# PHILIPS

Professional Lighting

Office

# Making the workspace work for everyone

Office Lighting Catalog 2016

# Let's work better

# 66

I think the future of the office will be more about **meeting and talking** to people and collaborating."

- Babette Bouman, Architect, Fokkema & Partners



# Create the "Future Office"

Today, creative visionairs are creating immersive experiences and exploring new ways of using light to alter the way people feel about their surroundings.

The impact of economic, social and environmental factors and an increased awareness of employee wellbeing have driven the need for new kinds of working environments.

Digitization, flexible working, energy efficiency, whatever challenges you face, let our insights from top investors, developers, designers and office building owners inspire you.

# **Key trends** driving today's changing workplace



Green buildings

# Connectivity

#### More than energy saving

#### Optimizing the office

Our increasing demands and finite resources call for a more considered, sustainable and responsible approach to how we do business. As urban growth continues, developers, energy efficiency and control designers and office building owners inspire you.

Technology of a "smart building" supports flexible, wireless working, optimizes employee comfort and productivity and offers to owners and tenants.



# Health and wellbeing

#### Good for business

With generations X, Y and Z now co-workers, each with their own different working styles and needs, we look at how workplace comfort can keep people healthy, happy, motivated and productive



# Engagement and experience

#### Flexibility is king

The digital revolution has changed the way we work, bringing with it infinitely more flexibility, choice and opportunity over how. where and when we work.



# 66

It's not just about developing energy efficient buildings- it's also about how to make buildings efficiently used."

- Anna Denell, Sustainability Director, Vasakornen AB

# **Green buildings** More than **energy saving**

Originating in the US in the 1970's, green buildings can be defined as having structures and using processes that are environmentally responsible and resource-efficient throughout their lifecycle.

# The value of building green





30 - 50% reduction in energy use\* **UP to 16%** increase in asset value



35% decrease in carbon emissions\*



# Connectivity We are **better connected**

The shift from analogue to digital has completely changed our world over the last 30 years. We now walk round with smartphones in our pockets containing more computing power than that which helped Neil Armstrong set foot on the moon in 1969.

66

**Innovation is our highest** priority and we want to raise the bar in terms of data analysis, delivering new insights into the use of the office space."

- Eric Ubels, CIO Deloitte

# **Solutions** to challenges





Value

**Future proof** 

Delivering value beyond illumination

System is flexible, future proof and upgradable



# Insight through data

Connectivity delivers insights via data to ensure optimization takes place



# Comfort and control

Employee comfort and control is increased, whether for closed offices. boardrooms or even open plan spaces



# Health and wellbeing

# Good for **business**

It makes perfect sense that if your staff is comfortable in their workplace they will feel motivated and productive, but it's only in recent times that "health and wellbeing" has emerged as an area of focus for employers – a factor also linked to staff recruitment, retention and job satisfaction.

66

The most important thing executives can do is send a very clear message to their employees that they care about each person's overall wellbeing."

- Tom Rath, Gallup

# Comfort and **efficiency**





**Up to 25%** 

Mental function

and memory

improvement

**Up to 12%** 

Call processing increase





**Up to 23%** 

Productivity increase



66

Some of the best decision and insights come from hallway and cafeteria discussions, meeting new people and impromptu team meetings."

Marissa Meyer, Yahoo CEO, 2013

# Engagement and experience

Flexible workspaces

Organizations know they have to change and adapt to stay competitive. It's the same with workplace environments.

# **Appropriate** spaces



Focusing spaces

Collaborative spaces



Social spaces



Learning spaces



# With work space, lighting too has evolved

Lighting, over the years has evolved into a tool that not only lits up spaces but also helps reduce energy consumption, safeguard resources and provides positive working environment.

# Early 20th century



# Late 20th century



# Light **for work**

# Efficient and sustainable

- Fixed tasks
- Task oriented
- Strict hierarchy
- No worker empowerment

# Light **for space**

# Impactful and innovative

- Open plan offices
- Increase in communications
- Beginning of electronics
- More efficient ways of working
- Task oriented autonomous working

# Light **for productivity**

**Higher efficiency** 

- Computer technology introduced
- Democratization of workplace
- Collaborative working
- Portable communication
- Flexitime

# Early 21st century

# Light for well being

Designed around you

- Workplace efficiency
- Employee health and wellbeing
- Environmental concerns
- Digital connectivity
- Desire for control and choice
- Employee empowerment
- Productivity and efficiency focussed
- Collaborative

# Work space **beyond illumination**

- $\cdot\,$  Healthier and happier workplaces
- · Flexibility to employees
- · Optimized asset utilization
- · Lower installation costs
- Connected system for real time information



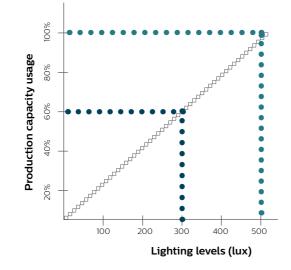
# **Lighting helps**

# Improve performance

Quality lighting contributes positively to task performance in terms of higher speed and lower failure rate. It improves, health and wellbeing, increases safety and lowers absenteeism.

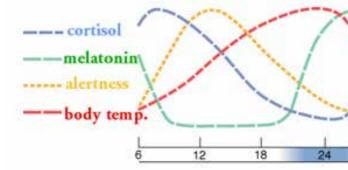
Good lighting can increase productivity by up to 8%\*.

The graph depicts increase in lux levels can improve focus and result in higher output



# Work as per circadian rhythm

- Light affects biological clock, moods and alertness
- Artificial light has simulating effect on body, same as natural light



Double plot (2 x 24 hrs) of typical circadian rhythms of body temperature, melatonin, cortisol and alertness in humans for a natural 24 hour light/dark.

# **Create positive** working environment

- Motivates people
- Creates inspiring working environment
- Makes the space look attractive
- Provides tidy and clean atmosphere
- Makes work a pleasant activity

# **Increase safety** and comfort

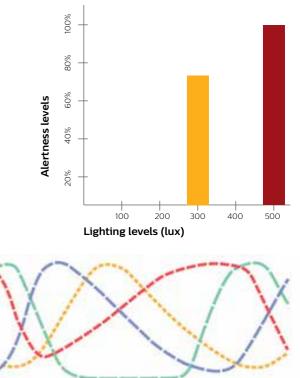
With quality light, many workplace accidents can be prevented. Uniform lighting levels and glare free light prevents employees from getting distracted.

Up to 20%\* errors can be reduced with quality light.



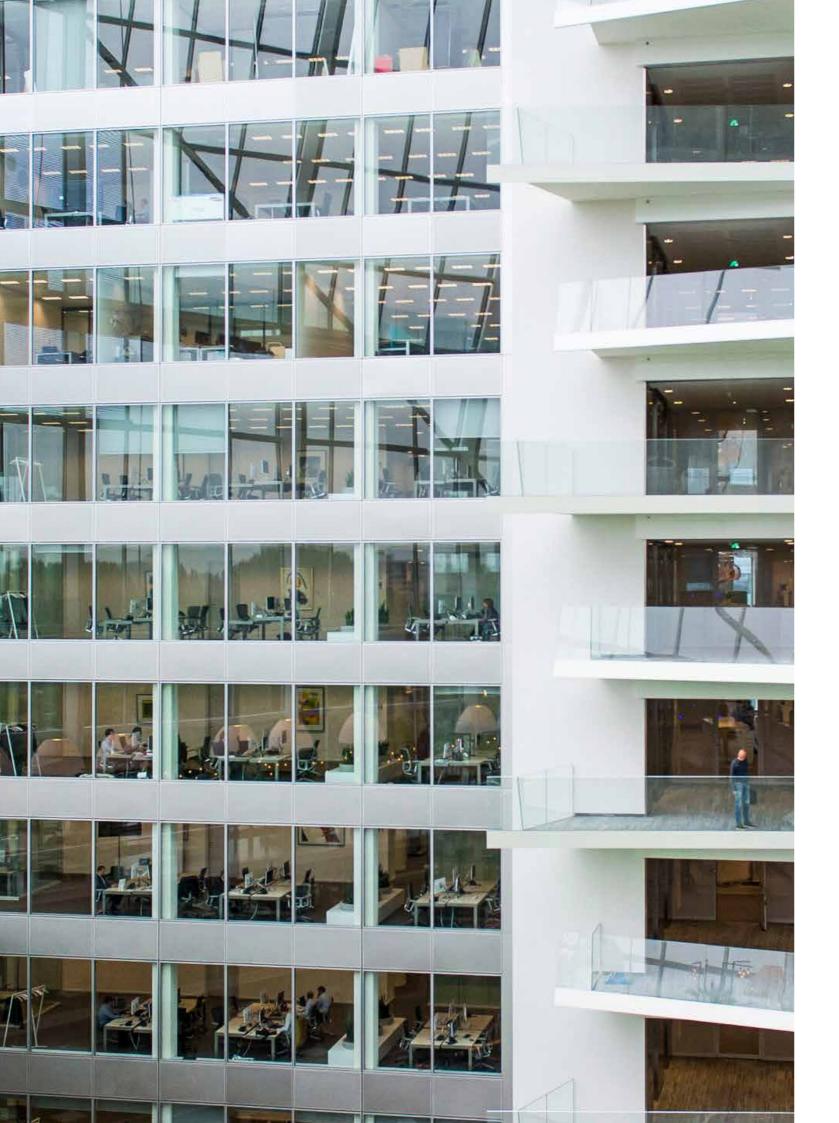






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# Philips **leads** the way

Light has a major impact on our wellbeing, moods and emotions. It inspires, attracts, communicates, sets the scene and enhances productivity and comfort in office.

Each year, we at Philips invest heavily in research to gather end-user insights, further deepening our understanding of people's needs, desires and aspirations. Combining these insights with our technological leadership, we are able to deliver meaningful innovations, advanced energy efficient products and systems that are designed around people and are very easy to experience.

We offer a complete portfolio of lighting systems and services for various application areas within an office. From open office areas to meeting rooms and other areas, our range of general lighting, functional lighting and task lighting solutions, meets your need.



# **State of the art** Lighting Innovation Center

The brightest brains in the country work together on the latest technology platforms to develop the most optimized solution for the customer using cutting edge design software and analysis tools. The design centre is equipped with the state of the art measurement, simulation and validation facility to check the designs, prototypes, safety and protection parameters and finally, the finished products at every step, from conceptualisation to delivery.

