## SYLVANIA

SCIENCE

NDUSTRY

MUSEUM

## Concord

# INSPIRATIONS 2023–2024

Digital | Lighting | Solutions





## Our mission



## 

We bring **technology** and creative **innovation** together through our **products**, **services** and **people** to enhance energy efficiency, improve sustainability, increase connectivity and promote wellbeing.

Building on over a 100 years of experience to improve light and life for our customers, enabling them to focus on what they do best by transforming the way they live and work.

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## Brands

## Concord







A trusted brand with over 50 years experience creating **beautiful spaces**, through **elegant lighting solutions**.

Concord is driven by 3 major inspirations:

#### Passion

Multi award-winning products designed and crafted in Europe with style and performance

Interior Luminaire of the year 2018 - Winner product - Pixer RedDot Design Award 2023 (Lighting Design category) - Winner product - Equinox

#### Innovation

In-house expertise paired with cutting edge technology

#### **Tailored illumination**

Versatile products and solutions perfectly tailored to meet the needs of our clients

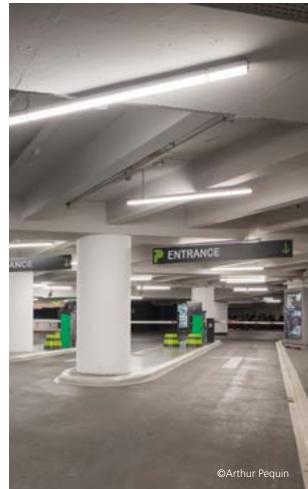












For almost 100 years the Sylvania brand has been providing efficient, reliable and high-quality lighting solutions to both professional and consumer clients.

Sylvania is built on 3 main principles:

#### One stop shop

Wide product range, combined with excellent expertise

#### **Reliable performance**

Resilient, low maintenance, high quality lighting

#### **Smart investment**

Affordable, highly efficient solutions delivering a quick ROI

## Ranges



PRO is the high-end range of the Sylvania brand products for professionals. The luminaires in this range offer good technical characteristics, combined with modern design and the latest lighting technology. The products in the PRO range focus on providing better performing and sustainable lighting solutions, specially designed for project use.



Sylvania's START range products are ideal for commercial, industrial and consumer projects which require a simple and reliable LED solution. The products are ideal for small or large scale environments and can be tailored to suit specific project needs.

Discover some of our START range products on page XX of the catalogue.



SpeciaLITE offers a wide range of lighting solutions for variety of applications such as grow lights for horticulture, UV-C purification and disinfection lamps, lighting solutions for inset attraction, special lights for pet care, swimming pool lights, paint workshop and food lighting as well as infrared lights.



The LiFeSafe range consists of LiFeSafe Standalone Emergency products, suitable for all emergency applications. It includes maintained and nonmaintained luminaires providing 3-hour emergency lighting, utilizing LiFePO4 batteries. The LiFeSafe range also has Emergency Exit Signs, Emergency Bulkheads, Emergency Spots and Emergency Conversion packs.

## Your**Home**

Sylvania's YourHome range supplies the perfect luminaire or lamp for every home application.

From creating a warm, relaxing light in the living room to a productive, functional atmosphere in the study, all of our solutions are shaped around the changing moods and needs of our customers.











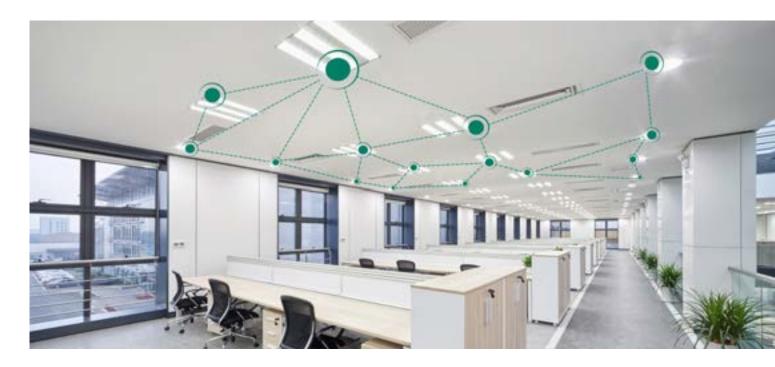
## **Digital** solutions

## SylSmart

SylSmart solutions empower the reduction of energy consumption and foster a culture of sustainability.

Our highly intelligent, robust and secure lighting control system is designed to meet the challenges of all industries using wireless frequencies and sensors. Our solutions provide real-time visual data on energy usage and guide you to a more sustainable future.





## **360 Services**

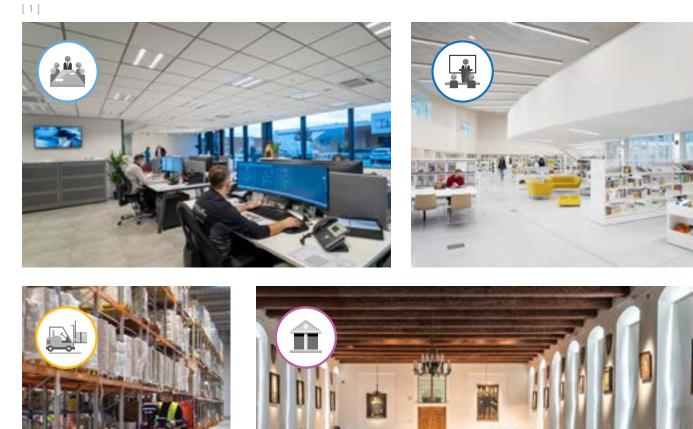
Implementing a holistic project management approach that balances the best financial interests of clients with the achievement of sustainability objectives which helps businesses deliver energy and cost-efficient projects is a delicate task which requires deep understanding, careful and precise attention whilst reducing the barriers and disruptions to adoption.

We help customers save energy, decarbonise, de-risk their investment and project timelines, minimise disruption, ensure access to key financial schemes, and help protect their capital with turnkey solutions for all phases of their project that safeguard successful project execution and ensure the client's needs are met.



## **Applications**

As an innovation leader, we supply an extensive range of lamps, luminaires and lighting control solutions for various professional lighting application areas.



[3]

#### Office [1]

We know that lighting impacts our health, mood and sense of well-being – and all of those things contribute to our productivity. We take a human centric approach to lighting office spaces, reducing negative elements such as eye fatigue and headaches.

#### Education [2]

The learning environment is where we cultivate ideas and nurture young talent. Light levels that are strictly regulated for UGR and flicker have an important role to play. Lighting also accounts for over 50% of electricity costs in most schools, presenting an excellent opportunity to increase efficiency and lower costs.

#### Logistics and Industry [3]

This is a demanding sector with demanding needs. Many of these buildings are running 24/7 and need an intelligent lighting solution that's cost-effective, low maintenance and sustainable. We work with these businesses to determine the total cost of ownership and guarantee a return on investment.

#### Museum and Galleries [4]

Lighting has many surprising uses in a museum or gallery. From illuminating exhibits and artefacts to making visitors feel comfortable and welcome, light is a huge part of the overall experience. We have a long and distinguished heritage in museum and gallery lighting. [2]

[4]

[5]







#### [6]

#### Retail [5]

Lighting can have a huge impact on the bottom line in the retail environment. From enticing window displays to encouraging customers to spend more time on the shop floor, lighting does so much more than illuminate a product. Done correctly, it can even reduce overheads.

#### Hospitality [6]

Ambience and atmosphere are key when it comes to hosting, and nothing impacts those things more than lighting. From hotels and restaurants to clubs and bars, we have a range of lighting solutions that can be tailored to suit any environment while creating unique customer experiences.

#### **Residential and Consumer** [7]

Light is one of the key ingredients when it comes to making a house a home. Whether the challenge is to bring warmth to a sitting room or function to a kitchen, we offer home owners a range of cost-effective solutions based solely on their unique needs.

#### Outdoor [8]

Due to fluctuations in weather and the changing seasons, outdoor lighting can be a complex challenge. Our outdoor lighting solutions takes all of this into account, providing cost-effective lighting that requires little to no maintenance. For commercial premises, facade lighting can create expressive and memorable architectural lighting experiences.





## LumiNature: Living in natural light



#### Driven by the sun Time indoors

Humans have thrived over 200,000 years under natural sunlight. Our brain activity is linked to the rhythm of the Sun. Due to modern lifestyle, 90% of our time is spent indoors. When our cognitive activity is at its strongest, we are most often subjected to artificially lit environments.

## Physiological response

Light regulates so much more than what we see – beyond visible light. Natural-like light can impact:

#### Lighting plays a major role

It has a significant impact on how people feel and how they perform.



### **Circadian rhythm**

Circadian rhythms are physical, mental and behavioural changes that follow roughly a 24-hour cycle responding primarily to light and darkness in an organism's environment. They can influence important bodily functions, sleep/wake cycles, hormone releases and more. Your mood
Your behaviour
Your cognitive functions
Your motivation levels
Your sleep/wake cycles



### More natural light – no blue peak



Our LumiNature lighting delivers a complete and balanced spectral distribution with all colours of light more evenly represented while eliminating the blue peak. This produces a natural, full-spectrum artificial light which enriches the colour of its surroundings and removes a major contributor to disturbed health cycles. Combine this with class-leading low glare optical solutions of Sylvania and Concord luminaires with exceptional low flicker rates for enhanced occupant comfort.



Get the most natural and truest colour reproduction in your spaces thanks to our exceptional colour rendering and colour fidelity across all colour temperatures. Enjoy all the benefits of more depth of colour and contrast without ultra-violet or infrared.

**Excellent colour rendering** 

LumiNature provides high CRI97+ from all colour temperatures, including the truest reds (R9>90).

### **Dynamic light - 100% adapted to the circadian rhythm**



Our intelligent, wireless SylSmart system enables dimmable, auto-adjusting tunable white light, that respects the circadian rhythm of the sun while also enabling full optimisation, automation, personalised control and flexibility. All installed with minimum effort and 100% programmed using the SylSmart mobile app.

### Rich and energising light – the role of melatonin

Melatonin is often referred to as a sleep hormone that regulates our chronobiological rhythms. Furthermore, it is an anti-oxidant as well as an anti-aging hormone that can support the fight against cancer. Melatonin is vital to the wellbeing of humans. Melatonin production is heavily influenced by the right kind of light at the right time of the day which the sun delivers effortlessly. Too much time under standard artificial light reduces the body's ability to regulate the level of this unique hormone. LumiNature ignites your body's healthy cycle for improved sleep, stronger productivity, and better health. Working in conjunction with your biological clock, it regulates a beneficial melanopic ratio throughout the day.

# Empowering your digital world

## Flexible and efficient Smart lighting solutions to suit your space

When creating a lighting design, thought should be given to how it is controlled as well as the financial and environmental costs. Whilst the comfort of occupants should remain the core consideration, modern society demands the delivery of sustainable solutions where comfort, simplicity, energy-efficiency, and a respect for the environment can be equally reconciled. With increasing regulations and standards targeting energy consumption for different buildings it is essential to select a solution that minimises energy usage.

#### A new generation of connected lighting

Intelligent lighting systems makes significant contributions to the eco-performance of residential buildings and introducing flexible solutions can deliver the desired functionality and aesthetics whilst also providing enhanced energy efficiency and cost savings. With its wireless technology, sensors, and distributed intelligence, Smart Lighting is the backbone of the digital infrastructure of buildings. The ability to tailor your lighting to the needs of the individual by setting scenes, sensing occupancy, and utilising natural light levels, combined with cutting-edge wireless Bluetooth mesh networking technology, enables SylSmart luminaires to deliver an optimum lighting experience.



#### **Communal areas**

#### SylSmart Standalone

Maximum control. Minimum installation. A wireless, plug-and-play lighting control solution perfect for smaller applications where ease of installation and crafting of light is paramount.

#### Easy to install

Plug and play design with in app set up and no additional control wiring required.

#### Dynamic control

Call personalised scenes and animations including RGB and TW at the touch of a button via the application or wireless wall switch.

#### Energy efficient

Customisable energy saving features based on time, occupancy and daylight. App driven maintenance and minimal disruption.

#### Secure

High encryption by the Bluetooth mesh. Select access levels by user: sharing, administrator only, password protected and open network.

#### Communal / Functional Areas

#### SylSmart Connected

Unlock the intelligent building. Using wireless mesh communication technology, SylSmart Connected offers an ideal solution that's easy to install, has low initial cost, and is low maintenance.

#### Integrated intelligence

Multifunctional sensors in each luminaire. The system delivers secure wireless communication with distributed intelligence and reliable performance.

#### Rapid installation & Effortless scalability

No additional wires or hardware is required, with offsite cloud based preconfiguration minimum on site disruption is achieved. Easy to scale to any project size from single floors to entire buildings.

#### Energy efficient

Customisable energy saving features based on time, occupancy and daylight. App driven maintenance and minimal disruption.

#### Secure & Reliable

Designed with security at its heart employing a wide range of security measures, such as cyclic keys, replay attack protection and prevention against man-in-themiddle attacks. The security is considered at all levels of the system and takes a through life approach to security. Sylvania's SylSmart Connected Pro extends the SylSmart Connected features, launching soon in key markets for global monitoring and data insights.

#### **Building wide**

#### SylSmart Energy

Powering your drive to net zero. SylSmart Energy is an advanced energy analytics platform that empowers facility managers and homeowners to take action regarding their carbon emissions and energy consumption.

#### In-depth analytics

Users can monitor detailed energy consumption throughout their home or building.

#### Formulate action plans

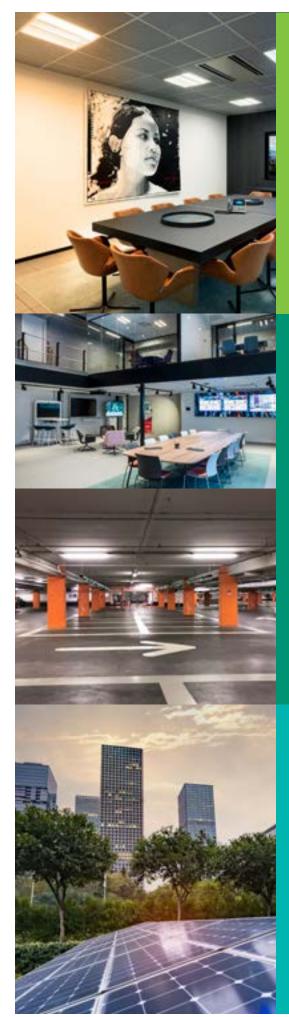
Create budgets and energy reduction strategies in order to meet your reduction targets and maximise savings.

#### Single pane of view

Monitor gas and electricity consumption and solar power generation across multiple sites from one platform.

#### Comprehensive Connectivity

Gather data automatically from your utility company or push data to other systems such as BMS via API.





## Tailored solutions with our holistic support

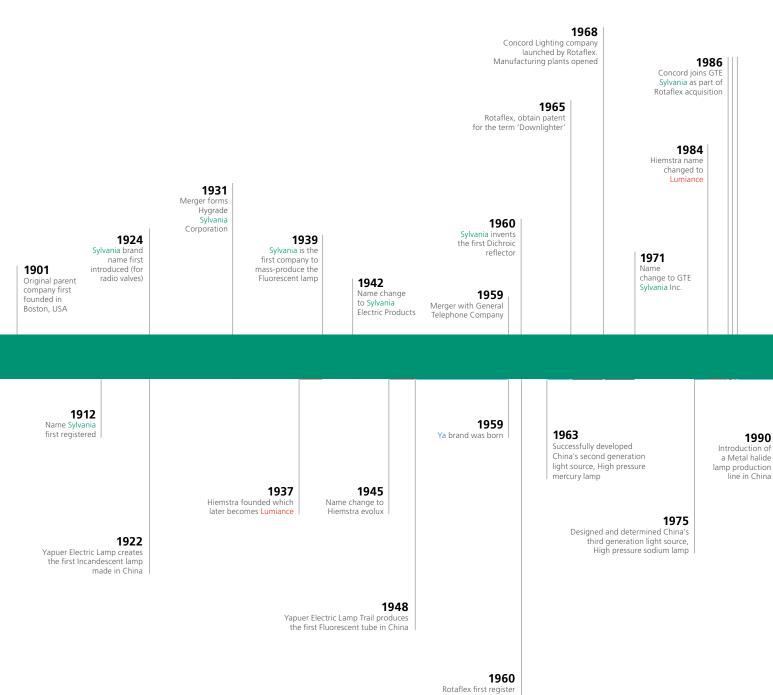
Our 360 Services have been created to offer our expertise and support you through the complete project cycle and beyond.

From an initial in-depth audit, we will tailor the complete design and deliver a turnkey solution for your lighting needs.

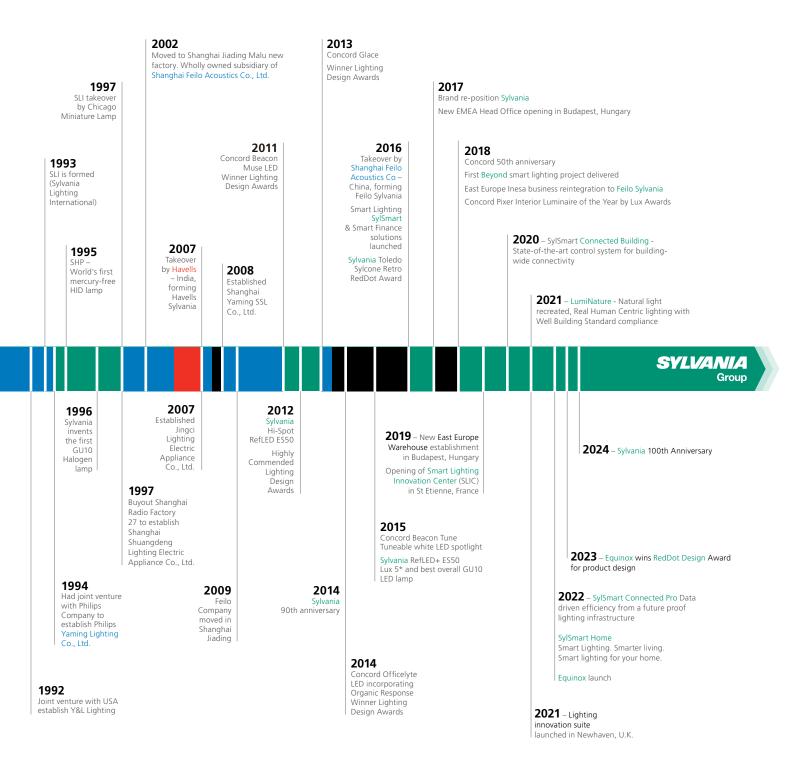
Whether you require support in developing bespoke lighting and product design, managing the overall project, improving cost-efficiency, saving energy, decarbonisation, or creating a future-proof system, we can assist you.



## 100 years of light and beyond

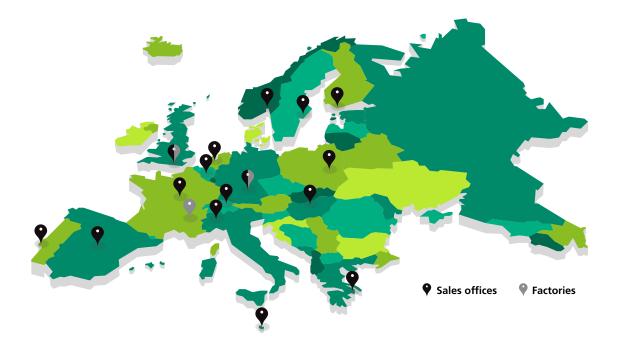


Concord Lighting International



SYLVANIA Group - Inspirations catalogue 19

## A made-in-Europe know-how at your service



Sylvania is a leading provider of total solutions for professional and architectural lighting. With nearly 100 years of expertise in luminaires and lamps, Sylvania has an extended offer for the public, private and commercial sectors. Choose our quality guarantee, and as Sylvania is not only a manufacturer, there is also a complete range of services at your disposal. Allow yourself a full serenity with Sylvania's expertise and be assured that all your lighting projects benefit from perfectly mastered solutions.

