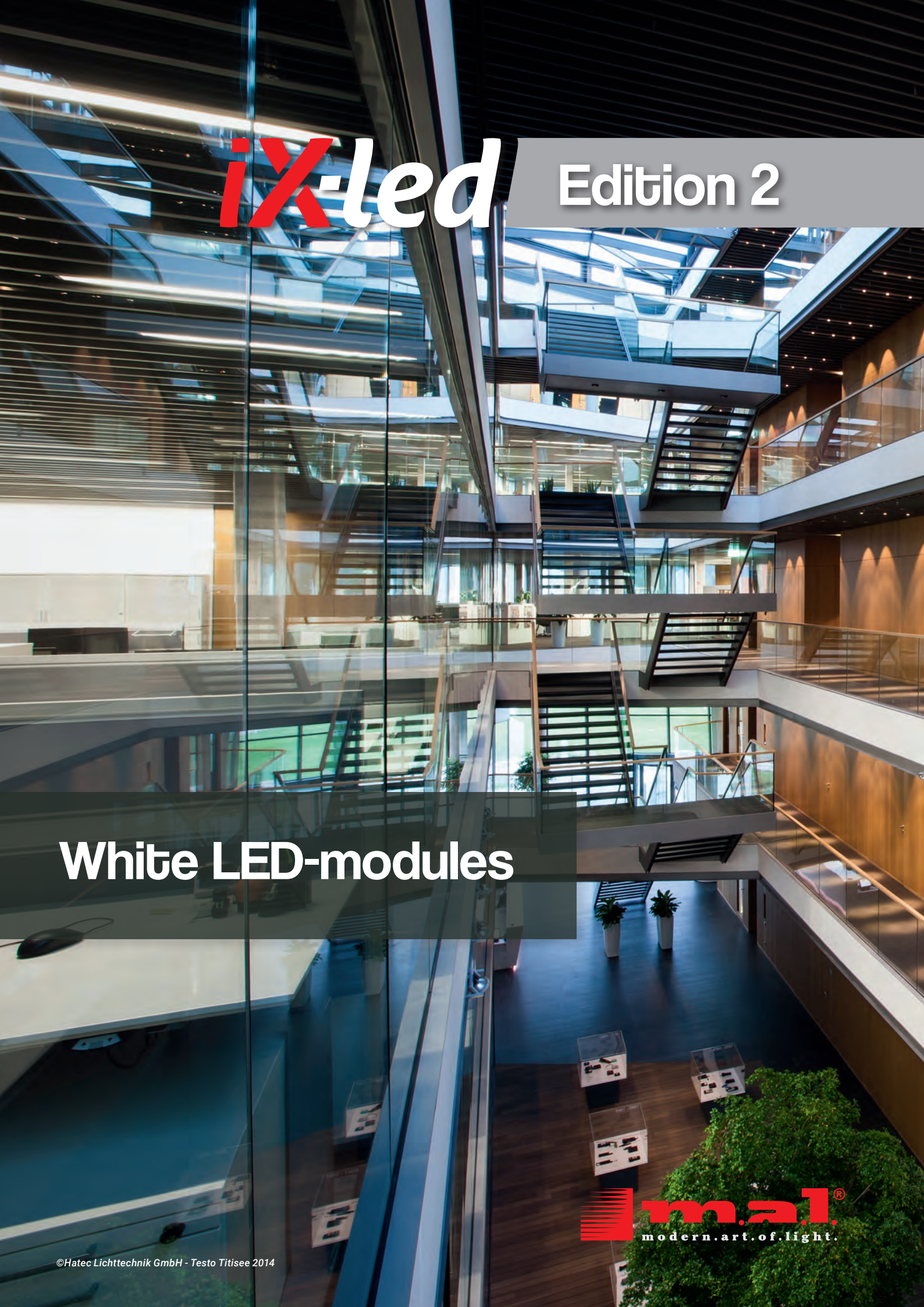


iX-led Edition 2

White LED-modules

m.a.l.®
modern.art.of.light.

The practical solution for your creative kit

You will find a complete overview of our **iX-led family** in our catalog. But what is „iX-led“ anyway? iX-led is our **LED module system** for your individual lighting solution. And iX-led is **quickly available**.

Thanks to the variously diverse, practical iX-led formats, the numerous light colors and color renderings, we provide you with a creative construction kit for your luminaire development and lighting applications. In the **iX-led product family**, you will find the right LED module for almost any task.

You want wore?

We will be happy to equip our LED modules with more powerful, more efficient LEDs at short notice. Or with other terminals. Or with other light colors. Even CRI 95 is possible on request. You prefer to glue the LED modules instead of screwing them? We can make it possible.

That‘s not enough?

Our LED modules can be customized specifically for your application. In addition, we are happy to optimize our modules so that they add value to your application: e.g. through optimal mounting and design to your driver portfolio. We are also familiar with standards and certifications. Thus we can carry out the Eprel entry for you or obtain the ENEC mark for you.

From the idea to the finished product and beyond - our team at **m.a.l.** develops and produces everything in Germany.

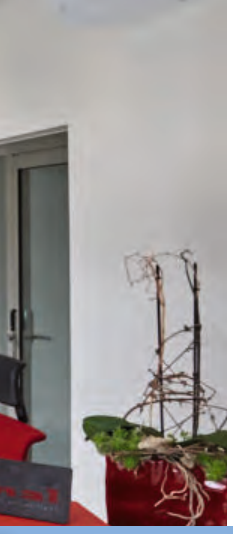
modern.art.of.light.

For more than 30 years, our company **modern.art.of.light.**, in short: m.a.l., stands for experience and sophisticated technology in the fieldof high-performance LED concepts and efficient LED lightingsystems. On May 2, 1994 our company was founded in Bebra by Markus Vockenroth. Quickly we specialized on the production oflighting technology. The main focus was especially on effecttechnology and lighting for water slides and leisure facilities.

In 2008 our company moved into the business premises in Tromagstraße in Bebra and the development, production and marketing of LED technology developed into the core business. But the will to grow further could not be realized in the Tromagstraße. So in March 2016, the new building in Wiesenweg in Bebra began. Since 2017 our new location shines and the **m.a.l.** Grand Opening was celebrated in May 2017.

Since then, we have been working on our projects with a lot of heart and soul. We support demanding customers in the development of new circuits, luminaires, modules and components. On request, we develop an individual product from layout to serial production and find a tailormade solution for every challenge.

But we as a team of **modern.art.of.light.** do not only offer the pure production: Our services go far beyond the actual production. With experience, creativity and qualified employees as well as an attractive price-performance ratio, **m.a.l.** has become one of the leading partners of well-known manufacturers in the field of LED competence and electronic systems.



Made in Germany

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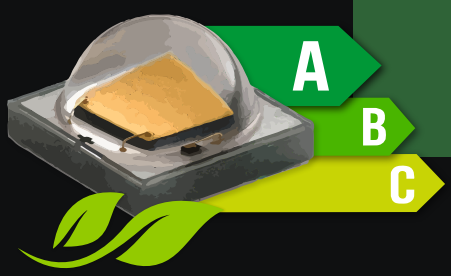
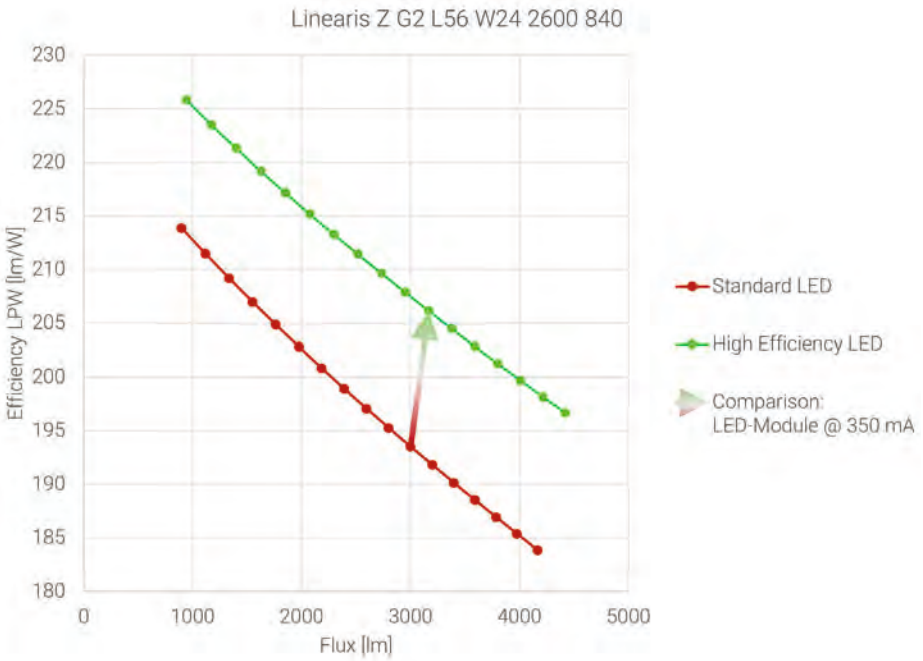


Smart efficiency

360° Efficiency

For us, efficiency means reducing the resources and energy required for the production of our LED modules. Also by keeping transport routes as short as possible. We bring efficiency to the overall product by working with you to develop solutions that, for example, enable resource-saving assembly. For us, efficiency also means that we design LED modules so that the driver you have chosen, used operates in the most efficient range. We also see efficiency in our quality. For us, quality comes before profit. We optimize the costs of our LED modules only as far as quality allows without compromising. A long service life means fewer replacements and better material efficiency.



An example of the possibilities we offer you with iX-led: Increased efficiency in the blink of an eye! Of course, our high quality and also the ENEC mark remain unchanged. This allows us - based on operation at 350 mA - to increase efficiency from 193 lm/W to 206 lm/W. The luminous flux also increases from 3000 lm to 3170 lm. With the current development of electricity prices, this investment will pay for itself after a short time.

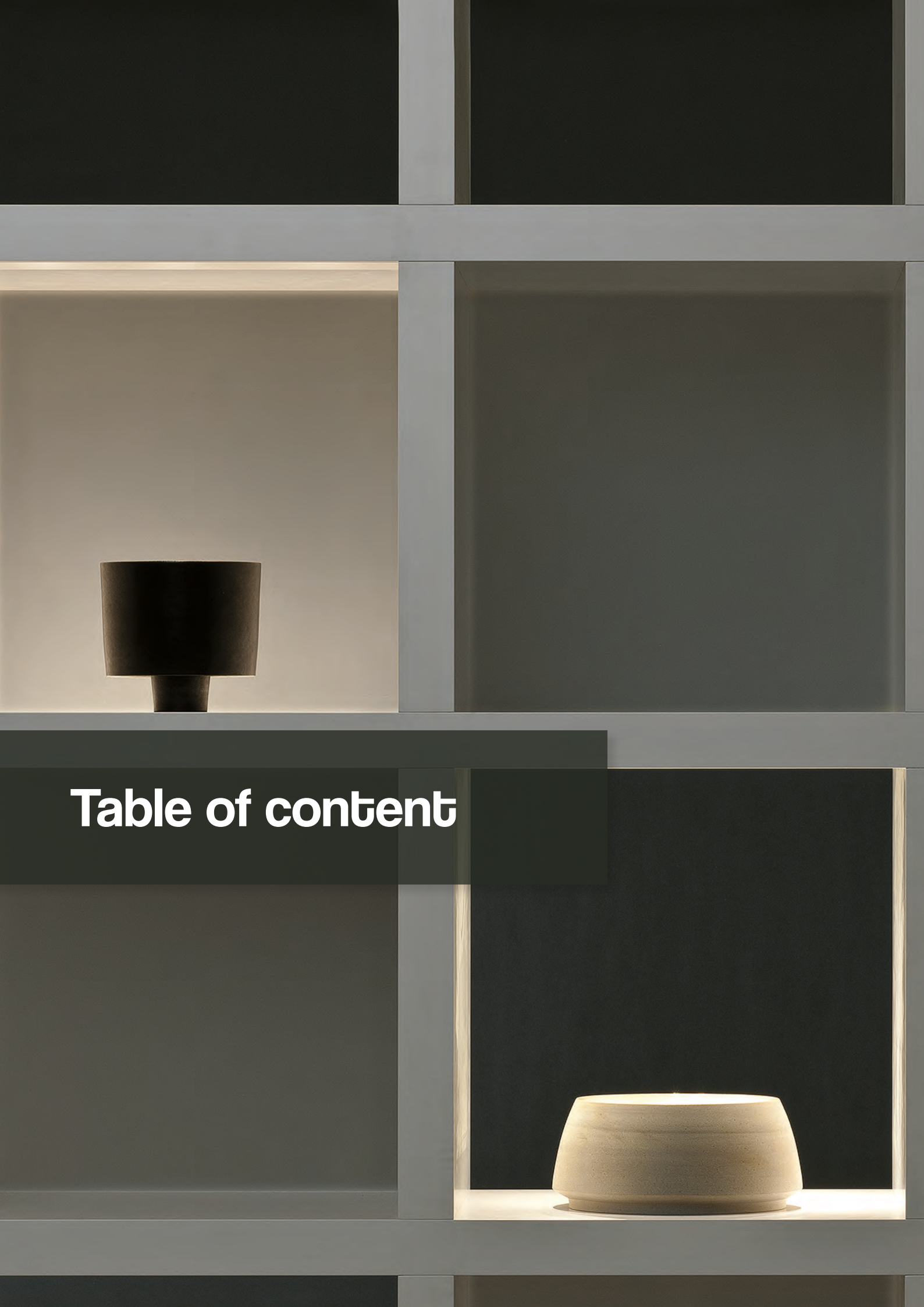


Table of content

▶ LED-modules for wide-area backlighting

▶ Ring-shaped LED-modules

© Meyer Lighting GmbH & Co.KG - Nya Östermalmshallen, Stockholm, 2022

White LED-modules

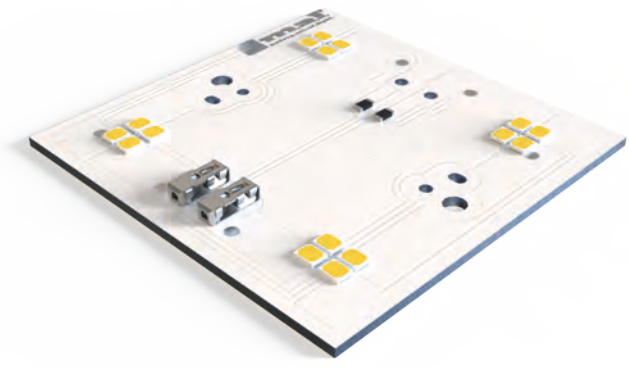
The LED has a short but very successful history. We as **m.a.l.** are proud to have helped shape this history.

In 1962, physicist Nick Holonyak developed the first commercial red LED. In 1992 the blue LED was developed by Shuji Nakamura. This is still considered the basis for the development of white LEDs.

In 1994 our company **m.a.l. Effekt Technik GmbH** was founded. Only a short time later, Nichia introduced the white LED to the market for the first time in 1996. The light of a blue LED was combined with a yellow dye and converted into white light. This laid the foundation for commercial general lighting using LEDs.

In 2000, our company specialized in LED lighting solutions. Since then, the fascination for LEDs has never left us. The quality of light plays a central role for us. We use only high quality LEDs from renowned manufacturers for our LED modules.

Our modules are equipped with selected LEDs, which together fulfill 3 Step McAdam. The genius of it? No more color differences are perceptible! We use LEDs with the highest efficiencies - 210 lm/W are not uncommon for us.



Made in Germany

Linearis Z - Industry standard linear modules

Linearis Z

Standard redefined: Our standard modules in the Linearis Z range are Zhaga-compliant LED modules with ENEC certification, available at short notice and ideal for installation in luminaires.

There is a choice of six different lengths in frames from 70 mm to 1400 mm and three widths from 16 mm to 24 mm. The modules are available in two luminous flux packages. The distance between the LEDs is either 11.7 mm or 23.3 mm. Color rendering values of CRI 80, CRI 90 and, on request, CRI 95 are possible with white LED modules.
NEW: Linearis Z LED modules in CRI 90 are fitted with LEDs in KSF technology.
This means maximum efficiency even with high color rendering.

Choose from a variety of eight light colors: 2200 K, 2700 K, 3000 K, 3500 K, 4000 K, 5000 K, 5700 K and 6500 K. The photometric range extends up to 216 lm/W or a good 10000 lm. By selecting LEDs with a color consistency of 3 Step MacAdam, a high level of color homogeneity is achieved in the module.

Our modules are designed for series connection. Modules of different lengths can also be easily combined with each other. The spacing of the LEDs is selected to ensure that they are evenly distributed across all modules.

In addition to modules with white LEDs, you can also choose from a range of modules with colored LEDs. Our range of colors with 11 different color options from Color Red to Royal Blue can be found in the Linearis Z Color chapter from page 308.

The Linearis Z LV variants in lengths of 1120 mm and 1400 mm are a special feature. These are designed for higher operating currents and are therefore suitable for SELV operation. You can find more detailed information in the Linearis Z LV chapter from page 50.

Choose your individual solution from our wide range of components.

Our iX-led standard modules are also available in small quantities at short notice and are very advantageous in the overall concept.

Standard does not mean rigid and unchangeable!

Do you need different light colors, different color rendering or slightly shorter/longer versions of the modules? Do you need to fit solder nuts as spacers or a threaded insert to simplify module installation? No problem. Other terminals or soldered cables are also possible. With the **iX-led product family**, we can adapt and customize the standard to your needs.

Explore our exclusive module series with more than 1000 lighting options.

LED module with mid-power LEDs for installation in luminaires.

Extremely versatile with **over 500 variants:**

- √ 6 lengths: 70 mm, 140 mm, 280 mm, 560 mm, 1120 mm and 1400 mm
- √ 3 widths: 16 mm, 20 mm and 24 mm
- √ 2 luminous flux packages: pitch distance 23.3 mm and 11.7 mm
- √ 2 color renderings: CRI 80 and CRI 90, CRI 95 on request
- √ 8 light colors: 2200 K, 2700 K, 3000 K, 3500 K, 4000 K, 5000 K, 5700 K and 6500 K
- √ 2 circuit types for extra-long modules in SELV - see page 48.

Excellent color consistency in the module: 3 Step MacAdam LEDs.

Plug-in terminals for easy and quick mounting.

For operation on suitable constant current drivers.

ENEC-mark	yes
Maximum working voltage	250 V
Ambient temperature	-20…+50 °C
Max. perm. operating temperature (Tc)	80 °C
EPREL database entry	yes
Beam angle	120°

Connections:

		W16	W20	W24
Terminals		2	2	2
Connection typ		rigid	rigid/flexible	rigid/flexible
Conductor cross section AWG		AWG 22-26	AWG 18-24	AWG 18-24
Conductor cross section	min	0.14 mm²	0.2 mm²	0.2 mm²
	max	0.34 mm²	0.75 mm²	0.75 mm²
Stripping length		4 - 5,5 mm	8 - 9 mm	8 - 9 mm

Also available with other terminals on request.

Did you know? Our **Linearis-Z modules** are **ENEC** certified!

Description	Type	Length	Width			Pitch distance	
			16 mm	20 mm	24 mm	23,3 mm	11,7 mm
Linearis Z G2	L7	70 mm	W16	W20	W24	165	325
Linearis Z G2	L14	140 mm	W16	W20	W24	325	650
Linearis Z G2	L28	280 mm	W16	W20	W24	650	1300
Linearis Z G2	L56	560 mm	W16	W20	W24	1300	2600
Linearis Z G2	L112	1120 mm	-x-	W20	-x-	2600	5200
Linearis Z G2	L140	1400 mm	-x-	W20	-x-	3250	6500

Type designation Composition and variant overview

The type designation is composed as follows for the Linearis Z:

Linearis Z	Describes the LED module family.
Linearis Z **G2**	We are now at generation 2.
Linearis Z G2 **L28**	L7 to L140 describes the rounded length of the LED module in cm. In the example it is 28 cm length.
Linearis Z G2 L28 **W24**	There are three widths available: W16, W20 and W24. The specification refers to the width of the LED module in mm. In the example it is 24 mm width.
Linearis Z G2 L28 W24 **650**	Two pitch distances are available in each length. We distinguish the two variants by their rounded luminous flux values in lm. In the example the 650 in the L28 corresponds to a pitch distance of 23.3 mm.
Linearis Z G2 L28 W24 650 **840**	The 840 includes light color and color rendering. In the example, 8xx stands for CRI 80 and x40 for 4000 K.

Linearis Z L7 165 - Industry standard linear modules

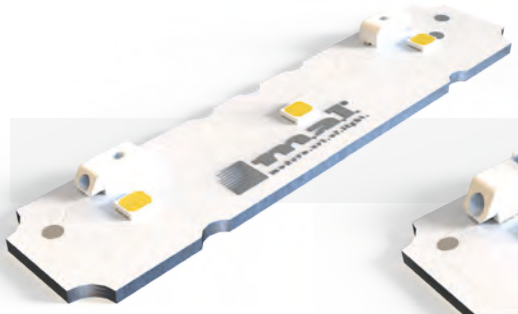
- √ linear module in three widths for installation in luminaires
- √ 3 Mid-Power-LEDs
- √ pitch distance 23.3 mm
- √ length 70 mm
- √ width 16 mm, 20 mm, 24 mm
- √ 2 connection terminals
- √ rated current 350 mA
- √ maximum operating current 500 mA
- √ maximum forward voltage 3.1 V
- √ meets the well-known industry standard

Please also refer to the technical data of the Linearis Z family on page 18. Further technical data and drawings from page 40.

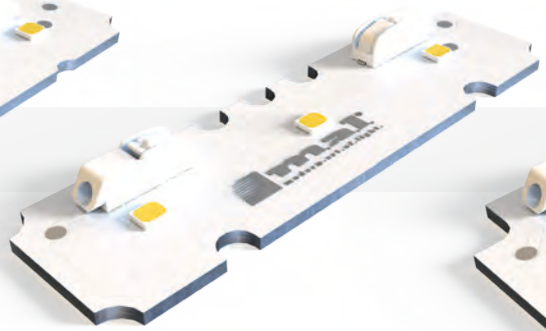
CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	width	order-nr.	Linearis Z G2 L7…
		If = 75 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 500 mA Tc = 25 °C				
≥80	2200	33 lm	170 lm/W	145 lm	152 lm/W	202 lm	144 lm/W	16 mm	7517-10000	…W16 165 822
								20 mm	7517-10016	…W20 165 822
								24 mm	7517-10032	…W24 165 822
	2700	38 lm	192 lm/W	169 lm	172 lm/W	235 lm	164 lm/W	16 mm	7517-10001	…W16 165 827
								20 mm	7517-10017	…W20 165 827
								24 mm	7517-10033	…W24 165 827
	3000	41 lm	206 lm/W	181 lm	184 lm/W	251 lm	175 lm/W	16 mm	7517-10002	…W16 165 830
								20 mm	7517-10018	…W20 165 830
								24 mm	7517-10034	…W24 165 830
	3500	41 lm	206 lm/W	181 lm	184 lm/W	251 lm	175 lm/W	16 mm	7517-10003	…W16 165 835
								20 mm	7517-10019	…W20 165 835
								24 mm	7517-10035	…W24 165 835
	4000	42 lm	216 lm/W	188 lm	193 lm/W	260 lm	184 lm/W	16 mm	7517-10004	…W16 165 840
								20 mm	7517-10020	…W20 165 840
								24 mm	7517-10036	…W24 165 840
	5000	42 lm	216 lm/W	188 lm	193 lm/W	260 lm	184 lm/W	16 mm	7517-10005	…W16 165 850
								20 mm	7517-10021	…W20 165 850
								24 mm	7517-10037	…W24 165 850
	5700	42 lm	216 lm/W	188 lm	193 lm/W	260 lm	184 lm/W	16 mm	7517-10006	…W16 165 857
								20 mm	7517-10022	…W20 165 857
								24 mm	7517-10038	…W24 165 857
	6500	42 lm	216 lm/W	188 lm	193 lm/W	260 lm	184 lm/W	16 mm	7517-10007	…W16 165 865
								20 mm	7517-10023	…W20 165 865
								24 mm	7517-10039	…W24 165 865

Up to 260 lm!

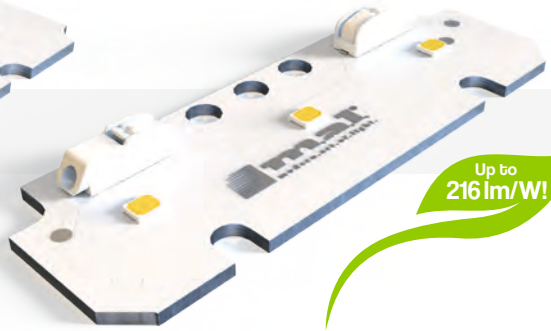
iX-led



16 mm



20 mm



24 mm

Up to 216 lm/W!

NEW: CRI 90 IN KSF-Technology

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	width	order-nr.	Linearis Z G2 L7...
		If = 75 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 500 mA Tc = 25 °C				
≥ 90	2200	28 lm	141 lm/W	124 lm	126 lm/W	172 lm	120 lm/W	16 mm	7517-10008	...W16 165 922
								20 mm	7517-10024	...W20 165 922
								24 mm	7517-10040	...W24 165 922
	2700	38 lm	194 lm/W	171 lm	174 lm/W	237 lm	166 lm/W	16 mm	7517-10009	...W16 165 927
								20 mm	7517-10025	...W20 165 927
								24 mm	7517-10041	...W24 165 927
	3000	39 lm	198 lm/W	174 lm	178 lm/W	242 lm	169 lm/W	16 mm	7517-10010	...W16 165 930
								20 mm	7517-10026	...W20 165 930
								24 mm	7517-10042	...W24 165 930
	3500	40 lm	203 lm/W	179 lm	182 lm/W	248 lm	173 lm/W	16 mm	7517-10011	...W16 165 935
								20 mm	7517-10027	...W20 165 935
								24 mm	7517-10043	...W24 165 935
	4000	41 lm	205 lm/W	180 lm	184 lm/W	250 lm	175 lm/W	16 mm	7517-10012	...W16 165 940
								20 mm	7517-10028	...W20 165 940
								24 mm	7517-10044	...W24 165 940
	5000	41 lm	205 lm/W	180 lm	184 lm/W	250 lm	175 lm/W	16 mm	7517-10013	...W16 165 950
								20 mm	7517-10029	...W20 165 950
								24 mm	7517-10045	...W24 165 950
	5700	41 lm	205 lm/W	180 lm	184 lm/W	250 lm	175 lm/W	16 mm	7517-10014	...W16 165 957
								20 mm	7517-10030	...W20 165 957
								24 mm	7517-10046	...W24 165 957
	6500	40 lm	203 lm/W	179 lm	182 lm/W	248 lm	173 lm/W	16 mm	7517-10015	...W16 165 965
								20 mm	7517-10031	...W20 165 965
								24 mm	7517-10047	...W24 165 965

Up to 250 lm!

Linearis Z L7 325 - Industry standard linear modules

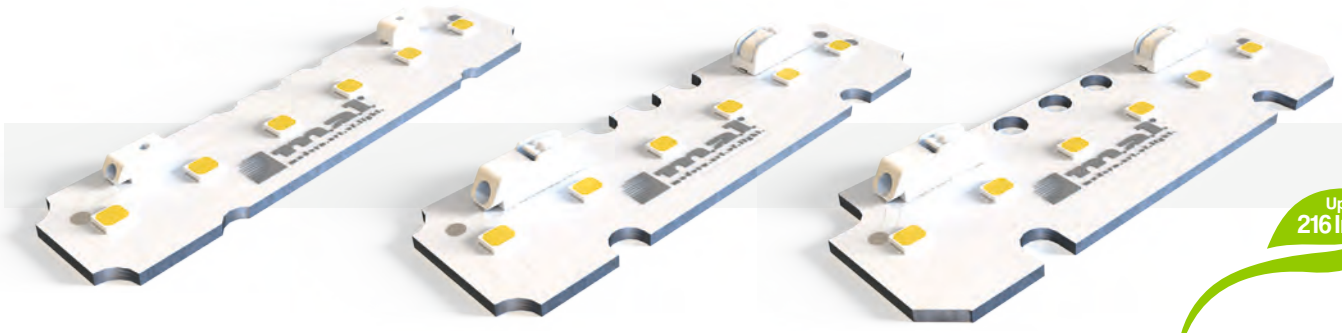
- √ linear module in three widths for installation in luminaires
- √ 6 Mid-Power-LEDs
- √ pitch distance 11.7 mm
- √ length 70 mm
- √ width 16 mm, 20 mm, 24 mm
- √ 2 connection terminals
- √ rated current 350 mA
- √ maximum operating current 500 mA
- √ maximum forward voltage 6.2 V
- √ meets the well-known industry standard

Please also refer to the technical data of the Linearis Z family on page 18. Further technical data and drawings from page 40.