Designed for Indian conditions, tested at our state of the art Lighting Innovation Center, Noida



# Delivering the best **performance and quality**

# Lifetime & reliability

Philips applies best known methods for handling issues associated with thermal management (source lifetime), optics (beam uniformity, quality and output), energy management (high energy efficiency, low power consumption) and ease of installation (contractor friendly) to deliver industry leading results.

# Color consistency and light quality

Optibin<sup>®</sup>, our proprietary production binning optimization process, ensures consistent performance from fixture to fixture. Our strategic relationships with the leading LED source suppliers also give us access to the best LED source binning and source performance. As a result, our LED lighting products generate the truest color and the best light intensity.

# Uniform beam quality

Philips' optics expertise gained from over a decade of LED lighting product development enables all our products to deliver uniform beam quality, with no hot spots or unevenness, ensuring optimal light distribution.

# **Delivery required specifications**

By virtue of our close collaboration with standards and regulatory agencies, today we are leading the way to develop and introduce standards for LED lighting products. Our products are tested in accordance with industry standards at accredited laboratories.

# Validation and testing

Philips performs extensive validation and environmental testing using accredited facilities to ensure product quality. Rigorous tests include thermal cycling, humidity, and water immersion to verify the functionality and robustness of products under various extreme environmental conditions.

### Complete system approach

Philips designs, develops, and manufactures complete system solutions: everything needed to power up and control intelligent LED illumination. This approach assures that the entire system is optimized to work together and meets regulatory compliance as well as provides a high level of flexibility in the system.









# Photometry lab

- Biggest Lab in Asia with latest facilities
- Gonio photometer measures the light distribution of luminaires in a 3 dimensional space
- · Provides 98% accuracy

# Thermal and electrical lab

- $\cdot$  Luminaires tested as per IEC and IS standards
- · Fully equipped to conduct all relevant tests.
- · Ensures superior product quality

# LED drivers and solar charge controller development lab

- $\cdot$  Fully equipped for CE compliance testing
- · Testing facilities incorporate all IEC standards
- Test facilities and equipments to monitor performance, safety, surge, EMI-EMC, thermal management, solar panel simulators etc.

# Dust and water ingress facility

- $\cdot$  All products are rigorously tested
- The facility covers entire range of ingress protection and is instrumental for customer acceptance tests.



# Creating operational efficiency



# Optimized building utilization

Our connected lighting systems can feed occupancy data to building- management systems to allow for optimal control of HVAC.



# **Real time information** on energy use

Data from light points can be integrated with data from other devices like HVAC resulting in useful actionable insights which can lead to increased productivity and space optimization.



# **Sustainable** lighting solutions

Our eco friendly solutions emit less heat and deliver quality light. It helps reduce the load on the environment and provide sustainable work places.



# Enhancing Individual and brand experience



# Individual lighting control to employees

Our lighting systems can provide individual control to the employees helping them personalize the lighting at their desks.



Our lighting solutions are designed in sync with the circadian rhythm which keeps the employees always in positive mood and helps them deliver more.



# Adaptable lighting solutions

We offer solutions that are flexible and scalable. These solutions are future ready and can be tuned to changing brand requirements.







Conference rooms

# Providing the right lighting within offices





Corridors and stairways

Reception areas

Private offices



Facade



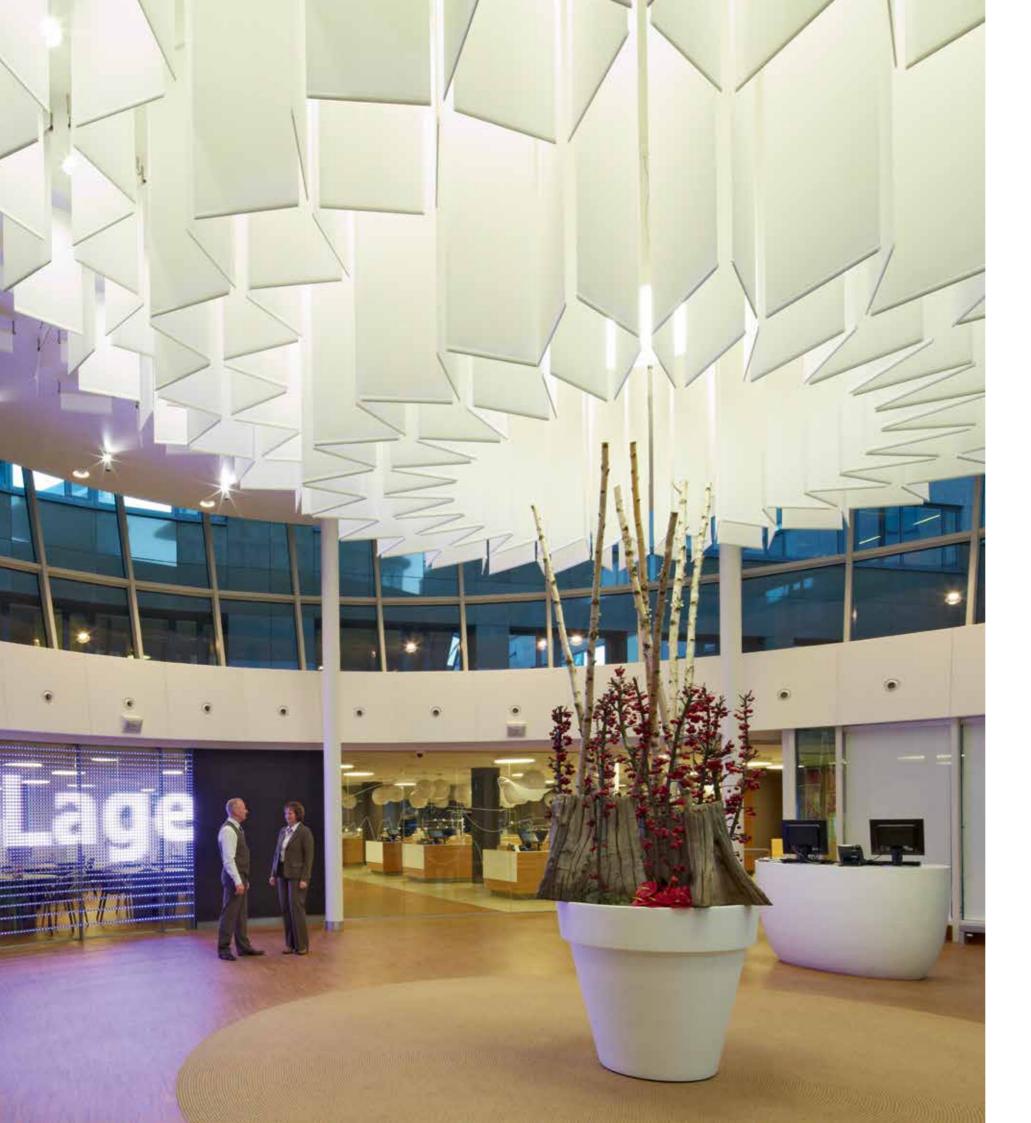


Open offices





Touchdown areas



# A memorable first impression from the moment visitors arrive

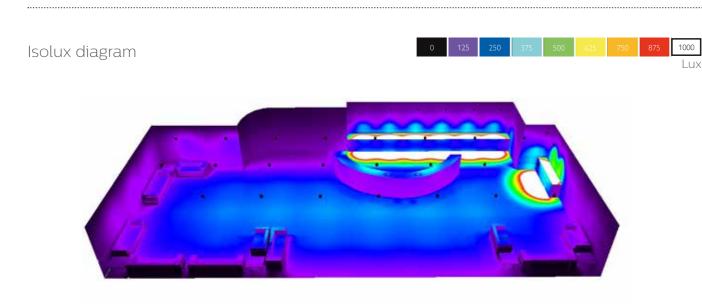
Lighting should help put visitors at ease while communicating the right image for companies.

Lighting solutions Office lighting **Reception areas** 

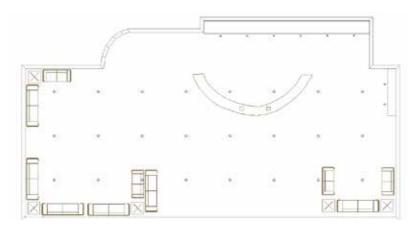
Our products are designed to create the most dramatic effects, accents, and soft, colorful ambiences. Whether the office design style is funky or functional, we have the right products to set the mood perfectly and enhance the expectations of clients and customers. Lighting also creates the right welcome for staff.

# Reception standard

Our standard setup uses LED downlights for the general lighting and puts additional focus on the reception desk by using pendant luminaires and a white cove at floor level.



# Plan view



# Recommended luminaires



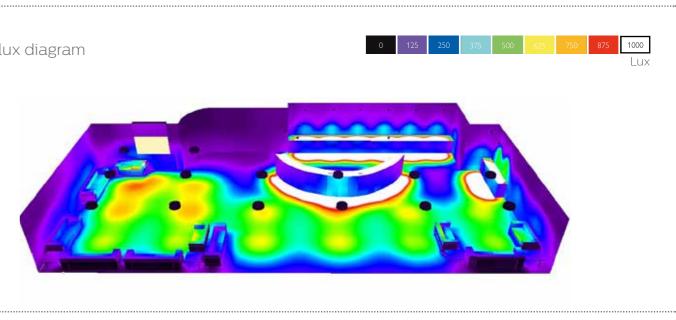




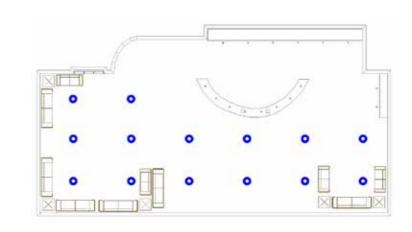
# Reception **advanced**

A step on from the standard setup – advanced uses more inspiring luminaires for both general and reception desk lighting. A personal touch and flexibility to change ambience is added by using colored cove lighting.

Isolux diagram



Plan view



# Recommended luminaires





GreenPerform

Vaya Linear LP

Vaya Linear MP

Smart Cake



Lighting solutions Office lighting Conference rooms

# A positive effect on the way people **feel and collaborate**

The lighting in spaces has a profound effect on the way people feel, present and communicate. We bring you lighting that creates spaces with maximum flexibility and comfort to relax or stimulate.

