



OMS
FOLLOW THE RIGHT LIGHT

Freyn II

So many possibilities with each luminaire



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LED

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Freyn II

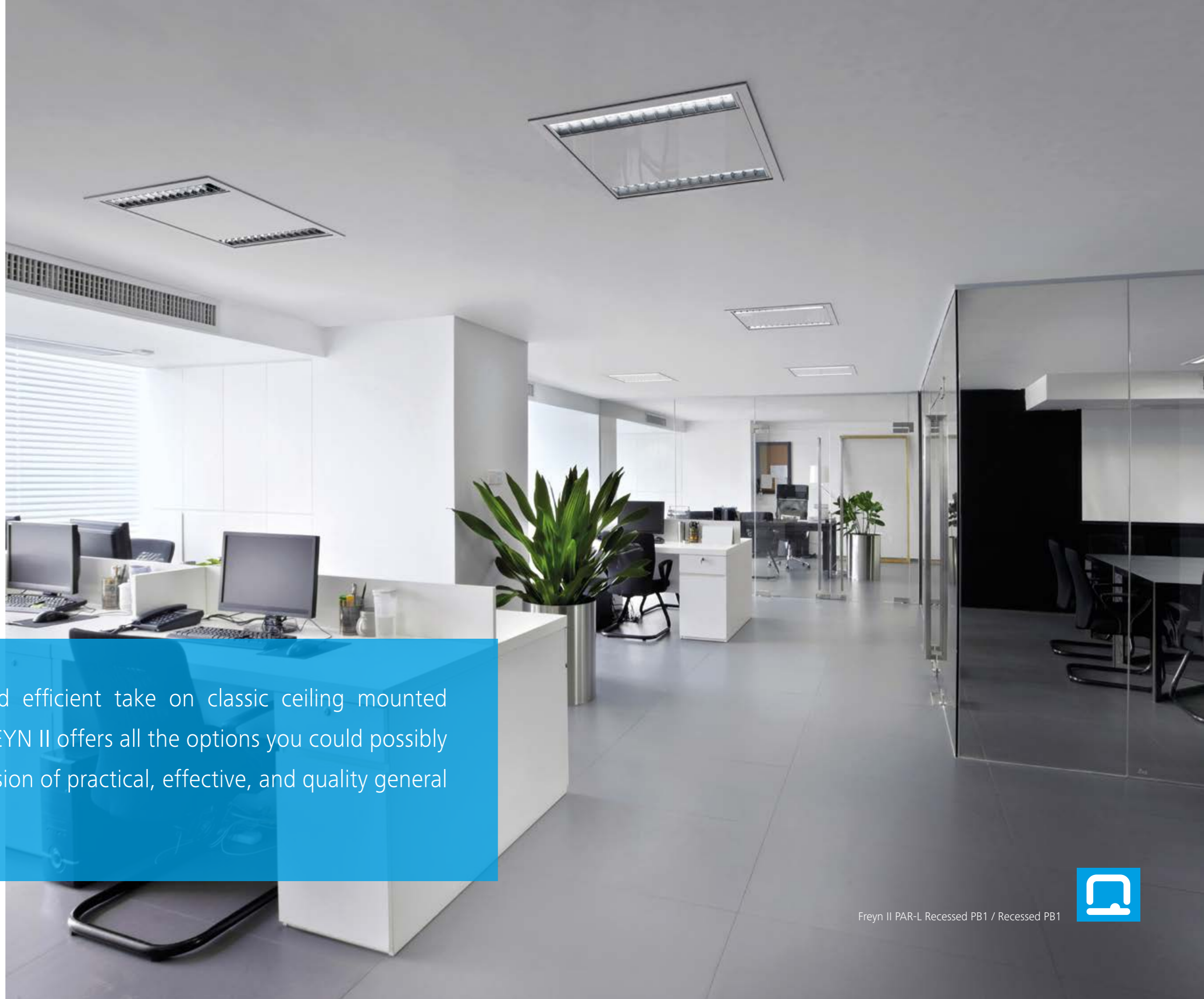
RECESSED

PAR-L RECESSED

SURFACED / SUSPENDED

PAR-L SURFACED / SUSPENDED





A modern and efficient take on classic ceiling mounted luminaires, FREYN II offers all the options you could possibly need for provision of practical, effective, and quality general illumination.



For many years now, general illumination has been dependent on standardised square and rectangular luminaires using fluorescent light sources.



The past

Originally using FD fluorescent tubes, and later more effective FDH, general illumination is a fundamental field within lighting.

FDH up to 75 lm/W with a lifetime of 20,000 hours

Designed to take the physical place of conventional general illumination luminaires, modern LED products deliver so much more than just a required amount of light.



The future

Higher efficiencies, improved lighting parameters, and almost infinite controllability make LED the light source of choice for modern lighting.

LED
up to 118 lm/W with a lifetime of 50,000 hours

Recessed, surfaced, or suspended, and with optical systems designed to ensure optimal visual comfort – all you need to do is select the most suitable variant for your specific needs.

Why LED

Many people still choose to install fluorescent luminaires despite the advancement of LED technology. So why exactly should we invest in LED?

■ **LEDs are more effective.** They consume less energy to produce the same light, making them cost effective to run and eco-friendly. This is further enhanced by the fact that LEDs work for longer, approximately twice as long as an equivalent fluorescent light source. And that makes a big difference in the long run, saving time and money on light source changes in addition to the amount and cost of energy used.

■ **LEDs are cleaner.** All light sources contain some amount of hazardous material. However, the amount contained in LEDs is negligible. On the other hand, fluorescent light sources contain significant quantities of mercury and other substances, which are not only dangerous when released into the environment, but also detrimental to our health. That is why fluorescent light sources must be carefully and appropriately disposed of – a hidden and often underestimated cost of conventional lighting systems.

■ **The light can be more easily controlled.** The light emitted from LEDs can be precisely controlled by optical systems designed specifically for LED. This means that light can be more evenly distributed, directed as needed, with reduced glare. Not only does this improve visual comfort, it further adds to the effectiveness of the overall lighting system.