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	width	order-nr.	Linearis Z G2 L7...
		If = 75 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 500 mA Tc = 25 °C				
≥80	2200	66 lm	170 lm/W	290 lm	152 lm/W	403 lm	144 lm/W	16 mm	7517-10048	...W16 325 822
								20 mm	7517-10064	...W20 325 822
								24 mm	7517-10080	...W24 325 822
	2700	76 lm	192 lm/W	339 lm	172 lm/W	470 lm	164 lm/W	16 mm	7517-10049	...W16 325 827
								20 mm	7517-10065	...W20 325 827
								24 mm	7517-10081	...W24 325 827
	3000	81 lm	206 lm/W	361 lm	184 lm/W	501 lm	175 lm/W	16 mm	7517-10050	...W16 325 830
								20 mm	7517-10066	...W20 325 830
								24 mm	7517-10082	...W24 325 830
	3500	81 lm	206 lm/W	361 lm	184 lm/W	501 lm	175 lm/W	16 mm	7517-10051	...W16 325 835
								20 mm	7517-10067	...W20 325 835
								24 mm	7517-10083	...W24 325 835
	4000	85 lm	216 lm/W	375 lm	193 lm/W	521 lm	184 lm/W	16 mm	7517-10052	...W16 325 840
								20 mm	7517-10068	...W20 325 840
								24 mm	7517-10084	...W24 325 840
	5000	85 lm	216 lm/W	375 lm	193 lm/W	521 lm	184 lm/W	16 mm	7517-10053	...W16 325 850
								20 mm	7517-10069	...W20 325 850
								24 mm	7517-10085	...W24 325 850
	5700	85 lm	216 lm/W	375 lm	193 lm/W	521 lm	184 lm/W	16 mm	7517-10054	...W16 325 857
								20 mm	7517-10070	...W20 325 857
								24 mm	7517-10086	...W24 325 857
	6500	85 lm	216 lm/W	375 lm	193 lm/W	521 lm	184 lm/W	16 mm	7517-10055	...W16 325 865
								20 mm	7517-10071	...W20 325 865
								24 mm	7517-10087	...W24 325 865

Up to 521lm!

iX-led



Up to 216 lm/W!

16 mm 20 mm 24 mm

NEW: CRI 90 IN KSF-Technology

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	width	order-nr.	Linearis Z G2 L7...
		If = 75 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 500 mA Tc = 25 °C				
≥ 90	2200	56 lm	141 lm/W	248 lm	126 lm/W	344 lm	120 lm/W	16 mm	7517-10056	...W16 325 922
								20 mm	7517-10072	...W20 325 922
								24 mm	7517-10088	...W24 325 922
	2700	77 lm	194 lm/W	341 lm	174 lm/W	474 lm	166 lm/W	16 mm	7517-10057	...W16 325 927
								20 mm	7517-10073	...W20 325 927
								24 mm	7517-10089	...W24 325 927
	3000	78 lm	198 lm/W	349 lm	178 lm/W	484 lm	169 lm/W	16 mm	7517-10058	...W16 325 930
								20 mm	7517-10074	...W20 325 930
								24 mm	7517-10090	...W24 325 930
	3500	80 lm	203 lm/W	357 lm	182 lm/W	496 lm	173 lm/W	16 mm	7517-10059	...W16 325 935
								20 mm	7517-10075	...W20 325 935
								24 mm	7517-10091	...W24 325 935
	4000	81 lm	205 lm/W	361 lm	184 lm/W	501 lm	175 lm/W	16 mm	7517-10060	...W16 325 940
								20 mm	7517-10076	...W20 325 940
								24 mm	7517-10092	...W24 325 940
	5000	81 lm	205 lm/W	361 lm	184 lm/W	501 lm	175 lm/W	16 mm	7517-10061	...W16 325 950
								20 mm	7517-10077	...W20 325 950
								24 mm	7517-10093	...W24 325 950
	5700	81 lm	205 lm/W	361 lm	184 lm/W	501 lm	175 lm/W	16 mm	7517-10062	...W16 325 957
								20 mm	7517-10078	...W20 325 957
								24 mm	7517-10094	...W24 325 957
	6500	80 lm	203 lm/W	357 lm	182 lm/W	496 lm	173 lm/W	16 mm	7517-10063	...W16 325 965
								20 mm	7517-10079	...W20 325 965
								24 mm	7517-10095	...W24 325 965

Up to 496 lm!

Linearis Z L14 325 - Industry standard linear modules

- √ linear module in three widths for installation in luminaires
- √ 6 Mid-Power-LEDs
- √ pitch distance 23.3 mm
- √ length 140 mm
- √ width 16 mm, 20 mm, 24 mm
- √ 2 connection terminals
- √ rated current 350 mA
- √ maximum operating current 500 mA
- √ maximum forward voltage 6.2 V
- √ meets the well-known industry standard

Please also refer to the technical data of the Linearis Z family on page 18. Further technical data and drawings from page 40.

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	width	order-nr.	Linearis Z G2 L14...
		If = 75 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 500 mA Tc = 25 °C				
≥80	2200	66 lm	170 lm/W	290 lm	152 lm/W	403 lm	144 lm/W	16 mm	7517-10096	...W16 325 822
								20 mm	7517-10112	...W20 325 822
								24 mm	7517-10128	...W24 325 822
	2700	76 lm	192 lm/W	339 lm	172 lm/W	470 lm	164 lm/W	16 mm	7517-10097	...W16 325 827
								20 mm	7517-10113	...W20 325 827
								24 mm	7517-10129	...W24 325 827
	3000	81 lm	206 lm/W	361 lm	184 lm/W	501 lm	175 lm/W	16 mm	7517-10098	...W16 325 830
								20 mm	7517-10114	...W20 325 830
								24 mm	7517-10130	...W24 325 830
	3500	81 lm	206 lm/W	361 lm	184 lm/W	501 lm	175 lm/W	16 mm	7517-10099	...W16 325 835
								20 mm	7517-10115	...W20 325 835
								24 mm	7517-10131	...W24 325 835
	4000	85 lm	216 lm/W	375 lm	193 lm/W	521 lm	184 lm/W	16 mm	7517-10100	...W16 325 840
								20 mm	7517-10116	...W20 325 840
								24 mm	7517-10132	...W24 325 840
	5000	85 lm	216 lm/W	375 lm	193 lm/W	521 lm	184 lm/W	16 mm	7517-10101	...W16 325 850
								20 mm	7517-10117	...W20 325 850
								24 mm	7517-10133	...W24 325 850
	5700	85 lm	216 lm/W	375 lm	193 lm/W	521 lm	184 lm/W	16 mm	7517-10102	...W16 325 857
								20 mm	7517-10118	...W20 325 857
								24 mm	7517-10134	...W24 325 857
	6500	85 lm	216 lm/W	375 lm	193 lm/W	521 lm	184 lm/W	16 mm	7517-10103	...W16 325 865
								20 mm	7517-10119	...W20 325 865
								24 mm	7517-10135	...W24 325 865

Up to 521lm!

Up to 216 lm/W!

16 mm 20 mm 24 mm

NEW: CRI 90 IN KSF-Technology

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	width	order-nr.	Linearis Z G2 L14...
		If = 75 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 500 mA Tc = 25 °C				
≥ 90	2200	56 lm	141 lm/W	248 lm	126 lm/W	344 lm	120 lm/W	16 mm	7517-10104	...W16 325 922
								20 mm	7517-10120	...W20 325 922
								24 mm	7517-10136	...W24 325 922
	2700	77 lm	194 lm/W	341 lm	174 lm/W	474 lm	166 lm/W	16 mm	7517-10105	...W16 325 927
								20 mm	7517-10121	...W20 325 927
								24 mm	7517-10137	...W24 325 927
	3000	78 lm	198 lm/W	349 lm	178 lm/W	484 lm	169 lm/W	16 mm	7517-10106	...W16 325 930
								20 mm	7517-10122	...W20 325 930
								24 mm	7517-10138	...W24 325 930
	3500	80 lm	203 lm/W	357 lm	182 lm/W	496 lm	173 lm/W	16 mm	7517-10107	...W16 325 935
								20 mm	7517-10123	...W20 325 935
								24 mm	7517-10139	...W24 325 935
	4000	81 lm	205 lm/W	361 lm	184 lm/W	501 lm	175 lm/W	16 mm	7517-10108	...W16 325 940
								20 mm	7517-10124	...W20 325 940
								24 mm	7517-10140	...W24 325 940
	5000	81 lm	205 lm/W	361 lm	184 lm/W	501 lm	175 lm/W	16 mm	7517-10109	...W16 325 950
								20 mm	7517-10125	...W20 325 950
								24 mm	7517-10141	...W24 325 950
	5700	81 lm	205 lm/W	361 lm	184 lm/W	501 lm	175 lm/W	16 mm	7517-10110	...W16 325 957
								20 mm	7517-10126	...W20 325 957
								24 mm	7517-10142	...W24 325 957
	6500	80 lm	203 lm/W	357 lm	182 lm/W	496 lm	173 lm/W	16 mm	7517-10111	...W16 325 965
								20 mm	7517-10127	...W20 325 965
								24 mm	7517-10143	...W24 325 965

Up to 501 lm!

Linearis Z L14 650 - Industry standard linear modules

- √ linear module in three widths for installation in luminaires
- √ 12 Mid-Power-LEDs
- √ pitch distance 11.7 mm
- √ length 140 mm
- √ width 16 mm, 20 mm, 24 mm
- √ 2 connection terminals
- √ rated current 350 mA
- √ maximum operating current 500 mA
- √ maximum forward voltage 12.4 V
- √ meets the well-known industry standard

Please also refer to the technical data of the Linearis Z family on page 18. Further technical data and drawings from page 40.

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	width	order-nr.	Linearis Z G2 L14...
		If = 75 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 500 mA Tc = 25 °C				
≥80	2200	131 lm	170 lm/W	580 lm	152 lm/W	806 lm	144 lm/W	16 mm	7517-10144	...W16 650 822
								20 mm	7517-10160	...W20 650 822
								24 mm	7517-10176	...W24 650 822
	2700	153 lm	192 lm/W	678 lm	172 lm/W	941 lm	164 lm/W	16 mm	7517-10145	...W16 650 827
								20 mm	7517-10161	...W20 650 827
								24 mm	7517-10177	...W24 650 827
	3000	163 lm	206 lm/W	722 lm	184 lm/W	1002 lm	175 lm/W	16 mm	7517-10146	...W16 650 830
								20 mm	7517-10162	...W20 650 830
								24 mm	7517-10178	...W24 650 830
	3500	163 lm	206 lm/W	722 lm	184 lm/W	1002 lm	175 lm/W	16 mm	7517-10147	...W16 650 835
								20 mm	7517-10163	...W20 650 835
								24 mm	7517-10179	...W24 650 835
	4000	169 lm	216 lm/W	750 lm	193 lm/W	1042 lm	184 lm/W	16 mm	7517-10148	...W16 650 840
								20 mm	7517-10164	...W20 650 840
								24 mm	7517-10180	...W24 650 840
	5000	169 lm	216 lm/W	750 lm	193 lm/W	1042 lm	184 lm/W	16 mm	7517-10149	...W16 650 850
								20 mm	7517-10165	...W20 650 850
								24 mm	7517-10181	...W24 650 850
	5700	169 lm	216 lm/W	750 lm	193 lm/W	1042 lm	184 lm/W	16 mm	7517-10150	...W16 650 857
								20 mm	7517-10166	...W20 650 857
								24 mm	7517-10182	...W24 650 857
	6500	169 lm	216 lm/W	750 lm	193 lm/W	1042 lm	184 lm/W	16 mm	7517-10151	...W16 650 865
								20 mm	7517-10167	...W20 650 865
								24 mm	7517-10183	...W24 650 865

Up to 1042 lm!

iX-led

Up to 216 lm/W!

16 mm 20 mm 24 mm

NEW: CRI 90 IN KSF-Technology

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	width	order-nr.	Linearis Z G2 14...
		If = 75 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 500 mA Tc = 25 °C				
≥ 90	2200	112 lm	141 lm/W	495 lm	126 lm/W	688 lm	120 lm/W	16 mm	7517-10152	...W16 650 922
								20 mm	7517-10168	...W20 650 922
								24 mm	7517-10184	...W24 650 922
	2700	153 lm	194 lm/W	682 lm	174 lm/W	947 lm	166 lm/W	16 mm	7517-10153	...W16 650 927
								20 mm	7517-10169	...W20 650 927
								24 mm	7517-10185	...W24 650 927
	3000	157 lm	198 lm/W	697 lm	178 lm/W	967 lm	169 lm/W	16 mm	7517-10154	...W16 650 930
								20 mm	7517-10170	...W20 650 930
								24 mm	7517-10186	...W24 650 930
	3500	160 lm	203 lm/W	714 lm	182 lm/W	991 lm	173 lm/W	16 mm	7517-10155	...W16 650 935
								20 mm	7517-10171	...W20 650 935
								24 mm	7517-10187	...W24 650 935
	4000	162 lm	205 lm/W	722 lm	184 lm/W	1002 lm	175 lm/W	16 mm	7517-10156	...W16 650 940
								20 mm	7517-10172	...W20 650 940
								24 mm	7517-10188	...W24 650 940
	5000	162 lm	205 lm/W	722 lm	184 lm/W	1002 lm	175 lm/W	16 mm	7517-10157	...W16 650 950
								20 mm	7517-10173	...W20 650 950
								24 mm	7517-10189	...W24 650 950
	5700	162 lm	205 lm/W	722 lm	184 lm/W	1002 lm	175 lm/W	16 mm	7517-10158	...W16 650 957
								20 mm	7517-10174	...W20 650 957
								24 mm	7517-10190	...W24 650 957
	6500	160 lm	203 lm/W	714 lm	182 lm/W	991 lm	173 lm/W	16 mm	7517-10159	...W16 650 965
								20 mm	7517-10175	...W20 650 965
								24 mm	7517-10191	...W24 650 965

Up to 1002 lm!

Linearis Z L28 650 - Industry standard linear modules

- √ linear module in three widths for installation in luminaires
- √ 12 Mid-Power-LEDs
- √ pitch distance 23.3 mm
- √ length 280 mm
- √ width 16 mm, 20 mm, 24 mm
- √ 2 connection terminals
- √ rated current 350 mA
- √ maximum operating current 500 mA
- √ maximum forward voltage 12.4 V
- √ meets the well-known industry standard

Please also refer to the technical data of the Linearis Z family on page 18. Further technical data and drawings from page 40.

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	width	order-nr.	Linearis Z G2 L28...
		If = 75 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 500 mA Tc = 25 °C				
≥80	2200	131 lm	170 lm/W	580 lm	152 lm/W	806 lm	144 lm/W	16 mm	7517-10192	...W16 650 822
								20 mm	7517-10208	...W20 650 822
								24 mm	7517-10224	...W24 650 822
	2700	153 lm	192 lm/W	678 lm	172 lm/W	941 lm	164 lm/W	16 mm	7517-10193	...W16 650 827
								20 mm	7517-10209	...W20 650 827
								24 mm	7517-10225	...W24 650 827
	3000	163 lm	206 lm/W	722 lm	184 lm/W	1002 lm	175 lm/W	16 mm	7517-10194	...W16 650 830
								20 mm	7517-10210	...W20 650 830
								24 mm	7517-10226	...W24 650 830
	3500	163 lm	206 lm/W	722 lm	184 lm/W	1002 lm	175 lm/W	16 mm	7517-10195	...W16 650 835
								20 mm	7517-10211	...W20 650 835
								24 mm	7517-10227	...W24 650 835
	4000	169 lm	216 lm/W	750 lm	193 lm/W	1042 lm	184 lm/W	16 mm	7517-10196	...W16 650 840
								20 mm	7517-10212	...W20 650 840
								24 mm	7517-10228	...W24 650 840
	5000	169 lm	216 lm/W	750 lm	193 lm/W	1042 lm	184 lm/W	16 mm	7517-10197	...W16 650 850
								20 mm	7517-10213	...W20 650 850
								24 mm	7517-10229	...W24 650 850
	5700	169 lm	216 lm/W	750 lm	193 lm/W	1042 lm	184 lm/W	16 mm	7517-10198	...W16 650 857
								20 mm	7517-10214	...W20 650 857
								24 mm	7517-10230	...W24 650 857
	6500	169 lm	216 lm/W	750 lm	193 lm/W	1042 lm	184 lm/W	16 mm	7517-10199	...W16 650 865
								20 mm	7517-10215	...W20 650 865
								24 mm	7517-10231	...W24 650 865

Up to 1042 lm!

Up to 216 lm/W!

16 mm 20 mm 24 mm

NEW: CRI 90 IN KSF-Technology

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	width	order-nr.	Linearis Z G2 L28...
		If = 75 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 500 mA Tc = 25 °C				
≥ 90	2200	112 lm	141 lm/W	495 lm	126 lm/W	688 lm	120 lm/W	16 mm	7517-10200	...W16 650 922
								20 mm	7517-10216	...W20 650 922
								24 mm	7517-10232	...W24 650 922
	2700	153 lm	194 lm/W	682 lm	174 lm/W	947 lm	166 lm/W	16 mm	7517-10201	...W16 650 927
								20 mm	7517-10217	...W20 650 927
								24 mm	7517-10233	...W24 650 927
	3000	157 lm	198 lm/W	697 lm	178 lm/W	967 lm	169 lm/W	16 mm	7517-10202	...W16 650 930
								20 mm	7517-10218	...W20 650 930
								24 mm	7517-10234	...W24 650 930
	3500	160 lm	203 lm/W	714 lm	182 lm/W	991 lm	173 lm/W	16 mm	7517-10203	...W16 650 935
								20 mm	7517-10219	...W20 650 935
								24 mm	7517-10235	...W24 650 935
	4000	162 lm	205 lm/W	722 lm	184 lm/W	1002 lm	175 lm/W	16 mm	7517-10204	...W16 650 940
								20 mm	7517-10220	...W20 650 940
								24 mm	7517-10236	...W24 650 940
	5000	162 lm	205 lm/W	722 lm	184 lm/W	1002 lm	175 lm/W	16 mm	7517-10205	...W16 650 950
								20 mm	7517-10221	...W20 650 950
								24 mm	7517-10237	...W24 650 950
	5700	162 lm	205 lm/W	722 lm	184 lm/W	1002 lm	175 lm/W	16 mm	7517-10206	...W16 650 957
								20 mm	7517-10222	...W20 650 957
								24 mm	7517-10238	...W24 650 957
	6500	160 lm	203 lm/W	714 lm	182 lm/W	991 lm	173 lm/W	16 mm	7517-10207	...W16 650 965
								20 mm	7517-10223	...W20 650 965
								24 mm	7517-10239	...W24 650 965

Up to 1002 lm!

Linearis Z L28 1300 - Industry standard linear modules

- √ linear module in three widths for installation in luminaires
- √ 24 Mid-Power-LEDs
- √ pitch distance 11.7 mm
- √ length 280 mm
- √ width 16 mm, 20 mm, 24 mm
- √ 2 connection terminals
- √ rated current 350 mA
- √ maximum operating current 500 mA
- √ maximum forward voltage 24.8 V
- √ meets the well-known industry standard

Please also refer to the technical data of the Linearis Z family on page 18. Further technical data and drawings from page 40.

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	width	order-nr.	Linearis Z G2 L28...
		If = 75 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 500 mA Tc = 25 °C				
≥80	2200	262 lm	170 lm/W	1161 lm	152 lm/W	1612 lm	144 lm/W	16 mm	7517-10240	...W16 1300 822
								20 mm	7517-10256	...W20 1300 822
								24 mm	7517-10272	...W24 1300 822
	2700	306 lm	192 lm/W	1355 lm	172 lm/W	1882 lm	164 lm/W	16 mm	7517-10241	...W16 1300 827
								20 mm	7517-10257	...W20 1300 827
								24 mm	7517-10273	...W24 1300 827
	3000	326 lm	206 lm/W	1444 lm	184 lm/W	2005 lm	175 lm/W	16 mm	7517-10242	...W16 1300 830
								20 mm	7517-10258	...W20 1300 830
								24 mm	7517-10274	...W24 1300 830
	3500	326 lm	206 lm/W	1444 lm	184 lm/W	2005 lm	175 lm/W	16 mm	7517-10243	...W16 1300 835
								20 mm	7517-10259	...W20 1300 835
								24 mm	7517-10275	...W24 1300 835
	4000	339 lm	216 lm/W	1501 lm	193 lm/W	2084 lm	184 lm/W	16 mm	7517-10244	...W16 1300 840
								20 mm	7517-10260	...W20 1300 840
								24 mm	7517-10276	...W24 1300 840
	5000	339 lm	216 lm/W	1501 lm	193 lm/W	2084 lm	184 lm/W	16 mm	7517-10245	...W16 1300 850
								20 mm	7517-10261	...W20 1300 850
								24 mm	7517-10277	...W24 1300 850
	5700	339 lm	216 lm/W	1501 lm	193 lm/W	2084 lm	184 lm/W	16 mm	7517-10246	...W16 1300 857
								20 mm	7517-10262	...W20 1300 857
								24 mm	7517-10278	...W24 1300 857
	6500	339 lm	216 lm/W	1501 lm	193 lm/W	2084 lm	184 lm/W	16 mm	7517-10247	...W16 1300 865
								20 mm	7517-10263	...W20 1300 865
								24 mm	7517-10279	...W24 1300 865

Up to 2084 lm!

iX-led

16 mm 20 mm 24 mm

Up to 216 lm/W!

NEW: CRI 90 IN KSF-Technology

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	width	order-nr.	Linearis Z G2 L28...
		If = 75 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 500 mA Tc = 25 °C				
≥ 90	2200	224 lm	141 lm/W	991 lm	126 lm/W	1376 lm	120 lm/W	16 mm	7517-10248	...W16 1300 922
								20 mm	7517-10264	...W20 1300 922
								24 mm	7517-10280	...W24 1300 922
	2700	306 lm	194 lm/W	1365 lm	174 lm/W	1894 lm	166 lm/W	16 mm	7517-10249	...W16 1300 927
								20 mm	7517-10265	...W20 1300 927
								24 mm	7517-10281	...W24 1300 927
	3000	313 lm	198 lm/W	1394 lm	178 lm/W	1935 lm	169 lm/W	16 mm	7517-10250	...W16 1300 930
								20 mm	7517-10266	...W20 1300 930
								24 mm	7517-10282	...W24 1300 930
	3500	321 lm	203 lm/W	1429 lm	182 lm/W	1983 lm	173 lm/W	16 mm	7517-10251	...W16 1300 935
								20 mm	7517-10267	...W20 1300 935
								24 mm	7517-10283	...W24 1300 935
	4000	324 lm	205 lm/W	1443 lm	184 lm/W	2003 lm	175 lm/W	16 mm	7517-10252	...W16 1300 940
								20 mm	7517-10268	...W20 1300 940
								24 mm	7517-10284	...W24 1300 940
	5000	324 lm	205 lm/W	1443 lm	184 lm/W	2003 lm	175 lm/W	16 mm	7517-10253	...W16 1300 950
								20 mm	7517-10269	...W20 1300 950
								24 mm	7517-10285	...W24 1300 950
	5700	324 lm	205 lm/W	1443 lm	184 lm/W	2003 lm	175 lm/W	16 mm	7517-10254	...W16 1300 957
								20 mm	7517-10270	...W20 1300 957
								24 mm	7517-10286	...W24 1300 957
	6500	321 lm	203 lm/W	1429 lm	182 lm/W	1983 lm	173 lm/W	16 mm	7517-10255	...W16 1300 965
								20 mm	7517-10271	...W20 1300 965
								24 mm	7517-10287	...W24 1300 965

Up to 2003 lm!

Linearis Z L56 1300 - Industry standard linear modules

- √ linear module in three widths for installation in luminaires
- √ 24 Mid-Power-LEDs
- √ pitch distance 23.3 mm
- √ length 560 mm
- √ width 16 mm, 20 mm, 24 mm
- √ 2 connection terminals
- √ rated current 350 mA
- √ maximum operating current 500 mA
- √ maximum forward voltage g 24.8 V
- √ meets the well-known industry standard

Please also refer to the technical data of the Linearis Z family on page 18. Further technical data and drawings from page 40.

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	width	order-nr.	Linearis Z G2 L56...
		If = 75 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 500 mA Tc = 25 °C				
≥80	2200	262 lm	170 lm/W	1161 lm	152 lm/W	1612 lm	144 lm/W	16 mm	7517-10288	...W16 1300 822
								20 mm	7517-10304	...W20 1300 822
								24 mm	7517-10320	...W24 1300 822
	2700	306 lm	192 lm/W	1355 lm	172 lm/W	1882 lm	164 lm/W	16 mm	7517-10289	...W16 1300 827
								20 mm	7517-10305	...W20 1300 827
								24 mm	7517-10321	...W24 1300 827
	3000	326 lm	206 lm/W	1444 lm	184 lm/W	2005 lm	175 lm/W	16 mm	7517-10290	...W16 1300 830
								20 mm	7517-10306	...W20 1300 830
								24 mm	7517-10322	...W24 1300 830
	3500	326 lm	206 lm/W	1444 lm	184 lm/W	2005 lm	175 lm/W	16 mm	7517-10291	...W16 1300 835
								20 mm	7517-10307	...W20 1300 835
								24 mm	7517-10323	...W24 1300 835
	4000	339 lm	216 lm/W	1501 lm	193 lm/W	2084 lm	184 lm/W	16 mm	7517-10292	...W16 1300 840
								20 mm	7517-10308	...W20 1300 840
								24 mm	7517-10324	...W24 1300 840
	5000	339 lm	216 lm/W	1501 lm	193 lm/W	2084 lm	184 lm/W	16 mm	7517-10293	...W16 1300 850
								20 mm	7517-10309	...W20 1300 850
								24 mm	7517-10325	...W24 1300 850
	5700	339 lm	216 lm/W	1501 lm	193 lm/W	2084 lm	184 lm/W	16 mm	7517-10294	...W16 1300 857
								20 mm	7517-10310	...W20 1300 857
								24 mm	7517-10326	...W24 1300 857
	6500	339 lm	216 lm/W	1501 lm	193 lm/W	2084 lm	184 lm/W	16 mm	7517-10295	...W16 1300 865
								20 mm	7517-10311	...W20 1300 865
								24 mm	7517-10327	...W24 1300 865

Up to 2084 lm!

iX-led

16 mm 20 mm 24 mm

Up to 216 lm/W!

NEW: CRI 90 IN KSF-Technology

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	width	order-nr.	Linearis Z G2 L56...
		If = 75 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 500 mA Tc = 25 °C				
≥ 90	2200	224 lm	141 lm/W	991 lm	126 lm/W	1376 lm	120 lm/W	16 mm	7517-10296	...W16 1300 922
								20 mm	7517-10312	...W20 1300 922
								24 mm	7517-10328	...W24 1300 922
	2700	306 lm	194 lm/W	1365 lm	174 lm/W	1894 lm	166 lm/W	16 mm	7517-10297	...W16 1300 927
								20 mm	7517-10313	...W20 1300 927
								24 mm	7517-10329	...W24 1300 927
	3000	313 lm	198 lm/W	1394 lm	178 lm/W	1935 lm	169 lm/W	16 mm	7517-10298	...W16 1300 930
								20 mm	7517-10314	...W20 1300 930
								24 mm	7517-10330	...W24 1300 930
	3500	321 lm	203 lm/W	1429 lm	182 lm/W	1983 lm	173 lm/W	16 mm	7517-10299	...W16 1300 935
								20 mm	7517-10315	...W20 1300 935
								24 mm	7517-10331	...W24 1300 935
	4000	324 lm	205 lm/W	1443 lm	184 lm/W	2003 lm	175 lm/W	16 mm	7517-10300	...W16 1300 940
								20 mm	7517-10316	...W20 1300 940
								24 mm	7517-10332	...W24 1300 940
	5000	324 lm	205 lm/W	1443 lm	184 lm/W	2003 lm	175 lm/W	16 mm	7517-10301	...W16 1300 950
								20 mm	7517-10317	...W20 1300 950
								24 mm	7517-10333	...W24 1300 950
	5700	324 lm	205 lm/W	1443 lm	184 lm/W	2003 lm	175 lm/W	16 mm	7517-10302	...W16 1300 957
								20 mm	7517-10318	...W20 1300 957
								24 mm	7517-10334	...W24 1300 957
	6500	321 lm	203 lm/W	1429 lm	182 lm/W	1983 lm	173 lm/W	16 mm	7517-10303	...W16 1300 965
								20 mm	7517-10319	...W20 1300 965
								24 mm	7517-10335	...W24 1300 965

Up to 2003 lm!

