

Introduction



Notes:

Smart management of hotel properties includes many different factors, and one of the important factors is lighting. It can make or break the ambience of the establishment, and has a high degree of impact on guest comfort.

LED lighting makes a significant contribution to a hotel's operational sustainability in terms of energy use and carbon emissions. Philips lighting offers clear solutions and convenient services that enable hotel management to get the most out of the difference that lighting can make.

Requirements and regulations in hospitality lighting



Notes:

A number of requirements and regulations affect hospitality lighting. Let's take a quick look at the most important ones.

Focus on indoor work places EN12464-1

Lighting for the Hospitality Segment

Focus on indoor work places EN12464-1

European standard

Specifies requirements of lighting systems for indoor work places in terms of:

- Quality
- Quantity of illumination

Other relevant standards

- The maintenance of lighting installations
- Electrical equipment standards
- The luminaire standard
- The measuring standard

EUROPEAN STANDARD **EN 12464-1**

NORME EUROPÉENNE

EUROPAISCHES NORMEN

November 2002

02 04 402 04

English version

Light and lighting - Lighting of work places - Part 1: Indoor work places

Luminaires lighting - Éclairage des lieux de travail - Partie 1: Luminaires et éclairage des lieux de travail


Licht und Leuchten - Arbeitsplätze beleuchten - Teil 1: Arbeitsplatzbeleuchtung

The European Standard was approved by CEN on 6 October 2002.


EUROPEAN STANDARD EN 12464-1:2002 specifies the conditions for using the European Standard in the field of a particular standard without any restriction, up to date, but not necessarily complete, information concerning both national standards and the conditions of application in the field of the standard.

The European Standard applies to the following countries: Austria, Belgium, Denmark, France, Germany, Greece, Italy, Ireland, Luxembourg, Netherlands, Portugal, Spain, Sweden, Switzerland, United Kingdom, and the former Yugoslav Republic of Macedonia. It also applies to the following countries: Albania, Bulgaria, Cyprus, Czech Republic, Estonia, Finland, Hungary, Iceland, Lithuania, Latvia, Malta, Poland, Romania, Slovakia, Slovenia, Turkey, and the former Yugoslav Republic of Macedonia.

Active since early 2003 and implemented in all European countries



EUROPEAN COMMISSION
DIRECTORATE-GENERAL FOR ECONOMIC AFFAIRS AND EMPLOYMENT
LUXEMBOURG



The recommendations in the European standard are minimum recommendations. For various reasons, an installation can be made better than the minimum recommendations. However, the minimum recommendations must always be complied with.

Notes:

One of the most important standards that applies to lighting in hotels is the European norm EN12464-1 'Light and lighting - Lighting of work places - Part 1: Indoor work places'. This norm is active since early 2003 and implemented in all European countries.

It specifies requirements for lighting systems for almost all indoor workplaces and the surrounding areas in terms of both the quality and the quantity of illumination. It also gives recommendations for good lighting practice.

As well as this specific application standard, a number of other standards are also relevant: for example, the maintenance of lighting installations, electrical equipment standards, the luminaire standard and the measuring standard.

However, all these standards are not specifically relevant to the design and selection of lighting systems for use in hotels, so we will not deal with them here.

Note that the recommendations in the European standard are minimum recommendations. For various reasons, an installation can be made better than the minimum recommendations. However, the minimum recommendations must always be complied with.

Focus on indoor work places EN12464-1 (contd.)

Lighting for the Hospitality Segment

Focus on indoor work places EN12464-1 (contd.)

Delight guests by providing an attractive ambience in all the areas

Quantity of light

- Functional areas: offices, kitchens, conference rooms, corridors

Quality of light

- Public areas: lobby and reception





[Green Globe](#)



[Green Eco Audit](#)



[Hoteles Sostenibles](#)

Notes:

The chapter for restaurants and hotels is rather limited. Recommendations for general areas should be taken from the corresponding chapters on general areas in the norm.

Important aspects are the quantity and quality of lighting. As people stay for long periods of time in the various areas, the color rendering should be good ($R_a > 80$), and direct glare must be within the limits, that are stated in the UGR column. The quantity of lighting is mainly important where specific tasks are performed, such as in offices, kitchens, conference rooms and corridors.

The quality of lighting is defined for public areas like the lobby and reception, but not for private areas like the guest rooms. And although the standard states that 'the lighting should be designed to create the appropriate atmosphere', no further details are given about how this should be done.

Although guest rooms are not covered, hotels will of course want to delight their guests by providing an attractive ambience there and in all the other areas.

Other functional requirements are also important even though they are not covered by the standard. For example, normal reading conditions for short-term reading should be respected, for example, 200 lux at reading locations in the public spaces and guest rooms.

We see an upcoming trend of "Green certificates" for hotels (green labeling, green washing).

These are foundations that certify hotels and companies which comply with certain green standards (related to energy, water, air conditioning) etc.

Some examples are:

Green Globe: <http://www.greenhotelcertification.com/>

Green Eco Audit: <http://www.ecocrownhospitality.com/>

Hoteles Sostenibles: <http://hotelesostenibles.com>

Application trends



Notes:

In this section, we will discuss the application trends of lighting in the hotel industry.

Market data: hotels

Lighting for the Hospitality Segment

Market data: hotels



Value of lighting: 200-2000 Euros per room



Notes:

First of all, let us look at some basic data about the hotel market.

There are about half a million hotels in the world, totaling approximately 18 million hotel rooms. 6.5 million of these are in Europe, divided among 182,000 hotels. That means an average of about 35 rooms per hotel.

For our role as a supplier of lighting solutions, it's important to know the rate at which new hotels are added, or existing hotels are refurbished.

As a rule of thumb, the increase in the number of hotel rooms fluctuates between 5% and 10% per year, depending on the strength of the economy.