■ **LEDs offer better quality light.** High-quality LEDs offer excellent colour rendition properties, a wide range of colour temperature options, are fully controllable using dimming and Tunable White, and can even emit physiologically beneficial light that benefits our health and wellbeing.

■ **LEDs are infinitely controllable.** LEDs can be dimmed as much as you want with little effect on their lifetime. This is not the case for any other type of light source. What's more, LEDs can be digitally controlled in ways no other light source can, which offers almost inexhaustible possibilities for inclusion into comfortable-to-use and energy saving Lighting Management Systems.

■ **LEDs bring some of the healthful properties of daylight indoors.** By combining Tunable White and dimming, LEDs can be used for daylight simulation, where lighting is used to support or enhance the natural cycle of the human body and so improve health, wellbeing, and performance.

■ **Air conditioning systems can work less.** It is important that indoor spaces not be too hot so that occupants are comfortable and motivated. In large-area applications where many luminaires are switched on for extended periods of time, an immense amount of heat is emitted from conventional light sources. Subsequently, air conditioning costs in such spaces are very high. By using low-IR LED, the energy consumption of AC systems and associated costs can be greatly reduced.

■ **LEDs improve user-comfort.** Modern LED lighting systems can be designed the way that users can control the lighting that directly affects them. When people have greater control over their environment, they not only benefit from improved comfort, they are happier, healthier, and more satisfied in their work.

In our fight to protect the environment, reduce energy use, and minimise costs, it is clear that LED is the future of lighting.

With consistently increasing demand for energy and its environmental impact, we want to make choices that are not only financially but also ecologically sound. As general illumination is a dominant field in artificial lighting, it is of vital importance to pay attention to long-term luminaire performance. Making the step to install new LED lighting really can make a difference. Maybe more than you expect.

System efficacy

FREYN II luminaires offer exceptional efficacies. This is the result of combining the best LEDs with cleverly designed PCBs, selection of the most effective components, and the addition of high-performance optical systems.

- FREYN II RECESSED up to 118 lm/W
- FREYN II PAR-L RECESSED up to 97 lm/W
- FREYN II SURFACED / SUSPENDED up to 118 lm/W
- FREYN II PAR-L SURFACED / SUSPENDED up to 94 lm/W

Service lifetime

All FREYN II luminaires have a lifetime of 50,000 hours / L80. Based on 12 hours of operation per day, 5 days per week, this equates to more than 16 years of reliable service without the need to change a single light source. This can be further improved by the use of a Lighting Management System that allows for dimming and switching off as required, meaning that 100 % output is not used all the time and energy use reduced.

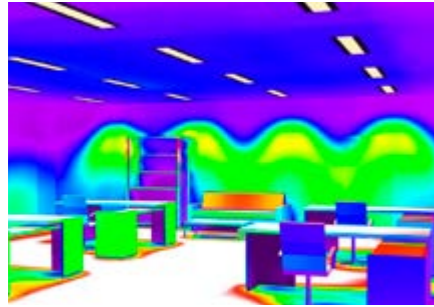
 ENERGY SAVING

 ECO FRIENDLY

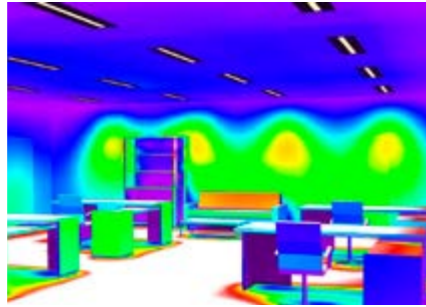
The real difference LED makes

To fully understand the scope of benefits offered by installing FREYN II, let us make real comparisons with conventional fluorescent luminaires.

