LENA LIGHTING

INDUSTRY IP23

Introducing our product

A robust luminaire for T5 and T8 tubes made of galvanized steel rated to IP23.

Multi-position mounting system of lamp holders in the universal end-cap made of plastic allows you to choose from super narrow, narrow or wide beam distribution.

The Industry luminaire is especially recommended for warehouses, manufacturing plants, shops and sports facilities.

Ergonomics & modernity

Constructor and Designer
Michał Jaraczewski

"The biggest challenge in the design of the luminaire was achieving high efficiency for a variety of mounting heights and applications that require different distribution curves. We created the universal fixture for high-storage warehouses and low rooms like open-production halls or large stores using T5 and T8 source."

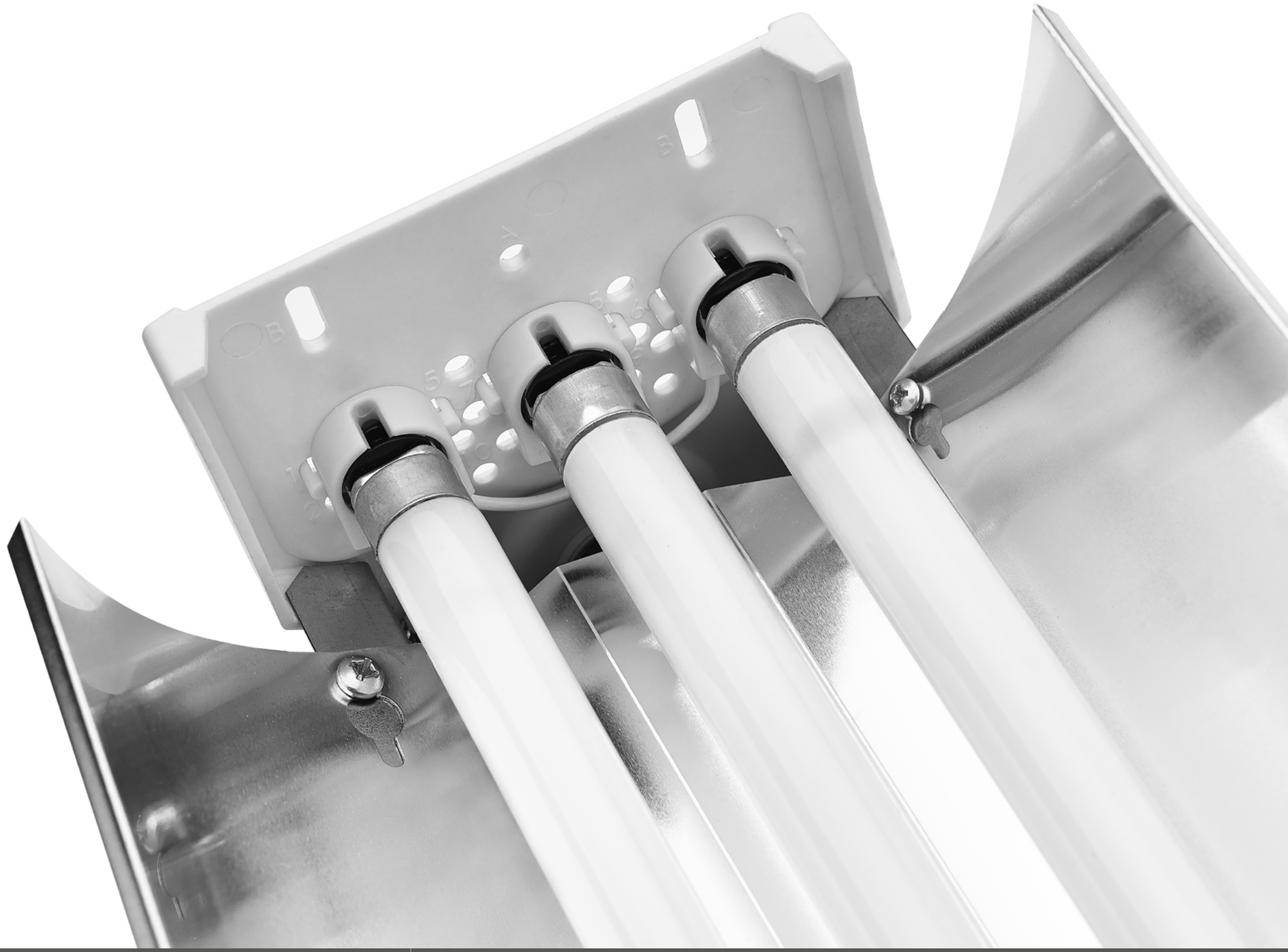
η = 95%

The high performance MIRO 5 aluminum reflector has been specially designed to achieve the highest possible efficiency of up to 95%.

The high performing luminaire ensures that there are less fixtures required with increased spacing between them to enjoy the required lighting environment. A safe return on investment and reduced energy costs.

Powerful

Fixture is offered with one, two or even three tubes - excellent solution for industrial lighting - if you need more light. Three tubes T5 80W Industry luminaires can in the majority of applications replace a 250 Watt high bay luminaire.



IP23

The IP23 rating ensures protection against water falling as a spray at any angle up to 60° from the vertical.

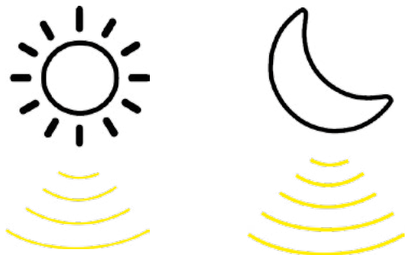
For example, water dripping from the ceiling of a warehouse as a result of condensation (a common occurrence especially in the winter season), shall have no harmful effect on the luminaire.

Dimming system

The easy way to be more efficient and to save energy is to use dimmable ballasts. We can provide Industry IP23 luminaire with dimmable ballasts in digital standards like DALI, DSI or simpler methods of control, such as switchDIM (control via conventional switches) and corridor FUNCTION (control via conventional motion sensors). Dimmable luminaires combined with intelligent sensors provide the optimal amount of light, appropriate to the presence or absence of people and the amount of available daylight.