With our solutions, we help you express your creations in the best way envisioned. Clever product features will bring out the best in your conference room designs and in the people who use it.

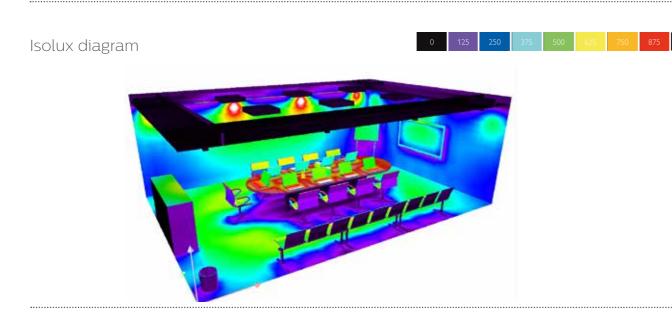


# Conference room standard

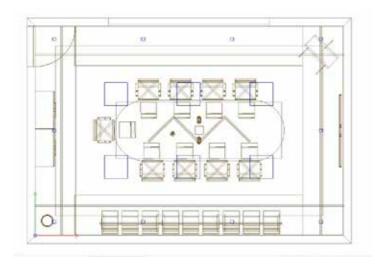
Rectangular pendant luminaires above the meeting table with recessed square luminaires providing the general lighting. White cove lighting is used on the long walls to provide good background lighting.

# Conference room advanced

Advanced uses innovative recessed and pendant luminaires with additional spots to create additional highlights.Instead of white, colored cove lighting has been added to provide more flexibility in scene setting.



# Plan view



# Recommended luminaires





GreenPerform

Dayline



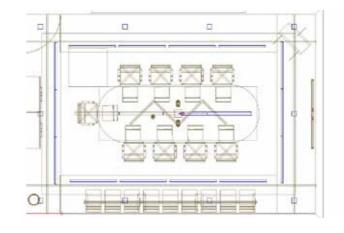


Plan view

Isolux diagram

1000

Lux



### Recommended luminaires







Chopstick



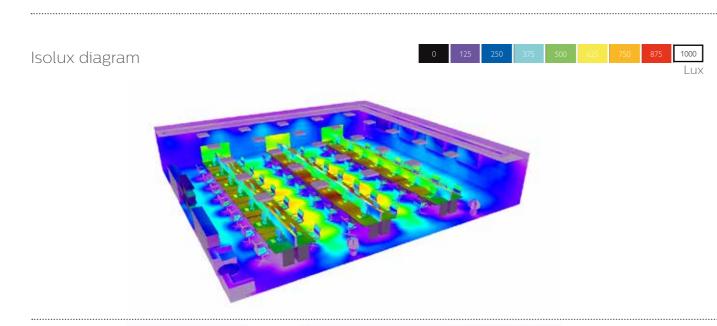
# Offices as **open and dynamic** as the people using it.

Our continued effort is to balance comfort and lighting effects that excite and energize. And because we focus on high efficiency, we ensure the energy bills look as good as your spaces.

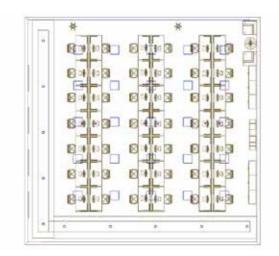
Lighting solutions Office lighting Open offices

# Open office **standard**

Standard office design using efficient office compliant square recessed LED luminaires.



# Plan view



# Recommended luminaires

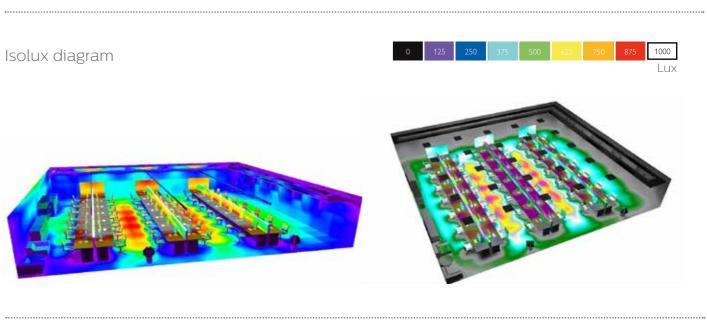




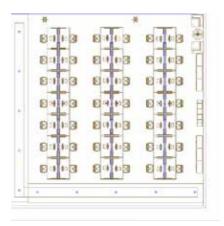


# Open office advanced

The advanced layout recommends a highly efficient LED recessed luminaire for general Illumination with additional desk lighting for added flexibility.



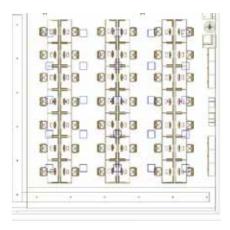
Plan view



### Recommended luminaires



**PowerBalance** 

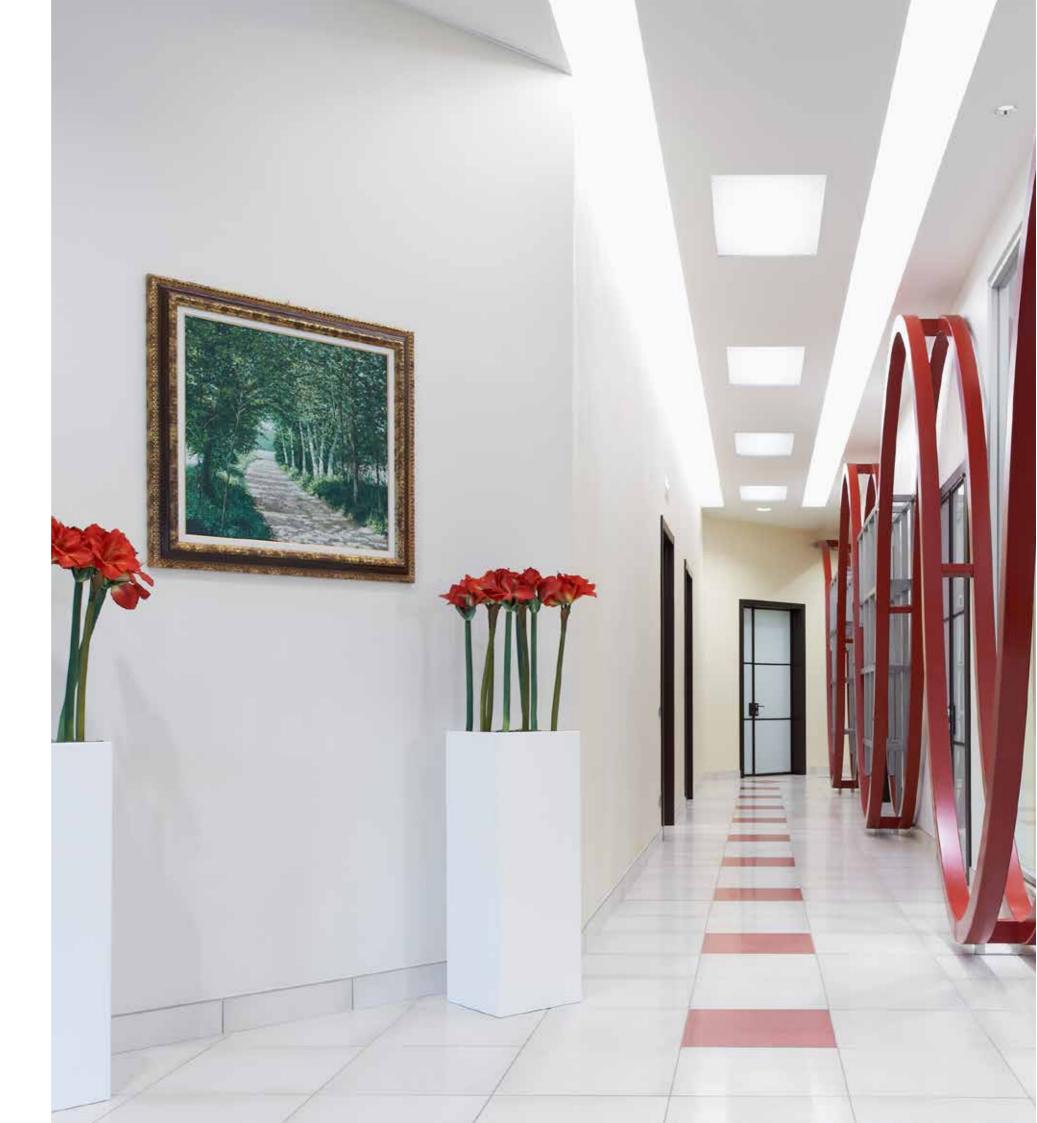




Lighting solutions Office lighting Corridors & stairways

# Stairways and corridors that are **a delight to walk down**

Create uniquely designed passage ways, corridors and stairways with accent displays that will bring these spaces to life. Our range of products give you the freedom to create spaces that are memorable, safe and stylish.

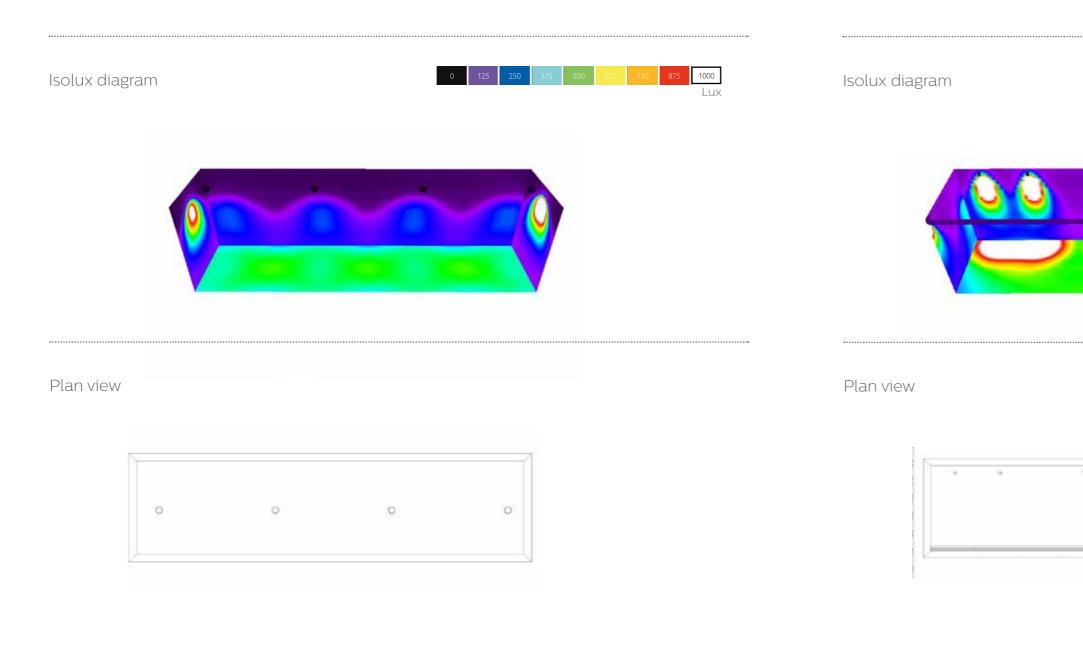


# Corridors and stairways standard

Our Standard setup using LED downlights on the central axis of the corridor



Advanced uses the same principle for general lighting as the standard design but with a more innovative look and feel. Additionally spots have been added to provide accents.



