

Lighting that transforms the patient experience

Philips Healthcare Lighting



Content

4	Shedding new	light on your	healthcare	spaces
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- 6 The path to a healthier future
- 8 Improving the patient experience
- 10 Retaining motivated caregivers
- 12 Creating a distinctive and positive image
- 14 Controlling operations and meeting financial goals
- 16 Philips healthcare lighting solutions
- 18 Why Philips



Who is Philips?

As a leader in healthcare and consumer lifestyles and the global leader in lighting, Philips is spearheading innovative and environmentally progressive solutions for today's healthcare facilities.

For a century and counting, Philips has been the foremost innovator and provider of lighting technologies, enabling new and more efficient uses of light that can transform our world both visually and practically.

We're proud to be a global leader in sustainability, too—we strive toward the ideal of meeting the needs of the present generation without compromising the ability of future generations to meet their own needs. We believe that every entity, from a local clinic to a national healthcare system, can benefit by being greener, too. Sustainability contributes to better everyday care and better long-range planning.

Like you, Philips takes patient needs as the starting point for healthcare equipment and lighting solutions. Our longstanding commitment to the mission of better care means providing flexibility to meet the specific needs of the user.

The Philips family of products delivers complete lighting solutions—from components and modules, to lamps, luminaires, and integrated systems—bringing you the utmost in quality, simplicity and innovations.

Shedding your heal

At Philips Lighting, we work with you to create welcoming, efficient healthcare spaces that bring you better facility operations—and better patient experiences.

new light on thcare spaces



Patients are changing, and with them the character of hospitals is changing too. Rising costs of care, the role of insurers, and more patient options for treatment—all these factors are forcing healthcare organizations to become more competitive. What once seemed like small differences between medical buildings are now the reasons that patients—and medical professionals—will favor one facility over another.

To compete in the high-stakes, high-stress reality of today's healthcare market, facilities must be designed around the needs of patients, visitors, healthcare providers and administrators.

Central to this equation is lighting. When healthcare facilities invest in better lighting, patients and staff not only see better, they feel better, too. One study showed that lighting can do far more than just improve visibility—it can actually accelerate the healing process, and improve caregiver performance.¹ Installing the proper lighting products can help patients relax, nurses become more efficient, and doctors focus more easily on the tasks at hand. And Philips lighting products can be part of the solution.

For more than 100 years, Philips has been providing products uniquely suited to improving the healthcare environment, from CT scanners to energy-efficient TV sets and energy efficient lighting solutions. Let our expertise in healthcare shed new light on the right choices for your facility.

 Excerpt from:Anjali Joseph, Ph.D., Director of Research, The Center for health Design. "The Impact of Light on Outcomes in Healthcare Settings", August 2006. Nov. 24, 2008.

The path to a heal

To be a leader in today's competitive environment, healthcare facilities need to improve in terms of ambiance, well-being and sustainability to help address the critical issues of patient experience, staff motivation, brand image and their financial goals. Lighting can support these key factors and help you transform your facility in meaningful and innovative ways.

> Ambiance: Welcoming, efficient facilities can provide physical and emotional comfort, putting patients and visitors at ease, and creating an optimal work environment for caregivers. Utilizing Philips lighting solutions, you can customize diagnostic areas, patient rooms, and lobbies, creating unique experiences for each occupant.

> Well-Being: Comfortable spaces can impact patient wellness. Implementing good lighting design and use of innovative lighting solutions can help put patients at ease and inspire confidence while promoting staff effectiveness.

> **Sustainability:** Employing systems that reduce a facility's environmental impact builds a positive image and saves dollars on energy use and maintenance. Our lighting products offer some of the highest efficiencies and longest life of any available today. Philips is committed to innovative solutions for reducing a facility's environmental "footprint" and cutting energy use—while remaining cost-effective.



Choosing the right lighting solution can help you achieve the desired mix of ambiance, well-being and sustainability.





Few environments are as challenging to illuminate as a hospital. A properly illuminated space is essential to drive the critical issues facing healthcare management.

- Patient Experience: Create appealing, emotionally uplifting environments
- Staff Retention: Improve staff well-being and motivation
- Brand Image: Create a distinctive corporate image
- Financial goals: Control facility operational costs

thier future



Comfort, care and quality Improving the patient experience

As patients assume greater responsibility for their own health, they demand higher levels of care. Sophisticated consumers now understand that patient comfort is part of the wellness equation, and they expect hospitals to be inviting and supportive during some of the most stressful moments of their lives. Philips lighting solutions for healthcare help you meet those expectations, putting patients at ease and adapting easily to their myriad of needs.



