

LINEARlight POWER

Professional LED modules



Areas of application

- Coving
- Shelf and cupboard lighting
- General illumination

Product benefits

- Consistent white light (Standard Deviation of Color Matching SDCM: ≤ 3)
- Modules can be easily joined together to make seamless strip lighting
- Low maintenance costs thanks to a lifetime of up to 50,000 h (L70/B50)
- Simple fixing thanks to mounting holes

Product features

- Metal core board equipped with 21 LEDs
- Luminous flux comparable with T5 HE fluorescent lamps
- Luminous flux: up to 2,250 lm/m
- Integrated SMD plug connector (male/female) on both sides of the PCB
- Color rendering index R_a : typ. 85
- Dimmable
- Up to six modules can be operated on one control gear
- Compatible with LINEARlight ADVANCED and ECO



Product family datasheet

Technical data

Electrical data

Product description	Nominal voltage	Type of current	Rated wattage	Input voltage range	Reverse Voltage
LR21P -W2F-840	24.0 V	DC	8.00 W	23...25 V	25 V
LR21P -W2F-830	24.0 V	DC	8.00 W	23...25 V	25 V

Photometrical data

Product description	Light color LED	Color temperature	Color rendering index Ra	Luminous flux	Total useful luminous flux	Luminous efficacy
LR21P -W2F-840	White	4000 K	>80	630 lm	630 lm	80 lm/W
LR21P -W2F-830	White	3000 K	>80	630 lm	630 lm	80 lm/W

Product description	Standard deviation of color matching	Light color (designation)
LR21P -W2F-840	≤3 sdcn	Cool White
LR21P -W2F-830	≤3 sdcn	Warm White

Light technical data

Product description	Beam angle	Starting time	Warm-up time (60 %)
LR21P -W2F-840	120 °	< 0.5 s	< 2.00 s
LR21P -W2F-830	120 °	< 0.5 s	< 2.00 s

LED module information

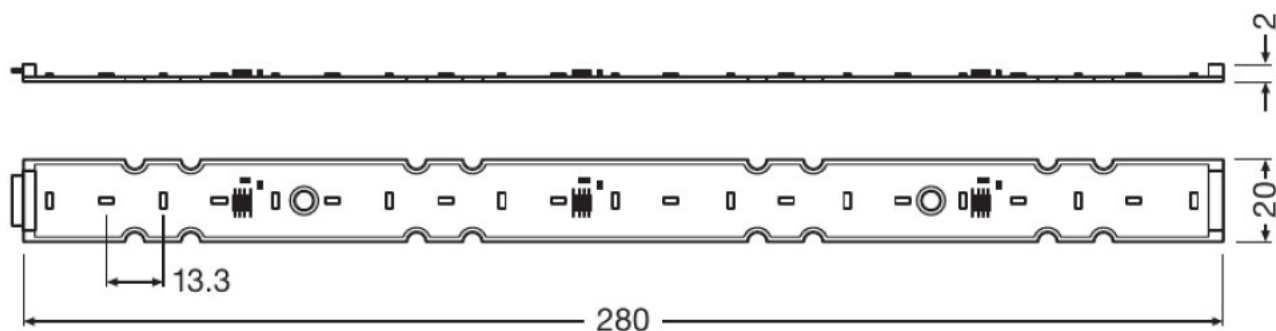
Product description	Number of LEDs per module
LR21P -W2F-840	21
LR21P -W2F-830	21

Dimensions & weight

Product description	Length	Width	Height	Product weight
LR21P -W2F-840	280.0 mm	20.0 mm	2.0 mm	30.00 g
LR21P -W2F-830	280.0 mm	20.0 mm	2.0 mm	30.00 g

Product family datasheet

Product line drawing



LR21P -W2F-840, LR21P -W2F-830

Colors & materials

Product description	Cover material	Body material
LR21P -W2F-840	Plastic	Anodised aluminum
LR21P -W2F-830	Plastic	Anodised aluminum

