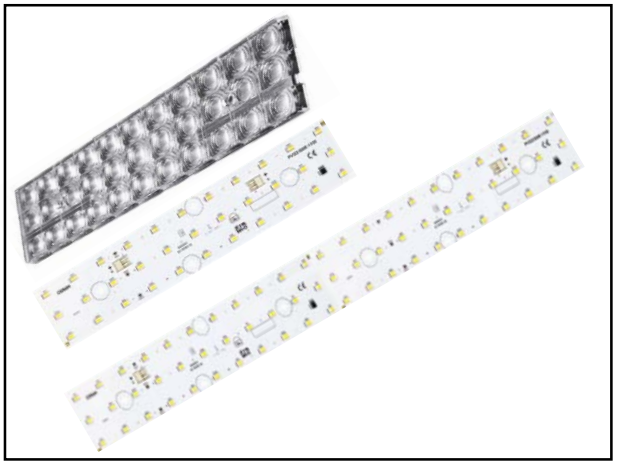
PrevaLED® Bar

Light Engines
1100lm on 280 x 55mm
2200lm on 560 x 55mm



Benefits

- Efficiency 155lm/W
- Perfect match to LEDiL Florence 3R lenses
- Homogeneous light distribution
- Consistent white light of 3 SDCM
- Seamless: no shadows between modules
- Poke-in connectors for 0,5mm² to 0,75mm² wire
- Self-cooling
- SELV/non-SELV module for easier fixture design
- Average lifetime 50.000h L80B10 at Tp (max) = 55°C
- CE, ENEC approval under preparation

Application

- Supermarket
- Industry

Dimension (l x w x h):

- 280mm x 55mm x 6mm
- 560mm x 55mm x 6mm

Typical technical data @rated current*

Product name	Flux (lm)	CCT (K)	CRI	SDCM	Vf (V)	If (mA)	P (W) Module	lm/W* Module
PLG2-Bar-1100-830-280x55-DC	1100	3000	> 80	3	31	225	7	155
PLG2-Bar-1100-840-280x55-DC	1100	4000	> 80	3	31	225	7	155
PLG2-Bar-1100-865-280x55-DC	1100	6500	> 80	3	31	225	7	155
PLG2-Bar-2200-830-560x55-DC	2200	3000	> 80	3	31	450	14	155
PLG2-Bar-2200-840-560x55-DC	2200	4000	> 80	3	31	450	14	155
PLG2-Bar-2200-865-560x55-DC	2200	6500	> 80	3	31	450	14	155

Typical values valid for Tp = 45°C
Energy Efficiency Class according 2012/874/EC: A++

Due to the special conditions of the manufacturing processes of LED the typical data of technical parameters can only reflect statistical figures and do not necessarily correspond to the actual parameters of each single product which could differ from the typical data.
* Tolerance for optical and electrical data: +/-10%

Typical performance @max. current*

Product name	Flux (lm)	CCT (K)	CRI	SDCM	Vf (V)	If (mA)	P (W) Module	lm/W* Module
PLG2-Bar-1100-830-280x55-DC	1730	3000	> 80	3	33	400	13	133
PLG2-Bar-1100-840-280x55-DC	1730	4000	> 80	3	33	400	13	133
PLG2-Bar-1100-865-280x55-DC	1730	6500	> 80	3	33	400	13	133
PLG2-Bar-2200-830-560x55-DC	3460	3000	> 80	3	33	800	26	133
PLG2-Bar-2200-840-560x55-DC	3460	4000	> 80	3	33	800	26	133
PLG2-Bar-2200-865-560x55-DC	3460	6500	> 80	3	33	800	26	133

Typical values valid for Tp 45°C

Optical parameters

Product name	# LED	Pitch (mm)
PLG2-Bar-1100-8xx-280x55-DC	33	26mm
PLG2-Bar-2200-8xx-560x55-DC	66	26mm

