

## LINEARlight FLEX ShortPitch

– LED modules for professional and industrial applications



### Product family benefits

- Color consistency up to 2 SDCM on entire light strip thanks to Single-bin technology
- Color rendering options  $R_a$ : 80 and 90
- Service lifetime (L80/B10): up to 60,000 h
- LM79 and LM80 compliant
- Embedded constant current regulators
- No solder-joints on circuit board
- Flexible and cuttable LED strips
- Dimmable (with suitable PWM dimming methods)

### Areas of application

- For high-end application with dedicated equipment and accessories



## Product family datasheet

### Technical data

Product description	Electrical data						Photometrical data
	Nominal voltage	Type of current	Nominal wattage per meter	Rated wattage	Input voltage range	Accidental reverse input voltage protection up to	Light color LED
LF800S -G4-822-10	24.0 V	DC	7.7 W	77.00 W	23...25 V	25 V	White
LF800S -G4-827-10	24.0 V	DC	7.7 W	77.00 W	23...25 V	25 V	White
LF800S -G4-830-10	24.0 V	DC	7.0 W	70.00 W	23...25 V	25 V	White
LF800S -G4-840-10	24.0 V	DC	7.0 W	70.00 W	23...25 V	25 V	White
LF800S -G4-850-10	24.0 V	DC	7.0 W	70.00 W	23...25 V	25 V	White
LF800S -G4-865-10	24.0 V	DC	7.0 W	70.00 W	23...25 V	25 V	White
LF800S -G4-927-10	24.0 V	DC	7.0 W	70.00 W	23...25 V	25 V	White
LF800S -G4-940-10	24.0 V	DC	7.0 W	70.00 W	23...25 V	25 V	White
LF800S -G4-965-10	24.0 V	DC	7.0 W	70.00 W	23...25 V	25 V	White

Product description	Color temperature	Color rendering index Ra	Luminous flux per meter	Total useful luminous flux	Luminous efficacy	Standard deviation of color matching	Light color (designation)
LF800S -G4-822-10	2195 K	≥80	740 lm	7400 lm	96 lm/W	≤3 sdc	White
LF800S -G4-827-10	2750 K	≥80	800 lm	8000 lm	104 lm/W	≤3 sdc	White
LF800S -G4-830-10	3065 K	≥80	800 lm	8000 lm	114 lm/W	≤3 sdc	White
LF800S -G4-840-10	4030 K	≥80	800 lm	8000 lm	114 lm/W	≤3 sdc	White
LF800S -G4-850-10	4980 K	≥80	800 lm	8000 lm	114 lm/W	≤3 sdc	White
LF800S -G4-865-10	6740 K	≥80	800 lm	8000 lm	114 lm/W	≤3 sdc	White
LF800S -G4-927-10	2750 K	≥90	620 lm	6200 lm	89 lm/W	≤3 sdc	White
LF800S -G4-940-10	4030 K	≥90	680 lm	6800 lm	97 lm/W	≤3 sdc	White
LF800S -G4-965-10	6740 K	≥90	680 lm	6800 lm	97 lm/W	≤3 sdc	White

Product description	Light technical data					LED module information
	LED pitch	Beam angle	Rated beam angle (half peak value)	Starting time	Warm-up time (60 %)	Number of LEDs per meter
LF800S -G4-822-10	8.33 mm	120 °	120.00 °	< 0.5 s	< 0.50 s	120
LF800S -G4-827-10	8.33 mm	120 °	120.00 °	< 0.5 s	< 0.50 s	120
LF800S -G4-830-10	8.33 mm	120 °	120.00 °	< 0.5 s	< 0.50 s	120
LF800S -G4-840-10	8.33 mm	120 °	120.00 °	< 0.5 s	< 0.50 s	120
LF800S -G4-850-10	8.33 mm	120 °	120.00 °	< 0.5 s	< 0.50 s	120
LF800S -G4-865-10	8.33 mm	120 °	120.00 °	< 0.5 s	< 0.50 s	120
LF800S -G4-927-10	8.33 mm	120 °	120.00 °	< 0.5 s	< 0.50 s	120
LF800S -G4-940-10	8.33 mm	120 °	120.00 °	< 0.5 s	< 0.50 s	120
LF800S -G4-965-10	8.33 mm	120 °	120.00 °	< 0.5 s	< 0.50 s	120

