



**DUST AND WATERPROOF
INDUSTRIAL LUMINAIRES**

2022



IBV Hungária Lighting and Plastic Processing Kft. – member of IBV Holding in Germany – was founded in 1993 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**, 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 nearly 30 years. **More than 95% of our production volume is sold on international markets in more than 70 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:	30 years
Product portfolio:	4000 product variants
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, weather resistance, luminous flux 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 150 to 2000 tons), 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.

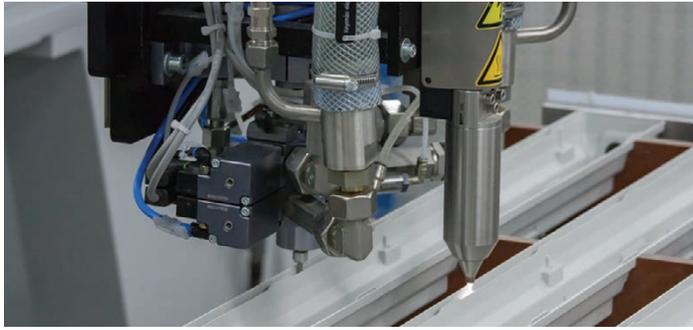
It is most widely used where there is a need for a component that is light yet and resistant such as in the automobile industry, aviation and ship industry and in the production of luminaires.



■ We extended our machinery portfolio with a brand new **Thermoset Injection Moulding (BMC)** machine with 200 tons of 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 **injection moulding** machines (with a pressing force from 900 up to 1200 tons) we process several hundred tons of thermoplastics annually, such as **PC** (polycarbonate), **PMMA** (Polymethylmethacrylate).

With these machines we produce UV resistant diffusers designed with respect to their optical characteristics. We have vast experience in the production and handling of **transparent** as well as **opalised** thermoplastic polymers.



■ 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 65, 66, 67 or 69 according to the needs of our customers. Benefits of this technology include swift production and reliable quality. In addition to our foaming machines, a special one has been installed where we use a **silicone-based sealing** material with unique features.

■ Coextrusion is a complex **extrusion process** in which the machine can extrude **two materials of different colours at the same time** (merged within the tool). Its main advantage is that the optical part of the luminaire can be clear or opalised, while the back of the extruded profile can be any other colour, usually white or grey. The machine has an extrusion speed of 0.8-3 m/min - depending on the construction. The raw materials we use are **PC** or **PMMA**. In the lighting business we use it for manufacturing **extruded profiles** applied at **tubular luminaires** such as in case of our newly developed 793-Multiproof too. **Coextrusion offers several advantages** to our company as an exciting field of technology. New dimensions are opening in product development that are limited only by imagination. This resulted in the **expansion of our product portfolio**. We expect that the installation of the new extruder line will provide our company with **further business opportunities** and **new target markets**.



■ 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**.

■ 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	
Premium LED range	870-Inspire GRP	✓	✓	⓪	⓪	⓪	⓪	⓪	⓪	✓	✗	✓	✗	✓	✓	✓	
	870-Inspire PC	✓	✓	⓪	⓪	⓪	⓪	⓪	⓪	✓	✗	✓	✗	✓	✓	✓	
	870-Inspire NB	✓	✓	✗	✗	⓪	⓪	⓪	⓪	✓	✗	✓	✗	✓	✓	✓	
	870-Inspire +/-	✓	✓	⓪	⓪	⓪	✓	⓪	✗	✓	✓	✓	✗	✓	✓	✗	
	870-Inspire Air	✓	✓	⓪	⓪	⓪	⓪	⓪	⓪	✓	✓	✓	✗	✓	✓	✗	
	870-Farmer	✗	✗	✗	✗	✗	✗	⓪	✗	✓	✗	✗	✗	⓪	✓	✗	
	771-Favourite	✓	✓	⓪	⓪	⓪	✓	⓪	✓*	✓	✓	✓	✓	✓	✓	✓	✓
	771-Orient +50°C	✓	✓*	⓪	⓪	⓪	✗	⓪	⓪	✓	✓	✓	✓	✗	✓	⓪	✗
	771-Extreme -30°C	✓	✓*	⓪	⓪	⓪	✓	⓪	✗	✓	✓	✓	✓	✗	✓	✓	✗
	771-Ventila	✓	✓	⓪	⓪	⓪	✗	⓪	✓*	✓	✓	✓	✓*	✓	✓	✓	✗
	771-Farmer	✗	⓪	✗	✗	✗	✗	⓪	✗	✓	✗	✗	✗	⓪	⓪	✗	
	775-PC	✓	✓	⓪	⓪	⓪	✓	⓪	✓*	✓	✓	✓	✓	✓	✓	✓	✓
	746-Clever	✓	✓	⓪	⓪	⓪	✓	⓪	✓*	✓	✓	✓	✓	✓	✓	✓	⓪
	790-Xtrude	✗	⓪	⓪	⓪	⓪	⓪	⓪	✓	✓	⓪	✓	✓	✗	⓪	✓	⓪
	793-Multiproof	✗	✓	✗	✗	⓪	⓪	✗	⓪	✓	✓	✓	✓	✗	⓪	⓪	✗
Standard LED range	872-Entry GRP	✓	✓	✗	✗	✗	✓	⓪	⓪	✓	✓	✓	✗	⓪	✓	✓	
	872-Entry PC	✓	✓	✗	✗	✗	⓪	⓪	⓪	✓	✗	✓	✗	⓪	✓	✓	
	872-Entry NB	⓪	✓	⓪	✗	⓪	✓	⓪	⓪	✓	✓	✓	✗	⓪	✓	✓	
	792-XSlide	✗	✓	✗	✗	✗	⓪	✗	⓪	✓	✓	✓	✗	⓪	✓	⓪	

✓ Available ✗ Not available ⓪ 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.

ADVANCED OPTIONS



 **Motion sensor, corridor function**



 **DALI Building lighting control**



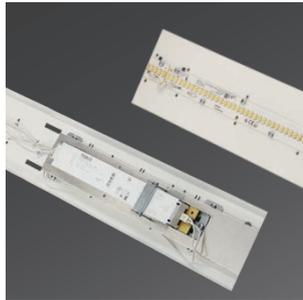
 **Daylight harvesting**



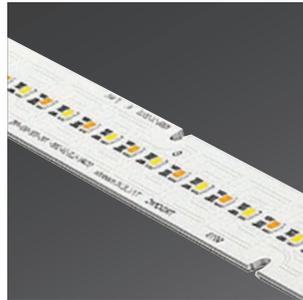
 **PoE Power over Ethernet (PoE) Smart Network**



 **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**



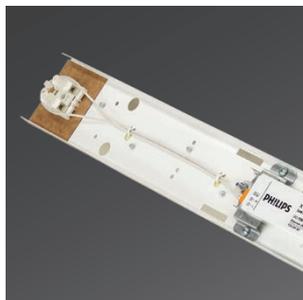
 **Special 3-pole connectors enabling quick (in-line) installation**



 **LED Available with LED tubes**



 **Quick installation**



 **Class II protection**



 **3F 1F Through wiring**



 **EMERGENCY Emergency lighting**

LEGEND

Symbols of concerning certification marks:

 'CE' mark of product conformity: Conformity mark documenting conformity verification of product with all EU harmonising provisions

 'ENEC11' marks of product quality: Licence mark indicating product conformity with European standards for electric safety of product

 'HACCP' mark: Hazard Analysis Critical Control Points, the declaration of conformity with legal norms for food industry

 'DLG-approved' test mark: The light fitting complies with the relevant requirements of the German Agricultural Society (DLG) and may be installed in agricultural buildings

Symbols concerning IP protection:

 Protected against splashing water

 Protected against jet water

 Protected against immersion (1m)

 Dustproof

 Dust-tight

IP65  Dust-tight + protected by a nozzle against enclosure from any direction shall have no harmful effects

IP66  Dust-tight + protected against powerful water jets

IP67  Dust-tight + immersed in water under defined conditions of pressure and time

IP69  Dust-tight + protection against high-pressure and high-temperature water directed towards the luminaire from any direction

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

 Luminaires equipped with electronic control gear

 Luminaires equipped with dimmable electronic control gear

 Dimmable LED luminaires

1F 1 phase through wiring

3F 3 phase through wiring

 Luminaires with emergency module

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.....	○	○	○
Methanol.....	○	○	○
Glycerine.....	+++	++	+++
Glycol.....	+++	+++	+++
AQUEOUS SOLUTIONS			
Sea water.....	+++	+++	+++
Hydrogen Peroxide up to 40%.....	○	++	○
Hydrogen Peroxide over 40%.....	○	++	○
Metal salts and their aqueous solutions.....	+++	+++	+++
Salt solutions.....	+++	+++	+++
GASES			
Carbon dioxide.....	+++	+++	+++
Carbon monoxide.....	+++	+++	+++
HYDROCARBONS			
Benzene.....	○	○	○
Diesel oil.....	+++	++	+++
Petroleum Ether.....	+++	++	+++
Aliphatic Hydrocarbons.....	++	+++	++
Aromatic Hydrocarbons.....	○	○	++
OILS			
Aniline.....	○	○	○
Machine-tool oils.....	○	○	+++
Diesel oil.....	○	○	+++
Brake oil.....	○	○	○
Flammable acid oils.....	○	++	+++
Camphor oil.....	○	○	○
Lubricating oil.....	++	+++	+++
Silicone oil.....	+++	+++	+++
Paraffin oil.....	++	+++	+++
Saturated mineral oil.....	○	○	++

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

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
○	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

Our products are continuously developing and hence we reserve the right to make technical modifications of the dimensions, technical data, weight and construction stated without prior written notice!

PRODUCT SEGMENTATION

LED products:

For our LED lighting products, we provide **5-3-2 years of warranty**, depending on the product as detailed below:

LED products with 5 years warranty:

- All our products in **classic construction** with injected **silicone-based** gasket (except for the 870-Inspire Air and the 771-Ventila product families)
- **870-Farmer, 771-Farmer** product families - in case the customer has ordered the products with the extended 5-year warranty
- **790-Xtrude** and **793-Multiproof** extruded product families
- **792-XSlide** extruded product family - in case the customer has ordered the products with the extended 5-year warranty

LED products with 3 years warranty:

- All our products in **classic construction** with non-aging **polyurethane** gasket
- **870-Farmer, 771-Farmer** product families - in case the customer has ordered the products with a 3-year warranty
- **792-XSlide** extruded product family - in case the customer has ordered the products with a 3-year warranty

Our LED products with 2 years warranty:

- We provide a **2-year warranty** on the **870-Inspire Air** and **771-Ventila** product families

T5/T8 fluorescent tube products:

- We provide a **2-year warranty on our luminaires for T5/T8 fluorescent tubes.**

Remarks:

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.

In the case of versions other than the above, individual written contract with the client shall be applied.

*Date of implementation**: 01.03.2022 (Note: The warranty period must always be checked on the basis of the document in force at the time of the despatch of the product.)

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

LED



**PREMIUM
LED RANGE**

**CLASSIC
CONSTRUCTION**

870-INSPIRE GRP

✔ TOP-PREMIUM QUALITY | **12**

870-INSPIRE PC

✔ IMPACT RESISTANT | **16**

870-INSPIRE NB

✔ NARROW BEAM FOR HIGH CEILINGS | **20**

870-INSPIRE +/-

✔ FOR EXTREME HIGH AND LOW TEMPERATURES | **24**

870-INSPIRE AIR

✔ FOR OUTDOOR APPLICATION | **28**

870-FARMER

✔ CHEMICALLY RESISTANT | **32**

771-FAVOURITE

✔ PROFESSIONAL PREMIUM | **37**

771-ORIENT +50°C

✔ FOR HIGH TEMPERATURES | **41**

771-EXTREME -30°C

✔ FOR LOW TEMPERATURES | **45**

771-VENTILA

✔ FOR OUTDOOR APPLICATION | **47**

771-FARMER

✔ CHEMICALLY RESISTANT | **51**

775-PC

✔ IMPACT RESISTANT | **54**

746-CLEVER

✔ HIGH LIGHT TRANSMISSIVITY | **59**

**EXTRUDED
PROFILE**

790-XTRUDE

✔ EXTRUDED, PREMIUM QUALITY | **63**

793-MULTIPROOF

✔ FOR FOOD INDUSTRY | **66**

**CLASSIC
CONSTRUCTION**

872-ENTRY GRP

✔ PROFESSIONAL STANDARD | **70**

872-ENTRY PC

✔ IMPACT RESISTANT | **74**

872-ENTRY NB

✔ NARROW BEAM FOR HIGH CEILINGS | **78**

**EXTRUDED
PROFILE**

792-XSLIDE

✔ EXTRUDED, STANDARD QUALITY | **82**

**RETROFIT
LED TUBES**

**RETROFIT LED
771-PRO LT**

✔ FOR LED TUBES | **85**

**RETROFIT LED
775-PRO LT**

✔ FOR LED TUBES | **87**

**RETROFIT LED
746-PRO LT**

✔ FOR LED TUBES WITHOUT GEAR TRAY | **89**

LED

870-INSPIRE GRP

High-end dust and waterproof luminaires with LED modules.

Synergy of art and technology
Inspiring design in professional quality.

YOUR MAIN BENEFITS:

Gear tray integrated into the diffuser

Cost efficient and user-friendly **installation** even without disassembling the luminaire



870-INSPIRE GRP



IP66



Option:

IP67



1F

3F



FIELD OF APPLICATION:

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

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

TECHNICAL DESCRIPTION AND BENEFITS:

■ **Housing:** It is made of flame retardant **GRP** - 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 and mechanical stability. Furthermore it is a good electrical insulator resisting the impacts of several chemicals and weather conditions. Its stability of size and shape at changing temperatures is excellent.

■ **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 light transmissivity (up to 90%)**
- **Homogenous, well-balanced light dispersing** (no shadows)
- **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) **simplifies the light calculation.**

■ The **gasket** between the diffuser and the housing is available in two versions:

- **Injected silicone-based endless foam**
- **Non-aging PU** (polyurethane) **endless foam**

■ **Fixing the diffuser to the body:** With stainless steel clips.

■ **Gear tray (reflector): The gear tray is integrated into the diffuser** thus enabling a **cost efficient and user-friendly installation** even **without disassembling** the luminaire. White powder coated steel sheet, the LED module mounting positions according to Zhaga standards or customized.

■ **Electrical components:** The adequate power supply is ensured through electronic driver.

Main technical options

Our new **opalised** diffuser made of UV-stabilized material achieves an **outstanding light transmissivity up to 90%**. This great light permeability offers **high efficacy (up to 160 lm/W)** emitted from the luminaire. Feel free to choose from our two types of slightly different diffuser designs.



A the **original** diffuser design



B the **modified oval** variant

In the interest of **LED board protection** the **gear tray is integrated into the diffuser** thus enabling a **cost efficient and user-friendly quick installation** even without disassembling the luminaire.

The **stainless steel clips** stay in their position during installation and can be released by bare hands.

Compatible with all optional accessories and smart solutions

PoE

870-INSPIRE GRP

Installation friendly construction: The **strap** ensures suspension of the gear tray and the diffuser during installation.

In order to **optimize the thermal management** of the luminaire and to **maximize the lifetime of the LED modules**, the driver is placed into the body without direct contact to the gear tray.

The **gear tray**, made of white powder coated steel sheet according to **Zhaga** standards, is **integrated into the diffuser**. With 870-Inspire GRP - depending on customer requirements - we can reach different levels of luminous flux from 2700 **up to 14000 lumen** with maximum **efficacy of 160 lm/W**. For more details please see technical data.

The injected **silicone-based gasket** with enhanced resistance ensures **maximum** chemical and weather **resistance** even under tough conditions. This endless foam sealing ensures the high IP protection up to IP67.



OPTIONS FOR CABLE ENTRY:

IP66 grommet

LESS THAN 2 min INSTALLATION TIME

Cable gland

The **Rapid Connector** enables the electrical connection **without disassembling** the luminaire.

Ways of installing (options):

1.a

2

1.b

With **strengthened** (0,6 mm) stainless steel mounting brackets.

1.a They are easy-to-install onto the **ceiling or the wall** (in horizontal position).

1.b In case of vertical positioning, **fixing screws** keep the mounting brackets tight avoiding the luminaire from sliding.

2. **Suspension** on chains, wire ropes etc. with stainless steel mounting brackets and **with hooks**. **Easy installation:** Adjustable distance of the mounting brackets (they can be positioned laterally on the housing)

Technical data (extract)

* EPREL database is available at <https://eprel.ec.europa.eu/screen/product/lightsources/xxxxxxx> (where the xxxxxx have to be substituted by the reference number given in the last column)

Products with 5 years warranty	Power (W)	Lum. total luminous flux emitted (lm)		Lum. efficacy (lm/W)		CCT (Kelvin)	CRI	Lifetime L70B50 (Ta=45°C)	Lifetime L80B10 (Ta=45°C)	A (mm)	B (mm)	Weight (kg)	EEI	Light source* (reference)
		PMMA	PC	PMMA	PC									
Lumnum EU 130 with Osram driver														
870 4ft (1200mm)	24	3400	3150	142	131	4000	>80	>72 000 h**	>50 000 h**	1174	700±76	2	D	802364
870 5ft (1500mm)	30	4300	4000	143	133	4000	>80	>72 000 h**	>50 000 h**	1454	1000±76	2,2	D	734821
870 4ft (1200mm)	37	5200	4800	140	130	4000	>80	>72 000 h**	>50 000 h**	1174	700±76	2	D	734862
870 5ft (1500mm)	51	7000	6500	137	128	4000	>80	>72 000 h**	>50 000 h**	1454	1000±76	2,2	D	734813
Lumnum EU PRO 160 with Osram driver														
870 4ft (1200mm)	22	3450	3200	157	145	4000	>80	>72 000 h	>50 000 h	1174	700±76	2	C	803878
870 5ft (1500mm)	27	4200	3900	157	144	4000	>80	>72 000 h	>50 000 h	1454	1000±76	2,2	C	734800
870 4ft (1200mm)	32	5000	4600	158	144	4000	>80	>72 000 h	>50 000 h	1174	700±76	2	C	803933
870 5ft (1500mm)	44	7000	6500	160	146	4000	>80	>72 000 h	>50 000 h	1454	1000±76	2,2	C	734760
Lumnum EU PRO 160 with Osram DIP Switch driver														
870 4ft (1200mm)	19	3000	3000	162	150	4000	>80	>72 000 h	>50 000 h	1185	700±78	2	C	803933
	23	3700	3700											
	27	4500	4500											
	32	5200	5200											
870 5ft (1500mm)	25	4100	4100	163	152	4000	>80	>72 000 h	>50 000 h	1477	1000±78	2,2	C	734760
	32	5200	5200											
	38	6200	6200											
	44	7200	7200											

** The application of through-wiring may influence the Ta. Max.

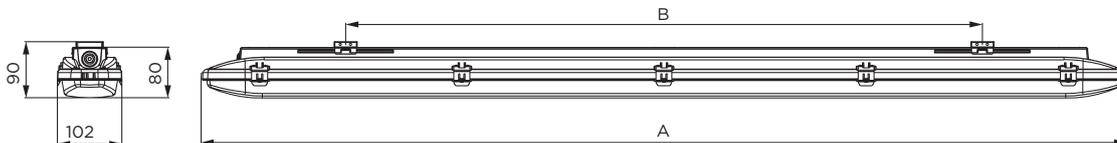
Products with 5 years warranty	Power (W)	Lum. total luminous flux emitted (lm)		Lum. efficacy (lm/W)		CCT (Kelvin)	CRI	Lifetime L70B50 (Ta=35°C)	Lifetime L80B10 (Ta=35°C)	A (mm)	B (mm)	Weight (kg)	EEI	Light source* (reference)
		PMMA	PC	PMMA	PC									
Lumnum EU PRO 140 HF with Philips driver														
870 4ft (1200mm)	61	8300	7700	136	126	4000	>80	>72 000 h	>50 000 h	1174	700±76	2	D	734708
870 5ft (1500mm)	77	10400	9600	135	125	4000	>80	>72 000 h	>50 000 h	1454	1000±76	2,2	D	734742
Philips Fortimo HV6														
870 4ft (1200mm)	60	8800	8100	146	136	4000	>80	>100 000 h	>64 000 h	1174	700±76	2	C	893529
870 5ft (1500mm)	75	11000	10100	146	134	4000	>80	>100 000 h	>64 000 h	1454	1000±76	2,2	C	893525 893529
Philips Fortimo HV6 HF 3klm/ft														
870 4ft (1200mm)	74	11300	10500	152	142	4000	>80	>100 000 h	>64 000 h	1174	700±76	2	C	893537
870 5ft (1500mm)	92	14000	12900	152	141	4000	>80	>100 000 h	>64 000 h	1454	1000±76	2,2	C	893533 893537

Further options:

On request:



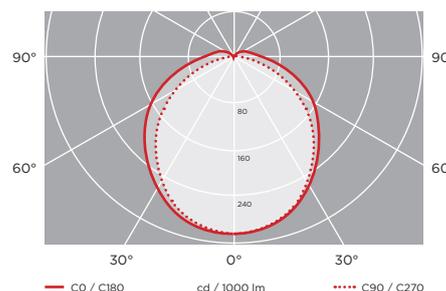
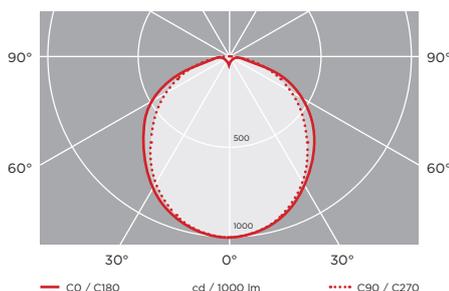
Schematic drawing with main dimensions



Photometric curves:

870-Inspire GRP, 4ft, Lumnum EU 130, 24W, 3400 lm

870-Inspire GRP, 5ft, Lumnum EU PRO 140 HF 77W, 10400lm



Luminaire customisation and the options of advanced controls are presented on page 5

LED

870-INSPIRE PC

High-end dust and waterproof luminaires with LED modules.

Synergy of art and technology
Inspiring design in professional quality.

YOUR MAIN BENEFITS:

Gear tray integrated into the diffuser

Cost efficient and user-friendly **installation** even without disassembling the luminaire



870-INSPIRE PC

IP66



Option:

IP67



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 environments. Thanks to its **enhanced impact resistance**, 870-Inspire PC 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 plug or venting cable gland is necessary, as well as the silicone gasket is recommended.

TECHNICAL DESCRIPTION AND BENEFITS:

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

■ **Diffuser:** Available in **PC** - injection moulded **opalised Polycarbonate** (high mechanical strength and high heat and shock resistance - up to IK10). As an option, injection moulded acrylic (PMMA) diffuser in opal version is available.

Further benefits:

- **Extremely high light transmissivity (up to 90%)**
- **Homogenous, well-balanced light dispersing** (no shadows)
- **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) **simplifies the light calculation.**

■ The **gasket** between the diffuser and the housing is available in two versions:

- **Injected silicone-based endless foam**
- **Non-aging PU** (polyurethane) **endless foam**

■ **Fixing the diffuser to the body:** With stainless steel clips.

■ **Gear tray (reflector):** **The gear tray is integrated into the diffuser** thus enabling a **cost efficient and user-friendly installation** even **without disassembling** the luminaire. White powder coated steel sheet, the LED module mounting positions according to Zhaga standards or customized.

■ **Electrical components:** The adequate power supply is ensured through electronic driver.

Main technical options

Our new **opalised** diffuser made of UV-stabilized material achieves an **outstanding light transmissivity up to 90%**. This great light permeability offers **high efficacy (up to 160 lm/W)** emitted from the luminaire. Feel free to choose from our two types of slightly different diffuser designs.



A the **original** diffuser design



B the **modified oval** variant



870-INSPIRE PC

In the interest of **LED board protection** the **gear tray is integrated into the diffuser** thus enabling a **cost efficient and user-friendly quick installation** even without disassembling the luminaire.

The **stainless steel clips** stay in their position during installation and can be released by bare hands.

Compatible with all optional accessories and smart solutions

Installation friendly construction: The **strap** ensures suspension of the gear tray and the diffuser during installation.

In order to **optimize the thermal management** of the luminaire and to **maximize the lifetime of the LED modules**, the driver is placed into the body without direct contact to the gear tray.