#### Made in Europe

We take pride in having local Research and Development and production facilities throughout Europe. Our factories and production units are located in France, England and Germany. Our Research and Development offices are a leading part of our organisation and allow us to be at the forefront of technological innovations, and to be constantly on the lookout for new developments, whether it be emerging uses by occupants, environmental challenges, or compliance with new regulatory standards. This company structure is a guarantee of quality, and a reflection of our strong social, work-policy and

environmental commitments. On this point, the manufacturing process and the European design approach significantly reduce the carbon footprint of our products.

Sylvania organisation for a customised support

With an agile and flexible approach, Sylvania designs bespoke solutions tailored to our clients' individual requirements. Adapting to any 'lighting intention', our job is to create and develop eco-efficient lighting solutions to meet each of your projects. Once your needs are clearly identified,

#### 22

production units in the Newhaven factory (GB)

### 42 000 m<sup>2</sup>

of French, English and German factories



Production in our Erlangen factory in Germany

the coordination with our R&D offices is the key turning point to make sure the best products and solutions are implemented, with the operational support of our production units.

Our custom-made services

Sylvania is not just a manufacturer. Whatever your project, benefit from our on-demand services designed to support you from A to Z. From the detailed analysis of your lighting systems, the installation and optimisation of your installations and eco-performance, compliance with regulations, and financing solutions, Sylvania is an expert at your side, each step of the way.

## 30%

of the production of the French factory corresponds to special luminaires

### 63%

of the German's production corresponds to lamps

#### DID YOU KNOW?

As the demand for luminaires with integrated HVAC (heating, ventilation, and air-conditioning) is increasing tremendously due to its numerous advantages, Sylvania continues to evolve with your needs and integrates these latest solutions in its offerings.

# Committed to sustainable lighting solutions

Each time we develop a new product and service we engage sustainable practices to deliver optimal lighting solutions while minimising our environmental impact. We employ comprehensive waste and energy conservation protocols that involve everyone in the business and extend to all areas of our operations.

We believe a responsible business is a healthy business and the prosperity of business and society is closely connected. Our mission is to bring technology, creativity, and innovation together through our products, services, and people to enhance energy efficiency, improve sustainability, increase connectivity, and promote wellbeing.

By mobilising our collective strength and strategic commitments to focus on creating healthy communities and a healthy environment, we can achieve long-term value and have a positive impact on society.



#### **Recognised for our contribution**

Sylvania is a business with a culture that places its people at the centre of all it does. We provide a professional, inclusive environment that helps our employees excel at everything they do, with policies in place to ensure we continue to evolve and adapt to the world around us. We want a career with Sylvania to be challenging, rewarding, and fulfilling, where our people can reach their potential both personally and professionally.

We are a progressive and innovative global business dedicated to delivering excellent products and services to our customers and an inclusive work environment for our employees. We value our people, their experience, their ideas, and their contribution and we thrive on empowering each other so we can grow and develop together.

#### Intelligent lighting for the future

Sylvania invests in delivering advanced solutions that enhance people's lives and help create better environments. Innovations such as SylSmart and 360 services offer so much more than quality lighting solutions, they represent the foundations on which future innovation can be built and deliver sustainable cost and energy efficiencies. Our approach to create an inclusive and sustainable business is recognised through our bronze certification from Ecovadis, one of the world's most recognised business sustainability ratings. This measures non-financial management systems and sits alongside our internal metrics, which we evaluate against industry best practices in a global context and employ continuous improvement principles to ensure we remain ahead in our market.





#### Made in Europe

Our heritage as a leading manufacturer of quality lighting solutions dates back more than 100 years and we are proud of our European production history. With manufacturing and R&D facilities located in France, Germany, and the UK we can design, develop, and produce innovative lighting solutions and deliver them to market with pace and agility whilst significantly reducing our carbon footprint.

Our European facilities are ISO9001, ISO14001, and ISO50001 certified, underlining our alignment with the principles of responsible manufacturing, and our continued commitment to reducing emissions and managing our waste.

#### Sylvania's CSR pledge by 2030



To become a net-zero emissions company



All company cars to become electrical



Technology plays a critical role in increasing energy

standards that offer extended lifetimes.

efficiency while enhancing luminaire performance and

our comprehensive portfolio contains an extensive range of lighting solutions manufactured to the highest quality

We take responsibility for managing the full life cycle of

products and have plans to embrace the principles of the

circular economy in our approach to sustainability on

future product development projects. Placing greater

emissions and manage waste. The interchangeable

components of some of our products increases their lifecycle and makes them in-line with our circular

emphasis on product design helps us proactively reduce

To create and implement a circular economy business model



"Sylvania is a responsible business. We strive to comply with the highest quality standards when it comes to our employees, customers, partners, and the environment. The commitment to our new CSR strategy is to improve and increase the sustainability of the company and all our stakeholders based on three main pillars - environment, social and governance (ESG). We have a clear vision for our future, we have the people to make the change and I strongly believe that collectively we can become a net-zero business by 2030. We will do this for ourselves and for the generations to come."

economy approach.

Eduardo Fuentes, Environmental & Sustainability Director EMEA

## Discover new products





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Areum Suspended Page 64



Areum Floor Page 64



Areum Wall Page 64



Equinox Page 76



Solstice Page 78



Insaver Slim Page 80



Obico Page 90



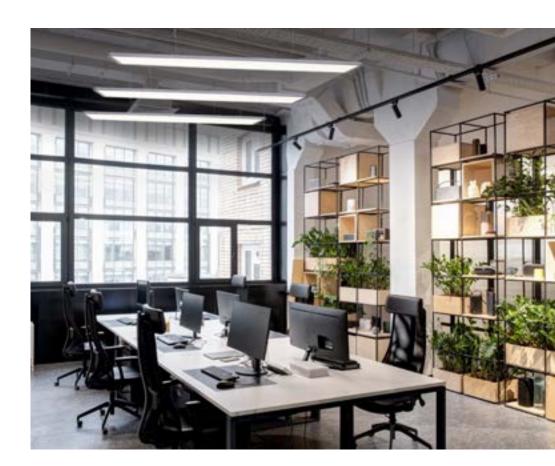
Lenzo Page 126



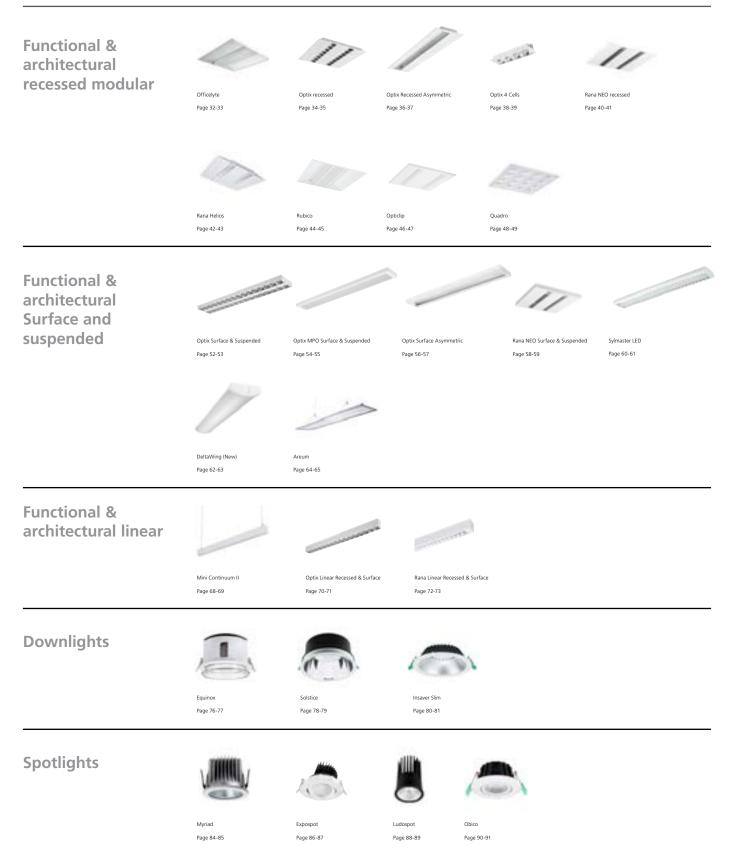
KubiXx <sub>Page</sub> 158



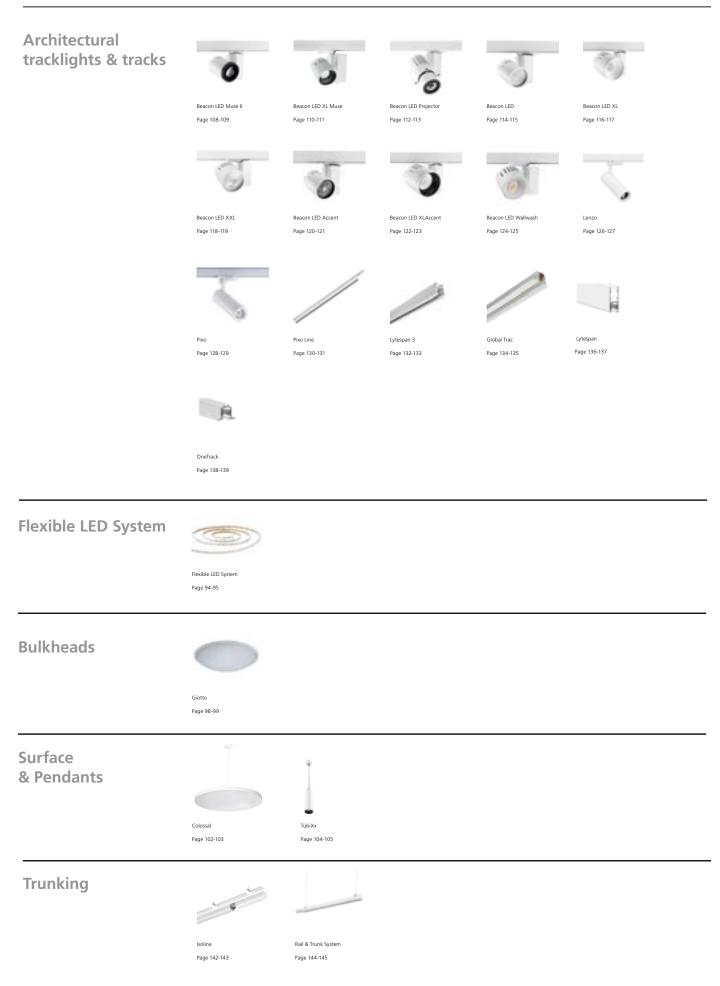
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### **PRODUCT** CATEGORIES



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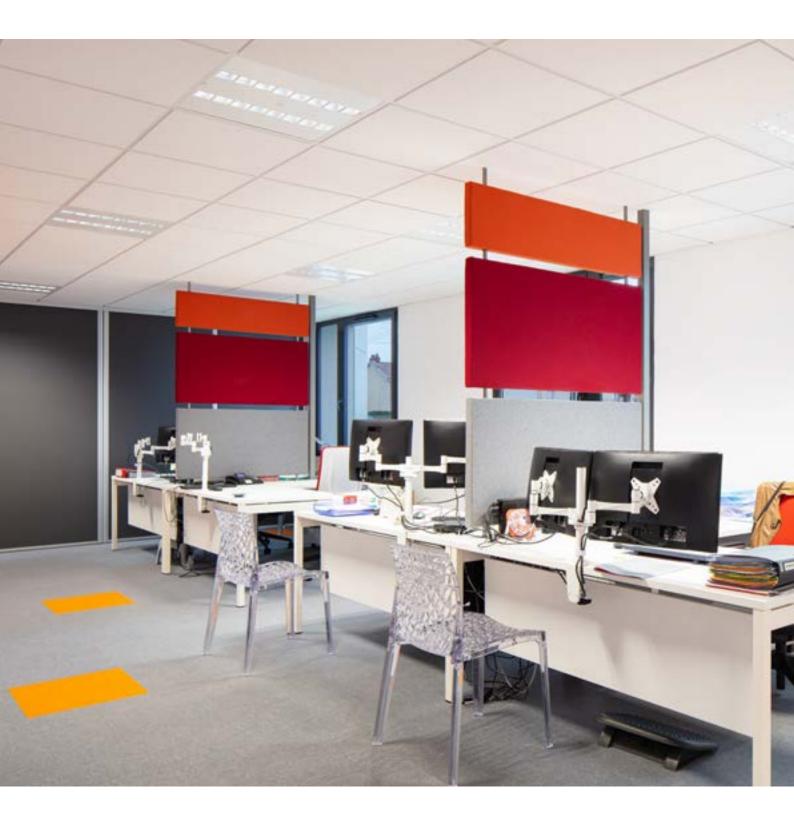


### **PRODUCT** CATEGORIES

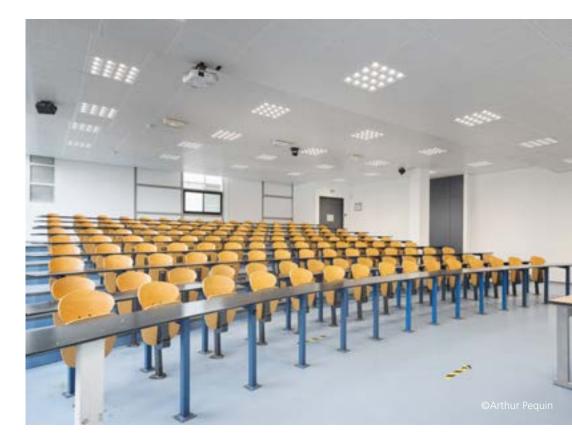
Battens	/				
	WayLine Page 148-149				
Weatherproof	_	1			
	Resisto Page 152-153	Resisto GRP Page 154-155			
Highbays	KubiXx	SylBay	Sylvania Granit	SportsBay	
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Outdoor	Raiden	Kalani	Zephyr	Muro Surface	Interrata
	Page 168-169	Page 170-171	Page 172-173	Page 174-175	Page 176-177
Emergency	<b>₽</b>				
	LiFeSafe Standalone Page 180-181				



## Find your lighting inspiration!







# Functional & architectural recessed modular



High efficiency

Comfort light

Customisable and sustainable

## OfficeLyte



Concord OfficeLyte is a highly efficient range offering comfort light perfect for office, education and meeting rooms. Visual comfort is an important factor when deciding upon your lighting scheme and our range conforms to EN12464-1 for indoor workplaces. All models are UGR<19 compliant, which means that the products are almost eliminating all the glare within the office environment. OfficeLyte is equipped with microprismatic optics, direct/indirect distribution for a smooth transition between illuminated surfaces and ceilings. OfficeLyte is also highly efficient with models featuring SylSmart Standalone and SylSmart Connected technology. High Efficiency and High Output versions provide the optimum energy efficient lighting schemes depending on ceiling heights and required spacings.







Fixture power From 24 to 37W

Luminous flux From 3.250 to 4.350lm

Efficacy Up to 141lm/W

Colour temp 3000K and 4000K

**CRI** 80

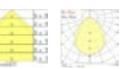


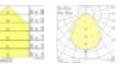
Discover the full range at sylvania-lighting.com

Dimmable Yes

**Control technology** DALI, SylSmart Standalone, SylSmart Connected

Average rated life 58.000 hrs (L80B20)







## Concord



High-quality comfort light witht luminance<200 Cd/m<sup>2</sup> at  $65^{\circ}$ 

Human Centric Lighting enabled

Customisable and sustainable

## **Optix Recessed**



Concord Optix Recessed is a flagship luminaire family of our office and education portfolio. Combining high performance glare-controlled optics (UGR<16 with aluminium optics) with state of the art highly efficient LEDs and wide variety of control options, Concord Optix Recessed offers the perfect lighting solution for office, education and seminar room environments. The aluminium optics versions offer a luminance<200 Cd/m<sup>2</sup> at 65° which is quite unique on the market. Apart from the aluminium optics finish, the range also offers products with white optics finish. In an effort to appreciate human health and well being, and as a result of the continuous evolution of the range, Concord Optix Recessed now brings you a new era in office lighting by recreating sunlight. Combining the innovation of Sylvania LumiNature with SylSmart Standalone technology, Concord Optix Recessed gives you one of the most natural, artificial lights in human centric lighting. Concord Optix Recessed is available with SylSmart Connected and SylSmart Standalone control options.









Finish White

Fixture power From 23 to 46W

Luminous flux From 3.200 to 4.600lm

Efficacy Up to 147lm/W

Colour temp 3000K, 4000K and Tunable White

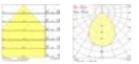
**CRI** 80, 90, 95, 96, 98

Dimmable <sub>Yes</sub>

Control technology DALI, SylSmart Standalone, SylSmart Connected

Average rated life 100.000 hrs (L80B20)







Discover the full range at sylvania-lighting.com



Very discreet design

Control range

Customisable and sustainable

#### Optix Recessed Asymmetric



Asymmetric version of the Concord Optix ceiling recessed mounted family. Perfect combination of Concord Optix product design, aluminium reflector and MicroPrismatic optical unit. Ideal for wall and blackboard illumination.







**Finish** White

Fixture power From 30 to 31W

Luminous flux From 3.380 to 3.480lm

Efficacy Up to 116lm/W

Colour temp 3000K and 4000K

**CRI** 80



Discover the full range at sylvania-lighting.com

Dimmable Yes

Control technology DALI, SylSmart Standalone

Average rated life 100.000 hrs (L80B20)



## Concord



Comfort light UGR≤19

Customisable and sustainable

Part of the OPTIX family design

#### **Optix 4 Cells**



Optix 4 Cells is a member of the Optix recessed family. The luminaire offers a perfect combination of the high performance glare-controlled optics (aluminised optic provides UGR<18) and the optimized diffusers and reflectors in a small and compact design. Optix 4 Cells provides customers with the opportunity to use the well known Optix lighting scheme in smaller offices and corridor areas.









**Finish** White

Fixture power 9W

Luminous flux From 962 to 1.098lm

Efficacy Up to 122lm/W

Colour temp 3000K and 4000K

**CRI** 80

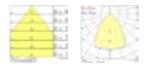


Dimmable Yes

Control technology DALI

Average rated life 96.000 hrs (L80B20)







Visual comfort, luminance<600 Cd/m<sup>2</sup> at 65° and UGR $\leq$ 19

High efficacy

#### **Rana NEO Recessed**



RANA NEO Recessed is a luminaire designed to enhance the quality of light in working areas such as offices, schools and circulation areas. The range offers perfect illumination at low glare level (UGR<19) without visible light source thanks to the combination of Louvre and MPO optics. The low flicker light engines deliver long lifespan.

The range features a total system efficacy of up to 125lm/W, depending on the configuration. The range is available with symmetric light distribution.

The SylSmart Connected and SylSmart Standalone enabled RANA NEO Recessed luminaires deliver an advanced lighting control solution to help maximise energy savings and user comfort without the drawbacks of traditional lighting control systems. This wireless and central control free system is aimed to make lighting controls simple for smaller applications such as meeting rooms, classrooms and corridors. Easy to install, easy to program. Maximum control, minimum installation.







**Finish** White

Fixture power From 30 to 33W

Luminous flux From 3.350 to 3.761lm

Efficacy Up to 125lm/W

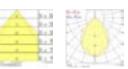
Colour temp 3000K and 4000K

**CRI** 80



Control technology DALI, SylSmart Standalone, SylSmart Connected

Average rated life 96.000 hrs (L80B20)







Discover the full range at sylvania-lighting.com





Circular economy concept with innovative LED T5 tubes

Comfort light UGR≤19

Optimal light distribution

#### **Rana Helios**



Rana Helios recessed is the first range in our portfolio designed around the concept of circular economy. The combination of omni-directional 360° radiation tubes and the luminaire's parabolic mirror louvres result in optimal light distribution and excellent glare control ideal for office and education environments. Rana Helios can offer a perfect solution for those conscious users who are looking for the latest LED technology and want to reduce their environmental footprint. The luminaire has a long lifetime, it is highly efficient and the Helios T5 LED tubes are upgradeable and replaceable. Thanks to the Helios T5 design, Rana Helios can provide high degree of flexibility: special spectra and high CRI options. Due to the standardised caps, the lamp replacement is simple and quick.





#### Helios: a Sylvania exclusive technology

The Helios T5 LED tubes are an entirely new class of linear LED light source with exceptionally high system performance. Sylvania has fundamentally changed the construction of a linear lamp with the development of Helios. This has seen a shift from surface-mounted LED emitters to gas-cooled LED filaments.