Even after the hotel interior is well-maintained, partial or full renovation would be required and executed every 7 to 12 years. This is valid for both the hotel room and the other non-private areas.

The value of lighting varies between 200 and 2000 Euros per room, once again with a significant spread.

Trends in hospitality lighting



Notes:

There are five important trends that influence applications in the hospitality lighting segment:

- The availability of sophisticated controls solutions
- The strong drive for sustainability and particularly for energy-efficiency
- The need for up-lamping in order to improve the total cost of ownership
- The increasing use of invisible light sources
- And finally, the strong penetration of the LED technology

Click each trend to learn more.

Application trends: lighting controls



Notes:


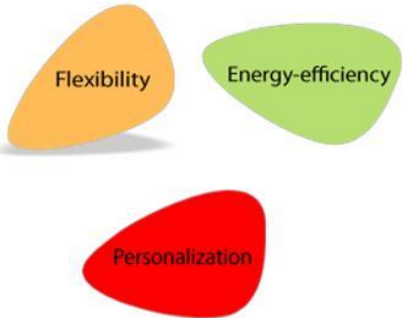
Flexibility, energy-efficiency, and personalization are a few important considerations that affect the designing of lighting solutions for the hotel industry.

Click each application trend to learn more.

Flexibility (Slide Layer)


Lighting for the Hospitality Segment

Application trends: lighting controls



To provide flexibility

- Advanced lighting controls help to increase flexibility
- Switch off or dim down according to different lighting needs

Click  to return to the main screen.

Click each application trend to learn more.


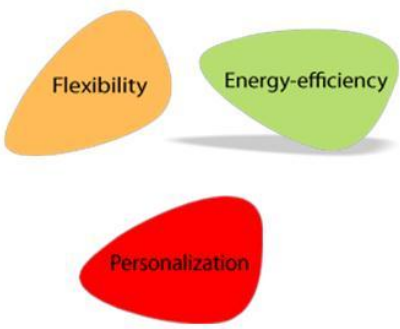
Notes:

Lighting controls are important to increase the flexibility of the lighting installation. Switch off or dim the lighting to meet different needs - for example, day and night, or if an area is occupied or not.

Energy-efficiency (Slide Layer)


Lighting for the Hospitality Segment

Application trends: lighting controls



To provide energy-efficiency

- Different lighting requirements throughout the day in lobbies, corridors, conference rooms
- Presence control in corridors, bathrooms, and public toilets

Click  to return to the main screen.

Click each application trend to learn more.

Notes:

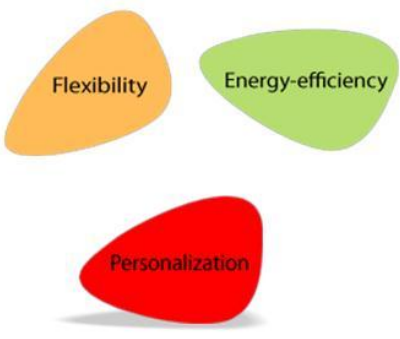
Lighting controls enable you to adjust lighting according to different requirements, which results in energy-savings. For example, areas such as lobbies, corridors, and conference rooms are used less during the night.

Energy can also be saved by presence detection by switching the lighting off completely when it is not needed - for example, in corridors, bathrooms, and toilets.

Personalization (Slide Layer)

Lighting for the Hospitality Segment


Application trends: lighting controls




- Flexibility
- Energy-efficiency
- Personalization

To provide personalization

- Lighting controls allow personalization
- In guest rooms to enhance different moods with personalized light



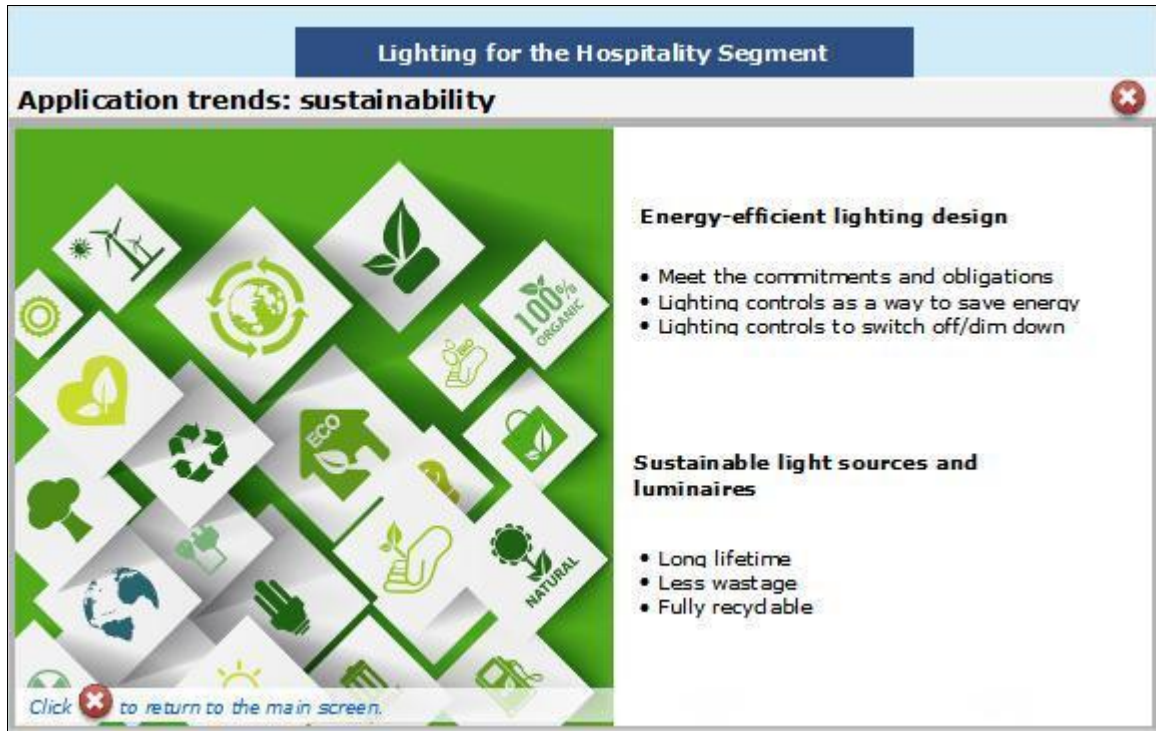
Click  to return to the main screen.