What is Color Rendering?

Color rendering (CRI) is the ability of a light source to represent colors in objects, and is a relative measurement which rates light sources on a scale of 0–100. The higher the CRI, the more true colors appear (Good = 70–80 CRI, Excellent = 80+CRI). High CRI is essential in settings where it is important that people appear natural and where visual clarity is important.



Ambiance: Lighting needs for patients and their families vary widely during a single hospital visit or stay. Bright general lighting can help highlight the reception desk, café and elevator banks. It can make public areas appear relaxed and welcoming, and create an environment for better examination by doctors and nurses. Warm, pleasant light in patient recovery rooms helps put patients at ease.



Philips T8 Fluorescent lamps with ALTO II[™] Technology and a CRI of 80 provide a high quality of light well-suited for patient comfort and examination.





Well-being: Our bodies are finely tuned to react to the ebb and flow of sunlight that occurs over the course of a day, but a hospital environment often interrupts this biological rhythm. Designing rooms around patient needs can help make hospitals less intimidating, reduce anxiety, encourage loved ones to spend more time with patients and allow staff to work more efficiently. Philips lighting solutions can recreate the dynamic nature of natural light in interior spaces, and help improve the patient's sense of well-being in the process.

Likewise, providing dark environments at night to promote healthy sleep patterns allows patients to maintain their daily rhythms and routines that create peace of mind. And as a 24–7 operation, hospitals need to provide adequate light for staff to perform their jobs at all hours of the day and to maintain alertness.



The innovative wayfinding system, **Philips CareGlow™ LED Device**, automatically illuminates indoor pathways with soft white light when the patient steps out of bed at night. No fumbling for a light switch, and no buzzing the staff. Instead, patients experience comfort and convenience to safely find their way at night.

Making a difference Retaining motivated care

Few professionals are as dependent on lighting as healthcare workers. The ability to see properly can literally be a lifesaver. Around-the-clock operations require environments that help your staff cope with the demands of their jobs.

Philips Lighting products bring the very best color rendering and clarity available to operating rooms, diagnostic centers, and doctors' offices.



Ambiance: Healthcare provider staff must be able to perform under stress at all times of the day and night. Nurse's stations, doctors' offices and patient rooms are busy areas where proper lighting is needed to accurately diagnose patients and perform demanding tasks. Lamps with a high color rendering index (CRI 80) promote clarity.

> Philips eW[®] Profile Powercore LED lighting fixture delivers high-quality white light that lasts for years and can be easily installed under cabinets.



Well-being: The natural rhythms of light and darkness-day and nightsynchronize our biological clocks, affecting alertness and perception levels. The intensity and color of light-cool vs. warm-can help establish those rhythms and improve comfort levels. Because natural lighting doesn't reach many hospital workspaces, Philips provides lighting solutions that can not only be dimmed, but can also be changed in color to help recreate the tones of natural daylight, such as morning and evening levels.



Trend: How working environments influence motivation and well-being

Choice of tones of white light affects people's mood and activity levels.¹

Warm white light









givers



Brightening the brand Creating a distin



ctive and positive image

Healthcare consumers and caregivers have more choice today than ever before. So in today's competitive healthcare market, first impressions count. Facilities that attract patients and medical professionals in a cost-effective way stand above their competitors.

You can set the tone with good general lighting and with unique accent architectural lighting. It's a simple yet valuable way to communicate your healthcare mission to the outside world—and present your brand image as a warm and caring entity.



Ambiance: Lighting that communicates the right mood and that improves visitor wayfinding helps send these messages. Highlighting a building's best architectural features such as atriums and artful façades is yet another way to boost awareness—and market share. In these ways, Philips lighting solutions can set you apart, and communicate your healthcare mission to the public.



Well-being: A thoughtful visual image does more than boost your brand image. It contributes to patient confidence in the provider's care. Those positive attitudes may mean more positive outcomes.

sustainability

Sustainability: Similarly, choosing environmentally friendly lighting solutions throughout your facilities sends a clear, healthy message all the while saving investors' dollars. Choosing products that have a small environmental footprint lets patients know the organization values sustainable choices. For hospitals following the *Green Guide for Healthcare*, seeking U.S. Green Building Council LEED[®] certification, or following H₂E—Hospitals for a Healthy Environment, Philips offers lamps with low-mercury and extra-long life technology—earth-friendly choices that reduce waste.

Boosting the bottom line Controlling operations an

In today's economy, healthcare facilities need to do everything they can to protect their bottom lines. Simplification, along with energy-efficient, long-lasting lighting solutions, means savings.