## Product family datasheet

Product description	Number of LEDs per smallest unit	Maximum operable length	Dimensions & weight			
			Length	Length – smallest unit	Width	Height
LF800S -G4-822-10	6	10000 mm <sup>1)</sup>	10000 mm	50.0 mm	8.00 mm	1.40 mm
LF800S -G4-827-10	6	10000 mm <sup>1)</sup>	10000 mm	50.0 mm	8.00 mm	1.40 mm
LF800S -G4-830-10	6	10000 mm <sup>1)</sup>	10000 mm	50.0 mm	8.00 mm	1.40 mm
LF800S -G4-840-10	6	10000 mm <sup>1)</sup>	10000 mm	50.0 mm	8.00 mm	1.40 mm
LF800S -G4-850-10	6	10000 mm <sup>1)</sup>	10000 mm	50.0 mm	8.00 mm	1.00 mm
LF800S -G4-865-10	6	10000 mm <sup>1)</sup>	10000 mm	50.0 mm	8.00 mm	1.40 mm
LF800S -G4-927-10	6	10000 mm <sup>1)</sup>	10000 mm	50.0 mm	8.00 mm	1.40 mm
LF800S -G4-940-10	6	10000 mm <sup>1)</sup>	10000 mm	50.0 mm	8.00 mm	1.40 mm
LF800S -G4-965-10	6	10000 mm <sup>1)</sup>	10000 mm	50.0 mm	8.00 mm	1.40 mm

Product description	Product weight	Temperatures & operating conditions			
		Performance temp. acc. to IEC 62717	Temperature range in operation at Tc point	Ambient temperature range	Temperature range at storage
LF800S -G4-822-10	103.60 g	45 °C	-30...75 °C <sup>2)</sup>	-30...+50 °C <sup>3)</sup>	-40...+85 °C
LF800S -G4-827-10	103.60 g	45 °C	-30...75 °C <sup>2)</sup>	-30...+50 °C <sup>3)</sup>	-40...+85 °C
LF800S -G4-830-10	103.60 g	45 °C	-30...75 °C <sup>2)</sup>	-30...+50 °C <sup>3)</sup>	-40...+85 °C
LF800S -G4-840-10	103.60 g	45 °C	-30...75 °C <sup>2)</sup>	-30...+50 °C <sup>3)</sup>	-40...+85 °C
LF800S -G4-850-10	103.60 g	45 °C	-30...75 °C <sup>2)</sup>	-30...+50 °C <sup>3)</sup>	-40...+85 °C
LF800S -G4-865-10	103.60 g	45 °C	-30...75 °C <sup>2)</sup>	-30...+50 °C <sup>3)</sup>	-40...+85 °C
LF800S -G4-927-10	103.60 g	45 °C	-30...75 °C <sup>2)</sup>	-30...+50 °C <sup>3)</sup>	-40...+85 °C
LF800S -G4-940-10	103.60 g	45 °C	-30...75 °C <sup>2)</sup>	-30...+50 °C <sup>3)</sup>	-40...+85 °C
LF800S -G4-965-10	103.60 g	45 °C	-30...75 °C <sup>2)</sup>	-30...+50 °C <sup>3)</sup>	-40...+85 °C