**Finish** White

Fixture power From 22 to 31W

Luminous flux From 3.100 to 4.500lm

Efficacy Up to 145lm/W

Colour temp 4000K

**CRI** 85



Discover the full range at sylvania-lighting.com

Dimmable Yes

Control technology DALI

Average rated life 50.000 hrs (L80B50)





### SYLVANIA



Comfort light UGR≤19

Direct/Indirect light distribution

#### Rubico



Rubico LED combines high efficacy and easy installation with an architectural look. The range offers MPO optics with satin side diffuser for enhanced visual comfort and aesthetics. Its low level of glare (UGR<19) and direct and indirect light distribution makes it ideal for hospitals, nurseries, schools and office applications. Available in a wide range of control options including DALI and SylSmart Standalone. A 3-hour self contained and central battery emergency versions are available as standard.





**Finish** White

Fixture power From 26 to 31W

Luminous flux From 2.850 to 3.500lm

Efficacy Up to 113lm/W

Colour temp 3000K and 4000K

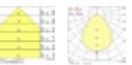
**CRI** 80

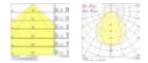


Dimmable Yes

Control technology DALI

Average rated life 100.000 hrs (L80B20)







Sustainable with replaceable light engines

High efficacy up to 132lm/W

Comfort light UGR≤19

### OptiClip



OptiClip is a LED luminaire range enabling almost the complete spectrum of lighting tasks in offices or educational environments. The product is designed around the removable and interchangeable light engines set flat on the surface of the fixture, connected with a plug & play cable to the driver. This solution offers extremely high flexibility and versatility on customising the customers' favourite lighting solutions and saves maintenance costs. The combination of the high lumen LED and special lens provides high efficacy and uniform light output. Due to the glare control (UGR < 19) OptiClip is suitable for offices, conference rooms and classrooms. The light engines are available in warm white (3000K) and neutral white (4000K), with colour rendering index (CRI) Ra > 80 or Ra > 90.











**Finish** White

Fixture power From 24 to 34W

Luminous flux From 3.100 to 4.500lm

Efficacy Up to 132lm/W

Colour temp 3000K and 4000K

**CRI** 80 and 90

Dimmable <sub>Yes</sub>

**Control technology** DALI, SylSmart Standalone, SylSmart Connected

Average rated life 60.000 hrs (L80B20)







Discover the full range at sylvania-lighting.com



Very comfortable light with UGR14-16 and luminance<1000 Cd/m<sup>2</sup> at  $65^{\circ}$ 

Adjustable lumen output from 2250-4650lm

High efficacy up to 150lm/W

#### Quadro



Quadro is a unique range of recessed architectural panels suitable for lighting applications where comfort light is extremely important. Quadro is ideal for offices, technical departments, meeting rooms, classrooms and other general indoor lighting applications. Quadro offers low glare of UGR<16. Its peerless design creates a special ambience with high efficacy of up to 150lm/W. The range features multipower functionality where the luminous flux of the luminaire can be tailored to local needs during installation by only setting a quick selector switch. The range includes 600x600, 625x625 and 1200x300 mm modules. Multipower, DALI and SylSmart Standalone enabled versions are available for additional comfort and energy saving.







**Finish** White

Fixture power From 14 to 34W

Luminous flux From 2.100 to 4.650lm

Efficacy Up to 153lm/W

Colour temp 3000K and 4000K

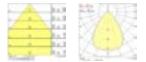
**CRI** 80



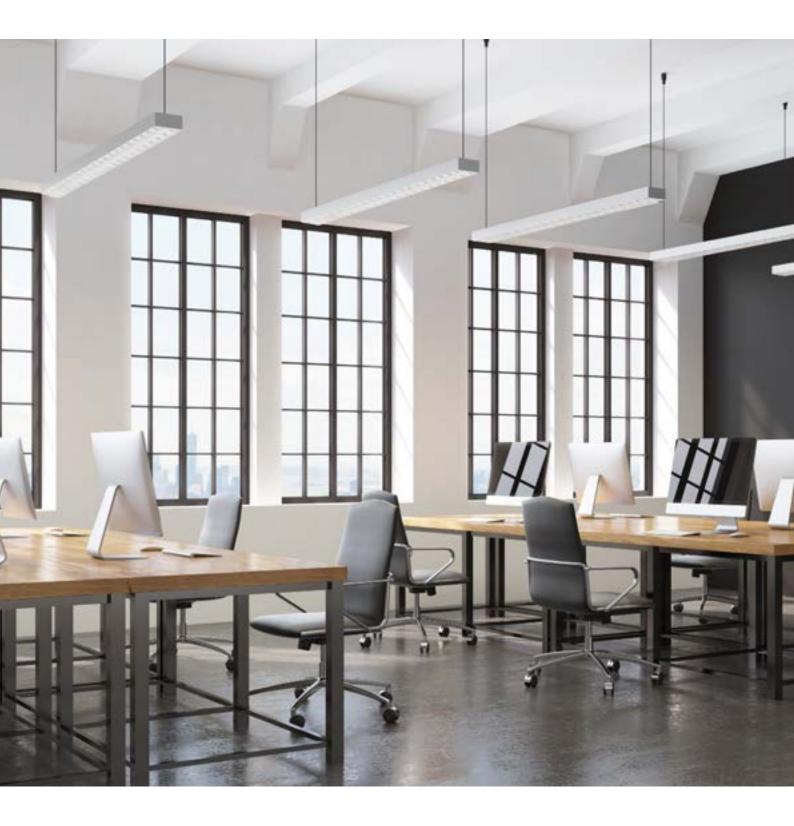
Control technology DALI, SylSmart Standalone

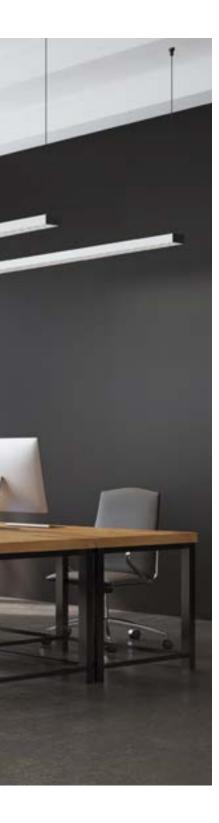
Average rated life 88.000 hrs (L80B20)













# Functional & architectural surface and suspended



Very high efficacy

High visual comfort Alu (UGR $\leq$ 16) and White (UGR $\leq$ 19)

#### **Optix Surface** & Suspended



Concord Optix Surface & Suspended is part of the Optix flagship luminaire family of our office and education portfolio. Combining high performance glare-controlled optics (UGR<16 with aluminium optics) with state of the art highly efficient LEDs and wide variety of control options, Concord Optix Surface & Suspended offers the perfect lighting solution for office, education and seminar room environments. The aluminium optics versions offer a luminance<200 Cd/m<sup>2</sup> at 65° which is guite unique on the market.

In an effort to appreciate human health and well being, and as a result of the continuous evolution of the range, Concord Optix Surface & Suspended now brings you a new era in office lighting by recreating sunlight. Combining the innovation of Sylvania LumiNature with SylSmart technology Concord Optix Surface & Suspended gives you one of the most natural, artificial lights in human centric lighting. Concord Optix Surface & Suspended is available with our SylSmart Connected and SylSmart Standalone control options.







**Finish** White

**Fixture power** From 23 to 48W

Luminous flux From 3.200 to 7.000lm

Efficacy Up to 164lm/W

Colour temp 3000K, 4000K and Tunable White

CRI 80, 90, 95, 98

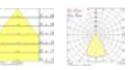


Control technology DALI, SylSmart Standalone, SylSmart Connected

Average rated life 100.000 hrs (L80B20)











Discover the full range at sylvania-lighting.com



Comfort light UGR≤19

High efficacy up to 136lm/W

#### Optix MPO Surface & Suspended



The Concord Optix MPO range has been developed for education and seminar room environments where minimalist, robust body design is required with high performance glare controlled illumination. The practical Micro Prismatic diffuser can provide optimal glare control. The Direct/ Indirect version can be mounted with suspension cable which is delivered with the luminaire. The smooth light emission surface creates a pleasant and glare-free light in accordance with UGR19, for the standard compliant illumination of workstations. Users get excellent light output and visual performance.







Fixture power From 23 to 51W

Luminous flux From 2.863 to 6.650lm

Efficacy Up to 136lm/W

Colour temp 3000K and 4000K

**CRI** 80

#### Dimmable Yes

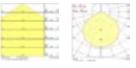
Control technology DALI, SylSmart Standalone, SylSmart Connected (1500mm version)

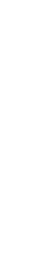
Average rated life 100.000 hrs (L80B20)











Functional & architectural recessed modular



Discover the full range at sylvania-lighting.com

### Concord



©Arthur Pequin

Low LED flicker <5%

#### Optix Surface Asymmetric





Asymmetric version of the Concord Optix ceiling surface mounted family. Perfect combination of Concord Optix product design, aluminium reflector and Micro Prismatic optical unit. Ideal for wall and blackboard illumination.







**Finish** White

Fixture power From 30 to 38W

Luminous flux From 3.380 to 4.250lm

Efficacy Up to 116lm/W

Colour temp 3000K and 4000K

**CRI** 80



Discover the full range at sylvania-lighting.com

Dimmable Yes

Control technology DALI, SylSmart Standalone

Average rated life 100.000 hrs (L80B20)





Visual comfort, luminance<600 Cd/m<sup>2</sup> at 65° and UGR≤19

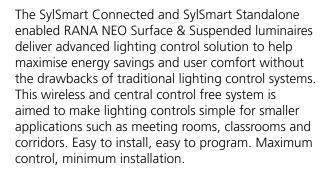
High efficacy

# Rana NEO Surface & Suspended



RANA NEO Surface & Suspended is a luminaire designed to enhance the quality of light in working areas such as offices, schools and circulation areas. The range offers perfect illumination at low glare level (UGR<19) without visible light source thanks to the combination of Louvre and MPO optic. The low flicker light engines deliver long lifespan.

The range features a total system efficacy of up to 135lm/W dependent on configuration. The range is available with symmetric light distribution.











Finish White

Fixture power From 29 to 73W

Luminous flux From 3.300 to 9.500lm

Efficacy Up to 135lm/W

Colour temp 3000K and 4000K

**CRI** 80



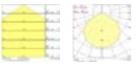
Discover the full range at sylvania-lighting.com

Dimmable Yes

**Control technology** DALI, SylSmart Standalone, SylSmart Connected

Average rated life 96.000 hrs (L80B20)

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Simply universal

Versatile

Customisable and sustainable

#### Sylmaster LED



Sylmaster T8 LED is a range of traditional ceiling mounted fixtures equipped with one or two ToLEDo T8 tubes, suitable for basic office and educational applications. Its ceiling surface mounting (and pendant with accessories) makes the Sylmaster T8 a highly suitable range to be used in various applications like in schools and medical centers, for storage rooms, corridors and staircases.







**Finish** White

Fixture power From 20 to 53W

Luminous flux From 1.500 to 3.800lm

Efficacy Up to 75lm/W

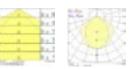
**Colour temp** 4000K

**CRI** 80



Discover the full range at sylvania-lighting.com

Dimmable No







Versatility

Wide range

Easy installation







The new DeltaWing is a surface mounted luminaire range for extensive use. Its uniform light distribution combined with a slim but robust design makes it the perfect solution for a wide range of applications including circulation areas of educational premisses, healthcare applications, office buildings and storage facilities. Suitable for surface, wall, cable wire and suspended mounting.

The family is available in two dimensions, variable lumen outputs and high performance. Due to the DIP switch option the flux level can be manually set up from 2,650lm up to 7,200lm and up to 136lm/W system efficacy level.

The curved-profile fixtures end in polycarbonate caps. The smooth polycarbonate extruded diffuser provides high efficiency, the precision prisms are designed to optimise light output.

DeltaWing offers non-dimmable, DALI, SylSmart Standalone and integrated Microwave sensored options with corridor function. The integrated Microwave sensor mounted discretely behind the diffuser helps further to reduce energy costs.

Easy installation with removable diffuser, three terminals for through wiring. The luminaires are sold with surface mounting brackets.



**Fixture power** From 34 to 58W

Luminous flux From 4.600 to 7.400lm

Efficacy Up to 135lm/W

Colour temp 4000K

CRI 80

Dimmable Yes

Control technology DALI, SylSmart Standalone, Microwave sensor

Average rated life 90.000 hrs (L80B50)





High visual comfort

Elegant & discreet design

Direct/Indirect distribution



Versatile luminaire family for a wide range of applications such as offices and educational facilities. The fusion of the minimalist design with the highly efficient LED technology and optical solutions create an elegant lighting solution with uniform direct/indirect light distribution. The direct/ indirect light emission creates a floating effect to all Areum luminaires and makes the occupants feel as if light is everywhere. The double-sided optical solution with the homogenous illumination and low glare level contribute to the occupants' visual comfort.





Dimmable

Connected, PIR

Control technology

Average rated life

100.000 hrs (L70B50)

DALI, SylSmart Standalone, SylSmart

Yes



Finish Grey

**Fixture power** From 40 to 94W

Luminous flux From 5.150 to 13.700lm

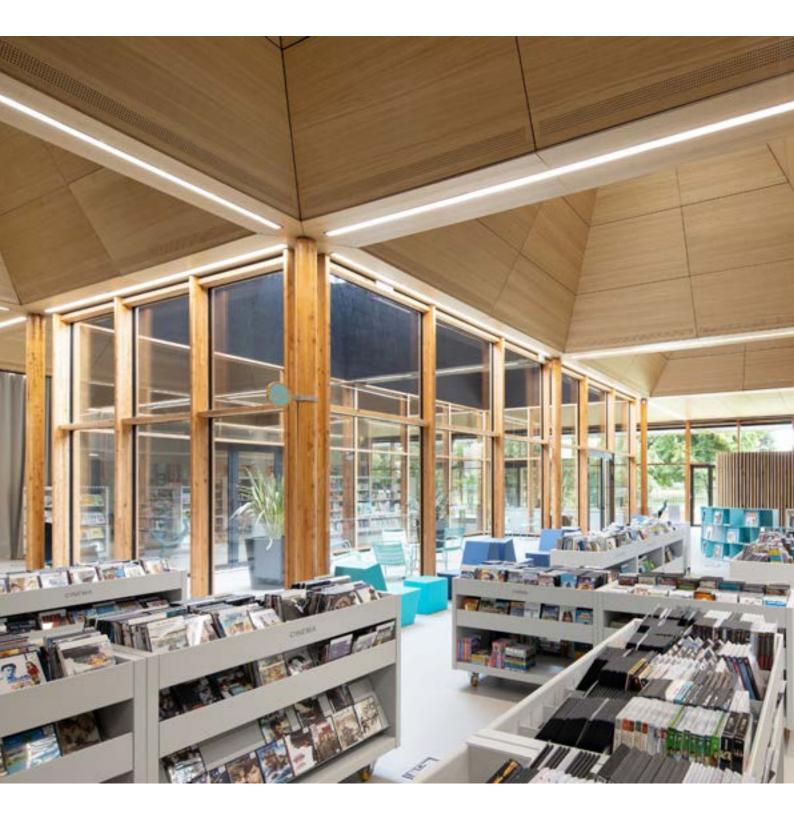
Efficacy Up to 149Im/WNA

Colour temp 4000K

CRI 80











# Functional & architectural linear



Fully customisable

Different mounting options

Two diffusor options

M2 2

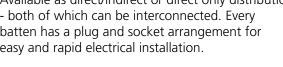
#### Mini Continuum II

Mini Continuum II Direct is available in two for when a seamless effect is required. Dimmable

Mini Continuum II is a uniquely clean, simple LED lighting system offering continuous, highly uniform lines of light across walls and ceilings. It is a highly versatile lighting tool that can be recessed, semirecessed, surface mounted or suspended, either vertically or horizontally. Mini Continuum II is the ideal solution for offices, meeting rooms, corridors, education facilities, museums and libraries.

Available as direct/indirect or direct only distribution - both of which can be interconnected. Every batten has a plug and socket arrangement for easy and rapid electrical installation.

versions: one with an outside trim detail for plasterboard ceilings; and a trimless version DALI versions and 3 hour non-maintained integral emergency options are available as standard options.







**Fixture power** From 10 to 67W

Luminous flux From 960 to 8.050lm

Efficacy Up to 127lm/W

Colour temp 3000K and 4000K

CRI 80



**Control technology** DALI

Average rated life 66.000 hrs (L90B10)











650°C

## Concord



Comfort light with a luminance<800 Cd/m² at 65° and UGR $\leq$ 19

Human Centric Lighting enabled

#### **Optix Linear Recessed, Surface & Suspended**



Concord Optix Linear Surface & Suspended is part of the Optix flagship luminaire family of our office and education portfolio, combining high performance glare-controlled optics with state of the art highly efficient LEDs and wide variety of control options. Ideal for fatigue-free screen work and visual comfort for occupants of commercial buildings in accordance with the recommendations of standard EN 12 464-1. Available in direct or direct/indirect (D/I at 70/30%) lighting versions. In an effort to appreciate human health and well being, and as a result of the continuous evolution of the range, Concord Optix Surface & Suspended now brings you a new era in office lighting by recreating sunlight. Combining the innovation of Sylvania LumiNature with SylSmart Standalone technology Concord Optix Surface & Suspended gives you one of the most natural, artificial lights in human centric lighting. Concord Optix Surface & Suspended is available with our SylSmart Connected and SylSmart Standalone control options.



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**Finish** White

Fixture power From 21 to 39W

Luminous flux From 2.200 to 4.500lm

Efficacy Up to 145lm/W

Beam angle

Colour temp 3000K, 4000K and Tunable White **CRI** 80, 90, 95, 98

Dimmable Yes

Control technology DALI, SylSmart Standalone, SylSmart Connected

Average rated life 100.000 hrs (L80B20)







Discover the full range at sylvania-lighting.com



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©Arthur Pequin

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Three different optics

#### Rana Linear Recessed & Surface



RANA Linear is a slim, sleek and unobtrusive range of LED luminaires designed to fulfill a wide range of applications including educational environments, medical buildings, storage facilities, offices, data centres, long corridors and other circulation areas. RANA Linear offers the possibility to mix and match recessed and/or surface luminaires in a single lighting scheme. The range features 3 different light distributions with 3 different optics: Opal diffuser (UGR<23), Micro Prismatic optic (UGR<21), and Louvre + Prismatic optic (UGR<19), ideal for Display Screen Equipment (DSE) workstations. RANA Linear can be remotely controlled with 1-10V or DALI (Switch-Dim) systems and SylSmart Connected and SylSmart Standalone technologies.





Finish White

Fixture power From 27 to 35W

Luminous flux From 2.890 to 3.300lm

Efficacy Up to 120lm/W

**Colour temp** 3000K, 4000K and Tunable White (only Louvre and Prismatic)

**CRI** 80



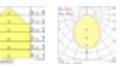
Discover the full range at sylvania-lighting.com

Dimmable Yes

Control technology DALI, SylSmart Standalone, SylSmart Connected

Average rated life 60.000 hrs (L80B20)

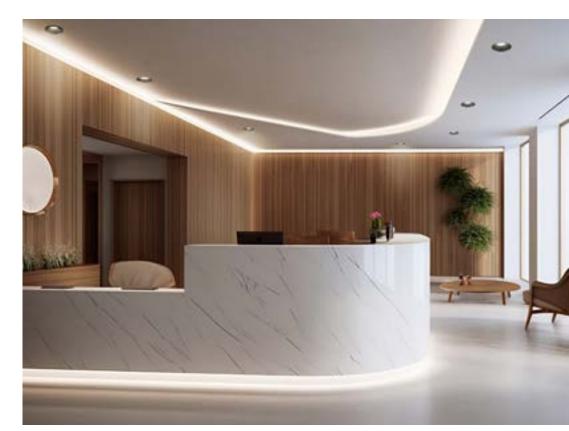












### Downlights

# Concord



The new vision of downlight

Floating halo effect on the ceiling, creating a special ambience

Unique adjustable optic system

#### **Concord Equinox**





reddot winner 2023 lighting design

Concord Equinox is an elegant and innovative luminaire designed using the latest optical technology. It is a high quality and efficient lighting solution for office, hospitality, and retail environments.