RELAX A8 PAR-V2 L1
2 x 28 W, 59 W, 3950lm, 67 lm/W

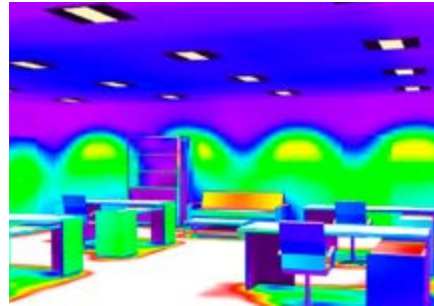


FREYN II RECESSED PV4
36 W, 4250 lm, 118 lm/W

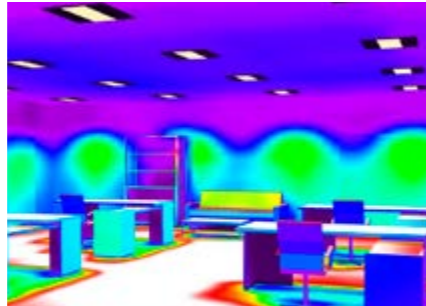


System efficacy ▲ 76 %
Energy consumption ▼ 39 %

RELAX A2 PAR-V2 L1
3 x 24 W, 75 W, 3800 lm, 51 lm/W

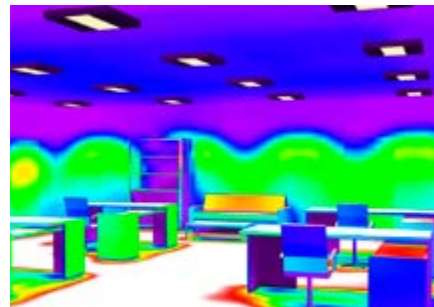


FREYN II PAR-L RECESSED PV1
39 W, 3800 lm, 97 lm/W

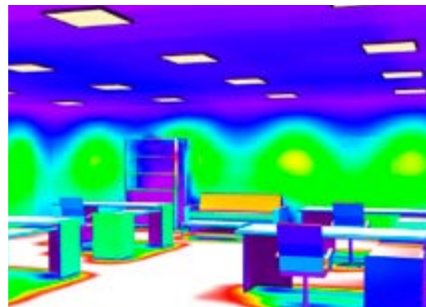


System efficacy ▲ 90 %
Energy consumption ▼ 48 %

CLASSIC A2 PAR-V2
3 x 24 W, 75 W, 4300 lm, 57 lm/W

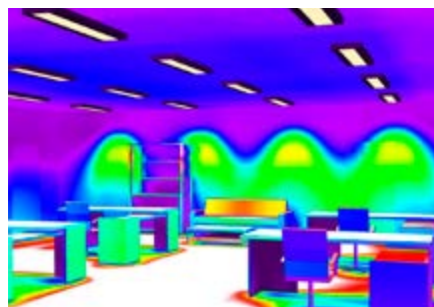


FREYN II A2 SURFACED SS1
36 W, 4250 lm, 118 lm/W

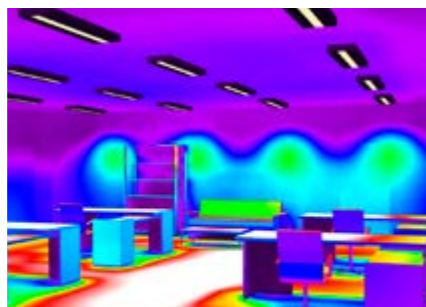


System efficacy ▲ 107 %
Energy consumption ▼ 52 %

CLASSIC PAR-V2
2 x 28 W, 62 W, 3950 lm, 64 lm/W



FREYN II PAR-L SURFACED SS4
33 W, 3100 lm, 94 lm/W



System efficacy ▲ 47 %
Energy consumption ▼ 47 %



LED

ECO FRIENDLY

ENERGY SAVING

LIGHTING MANAGEMENT SYSTEM



Freyn II

VERSATILITY

Choose between three mounting types, various lumen packages, microprismatic diffuser or parabolic louvre optical systems, and a range of shapes. Together, these features mean there is surely a FREYN II to fit almost any need. And in the case that you need something a little more specific, FREYN II is an ideal luminaire to customise thanks to its simple and flexible design.

EASY INSTALLATION

FREYN II is designed with a focus on effective yet simple operation, which begins with installation. A low profile, starting at only 27 mm for the RECESSED variant, means that FREYN II is suitable for installation in even the most restrictive ceilings. And of course, like many other OMS products, FREYN II can be installed easily without the use of any tools, which minimises complications, and installation times and costs.

A SAFE CHOICE

FREYN II is IEC Class I, with up to IP40 of the optical part, making the luminaire ideal for use at lower installation heights such as in offices, classrooms, and corridors, where there is always the possibility of contact with the luminaire. This also means FREYN II is easy to clean because there is no risk involved. What's more, each variant can be fitted with a 3H emergency unit on request to ensure sufficient illumination even in crisis situations.

EVEN MORE ON REQUEST

FREYN II standardly provides illumination with CRI 80+ in CCTs of 3000 K or 4000 K. However, we also offer CRI 90+, and CCTs of 2700 K, 5000 K and 6500 K on request. So, rest assured that even if you have atypical illumination needs, FREYN II will still deliver.

General illumination luminaires are the most used type of interior luminaire, with some being found in almost every interior space from offices, receptions, corridors, and meeting rooms to classrooms, conferences centres, event halls, and even hotel rooms.

Design and materials

Designed with long-term performance and efficiency in mind.

The sheet steel housing is finished in white (RAL 9003) with other colours available on request. Housings have IP20.

3H emergency units can be fit to all variants.

FREYN II LEDs fall into Photobiological Safety Class 0.

In-house designed LED modules ensure high-quality light output with consistent properties.

RECESSED and SURFACED / SUSPENDED variants are equipped with a micropismatic diffuser that ensures IP40 of the optical part.

SUSPENDED variants come with 4x 1.3 m suspension ropes (ordered separately, other lengths on request).

PAR-L variants are equipped with a polished aluminium parabolic louvre with IP20 of the optical part.

Choose between FIX, DALI and 1-10 V drivers in all variants. DALI and 1-10 V give you the possibility to use FREYN II in a Lighting Management System.

The housing acts as a heatsink, dissipating heat away from the enclosed components for effective passive thermal management and optimal luminaire lifetime.

FREYN II RECESSED

FREYN II

FREYN II PAR-L RECESSED



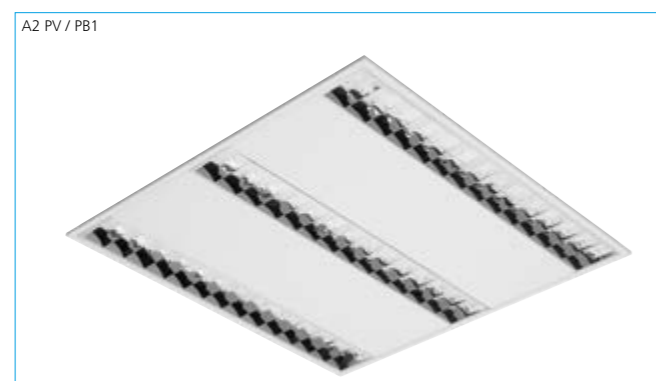
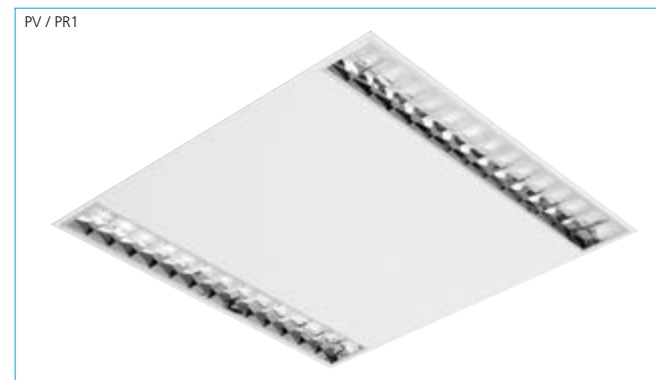
Freyn II variants

There is certainly a FREYN II ready to meet almost every need.