Product description	Lifespan				Additional product data
	Rated lamp life time	Nominal lamp life time	Lumen main. fact. at end of nom. life time	Number of switching cycles	Successor EAN
LF800S -G4-822-10	60000 h	60000 h	0.70	15000	4062172170055
LF800S -G4-827-10	60000 h	60000 h	0.70	15000	4062172169837
LF800S -G4-830-10	60000 h	60000 h	0.70	15000	4062172169851
LF800S -G4-840-10	60000 h <sup>5)</sup>	60000 h	0.70	15000	4062172169899
LF800S -G4-850-10	60000 h <sup>5)</sup>	60000 h	0.70	15000	4062172169912
LF800S -G4-865-10	60000 h <sup>5)</sup>	60000 h	0.70	15000	4062172169950
LF800S -G4-927-10	60000 h	60000 h	0.70	15000	4062172170017
LF800S -G4-940-10	60000 h	60000 h	0.70	15000	4062172170079
LF800S -G4-965-10	60000 h	60000 h	0.70	15000	4062172170130

Product description	Predecessor EAN	ID of contained light source	Capabilities	
			Lowest bending radius	Dimmable
LF800S -G4-822-10			20 mm	
LF800S -G4-827-10	4052899953116	LS_TRV_274058	20 mm	

## Product family datasheet

Product description	Predecessor EAN	ID of contained light source	Capabilities	
			Lowest bending radius	Dimmable
LF800S -G4-830-10	4052899953123	LS_TRV_274059	20 mm	
LF800S -G4-840-10	4052899953130	LS_TRV_274061	20 mm	
LF800S -G4-850-10		LS_TRV_285318	20 mm	Yes
LF800S -G4-865-10	4052899953154	LS_TRV_274062	20 mm	
LF800S -G4-927-10			20 mm	
LF800S -G4-940-10			20 mm	
LF800S -G4-965-10		LS_TRV_274069	20 mm	

Product description	Certificates & standards				
	Energy efficiency class	Energy consumption	Standards	Type of protection	Energy efficiency class of the contained light source
LF800S -G4-822-10	A+ <sup>4)</sup>	85 kWh/1000h	CE; ENEC 10 VDE/EAC/UL Recognized component according UL 8750	IP20	
LF800S -G4-827-10	A+ <sup>4)</sup>	85 kWh/1000h	CE; ENEC 10 VDE/EAC/UL Recognized component according UL 8750	IP20	F
LF800S -G4-830-10	A++ <sup>4)</sup>	77 kWh/1000h	CE; ENEC 10 VDE/EAC/UL Recognized component according UL 8750	IP20	F
LF800S -G4-840-10	A++ <sup>4)</sup>	77 kWh/1000h	CE; ENEC 10 VDE/EAC/UL Recognized component according UL 8750	IP20	F
LF800S -G4-850-10	A++ <sup>4)</sup>	77 kWh/1000h	CE; ENEC 10 VDE/EAC/UL Recognized component according UL 8750	IP20	F
LF800S -G4-865-10	A++ <sup>4)</sup>	77 kWh/1000h	CE; ENEC 10 VDE/EAC/UL Recognized component according UL 8750	IP20	F
LF800S -G4-927-10	A+ <sup>4)</sup>	77 kWh/1000h	CE; ENEC 10 VDE/EAC/UL Recognized component according UL 8750	IP20	
LF800S -G4-940-10	A+ <sup>4)</sup>	77 kWh/1000h	CE; ENEC 10 VDE/EAC/UL Recognized component according UL 8750	IP20	
LF800S -G4-965-10	A+ <sup>4)</sup>	77 kWh/1000h	CE; ENEC 10 VDE/EAC/UL Recognized component according UL 8750	IP20	F

Product description	Logistical data	Environmental information		
	Commodity code	Date of Declaration	Primary Article Identifier	Candidate List Substance 1
LF800S -G4-822-10	940540399000	05-01-2022	4052899575691	No declarable substances contained
LF800S -G4-827-10	940540399000	05-01-2022	4052899575752	No declarable substances contained
LF800S -G4-830-10	940540399000	01-01-2022	4052899575790	No declarable substances contained

