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# CMP's Lighting Connection

Bright ideas to improve your bottom line

Central Maine Power Company, 83 Edison Drive, Augusta, Maine 04336

## Give your business a lighting makeover!

Enter to win \$2,500 worth of lighting



Route to:

- Merchandising/Sales  
 Facilities  
 Finance

Last year's contest generated so much interest that we've decided to make our Business Lighting Makeover Contest an annual event. So here's your chance to be a winner in 2006!

If your entry is selected, you'll win up to \$2,500 worth of lighting equipment for a lighting upgrade at your place of business. And CMP's Business Lighting team and our Lighting Makeover partners, Rockingham Electric Supply and Lightolier-Genlyte, will work with you to turn your lighting dreams into reality.

This year we'll also choose fifteen runner-up winners who will receive a free lighting audit from Lightolier-Genlyte, a leading manufacturer of business and home lighting fixtures. They'll assess your business and give you detailed, actionable recommendations on lighting for success.

### What's your lighting story?

Tell us what's wrong with your current lighting and why you want to improve it. Give us all the details. We'll accept interior or exterior lighting challenges — or both. CMP's Business Lighting Experts will read all the entries and select **one grand prize winner and fifteen runners-up**. We'll consider the condition of existing lighting, the reasons you want to improve it and the likelihood a lighting makeover will have a significant impact on your business or organization.

Last year's Lighting Makeover Contest winner:  
David Skelton, Owner  
Bowdoinham Country Store



"Winning was great. The project went well and we can already see a positive impact on sales thanks to the new lighting. Customers love it too. One of the biggest changes is how the products look. It's really noticeable in the sandwich counter and the produce section. The tomatoes are a nice red and the peppers are a true green."



Craig Baranowski, CMP Lighting Expert, has helped hundreds of Maine businesses grow with better lighting. Are you next?

### If you entered last year, enter again — if you didn't, don't miss out this time

Here's how it works. Go to [www.cmpco.com/makeover](http://www.cmpco.com/makeover) to enter online and for the contest rules and details. If you don't have internet access, call **1-800-649-1169** to request an entry form and we'll send one to you. Online entries must be received by midnight **March 3, 2006**. Paper entries must be postmarked no later than **March 3, 2006**.

CMP's Lighting Experts are always available to offer their expertise for free. But wouldn't it be nice to have \$2,500 worth of lighting to bring a new plan to light? Enter our 2006 Lighting Makeover Contest now! ♦



# Where do you start? Tips on selecting the right lighting

Choosing business lighting is like running any business project. You start with a goal, create a plan, and choose the resources and actions that will get you there.

What do you want your lighting to do? The answer is different for every type of business — what works in a merchandise warehouse would not be a good solution for a luxury spa! In the same vein, you may have different goals for different areas of your business. Are you looking for a welcoming ambience, task lighting that reduces

errors, a way to highlight your top merchandise? Only you can provide the goal. After that, you can use these tips!

## Decide what you want to accomplish

There are three major types of lamps used both indoors and out. Choose those that match up to your business lighting goals. The chart below can help you determine which lamp(s) to select based on your business lighting needs.

### Types of Lamps

Incandescent	Fluorescent	HID
<ul style="list-style-type: none"> <li>◆ Do not require a ballast</li> <li>◆ Warm color appearance with a low color temperature and excellent color rendering (CRI 100)</li> <li>◆ Shorter service life than other light sources in most cases</li> <li>◆ Filament is sensitive to vibrations and jarring</li> <li>◆ Bulb can get very hot during operation</li> <li>◆ Must be properly shielded because incandescent lamps can produce direct glare as a point source</li> </ul>	<ul style="list-style-type: none"> <li>◆ Require a ballast</li> <li>◆ Range of color temperatures and color rendering capabilities</li> <li>◆ Low surface brightness compared to point sources</li> <li>◆ Cooler operation</li> <li>◆ Ambient temperatures and convection currents can affect light output and life</li> <li>◆ Requires compatibility with ballast</li> <li>◆ Low temperatures can affect starting unless a "cold weather" ballast is specified</li> </ul>	<ul style="list-style-type: none"> <li>◆ Require a ballast</li> <li>◆ Ambient temperature does not affect light output, although low ambient temperatures can affect starting, requiring a special ballast</li> <li>◆ Compact light source</li> <li>◆ High lumen packages</li> <li>◆ Point light source</li> <li>◆ Range of color temperatures and color rendering abilities depending on the lamp type</li> <li>◆ Long service life</li> </ul>
Application	Application	Application
<p>Good for spot and accent lighting</p> <p><small>* Source: <a href="http://lightsearch.com">lightsearch.com</a></small></p>	<p>Good for general lighting in many applications</p>	<p>Good for high-ceilinged spaces that require high lighting levels</p>

## Next, look at fixtures

In the end, it's the effect of the light itself you generally want noticed rather than the fixture. You'll need styles that are suitable for the type(s) of lamp you want, and which will work to direct the illumination where you want it. Look at the size of your area, the ceiling height, wall colors, etc. A lighting professional can help you create a plan and choose the best combination of ambient and task lighting and also work with you to place and mount fixtures to fit your business.