Click each application trend to learn more.

Notes:

Lighting controls allow personalization to be achieved, especially in guest rooms where different ambiances and moods need to be created using personalized light.

Application trends: sustainability



Lighting for the Hospitality Segment


Application trends: sustainability

Energy-efficient lighting design

- Meet the commitments and obligations
- Lighting controls as a way to save energy
- Lighting controls to switch off/dim down

Sustainable light sources and luminaires

- Long lifetime
- Less wastage
- Fully recyclable

Click  to return to the main screen.

Notes:

Sustainability and energy-efficiency are important considerations in hotel lighting. Major hotel chains must save energy and also meet the commitments and obligations that are consistent with their public profile.

Lighting controls are an excellent way to save energy.

Sustainable light sources and luminaires such as LEDs, offer longer lifetime. There would be less wastage at the end of a lifetime because the lamp and luminaire components can be fully recycled.

Application trends: up-lamping - TCO

Lighting for the Hospitality Segment

Application trends: up-lamping - TCO



The diagram is split into two main sections. On the left, under 'Up-lamping', there is an image of three different types of light bulbs: a standard incandescent bulb, a compact fluorescent bulb (CFL), and a Philips LED bulb. A red arrow points from the incandescent and CFL bulbs towards the LED bulb, indicating the transition. On the right, under 'Total Cost of Ownership', there is an image of five stacks of gold coins of increasing height, with a hand shadow in the background, representing the cumulative costs involved in ownership.

Up-lamping

- Replacing lamps by more advanced lamps (e.g. halogen or compact fluorescent replacing incandescent, LEDs replacing halogen)
- Cost saving by energy saving
- Cost saving by less maintenance
- Big contribution to lower Total Cost of Ownership

Total Cost of Ownership

Calculate all costs involved

- Initial investment
- Energy costs
- Maintenance costs

Click  to return to the main screen.

Notes:

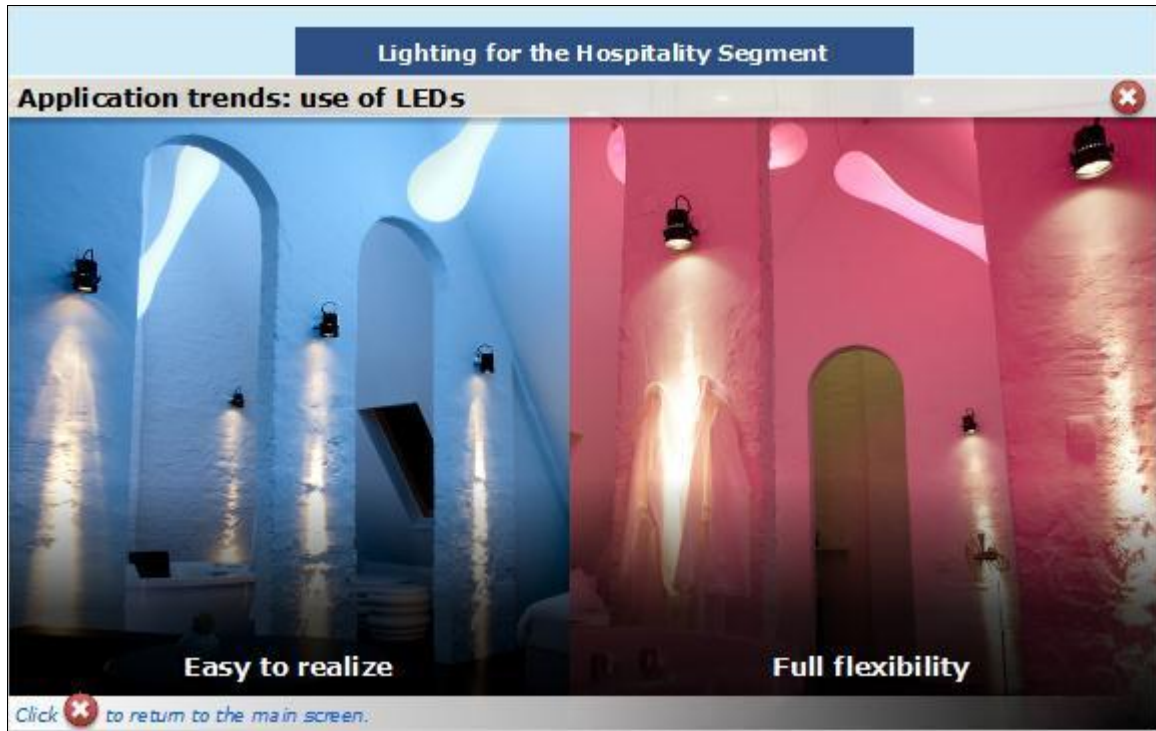
Up-lamping is an important aspect of sustainability. It means replacing the lamps in an existing installation with new and more energy-efficient lamps. It is easy, cost-effective, and a quick way to save energy. As a result, you save on running costs.

An additional cost-saving dimension is maintenance due to long lifetime of LED.

These benefits mean up-lamping can make a big contribution to a lower Total Cost of Ownership (TCO). TCO takes into account all the involved costs - initial investment, energy, and maintenance costs.