Recommended luminaires

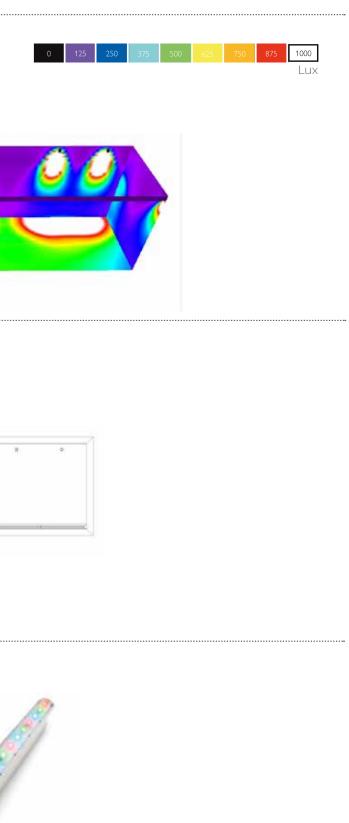


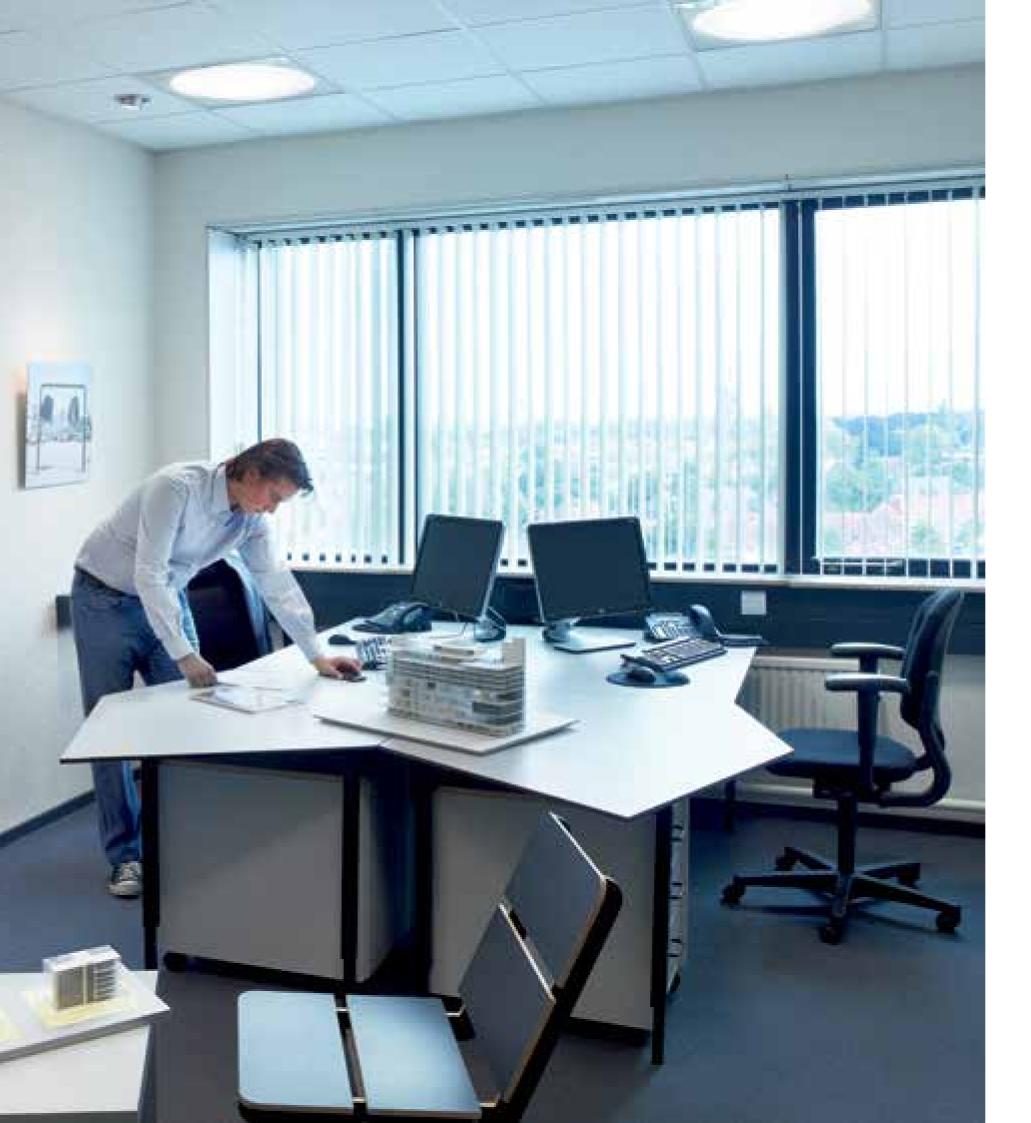
GreenPerform

Recommended luminaires









# Private offices that are **energizing and productive**.

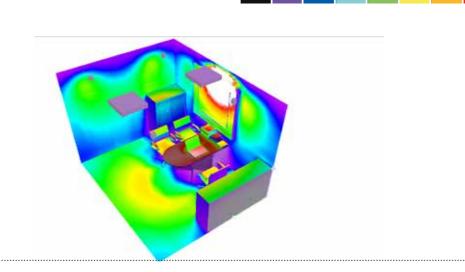
Our dynamic solutions support office spaces seamlessly. From luminaires that adjust automatically to natural light to lights that turn off when not needed. We help make smart offices even smarter, and private offices more energizing and adaptable for flexible working.

Lighting solutions Office lighting Private offices

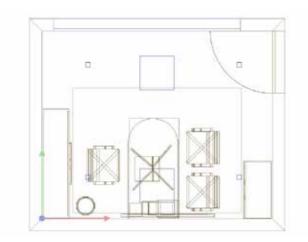
# Private office standard

The standard design uses four square recessed luminaires to provide functional lighting.

# Isolux diagram



# Plan view



# Recommended luminaires





Dayline



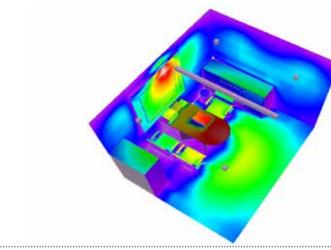
# Private office **advanced**

Advanced has the same layout as the standard design, but with more innovative luminaires and a dedicated suspended luminaire for the meeting table.

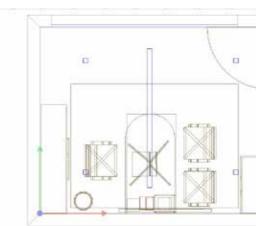
# Isolux diagram

1000

Lux



Plan view



Recommended luminaires





Smart Lotis

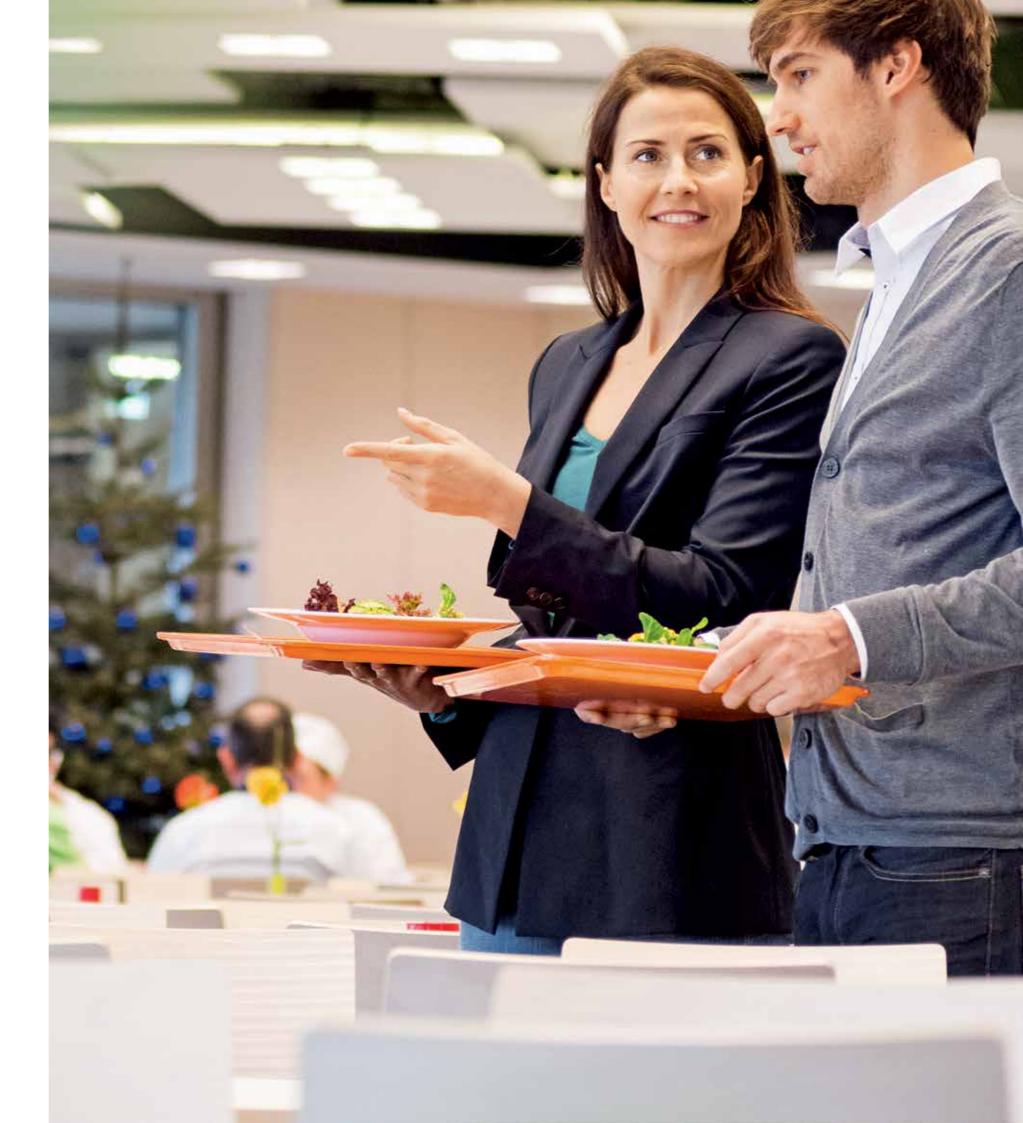
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OccuSwitch