Linearis Z L56 2600 - Industry standard linear modules

- √ linear module in three widths for installation in luminaires
- √ 48 Mid-Power-LEDs
- √ pitch distance 11.7 mm
- √ length 560 mm
- √ width 16 mm, 20 mm, 24 mm
- √ 2 connection terminals
- √ rated current 350 mA
- √ maximum operating current 500 mA
- √ maximum forward voltage 49.6 V
- √ meets the well-known industry standard

Please also refer to the technical data of the Linearis Z family on page 18. Further technical data and drawings from page 40.

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	width	order-nr.	Linearis Z G2 L56...
		If = 75 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 500 mA Tc = 25 °C				
≥80	2200	524 lm	170 lm/W	2322 lm	152 lm/W	3224 lm	144 lm/W	16 mm	7517-10336	...W16 2600 822
								20 mm	7517-10352	...W20 2600 822
								24 mm	7517-10368	...W24 2600 822
	2700	612 lm	192 lm/W	2710 lm	172 lm/W	3763 lm	164 lm/W	16 mm	7517-10337	...W16 2600 827
								20 mm	7517-10353	...W20 2600 827
								24 mm	7517-10369	...W24 2600 827
	3000	652 lm	206 lm/W	2888 lm	184 lm/W	4010 lm	175 lm/W	16 mm	7517-10338	...W16 2600 830
								20 mm	7517-10354	...W20 2600 830
								24 mm	7517-10370	...W24 2600 830
	3500	652 lm	206 lm/W	2888 lm	184 lm/W	4010 lm	175 lm/W	16 mm	7517-10339	...W16 2600 835
								20 mm	7517-10355	...W20 2600 835
								24 mm	7517-10371	...W24 2600 835
	4000	677 lm	216 lm/W	3001 lm	193 lm/W	4167 lm	184 lm/W	16 mm	7517-10340	...W16 2600 840
								20 mm	7517-10356	...W20 2600 840
								24 mm	7517-10372	...W24 2600 840
	5000	677 lm	216 lm/W	3001 lm	193 lm/W	4167 lm	184 lm/W	16 mm	7517-10341	...W16 2600 850
								20 mm	7517-10357	...W20 2600 850
								24 mm	7517-10373	...W24 2600 850
	5700	677 lm	216 lm/W	3001 lm	193 lm/W	4167 lm	184 lm/W	16 mm	7517-10342	...W16 2600 857
								20 mm	7517-10358	...W20 2600 857
								24 mm	7517-10374	...W24 2600 857
	6500	677 lm	216 lm/W	3001 lm	193 lm/W	4167 lm	184 lm/W	16 mm	7517-10343	...W16 2600 865
								20 mm	7517-10359	...W20 2600 865
								24 mm	7517-10375	...W24 2600 865

Up to 4167 lm!

iX-led

Up to 216 lm/W!

16 mm 20 mm 24 mm

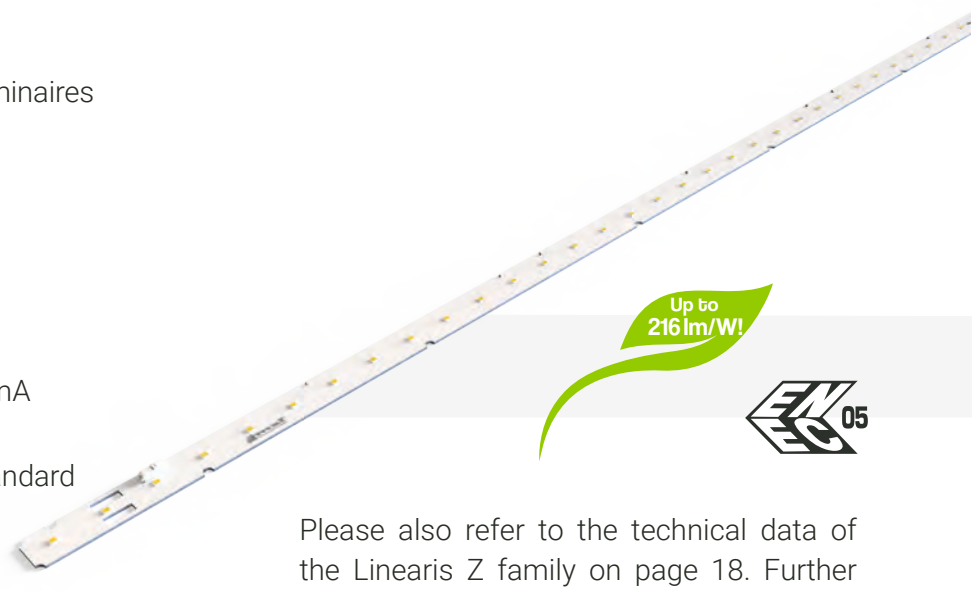
NEW: CRI 90 IN KSF-Technology

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	width	order-nr.	Linearis Z G2 L56...
		If = 75 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 500 mA Tc = 25 °C				
≥ 90	2200	447 lm	141 lm/W	1982 lm	126 lm/W	2752 lm	120 lm/W	16 mm	7517-10344	...W16 2600 922
								20 mm	7517-10360	...W20 2600 922
								24 mm	7517-10376	...W24 2600 922
	2700	613 lm	194 lm/W	2729 lm	174 lm/W	3788 lm	166 lm/W	16 mm	7517-10345	...W16 2600 927
								20 mm	7517-10361	...W20 2600 927
								24 mm	7517-10377	...W24 2600 927
	3000	626 lm	198 lm/W	2788 lm	178 lm/W	3870 lm	169 lm/W	16 mm	7517-10346	...W16 2600 930
								20 mm	7517-10362	...W20 2600 930
								24 mm	7517-10378	...W24 2600 930
	3500	642 lm	203 lm/W	2857 lm	182 lm/W	3965 lm	173 lm/W	16 mm	7517-10347	...W16 2600 935
								20 mm	7517-10363	...W20 2600 935
								24 mm	7517-10379	...W24 2600 935
	4000	648 lm	205 lm/W	2887 lm	184 lm/W	4006 lm	175 lm/W	16 mm	7517-10348	...W16 2600 940
								20 mm	7517-10364	...W20 2600 940
								24 mm	7517-10380	...W24 2600 940
	5000	648 lm	205 lm/W	2887 lm	184 lm/W	4006 lm	175 lm/W	16 mm	7517-10349	...W16 2600 950
								20 mm	7517-10365	...W20 2600 950
								24 mm	7517-10381	...W24 2600 950
	5700	648 lm	205 lm/W	2887 lm	184 lm/W	4006 lm	175 lm/W	16 mm	7517-10350	...W16 2600 957
								20 mm	7517-10366	...W20 2600 957
								24 mm	7517-10382	...W24 2600 957
	6500	642 lm	203 lm/W	2857 lm	182 lm/W	3965 lm	173 lm/W	16 mm	7517-10351	...W16 2600 965
								20 mm	7517-10367	...W20 2600 965
								24 mm	7517-10383	...W24 2600 965

Up to 4006 lm!

Linearis Z L112 2600 - Industry standard linear modules

- √ linear module for installation in luminaires
- √ 48 Mid-Power-LEDs
- √ pitch distance 23.3 mm
- √ length 1120 mm
- √ width 20 mm
- √ 2 connection terminals
- √ rated current 350 mA
- √ maximum operating current 500 mA
- √ maximum forward voltage 49.6 V
- √ meets the well-known industry standard



Up to 216 lm/W!

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Please also refer to the technical data of the Linearis Z family on page 18. Further technical data and drawings from page 40.

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 75 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 500 mA Tc = 25 °C			
≥80	2200	524 lm	170 lm/W	2322 lm	152 lm/W	3224 lm	144 lm/W	7517-10384	Linearis Z G2 L112 W20 2600 822
	2700	612 lm	192 lm/W	2710 lm	172 lm/W	3763 lm	164 lm/W	7517-10385	Linearis Z G2 L112 W20 2600 827
	3000	652 lm	206 lm/W	2888 lm	184 lm/W	4010 lm	175 lm/W	7517-10386	Linearis Z G2 L112 W20 2600 830
	3500	652 lm	206 lm/W	2888 lm	184 lm/W	4010 lm	175 lm/W	7517-10387	Linearis Z G2 L112 W20 2600 835
	4000	677 lm	216 lm/W	3001 lm	193 lm/W	4167 lm	184 lm/W	7517-10388	Linearis Z G2 L112 W20 2600 840
	5000	677 lm	216 lm/W	3001 lm	193 lm/W	4167 lm	184 lm/W	7517-10389	Linearis Z G2 L112 W20 2600 850
	5700	677 lm	216 lm/W	3001 lm	193 lm/W	4167 lm	184 lm/W	7517-10390	Linearis Z G2 L112 W20 2600 857
	6500	677 lm	216 lm/W	3001 lm	193 lm/W	4167 lm	184 lm/W	7517-10391	Linearis Z G2 L112 W20 2600 865

Up to 4167 lm!

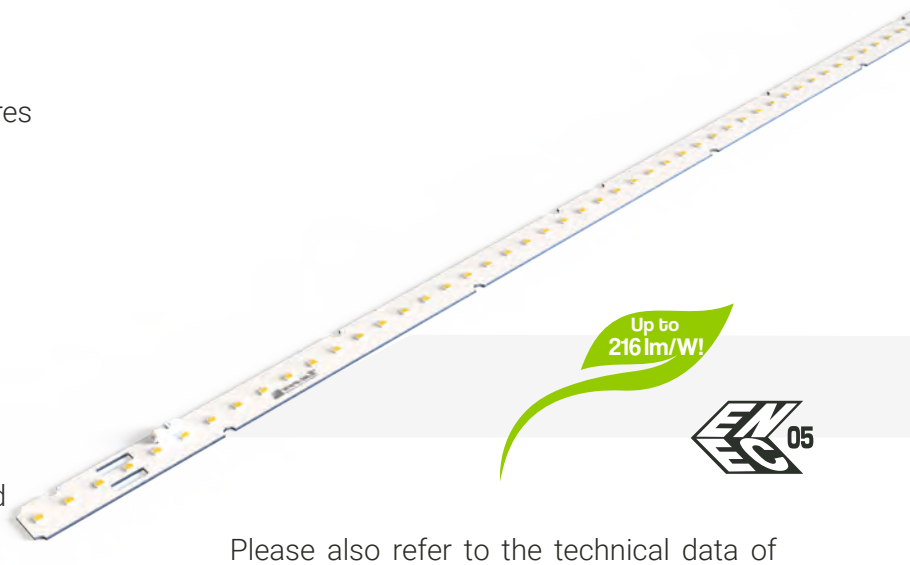
NEW: CRI 90 IN KSF-Technology

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 75 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 500 mA Tc = 25 °C			
≥90	2200	447 lm	141 lm/W	1982 lm	126 lm/W	2752 lm	120 lm/W	7517-10392	Linearis Z G2 L112 W20 2600 922
	2700	613 lm	194 lm/W	2729 lm	174 lm/W	3788 lm	166 lm/W	7517-10393	Linearis Z G2 L112 W20 2600 927
	3000	626 lm	198 lm/W	2788 lm	178 lm/W	3870 lm	169 lm/W	7517-10394	Linearis Z G2 L112 W20 2600 930
	3500	642 lm	203 lm/W	2857 lm	182 lm/W	3965 lm	173 lm/W	7517-10395	Linearis Z G2 L112 W20 2600 935
	4000	648 lm	205 lm/W	2887 lm	184 lm/W	4006 lm	175 lm/W	7517-10396	Linearis Z G2 L112 W20 2600 940
	5000	648 lm	205 lm/W	2887 lm	184 lm/W	4006 lm	175 lm/W	7517-10397	Linearis Z G2 L112 W20 2600 950
	5700	648 lm	205 lm/W	2887 lm	184 lm/W	4006 lm	175 lm/W	7517-10398	Linearis Z G2 L112 W20 2600 957
	6500	642 lm	203 lm/W	2857 lm	182 lm/W	3965 lm	173 lm/W	7517-10399	Linearis Z G2 L112 W20 2600 965

Up to 4006 lm!

Linearis Z L112 5200 - Industry standard linear modules

- √ linear module for installation in luminaires
- √ 96 Mid-Power-LEDs
- √ pitch distance 11.7 mm
- √ length 1120 mm
- √ width 20 mm
- √ 2 connection terminals
- √ rated current 350 mA
- √ maximum operating current 500 mA
- √ maximum forward voltage 99.2 V
- √ meets the well-known industry standard



Up to 216 lm/W!

ENEC 05

Please also refer to the technical data of the Linearis Z family on page 18. Further technical data and drawings from page 40.

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 75 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 500 mA Tc = 25 °C			
≥80	2200	1048 lm	170 lm/W	4644 lm	152 lm/W	6448 lm	144 lm/W	7517-10400	Linearis Z G2 L112 W20 5200 822
	2700	1224 lm	192 lm/W	5421 lm	172 lm/W	7527 lm	164 lm/W	7517-10401	Linearis Z G2 L112 W20 5200 827
	3000	1304 lm	206 lm/W	5776 lm	184 lm/W	8019 lm	175 lm/W	7517-10402	Linearis Z G2 L112 W20 5200 830
	3500	1304 lm	206 lm/W	5776 lm	184 lm/W	8019 lm	175 lm/W	7517-10403	Linearis Z G2 L112 W20 5200 835
	4000	1355 lm	216 lm/W	6003 lm	193 lm/W	8334 lm	184 lm/W	7517-10404	Linearis Z G2 L112 W20 5200 840
	5000	1355 lm	216 lm/W	6003 lm	193 lm/W	8334 lm	184 lm/W	7517-10405	Linearis Z G2 L112 W20 5200 850
	5700	1355 lm	216 lm/W	6003 lm	193 lm/W	8334 lm	184 lm/W	7517-10406	Linearis Z G2 L112 W20 5200 857
	6500	1355 lm	216 lm/W	6003 lm	193 lm/W	8334 lm	184 lm/W	7517-10407	Linearis Z G2 L112 W20 5200 865

Up to 8334 lm!

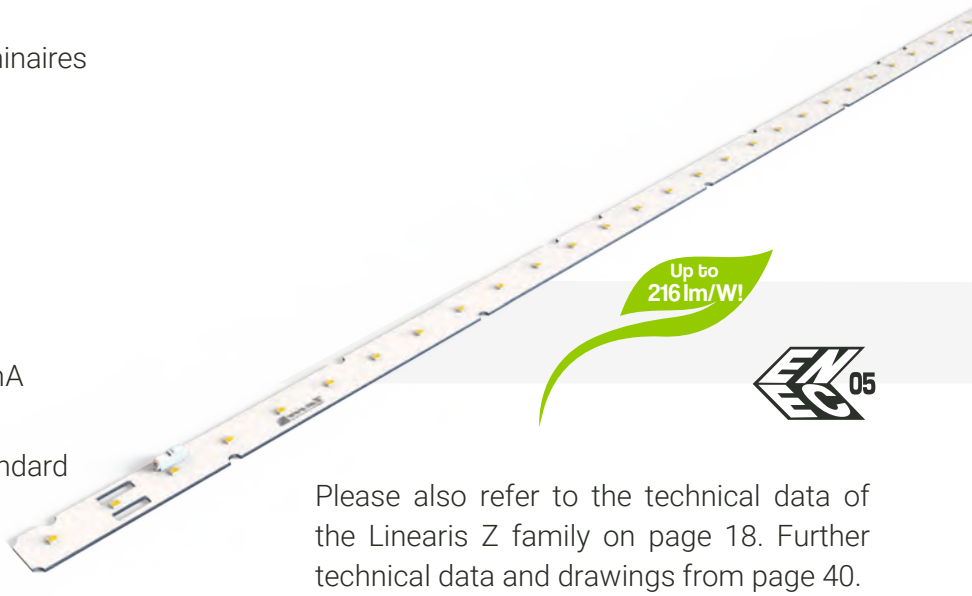
NEW: CRI 90 IN KSF-Technology

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 75 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 500 mA Tc = 25 °C			
≥90	2200	895 lm	141 lm/W	3964 lm	126 lm/W	5503 lm	120 lm/W	7517-10408	Linearis Z G2 L112 W20 5200 922
	2700	1226 lm	194 lm/W	5459 lm	174 lm/W	7576 lm	166 lm/W	7517-10409	Linearis Z G2 L112 W20 5200 927
	3000	1252 lm	198 lm/W	5577 lm	178 lm/W	7740 lm	169 lm/W	7517-10410	Linearis Z G2 L112 W20 5200 930
	3500	1283 lm	203 lm/W	5714 lm	182 lm/W	7930 lm	173 lm/W	7517-10411	Linearis Z G2 L112 W20 5200 935
	4000	1296 lm	205 lm/W	5773 lm	184 lm/W	8012 lm	175 lm/W	7517-10412	Linearis Z G2 L112 W20 5200 940
	5000	1296 lm	205 lm/W	5773 lm	184 lm/W	8012 lm	175 lm/W	7517-10413	Linearis Z G2 L112 W20 5200 950
	5700	1296 lm	205 lm/W	5773 lm	184 lm/W	8012 lm	175 lm/W	7517-10414	Linearis Z G2 L112 W20 5200 957
	6500	1283 lm	203 lm/W	5714 lm	182 lm/W	7930 lm	173 lm/W	7517-10415	Linearis Z G2 L112 W20 5200 965

Up to 8012 lm!

Linearis Z L140 3250 - Industry standard linear modules

√ linear module for installation in luminaires
√ 60 Mid-Power-LEDs
√ pitch distance 23.3 mm
√ length 1400 mm
√ width 20 mm
√ 2 connection terminals
√ rated current 350 mA
√ maximum operating current 500 mA
√ maximum forward voltage 62 V
√ meets the well-known industry standard



Please also refer to the technical data of the Linearis Z family on page 18. Further technical data and drawings from page 40.

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 75 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 500 mA Tc = 25 °C			
≥80	2200	655 lm	170 lm/W	2902 lm	152 lm/W	4030 lm	144 lm/W	7517-10416	Linearis Z G2 L140 W20 3250 822
	2700	765 lm	192 lm/W	3388 lm	172 lm/W	4704 lm	164 lm/W	7517-10417	Linearis Z G2 L140 W20 3250 827
	3000	815 lm	206 lm/W	3610 lm	184 lm/W	5012 lm	175 lm/W	7517-10418	Linearis Z G2 L140 W20 3250 830
	3500	815 lm	206 lm/W	3610 lm	184 lm/W	5012 lm	175 lm/W	7517-10419	Linearis Z G2 L140 W20 3250 835
	4000	847 lm	216 lm/W	3752 lm	193 lm/W	5209 lm	184 lm/W	7517-10420	Linearis Z G2 L140 W20 3250 840
	5000	847 lm	216 lm/W	3752 lm	193 lm/W	5209 lm	184 lm/W	7517-10421	Linearis Z G2 L140 W20 3250 850
	5700	847 lm	216 lm/W	3752 lm	193 lm/W	5209 lm	184 lm/W	7517-10422	Linearis Z G2 L140 W20 3250 857
	6500	847 lm	216 lm/W	3752 lm	193 lm/W	5209 lm	184 lm/W	7517-10423	Linearis Z G2 L140 W20 3250 865

Up to 5209 lm!

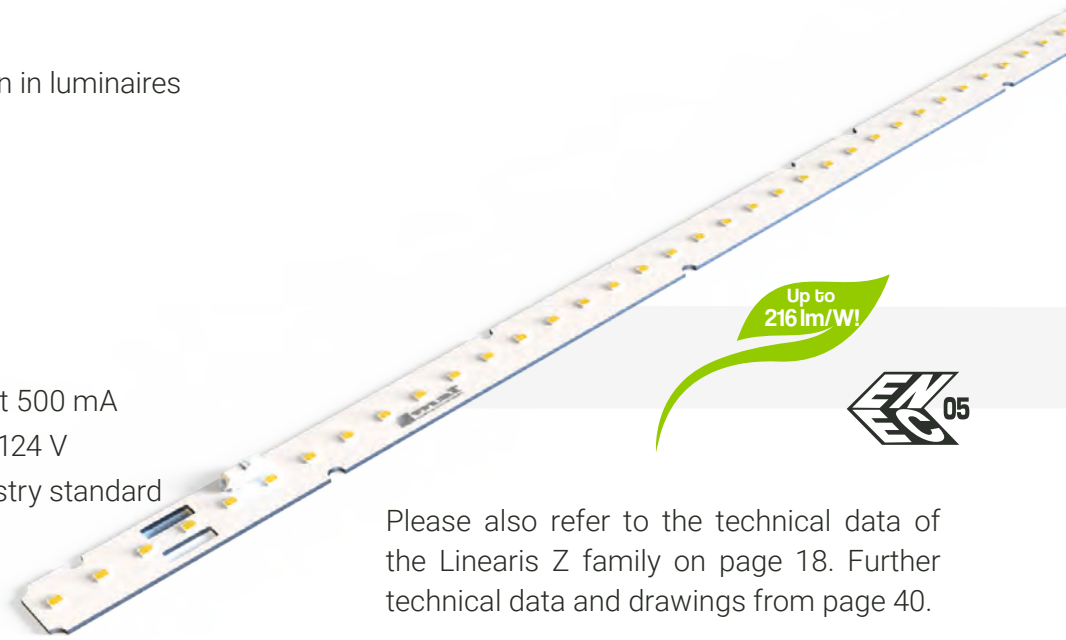
NEW: CRI 90 IN KSF-Technology

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 75 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 500 mA Tc = 25 °C			
≥90	2200	559 lm	141 lm/W	2477 lm	126 lm/W	3440 lm	120 lm/W	7517-10424	Linearis Z G2 L140 W20 3250 922
	2700	766 lm	194 lm/W	3412 lm	174 lm/W	4735 lm	166 lm/W	7517-10425	Linearis Z G2 L140 W20 3250 927
	3000	783 lm	198 lm/W	3485 lm	178 lm/W	4837 lm	169 lm/W	7517-10426	Linearis Z G2 L140 W20 3250 930
	3500	802 lm	203 lm/W	3571 lm	182 lm/W	4956 lm	173 lm/W	7517-10427	Linearis Z G2 L140 W20 3250 935
	4000	810 lm	205 lm/W	3608 lm	184 lm/W	5008 lm	175 lm/W	7517-10428	Linearis Z G2 L140 W20 3250 940
	5000	810 lm	205 lm/W	3608 lm	184 lm/W	5008 lm	175 lm/W	7517-10429	Linearis Z G2 L140 W20 3250 950
	5700	810 lm	205 lm/W	3608 lm	184 lm/W	5008 lm	175 lm/W	7517-10430	Linearis Z G2 L140 W20 3250 957
	6500	802 lm	203 lm/W	3571 lm	182 lm/W	4956 lm	173 lm/W	7517-10431	Linearis Z G2 L140 W20 3250 965

Up to 5008 lm!

Linearis Z L140 6500 - Industry standard linear modules

√ linear module for installation in luminaires
√ 120 Mid-Power-LEDs
√ pitch distance 11.7 mm
√ length 1400 mm
√ width 20 mm
√ 2 connection terminals
√ rated current 350 mA
√ maximum operating current 500 mA
√ maximum forward voltage 124 V
√ meets the well-known industry standard



Up to 216 lm/W!

ENEC 05

Please also refer to the technical data of the Linearis Z family on page 18. Further technical data and drawings from page 40.

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 75 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 500 mA Tc = 25 °C			
≥80	2200	1310 lm	170 lm/W	5805 lm	152 lm/W	8060 lm	144 lm/W	7517-10432	Linearis Z G2 L140 W20 6500 822
	2700	1530 lm	192 lm/W	6776 lm	172 lm/W	9408 lm	164 lm/W	7517-10433	Linearis Z G2 L140 W20 6500 827
	3000	1630 lm	206 lm/W	7220 lm	184 lm/W	10024 lm	175 lm/W	7517-10434	Linearis Z G2 L140 W20 6500 830
	3500	1630 lm	206 lm/W	7220 lm	184 lm/W	10024 lm	175 lm/W	7517-10435	Linearis Z G2 L140 W20 6500 835
	4000	1694 lm	216 lm/W	7503 lm	193 lm/W	10418 lm	184 lm/W	7517-10436	Linearis Z G2 L140 W20 6500 840
	5000	1694 lm	216 lm/W	7503 lm	193 lm/W	10418 lm	184 lm/W	7517-10437	Linearis Z G2 L140 W20 6500 850
	5700	1694 lm	216 lm/W	7503 lm	193 lm/W	10418 lm	184 lm/W	7517-10438	Linearis Z G2 L140 W20 6500 857
	6500	1694 lm	216 lm/W	7503 lm	193 lm/W	10418 lm	184 lm/W	7517-10439	Linearis Z G2 L140 W20 6500 865

Up to 10418 lm!

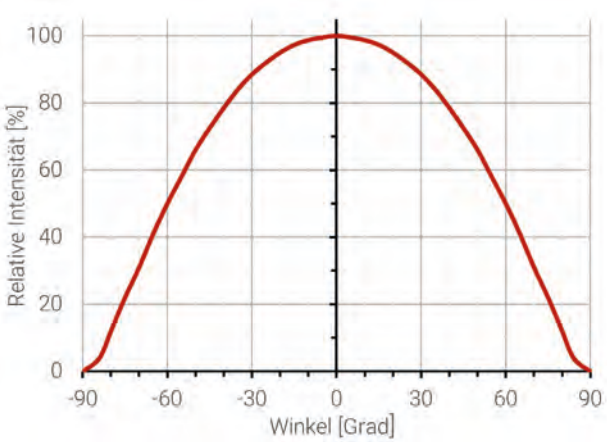
NEW: CRI 90 IN KSF-Technology

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 75 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 500 mA Tc = 25 °C			
≥90	2200	1118 lm	141 lm/W	4954 lm	126 lm/W	6879 lm	120 lm/W	7517-10440	Linearis Z G2 L140 W20 6500 922
	2700	1532 lm	194 lm/W	6824 lm	174 lm/W	9470 lm	166 lm/W	7517-10441	Linearis Z G2 L140 W20 6500 927
	3000	1565 lm	198 lm/W	6971 lm	178 lm/W	9674 lm	169 lm/W	7517-10442	Linearis Z G2 L140 W20 6500 930
	3500	1604 lm	203 lm/W	7143 lm	182 lm/W	9913 lm	173 lm/W	7517-10443	Linearis Z G2 L140 W20 6500 935
	4000	1621 lm	205 lm/W	7216 lm	184 lm/W	10015 lm	175 lm/W	7517-10444	Linearis Z G2 L140 W20 6500 940
	5000	1621 lm	205 lm/W	7216 lm	184 lm/W	10015 lm	175 lm/W	7517-10445	Linearis Z G2 L140 W20 6500 950
	5700	1621 lm	205 lm/W	7216 lm	184 lm/W	10015 lm	175 lm/W	7517-10446	Linearis Z G2 L140 W20 6500 957
	6500	1604 lm	203 lm/W	7143 lm	182 lm/W	9913 lm	173 lm/W	7517-10447	Linearis Z G2 L140 W20 6500 965

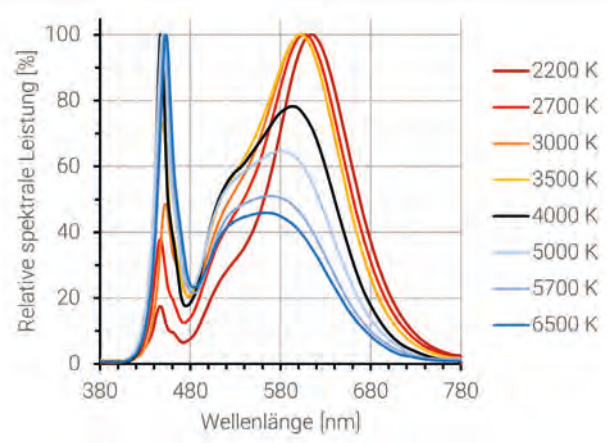
Up to 10015 lm!