Energy savings of up to 80% can be made.

Daylight sensor



Daylight sensors provide convenient light control and are engineered for optimum energy savings and easy installation, either inside or outside the luminaire, depending on application.

Sensors save energy by directing lighting controls to reduce lighting level to its target level based on available daylight.

Intelligent sensor system

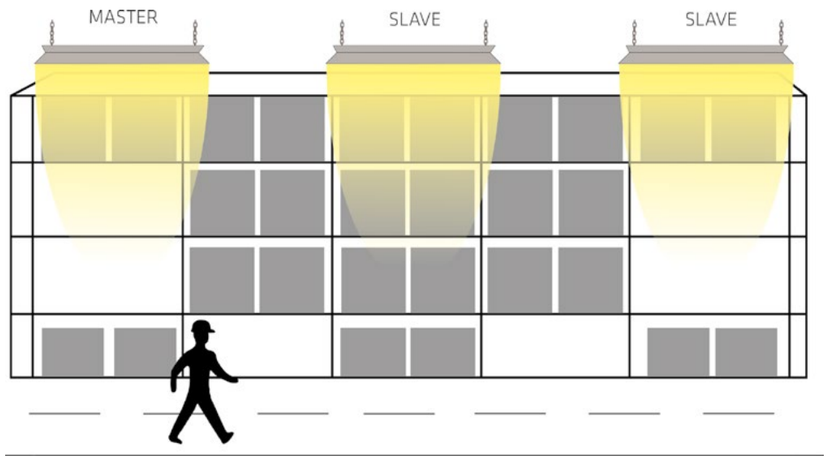
Radio Motion Sensors (RCR):

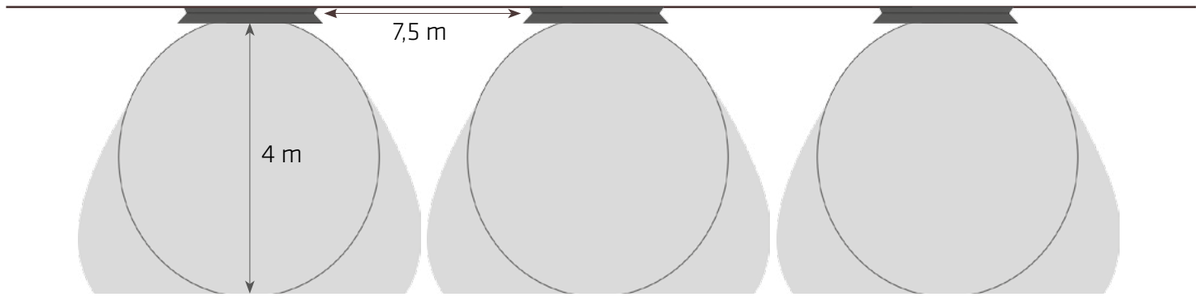
Microwave detectors which use high frequency electromagnetic waves are ideal for controlling lighting over large areas. In addition, they have the “day/night” identification function, which allows limiting the operation of the fitting to the specific conditions of ambient light intensity.

Passive Infrared Sensor (PIR):

The passive infrared sensor (PIR) detects changes in ambient temperatures. Thanks to adjustment, the sensitivity of the detection element and the time of deactivation, it is possible to optimally select working parameters of the light fitting, to provide the greatest comfort and energy saving.

We offer integrated sensors in the luminaire or autonomic solutions depending on application. Please ask for details of the Master-Slave solution to save more.





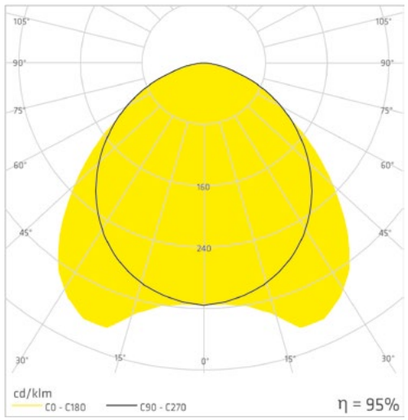
Wide beam
300 lx

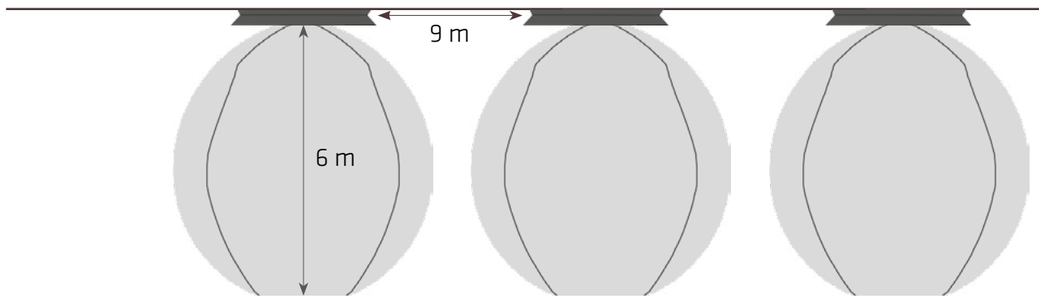
The Wide beam distribution was designed on the requirements made by supermarkets, open warehouses and industrial facilities.

To achieve the level of light intensity of 300lx on the floor and provide adequate uniformity, you need to mount Industry luminaire at an average of 7.5 meters assuming a mounting height of 4 meters.

The special aluminum louver (available as an accessory)- for a wide light distribution in buildings with a low ceiling height provides light with good glare control and with excellent efficiency and uniformity.

The recommended installation height is between 3 and 6 meters.