In some cases, changing lamps in an existing installation may be enough to make quick wins. But the gains can be even bigger if you upgrade the whole installation, including luminaires and control gear.

Application trends: use of LEDs



Notes:

Some other application areas for LED lighting can be seen in displays, around the bed heads, and at reception desks.

Compact halogen lamps with or without an integrated reflector are losing market share. Their short lifetime and relatively high energy consumption makes them less and less competitive against equivalent LED solutions.

No waste heat is generated from the lamp, the lifetime of LED is significantly longer than low-voltage halogen, and miniaturized lighting elements are also available.

Declining price levels are also making LED solutions increasingly attractive.

The color and color variation effects are easy to realize and have full flexibility.

Application trends: invisible light sources



Notes:

Over a period of time, lighting has become an integral part of the interior architecture. Lighting designers and interior designers are working together to get optimum results.

To meet different lighting requirements, several modifications are being made to lighting designs.

Instead of long, (semi-) continuous lines of luminaires in the ceiling, coves are built in which the artificial lighting is integrated. Single (spot) light sources are well-integrated in and around displays, and together with the interior elements, form the total architecture.

Lighting can also be integrated in racks, so that no additional lighting elements are required.

Application areas



Notes:

Moving on, we will learn about the different application areas in a hotel and the recommended lighting solutions for every area.

Lighting solutions per application area



Notes:

Let us first discuss the eight most important application areas in a hotel environment.

The façade, entrance, and reception determine the superficial first impression of the hotel.

General circulation areas such as the lobbies, foyers, lounges, corridors, and stairs form the second stage.

The wellness areas and fitness centers can be used by the guests whenever they want.

The intimate part of the hotel comprises the private areas, guest rooms, and bathrooms.

The restaurants and bars are open to everyone throughout the day.

The offices for hotel staff and the shared offices for guests form a significant part of the total floor area.

Conference rooms are often combined with other functions, like the ballroom or exhibition area.

Last but not least are the kitchen and service areas. Good working conditions for the staff will result in a pleasant stay for the hotel guests.

Click each application area to learn more.

Reception and lobbies

Lighting for the Hospitality Segment

Reception and lobbies

Product Overview

Example

- Make the first impressions count
- Create an inviting ambience at the entrance of your hotel
- Create the right atmosphere for the changing needs and expectations

Use LED lamps and luminaires with controls

Click each tab to learn more about the lighting applications in receptions and lobbies. Click to return to the application areas.

Notes:

First impressions count. The entrance to a hotel should have a welcoming ambience. Lighting can enhance this dynamic, especially in an area that is often busy, where people come together, get information, and interact. As the day evolves into evening and night, lighting creates the right atmosphere for the changing needs and expectations of hotel guests.

The best lighting effects in a reception or lobby can be achieved by using LED lamps, LED luminaires, and the right lighting controls.

Click each tab to learn more about the lighting applications in receptions and lobbies. Click the home icon to return to the application areas.

Here is a brief overview of the Philips products that are recommended for the design of lighting solutions for receptions and lobbies.

Click each product to view its details.

A highly-effective and a sustainable lighting solution was implemented at the Ritz-Carlton Hotel in Berlin. A wonderful atmosphere and a pleasant ambience has been created where both the guests and employees feel at ease.


Product Overview (Slide Layer)

Lighting for the Hospitality Segment


Reception and lobbies

Product Overview

Example



Click each product to view its details.

Click each tab to learn more about the lighting applications in receptions and lobbies. Click  to return to the application areas.


Example (Slide Layer)

Lighting for the Hospitality Segment

Reception and lobbies

Product Overview


Example



**Ritz-Carlton Hotel
(Berlin, Germany)**

"The LED lamps from Philips enable us to operate in a sustainable way without compromising on the ambience."

Markus Schmidt, Chief Engineer, Ritz-Carlton

Click each tab to learn more about the lighting applications in receptions and lobbies. Click  to return to the application areas.

Bars, restaurants, and lounges


Lighting for the Hospitality Segment


Bars, restaurants, and lounges

- Meet, unwind, socialize, and simply enjoy the experience
- Follow the daylight rhythm with lighting to set the right mood
- Make the atmosphere professional and refreshing, intimate and laid back
- Create an air of tranquility at night or make the lighting exciting and dynamic for parties
- Vary lighting schemes
 - Breakfast: moderate lighting
 - Lunch: active environment
 - Dinner: intimate night-time atmosphere

Product Overview

Example



Click each tab to learn more about the lighting applications in bars, restaurants, and lounges. Click  to return to the application areas.

Notes:

A hotel is a place where people meet, unwind, socialize, and simply enjoy the experience. By creating the right ambience, the hotel can cater to the different needs of their guests throughout the day as well as on special occasions. They can make the atmosphere professional and refreshing during the day, more intimate and laidback during the evening. They can create an air of tranquility at night or make the lighting exciting and dynamic for parties. Lighting sets the mood that enhances the guest experience.

In a hotel's restaurant, three different lighting schemes are typically provided to entertain the different moods of guests during breakfast, lunch, and dinner.

For breakfast, a quiet setting with a moderate lighting level is preferred.

For lunch time, a more active environment can be created with a rather uniform lighting of several hundred lux to suggest a businesslike feeling.

For dinner, the aim is to create an intimate night-time atmosphere. General lighting should be kept low, but with local increases at the tables to create extra intimacy. Candle lights can be added to create sparkle.

Click each tab to learn more about the lighting applications in bars, restaurants, and lounges. Click the home icon to return to the application areas.

Here is a brief overview of the Philips products that are recommended for the design of lighting solutions for bars, restaurants, and lounges.

Click each product to view its details.

An energy-efficient and environment-friendly lighting solution was much appreciated at the Spar Hotel in Gothenburg. With its new LED lighting, Spar Hotel has managed to reduce its lighting energy costs considerably.