Technical data: Linearis Z - Industry standard linear modules

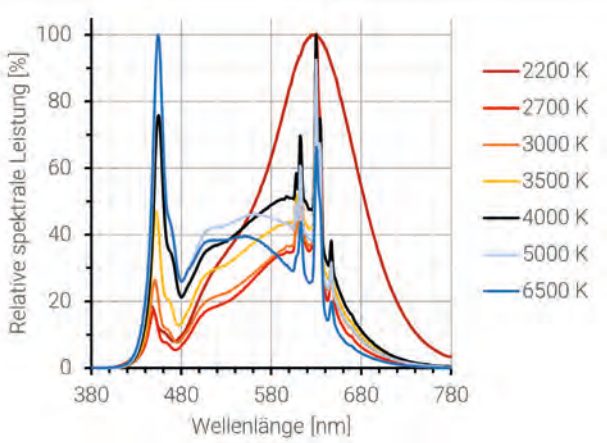
Light distribution curve



Spectrum CRI 80



Spectrum CRI 90



Lifetime of the LEDs used

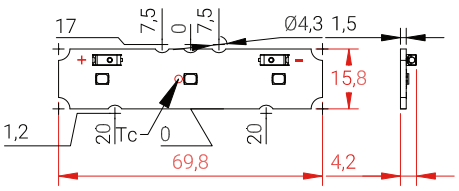
- The lifetime data is based on TM21 extrapolations of the available LM80 data of the LEDs used. They are to be regarded as purely informative data from which no warranty claim can be derived.

description	If	Tc	L70 B50	L70 B10	L80 B50	L80 B10	L90 B50	L90 B10
Linearis Z G2 L... W... ... 8/9xx	500 mA	80 °C	> 102000 h	> 102000 h	> 102000 h	> 102000 h	> 50000 h	> 50000 h

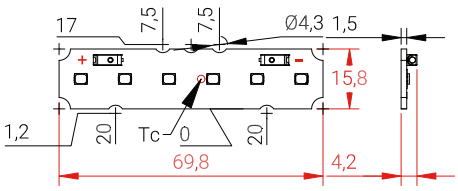
Technical drawings: Linearis Z - Industry standard linear modules

Linearis Z L7

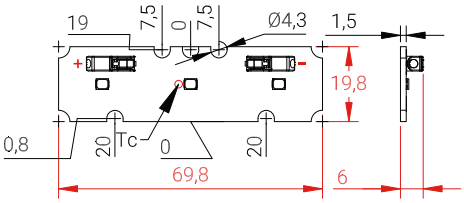
Lineraris Z G2 L7 W16 165 ...



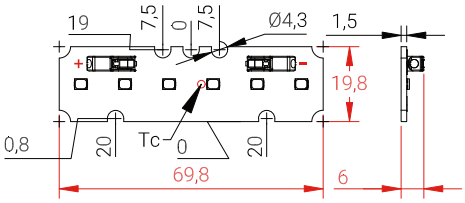
Lineraris Z G2 L7 W16 325 ...



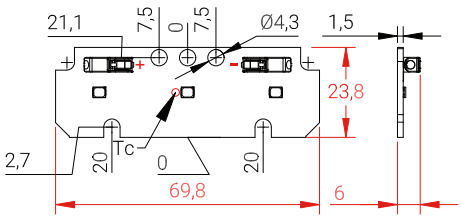
Lineraris Z G2 L7 W20 165 ...



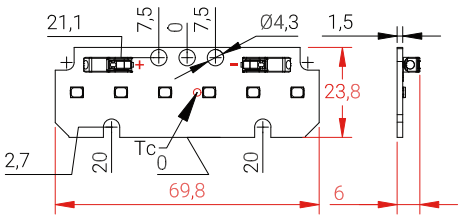
Lineraris Z G2 L7 W20 325 ...



Lineraris Z G2 L7 W24 165 ...

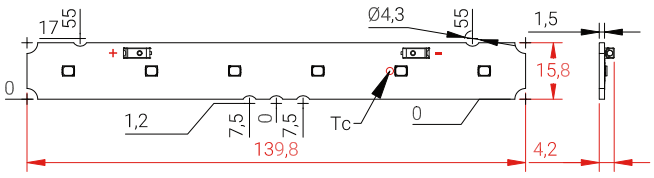


Lineraris Z G2 L7 W24 325 ...

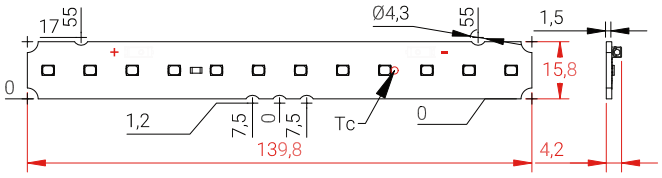


Linearis Z L14

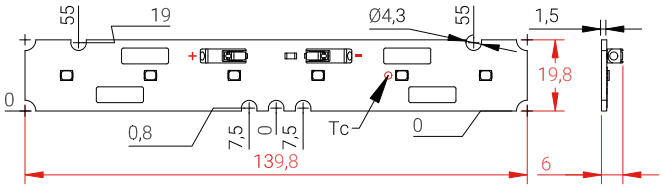
Linearis Z G2 L14 W16 325 ...



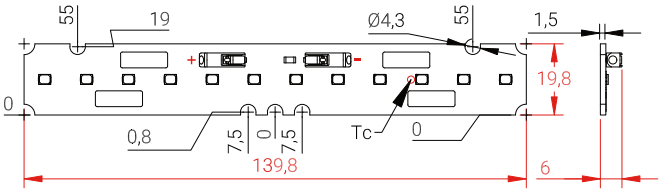
Linearis Z G2 L14 W16 650 ...



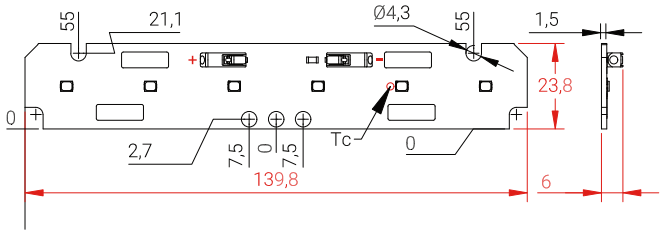
Linearis Z G2 L14 W20 325 ...



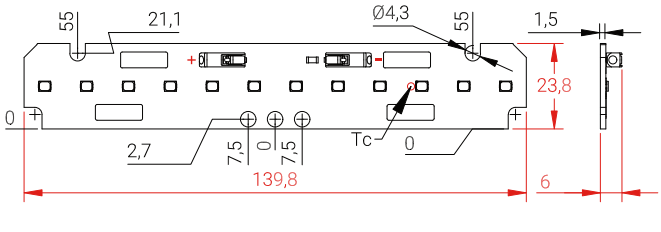
Linearis Z G2 L14 W20 650 ...



Linearis Z G2 L14 W24 325 ...

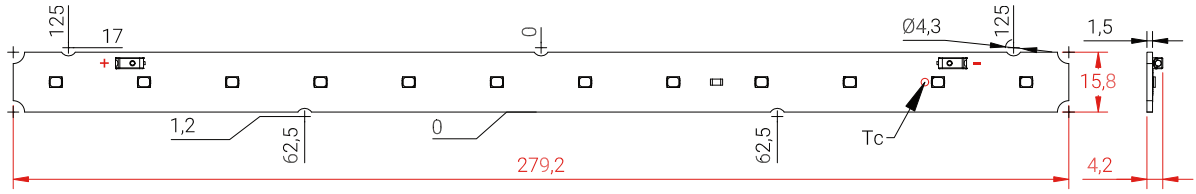


Linearis Z G2 L14 W24 650 ...

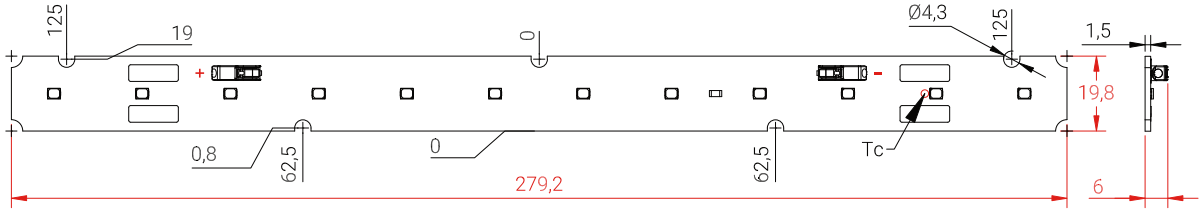


Linearis Z L28

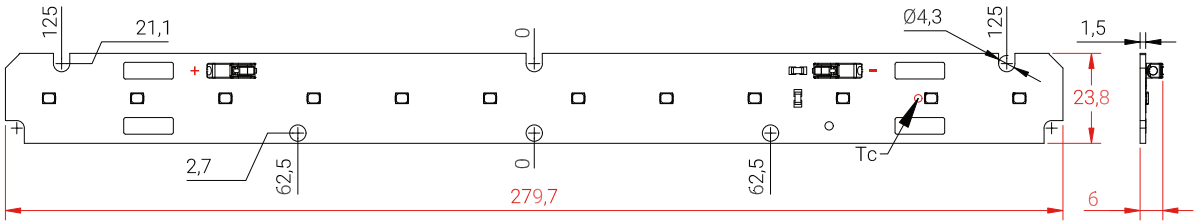
Linearis Z G2 L28 W16 650 ...



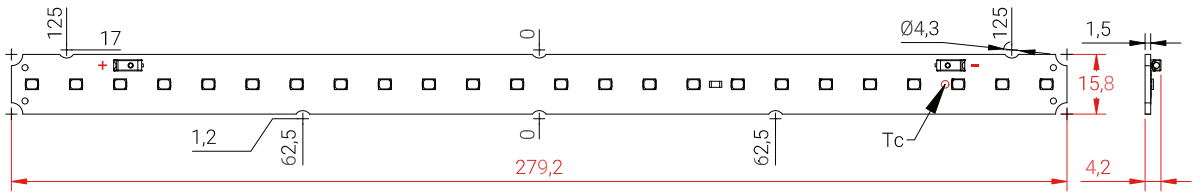
Linearis Z G2 L28 W20 650 ...



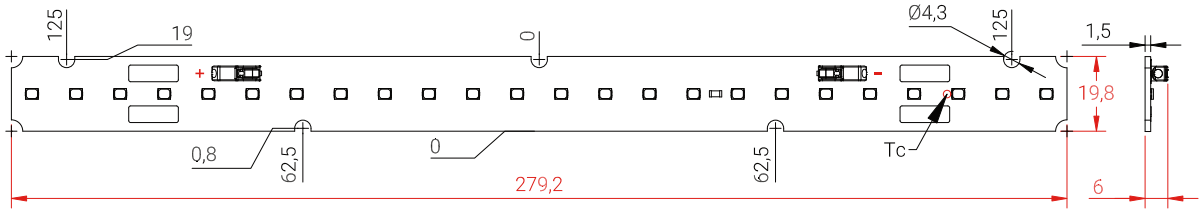
Linearis Z G2 L28 W24 650 ...



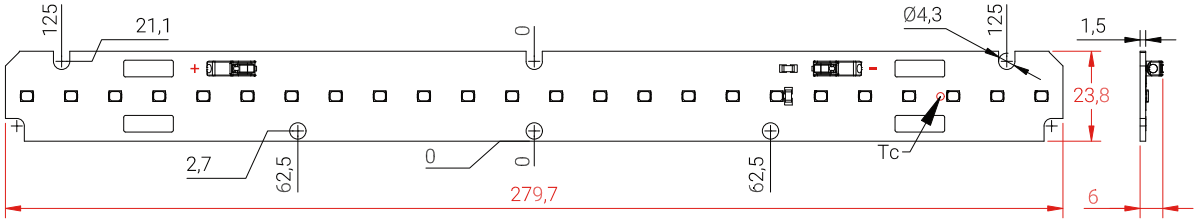
Linearis Z G2 L28 W16 1300 ...



Linearis Z G2 L28 W20 1300 ....

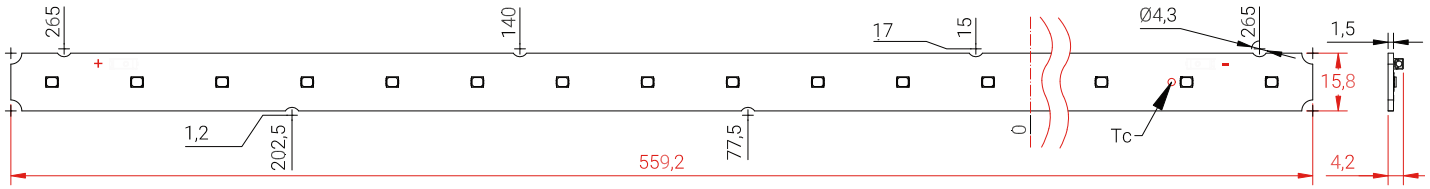


Linearis Z G2 L28 W24 1300 ....

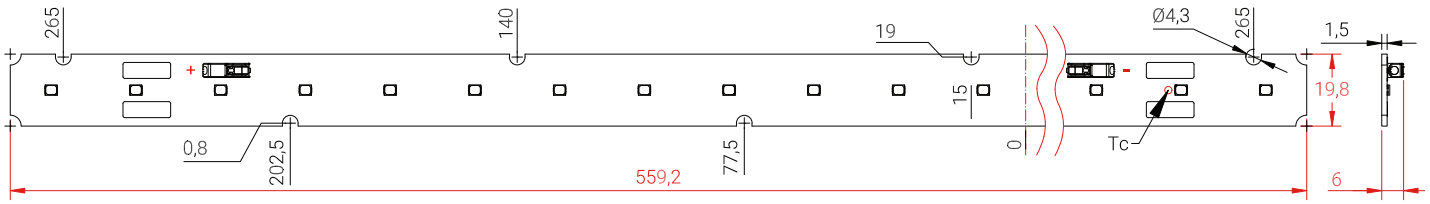


Linearis Z L56

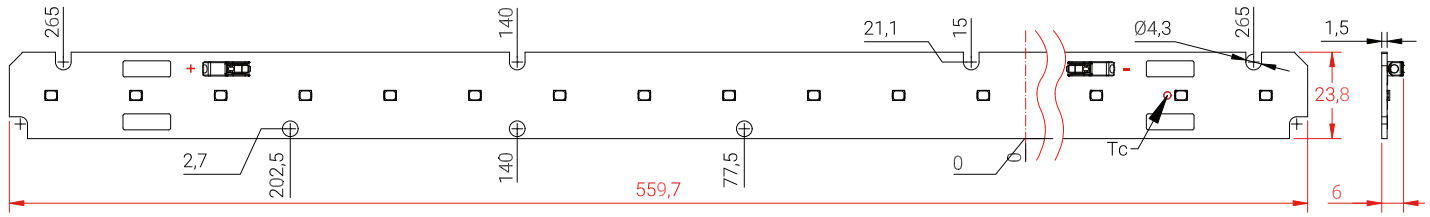
Linearis Z G2 L56 W16 1300 ...



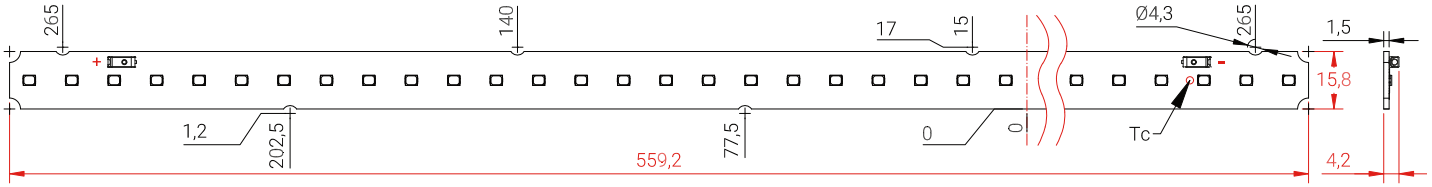
Linearis Z G2 L56 W20 1300 ...



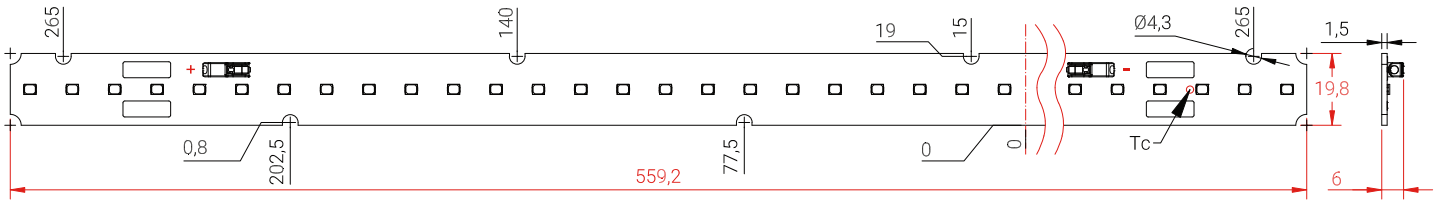
Linearis Z G2 L56 W24 1300 ...



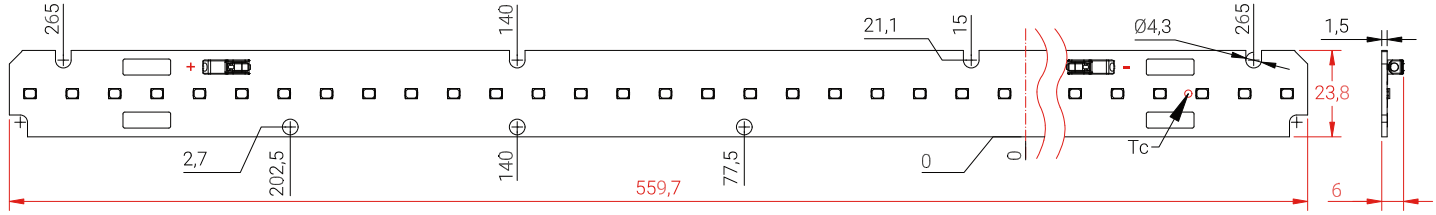
Linearis Z G2 L56 W16 2600 ...



Linearis Z G2 L56 W20 2600 ....

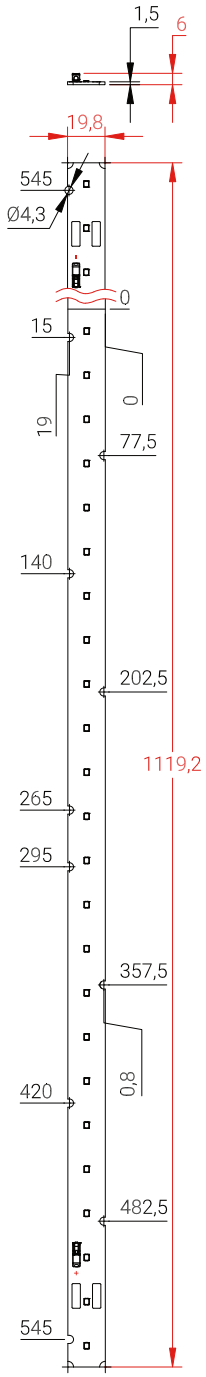


Linearis Z G2 L56 W24 2600 ....

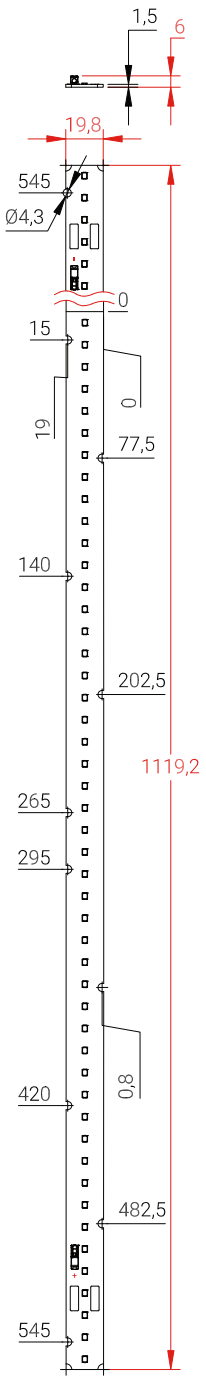


Linearis Z 112

Linearis Z G2 L112 W20 2600 ...

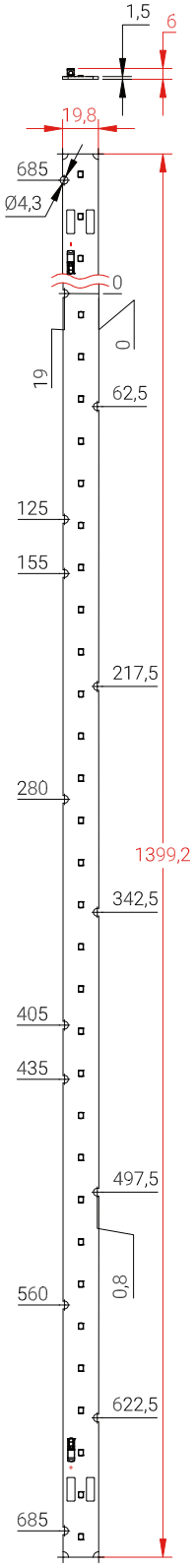


Linearis Z G2 L112 W20 5200 ...

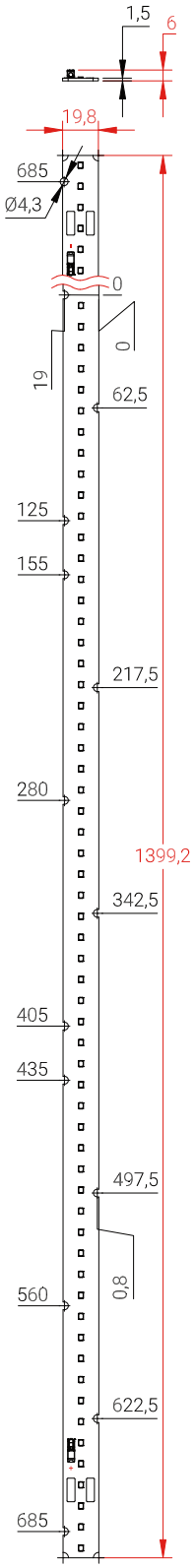


Linearis Z 140

Linearis Z G2 L140 W20 3250 ...



Linearis Z G2 L140 W20 6500 ...

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Linearis Z LV - Extralong standard linear modules in SELV

Linearis Z LV

Our standard modules of the iX-led Linearis Z LV series are Zhaga-compliant LED modules that are available at short notice and are ideal for installation in luminaires.

Compared to the Linearis-Z module family, the Linearis Z LV are designed for more universal connections. They have four terminals, so that a single-sided supply is possible.

Due to a special switching of the LEDs, the modules are designed for higher current. Nevertheless, they maintain a voltage of ≥ 50 V. Thus, the modules are excellently suited for installation in luminaires with SELV design.

They are available in two lengths: 1120 mm and 1400 mm, with a width of 20 mm.
The modules are each available in two luminous flux packages. The LED spacing is either 23.3 mm or 11.7 mm.

Color renderings of CRI 80 and CRI 90 are possible for white-equipped LED modules, and CRI 95 is available on request.

Choose from a variety of eight light colors: 2200 K, 2700 K, 3000 K, 3500 K, 4000 K, 5000 K, 5700 K and 6500 K. With this range, almost all lighting tasks can be solved.

The photometric bandwidth extends up to 216 lm/W or almost 10000 lm.
By selecting LEDs with a color consistency of 3 Step MacAdam, a high color homogeneity is achieved in the module.

Primarily our modules are developed for single applications, but can also be connected in series or parallel.

Choose your individual solution from our wide range of components.

Our iX-led standard modules are available at short notice, even in small quantities, and are very advantageous in the overall concept.

Standard does not mean rigid and unchangeable!

Do you need different light colors, different color renderings or minimally shorter/longer versions of the modules? You need the assembly of soldering nuts as spacers or a threaded insert for simplified mounting of the module? No problem. Other terminals or soldered cables are also possible. With the **iX-led product family** we can adapt and individualize the standard to your needs.

Explore our exclusive module series with more than 1000 lighting possibilities.

LED module with mid-power LEDs for installation in luminaires.

Versatile with:

√ 2 lengths: 1120 mm und 1400 mm
√ 2 luminous flux packages: pitch distance 23.3 mm and 11.7 mm
√ 2 color renderings: CRI 80 and CRI 90
√ 8 light colors: 2200 K, 2700 K, 3000 K, 3500 K, 4000 K, 5000 K, 5700 K and 6500 K

Excellent color consistency in the module: 3 Step MacAdam LEDs.

Plug-in terminals for easy and quick mounting.

For operation on suitable constant current drivers.

Maximum working voltage	250 V
Ambient temperature	-20… + 50 °C
Max. perm. operating temperature (Tc)	80 °C
EPREL database entry	yes
Beam angle	120°

Connections:

Terminals		4
Connection type		rigid / flexible
Conductor cross section AWG		AWG 18-24
Conductor cross section	min	0.2 mm²
	max	0.75 mm²
Stripping length		8 - 9 mm

Also available with other terminals on request.
Please also refer to the technical data of the Linearis Z LV family on page 56.

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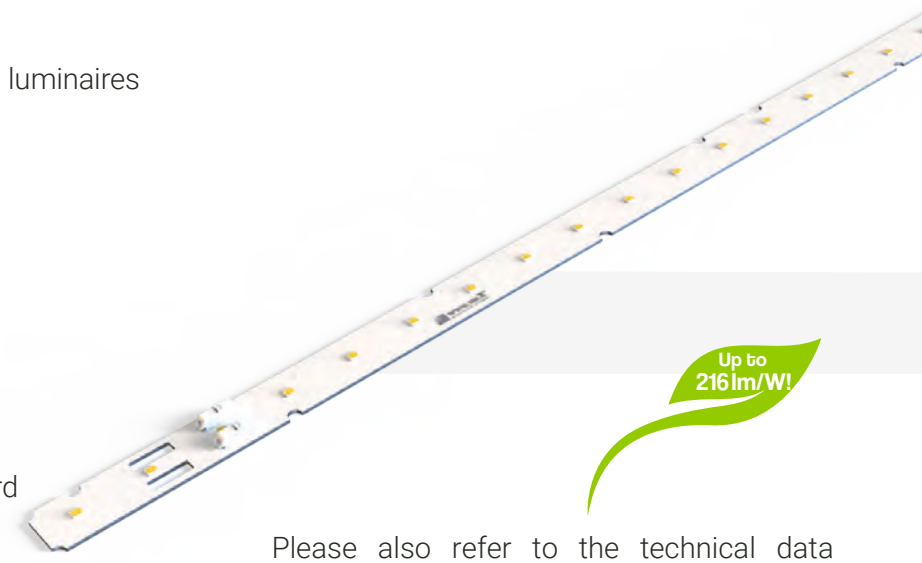
Linearis Z LV L112 2600 - Extra long industry standard linear modules in SELV

√ linear module in SELV for installation in luminaires
√ 48 Mid-Power-LEDs
√ pitch distance 23.3 mm
√ length 1120 mm
√ width 20 mm
√ 4 connection terminals
√ rated current 700 mA
√ maximum operating current 1050 mA
√ maximum forward voltage 24.8 V
√ meets the well-known industry standard



Up to 216 lm/W!

Please also refer to the technical data of the Linearis Z LV family on page 50. Further technical data and drawings from page 56.

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 150 mA Tc = 25 °C		If = 700 mA Tc = 25 °C		If = 1050 mA Tc = 25 °C			
≥80	2200	524 lm	170 lm/W	2322 lm	152 lm/W	3369 lm	143 lm/W	7517-10448	Linearis Z LV G2 L112 W20 2600 822
	2700	612 lm	192 lm/W	2710 lm	172 lm/W	3932 lm	162 lm/W	7517-10449	Linearis Z LV G2 L112 W20 2600 827
	3000	652 lm	206 lm/W	2888 lm	184 lm/W	4191 lm	174 lm/W	7517-10450	Linearis Z LV G2 L112 W20 2600 830
	3500	652 lm	206 lm/W	2888 lm	184 lm/W	4191 lm	174 lm/W	7517-10451	Linearis Z LV G2 L112 W20 2600 835
	4000	677 lm	216 lm/W	3001 lm	193 lm/W	4355 lm	182 lm/W	7517-10452	Linearis Z LV G2 L112 W20 2600 840
	5000	677 lm	216 lm/W	3001 lm	193 lm/W	4355 lm	182 lm/W	7517-10453	Linearis Z LV G2 L112 W20 2600 850
	5700	677 lm	216 lm/W	3001 lm	193 lm/W	4355 lm	182 lm/W	7517-10454	Linearis Z LV G2 L112 W20 2600 857
	6500	677 lm	216 lm/W	3001 lm	193 lm/W	4355 lm	182 lm/W	7517-10455	Linearis Z LV G2 L112 W20 2600 865

Up to 4355 lm!

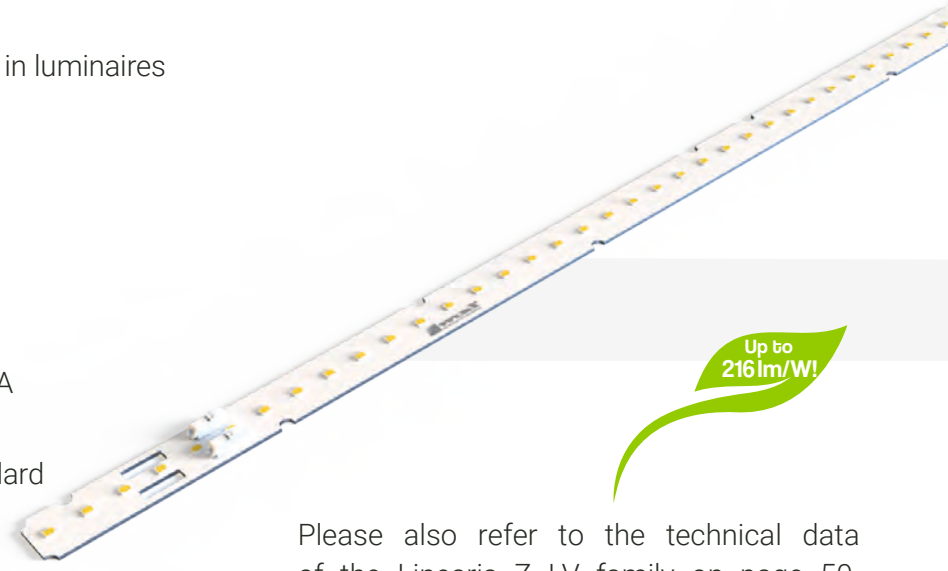
CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 150 mA Tc = 25 °C		If = 700 mA Tc = 25 °C		If = 1050 mA Tc = 25 °C			
≥90	2200	447 lm	141 lm/W	1982 lm	126 lm/W	2875 lm	119 lm/W	7517-10456	Linearis Z LV G2 L112 W20 2600 922
	2700	613 lm	194 lm/W	2729 lm	174 lm/W	3958 lm	164 lm/W	7517-10457	Linearis Z LV G2 L112 W20 2600 927
	3000	626 lm	198 lm/W	2788 lm	178 lm/W	4044 lm	168 lm/W	7517-10458	Linearis Z LV G2 L112 W20 2600 930
	3500	642 lm	203 lm/W	2857 lm	182 lm/W	4144 lm	172 lm/W	7517-10459	Linearis Z LV G2 L112 W20 2600 935
	4000	648 lm	205 lm/W	2887 lm	184 lm/W	4186 lm	174 lm/W	7517-10460	Linearis Z LV G2 L112 W20 2600 940
	5000	648 lm	205 lm/W	2887 lm	184 lm/W	4186 lm	174 lm/W	7517-10461	Linearis Z LV G2 L112 W20 2600 950
	5700	648 lm	205 lm/W	2887 lm	184 lm/W	4186 lm	174 lm/W	7517-10462	Linearis Z LV G2 L112 W20 2600 957
	6500	642 lm	203 lm/W	2857 lm	182 lm/W	4144 lm	172 lm/W	7517-10463	Linearis Z LV G2 L112 W20 2600 965

NEW: CRI 90 IN KSF-Technology

Up to 4186 lm!

Linearis Z LV L112 5200 - Extra long industry standard linear modules in SELV

√ linear module in SELV for installation in luminaires
√ 96 Mid-Power-LEDs
√ pitch distance 11.7 mm
√ length 1120 mm
√ width 20 mm
√ 4 connection terminals
√ rated current 1400 mA
√ maximum operating current 2100 mA
√ maximum forward voltage 24.8 V
√ meets the well-known industry standard



Up to 216 lm/W!

Please also refer to the technical data of the Linearis Z LV family on page 50. Further technical data and drawings from page 56.

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 300 mA Tc = 25 °C		If = 1400 mA Tc = 25 °C		If = 2100 mA Tc = 25 °C			
≥80	2200	1048 lm	170 lm/W	4644 lm	152 lm/W	6739 lm	143 lm/W	7517-10464	Linearis Z LV G2 L112 W20 5200 822
	2700	1224 lm	192 lm/W	5421 lm	172 lm/W	7865 lm	162 lm/W	7517-10465	Linearis Z LV G2 L112 W20 5200 827
	3000	1304 lm	206 lm/W	5776 lm	184 lm/W	8381 lm	174 lm/W	7517-10466	Linearis Z LV G2 L112 W20 5200 830
	3500	1304 lm	206 lm/W	5776 lm	184 lm/W	8381 lm	174 lm/W	7517-10467	Linearis Z LV G2 L112 W20 5200 835
	4000	1355 lm	216 lm/W	6003 lm	193 lm/W	8710 lm	182 lm/W	7517-10468	Linearis Z LV G2 L112 W20 5200 840
	5000	1355 lm	216 lm/W	6003 lm	193 lm/W	8710 lm	182 lm/W	7517-10469	Linearis Z LV G2 L112 W20 5200 850
	5700	1355 lm	216 lm/W	6003 lm	193 lm/W	8710 lm	182 lm/W	7517-10470	Linearis Z LV G2 L112 W20 5200 857
	6500	1355 lm	216 lm/W	6003 lm	193 lm/W	8710 lm	182 lm/W	7517-10471	Linearis Z LV G2 L112 W20 5200 865

Up to 8710 lm!

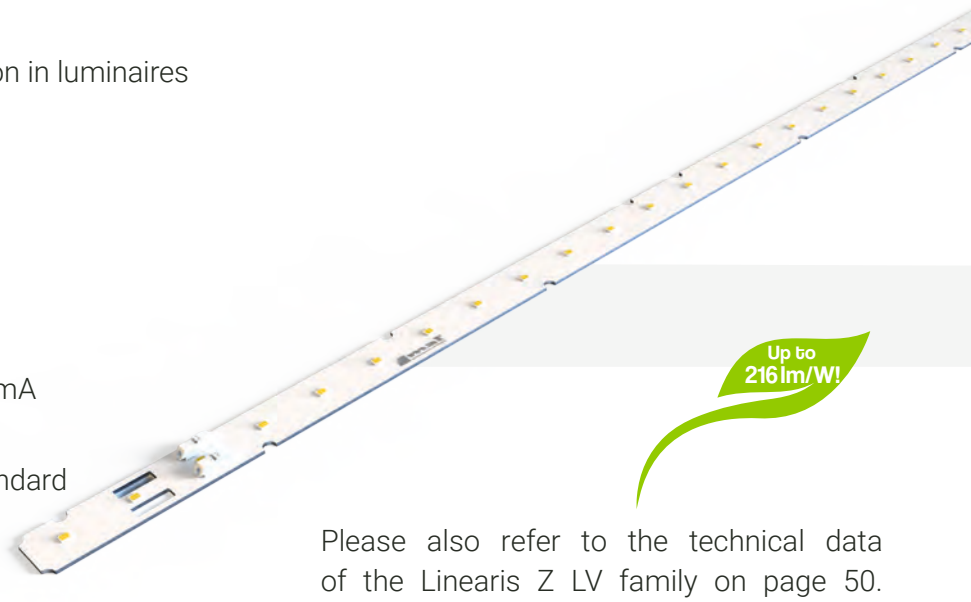
CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 300 mA Tc = 25 °C		If = 1400 mA Tc = 25 °C		If = 2100 mA Tc = 25 °C			
≥90	2200	895 lm	141 lm/W	3964 lm	126 lm/W	5751 lm	119 lm/W	7517-10472	Linearis Z LV G2 L112 W20 5200 922
	2700	1226 lm	194 lm/W	5459 lm	174 lm/W	7917 lm	164 lm/W	7517-10473	Linearis Z LV G2 L112 W20 5200 927
	3000	1252 lm	198 lm/W	5577 lm	178 lm/W	8088 lm	168 lm/W	7517-10474	Linearis Z LV G2 L112 W20 5200 930
	3500	1283 lm	203 lm/W	5714 lm	182 lm/W	8287 lm	172 lm/W	7517-10475	Linearis Z LV G2 L112 W20 5200 935
	4000	1296 lm	205 lm/W	5773 lm	184 lm/W	8372 lm	174 lm/W	7517-10476	Linearis Z LV G2 L112 W20 5200 940
	5000	1296 lm	205 lm/W	5773 lm	184 lm/W	8372 lm	174 lm/W	7517-10477	Linearis Z LV G2 L112 W20 5200 950
	5700	1296 lm	205 lm/W	5773 lm	184 lm/W	8372 lm	174 lm/W	7517-10478	Linearis Z LV G2 L112 W20 5200 957
	6500	1283 lm	203 lm/W	5714 lm	182 lm/W	8287 lm	172 lm/W	7517-10479	Linearis Z LV G2 L112 W20 5200 965

NEW: CRI 90 IN KSF-Technology

Up to 8372 lm!

Linearis Z LV L140 3250 - Extra long industry standard linear modules in SELV

√ linear module in SELV for installation in luminaires
√ 60 Mid-Power-LEDs
√ pitch distance 23.3 mm
√ length 1400 mm
√ width 20 mm
√ 4 connection terminals
√ rated current 700 mA
√ maximum operating current 1050 mA
√ maximum forward voltage 31 V
√ meets the well-known industry standard



Up to 216 lm/W!

Please also refer to the technical data of the Linearis Z LV family on page 50. Further technical data and drawings from page 56.

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 150 mA Tc = 25 °C		If = 700 mA Tc = 25 °C		If = 1050 mA Tc = 25 °C			
≥80	2200	655 lm	170 lm/W	2902 lm	152 lm/W	4212 lm	143 lm/W	7517-10480	Linearis Z LV G2 L140 W20 3250 822
	2700	765 lm	192 lm/W	3388 lm	172 lm/W	4915 lm	162 lm/W	7517-10481	Linearis Z LV G2 L140 W20 3250 827
	3000	815 lm	206 lm/W	3610 lm	184 lm/W	5238 lm	174 lm/W	7517-10482	Linearis Z LV G2 L140 W20 3250 830
	3500	815 lm	206 lm/W	3610 lm	184 lm/W	5238 lm	174 lm/W	7517-10483	Linearis Z LV G2 L140 W20 3250 835
	4000	847 lm	216 lm/W	3752 lm	193 lm/W	5444 lm	182 lm/W	7517-10484	Linearis Z LV G2 L140 W20 3250 840
	5000	847 lm	216 lm/W	3752 lm	193 lm/W	5444 lm	182 lm/W	7517-10485	Linearis Z LV G2 L140 W20 3250 850
	5700	847 lm	216 lm/W	3752 lm	193 lm/W	5444 lm	182 lm/W	7517-10486	Linearis Z LV G2 L140 W20 3250 857
	6500	847 lm	216 lm/W	3752 lm	193 lm/W	5444 lm	182 lm/W	7517-10487	Linearis Z LV G2 L140 W20 3250 865

Up to 5444 lm!

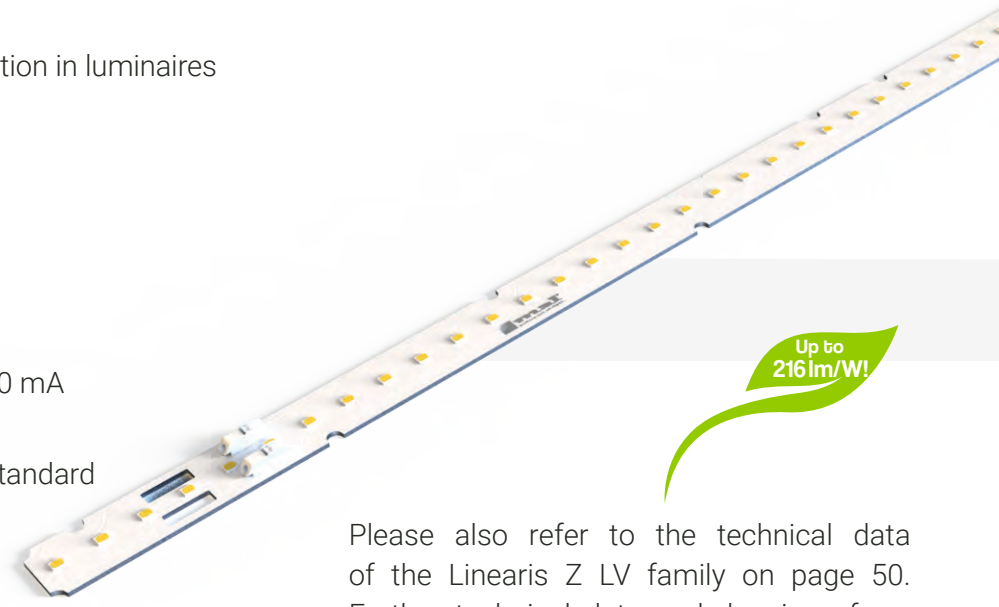
NEW: CRI 90 IN KSF-Technology

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 150 mA Tc = 25 °C		If = 700 mA Tc = 25 °C		If = 1050 mA Tc = 25 °C			
≥90	2200	559 lm	141 lm/W	2477 lm	126 lm/W	3594 lm	119 lm/W	7517-10488	Linearis Z LV G2 L140 W20 3250 922
	2700	766 lm	194 lm/W	3412 lm	174 lm/W	4948 lm	164 lm/W	7517-10489	Linearis Z LV G2 L140 W20 3250 927
	3000	783 lm	198 lm/W	3485 lm	178 lm/W	5055 lm	168 lm/W	7517-10490	Linearis Z LV G2 L140 W20 3250 930
	3500	802 lm	203 lm/W	3571 lm	182 lm/W	5179 lm	172 lm/W	7517-10491	Linearis Z LV G2 L140 W20 3250 935
	4000	810 lm	205 lm/W	3608 lm	184 lm/W	5233 lm	174 lm/W	7517-10492	Linearis Z LV G2 L140 W20 3250 940
	5000	810 lm	205 lm/W	3608 lm	184 lm/W	5233 lm	174 lm/W	7517-10493	Linearis Z LV G2 L140 W20 3250 950
	5700	810 lm	205 lm/W	3608 lm	184 lm/W	5233 lm	174 lm/W	7517-10494	Linearis Z LV G2 L140 W20 3250 957
	6500	802 lm	203 lm/W	3571 lm	182 lm/W	5179 lm	172 lm/W	7517-10495	Linearis Z LV G2 L140 W20 3250 965

Up to 5233 lm!

Linearis Z LV L140 6500 - Extra long industry standard linear modules in SELV

√ linear module in SELV for installation in luminaires
√ 120 Mid-Power-LEDs
√ pitch distance 11.7 mm
√ length 1400 mm
√ width 20 mm
√ 4 connection terminals
√ rated current 1400 mA
√ maximum operating current 2100 mA
√ maximum forward voltage 31 V
√ meets the well-known industry standard



Up to 216 lm/W!

Please also refer to the technical data of the Linearis Z LV family on page 50. Further technical data and drawings from page 56.

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 300 mA Tc = 25 °C		If = 1400 mA Tc = 25 °C		If = 2100 mA Tc = 25 °C			
≥80	2200	1310 lm	170 lm/W	5805 lm	152 lm/W	8424 lm	143 lm/W	7517-10496	Linearis Z LV G2 L140 W20 6500 822
	2700	1530 lm	192 lm/W	6776 lm	172 lm/W	9831 lm	162 lm/W	7517-10497	Linearis Z LV G2 L140 W20 6500 827
	3000	1630 lm	206 lm/W	7220 lm	184 lm/W	10476 lm	174 lm/W	7517-10498	Linearis Z LV G2 L140 W20 6500 830
	3500	1630 lm	206 lm/W	7220 lm	184 lm/W	10476 lm	174 lm/W	7517-10499	Linearis Z LV G2 L140 W20 6500 835
	4000	1694 lm	216 lm/W	7503 lm	193 lm/W	10887 lm	182 lm/W	7517-10500	Linearis Z LV G2 L140 W20 6500 840
	5000	1694 lm	216 lm/W	7503 lm	193 lm/W	10887 lm	182 lm/W	7517-10501	Linearis Z LV G2 L140 W20 6500 850
	5700	1694 lm	216 lm/W	7503 lm	193 lm/W	10887 lm	182 lm/W	7517-10502	Linearis Z LV G2 L140 W20 6500 857
	6500	1694 lm	216 lm/W	7503 lm	193 lm/W	10887 lm	182 lm/W	7517-10503	Linearis Z LV G2 L140 W20 6500 865

Up to 10887 lm!

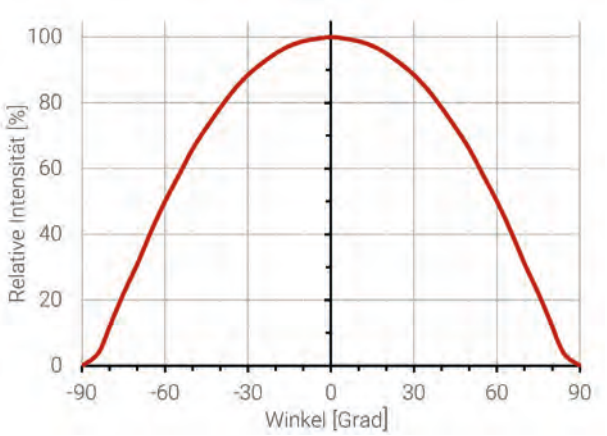
NEW: CRI 90 IN KSF-Technology

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 300 mA Tc = 25 °C		If = 1400 mA Tc = 25 °C		If = 2100 mA Tc = 25 °C			
≥90	2200	1118 lm	141 lm/W	4954 lm	126 lm/W	7188 lm	119 lm/W	7517-10504	Linearis Z LV G2 L140 W20 6500 922
	2700	1532 lm	194 lm/W	6824 lm	174 lm/W	9896 lm	164 lm/W	7517-10505	Linearis Z LV G2 L140 W20 6500 927
	3000	1565 lm	198 lm/W	6971 lm	178 lm/W	10110 lm	168 lm/W	7517-10506	Linearis Z LV G2 L140 W20 6500 930
	3500	1604 lm	203 lm/W	7143 lm	182 lm/W	10359 lm	172 lm/W	7517-10507	Linearis Z LV G2 L140 W20 6500 935
	4000	1621 lm	205 lm/W	7216 lm	184 lm/W	10466 lm	174 lm/W	7517-10508	Linearis Z LV G2 L140 W20 6500 940
	5000	1621 lm	205 lm/W	7216 lm	184 lm/W	10466 lm	174 lm/W	7517-10509	Linearis Z LV G2 L140 W20 6500 950
	5700	1621 lm	205 lm/W	7216 lm	184 lm/W	10466 lm	174 lm/W	7517-10510	Linearis Z LV G2 L140 W20 6500 957
	6500	1604 lm	203 lm/W	7143 lm	182 lm/W	10359 lm	172 lm/W	7517-10511	Linearis Z LV G2 L140 W20 6500 965

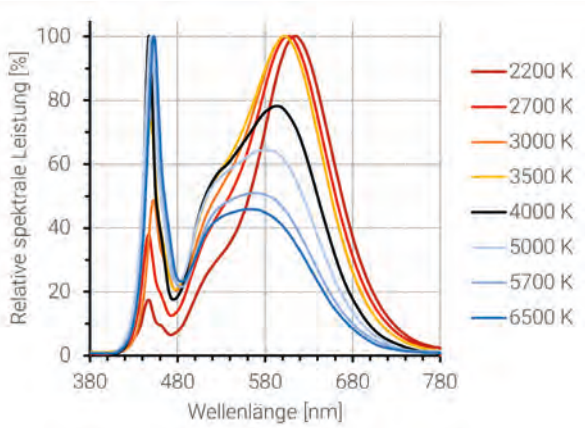
Up to 10466 lm!

Technical data: Linearis Z LV - Extra long industry standard linear modules in SELV

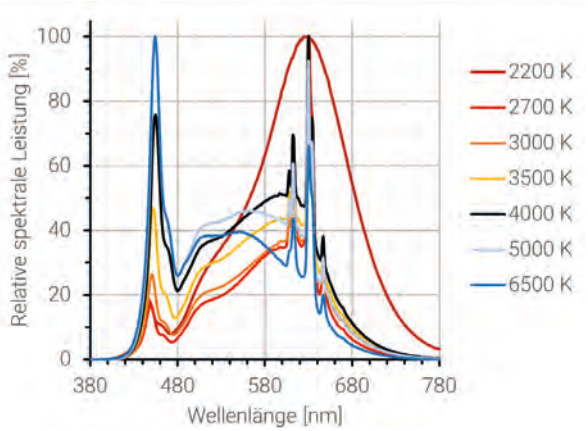
Light distribution curve



Spectrum CRI 80



Spectrum CRI 90



Lifetime of the LEDs used

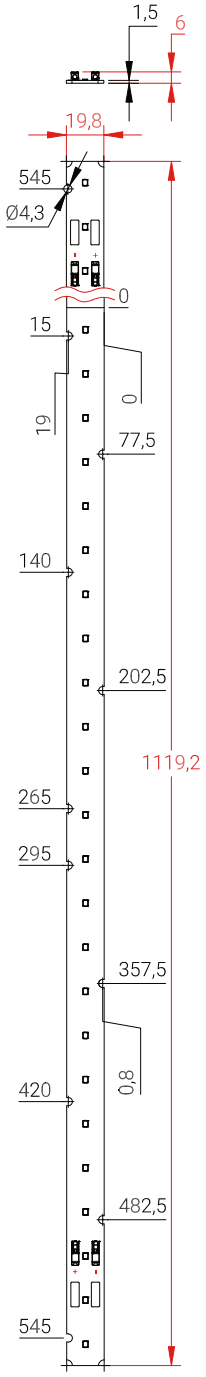
- The lifetime data is based on TM21 extrapolations of the available LM80 data of the LEDs used. They are to be regarded as purely informative data from which no warranty claim can be derived.

description	If	Tc	L70 B50	L70 B10	L80 B50	L80 B10	L90 B50	L90 B10
Linearis Z LV G2 L112 W20 2600 8/9xx	1050 mA	80 °C	> 102000 h	> 102000 h	> 102000 h	> 102000 h	> 50000 h	> 50000 h
Linearis Z LV G2 L112 W20 5200 8/9xx	2100 mA	80 °C	> 102000 h	> 102000 h	> 102000 h	> 102000 h	> 50000 h	> 50000 h
Linearis Z LV G2 L140 W20 3250 8/9xx	1050 mA	80 °C	> 102000 h	> 102000 h	> 102000 h	> 102000 h	> 50000 h	> 50000 h
Linearis Z LV G2 L140 W20 6500 8/9xx	2100 mA	80 °C	> 102000 h	> 102000 h	> 102000 h	> 102000 h	> 50000 h	> 50000 h

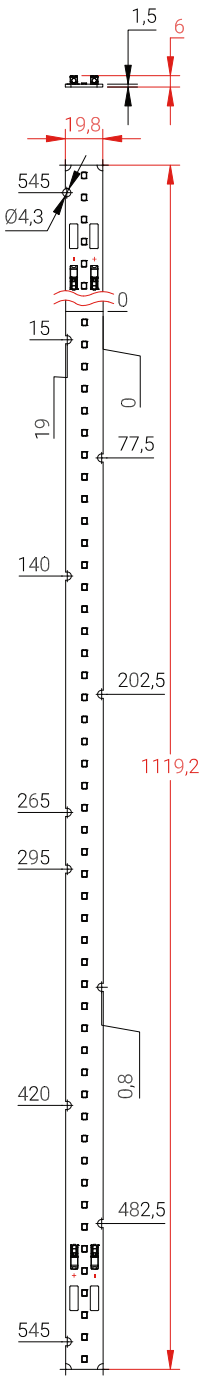
Technical drawings: Linearis Z LV - Extra long industry standard linear modules in SELV

Linearis Z LV112

Linearis Z LV G2 L112 W20 2600 ...

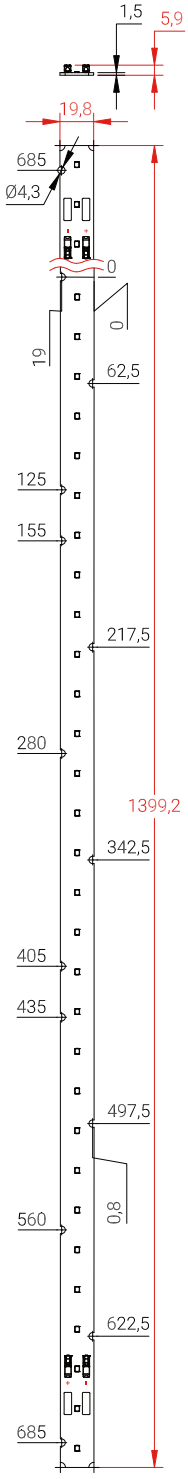


Linearis Z LV G2 L112 W20 5200 ...

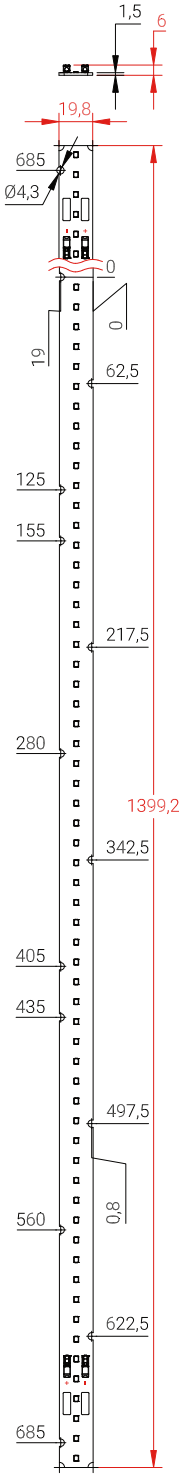


Linearis Z LV140

Linearis Z LV G2 L140 W20 3250 ...



Linearis Z LV G2 L140 W20 6500 ...



Linearis Z 3x11 – Industry standard 3x11 modules

Linearis Z 3x11

3x11 LED modules have become well established in general use on the market. Many luminaire manufacturers therefore base their luminaires on this format. There are already many lenses and optics for these modules freely available, which allows the implementation of many applications in luminaires.

We offer 3x11 LED-modules as well.

You can choose from seven light colors: CCT 2700 K, 3000 K, 3500 K, 4000 K, 5000 K, 5700 K and 6500 K and two color renderings: CRI 80 and CRI 90.
With a light bandwidth of 216 lm/W or just under 3000 lm, the LED modules are available to you for your lighting tasks at your disposal.

Our iX-led standard modules are available at short notice, even in small quantities, and are very advantageous in the overall concept.

Standard does not mean rigid and unchangeable!

Do you need different light colors, different color renderings or minimally shorter/longer versions of the modules? You need the assembly of soldering nuts as spacers or a threaded insert for simplified mounting of the module? No problem. Other terminals or soldered cables are also possible. With the **iX-led product family** we can adapt and individualize the standard to your needs.

Explore our exclusive module series with more than 1000 lighting possibilities.

LED module with 33 mid-power LEDs for installation in luminaires.

Versatile with:

√ Dimensions: 280 mm x 55 mm
√ 2 color renderings: CRI 80 and CRI 90
√ 7 light colors: CCT 2700 K, 3000 K, 3500 K, 4000 K, 5000 K, 5700 K and 6500 K

3-row

Excellent color consistency in the module: 3 Step MacAdam LEDs.

Plug-in terminals for easy and quick mounting.

For operation with suitable constant current drivers.

Maximum working voltage	250 V
Ambient temperature	-20…+50 °C
Max. perm. operating temperature (Tc)	80 °C
EPREL database entry	yes
Beam angle	120°

Connections:

Terminals		2
Connection type		rigid / flexible
Conductor cross section AWG		AWG 18-24
Conductor cross section	min	0.2 mm²
	max	0.75 mm²
Stripping length		8 - 9 mm

Also available with other terminals on request.

Please also refer to the technical data of the Linearis-Z family on page 40.

Did you know? Our **Linearis-Z 3x11 Modul** is **ENEC**-certified!

Linearis Z 3x11 L28 W55

Linearis Z 3x11 - Industry standard 3x11 modules

√ The classic - for installation in luminaires
√ 33 mid-power LEDs
√ pitch distance lengthwise 26 mm and crosswise 20 mm
√ length 280 mm
√ width 55 mm
√ 2 connection terminals

√ rated current 350 mA
√ maximum operating current 500 mA
√ maximum forward voltage 34.1 V
√ meets the well-known industry standard

Please also refer to the technical data of the Linearis Z 3x11 family on page 62. Further technical data and drawings from page 64.

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 75 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 500 mA Tc = 25 °C			
≥80	2700	421 lm	192 lm/W	1863 lm	172 lm/W	2587 lm	164 lm/W	7517-11000	Linearis Z 3x11 G2 L28 W55 827
	3000	448 lm	206 lm/W	1986 lm	184 lm/W	2757 lm	175 lm/W	7517-11001	Linearis Z 3x11 G2 L28 W55 830
	3500	448 lm	206 lm/W	1986 lm	184 lm/W	2757 lm	175 lm/W	7517-11002	Linearis Z 3x11 G2 L28 W55 835
	4000	466 lm	216 lm/W	2063 lm	193 lm/W	2865 lm	184 lm/W	7517-11003	Linearis Z 3x11 G2 L28 W55 840
	5000	466 lm	216 lm/W	2063 lm	193 lm/W	2865 lm	184 lm/W	7517-11004	Linearis Z 3x11 G2 L28 W55 850
	5700	466 lm	216 lm/W	2063 lm	193 lm/W	2865 lm	184 lm/W	7517-11005	Linearis Z 3x11 G2 L28 W55 857
	6500	466 lm	216 lm/W	2063 lm	193 lm/W	2865 lm	184 lm/W	7517-11006	Linearis Z 3x11 G2 L28 W55 865

Up to 2865 lm!