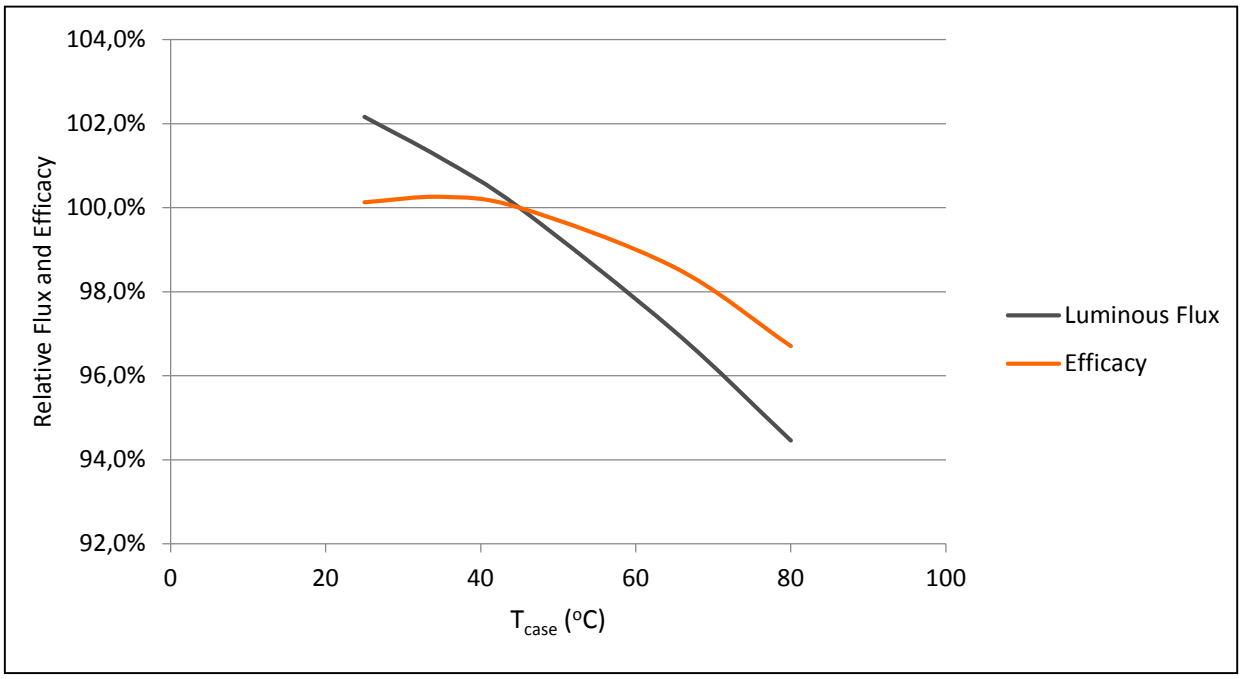
Minimum and Maximum Ratings

Product	Storage temperature [°C]	Tc max.* (@ typ. current)	L80 B10 @ Tc max. 55°C
PLG2-Bar-1100-8xx-280x55-DC	-35 … 80	80°C	50.000h
PLG2-Bar-2200-8xx-560x55-DC	-35 … 80	80°C	50.000h