Product Overview (Slide Layer)

Lighting for the Hospitality Segment

Bars, restaurants, and lounges

Product Overview

Example



Click each product to view its details.

Click each tab to learn more about the lighting applications in bars, restaurants, and lounges. Click  to return to the application areas.

Example (Slide Layer)

Lighting for the Hospitality Segment

Bars, restaurants, and lounges

Product Overview

Example



**Spar Hotel
(Majorna - Gothenburg, Sweden)**

"Our investment in LED lighting in the hotel's common areas has a payback period of around three years. That's a good investment!"

Alexander Pehrsson, Property Manager for Bygg-Göta AB

Click each tab to learn more about the lighting applications in bars, restaurants, and lounges. Click  to return to the application areas.

Corridors and other areas of transition

Lighting for the Hospitality Segment

Corridors and other areas of transition

- Friendly guide throughout transition areas
- Bright atmospheres in spaces without daylight
- Guest orientation
- Green and cost-effective solution
- Lighting breaks the monotony
- Energy saving without compromising guest's comfort

Occupancy control

Click each tab to learn more about the lighting applications in corridors and other areas of transition. Click to return to the application areas.

Notes:

Lighting acts as a friendly guide throughout transition areas. It can create a bright atmosphere in building spaces that have little or no natural daylight. Lighting solutions in ceilings and walls will guide your guests to their rooms and promote a feeling of safety for people finding emergency exits or staircases. Energy-efficient and sustainable lighting, including smart controls, are the key enablers for a green and cost-effective solution in an environment that is operational 24/7.

Some guests find long corridors disorienting and claustrophobic. Lighting reverses this effect with the help of bright walls, ceilings, illuminating pictures, and works of art.

In corridors, occupancy control is really important. Solutions like OccuSwitch work with any luminaire or lamp to switch lights off when no-one is around - a great way to save up to 30% of energy without compromising the comfort of guests during their stay.

Click each tab to learn more about the lighting applications in corridors and other areas of transition. Click the home icon to return to the application areas.

Here is a brief overview of the Philips products that are recommended for the design of lighting solutions for corridors and other areas of transition.

Click each product to view its details.

A retrofit solution with an ecologically sound design has been applied at the Moran Bewley's

Hotels in Dublin, without compromising the guest experience. This has made a major contribution towards reducing electricity costs with a fast return on investment, not compromising on the quality of light.


Product Overview (Slide Layer)

Lighting for the Hospitality Segment


Corridors and other areas of transition

Product Overview

Example



Click each product to view its details.

Click each tab to learn more about the lighting applications in corridors and other areas of transition. Click  to return to the application areas.


Example (Slide Layer)

Lighting for the Hospitality Segment

Corridors and other areas of transition

Product Overview


Example



**Moran Bewley's Hotels
(Dublin, Ireland)**

"Electricity costs are high but equally we realized that this offers the most scope by switching to sustainable solutions..."

Michael Moran, Project Development Director for the Group

Click each tab to learn more about the lighting applications in corridors and other areas of transition. Click  to return to the application areas.

Guest rooms

Lighting for the Hospitality Segment

Guest rooms

Product Overview

- Personal comfort: Top priority
- Individual needs and expectations
- Maximum comfort

Example

CorePro LED lamps range: affordable solution for guest rooms

Click each tab to learn more about the lighting applications in guest rooms. Click to return to the application areas.

Notes:

For any hotel, the personal comfort of guests should always be the top priority. Guests have their own individual needs and expectations from their hotel stay. Whether they're business travellers, city hoppers, or guests who want relaxation and pleasure, hotel rooms should always offer them maximum comfort.

With today's LED revolution, the technology is becoming more advanced. Our CorePro LED lamps provide a natural lighting effect for basic general lighting applications, and therefore, are now an affordable solution for guest rooms.

Click each tab to learn more about the lighting applications in guest rooms. Click the home icon to return to the application areas.

Here is a brief overview of the Philips products that are recommended for the design of lighting solutions for guest rooms.

Click each product to view its details.

An innovative, energy-efficient, long-lifetime, and minimal maintenance LED technology lighting solution has been applied at the Hilton Warsaw Hotel in Dublin. The switch to modern LED lighting solutions applied at the Hilton in important areas of the hotel resulted in the expected benefits.


Product Overview (Slide Layer)

Lighting for the Hospitality Segment


Guest rooms

Product Overview

Example



Click each product to view its details.

Click each tab to learn more about the lighting applications in guest rooms. Click  to return to the application areas.


Example (Slide Layer)

Lighting for the Hospitality Segment

Guest rooms

Product Overview


Example



**Hilton Warsaw Hotel
(Warsaw, Poland)**

"Working closely with Philips for uplighting led to a very successful partnership."

Remco Norden, CEO, Hilton Warsaw Hotel

Click each tab to learn more about the lighting applications in guest rooms. Click  to return to the application areas.

Luxury rooms and suites

Lighting for the Hospitality Segment

Luxury rooms and suites

Product Overview

Example

- Prioritize personal comfort and ambience
- Set the atmosphere for individual moods and needs
- Enjoy the benefit of flexibility through lighting

Click each tab to learn more about the lighting applications in luxury rooms and suites. Click  to return to the application areas.

Notes:

Personal comfort and ambience should always be the top priorities for a hotel. Guests have their own individual needs and expectations from their hotel stay, especially those who want relaxation and pleasure. Lighting sets the atmosphere for individual moods and needs. Lighting controls give you the benefit of flexibility to adjust lighting according to different requirements.

Click each tab to learn more about the lighting applications in luxury rooms and suites. Click the home icon to return to the application areas.

Here is a brief overview of the Philips products that are recommended for the design of lighting solutions for luxury rooms and suites.

Click each product to view its details.