## Product family datasheet

Product description	Logistical data	Environmental information		
	Commodity code	Date of Declaration	Primary Article Identifier	Candidate List Substance 1
LF800S -G4-840-10	940540399000	05-01-2022	4052899575851	No declarable substances contained
LF800S -G4-850-10	940540399000	30-12-2021	4062172061940	No declarable substances contained
LF800S -G4-865-10	940540399000	05-01-2022	4052899575875	Lead
LF800S -G4-927-10	940540399000	30-12-2021	4052899575912	No declarable substances contained
LF800S -G4-940-10	940540399000	05-01-2022	4052899575998	No declarable substances contained
LF800S -G4-965-10	940540399000	05-01-2022	4052899576018	No declarable substances contained

Product description	CAS No. of substance 1	Declaration No. in SCIP database	Safe Use Instruction
LF800S -G4-822-10	No CAS	No declarable substances contained	
LF800S -G4-827-10	No CAS	No declarable substances contained	
LF800S -G4-830-10	No CAS	No declarable substances contained	
LF800S -G4-840-10	No CAS	No declarable substances contained	
LF800S -G4-850-10	No CAS	No declarable substances contained	
LF800S -G4-865-10	7439-92-1	9474e19c-bd7f-4cbe-a874-b9503b10f831	The identification of the Candidate List substance is sufficient to allow safe use of the article.
LF800S -G4-927-10	No CAS	No declarable substances contained	
LF800S -G4-940-10	No CAS	No declarable substances contained	
LF800S -G4-965-10	No CAS	No declarable substances contained	

<sup>1)</sup> Max. cumulative product length powering it from a single end

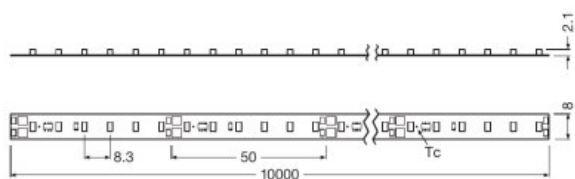
<sup>2)</sup> Exceeding the maximum ratings will reduce expected life time or destroy the LED strip.

<sup>3)</sup> Rated ambient temp. 25°C/Providing that temperature at T<sub>c</sub> point is below max value during operation/Temperature ramping for environmental testing acc. to IEC 62717, 1K/min

<sup>4)</sup> Applicable to nearest length value to 50 cm (EN 62717 cl. 6.1)

<sup>5)</sup> L70/B50 at T<sub>c</sub> 40 °C

## Product family datasheet



728406\_LINEARLIGHT FLEX ADVANCED SHORTPITCH



728438\_LINEARLIGHT FLEX ADVANCED SHORTPITCH

### Equipment / Accessories

- Flexessories: a complete set of aluminum channels with diffusers and lenses
- Connectors: quick-and-easy toolless installation with SLIMCONNECTsystem G2
- Drivers and dimmers: wide selection of OPTOTRONIC 24 V DALI, DMX and BLE
- Check for more detailed information the specification sheets in the download section

### Application advice

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

## Product family datasheet

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### Additional product information