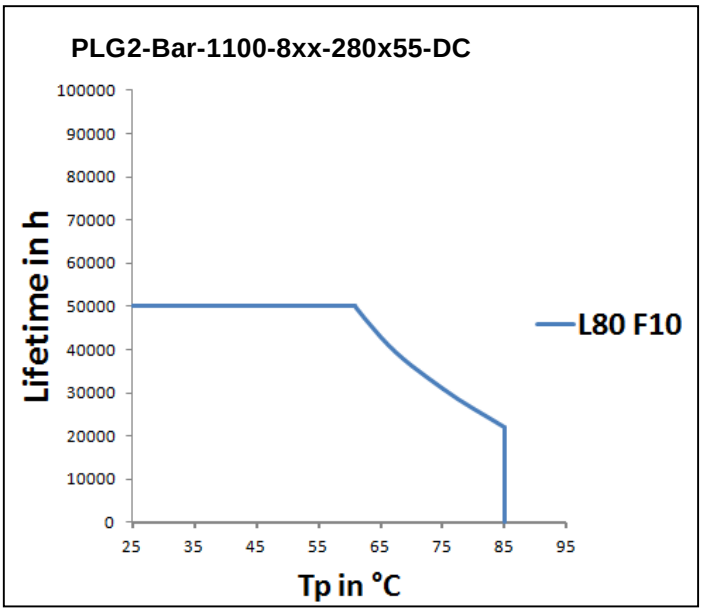
,
The modules are designed for operation with OPTOTRONIC® ECG.

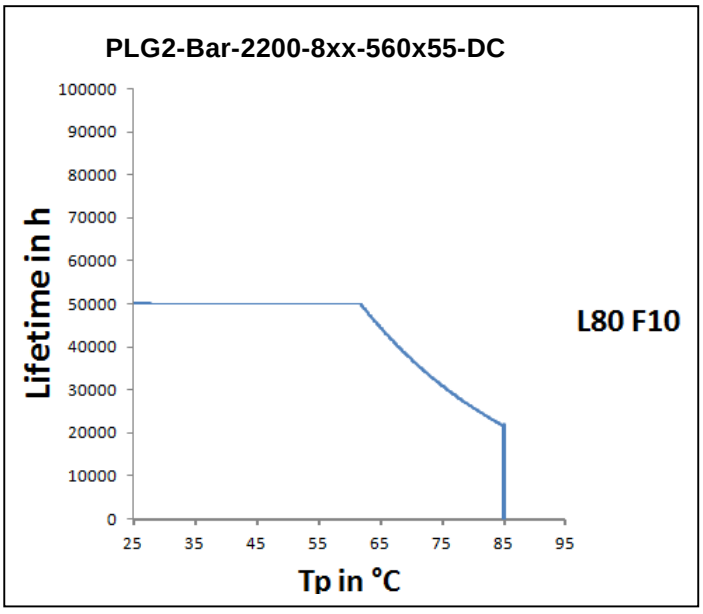
*) Exceeding maximum ratings for operating and storage temperature will reduce expected life time or destroy the light engine. The temperature of the LED module must be measured at the t_c-point according to EN60598-1 in thermally settled conditions with a temperature sensor. For exact location of the T_c -point see drawing below (marked as Tc1 and Tc2).

Temperature derating



L80B10 lifetime [h] as a function of Tp





Modularity

- The tables below show recommended combinations of the PrevaLED® Bar modules and Optotronic® drivers – but **not** all possible combinations.
- Calculations in the tables are based on the nominal currents. If currents other than the nominal currents are requested, the driver – module compatibility tables change.
- Numbers in brackets show possible combinations, but with currents noticeably smaller than the nominal currents.
- In parallel connection 280mm and 560mm modules can be used together (e.g. to build a 1400mm luminiare 2 x 560mm modules and 1 x 280 mm modules can be used in parallel connection). In the modularity tables one 560 mm module counts as two 280 mm modules (e.g. to look up possible driver matches for the 2 x 560mm and 1 x 280 mm combination mentioned above, the easiest way is to look for 5 x 280 mm in the table).
  In serial connection 280mm and 560mm modules can **not** be used together.
- XsYp is an abbreviation for X modules connected in series, Y modules connected in parallel.

OT FIT CS (triple current driver – SELV)

PrevaLED Bar is designed to be operated by OT FIT SELV drivers in parallel connection. Current setting via cable bridge (linear drivers) or selectable output current connectors (compact drivers).*

OT FIT 27V – 54V / **PrevaLED Bar**	Linear drivers			Compact drivers	
	OT FIT 80 / 220-240 / 1A6 CS L	**OT FIT 50 / 220-240 / 1A0 CS L**	**OT FIT 35 / 220-240 / 0A7 CS**	**OTe 25/220-240/420 CS**	**OTe 25/220-240/700 CS**
	1,2A / 1,4A / 1,55A	**0,8A / 0,93A / 1,0A**	**0,5A / 0,6A / 0,7A**	**290 / 350 / 420 mA**	**500 / 600 / 700 mA**
	360 x 30 x 21mm	**280 x 30 x 21mm**	**280 x 30 x 21mm**	**88 x 43 x 29.5 mm**	**88 x 43 x 29.5 mm**
PLG2-Bar-1100-8xx-280x55-DC	**5,6,(7)**	**4**	**2,3**	**1**	**2,3**
PLG2-Bar-2200-8xx-560x55-DC	**3**	**2**	**1**	**(1)**	**1**

* Final release of modularity under evaluation.

OTi DALI (wide window driver – SELV)

PrevaLED Bar is designed to be operated by OTi DALI drivers in parallel connection. Current setting via resistor coding (LEDSet) or Tuner4TRONIC software and DALI magic.*

OTi DALI 27V – 54V / **PrevaLED Bar**	**OTi DALI 80/220-240/2A1 LT2 L**	**OTi DALI 80/220-240/1A6 LT2 L**	**OTi DALI 50/220-240/1A4 LT2 L**	**OTi DALI 35/220-240/700 LT2 L**
	1,0A – 2,1A	**0,6A - 1,55A**	**0,6A - 1,4A**	**0,2A – 0,7A**
	360 x 30 x 21mm	**360 x 30 x 21mm**	**360 x 30 x 21mm**	**360 x 30 x 21mm**
PLG2-Bar-1100-8xx-280x55-DC	**7,8,9**	**6**	**3,4,5**	**1,2**
PLG2-Bar-2200-8xx-560x55-DC	**4**	**3**	**2**	**1**

* Final release of modularity under evaluation.

OT FIT D (single current driver – Non-SELV)

PrevaLED Bar is designed to be operated by OT Fit D Non-SELV drivers in serial connection.*

OT Fit D / PrevaLED Bar	OT FIT 30/220-240/125 D L	OT FIT 50/220-240/250 D L	OT FIT 50/220-240/350 D L
	125mA, 54V – 216V	250mA, 54V – 216V	350mA, 54V – 150V
	210 x 30 x 21mm	210 x 30 x 21mm	210 x 30 x 21mm
PLG2-Bar-1100-8xx-280x55-DC	(2,3,4,5,6)	2,3,4,5,6	-
PLG2-Bar-2200-8xx-560x55-DC	-	-	(2,3)

* Final release of modularity under evaluation.

OTi (wide window driver – Non-SELV)

PrevaLED Bar is designed to be operated by OTi and OTi DALI drivers in serial or combined serial-parallel connection. Current setting via resistor coding (LEDSet) and for OTi DALI drivers also via Tuner4TRONIC software and DALI magic.*

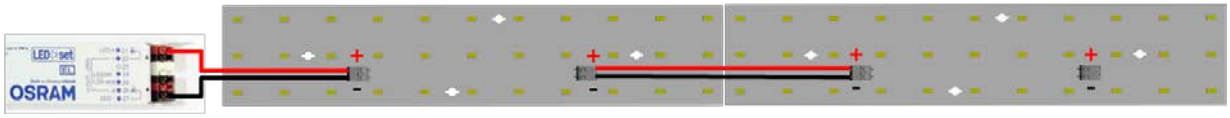
OTi 54V-240V / PrevaLED Bar	OTi 60/220-240/550 D LT2 L	OTi 90/220-240V/1A0 D LT2 L	OTi DALI 60 550	OTi DALI 90 1A0
	120mA – 550mA	250mA – 1000mA	125mA – 550mA	250mA – 1000mA
	280 x 30 x 21mm	280 x 30 x 21mm	280 x 30 x 21mm	280 x 30 x 21mm
PLG2-Bar-1100-8xx-280x55-DC	2,3,4,5 (Xs1p) 6 (3s2p), 8(4s2p)	10 (5s2p)	2,3,4,5 (Xs1p) 6 (3s2p), 8(4s2p)	10 (5s2p)
PLG2-Bar-2200-8xx-560x55-DC	2,3,4 (Xs1p)	5 (Xs1p)	2,3,4 (Xs1p)	5 (Xs1p)

* Final release of modularity under evaluation.

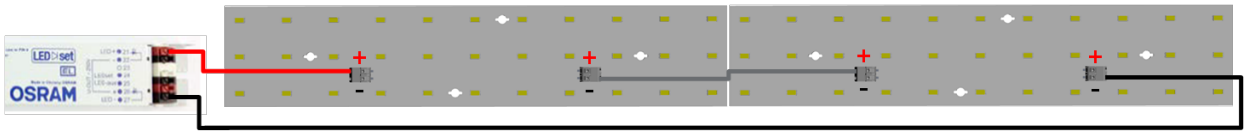
Installation examples

The installation examples 1 and 2 of the PrevaLED® Bar show the scenario of two 280mm modules connected in series and in parallel to an ECG (the cases 1s2p and 2s1p). Of course the same way of connecting is possible for the 560 mm modules.

1. Parallel connection (1s2p configuration – 280 mm modules)

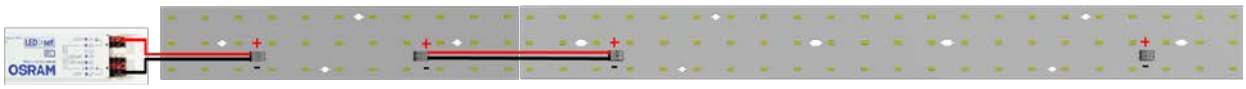


2. Serial connection (2s1p configuration – 280 mm modules)

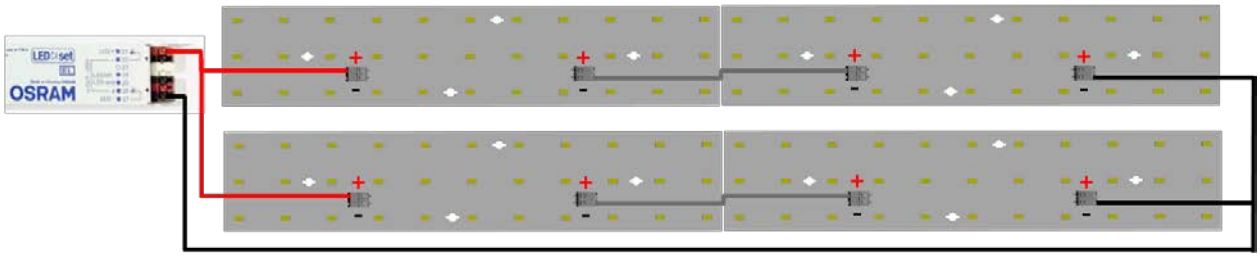


This examples can easily expanded to configurations with more than 2 modules, for example 3 modules in series (3s1p) or 4 modules in parallel – the way of connecting the modules remains the same, but additional modules are added.

When connecting the modules in parallel to the ECG it is also possible to combine 280 mm and 560 mm modules. This is **not** possible for serial connection.



For some cases the best solution is to use a combined serial and parallel connection of the modules. The picture below shows a possible way of connecting four 280 mm modules in 2s2p configuration.

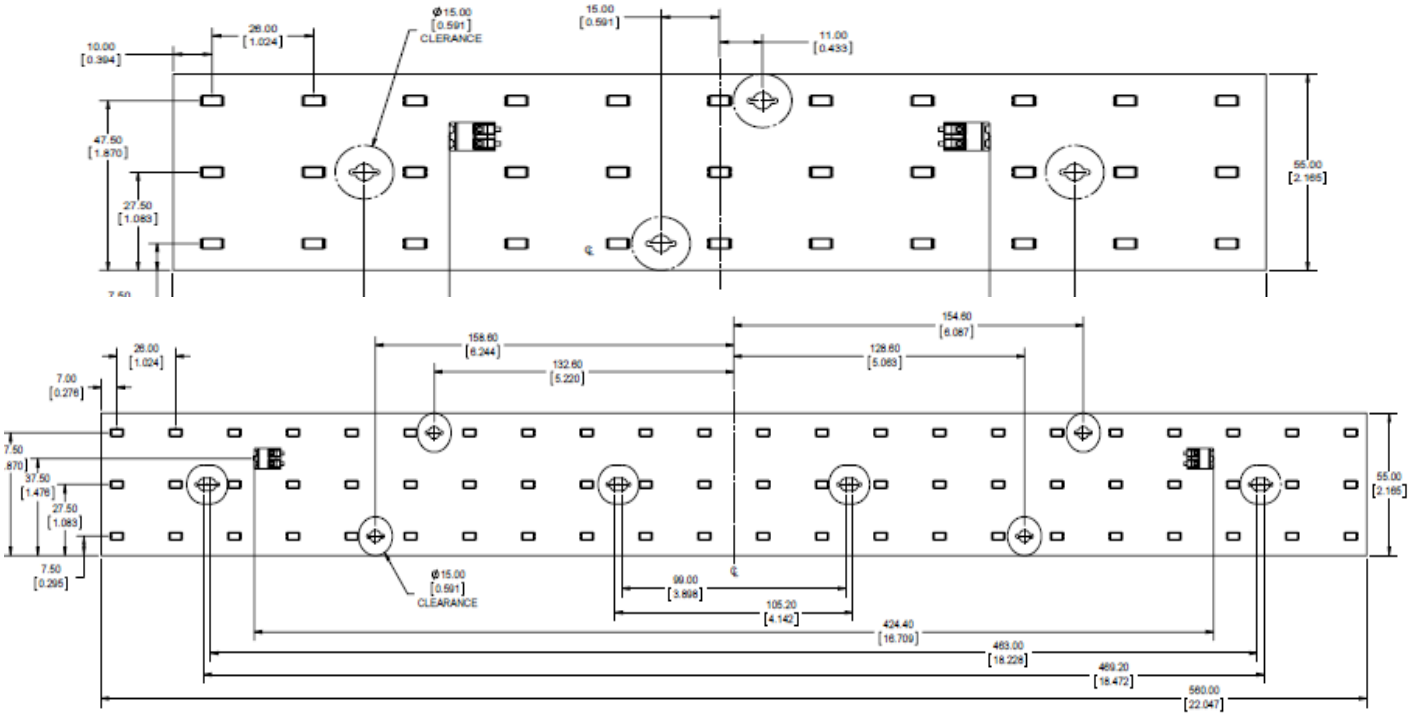


Please make sure to keep a clearance of minimum 1mm around the PrevaLED® Bar module

If you have any further questions about installation of PrevaLED® Bar Light engines, please consult your local Osram Sales representative.