Philips provided and executed a comprehensive solution at Intercontinental and Crowne Plaza Hotels in Dubai, which included the financing solution, the maintenance and marketing plan, project management, and the replacement of existing fixtures with new lighting systems.


Product Overview (Slide Layer)

Lighting for the Hospitality Segment


Luxury rooms and suites

Product Overview

Example



Click each product to view its details.

Click each tab to learn more about the lighting applications in luxury rooms and suites. Click  to return to the application areas.

Example (Slide Layer)

Lighting for the Hospitality Segment

Luxury rooms and suites

Product Overview

Example



**Intercontinental and Crowne Plaza Hotels
(Dubai, UAE)**

This project brings magnitude to our commitment to the environment and beautifying the iconic city of Dubai.

Click each tab to learn more about the lighting applications in luxury rooms and suites. Click  to return to the application areas.

Conference and meeting areas

Lighting for the Hospitality Segment

Conference and meeting areas

Product Overview

- Make your conference or meeting room a more effective space
- Enhance well-being, create excitement, and provide an air of calmness

Example

- Flexible lighting solutions for specific activities
- Increase the occupation rate of the facilities

Click each tab to learn more about the lighting applications in conference and meeting areas. Click  to return to the application areas.

Notes:

Lighting has a profound effect on the way people feel. Tailor it to create the perfect ambience for the task at hand and you can make your conference or meeting room a far more effective space. Lighting solutions help to enhance well-being, create excitement, and provide an air of calmness.

It is possible to provide flexible lighting solutions that can be adapted for specific activities - for example, energizing, presentation, brain storming (use of colors), socializing, etc. These possibilities can be translated into improved meeting results, and therefore, a better occupation rate at your facilities.

Click each tab to learn more about the lighting applications in conference and meeting areas. Click the home icon to return to the application areas.

Here is a brief overview of the Philips products that are recommended for the design of lighting solutions for conference and meeting areas.

Click each product to view its details.

A flexible, creative, cost-effective, and low-maintenance lighting solution has been executed by Philips at The Grand Sofitel hotel in Amsterdam. Many high-tech facilities were installed in the building, blending history and future into one.

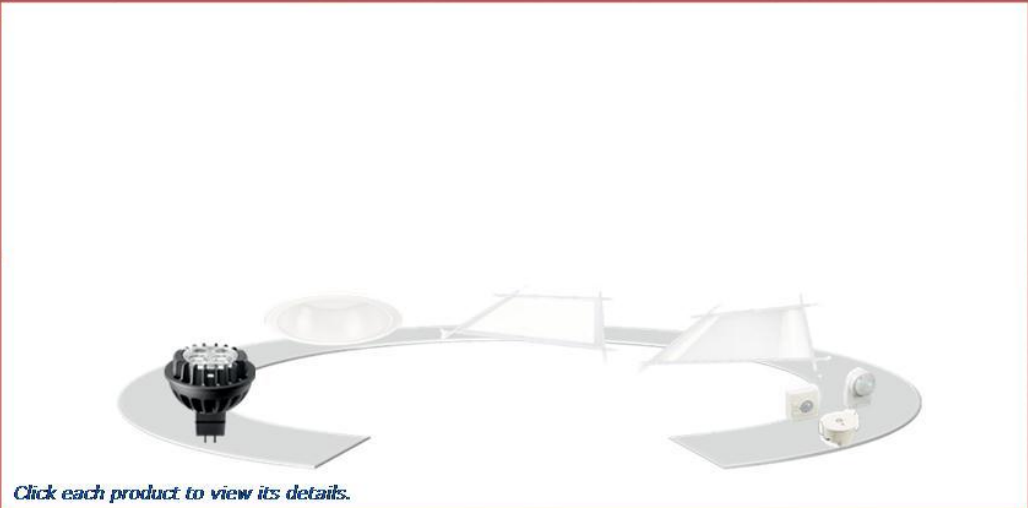
Product Overview (Slide Layer)

Lighting for the Hospitality Segment


Conference and meeting areas

Product Overview

Example



Click each product to view its details.

Click each tab to learn more about the lighting applications in conference and meeting areas. Click  to return to the application areas.

Example (Slide Layer)

Lighting for the Hospitality Segment

Conference and meeting areas

Product Overview

Example



**Grand Sofitel
(Amsterdam, The Netherlands)**

"We totally switched to LED lighting. In retrospect, we should have done this earlier. We are really impressed."

Willem van Dam, Chief of Technical Services, The Grand Sofitel, Amsterdam

Click each tab to learn more about the lighting applications in conference and meeting areas. Click  to return to the application areas.

Wellness areas

Lighting for the Hospitality Segment

Wellness areas

Product Overview

Example

- Make guests feel at ease
- Enhance the cleanliness & hygiene experience
- Improve guests' feeling of well-being

Stylish ToBeTouched Light Wheel: adjust lighting

Click each tab to learn more about the lighting applications in wellness areas. Click to return to the application areas

Notes:

The ultimate lighting solution will make guests feel at ease in all the wellness areas of the hotel. From underwater lighting to dimmable spots, we have everything you need to help them rejuvenate. With the stylish ToBeTouched 'Light Wheel', they can even change the brightness, color, saturation, and color temperature of the light to suit their mood.

In well-being areas and sports facilities, it's important to create an impression of cleanliness and hygiene.

Guests love to relax and unwind with a visit to the sauna or swimming pool. Taking a soothing massage or having a beauty treatment in a tranquil ambience will improve their feeling of well-being.

Click each tab to learn more about the lighting applications in wellness areas. Click the home icon to return to the application areas.

Here is a brief overview of the Philips products that are recommended for the design of lighting solutions for wellness areas.

Click each product to view its details.

Both functional and decorative lighting solutions equipped with a control system are being

enjoyed by the guests at Gran Melia Palacio de Isora hotel in Spain.