Because healthcare organizations operate 24–7, even small gains in efficiency can lead to significant savings. Replacing outdated lighting systems with more efficient, environmentally-friendly solutions will reduce energy consumption and maintenance requirements, saving funds for the core mission: healthcare delivery. Working with fewer lamp types and standardizing wattages can reduce complexity, making maintenance more manageable and less costly.

Philips has a strong commitment to sustainability and is continuously finding innovative ways to provide more environmentally sound and energy efficient choices for you. We are convinced that those facilities that combine the principles of economic growth and environmental stewardship will be the winners in the future.

To access your potential savings, our team of lighting experts can perform a Lighting Audit to help you maximize your profits without sacrificing your staff and patients' experience.

Healthcare T.C.O.O.: The Total Cost of (Lighting) Ownership

Understanding how various lighting choices impact the bottom line is essential. These elements will affect a property's payback, cash outlays and return on investment. Taken together, it's the total cost of ownership, or T.C.O.O.

Four factors drive the total cost of lighting ownership:

I. Product	The initial purchase cost for the lighting system.	Beyond first cost, compare performance: service life, lumen maintenance, and color rendering and stability.
2. Energy	Annual operating hours multiplied by electrical cost (kWh).	Consider product wattages as well as light output and lamp performance.
3. Maintenance	Includes labor and relamping costs.	Longer-life lamps that maintain color stability and lumen output can reduce maintenance.
4. Disposal	The end-of-life cost, including disposal and recycling of lamps, ballasts and fixtures.	Another area where longer-life lamps benefit the healthcare facilities, by reducing waste and cost.

 MasterColor CDMi 25W PAR38 offers 12,000 hours rated average life as compared to standard 75W PAR38 halogen with 3000 rated average life. The rated average life is the life obtained, on average, from large representative groups of lamps in laboratory tests under controlled conditions at 10 or more operating hours per start. It is based on survival of at least 50% of the lamps and allows for individual lamps or groups of lamps to vary considerably from the average.





Philips MasterColor® Integrated 25W PAR38 Ceramic Metal Halide lamps consume 3 times less energy and last up to 4 times longer than standard 75W PAR38 halogen lamps.¹ This cuts cost—but not light output.

d meeting financial goals



Sustainability: Going green doesn't have to cost more. You can save money by refitting older T12 lighting systems with new, high-performance long-life T8 lamps and electronic ballasts. Or replace high-wattage T8s with today's lower wattage, energy-efficient T8 lamps—without even changing the ballast. You can further reduce costs by adding long-life lamps to your fixtures, a move that extends the relamping cycle, reducing hassles and inventory levels.



For optimized system performance, Philips Energy Advantage T8 25W Fluorescent lamps featuring ALTO II[™] Technology and the high-efficiency Optanium[®] electronic ballast has the lowest mercury content and is one of the lowest energy-consuming 4-foot T8 systems on the market.

Philips: A "LEEDer" in Greening

Healthcare Regardless of what industry standards guide your sustainability program, lighting plays a key role. Four key points to consider when creating a lighting system for a healthcare facility:

- Improving the quality of the light produced
- Reducing mercury levels
- Maximizing energy efficiency
- Extending the life of the bulb—for less waste and lower maintenance costs

Philips has reduced the amount of mercury in our fluorescent T8 lamps significantly. An industry leader when it comes to environmentally friendly, energy-efficient products, our lighting systems can help you reach your environmental and financial goals more quickly.

Philips sustainable lighting solutions can help contribute points toward the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) certifications.