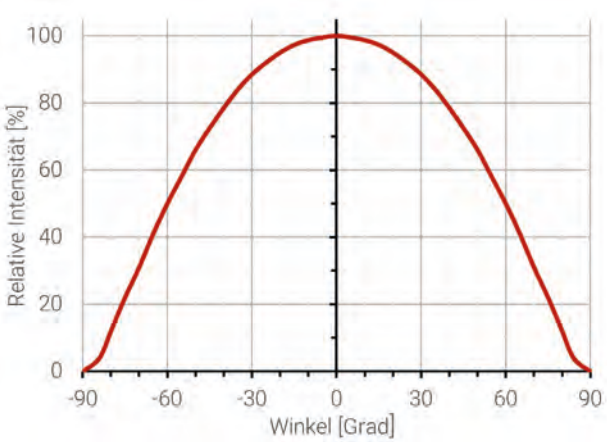
CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 75 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 500 mA Tc = 25 °C			
≥90	2700	421 lm	194 lm/W	1876 lm	174 lm/W	2604 lm	166 lm/W	7517-11007	Linearis Z 3x11 G2 L28 W55 927
	3000	431 lm	198 lm/W	1917 lm	178 lm/W	2660 lm	169 lm/W	7517-11008	Linearis Z 3x11 G2 L28 W55 930
	3500	441 lm	203 lm/W	1964 lm	182 lm/W	2726 lm	173 lm/W	7517-11009	Linearis Z 3x11 G2 L28 W55 935
	4000	446 lm	205 lm/W	1984 lm	184 lm/W	2754 lm	175 lm/W	7517-11010	Linearis Z 3x11 G2 L28 W55 940
	5000	446 lm	205 lm/W	1984 lm	184 lm/W	2754 lm	175 lm/W	7517-11011	Linearis Z 3x11 G2 L28 W55 950
	5700	446 lm	205 lm/W	1984 lm	184 lm/W	2754 lm	175 lm/W	7517-11012	Linearis Z 3x11 G2 L28 W55 957
	6500	441 lm	203 lm/W	1964 lm	182 lm/W	2726 lm	173 lm/W	7517-11013	Linearis Z 3x11 G2 L28 W55 965

NEW: CRI 90 IN KSF-Technology

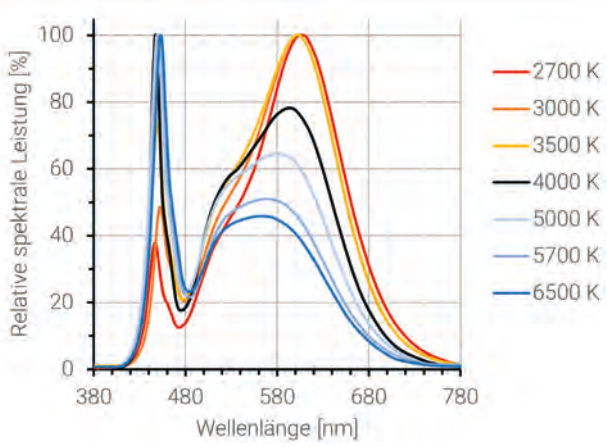
Up to 2754 lm!

Technical data: Linearis Z 3x11 - Industry standard 3x11 modules

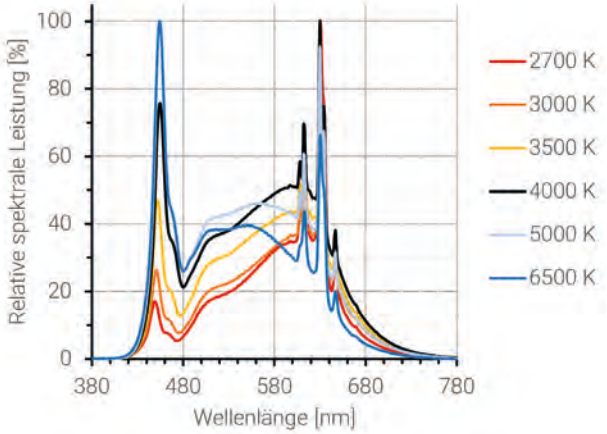
Light distribution curve



Spectrum CRI 80



Spectrum CRI 90



Lifetime of the LEDs used

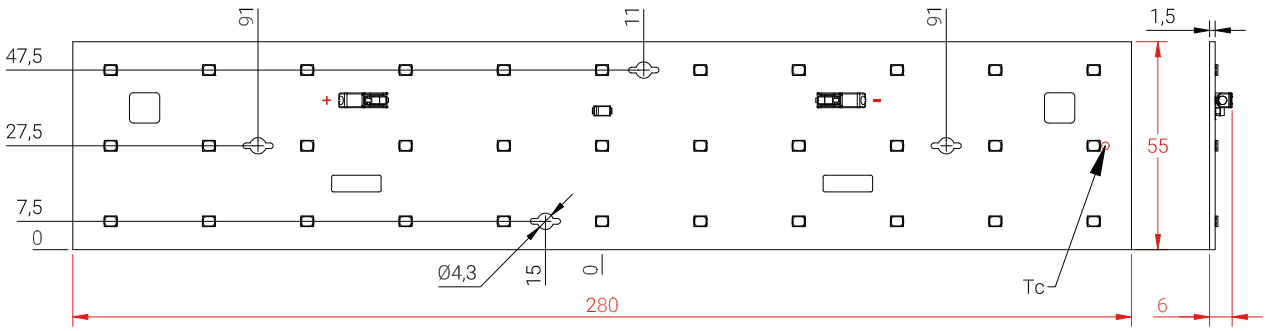
- The service life data is based on TM21 extrapolations of the available LM80 data of the LEDs used. They are to be regarded as purely informative data from which no warranty claim can be derived.

description	If	Tc	L70 B50	L70 B10	L80 B50	L80 B10	L90 B50	L90 B10
Linearis Z 3x11 G2 L28 W55 8/9xx	500 mA	80 °C	> 102000 h	> 102000 h	> 102000 h	> 102000 h	> 50000 h	> 50000 h

Technical drawing: Linearis Z 3x11 - Industry standard 3x11 modules

Linearis Z 3x11 L28

Linearis Z 3x11 G2 L28 W55 840



Opticus Daisy —
LED-modules for optics

Opticus Daisy

Our Opticus Daisy LED modules are optimally matched to LEDiL's popular Daisy optics. LEDiL offers with the product series „Daisy" excellent linear optics systems, which consist of different lenses and louvre elements. These can be combined with each other.

You can choose between **clear and frosted lenses**. The following options are available to you:

- 80° lens
- 50° lens
- 50° lens with improved glare control
- 35° lens
- 25° x 70° oval lens
- Asymmetry
- Wallwasher
- Lens for free standing luminaires

Combine these lenses with louvre elements. Choose between glossy or matte, as well as black, white and silver. You can choose from different dimensions for both the lenses and the louvre elements.

You are welcome to purchase the optics directly from us, just contact us.

With our Opticus Daisy LED modules, outputs of over 220 lm/W or almost 22000 lm are no problem. Choose between seven light colors: 2700 K, 3000 K, 3500 K, 4000 K, 5000 K, 5700 K and 6500 K and two color renderings: CRI 80 and CRI 90.

We offer **three different series**:

Opticus Daisy T

- several modules are connected together by parallel connection, resulting in an overall forward voltage
- with our Daisy-T-HCL modules a Tuneable White application is possible by two channels - for more information see page 268.

Opticus Daisy M

- several modules are interconnected by series connection
- optimized for standard operating currents 350 mA, 700 mA, 1050 mA

Opticus Daisy M1

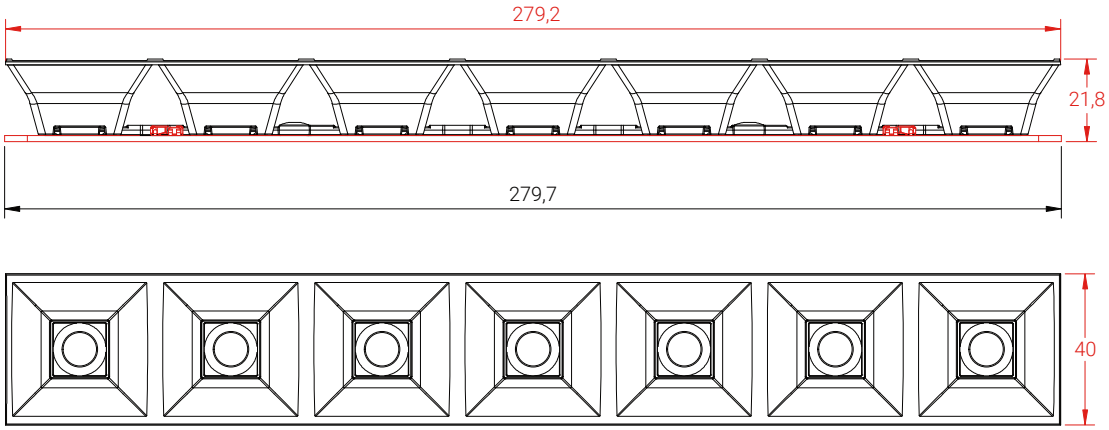
- several modules are connected to each other by series connection
- optimized for low operating currents

Matching optics from LEDiL for our Opticus Daisy module family

Our LED modules Opticus Daisy T, M and M1 are optimally matched to LEDiL's Daisy glare control and light control system.

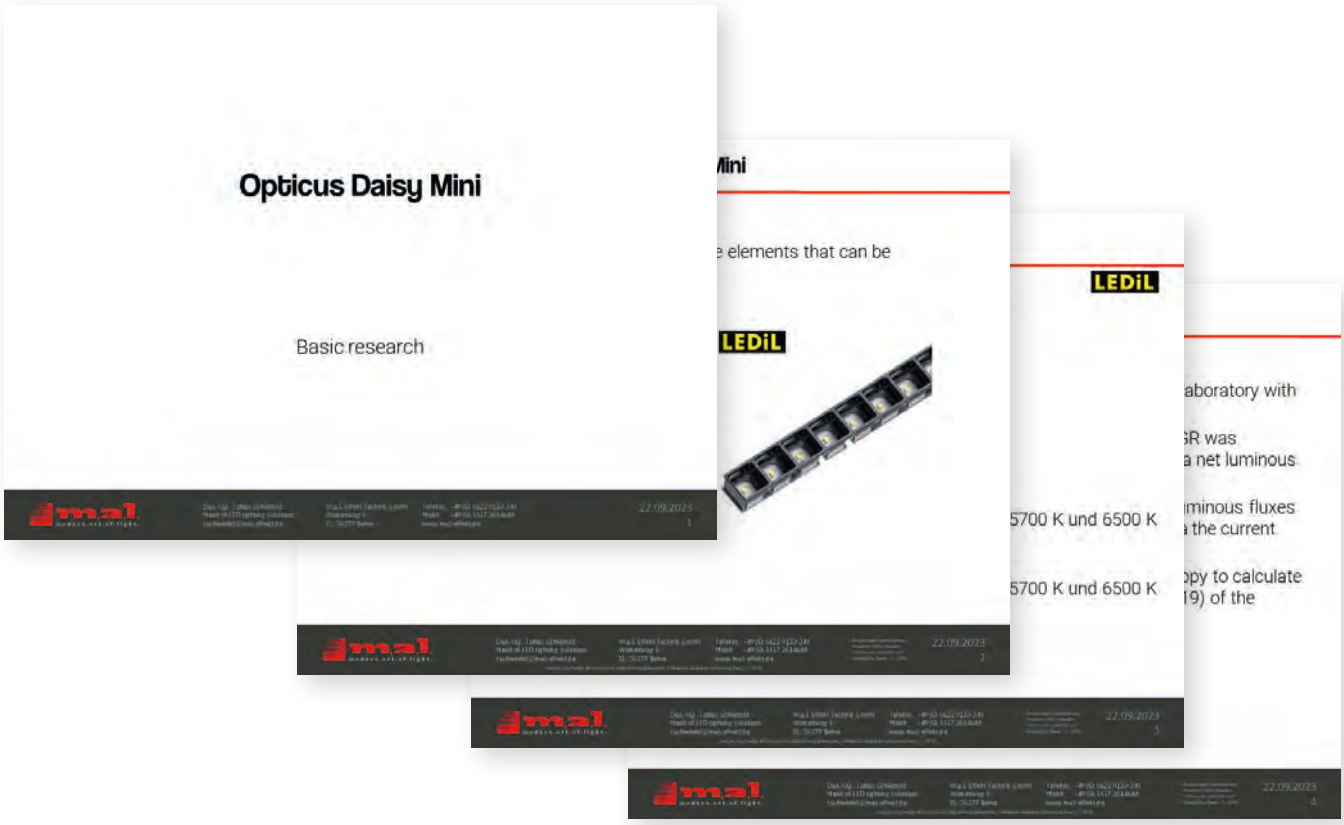
LEDiL offers a wide range of lenses and shades, so-called louvre elements. Lenses in clear and matte optics, with different beam angles, perform the primary task of creating the luminous intensity distribution curve. The louver elements in white, silver and black each in matt and high gloss take over the glare control.

The drawing shows the dimensions of the 7x1 version together with the Opticus Daisy LED module. Other dimensions 2x2, 4x1 to 28x1 are also available.



Quelle: https://www.ledil.com/search/?q=Daisy&q=Daisy

We will be happy to provide you with details on our LED modules in connection with LEDiL optics! Just contact us.



What else can you expect from Opticus Daisy? Our usual flexibility. Other variants are available on request - please contact us.

Our iX-led standard modules are available at short notice even in small quantities and are very advantageous in the overall concept.

Standard does not mean rigid and unchangeable!

Do you need different light colors, different color renderings or minimally shorter/longer versions of the modules? You need the assembly of soldering nuts as spacers or a threaded insert for simplified mounting of the module? No problem. Other terminals or soldered cables are also possible. With the **iX-led product family** we can adapt and individualize the standard to your needs.

Explore our exclusive module series with more than 1000 lighting possibilities.

Opticus Daisy M – Simple series connection

Opticus Daisy M

LED module with mid-power LEDs for installation in luminaires.

Versatile with:

√ 6 linear modules: 280 mm, 560 mm, 840 mm, 1120 mm and 1400 mm x 24 mm
√ 2x2 module: 62 mm x 62 mm
√ 2 color renderings: CRI 80 and CRI 90
√ 7 light colors: CCT 2700 K, 3000 K, 3500 K, 4000 K, 5000 K, 5700 K, and 6500 K

Excellent color consistency in the module: 3 Step MacAdam LEDs.

Plug-in terminals for quick and easy mounting.

Connection also possible from below.

For operation on suitable constant current drivers.

Maximum working voltage	250 V
Ambient temperature	-20…+50 °C
Max. perm. operating temperature (Tc)	80 °C
EPREL database entry	yes
Beam angle	120°

Connections:

		Linearmodules	**2x2**
Terminals		2	4
Connection direction		side	down
Connection type		rigid / flexible	rigid
Conductor cross section AWG		AWG 18-24	AWG 20
Conductor cross section	min	0.2 mm²	0.5 mm²
	max	0.5 mm²	0.5 mm²
Stripping length		8 - 9 mm	>3 mm

Also available with other terminals on request.

Opticus Daisy M 2x2 - Simple series connection

√ square module with LED matrix of 4 for installation in luminaires
√ for LEDiL Daisy optics 2x2
√ 4x4 Mid-Power-LEDs
√ pitch distance along and across 40 mm per 4 matrix
√ length 62 mm
√ width 62 mm
√ 4 connection terminals
√ connection also possible from below
√ rated current 700 mA
√ maximum operating current 850 mA
√ maximum forward voltage 13 V
√ photometric details and EULUMDAT at www.mal-effekt.de

Up to 221lm/W!

Please also refer to the technical data of the Opticus Daisy M family on page 73. Further technical data and drawings from page 80.

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 200 mA Tc = 25 °C		If = 700 mA Tc = 25 °C		If = 850 mA Tc = 25 °C			
≥80	2700	422 lm	194 lm/W	1393 lm	171 lm/W	1663 lm	166 lm/W	7518-00701	Opticus Daisy M G1 2x2 827
	3000	438 lm	207 lm/W	1446 lm	183 lm/W	1727 lm	177 lm/W	7518-00702	Opticus Daisy M G1 2x2 830
	3500	438 lm	207 lm/W	1446 lm	183 lm/W	1727 lm	177 lm/W	7518-00703	Opticus Daisy M G1 2x2 835
	4000	467 lm	221 lm/W	1542 lm	195 lm/W	1841 lm	189 lm/W	7518-00704	Opticus Daisy M G1 2x2 840
	5000	467 lm	221 lm/W	1542 lm	195 lm/W	1841 lm	189 lm/W	7518-00705	Opticus Daisy M G1 2x2 850
	5700	467 lm	221 lm/W	1542 lm	195 lm/W	1841 lm	189 lm/W	7518-00706	Opticus Daisy M G1 2x2 857
	6500	467 lm	221 lm/W	1542 lm	195 lm/W	1841 lm	189 lm/W	7518-00707	Opticus Daisy M G1 2x2 865

Up to 1841lm!

NEW: CRI 90 IN KSF-Technology

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 200 mA Tc = 25 °C		If = 700 mA Tc = 25 °C		If = 850 mA Tc = 25 °C			
≥90	2700	413 lm	193 lm/W	1367 lm	171 lm/W	1632 lm	166 lm/W	7518-00708	Opticus Daisy M G1 2x2 927
	3000	422 lm	198 lm/W	1396 lm	175 lm/W	1667 lm	169 lm/W	7518-00709	Opticus Daisy M G1 2x2 930
	3500	428 lm	200 lm/W	1415 lm	177 lm/W	1690 lm	172 lm/W	7518-00710	Opticus Daisy M G1 2x2 935
	4000	440 lm	206 lm/W	1453 lm	182 lm/W	1736 lm	176 lm/W	7518-00711	Opticus Daisy M G1 2x2 940
	5000	440 lm	206 lm/W	1453 lm	182 lm/W	1736 lm	176 lm/W	7518-00712	Opticus Daisy M G1 2x2 950
	5700	440 lm	206 lm/W	1453 lm	182 lm/W	1736 lm	176 lm/W	7518-00713	Opticus Daisy M G1 2x2 957
	6500	434 lm	203 lm/W	1434 lm	180 lm/W	1713 lm	174 lm/W	7518-00714	Opticus Daisy M G1 2x2 965

Up to 1736lm!

Opticus Daisy M L28 - Simple series connection

√ linear module with LED 4-matrix for installation in luminaires
√ for LEDiL Daisy optics 7x1
√ 7x4 Mid-Power LEDs
√ pitch distance 40 mm per 4 matrix
√ length 280 mm
√ width 24 mm
√ 2 connection terminals
√ connection also possible from below
√ rated current 1050 mA
√ maximum operating current 1500 mA
√ maximum forward voltage 13 V
√ photometric details and EULUMDAT at www.mal-effekt.de

Please also refer to the technical data of the Opticus Daisy M family on page 73. Further technical data and drawings from page 80.

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 350 mA Tc = 25 °C		If = 1.050 mA Tc = 25 °C		If = 1.500 mA Tc = 25 °C			
≥80	2700	739 lm	194 lm/W	2113 lm	175 lm/W	2933 lm	166 lm/W	7518-00101	Opticus Daisy M G1 L28 W24 827
	3000	767 lm	207 lm/W	2194 lm	187 lm/W	3045 lm	177 lm/W	7518-00102	Opticus Daisy M G1 L28 W24 830
	3500	767 lm	207 lm/W	2194 lm	187 lm/W	3045 lm	177 lm/W	7518-00103	Opticus Daisy M G1 L28 W24 835
	4000	818 lm	221 lm/W	2339 lm	200 lm/W	3247 lm	189 lm/W	7518-00104	Opticus Daisy M G1 L28 W24 840
	5000	818 lm	221 lm/W	2339 lm	200 lm/W	3247 lm	189 lm/W	7518-00105	Opticus Daisy M G1 L28 W24 850
	5700	818 lm	221 lm/W	2339 lm	200 lm/W	3247 lm	189 lm/W	7518-00106	Opticus Daisy M G1 L28 W24 857
	6500	818 lm	221 lm/W	2339 lm	200 lm/W	3247 lm	189 lm/W	7518-00107	Opticus Daisy M G1 L28 W24 865

Up to 3247 lm!

NEW: CRI 90 IN KSF-Technology

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 350 mA Tc = 25 °C		If = 1.050 mA Tc = 25 °C		If = 1.500 mA Tc = 25 °C			
≥90	2700	723 lm	193 lm/W	2074 lm	175 lm/W	2878 lm	165 lm/W	7518-00108	Opticus Daisy M G1 L28 W24 927
	3000	739 lm	198 lm/W	2117 lm	179 lm/W	2939 lm	169 lm/W	7518-00109	Opticus Daisy M G1 L28 W24 930
	3500	749 lm	200 lm/W	2147 lm	181 lm/W	2979 lm	171 lm/W	7518-00110	Opticus Daisy M G1 L28 W24 935
	4000	769 lm	206 lm/W	2205 lm	186 lm/W	3060 lm	176 lm/W	7518-00111	Opticus Daisy M G1 L28 W24 940
	5000	769 lm	206 lm/W	2205 lm	186 lm/W	3060 lm	176 lm/W	7518-00112	Opticus Daisy M G1 L28 W24 950
	5700	769 lm	206 lm/W	2205 lm	186 lm/W	3060 lm	176 lm/W	7518-00113	Opticus Daisy M G1 L28 W24 957
	6500	759 lm	203 lm/W	2176 lm	184 lm/W	3020 lm	174 lm/W	7518-00114	Opticus Daisy M G1 L28 W24 965

Up to 3060lm!

Opticus Daisy M L56 - Simple series connection

√ linear module with LED 4-matrix for installation in luminaires
√ for LEDiL Daisy optics 7x1
√ 14x4 Mid-Power-LED
√ pitch distance 40 mm per 4 matrix
√ length 560 mm
√ width 24 mm
√ 2 connection terminals
√ connection also possible from below
√ rated current 1050 mA
√ maximum operating current 1500 mA
√ maximum forward voltage 26 V
√ photometric details and EULUMDAT at www.mal-effekt.de

Please also refer to the technical data of the Opticus Daisy M family on page 73. Further technical data and drawings from page 80.

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 350 mA Tc = 25 °C		If = 1050 mA Tc = 25 °C		If = 1500 mA Tc = 25 °C			
≥80	2700	1478 lm	194 lm/W	4227 lm	175 lm/W	5866 lm	166 lm/W	7518-00201	Opticus Daisy M G1 L56 W24 827
	3000	1534 lm	207 lm/W	4387 lm	187 lm/W	6089 lm	177 lm/W	7518-00202	Opticus Daisy M G1 L56 W24 830
	3500	1534 lm	207 lm/W	4387 lm	187 lm/W	6089 lm	177 lm/W	7518-00203	Opticus Daisy M G1 L56 W24 835
	4000	1636 lm	221 lm/W	4679 lm	200 lm/W	6494 lm	189 lm/W	7518-00204	Opticus Daisy M G1 L56 W24 840
	5000	1636 lm	221 lm/W	4679 lm	200 lm/W	6494 lm	189 lm/W	7518-00205	Opticus Daisy M G1 L56 W24 850
	5700	1636 lm	221 lm/W	4679 lm	200 lm/W	6494 lm	189 lm/W	7518-00206	Opticus Daisy M G1 L56 W24 857
	6500	1636 lm	221 lm/W	4679 lm	200 lm/W	6494 lm	189 lm/W	7518-00207	Opticus Daisy M G1 L56 W24 865

Up to 6494 lm!

NEW: CRI 90 IN KSF-Technology

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 350 mA Tc = 25 °C		If = 1050 mA Tc = 25 °C		If = 1500 mA Tc = 25 °C			
≥90	2700	1447 lm	193 lm/W	4147 lm	175 lm/W	5756 lm	165 lm/W	7518-00208	Opticus Daisy M G1 L56 W24 927
	3000	1477 lm	198 lm/W	4235 lm	179 lm/W	5877 lm	169 lm/W	7518-00209	Opticus Daisy M G1 L56 W24 930
	3500	1498 lm	200 lm/W	4293 lm	181 lm/W	5958 lm	171 lm/W	7518-00210	Opticus Daisy M G1 L56 W24 935
	4000	1538 lm	206 lm/W	4410 lm	186 lm/W	6121 lm	176 lm/W	7518-00211	Opticus Daisy M G1 L56 W24 940
	5000	1538 lm	206 lm/W	4410 lm	186 lm/W	6121 lm	176 lm/W	7518-00212	Opticus Daisy M G1 L56 W24 950
	5700	1538 lm	206 lm/W	4410 lm	186 lm/W	6121 lm	176 lm/W	7518-00213	Opticus Daisy M G1 L56 W24 957
	6500	1518 lm	203 lm/W	4351 lm	184 lm/W	6040 lm	174 lm/W	7518-00214	Opticus Daisy M G1 L56 W24 965

Up to 6121 lm!

Opticus Daisy M L84 - Simple series connection

√ linear module with LED 4-matrix for installation in luminaires
√ for LEDiL Daisy optics 7x1
√ 21x4 Mid-Power-LEDs
√ pitch distance 40 mm per 4 matrix
√ length 840 mm
√ width 24 mm
√ 2 connection terminals
√ connection also possible from below
√ rated current 1050 mA
√ maximum operating current 1500 mA
√ maximum forward voltage 39 V
√ photometric details and EULUMDAT at www.mal-effekt.de

Please also refer to the technical data of the Opticus Daisy M family on page 73. Further technical data and drawings from page 80.

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 350 mA Tc = 25 °C		If = 1050 mA Tc = 25 °C		If = 1500 mA Tc = 25 °C			
≥80	2700	2217 lm	194 lm/W	6340 lm	175 lm/W	8799 lm	166 lm/W	7518-00301	Opticus Daisy M G1 L84 W24 827
	3000	2301 lm	207 lm/W	6581 lm	187 lm/W	9134 lm	177 lm/W	7518-00302	Opticus Daisy M G1 L84 W24 830
	3500	2301 lm	207 lm/W	6581 lm	187 lm/W	9134 lm	177 lm/W	7518-00303	Opticus Daisy M G1 L84 W24 835
	4000	2454 lm	221 lm/W	7018 lm	200 lm/W	9741 lm	189 lm/W	7518-00304	Opticus Daisy M G1 L84 W24 840
	5000	2454 lm	221 lm/W	7018 lm	200 lm/W	9741 lm	189 lm/W	7518-00305	Opticus Daisy M G1 L84 W24 850
	5700	2454 lm	221 lm/W	7018 lm	200 lm/W	9741 lm	189 lm/W	7518-00306	Opticus Daisy M G1 L84 W24 857
	6500	2454 lm	221 lm/W	7018 lm	200 lm/W	9741 lm	189 lm/W	7518-00307	Opticus Daisy M G1 L84 W24 865

Up to
9741lm!

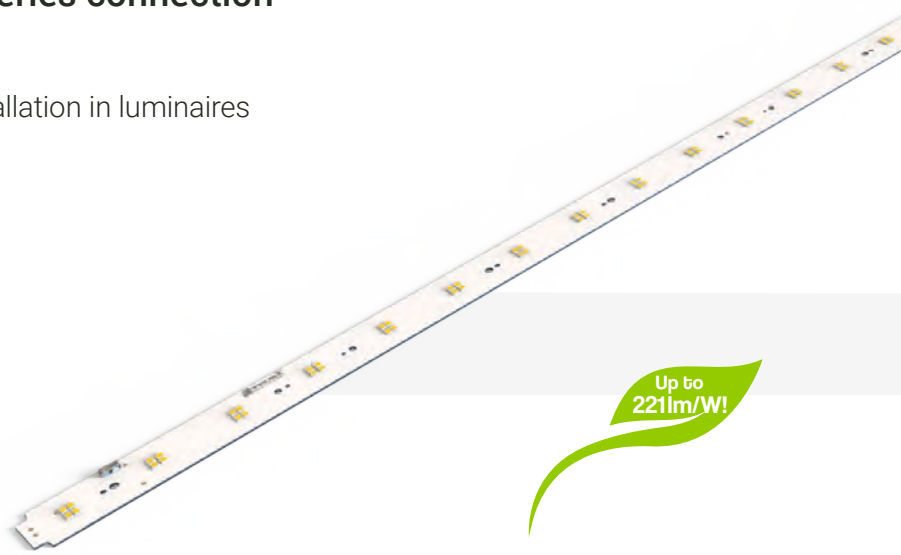
NEW:
CRI 90 IN
KSF-Technology

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 350 mA Tc = 25 °C		If = 1050 mA Tc = 25 °C		If = 1500 mA Tc = 25 °C			
≥90	2700	2170 lm	193 lm/W	6221 lm	175 lm/W	8634 lm	165 lm/W	7518-00308	Opticus Daisy M G1 L84 W24 927
	3000	2216 lm	198 lm/W	6352 lm	179 lm/W	8816 lm	169 lm/W	7518-00309	Opticus Daisy M G1 L84 W24 930
	3500	2246 lm	200 lm/W	6440 lm	181 lm/W	8938 lm	171 lm/W	7518-00310	Opticus Daisy M G1 L84 W24 935
	4000	2307 lm	206 lm/W	6615 lm	186 lm/W	9181 lm	176 lm/W	7518-00311	Opticus Daisy M G1 L84 W24 940
	5000	2307 lm	206 lm/W	6615 lm	186 lm/W	9181 lm	176 lm/W	7518-00312	Opticus Daisy M G1 L84 W24 950
	5700	2307 lm	206 lm/W	6615 lm	186 lm/W	9181 lm	176 lm/W	7518-00313	Opticus Daisy M G1 L84 W24 957
	6500	2277 lm	203 lm/W	6527 lm	184 lm/W	9059 lm	174 lm/W	7518-00314	Opticus Daisy M G1 L84 W24 965

Up to
9181lm!

Opticus Daisy M L112 - Simple series connection

√ linear module with LED 4-matrix for installation in luminaires
√ for LEDiL Daisy optics 7x1 and 28x1
√ 28x4 Mid-Power-LEDs
√ pitch distance 40 mm per 4 matrix
√ length 1120 mm
√ width 24 mm
√ 2 connection terminals
√ connection also possible from below
√ rated current 1050 mA
√ maximum operating current 1500 mA
√ maximum forward voltage 52 V
√ photometric details and EULUMDAT at www.mal-effekt.de



Please also refer to the technical data of the Opticus Daisy M family on page 73. Further technical data and drawings from page 80.

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 350 mA Tc = 25 °C		If = 1050 mA Tc = 25 °C		If = 1500 mA Tc = 25 °C			
≥80	2700	2956 lm	194 lm/W	8453 lm	175 lm/W	11732 lm	166 lm/W	7518-00401	Opticus Daisy M G1 L112 W24 827
	3000	3068 lm	207 lm/W	8775 lm	187 lm/W	12179 lm	177 lm/W	7518-00402	Opticus Daisy M G1 L112 W24 830
	3500	3068 lm	207 lm/W	8775 lm	187 lm/W	12179 lm	177 lm/W	7518-00403	Opticus Daisy M G1 L112 W24 835
	4000	3272 lm	221 lm/W	9358 lm	200 lm/W	12988 lm	189 lm/W	7518-00404	Opticus Daisy M G1 L112 W24 840
	5000	3272 lm	221 lm/W	9358 lm	200 lm/W	12988 lm	189 lm/W	7518-00405	Opticus Daisy M G1 L112 W24 850
	5700	3272 lm	221 lm/W	9358 lm	200 lm/W	12988 lm	189 lm/W	7518-00406	Opticus Daisy M G1 L112 W24 857
	6500	3272 lm	221 lm/W	9358 lm	200 lm/W	12988 lm	189 lm/W	7518-00407	Opticus Daisy M G1 L112 W24 865

Up to
12988lm!

NEW:
CRI 90 IN
KSF-Techno-
logy

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 350 mA Tc = 25 °C		If = 1050 mA Tc = 25 °C		If = 1500 mA Tc = 25 °C			
≥90	2700	2893 lm	193 lm/W	8294 lm	175 lm/W	11512 lm	165 lm/W	7518-00408	Opticus Daisy M G1 L112 W24 927
	3000	2954 lm	198 lm/W	8469 lm	179 lm/W	11755 lm	169 lm/W	7518-00409	Opticus Daisy M G1 L112 W24 930
	3500	2995 lm	200 lm/W	8586 lm	181 lm/W	11917 lm	171 lm/W	7518-00410	Opticus Daisy M G1 L112 W24 935
	4000	3077 lm	206 lm/W	8820 lm	186 lm/W	12241 lm	176 lm/W	7518-00411	Opticus Daisy M G1 L112 W24 940
	5000	3077 lm	206 lm/W	8820 lm	186 lm/W	12241 lm	176 lm/W	7518-00412	Opticus Daisy M G1 L112 W24 950
	5700	3077 lm	206 lm/W	8820 lm	186 lm/W	12241 lm	176 lm/W	7518-00413	Opticus Daisy M G1 L112 W24 957
	6500	3036 lm	203 lm/W	8703 lm	184 lm/W	12079 lm	174 lm/W	7518-00414	Opticus Daisy M G1 L112 W24 965

Up to
12241lm!

Opticus Daisy M L140 - Simple series connection

√ linear module with LED 4-matrix for installation in luminaires
√ for LEDiL Daisy optics 7x1 and 28x1
√ 35x4 Mid-Power-LEDs
√ pitch distance 40 mm per 4 matrix
√ length 1400 mm
√ width 24 mm
√ 2 connection terminals
√ connection also possible from below
√ rated current 1050 mA
√ maximum operating current 1500 mA
√ maximum forward voltage 65 V
√ photometric details and EULUMDAT at www.mal-effekt.de

Please also refer to the technical data of the Opticus Daisy M family on page 73. Further technical data and drawings from page 80.

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 350 mA Tc = 25 °C		If = 1050 mA Tc = 25 °C		If = 1500 mA Tc = 25 °C			
≥80	2700	3695 lm	194 lm/W	10566 lm	175 lm/W	14666 lm	166 lm/W	7518-00501	Opticus Daisy M G1 L140 W24 827
	3000	3835 lm	207 lm/W	10968 lm	187 lm/W	15224 lm	177 lm/W	7518-00502	Opticus Daisy M G1 L140 W24 830
	3500	3835 lm	207 lm/W	10968 lm	187 lm/W	15224 lm	177 lm/W	7518-00503	Opticus Daisy M G1 L140 W24 835
	4000	4090 lm	221 lm/W	11697 lm	200 lm/W	16235 lm	189 lm/W	7518-00504	Opticus Daisy M G1 L140 W24 840
	5000	4090 lm	221 lm/W	11697 lm	200 lm/W	16235 lm	189 lm/W	7518-00505	Opticus Daisy M G1 L140 W24 850
	5700	4090 lm	221 lm/W	11697 lm	200 lm/W	16235 lm	189 lm/W	7518-00506	Opticus Daisy M G1 L140 W24 857
	6500	4090 lm	221 lm/W	11697 lm	200 lm/W	16235 lm	189 lm/W	7518-00507	Opticus Daisy M G1 L140 W24 865

Up to 16235 lm!

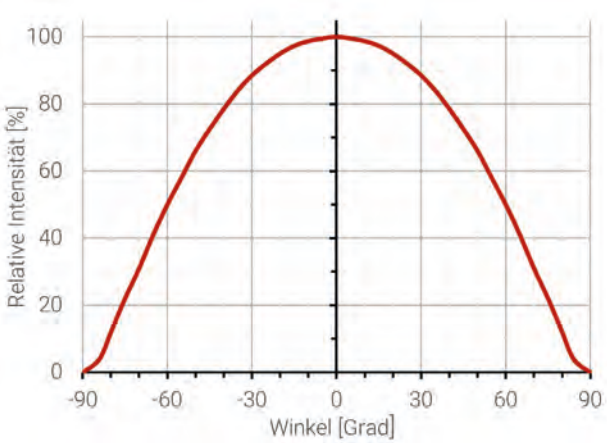
NEW: CRI 90 IN KSF-Technology

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 350 mA Tc = 25 °C		If = 1050 mA Tc = 25 °C		If = 1500 mA Tc = 25 °C			
≥90	2700	3617 lm	193 lm/W	10368 lm	175 lm/W	14389 lm	165 lm/W	7518-00508	Opticus Daisy M G1 L140 W24 927
	3000	3693 lm	198 lm/W	10587 lm	179 lm/W	14693 lm	169 lm/W	7518-00509	Opticus Daisy M G1 L140 W24 930
	3500	3744 lm	200 lm/W	10733 lm	181 lm/W	14896 lm	171 lm/W	7518-00510	Opticus Daisy M G1 L140 W24 935
	4000	3846 lm	206 lm/W	11025 lm	186 lm/W	15301 lm	176 lm/W	7518-00511	Opticus Daisy M G1 L140 W24 940
	5000	3846 lm	206 lm/W	11025 lm	186 lm/W	15301 lm	176 lm/W	7518-00512	Opticus Daisy M G1 L140 W24 950
	5700	3846 lm	206 lm/W	11025 lm	186 lm/W	15301 lm	176 lm/W	7518-00513	Opticus Daisy M G1 L140 W24 957
	6500	3795 lm	203 lm/W	10879 lm	184 lm/W	15099 lm	174 lm/W	7518-00514	Opticus Daisy M G1 L140 W24 965

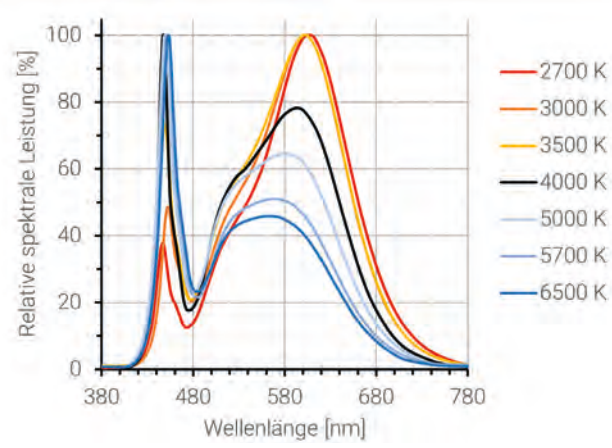
Up to 15301 lm!

Technical data: Opticus Daisy M - Simple series connection

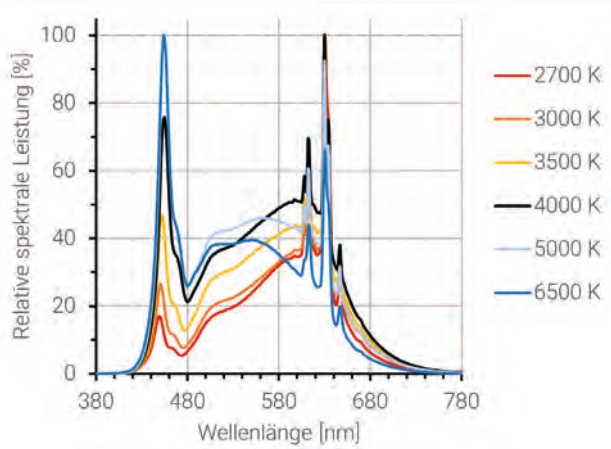
Light distribution curve



Spectrum CRI 80



Spectrum CRI 90



Lifetime of the LEDs used

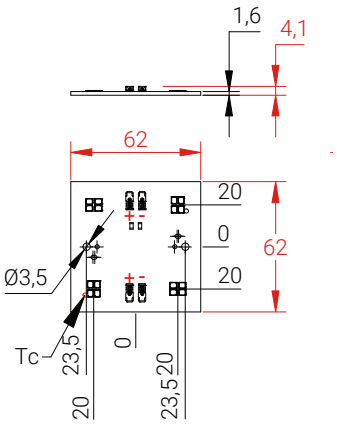
- The lifetime data is based on TM21 extrapolations of the available LM80 data of the LEDs used. They are to be regarded as purely informative data from which no warranty claim can be derived.

description	If	Tc	L70 B50	L70 B10	L80 B50	L80 B10	L90 B50	L90 B10
Opticus Daisy M G1 2x2 8/9xx	850 mA	80 °C	> 102000 h	> 102000 h	> 102000 h	> 102000 h	> 50000 h	> 50000 h
Opticus Daisy M G1 L... W24 8/9xx	1500 mA	80 °C	> 102000 h	> 102000 h	> 102000 h	> 102000 h	> 50000 h	> 50000 h

Technical drawings: Opticus Daisy M - Simple series connection

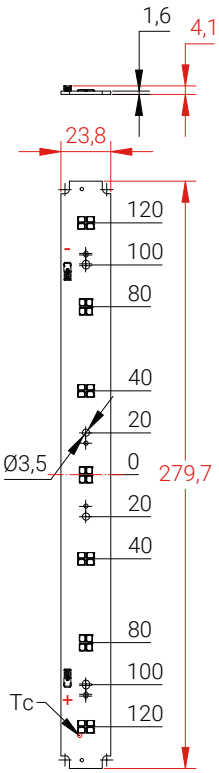
Opticus Daisy M 2x2

Opticus Daisy M G1 2x2



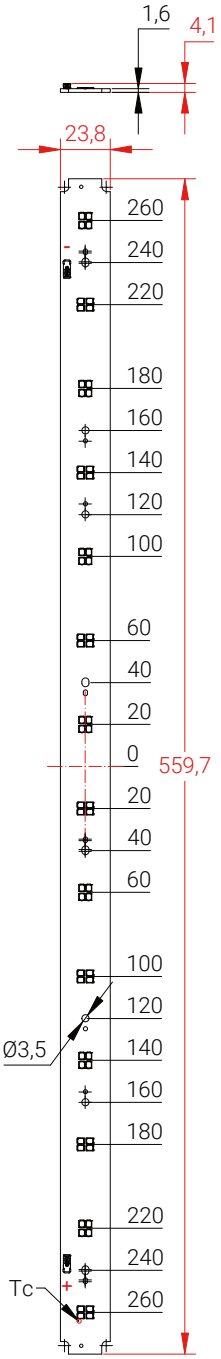
Opticus Daisy M L28

Opticus Daisy M G1 L28



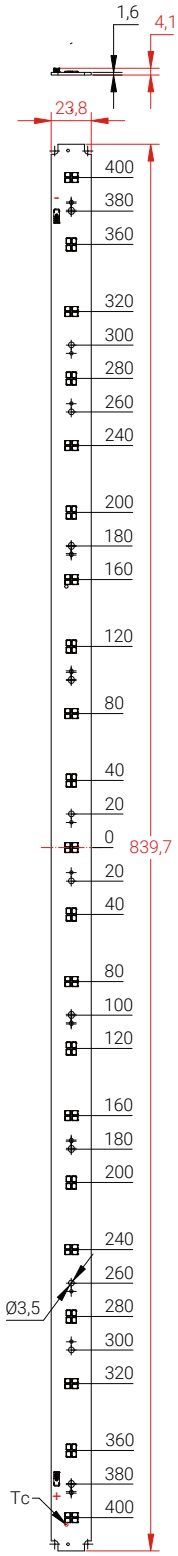
Opticus Daisy M L56

Opticus Daisy M G1 L56



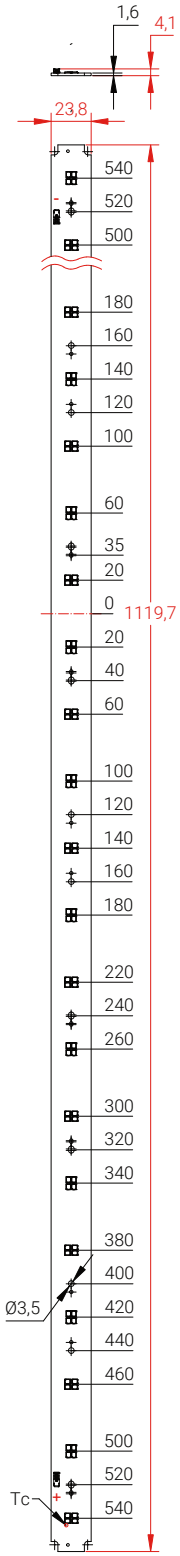
Opticus Daisy M L84

Opticus Daisy M G1 L84



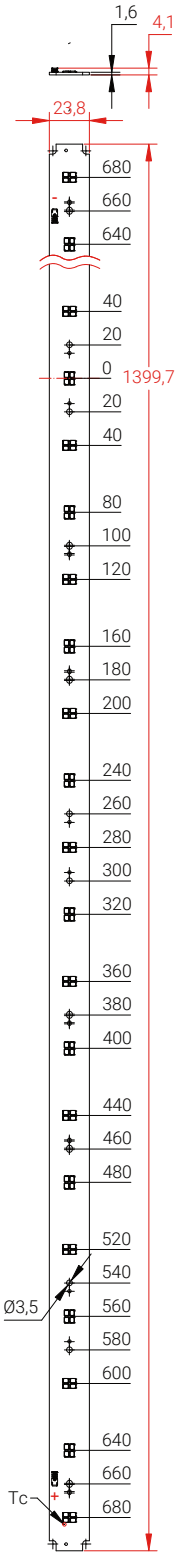
Opticus Daisy M L112

Opticus Daisy M G1 L112



Opticus Daisy M L140

Opticus Daisy M G1 L140



Opticus Daisy M1 - Low operating currents in series connection

Opticus Daisy M1

LED module with mid-power LEDs for installation in luminaires.

Versatile with:

√ 3 linear modules: 140 mm, 280 mm and 560 mm x 24 mm
√ 2 color renderings: CRI 80 and CRI 90
√ 7 light colors: CCT 2700 K, 3000 K, 3500 K, 4000 K, 5000 K, 5700 K and 6000 K

Excellent color consistency in the module: 3 Step MacAdam LEDs.

Plug-in terminals for quick and easy mounting.

Connection also possible from below.

For operation on suitable constant current drivers.

Maximum working voltage	250 V
Ambient temperature	-20…+50 °C
Max. perm. operating temperature (Tc)	80 °C
EPREL database entry	yes
Beam angle	120°

Connections:

Terminals		2	
Connection direction		side	down
Connection type		rigid / flexible	rigid
Conductor cross section AWG		AWG 18-24	AWG 20
Conductor cross section	min	0.2 mm²	0.5 mm²
	max	0.5 mm²	0.5 mm²
Stripping length		8 - 9 mm	>3 mm

Also available with other terminals on request.

Opticus Daisy M1 L14 - Low operating currents in series connection

√ linear module with LED 4 matrix for installation in luminaires
√ for LEDiL Daisy optics 4x1
√ 4x4 Mid-Power LEDs
√ pitch distance 40 mm per 4 matrix
√ length 140 mm
√ width 24 mm
√ 2 connection terminals
√ connection also possible from below
√ rated current 600 mA
√ maximum operating current 850 mA
√ maximum forward voltage 13 V
√ photometric details and EULUMDAT at www.mal-effekt.de

Please also refer to the technical data of the Opticus Daisy M1 family on page 87. Further technical data and drawings from page 91.

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 200 mA Tc = 25 °C		If = 600 mA Tc = 25 °C		If = 850 mA Tc = 25 °C			
≥80	2700	422 lm	194 lm/W	1208 lm	175 lm/W	1663 lm	166 lm/W	7518-04001	Opticus Daisy M1 G1 L14 W24 827
	3000	438 lm	207 lm/W	1254 lm	187 lm/W	1727 lm	177 lm/W	7518-04002	Opticus Daisy M1 G1 L14 W24 830
	3500	438 lm	207 lm/W	1254 lm	187 lm/W	1727 lm	177 lm/W	7518-04003	Opticus Daisy M1 G1 L14 W24 835
	4000	467 lm	221 lm/W	1337 lm	200 lm/W	1841 lm	189 lm/W	7518-04004	Opticus Daisy M1 G1 L14 W24 840
	5000	467 lm	221 lm/W	1337 lm	200 lm/W	1841 lm	189 lm/W	7518-04005	Opticus Daisy M1 G1 L14 W24 850
	5700	467 lm	221 lm/W	1337 lm	200 lm/W	1841 lm	189 lm/W	7518-04006	Opticus Daisy M1 G1 L14 W24 857
	6500	467 lm	221 lm/W	1337 lm	200 lm/W	1841 lm	189 lm/W	7518-04007	Opticus Daisy M1 G1 L14 W24 865

Up to 1841lm!

NEW: CRI 90 IN KSF-Technology

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 200 mA Tc = 25 °C		If = 600 mA Tc = 25 °C		If = 850 mA Tc = 25 °C			
≥90	2700	413 lm	193 lm/W	1185 lm	175 lm/W	1632 lm	166 lm/W	7518-04008	Opticus Daisy M1 G1 L14 W24 927
	3000	422 lm	198 lm/W	1210 lm	179 lm/W	1667 lm	169 lm/W	7518-04009	Opticus Daisy M1 G1 L14 W24 930
	3500	428 lm	200 lm/W	1227 lm	181 lm/W	1690 lm	172 lm/W	7518-04010	Opticus Daisy M1 G1 L14 W24 935
	4000	440 lm	206 lm/W	1260 lm	186 lm/W	1736 lm	176 lm/W	7518-04011	Opticus Daisy M1 G1 L14 W24 940
	5000	440 lm	206 lm/W	1260 lm	186 lm/W	1736 lm	176 lm/W	7518-04012	Opticus Daisy M1 G1 L14 W24 950
	5700	440 lm	206 lm/W	1260 lm	186 lm/W	1736 lm	176 lm/W	7518-04013	Opticus Daisy M1 G1 L14 W24 957
	6500	434 lm	203 lm/W	1243 lm	184 lm/W	1713 lm	174 lm/W	7518-04014	Opticus Daisy M1 G1 L14 W24 965

Up to 1736lm!

Opticus Daisy M1 L28 - Low operating currents in series connection

√ linear module with LED 4-matrix for installation in luminaires
√ for LEDiL Daisy optics 7x1
√ 7x4 Mid-Power-LEDs
√ pitch distance 40 mm per 4 matrix
√ length 280 mm
√ width 24 mm
√ 2 connection terminals
√ connection also possible from below
√ rated current 600 mA
√ maximum operating current 850 mA
√ maximum forward voltage 22.75 V
√ photometric details and EULUMDAT at www.mal-effekt.de

Plea se also r efer to the technical data of the Opticus Daisy M1 family on page 87. Further technical data and drawings from page 91.

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 200 mA Tc = 25 °C		If = 600 mA Tc = 25 °C		If = 850 mA Tc = 25 °C			
≥80	2700	739 lm	194 lm/W	2113 lm	175 lm/W	2911 lm	166 lm/W	7518-04101	Opticus Daisy M1 G1 L28 W24 827
	3000	767 lm	207 lm/W	2194 lm	187 lm/W	3022 lm	177 lm/W	7518-04102	Opticus Daisy M1 G1 L28 W24 830
	3500	767 lm	207 lm/W	2194 lm	187 lm/W	3022 lm	177 lm/W	7518-04103	Opticus Daisy M1 G1 L28 W24 835
	4000	818 lm	221 lm/W	2339 lm	200 lm/W	3223 lm	189 lm/W	7518-04104	Opticus Daisy M1 G1 L28 W24 840
	5000	818 lm	221 lm/W	2339 lm	200 lm/W	3223 lm	189 lm/W	7518-04105	Opticus Daisy M1 G1 L28 W24 850
	5700	818 lm	221 lm/W	2339 lm	200 lm/W	3223 lm	189 lm/W	7518-04106	Opticus Daisy M1 G1 L28 W24 857
	6500	818 lm	221 lm/W	2339 lm	200 lm/W	3223 lm	189 lm/W	7518-04107	Opticus Daisy M1 G1 L28 W24 865

Up to 3223 lm!

NEW: CRI 90 IN KSF-Technology

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 200 mA Tc = 25 °C		If = 600 mA Tc = 25 °C		If = 850 mA Tc = 25 °C			
≥90	2700	723 lm	193 lm/W	2074 lm	175 lm/W	2856 lm	166 lm/W	7518-04108	Opticus Daisy M1 G1 L28 W24 927
	3000	739 lm	198 lm/W	2117 lm	179 lm/W	2917 lm	169 lm/W	7518-04109	Opticus Daisy M1 G1 L28 W24 930
	3500	749 lm	200 lm/W	2147 lm	181 lm/W	2957 lm	172 lm/W	7518-04110	Opticus Daisy M1 G1 L28 W24 935
	4000	769 lm	206 lm/W	2205 lm	186 lm/W	3037 lm	176 lm/W	7518-04111	Opticus Daisy M1 G1 L28 W24 940
	5000	769 lm	206 lm/W	2205 lm	186 lm/W	3037 lm	176 lm/W	7518-04112	Opticus Daisy M1 G1 L28 W24 950
	5700	769 lm	206 lm/W	2205 lm	186 lm/W	3037 lm	176 lm/W	7518-04113	Opticus Daisy M1 G1 L28 W24 957
	6500	759 lm	203 lm/W	2176 lm	184 lm/W	2997 lm	174 lm/W	7518-04114	Opticus Daisy M1 G1 L28 W24 965

Up to 3037 lm!

Opticus Daisy M1 L56 - Low operating currents in series connection

√ linear module with LED 4-matrix for installation in luminaires
√ for LEDiL Daisy optics 7x1
√ 28x4 Mid-Power-LEDs
√ pitch distance 40 mm per 4 matrix
√ length 560 mm
√ width 24 mm
√ 2 connection terminals
√ connection also possible from below
√ rated current 600 mA
√ maximum operating current 850 mA
√ maximum forward voltage 45.5 V
√ photometric details and EULUMDAT at www.mal-effekt.de

Plea se also r efer to the technical data of the Opticus Daisy M1 family on page 87. Further technical data and drawings from page 91.

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 200 mA Tc = 25 °C		If = 600 mA Tc = 25 °C		If = 850 mA Tc = 25 °C			
≥80	2700	1478 lm	194 lm/W	4227 lm	175 lm/W	5822 lm	166 lm/W	7518-04201	Opticus Daisy M1 G1 L56 W24 827
	3000	1534 lm	207 lm/W	4387 lm	187 lm/W	6044 lm	177 lm/W	7518-04202	Opticus Daisy M1 G1 L56 W24 830
	3500	1534 lm	207 lm/W	4387 lm	187 lm/W	6044 lm	177 lm/W	7518-04203	Opticus Daisy M1 G1 L56 W24 835
	4000	1636 lm	221 lm/W	4679 lm	200 lm/W	6445 lm	189 lm/W	7518-04204	Opticus Daisy M1 G1 L56 W24 840
	5000	1636 lm	221 lm/W	4679 lm	200 lm/W	6445 lm	189 lm/W	7518-04205	Opticus Daisy M1 G1 L56 W24 850
	5700	1636 lm	221 lm/W	4679 lm	200 lm/W	6445 lm	189 lm/W	7518-04206	Opticus Daisy M1 G1 L56 W24 857
	6500	1636 lm	221 lm/W	4679 lm	200 lm/W	6445 lm	189 lm/W	7518-04207	Opticus Daisy M1 G1 L56 W24 865

Up to 6445 lm!

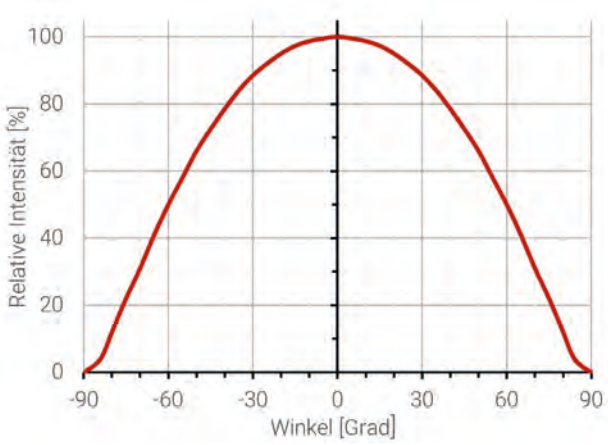
NEW: CRI 90 IN KSF-Technology

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 200 mA Tc = 25 °C		If = 600 mA Tc = 25 °C		If = 850 mA Tc = 25 °C			
≥90	2700	1447 lm	193 lm/W	4147 lm	175 lm/W	5712 lm	166 lm/W	7518-04208	Opticus Daisy M1 G1 L56 W24 927
	3000	1477 lm	198 lm/W	4235 lm	179 lm/W	5833 lm	169 lm/W	7518-04209	Opticus Daisy M1 G1 L56 W24 930
	3500	1498 lm	200 lm/W	4293 lm	181 lm/W	5913 lm	172 lm/W	7518-04210	Opticus Daisy M1 G1 L56 W24 935
	4000	1538 lm	206 lm/W	4410 lm	186 lm/W	6074 lm	176 lm/W	7518-04211	Opticus Daisy M1 G1 L56 W24 940
	5000	1538 lm	206 lm/W	4410 lm	186 lm/W	6074 lm	176 lm/W	7518-04212	Opticus Daisy M1 G1 L56 W24 950
	5700	1538 lm	206 lm/W	4410 lm	186 lm/W	6074 lm	176 lm/W	7518-04213	Opticus Daisy M1 G1 L56 W24 957
	6500	1518 lm	203 lm/W	4351 lm	184 lm/W	5994 lm	174 lm/W	7518-04214	Opticus Daisy M1 G1 L56 W24 965

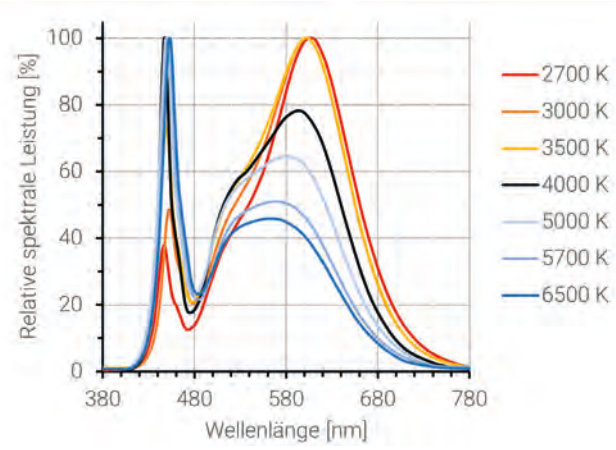
Up to 6074 lm!

