on workshop. Space is limited to 24 participants.

> Professional CEUs available for all classes.

Lighting Retrofits and Audits 3-5pm | \$30 | Register Here

OCT 9 at LDL, Seattle OCT 23 at SnoPUD NOV 1 at Tacoma Public Utilities

This course will help participants identify existing strengths and weaknesses of their current lighting system so informed decisions can be made on the retrofit.

#### **Big Box Retail Lighting**

**2-4pm** | \$30 | <u>Register Here</u>

#### NOV 6 at Tacoma Public Utilities NOV 8 at LDL, Seattle NOV 13 at SnoPUD

The course includes best practices for control strategies and will also explore new lighting products which are enabling big box retailers to collect valuable data from consumers from connected lighting systems.



## **Delivering Non-Energy Benefits** through Quality Lighting

nherent in the name of the Lighting Design Lab is a recognition that although conservation is the goal, design is the avenue. If the result is not high quality, then the conservation measure will not persist. In fact, energy conservation is only one of many benefits to a quality design scheme. We know people like to feel in control of their environment. This means, when possible, being able to adjust the lighting to suit their changing needs. Decades ago, this was a difficult and costly proposition. Today's lighting and control technologies are more reliable and less expensive, leading to control opportunities in most projects.

At the heart of most control strategies is dimming. Whether it is a private or a shared space, there are times when a change in brightness is desired. The benefits can be aesthetic, but there is energy to be saved, too. Also, a dimmed lighting system runs cooler and thereby offers a potential maintenance cost savings. Additionally, the ability to dim allows the lighting to be tuned to the precise light level appropriate to a given task.

Another fundamental control strategy is having the lighting adjust based on occupancy. At its most basic, this means having sensors that turn the lights off when the space is vacant. Today's control systems are capable of so much more, and with a little design effort, the result can lead to a more pleasing, secure, and efficient environment. For instance, if the lights are capable of dimming, then, when the occupancy sensor detects an empty room, instead of turning the lights completely off, they might dim down to 25 percent, leaving the space inviting while still saving most of the energy.

When a time clock is layered into the control scheme, there can be different control protocols that occur after normal business hours, such as during weekends, holidays, or various scheduled events. When combined with occupancy controls, this can be a powerful tool for energy savings and security in a building.

Good daylighting should be a goal for all living and working environments. When deployed properly, daylight-responsive lighting uses less energy while maintaining or even improving the performance and productivity of the building and the users. Combined with dimming and appropriate zoning, the system can control glare, balance brightness, and add to a more pleasing visual environment for all.



Over the millennia, humans have evolved around a dynamic solar light source that changes daily, seasonally, and with the weather, so it is only natural that we would respond favorably to an electric lighting system that is at least somewhat responsive to changing conditions. While energy cost savings are important, they should not be the only factor to consider when making lighting control choices on current and future projects.





**Quiz:** What were the nonenergy benefits mentioned in the feature article (starting on page 3)?

- Personal control
- Higher productivity
- Lower maintenance costs
- Aesthetic advantage
- □ Task tuning
- □ Green goals
- □ Cost saving
- Dynamic visual environment



# What else does LDL do?

# LDL Supports new program design and implementation for Seattle City Light.

A sking big changes to popular utility programs can be challenging for everyone involved. The same can be said for rolling out completely new programs. When Seattle City Light saw the need and opportunity to make significant changes to their lighting program, they turned to LDL for support.

LDL worked directly with City Light staff to understand key program goals like shifting commodity style lamps to an instant discount distributor model and updating the retrofit program to effectively promote advanced lighting controls. LDL then analyzed regional and national (utility) program offerings to identify best practices. In addition to program design support, LDL supported the development of marketing collateral and trade ally engagement.

Joe Fernandi, Program Design Manager for City Light, affirmed the value of bringing in LDL, saying, "They strengthened our case for a new strategic direction and then helped us get there. They displayed a clear understanding for the sort of real world issues which can mire program implementation, and they worked with utility staff and trade allies to find simple solutions. Their direct support was integral to the program launch happening smoothly and on time."