The **gear tray**, made of white powder coated steel sheet according to **Zhaga** standards, is **integrated into the diffuser**. With 870-Inspire PC - depending on customer requirements - we can reach different levels of luminous flux from 3000 up to **12900 lumen** with maximum **efficacy of 152 lm/W**. For more details please see technical data.

The injected **silicone-based gasket** with enhanced resistance ensures **maximum** chemical and weather **resistance** even under tough conditions. This endless foam sealing ensures the high IP protection up to IP67.



OPTIONS FOR CABLE ENTRY:

IP66 grommet

LESS THAN 2 min INSTALLATION TIME

Cable gland

The **Rapid Connector** enables the electrical connection **without disassembling** the luminaire.

Ways of installing (options):

With **strengthened** (0,6 mm) stainless steel mounting brackets.

1.a They are easy-to-install onto the **ceiling or the wall** (in horizontal position).

1.b In case of vertical positioning, **fixing screws** keep the mounting brackets tight avoiding the luminaire from sliding.

2. **Suspension** on chains, wire ropes etc. with stainless steel mounting brackets and **with hooks**. **Easy installation:** Adjustable distance of the mounting brackets (they can be positioned laterally on the housing)

Ways of installing (options):
 With **strengthened** (0,6 mm) stainless steel mounting brackets.
 1.a They are easy-to-install onto the **ceiling or the wall** (in horizontal position).
 1.b In case of vertical positioning, **fixing screws** keep the mounting brackets tight avoiding the luminaire from sliding.

2. **Suspension** on chains, wire ropes etc. with stainless steel mounting brackets and **with hooks**.
Easy installation: Adjustable distance of the mounting brackets (they can be positioned laterally on the housing)

Technical data (extract)

* EPREL database is available at <https://eprel.ec.europa.eu/screen/product/lightsources/xxxxxxx> (where the xxxxxx have to be substituted by the reference number given in the last column)

Products with 5 years warranty	Power (W)	Lum. total luminous flux emitted (lm)		Lum. efficacy (lm/W)		CCT (Kelvin)	CRI	Lifetime L70B50 (Ta=45°C)	Lifetime L80B10 (Ta=45°C)	A (mm)	B (mm)	Weight (kg)	EEL	Light source* (reference)
		PMMA	PC	PMMA	PC									
Lumnium EU 130 with Osram driver														
870 2ft (600mm)	24	3300	3000	137	125	4000	>80	>72 000 h**	>72 000 h**	615	300±25	0,9	D	1059419
870 4ft (1200mm)	24	3400	3150	142	131	4000	>80	>72 000 h**	>50 000 h**	1174	700±76	2	D	802364
870 5ft (1500mm)	30	4300	4000	143	133	4000	>80	>72 000 h**	>50 000 h**	1454	1000±76	2,2	D	734821
870 4ft (1200mm)	37	5200	4800	140	130	4000	>80	>72 000 h**	>50 000 h**	1174	700±76	2	D	734862
870 5ft (1500mm)	51	7000	6500	137	128	4000	>80	>72 000 h**	>50 000 h**	1454	1000±76	2,2	D	734813

Lumnium EU PRO 160 with Osram driver														
870 4ft (1200mm)	22	3450	3200	157	145	4000	>80	>72 000 h	>50 000 h	1174	700±76	2	C	803878
870 5ft (1500mm)	27	4200	3900	157	144	4000	>80	>72 000 h	>50 000 h	1454	1000±76	2,2	C	734800
870 4ft (1200mm)	32	5000	4600	158	144	4000	>80	>72 000 h	>50 000 h	1174	700±76	2	C	803933
870 5ft (1500mm)	44	7000	6500	160	146	4000	>80	>72 000 h	>50 000 h	1454	1000±76	2,2	C	734760

Lumnium EU PRO 160 with Osram DIP Switch driver														
870 4ft (1200mm)	19	3000	3000	162	150	4000	>80	>72 000 h	>50 000 h	1185	700±78	2	C	803933
	23	3700	3700											
	27	4500	4500											
	32	5200	5200											
870 5ft (1500mm)	25	4100	4100	163	152	4000	>80	>72 000 h	>50 000 h	1477	1000±78	2,2	C	734760
	32	5200	5200											
	38	6200	6200											
	44	7200	7200											

** The application of through-wiring may influence the Ta. Max.

Products with 5 years warranty	Power (W)	Lum. total luminous flux emitted (lm)		Lum. efficacy (lm/W)		CCT (Kelvin)	CRI	Lifetime L70B50 (Ta=35°C)	Lifetime L80B10 (Ta=35°C)	A (mm)	B (mm)	Weight (kg)	EEL	Light source* (reference)
		PMMA	PC	PMMA	PC									
Lumnium EU PRO 140 HF with Philips driver														
870 4ft (1200mm)	61	8300	7700	136	126	4000	>80	>72 000 h	>50 000 h	1174	700±76	2	D	734708
870 5ft (1500mm)	77	10400	9600	135	125	4000	>80	>72 000 h	>50 000 h	1454	1000±76	2,2	D	734742
Philips Fortimo HV6														
870 4ft (1200mm)	60	8800	8100	146	136	4000	>80	>100 000 h	>64 000 h	1174	700±76	2	C	893529
870 5ft (1500mm)	75	11000	10100	146	134	4000	>80	>100 000 h	>64 000 h	1454	1000±76	2,2	C	893525 893529
Philips Fortimo HV6 HF 3klm/ft														
870 4ft (1200mm)	74	11300	10500	152	142	4000	>80	>100 000 h	>64 000 h	1174	700±76	2	C	893537
870 5ft (1500mm)	92	14000	12900	152	141	4000	>80	>100 000 h	>64 000 h	1454	1000±76	2,2	C	893533 893537

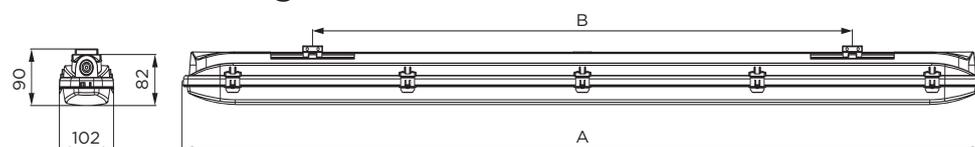
Further options:



On request:

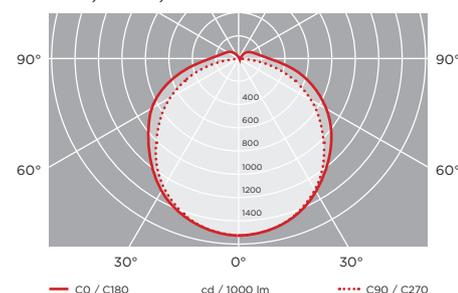


Schematic drawing with main dimensions

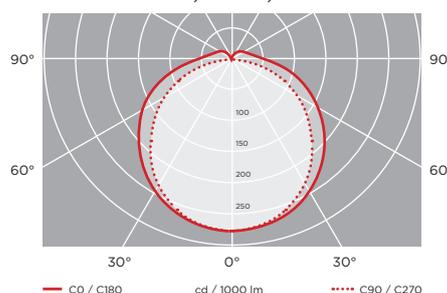


Photometric curves:

870-Inspire PC, opal PC, 4ft, Lumnium EU 130, 24W, 3150 lm



870-Inspire PC, opal PC, 5ft, Lumnium EU PRO 140 HF, 77W, 9600lm



Luminaire customisation and the options of advanced controls are presented on page 5

LED

870-INSPIRE NB

High-end dust and waterproof luminaires with LED modules and with narrow beam optics.

Synergy of art and technology. Perfect choice for high ceilings!

YOUR MAIN BENEFITS:

Narrow beam luminaire, suitable for high ceilings, with transparent diffuser and narrow beam optics
Ideal alternative to high bay fixtures, in a more cost-effective performance

CE

870-INSPIRE NB



IP66



Option:

IP67



1F

3F



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. In accordance with their IP rating they can be widely used to illuminate spaces with dusty and humid environments.

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

TECHNICAL DESCRIPTION AND BENEFITS:

■ **Housing:** Available in flame retardant **GRP** - 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 and mechanical stability. Furthermore it is a good electrical insulator resisting the impacts of several chemicals and weather conditions. Its stability of size and shape at changing temperatures is excellent.

Or also available in 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.

■ **Diffuser:** Available in **PC** - injection moulded **transparent Polycarbonate** (high mechanical strength and high heat and shock resistance) **or in Acrylic** - injection moulded **transparent PMMA** (unique non-aging properties, high chemical resistance). With the use of transparent diffuser a 40° narrow beam radiation angle is achievable for high bay applications.

Further benefits:

- **Extremely high light transmissivity (up to 93%)**
- **Homogenous, well-balanced light dispersing** (no shadows)
- **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) **simplifies the light calculation.**

■ The **gasket** between the diffuser and the housing is available in two versions:

- **Injected silicone-based endless foam**
- **Non-aging PU (polyurethane) endless foam**

■ **Fixing the diffuser to the body:** With stainless steel clips.

■ **Gear tray (reflector):** **The gear tray is integrated into the diffuser** thus enabling a **cost efficient and user-friendly installation** even **without disassembling** the luminaire. White powder coated steel sheet, the LED module mounting positions according to Zhaga standards or customized.

■ **Electrical components:** The adequate power supply is ensured through electronic driver.

Main technical options

Our **transparent** diffuser made of UV-stabilized material achieves an **outstanding light transmissivity up to 93%**. This great light permeability offers **high efficacy (up to 157 lm/W)** emitted from the luminaire.



Narrow beam optics



In the interest of **LED board protection** the **gear tray is integrated into the diffuser** thus enabling a **cost efficient and user-friendly quick installation** even without disassembling the luminaire.

The **stainless steel clips** stay in their position during installation and can be released by bare hands.

Compatible with all optional accessories and smart solutions

870-INSPIRE NB

In order to **optimize the thermal management** of the luminaire and to **maximize the lifetime of the LED modules**, the driver is placed into the body without direct contact to the gear tray.

Installation friendly construction: The **strap** ensures suspension of the gear tray and the diffuser during installation.

The **gear tray**, made of white powder coated steel sheet according to **Zhaga** standards, is **integrated into the diffuser**. With 870-Inspire NB - depending on customer requirements - we can reach different levels of luminous flux **up to 14500 lumen** with maximum **efficacy of 157 lm/W**. For more details please see technical data.

The injected **silicone-based gasket** with enhanced resistance ensures **maximum** chemical and weather **resistance** even under tough conditions. This endless foam sealing ensures the high IP ingress protection up to IP67.



OPTIONS FOR CABLE ENTRY:

IP66 grommet

LESS THAN 2 min INSTALLATION TIME

Cable gland

The **Rapid Connector** enables the electrical connection **without disassembling** the luminaire.

Ways of installing (options):

1.a

2

1.b

With **strengthened** (0,6 mm) stainless steel mounting brackets.

1.a They are easy-to-install onto the **ceiling or the wall** (in horizontal position).

1.b In case of vertical positioning, **fixing screws** keep the mounting brackets tight avoiding the luminaire from sliding.

2. **Suspension** on chains, wire ropes etc. with stainless steel mounting brackets and **with hooks**. **Easy installation:** Adjustable distance of the mounting brackets (they can be positioned laterally on the housing)

Technical data (extract)

* EPREL database is available at <https://eprel.ec.europa.eu/screen/product/lightsources/xxxxxxx> (where the xxxxxx have to be substituted by the reference number given in the last coloumn)

Products with 5 years warranty	Power (W)	Lum. total luminous flux emitted (lm)		Lum. efficacy (lm/W)		CCT (Kelvin)	CRI	Lifetime L70B50 (Ta=35°C)	Lifetime L80B10 (Ta=35°C)	A (mm)	B (mm)	Weight (kg)	EEL	Light source* (reference)
		PMMA	PC	PMMA	PC									
Lumnium EU 130 with Osram driver														
870 4ft (1200mm)	37	5400	5000	146	135	4000	>80	>72 000 h**	>50 000 h**	1174	700±76	2	D	734862
870 5ft (1500mm)	51	7300	6800	143	133	4000	>80	>72 000 h**	>50 000 h**	1454	1000±76	2,2	D	734813
Lumnium EU PRO 160 with Osram driver														
870 4ft (1200mm)	32	5200	4800	163	150	4000	>80	>72 000 h	>50 000 h	1174	700±76	2	C	803933
870 5ft (1500mm)	44	7300	6800	166	155	4000	>80	>72 000 h	>50 000 h	1454	1000±76	2,2	C	734760
Lumnium EU PRO 140 HF with Philips driver														
870 4ft (1200mm)	61	8600	8000	141	131	4000	>80	>72 000 h	>50 000 h	1174	700±76	2	D	734708
870 5ft (1500mm)	77	10900	10100	142	131	4000	>80	>72 000 h	>50 000 h	1454	1000±76	2,2	D	734742
Philips Fortimo HV6 HF														
870 4ft (1200mm)	60	9100	8400	152	140	4000	>80	>100 000 h	>64 000 h	1174	700±76	2	C	893529
870 5ft (1500mm)	75	11400	10600	152	141	4000	>80	>100 000 h	>64 000 h	1454	1000±76	2,2	C	893525 893529
870 4ft (1200mm)	74	11500	10700	155	145	4000	>80	>100 000 h	>64 000 h	1174	700±76	2	C	893537
870 5ft (1500mm)	92	14500	13500	158	147	4000	>80	>100 000 h	>64 000 h	1454	1000±76	2,2	C	893533 893537
Lumnium EU 160 with Osram DIP Switch driver														
870 4ft (1200mm)	19	3100	2900	165	150	4000	>80	>72 000 h	>50 000 h	1185	700±78	2	C	803933
	23	3800	3500											
	27	4700	4400											
	32	5200	4800											
870 5ft (1500mm)	25	4200	3900	165	159	4000	>80	>72 000 h	>50 000 h	1477	1000±78	2,2	C	734760
	32	5400	5000											
	38	6400	5900											
	44	7500	7000											

** The application of through-wiring may influence the Ta. Max.

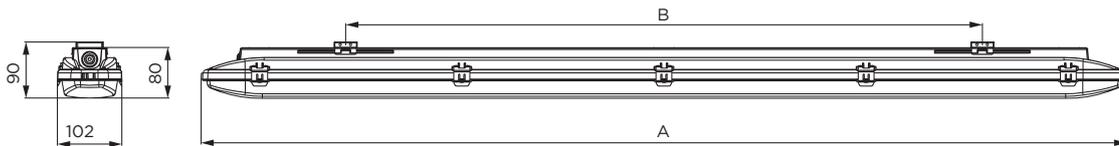
Further options:



On request:



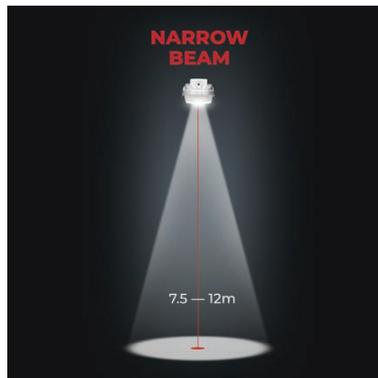
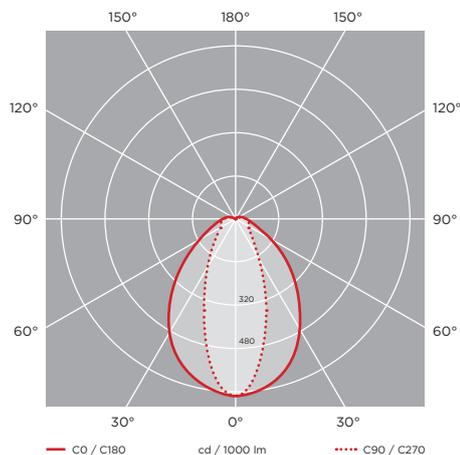
Schematic drawing with main dimensions



Photometric curves:

870-Inspire NB, 5ft, PMMA, Philips Fortimo, HV6HF, 92W, 14 500 lm

With the use of transparent diffuser a 40° narrow beam radiation angle is achievable for high bay applications.



Luminaire customisation and the options of advanced controls are presented on page 5





870-INSPIRE +/-

High-end dust and waterproof luminaires with LED modules.

Professional quality suitable for wide application

2-in-1: Error-free functioning at extreme ambient temperature

YOUR MAIN BENEFITS:

A professional luminaire adapted for **extremely high and extremely low** ambient temperatures. (Ta: -30 to +60 °C) for wide usage, that fulfils the strongest quality requirements.



870-INSPIRE +/-



IP66



Option:



1F

3F



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. In accordance with their IP rating they can be widely used to illuminate spaces with dusty and humid environments. Thanks to its **enhanced temperature resistance**, 870-Inspire +/- is especially suitable for applications, where **error-free functioning at high and low ambient temperature** is desired (industrial plants, cold stores, in countries with subtropic climate...etc.)

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

TECHNICAL DESCRIPTION AND BENEFITS:

■ **Housing: Available with PC or GRP body**, in light grey (RAL7035) colour.

In case of PC: It is made of flame retardant **injection moulded polycarbonate (PC)** - suitable for 850°C glow wire test too. Polycarbonate has very high mechanical strength and allows us to reach an excellent shock resistance.

In case of GRP: It is made of flame retardant **GRP - glass fibre reinforced polyester** - on request suitable for 850°C glow wire test too. Glass fibre reinforced polyester has very good temperature resistance and mechanical stability. Furthermore it is a good electrical insulator resisting the impacts of several chemicals and weather conditions. Its stability of size and shape at changing temperatures is excellent.

■ **Diffuser: Available in PC** - injection moulded **opalised polycarbonate** (high mechanical strength and high heat and shock resistance). Thanks to its **enhanced impact resistance**, 870-Inspire +/- is especially suitable for applications, where **a high IK impact rating** at extreme ambient temperature is required.

Further benefits:

- **Extremely high light transmissivity (up to 90%)**
- **Homogenous, well-balanced light dispersing** (no shadows)
- **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) **simplifies the light calculation.**

■ The **gasket** between the diffuser and housing is **injected silicone-based endless foam.**

■ **Fixing the diffuser to the body:** With **stainless steel** clips.

■ **Gear tray (reflector): The gear tray is integrated into the diffuser** thus enabling a **cost efficient and user-friendly installation** even **without disassembling** the luminaire. White powder coated steel sheet, the LED module mounting positions according to Zhaga standards or customized.

■ **Electrical components:** The adequate power supply is ensured through electronic driver.

Main technical options

Our new **opalised** diffuser made of UV-stabilized material achieves an **outstanding light transmissivity up to 90%**. This great light permeability offers **high efficacy (up to 141 lm/W)** emitted from the luminaire. Feel free to choose from our two types of slightly different diffuser designs.



A the **original** diffuser design



B the **modified oval** variant



870-INSPIRE +/-

In the interest of **LED board protection** the **gear tray is integrated into the diffuser** thus enabling a **cost efficient and user-friendly quick installation** even without disassembling the luminaire.

The **stainless steel clips** stay in their position during installation and can be released by bare hands.

Compatible with all optional accessories and smart solutions

Compatible with all optional accessories and smart solutions

PoE

Extra-long (double) lifetime of the driver, high luminous flux even at extreme ambient temperatures are your benefits.

Installation friendly construction: The **strap** ensures suspension of the gear tray and the diffuser during installation.

In order to optimise the thermal management of the luminaire at high ambient temperatures, the driver is fixed to the gear tray with a **heat sink plate**. Thus heat sensitive LED components function properly **up to Ta +60 °C**.

The **gear tray**, made of white powder coated steel sheet according to **Zhaga** standards, is **integrated into the diffuser**. With 870-Inspire +/- - depending on customer requirements - we can reach different levels of luminous flux **up to 9800 lumen** with maximum **efficacy of 141 lm/W**. For more details please see technical data.

The injected **silicone-based gasket** with enhanced resistance ensures **maximum** chemical and weather **resistance** even under tough conditions. This endless foam sealing ensures the high IP protection up to IP66.



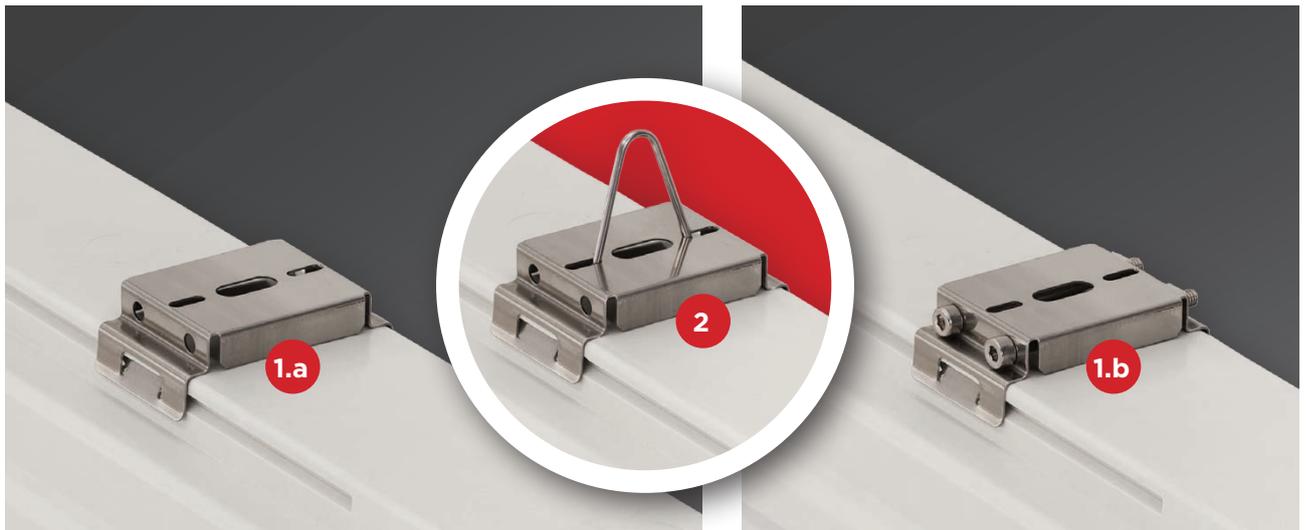
OPTIONS FOR CABLE ENTRY:

In case of **standard version** a **venting cable gland** is applied



The **Rapid Connector** enables the electrical connection **without disassembling** the luminaire. In case of throughwiring version, with the usage of **rapid connectors on the two ends**, a **venting plug** is applied.

Thanks to the **venting cable gland** or the **venting plug** the **condensation of the humidity** inside the luminaire can be **avoided**.



Ways of installing (options):

With **strengthened** (0,6 mm) stainless steel mounting brackets.
 1.a They are easy-to-install onto the **ceiling or the wall** (in horizontal position).
 1.b In case of vertical positioning, **fixing screws** keep the mounting brackets tight avoiding the luminaire from sliding.