Drawings

PrevaLED Bar: PLG2-Bar-1100-8xx-280x55-DC

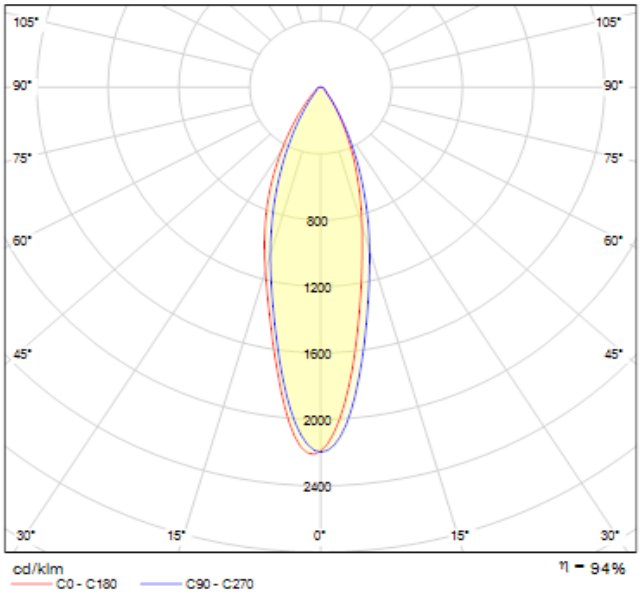


Optics
LEDIL FLORENCE-3R

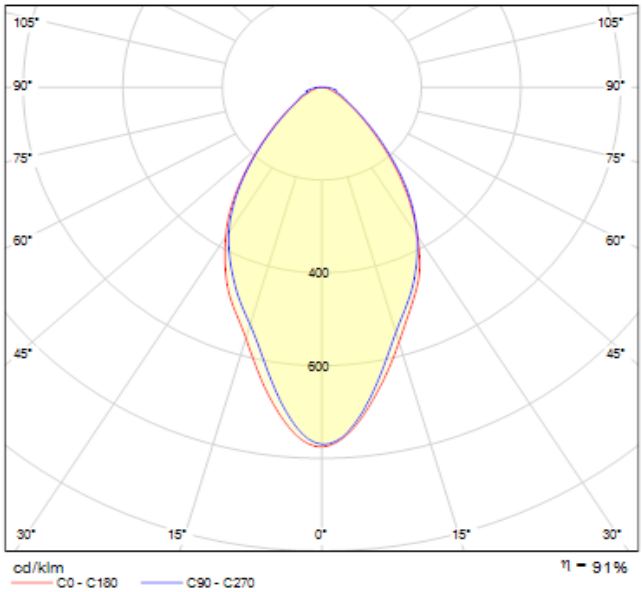
280mm PrevaLED Bar - PLG2-Bar-1100-8xx-280x55-DC is fully compatible with LEDIL FLORENCE-3R product family. FLORENCE-3R offers 4 optical versions. FLORENCE symmetrical beam Z30(30deg), Z60(60deg) and Z90(90deg) applications provide a uniform and low glare light distribution in advanced low bay environments with 90% efficiency.
FLORENCE asymmetrical beam ZT25 application is designed especially for retail environments where items are illuminated on shelves on both sides of the aisle. ZT25 provides a uniform double sided asymmetric beam with a twenty degree tilt optimized to illuminate products on the shelves.

Product Numer	Viewing angle	Light beam
F14486_FLORENCE-Z30	29 deg	Medium
F14112_FLORENCE-Z60	57 deg	Very wide
F13853_FLORENCE-Z90	92 deg	WWW-class
F14170_FLORENCE-ZT25	Asymmertic deg	Asymmetric

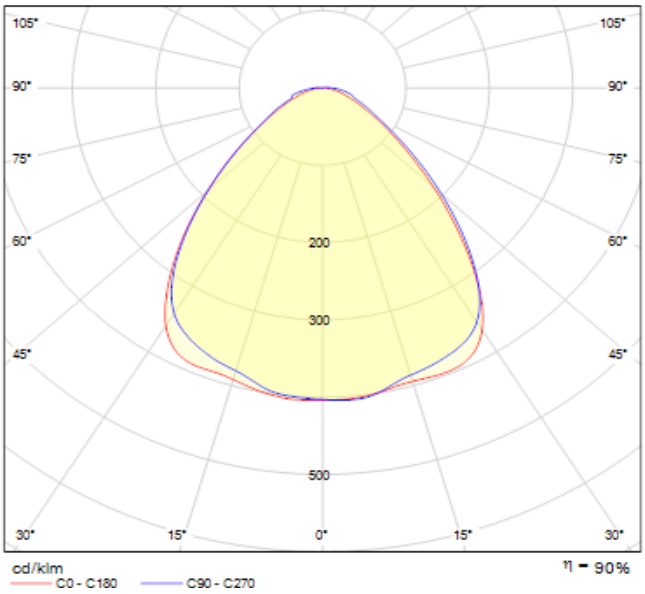
F14486_FLORENCE-Z30 [1]