- Some LED modules are equipped with a self-adhesive tape for attaching the LED module to suitable materials, such as aluminum profiles, which must be clean and free of oil or silicone coatings, as well as other dirt/dust particles. The adhesive tape is intended for single use and if removed may damage the material to which it is stuck and the LED module itself, which must then be scrapped. Use the adhesive tape when the installation material temperature is in the 18 °C...35 °C range. Complete adhesion takes up to 72 h.
- LED modules are designed for static installations in accordance with IPC 6013C – Use A. Take material vibrations, repetitive torsion, and elongation/compression into account.
- If the operating environment covers a broad temperature range (e.g. outdoor applications) and the operating length is longer than 2 m, the use of adequate mounting surfaces is required. The use of an additional thicker adhesive tape between LED module and mounting surface is also recommended in order to absorb the stress of any mismatch in expansion. Assure enough space for module expansion with increasing temperature.
- The manufacturer is not responsible for damage due to chemical corrosion. The user must provide suitable protection against corrosive agents such as moisture and condensation and any other harmful elements/compounds. Make certain to avoid corrosive atmospheres. According to the current state of LED technology, hydrogen sulfide (H<sub>2</sub>S) causes accelerated corrosion which leads to shortened lifetime or premature failure. Sources of H<sub>2</sub>S may be rubber, foam rubber, soft-foam tapes, rubber-based sealing, natural sources (e.g. sulfur springs), etc. To avoid H<sub>2</sub>S from sulfur-vulcanized rubber use silicon-based materials or peroxide-crosslinked rubber instead. Follow the recommendations in the material datasheet of the rubber supplier.
- IP00 LED modules, as manufactured, have no conformal coating and therefore offer no inherent protection against corrosion. Conformal coating treatment is possible, however materials must be selected properly in order to avoid product damage or impaired performance; the user must also completely seal the cut parts (ends/edges).
- For applications involving exposure to humidity and dust the module must be protected by a fixture or housing with a suitable IP protection class.
- Consult OSRAM Technical Service for further advice.
- Only a qualified electrician may install the module.
- Handle with care and ensure that there is no mechanical product damage, including damage to invisible internal electronics parts.
- Exceeding maximum operating and storage temperature ratings can reduce the expected lifetime or even destroy the LED module. The temperature of the LED module must be measured at the T<sub>c</sub>-point in accordance with EN 60598-1 under steady-state conditions, considering the worst case; drive all channels at 100 % power. Refer to the product drawing for the exact location of the T<sub>c</sub>-point.
- Exceeding the maximum ratings for the operating voltage causes hazardous overload and will likely destroy the LED module.
- Installation of LED modules and connection to the power supply must comply with all applicable electrical and safety standards.
- Observe correct polarity and wiring diagrams! Incorrect polarity or wrong wiring can cause unpredictable permanent damage or even failure of the product.
- Never exceed the maximum operable length, including daisy-chaining connections.
- Always ensure electrical isolation between the LED module and the mounting surface, especially in the vicinity of connections or cut ends.
- IP00 LED modules are ESD-sensitive; take adequate precautions during installation and operation of the products.
- Use only SELV LED drivers in accordance with applicable lighting standards and LED module ratings. In order to safely operate OSRAM LED modules it is necessary to supply them with an electronically stabilized power supply providing protection against short circuits, overload and overheating. To simplify the approval process of the luminaire/installation, the electronic power supplies control gear for LED modules must bear the CE and ENEC marking. In Europe the Declarations of Conformity must include at least the following standards: EN 61347-2-13, EN 55015, EN 61547 and EN 61000-3-2. ENEC certification will be based on EN 61347-2-13 and EN 62384. OSRAM OPTOTRONIC LED drivers comply with all relevant standards and guarantee safe operation; see the relevant brochure for more detailed information about OSRAM OPTOTRONIC.
- Avoid installations in rural and urban areas with high industrial activity and heavy traffic (higher than class than 4C1 according IEC 60721-3) and as well as installation in spa, areas with chlorine atmosphere, direct exposure to blown sand.