2. **Suspension** on chains, wire ropes etc. with stainless steel mounting brackets and **with hooks**.
Easy installation: Adjustable distance of the mounting brackets (they can be positioned laterally on the housing)

Technical data (extract)

* EPREL database is available at <https://eprel.ec.europa.eu/screen/product/lightsources/xxxxxxx> (where the xxxxxx have to be substituted by the reference number given in the last coloumn)

Products with 5 years warranty	Power (W)	Lum. total luminous flux emitted (lm)		Lum. efficacy (lm/W)		CCT (Kelvin)	CRI	Lifetime L70B50 (Ta=50°C)	Lifetime L80B10 (Ta=50°C)	A (mm)	B (mm)	Weight (kg)	EEI	Light source* (reference)
		PMMA	PC	PMMA	PC									
870 Philips Fortimo HV6 HF with Philips driver														
870 4ft (1200mm)	59	n.a.	8200	n.a.	138	4000	>80	>100.000 h	>64.000 h	1174	700±76	2	C	893529
870 5ft (1500mm)	70	n.a.	9800	n.a.	141	4000	>80	>100.000 h	>64.000 h	1454	1000±76	2,2	C	893525 893529

Products with 5 years warranty	Power (W)	Lum. total luminous flux emitted (lm)		Lum. efficacy (lm/W)		CCT (Kelvin)	CRI	Lifetime L70B50 (Ta=60°C)	Lifetime L80B10 (Ta=60°C)	A (mm)	B (mm)	Weight (kg)	EEI	Light source* (reference)
		PMMA	PC	PMMA	PC									
870 Philips Fortimo HV6 HF with Philips driver														
870 4ft (1200mm)	43	n.a.	6100	n.a.	142	4000	>80	>100.000 h	>64.000 h	1174	700±76	2	C	893529
870 5ft (1500mm)	56	n.a.	7900	n.a.	145	4000	>80	>100.000 h	>64.000 h	1454	1000±76	2,2	C	893525 893529

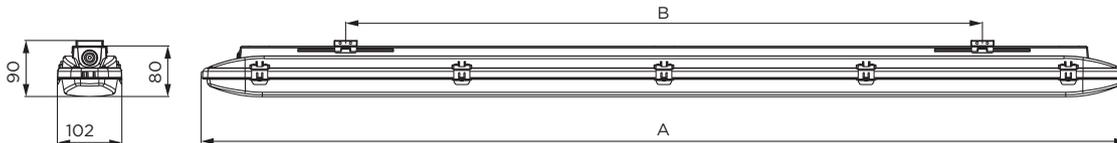
Further options:



On request:



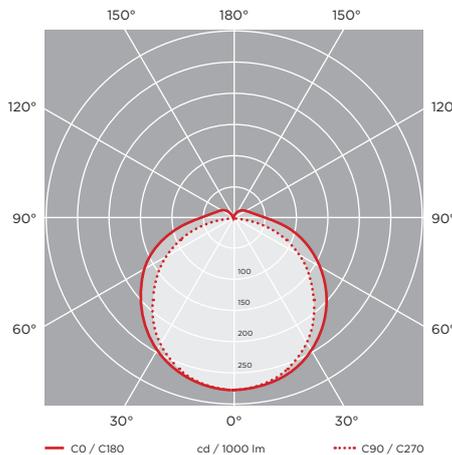
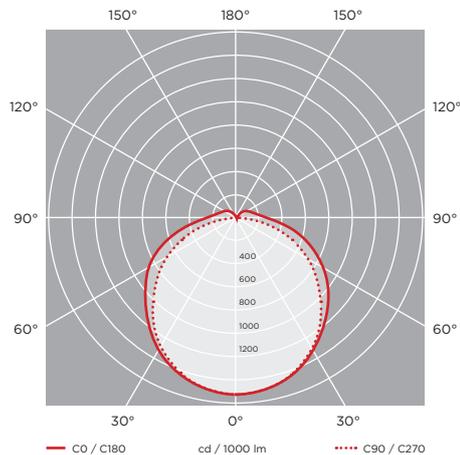
Schematic drawing with main dimensions



Photometric curves:

870-Inspire +/-, opal PC, 4ft, Philips Fortimo HV6 HF, 59W, 8200 lm

870-Inspire +/-, opal PC, 5ft, Philips Fortimo HV6 HF, 70W, 9800 lm



Luminaire customisation and the options of advanced controls are presented on page 5



LED

870-INSPIRE AIR

High-end dust and waterproof luminaires for outdoor with LED modules.

A professional solution especially for outdoor applications. 870-Inspire Air withstands the impact of adverse weather conditions.

YOUR MAIN BENEFITS:

Enhanced weather resistance (sunlight, rain, wind). Suitable for outdoor applications with errorfree functioning. Gear tray integrated into the diffuser. Quick installation even without disassembling the luminaire.



870-INSPIRE AIR

IP66



Option:



1F

3F



FIELD OF APPLICATION:

Due to the construction principles of gasket, closing system and diffuser our fixtures ensure a high grade of protection (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, **870-Inspire Air** is especially suitable for applications, where **errorfree functioning in outdoor conditions** is desired.

TECHNICAL DESCRIPTION AND BENEFITS:

- **Housing:** Available flame retardant **GRP** - glass fibre reinforced polyester in light grey (RAL7035) colour. Glass fibre reinforced polyester has very good temperature resistance and mechanical stability. Furthermore it is a good electrical insulator resisting the impacts of several chemicals and weather conditions. Its stability of size and shape at changing temperatures is excellent.
- **Diffuser:** is available in injection moulded **opalised Acrylic PMMA** with unique non-aging properties, extremely high light permeability and well-balanced light dispersing. The diffusers are designed with respect to their optical characteristics and are UV resistant. Main advantages: **weather resistance** and extremely high light efficiency.
 - **Further benefits:**
 - **Extremely high light transmissivity (up to 90%)**
 - **Homogenous, well-balanced light dispersing** (no shadows)
 - 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) simplifies the light calculation
- The **gasket** between the diffuser and housing is **injected silicone-based** endless foam.
- **Fixing the diffuser to the body:** With **stainless steel** clips.
- **Gear tray** (reflector): **The gear tray is integrated into the diffuser** thus enabling a **cost efficient and user-friendly installation** even **without disassembling** the luminaire. White powder coated steel sheet according to **Zhaga standards** or customized.
- **Electrical components:** The adequate power supply is ensured through electronic driver.

Main technical options

Our new **opalised** diffuser made of UV-stabilized material achieves an **outstanding light transmissivity up to 90%**. This great light permeability offers **high efficacy (up to 160 lm/W)** emitted from the luminaire. Feel free to choose from our two types of slightly different diffuser designs.



A the **original** diffuser design



B the **modified oval** variant

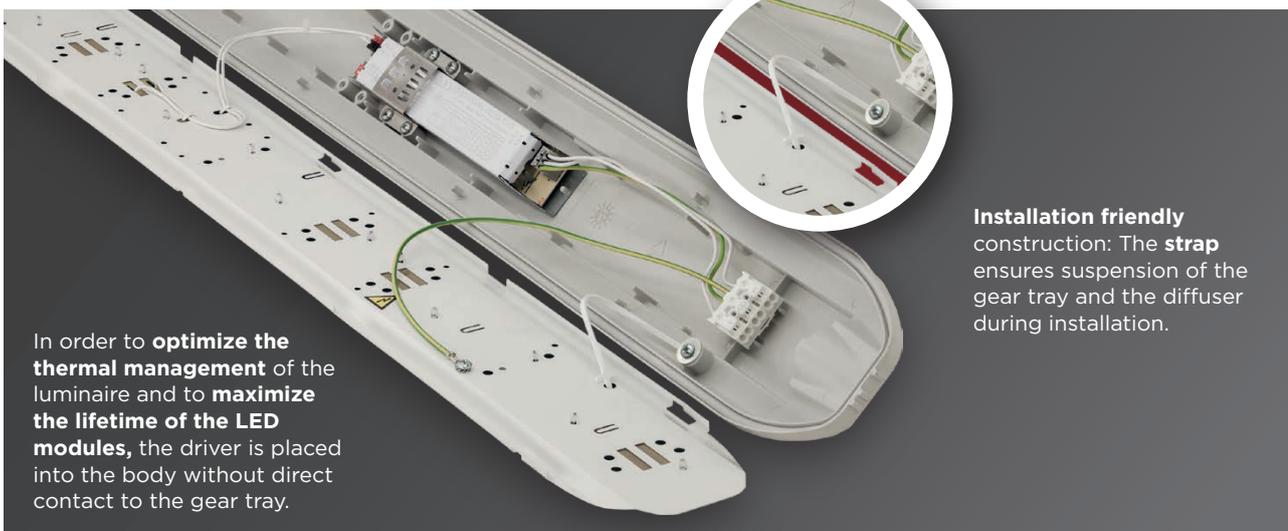


The **stainless steel clips** stay in their position during installation and can be released by bare hands.

Compatible with all optional accessories and smart solutions!



In the interest of **LED board protection** the **gear tray is integrated into the diffuser** thus enabling a **cost efficient and user-friendly quick installation** even without disassembling the luminaire.



In order to **optimize the thermal management** of the luminaire and to **maximize the lifetime of the LED modules**, the driver is placed into the body without direct contact to the gear tray.

Installation friendly construction: The **strap** ensures suspension of the gear tray and the diffuser during installation.

The **gear tray**, made of white powder coated steel sheet according to **Zhaga** standards, **is integrated into the diffuser**. With **870-Inspire Air** - depending on customer requirements - we can reach different levels of luminous flux from **2700 up to 14000 lumen** with maximum **efficacy up to 160 lm/W**. For more details please see technical data.

The injected **silicone-based gasket** with enhanced resistance ensures **maximum** chemical and weather **resistance** even under tough conditions. This endless foam sealing ensures the high IP protection up to IP66.



OPTIONS FOR CABLE ENTRY:

VENTING CABLE GLAND

LESS THAN 2 min INSTALLATION TIME

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

The **Rapid Connector** enables the electrical connection **without disassembling** the luminaire.

The **venting plug** is a pressure equalizer instead of the venting cable gland in case of application of rapid connector



Ways of installing (options):
 With **strengthened** (0,6 mm) stainless steel mounting brackets.
 1.a They are easy-to-install onto the **ceiling or the wall** (in horizontal position).

1.b In case of vertical positioning, **special screws** keep the mounting brackets tight avoiding the luminaire from sliding.

Easy installation: Adjustable distance of the mounting brackets (they can be positioned laterally on the housing)

Technical data (extract)

* EPREL database is available at <https://eprel.ec.europa.eu/screen/product/lightsources/xxxxxxx> (where the xxxxxx have to be substituted by the reference number given in the last column)

Products with 2 years warranty	Power (W)	Lum. total luminous flux emitted (lm)		Lum. efficacy (lm/W)		CCT (Kelvin)	CRI	Lifetime L70B50 (Ta=45°C)	Lifetime L80B10 (Ta=45°C)	A (mm)	B (mm)	Weight (kg)	EEI	Light source* (reference)
		PMMA	PC	PMMA	PC									
Lumnium EU 130 with Osram driver														
870 4ft (1200mm)	24	3400	n.a.	142	n.a.	4000	>80	>72 000 h**	>50 000 h**	1174	700±76	2	D	802364
870 5ft (1500mm)	30	4300	n.a.	143	n.a.	4000	>80	>72 000 h**	>50 000 h**	1454	1000±76	2,2	D	734821
870 4ft (1200mm)	37	5200	n.a.	140	n.a.	4000	>80	>72 000 h**	>50 000 h**	1174	700±76	2	D	734862
870 5ft (1500mm)	51	7000	n.a.	137	n.a.	4000	>80	>72 000 h**	>50 000 h**	1454	1000±76	2,2	D	734813
Lumnium EU PRO 160 with Osram driver														
870 4ft (1200mm)	22	3450	n.a.	157	n.a.	4000	>80	>72 000 h	>50 000 h	1174	700±76	2	C	803878
870 5ft (1500mm)	27	4200	n.a.	157	n.a.	4000	>80	>72 000 h	>50 000 h	1454	1000±76	2,2	C	734800
870 4ft (1200mm)	32	5000	n.a.	158	n.a.	4000	>80	>72 000 h	>50 000 h	1174	700±76	2	C	803933
870 5ft (1500mm)	44	7000	n.a.	160	n.a.	4000	>80	>72 000 h	>50 000 h	1454	1000±76	2,2	C	734760
Lumnium EU PRO 160 with Osram DIP Switch driver														
870 4ft (1200mm)	19	3000	n.a.	162	n.a.	4000	>80	>72 000 h	>50 000 h	1185	700±78	2	C	803933
	23	3700												
	27	4500												
	32	5200												
870 5ft (1500mm)	25	4100	n.a.	163	n.a.	4000	>80	>72 000 h	>50 000 h	1477	1000±78	2,2	C	734760
	32	5200												
	38	6200												
	44	7200												

** The application of through-wiring may influence the Ta. Max.

Products with 2 years warranty	Power (W)	Lum. total luminous flux emitted (lm)		Lum. efficacy (lm/W)		CCT (Kelvin)	CRI	Lifetime L70B50 (Ta=35°C)	Lifetime L80B10 (Ta=35°C)	A (mm)	B (mm)	Weight (kg)	EEI	Light source* (reference)
		PMMA	PC	PMMA	PC									
Lumnium EU PRO 140 HF with Philips driver														
870 4ft (1200mm)	61	8300	n.a.	136	n.a.	4000	>80	>72 000 h	>50 000 h	1174	700±76	2	D	734708
870 5ft (1500mm)	77	10400	n.a.	135	n.a.	4000	>80	>72 000 h	>50 000 h	1454	1000±76	2,2	D	734742
Philips Fortimo HV6														
870 4ft (1200mm)	60	8800	n.a.	146	n.a.	4000	>80	>100 000 h	>64 000 h	1174	700±76	2	C	893529
870 5ft (1500mm)	75	11000	n.a.	146	n.a.	4000	>80	>100 000 h	>64 000 h	1454	1000±76	2,2	C	893525 893529
Philips Fortimo HV6 HF 3klm/ft														
870 4ft (1200mm)	74	11300	n.a.	152	n.a.	4000	>80	>100 000 h	>64 000 h	1174	700±76	2	C	893537
870 5ft (1500mm)	92	14000	n.a.	152	n.a.	4000	>80	>100 000 h	>64 000 h	1454	1000±76	2,2	C	893533 893537

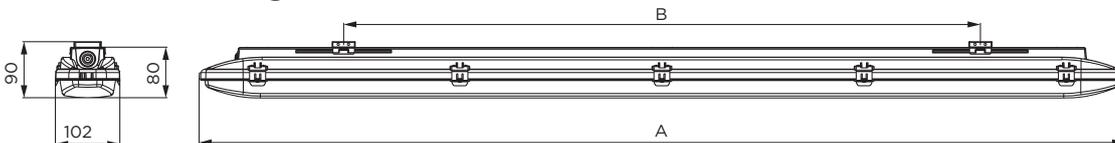
Further options:



On request:

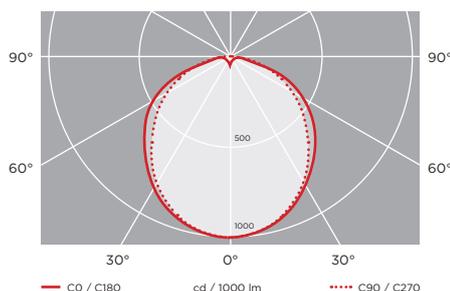


Schematic drawing with main dimensions

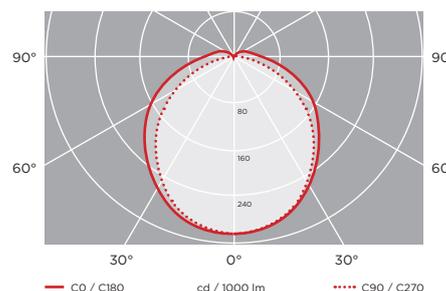


Photometric curves:

870-Inspire Air, 4ft, Lumnium EU 130, 24W, 3400 lm



870-Inspire Air, 5ft, Lumnium EU PRO 140 HF, 77W, 10400lm



Luminaire customisation and the options of advanced controls are presented on page 5





870-FARMER

High-end dust and waterproof luminaires with LED modules.

Perfect choice for farming industry and chemically aggressive environment!

YOUR MAIN BENEFITS:

Corrosion resistant luminaire, especially designed for **long-term resistance** against chemicals, **especially ammonia**. Gear tray integrated into the diffuser, **user-friendly installation**.



870-FARMER



IP66



Option:



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. In accordance with their IP rating they can be widely used to illuminate spaces with dusty and humid environments.

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

TECHNICAL DESCRIPTION AND BENEFITS:

- **Housing:** It is made of flame retardant **GRP** - 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 and mechanical stability. Furthermore it is a good electrical insulator resisting the impacts of several chemicals and weather conditions. Its stability of size and shape at changing temperatures is excellent.
- **Diffuser: Available in Acrylic** - injection moulded **opalised PMMA** (unique non-aging properties, high chemical resistance).
 - Further benefits:**
 - **Extremely high light transmissivity (up to 93%)**
 - **Homogenous, well-balanced light dispersing** (no shadows)
 - **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) **simplifies the light calculation**.
- **Gasket: silicone-based endless foam** with enhanced resistance.
- **Fixing the diffuser to the body:** with **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 a special **hermetically sealed electronic driver - LUMNIUM Farmer HV**.

Main technical options

Our new **opalised** diffuser made of UV-stabilized material achieves an **outstanding light transmissivity up to 93%**. This great light permeability offers **high efficacy (up to 164 lm/W)** emitted from the luminaire. Feel free to choose from our two types of slightly different diffuser designs.



A the **original** diffuser design



B the **modified oval** variant

The **maximum of chemical resistance** achieved by using **special components**:

Tinned wires

Hermetically sealed driver

Corrosion resistant LED system, LUMNIUM Farmer HV, designed for long-term resistance against chemicals, especially ammonia.

Installation friendly construction: The **strap** ensures suspension of the gear tray and the diffuser during installation.

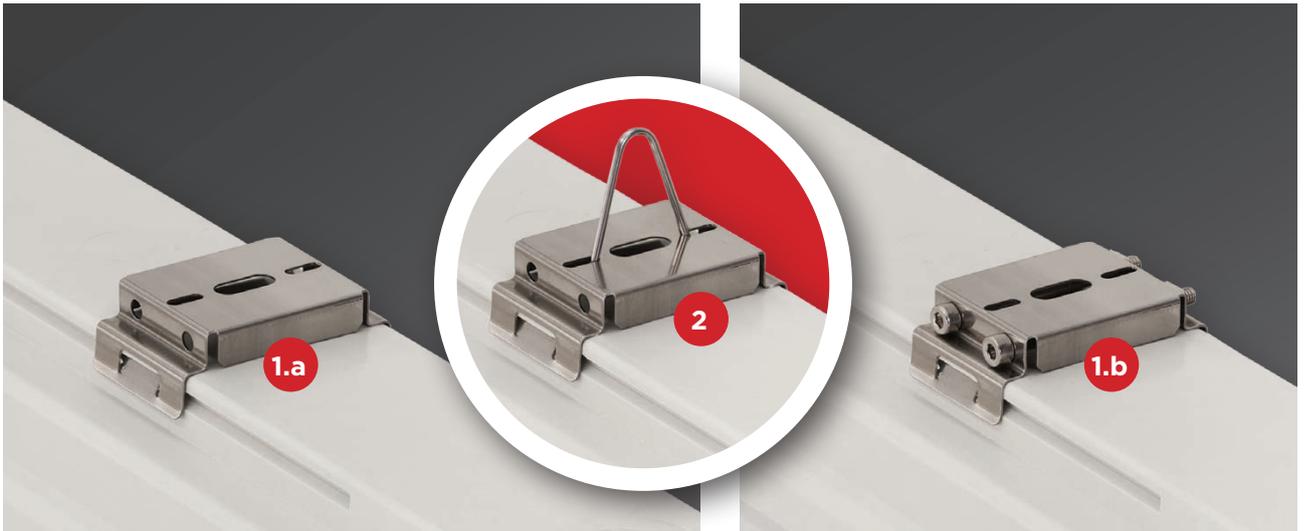
In order to **optimize the thermal management** of the luminaire and to **maximize the lifetime of the LED modules**, the driver is placed into the body without direct contact to the gear tray.

The **gear tray**, made of white powder coated steel sheet according to **Zhaga** standards, is **integrated into the diffuser**. With 870-Farmer - depending on customer requirements - we can reach different levels of luminous flux from 3800 up to **6600 lumen** with maximum **efficacy of 164 lm/W**. For more details please see technical data.

The injected **silicone-based gasket** with enhanced resistance ensures **maximum** chemical and weather **resistance** even under tough conditions. This endless foam sealing ensures the high IP protection up to IP66.



HIGHLIGHTED BENEFITS:



Ways of installing (options):

With **strengthened** (0,6 mm) stainless steel mounting brackets.
 1.a They are easy-to-install onto the **ceiling or the wall** (in horizontal position).
 1.b In case of vertical positioning, **fixing screws** keep the mounting brackets tight avoiding the luminaire from sliding.

2. **Suspension** on chains, wire ropes etc. with stainless steel mounting brackets and **with hooks**.
Easy installation: Adjustable distance of the mounting brackets (they can be positioned laterally on the housing)

Technical data (extract)

* EPREL database is available at <https://eprel.ec.europa.eu/screen/product/lightsources/xxxxxxx> (where the xxxxxx have to be substituted by the reference number given in the last coloumn)

Products with 3 years or with extended 5 years warranty	Power (W)	Lum. total luminous flux emitted (lm)		Lum. efficacy (lm/W)		CCT (Kelvin)	CRI	Lifetime L70B50 (Ta=35°C)	Lifetime L80B10 (Ta=35°C)	A (mm)	B (mm)	Weight (kg)	EEI	Light source* (reference)
		PMMA	PC	PMMA	PC									
Lumnum3 Farmer HV														
870 4ft (1200mm)	23	3800	n.a.	164	n.a.	4000	>80	50.000 h	50.000 h	1277	700	2	D	696329
870 5ft (1500mm)	33	5000	n.a.	152	n.a.	4000	>80	50.000 h	50.000 h	1577	1000	2,2	D	696329
870 5ft (1500mm)	43	6600	n.a.	154	n.a.	4000	>80	50.000 h	40.000 h	1577	1000	2,2	D	696329
Lumnum5 Farmer HV														
870 4ft (1200mm)	23	3800	n.a.	164	n.a.	4000	>80	50.000 h	50.000 h	1277	700	2	D	696329
870 5ft (1500mm)	33	5000	n.a.	152	n.a.	4000	>80	50.000 h	50.000 h	1577	1000	2,2	D	696329
870 5ft (1500mm)	43	6600	n.a.	154	n.a.	4000	>80	50.000 h	40.000 h	1577	1000	2,2	D	696329

Other colour temperatures available on request



870-FARMER

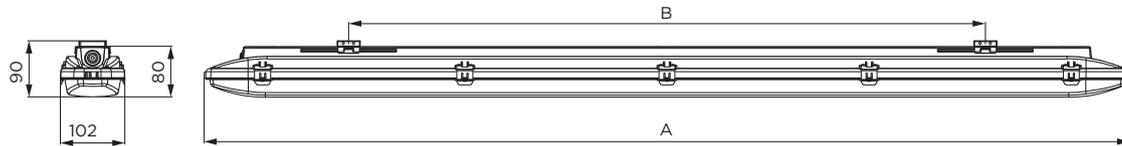
Further options:



On request:

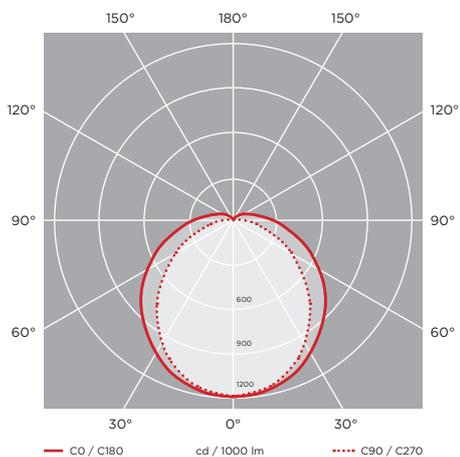


Schematic drawing with main dimensions

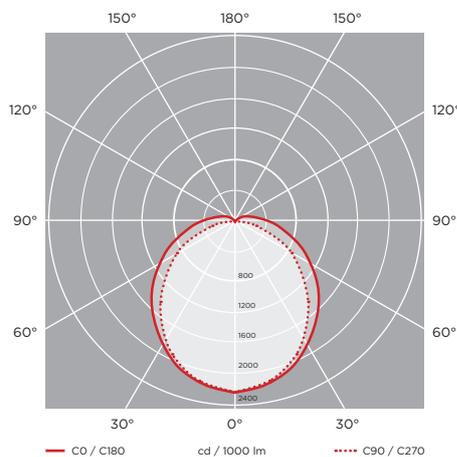


Photometric curves:

870-Farmer, 4ft, 1200m, Lumnum Farmer HV, 23W, 3800lm, PMMA



870-Farmer, 5ft, 1500mm, Lumnum Farmer HV, 43W, 6600lm, PMMA



Luminaire customisation and the options of advanced controls are presented on page 5



771-FAVOURITE

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 and mechanical stability. Furthermore it is a good electrical insulator resisting the impacts of several chemicals and 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).

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

LED

CE



771-FAVOURITE

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**.



771-FAVOURITE



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

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**.

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



With 771-Favourite - depending on customer requirements - we can reach different levels of luminous flux (lumen) as well as luminous efficacy (lm/Watt). For more details please see technical data.



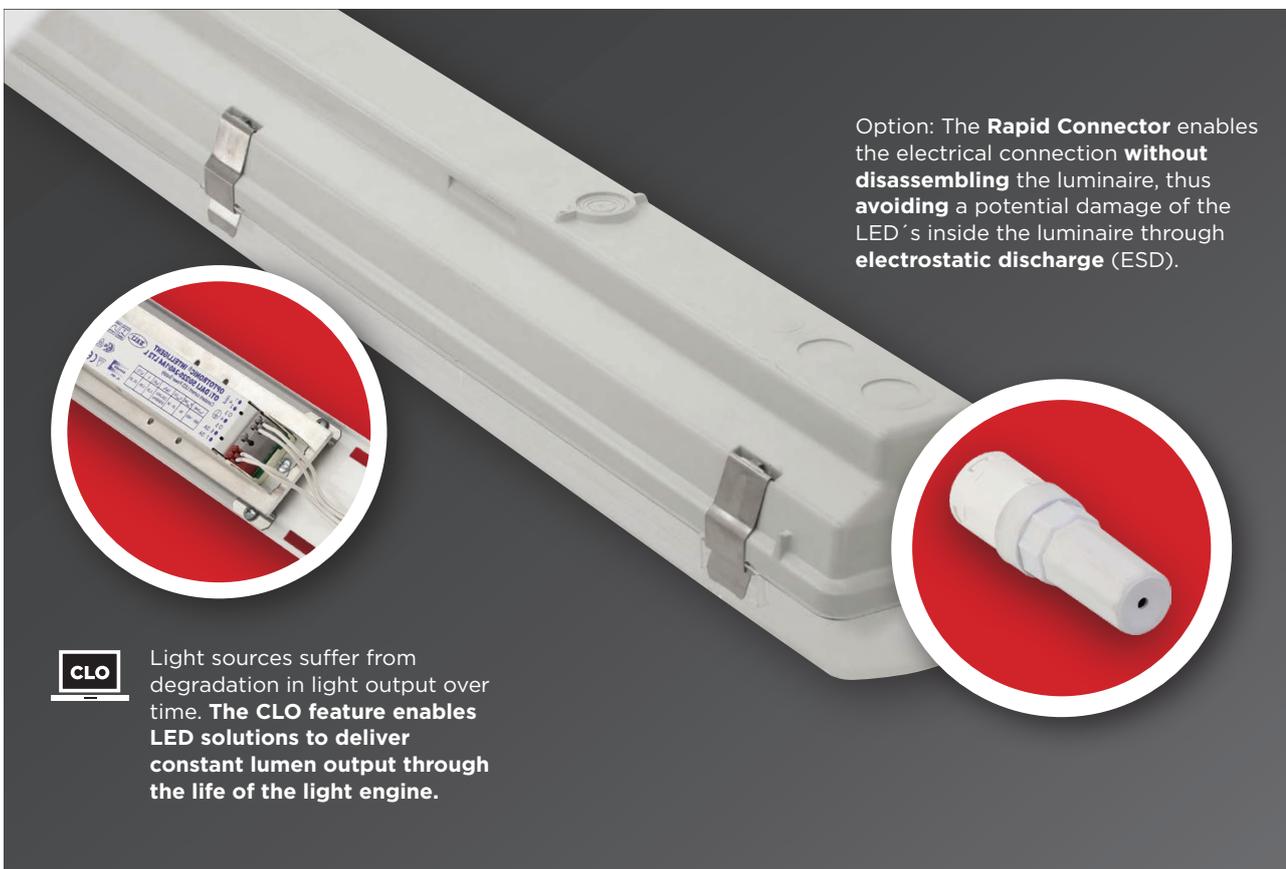
In order to optimise the thermal management of the luminaire we avoid the direct contact of the gear tray and driver, thus increasing the lifetime of the modules and driver.



LED Version with motion sensor



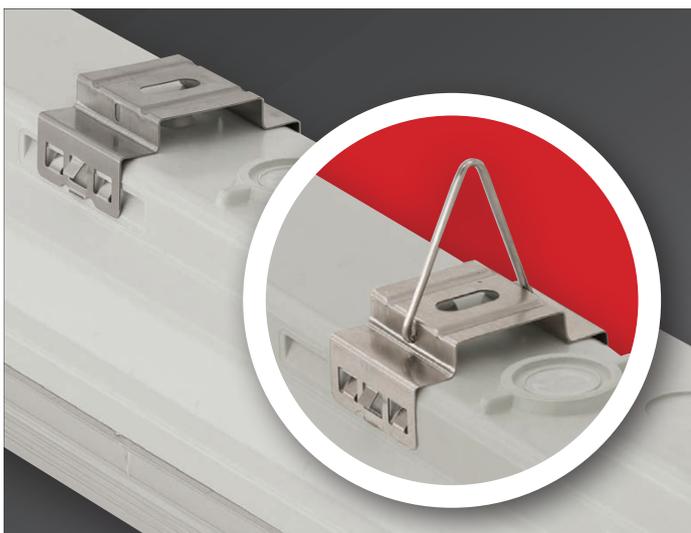
The gear tray is made of white powder coated steel sheet according to **Zhaga** standards. On request customisation possible.



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)**.

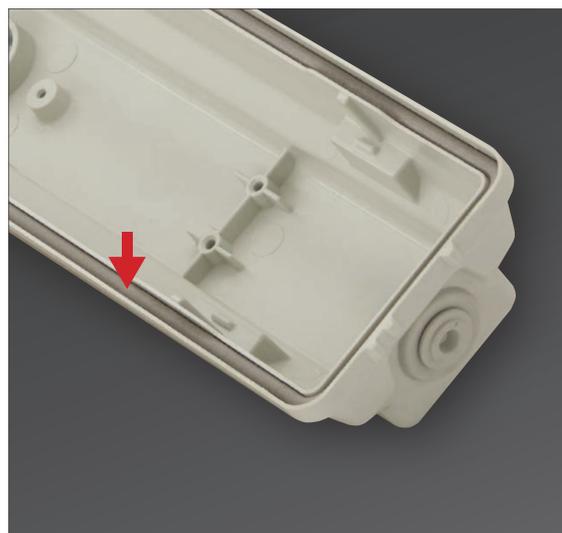


Light sources suffer from degradation in light output over time. The **CLO feature enables LED solutions to deliver constant lumen output through the life of the light engine.**



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 **silicone-based** foam with enhanced resistance.

Technical data (extract)

* EPREL database is available at <https://eprel.ec.europa.eu/screen/product/lightsources/xxxxxxx> (where the xxxxxx have to be substituted by the reference number given in the last column)

Products with 5 years warranty	Power (W)	Lum. total luminous flux emitted (lm)		Lum. efficacy (lm/W)		CCT (Kelvin)	CRI	Lifetime L70B50 (Ta=35°C)	Lifetime L80B10 (Ta=35°C)	A (mm)	B (mm)	Weight (kg)	EEI	Light source* (reference)
		PMMA	PC	PMMA	PC									
Lumium EU 130 with Osram driver														
771 2ft (600mm)	24	3300	3000	137	125	4000	>80	>72 000 h	>50 000 h	669	415	0,9	D	1059419
771 4ft (1200mm)	25	3400	3200	136	130	4000	>80	>72 000 h	>50 000 h	1277	800	2,2	D	802364
771 5ft (1500mm)	30	4200	4000	140	133	4000	>80	>72 000 h	>50 000 h	1577	1100	2,5	D	734821
771 4ft (1200mm)	38	5100	4900	134	129	4000	>80	>72 000 h	>50 000 h	1277	800	2,2	D	734862
771 5ft (1500mm)	51	7000	6600	137	129	4000	>80	>72 000 h	>50 000 h	1577	1100	2,5	D	734813
Lumium EU PRO 160 with Osram driver														
771 4ft (1200mm)	22	3300	3200	150	145	4000	>80	>72 000 h	>50 000 h	1277	700	2,2	C	803878
771 5ft (1500mm)	27	4200	4000	155	148	4000	>80	>72 000 h	>50 000 h	1577	1000	2,5	C	734800
771 4ft (1200mm)	31	4800	4600	155	148	4000	>80	>72 000 h	>50 000 h	1277	700	2,2	C	803933
771 5ft (1500mm)	41	6500	6200	158	151	4000	>80	>72 000 h	>50 000 h	1577	1000	2,5	C	734760
Lumium EU PRO 140 HF with Philips driver														
771 4ft (2x1200mm)**	58	8000	7500	138	129	4000	>80	>72 000 h	>50 000 h	1277	700	2,65	D	734708
771 5ft (2x1500mm)**	73	10200	9600	140	131	4000	>80	>72 000 h	>50 000 h	1577	1000	3	D	734742
Osram Basic Linear G3														
771 2ft (600mm)	21	2400	2300	119	112	4000	>80	>50 000 h	>41 000 h	669	360	1,3	D	892178
771 4ft (1200mm)	23	2900	2800	124	119	4000	>80	>50 000 h	>50 000 h	1277	700	1,8	D	892186
771 5ft (1500mm)	28	3700	3500	132	126	4000	>80	>50 000 h	>50 000 h	1577	1000	2,2	D	892176 892186
771 4ft (1200mm)	28	3900	3700	140	134	4000	>80	>50 000 h	>45 000 h	1277	700	2	D	892188
771 5ft (1500mm)	35	4700	4500	136	130	4000	>80	>50 000 h	>50 000 h	1577	1000	2,2	D	892178 892188
771 4ft (2x1200mm)**	39	5300	5000	135	127	4000	>80	>50 000 h	>43 000 h	1277	700	2,5	D	892188
771 5ft (2x1500mm)**	47	6800	6400	144	136	4000	>80	>50 000 h	>43 000 h	1577	1000	2,7	D	892178 892188
Philips Fortimo LED Strip LV5														
771 2ft (600mm)	15	2100	2000	138	131	4000	>80	>72 000 h	>50 000 h	669	360	1,7	C	778312
771 4ft (1200mm)	31	4500	4300	143	136	4000	>80	>72 000 h	>50 000 h	1277	700	2,2	C	778351
771 5ft (1500mm)	38	5400	5200	142	136	4000	>80	>72 000 h	>50 000 h	1577	1000	2,5	C	778365
771 5ft (2x1500mm)**	49	6900	6500	140	128	4000	>80	>72 000 h	>50 000 h	1577	1000	2,7	C	778365
Philips Fortimo LED Strip HV6														
771 4ft (2x1200mm)**	56	8300	7800	150	141	4000	>80	>100 000 h	>64 000 h	1277	700	2,65	C	893529
771 5ft (2x1500mm)**	70	10500	9900	150	141	4000	>80	>100 000 h	>64 000 h	1577	1000	3	C	893525 893529
771 4ft (2x1200mm)**	66	10000	9400	153	144	4000	>80	>100 000 h	>64 000 h	1277	700	2,65	C	893537
771 5ft (2x1500mm)**	83	12700	12000	153	145	4000	>80	>100 000 h	>64 000 h	1577	1000	3	C	893533 893537

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

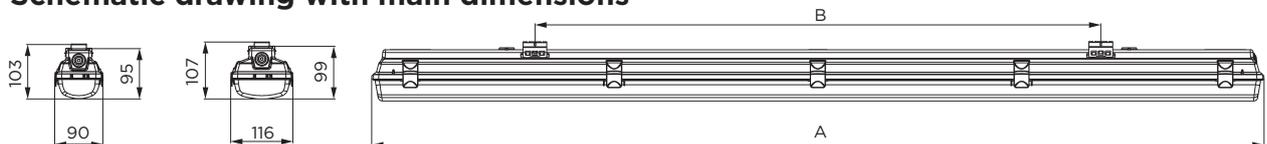
Further options:



On request:

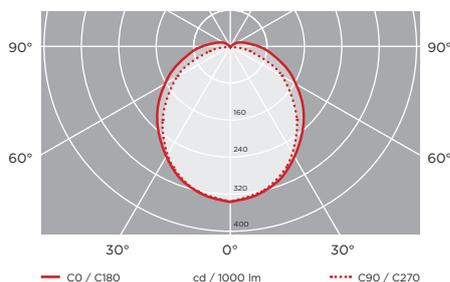


Schematic drawing with main dimensions



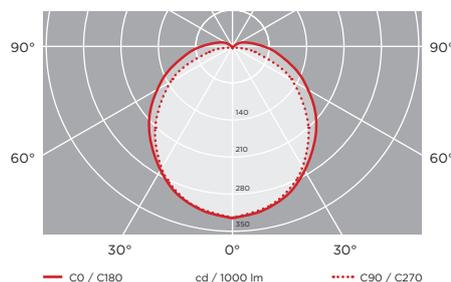
Photometric curves:

771-Favourite, 5ft (2x1500mm),
Osram Basic Linear G3, 47W, 6800lm, PMMA



Photometric curves:

771-Favourite, 5ft (2x1500mm),
Philips Fortimo LED Strip HV6, 70W, 10500lm, PMMA



Luminaire customisation and the options of advanced controls are presented on page 5

771-ORIENT +50°C

Industrial dust and waterproof luminaires with LED modules

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

YOUR MAIN BENEFITS:

A professional luminaire for wide usage, that fulfils 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 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. Glass fibre reinforced polyester has very good temperature resistance and mechanical stability. Furthermore it is a good electrical insulator resisting the impacts of several chemicals and 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 **silicone-based foam** with enhanced resistance.
- **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. For more details please see technical data.

LED

CE

771-ORIENT +50 °C

IP65



Option:





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**.

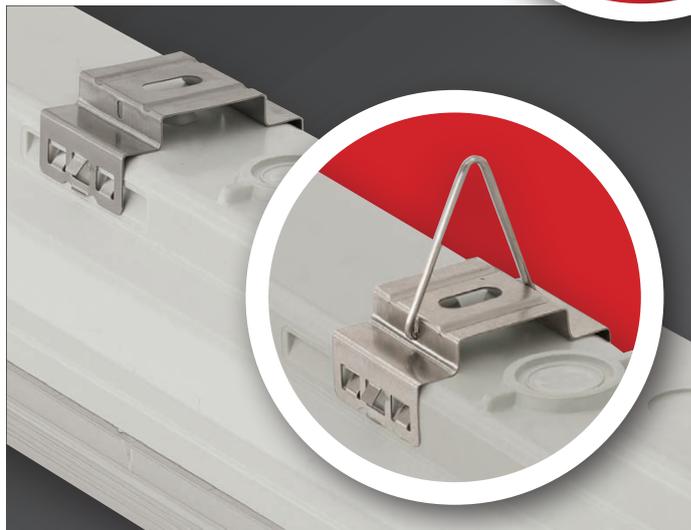


771-ORIENT +50 °C



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

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**.



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. For more details please see technical data.



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)**.

771-ORIENT +50 °C



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 $T_a +50^{\circ}\text{C}$.



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



Technical data (extract)

* EPREL database is available at <https://eprel.ec.europa.eu/screen/product/lightsources/xxxxxxx> (where the xxxxxx have to be substituted by the reference number given in the last column)

Products with 5 years warranty	Power (W)	Lum. total luminous flux emitted (lm)		Lum. efficacy (lm/W)		CCT (Kelvin)	CRI	Lifetime L70B50 (Ta=+50°C)	Lifetime L80B10 (Ta=+50°C)	A (mm)	B (mm)	Weight (kg)	EEI	Light source* (reference)
		PMMA	PC	PMMA	PC									
Philips Fortimo LED Strip LV														
771 4ft (1200mm)	26	n.a.	3 400	n.a.	132	4000	>80	>70 000 h	>50 000 h	1277	700	2,2	C	778351
771 5ft (1500mm)	31	n.a.	4 200	n.a.	135	4000	>80	>70 000 h	>50 000 h	1577	1000	2,5	C	778365
771 5ft (2x1500mm)**	39	n.a.	5 200	n.a.	134	4000	>80	>70 000 h	>50 000 h	1577	1000	2,7	C	778365
Philips Fortimo LED Strip HV6														
771 4ft (2x1200mm)**	59	n.a.	8 100	n.a.	137	4000	>80	>50 000 h	>50 000 h	1277	700	2,65	C	893529
771 5ft (2x1500mm)**	70	n.a.	9 900	n.a.	141	4000	>80	>50 000 h	>50 000 h	1577	1000	3	C	893525 893529

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

Other colour temperatures available on request

771-ORIENT +50 °C



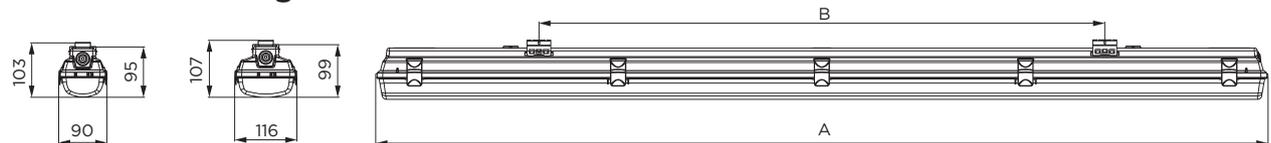
Further options:



On request:



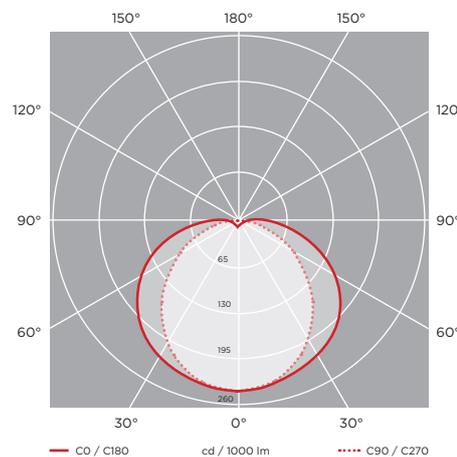
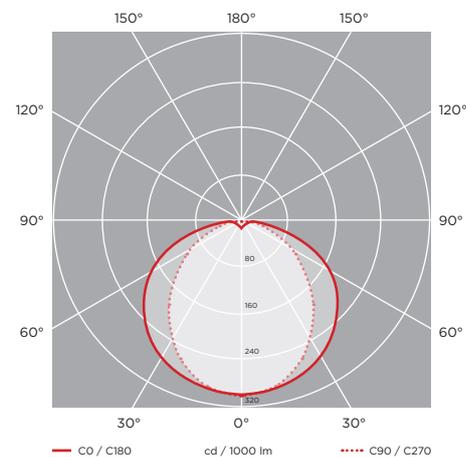
Schematic drawing with main dimensions



Photometric curves:

771-Orient +50°C 4ft 1200mm, Philips Fortimo LED Strip LV5, 26W, 3400lm, PC

771-Orient +50°C 5ft (2x1500mm)*, Philips Fortimo LED Strip HV6, 70W, 9900lm, PC



Luminaire customisation and the options of advanced controls are presented on page 5

771-EXTREME -30°C

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:

- **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 and mechanical stability. Furthermore it is a good electrical insulator resisting the impacts of several chemicals and weather conditions. Its stability of size and shape at changing temperatures is excellent.
- **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
- In order to ensure maximum temperature, chemical and weather resistance even under tough conditions, the **gasket** between the diffuser and housing is made of **silicone-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. For more details please see technical data.

LED

CE

771-EXTREME -30°C

IP65



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 silicone-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**.

771-EXTREME -30°C

Technical data (extract)

* EPREL database is available at <https://eprel.ec.europa.eu/screen/product/lightsources/xxxxxxx> (where the xxxxxx have to be substituted by the reference number given in the last column)

Products with 5 years warranty	Power (W)	Lum. total luminous flux emitted (lm)		Lum. efficacy (lm/W)		CCT (Kelvin)	CRI	Lifetime L70B50 (Ta=-30°C)	Lifetime L80B10 (Ta=-30°C)	A (mm)	B (mm)	Weight (kg)	EEI	Light source* (reference)
		PMMA	PC	PMMA	PC									
Lumnium3 Farmer HV														
771 4ft (2x1200mm)**	55	n.a.	7 800	n.a.	141	4000	>80	>50 000 h	>50 000 h	1277	700	2,65	C	893529
771 5ft (2x1500mm)**	70	n.a.	9 900	n.a.	141	4000	>80	>50 000 h	>50 000 h	1577	1000	3	C	893525 893529

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

Other colour temperatures available on request

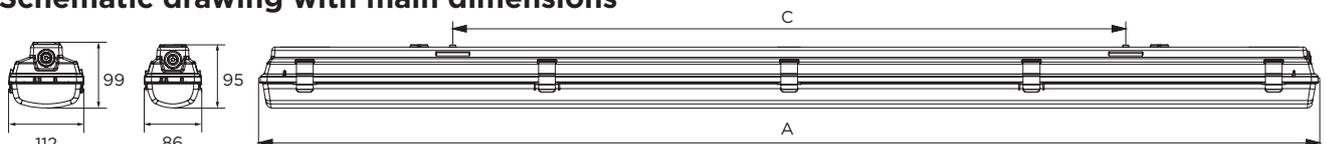
Further options:



On request:

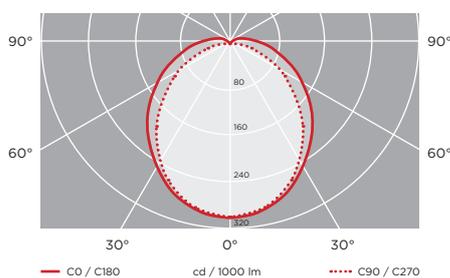


Schematic drawing with main dimensions

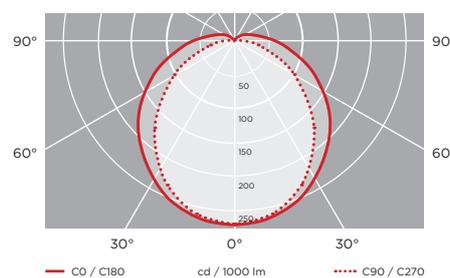


Photometric curves:

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



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



Luminaire customisation and the options of advanced controls are presented on page 5

771-VENTILA

Industrial dust and waterproof luminaires with LED modules

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

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 +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 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. Glass fibre reinforced polyester has very good temperature resistance and mechanical stability. Furthermore it is a good electrical insulator resisting the impacts of several chemicals and 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, well-balanced light dispersing 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 **silicone-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. For more details please see technical data.

LED

CE

771-VENTILA

IP65



Option:

IP66



3F



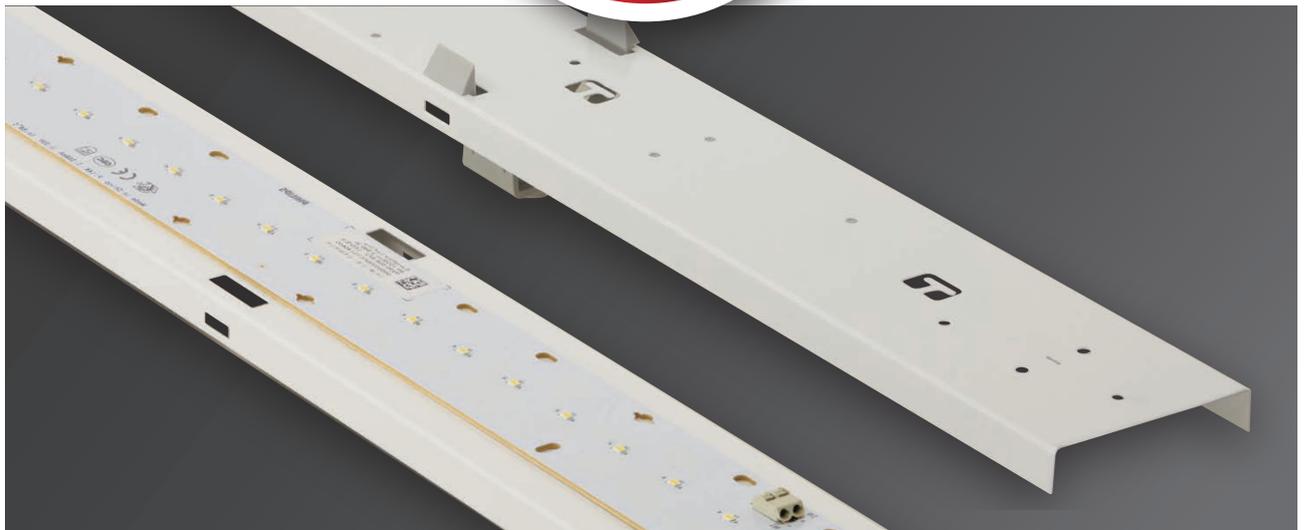
Main technical options

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. For more details please see technical data.

In order to ensure **maximum** heat, chemical and **weather resistance** even under tough conditions, the **gasket** between the diffuser and housing is made of **silicone-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)

* EPREL database is available at <https://eprel.ec.europa.eu/screen/product/lightsources/xxxxxxx> (where the xxxxxx have to be substituted by the reference number given in the last column)

Products with 5 years warranty	Power (W)	Lum. total luminous flux emitted (lm)		Lum. efficacy (lm/W)		CCT (Kelvin)	CRI	Lifetime L70B50 (Ta=35°C)	Lifetime L80B10 (Ta=35°C)	A (mm)	B (mm)	Weight (kg)	EEI	Light source* (reference)
		PMMA	PC	PMMA	PC									
Lumnium EU 130 with Osram driver														
771 2ft (600mm)	24	3300	n.a.	137	n.a.	4000	>80	>72 000 h	>50 000 h	669	415	0,9	D	1059419
771 4ft (1200mm)	25	3400	n.a.	136	n.a.	4000	>80	>72 000 h	>50 000 h	1277	800	2,2	D	802364
771 5ft (1500mm)	30	4200	n.a.	140	n.a.	4000	>80	>72 000 h	>50 000 h	1577	1100	2,5	D	734821
771 4ft (1200mm)	38	5100	n.a.	134	n.a.	4000	>80	>72 000 h	>50 000 h	1277	800	2,2	D	734862
771 5ft (1500mm)	51	7000	n.a.	137	n.a.	4000	>80	>72 000 h	>50 000 h	1577	1100	2,5	D	734813
Lumnium EU PRO 160 with Osram driver														
771 4ft (1200mm)	22	3300	n.a.	150	n.a.	4000	>80	>72 000 h	>50 000 h	1277	700	2,2	C	803878
771 5ft (1500mm)	27	4200	n.a.	155	n.a.	4000	>80	>72 000 h	>50 000 h	1577	1000	2,5	C	734800
771 4ft (1200mm)	31	4800	n.a.	155	n.a.	4000	>80	>72 000 h	>50 000 h	1277	700	2,2	C	803933
771 5ft (1500mm)	41	6500	n.a.	158	n.a.	4000	>80	>72 000 h	>50 000 h	1577	1000	2,5	C	734760
Lumnium EU PRO 140 HF with Philips driver														
771 4ft (2x1200mm)**	58	8000	n.a.	138	n.a.	4000	>80	>72 000 h	>50 000 h	1277	700	2,65	D	734708
771 5ft (2x1500mm)**	73	10200	n.a.	140	n.a.	4000	>80	>72 000 h	>50 000 h	1577	1000	3	D	734742
Osram Basic Linear G3														
771 2ft (600mm)	21	2400	n.a.	119	n.a.	4000	>80	>50 000 h	>41 000 h	669	360	1,3	D	892178
771 4ft (1200mm)	23	2900	n.a.	124	n.a.	4000	>80	>50 000 h	>50 000 h	1277	700	1,8	D	892186
771 5ft (1500mm)	28	3700	n.a.	132	n.a.	4000	>80	>50 000 h	>50 000 h	1577	1000	2,2	D	892176 892186
771 4ft (1200mm)	28	3900	n.a.	140	n.a.	4000	>80	>50 000 h	>45 000 h	1277	700	2	D	892188
771 5ft (1500mm)	35	4700	n.a.	136	n.a.	4000	>80	>50 000 h	>50 000 h	1577	1000	2,2	D	892178 892188
771 4ft (2x1200mm)**	39	5300	n.a.	135	n.a.	4000	>80	>50 000 h	>43 000 h	1277	700	2,5	D	892188
771 5ft (2x1500mm)**	47	6800	n.a.	144	n.a.	4000	>80	>50 000 h	>43 000 h	1577	1000	2,7	D	892178 892188
Philips Fortimo LED Strip LV5														
771 2ft (600mm)	15	2100	n.a.	138	n.a.	4000	>80	>72 000 h	>50 000 h	669	360	1,7	C	778312
771 4ft (1200mm)	31	4500	n.a.	143	n.a.	4000	>80	>72 000 h	>50 000 h	1277	700	2,2	C	778351
771 5ft (1500mm)	38	5400	n.a.	142	n.a.	4000	>80	>72 000 h	>50 000 h	1577	1000	2,5	C	778365
771 5ft (2x1500mm)**	49	6900	n.a.	140	n.a.	4000	>80	>72 000 h	>50 000 h	1577	1000	2,7	C	778365
Philips Fortimo LED Strip HV6														
771 4ft (2x1200mm)**	56	8300	n.a.	150	n.a.	4000	>80	>100 000 h	>64 000 h	1277	700	2,65	C	893529
771 5ft (2x1500mm)**	70	10500	n.a.	150	n.a.	4000	>80	>100 000 h	>64 000 h	1577	1000	3	C	893525 893529
771 4ft (2x1200mm)**	66	10000	n.a.	153	n.a.	4000	>80	>100 000 h	>64 000 h	1277	700	2,65	C	893537
771 5ft (2x1500mm)**	83	12700	n.a.	153	n.a.	4000	>80	>100 000 h	>64 000 h	1577	1000	3	C	893533 893537

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

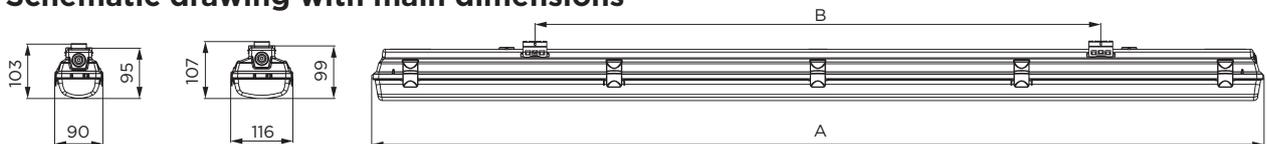
Further options:



On request:



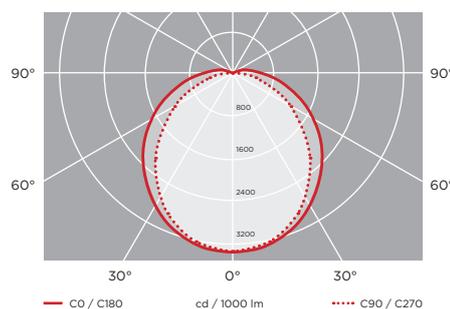
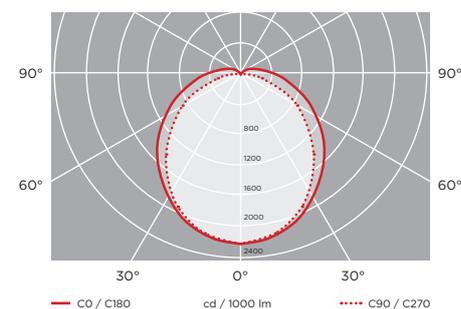
Schematic drawing with main dimensions



Photometric curves:

771-Ventila 5ft (2x1500mm)
Osram Basic Linear G3 47W 6800lm

771-Ventila 5ft (2x1500mm)
Philips Fortimo LED Strip HV6 70W 10500lm



Luminaire customisation and the options of advanced controls are presented on page 5



771-FARMER

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.

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 and mechanical stability. Furthermore it is a good electrical insulator resisting the impacts of several chemicals and weather conditions. 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** (no shadows)
- **Gasket:** **silicone-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**.

LED



CE

771-FARMER

IP65



Option:

IP66



Main technical options

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



771-FARMER

The **maximum of chemical resistance** achieved by using **special components**:

Tinned wires

Hermetically sealed driver

Corrosion resistant LED system, LUMNIUM Farmer HV, designed for long-term resistance against chemicals, especially ammonia.

Strengthened suspension brackets made of stainless steel

1

2



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)

* EPREL database is available at <https://eprel.ec.europa.eu/screen/product/lightsources/xxxxxxx> (where the xxxxxx have to be substituted by the reference number given in the last column)

Products with 3 years or with extended 5 years warranty	Power (W)	Lum. total luminous flux emitted (lm)		Lum. efficacy (lm/W)		CCT (Kelvin)	CRI	Lifetime L70B50 (Ta=35°C)	Lifetime L80B10 (Ta=35°C)	A (mm)	B (mm)	Weight (kg)	EEL	Light source* (reference)
		PMMA	PC	PMMA	PC									
Lumnium3 Farmer HV														
771 2 ft (600 mm)	14	1900	n.a.	136	n.a.	4000	>80	50 000 h	50 000 h	669	360	1,2	D	696329
771 4ft (1200mm)	23	3800	n.a.	164	n.a.	4000	>80	50 000 h	50 000 h	1277	700	2	D	696329
771 5ft (1500mm)	33	5000	n.a.	152	n.a.	4000	>80	50 000 h	50 000 h	1577	1000	2,2	D	696329
771 5ft (2x1500mm)**	43	6600	n.a.	154	n.a.	4000	>80	50 000 h	40 000 h	1577	1000	2,2	D	696329
Lumnium5 Farmer HV														
771 2 ft (600 mm)	14	1900	n.a.	136	n.a.	4000	>80	50 000 h	50 000 h	669	360	1,2	D	696329
771 4ft (1200mm)	23	3800	n.a.	164	n.a.	4000	>80	50 000 h	50 000 h	1277	700	2	D	696329
771 5ft (1500mm)	33	5000	n.a.	152	n.a.	4000	>80	50 000 h	50 000 h	1577	1000	2,2	D	696329
771 5ft (2x1500mm)**	43	6600	n.a.	154	n.a.	4000	>80	50 000 h	40 000 h	1577	1000	2,2	D	696329

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

Other colour temperatures available on request

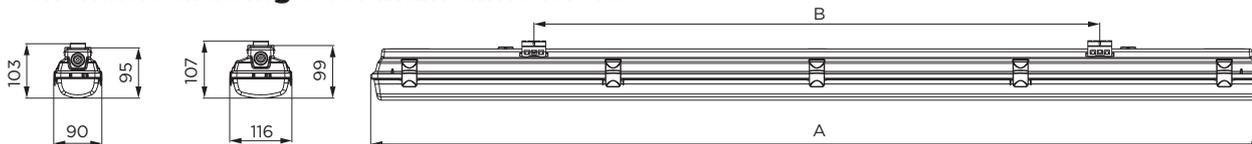
Further options:



On request:

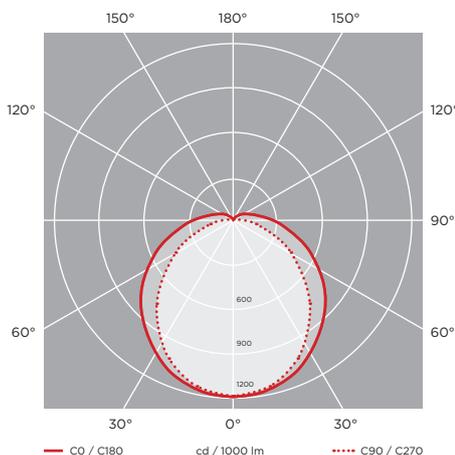


Schematic drawing with main dimensions

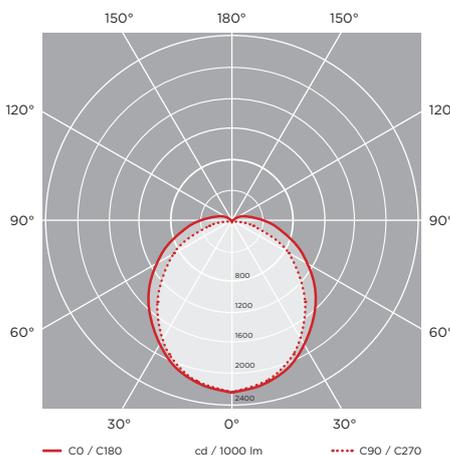


Photometric curves:

771-Farmer, 4ft, 1x1200m, Lumnium Farmer HV, 23W, 3800lm, PMMA



771-Farmer, 5ft, 2x1500mm, Lumnium Farmer HV, 43W, 6600lm, PMMA



Luminaire customisation and the options of advanced controls are presented on page 5



775-PC

Industrial dust and waterproof luminaires

Equipped with **LED modules**. 775-PC 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).



775-PC



IP65



Option:

IP66

IP67



3F



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 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 high shock resistance - up to IK10, with extremely high light permeability and well-balanced light dispersing.
As an option injection moulded acrylic (PMMA) diffuser in opal version is available.

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

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

■ **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. For more details please see technical data.

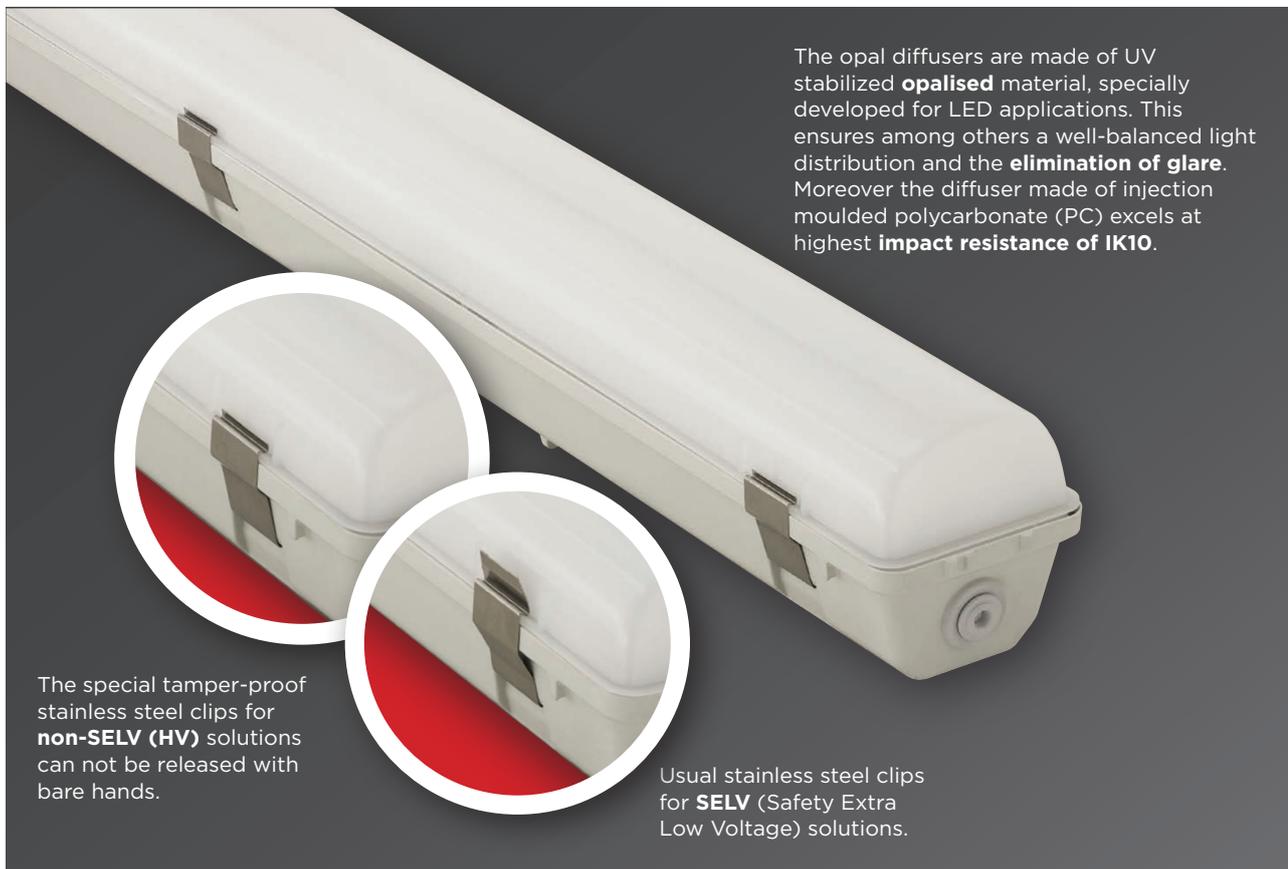
Main technical options

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**.



LED

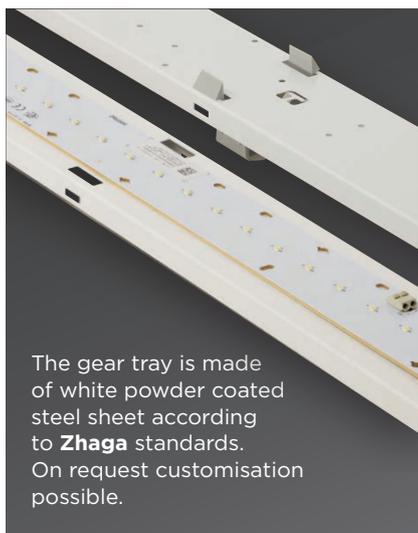
The opal diffusers are made of UV stabilized **opalised** material, specially developed for LED applications. This ensures among others a well-balanced light distribution and the **elimination of glare**. Moreover the diffuser made of injection moulded polycarbonate (PC) excels at highest **impact resistance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

775-PC



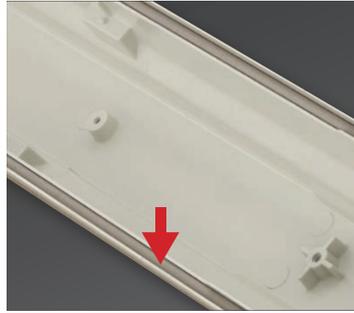
The gear tray is made of white powder coated steel sheet according to **Zhaga** standards. On request customisation possible.



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 **silicone-based** foam with enhanced resistance.

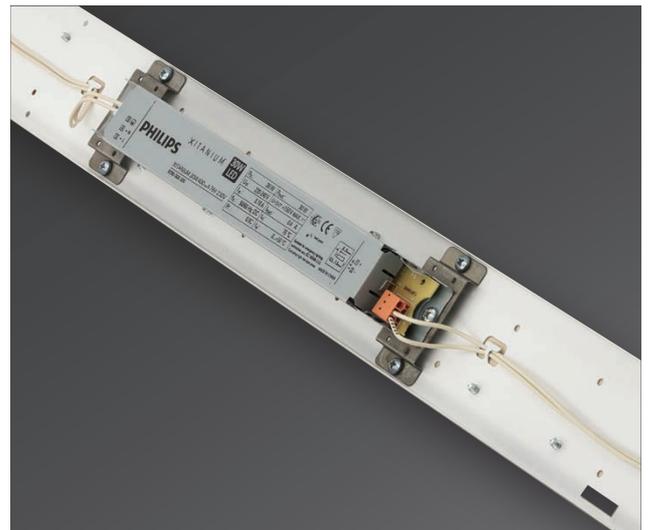


CLO

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
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. For more details please 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.

Technical data (extract)

* EPREL database is available at <https://eprel.ec.europa.eu/screen/product/lightsources/xxxxxxx>
(where the xxxxxxx have to be substituted by the reference number given in the last column)

Products with 5 years warranty	Power (W)	Lum. total luminous flux emitted (lm)		Lum. efficacy (lm/W)		CCT (Kelvin)	CRI	Lifetime L70B50 (Ta=35°C)	Lifetime L80B10 (Ta=35°C)	A (mm)	B (mm)	Weight (kg)	EEL	Light source* (reference)
		PMMA	PC	PMMA	PC									
Lumium EU 130 with Osram driver														
775 2ft (2x600mm)**	24	3300	3000	137	125	4000	>80	>72 000 h	>50 000 h	669	360	0,9	D	1059419
775 4ft (1200mm)	25	3400	3200	136	130	4000	>80	>72 000 h	>50 000 h	1277	700	2,2	D	802364
775 5ft (1500mm)	30	4200	4000	140	133	4000	>80	>72 000 h	>50 000 h	1577	1000	2,5	D	734821
775 4ft (1200mm)	38	5100	4900	134	129	4000	>80	>72 000 h	>50 000 h	1277	700	2,2	D	734862
775 5ft (1500mm)	51	7000	6600	137	129	4000	>80	>72 000 h	>50 000 h	1577	1000	2,5	D	734813
Lumium EU PRO 160 with Osram driver														
775 4ft (1200mm)	22	3300	3200	150	145	4000	>80	>72 000 h	>50 000 h	1277	700	2,2	C	803878
775 5ft (1500mm)	27	4200	4000	155	148	4000	>80	>72 000 h	>50 000 h	1577	1000	2,5	C	734800
775 4ft (1200mm)	31	4800	4600	155	148	4000	>80	>72 000 h	>50 000 h	1277	700	2,2	C	803933
775 5ft (1500mm)	41	6500	6200	158	151	4000	>80	>72 000 h	>50 000 h	1577	1000	2,5	C	734760
Lumium EU PRO 140 HF with Philips driver														
775 4ft (2x1200mm)**	58	8000	7500	138	129	4000	>80	>72 000 h	>50 000 h	1277	700	2,65	D	734708
775 5ft (2x1500mm)**	73	10200	9600	140	131	4000	>80	>72 000 h	>50 000 h	1577	1000	3	D	734742
Osram Basic Linear G3														
775 2ft (2x600mm)**	21	2400	2300	119	112	4000	>80	>50 000 h	>41 000 h	669	360	1,3	D	892178
775 4ft (1200mm)	23	2900	2800	124	119	4000	>80	>50 000 h	>50 000 h	1277	700	1,8	D	892186
775 5ft (1500mm)	28	3700	3500	132	126	4000	>80	>50 000 h	>50 000 h	1577	1000	2,2	D	892176 892186
775 4ft (1200mm)	28	3900	3700	140	134	4000	>80	>50 000 h	>45 000 h	1277	700	2	D	892188
775 5ft (1500mm)	35	4700	4500	136	130	4000	>80	>50 000 h	>50 000 h	1577	1000	2,2	D	892178 892188
775 4ft (2x1200mm)**	39	5300	5000	135	127	4000	>80	>50 000 h	>43 000 h	1277	700	2,5	D	892188
775 5ft (2x1500mm)**	47	6800	6400	144	136	4000	>80	>50 000 h	>43 000 h	1577	1000	2,7	D	892178 892188
Philips Fortimo LED Strip LV5														
775 2ft (2x600mm)**	15	2100	2000	138	131	4000	>80	>72 000 h	>50 000 h	669	360	1,7	C	778312
775 4ft (1200mm)	31	4500	4300	143	136	4000	>80	>72 000 h	>50 000 h	1277	700	2,2	C	778351
775 5ft (1500mm)	38	5400	5200	142	136	4000	>80	>72 000 h	>50 000 h	1577	1000	2,5	C	778365
775 5ft (2x1500mm)**	49	6900	6500	140	128	4000	>80	>72 000 h	>50 000 h	1577	1000	2,7	C	778365
Philips Fortimo LED Strip HV6														
775 4ft (2x1200mm)**	56	8300	7800	150	141	4000	>80	>100 000 h	>64 000 h	1277	700	2,65	C	893529
775 5ft (2x1500mm)**	70	10500	9900	150	141	4000	>80	>100 000 h	>64 000 h	1577	1000	3	C	893525 893529
775 4ft (2x1200mm)**	66	10000	9400	153	144	4000	>80	>100 000 h	>64 000 h	1277	700	2,65	C	893537
775 5ft (2x1500mm)**	83	12700	12000	153	145	4000	>80	>100 000 h	>64 000 h	1577	1000	3	C	893533 893537

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

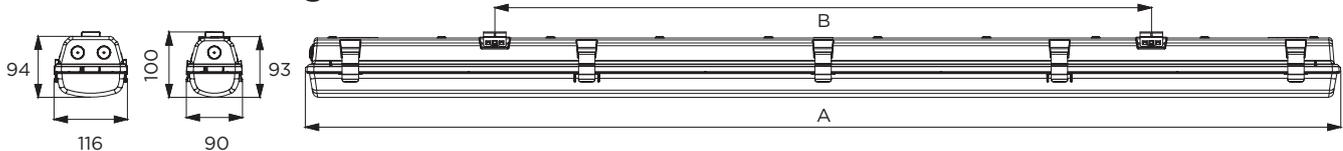
Calculated values based on the available datasheets

Further options:

On request:



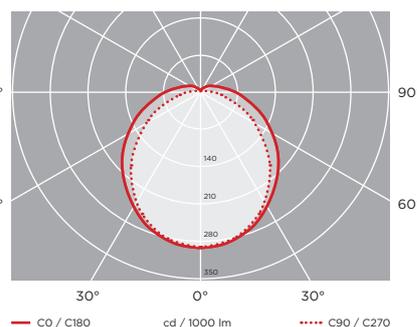
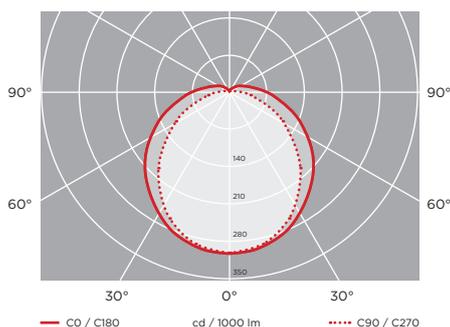
Schematic drawing with main dimensions



Photometric curves:

775-PC, 4ft (2x1200mm)
Osram Basic Linear G3, 39W, 5000lm, PC

775-PC, 4ft (2x1200mm)
Philips Fortimo LED Strip HV6, 55W, 7800lm, PC



Luminaire customisation and the options of advanced controls are presented on page 5





Kinyomási elágazás B



746-CLEVER

Industrial dust and waterproof luminaires with LED modules

**With an 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:

- **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 and mechanical stability. Furthermore it is a good electrical insulator resisting the impacts of several chemicals and 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).
- The **gasket** between the diffuser and the housing is available in two versions:
 - **Injected silicone-based endless foam**
 - **Non-aging PU (polyurethane) endless foam**
 - **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.

LED

CE

746-CLEVER

IP65



Option:

IP66





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.**



746-CLEVER



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

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.**

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



With 746-Clever - depending on customer requirements - we can reach different levels of luminous flux (lumen) as well as luminous efficacy (lm/Watt). For more details please 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.



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

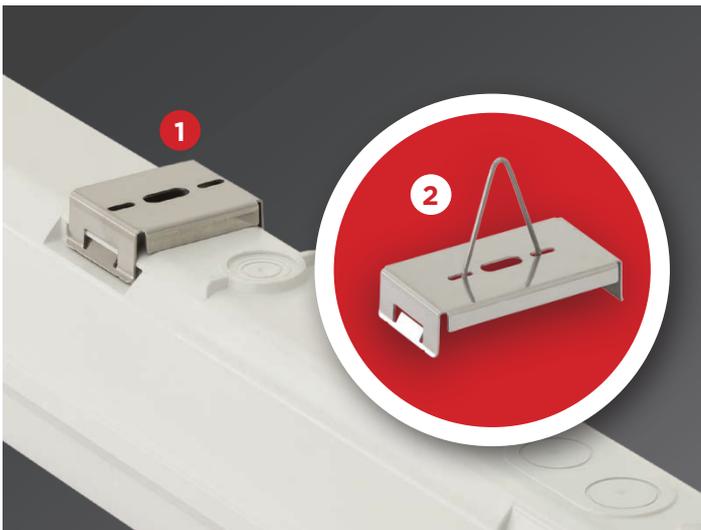


The gear tray is made of white powder coated steel sheet according to **Zhaga** standards. On request customisation possible.



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



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)

* EPREL database is available at <https://eprel.ec.europa.eu/screen/product/lightsources/xxxxxxx> (where the xxxxxx have to be substituted by the reference number given in the last column)

Products with 5 years warranty	Power (W)	Lum. total luminous flux emitted (lm)		Lum. efficacy (lm/W)		CCT (Kelvin)	CRI	Lifetime L70B50 (Ta=35°C)	Lifetime L80B10 (Ta=35°C)	A (mm)	B (mm)	Weight (kg)	EEI	Light source* (reference)
		PMMA	PC	PMMA	PC									
Lumnium EU 130 with Osram driver														
746 2ft (600mm)	24	3300	3000	137	125	4000	>80	>72 000 h	>50 000 h	669	415	0,9	D	1059419
746 4ft (1200mm)	25	3400	3200	136	130	4000	>80	>72 000 h	>50 000 h	1277	800	2,2	D	802364
746 5ft (1500mm)	30	4200	4000	140	133	4000	>80	>72 000 h	>50 000 h	1577	1100	2,5	D	734821
746 4ft (1200mm)	38	5100	4900	134	129	4000	>80	>72 000 h	>50 000 h	1277	800	2,2	D	734862
746 5ft (1500mm)	51	7000	6600	137	129	4000	>80	>72 000 h	>50 000 h	1577	1100	2,5	D	734813
Lumnium EU PRO 160 with Osram driver														
746 4ft (1200mm)	22	3300	3200	150	145	4000	>80	>72 000 h	>50 000 h	1277	800	2,2	C	803878
746 5ft (1500mm)	27	4200	4000	155	148	4000	>80	>72 000 h	>50 000 h	1577	1100	2,5	C	734800
746 4ft (1200mm)	31	4800	4600	155	148	4000	>80	>72 000 h	>50 000 h	1277	800	2,2	C	803933
746 5ft (1500mm)	41	6500	6200	158	151	4000	>80	>72 000 h	>50 000 h	1577	1100	2,5	C	734760
Lumnium EU PRO 140 HF with Philips driver														
746 4ft (2x1200mm)**	58	8000	7500	138	129	4000	>80	>72 000 h	>50 000 h	1277	800	2,65	D	734708
746 5ft (2x1500mm)**	73	10200	9600	140	131	4000	>80	>72 000 h	>50 000 h	1577	1100	3	D	734742
Osram Basic Linear G3														
746 4ft (1200mm)	23	2900	2800	124	119	4000	>80	>50 000 h	>50 000 h	1277	800	1,8	D	892186
746 5ft (1500mm)	28	3700	3500	132	126	4000	>80	>50 000 h	>50 000 h	1577	1100	2,2	D	892176 892186
746 4ft (1200mm)	28	3900	3700	140	134	4000	>80	>50 000 h	>45 000 h	1277	800	2	D	892188
746 5ft (1500mm)	35	4700	4500	136	130	4000	>80	>50 000 h	>50 000 h	1577	1100	2,2	D	892178 892188
746 4ft (2x1200mm)**	39	5300	5000	135	127	4000	>80	>50 000 h	>43 000 h	1277	800	2,5	D	892188
746 5ft (2x1500mm)**	47	6800	6400	144	136	4000	>80	>50 000 h	>43 000 h	1577	1100	2,7	D	892178 892188
Philips Fortimo LED Strip LV5														
746 2ft (600 mm)	15	2100	2000	138	131	4000	>80	>72 000 h	>50 000 h	669	415	1,7	C	778312
746 4ft (1200mm)	31	4500	4300	143	136	4000	>80	>72 000 h	>50 000 h	1277	800	2,2	C	778351
746 5ft (1500mm)	38	5400	5200	142	136	4000	>80	>72 000 h	>50 000 h	1577	1100	2,5	C	778365
746 5ft (2x1500mm)**	49	6900	6500	140	128	4000	>80	>72 000 h	>50 000 h	1577	1100	2,7	C	778365
Philips Fortimo LED Strip HV6														
746 4ft (2x1200mm)**	56	8300	7800	150	141	4000	>80	>100 000 h	>64 000 h	1277	800	2,65	C	893529
746 5ft (2x1500mm)**	70	10500	9900	150	141	4000	>80	>100 000 h	>64 000 h	1577	1100	3	C	893525 893529
746 4ft (2x1200mm)**	66	10000	9400	153	144	4000	>80	>100 000 h	>64 000 h	1277	800	2,65	C	893537
746 5ft (2x1500mm)**	83	12700	12000	153	145	4000	>80	>100 000 h	>64 000 h	1577	1100	3	C	893533 893537

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

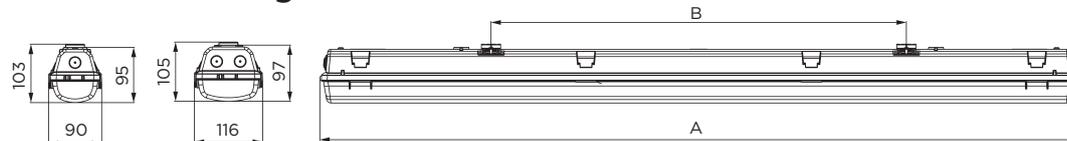
Further options:



On request:

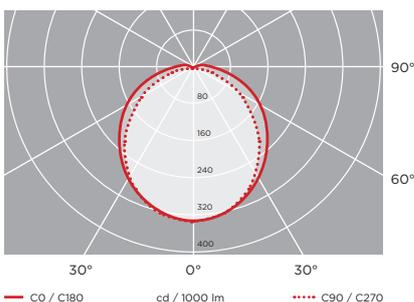


Schematic drawing with main dimensions

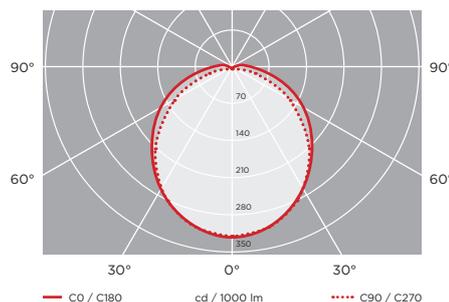


Photometric curves:

746-Clever, 4ft (2x1200mm), Osram Basic Linear G3, 39W, 5300lm, PMMA



746-Clever, 4ft (2x1200mm), Philips Fortimo LED Strip HV6, 55W, 8300lm, PMMA



Luminaire customisation and the options of advanced controls are presented on page 5



790-XTRUDE

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.



790-XTRUDE

IP65



Option:





Main technical options

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



790-XTRUDE

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**.



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

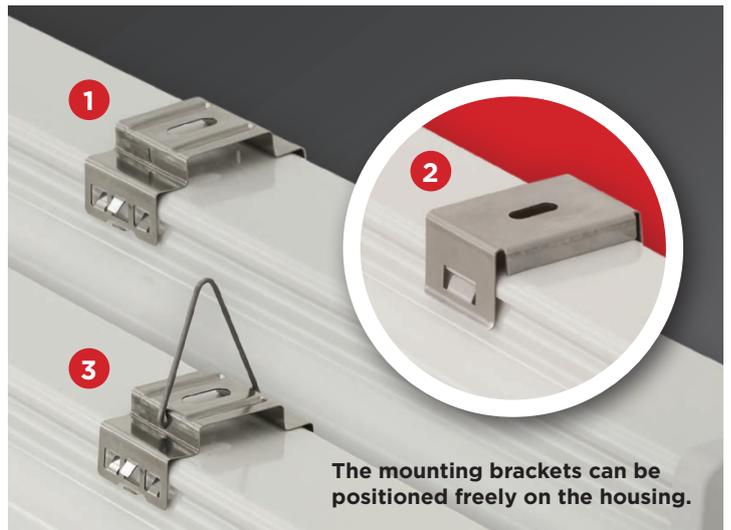


The **pull-out (sliding) tray** accelerates the electrical connection easily **without disassembling** the luminaire.

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



In option:
The 790-Xtrude product is available with **transparent housing** and **asymmetric beam optics** as **790-Xtrude AB version**.



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)

* EPREL database is available at <https://eprel.ec.europa.eu/screen/product/lightsources/xxxxxxx> (where the xxxxxx have to be substituted by the reference number given in the last coloumn)

Products with 5 years warranty	Power (W)	Lum. total luminous flux emitted (lm)		Lum. efficacy (lm/W)		CCT (Kelvin)	CRI	Lifetime L70B50 (Ta=35°C)	Lifetime L80B10 (Ta=35°C)	A (mm)	B (mm)	Weight (kg)	EEL	Light source* (reference)
		PMMA	PC	PMMA	PC									
Lumnium EU 130 with Osram driver														
790 2ft (600mm)	25	n.a.	3400	n.a.	136	4000	>80	>72 000 h	>50 000 h	648	350	0,8	D	1059419
790 4ft (1200mm)	25	n.a.	3400	n.a.	136	4000	>80	>72 000 h	>50 000 h	1208	600	1,2	D	802364
790 5ft (1500mm)	31	n.a.	4200	n.a.	135	4000	>80	>72 000 h	>50 000 h	1488	850	1,3	D	734821
790 4ft (1200mm)	38	n.a.	5100	n.a.	134	4000	>80	>72 000 h	>50 000 h	1208	600	1,6	D	734862
790 5ft (1500mm)	51	n.a.	6800	n.a.	133	4000	>80	>72 000 h	>50 000 h	1488	850	1,7	D	734813
Lumnium EU PRO 160 with Osram driver														
790 4ft (1200mm)	22	n.a.	3300	n.a.	150	4000	>80	>72 000 h	>50 000 h	1208	600	1,2	C	803878
790 5ft (1500mm)	27	n.a.	4100	n.a.	151	4000	>80	>72 000 h	>50 000 h	1480	850	1,3	C	734800
790 4ft (1200mm)	31	n.a.	4800	n.a.	154	4000	>80	>72 000 h	>50 000 h	1208	600	1,6	C	803933
790 5ft (1500mm)	41	n.a.	6400	n.a.	156	4000	>80	>72 000 h	>50 000 h	1480	850	1,7	C	734760
Lumnium EU PRO 140 HF with Philips driver														
790 4ft (1200mm)	61	n.a.	8100	n.a.	132	4000	>80	>72.000 h	>50.000 h	1208	600	1,6	D	734708
790 5ft (1500mm)	77	n.a.	10000	n.a.	130	4000	>80	>72.000 h	>50.000 h	1480	850	1,7	D	734742
Osram Basic Linear G3														
790 2ft (600mm)	21	n.a.	2600	n.a.	116	4000	>80	>50 000 h	>41 000 h	648	350	0,9	D	892178
790 4ft (1200mm)	23	n.a.	2900	n.a.	126	4000	>80	>50 000 h	>50 000 h	1208	600	1,45	D	892186
790 5ft (1500mm)	28	n.a.	3800	n.a.	138	4000	>80	>50 000 h	>50 000 h	1488	850	1,72	D	892176 892186
790 4ft (1200mm)	28	n.a.	3600	n.a.	130	4000	>80	>50 000 h	>45 000 h	1208	600	1,45	D	892188
790 5ft (1500mm)	35	n.a.	4900	n.a.	142	4000	>80	>50 000 h	>50 000 h	1488	850	1,72	D	892178 892188
790 4ft (1200mm)	38	n.a.	5000	n.a.	130	4000	>80	>50 000 h	>43 000 h	1208	600	1,45	D	892188
790 5ft (1500mm)	47	n.a.	6600	n.a.	141	4000	>80	>50 000 h	>43 000 h	1488	850	1,72	D	892178 892188
Philips Fortimo LED Strip HV6														
790 4ft (1200mm)	56	n.a.	8200	n.a.	143	4000	>80	>100 000 h	>64 000	1208	600	1,6	C	893529
790 5ft (1500mm)	70	n.a.	10000	n.a.	142	4000	>80	>100 000 h	>64 000	1488	850	1,7	C	893525 893529

790-XTRUDE

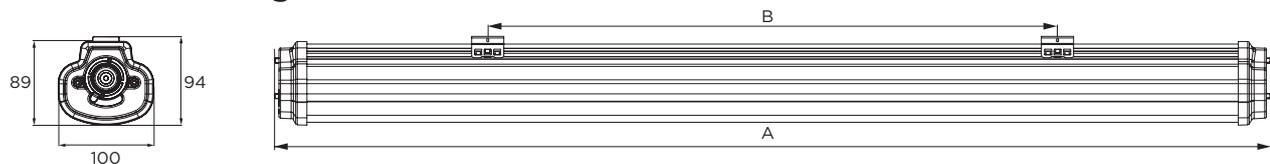
Further options:



On request:



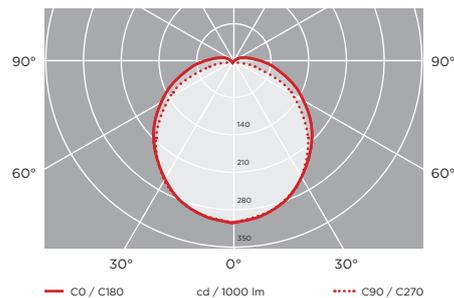
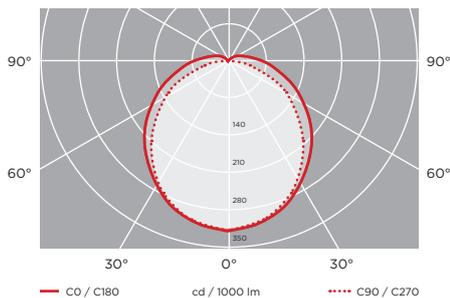
Schematic drawing with main dimensions



Photometric curves:

790-Xtrude, 4 ft (1200mm)
Osram Basic Linear G3, 28W, 3600lm, PC

790-Xtrude, 5 ft (1500mm),
Lumnium EU 130 SO, 51W, 6800lm, PC



Luminaire customisation and the options of advanced controls are presented on page 5

LED

793-MULTIPROOF

Professional dust and waterproof extruded luminaires with LED modules.

For diverse industrial areas! (farming or food and outdoor)

CE

HACCP

YOUR MAIN BENEFITS:

The luminaires fulfil the requirements of food law (HACCP) - highly resistant against several detergents and chemicals – also withstanding the high-pressure jet water (on request IP69)



793 - MULTIPROOF

IP66



Option:

IP67

IP69



1F

3F



FIELD OF APPLICATION:

Due to the construction principles of the extruded profile and the end caps, our LED fixtures ensure a **high grade of protection (IP66, IP67, IP69)** against dust, contamination and water permeation. In accordance with their IP grade, they can be widely used to illuminate spaces with dusty, humid environment.

Thanks to its enhanced weather and chemical resistance, 793-Multiproof is extremely versatile and suitable for a plenty of applications where errorfree functioning is desired.

The co-extruded PMMA profile allows us **placement in farming industry or in food-processing industry and in outdoor areas.**

TECHNICAL DESCRIPTION AND BENEFITS:

■ **Housing:** Made of **Acrylic (PMMA)** by **co-extrusion**, in white (RAL 9010) colour. The optical diffusing (upper) part is opalised. Thanks to the **strengthened Acrylic** raw material used, the whole fitting shows very high mechanical strength and **high heat and shock resistance** (=> IK08). At the same time further main advantages of the PMMA also apply such as **weather, chemical and UV resistance.**

The **extruded opal** diffuser offers you:

- **high light transmissivity** (up to 89%)
- **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)

■ **End caps:** Made of impact resistant polyamide and glued to the body.

■ **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.

Main technical options

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



LED

1,5 min
INSTALLATION TIME

The diffusing part of the co-extruded PMMA profile is made of UV stabilized, **opalized** material ensuring well-balanced light distribution and the elimination of glare. **The light angle is adjustable** thanks to the freely **rotatable tube** in the clamps (no shadows).

Ways of installing: With stainless steel **mounting clamps**. They are easy to install onto the **wall or ceiling**. The clamps can be positioned freely on the fixture thus the tube is freely rotatable.

Quick installation: thanks to the application of **rapid connector** (Adels, Stucchi, Wieland), the electrical connection is **fast and easy** even without disassembling the luminaire. **Your benefits:** significant **cost savings and increased competitiveness** on the market.

793-MULTIPROOF



In food industry and outdoor areas: thanks to the **venting plug** the **condensation** of the humidity inside the luminaire can be **avoided**.



In farmer industry: the luminaire is equipped with special chemically-resistant electronic components (LED modules with protective layer, hermetically sealed driver, tinned cables, Adels rapid connector)

The glued end caps are locked up hermetically ensuring the **high IP protection** (up to IP69).



Technical data (extract)

* EPREL database is available at <https://eprel.ec.europa.eu/screen/product/lightsources/xxxxxxx> (where the xxxxxx have to be substituted by the reference number given in the last column)

Products with 5 years warranty	Power (W)	Lum. total luminous flux emitted (lm)		Lum. efficacy (lm/W)		CCT (Kelvin)	CRI	Lifetime L70B50 (Ta=35°C)	Lifetime L80B10 (Ta=35°C)	A (mm)	B (mm)	Weight (kg)	EEI	Light source* (reference)
		PMMA	PC	PMMA	PC									
Lumnium EU 130 with Osram driver														
793 2ft (600mm)	24	3100	n.a.	128	n.a.	4000	>80	>72 000 h	>50 000 h	602	400	0,91	D	1059419
793 4ft (1200mm)	24	3300	n.a.	131	n.a.	4000	>80	>72 000 h	>50 000 h	1164	775	1,49	D	802364
793 5ft (1500mm)	30	4100	n.a.	137	n.a.	4000	>80	>72 000 h	>50 000 h	1462	975	1,79	D	734821
793 4ft (1200mm)	37	5000	n.a.	133	n.a.	4000	>80	>72 000 h	>50 000 h	1164	775	1,49	D	734862
793 5ft (1500mm)	51	6700	n.a.	134	n.a.	4000	>80	>72 000 h	>50 000 h	1462	975	1,79	D	734813
Lumnium EU PRO 160 with Osram driver														
793 4ft (1200mm)	22	3150	n.a.	143	n.a.	4000	>80	>72 000 h	>50 000 h	1164	775	1,49	C	803878
793 5ft (1500mm)	27	3900	n.a.	146	n.a.	4000	>80	>72 000 h	>50 000 h	1462	975	1,79	C	734800
793 4ft (1200mm)	32	4600	n.a.	149	n.a.	4000	>80	>72 000 h	>50 000 h	1164	775	1,49	C	803933
793 5ft (1500mm)	41	6300	n.a.	154	n.a.	4000	>80	>72 000 h	>50 000 h	1462	975	1,79	C	734760

793 - MULTIPROOF

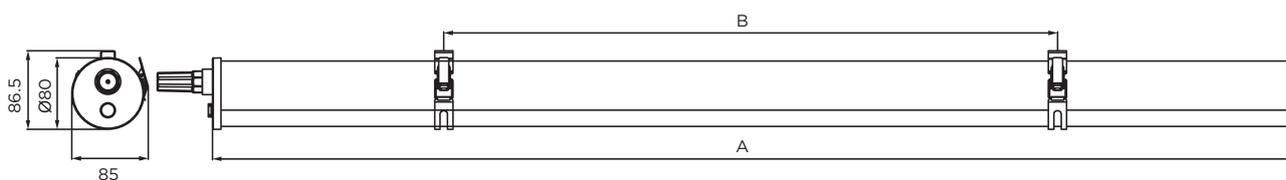
Further options:



On request:

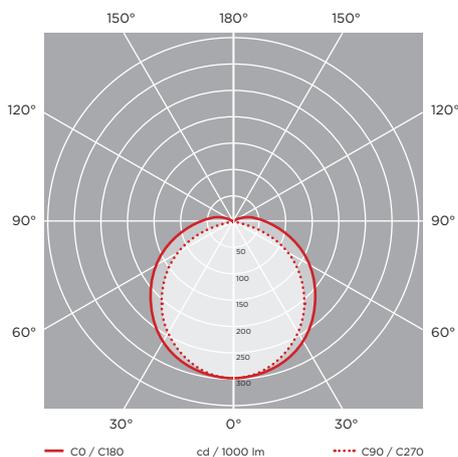


Schematic drawing with main dimensions

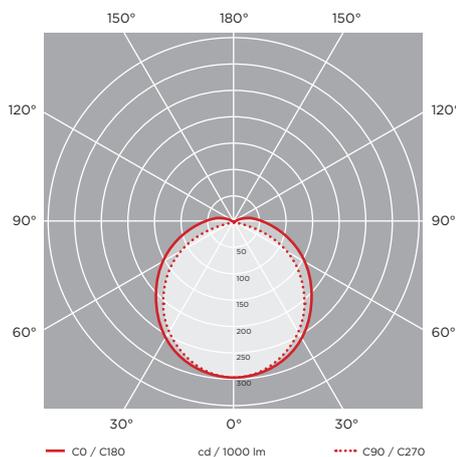


Photometric curves:

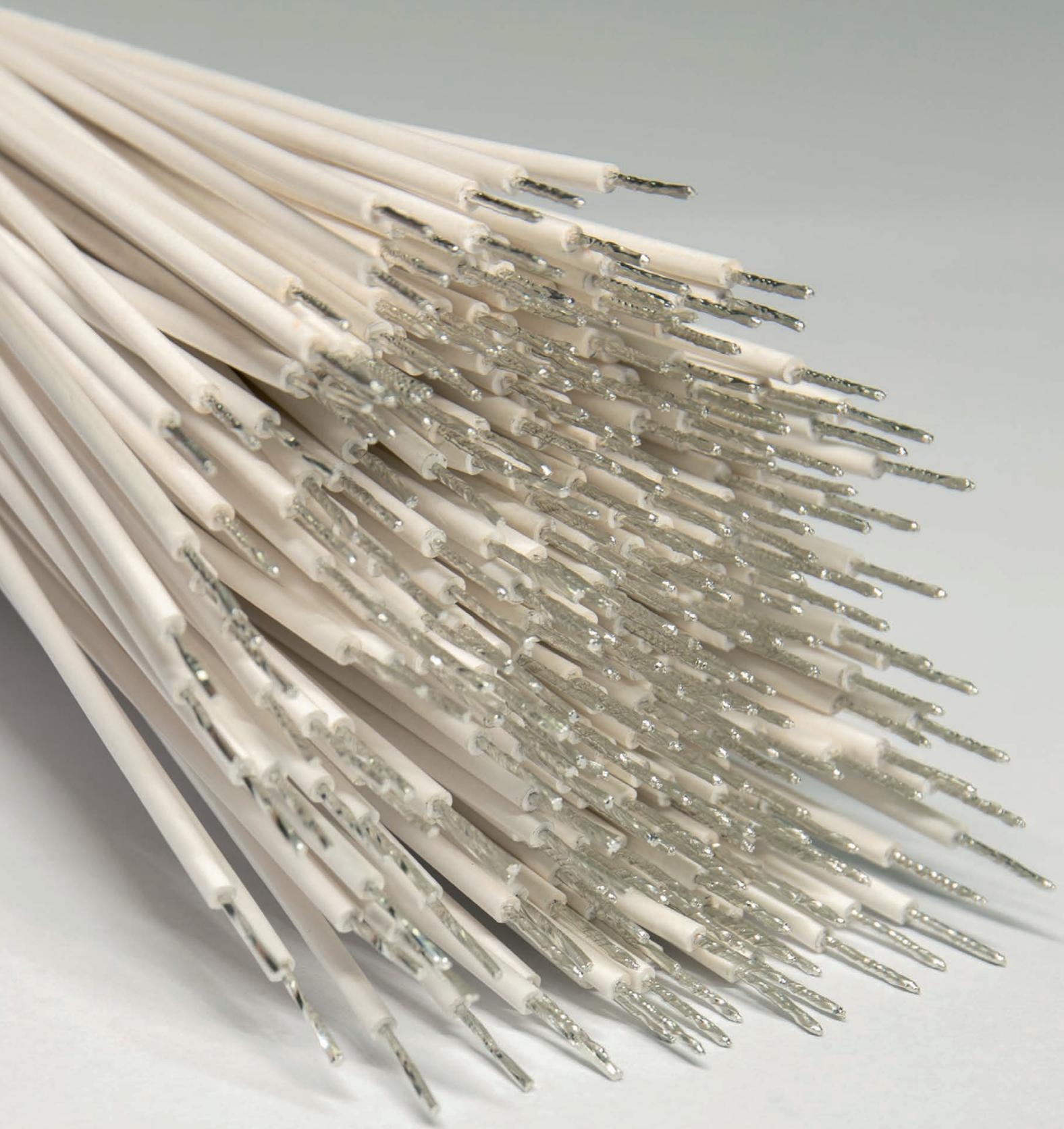
793-Multiproof, 5ft, Lumnium EU 130, 51W, 6700 lm



793-Multiproof, 5ft, Lumnium EU 160, 41W, 6300 lm



Luminaire customisation and the options of advanced controls are presented on page 5



LED

872-ENTRY GRP

Industrial dust and waterproof luminaires with LED modules

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

CE



YOUR MAIN BENEFITS:

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

872-ENTRY GRP



IP66



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 and mechanical stability. Furthermore it is a good electrical insulator resisting the impacts of several chemicals and weather conditions. Its stability of size and shape at changing temperatures is excellent.
- **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 the housing is available in two versions:

- **Injected silicone-based endless foam**
- **Non-aging PU** (polyurethane) **endless 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.



Option:

IP67



1F

3F



PC 850°C

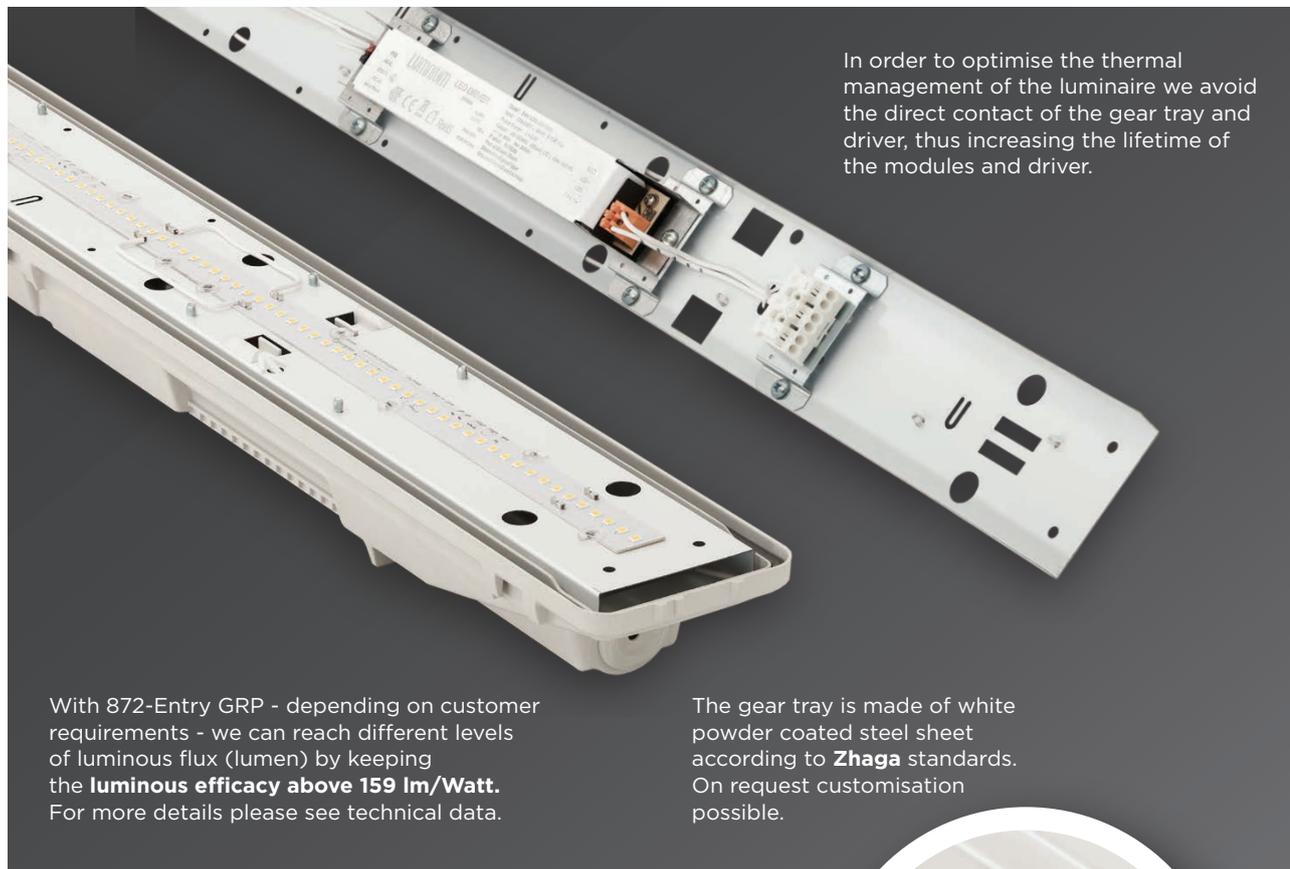


Main technical options

Our **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**.



Compact design for LED



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 GRP - depending on customer requirements - we can reach different levels of luminous flux (lumen) by keeping the **luminous efficacy above 159 lm/Watt**. For more details please see technical data.

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

872-ENTRY GRP



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



OPTIONS FOR CABLE ENTRY:

IP66 grommet

Cable gland



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)

* EPREL database is available at <https://eprel.ec.europa.eu/screen/product/lightsources/xxxxxxx> (where the xxxxxx have to be substituted by the reference number given in the last column)

Products with 5 years or optionally with 3 years warranty	Power (W)	Lum. total luminous flux emitted (lm)		Lum. efficacy (lm/W)		CCT (Kelvin)	CRI	Lifetime L70B50 (Ta=35°C)	Lifetime L80B10 (Ta=35°C)	A (mm)	B (mm)	Weight (kg)	EEI	Light source* (reference)
		PMMA	PC	PMMA	PC									
Lumnium EU 130 with Osram driver														
872 2ft (600mm)	25	3200	3000	128	117	4000	>80	>72 000 h	>50 000 h	605	238±23	0,9	D	1059419
872 4ft (1200mm)	25	3500	3300	136	126	4000	>80	>72 000 h	>50 000 h	1185	700±78	1,5	D	802364
872 5ft (1500mm)	30	4500	4200	137	127	4000	>80	>72 000 h	>50 000 h	1477	1000±78	1,8	D	734821
872 4ft (1200mm)	36	5300	4900	136	126	4000	>80	>72 000 h	>50 000 h	1185	700±78	1,5	D	734862
872 5ft (1500mm)	50	7000	6600	137	127	4000	>80	>72 000 h	>50 000 h	1477	1000±78	1,8	D	734813
Lumnium EU PRO 160 with Osram driver														
872 4ft (1200mm)	22	3500	3200	159	145	4000	>80	>72 000 h	>50 000 h	1185	700±78	1,5	C	803878
872 5ft (1500mm)	27	4400	4100	163	152	4000	>80	>72 000 h	>50 000 h	1477	1000±78	1,8	C	734800
872 4ft (1200mm)	31	5000	4600	161	148	4000	>80	>72 000 h	>50 000 h	1185	700±78	1,5	C	803933
872 5ft (1500mm)	41	6800	6300	165	153	4000	>80	>72 000 h	>50 000 h	1477	1000±78	1,8	C	734760
Osram Basic Linear G3														
872 2ft (600mm)	21	2600	2300	125	110	4000	>80	50 000 h	41 000 h	605	238±23	0,9	D	892178
872 4ft (1200mm)	23	3000	2700	130	120	4000	>80	50 000 h	46 000 h	1185	700±78	1,5	D	892186
872 5ft (1500mm)	28	3900	3600	140	130	4000	>80	50 000 h	50 000 h	1477	1000±78	1,8	D	892176 892186
872 4ft (1200mm)	39	5400	5000	140	130	4000	>80	50 000 h	41 000 h	1185	700±78	1,5	D	892188
872 5ft (1500mm)	47	6900	6400	145	136	4000	>80	50 000 h	41 000 h	1477	1000±78	1,8	D	892178 892188
Lumnium EU 130 with Osram DIP Switch driver														
872 4ft (1200mm)	23	3400	3100	136	126	4000	>80	>72 000 h	>50 000 h	1185	700±78	1,5	D	734862
	28	4100	3800											
	34	4800	4400											
	39	5300	4900											
872 5ft (1500mm)	30	4500	4200	137	127	4000	>80	>72 000 h	>50 000 h	1477	1000±78	1,8	D	734813
	37	5500	5100											
	44	6400	5900											
	51	7000	6600											

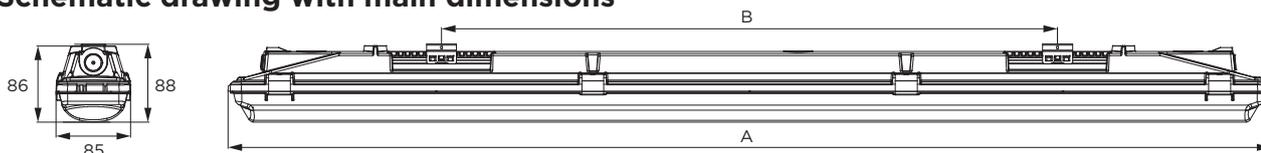
872-ENTRY GRP

Further options:

On request:



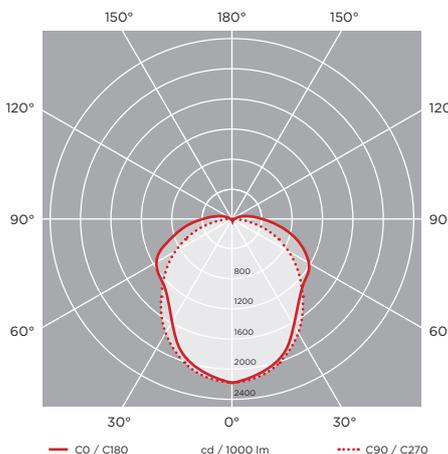
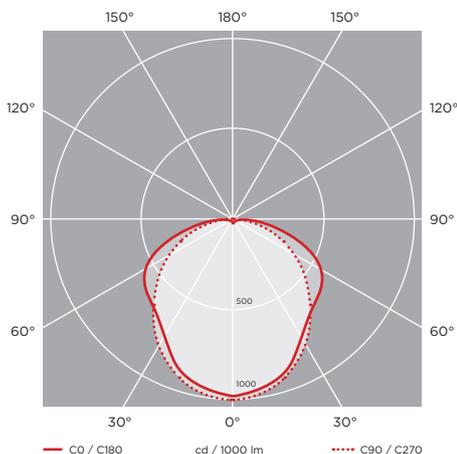
Schematic drawing with main dimensions



Photometric curves:

872-Entry GRP 4ft (1200mm) PMMA, Osram Basic Linear G3, 39W, 5400lm

872-Entry GRP 5ft (1500mm) PMMA, Lumnium EU PRO 160 41W,6800lm



Luminaire customisation and the options of advanced controls are presented on page 5

872-ENTRY PC

Industrial dust and waterproof luminaires with LED modules

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

CE



YOUR MAIN BENEFITS:

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

872-ENTRY PC



IP66



Option:

IP67



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. Thanks to its **enhanced impact resistance**, 872-Entry PC 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 the silicone gasket is recommended.

TECHNICAL DESCRIPTION AND BENEFITS:

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

■ **Diffuser: Available in PC** – injection moulded **opalised Polycarbonate** (high mechanical strength and high heat and shock resistance – IK08). As an option, injection moulded acrylic (PMMA) diffuser in opal version is available.

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 the housing is available in two versions:

- **Injected silicone-based endless foam**
- **Non-aging PU** (polyurethane) **endless 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 **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**.



Compact design for LED



LED



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 PC - depending on customer requirements - we can reach different levels of luminous flux (lumen) by keeping the **luminous efficacy above 153 lm/Watt**. For more details please see technical data.

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

872-ENTRY PC



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



OPTIONS FOR CABLE ENTRY:

IP66 grommet

Cable gland



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)

* EPREL database is available at <https://eprel.ec.europa.eu/screen/product/lightsources/xxxxxxx> (where the xxxxxx have to be substituted by the reference number given in the last coloumn)

Products with 5 years or optionally with 3 years warranty	Power (W)	Lum. total luminous flux emitted (lm)		Lum. efficacy (lm/W)		CCT (Kelvin)	CRI	Lifetime L70B50 (Ta=35°C)	Lifetime L80B10 (Ta=35°C)	A (mm)	B (mm)	Weight (kg)	EEI	Light source* (reference)
		PMMA	PC	PMMA	PC									
Lumnium EU 130 with Osram driver														
872 4ft (1200mm)	25	3500	3300	136	126	4000	>80	>72 000 h	>50 000 h	1185	700±78	1,5	D	802364
872 5ft (1500mm)	30	4500	4200	137	127	4000	>80	>72 000 h	>50 000 h	1477	1000±78	1,8	D	734821
872 4ft (1200mm)	36	5300	4900	136	126	4000	>80	>72 000 h	>50 000 h	1185	700±78	1,5	D	734862
872 5ft (1500mm)	50	7000	6600	137	127	4000	>80	>72 000 h	>50 000 h	1477	1000±78	1,8	D	734813
Lumnium EU PRO 160 with Osram driver														
872 4ft (1200mm)	22	3500	3200	159	145	4000	>80	>72 000 h	>50 000 h	1185	700±78	1,5	C	803878
872 5ft (1500mm)	27	4400	4100	163	152	4000	>80	>72 000 h	>50 000 h	1477	1000±78	1,8	C	734800
872 4ft (1200mm)	31	5000	4600	161	148	4000	>80	>72 000 h	>50 000 h	1185	700±78	1,5	C	803933
872 5ft (1500mm)	41	6800	6300	165	153	4000	>80	>72 000 h	>50 000 h	1477	1000±78	1,8	C	734760
Osram Basic Linear G3														
872 4ft (1200mm)	23	3000	2700	130	120	4000	>80	50 000 h	46 000 h	1185	700±78	1,5	D	892186
872 5ft (1500mm)	28	3900	3600	140	130	4000	>80	50 000 h	50 000 h	1477	1000±78	1,8	D	892176 892186
872 4ft (1200mm)	39	5400	5000	140	130	4000	>80	50 000 h	41 000 h	1185	700±78	1,5	D	892188
872 5ft (1500mm)	47	6900	6400	145	136	4000	>80	50 000 h	41 000 h	1477	1000±78	1,8	D	892178 892188
Lumnium EU 130 HO with Osram DIP Switch driver														
872 4ft (1200mm)	23	3400	3100	136	126	4000	>80	>72 000 h	>50 000 h	1185	700±78	1,5	D	734862
	28	4100	3800											
	34	4800	4400											
	39	5300	4900											
872 5ft (1500mm)	30	4500	4200	137	127	4000	>80	>72 000 h	>50 000 h	1477	1000±78	1,8	D	734813
	37	5500	5100											
	44	6400	5900											
	51	7000	6600											

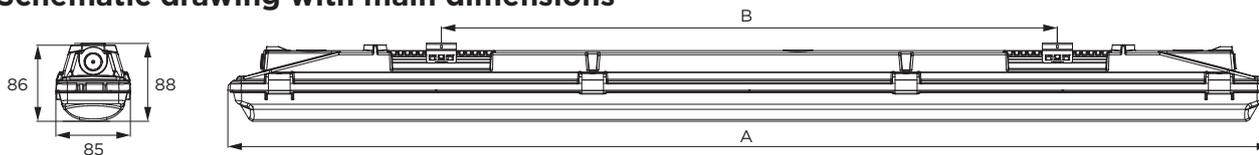
872-ENTRY PC

Further options:

On request:



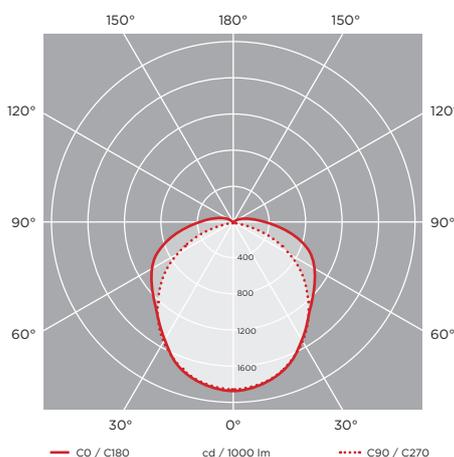
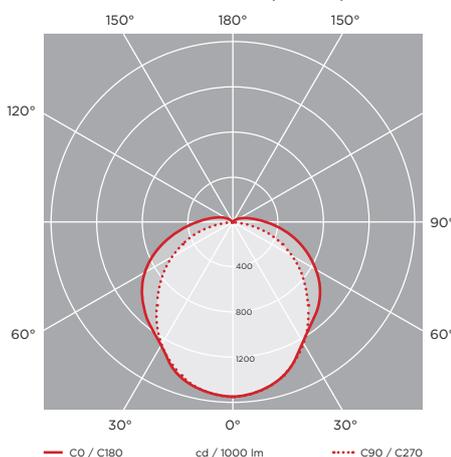
Schematic drawing with main dimensions



Photometric curves:

872-Entry PC 4ft (1200mm) PC, Osram Basic Linear G3, 39W, 5000lm

872-Entry PC 5ft (1500mm) PC, Lumnium EU PRO 160 41W, 6300lm



Luminaire customisation and the options of advanced controls are presented on page 5

LED

872-ENTRY NB

Industrial dust and waterproof luminaires with LED modules and with narrow beam optics

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

YOUR MAIN BENEFITS:

Narrow beam luminaire, suitable for high ceilings, with transparent diffuser and narrow beam optics. Alternative to high bay fixtures, in a more cost-effective performance.



872-ENTRY NB

IP66



Option:

IP67



1F

3F

PC
850°C

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 and mechanical stability. Furthermore it is a good electrical insulator resisting the impacts of several chemicals and weather conditions. Its stability of size and shape at changing temperatures is excellent.
 - Available in **PC** - injection moulded **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 **transparent Polycarbonate** (high mechanical strength and high heat and shock resistance) or in **Acrylic** - injection moulded **transparent PMMA** (unique non-aging properties, high chemical resistance).

Further benefits:

- **Extremely high lighting efficiency** through high **light permeability, unique on the market**, up to 93%
- 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 the housing is available in two versions:
 - **Injected silicone-based endless foam**
 - **Non-aging PU** (polyurethane) **endless 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 **transparent** diffuser achieves an **outstanding light transmissivity of up to 93%**. With this great light permeability, it is **an excellent choice for luminaires equipped with LED-modules**.



Narrow beam optics



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 NB - depending on customer requirements - we can reach different levels of luminous flux (lumen). For more details please 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 **transparent 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**.



872-ENTRY NB

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



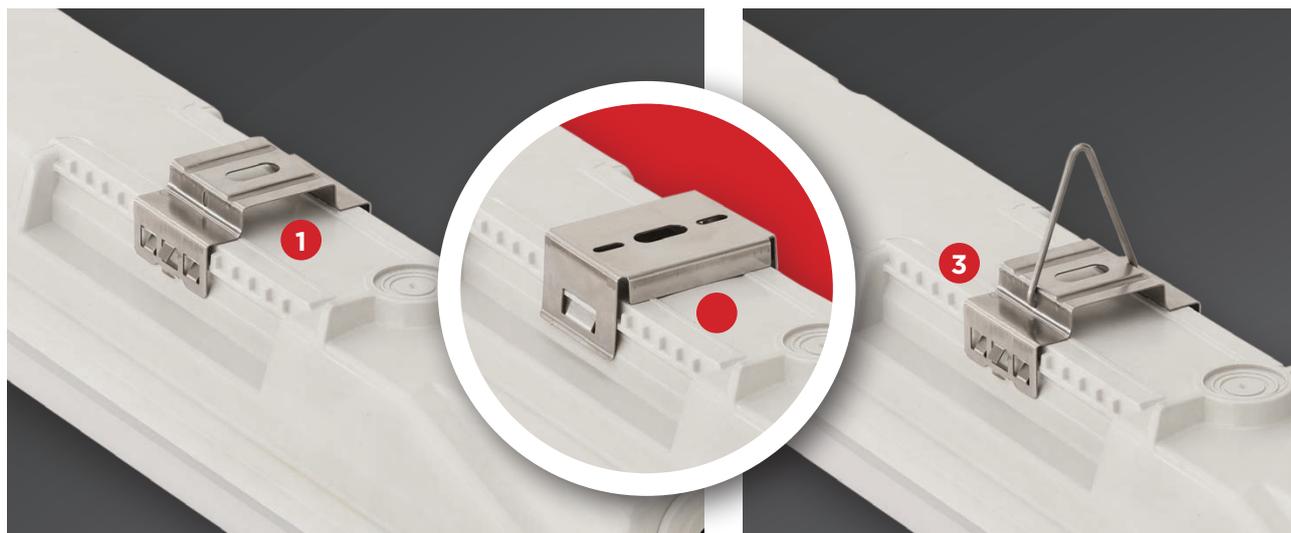
OPTIONS FOR CABLE ENTRY:

IP66 grommet

Cable gland



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)

* EPREL database is available at <https://eprel.ec.europa.eu/screen/product/lightsources/xxxxxxx> (where the xxxxxx have to be substituted by the reference number given in the last column)

Products with 5 years or optionally with 3 years warranty	Power (W)	Lum. total luminous flux emitted (lm)		Lum. efficacy (lm/W)		CCT (Kelvin)	CRI	Lifetime L70B50 (Ta=35°C)	Lifetime L80B10 (Ta=35°C)	A (mm)	B (mm)	Weight (kg)	EEI	Light source* (reference)
		PMMA	PC	PMMA	PC									
Lumnum EU 130 with Osram driver														
872 4ft (1200mm)	36	5300	4900	136	136	4000	>80	>72 000 h	>50 000 h	1185	700±78	1,5	D	734862
872 5ft (1500mm)	50	7000	6500	137	130	4000	>80	>72 000 h	>50 000 h	1477	1000±78	1,8	D	734813
Lumnum EU PRO 160 with Osram driver														
872 4ft (1200mm)	31	5000	4600	161	148	4000	>80	>72 000 h	>50 000 h	1185	700±78	1,5	C	803933
872 5ft (1500mm)	41	6800	6300	165	153	4000	>80	>72 000 h	>50 000 h	1477	1000±78	1,8	C	734760
Osram Basic Linear G3														
872 4ft (1200mm)	39	5400	5000	140	128	4000	>80	50 000 h	41 000 h	1185	700±78	1,5	D	892188
872 5ft (1500mm)	47	6900	6400	145	136	4000	>80	50 000 h	41 000 h	1477	1000±78	1,8	D	892178 892188
Lumnum EU 130 HO with Osram DIP Switch driver														
872 4ft (1200mm)	23	3400	3100	136	126	4000	>80	>72 000 h	>50 000 h	1185	700±78	1,5	D	734862
	28	4100	3800											
	34	4800	4400											
	39	5300	4900											
872 5ft (1500mm)	30	4500	4200	137	127	4000	>80	>72 000 h	>50 000 h	1477	1000±78	1,8	D	734813
	37	5500	5100											
	44	6400	5900											
	51	7000	6500											

** The application of through-wiring may influence the Ta. Max.

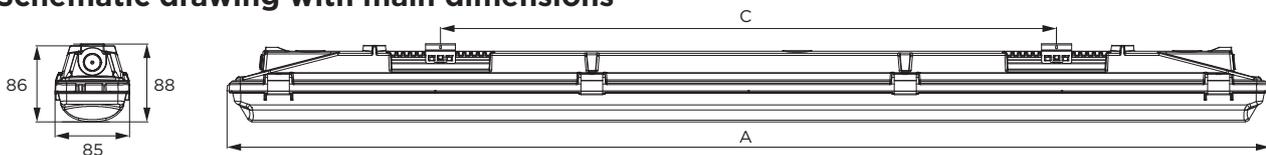
Further options:



On request:



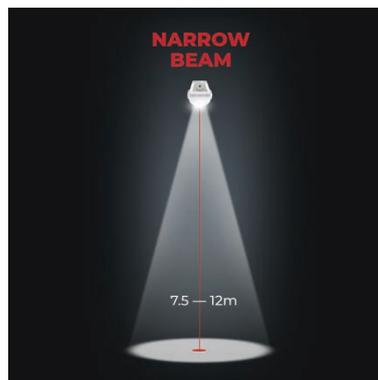
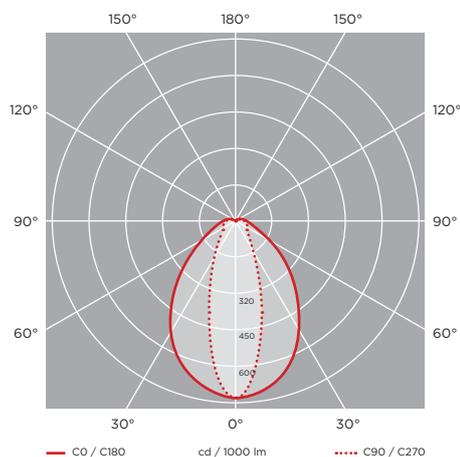
Schematic drawing with main dimensions



Photometric curves:

872-Entry NB, 5ft, PMMA, Lumnum EU 130, 50W, 7000 lm

With the use of transparent diffuser a 40° narrow beam radiation angle is achievable for high bay applications.



Luminaire customisation and the options of advanced controls are presented on page 5



792-XSLIDE

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**



792-XSLIDE



IP65



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.

Option:

IP66



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.

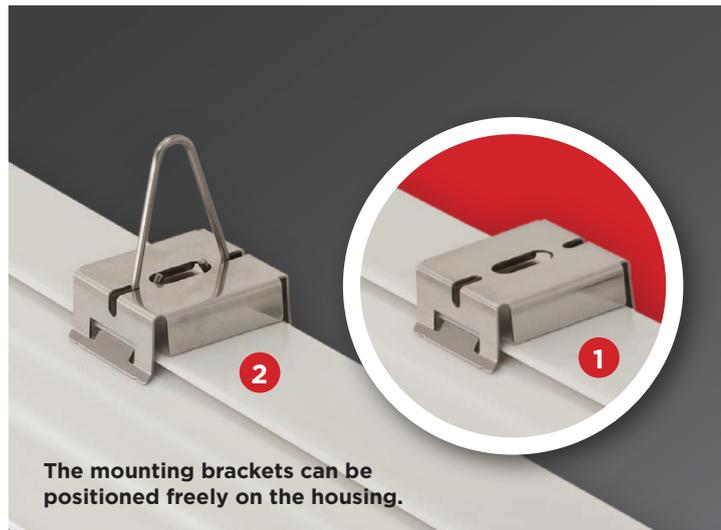


The glued end caps are locked up hermetically. After opening it the connector tray is accessible.

792-XSLIDE



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)

* EPREL database is available at <https://eprel.ec.europa.eu/screen/product/lightsources/xxxxxxx> (where the xxxxxx have to be substituted by the reference number given in the last column)

Products with 5 years or optionally with 3 years warranty	Power (W)	Lum. total luminous flux emitted (lm)		Lum. efficacy (lm/W)		CCT (Kelvin)	CRI	Lifetime L70B50 (Ta=35°C)	Lifetime L80B10 (Ta=35°C)	A (mm)	B (mm)	Weight (kg)	EEI	Light source* (reference)
		PMMA	PC	PMMA	PC									
Lumnium EU 130 with Osram driver														
792 2ft (600mm)	24	n.a.	3000	n.a.	125	4000	>80	>72 000 h	>50 000 h	610	230	0,91	D	1059419
792 4ft (1200mm)	25	n.a.	3200	n.a.	128	4000	>80	>72 000 h	>50 000 h	1180	860	1,49	D	802364
792 5ft (1500mm)	30	n.a.	4000	n.a.	133	4000	>80	>72 000 h	>50 000 h	1480	1160	1,79	D	734821
792 4ft (1200mm)	38	n.a.	4900	n.a.	128	4000	>80	>72 000 h	>50 000 h	1180	860	1,49	D	734862
792 5ft (1500mm)	50	n.a.	6500	n.a.	130	4000	>80	>72 000 h	>50 000 h	1480	1160	1,79	D	734813
Lumnium EU PRO 160 with Osram driver														
792 4ft (1200mm)	22	n.a.	3200	n.a.	145	4000	>80	>72 000 h	>50 000 h	1180	860	1,49	C	803878
792 5ft (1500mm)	27	n.a.	4000	n.a.	148	4000	>80	>72 000 h	>50 000 h	1480	1160	1,79	C	734800
792 4ft (1200mm)	31	n.a.	4700	n.a.	151	4000	>80	>72 000 h	>50 000 h	1180	860	1,49	C	803933
792 5ft (1500mm)	41	n.a.	6400	n.a.	156	4000	>80	>72 000 h	>50 000 h	1480	1160	1,79	C	734760
Osram Basic Linear G3														
792 2ft (600mm)	21	n.a.	2500	n.a.	119	4000	>80	>50 000	>43 000	610	230	0,9	D	892178
792 4ft (1200mm)	23	n.a.	3000	n.a.	131	4000	>80	>50 000	>50 000	1180	860	1,45	D	892186
792 5ft (1500mm)	28	n.a.	3800	n.a.	138	4000	>80	>50 000	>50 000	1480	1160	1,72	D	892176 892186
792 4ft (1200mm)	39	n.a.	5300	n.a.	136	4000	>80	>50 000	>41 000	1180	860	1,45	D	892188
792 5ft (1500mm)	47	n.a.	6400	n.a.	135	4000	>80	>50 000	>41 000	1480	1160	1,72	D	892178 892188

792-XSLIDE

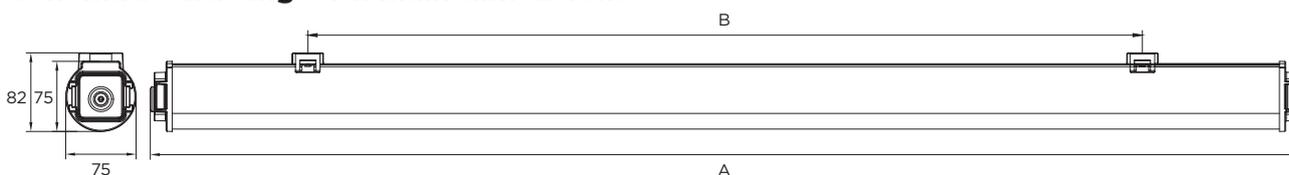
Further options:



On request:

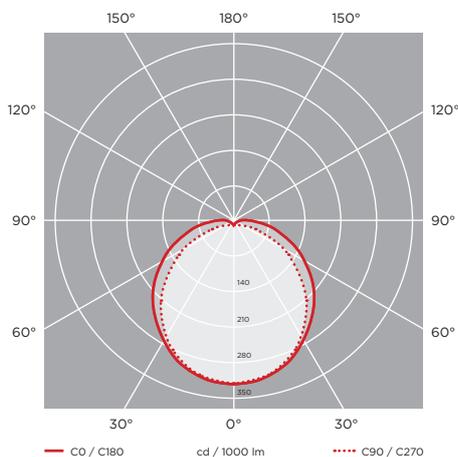


Schematic drawing with main dimensions

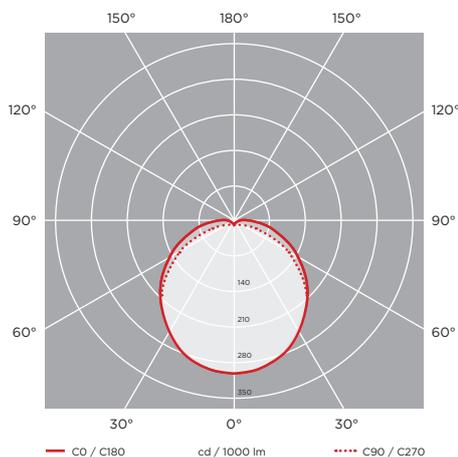


Photometric curves:

792-XSlide 4ft (1200mm)
Osram Basic Linear G3, 39W, 5300lm, PC



792-XSlide 5ft (1500mm)
Lumnium EU 130 HO, 51W, 6800lm, PC



Luminaire customisation and the options of advanced controls are presented on page 5

RETROFIT LED 771-PRO LT

Industrial dust and waterproof luminaires
With 1 and 2 LED tubes.

YOUR MAIN BENEFITS:

This product family has been **designed for energy efficient LED tubes**.
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 (**GRP**) – on request suitable for 850°C glow wire test too –, in light grey (RAL7035) colour. Glass fibre reinforced polyester has very good temperature resistance and mechanical stability. Furthermore it is a good electrical insulator resisting the impacts of several chemicals and 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, **high 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. Silicone-based foam with enhanced resistance is optionally available.
- **Fixing the diffuser to the body:** with stainless steel clips.
- **Gear tray** (reflector): white powder coated steel sheet.
- **Way of installing:** 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.

LED

CE

RETROFIT LED
771-PRO LT

IP65



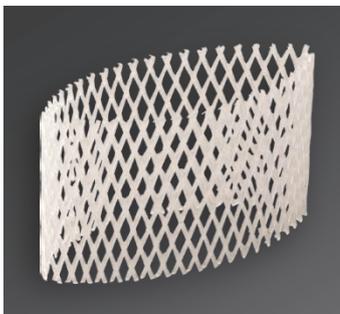
Option:

IP66



Main technical options

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



RETROFIT LED
771-PRO LT



Retrofit LED 771-Pro LT has been designed for LED tubes.

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

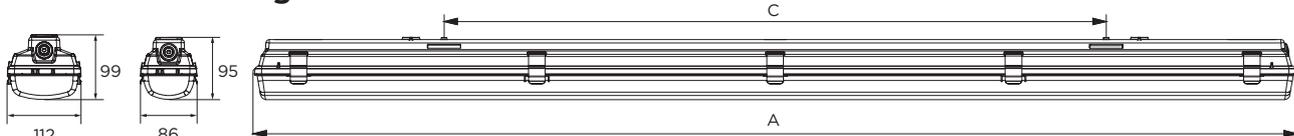


Fixing the diffuser to the body: with highly resistant stainless steel clips.

Technical data (extract)

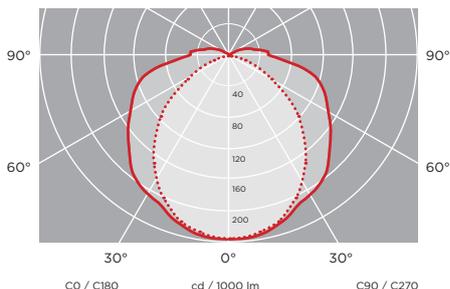
Type	Lampholder	Power (W)	Luminous flux (lm)	Dimensions A (mm)	C (mm)	Weight (kg)
771-Pro LT equipped with Retrofit LED tube (Philips Core Pro LED tube)						
771-Pro LT 1x600mm	T8/G13	1x8	680*	699	360	1,19
771-Pro LT 1x1200mm	T8/G13	1x14,5	1360*	1277	700	2,47
771-Pro LT 1x1500mm	T8/G13	1x20	1870*	1577	1000	2,57
771-Pro LT 2x600mm	T8/G13	2x8	1360*	699	360	2,31
771-Pro LT 2x1200mm	T8/G13	2x14,5	2720*	1277	700	3,35
771-Pro LT 2x1500mm	T8/G13	2x20	3740*	1577	1000	3,37

Schematic drawing with main dimensions:

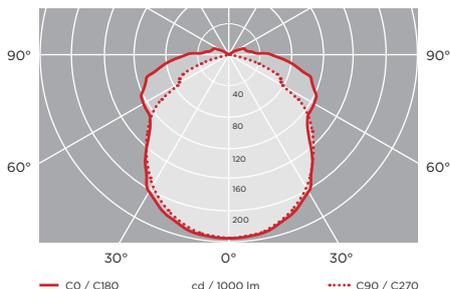


Photometric curves:

Retrofit LED 771-Pro LT
1x1200mm 1x14,5W (LED tube)



Retrofit LED 771-Pro LT
2x1500mm 2x20W (LED tube)



RETROFIT LED 775-PRO LT

Industrial dust and waterproof luminaires
With 1 and 2 LED tubes.

YOUR MAIN BENEFITS:

This product family has been **designed for energy efficient LED tubes**.
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 injection moulded polycarbonate (**PC**) – suitable for 850°C glow wire test too –, 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 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, **high 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** – up to IK10.
- **The gasket** between the diffuser and housing is made of non-aging PU (polyurethane) foam. Silicone-based foam with enhanced resistance is optionally available.
- **Fixing the diffuser to the body:** with stainless steel clips.
- **Gear tray** (reflector): white powder coated steel sheet.
- **Way of installing:** 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.

LED

CE

RETROFIT LED
775-PRO LT

IP65



Option:

IP66



Main technical options

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



Retrofit LED 775-Pro LT has been designed for LED tubes.

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



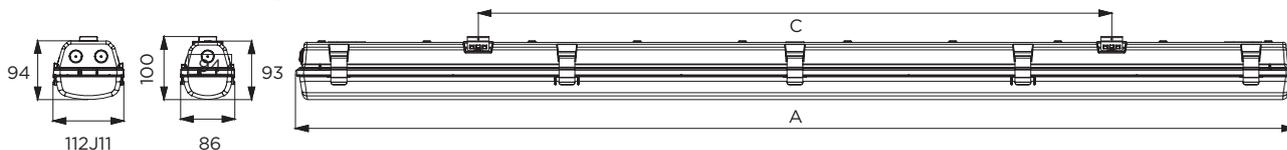
Fixing the diffuser to the body: with highly resistant stainless steel clips.

RETROFIT LED 775-PRO LT

Technical data (extract)

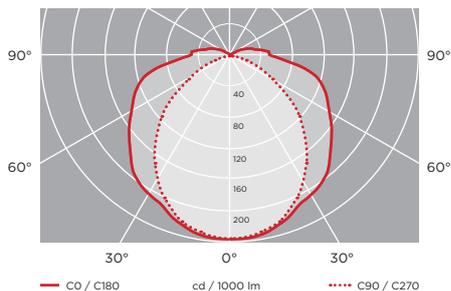
Type	Lampholder	Power (W)	Luminous flux (lm)	Dimensions A (mm)	C (mm)	Weight (kg)
775-Pro LT equipped with Retrofit LED tube (Philips Core Pro LED tube)						
775-Pro LT 1x600mm	T8/G13	1x8	680*	699	360	1,19
775-Pro LT 1x1200mm	T8/G13	1x14,5	1360*	1277	700	2,47
775-Pro LT 1x1500mm	T8/G13	1x20	1870*	1577	1000	2,57
775-Pro LT 2x600mm	T8/G13	2x8	1360*	699	360	2,31
775-Pro LT 2x1200mm	T8/G13	2x14,5	2720*	1277	700	3,35
775-Pro LT 2x1500mm	T8/G13	2x20	3740*	1577	1000	3,37

Schematic drawing with main dimensions:

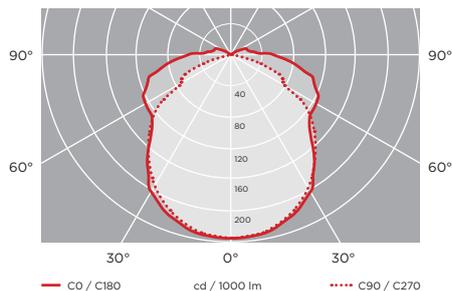


Photometric curves:

Retrofit LED 775-Pro LT 1x1200mm 1x14,5W (LED tube)



Retrofit LED 775-Pro LT 2x1500mm 2x20W (LED tube)



RETROFIT LED 746-PRO LT

Industrial dust and waterproof luminaires
With 1 and 2 LED tubes.

YOUR MAIN BENEFITS:

This product family has been **designed for energy efficient LED tubes.**

Full range available in IP65 and IP66.

Thanks to its special construction this model offers you an additional price advantage: It can be used **without any gear tray.**



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 (**GRP**) – on request suitable for 850°C glow wire test too –, in light grey (RAL7035) colour. Glass fibre reinforced polyester has very good temperature resistance and mechanical stability. Furthermore it is a good electrical insulator resisting the impacts of several chemicals and 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, **high 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. Silicone-based foam with enhanced resistance is optionally 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 an 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.

LED

CE

RETROFIT LED
746-PRO LT

IP65



Option:

IP66



Main technical options

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



RETROFIT LED
746-PRO LT



Retrofit LED 746-Pro LT 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 **transparent prismatic diffusers** are designed with respect to their optical characteristics and are UV resistant.

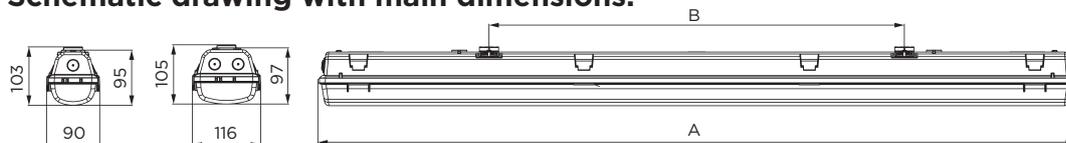


Fixing the diffuser to the body: with highly resistant stainless steel clips.

Technical data (extract)

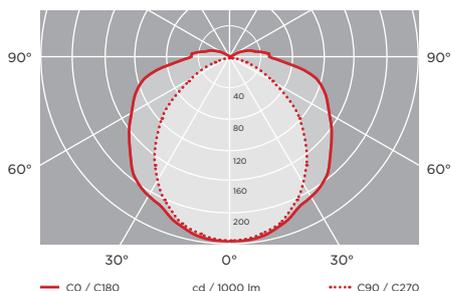
Type	Lampholder	Power (W)	Luminous flux (lm)	Dimensions A (mm)	B (mm)	Weight (kg)
746-Pro LT equipped with Retrofit LED tube (Philips Core Pro LED tube)						
746-Pro LT 1x600mm	T8/G13	1x8	680*	699	435	1,19
746-Pro LT 1x1200mm	T8/G13	1x14,5	1360*	1277	800	2,47
746-Pro LT 1x1500mm	T8/G13	1x20	1870*	1577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

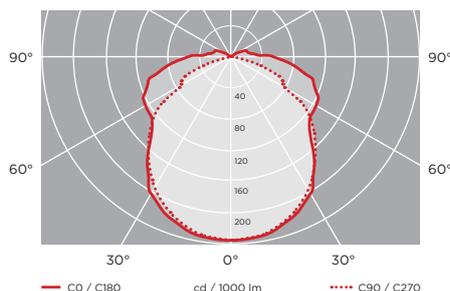


Photometric curves:

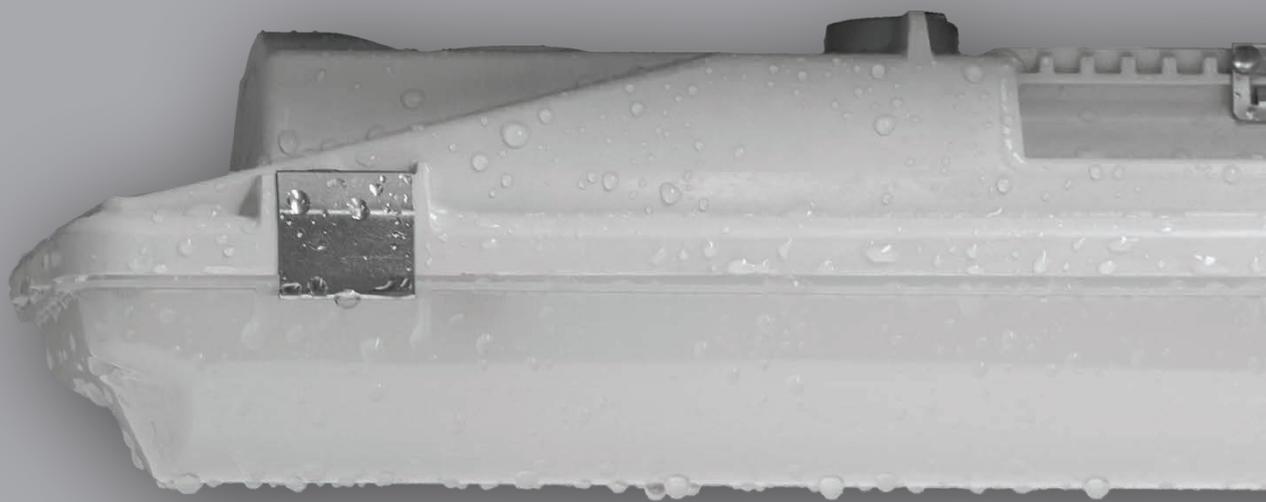
Retrofit LED 746-Pro LT
1x1200mm 1x14,5W (LED tube)



Retrofit LED 746-Pro LT
2x1500mm 2x20W (LED tube)



INTRODUCTION	2
OUR COMPETENCIES	3
ADVANCED OPTIONS	5
RESISTANCE TO CHEMICALS	8
WARRANTY	9
LED LUMINAIRES PORTFOLIO	11
CONTENTS	91
CONTACT US	92



i | b IBV HUNGÁRIA
v Lighting and Plastic Processing

Light embodied

H-6100 Kiskunfélegyháza

Csanyi út 71.

HUNGARY

Tel.: +36 76 562 100

+36 70 463 2226

Fax: +36 76 562 170

E-mail: sales@ibv.hu

www.ibv.hu