Using QuarkStar's award-winning system of light refraction, Equinox provides functional downlighting with simultaneous upper lighting. This creates a halo backlight which improves the ambience and avoids the dark, cave-like effect. Furthermore, it lowers the contrast which would otherwise result in discomfort glare. QuarkStar and Concord by Sylvania have an exclusive partnership for this project.

The beautiful luminaire offers trim and trimpless design options, low glare of UGR<19, high efficiency of up to 125lm/W with CRI90 LED chips for excellent

colour rendering. Available in 3000K and 4000K. The trim version comes in black and white housing colours. Concord Equinox comes in one size of 165mm cut-out and is equipped with switch dim DALI drivers with loop in loop out function and SylSmart Connected version.

For perfect light quality, LumiNature models are available with high colour rendering of CRI97 in Human Centric Lighting Tunable White version (2700K-6500K) equipped with SylSmart Connected driver. Concord Equinox is a winner of the Red Dot Design Awards 2023 in the Lighting Product Design category.





**Finish** Black and White

Fixture power From 20W to 25W

Luminous flux From 1.925 to 2.500lm

Efficacy Up to 125lm/W

Beam angle <sup>64°</sup>

Colour temp 3000K-4000K and LumiNature models HCL TW version 2700K-6500K



Discover the full range at sylvania-lighting.com





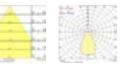
**CRI** 90 and 97

Dimmable Yes

Control technology DALI, Switch dim, SylSmart Connected

Average rated life 114.000 hrs (L80B20)





# Concord



Environmentally friendly design

High visual comfort UGR19 & luminance less than <300 Cd/m<sup>2</sup> at  $65^{\circ}$ 





Solstice is a comprehensive downlights family, specially developed for the architectural specification market. The floating reflector and the unique style of the range can provide a signature look to any lighting design project in the retail, office, education or hospitality segments.

The Solstice product family has an ecofriendly design, made with high-quality aluminium materials, which can be recycled almost 100% at the end of the product's lifecycle. It is also easy to disassemble the product for any future upgrade or change of parts thanks to the snap fit design and no added glue.

The product family uses the latest high-efficiency LED chips, which guarantee superior quality and reliability. Solstice offers a wide range of lumen options, starting at 1000lm and reaching 6050lm.

Due to the deep reflector design, Solstice has low glare light of UGR<19 for lumens lower than 2400lm with wide light distribution and beam angle of approximately 70 degrees. Solstice provides comfortable light with luminance level at 65 degrees below 300 cd/m<sup>2</sup> for lumens <2400lm and below 1000 cd/m<sup>2</sup> for lumens <6050lm.

The product is available in 3 body sizes - 150mm, 200mm and 250mm and two different shapes round and square. The range comes in two different bezel colours (black and white) and four reflector colours (silver, white, black and gold). Solstice is available as a recessed luminaire, with surface mounted and pendant options to follow soon.

All versions of Solstice can be controlled with either DALI (push-dim) or with SylSmart drivers.





**Finish** Bezel colours (White and Black) and four reflector colours (Silver, White, Black and Gold)

Fixture power From 15 to 46W

Luminous flux From 1.000 to 6.050lm

Efficacy Up to 141lm/W

Beam angle 70°



Discover the full range at sylvania-lighting.com



Colour temp 3000K-4000K and LumiNature models HCL TW version 2700K-6500K

**CRI** 90 and 97

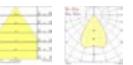
Dimmable Yes

Control technology DALI, Switch dim, SylSmart Standalone, SylSmart Connected

Average rated life 170.000 hrs (L80B20)











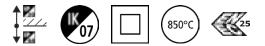


Uniform and comfortable light UGR≤19

Good ingress protection

Multipower solution

#### **Insaver Slim**



Insaver Slim is a comprehensive range of downlights with lumen values from 620lm to 4950lm.

The redesigned, patented lenses provide very good uniformity of light, bigger beam angle of 70 degrees and a wide light distribution curve.

Insaver Slim offers reduced glare of UGR<19 for lumens up to 3050lm, which makes it perfect for offices and education areas. The high IP rating - IP44 or IP65 for recessed versions alllows the product to the installed in areas where additional water ingress protection is needed. The high output versions of 2950-4950Im are perfect for commercial & hospitality environments. The range benefits from high efficacy: up to 131Im/W. The mulitpower versions with selectable power allow the luminous flux to be tailored to the clients' needs.

The Insaver Slim products have a long lifespan (88.000 hrs L80B20) and 5-year warranty. PIR, DALI and SylSmart Standalone options are also available.



**Finish** White

Fixture power From 4.9 to 41W

Luminous flux From 620 to 4.950lm

Efficacy Up to 131lm/W

Beam angle 70°

Colour temp 3000K and 4000K



**CRI** 80 and 90

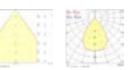
Dimmable Yes

**Control technology** PIR, DALI, Switch dim, SylSmart Standalone

Average rated life 88.000 hrs (L80B20)





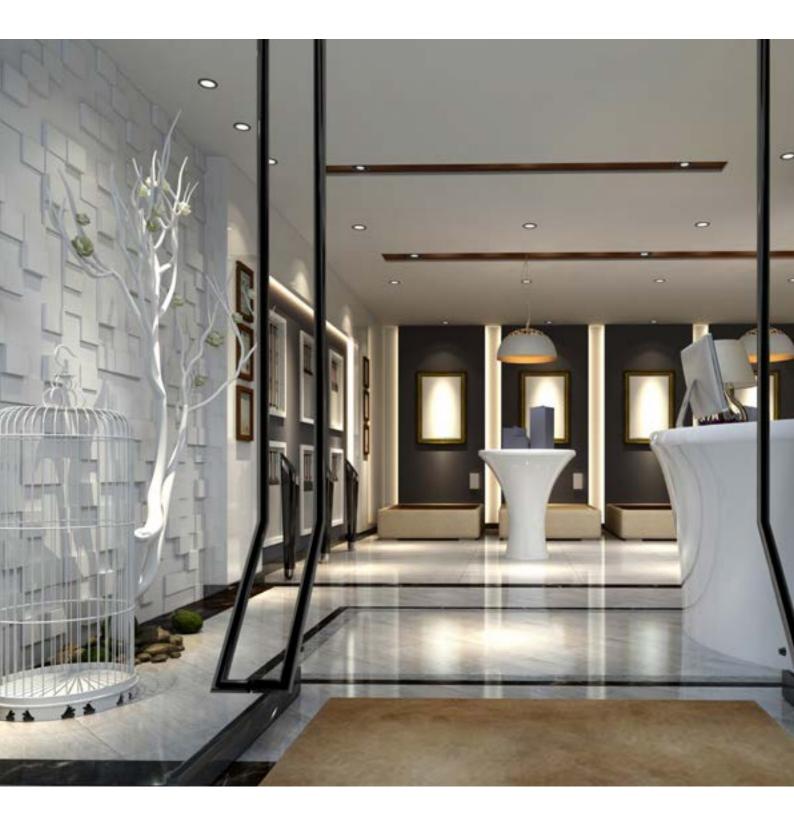








Discover the full range at sylvania-lighting.com







# Spotlights



Variety of design options throughout the range

Different colour temperatures

Dimmable options available

### **Myriad**



Concord Myriad is a versatile spotlights range, designed to create innovative interior lighting for a variety of architectual applications. It comes in different colour temperatures, reflector ranges and bezel colours, offering a uniform appearance and flexibility of design throughout the product range. Myriad V provides a range of trim and trimless versions with a choice of decorative accessories for the IP20 versions and the option for plaster up kits for a smooth finish, both IP20 and IP65. Myriad Deco allows for a choice of black, silver or white reflectors and a choice of bezel colours in both Round and Square versions.





Finish Chrome, Black, Silver, White

Fixture power From 10 to 20W

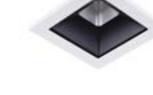
Luminous flux From 567 to 1.286lm

Efficacy Up to 124lm/W

Beam angle 28°, 48°

**Colour temp** 2700-4000K









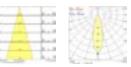
**CRI** 90

Dimmable Yes

Control technology Phase DIM, DALI

Average rated life 100.000 hrs (L80B20)

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Modular luminaire with different shapes

Freedom and flexibility in the lighting

Good colour rendering CRI90

#### Expospot



Expospot is a high-quality modular spotlight, designed specifically for retail applications. Expospot can be tilted or adjusted in various angles to create high quality light. It is available in fixed, adjustable and mono (Round and Square), duo and trio versions, ensuring one has full freedom and flexibility in the lighting of the end user space.

The range offers high efficiency, high output and very high output options. Two colour temperatures - 3000K and 4000K and efficacy up to 114lm/W. Expospot comes in two colours - Black and White.













Finish Black and White

Fixture power From 21 to 171W

Luminous flux From 1.769 to 5.647lm

Efficacy Up to 114lm/W

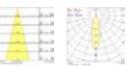
Beam angle From 25° to 58°

Colour temp 3000K and 4000K **CRI** 90

Dimmable No

Control technology Switch

Average rated life 100.000 hrs (L80B20)







Spotlights



Discover the full range at sylvania-lighting.com



Variety of housing finishes

Easy to assemble

High colour rendering CRI90

#### Ludospot



Ludospot is arange of integrated LED accent downlights with a modular design. A wide range of housing options allows direct replacement of most recessed halogen spotlight installations on the market. It offers easy and quick mounting of the modules thanks to the Twist&Lock system, the housings can accommodate single, double or triple LED modules, depending on the project's requirements.

Ludospot 50 has high colour rendering index CRI90 and with SDCM <3 light colour consistency makes it ideal for retail, restaurant and hotel hospitality applications. The fixtures are also perfect for using around the home, thanks to the IP44 option. Ludospot 111 is the perfect choice to replace 35W and 70W HID recessed lamps or ceiling mounted spots. The high colour rendering index CRI90, with SDCM <3 light colour consistency makes it ideal for retail, shops, malls and hotel hospitality applications, with single or multiple LED module housings. There is a shape to suit every type of ceiling - choose from round, square, rectangular or even a surface mounted ceiling frame.

CRI Finish Black and White 90 **Fixture power Dimmable** From 12 to 38W Yes Luminous flux Control technology From 920 to 3.550lm Ludospot 50: Leading edge/trailing edge, phase dimming Ludospot 111: Non-dimmable Efficacy Up to 93Im/W Average rated life 100.000 hrs (L70B50)

Spotlights



Beam angle 28°, 40°

Colour temp 3000K and 4000K

Discover the full range at sylvania-lighting.com

# SYLVANIA



360° adjustability

Colour temperature adjustability

Compatible with glass wool and mineral insulation material

### Obico



The Obico spotlight range combines high lumen efficacy with outstanding value and multiple options in a single luminaire. The Obico range offers IP65 protection from water and steam as well as 360° adjustability of the product, making it the preferred choice for installers and contractors that are looking for an all-in-one solution.

The colour temperature can be selected with a simple flick of a switch located on the driver. For Obico 68 with 68mm cut out a 3-CCT choice is available (2700K-3000K-4000K), and for Obico 80 with 80mm cut out a 2-CCT choice is available (3000K or 4000K).

The luminaire is compatible with trailing-edge and leadingedge dimmers and comes with a loop-in, loop-out wiring system integrated in the driver to ensure a quick and simple installation.

Obico offers excellent colour rendering of CRI90 and high efficiency of up to 102lm/W. The slim profile of less than 40mm makes Obico suitable for shallow ceiling voids.

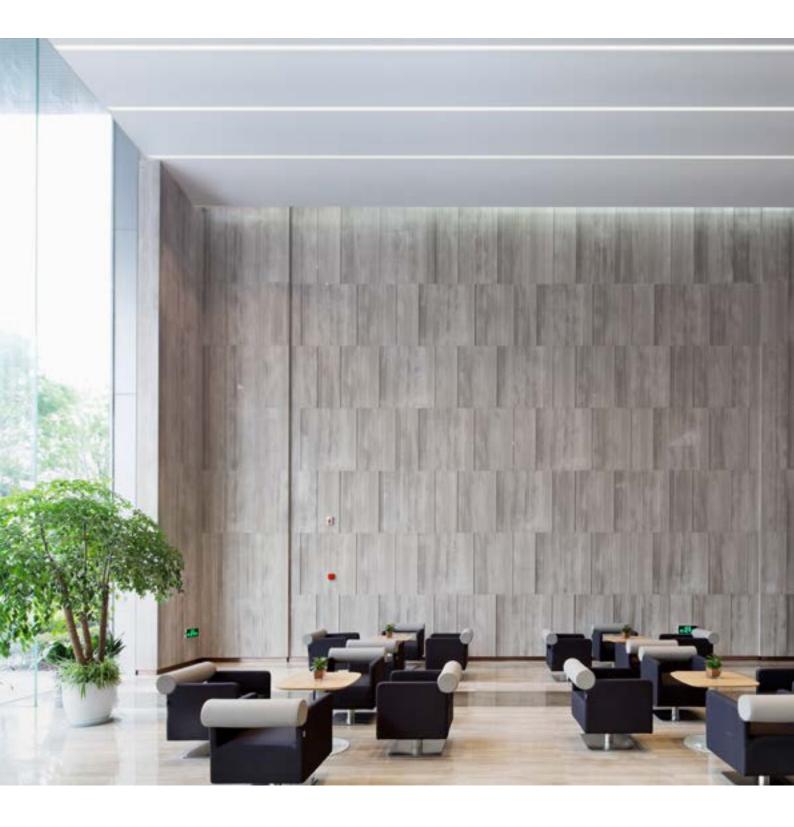
The fire rated model is designed and tested to meet Fire Rating Standards for safety and reassurance: BS 476-21:1987.





Discover the full range at sylvania-lighting.com

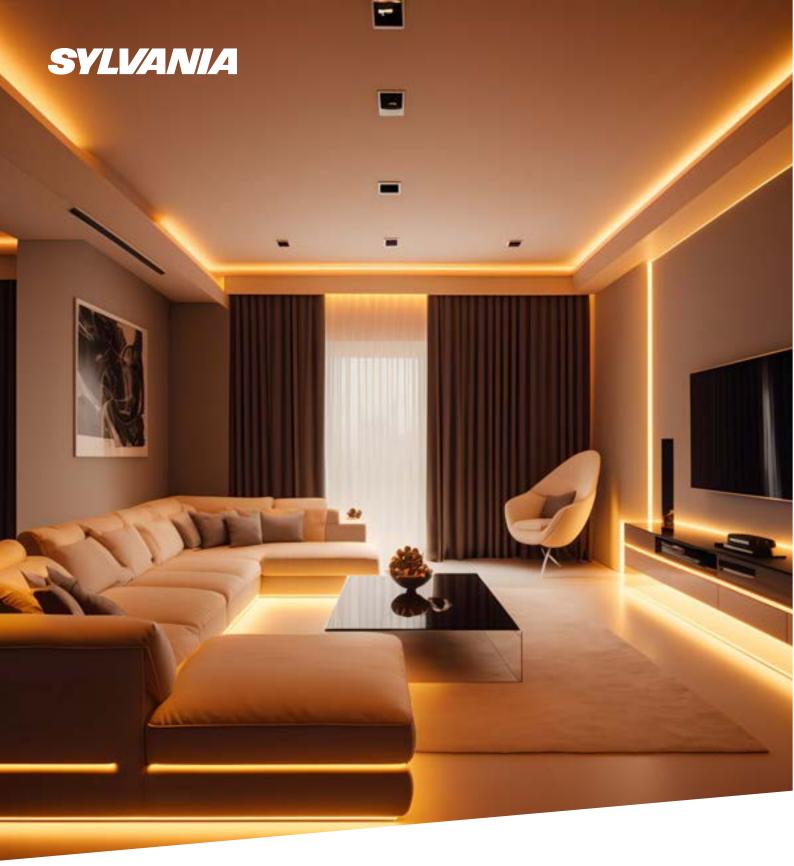
SYLVANIA Group - Inspirations catalogue 91







## Flexible LED System



High colour rendering of LED strips

Flexible installation

Wide range of profiles

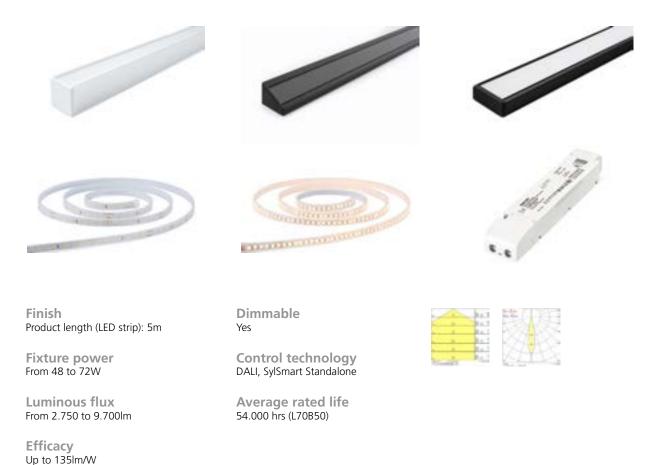
#### **Flexible LED System**



The Flexible LED system is a range of LED strips (Flex Pro and START Flex), drivers and high quality aluminium profiles for indoor and outdoor use.

The LED strip range consists of Flex Pro and START Flex products. Flex Pro offers high quality CRI>90 and SDCM≤3 LED strips providing uniform colour and excellent light quality. The START Flex range is built with CRI>80 SDCM≤3 LED chips and meets requirements for most applications. The RGBW version is perfect for colour setting scenes. For outdoor applications we recommend the Flex Pro IP67 product, which offers full IP67 protection against water and solid objects like dust and sand. Additionally, the Flexible LED systems range offers standard, DALI and SylSmart drivers. The highquality aluminum profiles for the Flex Pro and START Flex products come in different sizes and shapes to address the needs of each customer.

The Flexible LED system is an inspiring lighting solution that can be used in many different applications such as hotels, offices, bars and restaurants, residential properties and exteriors of buildings.

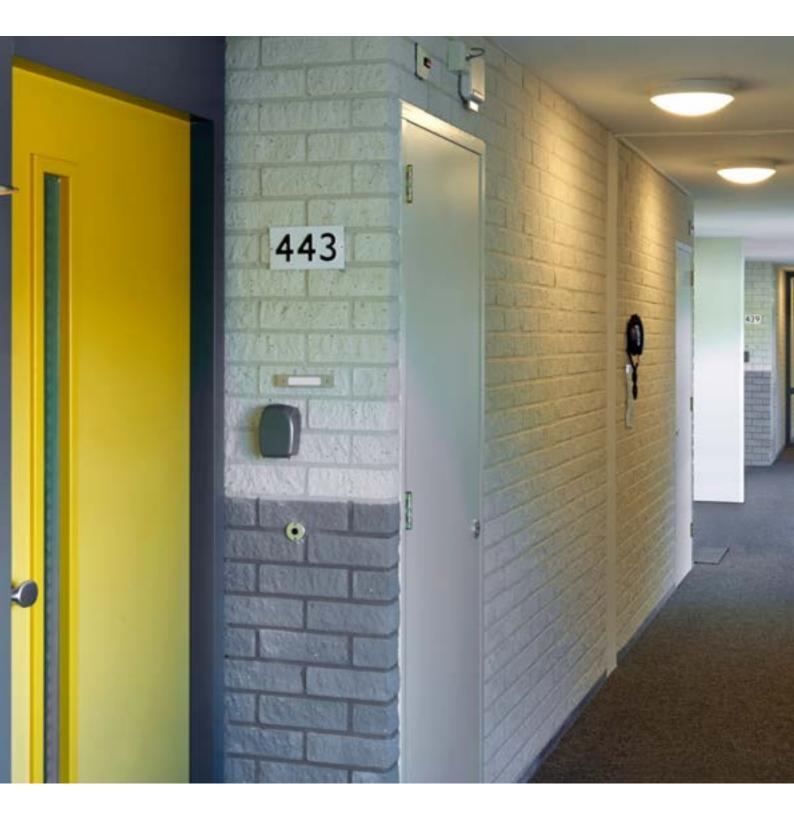


Colour temp 3000K and 4000K

**CRI** 90



Discover the full range at sylvania-lighting.com







### Bulkheads



MW presence detection

Master & slave version

High resistance IK10

### Giotto



With its simple yet robust design, Giotto is a customer favourite as a reliable and easy to install LED bulkhead. Giotto is available in 3 different body sizes: 235mm, 305mm and 335mm.