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### Sales and Technical Support

## Product family datasheet








Sales and Technical Support [www.osram.com](http://www.osram.com)

### Download Data

File	
	User instruction LINEARlight FLEX
	Product Datasheet LINEARlight FLEX ShortPitch LF800S (EN)
	Brochures Light is freedom of design (EN)
	Certificates VDE-ENEC Certificate
	Certificates EAC Certificate
	Certificates UL Certificate
	Certificates UL Certificate-20180523-E346592
	Certificates CB TEST CERTIFICATE
	Declarations of conformity EU declaration of conformity 3657584
	Declarations of conformity Manufacturers Declaration of Conformity 3657594
	Eulumdat Eulumdat LF800S-G4-822-10
	IES data IES data LF800S-G4-822-10
	Eulumdat Eulumdat LF800S-G4-827-10
	IES data IES data LF800S-G4-827-10
	Eulumdat Eulumdat LF800S-G4-830-10
	IES data IES data LF800S-G4-830-10
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	IES data IES data LF800S-G4-840-10
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## Product family datasheet

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	IES data IES data LF800S-G4-940-10
	Eulumdat Eulumdat LF800S-G4-965-10
	IES data IES data LF800S-G4-965-10

### Ecodesign regulation information:

ul>This product is considered to be a "containing product" in the sense of Regulations (EU) 2019/2020 and (EU) 2019/2015. Tolerances of the reported values, are according to LED Modules Performance standard IEC/EN 62717.

In general, the replacement of the contained light sources without permanent damage to the product with the use of common available tools is possible in the final application when they can be dismantled from the installation environment and substituted for the necessary number of light sources restoring its full electrical/mechanical/thermal/optical functionality by means of a professional installer.

- In the contrary, and limited to the LINEARlight Flex Diffuse, LINEARlight Rigid Finesse, GINO LED Flex Diffuse and LUMINENT Milky product families, the contained light source is an integrated part of the containing product and its removal can only be done by causing a permanent damage to the containing product due to its tight mechanical, electrical, optical, thermal interaction and/or environmental protection with or from the containing product. Therefore, a replacement of the light source with the use of common available tools is not justified.

Dismantling of light sources from containing products at end of life: Containing products with light sources which are scalable in length can be cut to the length of the contained light source and if applicable mechanically detached from protective and/or optical covers. Containing products shall be separated from building material and/or from other additional mounting accessories by means of a professional installer.

Separate control gear and light sources must be disposed of at certified disposal companies in accordance with Directive 2012/19/EU (WEEE) in the EU and with Waste Electrical and Electronic Equipment (WEEE) Regulations 2013 in the UK. For this purpose, collection points for recycling centres and take-back systems (CRSO) are available from retailers or private disposal companies, which accept separate control gear and light sources free of charge. In this way, raw materials are conserved and materials are recycled.

### Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4052899575691	LF800S -G4-822-10	Shipping carton box 8	241 mm x 195 mm x 205 mm	9.63 dm <sup>3</sup>	1762.00 g
4052899575752	LF800S -G4-827-10	Shipping carton box 8	241 mm x 195 mm x 205 mm	9.63 dm <sup>3</sup>	1762.00 g

## Product family datasheet

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### Logistical Data

4052899575790	LF800S -G4-830-10	Shipping carton box 8	241 mm x 195 mm x 205 mm	9.63 dm <sup>3</sup>	1762.00 g
4052899575851	LF800S -G4-840-10	Shipping carton box 8	241 mm x 195 mm x 205 mm	9.63 dm <sup>3</sup>	1762.00 g
4062172061940	LF800S -G4-850-10	Shipping carton box 8	241 mm x 195 mm x 205 mm	9.63 dm <sup>3</sup>	1762.00 g
4052899575875	LF800S -G4-865-10	Shipping carton box 8	241 mm x 195 mm x 205 mm	9.63 dm <sup>3</sup>	1762.00 g
4052899575912	LF800S -G4-927-10	Shipping carton box 8	241 mm x 195 mm x 205 mm	9.63 dm <sup>3</sup>	1762.00 g
4052899575998	LF800S -G4-940-10	Shipping carton box 8	241 mm x 195 mm x 205 mm	9.63 dm <sup>3</sup>	1762.00 g
4052899576018	LF800S -G4-965-10	Shipping carton box 8	241 mm x 195 mm x 205 mm	9.63 dm <sup>3</sup>	1762.00 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.

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### Disclaimer

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