Product Overview (Slide Layer)

Lighting for the Hospitality Segment

Wellness areas

Product Overview

Example



Click each product to view its details.

Click each tab to learn more about the lighting applications in wellness areas. Click  to return to the application areas.

Example (Slide Layer)

Lighting for the Hospitality Segment

Wellness areas

Product Overview

Example



**Gran Melia Palacio de Isora
(Tenerife, Spain)**

"The Palacio de Isora hotel's 20 communal areas, e.g., the wellness area, now almost all use LED lighting."

Gran Melia Palacio de Isora, Tenerife, Spain

Click each tab to learn more about the lighting applications in wellness areas. Click  to return to the application areas.

Outdoor areas and car parks

The screenshot shows a web application titled "Lighting for the Hospitality Segment" with a sub-section "Outdoor areas and car parks". On the left, there are two vertical tabs: "Product Overview" and "Example". The "Product Overview" tab is active, displaying a list of benefits for using Philips Master LEDtubes in outdoor areas and car parks. The "Example" tab shows a car in a parking garage illuminated by the lights. At the bottom, there is a navigation instruction: "Click each tab to learn more about the lighting applications in outdoor areas and car parks. Click  to return to the application areas."

Lighting for the Hospitality Segment

Outdoor areas and car parks

Product Overview

- Turn a hotel into a landmark
- Make it distinctive and eye-catching
- Express unique identity with lights and subtle color settings
- Create dynamic scenes with light
- Reduce energy consumption and light spillage
- Reduce carbon emissions and costs
- Deliver high quality light, optimum visibility, and safety

Master LEDtubes

Example

Click each tab to learn more about the lighting applications in outdoor areas and car parks. Click  to return to the application areas.

Notes:

Lighting can turn a hotel into a landmark that people will remember and recognize. The façade of a hotel should be inviting and welcoming. Making it distinctive and eye-catching could help generate significant amounts of extra revenue. A hotel's unique identity can be expressed with white lights, dynamic ambiances, or subtle color settings.

New technologies allow you to create dynamic and scene-setting effects with light. Dimming solutions can be used for softer ambiances, and changing programs adapt the light to suit different occasions or communicate seasonal messages. With lighting controls, you can use light in the most sustainable way, reducing energy consumption and light spillage.

Most parking facilities operate 24 hours a day. Sustainable, energy-efficient lighting solutions are essential to help reduce carbon emissions and costs.

Our MASTER LEDtubes are tough and durable for both indoors and outdoors, delivering high quality light, optimum visibility, and safety. When used with the right controls, our lighting solutions provide illumination only when and where it is needed.

Click each tab to learn more about the lighting applications in outdoor areas and car parks. Click the home icon to return to the application areas.

Here is a brief overview of the Philips products that are recommended for the design of lighting solutions for outdoor areas and car parks.

Click each product to view its details.

The modern LED lighting solution offering secured energy-savings, an extended life cycle and significantly low maintenance costs, and has been much appreciated by NH Hoteles in Vienna. The original ambience has been maintained keeping an environment-friendly approach.

Product Overview (Slide Layer)

Lighting for the Hospitality Segment

Outdoor areas and car parks

Product Overview

Example



Click each product to view its details.

Click each tab to learn more about the lighting applications in outdoor areas and car parks. Click  to return to the application areas.


Example (Slide Layer)

Lighting for the Hospitality Segment

Outdoor areas and car parks

Product Overview


Example



**NH Hoteles
(Vienna, Austria)**

"Economic efficiency, high standards and the sustainability and environmental objectives of NH Hoteles can all be achieved with modern LED lights from Philips."

Stefan Müller, Director of Environment & Engineering NH Hoteles Central Europe

Click each tab to learn more about the lighting applications in outdoor areas and car parks. Click  to return to the application areas.

Basics of controls



Notes:

Let us discuss some important lighting controls and their functionalities for the hospitality segment.

Lighting controls for hospitality: functionalities



Notes:

Lighting controls offer three main functionalities: presence detection, daylight linking, and scene-setting.

- In presence detection, the light is switched on when someone enters the room or area, and then switched off again after a certain period of time when the person leaves the room, thereby saving energy in lighting areas when no-one is there.
- Daylight linking saves energy by dimming the lighting or in some cases even switching it off completely when sufficient daylight is detected to be entering the area.
- Scene-setting controls make it easy to change lighting scenes to meet the needs of different activities and situations. The different scenes can be pre-programmed, so that they can be instantly selected when needed without the need to make manual settings.


Now we'll see how we can implement these three functionalities of lighting controls with actual products.


Click each functionality to learn more.

Presence detection (Slide Layer)

Lighting for the Hospitality Segment

Lighting controls for hospitality: functionalities

Presence detection 



Occuswitch


- Movement detector
- Switches lights off after room has been empty for a certain time
- Stand-alone operation
- Can be combined with Luxsense for daylight-linked lighting

"Up to 80% energy saving"

Extended maintenance period to replace lamps

Applications

- **Washing room**
- **Corridors**
- **Elevator**
- **Small conference areas**
- **Other secondary areas**

Click  to return to the main screen.

Notes:

For presence detection, the Occuswitch is an excellent investment. It can help in energy savings of up to 80% and has an extended maintenance period before it needs to be replaced. This movement detector switches the lights off when a room has been unoccupied for a certain time. It can work stand-alone or can be combined with Luxsense for daylight-linked lighting.

The various application areas include:

- Washing room
- Corridors
- Elevator
- Small conference areas (and)
- Other secondary areas





Daylight linking (Slide Layer)

Lighting for the Hospitality Segment



Lighting controls for hospitality: functionalities

Daylight linking


Daylight linked artificial lighting can be dimmed lower in case of sufficient daylight.