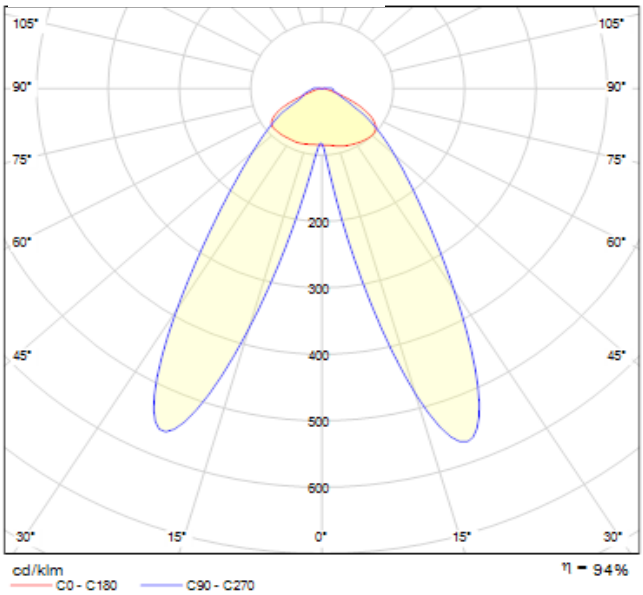
F14112_FLORENCE-Z60 [1]



F14112_FLORENCE-Z90 [1]



F14170_FLORENCE-ZT25 [1]



[1] not rated values

Ordering Codes

Product name	EAN (single product)	Type	Shipping Unit
PLG2-Bar-1100-830-280x55-DC	4052899303935	Make to stock	40 x 1
PLG2-Bar-1100-840-280x55-DC	4052899303959	Make to stock	40 x 1
PLG2-Bar-1100-865-280x55-DC	4052899303973	Make to Order	40 x 1
PLG2-Bar-2200-830-560x55-DC	4052899303997	Make to stock	40 x 1
PLG2-Bar-2200-840-560x55-DC	4052899304017	Make to stock	40 x 1
PLG2-Bar-2200-865-560x55-DC	4052899304031	Make to Order	40 x 1

Safety Information

- The LED module itself and all its components must not be mechanically stressed.

The modules are intended for operation only with matching OPTOTRONIC®.

To also ease the luminaire/installation approval, electronic control gear for LED or LED modules should carry the CE mark and be ENEC certified. In Europe the declarations of conformity must include the following standards:
CE: EC 61347-2-13, EN 55015, IEC 61547 and IEC 61000-3-2 - ENEC: 61347-2-13 and IEC/EN 62384.

Also check for the mark of an independent authorized certification institute.

Please see the relevant brochure for more detailed information (see "Related and Further Information")

- Installation of LED modules (with power supplies) needs to be made with regard to all applicable electrical and safety standards. Only qualified personnel should be allowed to perform installations.
- Pay attention to standard ESD precautions when installing the module.
- Photobiological safety according to IEC 62471, risk group RG1
- Max. Voltage U-OUT = 250V for operation on non-isolated and SELV LED controlgear.

Sales and Technical Support

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Sales and technical support is given by the local OSRAM subsidiaries.
On our world wide homepage all OSRAM subsidiaries are listed with complete address and phone numbers.

Note: Typical performance data are subject to change without any further notice, particularly as LED technology evolves.

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