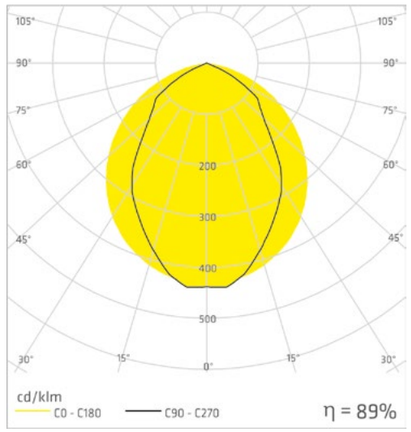


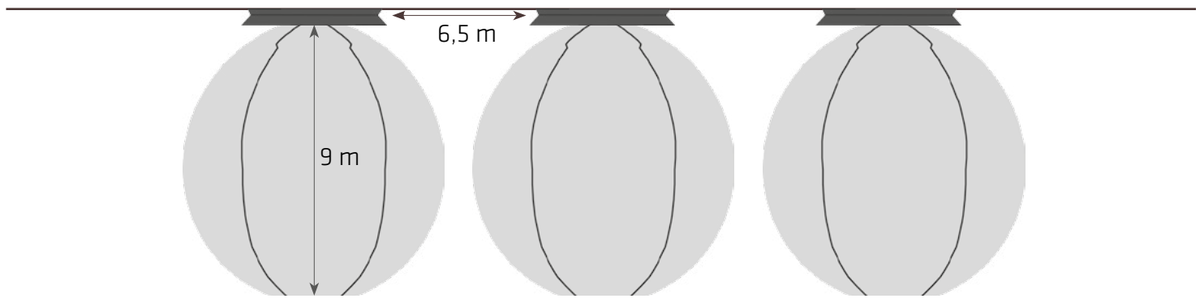
Middle narrow beam
150 lx

A very good alternative for middle height applications such as warehouses, where the installation height is between 4 and 8 meters.

The profile of the middle narrow reflector is significantly different than narrow beam in order to optimally find the solution for your requirements.

Please don't hesitate to ask our lighting planners for advice.





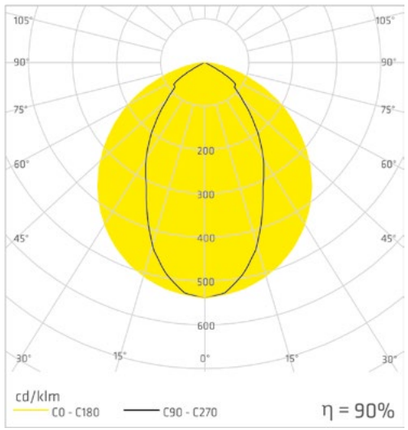
Narrow beam
150 lx

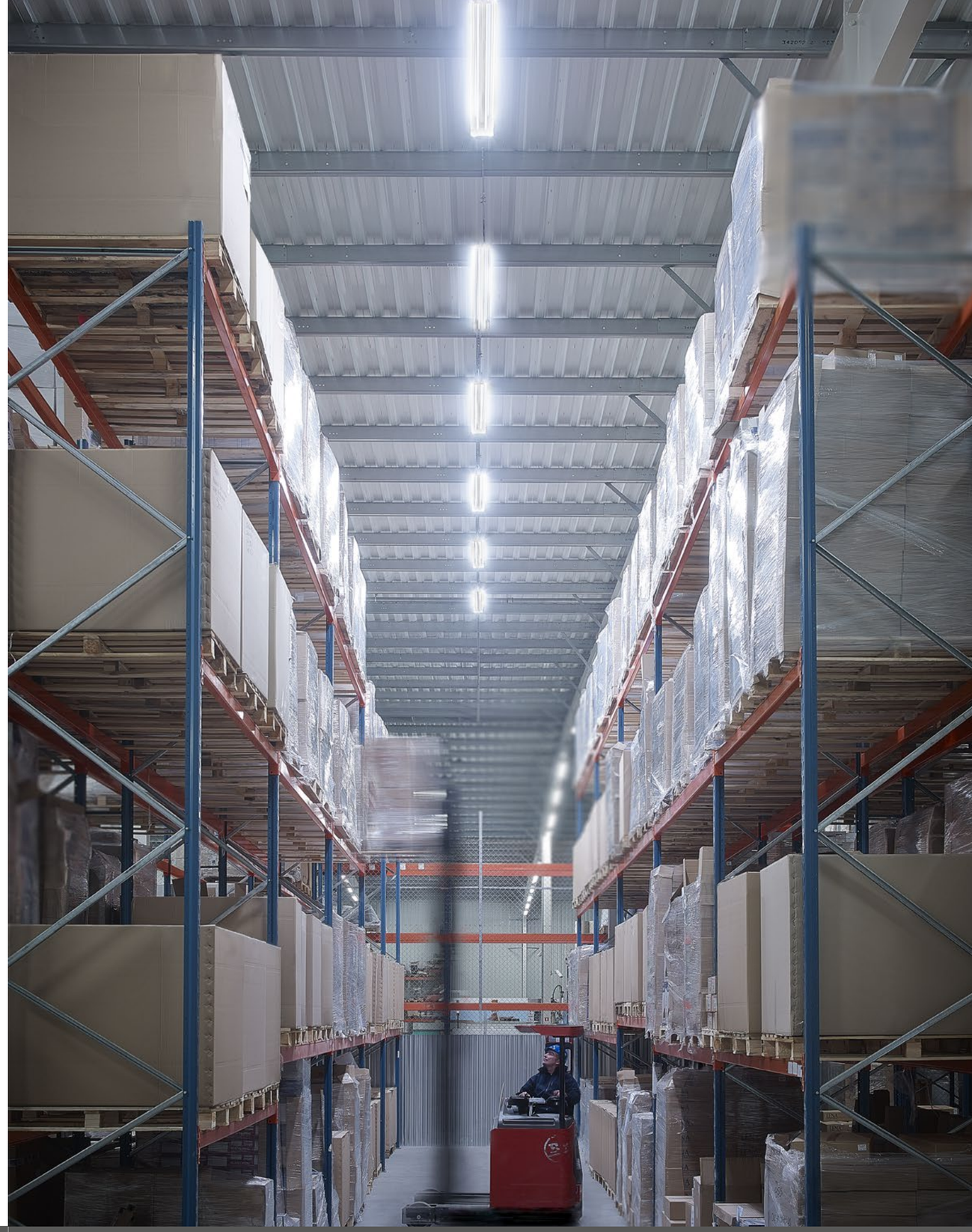
The luminaire is specially designed to illuminate long and high rows of racking in warehouses with the required uniformity provided as efficiently as possible.

The narrow elliptical shape of the reflector has been developed by our R&D department to properly illuminate floor and racking to ensure the optimal and comfortable workplace lighting environment. The High efficiency of our luminaire (up to 95%) is achieved by the ultimate performance aluminum reflector made of Miro 5 to guarantee a short payback on your investment.

In order to secure a luminous intensity level of 150 lx on the floor with correct uniformity, you can mount the Industry luminaire at a spacing of 6.5 m with an installation height of 9 m.

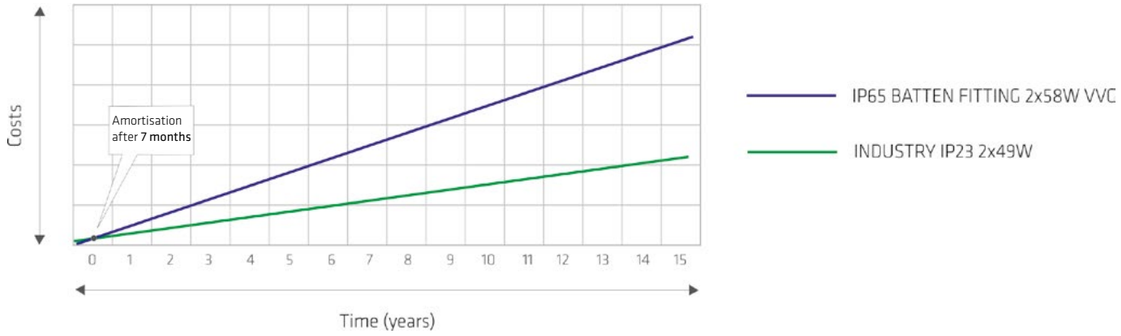
The recommended installation height is 7 meters or more.





Modernization

Amortisation of costs



The basic assumption of case study:

+ Hours of operation - 2 shifts - lighting time 16 hours per day
+ The proposal was assessed over 15 years
+ The Unit price of electricity for 1 kWh at 0.087 EUR which was constant for the whole calculation period
+ The cost of replacing the light sources on the basis of average market prices
+ Replacement lamps - in accordance with the manufacturers stated lifetime
+ The luminaire power consumption was calculated including the actual losses on the ballast (Total Circuit Watts)

Payback time – less than 1 year!

Case study

Our customer approached us with a request to upgrade the lighting in his warehouse. The dimensions of the building were 70 x 45 meters and height of 11 meters, with total area of 3,124.50 m².

The original lighting comprised of 216 2 x 58 Watt IP65 batten luminaires with VVG ballasts mounted in 7 rows of racking at a height of 9 meters. The IP 65 batten fixtures are a common type of product for this application despite the fact that such a high liquid ingress protection is in most cases not required.

The Industry luminaire IP23 is the best solution for warehouses and gives sufficient protection. After receiving the warehouse drawings, our lighting planners created a simulation of the lighting effect and selected the optimal solution. They suggested the use of only 109 Industry 2x49W luminaires with a narrow light distribution and achieved the same light parameters 150lx on the floor.

The payback was achieved in only seven months - after which time you benefit from the modernized lighting and reduced energy and maintenance costs.

Less fittings - same effect

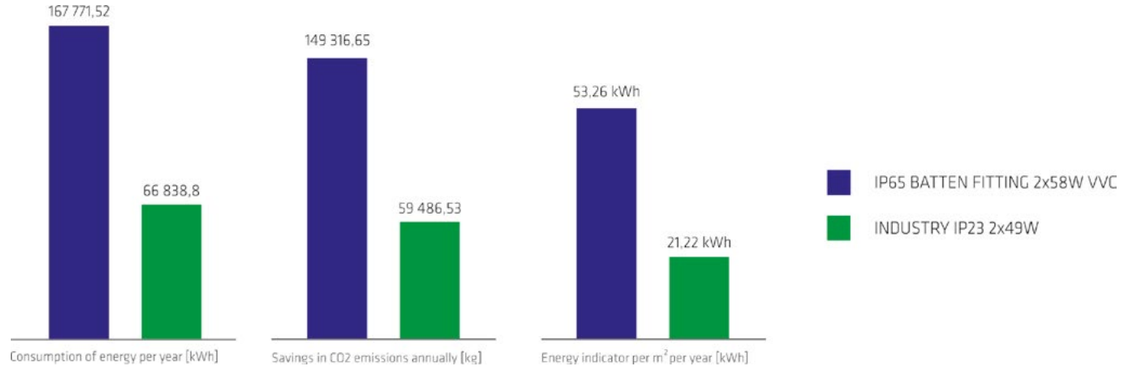
216

IP 65 BATTEN FITTING 2x58 VVG

109

INDUSTRY IP23 2x49W

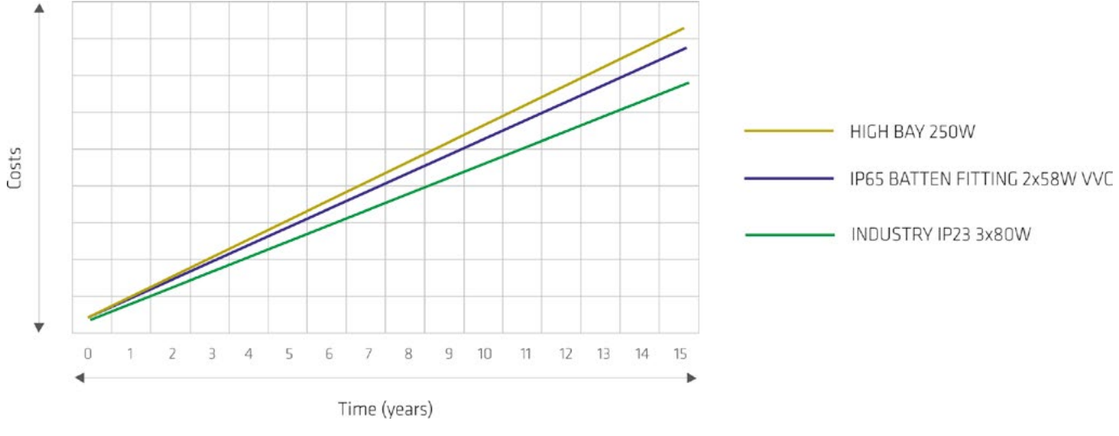
Comparison of energy costs



Use fewer luminaires, with increased spacing's to provide the required lighting environment.

New investment

Amortisation of costs



The basic assumption of case study:

+ Hours of operation - 2 shifts - lighting time 16 hours per day
+ The proposal was assessed over 15 years
+ The Unit price of electricity for 1 kWh at 0.087 EUR which was constant for the whole calculation period
+ The cost of replacing the light sources on the basis of average market prices
+ Replacement lamps - in accordance with the manufacturers stated lifetime
+ The luminaire power consumption was calculated including the actual losses on the ballast (Total Circuit Watts)

Case study

For new installations such as an open production hall, it is useful to consider various alternatives and choose the best solution at the first designing stage. As a example, a production hall measuring 100m x 60 m with a mounting height 8 meters.

In such applications high bay or IP65 batten luminaires are typically specified and these fittings were compared the Industry luminaire in this case study.

The required illumination for this application is 300lx on the floor while keeping the relevant light uniformity. To achieve this, 150 High Bay 250W luminaires were required, alternatively 240 pieces 2x80W IP65 batten fittings or 143 Industry 3x80W luminaires with a wide light beam.

The highly efficient Industry luminaires with the outstanding lighting quality with T5 tubes gave the Industry luminaire a significant advantage over the alternative lighting solutions.

Less fittings - same effect

150

HIGH BAY 250W

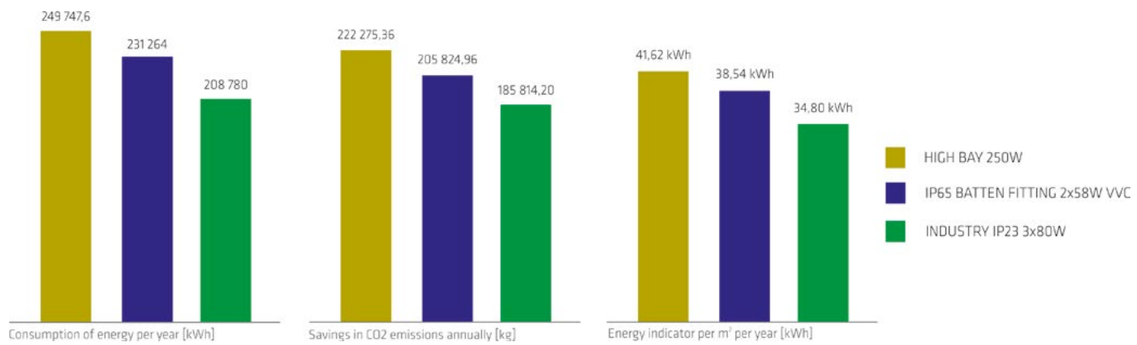
240

IP65 BATTEN FITTING 2x80W

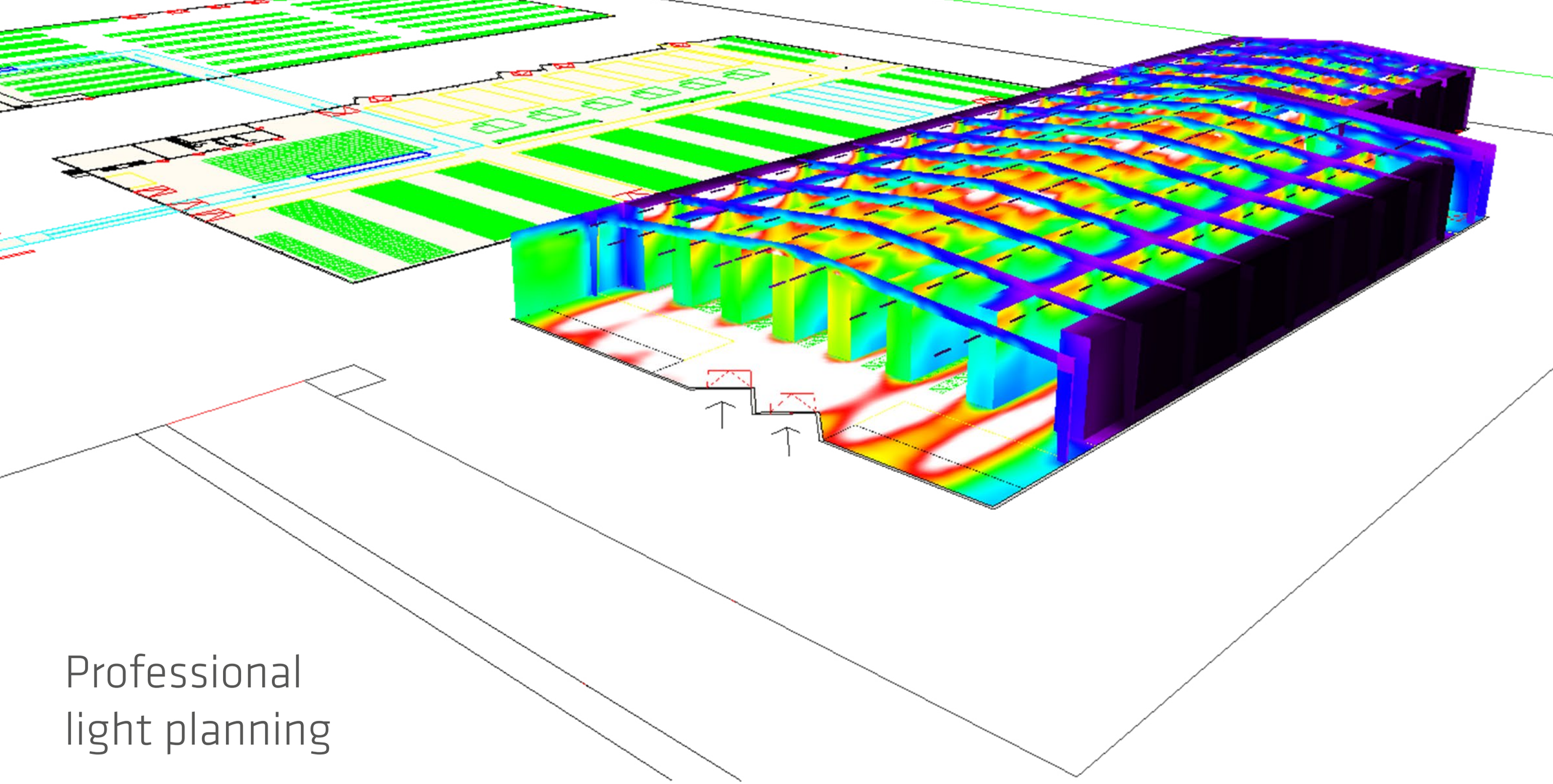
143

INDUSTRY IP23 3x80W

Comparison of energy costs



Choose the Industry IP23 to maximize the efficiency from the very beginning of your new investment.



Professional light planning

We support lighting planners with LDT files and all luminaire data is measured in our internal laboratory.

We offer all of the lighting calculations for the whole project with DIALux software based on construction drawings using CAD data from other architectural programs.

We support our customers with planning the whole building, including outdoors spaces, making the photorealistic visualisations or creating the artificial light scenarios.

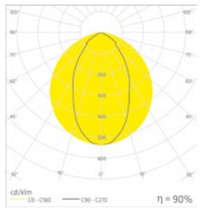
We provide you with the energy evaluation for your lighting solution and support you in complying with the respective national and international regulations.

We can provide the final results of the light planning in simple PDF document in many different languages.

Article numbers for INDUSTRY IP23

LIGHT DISTRIBUTION FOR ROOMS WITH HIGH CEILINGS >7M FOR T5 LAMPS

2 TUBES T5



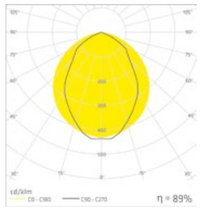
INDEX	DESCRIPTION	WEIGHT	LENGHT
LS1 - ONE 5 POLE PUSH-IN TERMINAL BLOCK			
543029	INDUSTRY 2x28W T5 EVG IP23 LS1 high position	2,0kg	1230mm
543036	INDUSTRY 2x54W T5 EVG IP23 LS1 high position	2,0kg	1230mm
543043	INDUSTRY 2x35W T5 EVG IP23 LS1 high position	2,2kg	1530mm
543050	INDUSTRY 2x49W T5 EVG IP23 LS1 high position	2,2kg	1530mm
543067	INDUSTRY 2x80W T5 EVG IP23 LS1 high position	2,3kg	1530mm
LS2 - TWO 5 POLE PUSH-IN TERMINAL BLOCK CONNECTED WITH 5 x 2,5MM² CABLES			
543388	INDUSTRY 2x28W T5 EVG IP23 LS2 high position	2,2kg	1230mm
543395	INDUSTRY 2x54W T5 EVG IP23 LS2 high position	2,2kg	1230mm
543517	INDUSTRY 2x35W T5 EVG IP23 LS2 high position	2,4kg	1530mm
543524	INDUSTRY 2x49W T5 EVG IP23 LS2 high position	2,4kg	1530mm
543531	INDUSTRY 2x80W T5 EVG IP23 LS2 high position	2,5kg	1530mm

LIGHT DISTRIBUTION FOR MEDIUM-HIGH ROOMS 4-8M FOR T5 LAMPS

1 TUBE T5

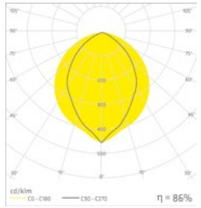
INDEX	DESCRIPTION	WEIGHT	LENGHT
LS1 - ONE 5 POLE PUSH-IN TERMINAL BLOCK			
543081	INDUSTRY 1x28W T5 EVG IP23 LS1 medium position	1,95kg	1230mm
543098	INDUSTRY 1x54W T5 EVG IP23 LS1 medium position	1,95kg	1230mm
543203	INDUSTRY 1x35W T5 EVG IP23 LS1 medium position	2,15kg	1530mm
543210	INDUSTRY 1x49W T5 EVG IP23 LS1 medium position	2,15kg	1530mm
543227	INDUSTRY 1x80W T5 EVG IP23 LS1 medium position	2,25kg	1530mm
LS2 - TWO 5 POLE PUSH-IN TERMINAL BLOCK CONNECTED WITH 5 x 2,5MM² CABLES			
543159	INDUSTRY 1x28W T5 EVG IP23 LS2 medium position	2,15kg	1230mm
543166	INDUSTRY 1x54W T5 EVG IP23 LS2 medium position	2,15kg	1230mm
543272	INDUSTRY 1x35W T5 EVG IP23 LS2 medium position	2,35kg	1530mm
543289	INDUSTRY 1x49W T5 EVG IP23 LS2 medium position	2,35kg	1530mm
543296	INDUSTRY 1x80W T5 EVG IP23 LS2 medium position	2,45kg	1530mm

2 TUBES T5



INDEX	DESCRIPTION	WEIGHT	LENGHT
LS1 - ONE 5 POLE PUSH-IN TERMINAL BLOCK			
543333	INDUSTRY 2x28W T5 EVG IP23 LS1 medium position	2,0kg	1230mm
543340	INDUSTRY 2x54W T5 EVG IP23 LS1 medium position	2.0kg	1230mm
543449	INDUSTRY 2x35W T5 EVG IP23 LS1 medium position	2,2kg	1530mm
543456	INDUSTRY 2x49W T5 EVG IP23 LS1 medium position	2,2kg	1530mm
543463	INDUSTRY 2x80W T5 EVG IP23 LS1 medium position	2,3kg	1530mm
LS2 - TWO 5 POLE PUSH-IN TERMINAL BLOCK CONNECTED WITH 5 x 2,5MM² CABLES			
543401	INDUSTRY 2x28W T5 EVG IP23 LS2 medium position	2,2kg	1230mm
543418	INDUSTRY 2x54W T5 EVG IP23 LS2 medium position	2,2kg	1230mm
543548	INDUSTRY 2x35W T5 EVG IP23 LS2 medium position	2,4kg	1530mm
543555	INDUSTRY 2x49W T5 EVG IP23 LS2 medium position	2,4kg	1530mm
543562	INDUSTRY 2x80W T5 EVG IP23 LS2 medium position	2,5kg	1530mm

3 TUBES T5



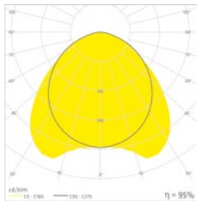
INDEX	DESCRIPTION	WEIGHT	LENGHT
LS1 - ONE 5 POLE PUSH-IN TERMINAL BLOCK			
543609	INDUSTRY 3x28W T5 EVG IP23 LS1 medium position	2,25kg	1230mm
543616	INDUSTRY 3x54W T5 EVG IP23 LS1 medium position	2,25kg	1230mm
543685	INDUSTRY 3x35W T5 EVG IP23 LS1 medium position	2,45kg	1530mm
543692	INDUSTRY 3x49W T5 EVG IP23 LS1 medium position	2,45kg	1530mm
543708	INDUSTRY 3x80W T5 EVG IP23 LS1 medium position	2,55kg	1530mm
LS2 - TWO 5 POLE PUSH-IN TERMINAL BLOCK CONNECTED WITH 5 x 2,5MM² CABLES			
543647	INDUSTRY 3x28W T5 EVG IP23 LS2 medium position	2,45kg	1230mm
543654	INDUSTRY 3x54W T5 EVG IP23 LS2 medium position	2,45kg	1230mm
543746	INDUSTRY 3x35W T5 EVG IP23 LS2 medium position	2,65kg	1530mm
543753	INDUSTRY 3x49W T5 EVG IP23 LS2 medium position	2,65kg	1530mm
543760	INDUSTRY 3x80W T5 EVG IP23 LS2 medium position	2,75kg	1530mm

LIGHT DISTRIBUTION FOR ROOMS WITH LOW CEILLINGS <5M FOR T5 LAMPS

1 TUBE T5

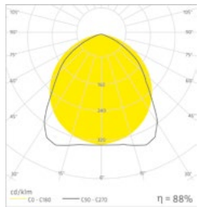
INDEX	DESCRIPTION	WEIGHT	LENGHT
LS1 - ONE 5 POLE PUSH-IN TERMINAL BLOCK			
543104	INDUSTRY 1x28W T5 EVG IP23 LS1 low position	1,95kg	1230mm
543111	INDUSTRY 1x54W T5 EVG IP23 LS1 low position	1,95kg	1230mm
543234	INDUSTRY 1x35W T5 EVG IP23 LS1 low position	2,15kg	1530mm
543241	INDUSTRY 1x49W T5 EVG IP23 LS1 low position	2,15kg	1530mm
543258	INDUSTRY 1x80W T5 EVG IP23 LS1 low position	2,25kg	1530mm
LS2 - TWO 5 POLE PUSH-IN TERMINAL BLOCK CONNECTED WITH 5 x 2,5MM² CABLES			
543173	INDUSTRY 1x28W T5 EVG IP23 LS2 low position	2,15kg	1230mm
543180	INDUSTRY 1x54W T5 EVG IP23 LS2 low position	2,15kg	1230mm
543302	INDUSTRY 1x35W T5 EVG IP23 LS2 low position	2,35kg	1530mm
543319	INDUSTRY 1x49W T5 EVG IP23 LS2 low position	2,35kg	1530mm
543326	INDUSTRY 1x80W T5 EVG IP23 LS2 low position	2,45kg	1530mm

2 TUBES T5



INDEX	DESCRIPTION	WEIGHT	LENGHT
LS1 - ONE 5 POLE PUSH-IN TERMINAL BLOCK			
543357	INDUSTRY 2x28W T5 EVG IP23 LS1 low position	2,0kg	1230mm
543364	INDUSTRY 2x54W T5 EVG IP23 LS1 low position	2.0kg	1230mm
543470	INDUSTRY 2x35W T5 EVG IP23 LS1 low position	2,2kg	1530mm
543487	INDUSTRY 2x49W T5 EVG IP23 LS1 low position	2,2kg	1530mm
543494	INDUSTRY 2x80W T5 EVG IP23 LS1 low position	2,3kg	1530mm
LS2 - TWO 5 POLE PUSH-IN TERMINAL BLOCK CONNECTED WITH 5 x 2,5MM² CABLES			
543425	INDUSTRY 2x28W T5 EVG IP23 LS2 low position	2,2kg	1230mm
543432	INDUSTRY 2x54W T5 EVG IP23 LS2 low position	2,2kg	1230mm
543579	INDUSTRY 2x35W T5 EVG IP23 LS2 low position	2,4kg	1530mm
543586	INDUSTRY 2x49W T5 EVG IP23 LS2 low position	2,4kg	1530mm
543593	INDUSTRY 2x80W T5 EVG IP23 LS2 low position	2,5kg	1530mm

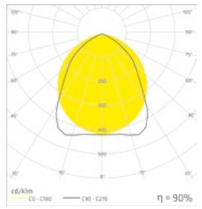
3 TUBES T5



INDEX	DESCRIPTION	WEIGHT	LENGHT
LS1 - ONE 5 POLE PUSH-IN TERMINAL BLOCK			
543623	INDUSTRY 3x28W T5 EVG IP23 LS1 low position	2,25kg	1230mm
543630	INDUSTRY 3x54W T5 EVG IP23 LS1 low position	2,25kg	1230mm
543715	INDUSTRY 3x35W T5 EVG IP23 LS1 low position	2,45kg	1530mm
543722	INDUSTRY 3x49W T5 EVG IP23 LS1 low position	2,45kg	1530mm
543739	INDUSTRY 3x80W T5 EVG IP23 LS1 low position	2,55kg	1530mm
LS2 - TWO 5 POLE PUSH-IN TERMINAL BLOCK CONNECTED WITH 5 x 2,5MM² CABLES			
543661	INDUSTRY 3x28W T5 EVG IP23 LS2 low position	2,45kg	1230mm
543678	INDUSTRY 3x54W T5 EVG IP23 LS2 low position	2,45kg	1230mm
543777	INDUSTRY 3x35W T5 EVG IP23 LS2 low position	2,65kg	1530mm
543784	INDUSTRY 3x49W T5 EVG IP23 LS2 low position	2,65kg	1530mm
543791	INDUSTRY 3x80W T5 EVG IP23 LS2 low position	2,75kg	1530mm

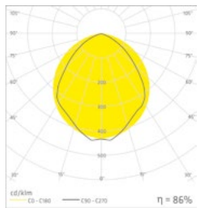
UNIVERSAL LIGHT DISTRIBUTION FOR T8 LAMPS

1 TUBE T8



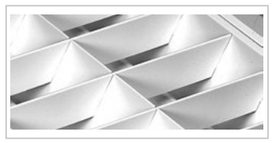
INDEX	DESCRIPTION	WEIGHT	LENGHT
LS1 - ONE 5 POLE PUSH-IN TERMINAL BLOCK			
543074	INDUSTRY 1x36W T8 EVG IP23 LS1 standard version	1,95	1285mm
543197	INDUSTRY 1x58W T8 EVG IP23 LS1 standard version	2,15	1585mm
LS2 - TWO 5 POLE PUSH-IN TERMINAL BLOCK CONNECTED WITH 5 x 2,5MM² CABLES			
543128	INDUSTRY 1x36W T8 EVG IP23 LS2 standard version	2,15kg	1285mm
543265	INDUSTRY 1x58W T8 EVG IP23 LS2 standard version	2,35kg	1585mm

2 TUBES T8



INDEX	DESCRIPTION	WEIGHT	LENGHT
LS1 - ONE 5 POLE PUSH-IN TERMINAL BLOCK			
543005	INDUSTRY 2x36W T8 EVG IP23 LS1 standard version	2,0kg	1285mm
543012	INDUSTRY 2x58W T8 EVG IP23 LS1 standard version	2.0kg	1585mm
LS2 - TWO 5 POLE PUSH-IN TERMINAL BLOCK CONNECTED WITH 5 x 2,5MM² CABLES			
543371	INDUSTRY 2x36W T8 EVG IP23 LS2 standard version	2,2kg	1285mm
543500	INDUSTRY 2x58W T8 EVG IP23 LS2 standard version	2,4kg	1585mm

Accessory



ALUMINIUM LOUVER
36 W - 543982
58W - 543999
28W, 54W - 543968
35W, 49W, 80W - 543975

ACCESSORY - 543944

Complete offer


LED GO!


Suspended fittings


Track and surface mounting fittings


Recessed and surface fittings


Downlights


Industrial fittings


Floodlights


Plafonds


Accent fittings


Emergency fittings


Street lighting

LENA LIGHTING

For years Lena Lighting S.A. has been a leading producer of professional, cost effective light fittings. Thanks to the cooperation with biggest electro-technical wholesalers and our own network of sales representatives, Lena Lighting's light fittings can be found wherever the highest quality of lighting is required. By developing the export to already more than 50 countries all over the world, Lena Lighting S.A. has achieved the position as the unquestionable leader among Polish exporters of professional lighting.

One of the success foundations of Lena Lighting is high quality of manufactured fittings. Since 2005, the Company has been operating within the ISO 9001:2000 system. Our specialists from the Research and Development Department are constantly working on increasing the quality standards. The products meet very high international standards resulting in their reliability, long life cycle and energy-efficiency. Electronic systems increase the energy efficiency, at the same time improving the illumination quality.

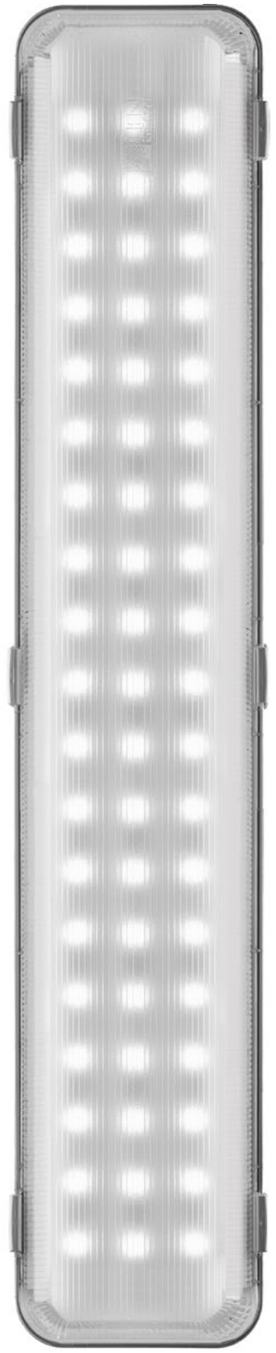
The use of energy-efficient fluorescent lamps and LEDs light sources gives us significant economic and environmental benefits.

POLISH MANUFACTURER - GUARANTEE OF QUALITY AND AVAILABILITY OF PRODUCTS.

We introduce

LED GO!

Lena LED Technology



CODAR RS LED

Discover all of our LED products
www.lenalighting.pl/lena-led-technology/en

LENA LIGHTING

Lena Lighting S.A.
ul. Kórnicka 52
63-000 Środa Wielkopolska
tel. +48 (61) 28 60 300
fax.+48 (61) 28 54 059

e-mail: office@lenalighting.pl
www.lenalighting.pl