Temperatures & operating conditions

Product description	Maximum temperature at tc test point	Temperature range in operation at Tc point
LR21P -W2F-840	65 °C	-30...65 °C ¹⁾
LR21P -W2F-830	65 °C	-30...65 °C ¹⁾

¹⁾ At the T_c point

Lifespan

Product description	Lifespan
LR21P -W2F-840	50000 h ¹⁾
LR21P -W2F-830	50000 h ¹⁾

¹⁾ L70/B90 at Tc 65 °C

Product family datasheet

Capabilities

Product description	Dimmable	Self-adhesive
LR21P -W2F-840	Yes	Yes
LR21P -W2F-830	Yes	Yes

Certificates & standards

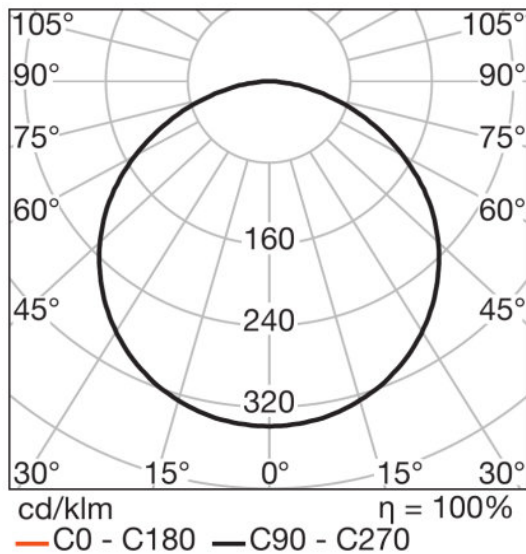
Product description	Energy efficiency class	Energy consumption	Standards
LR21P -W2F-840	A+	9 kWh/1000h	Acc. to EC 61347-2-13/Acc. to EN 55015/Acc. to IEC 61547/Acc. to IEC 61000-3-2/Acc. to ENEC 61347-2-13/Acc. to IEC/EN 62384
LR21P -W2F-830	A+	9 kWh/1000h	Acc. to EC 61347-2-13/Acc. to EN 55015/Acc. to IEC 61547/Acc. to IEC 61000-3-2/Acc. to ENEC 61347-2-13/Acc. to IEC/EN 62384

Logistical data

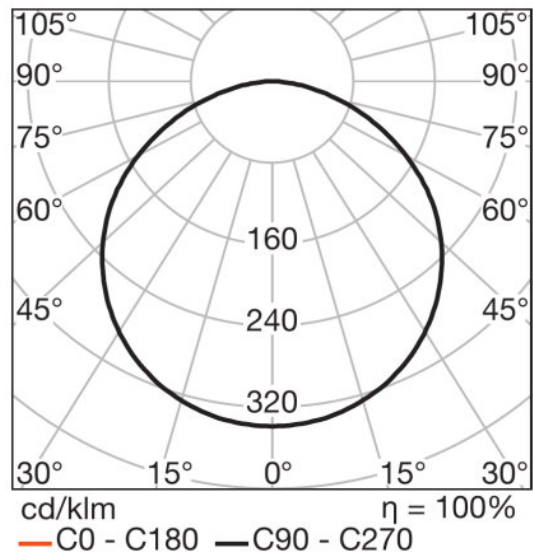
Product description	Temperature range at storage
LR21P -W2F-840	-30...90 °C
LR21P -W2F-830	-30...90 °C

Product family datasheet

Light Distribution



LR21P -W2F-840



LR21P -W2F-830

Equipment / Accessories

- CONNECTsystem LR
- Expandable via optional accessories to create an individual complete module

Application advice

For more detailed application information and graphics please see product datasheet.

Additional product information

- Installation of LED modules (with power supplies) needs to be made under consideration of all valid regulations and norms.
- Installation by qualified electrician only.
- Please see the relevant application guides and instructions sheets for more detailed safety and mounting information. Additional information is available on request.
- Complies with IEC/EN 61547
- Complies with IEC/EN 61000-3-2
- Complies with EN 55015, CISPR 15
- Complies with IEC/EN 61347-1
- Complies with IEC/EN 61347-2-13
- Suitable for usage in furnitures (DIN 57710).
- LED modules are dimmable by means of PWM (pulse width modulation). It is recommended using the following OSRAM control gears: OPTOTRONIC OT DIM, OT DALI DIM or OPTOTRONIC 24 V power supplies with integrated 1...10 V dimming interface.

Product family datasheet








Parallel connection is mandatory for safe electrical operation. Serial connection of LED modules is strongly discouraged. Unbalanced voltage drop in serial connection can cause hazardous overload and damage the LED module.

- Electrical contact is achieved with the contact cables or the terminals of the module. Please refer to the technical data for maximum number of LED modules that can be operated on one control gear.
- In order to operate OSRAM LED modules safely, it is absolutely necessary to operate them with an electronically stabilized power supply that protects against short circuits, overload and overheating.
- In case other power supplies than OSRAM OPTOTRONIC are used, compliance to the necessary operating parameters (voltage, current, power) has to be ensured.
- Pay attention to polarity! Wrong polarity can cause destruction or malfunction of the module.
- Use only coordinated LR-4PIN CONNECTsystem for electrical installation.
- Conducting paths on the circuit board must not be damaged or destroyed during installation.
- Luminaire must be cleaned regularly to avoid loss of luminous flux.
- The LED module itself and all its components must not be stressed mechanically.
- Operation in or under water is prohibited.
- Protect against splashes!
- The module, as manufactured, has no inherent protection against corrosion. It is the user's responsibility to provide suitable protection against corrosive agents, such as moisture, condensation and other harmful elements.
- To avoid mechanical damage, the LED modules have to be attached securely to the intended mounting surface. It is recommended to avoid heavy vibration.

Sales and Technical Support

Sales and Technical Support www.osram.com

Download Data

File	
	Product Family Datasheet 337691_LINEARlight Power - LR21P (GB)
	Certificates 336420_CB Test Certificate DE1-49856 for LINEARlight 24 V
	Declarations of conformity 485808_EC-DoC LS_LRXXX-Linear Rigid
	Declarations of conformity 485809_EC-Man-DoC LS_LRXXX-Linear Rigid
	CAD data 340944_LINEARlight Power – Drawing
	Eulumdat 340901_LINEARLIGHT RIGID LR21P-W2F-840
	Eulumdat 340904_LINEARLIGHT RIGID LR21P-W2F-830

Logistical Data

Product family datasheet

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4008321971494	LR21P -W2F-840	Shipping carton box 8	317 mm x 46 mm x 265 mm	3.86 dm ³	362.00 g
4008321971470	LR21P -W2F-830	Shipping carton box 8	317 mm x 52 mm x 265 mm	4.37 dm ³	408.00 g

The mentioned product code describes the smallest quantity unit which can be ordered. One shipping unit can contain one or more single products. When placing an order, for the quantity please enter single or multiples of a shipping unit.

Accessories Mandatory

Product description	Accessory name	Accessory code
LR21P -W2F-840	LR -4PIN-500	▶ 4008321971852
LR21P -W2F-830	LR -4PIN-500	▶ 4008321971852

Accessories Optional

Product description	Accessory name	Accessory code
LR21P -W2F-840	LR -4CONN-45	▶ 4008321971814
LR21P -W2F-840	LR -4CONN-250	▶ 4008321994400
LR21P -W2F-840	LT -ENDCAP-G2	▶ 4052899076358
LR21P -W2F-830	LR -4CONN-45	▶ 4008321971814
LR21P -W2F-830	LR -4CONN-250	▶ 4008321994400
LR21P -W2F-830	LT -ENDCAP-G2	▶ 4052899076358

Disclaimer

Subject to change without notice. Errors and omission excepted. Always make sure to use the most recent release.