Philips healthcare lighting

	Factors			A maltantana	
Lamps	Ambiance	Well-Being	Sustainability	Applications	
Energy Advantage T8 25W Linear Fluorescent • Features ALTO II [™] Technology with only 1.7mg of mercury • Operates on any Instant Start and Programmed Start Ballast ¹ • High energy savings and long life to reduce relamping cycle		~	V	• Patient room • Treatment areas • Staff areas/offices	
SILHOUETTE® Series T5 High Output Fluorescent • Slim profile lamp for design flexibility with outstanding lumen performance • Operates on any Programmed Start Ballast ¹ • Features ALTO® Lamp Technology with only 1.4mg of mercury • Energy efficient and long life		V	V	• Patient room • Treatment areas • Staff areas/offices	
Energy Advantage T8 25W U-Bent Fluorescent • Features ALTO® Lamp Technology with only 2.0mg of mercury • Operates on any Instant Start and Programmed Start Ballasts • High energy savings and extra long life to reduce relamping cycle		V	~	• Patient room • Treatment areas • Staff areas/offices	
Energy Advantage PL-T Non-integrated Compact Fluorescent • 27W and 33W are direct replacements for 32W and 42W standard PL-T lamps with comparable light output • No ballast change required • Features ALTO® Lamp Technology	V	~	V	• Corridors • Entrance area • Lobby	
 MasterColor® CDM 25W Integrated PAR38 Easy retrofit upgrade from halogen PAR38 Energy efficient—uses up to 3 times less energy than a 75W PAR38 halogen lamp with comparable light output 	۷		V	• Lobby	
Ballasts					
 Optanium[®] Electronic Ballast For T8 Fluorescents, extends the service cycle, which lowers labor and material costs Energy efficient, long life system solution 		~	V	• Patient room • Treatment areas • Staff areas/offices	
Centium® Electronic Ballast • For T5 Fluorescents, ideal for use with occupancy sensors • Programmed start for maximizing lamp life • Smaller footprint than traditional ballasts enabling sleek fixture designs		V	~	• Patient room • Treatment areas • Staff areas/offices	

solutions

	Factors			
LEDs	Ambiance Well-Being Sustainability		Applications	
 CareGlow[™] LED Device Motion activated low ambient wayfinding lighting provides confidence at night LED technology uses only 2 watts of energy Easily installed in any location, requires no maintenance 		V		• Patient room
eW [®] Profile Powercore • Low profile linear line-voltage under cabinet light fixture • End-to-end connections • Low power consumption—up to 50 fixture-feet per run • Fully dimmable		V	V	• Offices • Nurses station • Gift shop
e₩ [®] Cove Powercore • LED cove fixture delivers white light with simple line-power installation • Flexible adaptable mounting, works with commercial dimmers • Mounts directly to flat surfaces in runs of up to 100 linear feet on a single circuit	~		~	• Restaurant • Lobby • Elevators
More Products from the Philips Family				
 Lightolier OBL Fixture Over-bed wall mounted fixture with separate lamp compartments for controlled uplight and downlight .125 thick DR acrylic linear prismatic impact resistant refractor Four-way pull switch (120V) 		•	✓	• Patient room
 Lightolier MD Coffer Four integral lighting functions: indirect ambient, direct reading, examination and optional night light Precise glare-free light control Installs as one-piece unit for recessed or surface mount 		V	~	• Patient room • Treatment areas
 ColorBlast® 12 Powercore Rich, saturated wall-washing color and color changing effect light fixture Simplified installation for easier, more consistent positioning Enhances architectural lighting effects in stores 	~		v	• Exterior

I) Starting voltage should be equal to or greater than 550V. These lamps are not recommended for use where the temperature in fixture is below 70°F. Striations may occur where air movement is present in fixture. For best operation, use ballast with anti-striation circuitry.

Why Philips

At Philips, we pride ourselves on producing tomorrow's products today. Just like you, we value lighting solutions that are flexible enough to fit the needs of each unique user, while sustaining our environment.

Customized Solutions

We are committed to working together with you to create effective and efficient environments. Whether you're planning an entirely new lighting design or just need an audit of your existing property, our team of applications lighting experts will work with you to create a solution that is tailored to your unique needs.

Always in Touch

Whether your properties are scattered across the country or represent a single location, a Philips representative nearby can answer questions about lighting. That representative will help you design and implement solutions to meet your most pressing needs.

A visit to a Philips Lighting Application Center can bring those solutions to life. Each Center hosts demonstrations and workshops where customers can acquaint themselves with the latest in healthcare lighting technologies.

Our network of national distributors can address all your re-lamping and re-ballasting needs while our national accounts team ensures that your facility receives premium services.

One Partner, Many Solutions

Philips leads the global lighting market as a pace setter in the industry, as well as the best partner to do business with, and as a responsible corporate citizen contributing to the sustainability of society at large. We can offer integrated solutions that draw upon capabilities from across the entire Philips group—from defibrillators and coffee-makers, to the most advanced televisions and set-top boxes. All are part of our drive to help build world-class, cost-effective healthcare properties.

Only Philips delivers a full portfolio of solutions, providing our customers the luxury and the flexibility that comes with choice, and the confidence that comes from partnering with an industry innovator.

Philips—delivering your lighting solutions



Luminaires featuring Lightolier, Vista and Alko



Solid State Lighting featuring Color Kinetics



Lamps and Ballasts featuring Philips Lighting Company and Philips Lighting Electronics



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