Lighting solutions Office lighting Touchdown areas

# Touch- down areas that inspire and make short stays productive and useful

We aid you in making office touch- down areas inspiring and functional. More and more offices have spaces for plug-and-go, laptop focused activities that cater to peak period overspills. We provide the right kind of lighting that help make these spaces defined and productive for short periods of time.



# Touch- down areas standard

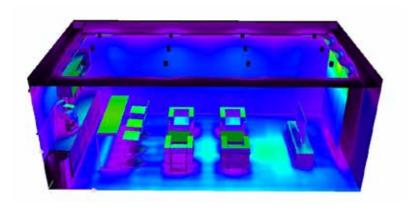
In our standard solution LED downlight is used for both general lighting and more contrast lighting on the seating area. Several small spots have been added to highlight the separation furniture.

# Touch- down areas advanced

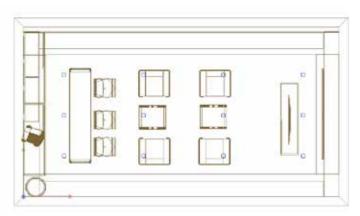
Advanced uses the same general lighting as our standard design, but with more inspiring elliptical pendant luminaires to light the seating area.

Isolux diagram





# Plan view



# Recommended luminaires

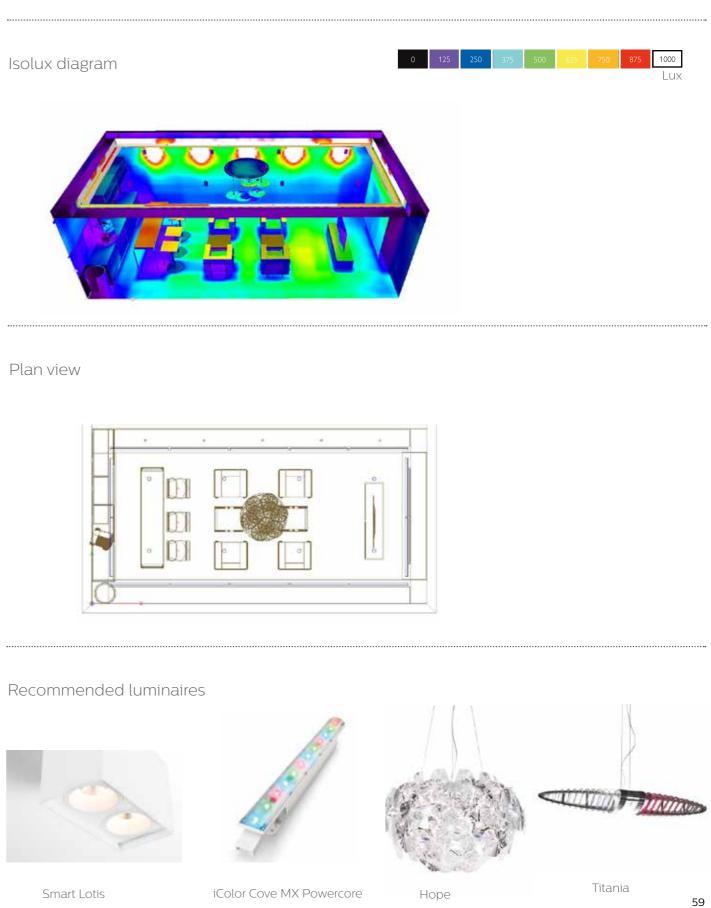




GreenLED Ultima

Vaya Cove LP





Plan view



# Recommended luminaires









This helps build and differentate your brand in competitive market.

Lighting solutions Office lighting Facade

# Lighting solutions that differentiates your brand

We offer benefits of LED lighting with flexibility of choosing the right color to highlight your office space

# **Recommended products** for facades



#### ColorReach Powercore

Combines all benefits of LED based lighting and control in an elegant fixture specifically designed for large scale installations.



#### ColorBlast Powercore

Combines rich, saturated, wallwashing color and color-changing effects with simplified installation.



#### ColorGraze QLX Powercore

Features outstanding light output at reduced power levels for the right balance between performance and price.



ColorBurst Powercore High-output, exterior-rated LED lighting fixture designed for accent and site lighting.



# ColorReach Compact Powercore

Outputs thousands of lumens and throws light hundreds of feet, delivering true LED-based illumination for large scale structures.



### ColorGraze EC Powercore

Delivers 241 lumens per foot while consuming just 10 W maximum.



### ColorGraze MX Powercore

Features the most light output in our line of color-changing LED grazing fixtures, for high-intensity multi-storey façade and surface illumination.



ColorBurst Compact Powercore High-output, exterior-rated LED lighting fixture designed for accent and site lighting.

# Office **Toolkit**

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# Chopstick

Chopstick offers small size with big lighting performance and a price point that makes it ideal to use in many different types of spaces.

# Balance of light, form and materials

# Architects delight

# Super efficient

Sleek minimalistic design providing more uniform luminous environments with optimal energy-efficiency.

# Chopstick provides superior efficacy of 110 lm/W.

# **Key features**

- Wide-spread lighting distribution
- Efficacy up to 108lm/W
- Available in 4ft and 8ft modules

# **Technical specifications**

Туре	Chopst
System Wattage (W)	47,32
IP rating	IP20
Lumen Output (lm)	4800, 3
System Efficacy (lm/W)	110
Color Temperature (K)	3000, 3
CRI	>80
Housing	Metallio
Cover	20 gaug
Mounting	Suspen
THD	<10
PF	>0.9
Operating Voltage	220-24



# Perfect distribution

Chopstick LED offers a semi-indirect lighting distribution ideal for open environments and smaller private spaces. High efficacy and high peak zenith distribution results in the ability to spread distance between fixtures.

#### ick

3400

3500, 4000

ic CRCA powder coated Ige cold-rolled steel precision formed nded, Wall

#### 40V , 50 / 60 Hz





# Sereno

Philips Sereno, a range of office luminaires with a wide range of optics specially designed to meet the highest standard of work place lighting. Sereno luminaires offer the latest technology for high comfort and optical efficiency in a miniature profile. Sereno is available in surface/suspended and wall mounted versions in a variety of dedicated optics such as D8 Mirrors, Opal Diffuzer and indirect optics. Sereno offers the best combination of performance, energy efficiency, asthetics and flexibility of designing.

# **Balance of light, form and materials**

#### Office standard compliant

# Best in class LPD

Sereno LED is an office standard compliant LED luminaire with UGR<19

With high Light Power Density, this luminaire provides high levels of energy efficiency.

# **Key features**

- Energy efficient
- Ultra flat light with only 47mm in height
- Maintenance friendly

# **Technical specifications**

Туре	Sereno
System Wattage (W)	28
IP rating	IP20
Lumen Output (lm)	3000
System Efficacy (lm/W)	>105
Color Temperature (K)	4000, 5
CRI	>80
Housing	Extrude
Cover	CRCA f
Mounting	Susper
THD	<10
PF	>0.9
Operating Voltage	220-24



#### Superior visual comfort

This luminaire helps increase productivity with its superior visual comfort lighting.

#### 5000

led aluminum housing front frame with high efficiency PMMA diffuser nded, Wall

#### 40V , 50 / 60 Hz



# LineLight

LineLight lighting solution is linear lighting solution suitable for use in variety of Indoor applications. It's sleek design, elegant looks complement any interior architecture and visual effect. LineLight offers the unique flexibility of continous mounting or standalone mounting in lengths of 4ft and 8ft.

# **Sleek and elegant**

#### **Continuous mounting**

### Driving performance beyond the edge

Extruded aluminium housing for continuous mounting ensures no sagging.

LineLight delivers high performance and a quality light output.

# **Key features**

- Comes in 4ft and 8ft modules
- Maintenance free
- Eco friendly

# **Technical specifications**

Туре	RC 311 LED 22S 4000 / 6500 PSU OD GR / WH		
System Wattage (W)	28		
IP Rating	IP20		
Lumen Output (lm)	2200		
System Efficacy (lm/W)	80		
Color Temperature (K)	4000, 6500		
CRI	>80		
Housing	White/ Grey		
Cover	PMMA		
Mounting	Reccessed		
THD	<10		
PF	>0.9		
Operating Voltage	170 – 270 V		



\*Conditions apply

#### **Perfect distribution** curve

LineLight offers the best continuous linear lighting providing unparalleled distribution & brightness to create a balanced luminous environment, with smooth & even gradients of light through out the space.



# PowerBalance

PowerBalance is Philips' most energy-efficient office specification compliant LED luminaire. It more than halves energy costs compared to a high efficiency T5 solution, and the LED system has a longer lifetime. This results in significantly lower operational costs, ensuring a payback that meets the needs of the specification market.

### Best in class visual comfort

#### Smart Pyramid Optics -**UGR<19**

#### Low indirect Glare

The luminaire offers low direct glare which results in enhance visual comfort

The luminaire provides luminance below the angle of 65°, thereby reducing indirect glare in an office environment.

### **Key features**

- Highly efficient, efficacy >90 lm/W
- Compact look and feel
- Premium material and finish

## **Technical specifications**

Туре	RC360B
System Wattage (W)	29
IP Rating	IP20
Lumen Output (lm)	3400
System Efficacy (lm/W)	115
Color Temperature (K)	4000
CRI	>80
Housing	Powder Coated Steel
Cover	Plastic
Mounting	Recessed
THD	<10
PF	>0.95
Operating Voltage	220V-240V/50, 60Hz



\*Conditions apply

#### High color rendering

With CRI>80, the luminaire renders color naturally and makes people comfortable.



# Dayline

Dayline is an efficient luminaire which saves up to 65%\* energy as compared to 2 x PLL 36W luminaire. It ensures long, maintenance free life and comes with DALI dimming options. Dayline is a perfect combination of innovative design and efficient LED technology.

### **Efficient lighting. More Savings**

High energy savings

High lumen efficacy

Dayline offers high energy savings up to 65%\*.

With efficacy of up to 100 lm/W, the luminaire is highly efficient.

## **Key features**

- High quality light, CRI=80
- Long life of up to 50,000 hours
- Soft opal diffuser provides high visual comfort
- Eco friendly

## **Technical specifications**

RC240B LED
30, 42
IP20
3000, 3600
up to 100
3500, 4000
80
Polyester power coated
Acrylic
Recessed
<10%
>0.9
220-240V , 50 / 60 Hz



#### No maintenance

With Dayline, operational costs are reduced as it requires no maintenance.



# FullGlow

FullGlow is a beautifully designed luminaire which is bound to delight the occupants with refreshing and comfortable experience through its pure form and glare-free light. It comes in two versions - standard and high efficiency. With up to 50%\* energy savings and maintenance free operation, this product is an owner's delight.

## **Inspiring and efficient**

#### Very high efficacy

#### Tailored to suit different needs

Efficacy of >95 Lm/watt ensures maximum savings.

This luminaire comes in two versions, standard and high efficiency, offering flexibility for varied application.

#### **Key features**

- 50%\* energy savings
- High quality light, CRI=80
- No maintenance

## **Technical specifications**

Туре	FullGlo
System Wattage (W)	29
IP Rating	IP20
Lumen Output (lm)	2800
System Efficacy (lm/W)	>90
Color Temperature (K)	4000,6
CRI	80
Housing	Metallio
Cover	Acrylic
Mounting	Recess
THD	<10%
PF	>0.9
Operating Voltage	220-24



\*Conditions apply

#### EMC & EMI compliant drivers

EMC ensures that operation does not influence the electromagnetic environment to the extent that the functions of other devices and systems are adversely affected.

#### FullGlow (High efficiency) w (Standard) 38 IP20 3500 >90 6500 4000,6500 80 ic CRCA powder coated Metallic CRCA powder coated Acrylic Recessed sed <10% >0.9 40V , 50 / 60 Hz 220-240V, 50 / 60 Hz



### Affordable and reliable

## Attractive payback period

#### Easy to install

GreenSquare recovers its cost in a very short period of time. Overall TCO is low. It replaces conventional 2x2 luminaires with ease as no separate structure/ renovation in ceiling is required.

#### **Key features**

- 40%\* energy saving
- Maintenance free
- Long life of 40000 hours\*

### **Technical specifications**

Туре	GreenS
System Wattage (W)	38
IP Rating	IP20
Lumen Output (lm)	2900
System Efficacy (lm/W)	75
Color Temperature (K)	4000,6
CRI	80
Housing	Metallio
Cover	Acrylic
Mounting	Recess
THD	<10%
PF	>0.9
Operating Voltage	220-24



# GreenSquare

Green Square provides an optimum visual environment for office work. It provides the right light levels to see printed, handwritten or on-screen documents clearly, without causing glare and fatigue. By providing uniform illumination and having no significant light depreciation over time, GreenSquare ensures enhanced productivity in your office for years together with a refreshing and comforting experience.

#### Elegant ceiling look

GreenSquare give the ceiling an aesthetically enhanced look.

#### Square

6500

lic CRCA powder coated

sed

#### 40V , 50 / 60 Hz



# GreenPerform

GreenPerform is an innovative lighting solution which offers a wide range of dimming options for workplaces. The product has options in all variants and all types of dimming solutions like Phase –Cut, Analog and DALI. It offers inherent benefits of LED products such as high energy saving of up to 50% and up to 5 time more life. The range is available from 600 lumens to 2000 lumens making it an efficient and high performance option.

### Performance and advanced controls

Exhaustive range with dimming both Analog and Phase cut

The range of products offer varied dimming solutions like Analog, Phase-cut and DALI. The product range is available in various dimensions and lumen outputs with advanced controls.

#### **Key features**

- 50%\* energy savings
- No maintenance
- Eco friendly

### **Technical specifications**

Туре	GreenL
System Wattage (W)	7.5, 11.5
IP Rating	IP20
Lumen Output (lm)	600, 10
System Efficacy (lm/W)	>85
Color Temperature (K)	3000, 4
CRI	>80
Housing	Heat si
Cover	High Ef
Mounting	Recess
THD	<20%
PF	>0.9
Operating Voltage	220V-2



High Efficiency with more than

85 lm/W

The range helps in saving upto 50% energy and up to 5 times more life over CFL downlighters making it an efficient solution with high performance.

## Longer life with 50K hours

With higher efficiency and energy saving the GreenPerform also results into a longer life with up to 50,000 hours.

#### LEDi

5, 14.5, 17, 24

000, 1200, 1600, 2100

4000, 6500

sink: PDC-Al, Reflector: PC and Clip: SS Spring Efficiency diffuser with more than 85% transmittance sed

240V/50, 60Hz



# GreenLED Ultima

Green LED Ultima is a slim downlighter with high lumen efficacy of 100 lm/W. It displays true colors with its high color rendering index of 80 and has a long life of 40000 hours.

### Performance in slim design

#### Slim aesthetic design

#### Ultimate performance

Ultima adds aesthetics to the space with its slim lip design.

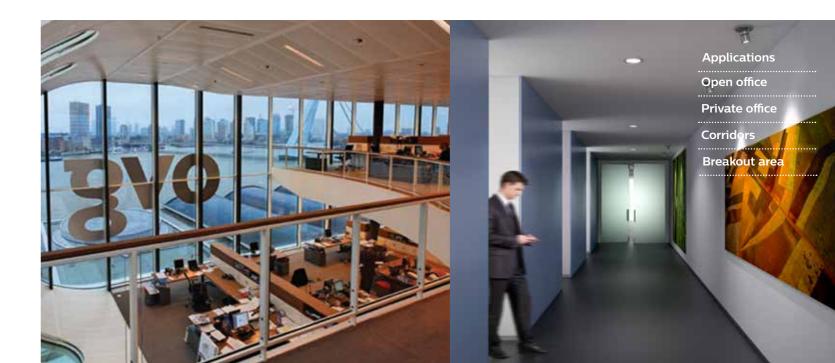
High efficiency (100 lm / w) leading to best in class savings over conventional CFL downlight.

#### **Key features**

- Long life of 40000\* hours
- High quality light, CRI=80
- Eco friendly

### **Technical specifications**

Туре	GreenLED Ultima
System Wattage (W)	6.5, 10
IP Rating	IP20
Lumen Output (lm)	600,1000
System Efficacy (lm/W)	up to 100
Color Temperature (K)	3000, 4000, 6500
CRI	>80
Housing	Plastic body, reflector PC, steel clips
Cover	High quality diffuser
Mounting	Recessed
THD	<20%
PF	>0.9
Operating Voltage	220V-240V/50, 60Hz



#### Display true color

Powered with DuraMAX technology, Ultima gives durable brightness enriching true color of merchandise.



# LuxSpace

LuxSpace provides the perfect combination of efficiency, light comfort and design, without compromising on lighting performance. It offers a wide choice of options for creating the desired ambience.

### High efficiency, visual comfort and a stylish design

High system efficacy

Low UGR

LuxSpace delivers high system efficacy of 100 lm/W.

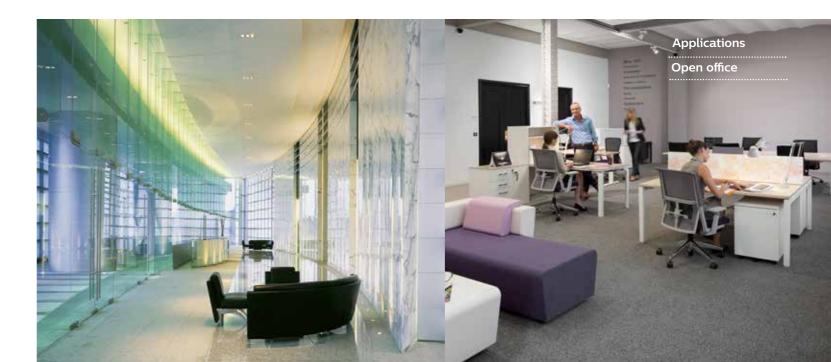
It has a UGR < 19 resulting in

### **Key features**

- Highly efficient, efficacy >90 lm/W
- Compact look and feel
- Premium material and finish

## **Technical specifications**

Туре	BBS478
System Wattage (W)	8, 13, 28
IP Rating	IP20
Lumen Output (lm)	600, 10
System Efficacy (lm/W)	>90
Color Temperature (K)	3000, 4
CRI	>80
Housing	Steel ar
Cover	Option
Mounting	Recesse
THD	<20%
PF	>0.9
Operating Voltage	220V-24



#### Long life class

no direct glare in an installation.

LuxSpace offers a compact look and feel and a perfect fit with easy installation, with a long lifetime of 50,000\* hours.

#### 8, BBS488/489, BBS498/499, BBS496

28, 40.5

000, 1500, 2000, 3000

4000

and polycarbonate

of various attachments

sed

240V/50, 60Hz



### Smart, efficient and reliable

#### Plug and play

#### Smart savings

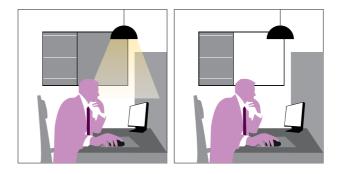
OccuSwitch offers a single function occupancy control. It is very easy to install and can be applied without any commissioning. Energy consumption based upon actual usage instead of connected load. It offers good pay-back scenario with savings up to 30%.

#### **Key features**

- Automatic control
- Daylight override and switching
- Smart timer

#### **Daylight sensing**

#### (



OccuSwitch

OccuSwitch is a movement detector with a build-in switch. It will switch off the lights in a room or area when it is vacant and thus save energy. Occuswitch can switch any load up to 6 A and control an office area of around 20Sqm for small movement (e.g. desk work) and around 50Sqm for large movement (e.g. walking). It's smart daylight sensing technology offers additional saving through daylight override and daylight switching.

\*Conditions apply

#### **Daylight Harvesting**

Inbuilt photocell sensor to switch off lights when desired lighting levels are available through daylight

#### **Occupancy sensing**







# Lighting **Systems**

## Exactly the right illumination experience

Lighting systems from Philips help people feel comfortable, productive, and safe. They beautify spaces and transform environments. Our lighting systems combine world-class traditional and LED luminaires with analog and digital controls that let you deliver exactly the right illumination experiences, whenever and wherever you need them.

# Transforming your goals into effective lighting application

As leaders in the LED technology revolution, we create lighting systems that prioritize energy efficiency, sustainability, and operational cost reduction. We focus on improving the livability and effectiveness of indoor and outdoor environments, providing everything from functional general illumination to spectacular color-changing experiences that enhance your brand, encourage social interactions, and revitalize communities.

At Philips, we have the deep expertise and range of systems to transform your goals into effective lighting applications. You can count on us to understand your goals, and to help you specify and execute flawless solutions that ensure ideal lighting for your specific lighting needs.



#### Save energy

With LED based systems and controls



#### **Reduce costs**

Use highly Influence mood, energy efficient create the best lighting, only when customer and where it's experience needed

Adjust

ambience



#### Soothe and energize

Create an enhanced healing environment, make people feel at home



Enhance your brand

Gorgeous lighting has the power to make your brand sparkle



#### Transform environments

with dynamic, controllable color, white and fullspectrum light



#### Create spectacle

Astonish and surprise with large scale, color changing light shows

Support

productivity

Boost vitality, promote well-being, and improve performance with light





Beautify cities

Beautifully illuminate facades, monuments, based schedules bridges and roads



#### Streamline operations

Timeline and rules adjust light levels and change scenes automatically

# Optimizing the office space

With information managed by the lighting system, you can give your employees the right to control their "Right Light" at their work areas to suit their individual preferences. By enhancing light quality and comfort, and by giving employees more control over their environment, lighting systems can help make your workplace more pleasing and more productive.



#### **Deeper insight for more effective** management

In a connected lighting system, intelligent luminaires merge with a facility's IT and power infrastructures. Because lighting is installed virtually everywhere that people go, the lighting system can serve as a pervasive data communications platform.



#### Lighting works better when it plays well with others

Philips connected lighting systems can integrate with building automation systems and other systems in a facility. Lighting management becomes one aspect of a system that includes other important services—including HVAC, maintenance, daylighting, environmental and chemical monitoring and compliance.

#### Lighting the way to a better day

Light and circadian rhythms, the "built-in clocks" govern our cycles of sleep and waking up, stimulation and relaxation. Well designed lighting experiences can have a positive effect on concentration, relaxation, sleep patterns, and the overall feeling of health and well-being.

With timeline based control systems from Philips, you can make your office the ideal place to think, create, and collaborate.

#### The right level of light, when and where you need it



#### Your building, their way

Office workers can control the lighting at their specific work areas to suit their individual preferences, even in open-plan offices. By enhancing light quality and comfort, and by giving workers more control over their environment, connected lighting systems can help make your workplace more pleasing and more productive.



With simple to sophisticated controls, Philips lighting systems can target lighting for different applications in different zones or areas of your business. Scene setting and timeline based dimming schedules give you a straight forward and flexible way to ensure the optimal lighting experiences in every application area.

# **Connected lighting system** beyond illumination

Imagine a world of beautifully illuminated indoor and outdoor spaces, where every light point is connected to an intelligent system that delivers high quality, reliable illumination and that serves as a pathway for information and services to deliver extraordinary value beyond illumination to the users and managers of spaces.

Philips connected lighting system deliver value beyond illumination turning the lighting points into intelligent source of information

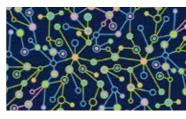
# What makes lighting system connected











#### **Connected luminaires**

Luminaires are uniquely identified and seamlessly integrated into the IT network in a building or city and share information about their status and operations.

#### **Connected spaces**

Outfitted with integrated sensors, each luminaire becomes a point of intelligence that can share information on occupancy, activity patterns, changes in temperature or humidity and daylight levels.

#### Connected people

By integrating wireless communications into the lighting system, you can deliver location based services and in context information via mobile apps to people in illuminated spaces.

#### **Connected software**

With our sophisticated lighting management software, operators of spaces can monitor and manage the lighting system in real time. You can store, visualize and analyze historical information about luminaire performance.

#### Connected landscape

Connected lighting systems can integrate with other systems in a building or a city, creating new synergies and efficiencies and making lighting an integral part of the new digital ecology.

# Lighting Services

## Value beyond illumination

New lighting technology combined with lighting controls is much more energy efficient than traditional lighting. It can also contribute to your business performance and success in more ways than you might imagine. Today's top lighting technology can increase operational efficiency, reduce seat cost/ employee through space optimization in an office environment, increase foot fall through enhanced shopper experience in retail, make a building or brand stand out of the crowd, expand an entertainment venue's source of revenue, and even help the healing process for patients in hospitals. With Philips Lighting as your partner, you can easily start benefiting from the dramatic difference that lighting can make. Upfront capital investment on your part may not even be necessary.



## End to end Solution Partner

We at Philips Lighting believe in providing a solution rather than a product and that is why we make business- effective lighting solution, a simple and streamlined process for our customers. Your industry segments' needs are extremely familiar to us, so you can count on us to reliably deliver or help coordinate any- or all- parts of the lighting solution you want, from concept design and detailed audit to complete lifecycle services. When you partner with Philips Lighting as an end to end solution partner, you're assured of results that give you maximum business impact and a committed lighting quality with minimum hassle and risk.

We focus on total value of ownership for our customers through this engagement and how we maximize this over the complete lifecycle. This effectively addresses a variety of business needs in terms of operational efficiency, sustainability, enhanced safety, increased revenue and shopper experience. A capable solution partner would derive value out of customized solution for specific requirements, optimizing the lighting design and focusing on benefits that go beyond illumination.

Delivering the agreed business benefits across the lifecycle of the delivered solution warrants a strong service commitment and a process driven approach to maximize the ROI and also enhance the life of your lighting asset deferring your CAPEX investment. That is why we at Philips Lighting have defined a suite of service offerings to complement and support your lighting investment.

Philips Lighting representatives are available whenever you need them to make sure your solution performs as expected.

# A trusted partner to give you **peace of mind**

We listen and understand your needs



Global presence and local experience delivering multitiered support

The next competitor is half of Philips size.



World-class innovation capabilities and deep application and system expertise We have 12000 Patents



One-stop shop: solutions and services across the lighting value chain



Proven record of quality and reliability – no unpleasant surprises

Products designed for unique & demanding power conditions

# Range of value-adding services

#### Choose the combination of services you need





Lifecycle

Professional

Lighting audit, solution design

Maintenance, asset management

#### Benefits for customer

Recommendation for improvement

Extension and availability of lighting installation

Optimized & efficient solution design



Managed

Plan, build, finance, operate and maintain



#### Project

Implementation, testing and commissioning

Operation and performance guaranteed

EMI/rental financial model available. Quick, efficient and minimal disruption installation

# **Professional** Services

# A lighting service that **fits your business needs**:

- Lighting audit
- Energy audit
- Solution design
- Training services

Lighting audit	Energy audit	So
<ul> <li>Age, condition and quantity of existing light fixtures</li> </ul>	<ul> <li>Existing energy usage and expenditure</li> </ul>	
<ul> <li>Manufacturer and model number</li> </ul>	<ul> <li>Energy-saving strategies that work best</li> </ul>	·
• Wattage, type and model	<ul> <li>System evaluation and interview with facility stakeholders</li> </ul>	
• Electrical infrastructure		
<ul> <li>End-user usage understanding</li> </ul>		

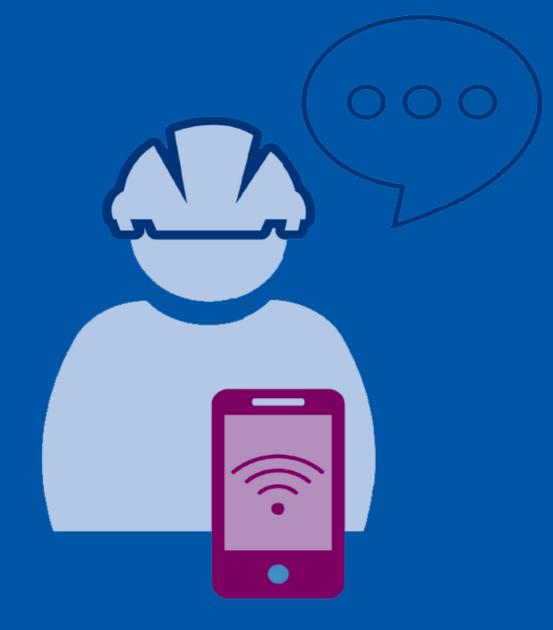
#### olution design

- Application choice
- Detailed lighting design
- Visualizations, customizations and mock up
- Lamps, luminaires, controls etc

#### **Training services**

- Application training
- New lighting technology
- Control systems
- Service engineer trainings

# Lifecycle Services



# Choose the combination you need

We support you in different ways:

If you have your own technical department or a trusted maintenance partner

• We provide remote diagnostics and parts replacement

If you have an outsource strategy, so that you can focus on your core activity

• We take care of your lighting assets

 Extension of warranty Covers manufacturing defects

- Spare management Resolution on a best effort basis
- Contact center/help desk: 9 x 5

Extended warranty

 Spare inventory & obsolescence management

Contact center/help desk: 9x5

• SLA based spare delivery

 After hour support (as per need)

Parts management services

- Complete spare management

- Response/Resolution SLA
- After hour support (as per need)
- Labor: includes install/ de-install
- Covers defects beyond manufacturing defects
- Preventive maintenance

Light assure service

# Managed Services



## Light as a service and circular economy benefits

#### Operation and performance guaranteed by Philips:

- Plan
- Build
- Finance
- Operate
- Maintain
- Upgrade/ reuse





Unique business model with compelling financing solutions including rental/ lease or deferred payment model

High savings on energy and maintenance costs.

Benefits beyond illumination



Performance based managed lighting solution and service



Taking responsibility to minimize CO2 emissions and waste of materials

# Project Services

# Quick, cost-efficient and minimal disruption installation

#### Complete management of the projects

- Project management
- Installation
- Commissioning and testing
- Integration and programing



#### Project Management

Turn drawing board designs into a reality as smoothly as possible



#### Installing your system

Right installations to ensure performance reliability far into the future



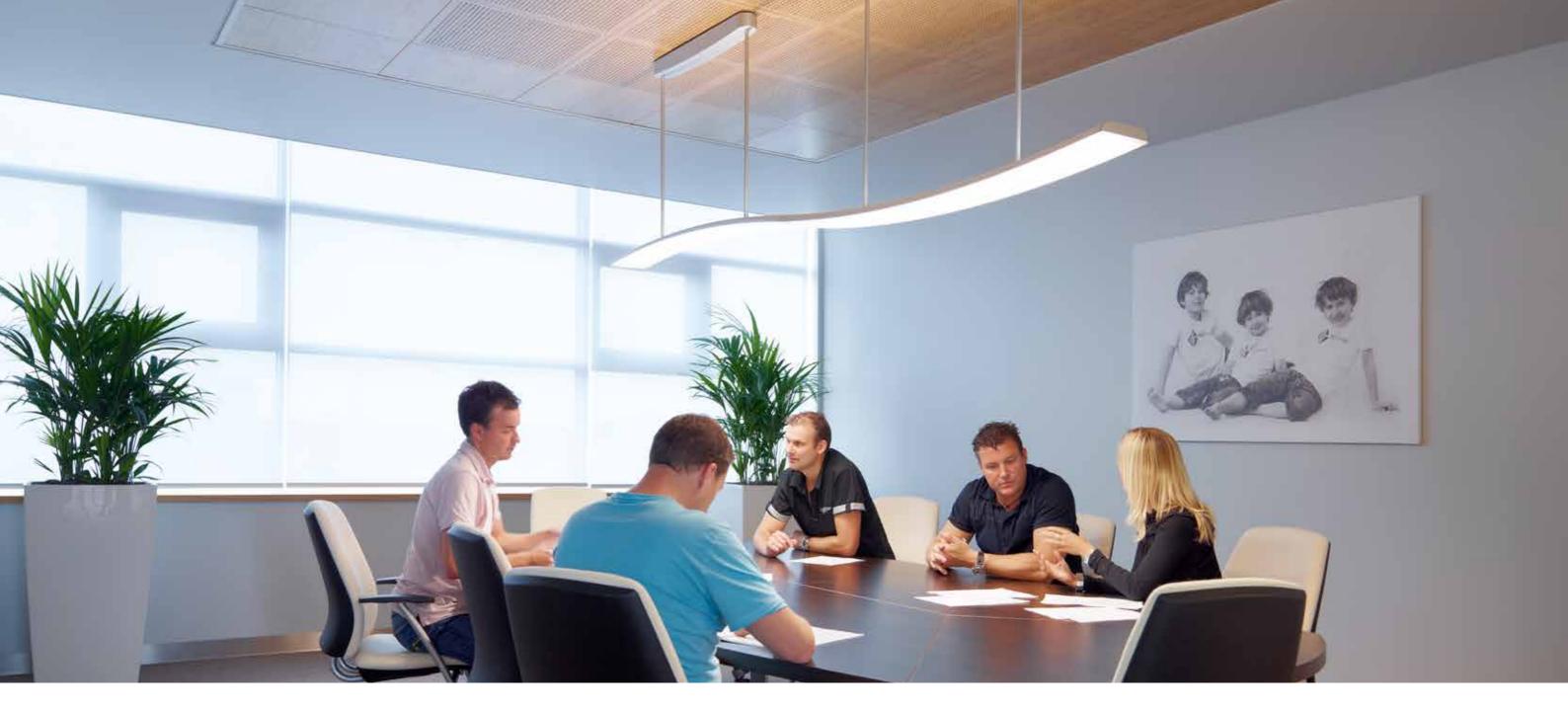
Integration of lighting systems with HVAC, IT systems and programming for PCK/AmpLight/Dynalite.

# Lighting Academy

## Taking the **lead in lighting**

Philips Lighting Academy is a special initiative of Philips India Limited. It was set up in late 2011 to foster multi-level learning on lighting theory, design, innovation and application in the company's internal and external stakeholders.

With digitization transforming lighting technologies and forcing paradigm changes in the ways lighting had been perceived and transacted for years the world over, it had become imperative to refresh traditional lighting knowledge and acquire new knowledge on digital technologies.



#### Philips Lighting Academy brings simple, user-friendly e-learning, completely free,on its website on handpicked lighting subjects:

- Introduction to lighting theory and application
- Understanding LED technology
- Lamps Incandescent, Halogen and Fluorescent
- Introduction to luminaires

#### "Winning Together" – a Philips Lighting Academy exclusive

"Winning together" is a learning program specially conceived and designed primarily for architects, designers and electrical consultants. It brings easy online learning on a wide and comprehensive array of lighting subjects, ranging from LED technology, lamps and luminaires to creative lighting, architectural lighting and sustainability. convenience.

"Winning Together" also brings an exclusive series of webinars by Indian and Global experts, designed and developed for a select audience on such topics as:

- Green Lighting Solutions
- Choosing your LED Products
- Standards and Lighting Design
- Intelligent Lighting System
- Light & Sustainability

- Special online certifications by Philips Lighting Academy for standalone and short-term programs
- Exclusive live classroom sessions a huge library of recorded lectures and webinars

#### The Academy's training tools:

- Publications
- Online standalone learning modules
- Webinars/ webcasts/ e-classrooms
- Learning from Philips Lighting Academy is easy, affordable and fun. To know us better, visit us at http://www.lighting. philips.co.in/education/lightingacademy-india.html or write to us at LiteAcademy.India@philips.com

# Customer **Testmonials**

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**Case Study** 

iGate, Pune, India State Bank of India, Agra, India The Edge, Amsterdam, The Netherlands

Waterpark Place, Toronto, Canada

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## iGate Pune, India

"We are committed towards conserving energy and employee wellbeing. Lighting plays a very vital role in it. Thanks to Philips Lighting, they provided us innovative and wide range of lighting solutions, that has helped us deliver on our commitment. "

-

Viswanathan R., Director- Facilities and Infra Projects,



# State Bank of India

Agra, India

" If you ask customers entering the branch, the cheer on their face tells the full story. We are completely satisfied after changing the existing lighting with Philips LED lighting"

Ashok Kumar, Chief Manager, State Bank of India, Agra Branch



# The Edge Amsterdam, The Netherlands

"Innovation is our highest priority and we want our employees to create a more intuitive, comfortable and productive environment. We also raise the bar in terms of data analysis, delivering new insight into the use of the office space. It shows how we can reduce CO2 emissions from buildings and create a more sustainable world."

Erik Ubels, CIO Deloitte in the Netherlands



# Waterpark Place

Toronto, Canada

"A pleasing workspace with personal control within it means we can attract and retain the best talent. Our system is the key element to attracting the next generation of workers."

William MacGowan, Director for Cisco's Smart+ Connected Real Estate

#### South

#### Philips Lighting India Ltd,

Sunny Side, #8/17, 3rd Floor, C Block, Shafee Mohammed Road, Greams Road, Chennai -600006 Tel :- 91 44 6650 1000 Fax :- 91 44 6650 1075 Email : lighting.india@philips.com

#### Philips Lighting India Ltd,

Philips Innovation Campus Manyata Tech Park, Nagavara Bengaluru-560045 Tel : 080-4189 0000 Fax :- 080 6692 9930 Email : lighting.india@philips.com

#### Philips Lighting India Ltd,

6-3-1109 / I / P/ 103, 3rd floor Jewalpawani Towers, Rajbhavan Road, Somajiguda, Hyderabad Tel :- 040 6646 7676 / 4825 Fax :- 040 6678 7974 Email : lighting.india@philips.com

#### West

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Boomerang, B2 Wing, 5th Floor, Unit No. 506, Chandivali Farm Road, Near Chandivali Studio, Andheri (East), Mumbai 400072 Tel :- 91 22 6691 2000 Fax :- 91 22 6691 2389 / 66912398 Email : lighting.india@philips.com

#### Philips Lighting India Ltd,

602, Heritage Tower, 6th floor, Behind Visnagar Co-op Bank, Near Gujarat Vidyapith, Usmanpura, Ahmedabad, Gujarat Tel :- 91 79 2754 0708 Fax :- 91 79 2754 0666 Email : lighting.india@philips.com

#### East

#### Philips Lighting India Ltd,

7, Justice Chandra Madhab Road, Kolkata 700 020 Tel : 91 33 2486 7621-24 Fax : 91 33 2486 8318 Email : lighting.india@philips.com

#### North

#### Philips Lighting India Ltd,

9th Floor, DLF - 9B, DLF Cyber City DLF Phase 3, Gurgaon 122002 Tel :- 91 124 460 6000 Fax :- 91 124 460 6666 Email : lighting.india@philips.com

#### Philips Lighting India Ltd,

8th floor, DLF - 9B, DLF Cyber City DLF phase 3, Gurgaon 122002 Tel :- 91 124 460 6000 Fax :- 91 124 460 6666

Contact customer service executive at 1800 102 2929 (Toll free) 1860 180 1111, 0124- 4291111 "Standard call rates apply"

#### Philips Lighting Bangladesh Ltd,

House No. 22, Road: 113/A Chaklader House, Gulshan-2 Dhaka-1212

#### Philips Lighting Lanka Pvt. Ltd,

6th floor, East Trade Tower, World Trade Center, Colombo-1 Tel :- 94 11 233 4362/ 233 4312

For more information contact us at **lighting.india@philips.com** or call at **1800 102 2929** www.lighting.philips.co.in



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