## Light Fixture Specification Checklist\*

A luminaire, often called a light fixture, is a complete lighting unit that produces and distributes light. It contains the light sources designed to diffuse or distribute the light in a controlled pattern, components to protect and position the lamp(s), and a connection to the power source.

The light fixture's basic function is to produce and distribute light to fulfill the design goals for the lighted

## Where do you start?

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space. Below is a checklist for specifying the right fixture for the job.

### Characteristics of the Space\*

One should fully understand the demands of the application and conditions in the space that will affect the operation of the lighting system:

- ◆ Tasks to be performed in the space
- ◆ Desired light levels based on the tasks performed in the space
- ◆ Room size and dimensions
- ◆ Structural obstructions such as beams
- ◆ Layout of furniture and obstructions such as partitions
- ◆ Room and object surface colors and reflectances
- ◆ Availability of daylight
- ◆ Special concerns such as safety and security
- ◆ Hours of operation
- ◆ Assessment of normal operating conditions
- ◆ Possibility or known existence of abnormal operating conditions
- ◆ Cleanliness of the area during operation
- ◆ Maintenance schedule

For more technical information on lighting, visit [www.cmpco.com](http://www.cmpco.com), go to **Services**, and click on **Business Lighting**. You'll find links to more details, including the Q&A in Vol. 6 No. 4 of *CMP's Lighting Connection* newsletter, in which we addressed lamp types. Or give us a call at **1-800-649-1169** and we'll be happy to assist you.◆

\* Source: [lightsearch.com](http://lightsearch.com)



**Q. My lighting fixtures are about 20 years old. Should I think about replacing them?**

**A.** First, let's define what you mean by a light fixture. We'll assume you're talking about the whole unit (also called a luminaire), which consists of the lamp (bulb) — plus the housing and equipment that operate the energized lamp and direct the light into the space you want illuminated. For simplicity, let's say there are two parts: the lamp and the fixture. Typically, lamps will need

to be replaced before the fixture reaches the end of its life.

How long any one fixture lasts depends on several factors.

The environment in which a fixture operates — the

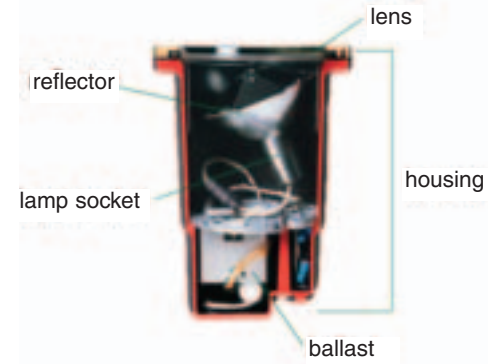
temperature of the

space, the presence of dust, dirt, and other contaminants, vibrations and other disturbances, etc. — affects its longevity. Another key factor is the actual hours of operation, as well as the on/off cycles. The heat generated by the lamp itself has an impact on the fixture's useful life too. In addition, parts will wear out over time and need to be replaced. Over time, maintenance costs can add up — and the quantity and quality of light from that fixture will deteriorate.

So, if your fixtures have been in place for 20 years, it's definitely time to consider replacing them. In its analyses of lighting systems, the U.S Department of Energy assumes fluorescent fixtures have a life span of 15 years. Plus, lighting design and technology have advanced a lot in 20 years, so you can get new fixtures and take advantage of new lamp technology that will do a much better job for you. For example, there are new recessed fixtures designed to get the most out of T5s, the latest development in linear fluorescent lamps. Other new fixtures offer integrated occupancy and daylight sensors.

The older your existing lighting system, the more likely you are to benefit by changing it.

One final tip: you may be using your space differently than when the lighting was originally installed. And a lighting system that's not meeting your needs is not effective or efficient, regardless of its age or its technology. So your aging fixtures may offer an opportunity for you to upgrade to a better lighting strategy.◆



*Light fixture components*

**Contact CMP's Lighting Experts:**  
**email: [lighting.expert@cmpco.com](mailto:lighting.expert@cmpco.com)**  
**or**  
**call (toll-free): 1-800-649-1169**

# Bright lights, bright minds...

The Freeport Public Library, built in 1997, employs a variety of light fixtures and lamp types. The result: an inviting, well-lit space.



*Large metal halide pendants provide good illumination for stacks with high shelves. These lamps provide a bright white light and the fixtures add to the decor.*



*Recessed fixtures in lobby area provides good and unobtrusive lighting.*



*Sleek fluorescent fixtures provide direct and indirect lighting using energy efficient T-8 lamps. This provides bright, uniform lighting, while minimizing glare.*



*Decorative wall sconces use compact fluorescent lamps to provide wall-washing illumination with an interesting eye-catching fixture.*

CMP's Lighting Connection is provided by CMP as a resource to keep its business customers informed on lighting-related issues. The information provided may include references to particular products, services, and vendors. Such references should in no way be construed as endorsement by CMP of any particular product, service, or vendor that is mentioned in CMP's Lighting Connection.

**Enter our Lighting Makeover Contest now to WIN \$2,500 worth of lighting fixtures for your business. More details inside. Enter today!**

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