Giotto can be used in many different indoor and outdoor applications such as hospitality or logistics and industry. The product range includes a microwave function option which serves as a presence detector, providing more lighting control to users. Giotto Microwave is available in 305mm and 335mm sizes and can be used with multiple 'slave' fittings controlled by one 'master' fitting.



Finish White

Fixture power From 10.1 to 19.5W

Luminous flux From 1.075 to 2.350lm

Efficacy Up to 129lm/W

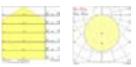
Beam angle

Colour temp 3000K and 4000K **CRI** 80

Dimmable Yes

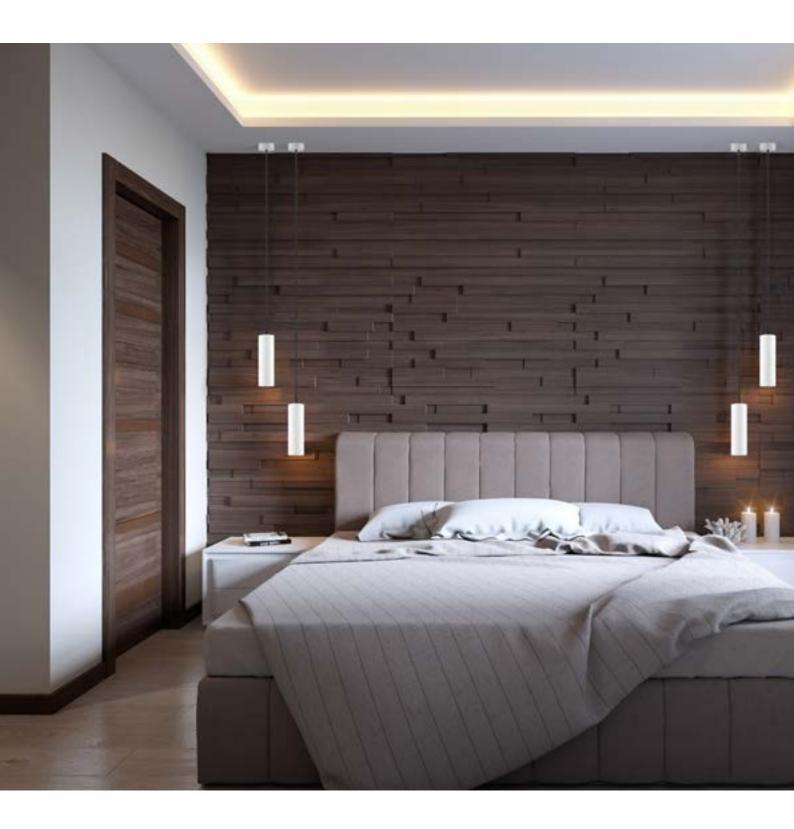
Control technology 1-10V, DALI, Microwave sensor

Average rated life 120.000 hrs (L70B50)

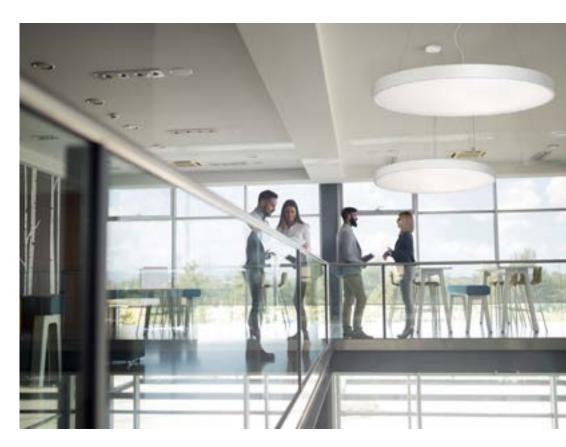




Discover the full range at sylvania-lighting.com







### Surface & Pendants



Customisable and sustainable

4 different diameters (max 1200mm)

Various diffuser options

### Colossal



Concord Colossal luminaires are best characterized by their pure circular lines and slender body which elevates spaces to the next level with its diffused light.

Concord Colossal is Sylvania's new round-shaped luminaire range combining the purest modern appearance with the latest highly efficient lighting technology. The composition of the slightly curved, slim aluminium ring and the full flat homogenous diffuser provides perfect lighting experience in all office, retail and hospitality interiors and decorative applications. Thanks to its design, the new Colossal delivers soft, extremely homogeneous, glare-free, efficient and uniform illumination in all environments. The wide variety of dimensions and the optional light distributions provide freedom of choice to create unique lighting installations. The product is offered in four different dimensions which makes Colossal a versatile product, suitable for surface, suspended and wall mounted projects.







**Finish** White

Fixture power From 15.9W to 153.3W

Luminous flux From 1.650lm to 22.175lm

Efficacy Up to 144lm/W

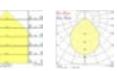
Colour temp 3000K and 4000K

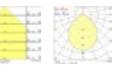
**CRI** 80 and 90 (only 4000K)

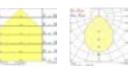
Dimmable Yes

Control technology DALI, SylSmart Standalone, SylSmart Connected

Average rated life 145.000 hrs (L80B20)











Discover the full range at sylvania-lighting.com

SYLVANIA Group - Inspirations catalogue 103

# Concord



Versatile design

High colour rendering CRI92

Dimmable options available

### TubiXx



The Concord TubiXx LED pendant and surface mounted light range is perfect for hospitality environments as it brings a warm and decorative lighting atmosphere. The Concord TubiXx pendant and surface mounted product range has a timeless design combined with LED technology. Available in different colour finishes, colour temperatures and reflectors (Black body with Gold reflector, White body with White reflector, White Body with Black reflector), this range can match modern or even more classic environments. The beam angle of the product is between 33.8 and 36.5 degrees and it is dimmable. The luminous flux ranges between 1152 to 1370lm at 14W. The product's effiency is up to 97lm/W, lifetime: 50.000 hrs. Concord TubiXx has an IP20 and IK02 rating.









**Finish** White body with White reflector, Black body with Gold reflector, White Body with Black reflector

Fixture power 14W

Luminous flux From 1.152 to 1.361lm

Efficacy Up to 96lm/W

Beam angle From 33,8° to 36,5°

**Colour temp** 2700K, 3000K and 4000K



Discover the full range at sylvania-lighting.com

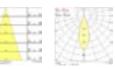
**CRI** 90

Dimmable Yes

Control technology Tridonic ready2mains™

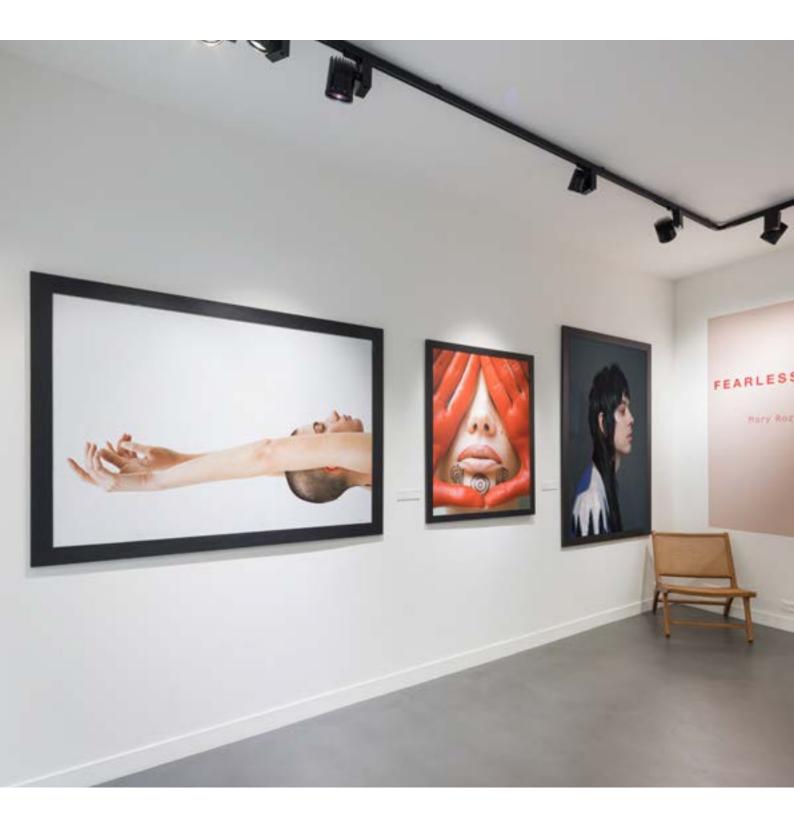
Average rated life 50.000 hrs (L90B10)





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SYLVANIA Group - Inspirations catalogue 105







### Architectural tracklights & tracks



#### High colour rendering up until CRI97

Unique adjustability

Dimmable options available

### Beacon LED Muse II







650°C



Concord Beacon is an award winning LED tracklights range, specifically designed for museums, galleries, high-end retail and hospitality applications where colour rendition plays an important and active role. The unique soft-touch ring enables the end-user to manually adjust the beam from a wide flood (55°) down to a tight spot (8°), without the need of any additional lenses or reflectors.

Beacon Muse II has a very high CRI of 97 with the R9 value at 90 - ensuring vibrant reds - the ideal spotlight for museum, gallery and retail applications where a high quality of light is required. Available with trailing edge, on-board dimming, DALI or SylSmart wireless SSC dimming.

Available in 3000K or 4000K colour temperatures. White or Black paint finishes are available as standard. Other colours are available on request. Accessories available: Monopoint, Elongation lens, Softener lens, Honeycomb filter, Barn door and Snoot.





**Finish** Black and White

Fixture power 21W

Luminous flux From 553 to 1.150lm

Efficacy Up to 55lm/W

Beam angle From 8° to 55°

Colour temp 3000K and 4000K



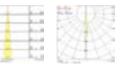


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Dimmable Yes

**Control technology** Trailing Edge, On-board dimming, DALI, SylSmart Standalone

Average rated life 100.000 hrs (L80B20)









Unique adjustablity of the beam

Multiple dimming options

High colour rendering up to CRI97

### Beacon LED XL Muse



 $(650^{\circ}C)$ 



SylSmart

Beacon LED XL Muse is part of the innovative and award-winning Beacon Muse range of spotlights. The soft-touch ring enables the end-user to manually adjust the beam from a wide flood (70°) down to a tight spot (10°) without the need of any additional lenses or reflectors.

Beacon XL Muse has a very high CRI of 97 with the R9 value at 90 - ensuring vibrant reds - the ideal spotlight for museum, gallery and retail applications where a high quality of light is required. Dimmable via on-board potentiometer. The product is available in 3000K or 4000K colour temperatures. White or Black paint finishes are available as standard. Other colour available on request. Barn doors, Elongation lens, Honeycomb and Snoot accessories are also available.



**Finish** Black and White

Fixture power From 36W to 41W

Luminous flux From 2.544 to 2.884lm

Efficacy Up to 70lm/W

Beam angle Adjustable between 10° to 70°

Colour temp 3000K and 4000K





**CRI** 97

Dimmable Yes

Control technology On-board dimming, DALI, SylSmart

Average rated life 100.000 hrs (L80B20)







Precise light exactly where it is needed

High colour rendering up to CRI97

IR/UV free light source

### **Beacon LED Projector**



Concord Beacon is an award-winning LED tracklights range, specifically designed for museums, galleries, high-end retail and hospitality applications where colour rendition plays an important and active role. Beacon Projector offers precision light exactly where it is needed. The product is available as a Framing, Iris or Gobo projector.

The Framing Projector has four adjustable arms allowing the beam to be framed to the desired size shape (square/rectangle or irregular 4-sided shapes). The Iris Projector has an adjusting lever to create a perfect circle of light in the required size. The Gobo Projector with the use of ROSCO filters allows to project a still image printed/cut/lasered onto a specially made glass/metal/acetate filter for example a company logo, text, shapes, images. All Beacon LED projector products have high colour rendering index of CRI97. The total power consumption of the products from the range is 35W. Clients can choose between 3000K and 4000K versions. The luminous flux across the range is 474Im.





**Finish** Black and White

Fixture power 35W

Luminous flux 474lm

Efficacy Up to 14lm/W

Beam angle Four adjustable arms allowing the beam to be framed to the desired size shape (square/rectangle or irregular 4 sided shapes)





Colour temp 3000K and 4000K

**CRI** 97

Dimmable <sub>Yes</sub>

Control technology On-board dimming, DALI

Average rated life 89.000 hrs (L80B20)



# Concord



Variety of beam angles

Dimmable options available

Different accessories available

### **Beacon LED**



A comprehensive range of efficient and high performing LED spotlights, ideal for retail, display, museum and gallery applications. High colour rendering with CRI 93 and 85 for High Output versions. Beacon LED offers a variety of beam distributions. The following dimmable options are available: Trailing Edge, On-board dimming and/or DALI.

Available in 3000K or 4000K colour temperatures. White or Black paint finish as standard. Other colours are available on request. Beacon LED has the following accessories in the range: Monopoint, Elongation lens, Softener lens, Honeycomb filter, Barn door and Snoot. IR/UV free light source without heat radiation. The total power consumption of the products is 21W.





Finish Black and White

Fixture power 21W

Luminous flux From 1.512 to 2.300lm

Efficacy Up to 112lm/W

**Beam angle** 12°, 38°, 55°

Colour temp 3000K and 4000K





**CRI** 85 and 93

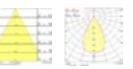
Dimmable Yes

Control technology Trailing Edge, On-board dimming, DALI

Average rated life 72.000 hrs (L80B20)

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Variety of beam angles

Multiple dimming options

Different accessories available

### **Beacon LED XL**



Beacon LED XL is a high performing LED spotlight, ideal for retail and display applications. It has a high colour rendering index of CRI 85. Beacon LED XL offers a variety of beam distributions options - Medium (34°) and Wide (50°). No-dimmable, On-board dimming or DALI versions are available. Beacon LED XL has an efficacy of up to 119 lm/W and fixture power of 33W across the range. The luminous flux is 3911lm. Available in 3000K or 4000K colour temperatures. White or Black paint finish as standard. Other colours are available on request.

Accessories can be purchased separately (Elongation lens, Honeycomb filter, Barn door and Snoot). The product has a long lifetime: >72,000 hours life at L80B10.





**Finish** Black and White

Fixture power 33W

Luminous flux From 2.802 to 3.911lm

Efficacy Up to 119lm/W

Beam angle 34°, 50°

Colour temp 3000K and 4000K



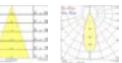


CRI 93 and 85 (High Output version)

Dimmable Yes

Control technology On-board dimming, DALI

Average rated life 72.000 hrs (L80B10)







# Concord

Variety of beam angles

Multiple dimming options

Different accessories available

#### **Beacon LED XXL**



Beacon LED XXL is designed to push the boundaries of lighting within the retail and display sectors. Beacon LED XXL is not just offering a powerful lighting solution, but also provides high quality of light. Available with typical 93CRI or 85CRI (for High Output) in both 3000K or 4000K. Non-dimmable, on-board and DALI dimmable versions are also available. It is the ideal LED replacement for traditional 70W CMI solutions.

The product has three beam options Narrow (21°), Medium (50°) or Wide (67°). White or Black paint finishes are available as a standard. Other colours can be ordered upon request.

Beacon LED XXL comes with 5 years warranty.









Finish Black and White

Fixture power 48W

Luminous flux From 3.670 to 5.762lm

Efficacy Up to 91lm/W

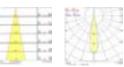
**Beam angle** 21°, 50°, 67°

Colour temp 3000K and 4000K **CRI** 85 and 93

Dimmable Yes

Control technology On-board dimming, DALI

Average rated life 100.000 hrs (L80B20)











Variety of beam angles

High colour rendering up to CRI97

Different accessories available

### **Beacon LED Accent**



Beacon Accent offers a veriety of accessories

to choose from: Elongation lens, Softner lens,

Honeycomb filter, Barn door and Snoot.

Beacon Accent is a range of LED spotlights which has been specifically designed for museums, galleries and highend retail where colour rendition plays an important and active role. With a very high CRI of 97 and the R9 value (saturated red) at 90, the Beacon Accent range provides truer, richer and more vibrant colours.

The dark-light detail helps to reduce glare and increase visual comfort. The product is available in 3000K and 4000K CCT's, dimming via an on-board potentiometer and a choice of 3 beam angles – Narrow (10°), Medium (37°) and Wide (52°).





Finish Black and White

Fixture power 21W

Luminous flux From 503 to 1.578lm

Efficacy Up to 69lm/W

**Beam angle** 10°, 37°, 52°

Colour temp 3000K and 4000K





**CRI** 97

Dimmable Yes

Control technology On-board dimming

Average rated life 100.000 hrs (L80B20)

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Variety of beam angles

High colour rendering up to CRI93

Different accessories available

### **Beacon LED XL Accent**





Architectural tracklights & tracks

Beacon LED XL Accent has been specifically designed for retail and display environments. The product gives a complete control over the direction and intensity of the light you require. It is not only stylish but perfectly practical in every way, producing a high quality CRI93 (High output versions CRI 85) and high intensity lighting effect. These beautiful spotlights come in a white or black finish (additional colours available upon request) and are also available with dimmable options.

Beacon LED XL Accent is offered in two diffrent beam angles: Medium (34°) and Wide (50°). The product is available in 3000K or 4000K colour temperatures.

Beacon LED XL Accent has a variety of accessories to choose from: Elongation lens, Honeycomb filter, Barn door and Snoot.





Finish Black and White

**Fixture power** 33W

Luminous flux From 2.802 to 3.682lm

Efficacy Up to 119lm/W

**Beam angle** 34°, 50°

Colour temp 3000K and 4000K



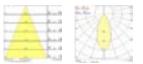
CRI 85 and 93

Dimmable Yes

**Control technology** On-board dimming, DALI

Average rated life 100.000 hrs (L80B20)









## Concord



11

High colour rendering CRI93

Multiple dimming options

### **Beacon LED Wallwash**



Beacon Wallwash is an integrated LED tracklight which utilizes a specially adapted asymmetric lens to provide a high-quality wall washing effect for any display environment, thus it is particularly suitable for museums, galleries, and retail applications. The product has a uniform ceiling to floor vertical illuminance of up to 3.5 meters in height at 4.5 meters spacing.

Beacon Wallwash offers two colour temperatures: 3000K warm white and 4000K cool white. The total system power is 48W, total fixture output: 3823lm, luminaire efficacy: 85lm/W, colour rendering CRI 93 typical. Beacon Wallwash offers on-board and DALI dimming. It has an ingress protection rating of IP20, thus it is suitable only for internal environments. The product is offered in black and white colours.





Finish Black and White

Fixture power 48W

Luminous flux From 3.823 to 4.089lm

Efficacy up to 85lm/W

Beam angle Asymmetric wallwash

Colour temp 3000K and 4000K





**CRI** 93

Dimmable <sub>Yes</sub>

Control technology On-board dimming, DALI

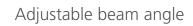
Average rated life 100.000 hrs (L80B20)







# SYLVANIA



High colour rendering CRI90

Simple and slick integral design

### Lenzo

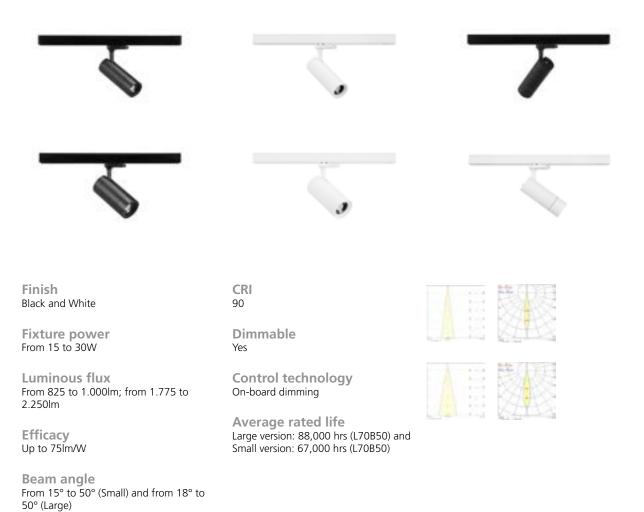


Lenzo is a dimmable track spotlight, designed for museums, galleries and retail. Its minimalistic look with no driver box, and full flexible beam angle setting, makes it an extremely versatile product.