   **ActiLume** 

- Daylight-linking and presence detection, integrated in the luminaire
- Saves 50% on electrical energy
- DALI driver required

 **Luxsense** 

- Simple daylight-linking function, integrated in the luminaire
- Energy savings of 25-50%
- Compensates for decrease in lamp performance over time
- 1-10V regulating driver required

Click  to return to the main screen.

Notes:

Daylight linked artificial lighting can be dimmed lower in case of sufficient daylight.

For daylight linking, we can choose between ActiLume and Luxsense.


ActiLume combines both daylight-linking and presence detection, integrated in the luminaire. This combination allows energy savings of up to 50%. A DALI driver is required for connecting the luminaire to the lighting control system.

Alternatively, we can choose Luxsense, which is a simple way to implement daylight-linking integrated in the luminaire. Energy savings of 25-50% can be achieved through this product. Luxsense compensates for the decreasing lamp performance over time by automatically increasing the luminaire power to reach the desired light level. A 1-10V regulating driver is required for connecting the luminaire to the lighting control system.


Scene setting (Slide Layer)

Lighting for the Hospitality Segment

Lighting controls for hospitality: functionalities


Scene-setting 

Dynalite



Lighting according to activity – easy to control

- Scene-setting lighting control system
- Variety of push-button interfaces such as wall mounted controllers, handheld remote controls, sensors
- Easy to program using DALI protocol

Click  to return to the main screen.

Notes:

Dynalite is a scene-setting lighting control system, and is available with a variety of push-button interfaces such as wall-mounted controllers and handheld remote control units, as well as with different sensors. Programming a Dynalite system is easy using the DALI protocol.

Lighting functions



Notes:

Let us now look at the key lighting functions of the hospitality segment.

Key lighting functions



Notes:

The three key lighting functions used in the hospitality segment are:

- General lighting
- Accent lighting (and)
- Decorative lighting

Click each image to learn more.

Decorative lighting

Lighting for the Hospitality Segment						
Key lighting functions						
Decorative lighting						
Best	Energy-efficiency and light quality, at lowest total cost of ownership	MASTER LEDspot LV 	MASTER LEDcapsule LV 	MASTER LEDbulb DIM 	MASTER LEDcandle 	MASTER LEDcapsule LV 
Better	Energy-efficiency and light quality, at moderate investment		CorePro LEDbulb DIM 			
Good	Energy-efficiency and light quality, at lower investment		CorePro LEDbulb ND 			

Notes:

Decorative lighting is the name used to describe the use of attractive lighting to provide a point of interest or attraction in an interior. Here is a comparative analysis of lighting solutions under decorative lighting.








Accent lighting

Lighting for the Hospitality Segment				
Key lighting functions				
	Accent lighting, for example spotlight	Up-lamping (installation < 5 yrs old, no investment in new luminaires & infra-structure)	Renovation (installation > 5 yrs old, investment in new luminaires)	New-build installation (investment in new luminaires & new infra-structure)
Best	Energy-efficiency and light quality, at lowest total cost of ownership	MASTER LEDspot MV LV 	CoreLine Proset 	CoreLine Proset 
Better	Energy-efficiency and light quality, at moderate investment	MASTER LEDspot MV Value 	CoreLine Proset 	CoreLine Proset 
Good	Energy-efficiency and light quality, at lower investment	CorePro LEDspot ND MV 	Zadora LED (Master LEDspot MV Value) 	Zadora LED (Master LEDspot MV Value) 

Notes:

Accent lighting is directional light to emphasize a particular object or to draw attention or create accent to a part of the field of view. Here is a comparative analysis of lighting solutions under accent lighting.

General lighting

Lighting for the Hospitality Segment				
Key lighting functions				
	General lighting, for example downlight	Up-lamping (installation < 5 yrs old, no investment in new luminaires & infra-structure)	Renovation (installation > 5 yrs old, investment in new luminaires)	New-build installation (investment in new luminaires & new infra-structure)
Best	Energy-efficiency and light quality, at lowest total cost of ownership	MASTER LEDbulb DIM 	CoreLine Downlight  Motion/ presence on/off controls	CoreLine Downlight  Motion/ presence on/off controls
Better	Energy-efficiency and light quality, at moderate investment	CorePro LEDbulb DIM 	CoreLine Downlight 	CoreLine Downlight 
Good	Energy-efficiency and light quality, at lower investment	CorePro LEDbulb ND 		

Notes:

General lighting provides the required illuminance over the total area with a certain degree of uniformity. Here is a comparative analysis of lighting solutions under general lighting.

Summary

Lighting for the Hospitality Segment

Summary

Lighting solutions

- Make a difference to guests
- Make them feel at home
- Help in conserving energy

Two types of regulations


- Lighting application norms
- System design and safety norms

Market trends

- Lighting controls
- Sustainability
- Up-lamping and TCO
- Invisible light sources
- Use of LEDs

Benefits of LED solutions

- Unrivalled economics
- High visual comfort
- Flexibility in design and operation



Notes:

That brings us to the end of this module on lighting in the hospitality segment!

Lighting solutions make a difference to guests, make them feel at home, and at the same time help in conserving energy.

Lighting is generally affected by two types of regulations. Lighting application norms, which are the focus of the international commission on illumination, and system design and safety norms, which are the focus of the International Electrotechnical Commission.

The general trends that influence applications in the hospitality lighting segment are the availability of sophisticated controls solutions, strong drive for sustainability and particularly for energy-efficiency, need for up-lamping in order to improve the total cost of ownership, increasing use of invisible light sources, and finally, strong penetration of the LED technology.

The benefits that LED solutions bring to the hospitality segment are unrivalled economics, high visual comfort, and flexibility in design and operation.

This knowledge is useful in developing and using appropriate marketing themes and tools, and in dealing effectively with the different environments and applications in this lighting segment.

Thank You

Thank you for completing this course!

For additional information, please refer to:

