IBV HUNGÁRIA
Lighting and Plastic Processing

DUST AND WATERPROOF
INDUSTRIAL LUMINAIRES

2020

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LED

T8/T5

IBV HUNGÁRIA
Lighting and Plastic Processing

IBV Hungária Lighting and Plastic Processing Kft. – member of IBV Holding in Germany – was founded in 1991 in Hungary, Kiskunfélegyháza, a town with significant industrial heritage. Thanks to its dynamic development, today our company **is one of the leading producers of dust and waterproof luminaires in Europe**.

One of our main activities is the production of IBV developed **industrial luminaries with a high IP rating for fluorescent tubes or equipped with LED**, in addition to manufacturing GRP-based (**glass fibre reinforced polyester**) products (kitchen sinks, electric cabinets and telecommunication equipment) designed in cooperation with our partners.

We have leading position on the international market of dust and waterproof luminaries. Our company has been recognized on the market as an **expert** in the field of plastic processing **producing excellent quality products** thanks to the vast experience acquired over 27 years. **More than 95% of our production volume is sold on international markets in more than 60 countries** of 5 continents.

Feedback from our partners on countless occasions confirms the **outstanding price/performance ratio** of our products we are able to offer thanks to two major factors: **German technology used in combination with professional know-how of Hungarian experts**.

The quality level of our products meets the requirements of **European standards (ENEC)** and the highest expectations of our customers. Our SAP integrated company management system gives framework to our activities, thus ensuring that we keep providing our customers with high-quality products. Our company's quality and environment management systems are certified and meet the requirements of the **ISO 9001** quality management system as well as the **ISO 14001** environment management system.

Briefly in figures:

Experience in lighting:	27 years
Product portfolio:	650 product variation
Luminaires sold:	2.2 million pieces/year
GRP processing:	5500 ton/year
Number of employees:	~500
Built-up area:	35,000 m^2

IBV Hungaria Introduction Movie

OUR COMPETENCIES

■ IBV Hungária Kft's quality management system guarantees that we deliver high-quality products with reliable operation. **Our products meet the European standards as well as the highest expectations of our customers**.

Since 2003 our manufacturing and supporting activities are regulated by the **ISO 9001 Quality Management System** and since 2013 also by the **ISO 14001 Environmental Management System.**

We can undertake a comprehensive quality inspection of our products during the sampling process as well as during production. **EMC** (electromagnetic compatibility), **IP** (ingress protection) and other product-specific tests are frequently run in our laboratory. Besides the basic dimensional measuring and impact resistance measuring we can inspect other product features through tests such as glow-wire, scratch resistance and components' water absorption.

Our products comply with the requirements set forth by the relevant European standards and therefore bear the **CE sign**. Furthermore, they are also certified by independent, accredited institutes and as such they also have the **ENEC** sign.

On today's market of luminaires a producer's success is determined by the quality of its products and whether they work safely and reliably. In the light of this, our production is driven by the principle of manufacturing good quality products, which is ensured by careful scrutiny and continuous improvement of our processes from purchase of components to delivery of our products. Our luminaires are equipped exclusively with good quality components and each single piece is tested using a 100% electricity test.

■ As one of Europe's largest **GRP (glass fibre reinforced polyester)** consumers, our company processes more than 5.000 tons of raw material annually. This makes us – after the automobile industry – the continent's largest consumer of GRP.

Thanks to our plant giving place to more than **40 pressing machines** (with a pressing force from 150t to 2000t), we are able to manufacture products of the size of a match-box to that of the size of a cabinet.

The GRP (called also SMC) is processed in high temperature and under great pressing force in the tool where it (after about 1.5-2 minutes) cures. As a result we get a product with perfect features.

Polyester belonging to the group of thermosetting plastics has great mechanical characteristics and its stability of size and shape at changing temperatures is excellent, far better than in case of other plastics (e.g. polycarbonate); additionally, it is also a good electrical insulator.

It is most widely used where there is a need for a component that is light yet and resistant such as in the automobile industry, aviation and ship industry and in the production of luminaires. Before pressing a special paint is applied on the surface of the mould – with PIMC technology – so we can manufacture wear- and chemical-resistant coloured-surface products that can even resist adverse weather conditions.

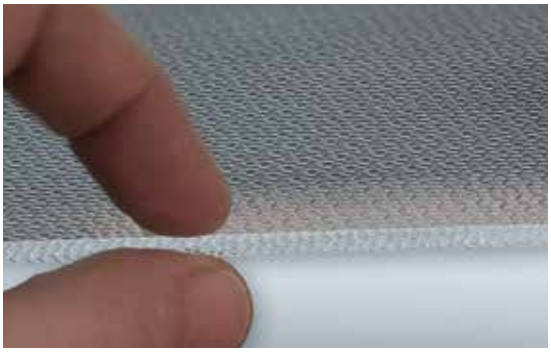
■ We extended our machinery portfolio with a brand new **Thermoset Injection Moulding** (BMC) machine with 200 To press force. On this BMC machine we are able to produce various products for the middle voltage and home appliances markets made of **Bulk Moulded Compound (BMC)** material.

■ With our three **injection moulding** machines (with a pressing force of 1.000 ton) we process several hundred tons of thermoplastics annually, such as **PC** (polycarbonate), **PMMA** (Polymethylmethacrylate), **SAN** (styrene acrylonitrile).

With these machines we produce UV resistant diffusers designed with respect to their optical characteristics. Our offer includes diffusers prepared with longitudinal prisms

We have vast experience in the production and handling of **transparent** as well as **opalised** thermoplastic polymers.

Apart from diffusers we can also extrude plain sheets as well as industrial curtains.



■ The **sealing** of our products is done through the use of a two-component **polyurethane foam** that is applied with the help of an automatized production line. This allows us to manufacture products with an IP rating of 54, 65, 66 or 67, according to the needs of our customers. Benefits of this technology include swift production and reliable quality. In addition to our three foaming machines, a fourth one has been recently installed where we use a **silicone-based sealing** material.

■ The assembly of our luminaires takes place in our **assembly workshop** on highest level. The Kanban system ensures that all the necessary components are at disposal according to needs, thus contributing to an efficient assembly process. All of our assembled luminaires are **100% quality and functionality checked**.

■ We also carry out the painting of our products in our painting workshops. This is where the components most exposed to strain get a lacquer coat to enhance their aesthetic value as well as their ability to resist weather conditions.

■ Numerous European companies have transferred the production of their plastic products to us. We have assumed our partners´ production successfully whether it be GRP or thermoplastics processing. Nothing expresses the trust of our partners placed in us better than the fact that such projects resulting from production transfers accounts for 30% of our revenue.

We have gained great **experience in the maintenance and repair of moulds** producing plastic components, thanks to the fact that we look after our own as well as our partners' moulds. Our mould shop has all the facilities necessary for maintaining and repairing the moulds, which helps us to provide ongoing maintenance work of several hundred moulds.

It is our extensive know-how, experience and expert knowledge acquired over the years that help us orchestrate a complex transfer of production very often requiring significant technological development – from design through sampling process to the successful realization of the project – in a professional manner ensuring our partner that the production is in safe and competent hands.

CUSTOMISED LUMINAIRES

IBV's expertise in tooling, luminaire housing manufacture, diffuser technology and electronics means we have all the skills, knowledge and capability to develop customised products for our partners.

You may have specific requirements for:

- Lighting levels to achieve
- Alternative design life
- Varying input voltages
- Need in built-sensors
- Emergency lighting, or
- Options for advanced controls

IBV will be your partner in developing a specific lighting product and/or a product range with all test certificates and supporting documentation.

ADVANCED LIGHTING SOLUTIONS

The world is rapidly changing with the drive for energy efficiency and IBV is constantly innovating and adapting to meet these changes for our partners and customers.

Today, IBV offers bespoke and customised lighting solutions for both new build projects and retrofit lighting to:

- Adjust colour temperatures during the day
- Harvest daylight with auto dimming
- Auto test emergency lighting

IBV luminaires can be provided with control options to include:

- 0-10V dimming, DALI
- Wireless
- Networked, PoE etc.

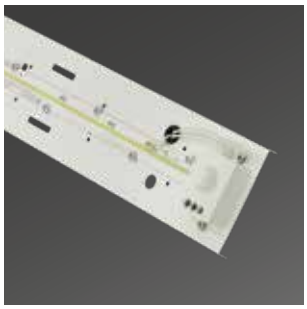
The following Table presents a summary of options available today by luminaire type.

Product family	Motion sensor	DALI	Daylight harvest	PoE	Wireless control	Extra long lifetime	Colour temperature changing	110 Volt	Strengthened ceiling brackets	5-pole Connectors	3-pole Connectors	Available with LED tubes	Class II protection	Through wiring	Emergency kit
872-Entry LED	Q	✔	✘	✘	✘	Q	✘	Q	✔	✔	✔	✘	Q	✔	✔
870-Inspire LED	✔	✔	Q	Q	Q	✔	Q	Q	✔	✔	✔	✘	✔	✔	✔
792-XSlide LED	✘	✔	✘	✘	✘	Q	✘	Q	✔	✔	✔	✘	Q	✔	✔
790-Xtrude LED	✘	Q	Q	Q	Q	Q	Q	✔	✔	Q	✔	✘	Q	✔	Q
771-Favourite LED	✔	✔	Q	Q	Q	✔	Q	✔*	✔	✔	✔	✔	✔	✔	✔
771-Farmer LED	✘	Q	✘	✘	✘	✘	Q	✘	✔	✘	✘	✘	Q	Q	✘
771-Orient LED	✔	✔*	Q	Q	Q	✘	Q	Q	✔	✔	✔	✘	✔	Q	✘
771-Ventila LED	✔	✔	Q	Q	Q	✘	Q	✔*	✔	✔	✔	✔*	✔	✔	✘
771-Extreme -30 LED	✔	✔*	Q	Q	Q	✔	Q	✘	✔	✔	✔	✘	✔	✔	✘
746-Clever LED	✔	✔	Q	Q	Q	✔	Q	✔*	✔	✔	✔	✔	✔	✔	Q
775-PC LED	✔	✔	Q	Q	Q	✔	Q	✔*	✔	✔	✔	✔	✔	✔	✔

✔ Available ✘ Not available Q On request

*The luminaires can be delivered after successful tests.

The marketing materials for the above, either printed or on-line, is ever changing. Therefore the overview below is just to highlight some of the main versions and devices, that can be combined/used with our luminaires. We would be pleased to develop your advanced lighting options upon your request.



Motion sensor, corridor function

DALI

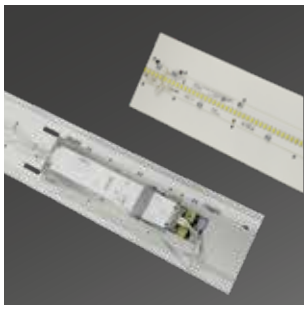
Building lighting control

Daylight harvesting

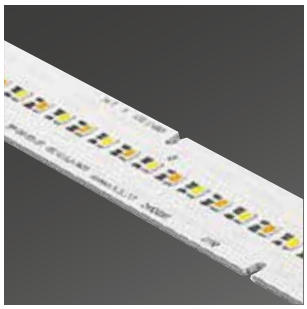
PoE

Power over Ethernet (PoE) Smart Network

Wireless communication



Extra long lifetime (100,000 hours)



K

Changing of correlated colour temperature

110V

Mains voltage 110V

Kg

Strengthened mounting brackets

Special 5-pole connectors enabling quick (in-line) installation

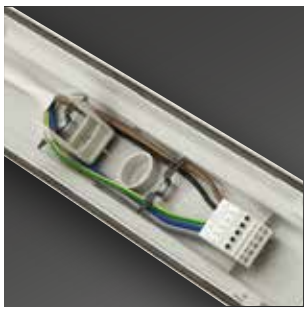
Special 3-pole connectors enabling quick (in-line) installation

LED

Available with LED tubes

Quick installation

Class II protection



3F 1F

Through wiring

EMERGENCY

Emergency lighting

LEGEND

Symbols concerning the application:

Luminaires with this symbol are double insulated (Class II protection)

Luminaires with this mark are suitable for direct installing on normal flammable building materials, according to DIN 4102 or similar materials, which have an ignition temperature of at least 200°

Luminaires bearing this symbol have limited surface temperature and are suitable for use in premises which are susceptible to dust and fibres.

Glow wire test 850°C

Protection level against external impact

Symbols concerning the built-in components:

Equipped with LED

T8 fluorescent tube ø 26mm with G13 lampholder

T5 fluorescent tube ø 16mm with G5 lampholder

Luminaires equipped with electronic control gear

Luminaires equipped with dimmable electronic control gear

Dimmable LED luminaires

1 phase through wiring

3 phase through wiring

Luminaires with emergency module

Symbols concerning IP protection:

- protected against splashing water

- protected against jet water

- protected against immersion (1m)

IP66

Protected against powerful water jets (heavy seas)

- dustproof

- dust-tight

RESISTANCE TO CHEMICALS

Since the aggressive agents in liquid or gas form can destroy the plastic parts of the lighting fixtures, increased attention must be paid to the selection of the proper materials. The following table will help in this selection. It contains the most frequently used chemicals. More information can be found on our website (www.ibv.hu).

CHEMICALS	PMMA diffuser	PC diffuser housing	GRP housing
ALCOHOLS			
Alcohol up to 30%	+++	+++	+++
Alcohol concentrate	o	o	o
Methanol	o	o	o
Glycerine	+++	++	+++
Glycol	+++	+++	+++
AQUEOUS SOLUTIONS			
Sea water	+++	+++	+++
Hydrogen Peroxide up to 40%	o	++	o
Hydrogen Peroxide over 40%	o	++	o
Metal salts and their aqueous solutions	+++	+++	+++
Salt solutions	+++	+++	+++
GASES			
Carbon dioxide	+++	+++	+++
Carbon monoxide	+++	+++	+++
HYDROCARBONS			
Benzene	o	o	o
Diesel oil	+++	++	+++
Petroleum Ether	+++	++	+++
Aliphatic Hydrocarbons	++	+++	++
Aromatic Hydrocarbons	o	o	++
OILS			
Aniline	o	o	o
Machine-tool oils	o	o	+++
Diesel oil	o	o	+++
Brake oil	o	o	o
Flammable acid oils	o	++	+++
Camphor oil	o	o	o
Lubricating oil	++	+++	+++
Silicone oil	+++	+++	+++
Paraffin oil	++	+++	+++
Saturated mineral oil	o	o	++

	PMMA diffuser	PC diffuser housing	GRP housing
INORGANIC ACIDS			
Battery acid	+++	+++	+++
Bromic acid	o	o	o
Hydrochloric acid up to 20%	+++	+++	+++
Hydrochloric acid over 20%	+++	++	+++
Nitric acid up to 10%	+++	+++	+++
Nitric acid between 10% and 20%	++	++	++
Nitric acid over 20%	o	o	o
Sulphydric acid	+++	+++	+++
Sulphuric acid up to 50%	+++	+++	+++
Sulphuric acid up to 70%	++	++	+++
Sulphuric acid over 70%	o	o	o
Sulphurous acid up to 5%	++	o	++
ORGANIC ACIDS			
Acetic acid up to 5%	++	+++	+++
Acetic acid up to 30%	o	++	+++
Butyric acid	o	++	+++
Citric acid	++	+++	+++
Lactic acid	++	+++	+++
BASIC COMPOUNDS			
Ammonia 0,005% *	+++	o	+++
Milk of lime	+++	++	+++
Synthetic basic compounds	+++	++	+++
Sodium hydroxide up to 2%	+++	o	++
Sodium hydroxide up to 10%	+++	o	o
SOLVENTS			
Acetone	o	o	o
Ketone	o	o	o
Chlorofenol	o	o	o
Chloroform	o	o	o
Methylene Chloride	o	o	o
Dioxane	o	o	+++
Ether	o	o	++
Ethyl Acetate	o	o	o
Phenol	o	o	o
Methyl-ethyl ketone	o	o	o
Turpentine	++	++	+++
Pyridine	o	o	o
Carbon tetrachloride	o	o	+++
Xylene	o	o	o

Before selecting the product, please check the chemical environment for the lighting application. The above table refers to an ambient temperature of 25°C±10°C. The chemical resistance is only valid if there are no mechanical effects, which may cause surface deformation, elongation or evolution of capillary cracks.

Legend:

+++ **resistant**
++ **limited resistance**
o **not resistant**

* Occupational Exposure Limit - EC (2000)

It is recommended to consult the manufacturer before any product is selected for potentially chemically aggressive applications.

GENERAL CONDITIONS OF WARRANTY

We continuously improve our products to meet current and future consumer needs, hence we reserve the right to make technical modifications of the dimensions, technical data, weight and construction stated without prior written notice.

We provide **a 2-year warranty for our T5/T8 fluorescent tube products**.

For our LED lighting products, we provide a 3 or 5 year warranty, depending on the product as detailed below:

PRODUCT SEGMENTATION

Premium-LED-Products – 5 year warranty:
Our **Premium LED products** have a housing and diffuser with a **silicon** injected gasket and the following LED array and driver technology:

- Philips Fortimo LV LED system
- Philips Fortimo HV HF LED system
- Osram Basic Linear LED system
- Lumnium5 LED system

Standard-LED-Products – 3 year warranty:
Our **Standard LED products** have a housing and diffuser with a **polyurethane** gasket and the following LED array and driver technology:

- Philips Fortimo LV LED system
- Philips Fortimo HV HF LED system
- Osram Basic Linear LED system

This also includes the standard products below, which are independent of the gasket material:

- Lumnium3 LED system

Other LED Products – 2 year warranty:
The 771-VENTILA LED product range has a 2 year warranty.

Please Note:
Regarding any other products not stated above and/or variations on a product – such as luminaires equipped with emergency battery kit or sensor – the above extended warranty period is not applicable.

The luminaires presented in this catalogue
are available **as unassembled sets**
(without electrical components) **on request**.


LED

872-ENTRY LED

Industrial dust and waterproof luminaires with LED modules

Trend-setting lighting in IP66 (option in IP67), quick installation. Specially developed for LED applications.

YOUR MAIN BENEFITS:

Size perfectly **adapted to LED**, easy to install, **slim design**

FIELD OF APPLICATION:

Thanks to the construction principles of gasket, closing system and diffuser our LED fixtures ensure a high grade of protection (IP66) against dust, contamination and water permeation. (Optionally available in IP67). In accordance with their IP rating they can be widely used to illuminate spaces with dusty and humid environment. When using outdoors, the fittings should be protected against direct sunlight and adverse weather conditions. Under 0°C the application of venting cable gland is necessary, as well as the silicone gasket is recommended.

TECHNICAL DESCRIPTION AND BENEFITS:

- **Housing: – Available in** flame retardant **glass fibre reinforced polyester**, in light grey (RAL7035) colour (on request suitable for 850°C glow wire test too). Glass fibre reinforced polyester has very good temperature resistance, mechanical stability, furthermore it is a good electrical insulator, it resists the impacts of several chemicals and the impacts of weather conditions. Its stability of size and shape at changing temperatures is excellent.
  – **Available in PC** – injection moulded **opalised Polycarbonate** in light grey (RAL7035) colour (suitable for 850°C glow wire test too). Polycarbonate has high mechanical strength and high heat and shock resistance

- **Diffuser: Available in PC** - injection moulded **opalised Polycarbonate** (high mechanical strength and high heat and shock resistance) or **in Acrylic** - injection moulded **opalised PMMA** (unique non-aging properties, high chemical resistance).

  Further benefits:
  - **Extremely high lighting efficiency** through high **light permeability, unique on the market**, up to 90%
  - An **excellent light uniformity** through **well-balanced light dispersing** (no shadows)
  - **Elimination of the dazzling effect** (no glare)
  - **Keeping the usual, well known features of the diffuser** such as chemical and heat resistance, mechanical features, **UV stabilization** etc.
  - **Universal** width (no single and twin) and slim **shape simplifies the light calculation**.

- The **gasket** between the diffuser and housing is available in two versions:
  - **Injected silicone-based** foam
  - Non-aging **PU (polyurethane)** foam

- **Fixing the diffuser to the body:** With tamper-proof (vandal-proof) stainless steel clips.

- **Gear tray** (reflector): White powder coated steel sheet according to Zhaga standards or customised.

- **Electrical components:** The adequate power supply is ensured through electronic driver, that is built into the luminaire.

Main technical options

Our new **opalised** diffuser achieves an **outstanding light transmissivity** of **up to 90%**. With this great light permeability, it is **an excellent choice for luminaires equipped with LED-modules**.

In order to optimise the thermal management of the luminaire we avoid the direct contact of the gear tray and driver, thus increasing the lifetime of the modules and driver.

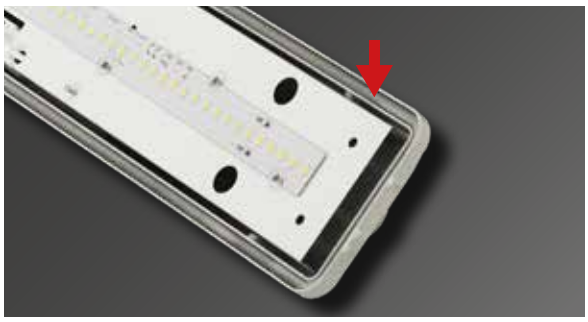
With 872-Entry LED - depending on customer requirements - we can reach different levels of luminous flux (lumen) by keeping the **luminous efficacy above 130 lm/Watt.** Details see: Technical data.

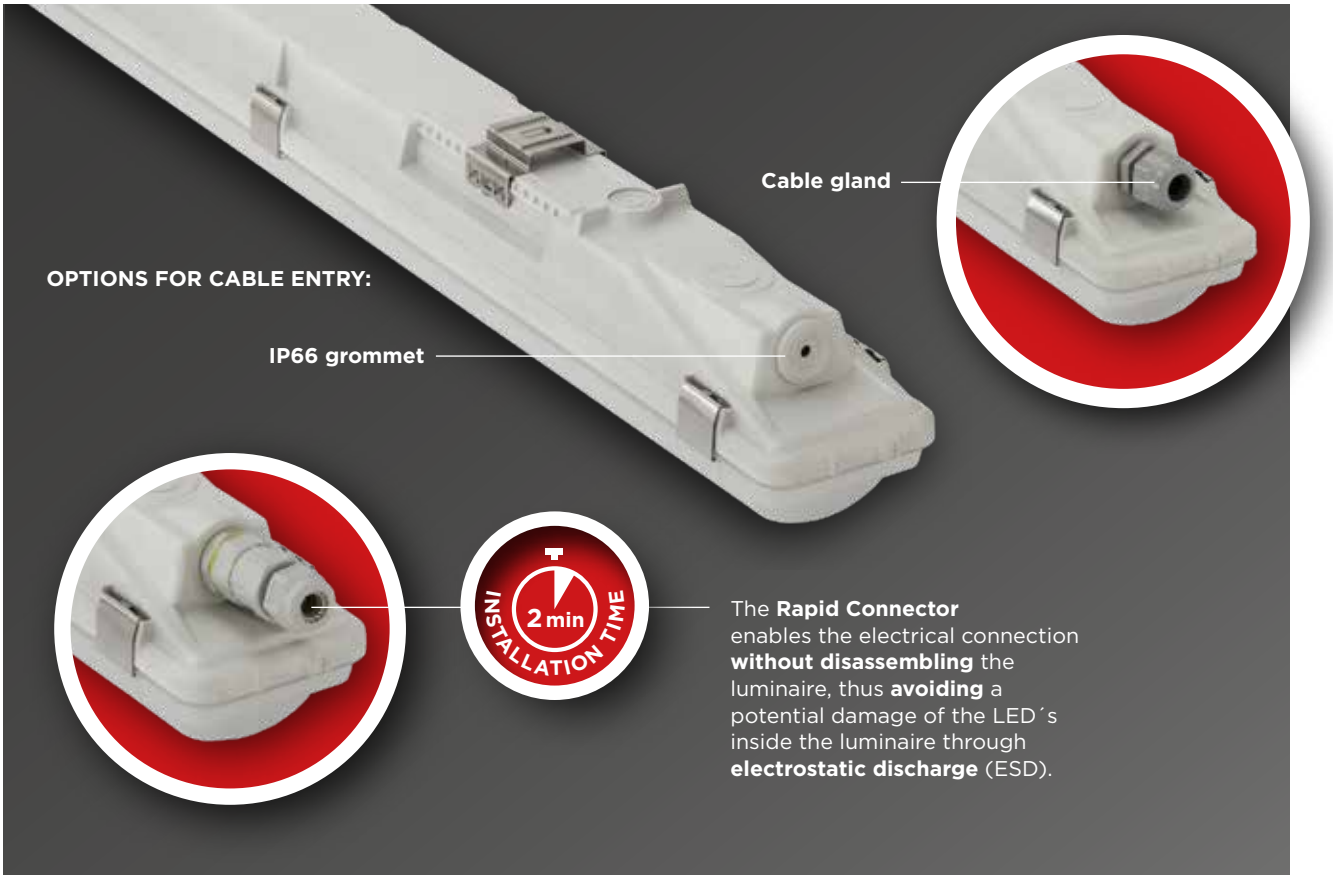
The gear tray is made of white powder coated steel sheet according to **Zhaga** standards. On request customisation possible.

The special **tamper-proof stainless steel clips** cannot be released with bare hands.

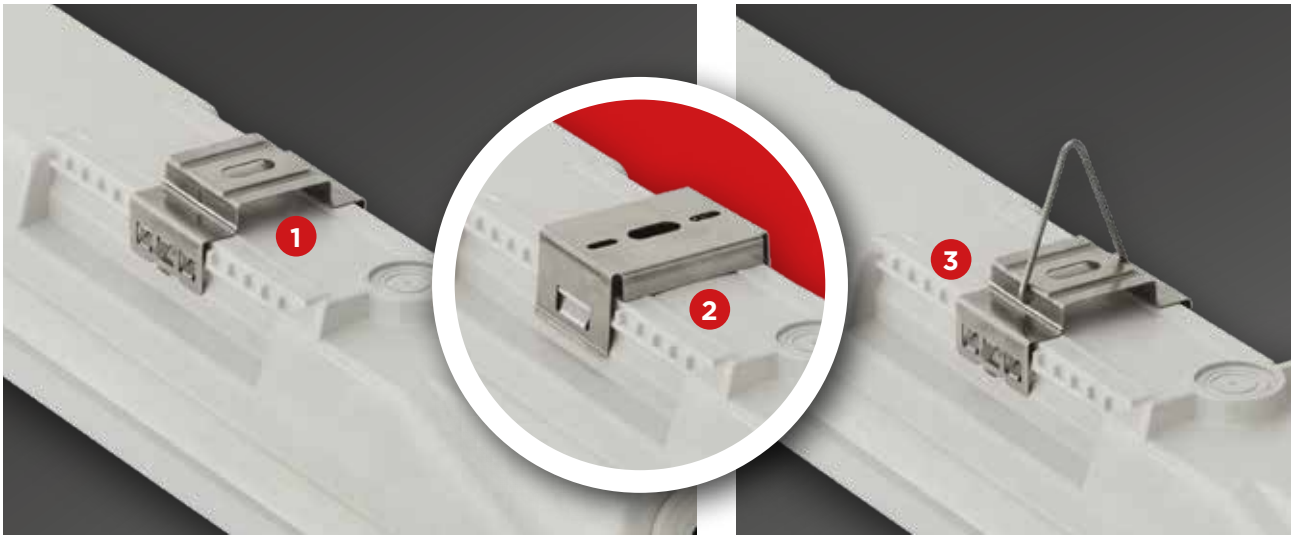
The **opal diffusers** are made of UV-stabilized material, specially **developed for LED** applications. This ensures among others a well-balanced light distribution and the **elimination of glare**.

The injected **silicon-based gasket** with enhanced resistance ensures **maximum** chemical and weather **resistance** even under tough conditions. Non-aging polyurethane foam is optionally available.





The **Rapid Connector** enables the electrical connection **without disassembling** the luminaire, thus **avoiding** a potential damage of the LED´s inside the luminaire through **electrostatic discharge** (ESD).



Ways of installing (options):

1. With **standard** (0,4 mm) stainless steel mounting brackets (easy-to-install) onto the **ceiling**.
2. With **strengthened** (0,6 mm) stainless steel mounting brackets. They are easy-to-install onto the **ceiling or the wall** (in horizontal position).
3. **Suspension** on chains, wire ropes etc. with stainless steel mounting brackets and **with hooks**.

The mounting brackets can be positioned with lateral flexibility for easy installation.

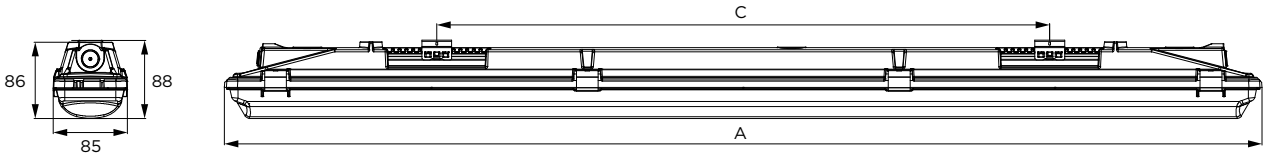
Technical data (extract)

Type	Power (W)	Warranty (years)	Luminare total luminous flux - emitted (lm)	Lum. efficacy (lm/W)	Correlated colour temp (Kelvin)	CRI	Lifetime L70B50 (Ta=35°C)	Lifetime L80B10 (Ta=35°C)	A (mm)	C (mm)	Weight (kg)
Lumnium3 HV											
872 2ft (600mm)	23	3 years	3100	131	4000	>80	50.000 h	>34.000 h	605	238±23	0,91
872 4ft (1200mm)	23	3 years	3000	130	4000	>80	50.000 h	>34.000 h	1185	700±78	1,49
872 5ft (1500mm)	29	3 years	4300	147	4000	>80	50.000 h	>34.000 h	1477	1000±78	1,79
872 4ft (1200mm)	37	3 years	4800	131	4000	>80	50.000 h	>34.000 h	1185	700±78	1,49
872 5ft (1500mm)	50	3 years	6800	135	4000	>80	50.000 h	>34.000 h	1477	1000±78	1,79
Osram Basic Linear G3											
872 2ft (600mm)	21	5 years	2600	125	4000	>80	50.000 h	>41.000 h	605	238±23	0,91
872 4ft (1200mm)	23	5 years	3000	130	4000	>80	50.000 h	>46.000 h	1185	700±78	1,49
872 5ft (1500mm)	28	5 years	3900	140	4000	>80	50.000 h	>50.000 h	1477	1000±78	1,79
872 4ft (1200mm)	39	5 years	5400	140	4000	>80	50.000 h	>41.000 h	1185	700±78	1,49
872 5ft (1500mm)	47	5 years	6900	145	4000	>80	50.000 h	>41.000 h	1477	1000±78	1,79

Further options:

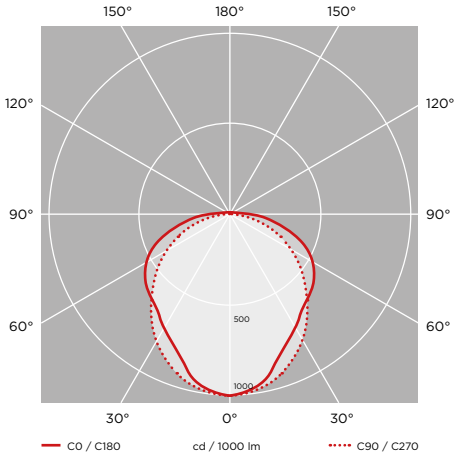
On request:

Schematic drawing with main dimensions

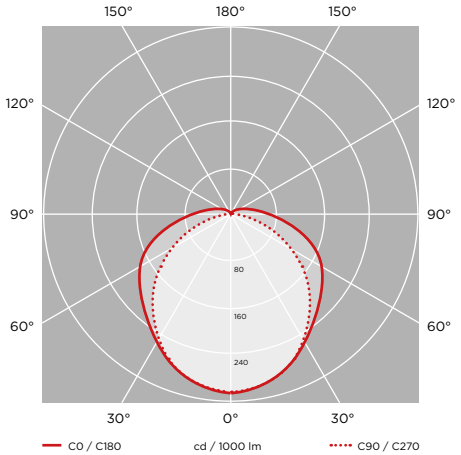


Photometric curves:

872-Entry LED, 4 ft. 23W Lumnium3 HV



872-Entry LED, 4 ft. 39W Osram Basic Linear G3



Luminaire customisation and the options of advanced controls are presented on page 7

792-XSLIDE LED

Industrial dust and waterproof luminaires with LED modules

YOUR MAIN BENEFITS:

Comfortable and **quick installation** without disassembling the luminaire
Extruded profile with **outstanding light transmissivity**
Slender design and clean impression, specially developed for LED applications
Glued end caps with **pull-out (sliding) tray for easy connection**
Economical and **cost-efficient**

FIELD OF APPLICATION:

Thanks to the construction principles of gasket, end caps and the extruded profile our LED fixtures ensure a high grade of protection (IP 65) against dust, contamination and water permeation. In accordance with their IP grade they can be widely used to illuminate spaces with dusty, humid environment.

When using outdoors, the fittings should be protected against direct sunlight and adverse weather conditions.

TECHNICAL DESCRIPTION AND BENEFITS:

- **Housing:** Made of **Polycarbonate (PC)** by **co-extrusion**. The housing is made in light grey (RAL7035) colour. The diffusing (upper) part is opalised. Thanks to the used raw material the whole fitting shows very high mechanical strength and **high heat and shock resistance (IK08)**.
- The **co-extruded opal** diffuser offers you:
  - **extremely high light transmissivity** (up to 90%) **unique on the market**
  - **homogenous, well-balanced light dispersing** (no shadows)
  - **elimination of the dazzling effect** (no glare)
  - **unique appearance** and **clean impression** (**no clips, no dots** of the single LED´s)
  - **keeping the usual, well-known features of the diffuser** such as chemical and heat resistance, mechanical features, **UV stabilization** etc.
- **End caps:** Made of extremely resistant polyamide and glued to the housing.
- **Gear tray** (reflector): White powder coated steel sheet according to **Zhaga** standards or customized.
- **Electrical components:** The adequate power supply is ensured through electronic driver, that is built into the luminaire.

IP65

LED

IK08

Option:

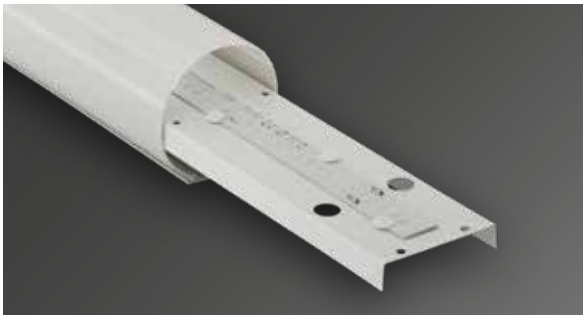
IP66

1F

3F

EMERGENCY

Main technical options



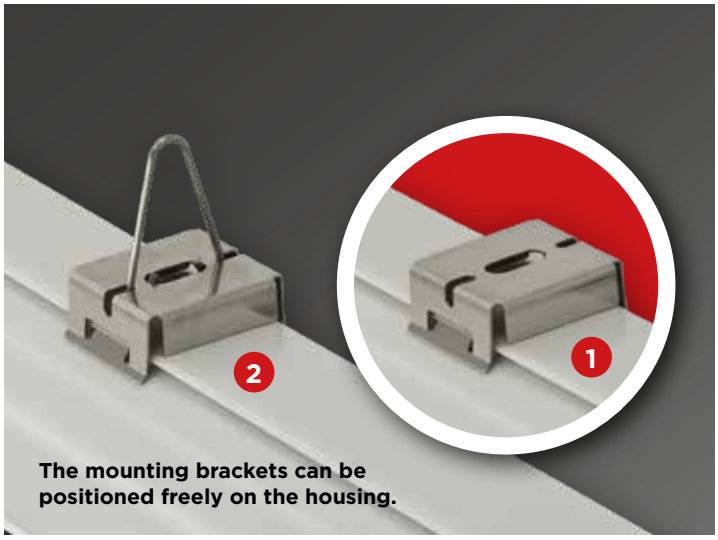
The gear tray is made of white powder coated steel sheet according to **Zhaga** standards.

The diffusing part of the profile is made of UV stabilized **opalised** material, specially developed for LED applications. This ensures among others a well-balanced light distribution and the **elimination of glare.**

The glued end caps are locked up hermetically. After opening it the connector tray is accessible.

The **pull-out (sliding) tray accelerates** the electrical connection easily **without disassembling the** luminaire.

IP 65 protection is ensured by adhesive that secures the end caps to the body.



The mounting brackets can be positioned freely on the housing.

Ways of installing:

1. With **strengthened** stainless steel mounting brackets. They are easy to install onto the wall or ceiling.
2. **Suspension on chains or rope** with stainless steel suspension brackets mounted with **hooks**.

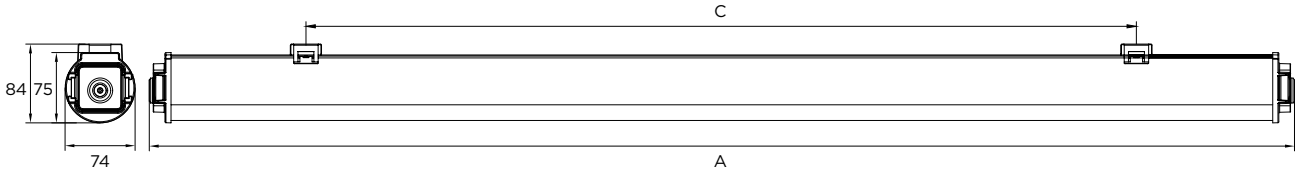
Technical data (extract)

Type	Power (W)	Warranty (years)	Luminare total luminous flux - emitted (lm)	Lum. efficacy (lm/W)	Correlated colour temp (Kelvin)	CRI	Lifetime L70B50 (Ta=35°C)	Lifetime L80B10 (Ta=35°C)	A (mm)	C (mm)	Weight (kg)
Lumnium3 HV											
792 2ft (600mm)	24	3 years	2900	121	4000	>80	50.000 h	>34.000 h	622	287	0,8
792 4ft (1200mm)	23	3 years	3100	135	4000	>80	50.000 h	>34.000 h	1218	586	1,2
792 5ft (1500mm)	29	3 years	4000	134	4000	>80	50.000 h	>34.000 h	1492	720	1,3
792 4ft (1200mm)	36	3 years	4800	129	4000	>80	50.000 h	>34.000 h	1218	586	1,6
792 5ft (1500mm)	51	3 years	6500	127	4000	>80	50.000 h	>34.000 h	1492	720	1,7
Osram Basic Linear G3											
792 2ft (600mm)	21	5 years	2500	119	4000	>80	50.000 h	>43.000 h	622	287	0,9
792 4ft (1200mm)	23	5 years	3000	131	4000	>80	50.000 h	>50.000 h	1218	586	1,45
792 5ft (1500mm)	28	5 years	3800	138	4000	>80	50.000 h	>50.000 h	1492	720	1,72
792 4ft (1200mm)	39	5 years	5300	136	4000	>80	50.000 h	>41.000 h	1218	586	1,45
792 5ft (1500mm)	47	5 years	6400	135	4000	>80	50.000 h	>41.000 h	1492	720	1,72

Further options:

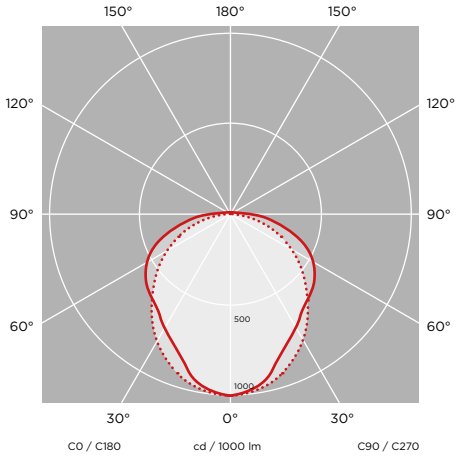
On request:

Schematic drawing with main dimensions

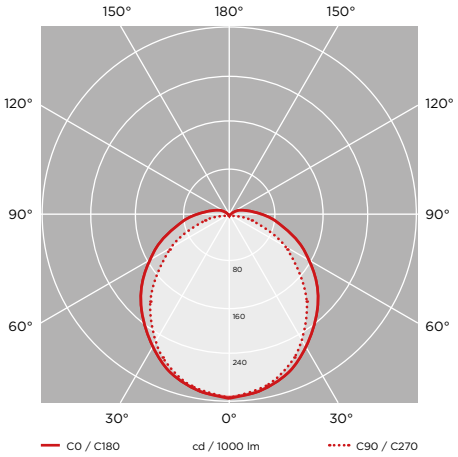


Photometric curves:

792-XSlide LED, 4 ft, 23W, Lumnium3 HV



792-XSlide LED, 4 ft, 39W, Osram Basic Linear G3



Luminaire customisation and the options of advanced controls are presented on page 7

790-XTRUDE LED 2020

Industrial dust and waterproof luminaires with LED modules

Unique appearance with easier, quick installation!
Extruded profile with outstanding light transmissivity! Specially developed for LED applications.

YOUR MAIN BENEFITS:

Quick installation, length perfectly adapted to the size of the LED modules

FIELD OF APPLICATION:

Thanks to the construction principles of gasket, end caps and the extruded profile our LED fixtures ensure a high grade of protection (IP 65) against dust, contamination and water permeation. In accordance with their IP grade they can be widely used to illuminate spaces with dusty, humid environment.

When using outdoors, the fittings should be protected against direct sunlight and adverse weather conditions.

TECHNICAL DESCRIPTION AND BENEFITS:

- **Housing:** Made of **Polycarbonate (PC)** by **co-extrusion**. The housing is made in light grey (RAL7035) colour. The diffusing (upper) part is opalised. Thanks to the used raw material the whole fitting shows very high mechanical strength and **high heat and shock resistance (IK08)**.
- The **co-extruded opal** diffuser offers you:
  - **extremely high light transmissivity** (up to 90%) **unique on the market**
  - **homogenous, well-balanced light dispersing** (no shadows)
  - **elimination of the dazzling effect** (no glare)
  - **unique appearance and clean impression (no clips, no dots** of the single LED´s)
  - **keeping the usual, well-known features of the diffuser** such as chemical and heat resistance, mechanical features, **UV stabilization** etc.
- **End caps:** Made of extremely resistant polyamide and glued to the housing.
- **Gear tray** (reflector): White powder coated steel sheet according to **Zhaga** standards or customized.
- **Electrical components:** The adequate power supply is ensured through electronic driver, that is built into the luminaire.

IP65

Option:

Main technical options

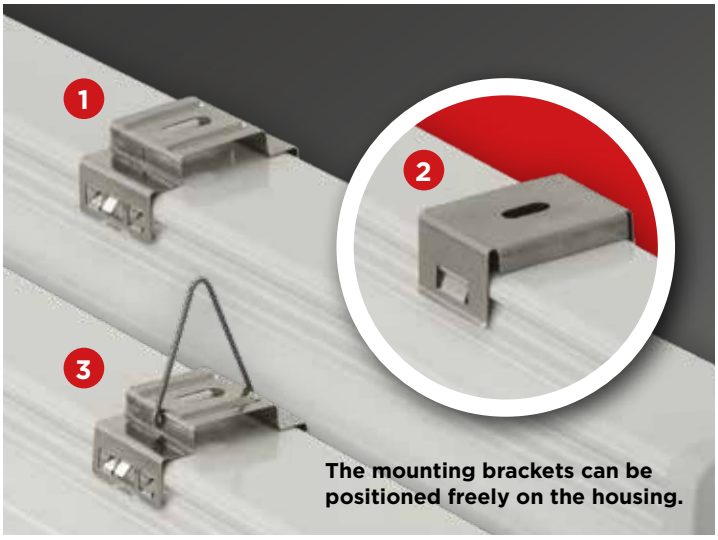
The gear tray is made of white powder coated steel sheet according to **Zhaga** standards.

The diffusing part of the profile is made of UV stabilized **opalised** material, specially developed for LED applications. This ensures among others a well-balanced light distribution and the **elimination of glare.**

The **pull-out (sliding) tray accelerates** the electrical connection easily **without disassembling the** luminaire.

The glued end caps are locked up hermetically by a bayonet mechanism. After opening it, the connector tray is accessible.

IP 65 protection is ensured by adhesive that is placed into the seal channel and it secures the end caps to the body.



The mounting brackets can be positioned freely on the housing.

Ways of installing:

1. With stainless steel mounting brackets (easy-to-install) onto the ceiling.
2. With **strengthened** stainless steel mounting brackets. They are easy to install onto the wall or ceiling.
3. **Suspension on chains or rope** with stainless steel suspension brackets mounted with **hooks**.

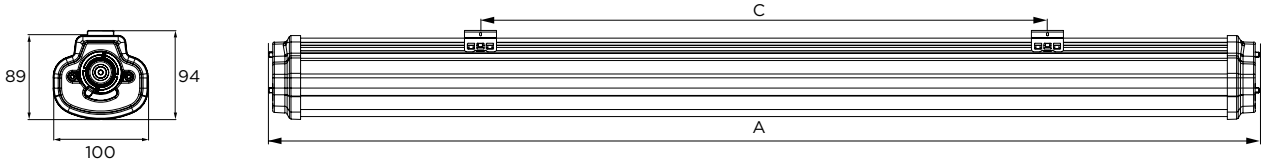
Technical data (extract)

Type	Power (W)	Warranty (years)	Luminare total luminous flux - emitted (lm)	Lum. efficacy (lm/W)	Correlated colour temp (Kelvin)	CRI	Lifetime L70B50 (Ta=35°C)	Lifetime L80B10 (Ta=35°C)	A (mm)	C (mm)	Weight (kg)
Osram Basic Linear G3											
790 2ft (600mm)	21	5 years	2600	116	4000	>80	50.000 h	>41.000 h	648	575	0,9
790 4ft (1200mm)	23	5 years	2900	126	4000	>80	50.000 h	>50.000 h	1208	575	1,45
790 5ft (1500mm)	28	5 years	3800	138	4000	>80	50.000 h	>50.000 h	1488	575	1,72
790 4ft (1200mm)	28	5 years	3600	130	4000	>80	50.000 h	>45.000 h	1208	575	1,45
790 5ft (1500mm)	35	5 years	4900	142	4000	>80	50.000 h	>50.000 h	1488	575	1,72
790 4ft (1200mm)	38	5 years	5000	130	4000	>80	50.000 h	>43.000 h	1208	575	1,45
790 5ft (1500mm)	47	5 years	6600	141	4000	>80	50.000 h	>43.000 h	1488	575	1,72
Philips Fortimo LED Strip HV5											
790 4ft (1200mm)	59	5 years	8100	137	4000	>80	50.000 h	>40.000 h	1208	575	1,2
790 5ft (1500mm)	73	5 years	10200	139	4000	>80	50.000 h	>40.000 h	1488	575	1,3

Further options:

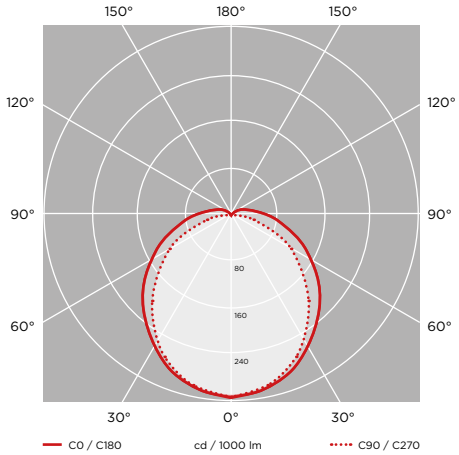
On request:

Schematic drawing with main dimensions

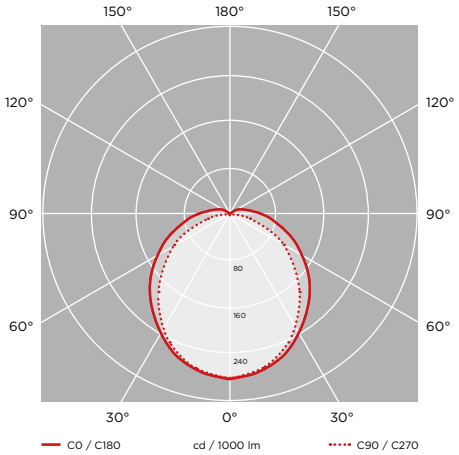


Photometric curves:

790-Xtrude LED, 4 ft, 28W, Osram Basic Linear G3



790-Xtrude LED, 4 ft, 59W, Philips Fortimo LED Strip HV5



Luminaire customisation and the options of advanced controls are presented on page 7

771-FAVOURITE LED

Industrial dust and waterproof luminaires with LED modules

Now with a new, opalised diffuser with unique light transmissivity!
Specially developed for LED applications

FIELD OF APPLICATION:

Thanks to the construction principles of gasket, closing system and diffuser our LED fixtures ensure a high grade of protection (IP65, IP66 or IP67) against dust, contamination and water permeation. In accordance with their IP grade they can be widely used to illuminate spaces with dusty and humid environment.

When using outdoors, the fittings should be protected against direct sunlight and adverse weather conditions. Under 0°C the application of venting cable gland is necessary, as well as silicone gasket is strongly recommended.

TECHNICAL DESCRIPTION AND BENEFITS:

- **Housing:** It is made of flame retardant glass fibre reinforced polyester (on request suitable for 850°C glow wire test too), in light grey (RAL7035) colour. Glass fibre reinforced polyester has very good temperature resistance, mechanical stability, furthermore it is a good electrical insulator, it resists the impacts of several chemicals and the impacts of weather conditions. Its stability of size and shape at changing temperatures is excellent.
- **Diffuser:** Our LED luminaires with **opal** diffuser offer you:
  - **extremely high light efficiency** through high **light permeability, unique on the market,** (up to 93% light transmissivity)
  - an **excellent light uniformity** through **well-balanced light dispersing** (no shadows)
  - **elimination of the dazzling effect** (no glare)
  - **aesthetical appearance (no dots** of the single LEDs)
  - **keeping the usual, well-known features of the diffuser** such as chemical and heat resistance, mechanical features, **UV stabilization** etc.

  Available in PC - injection moulded **Polycarbonate** (high mechanical strength and high heat and shock resistance) **or in Acrylic** - injection moulded **PMMA** (unique non-aging properties, high chemical resistance).
- In order to ensure **maximum heat**, chemical and weather **resistance** even under tough conditions, the **gasket** between the diffuser and housing is made of **silicon-based, endless foam** with enhanced resistance. Non-aging **PU (polyurethane)** foam is optionally available.
- **Fixing the diffuser to the body:** with highly resistant clips made of **stainless steel** (standard or tamper-proof).
- **Gear tray** (reflector): White powder coated steel sheet according to **Zhaga** standards or customised.
- **Electrical components:** The adequate power supply is ensured through electronic driver, that is built into the luminaire.

IP65

Option:
IP66
IP67

3F

Main technical options

Our opal diffuser has an **outstanding light transmissivity** up to **93%**. With this great light permeability, it is an **excellent choice for luminaires equipped with LED modules**.

The opal diffusers are made of UV stabilized **opalised** material, specially developed for LED applications. This ensures among others a well-balanced light distribution and the **elimination of glare**.

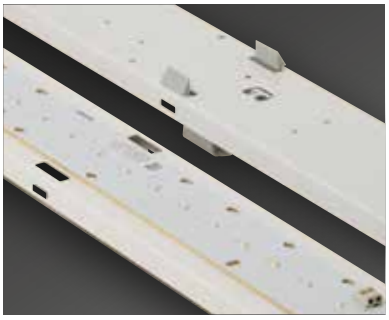
Usual stainless steel clips for **SELV** (Safety Extra Low Voltage) solutions.

The special tamper-proof stainless steel clips for **non-SELV (HV)** solutions can not be released with bare hands.

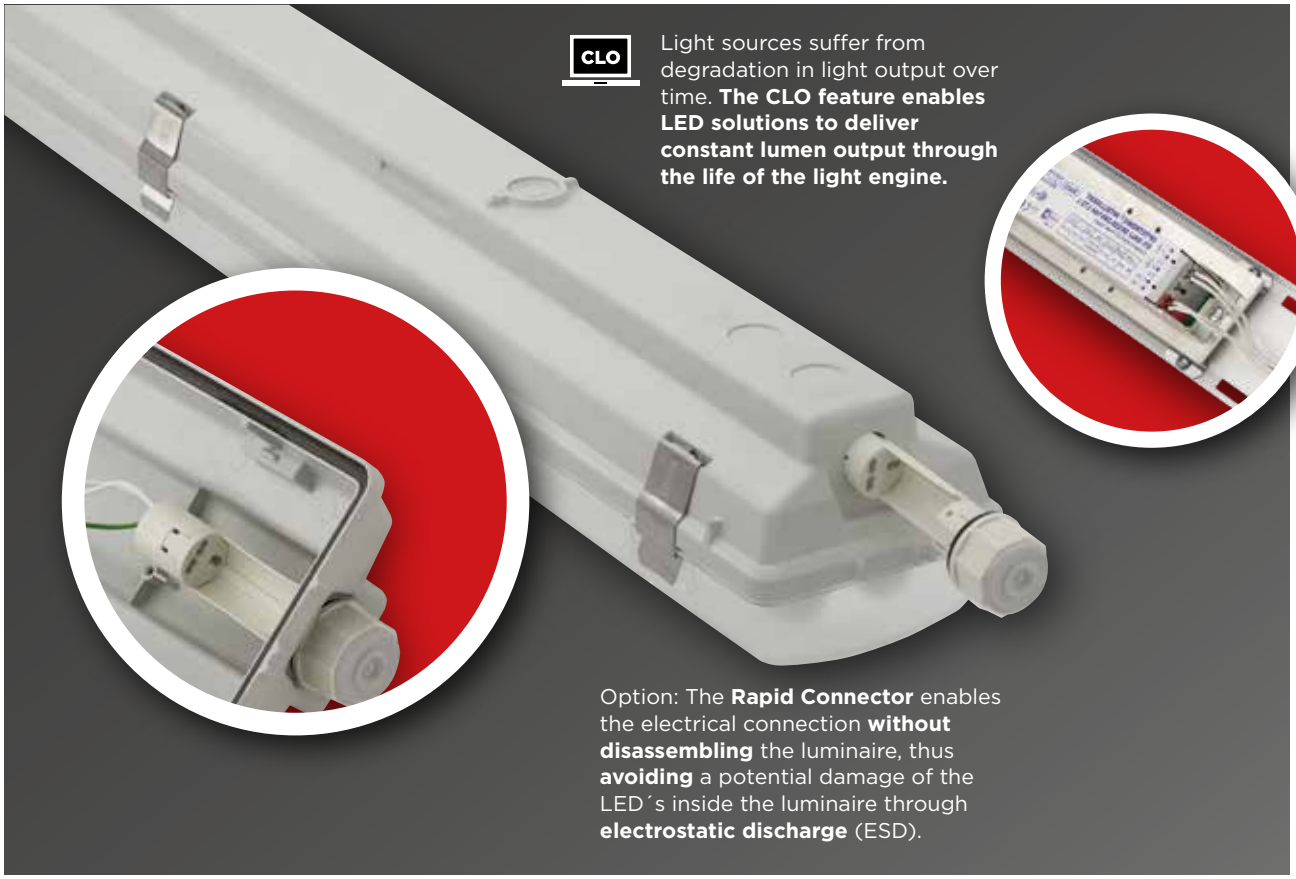
With 771-Favourite LED - depending on customer requirements - we can reach different levels of luminous flux (lumen) as well as luminous efficacy (lm/Watt).
Details see: Technical data.

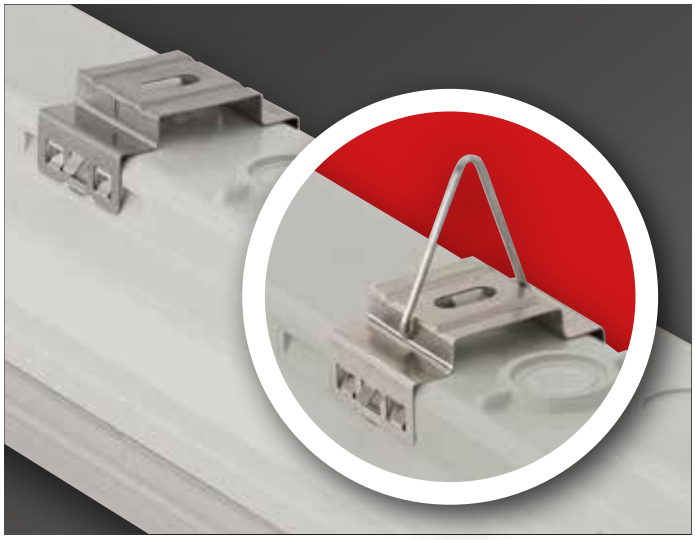
In order to optimise the thermal management of the luminaire we avoid the direct contact of the gear tray and driver, thus increasing the lifetime of the modules and driver.

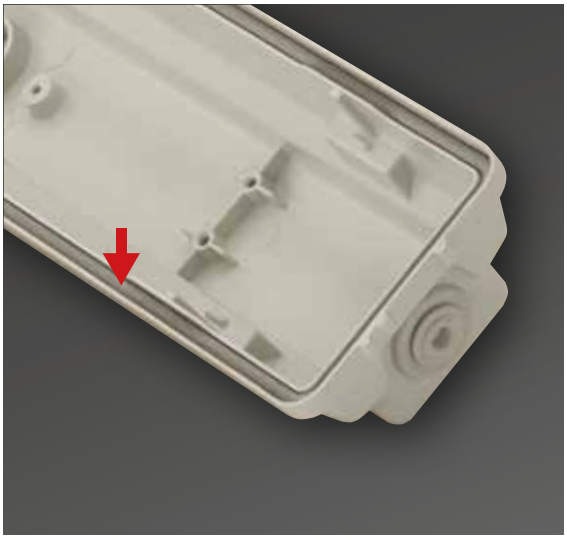

LED Version with motion sensor



The gear tray is made of white powder coated steel sheet according to **Zhaga** standards. On request customisation possible.







Ways of installing:

1. With stainless steel suspension brackets (easy-to-install) onto the ceiling.
2. Suspension on chains with stainless steel suspension brackets mounted with hooks.

In order to ensure **maximum heat**, chemical and weather **resistance** even under tough conditions, the **gasket** between the diffuser and housing is made of **silicon-based** foam with enhanced resistance.

Technical data (extract)

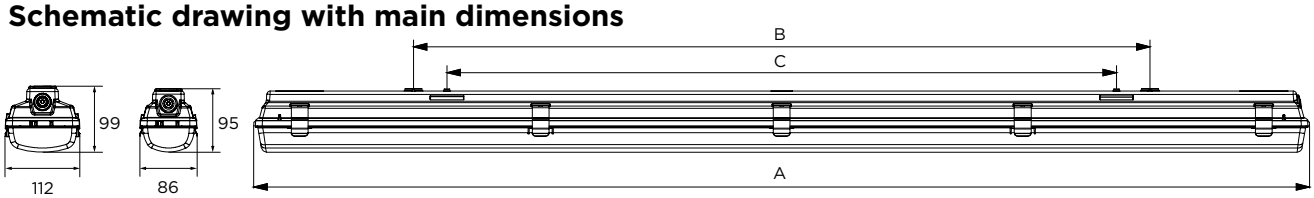
Type	Power (W)	Warranty (years)	Luminare total luminous flux - emitted (lm)	Lum. efficacy (lm/W)	Correlated colour temp (Kelvin)	CRI	Lifetime L70B50 (Ta=35°C)	Lifetime L80B10 (Ta=35°C)	A (mm)	C (mm)	Weight (kg)
Osram Basic Linear G3											
771 1x600 mm	21	5 years	2400	119	4000	>80	50.000 h	>41.000 h	669	360	1,3
771 1x1200mm	23	5 years	2900	124	4000	>80	50.000 h	>50.000 h	1277	700	1,8
771 1x1500mm	28	5 years	3700	132	4000	>80	50.000 h	>50.000 h	1577	1000	2,2
771 1x1200mm	28	5 years	3600	130	4000	>80	50.000 h	>45.000 h	1277	700	2
771 1x1500mm	35	5 years	4700	136	4000	>80	50.000 h	>50.000 h	1577	1000	2,2
771 1x1200mm*	39	5 years	5300	135	4000	>80	50.000 h	>43.000 h	1277	700	2,5
771 2x1500mm*	47	5 years	6800	144	4000	>80	50.000 h	>43.000 h	1577	1000	2,7
Philips Fortimo LED Strip LV4											
771 1x600 mm	16	5 years	1900	123	4000	>80	70.000 h	>50.000 h	669	360	1,7
771 1x1200mm	31	5 years	4000	128	4000	>80	70.000 h	>50.000 h	1277	700	2,2
771 1x1500mm	39	5 years	5000	128	4000	>80	70.000 h	>50.000 h	1577	1000	2,5
771 2x1500mm*	52	5 years	6400	123	4000	>80	70.000 h	>50.000 h	1277	700	2,7
Philips Fortimo LED Strip HV5											
771 2x1200mm*	59	5 years	8100	138	4000	>80	50.000 h	>40.000 h	1277	700	2,65
771 2x1500mm*	73	5 years	10200	140	4000	>80	50.000 h	>40.000 h	1577	1000	3
Lumnium3 HV											
771 1x600mm	24	3 years	3100	130	4000	>80	50.000 h	>34.000 h	605	238±23	1,2
771 1x1200mm	25	3 years	3200	130	4000	>80	50.000 h	>34.000 h	1185	700±78	2
771 1x1500mm	30	3 years	4100	135	4000	>80	50.000 h	>34.000 h	1477	1000±78	2,2
771 1x1200mm	36	3 years	5000	137	4000	>80	50.000 h	>34.000 h	1185	700±78	2
771 1x1500mm	50	3 years	6700	133	4000	>80	50.000 h	>34.000 h	1477	1000±78	2,2

* The LED strips are placed in one line in a twin (wider) housing.

Further options:

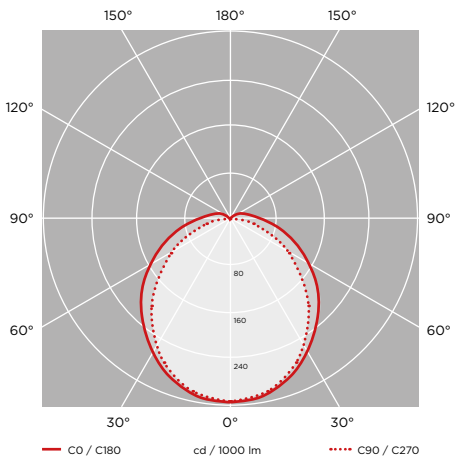
On request:

Schematic drawing with main dimensions



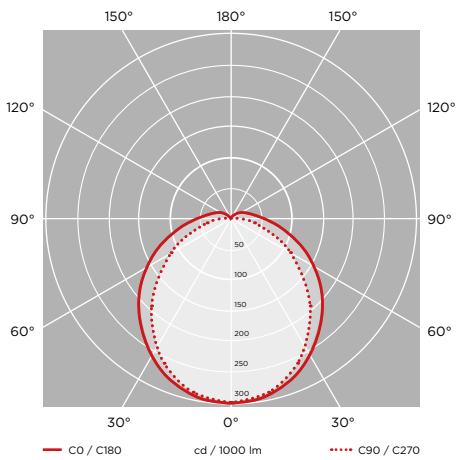
Photometric curves:

771-Favourite LED 2x1500mm 47W
Osram Basic Linear G3



Photometric curves:

771-Favourite LED 2x1500mm 73W
Philips Fortimo LED Strip HV5



Luminaire customisation and the options of advanced controls are presented on page 7

771-FARMER LED

Industrial dust and waterproof luminaires with LED modules

Specially developed for farming industry and chemically aggressive environment!

YOUR MAIN BENEFITS:

Solution in high IP protection for **extremely harsh environment**. Heavily armed with special components for long-term **fight against chemicals**. Perfectly applicable in **agricultural industry.**

FIELD OF APPLICATION:

Thanks to the construction principles of gasket, closing system and diffuser our LED fixtures ensure a high grade of protection (IP 65, IP 66) against dust, contamination and water permeation. In accordance with their IP grade and high chemical resistance they are especially recommended for buildings where animals are kept and also for harsh environmental rooms.

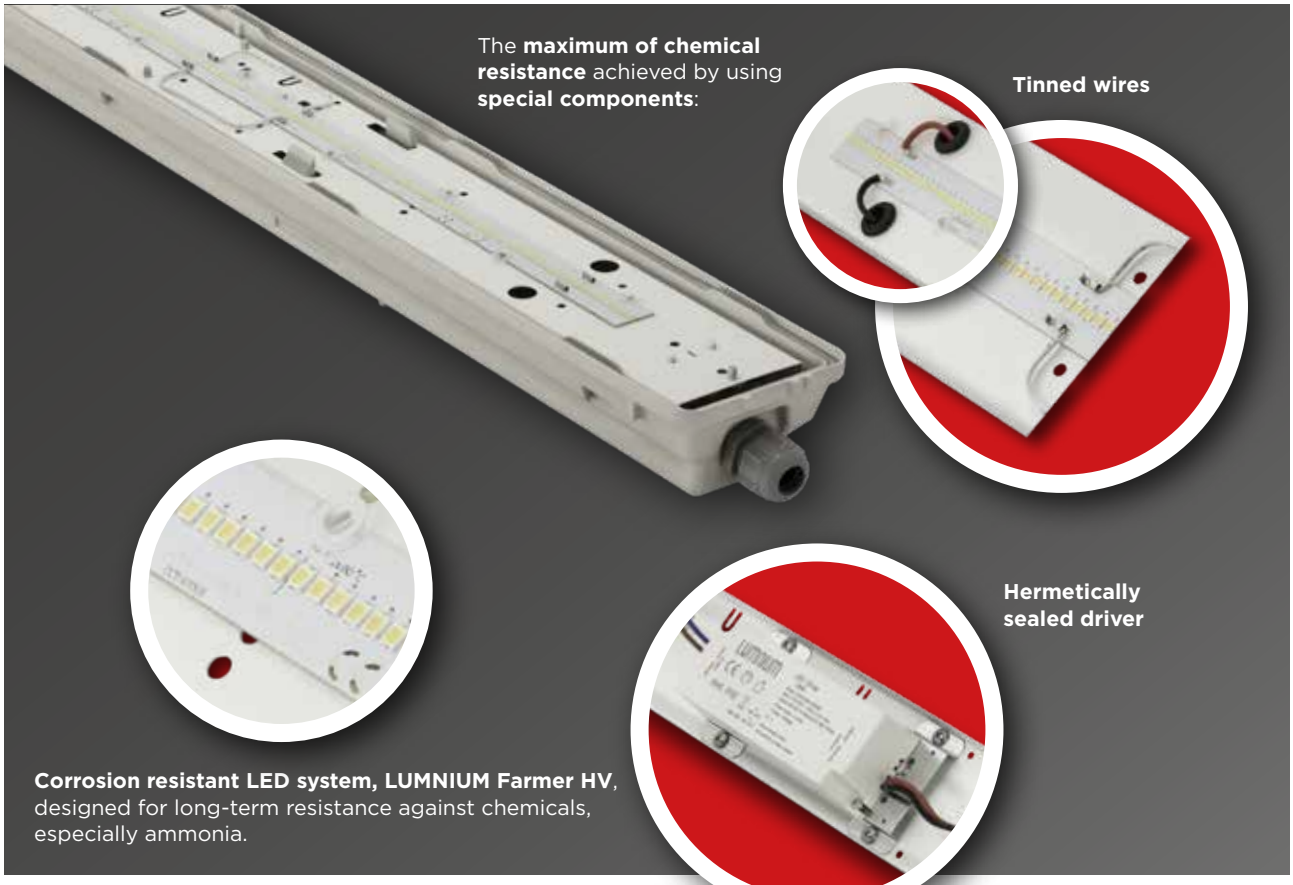
When using outdoors, the fittings should be protected against direct sunlight and adverse weather conditions. Under 0°C the application of venting cable gland is necessary, as well as the silicone gasket is recommended.

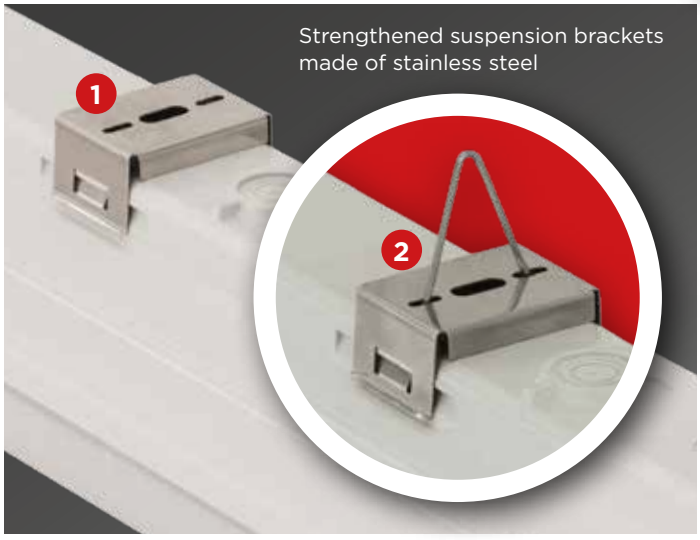
TECHNICAL DESCRIPTION AND BENEFITS:

- **Housing:** It is made of flame retardant glass-fibre reinforced polyester, in light grey (RAL7035) colour. Glass-fibre reinforced polyester has very good temperature resistance, mechanical stability, furthermore it is a good electrical insulator, it resists the impacts of several chemicals. Its stability of size and shape at changing temperatures is excellent.
- **Diffuser:** The diffuser is available in **injection moulded opal acrylic (PMMA)** with unique **non-aging** properties and **extremely high chemical resistance**.
- Our LED-luminaires with **opal** diffuser offer you:
  - **extremely high light transmissivity** (up to 93%) **unique on the market**
  - **homogenous, well-balanced light dispersing** (no shadows)
- **Gasket: silicon-based endless foam** with enhanced resistance
- **Fixing the diffuser to the body**: with highly resistant **tamper-proof clips made of stainless steel**
- **Gear tray** (reflector): white powder coated steel sheet according to **Zhaga** standards or customised
- **Electrical components:** The adequate power supply is ensured through a special **hermetically sealed electronic driver - LUMNIUM Farmer HV**.

Main technical options

Our new opal diffuser has an **outstanding light transmissivity up to 93%**. Thanks to the wide beam angle, **homogenous illumination** even at low height of luminaire.





Ways of installing (options):

1. With stainless steel suspension brackets (easy-to-install) onto the ceiling.
2. Suspension on chains with stainless steel suspension brackets mounted with hooks.

Endless silicone foam as sealing with enhanced resistance and extreme durability

Technical data (extract)

Type	Power (W)	Warranty (Years)	Luminare total luminous flux - emitted (lm)	Lum. efficacy (lm/W)	Correlated colour temp (Kelvin)	CRI	Lifetime L70B50 (Ta=35°C)	Lifetime L80B10 (Ta=35°C)	A (mm)	C (mm)	Weight (kg)
Lumnium3 Farmer HV											
771 1x600 mm	14	3 years	1900	136	4000	>80	>50.000 h	>50.000 h	669	360	1,2
771 1x1200mm	23	3 years	3800	164	4000	>80	>50.000 h	>50.000 h	1277	700	2
771 1x1500mm	33	3 years	5000	152	4000	>80	>50.000 h	>50.000 h	1577	1000	2,2
771 2x1500mm*	43	3 years	6600	154	4000	>80	>50.000 h	>40.000 h	1577	1000	2,2
Lumnium5 Farmer HV											
771 1x600 mm	14	5 years	1900	136	4000	>80	>50.000 h	>50.000 h	669	360	1,2
771 1x1200mm	23	5 years	3800	164	4000	>80	>50.000 h	>50.000 h	1277	700	2
771 1x1500mm	33	5 years	5000	152	4000	>80	>50.000 h	>50.000 h	1577	1000	2,2
771 2x1500mm*	43	5 years	6600	154	4000	>80	>50.000 h	>40.000 h	1577	1000	2,2

* The LED strips are placed in one line in a twin (wider) housing.

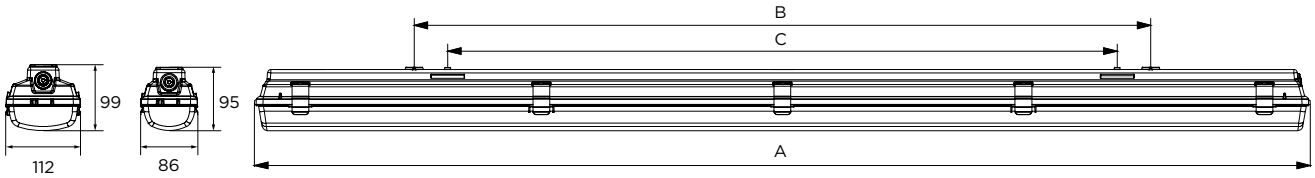
Other colour temperatures available on request

Further options:

On request:

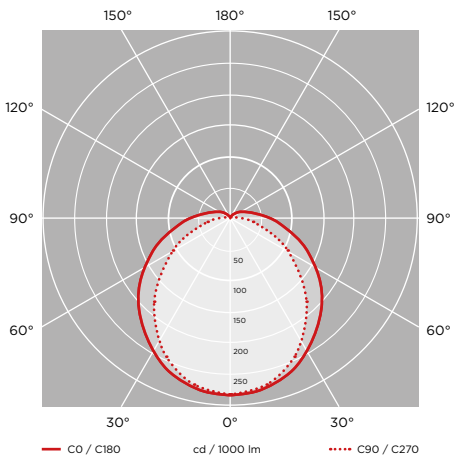
K

Schematic drawing with main dimensions

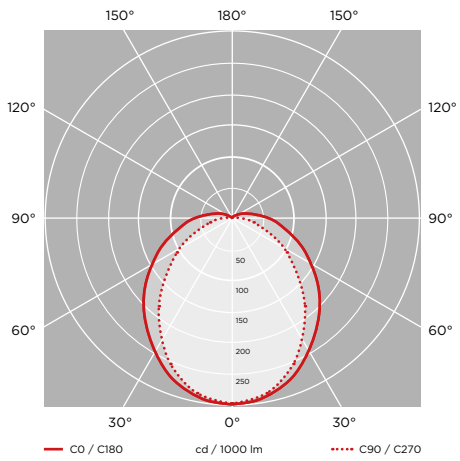


Photometric curves:

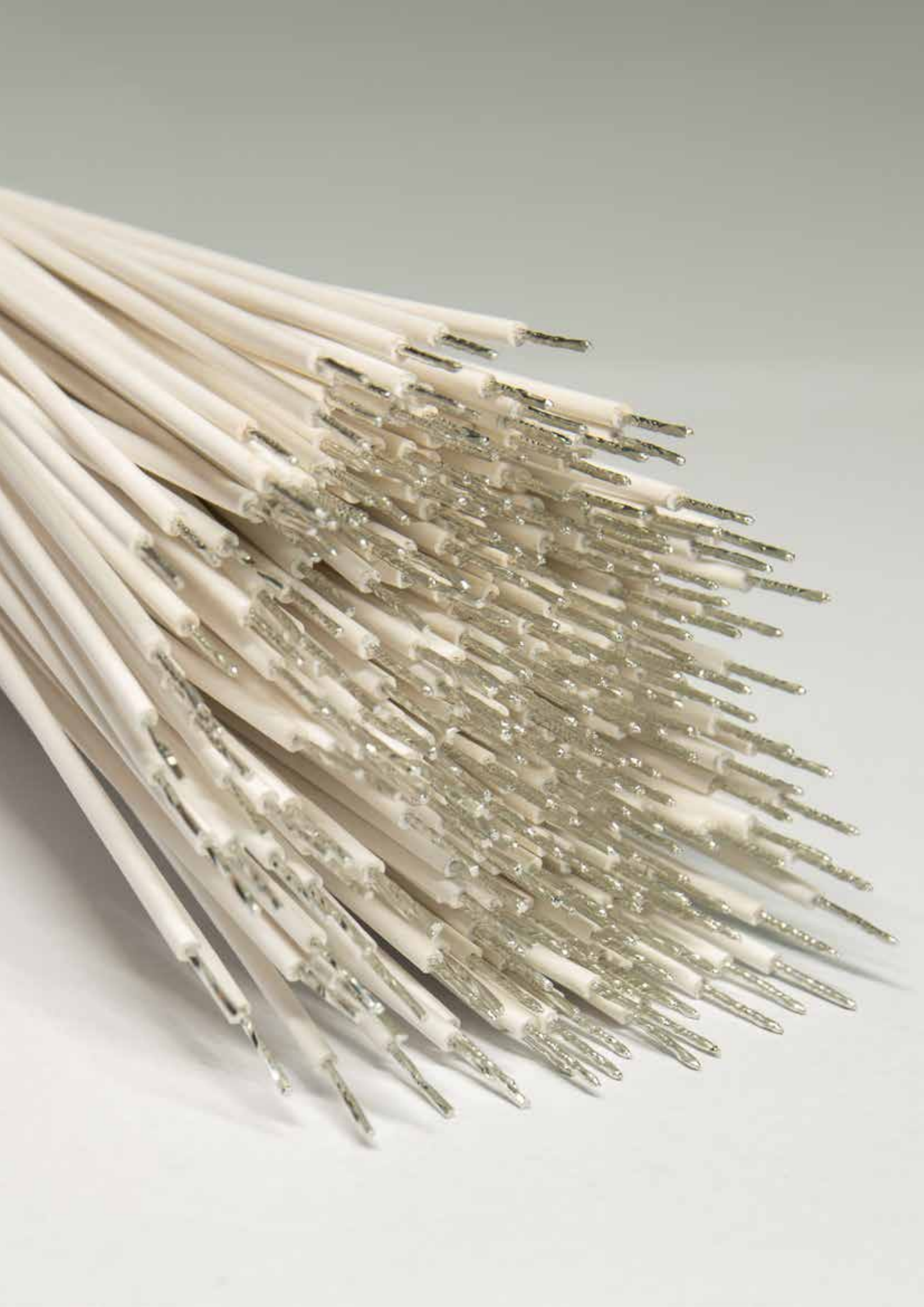
771-Farmer LED 1x1200mm 23W
Lumnium3 HV



771-Farmer LED 2x1500mm 43W
Lumnium3 HV



Luminaire customisation and the options of advanced controls are presented on page 7



771-ORIENT LED

Industrial dust and waterproof luminaires with LED modules

771 Orient LED is available in the following sizes: 1200mm, 1500mm. Available in IP65

YOUR MAIN BENEFITS:

A professional luminaire for wide usage, that fulfills the strongest quality requirements.
Especially for applications where **high heat resistance (up to Ta +50 °C)** is required.

FIELD OF APPLICATION:

Due to the construction principles of gasket, closing system and diffuser our fixtures ensure a high grade of protection (IP65) against dust, contamination and water permeation. In accordance with their IP grade they can be used widely to illuminate spaces with dusty and humid environment. Thanks to its **enhanced heat resistance**, 771-Orient LED is especially suitable for applications, where **error-free functioning at higher ambient temperature** is desired.

When using outdoors, the fittings should be protected against direct sunlight and adverse weather conditions.

TECHNICAL DESCRIPTION AND BENEFITS:

- **Housing:** It is made of flame retardant glass fibre reinforced polyester (on request suitable for 850°C glow wire test too), in light grey (RAL7035) colour. This material has very good temperature resistance, mechanical stability, furthermore it is a good electrical insulator, it resists the impacts of several chemicals and the impacts of weather conditions. Its stability of size and shape at changing temperatures is excellent.
- The **diffuser** is available in injection moulded **opal polycarbonate (PC)** with extremely high light permeability and well-balanced light dispersing. Main advantages: High mechanical strength and high heat and shock resistance and excellent transparency.

  The diffusers are designed with respect to their optical characteristics and are **UV resistant**.
- In order to ensure maximum heat, chemical and weather resistance even under tough conditions, the gasket between the diffuser and housing is made of **silicon-based foam** with enhanced resistance. Non-aging **PU (polyurethane)** foam is optionally available.
- **Fixing the diffuser to the body:** with highly resistant stainless steel clips
- **Gear tray** (reflector): White powder coated steel sheet according to Zhaga standards or customised.
- **Electrical components:** in accordance with the requested specification suitable for LED technology, details see under technical data.

IP65

LED

Option:

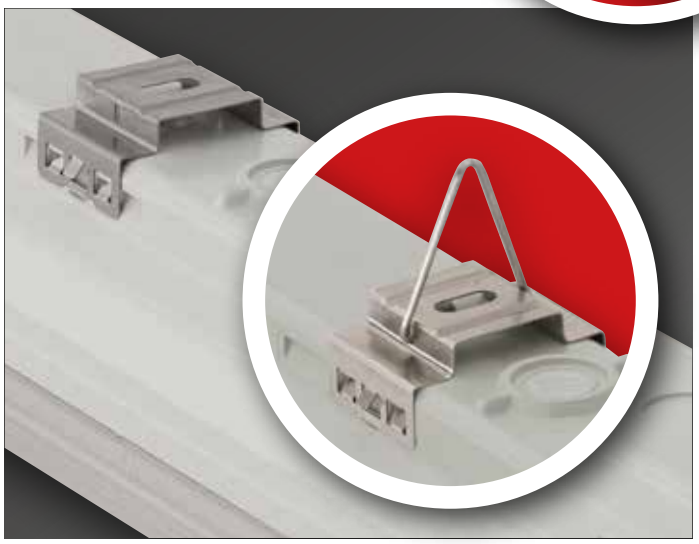
PC 850°C

Main technical options

Our new opal diffuser has an **outstanding light transmissivity of more than 90%**. With this great light permeability, it is an **excellent choice for luminaires equipped with LED modules**.

The opal diffusers are made of UV stabilized **opalised** material, specially developed for LED applications. This ensures among others a well-balanced light distribution and the **elimination of glare**.
Moreover the diffuser made of injection moulded polycarbonate (PC) excels at highest **impact resistance of IK10.**

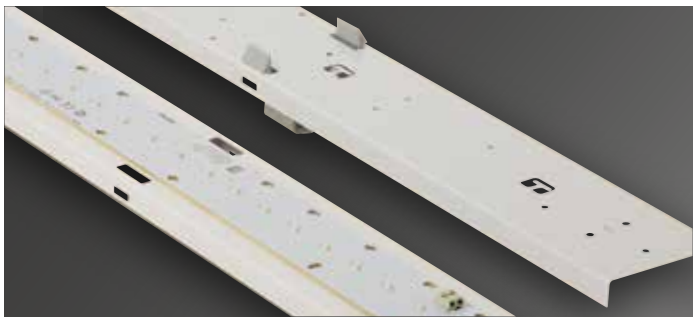
Fixing of the diffuser to the body: With highly resistant stainless steel clips. Optionally tamper-proof clips available on request.



Ways of installing:

1. With stainless steel suspension brackets (easy-to-install) onto the ceiling.
2. Suspension on chains with stainless steel suspension brackets mounted with hooks.

Depending on customer requirements we can reach different levels of luminous flux (lumen) and high luminous efficacy (lm/Watt) of our LED luminaires. Details see attached overview.



The gear tray is made of white powder coated steel sheet according to **Zhaga** standards. On request customisation possible.

Option: The **Rapid Connector** enables the electrical connection **without disassembling** the luminaire, thus **avoiding** a potential damage of the LED´s inside the luminaire through **electrostatic discharge** (ESD).

In order to optimise the thermal management of the luminaire at high ambient temperatures, the driver is fixated to the gear tray with a heat sink plate. Thus heat sensitive LED components function properly up to Ta +50°C.

In order to ensure **maximum heat**, chemical and weather **resistance** even under tough conditions, the **gasket** between the diffuser and housing is made of **silicon-based** foam with enhanced resistance.

Technical data (extract)

Type	Power (W)	Warranty (years)	Luminare total luminous flux - emitted (lm)	Lum. efficacy (lm/W)	Correlated colour temp (Kelvin)	CRI	Lifetime L70B50 (Ta=50°C)	Lifetime L80B10 (Ta=50°C)	A (mm)	C (mm)	Weight (kg)
Philips Fortimo LED Strip LV4											
771 1x1200mm	26	5 years	3400	132	4000	>80	>70.000 h	>50.000 h	1277	700	2,2
771 1x1500mm	31	5 years	4200	135	4000	>80	>70.000 h	>50.000 h	1577	1000	2,5
771 2x1500mm*	39	5 years	5200	134	4000	>80	>70.000 h	>50.000 h	1577	1000	2,7
Philips Fortimo LED Strip HV5											
771 2x1200mm*	59	5 years	7700	137	4000	>80	>50.000 h	>40.000 h	1277	800	2,65
771 2x1500mm*	73	5 years	9600	130	4000	>80	>50.000 h	>40.000 h	1577	1000	3

* The LED strips are placed in one line in a twin (wider) housing.

Other colour temperatures available on request

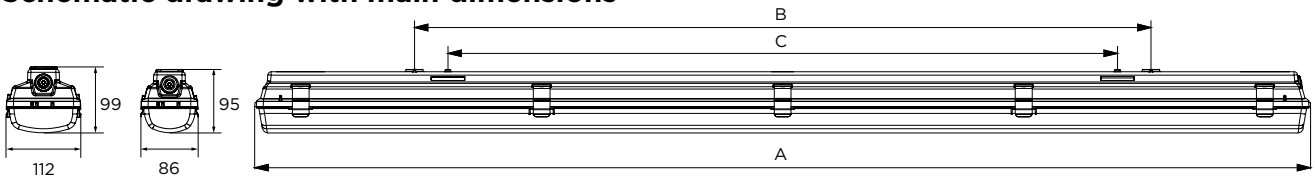
Ø 26 G 13

Ø 16 G 5

Further options:

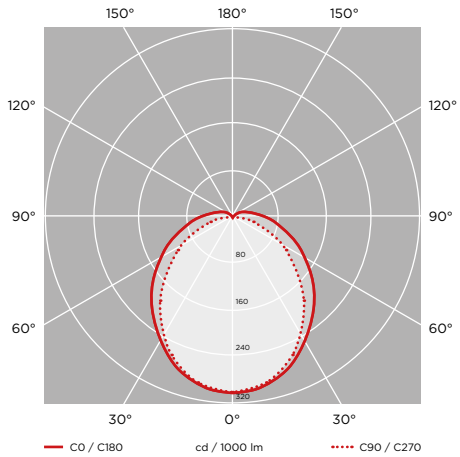
On request:

Schematic drawing with main dimensions

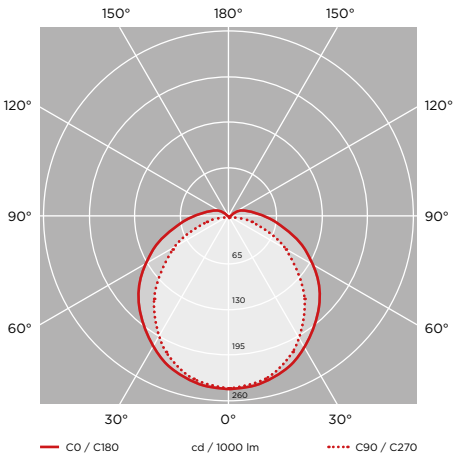


Photometric curves:

771-Orient LED 2x1200mm 59W
Philips Fortimo LED Strip HV5



771-Orient LED 2x1500mm 73W
Philips Fortimo LED Strip HV5



Luminaire customisation and the options of advanced controls are presented on page 7

SERIES 771-EXTREME -30°C LED

Industrial dust and waterproof luminaires with LED modules for ambient temperature down to Ta -30 °C

With a new, opalised diffuser with unique light transmissivity! Specially developed for LED applications

YOUR MAIN BENEFITS:

The shape of 771-Favourite adapted for **extremely low (-30°C)** ambient temperatures.

FIELD OF APPLICATION:

Thanks to the construction principles of gasket, closing system and diffuser our LED fixtures ensure a high grade of protection (IP65, IP66) against dust, contamination and water permeation even at extremely low ambient temperature. In accordance with their IP grade they can be widely used to illuminate spaces with dusty, humid environment down to Ta -30 °C.

TECHNICAL DESCRIPTION AND BENEFITS:

- **Diffuser:** Our LED luminaires with opal diffuser offer you:
  - very good light efficiency through high light permeability, (up to 90% light transmissivity)
  - the usual, well-known features of the diffuser such as chemical and heat resistance, mechanical features, UV stabilization etc.

  Available in PC - injection moulded **Polycarbonate**.
  Main advantages: high mechanical strength and high heat and shock resistance

- **Housing:** It is made of flame retardant glass fibre reinforced polyester (on request suitable for 850°C glow wire test too), in light grey (RAL7035) colour. Glass fibre reinforced polyester has very good temperature resistance, mechanical stability, furthermore it is a good electrical insulator, it resists the impacts of several chemicals and the impacts of weather conditions. Its stability of size and shape at changing temperatures is excellent.

- In order to ensure maximum temperature, chemical and weather resistance even under tough conditions, the **gasket** between the diffuser and housing is made of **silicon-based** foam with enhanced durability.

- **Fixing of the diffuser to the body:** with highly resistant stainless steel clips (standard or tamper-proof version).

- **Gear tray (reflector):** White powder coated steel sheet according to **Zhaga** standards or customised.

- **Electrical components:** in accordance with the requested specification suitable for LED technology, details see under technical data.

Main technical options

In order to ensure maximum heat, chemical and weather resistance even under tough conditions, the gasket between the diffuser and housing is made of silicon-based foam with enhanced durability.

Quick installation with stainless steel suspension brackets.

Comes with venting cable gland in order to prevent the build-up of moisture inside the luminaire thus avoiding its damage.

The opal diffusers are made of UV stabilized **opalised** material, specially developed for LED applications. This ensures among others a well-balanced light distribution and the elimination **of glare**.

Technical data (extract)

Type	Power (W)	Warranty (years)	Luminare total luminous flux - emitted (lm)	Lum. efficacy (lm/W)	Correlated colour temp (Kelvin)	CRI	Lifetime L70B50 (Ta=35°C)	Lifetime L80B10 (Ta=35°C)	A (mm)	C (mm)	Weight (kg)
Philips Fortimo LED PC HV5											
771 2x1200mm*	56	5 years	7700	137	4000	>80	>70.000 h	>40.000 h	1277	476	2,65
771 2x1500mm*	73	5 years	9600	130	4000	>80	>70.000 h	>40.000 h	1577	1000	3

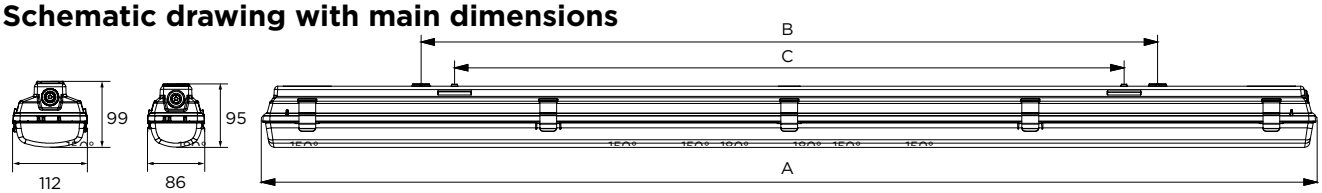
* The LED strips are placed in one line in a twin (wider) housing.

Other colour temperatures available on request

Further options:

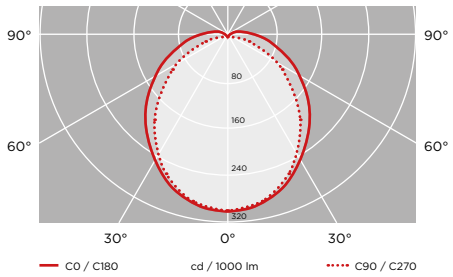
On request:

Schematic drawing with main dimensions

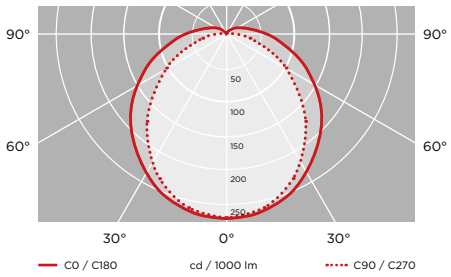


Photometric curves:

771-Extreme -30°C LED 2x1200mm 56W
Philips Fortimo LED PC HV5



771-Extreme -30°C LED 2x1500mm 73W
Philips Fortimo LED PC HV5



Luminaire customisation and the options of advanced controls are presented on page 7

771-VENTILA LED

Industrial dust and waterproof luminaires with LED modules

771-Ventila LED is available in the following sizes: 1x600mm, 1x1200mm, 1x1500mm, 2x600mm, 2x1200mm, 2x1500mm

YOUR MAIN BENEFITS:

A professional solution especially **for outdoor applications**. 771-Ventila LED withstands the impact of adverse weather conditions (sunlight, rain, wind etc.). Ta = -20 to +35°C
Full range available in IP65 or IP66.

FIELD OF APPLICATION:

Due to the construction principles of gasket, closing system and diffuser our fixtures ensure a high grade of protection (IP65, IP66) against dust, contamination and water permeation. In accordance with their IP grade they can be used widely to illuminate areas with dusty and humid environment.

Thanks to its **enhanced weather resistance**, 771-Ventila LED is especially suitable for applications, where **error-free functioning in outdoor conditions** is desired.

TECHNICAL DESCRIPTION AND BENEFITS:

- **Housing:** It is made of flame retardant glass fibre reinforced polyester (on request suitable for 850°C glow wire test too), in light grey (RAL7035) colour. This material has very good temperature resistance, mechanical stability, furthermore it is a good electrical insulator, it resists the impacts of several chemicals and the impacts of weather conditions. Its stability of size and shape at changing temperatures is excellent.
- The **diffuser** is available in injection moulded **opal acrylic** (PMMA) with extremely high light permeability and well-balanced light dispersing.
  Main advantages: **weather resistance** and extremely high light efficiency.
- The diffusers are designed with respect to their optical characteristics and are **UV resistant**.
- In order to ensure **maximum heat**, chemical and weather **resistance** even under tough conditions, the **gasket** between the diffuser and housing is made of **silicon-based foam** with enhanced durability.
- **Fixing of the diffuser to the body:** with highly resistant stainless steel clips (standard or tamper-proof version).
- **Gear tray** (reflector): White powder coated steel sheet according to **Zhaga** standards or customised.
- **Electrical components:** in accordance with the requested specification suitable for LED technology, details see under technical data.

Main technical options

Our opal diffuser has an **outstanding light transmissivity of more than 93%**. With this great light permeability, it is an **excellent choice for luminaires equipped with LED modules**.

The opal diffusers are made of UV stabilized **opalised** material, specially developed for LED applications. This ensures among others a well-balanced light distribution and the **elimination of glare**.

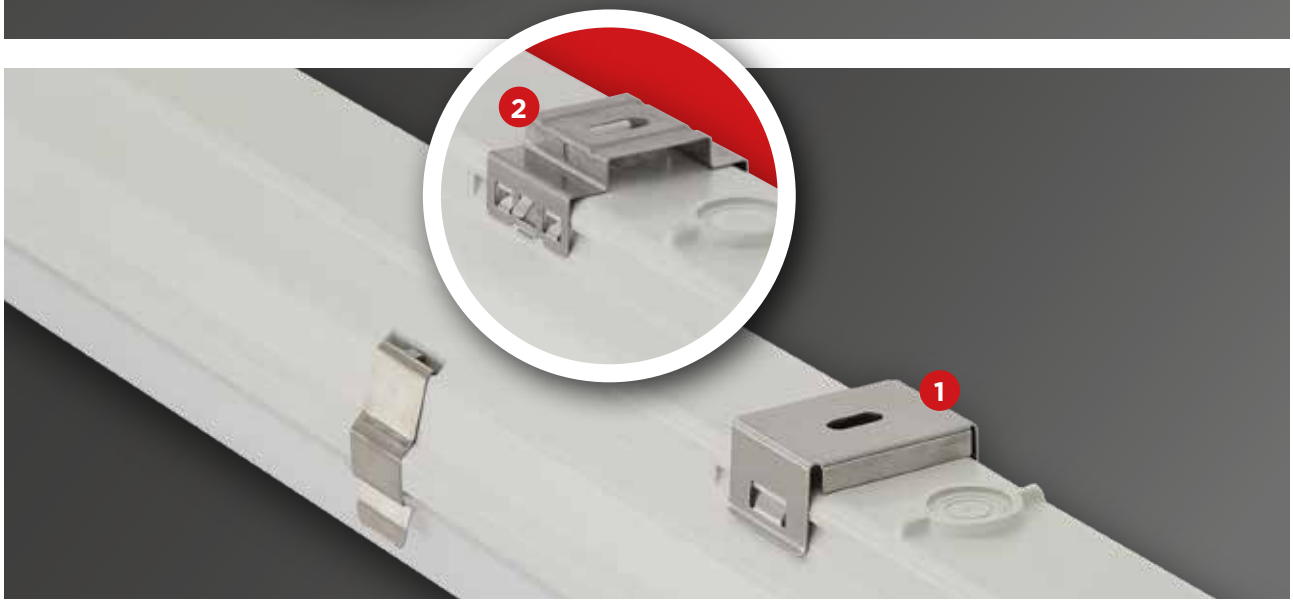
Fixing of the diffuser to the body: With highly resistant stainless steel clips. Optionally tamper-proof clips available on request.

The gear tray is made of white powder coated steel sheet according to **Zhaga** standards. On request customisation possible.

Depending on customer requirements we can reach different levels of luminous flux (lumen) and high luminous efficacy (lm/Watt) of our LED luminaires. Details see attached overview.

In order to ensure **maximum** heat, chemical and **weather resistance** even under tough conditions, the **gasket** between the diffuser and housing is made of **silicon-based** foam with enhanced durability.

Comes with **venting cable gland** in order to prevent the build-up of moisture inside the luminaire thus avoiding its damage.



Ways of installing:

1. In order to withstand the outdoor weather conditions (wind, storm), we recommend to use **strengthened** stainless steel suspension brackets. They are easy to install onto the **wall and ceiling**.
2. **Usual** suspension brackets, suitable for installation onto the **ceiling**, are available on request.

Technical data (extract)

Type	Power (W)	Warranty (years)	Luminare total luminous flux - emitted (lm)	Lum. efficacy (lm/W)	Correlated colour temp (Kelvin)	CRI	Lifetime L70B50 (Ta=35°C)	Lifetime L80B10 (Ta=35°C)	A (mm)	C (mm)	Weight (kg)
Osram Basic Linear G3											
771 1x1200mm	23	5 years	2900	124	4000	>80	>50.000 h	>50.000 h	1277	800	1,8
771 1x1500mm	28	5 years	3700	132	4000	>80	>50.000 h	>50.000 h	1577	1100	2,2
771 1x1200mm	28	5 years	3600	130	4000	>80	>50.000 h	>45.000 h	1277	800	2
771 1x1500mm	35	5 years	4700	136	4000	>80	>50.000 h	>50.000 h	1577	1100	2,2
771 2x1200mm*	39	5 years	5300	135	4000	>80	>50.000 h	>43.000 h	1277	800	2,5
771 2x1500mm*	47	5 years	6800	144	4000	>80	>50.000 h	>43.000 h	1577	1100	2,7
Philips Fortimo LED Strip LV4											
771 1x600mm	16	5 years	1900	123	4000	>80	>70.000 h	>50.000 h	699	360	1,7
771 1x1200mm	31	5 years	4000	128	4000	>80	>70.000 h	>50.000 h	1277	700	2,2
771 1x1500mm	39	5 years	5000	128	4000	>80	>70.000 h	>50.000 h	1577	1000	2,5
771 2x1500mm*	52	5 years	6400	123	4000	>80	>70.000 h	>50.000 h	1577	1000	2,7
Philips Fortimo LED Strip HV5											
771 2x1200mm*	59	5 years	8100	138	4000	>80	>50.000 h	>40.000 h	1277	700	2,65
771 2x1500mm*	73	5 years	10200	140	4000	>80	>50.000 h	>40.000 h	1577	1000	3

* The LED strips are placed in one line in a twin (wider) housing.

Other colour temperatures available on request

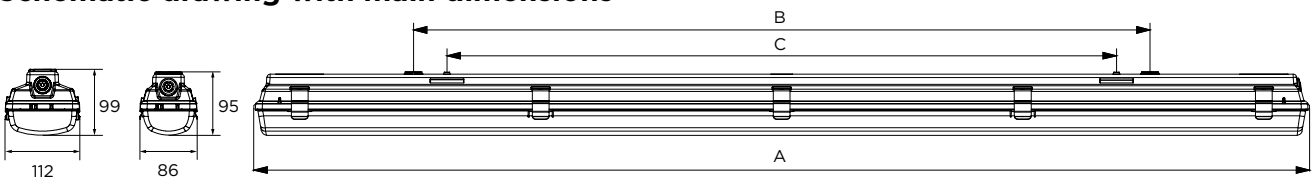
Further options:

DALI | 110V | Kg | LED

On request:

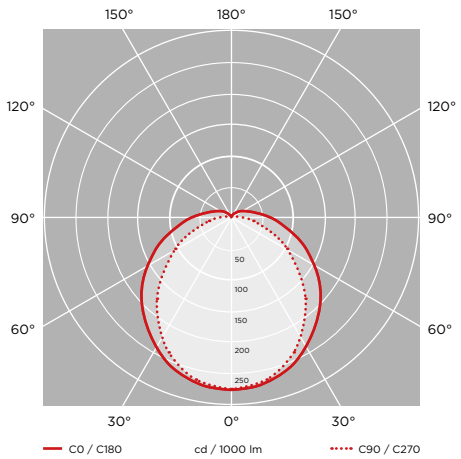
PoE | K

Schematic drawing with main dimensions

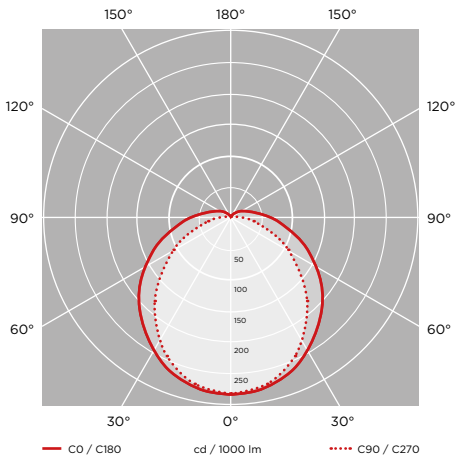


Photometric curves:

771-Ventila LED 1x1200mm 28W
Osram Basic Linear G3



771-Ventila LED 1x1200mm 31W
Philips Fortimo LED Strip LV4



Luminaire customisation and the options of advanced controls are presented on page 7

746-CLEVER LED

Industrial dust and waterproof luminaires with LED modules

Now with a new, opalised diffuser with unique light transmissivity!
Specially developed for LED applications

FIELD OF APPLICATION:

Thanks to the construction principles of gasket, closing system and diffuser our LED fixtures ensure a high grade of protection (IP65 or IP66) against dust, contamination and water permeation. In accordance with their IP grade they can be widely used to illuminate spaces with dusty and humid environment.

When using outdoors, the fittings should be protected against direct sunlight and adverse weather conditions. Under 0°C the application of venting cable gland is necessary, as well as silicone gasket is strongly recommended.

TECHNICAL DESCRIPTION AND BENEFITS:

- **Diffuser:** Our LED luminaires with **opal** diffuser offer you:
  - **extremely high light efficiency** through high **light permeability, unique on the market,** (up to 93% light transmissivity)
  - an **excellent light uniformity** through **well-balanced light dispersing** (no shadows)
  - **elimination of the dazzling effect** (no glare)
  - **aesthetical appearance (no dots** of the single LEDs)
  - **keeping the usual, well-known features of the diffuser** such as chemical and heat resistance, mechanical features, **UV stabilization** etc.

  Available in PC - injection moulded **Polycarbonate** (high mechanical strength and high heat and shock resistance) **or in Acrylic** - injection moulded **PMMA** (unique non-aging properties, high chemical resistance).
- **Housing:** It is made of flame retardant glass fibre reinforced polyester, in light grey (RAL7035) colour. Glass fibre reinforced polyester has very good temperature resistance, mechanical stability, furthermore it is a good electrical insulator, it resists the impacts of several chemicals and the impacts of weather conditions. Its stability of size and shape at changing temperatures is excellent.
- In order to ensure **maximum heat**, chemical and weather **resistance** even under tough conditions, the **gasket** between the diffuser and housing is made of **silicon-based, endless foam** with enhanced resistance. Non-aging **PU (polyurethane)** foam is optionally available.
- **Fixing the diffuser to the body:** with highly resistant clips made of **stainless steel** (standard or tamper-proof).
- **Gear tray** (reflector): White powder coated steel sheet according to **Zhaga** standards or customised.
- **Electrical components:** The adequate power supply is ensured through electronic driver, that is built into the luminaire.

Main technical options

Our opal diffuser has an **outstanding light transmissivity** of up to **93%**. With this great light permeability, it is an **excellent choice for luminaires equipped with LED modules**.

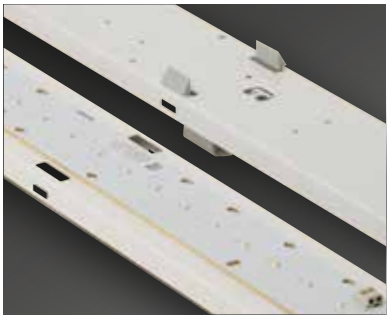
The opal diffusers are made of UV stabilized **opalised** material, specially developed for LED applications. This ensures among others a well-balanced light distribution and the **elimination of glare**.

Usual stainless steel clips for **SELV** (Safety Extra Low Voltage) solutions.

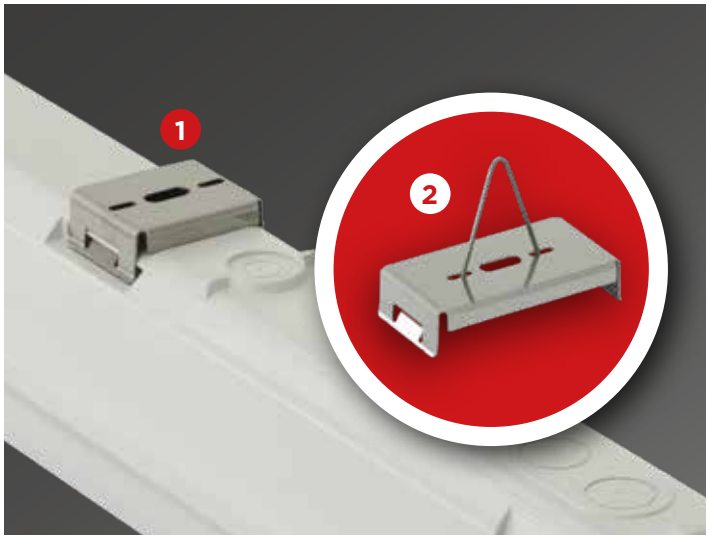
The special tamper-proof stainless steel clips for **non-SELV (HV)** solutions can not be released with bare hands.

With 746-Clever LED - depending on customer requirements - we can reach different levels of luminous flux (lumen) as well as luminous efficacy (lm/Watt). Details see attached overview.

In order to optimise the thermal management of the luminaire we avoid the direct contact of the gear tray and driver, thus increasing the lifetime of the modules and driver.



The gear tray is made of white powder coated steel sheet according to **Zhaga** standards. On request customisation possible.



Ways of installing:
1. With stainless steel suspension brackets (easy-to-install) onto the ceiling.
2. Suspension on chains with stainless steel suspension brackets mounted with hooks.

LED Version with motion sensor

Technical data (extract)

Type	Power (W)	Warranty (Years)	Luminare total luminous flux - emitted (lm)	Lum. efficacy (lm/w)	Correlated colour temp (Kelvin)	CRI	Lifetime L70B50 (Ta=35°C)	Lifetime L70B50 (Ta=35°C)	A (mm)	B (mm)	Weight (kg)
Osram Basic Linear G3											
746 1x1200mm	23	5 years	2900	124	4000	>80	>50.000 h	>50.000 h	1277	700	1,8
746 1x1500mm	28	5 years	3700	132	4000	>80	>50.000 h	>50.000 h	1577	1000	2,2
746 1x1200mm	28	5 years	3600	130	4000	>80	>50.000 h	>45.000 h	1277	700	2
746 1x1500mm	35	5 years	4700	136	4000	>80	>50.000 h	>50.000 h	1577	1000	2,2
746 2x1200mm*	39	5 years	5300	135	4000	>80	>50.000 h	>43.000 h	1277	700	2,5
746 2x1500mm*	47	5 years	6800	144	4000	>80	>50.000 h	>43.000 h	1577	1000	2,7
Philips Fortimo LED Strip LV4											
746 1x600mm	16	5 years	1900	123	4000	>80	>70.000 h	>50.000 h	669	360	1,7
746 1x1200mm	31	5 years	4000	128	4000	>80	>70.000 h	>50.000 h	1277	700	2,2
746 1x1500mm	39	5 years	5000	128	4000	>80	>70.000 h	>50.000 h	1577	1000	2,5
746 2x1500mm*	52	5 years	6400	123	4000	>80	>70.000 h	>50.000 h	1577	1000	2,7
Philips Fortimo LED Strip HV5											
746 2x1200mm*	59	5 years	8100	138	4000	>80	>50.000 h	>40.000 h	1277	700	2,65
746 2x1500mm*	73	5 years	10200	140	4000	>80	>50.000 h	>40.000 h	1577	1000	3

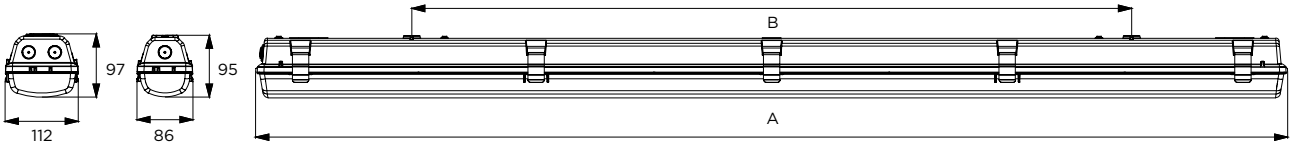
* The LED strips are placed in one line in a twin (wider) housing.

Other colour temperatures available on request

Further options:

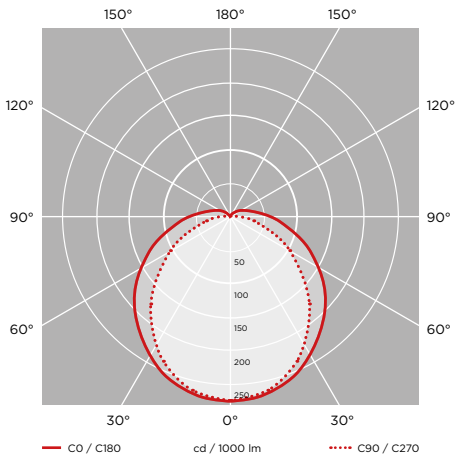
On request:

Schematic drawing with main dimensions

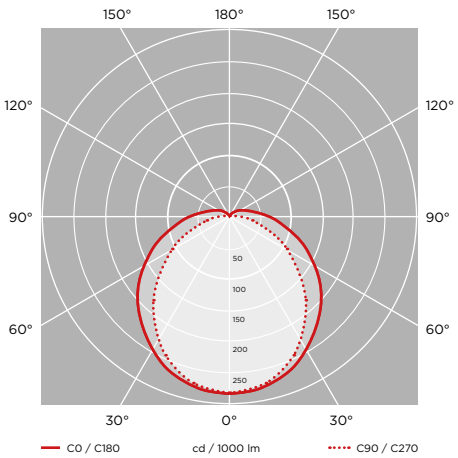


Photometric curves:

746-Clever LED 1x1200mm 28W
Osram Basic Linear G3



746-Clever LED 1x1200mm 31W
Philips Fortimo LED Strip LV4



Luminaire customisation and the options of advanced controls are presented on page 7

775-PC LED

Industrial dust and waterproof luminaires

Equipped with **LED modules**. 775-PC LED is available in the following sizes: 2x600mm, 1x1200mm, 1x1500mm, 2x1200mm, 2x1500mm

YOUR MAIN BENEFITS:

A professional luminaire for wide usage, that fulfils the strongest quality requirements.
Especially for applications, where **high impact resistance (IK rating)** is required.
Available in IP65 (or optionally also IP66 or IP67).

FIELD OF APPLICATION:

Due to the construction principles of gasket, closing system and diffuser our fixtures ensure a high grade of protection (IP65 or IP66) against dust, contamination and water permeation. (Optionally available in IP67). In accordance with their IP-grade they can be used widely to illuminate spaces with dusty and humid environment. Thanks to its **enhanced impact resistance**, 775-PC LED is especially suitable for applications, where **a high IK impact rating** is required.

When using outdoors, the fittings should be protected against direct sunlight and adverse weather conditions. Under 0°C the application of venting cable gland is necessary, as well as silicone gasket is strongly recommended.

TECHNICAL DESCRIPTION AND BENEFITS:

- **Housing:** It is made of flame retardant **injection moulded polycarbonate (PC)** (suitable for 850°C glow wire test), in light grey (RAL7035) colour. This material has very high mechanical strength and allows us to reach an excellent shock resistance.

- The **diffuser** is available in the following versions:
  Injection moulded polycarbonate **(PC), opal**, with a shock resistance of IK10, with extremely high light permeability and well-balanced light dispersing.
  As option injection moulded acrylic (PMMA) diffuser in opal version is available. (not IK10)

  The diffusers are designed with respect to their optical characteristics and are **UV resistant**.

- In order to ensure **maximum heat**, chemical and weather **resistance** even under tough conditions, the **gasket** between the diffuser and housing is made of **silicon-based, endless foam** with enhanced resistance. Non-aging **PU (polyurethane)** foam is optionally available.

- **Fixing of the diffuser to the body:** with highly resistant clips made of **stainless steel** (standard or tamper-proof).

- **Gear tray** (reflector): White powder coated steel sheet according to **Zhaga** standards or customised.

- **Electrical components:** in accordance with the requested specification suitable for LED technology, details see under technical data.

IP65

LED

IK10

Option:

IP66
IP67

3F

EMERGENCY

Main technical options

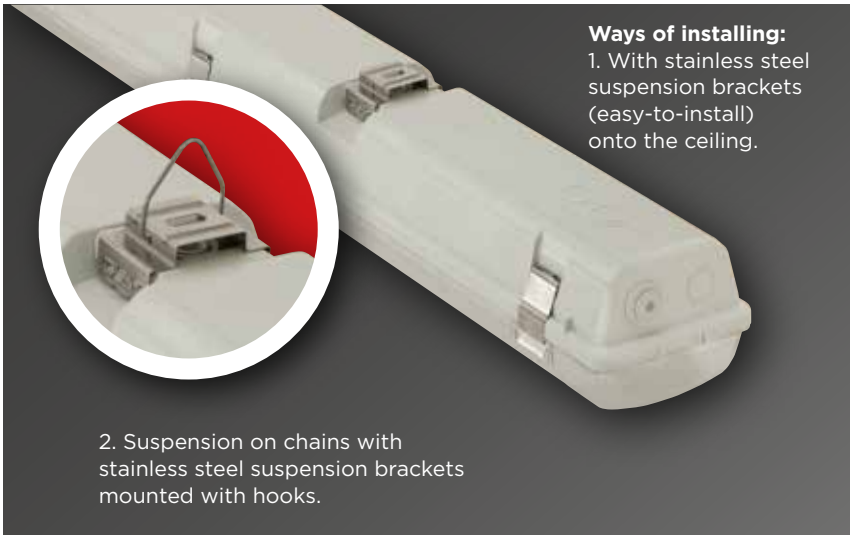
Our new opal diffuser has an **outstanding light transmissivity of more than 90%**. With this great light permeability, it is an **excellent choice for luminaires equipped with LED modules**.

The opal diffusers are made of UV stabilized **opalised** material, specially developed for LED applications. This ensures among others a well-balanced light distribution and the **elimination of glare**. Moreover the diffuser made of injection moulded polycarbonate (PC) excels at highest **impact resistance of IK10**.

The special tamper-proof stainless steel clips for **non-SELV (HV)** solutions can not be released with bare hands.

Usual stainless steel clips for **SELV** (Safety Extra Low Voltage) solutions.

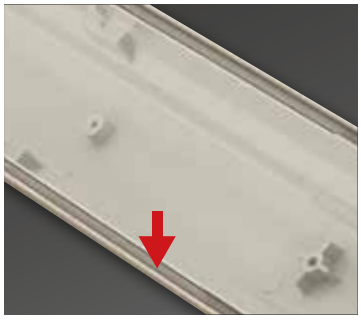
The gear tray is made of white powder coated steel sheet according to **Zhaga** standards. On request customisation possible.



Ways of installing:
1. With stainless steel suspension brackets (easy-to-install) onto the ceiling.

2. Suspension on chains with stainless steel suspension brackets mounted with hooks.

In order to ensure **maximum heat**, chemical and weather **resistance** even under tough conditions, the **gasket** between the diffuser and housing is made of **silicon-based** foam with enhanced resistance.

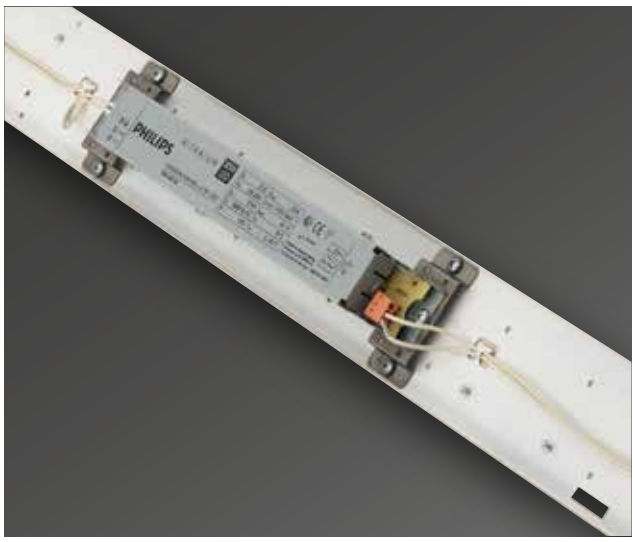


775-PC LED
with motion sensor

CLO

Light sources suffer from degradation in light output over time. **The CLO feature enables LED solutions to deliver constant lumen output through the life of the light engine.**

Further accessories:
1. cable gland
Different connectors enabling the electrical connection **without disassembling** the luminaire, thus **avoiding** a potential damage of the LED´s inside the luminaire through **electrostatic discharge** (ESD).
2. rapid connector
3. circular connector system



Depending on customer requirements we can reach different levels of luminous flux (lumen) as well as luminous efficacy (lm/Watt) of our LED luminaires.
Details see attached overview.

In order to optimise the thermal management of the luminaire we avoid the direct contact of the gear tray and driver, thus increasing the lifetime of the modules and driver.

Technical data (extract)

Type	Power (W)	Warranty (Years)	Luminare total luminous flux - emitted (lm)	Lum. efficacy (lm/w)	Colour temp. (K)	CRI	Lifetime L70B50 (Ta=35°C)	Lifetime L80B10 (Ta=35°C)	A (mm)	B (mm)	Weight (kg)
Osram Basic Linear G3											
775 1x1200 mm	23	5 years	2800	119	4000	>80	>50.000 h	>50.000 h	1277	700	1,8
775 1x1500mm	28	5 years	3500	126	4000	>80	>50.000 h	>50.000 h	1577	1000	2,2
775 1x1200mm	28	5 years	3500	124	4000	>80	>50.000 h	>45.000 h	1277	700	2
775 1x1500mm	35	5 years	4500	130	4000	>80	>50.000 h	>50.000 h	1577	1000	2,2
775 2x1200mm*	39	5 years	5000	127	4000	>80	>50.000 h	>43.000 h	1277	700	2,5
775 2x1500mm*	47	5 years	6400	136	4000	>80	>50.000 h	>43.000 h	1577	1000	2,7
Philips Fortimo LED Strip LV4											
775 1x600mm	16	5 years	1800	116	4000	>80	>70.000 h	>50.000 h	669	360	1,7
775 1x1200mm	31	5 years	3800	120	4000	>80	>70.000 h	>50.000 h	1277	700	2,2
775 1x1500mm	39	5 years	4900	126	4000	>80	>70.000 h	>50.000 h	1577	1000	2,5
775 2x1500mm*	52	5 years	6200	121	4000	>80	>70.000 h	>50.000 h	1577	1000	2,7
Philips Fortimo LED Strip HV5											
775 2x1200mm	59	5 years	7700	130	4000	>80	>50.000 h	>40.000 h	1277	700	2,65
775 2x1500mm	73	5 years	9600	131	4000	>80	>50.000 h	>40.000 h	1577	1000	3
Lumnium3 HV											
775 2x600mm	24	3 years	2900	120	4000	>80	50.000 h	>34.000 h	669	238±23	1,2
775 1x1200mm	25	3 years	3000	122	4000	>80	50.000 h	>34.000 h	1277	700±78	2
775 1x1500mm	30	3 years	3800	125	4000	>80	50.000 h	>34.000 h	1577	1000±78	2,2
775 1x1200mm	36	3 years	4700	130	4000	>80	50.000 h	>34.000 h	1277	700±78	2
775 1x1500mm	50	3 years	6300	125	4000	>80	50.000 h	>34.000 h	1577	1000±78	2,2

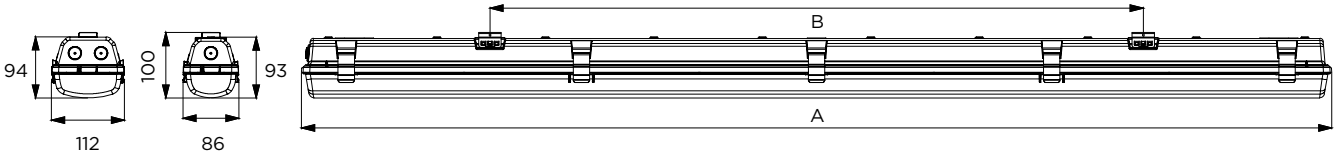
* The LED strips are placed in one line in a twin (wider) housing.

Other colour temperatures available on request

Further options:

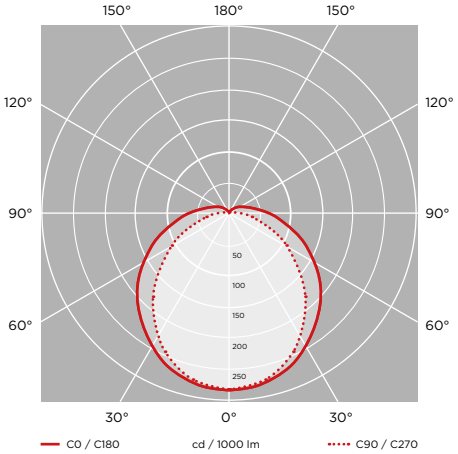
On request:

Schematic drawing with main dimensions

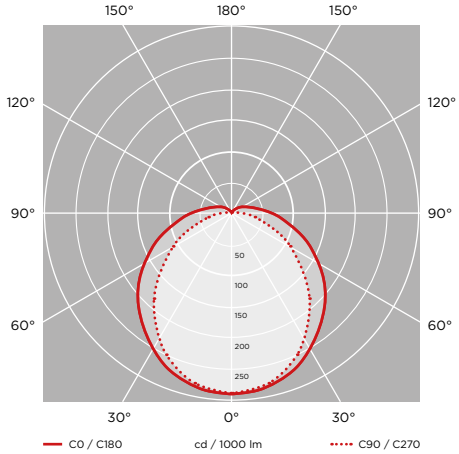


Photometric curves:

775-PC LED 2x1200mm 39W
Osram Basic Linear G3



775-PC LED 2x1200mm 59W
Philips Fortimo LED Strip HV5



Luminaire customisation and the options of advanced controls are presented on page 7

LED

CE

746 PRO LT

IP65

F

D

Option:

IP66

PC 850°C

Ø 26 G 13

Ø 16 G 5

3F

SERIES 746 PRO LT

Industrial dust and waterproof luminaires

With 1 and 2 LED tubes.

YOUR MAIN BENEFITS:

This product family has been **designed for LED tubes**. Thanks to its special construction this model offers you an additional price advantage: It can be used without any gear tray.
Full range available in IP65 and IP66

FIELD OF APPLICATION:

Thanks to the construction principals of gasket, closing system and diffuser our fixtures ensure a high grade of protection (IP65, IP66) against dust, contamination and water permeation. In accordance with their IP grade they can be widely used to illuminate spaces with dusty and humid environment.

When using outdoors, the fittings should be protected against direct sunlight and adverse weather conditions. Under 0°C the application of venting cable gland is necessary, as well as silicone gasket is strongly recommended.

TECHNICAL DESCRIPTION AND BENEFITS:

- **Housing:** It is made of flame retardant glass fibre reinforced polyester (on request suitable for 850°C glow wire test too), in light grey (RAL7035) colour. This material has very good temperature resistance, mechanical stability, furthermore it is a good electrical insulator, it resists the impacts of several chemicals and the impacts of weather conditions. Its stability of size and shape at changing temperatures is excellent.

- The **diffuser** is available in the following versions:
  Injection moulded acrylic (PMMA):
  transparent, with longitudinal prisms, designed with respect to their optical characteristics.
  Main advantages of PMMA: Very good transparency (better than the transparency of glass), unique nonaging properties, chemical and **UV-resistance**.
  Injection moulded polycarbonate (PC):
  transparent, with longitudinal internal prisms, designed with respect to their optical characteristics.
  Main advantages of PC: High mechanical strength and high heat and shock resistance.

- **The gasket** between the diffuser and housing is made of non-aging PU (polyurethane) foam. An option with enhanced gasket resistance is available.

- **Fixing the diffuser to the body:** with stainless steel clips

- **Gear tray** (reflector): **No gear tray needed.** The electrical components are mounted directly into the housing. As option white powder coated steel sheet gear tray is available.

- **Way of installing:** direct (with screws) or with stainless steel mounting brackets (easy-to-install) onto the wall or ceiling or suspended.

- **Electrical components:** The adequate power supply is ensured through electronic driver, that is built in into the LED tube.

Main technical options

Optimised economical packaging with plastic net. On request traditional carton box or retail-box packaging available.

746 ProLT has been designed for LED tubes. Thanks to its special construction this model offers you an additional price advantage: The application of a gear tray can be omitted without any negative impact on the efficiency and luminous flux, as the surface needed for light reflection is ensured by the LED tube itself.

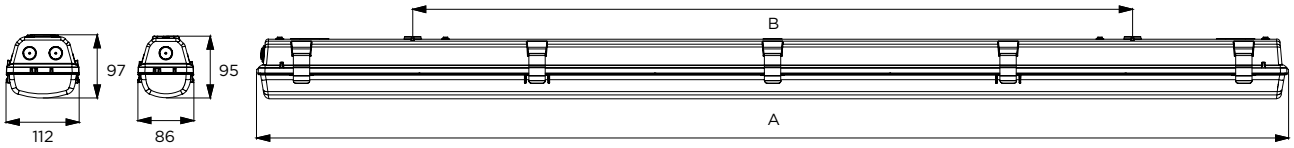
The prismatic diffusers are designed with respect to their optical characteristics and are UV resistant.

Fixing of the diffuser to the body: with highly resistant stainless steel clips.

Technical data (extract)

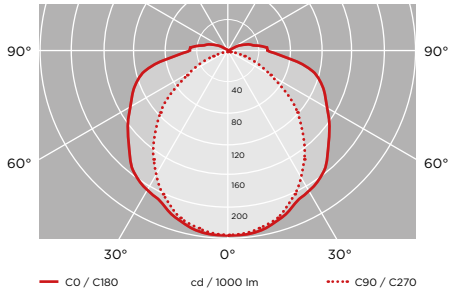
Type	Lampholder	Power (W)	Luminous flux (lm)	Dimensions A (mm)	B (mm)	Weight (kg)
746 Pro LT equipped with Retrofit LED tube (Philips Core Pro LED tube)						
746 Pro LT 1x600mm	T8/G13	1x8	680*	699	435	1,19
746 Pro LT 1x1200mm	T8/G13	1x14,5	1360*	1277	800	2,47
746 Pro LT 1x1500mm	T8/G13	1x20	1870*	1577	1100	2,57
746 Pro LT 2x600mm	T8/G13	2x8	1360*	699	435	2,31
746 Pro LT 2x1200mm	T8/G13	2x14,5	2720*	1277	800	3,35
746 Pro LT 2x1500mm	T8/G13	2x20	3740*	1577	1100	3,37

Schematic drawing with main dimensions:

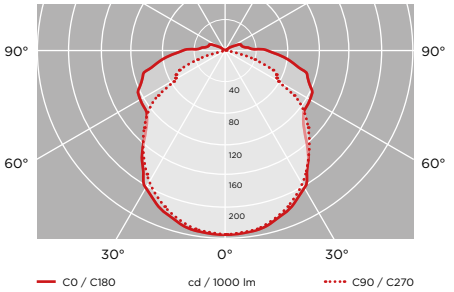


Photometric curves:

746 PRO LT 1x1200mm 1x14,5W (LED tube)



746 PRO LT 2x1500mm 2x20W (LED tube)



RETROFIT LED

Industrial dust and waterproof luminaires with LED tubes

With 1 and 2 LED tubes (Retrofit)
For T8 (G13)

CE

Most of our luminaires can be equipped with extremely energy efficient LED tubes (so called Retrofit). The LED tube versions are available at following series: 771-Favourite, 775-PC Line, 746-Clever, 770-Classic.

IP65

F

D

Option:

PC 850°C

FIELD OF APPLICATION:

Thanks to the construction principles of gasket, closing system and diffuser (cover) our LED tube fixtures ensure a high grade of protection (IP65, IP66) against dust, contamination and water permeation. In accordance with their IP grade they can be widely used to illuminate spaces with dusty and humid environment.

When using outdoors, the fittings should be protected against direct sunlight and adverse weather conditions. Under 0°C the application of venting cable gland is necessary, as well as silicone gasket is strongly recommended.

TECHNICAL DESCRIPTION AND BENEFITS:

See the relevant page of the chosen basic model

- **Electrical components:** At luminaires equipped with retrofit LED tubes, an appropriate power supply is managed by an electronic driver built into the LED tube.

Main technical options

771-Favourite R, equipped with LED tubes. The distribution surface of the LED tube is made of opalised material specially developed for LED applications. This ensures a well-balanced light distribution and the elimination of glare.

770-Classic Retrofit, version with two LED tubes

746-Clever Retrofit

The luminous efficacy of LED tubes (lm/Watt) is comparable with the efficacy of traditional (fluorescent) tubes

Technical data (extract)

Type	Lampholder	Power (W)	Luminous flux (lm)	A (mm)	B (mm)	C (mm)	Weight (kg)
771-Favouirte equipped with Retrofit LED tube (Philips Core Pro LED tube)							
771 RLED 1x600mm	T8/G13	1x8	720*	699	460	360	1,19
771 RLED 1x1200mm	T8/G13	1x14,5	1440*	1 277	800	700	2,47
771 RLED 1x1500mm	T8/G13	1x20	1980*	1 577	1 100	1 000	2,57
771 RLED 2x600mm	T8/G13	2x8	1440*	699	460	360	2,31
771 RLED 2x1200mm	T8/G13	2x14,5	2880*	1 277	800	700	3,37
771 RLED 2x1500mm	T8/G13	2x20	3960*	1 577	1 100	1 000	3,37

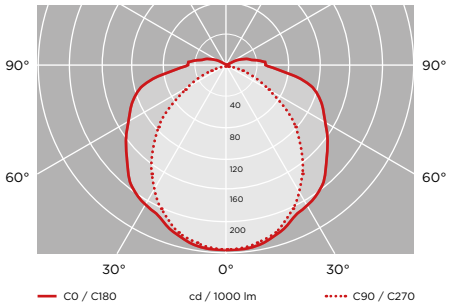
Ø 26
G 13

Schematic drawing with main dimensions:

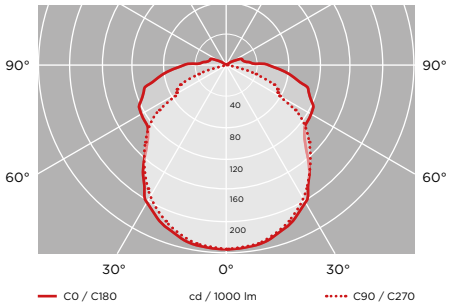
see on page with the corresponding basic type

Photometric curves:

771-Favourite RLED 1x1200mm 14,5W (LED tube)



771-Favourite RLED 2x1500mm 20W (LED tube)



The applying certification signs can vary at different types/ versions.


T8/T5

SERIES 771-FAVOURITE

Industrial dust and waterproof luminaires

With 1 and 2 fluorescent tubes for T5 or T8 lamps

YOUR MAIN BENEFITS:

A professional luminaire for wide usage, that fulfills the strongest quality requirements. Best price performance ratio. Best sold model.
Full range available in T8, T5, IP65, IP66 or IP67

FIELD OF APPLICATION:

Due to the construction principals of gasket, closing system and diffuser our fixtures ensure a high grade of protection (IP65, IP66 or IP67) against dust, contamination and water permeation. In accordance with their IP grade they can be used widely to illuminate spaces with dusty and humid environment.

When using outdoors, the fittings should be protected against direct sunlight and adverse weather conditions.

TECHNICAL DESCRIPTION AND BENEFITS:

- **Housing:** It is made of flame retardant glass fibre reinforced polyester (on request suitable for 850°C glow wire test too), in light grey (RAL7035) colour. This material has very good temperature resistance, mechanical stability, furthermore it is a good electrical insulator, it resists the impacts of several chemicals and the impacts of weather conditions. Its stability of size and shape at changing temperatures is excellent.

- **The diffuser is available in the following versions:**
  Injection moulded polycarbonate (PC)
  Main advantages: High mechanical strength and heat and shock resistance and excellent transparency.
  Injection moulded acrylic (PMMA)
  Main advantages: Very good transparency (better than the transparency of glass), unique non-aging properties and chemical resistance.
  Both diffusers are made with optically designed longitudinal, internal prisms and are **UV resistant**.

- **The gasket** between the diffuser and housing is made of non-aging PU (polyurethane) foam. As option gasket with enhanced resistance is available.

- **Fixing the diffuser to the body:** with stainless steel clips

- **Gear tray (reflector):** White powder coated steel sheet.
  As an option glossy aluminium reflector is possible.

- **Electrical components:** in accordance with the requested specification: LED-tube, low power factor, high power factor or electronic control gear.

IP65

Option:

IP66

IP67

PC 850°C

Main technical options

Option:
Through wiring

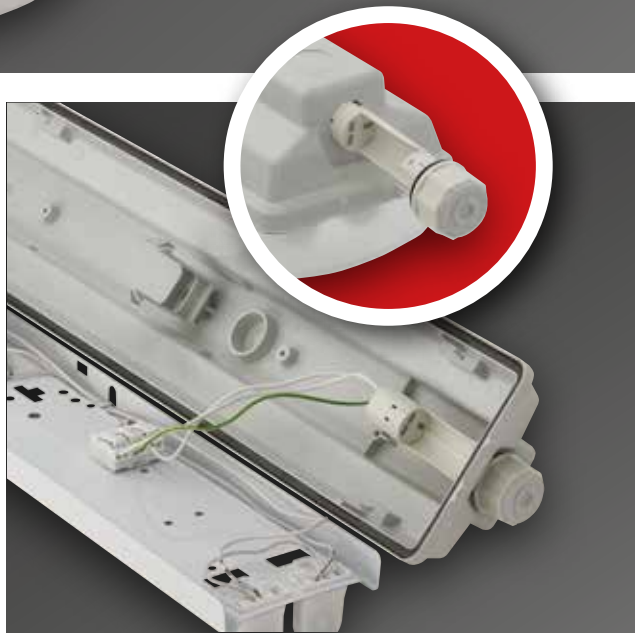
Ways of installing:

1. Direct (with screws) onto the wall or ceiling.
2. With stainless steel suspension brackets (easy-to-install) onto the ceiling.
3. Suspension on chains with stainless steel suspension brackets mounted with hooks.

Depending on installation options several possibilities for cable entry.

IP67 protected (PC diffuser, cable gland, stainless steel clips and suspension brackets).

The suspension of the diffuser is possible with special stainless steel clips. (On request)



Option: To accelerate on-site installation rapid connectors can be ordered, which makes possible the electrical connection without disassembling the luminaire, and ensuring the same IP grade (IP65).

771-Favourite equipped with a new opalised diffuser with unique light transmissivity specially developed for LED applications. More information see in LED part of the catalogue.

Diffuser: Injection moulded polycarbonate (PC) or Acrylic (PMMA). Both diffusers are made with optically designed longitudinal internal prisms and are UV resistant.

Fixing the diffuser to the body: With secure, stainless steel clips. Cable entry through grommets or through cable glands.

Gear tray (reflector): white powder coated steel sheet, which is fixed to the body by flexible gear tray retaining clips. Therefore it is easy to remove and suspend it during installation.

Universal gear tray for both, T8 as well as T5 version

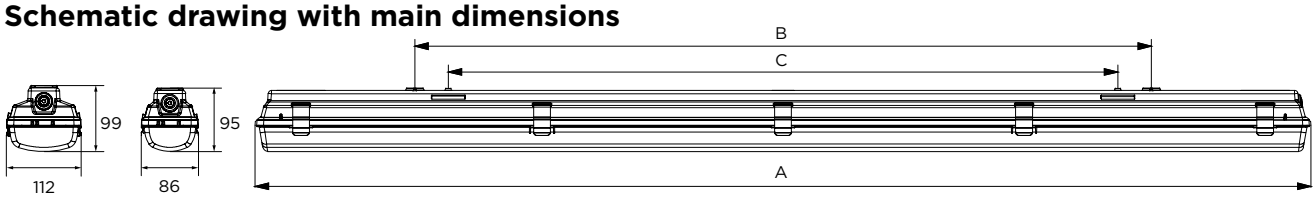
Further options:

- LED tubes
- emergency kit
- aluminium reflector
- dimmable ballast
- Class II protection
- IP66
- halogen-free wiring

Technical data (extract)

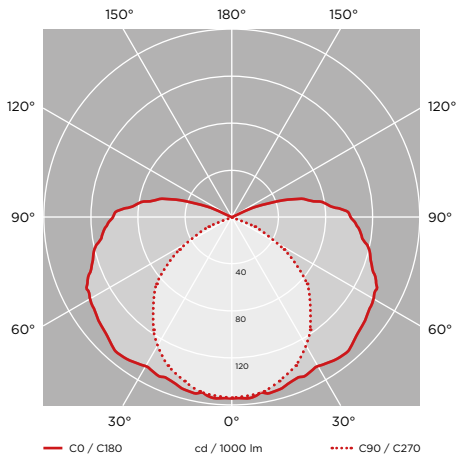
Type	Tube/Lampholder	Power (W)	Dimensions A (mm)	B (mm)	C (mm)	Weight (kg)
With electronic control gear for T8 fluorescent tubes						
771 118 EVG	T8/G13	1 x 18	669	460	360	1,67
771 136 EVG	T8/G13	1 x 36	1 277	800	700	2,12
771 158 EVG	T8/G13	1 x 58	1 577	1 100	1 000	2,38
771 218 EVG	T8/G13	2 x 18	669	460	360	2,24
771 236 EVG	T8/G13	2 x 36	1 277	800	700	2,66
771 258 EVG	T8/G13	2 x 58	1 577	1 100	1 000	2,96
With electronic control gear for T5 HE class fluorescent tubes						
771 114 EVG	T5/G5	1 x 14	669	460	360	1,71
771 128 EVG	T5/G5	1 x 28	1 277	800	700	2,16
771 135 EVG	T5/G5	1 x 35	1 577	1 100	1 000	2,39
771 214 EVG	T5/G5	2 x 14	669	460	360	2,25
771 228 EVG	T5/G5	2 x 28	1 277	800	700	2,52
771 235 EVG	T5/G5	2 x 35	1 577	1 100	1 000	2,77
With electronic control gear for T5 HO fluorescent tubes						
771 124 EVG	T5/G5	1 x 24	669	460	360	1,63
771 154 EVG	T5/G5	1 x 54	1 277	800	700	2,16
771 149 EVG	T5/G5	1 x 49	1 577	1 100	1 000	2,53
771 180 EVG	T5/G5	1 x 80	1 577	1 100	1 000	2,58
771 224 EVG	T5/G5	2 x 24	669	460	360	2,23
771 254 EVG	T5/G5	2 x 54	1 277	800	700	2,52
771 249 EVG	T5/G5	2 x 49	1 577	1 100	1 000	2,77
771 280 EVG	T5/G5	2 x 80	1 577	1 100	1 000	2,84

Schematic drawing with main dimensions

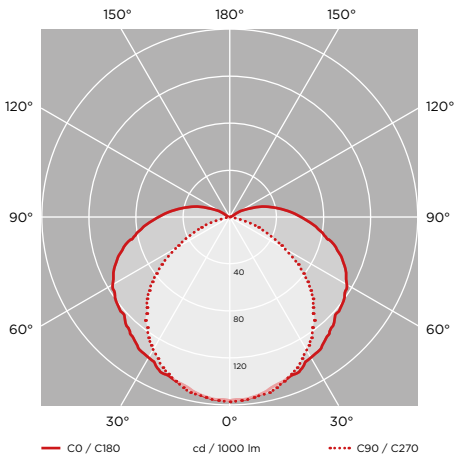


Photometric curves:

771-Favourite 1x58W



771-Favourite 2x58W



SERIES 771-ORIENT

Industrial dust and waterproof luminaires

With 1 and 2 fluorescent tubes for T8 or T5 lamps

YOUR MAIN BENEFITS:

A professional luminaire for wide usage, that fulfills the strongest quality requirements.
Especially for applications, where **high heat resistance** (up to Ta +50 °C) is required.
Available in IP65 or IP66

FIELD OF APPLICATION:

Field of application: Due to the construction principles of gasket, closing system and diffuser our fixtures ensure a high grade of protection (IP65, IP66) against dust, contamination and water permeation. In accordance with their IP rating they can be used widely to illuminate spaces with dusty and humid environment.
Thanks to its **enhanced heat resistance**, 771-Orient is especially suitable for applications, where **error-free functioning at higher ambient temperature** is desired.

When using outdoors, the fittings should be protected against direct sunlight and adverse weather conditions.

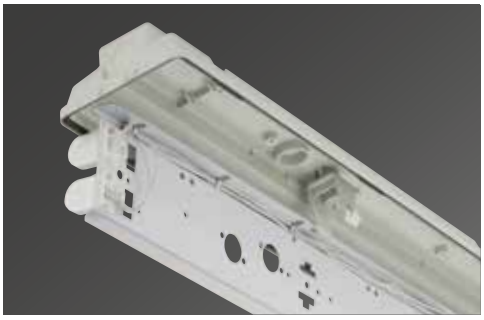
TECHNICAL DESCRIPTION AND BENEFITS:

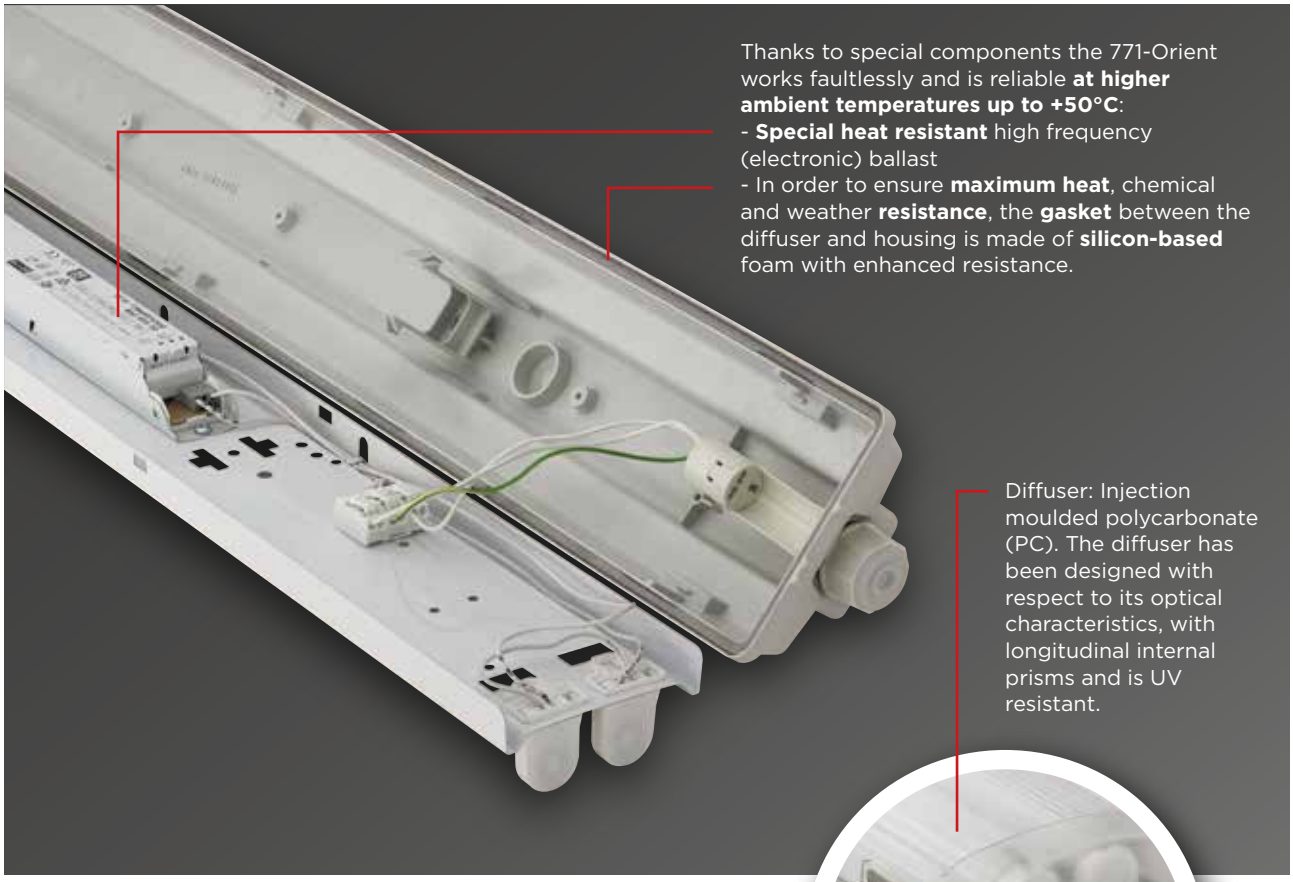
- **Housing:** It is made of flame retardant glass fibre reinforced polyester (on request suitable for 850°C glow wire test too), in light grey (RAL7035) colour. This material has very good temperature resistance, mechanical stability, furthermore it is a good electrical insulator, it resists the impacts of several chemicals and the impacts of weather conditions. Its stability of size and shape at changing temperatures is excellent.
- The **diffuser** is available in injection moulded polycarbonate (PC).
  Main advantages: High mechanical strength and high heat and shock resistance and excellent transparency.

  The diffusers are designed with respect to their optical characteristics and are UV resistant.
- In order to ensure **maximum heat**, chemical and weather **resistance** even under tough conditions, the **gasket** between the diffuser and housing is made of **silicon-based foam** with enhanced resistance.
  Non-aging PU (polyurethane) foam is optionally available.
- **Fixing the diffuser to the body:** with highly resistant stainless steel clips
- **Gear tray** (reflector): White powder coated steel sheet. As an option glossy aluminium reflector is possible.
- **Electrical components:** electronic control gear.

Main technical options

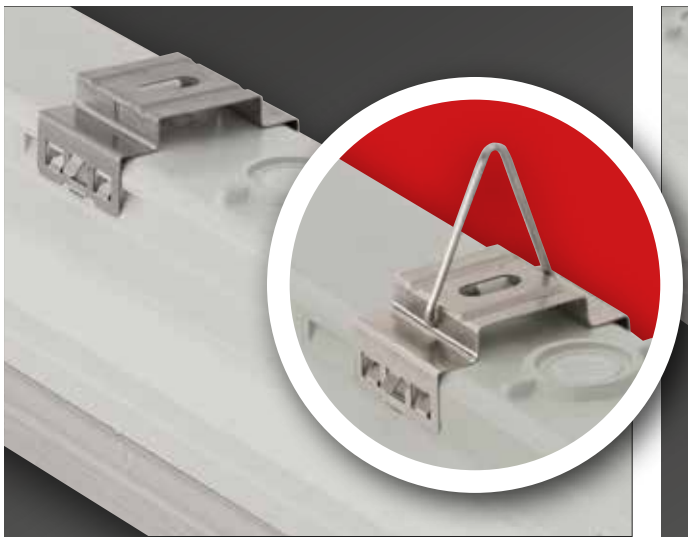
Gear tray (reflector): white powder coated steel sheet, which is fixed to the body by flexible gear tray retaining clips. Therefore it is easy to remove and suspend it during installation.





Thanks to special components the 771-Orient works faultlessly and is reliable **at higher ambient temperatures up to +50°C**:
- **Special heat resistant** high frequency (electronic) ballast
- In order to ensure **maximum heat**, chemical and weather **resistance**, the **gasket** between the diffuser and housing is made of **silicon-based** foam with enhanced resistance.

Diffuser: Injection moulded polycarbonate (PC). The diffuser has been designed with respect to its optical characteristics, with longitudinal internal prisms and is UV resistant.



Ways of installing:

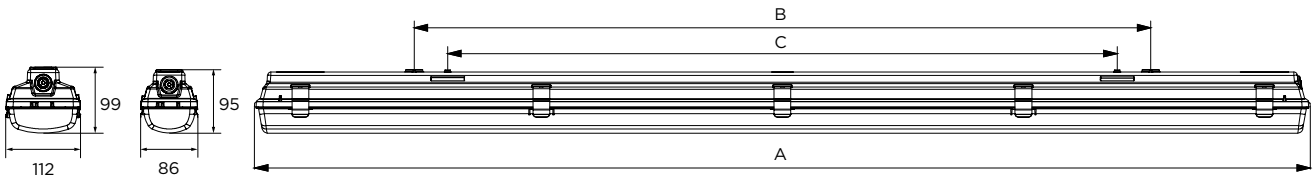
1. Direct (with screws) onto the wall or ceiling.
2. With stainless steel suspension brackets (easy-to-install) onto the ceiling.
3. Suspension on chains with stainless steel suspension brackets mounted with hooks.

Fixing the diffuser to the body: With highly resistant stainless steel clips. Cable entry through grommets or through cable glands.

Technical data (extract)

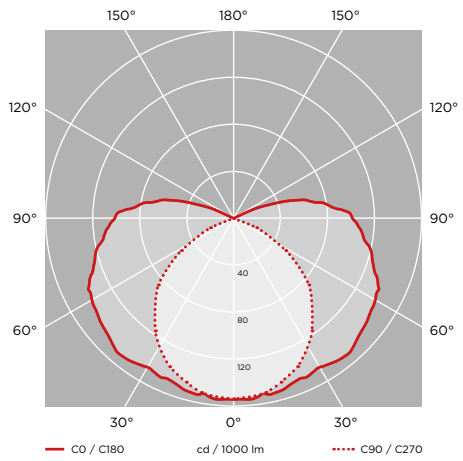
Type	Tube/Lampholder	Power (W)	Dimensions A (mm)	B (mm)	C (mm)	Weight (kg)
With electronic control gear for T8 fluorescent tubes						
Orient 136 EVG	T8/G13	1 x 36	1 277	800	700	2,12
Orient 158 EVG	T8/G13	1 x 58	1 577	1 100	1 000	2,38
Orient 236 EVG	T8/G13	2 x 36	1 277	800	700	2,66
Orient 258 EVG	T8/G13	2 x 58	1 577	1 100	1 000	2,96
With electronic control gear for T5 HE class fluorescent tubes						
Orient 128 EVG	T5/G5	1 x 28	1 277	800	700	2,16
Orient 135 EVG	T5/G5	1 x 35	1 577	1 100	1 000	2,39
Orient 228 EVG	T5/G5	2 x 28	1 277	800	700	2,52
Orient 235 EVG	T5/G5	2 x 35	1 577	1 100	1 000	2,77

Schematic drawing with main dimensions

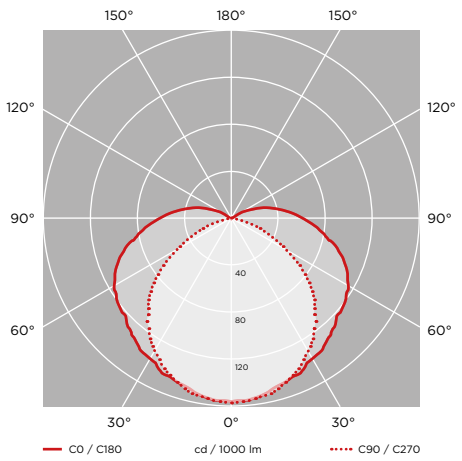


Photometric curves:

771-Orient 1x58W



771-Orient 2x58W



Further options:
- aluminium reflector
- dimmable ballast
- Class II protection
- IP66
- halogen-free wiring

771-VENTILA

Industrial dust and waterproof luminaires

With 1 or 2 fluorescent tubes in T8 or T5

YOUR MAIN BENEFITS:

A professional solution especially **for outdoor applications**. 771-Ventila withstands the impact of adverse weather conditions (sunlight, rain, wind etc.).
Ta = -20 to +25°C
Full range available in IP65 or IP66.

FIELD OF APPLICATION:

Due to the construction principles of gasket, closing system and diffuser our fixtures ensure a high grade of protection (IP65, IP66) against dust, contamination and water permeation. In accordance with their IP rating they can be used widely to illuminate areas with dusty and humid environment.
Thanks to its **enhanced weather resistance**, 771-Ventila is especially suitable for applications, where **error-free functioning in outdoor conditions** is desired.

TECHNICAL DESCRIPTION AND BENEFITS:

- **Housing:** It is made of flame retardant glass fibre reinforced polyester (on request suitable for 850°C glow wire test too), in light grey (RAL7035) colour. This material has very good temperature resistance, mechanical stability, furthermore it is a good electrical insulator, it resists the impacts of several chemicals and the impacts of weather conditions. Its stability of size and shape at changing temperatures is excellent.
- The **diffuser** is available in injection moulded **acrylic (PMMA)** with longitudinal internal prisms. Main advantages: extremely high transparency (better than the transparency of glass), unique non-aging properties and weather resistance.
- The diffusers are designed with respect to their optical characteristics and are **UV resistant**.
- In order to ensure **maximum** heat, chemical and weather **resistance** even under tough conditions, the **gasket** between the diffuser and housing is made of **silicon-based foam** with enhanced durability.
- **Fixing of the diffuser to the body:** with highly resistant stainless steel clips (standard or tamper-proof version).
- **Gear tray** (reflector): White powder coated steel sheet according to **Zhaga** standards or customised.
- **Electrical components:** in accordance with electronic control gear (T5, T8)
- Conditions for applications at negative temperatures:
  - cold resistant fluorescent tube, (e.g. Polar)
  - cold resistant starter.

CE

771-VENTILA

IP65

F

D

Option:

IP66

Main technical options

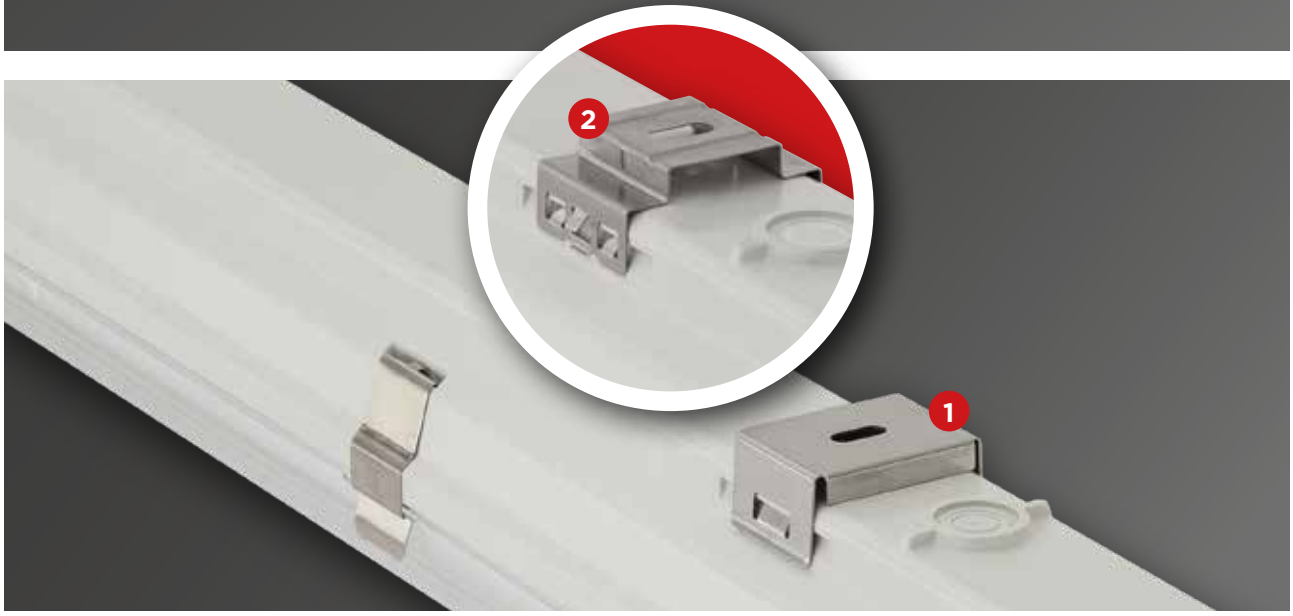
In order to ensure **maximum** heat, chemical and **weather resistance** even under tough conditions, the **gasket** between the diffuser and housing is made of **silicon-based** foam with enhanced durability.

Diffuser: Injection moulded Acrylic (PMMA). The diffuser is made with optically designed longitudinal internal prisms and is UV resistant

Fixing of the diffuser to the body: With highly resistant stainless steel clips. Optionally tamper-proof clips available on request.

Gear tray (reflector): white powder coated steel sheet, which is fixed to the body by flexible gear tray retaining clips. Therefore it is easy to remove and suspend it during installation.

Universal gear tray for both, T8 as well as T5 version



Ways of installing:

1. In order to withstand the outdoor weather conditions (wind, storm), we recommend to use **strengthened** stainless steel suspension brackets. They are easy to install onto the **wall and ceiling**.
2. **Usual** suspension brackets, suitable for installation onto the **ceiling**, are available on request.

Technical data (extract)

Type	Tube/Lampholder	Power (W)	Dimensions A (mm)	C (mm)	Weight (kg)
With electronic control gear for T8 fluorescent tubes					
771 Vent 118 EVG	T8/G13	1 x 18	669	360	1,67
771 Vent 136 EVG	T8/G13	1 x 36	1 277	700	2,12
771 Vent 158 EVG	T8/G13	1 x 58	1 577	1 000	2,38
771 Vent 218 EVG	T8/G13	2 x 18	669	360	2,24
771 Vent 236 EVG	T8/G13	2 x 36	1 277	700	2,66
771 Vent 258 EVG	T8/G13	2 x 58	1 577	1 000	2,96
With electronic control gear for T5 HE class fluorescent tubes					
771 Vent 114 EVG	T5/G5	1 x 14	669	360	1,71
771 Vent 128 EVG	T5/G5	1 x 28	1 277	700	2,16
771 Vent 135 EVG	T5/G5	1 x 35	1 577	1 000	2,39
771 Vent 214 EVG	T5/G5	2 x 14	669	360	2,25
771 Vent 228 EVG	T5/G5	2 x 28	1 277	700	2,52
771 Vent 235 EVG	T5/G5	2 x 35	1 577	1 000	2,77
With electronic control gear for T5 HO fluorescent tubes					
771 Vent 124 EVG	T5/G5	1 x 24	669	360	1,63
771 Vent 154 EVG	T5/G5	1 x 54	1 277	700	2,16
771 Vent 149 EVG	T5/G5	1 x 49	1 577	1 000	2,53
771 Vent 180 EVG	T5/G5	1 x 80	1 577	1 000	2,58
771 Vent 224 EVG	T5/G5	2 x 24	669	360	2,23
771 Vent 254 EVG	T5/G5	2 x 54	1 277	700	2,52
771 Vent 249 EVG	T5/G5	2 x 49	1 577	1 000	2,77
771 Vent 280 EVG	T5/G5	2 x 80	1 577	1 000	2,84

Ø 26 G 13

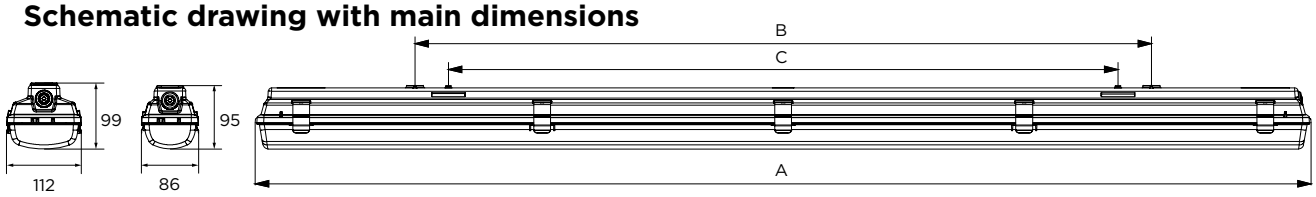
Ø 16 G 5

EVG

EVG DIMM

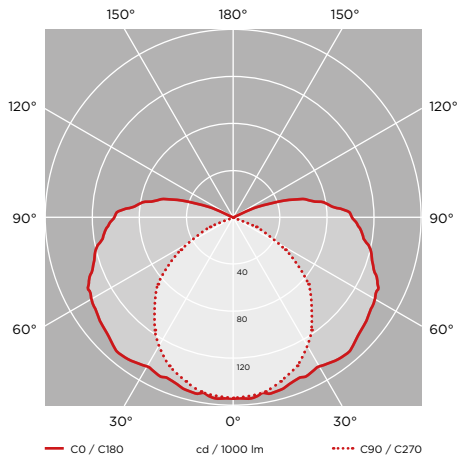
3F

Schematic drawing with main dimensions

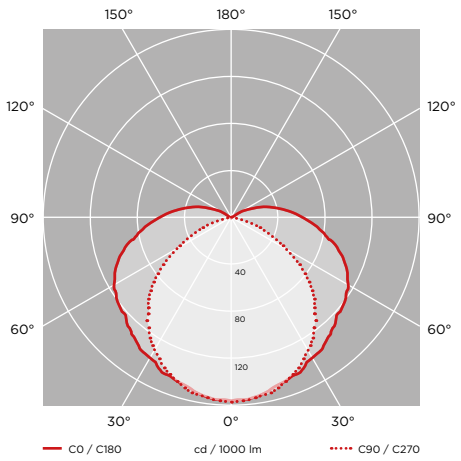


Photometric curves:

771-Ventila 1x58W



771-Ventila 2x58W



Further options:
- Class II protection
- halogen-free wiring
- motion detector
- through wiring
- DALI

775-PC LINE

Industrial dust and waterproof luminaires

With 1 and 2 fluorescent tubes for T5 or T8 lamps, in IP65 or IP66
775-PC Line is available in the following sizes:
1x36W (1x1200 mm), 1x58W (1x1500 mm), 2x36W (2x1200 mm), 2x58W (2x1500 mm)

YOUR MAIN BENEFITS:

A professional luminaire for wide usage, that fulfills the strongest quality requirements.
Especially for applications, where **high impact resistance (IK rating)** is required.

FIELD OF APPLICATION:

Due to the construction principles of gasket, closing system and diffuser our fixtures ensure a high grade of protection (IP65 or IP66) against dust, contamination and water permeation. In accordance with their IP rating, they can be used widely to illuminate spaces with dusty and humid environment. Thanks to its **enhanced impact resistance**, 775-PC Line is especially suitable for applications where a high IK impact rating is required.

When using outdoors, the fittings should be protected against direct sunlight and adverse weather conditions.

TECHNICAL DESCRIPTION AND BENEFITS:

- **Housing** It is made of flame retardant **injection moulded polycarbonate (PC)** (suitable for 850°C glow wire test), in light grey (RAL7035) colour.

  This material has very high mechanical strength and allows us to reach an excellent shock resistance.

- The **diffuser** is available in the following versions:
  Injection moulded polycarbonate **(PC), transparent**, with a shock resistance of IK10. The internal prisms are designed with respect to their optical characteristics.

  As option injection moulded acrylic (PMMA) diffuser is available. (not IK10)
  The diffusers are UV resistant.

- **The gasket** between the diffuser and housing is made of non-aging PU (polyurethane) foam.
  In order to ensure maximum chemical and weather resistance, silicon-based gasket with enhanced resistance is optionally available.

- **Fixing of the diffuser to the body:** with stainless steel clips.

- **Gear tray** (reflector): White powder coated steel sheet. As an option glossy aluminium reflector is possible.

- **Electrical components:** in accordance with the requested specification: LED-tube, low power factor, high power factor or electronic control gear.

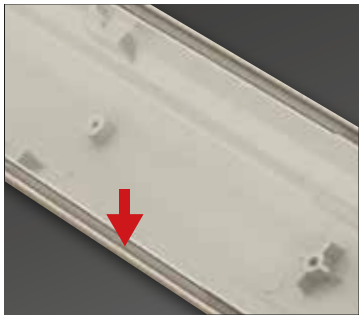
IP65

Option:

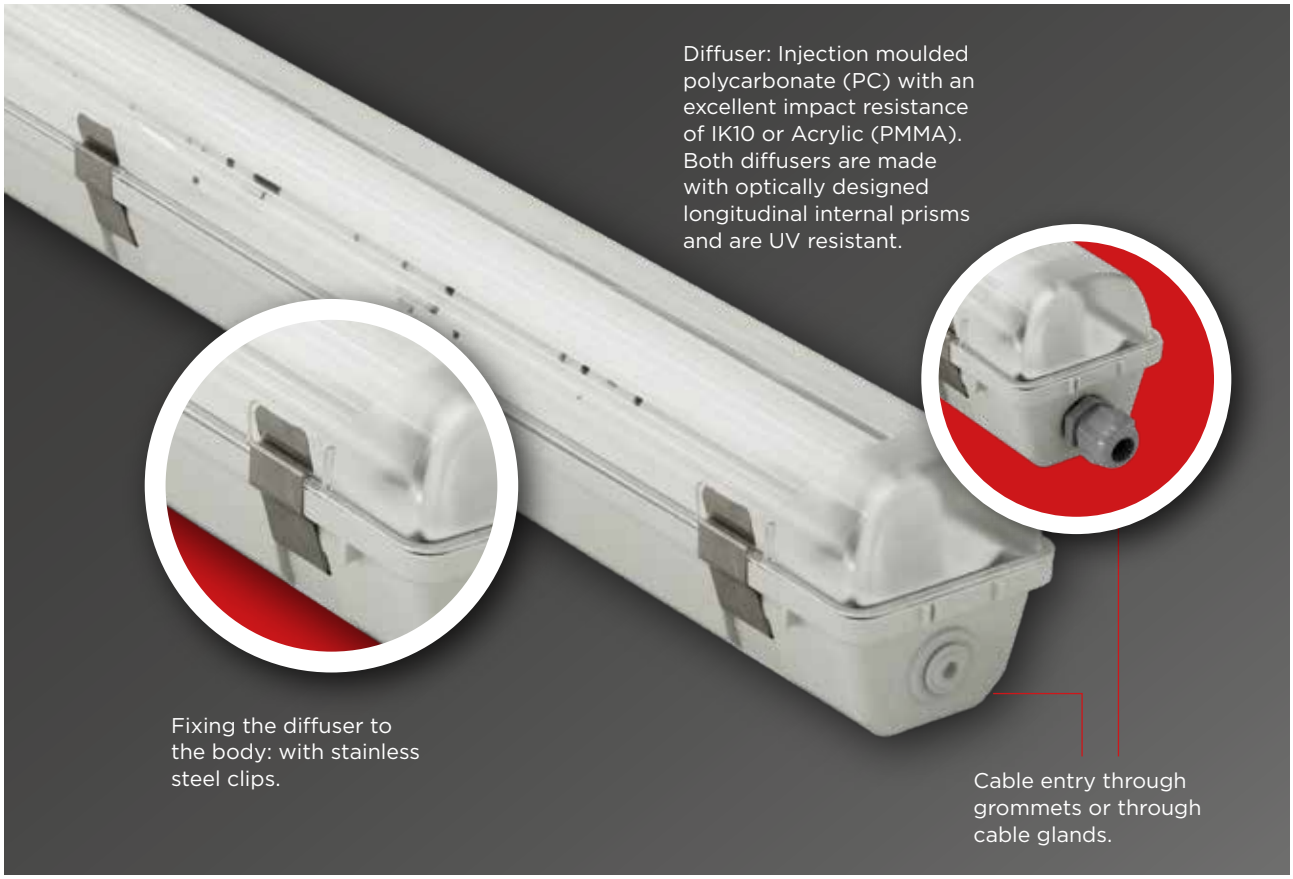
IP66

Main technical options

In order to ensure maximum chemical and weather resistance, **silicon-based gasket** with enhanced resistance is optionally available.



Universal gear tray for both, T8 as well as T5 version

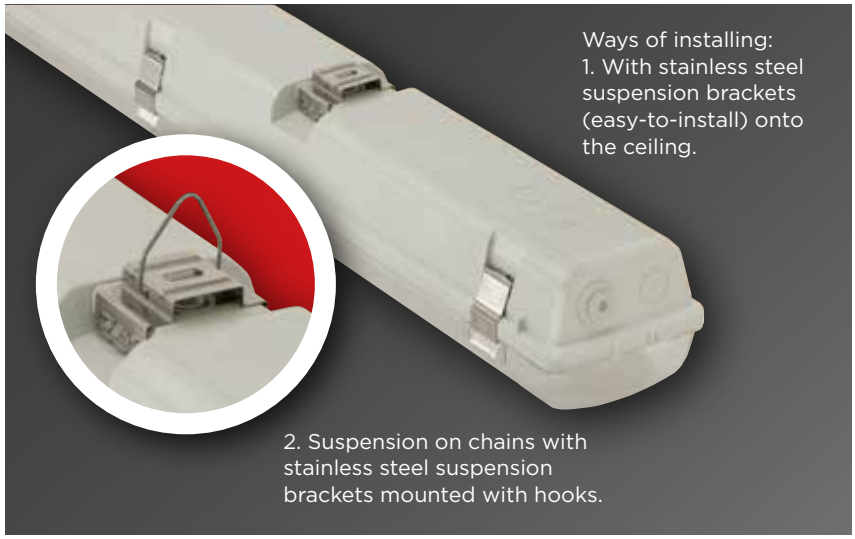


Diffuser: Injection moulded polycarbonate (PC) with an excellent impact resistance of IK10 or Acrylic (PMMA). Both diffusers are made with optically designed longitudinal internal prisms and are UV resistant.

Fixing the diffuser to the body: with stainless steel clips.

Cable entry through grommets or through cable glands.

Depending on installation options several possibilities for cable entry.



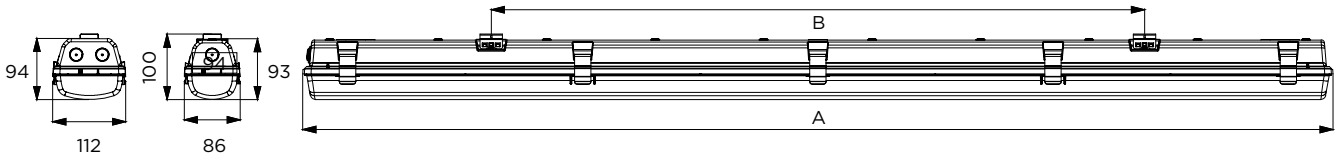
Ways of installing:
1. With stainless steel suspension brackets (easy-to-install) onto the ceiling.

2. Suspension on chains with stainless steel suspension brackets mounted with hooks.

Technical data (extract)

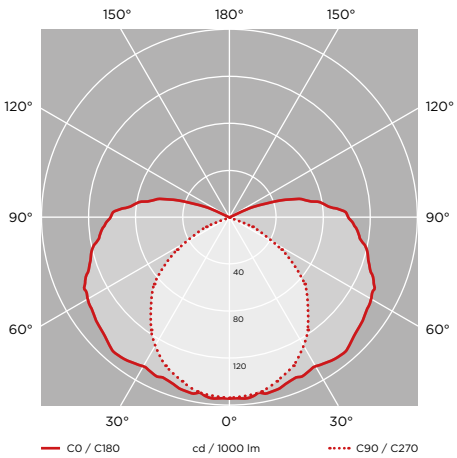
Type	Tube/Lampholder	Power (W)	Dimensions A (mm)	B (mm)	Weight (kg)
With electronic control gear for T8 fluorescent tubes					
775 136 EVG	T8/G13	1X36	1277	700	1,95
775 158 EVG	T8/G13	1X58	1577	1000	2,16
775 236 EVG	T8/G13	2X36	1277	700	2,48
775 258 EVG	T8/G13	2X58	1577	1000	2,72
With electronic control gear for T5 HE class fluorescent tubes					
775 128 EVG	T5/G5	1X28	1277	700	1,99
775 135 EVG	T5/G5	1X35	1577	1000	2,17
775 228 EVG	T5/G5	2X28	1277	700	2,34
775 235 EVG	T5/G5	2X35	1577	1000	2,53
With electronic control gear for T5 HO fluorescent tubes					
775 154 EVG	T5/G5	1X54	1277	700	1,99
775 149 EVG	T5/G5	1X49	1577	1000	2,31
775 254 EVG	T5/G5	2X54	1277	700	2,34
775 249 EVG	T5/G5	2X49	1577	1000	2,53

Schematic drawing with main dimensions

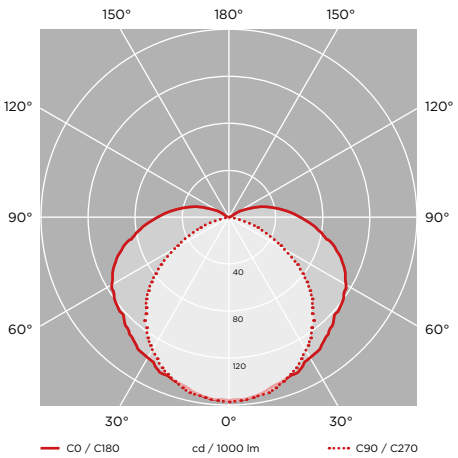


Photometric curves:

775-PC Line 1x58W



775-PC Line 2x58W



Further options:

- LED tubes
- emergency kit
- through wiring
- aluminium reflector
- dimmable ballast
- Class II protection
- IP66
- halogen-free wiring

SERIES 746-CLEVER

Industrial dust and waterproof luminaires

In **basic** version (without gear tray) with 1 and 2 fluorescent tubes for **T8** lamps or with **LED tubes**.
In version with gear tray with 1 and 2 fluorescent tubes for **T5** or **T8** lamps

YOUR MAIN BENEFITS:

Beauty and functionality go hand in hand with reasonable price. Thanks to its special construction this model offers you an **additional price advantage**: It **can be used without any gear tray** (the electrical components are mounted onto the housing directly). A clever solution. Full **range available** in T8, T5, IP65

FIELD OF APPLICATION:

Thanks to the construction principles of gasket, closing system and diffuser our fixtures ensure a high grade of protection (IP65) against dust, contamination and water permeation. In accordance with their IP rating they can be widely used to illuminate spaces with dusty and humid environment. In order to reach the optimal cost-performance ratio **the basic version of 746-Clever has been developed without a gear tray**. The electrical components are mounted directly into the housing.
When using outdoors, the fittings should be protected against direct sunlight and adverse weather conditions.

TECHNICAL DESCRIPTION AND BENEFITS:

- **Housing:** It is made of flame retardant glass fibre reinforced polyester (on request suitable for 850°C glow wire test too), in light grey (RAL7035) colour. This material has very good temperature resistance, mechanical stability, furthermore it is a good electrical insulator, it resists the impacts of several chemicals and the impacts of weather conditions. Its stability of size and shape at changing temperatures is excellent.

- The **diffuser** is available in the following versions:
  Injection moulded acrylic (PMMA):
  transparent, with longitudinal prisms, designed with respect to their optical characteristics.
  Main advantages of PMMA: Very good transparency (better than the transparency of glass), unique nonaging properties, chemical and **UV-resistance**.
  Injection moulded polycarbonate (PC):
  transparent, with longitudinal internal prisms, designed with respect to their optical characteristics.
  Main advantages of PC: High mechanical strength and high heat and shock resistance.

- **The gasket** between the diffuser and housing is made of non-aging PU (polyurethane) foam. As option gasket with enhanced resistance is available.

- **Fixing the diffuser to the body:** with stainless steel clips

- **Gear tray (reflector):** As option white powder coated steel sheet gear tray or glossy aluminium reflector.

- **Way of installing:** direct (with screws) onto the wall or ceiling or suspended.

- **Electrical components:** in basic version (without gear tray) low power factor. In case of construction with gear tray, in accordance with the requested specification: LED-tube, low power factor, high power factor or electronic control gear in T8 or T5.

CE

746-CLEVER

IP65

F

D

Option:

IP66

PC
850°C

Main technical options

746-Clever can be used in two versions: **without** gear tray (basic) as well as **with** gear tray (enhanced)

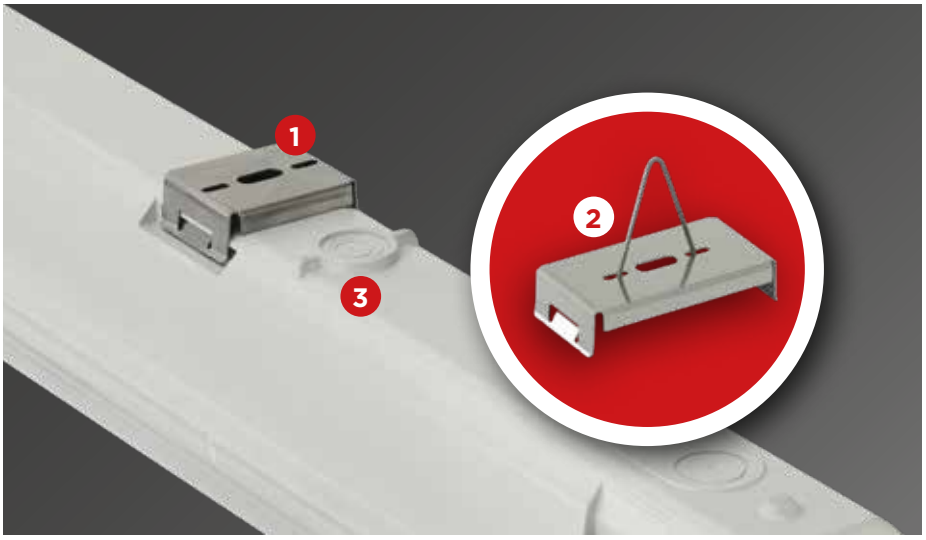
Optimised economical packaging with plastic net. On request traditional single carton box or a large box option is available to package 4 luminaires.

746-Clever equipped with LED tubes

Several possibilities for cable entry.

Transparent polycarbonate (PC) or Acrylic (PMMA) diffuser. Both are made with optically designed longitudinal internal prisms and are UV resistant.

Fixing the diffuser to the body: stainless steel clips.



Further options:

- LED tubes
- emergency kit
- through wiring
- aluminium reflector
- dimmable ballast
- rapid connector
- halogen-free wiring

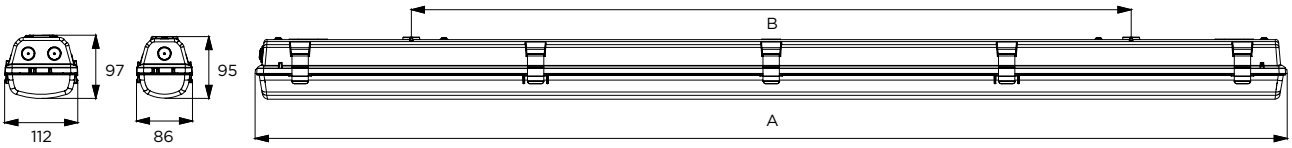
Ways of installing:

1. With stainless steel suspension brackets (easy-to-install) onto the ceiling.
2. Suspension on chains with stainless steel suspension brackets mounted with hooks.
3. Direct (with screws) onto the wall or ceiling.

Technical data (extract)

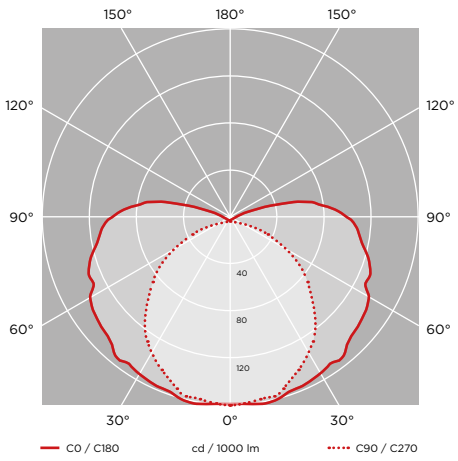
Type	Tube/Lampholder	Power (W)	Dimensions A (mm)	B (mm)	Weight (kg)
With electronic control gear for T8 fluorescent tubes, version without gear tray					
746 118 EVG	T8/G13	1 x 18	669	415	0,89
746 136 EVG	T8/G13	1 x 36	1 277	800	1,37
746 158 EVG	T8/G13	1 x 58	1 577	1 100	1,67
746 218 EVG	T8/G13	2 x 18	669	415	1,09
746 236 EVG	T8/G13	2 x 36	1 277	800	1,79
746 258 EVG	T8/G13	2 x 58	1 577	1 100	2,13

Schematic drawing with main dimensions

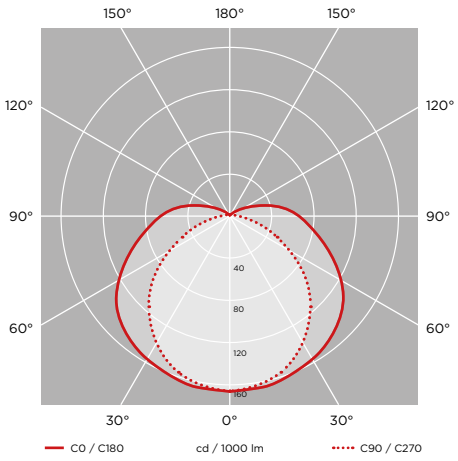


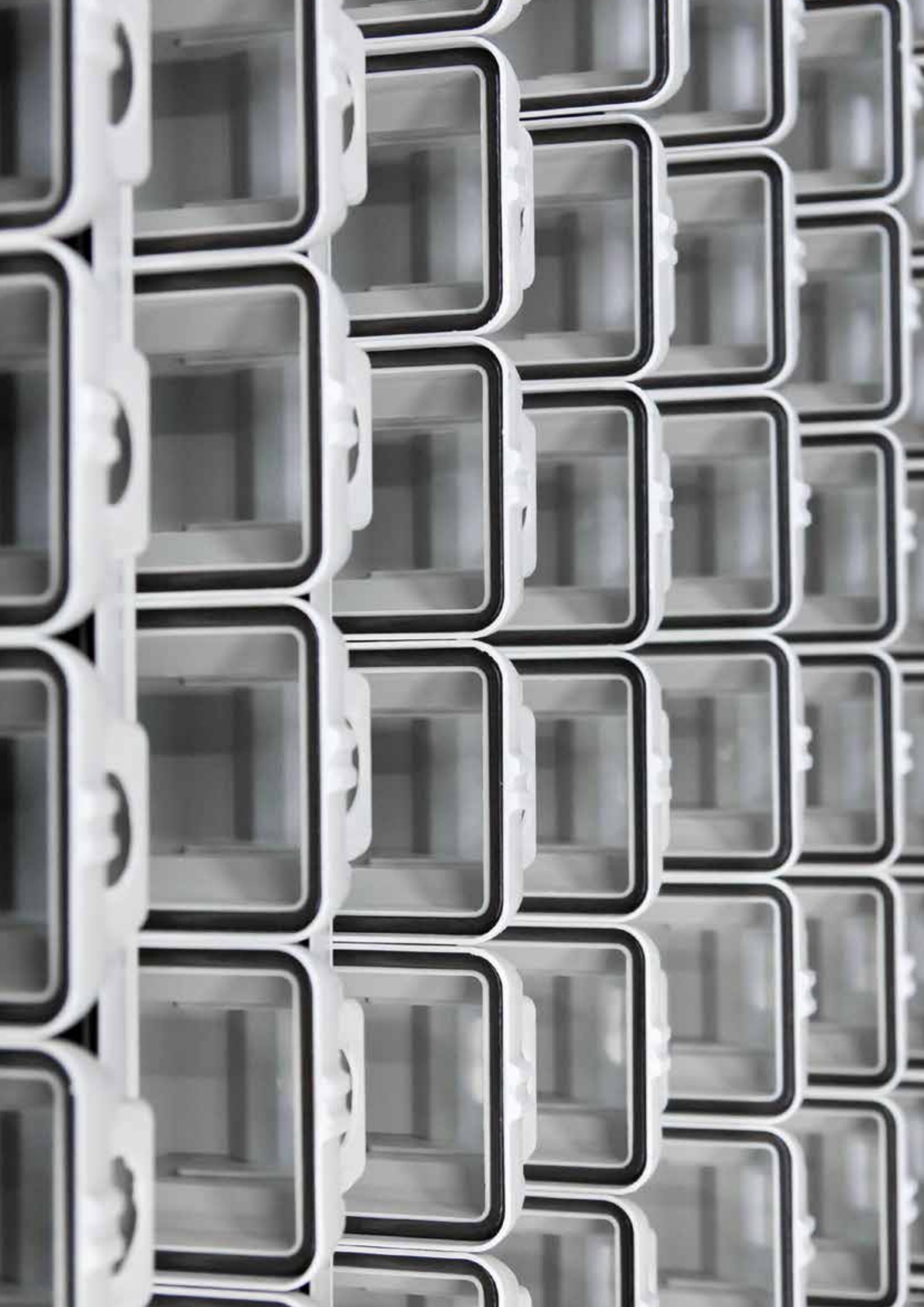
Photometric curves:

746-Clever 1x36W



746-Clever 2x36W





SERIES 770-EXTREME +60°C

Industrial dust and waterproof luminaires for ambient temperature +60°C

With 1 and 2 fluorescent tubes
For T8 lamps

CE

770-EXTREME +60°C

IP65

YOUR MAIN BENEFITS:

The shape of 770-Classic adapted for extremely high (+60°C) ambient temperatures.

FIELD OF APPLICATION:

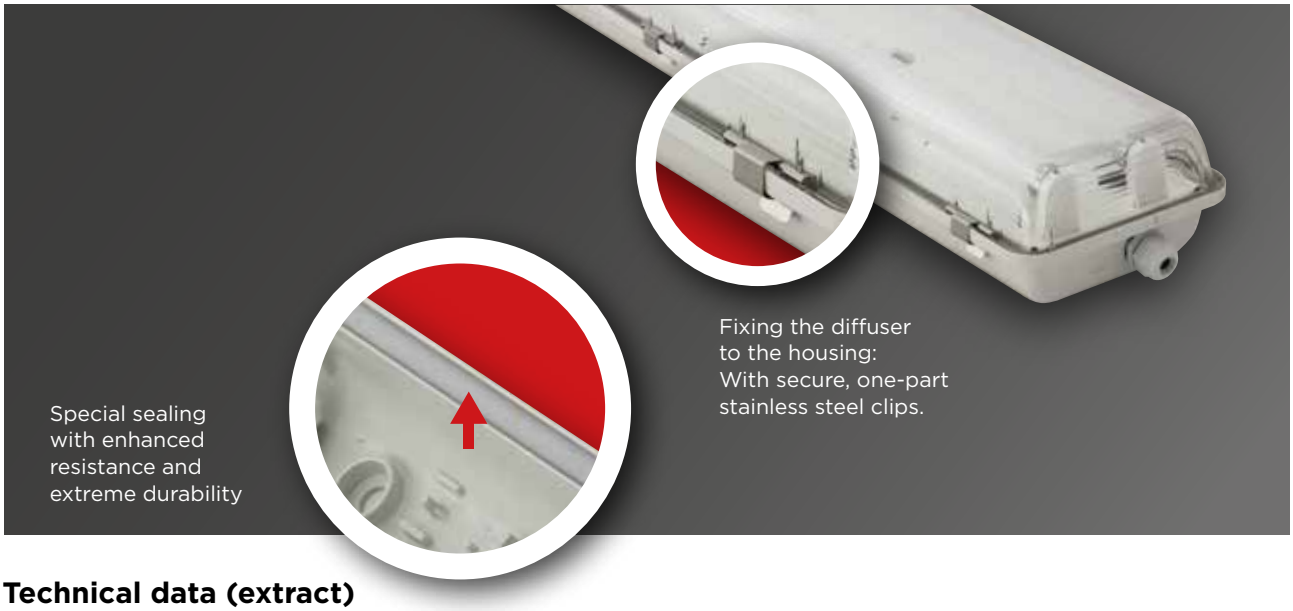
Thanks to their special construction our diffuser covered fittings ensure a high grade of protection (IP65) against dust, contamination and water permeation even at extremely high ambient temperature. In accordance with their IP rating, they can be widely used to illuminate spaces with dusty, humid environment up to Ta +60°C.

When using outdoors, the fittings should be protected against direct sunlight and adverse weather conditions.

TECHNICAL DESCRIPTION AND BENEFITS:

- **Housing and cover:** : It is made of flame retardant glass fibre reinforced polyester (on request suitable for 850°C glow wire test too), in light grey (RAL7035) colour. This material has very good temperature resistance, mechanical stability, furthermore it is a good electrical insulator, it resists the impacts of several chemicals and the impacts of weather conditions. Its stability of size and shape at changing temperatures is excellent.
- The **diffuser** can be ordered in injection **moulded polycarbonate** (PC). Main advantages: high mechanical strength and high heat resistance, as well as excellent transparency and **UV-resistance.**
- The **gasket** between the diffuser and the housing is ensured by anti-aging silicone sealing.
- **Fixing the diffuser to the body:** with stainless steel clips.
- **Gear tray** (reflector): White powder coated steel sheet. On request glossy aluminium reflector is available.
- **Ways of installing:** direct onto the wall or ceiling resp. suspended.
- **Electrical components:** in accordance with low power factor (magnetic ballast).

Main technical options



770-EXTREME +60°C

Ø 26
G 13

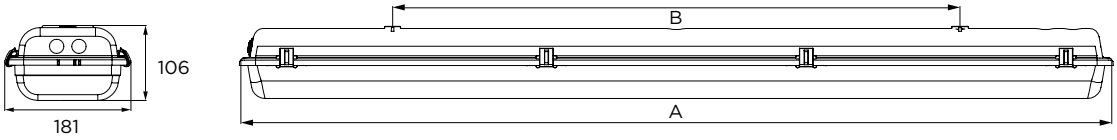
VVG

Technical data (extract)

Type	Tube/Lampholder	Power (W)	Dimensions A (mm)	B (mm)	Weight (kg)
With A2 magnetic ballast for T8 fluorescent tubes (Extreme +60°C)					
770 136 +60*	T8/G13	1 x 36	1 278	800	3,14
770 158 +60*	T8/G13	1 x 58	1 578	1 100	4,04
770 236 +60	T8/G13	2 x 36	1 278	800	4,39

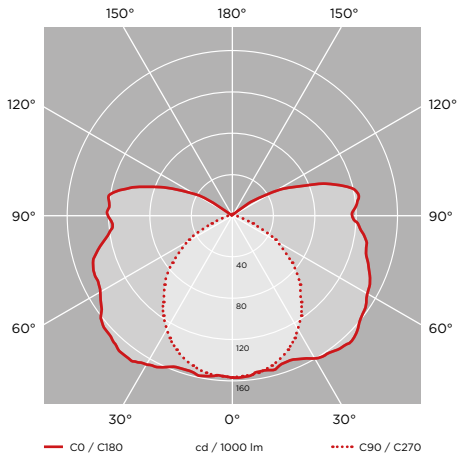
* One fluorescent tube in a twin housing.

Schematic drawing with main dimensions:

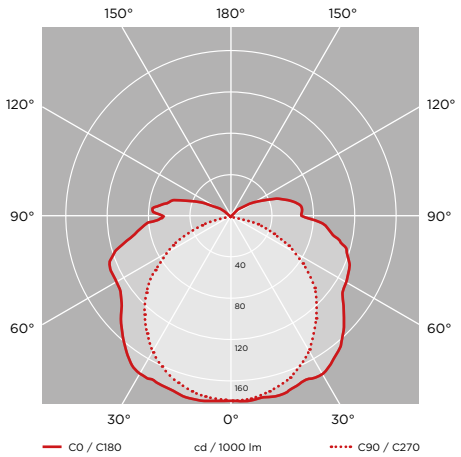


Photometric curves:

770-Extreme +60 1x36



770-Extreme +60 2x36



SERIES 770-CLASSIC

Industrial dust and waterproof luminaires

With 1 and 2 fluorescent tubes for **T5** or **T8** lamps or with **LED tubes**

YOUR MAIN BENEFITS:

Highest class luminaire in traditional construction. Premium product!
Full range available in T8, T5, IP65

FIELD OF APPLICATION:

Thanks to the gasketed fixtures our diffuser covered fittings ensure a high grade of protection (IP65) against dust, contamination and water permeation. In accordance with their IP rating, they can be widely used to illuminate spaces with dusty and humid environment.

When using outdoors, the fittings should be protected against direct sunlight and adverse weather conditions.

TECHNICAL DESCRIPTION AND BENEFITS:

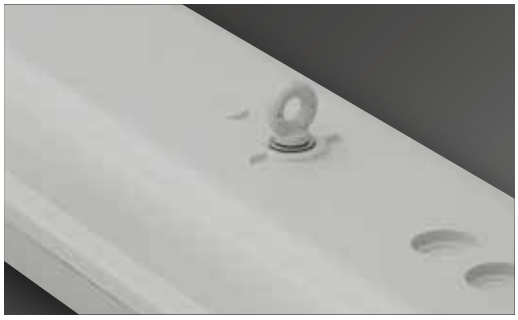
- **Housing:** It is made of flame retardant glass fibre reinforced polyester (on request suitable for 850°C glow wire test too), in light grey (RAL7035) colour. This material has very good temperature resistance, mechanical stability, furthermore it is a good electrical insulator, it resists the impacts of several chemicals and the impacts of weather conditions. Its stability of size and shape at changing temperatures is excellent.
- **The diffuser** can be ordered with **injection moulded styrene acrylonitrile** (SAN). Main advantages: strong, resistant, deformable in very slight degree only, transparent.
  All diffusers are optically designed and are **UV resistant**.
- **The gasket** between the diffuser and the housing is ensured by anti-aging PU (polyurethane) foam or silicone sealing.
- **Fixing the diffuser to the body:** with highly resistant clips made of Polyoxymethylene (POM) or with stainless steel clips
- **Gear tray** (reflector): White powder coated steel sheet. As an option glossy aluminium reflector is available.
- **Electrical components:** in accordance with the requested specification: low power factor, high power factor, electronic control gear or LED tubes.

IP65

Option:

PC 850°C

Main technical options



Ways of installing: The fittings can be installed direct (with screws) onto wall, ceiling or suspended on chains

Gear tray (reflector): white painted steel sheet, which is fixed to the housing by flexible gear tray retaining clips. Therefore it is easy to remove and suspend it during installation

On request mirror aluminium reflector made of anodised aluminium available


Several possibilities for cable entry

Equipped with Retrofit LED tubes. More information on LED products see in LED part of the catalogue.


Injection moulded diffusers (SAN) are made with longitudinal prisms

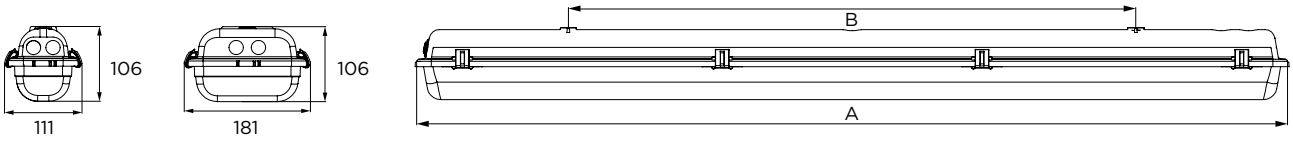
Further options:
- LED tubes
- dimmable ballast
- Class II protection
- through wiring
- rapid connector
- halogen-free wiring

Upon request, 1 or 3 hour emergency battery kits can be ordered.

Technical data (extract)

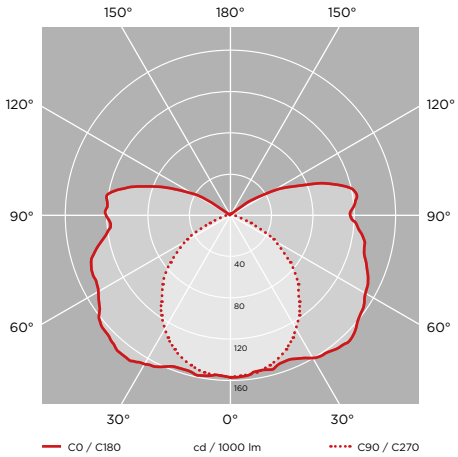
Type	Tube/Lampholder	Power (W)	Dimensions A (mm)	B (mm)	Weight (kg)
With electronic control gear for T8 fluorescent tubes					
770 118 EVG	T8/G13	1 x 18	670	460	1,35
770 136 EVG	T8/G13	1 x 36	1 278	800	2,32
770 158 EVG	T8/G13	1 x 58	1 578	1 100	2,75
770 218 EVG	T8/G13	2 x 18	670	460	1,55
770 236 EVG	T8/G13	2 x 36	1 278	800	3,29
770 258 EVG	T8/G13	2 x 58	1 578	1 100	3,99
With electronic control gear for T5 HE class fluorescent tubes					
770 114 EVG	T5/G5	1 x 14	670	460	1,37
770 128 EVG	T5/G5	1 x 28	1 278	800	2,86
770 135 EVG	T5/G5	1 x 35	1 578	1 100	2,77
770 214 EVG	T5/G5	2 x 14	670	460	1,84
770 228 EVG	T5/G5	2 x 28	1 278	800	3,33
770 235 EVG	T5/G5	2 x 35	1 578	1 100	3,99
With electronic control gear for T5 HO fluorescent tubes					
770 124 EVG	T5/G5	1 x 24	670	460	1,36
770 154 EVG	T5/G5	1 x 54	1 278	800	2,89
770 149 EVG	T5/G5	1 x 49	1 578	1 100	2,96
770 180 EVG	T5/G5	2 x 80	1 578	1 100	2,84
770 224 EVG	T5/G5	2 x 24	670	460	1,93
770 254 EVG	T5/G5	2 x 54	1 278	800	3,44
770 249 EVG	T5/G5	2 x 49	1 578	1 100	4,08
770 280 EVG	T5/G5	2 x 80	1 578	1 100	4,13

Schematic drawing with main dimensions

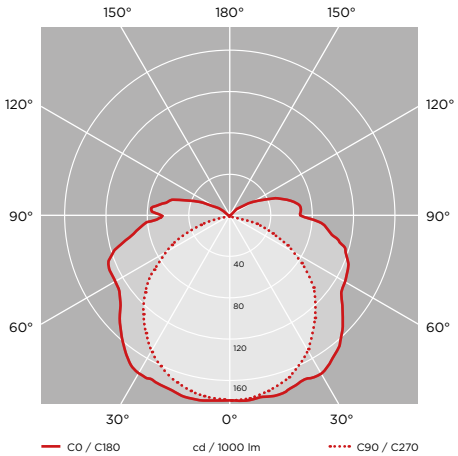


Photometric curves:

770-Classic 1x18W



770-Classic 2x18W




Kinyomási elágazás B

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Lighting and Plastic Processing

Light embodied

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