FREYN II RECESSED



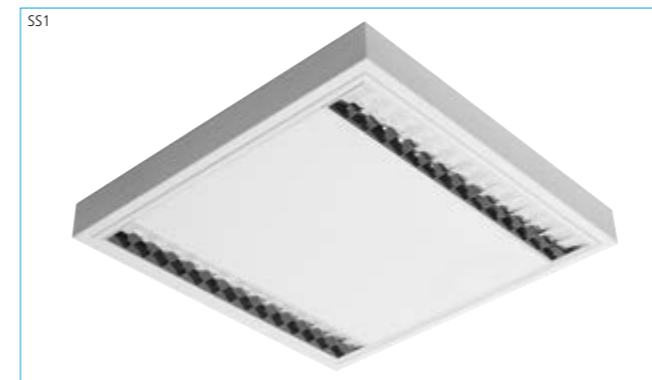
FREYN II PAR-L RECESSED



FREYN II SURFACED / SUSPENDED

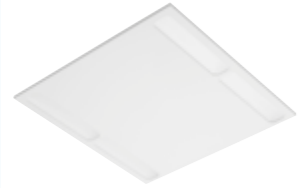


FREYN II PAR-L SURFACED / SUSPENDED



Application

FREYN II RECESSED PV / PR1



FREYN II RECESSED PV / PR4



RECESSED

Ideal for installation in spaces where visually demanding tasks are performed.

FREYN II SURFACED / SUSPENDED SS1



FREYN II SURFACED / SUSPENDED SS4



SURFACED / SUSPENDED

Ideal for installation in spaces where visually demanding tasks are performed.

FREYN II PAR-L SURFACED / SUSPENDED SS1



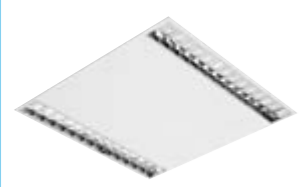
FREYN II PAR-L SURFACED / SUSPENDED SS4



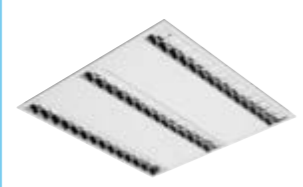
PAR-L SURFACED / SUSPENDED

Ideal for installation in spaces where the highest levels of visual comfort are required.

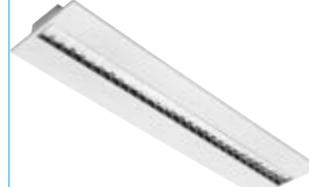
FREYN II PAR-L RECESSED PV / PR1



FREYN II PAR-L RECESSED A2 PV / PB1

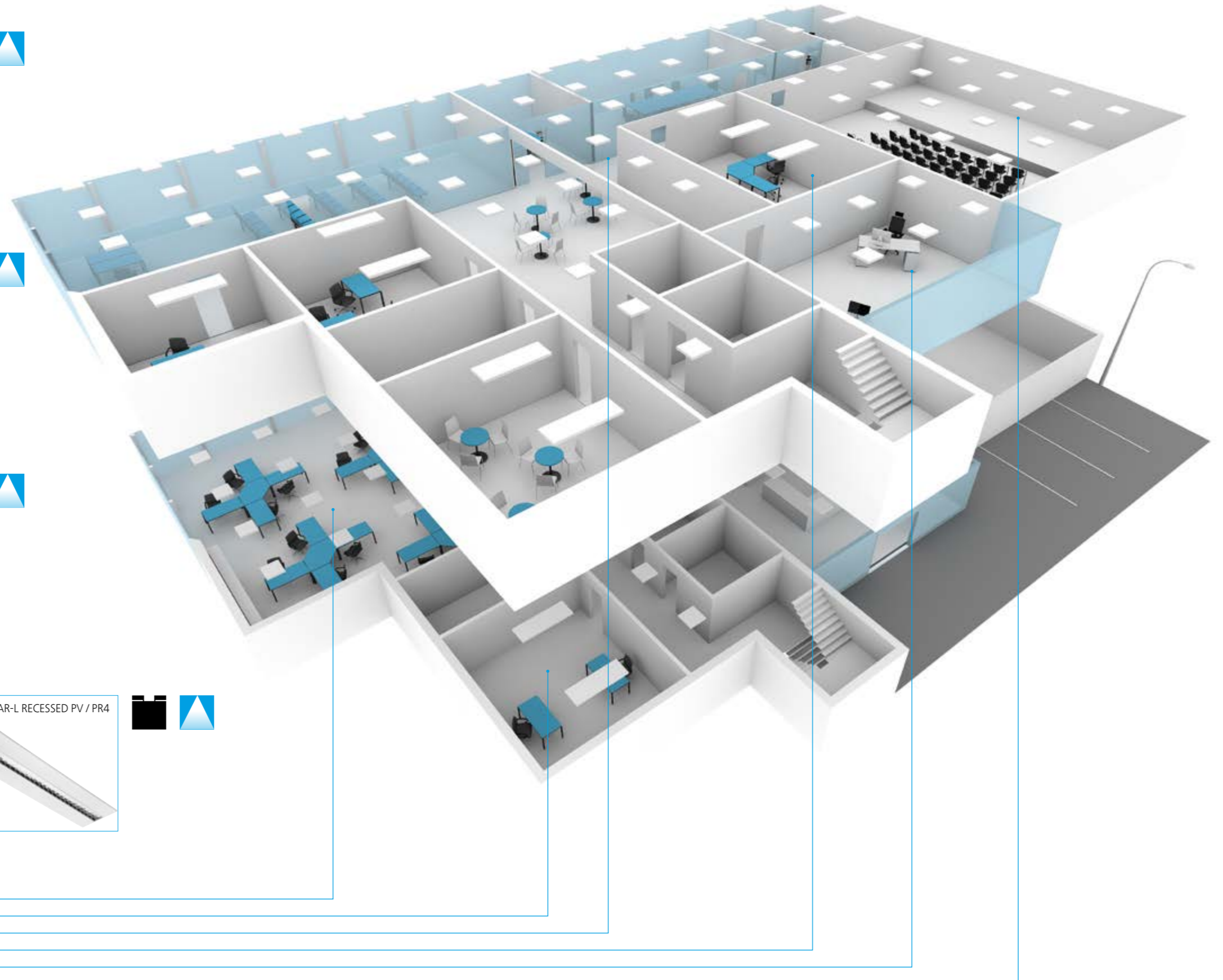


FREYN II PAR-L RECESSED PV / PR4



PAR-L RECESSED

Ideal for installation in spaces where the highest levels of visual comfort are required.





FREYN II RECESSED

MICROPRISMA
LED



PV1



PV4



FRAME FOR PLASTERBOARD INSTALLATION (PB1)

Freyn II Recessed



Mounting

Ceiling recessed
PVx / PRx – T-ceiling

Light source Optical system Wiring

LED
Microprismatic diffuser (MCD)
Electronic control gear FIX/DALI (ECG/EDA)

Materials

Emergency unit variant (3H)
Housing: sheet steel

Surface finish

Diffuser: microprismatic PMMA
Housing: white RAL 9003 (W03)

Accessories

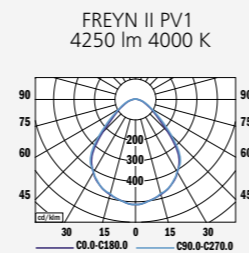
Frame for plasterboard installation (PV version)

Service lifetime

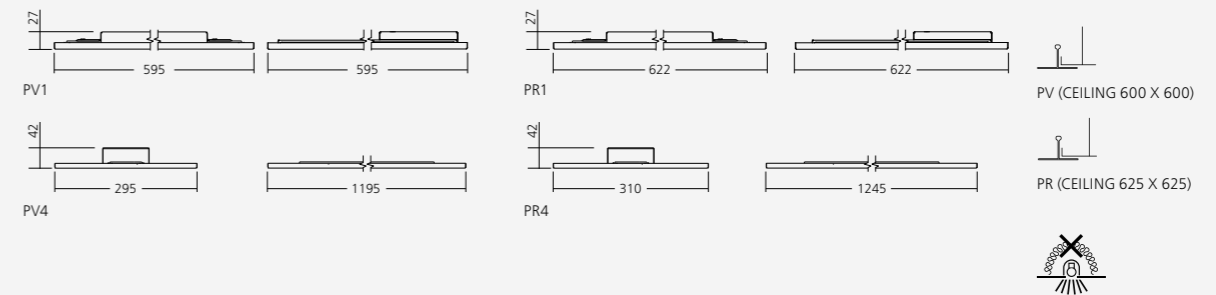
50,000 hours/L80

Ambient temperature

From -20 °C to +35 °C
(from 0 °C with EM unit)



LOR =100 %
lower flux fraction 100 %
upper flux fraction 0 %
UGR <19



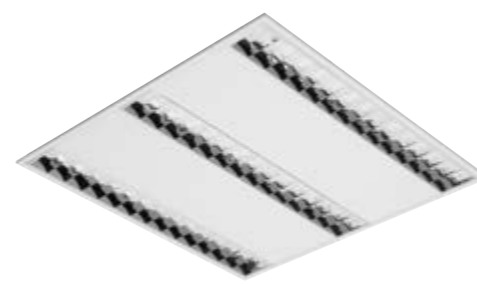
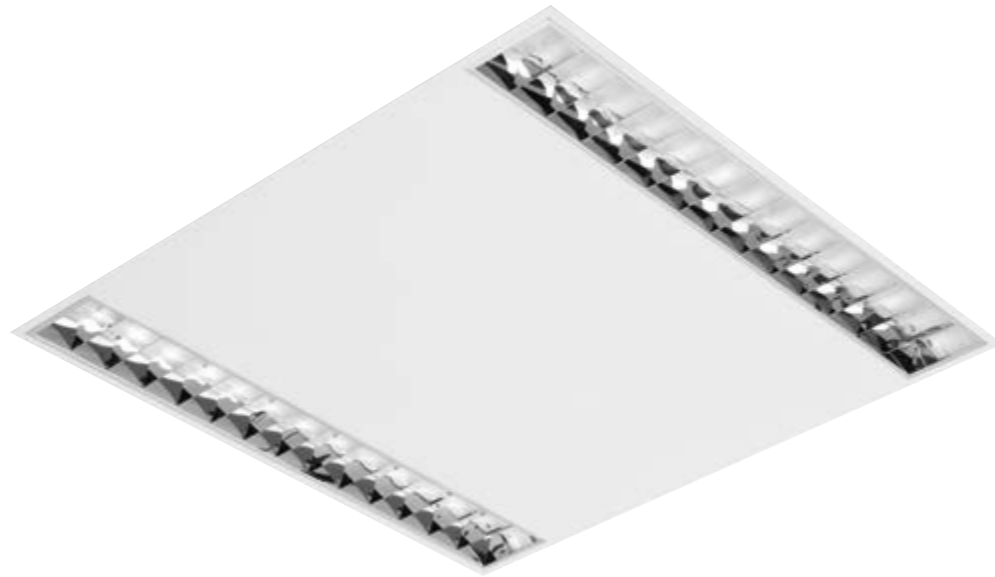
TYPE	NET LUMEN OUTPUT (at Ta = 25 °C) [lm]	POWER CONSUMPTION [W]	SYSTEM EFFICACY [lm/W]	COLOUR RENDERING INDEX CRI [Ra]	CORRELATED COLOUR TEMPERATURE CCT [K]	BEAM ANGLE (C0-180, C90-270)	EMERGENCY UNIT 3H [lm]	WEIGHT [kg]
FREYN II PV/PR1	2800	26	108	80+	3000	85° 89°	410	3.1
FREYN II PV/PR1	3050	26	117	80+	4000	85° 89°	420	3.1
FREYN II PV/PR1	3900	36	108	80+	3000	85° 89°	410	3.1
FREYN II PV/PR1	4250	36	118	80+	4000	85° 89°	420	3.1
FREYN II PV/PR4	2800	26	108	80+	3000	84° 87°	410	3.3
FREYN II PV/PR4	3050	26	117	80+	4000	84° 87°	420	3.3
FREYN II PV/PR4	3900	36	108	80+	3000	84° 87°	410	3.3
FREYN II PV/PR4	4250	36	118	80+	4000	84° 87°	420	3.3

Luminous flux tolerance +/- 10 %.

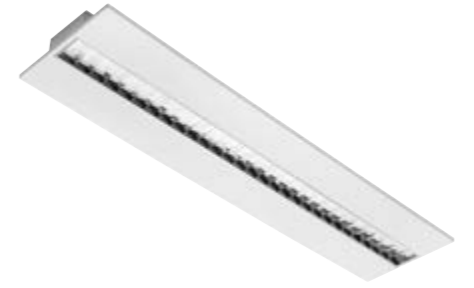


FREYN II PAR-L RECESSED

PAR-L
LED



A2 PV1

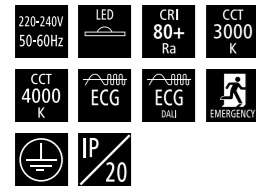


PV4



FRAME FOR PLASTERBOARD INSTALLATION (PB1)

Freyn II Par-L Recessed



Mounting

Ceiling recessed
PVx / PRx – T-ceiling
A2 PB1 – Plasterboard ceiling

Light source Optical system Wiring

LED
Parabolic louvre PAR-L (PLL)
Electronic control gear FIX/DALI (ECG/EDA)
Emergency unit variant (3H)

Materials

Housing: sheet steel
Parabolic louvre: polished aluminium

Surface finish

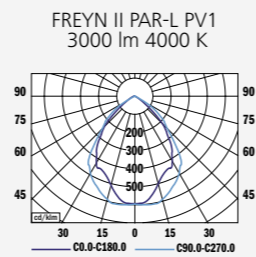
Housing: white RAL 9003 (W03)
Frame for plasterboard installation (PV version)
50,000 hours/L80

Accessories

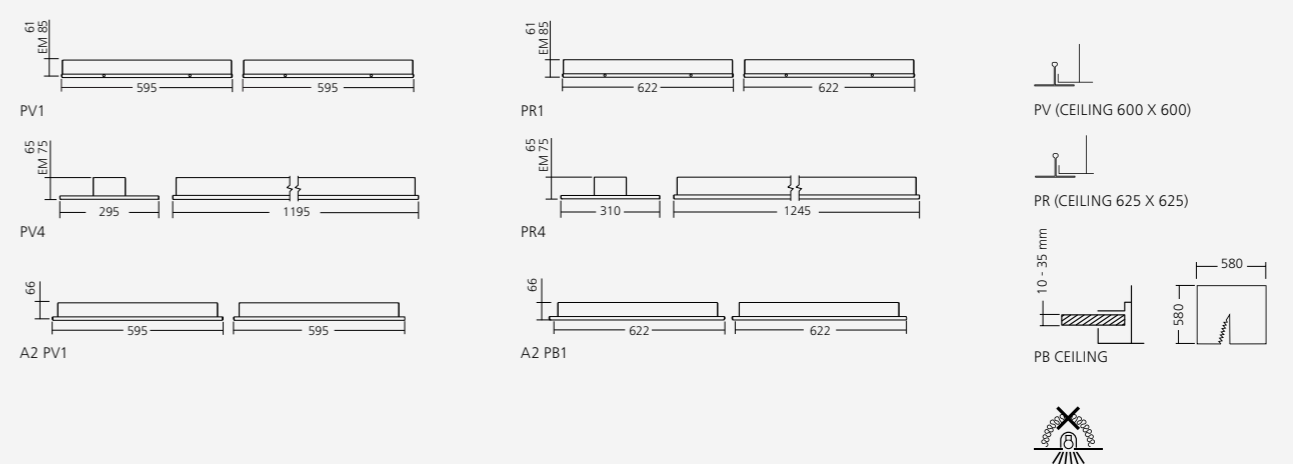
Service lifetime

From -20 °C to +35 °C
(from 0 °C with EM unit)

Ambient temperature



LOR =100 %
lower flux fraction 100 %
upper flux fraction 0 %
UGR <16



TYPE	NET LUMEN OUTPUT (at Ta = 25 °C) [lm]	POWER CONSUMPTION [W]	SYSTEM EFFICACY [lm/W]	COLOUR RENDERING INDEX CRI [Ra]	CORRELATED COLOUR TEMPERATURE CCT [K]	BEAM ANGLE (C0-180, C90-270)	EMERGENCY UNIT 3H [lm]	WEIGHT [kg]
FREYN II PAR-L PV/PR1	2850	32	89	80+	3000	79°, 85°	310	4.3
FREYN II PAR-L PV/PR1	3000	32	94	80+	4000	79°, 85°	320	4.3
FREYN II PAR-L PV/PR4	2950	33	89	80+	3000	80°, 86°	300	4.7
FREYN II PAR-L PV/PR4	3100	33	94	80+	4000	80°, 86°	310	4.7
FREYN II A2 PAR-L PV/PB1	3600	39	92	80+	3000	78°	280	4.6
FREYN II A2 PAR-L PV/PB1	3800	39	97	80+	4000	78°	300	4.6

Luminous flux tolerance +/- 10 %.



SAFETY

2

6

FREYN II SURFACED / SUSPENDED

MICROPRISMA
LED



SS1

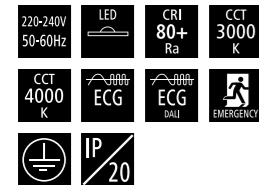


SS4



SUS 1.35 C0/003 SUSPENSION 03

Freyn II Surfacd / Suspended



Mounting

Light source

Optical system

Wiring

Materials

Surface finish

Service lifetime

Ambient temperature

Surfacd/Suspended (SSx)

LED

Microprismatic diffuser (MCD)

Electronic control gear FIX/DALI (ECG/EDA)

Emergency unit variant (3H)

Housing: sheet steel

Diffuser: microprismatic PMMA

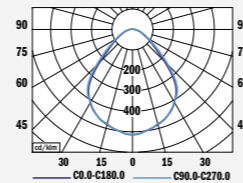
Housing: white RAL 9003 (W03)

50,000 hours/L80

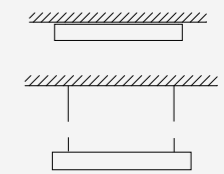
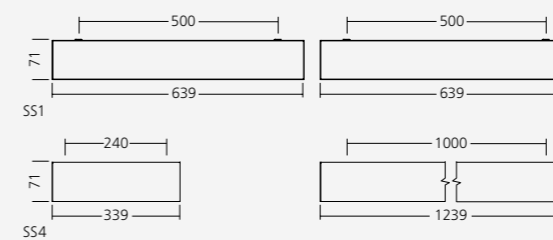
From -20 °C to +35 °C

(from 0 °C with EM unit)

FREYN II SS1
4250 lm 4000 K



LOR = 100 %
lower flux fraction 100 %
upper flux fraction 0 %
UGR < 19



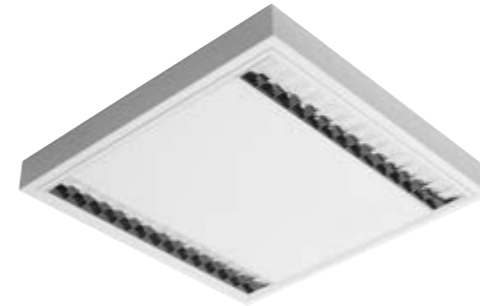
TYPE	NET LUMEN OUTPUT (at Ta = 25 °C) [lm]	POWER CONSUMPTION [W]	SYSTEM EFFICACY [lm/W]	COLOUR RENDERING INDEX CRI (Ra)	CORRELATED COLOUR TEMPERATURE CCT [K]	BEAM ANGLE (C0-180, C90-270)	EMERGENCY UNIT 3H [lm]	WEIGHT [kg]
FREYN II SS1	2800	26	108	80+	3000	85° 89°	410	8.0
FREYN II SS1	3050	26	117	80+	4000	85° 89°	420	8.0
FREYN II SS1	3900	36	108	80+	3000	85° 89°	410	8.0
FREYN II SS1	4250	36	118	80+	4000	85° 89°	420	8.0
FREYN II SS4	2800	26	108	80+	3000	84° 87°	410	8.5
FREYN II SS4	3050	26	117	80+	4000	84° 87°	420	8.5
FREYN II SS4	3900	36	108	80+	3000	84° 87°	410	8.5
FREYN II SS4	4250	36	118	80+	4000	84° 87°	420	8.5

Luminous flux tolerance +/- 10 %.



FREYN II PAR-L SURFACED / SUSPENDED

PAR-L
LED



SS1

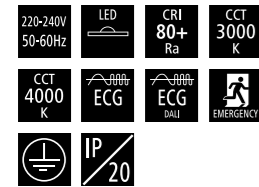


SS4



SUS 1.35 CO/003 SUSPENSION 03

Freyn II Par-L Surfaced / Suspended



Mounting

Light source

Optical system

Wiring

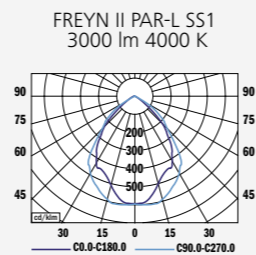
Materials

Surface finish

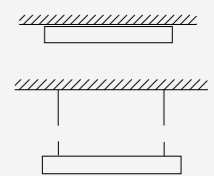
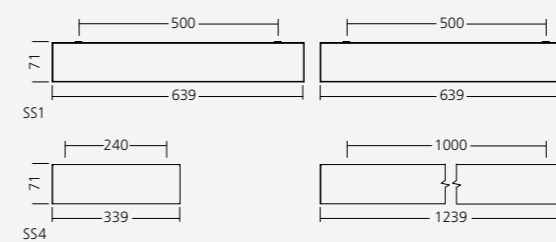
Service lifetime

Ambient temperature

Surfaced/Suspended (SSx)
LED
Parabolic louvre PAR-L (PLL)
Electronic control gear FIX/DALI (ECG/EDA)
Emergency unit variant (3H)
Housing: sheet steel
Parabolic louvre: polished aluminium
Housing: white RAL 9003 (W03)
50,000 hours/L80
From -20 °C to +35 °C (from 0 °C with EM unit)



LOR = 100 %
lower flux fraction 100 %
upper flux fraction 0 %
UGR < 16



TYPE	NET LUMEN OUTPUT (at Ta = 25 °C) [lm]	POWER CONSUMPTION [W]	SYSTEM EFFICACY [lm/W]	COLOUR RENDERING INDEX CRI (Ra)	CORRELATED COLOUR TEMPERATURE CCT [K]	BEAM ANGLE (C0-180, C90-270)	EMERGENCY UNIT 3H [lm]	WEIGHT [kg]
FREYN II PAR-L SS1	2850	32	89	80+	3000	79°, 85°	310	9.2
FREYN II PAR-L SS1	3000	32	94	80+	4000	79°, 85°	320	9.2
FREYN II PAR-L SS4	2950	33	89	80+	3000	80°, 86°	300	9.9
FREYN II PAR-L SS4	3100	33	94	80+	4000	80°, 86°	310	9.9

Luminous flux tolerance +/- 10 %.



OMS

Quality lighting developed
and produced in Europe.

OMS is the developer and producer of industrial and state-of-the-art luminaires and comprehensive interior and exterior lighting solutions. Since our establishment back in 1995, we have risen to become one of the fastest growing lighting companies in Europe, operating in 122 countries around the globe.

Established **1995**

Number of employees **950**

Export **98.5 %**

Production surface area **93,500 m²**

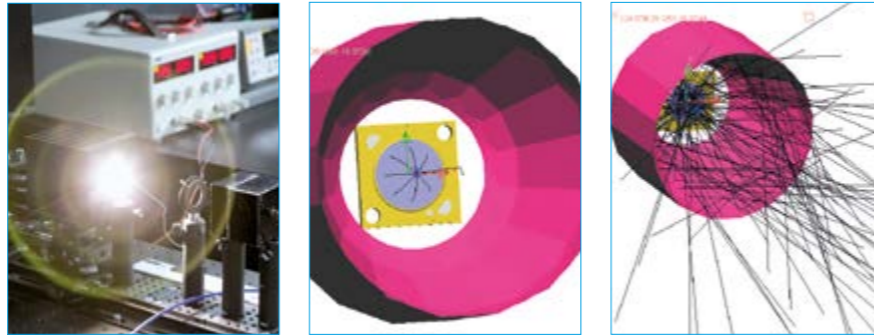


Innovation requires a different approach.

We have one of the best equipped R&D departments in Europe where you will find a team of highly qualified and experienced specialists. This allows us to develop products from concept to manufacture all under one roof.

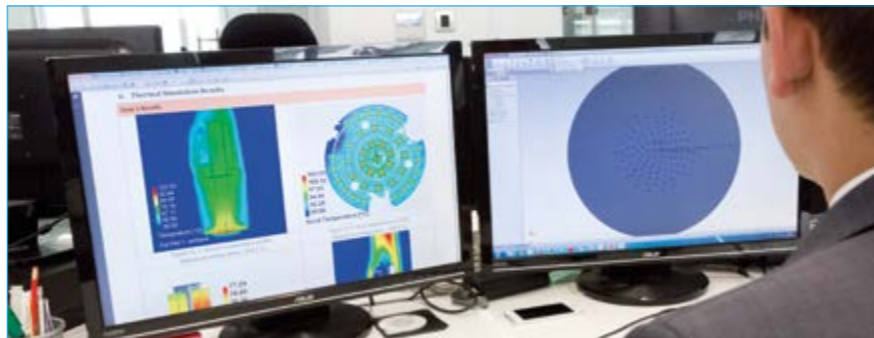
OPTICAL DESIGN

Optimal luminaire performance is only achieved if effective and appropriate optical parts are selected and refined to meet the specific needs of each product. We have access to the latest development technologies as well as having vast practical experience and theoretical knowledge, all of which are applied to every product that passes through our hands.



THERMAL DESIGN

The digitisation and miniturisation of technologies places increased emphasis on the use of optimal thermal management. We have extensive test facilities that allow us to characterise every product to ensure reliable performance. We are also active in research and the development of innovative concepts.



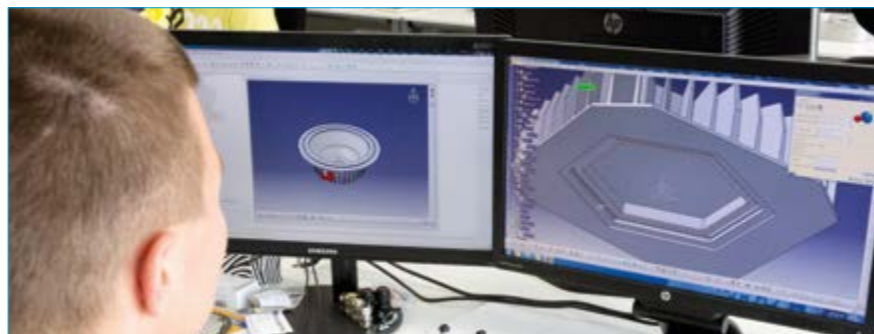
ELECTRONIC DESIGN

The boundaries of electronic design are consistently being broken by new technologies as well as by the innovative use of existing ones, highlighting the need for flawless development processes. We create advanced system level designs with all stages verified in-house, including DALI compatibility and long-term performance. In addition, we put a great deal of energy into the innovation of new products.



MECHANICAL ENGINEERING

We have more than 20 years of experience in the mechanical design of luminaires, their customisation, and the development of other mechanical appliances and precision tools such as optical measurement and electronic testing devices. Using the latest software, analysis methods and equipment, we can develop mechanical designs for anything from the simplest tools to complete mechanical solutions.

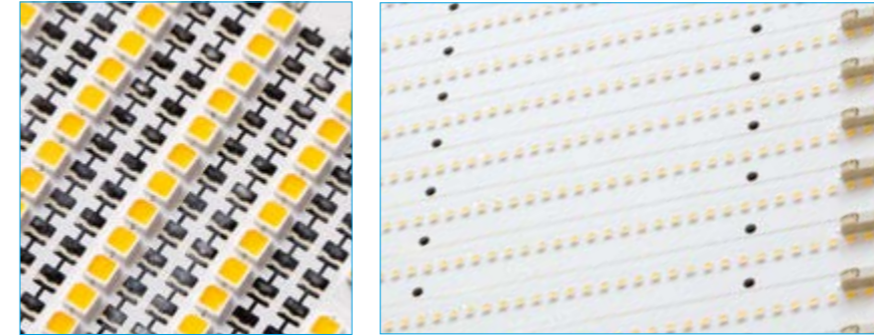


From concept to manufacture, under one roof.

Our superior manufacturing capabilities are the backbone of the company. For this reason, we view continual technological development as paramount and invest our energy in what matters most.

LED PRODUCT DEVELOPMENT

LED light sources offer a great many advantages over conventional ones because they are fundamentally different technologies. This means that the development of LED products requires a fundamentally different approach to their industrial, optical, electronic, thermal, and mechanical design.



LED PRODUCT MANUFACTURE

Our LED modules are designed by our own electrical engineers in close collaboration with the optical and thermal teams. This, in combination with fully automated PCB production, means our products meet the most rigorous design standards. All of our LED luminaires are assembled in a specialised ESP facility and thoroughly tested using precision equipment in line with stringent ISO 9001 technical standards.



METAL & PLASTICS PRODUCTION

We have been manufacturing luminaires for more than 20 years. That history stands as a firm foundation for our current high-tech production facilities and processes. We use a wide range of machines that together offer us unbeatable production scalability and versatility.



SPECIAL REQUEST FACTORY

Our special request factory provides us with unrivalled flexibility. The machines allow us to make very small and precise parts with ease and at speed so that we can respond quickly to customer demand, produce rapid prototypes and customised solutions, and shorten the development time of new products.



The manufacturer reserves all rights to make changes in materials and components used in production of lighting fittings.

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