The product's improved zoom mechanism allows the beam angle to be adjusted easily and makes it suitable for a variety of applications. The zoom can be set manually in the desired beam angle by twisting the front part of the fixture.

Lenzo has a very precise light beam due to its high quality lens, which can be set between 15 and 50 degrees for the small version and between 18 and 50 degrees for the large version. Lenzo has an on-board dimmer with a slider at the back of the product, which allows you to set the desired lumen output.

The product is available in 3000K and 4000K light colour temperatures and Black and White housing colours.



Colour temp 3000K and 4000K





High colour rendering CRI90

Delivered with 3 lenses (24°, 36° & 54°)

Simple and slick integral design

### **Pixo**



Pixo is an elegant track spotlight, suitable for retail, hospitality, museum and gallery applications. The product has no driver box and no visible screws which contributes to its clean design features. The fixture emits an extremely precise light beam angle due to the high quality lenses. Pixo has an easily replaceble lens system, included in the packaging: choose between the standard light beam angle - 36 degrees or additional 24 or 54 beam angle.

Pixo is available in both 3000K and 4000K colour temperatures, CRI90, Black and White housing colours. The product comes in three different sizes: Small, Medium and Large. Pixo is a non-dimmable product which comes with 5 year warranty.

Architectural tracklights & tracks



**Fixture power** From 15 to 52W

Luminous flux From 1.496 to 5.250lm

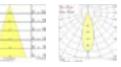
Efficacy Up to 108lm/W

Beam angle 24°, 36° and 54°

Colour temp 3000K and 4000K No

Average rated life 72.000 hrs (L70B50)









### SYLVANIA



Innovative anti-glare lens

Modular solution for various applications

Easy installation





Pixo Line is a linear track system, suitable for office, retail and industrial environments. Pixo Line offers easy installation with two separate modules which can be used for the installation on track (a linear LED module and an in-track driver). Pixo Line has a light module for various applications which can be combined with multipower or DALI in-track driver.

The product delivers up to 7326lm. Available in warm white (3000K) and neutral white (4000K) colour temperatures, CRI80, White or Black finishing colours. UGR19 and 90D Optic Diffuser versions as standard.

Opal diffuser and asymmetric versions can be provided on request. Electrified track and accessories can be ordered separately.

Compatible with Zhaga Book 14.







**Finish** Black and White

Fixture power Up to 54W

Luminous flux Up to 7.326lm

Efficacy Up to 133lm/W

Beam angle 70°, 90°, 120°, Asymmetric, Double Asymmetric

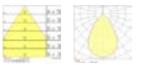
Colour temp 3000K and 4000K **CRI** 80

Dimmable yes

Control technology DALI

Average rated life 90.000 hrs (L70B50)







Independent circuit dimming

Easy installation

Environmentally friendly

### Lytespan 3

Lytespan 3 is a polarised 16A three circuit track system with a common neutral. Suitable for use with Concord, Lumiance and other European three circuit adaptors. Each of the three circuits can be independently dimmed. Unique Lytespan 3 "venturi" trunk profile is available in standard or recessed form. Couplers and feeds are pre-wired and polarised for ease of installation. The range includes: Starter and joiner track kits, accessories and recessed track units. Lytespan 3: 3 Circuit Track has an extruded aluminium body and is suitable for surface mounting and suspending. White RAL 9016, Class 1, maximum installed load: 3x3680W (11040W), fuse: 3x16A, supply cable: 5 x 1.5mm<sup>2</sup>, 400 VAC supply.

Lytespan 3 tracks will be phased out from the tracks portfolio in 2023 and replaced by the new Lytespan range.





**Finish** White, Silver, Black



### Concord

Easy installation

Multiple mounting options

Durable design

### **Global Trac**

Global Trac is a high load capacity track system which can be used in many different applications, including shops, department stores, public buildings, and restaurants.

Global Trac offers recessed, surface mounted and suspended track options and accessories. Its modular approach allows installers to extend and adapt the product easily. The track profiles can be cut at the desired length. Global Trac Pro 3 circuit track is suitable for non-dimmable applications and is compatible with Global adaptors. The tracks are available in black and white colour. All materials are halogen free and V0-self-extinguishing.





Finish Black and White







Environmentally friendly design

Easy installation

Variety of interchangable accessories



Concord Lytespan is a new high-quality tracks range which offers a wide range of solutions for architectural projects. The range consists of: H-Track, which allows track lights to be placed in a way in which they emit light upwards and downwards, Round Tracks, which offer an elegant solution to any architectural project and Trimless Recessed Tracks, which are ideal for projects where an infinity ceiling effect is preferred.

The Lytespan range comes with a variety of accessories and is available in two colours – black and white. The different accessories allow

the product to be surface mounted, recessed or suspended. Lytespan is offered in three different sizes – 1m, 2m and 3m which will provide more flexibility to customers to choose their length according to the project's needs.

Lytespan has an environmentally friendly and elegant design as the product is made of 100% aluminum which is recyclable at the end of its lifecycle.







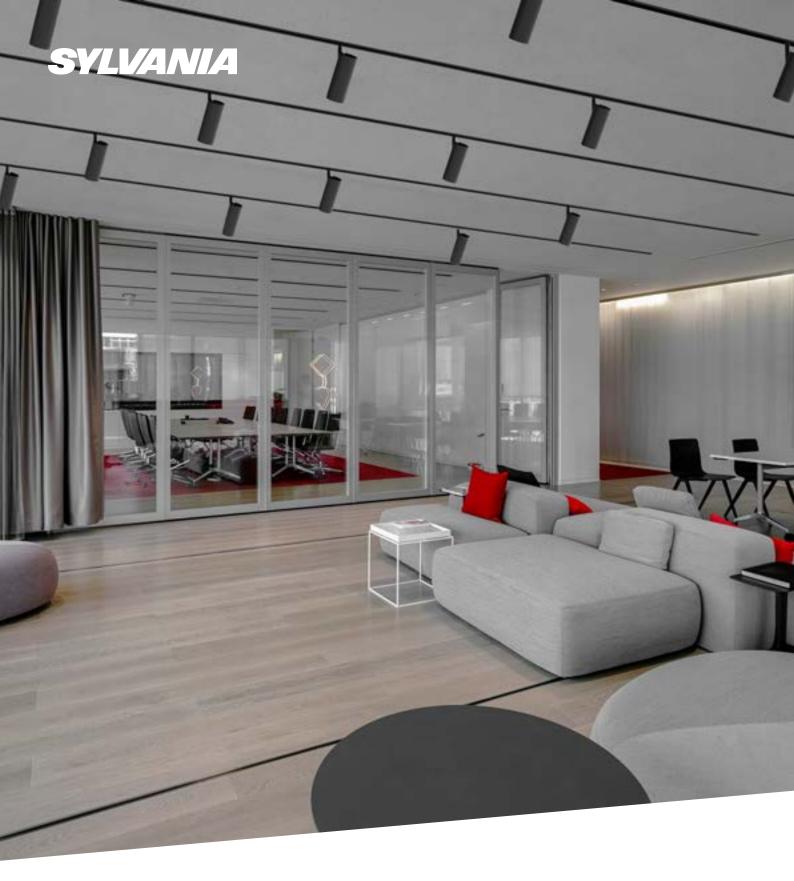








**Finish** Black and White



Environmentally friendly design

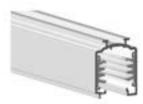
Easy installation

Variety of interchangable accessories



Sylvania's OneTrack is a new tracks range, which will replace the existing Global Trac product family. OneTrack range comes with a variety of accessories and will be available in two colours – black and white. Various installation accessories will allow the product to be surface mounted, recessed or suspended. OneTrack is available in three different sizes – 1m, 2m and 3m which will provide flexibility to customers to choose the length according to their project's needs.

OneTrack has an environmentally friendly design as the product is made of 100% aluminium which is recyclable at the end of its lifecycle.









Finish Black and White









## Trunking



High efficacy up to 157lm/W

Quick to install

Customisable and sustainable

### Isoline



Isoline is Sylvania's latest linear trunking system design that can be used in many applications from logistics and industry to warehouses and supermarkets. Its flexibility creates an effect that provides an excellent quality of light, coupled with high efficiency which offer a short return on investment. Easy to specify and simple to install (no tools required connection system), Isoline provides a complete range for a linear lighting system. The range is manufactured in France and offers a 5 wire or 8 wire version to provide the ultimate options within the system. DALI dimming with Emergency down to basic switching. Various optical distributions allow the designer to maximise the light output in any space, complimented with 3-hour emergency option. The range comes with a full suite of accessories.

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Fixture power From 56 to 117W

Luminous flux From 8.000 to 17.550lm

Efficacy Up to 157lm/W

**Beam angle** 60°, 90°, asymmetric and double asymmetric

Colour temp 4000K **CRI** 80

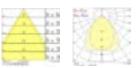
Dimmable Yes

Control technology DALI

Average rated life 60.000 hrs (L80B10)













High efficacy

Quick to install

Aesthetic design

### **Rail & Trunk System**



**Frunking** 

Rail & Trunk System is a complete versatile lighting trunking system providing an efficient and effective way of lighting larger spaces including supermarkets, logistical spaces and light assembly industrial areas. Simple design, energy-efficient, low maintenance option. It is the perfect solution where conventional lighting systems need replacement and require a low cost, simple installation tool free.

With various light engine options Rail & Trunk System is a flexible offer which meets the demand of many applications. Its simple assembly and tool free design creates a seamless light line with Emergency, DALI and Sensor options.

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**Finish** White

**Fixture power** From 50 to 70W

Luminous flux From 8.000 to 11.200lm

Efficacy Up to 160lm/W

**Beam angle** 36°, 90°, asymmetric and double asymmetric

Colour temp 3000K and 4000K

Discover the full range at sylvania-lighting.com

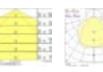
CRI 80

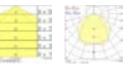
Dimmable Yes

**Control technology** DALI

Average rated life 75.000 hrs (L80B20)





















### Battens

SYLVANIA Group - Inspirations catalogue 147



High efficiency

Easy installation

Large variety

### WayLine



Battens

WayLine is a range of industrial LED Battens perfect for lighting large industrial areas such as corridors, warehouses, back of house areas or general purpose spaces. The range is available in either 3000K warm white or 4000K neutral white. The 4000K version delivers up to 8400lm (luminaire lumen output), and up to 144lm/W (total system efficacy). The range offers ease of installation through the 2-part housing push-in design. There are various options of non-dimmable, DALI dimmable, 3 hour maintained emergency, integrated microwave sensor (presence detection) and integrated microwave sensor with corridor function. Symmetric and asymmetric reflectors are available for each length.



**Finish** White

Fixture power From 9 to 64W

Luminous flux From 1.200 to 8.400lm

Efficacy Up to 144lm/W

Beam angle 115°

Colour temp 3000K and 4000K **CRI** 80

Dimmable Yes

Control technology DALI

Average rated life 90.000 hrs (L80B20)





Discover the full range at sylvania-lighting.com

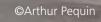






# Weatherproof





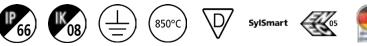
Customisable and sustainable

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High efficacy up to 137lm/W

Easy to install

### Resisto



Resisto, the Sylvania weatherproof range, excels in quality, provides improved installation and functionality, and helps achieve greater energy savings with its SylSmart Standalone and Connected enabled versions in parking lots, workshops, storage facilities and underpass areas. Its wide range means it can meet almost any need. Manufactured in Germany, it also can be customised to meet specific customer requests. Resisto is an ideal replacement for T5 and T8 luminaires, offering great energy savings. The luminaire benefits from a water and dust resistant polycarbonate body and diffuser offering IP66 protection (IP65 for SylSmart version) and an impact rating of IK08 (SylSmart sensor IK03). For further cost savings, available with microwave presence sensor – now with dedicated corridor function versions and no dark end.



Weatherproof



**Finish** Grey

Fixture power From 10 to 61W

Luminous flux From 1.400 to 9.700lm

Efficacy Up to 162lm/W

Beam angle 110°

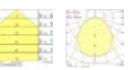
**Colour temp** 3000K, 4000K and 6500K

**CRI** 80

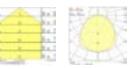
Dimmable Yes

**Control technology** DALI, SylSmart Standalone, SylSmart Connected, Microwave sensor

Average rated life 69.000 hrs (L80B20)









Discover the full range at sylvania-lighting.com



High chemical resistance

High efficacy up to 143lm/W

Customisable and sustainable

### **Resisto GRP**



Weatherproof

Resisto GRP is the most robust and chemically versatile version of our Resisto family. Resistant against a variety of acids, alkalis, halogens, mineral oils, Resisto GRP is an ideal replacement for T5 and T8 luminaires, offering great energy savings. This LED integrated waterproof fixture is available in 1200mm and 1500mm nominal length providing high efficiency throughout the range with up to 143lm/W (total system efficiency). The body of Resisto GRP is made from extremely resistant glassreinforced polyester and its polymethyl methacrylate diffuser provides an improved uniformity. The range is available in Neutral White (4000K) colour temperature.





Finish White

Fixture power From 24 to 51W

Luminous flux From 3.400 to 7.000lm

Efficacy Up to 143lm/W

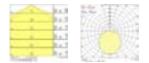
Beam angle 120°

Colour temp 4000K **CRI** 80

Dimmable No

Average rated life 72.000 hrs (L80B20)



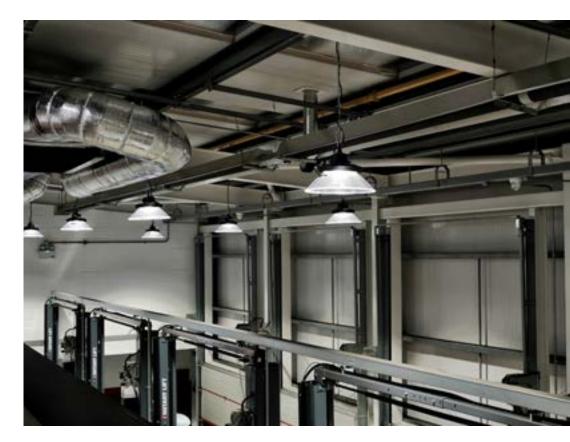




Discover the full range at sylvania-lighting.com







Highbays



High efficacy up to 177lm/W

Wide range of lumen outputs

Customisable and sustainable





KubiXx is a highly efficient and intelligent highbay, optimised for high bay racking platforms and production environments. The KubiXx range perfectly combines form and function. The luminaire benefits from a robust design and precision optics, with two types of distributions: wide and aisle. The innovative luminaire is compatible with SylSmart Connected and is optimised for high bay racking platforms and manufacturing environments. Manufactured in the UK, the KubiXx range is equipped with a DALI driver as standard. A PIR version is also available in the range. The product will be launched in Q4 2023 and will replace the existing SylBay range.



5.5	100	100		
		-		
3				
		100	623	

Finish Grey

Fixture power From 52 to 268W

Luminous flux From 9.000 to 47.000lm

Efficacy Up to 177lm/W

**Beam angle** 90°, 30°\*60°

Colour temp 4000K **CRI** 80

Dimmable Yes

Control technology DALI, SylSmart Connected, PIR

Average rated life TBC





Wide range of lumen outputs

Customisable and sustainable

Perfect for industry

### **SylBay**



SylBay is a tough and intelligent Highbay optimised for high bay racking platforms and manufacturing environments. The SylBay range perfectly balances form and functionality. The luminaire benefits from robust design and precision optics, and UGR<19. SylBay offers SylSmart Standalone and SylSmart Connected enabled versions, optimised for high bay racking platforms and manufacturing environments. The SylBay range is fitted with a DALI driver as a standard. SylBay L2/L3 DALI versions (mounting mode: suspended) have been ball proof certified in accordance with VDE 0710-13. The detection range of the PIR version is up to 16m at 15m mounting height.

SylBay will be phased out in 2023 and will be replaced by a new Highbay product called Kubixx.









Finish Grey

Fixture power From 57 to 327W

Luminous flux From 9.100 to 47.400lm

Efficacy Up to 160lm/W

**Beam angle** 90°, 30°\*60°

Colour temp 4000K **CRI** 80

Dimmable Yes

Control technology DALI, SylSmart Connected, PIR

Average rated life 120.000 hrs (L80B20)









High efficacy up to 163lm/W

Scalable with MW sensor

SylSmart Connected enabled

### Sylvania Granit



Sylvania Granit is a highly efficient and long lasting Highbay range ideal for the tough environmental conditions of industrial applications. The compact, circular luminaire combines powerful light output with easy handling. The 1 metre chain and 1.5 metre flying lead, provided as standard, together with the product's low weight, contribute for the easy installation. The range provides a clear, bright light to aid productivity.

Sylvania Granit has been developed to be energy efficient and long lasting; making it the go-to range for both installers and contractors. With the centre

module for microwave occupancy sensing further energy savings are just a twist away. The SylSmart Connected enabled versions ensure unparalleled smart lighting experience with versatility, flexibility, and security as standard. Versatile mounting options make Sylvania Granit a Highbay luminaire that can be used in a wide range of applications. In addition to the standard suspension chain version, rotating ceiling installation offers added flexibility. Highbays





**Finish** Black

Fixture power From 80 to 200W

Luminous flux From 13.000 to 32.000lm

Efficacy Up to 163lm/W

Beam angle 55°, 85°

Colour temp 4000K **CRI** 80

Dimmable Yes

Control technology DALI, 0-10V, SylSmart Connected, Microwave sensor

Average rated life 82.000 hrs (L80B20)









Perfect for sports halls

High efficacy up to 156lm/W

Customisable and sustainable





Highbays

Sportsbay is a range of high efficiency versatile and robust LED luminaires specifically developed with sports halls in mind. The range benefits of ball proof certification in accordance with VDE 0710-13. The luminaire has a robust design (IK10) and precision optics with an extensive beam angle. Available in 1200mm and 1500mm with 2 lumen packages (12,000lm and 18,000lm), SportsBay has a high efficacy level (>150lm/W). SportsBay can be installed suspended or with brackets as well as in a continiuous line.

The product will be released in Q4 2023.







Finish White

Fixture power From 81 to 122W

Luminous flux From 12.700 to 18.300lm

Efficacy Up to 156lm/W

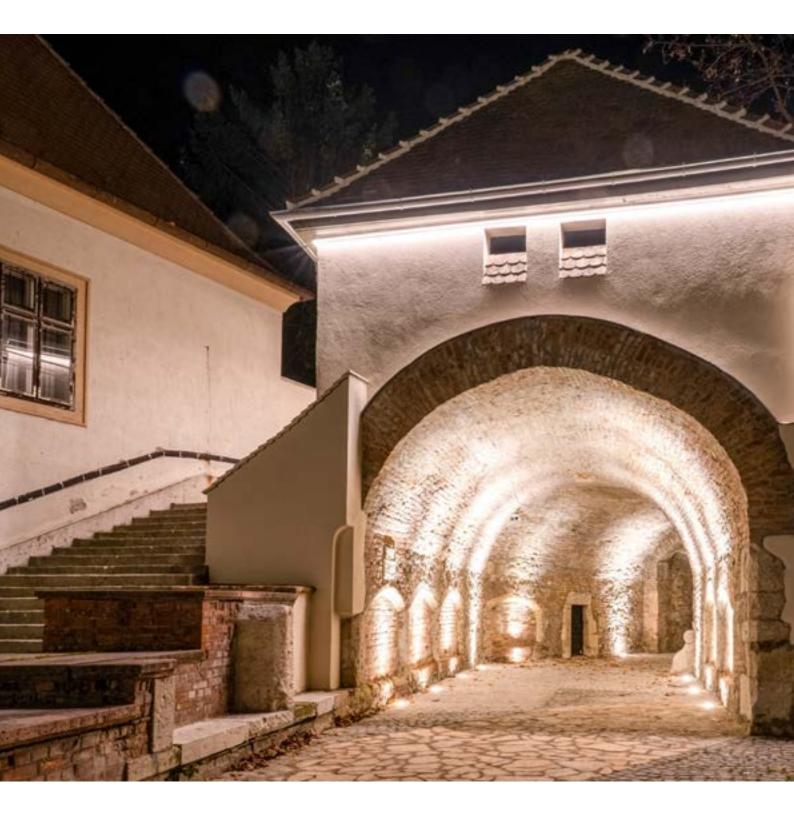
Beam angle 120°

Colour temp 4000K **CRI** 80

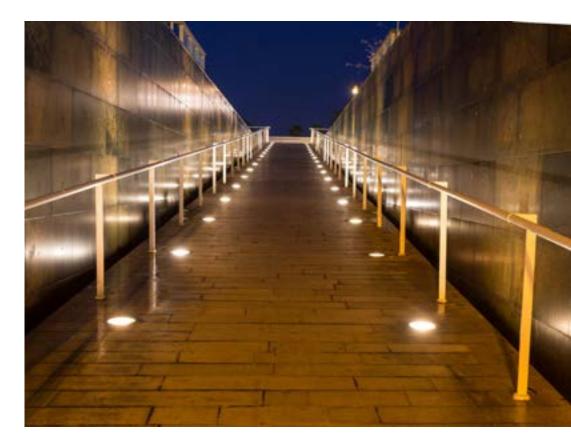
Dimmable Yes

Control technology DALI, SylSmart Connected

Average rated life 76.000 hrs (L80B20)







### Outdoor

# Concord

Slim & unique grey design

Perfect for sports halls & swimming pool areas

Quick and easy to install

### Raiden



Concord Raiden is an outdoor and indoor floodlight range with unique in-house design, which replaces traditional HID. The slim yet tough Raiden provides a perfect lighting solution for industrial and parking areas, building facades, billboards and small recreational facilities with its high protection class of IP66 and heavy-duty housing of IK08. The Raiden family consists of highly efficient luminaires - up to 138Im/W (total system efficacy) delivering high performance of up to 50.800Im at the same time (luminaire lumen output of Raiden 50kIm Symmetric Wide version). Raiden offers numerous lighting options with 4 sizes, 7 lumen packages (3, 8, 12, 21, 30, 40, 50 klm) and 4 beam angles (Symmetric narrow, Symmetric wide, Asymmetric wide and Street). The range offers products dedicated for swimming pool areas, called Raiden Aqua. The range has non-dimmable and DALI versions.

Dutdoo





Finish Grey

Fixture power From 26 to 375W

Luminous flux From 3.050 to 50.000lm

Efficacy Up to 138lm/W

Beam angle 25°, 60°, asymmetric 110°\*50° and street 155°\*75°

Colour temp 4000K



Discover the full range at sylvania-lighting.com





**CRI** 80

Dimmable Yes

Control technology DALI

Average rated life 100.000 hrs (L80B20)









SYLVANIA Group - Inspirations catalogue 169





High efficacy up to 140lm/W

Wide range of lumen outputs from 6200 - 41.800lm

Robust exterior floodlight made of die-cast aluminium body

### Kalani



Dutdoo

Kalani is highly efficient, durable die-cast Its universal mounting bracket allows wall or aluminium body floodlight, perfect for recreational surface mounting with the possibility of tilting sport, building facade, parking lot or area lighting upwards or downwards. applications, providing 1:1 replacement of conventional technologies. The family comes in 5 different sizes, offers a wide range of accessories and Symmetric and Asymmetric beam angle verions. Designed to withstand all types of weather, its IP66 protection rating, IK08 heavy duty housing and operating temperature range of -30 to +50°C mean that it requires minimal maintenance. Kalani comes with a 1.5m cable, which means that there is no need to open the gear box during installation.

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Finish Black

Fixture power From 50 to 300W

Luminous flux From 6.200 to 41.800lm

Efficacy Up to 140lm/W

Beam angle 60°, 65°\*120°

Colour temp 3000K and 4000K **CRI** 80

Dimmable No

Average rated life 100.000 hrs (L80B20)

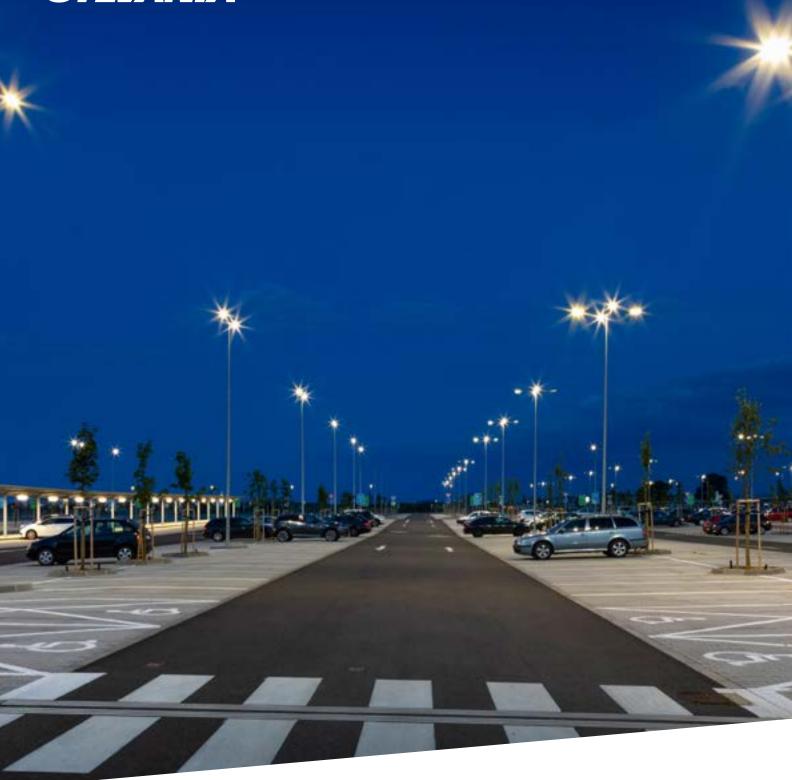






Discover the full range at sylvania-lighting.com





Sustainable with photocell option

Mounting height 6-8 metres

Long lifespan

### Zephyr



The new generation of Zephyr LED lantern has been designed to provide solution for minor road and area lighting. The range is made of high quality die-cast aluminium housing and robust build with IK08 protection and IP66 ratings, offering a perfect solution for amenity including car parks and perimeter lighting. Zephyr has a choice of different lumen packages (3500, 5500, 7700, 10.000lm), delivering up to 126lm/W. Adjustable post top adapter accessory is available (60-60mm). The range offers photocell versions for operation during dusk to dawn.



Finish Grey

Fixture power From 30 to 81W

Luminous flux From 3.250 to 10.000lm

Efficacy Up to 126lm/W

Colour temp 3000K and 4000K

**CRI** 80



Dimmable No

Average rated life 90.000 hrs (L70B50)







Switchable integrated photocell

Good ingress and impact protection

Multipower solution

### **Muro Surface**



Dutdoo

Muro Surface is a surface mounted wall luminaire that provides an ideal solution for guidance light around buildings, staircases and stairwells both indoor and outdoor.

Muro Surface features multipower functionality with 5 lumen options from 1700 to 3250lm where the luminous flux of the luminaire can be tailored to local needs during installation by only setting a quick selector switch. Muro Surface comes in neutral white (4000K) colour temperature and anthracite grey colour with die cast aluminium housing. It is available with 3 hours combined nonmaintained emergency function. The lifetime of the product is 72.000hrs.

Muro Surface offers through-wiring possibility thanks to the cable entries.



Finish Anthracite grey

Fixture power From 14 to 28W and from 16 to 30W

Luminous flux From 1.700 to 3.250lm

Efficacy Up to 121lm/W

Beam angle Asymmetrical beam

Colour temp 4000K 80

CRI

**Dimmable** No

Average rated life 72.000 hrs (L80B20)







Variety of sizes

Wide range of operating temperatures

Different beam angles

### Interrata

The Interrata family offers recessed walk over and drive over ground lights for lighting of building facades and sculptures. Available in 4 different sizes from 100mm to 260mm. The adjustable structure makes it possible to tilt +/- 30 degrees for the fine tuning of the light effect at different applications.

Interrata offers clear and frosted glass options for the XS size product. The pressure load of the luminaire is 2000kg (~20kN) for S/M/L and 500kg (~5kN) for XS size. Honeycomb and frosted glass accessory is available for the adjustable version. The lifetime of the product is 50.000hrs.





Finish Stainless steel bezel

Fixture power From 2,7 to 29W

Luminous flux From 115 to 2.075lm

Efficacy Up to 80lm/W

**Beam angle** 12°, 25°, 30°,100°

Colour temp 3000K and 4000K



Discover the full range at sylvania-lighting.com



**CRI** 80

Dimmable No

Average rated life 50.000 hrs (L70B50)

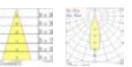














# Outdoor













# Emergency





Self-test luminaires

Multiple mounting options

Robust design

# LiFeSafe Standalone Emergency





Emergency

The LiFeSafe Standalone Emergency range offers products for all emergency applications which are LIAQA approved.

The range includes maintained and non-maintained luminaires providing 3-hour emergency lighting, utilizing LiFePO4 batteries. Offering self-test operation and complying with EN 60598-2-22.

The LiFeSafe Standalone Emergency range consists of the following product types: Multifix Exit Signs, Wall Mounted Exit Signs, Bulkheads and Downlights.

The LiFeSafe Multifix range offers Surface, Recessed, Suspended, Wall and Flag mounted products. The Suspended version comes with a 1m adjustable length steel wire and the product includes six ISO7010 legends: Left, Right, 2 x Up and 2 x Down. It is available in Maintained or Non-maintained mode of operation with 30.000hrs lifetime.

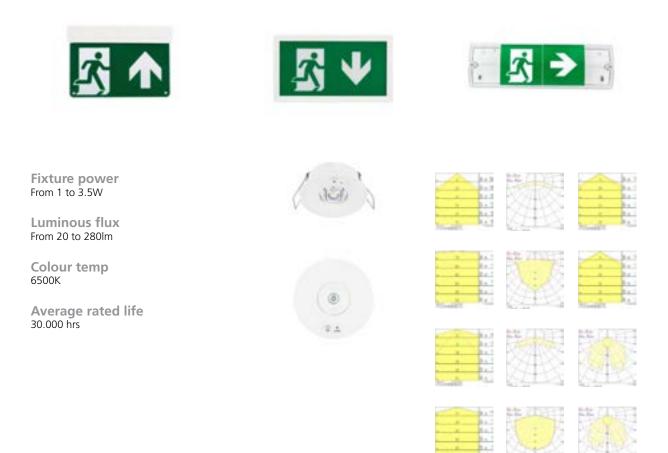
The LiFeSafe Exit Signs are ultra slim wall mounted Exit signs with integrated adjustable downlight.

The product includes four ISO7010 legends: Left, Right, Up, Down. It is available in Maintained or Non-maintained mode of operation with 30.000hrs lifetime.

LiFeSafe Bulkhead has a IP65 and IK07 rating. The product is suitable for both interior or exterior use. The product offers a self-test mode. LiFeSafe Bulkhead is available in Maintained or Non-maintained mode of operation with 30.000hrs lifetime.

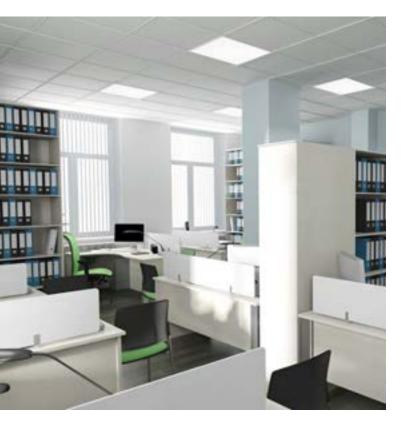
LiFeSafe IP65 Surface Round Downlight is a surface mounted IP65 round emergency downlight with interchangeable lenses for open area or corridor beam. Self-testing and non-maintained modes available.

LiFeSafe Downlight is a recessed downlight with interchangeable lens for open area or corridor beam. Self-testing and non-maintained modes available. 30.000hrs lifetime.











The START range consists of functional LED products designed to illuminate commercial, industrial and residential areas.

They guarantee efficiency, functionality and reliability.

Ideal for large-scale installations, the START range adapts to all environments, offering a variety of luminaires with both dimming and intelligent sensors for better lighting control.

Check out some of our START products by scanning the QR codes below.



START Panel





START Spot





START Flood flat





START Waterproof Slim





START Downlight IP44





START Highbay





START Surface IP66



SYLVANIA Group - Inspirations catalogue 183

# **Case study**

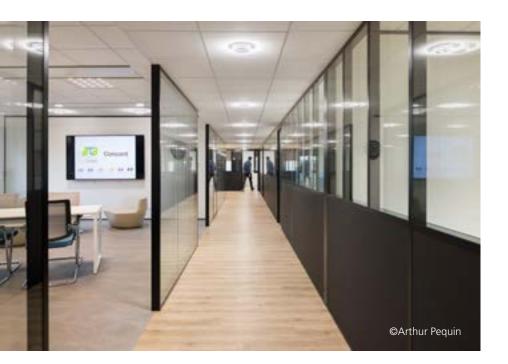
## The First Concord Equinox installation

Client: BTB-GES

Project: New office

**Products used:** 25 Concord Equinox luminaires, DALI, 3000K

Project year: 2023



BTB-GES, an electrical and engineering services company in France, opened a new office in the outskirts of Paris. The 410m2 space is also home to BTB-CA (a company part of the group), which specializes in workspace design and has been entrusted with the renovation of the BTB-GES office.

BTB-CA was looking for innovative and high-quality products for the office project. The Concord Equinox downlight has been chosen by the BTB-CA architects due to its unique design and technical features.

"Apart from its beautiful design, which differs a lot from what is available currently on the market, its adjustable optics allowed us to stand out and create something original by playing with the ambiences", said Arnaud Joly, Head of the BTB-GES design office.

The 25 Concord Equinox luminaires were distributed between the reception area, the circulation zones and the break room. Installation was very simple for the installers in charge of the project.

"The installation went very smoothly. It's easy to change the vertical position of the optic using 3 screws located on the adjustment bracket", added Arnaud Joly.





# **Case study**

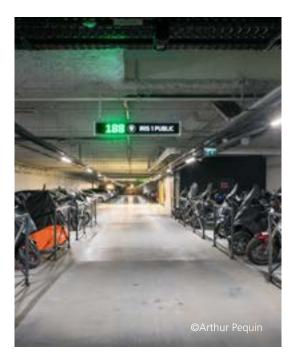
## Q-PARK: Saving from the first year

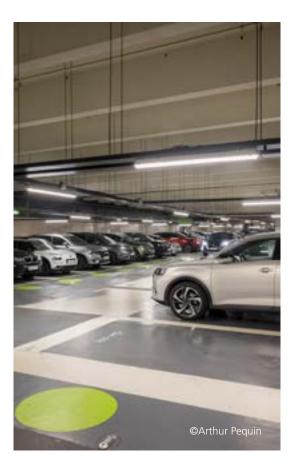
Client: Q-Park

Project: Carpark renovation

**Products used:** Resisto MW, START Surface IP66, START Flex, START Waterproof Tubular

Project year: 2022







Q-Park, a major car park operator in France and abroad, took over the management of the Paris La Défense car parks for 8 years, with an investment program of  $\in$ 36 million which includes the overall renovation of its facilities by replacing old lighting with more efficient LED options.

A major requirement was to achieve a minimum of 85 lux at ground level without changing the existing cable tray. Between 16,000 and 17,000 luminaires have been replaced during the renovation.

Almost 11,000 Resisto MW (microwave frequency) products have been installed. The MW corridor detection function maintains 10% flux when no movement is detected in traffic areas and increases to 100% when movement is detected, ensuring continuous lighting while minimizing energy costs.

"We're already seeing 30 to 40% savings on the re-lamped car parks", said a representative of Q-Park.

Other Sylvania products used for this project include: START Surface IP66 (lift areas), START Flex (motorbike parking spaces and pedestrian walkways), START Waterproof Tubular (car park entrances).

## ICON LIBRARY

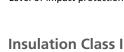


## **IP Rating**

Ingress protection against dust and liquid \* Rating behind ceiling void is IP20



IK Rating Level of impact protection



Protection against electric shock by protective earthing

## **Insulation Class II**

Protection against electric shock by double or reinforced insulation, but no protective earth

## **Insulation Class III**

Protection against electric shock by using power supply with safety extra-low voltage

## Tilt Angle

Angle in which the fixture can be tilted



## Rotation Angle

**Glow Wire Test** 

Angle in which the fixture can be rotated



850°C

## Glow Wire Test

The glow wire test is a physical thermal testing method for plastics

The glow wire test is a physical thermal testing method



## D Mark

for plastics

D-Mark is a European fire protection certification



## SylSmart

Intelligent wireless system, programmable with a SylSmart mobile app



## LumiNature

Natural light recreated



## ENEC

Demonstrates compliance with European standards



## Made in France

Product manufactured in France



## Made in Germany

Product manufactured in Germany

## Made in the UK

Product manufactured in the United Kingdom

## New

Please enquire regarding stock availability



Preliminary technical data Please enquire for availability



## IP RATING

#### Level of protection from solid and liquid materials

0	No special protection	0	No special protection
1	Protection from solid objects greater than 50mm in diameter, such as a hand.	1	Protection against condensation
2	Protection against objects not greater than 80mm in length and 12mm in diameter	2	Protection against water droplets deflected up to 15° from vertical
3	Protection from solid objects greater than 2.5mm or more	3	Protection against spray up to 60° from vertical
4	Protection against solid objects larger than 1mm	4	Protection against water spray from all directions
5	Protection against dust that may harm equipment	5	Protection against low pressure water jets from all directions
6	Totally dust-tight	6	Protection against high pres- sure water jets and waves
		7	Protection against tempo- rary immersion
IP 6 6 8			Protection against pro- longed effects of submersion under pressure. Submersion depth to be specified*

## IK RATING

Level of protection against mechanical impacts

00	Not protected
01	Protected against 0.14 joules impact
02	Protected against 0.2 joules impact
03	Protected against 0.35 joules impact
04	Protected against 0.5 joules impact
05	Protected against 0.7 joules impact
06	Protected against 1 joules impact
07	Protected against 2 joules impact
08	Protected against 5 joules impact
09	Protected against 10 joules impact
10	Protected against 20 joules impact



# Technical information

#### Ballast lumen factor BLF (%)

Refers to the ratio of light output from the lamp on emergency operation to the nominal light output.

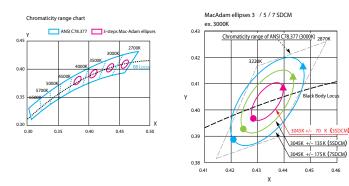
#### Beam Angle

Indicates how broadly the light is emitted from a reflector lamp. It can be thought of as an imaginary cone whose apex intersects the lamp face, and the breadth of the cone extends outwards to the point where luminous intensity has diminished to 50% of the centre beam value.

#### Binning

The term binning refers to the variations which occur within a single production batch of LED's such as chromaticity, lumen output and forward voltage. It is important that a specific bin has been identified and selected to ensure a uniform and constantly even lighting installation is achieved. If all the LED's were selected from one production batch and used in the same luminaire or installation, there would be a mix of colour temperatures and brightness levels. For the lighting manufacturer / designer binning is an essential part of LED specification.

MacAdam ellipses methodology was created in 1943 for mathematically constructing ellipses around target points, something which became very useful for the lamp industry. ANSI C78.377 is now the standard for chromaticity specified by the American National Standards Institute. ANSI recommends that lamp manufacturers stay within a "4-step" ellipse. This means that, given a certain target point on the CIE diagram, manufacturers are given a fairly wide range of perceptible differences.

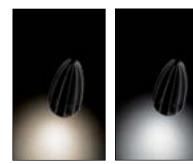


#### Candela (cd)

The unit of measurement for luminous intensity, which refers to the quantity of light emitted in a particular direction. The symbol is cd.

#### Colour Correlated Temperature (CCT)

An incandescent light bulb is very close to a perfect black-body radiator, so its colour temperature is basically the temperature of the filament. However many light sources, such as fluorescent tubes or high intensity discharge lamps, emit light by processes other than thermal radiation and therefore it is not possible to apply the black-body spectrum. For these light sources it is possible to assign what is known as a colour correlated temperature (CCT). The CCT is the colour temperature of a black-body (Planckian) radiator which most closely matches the colour of the light emitted from the lamp.



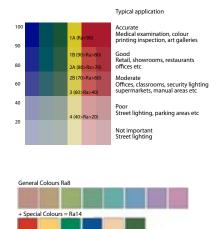
Warm White 3,000K

Neutral White 4,000K

#### Colour Rendering Index (CRI)

The colour rendering of a light source is an indicator of its ability to realistically reproduce the colour of an object. The chart illustrates our ability to accurately determine colour depending on the colour rendering properties of the light source. The higher the colour rendering index (on a scale of 0 to 100) of the source the better our ability to perceive differences in colour, which is a considerable aid to highlighting fashion products and effective display of coloured artworks.

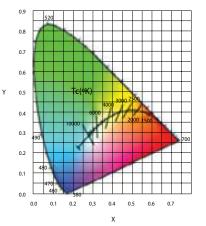
The CIE colour rendering index (CRI) is a method to determine how well a light source's illumination of eight standardised colour patches compares to the illumination provided by a reference source. At Ra (8) the perceived colour shift of eight reference colours is measured as a percentage and averaged to give one number. However it is currently understood that due to the spectral power distribution of LED's that instead of using the standard Ra8 it is important to include 7 additional colours which include red, yellow, blue & green and use Ra14 to ensure better results.



#### **Colour Temperature**

Colour temperature is a characteristic of visible light that plays a significant role in lighting applications. The colour temperature of a light source is the temperature of a perfect black-body radiator that radiates light of a similar appearance to that of the light source. The colour temperature is measured in units of absolute temperature; Kelvin (K).

Colour temperature works paradoxically to our cultural associations with colour, red as hot and blue as cold. On the black-body curve, blue occurs at higher temperatures than red. A good example is a candle which has a warm red orange appearance but in fact has a low Kelvin temperature, 1,850K. Therefore higher colour temperatures (5,000K more) are called cool colours (blueish white); lower colour temperatures (2,700K – 3,000K) are called warm colours (yellowish white through red).



The Planckian locus shows the chromaticities of black-body light sources of various colour temperatures and lines of constant correlated colour temperature shown within the CIE chromaticity diagram

# Technical information

#### Dimmability

The Sylvania lamps range includes Dimmable LEDs lamps. Most conventional dimmers have been designed for incandescent lamps and are therefore rated for higher minimum loads (W) than LED lamps consume. There may therefore be some restrictions in terms of functionality of dimmers with individual LEDs – but when more than one lamp is used to increase the total loading, dimming becomes easier. For full list of dimmer compatibility, please consult your local salesforce.

#### Downward Flux Fraction (DFF)

The factor of the total LOR, which is downward, taking the combined ULOR and DLOR as 100%. Using Cassini as an example, the DLOR is 37% and the ULOR is 15% so the combined is 52%. If this is taken as 100% LOR, 72% is downward (37% divided by 52%).

#### Drivers

Electronic devices that transform the high mains voltage into a constant current lower voltage for operating the LEDs. A miniature electronic driver is contained inside the base of each Sylvania LED lamp.

#### Glare

Discomfort glare is due to a high contrast between the source of light and the task. It is for that reason that luminance values are limited for certain tasks.

#### Heat Sink

A device used to conduct heat away from the LED sources and dissipate it to the surrounding air. The more efficiently an LED is cooled the greater its efficacy, light output and lifetime. Materials having excellent thermal properties and optimised cooling fin geometries are engineered into Havells Sylvania lamps and luminaires to deliver the pinnacle of performance.

#### Infrared (IR) Radiation

Comprises electromagnetic waves in the spectral range between visible light and microwaves, which produce a heating effect when absorbed by materials. All lamps and luminaires produce infrared radiation, but the quantity emitted by LEDs is far lower than other technologies and this makes them ideal for reducing air conditioning load, as well as for the illumination of heat-sensitive goods.

#### Illuminance

This definition determines the amount of light that covers a surface. If Ø is the luminous flux and S is the area of the given surface then the illuminance E is determined by  $E=\emptyset/S$ . The unit of illumination in SI system is Ix, and in foot-pound system it is foot-candle. One Ix is the illuminance of 1 m<sup>2</sup> surface area uniformly lighted by 1 lm of luminous flux.

#### Junction Temperature (Tj)

The temperature of the Junction of the LED die inside the LED lamp. Measuring the LED die temperature by direct mechanical means is difficult and may lead to erroneous results. It is recommended that the Tj is calculated with manufacturer's data through measurement of the temperature at the solder point (Tsp).

#### LED (Light Emitting Diode)

The semiconductor in the LEDs we provide emits blue light. The colour of the light ultimately depends on the phosphors used on the surface of the LED or lens.

#### Lens

An optical component having two refractive surfaces, at least one of which is either convex or concave. In LED lamps the function of a lens is to focus or disperse the light rays to achieve the desired beam angle or light distribution pattern.

#### Lifetime

LED lamps can have extremely long lives, however their light output diminshes as they age. They can carry on working until they are emitting less than 10% of their initial light output, but with so little light left they would be practically useless. Sylvania defines the lifetime of its LED lamps the same way as for other lamps: i.e. the burning hours until the light output has decreased to 70% of the initial value, or when 50% of a group of lamps will have failed – whichever is the soonest. The International Electrotechnical Commission (IEC) is currently preparing an international standard based on similar threshold values.

#### Visible light

Light Electromagnetic radiation with a wavelength between 380-780nm. Ultraviolet light has a wavelength of less than 380nm whilst infrared light's is greater than 720nm.

#### Lighting level

A measure of light falling on a particular point or surface. This unit is measured in lux.

#### Light output ratio (LOR)

The ratio of the luminaire light output to lamp light output. The efficiency of the luminaire.

#### Lumen (lm)

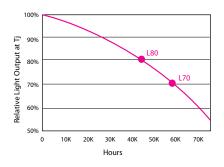
Unit of luminous flux used to describe a quantity of light emitted by a source.

#### Lumen Maintenance

Rated Lumen Maintenance Life (Lxx): The elapsed operating time over which the LED light source will exceed the percentage, xx, of its initial light output.

- L80 = Time to 80% lumen maintenance, in hours
- L70 = Time to 70% lumen maintenance, in hours

For LED lamps and luminaires, lumen maintenance is often shown as curves of relative lumen output over time for the LED under various operating conditions, such as drive current and junction temperature.



#### Luminance

The measure of brightness with which the eye perceives an illuminated surface from a certain direction. The luminous intensity per unit of visible surface of a light source (direct) or an illuminated surface (reflection). Luminance is indicated in candelas per square metre (cd/m2).

#### Luminous efficacy (Im/W)

Indicates how efficiently a light source converts electrical energy to light.

#### Luminous flux (Im)

The total light output of a light source measured in lumens.

#### Luminous intensity (cd)

The power of a source or illuminated surface to emit light in a particular direction, measured in candelas.

#### Lux (lux)

The unit of illuminance, equal to one lumen per square metre (lm/m<sup>2</sup>).

# Technical information

#### Illuminance cone

This shows beam angle and illuminance figures at different heights.

#### Polar curve

The graphic representation of the luminous intensity in different directions. If two curves are plotted, the distributions are in two vertical planes. They are absolute values.

#### Recycling

Feilo Sylvania lamps and luminaires are extremely durable and do not contain any mercury, lead or other toxic metals. However because their drivers contain electronic components they must be disposed of as waste electrical and electronic equipment at the end of their life.

#### Reflector

An optical component having a reflective surface (the surface could be specular or diffusing depending on the job it is required to do) surface, which captures light rays from the source and bounces them back at a particular angle. Although more commonly used in incandescent and halogen lamps, some Sylvania LED lamps use reflectors to control their light instead of a lens.

#### Room index K

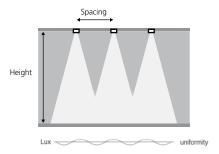
An index relating to the dimensions of a room influencing the amount of light emitted from the fitting onto the working surface.

 $K = \underbrace{a \times b}_{h \times (a+b)}$ 

where: a = room length b = room width h = height between the luminaire and working surface

#### Spacing to height ratio (SHR)

Used to determine the maximum distance between luminaires. The ratio of the distance between adjacent luminaires to the the distance between the luminaire plane and the horizontal working plane.



#### Switching Cycles

LED lamps cannot be switched on and off indefinitely, but are rated to tolerate an impressive 60,000 switching cycles or more.

#### TCO (Total Cost of Ownership)

TCO includes all the costs over the entire life of a lamp or for a particular operating time. It covers procurement costs, electricity consumption costs, relamping costs and may even incorporate a reduction in the necessary air conditioning load. LEDs are presently more expensive to purchase than lamps based on other technologies, but their minimal energy consumption results in rapid payback when replacing incandescent and halogen lamps.

#### Transformer

A device for reducing the high mains voltage down to a lower voltage. A distinction is made between conventional (magnetic) transformers and electronic transformers.

#### Uniformity ratio of illuminance

This indicates the degree of evenness of the light on the working surface and is shown as a ratio of the minimum to the mean lighting level on a surface. It becomes less even as the uniformity decreases. Typically you want 0.7 as a min for most schemes.

#### Ultra Violet (UV) radiation

Comprises electromagnetic waves in the spectral range between visible light and X-rays, which are invisible to the human eye but essential for all life (delivered via natural sunlight). Small amounts of UV are emitted by many light sources (e.g. Halogen and Discharge) and over time will cause fading of coloured objects being illuminated. Feilo Sylvania lamps and luminaires do not emit any UV radiation.

#### Utilisation factor

The ratio of the light flux which the reference surface receives to the total luminous flux. This is influenced by the shape of the room and selected luminaire and is expressed in the form of UF tables.

# **Emergency Lighting**

Emergency lighting is a vital and necessary safety requirement for most building types. The safety it provides for occupants is paramount and not negotiable.

#### **Product Safety**

- All Feilo Sylvania emergency luminaires carry the CE mark. They are designed to conform to BS EN 60598-2-22 and are manufactured in accordance with the quality system BS EN ISO 9001 under certificate number FM01687
- Any emergency lighting luminaire conversion other than by Feilo Sylvania to a CE marked luminaire invalidates this CE marking and its associated legal protection

#### **Emergency Lighting Equipment**

This comprises an inverter plus a set of batteries, which conform to BS EN 60598-2-22 and may be mounted:

- Integral within the luminaire (self contained integral)
- Remote from, but within 1 metre of, the luminaire (self contained remote)

#### Non-maintained Operation

In this mode of operation the emergency lighting lamps are not normally energized. An automatic monitoring and switching system is provided to switch on the emergency lighting if the normal supply is interrupted

#### **Maintained Operation**

- A single lamp is used for both general and emergency modes
- In multi-lamp luminaires only one lamp will be used for the provision of emergency illumination
- Emergency lighting is provided for at least 3 hours (1 hour duration available to special order)

#### Maintained Remote Emergency Gear

Downlights are almost all with remote emergency packs. Linear and ambient fittings are likely to have emergency gear within the fitting. Where the housing design precludes integral gear a remote control gear box is provided complete with connection cables.

#### Product Combined Operation (also known as Sustained)

- Separate lamps provide general and emergency illumination
- Emergency lighting is provided for at least 3 hours. (1 hour duration available to special order)

#### Self-testing

Automatic self-testing and monitoring of Feilo Sylvania luminaires is available to special order on a project basis.

#### **Central Battery**

Feilo Sylvania luminaires for use with a central battery system are available to special order on a project basis

#### System Design

This guide should be read in conjunction with current standards

#### Legislation Changes & Requirements

The British Standard BS5266 has been revised to conform with the European Standard EN1838 (issued in the UK under reference BS EN1838/BS5266 Part 7) which specifies luminous requirements for emergency systems installed in premises. It also now calls up the luminaire product standard BS EN60598-2-22: 1999

Emergency lighting is provided for use when the supply to the normal lighting fails and is therefore powered from a source independent of that supplying the normal lighting. For the purposes of this standard emergency lighting is regarded as a generic term of which there are a number of forms

#### Definitions

#### Emergency Exit

An exit which is intended to be used in an emergency.

#### Escape Route

A route designated for escape in the event of an emergency

#### **Emergency Escape Lighting**

That part of emergency lighting that provides illumination for the safety of people leaving a location or attempting to terminate a potentially dangerous process before doing so.

#### Escape Route Lighting

That part of emergency escape lighting provided to ensure that the means of escape can be effectively identified and safely used when the location is occupied

#### **Open Area Lighting**

In some countries this is known as anti-panic lighting. This relates to that part of emergency escape lighting provided to avoid panic and provide illumination, allowing people to reach a place where an escape route can be identified

#### High Risk Task Area Lighting

That part of emergency escape lighting that provides illumination for the safety of people involved in a potentially dangerous process or situation and to enable proper shut down procedures for the safety of the operator and other occupants of the premises

#### Areas Covered/Levels of Illumination

#### **Defined Escape Route**

Based on 2m wide on the horizontal plane, preferably 1 lux but not less than 0.2 lux on the centre line. The lighting provided should operate within 5 seconds of the failure of the normal supply

#### Open Area (Sometimes referred to as 'anti-panic' lighting)

Not less than 0.5 lux at floor level of the open space. The ratio of max to min illuminance should be greater than 40:1.

These extracts are provided for guidance purposes. In order to fully comply with the many elements of the various applicable standards, a full and thorough assessment must be made

# Luminaire Classifications

#### **Quality Registered**

All lighting luminaires produced by Feilo Sylvania are designed, manufactured and tested under a quality assurance system in accordance with BS EN ISO 9001 under certificate number FM 01687. Also, the company also complies with the environmental management system, BS EN ISO14001 certificate number EMS39002.

#### Compliance

The European Norm Electrical Certification (ENEC) has been adopted as a common mark of conformity with European Standards. A mark issued by any single national approbation body implies compliance with all seventeen international bodies. The ENEC mark now replaces the national test house symbol, and is appended by a number indicating from which test house the approbation originated.

## CE

The designated product(s) is (are) in conformity with the provisions of the following European Directives:

2014/20/EU & amendments	Directive 2014/35/EU of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of electrical equipment designed for use within certain voltage limits.
2014/30/EU & amendments	Directive 2014/35/EU of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to electromagnetic compatibility
2009/125/EC & amendments	Directive of the European Parliament and of the Council of 21 October 2009 on the establishing a framework for the setting of ecodesign requirements for energy-related products.
2011/65/EU & amendments	Directive of the European Parliament and of the Council of 6 June 2011 on the restrictions of the use of certain hazardous substances in electrical and electronic equipment.
COMMISSION REGULATION (EU) 2019/2020 & amendments	Laying down ecodesign requirements for light sources and separate control gears (Single Lighting Regulation)

#### If the product incorporates radio equipment:

2014/53/EU

Directive of the European Parliament and of the Council of 16 April 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of radio equipment and repealing Directive 1999/5/EC Text with EEA relevance.

#### UK CA

#### The designated product(s) is (are) in conformity with the provisions of the following UK Legislation:

The designated product(s) is (are) in conformity with the provisions of the following UK Legislation:

The Electrical Equipment (Safety) Regulations 2016

The Electromagnetic Compatibility Regulations 2016

The Ecodesign for Energy-Related Products Regulations 2011

2012 No.3032 The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012

2021 No.1095 The Ecodesign for Energy-Related Products and Energy Information (Lighting Products) Regulations 2021

#### If the product incorporates radio equipment:

The Radio Equipment Regulations 2017

#### **Electrical protection**

EN 60598



Class I – Luminaire which relies on an earthed metal case to offer protection from live parts in case of failure.



Class II – Luminaire which relies on two layers of insulation to offer protection from live parts in case of failure.



Class III – Luminaire whose protection against electrical shock relies on supply at safely extra-low (SELV) and in which voltages higher than those of SELV are not generated

#### Voltage

Fittings and transformers are supplied primarily for operation on 230/240V 50 Hz. For alternative electrical specifications contact Technical Support.

#### Radio suppression

EN 55015, EN 61000 & EN 61547 Fittings comply with radio interference suppression and electromagnetic compatibility (EMC) regulations

#### Degree of protection

#### EN 60529

IP rating system is an International classification showing degrees of protection provided by luminaires against ingress by solid objects or moisture.

# Specifications

The following notes prepared to meet the company's obligations imposed by the Health & Safety at Work Act 1974 (as amended) are of a general nature only. Specific information regarding installation use and disposal appropriate to individual models is provided in the instruction leaflet packed with the product, or can be found on the relevant pages of this catalogue.

The Health & Safety at Work Act 1974 imposes upon the users of the company's products an obligation to ensure that all personnel involved in the installation, handling, use or disposal of these products are acquainted with the information provided by the company and are made fully aware of any precautions that need to be taken.

The installation of these products should only be carried out by a qualified installer in accordance with the instructions supplied with the product.

#### Specifications

Leadership in design is based on constant development and improvement. Whilst great care is taken to give up-to-date information in this publication, the right is reserved to change any specifications herein detailed, without prior notice. All descriptions, illustrations etc, in this publication shall not form part of any contract.

#### Track and Spotlights

All track and spotlights are designed for normal, dry interiors, and are not recommended for use in damp or corrosive situations. Adequate ventilation will be necessary when tungsten spotlights are used in confined spaces where elevated temperatures will occur.

#### Lamps

Wattage and where applicable type of lamp are shown for every fitting. Incorrect lamps may affect efficiency, change the planned distribution, create glare and in some cases, seriously overheat the luminaire. Unless otherwise stated all luminaires are supplied without lamps.

#### Wiring

The majority of luminaires are fully prewired and with heat resistant cable wherever required.

#### Weights

Where given, the weights of luminaires do not include lamps.

#### **Control Gear**

Transformers and Control Gear are available for 240V 50HZ and 230V 50HZ with other options subject to special quotation.

 $\rm 240V$  50HZ will be supplied unless any other voltage is requested at the time of ordering.

#### **Ceiling Cut-outs**

Throughout this publication cut-out sizes refer to the aperture for the ceiling ring with recessed fittings when mounted in soft fibrous tiles. For timber or metal tiles and cast-in construction, check dimensions on site.

#### Product colours and finishes

The Feilo Sylvania range of standard colours has been rationalised. This has given Feilo Sylvania the opportunity to harmonise its standard colours in line with developments that have taken place in architectural materials and building accessories.

For reference the standard paint finishes are now: Concord luminaire RAL 9005 Jet Black RAL 9006 White Aluminium RAL 9010 Pure White RAL 9016 Traffic White

#### Sylvania Outdoor luminaires RAL 9007 Grey aluminium

LED Lamps

RAL 9023 Pearl dark grey RAL 9016 Traffic White

#### Please note:

- Due to photography and the printing process the colours reproduced in this catalogue may not be truly representative.
- Though paint colours may be the same, gloss, matt, satin and textured finishes will appear different.

#### Protection of Electronic Components

All products incorporating electronic components are protected against damage which may result from transients on the mains supply.

The level of protection incorporated is generally in excess of the minimum level specified in the current international standards.

It is the customer's responsibility to ensure that electronic equipment is not subjected to transients above these international immunity standards. In extreme cases additional suppression devices may be needed on the mains supply. The company does not take responsibility for damage to products caused by excessive mains transients.

#### Terms and Conditions of Sale

For our latest T&Cs - please refer to our website: https://www.sylvania-lighting.com/en-gb/legal/ts-and-cs-of-sale/

#### Warranty Policy

For our latest warranty policy - please refer to our website: https://www.sylvania-lighting.com/en-gb/warranty/warranties/



Although every effort has been made to ensure accuracy in the compilation of the technical detail within this publication, specifications and performance data are constantly changing. Current details should therefore be checked with Feilo Sylvania International Group Kft.

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