Technical data: Opticus Daisy M1 - Low operating currents in series connection

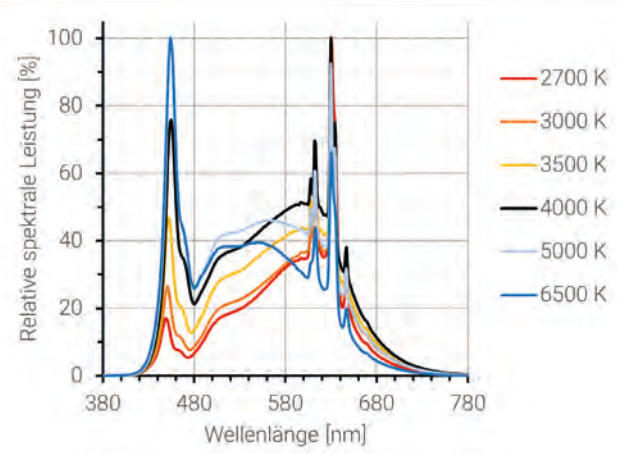
Light distribution curve



Spectrum CRI 80



Spectrum CRI 90



Lifetime of the LEDs used

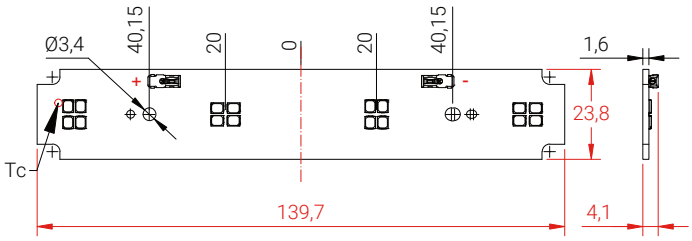
- The lifetime data is based on TM21 extrapolations of the available LM80 data of the LEDs used. They are to be regarded as purely informative data from which no warranty claim can be derived.

description	If	Tc	L70 B50	L70 B10	L80 B50	L80 B10	L90 B50	L90 B10
Opticus Daisy M1 G1 L... W24 8/9xx	850 mA	80 °C	> 102000 h	> 102000 h	> 102000 h	> 102000 h	> 50000 h	> 50000 h

Technical drawings: Opticus Daisy M1 - Low operating currents in series connection

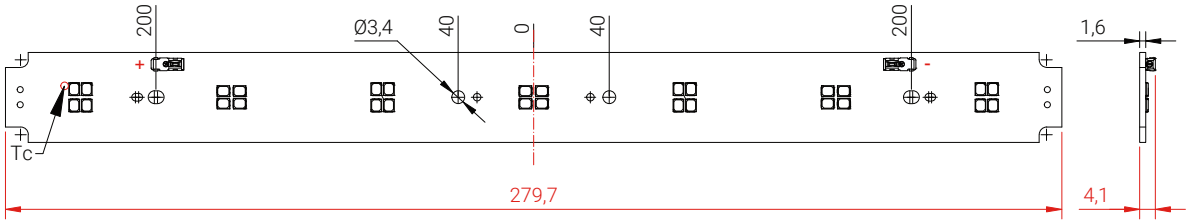
Opticus Daisy M1 L14

Opticus Daisy M1 G1 L14



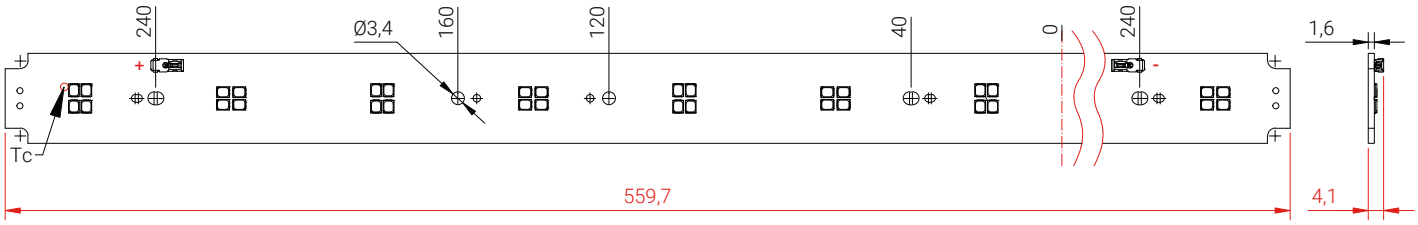
Opticus Daisy M1 L28

Opticus Daisy M1 G1 L28



Opticus Daisy M1 L56

Opticus Daisy M1 G1 L56



Opticus Daisy T - Simple parallel connection

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Opticus Daisy T

LED module with mid-power LEDs for installation in luminaires.

Versatile with:

√ 4 linear modules: 140 mm, 280 mm, 560 mm and 1120 mm x 24 mm
√ 2 color renderings: CRI 80 and CRI 90
√ 7 light colors: CCT 2700 K, 3000 K, 3500 K, 4000 K, 5000 K, 5700 K and 6500 K

Excellent color consistency in the module: 3 Step MacAdam LEDs.

Plug-in terminals for easy and quick mounting.

Connection also possible from below.

For operation on suitable constant current drivers.

Maximum operating voltage	250 V
Ambient temperature	-20…+50 °C
Max. perm. operating temperature (Tc)	80 °C
EPREL databse entry	yes
Beam angle	120°

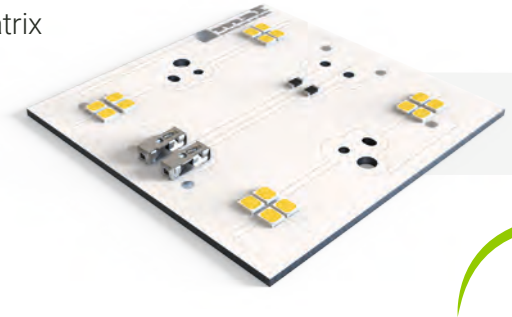
Connections:

Terminals		4	
Connection direction		side	down
Connection type		rigid / flexible	rigid
Conductor cross section AWG		AWG 18-24	AWG 20
Conductor cross section	min	0.2 mm²	0.5 mm²
	max	0.5 mm²	0.5 mm²
Stripping length		8 - 9 mm	>3 mm

Also available with other terminals on request.

Opticus Daisy T 2x2 - Simple parallel connection

√ square module with LED matrix of 4 for installation in luminaires
√ for LEDiL Daisy optics 2x2
√ 16 Mid-Power-LEDs
√ pitch distance along and across 40 mm per 4 matrix
√ length 62 mm
√ width 62 mm
√ 2 connection terminals
√ connection also possible from below
√ rated current 350 mA
√ maximum operating current 450 mA
√ maximum forward voltage 26 V
√ photometric details and EULUMDAT on www.mal-effekt.de



Up to 221lm/W!

Please also refer to the technical data of the Opticus Daisy T family on page 97. Further technical data and drawings from page 103.

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 100 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 450 mA Tc = 25 °C			
≥80	2700	422 lm	194 lm/W	1393 lm	171 lm/W	1752 lm	164 lm/W	7518-01701	Opticus Daisy T G1 2x2 827
	3000	438 lm	207 lm/W	1446 lm	183 lm/W	1818 lm	175 lm/W	7518-01702	Opticus Daisy T G1 2x2 830
	3500	438 lm	207 lm/W	1446 lm	183 lm/W	1818 lm	175 lm/W	7518-01703	Opticus Daisy T G1 2x2 835
	4000	467 lm	221 lm/W	1542 lm	195 lm/W	1939 lm	187 lm/W	7518-01704	Opticus Daisy T G1 2x2 840
	5000	467 lm	221 lm/W	1542 lm	195 lm/W	1939 lm	187 lm/W	7518-01705	Opticus Daisy T G1 2x2 850
	5700	467 lm	221 lm/W	1542 lm	195 lm/W	1939 lm	187 lm/W	7518-01706	Opticus Daisy T G1 2x2 857
	6500	467 lm	221 lm/W	1542 lm	195 lm/W	1939 lm	187 lm/W	7518-01707	Opticus Daisy T G1 2x2 865

Up to 1939 lm!

NEW: CRI 90 IN KSF-Technology

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 100 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 450 mA Tc = 25 °C			
≥90	2700	413 lm	193 lm/W	1367 lm	171 lm/W	1719 lm	164 lm/W	7518-01708	Opticus Daisy T G1 2x2 927
	3000	422 lm	198 lm/W	1396 lm	175 lm/W	1755 lm	167 lm/W	7518-01709	Opticus Daisy T G1 2x2 930
	3500	428 lm	200 lm/W	1415 lm	177 lm/W	1779 lm	170 lm/W	7518-01710	Opticus Daisy T G1 2x2 935
	4000	440 lm	206 lm/W	1453 lm	182 lm/W	1827 lm	174 lm/W	7518-01711	Opticus Daisy T G1 2x2 940
	5000	440 lm	206 lm/W	1453 lm	182 lm/W	1827 lm	174 lm/W	7518-01712	Opticus Daisy T G1 2x2 950
	5700	440 lm	206 lm/W	1453 lm	182 lm/W	1827 lm	174 lm/W	7518-01713	Opticus Daisy T G1 2x2 957
	6500	434 lm	203 lm/W	1434 lm	180 lm/W	1803 lm	172 lm/W	7518-01714	Opticus Daisy T G1 2x2 965

Up to 1827 lm!

Opticus Daisy T L14 - Simple parallel connection

√ linear module with LED 4 matrix for installation in luminaires
√ for LEDiL Daisy optics 4x1
√ 16 Mid-Power-LEDs
√ pitch distance 40 mm per 4 matrix
√ length 140 mm
√ width 24 mm
√ 4 connection terminals
√ connection also possible from below
√ rated current 350 mA
√ maximum operating current 450 mA
√ maximum forward voltage 26 V
√ photometric details and EULUMDAT on www.mal-effekt.de

Please also refer to the technical data of the Opticus Daisy T family on page 97. Further technical data and drawings from page 103.

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 100 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 450 mA Tc = 25 °C			
≥80	2700	422 lm	194 lm/W	1393 lm	171 lm/W	1752 lm	164 lm/W	7518-01001	Opticus Daisy T G1 L14 W24 827
	3000	438 lm	207 lm/W	1446 lm	183 lm/W	1818 lm	175 lm/W	7518-01002	Opticus Daisy T G1 L14 W24 830
	3500	438 lm	207 lm/W	1446 lm	183 lm/W	1818 lm	175 lm/W	7518-01003	Opticus Daisy T G1 L14 W24 835
	4000	467 lm	221 lm/W	1542 lm	195 lm/W	1939 lm	187 lm/W	7518-01004	Opticus Daisy T G1 L14 W24 840
	5000	467 lm	221 lm/W	1542 lm	195 lm/W	1939 lm	187 lm/W	7518-01005	Opticus Daisy T G1 L14 W24 850
	5700	467 lm	221 lm/W	1542 lm	195 lm/W	1939 lm	187 lm/W	7518-01006	Opticus Daisy T G1 L14 W24 857
	6500	467 lm	221 lm/W	1542 lm	195 lm/W	1939 lm	187 lm/W	7518-01007	Opticus Daisy T G1 L14 W24 865

Up to 1939lm!

NEW: CRI 90 IN KSF-Technology

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 100 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 450 mA Tc = 25 °C			
≥90	2700	413 lm	193 lm/W	1367 lm	171 lm/W	1719 lm	164 lm/W	7518-01008	Opticus Daisy T G1 L14 W24 927
	3000	422 lm	198 lm/W	1396 lm	175 lm/W	1755 lm	167 lm/W	7518-01009	Opticus Daisy T G1 L14 W24 930
	3500	428 lm	200 lm/W	1415 lm	177 lm/W	1779 lm	170 lm/W	7518-01010	Opticus Daisy T G1 L14 W24 935
	4000	440 lm	206 lm/W	1453 lm	182 lm/W	1827 lm	174 lm/W	7518-01011	Opticus Daisy T G1 L14 W24 940
	5000	440 lm	206 lm/W	1453 lm	182 lm/W	1827 lm	174 lm/W	7518-01012	Opticus Daisy T G1 L14 W24 950
	5700	440 lm	206 lm/W	1453 lm	182 lm/W	1827 lm	174 lm/W	7518-01013	Opticus Daisy T G1 L14 W24 957
	6500	434 lm	203 lm/W	1434 lm	180 lm/W	1803 lm	172 lm/W	7518-01014	Opticus Daisy T G1 L14 W24 965

Up to 1827 lm!

Opticus Daisy T L28 - Simple parallel connection

√ Linear module with LED 4-matrix for installation in luminaires
√ for LEDiL Daisy optics 7x1
√ 28 Mid-Power-LEDs
√ pitch distance 40 mm per 4 matrix
√ length 280 mm
√ width 24 mm
√ 4 connection terminals
√ connection also possible from below
√ rated current 350 mA
√ maximum operating current 450 mA
√ maximum forward voltage 45.5 V
√ photometric details and EULUMDAT on www.mal-effekt.de

Please also refer to the technical data of the Opticus Daisy T family on page 97. Further technical data and drawings from page 103.

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 100 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 450 mA Tc = 25 °C			
≥80	2700	739 lm	194 lm/W	2438 lm	171 lm/W	3065 lm	164 lm/W	7518-01101	Opticus Daisy T G1 L28 W24 827
	3000	767 lm	207 lm/W	2530 lm	183 lm/W	3182 lm	175 lm/W	7518-01102	Opticus Daisy T G1 L28 W24 830
	3500	767 lm	207 lm/W	2530 lm	183 lm/W	3182 lm	175 lm/W	7518-01103	Opticus Daisy T G1 L28 W24 835
	4000	818 lm	221 lm/W	2699 lm	195 lm/W	3393 lm	187 lm/W	7518-01104	Opticus Daisy T G1 L28 W24 840
	5000	818 lm	221 lm/W	2699 lm	195 lm/W	3393 lm	187 lm/W	7518-01105	Opticus Daisy T G1 L28 W24 850
	5700	818 lm	221 lm/W	2699 lm	195 lm/W	3393 lm	187 lm/W	7518-01106	Opticus Daisy T G1 L28 W24 857
	6500	818 lm	221 lm/W	2699 lm	195 lm/W	3393 lm	187 lm/W	7518-01107	Opticus Daisy T G1 L28 W24 865

Up to 3393 lm!

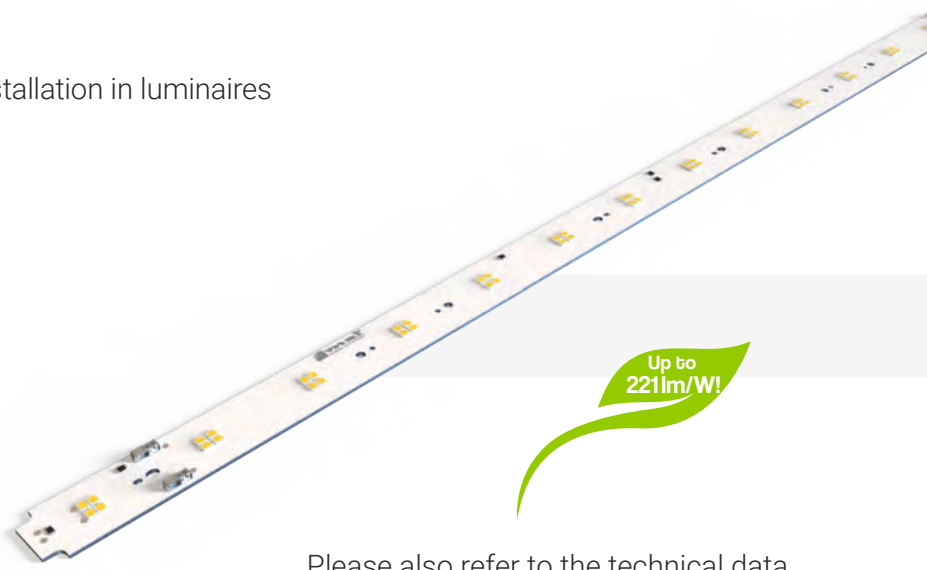
NEW: CRI 90 IN KSF-Technology

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 100 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 450 mA Tc = 25 °C			
≥90	2700	723 lm	193 lm/W	2392 lm	171 lm/W	3007 lm	164 lm/W	7518-01108	Opticus Daisy T G1 L28 W24 927
	3000	739 lm	198 lm/W	2442 lm	175 lm/W	3071 lm	167 lm/W	7518-01109	Opticus Daisy T G1 L28 W24 930
	3500	749 lm	200 lm/W	2476 lm	177 lm/W	3113 lm	170 lm/W	7518-01110	Opticus Daisy T G1 L28 W24 935
	4000	769 lm	206 lm/W	2544 lm	182 lm/W	3198 lm	174 lm/W	7518-01111	Opticus Daisy T G1 L28 W24 940
	5000	769 lm	206 lm/W	2544 lm	182 lm/W	3198 lm	174 lm/W	7518-01112	Opticus Daisy T G1 L28 W24 950
	5700	769 lm	206 lm/W	2544 lm	182 lm/W	3198 lm	174 lm/W	7518-01113	Opticus Daisy T G1 L28 W24 957
	6500	759 lm	203 lm/W	2510 lm	180 lm/W	3156 lm	172 lm/W	7518-01114	Opticus Daisy T G1 L28 W24 965

Up to 3198 lm!

Opticus Daisy T L56 - Simple parallel connection

√ linear module with LED 4-matrix for installation in luminaires
√ for LEDiL Daisy optics 7x1
√ 56 Mid-Power-LEDs
√ pitch distance 40 mm per 4 matrix
√ length 560 mm
√ width 24 mm
√ 4 connection terminals
√ connection also possible from below
√ rated current 600 mA
√ maximum operating current 850 mA
√ maximum forward voltage 45.5 V
√ photometric details and EULUMDAT on www.mal-effekt.de



Please also refer to the technical data of the Opticus Daisy T family on page 97. Further technical data and drawings from page 103.

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 200 mA Tc = 25 °C		If = 600 mA Tc = 25 °C		If = 850 mA Tc = 25 °C			
≥80	2700	1478 lm	194 lm/W	4227 lm	175 lm/W	5822 lm	166 lm/W	7518-01201	Opticus Daisy T G1 L56 W24 827
	3000	1534 lm	207 lm/W	4387 lm	187 lm/W	6044 lm	177 lm/W	7518-01202	Opticus Daisy T G1 L56 W24 830
	3500	1534 lm	207 lm/W	4387 lm	187 lm/W	6044 lm	177 lm/W	7518-01203	Opticus Daisy T G1 L56 W24 835
	4000	1636 lm	221 lm/W	4679 lm	200 lm/W	6445 lm	189 lm/W	7518-01204	Opticus Daisy T G1 L56 W24 840
	5000	1636 lm	221 lm/W	4679 lm	200 lm/W	6445 lm	189 lm/W	7518-01205	Opticus Daisy T G1 L56 W24 850
	5700	1636 lm	221 lm/W	4679 lm	200 lm/W	6445 lm	189 lm/W	7518-01206	Opticus Daisy T G1 L56 W24 857
	6500	1636 lm	221 lm/W	4679 lm	200 lm/W	6445 lm	189 lm/W	7518-01207	Opticus Daisy T G1 L56 W24 865

Up to 6445 lm!

NEW: CRI 90 IN KSF-Technology

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 200 mA Tc = 25 °C		If = 600 mA Tc = 25 °C		If = 850 mA Tc = 25 °C			
≥90	2700	1447 lm	193 lm/W	4147 lm	175 lm/W	5712 lm	166 lm/W	7518-01208	Opticus Daisy T G1 L56 W24 927
	3000	1477 lm	198 lm/W	4235 lm	179 lm/W	5833 lm	169 lm/W	7518-01209	Opticus Daisy T G1 L56 W24 930
	3500	1498 lm	200 lm/W	4293 lm	181 lm/W	5913 lm	172 lm/W	7518-01210	Opticus Daisy T G1 L56 W24 935
	4000	1538 lm	206 lm/W	4410 lm	186 lm/W	6074 lm	176 lm/W	7518-01211	Opticus Daisy T G1 L56 W24 940
	5000	1538 lm	206 lm/W	4410 lm	186 lm/W	6074 lm	176 lm/W	7518-01212	Opticus Daisy T G1 L56 W24 950
	5700	1538 lm	206 lm/W	4410 lm	186 lm/W	6074 lm	176 lm/W	7518-01213	Opticus Daisy T G1 L56 W24 957
	6500	1518 lm	203 lm/W	4351 lm	184 lm/W	5994 lm	174 lm/W	7518-01214	Opticus Daisy T G1 L56 W24 965

Up to 6074 lm!

Opticus Daisy T L112 - Simple parallel connection

√ linear module with LED 4-matrix for installation in luminaires
√ for LEDiL Daisy optics 7x1 and 28x1
√ 112 Mid-Power-LEDs
√ pitch distance 40 mm per 4 matrix
√ length 1120 mm
√ width 24 mm
√ 4 connection terminals
√ connection also possible from below
√ rated current 1200 mA
√ maximum operating current 1750 mA
√ maximum forward voltage 45.5 V
√ light technical data and EULUMDAT on www.mal-effekt.de

Please also refer to the technical data of the Opticus Daisy T family on page 97. Further technical data and drawings from page 103.

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 400 mA Tc = 25 °C		If = 1.200 mA Tc = 25 °C		If = 1.750 mA Tc = 25 °C			
≥80	2700	2956 lm	194 lm/W	8453 lm	175 lm/W	11953 lm	165 lm/W	7518-01401	Opticus Daisy T G1 L112 W24 827
	3000	3068 lm	207 lm/W	8775 lm	187 lm/W	12408 lm	176 lm/W	7518-01402	Opticus Daisy T G1 L112 W24 830
	3500	3068 lm	207 lm/W	8775 lm	187 lm/W	12408 lm	176 lm/W	7518-01403	Opticus Daisy T G1 L112 W24 835
	4000	3272 lm	221 lm/W	9358 lm	200 lm/W	13233 lm	188 lm/W	7518-01404	Opticus Daisy T G1 L112 W24 840
	5000	3272 lm	221 lm/W	9358 lm	200 lm/W	13233 lm	188 lm/W	7518-01405	Opticus Daisy T G1 L112 W24 850
	5700	3272 lm	221 lm/W	9358 lm	200 lm/W	13233 lm	188 lm/W	7518-01406	Opticus Daisy T G1 L112 W24 857
	6500	3272 lm	221 lm/W	9358 lm	200 lm/W	13233 lm	188 lm/W	7518-01407	Opticus Daisy T G1 L112 W24 865

Up to
13233 lm!

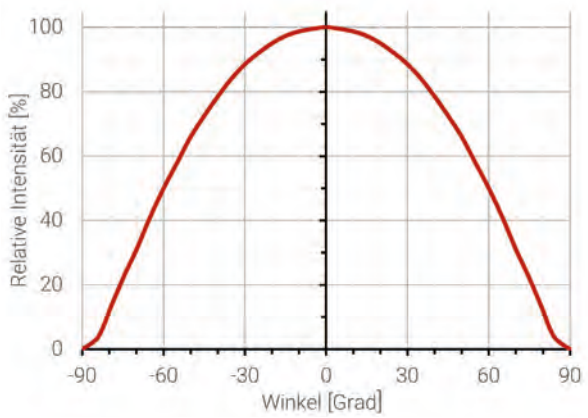
NEW:
CRI 90 IN
KSF-Techno-
logy

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 400 mA Tc = 25 °C		If = 1.200 mA Tc = 25 °C		If = 1.750 mA Tc = 25 °C			
≥90	2700	2893 lm	193 lm/W	8294 lm	175 lm/W	11728 lm	165 lm/W	7518-01408	Opticus Daisy T G1 L112 W24 927
	3000	2954 lm	198 lm/W	8469 lm	179 lm/W	11976 lm	168 lm/W	7518-01409	Opticus Daisy T G1 L112 W24 930
	3500	2995 lm	200 lm/W	8586 lm	181 lm/W	12141 lm	171 lm/W	7518-01410	Opticus Daisy T G1 L112 W24 935
	4000	3077 lm	206 lm/W	8820 lm	186 lm/W	12471 lm	175 lm/W	7518-01411	Opticus Daisy T G1 L112 W24 940
	5000	3077 lm	206 lm/W	8820 lm	186 lm/W	12471 lm	175 lm/W	7518-01412	Opticus Daisy T G1 L112 W24 950
	5700	3077 lm	206 lm/W	8820 lm	186 lm/W	12471 lm	175 lm/W	7518-01413	Opticus Daisy T G1 L112 W24 957
	6500	3036 lm	203 lm/W	8703 lm	184 lm/W	12306 lm	173 lm/W	7518-01414	Opticus Daisy T G1 L112 W24 965

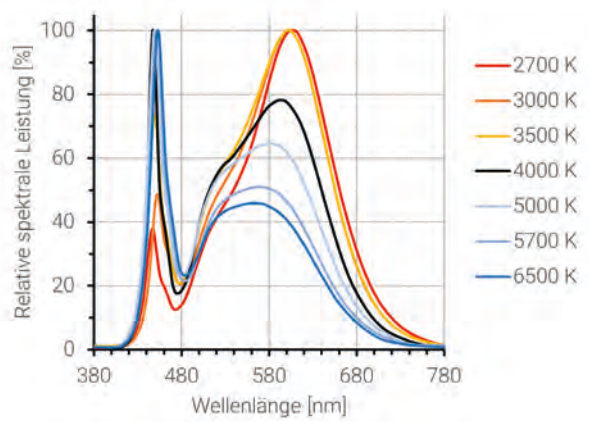
Up to
12471 lm!

Technical data: Opticus Daisy T - Simple parallel connection

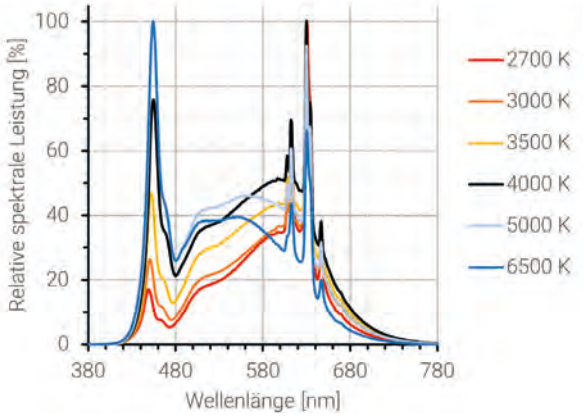
Light distribution curve



Spectrum CRI 80



Spectrum CRI 90



Lifetime of the LEDs used

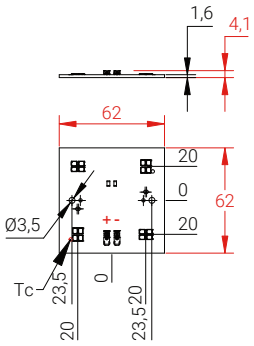
- The lifetime data is based on TM21 extrapolations of the available LM80 data of the LEDs used. They are to be regarded as purely informative data from which no warranty claim can be derived.

description	If	Tc	L70 B50	L70 B10	L80 B50	L80 B10	L90 B50	L90 B10
Opticus Daisy T G1 L14 W24 8/9xx	450 mA	80 °C	> 102000 h	> 102000 h	> 102000 h	> 102000 h	> 50000 h	> 50000 h
Opticus Daisy T G1 L28 W24 8/9xx	450 mA	80 °C	> 102000 h	> 102000 h	> 102000 h	> 102000 h	> 50000 h	> 50000 h
Opticus Daisy T G1 L56 W24 8/9xx	850 mA	80 °C	> 102000 h	> 102000 h	> 102000 h	> 102000 h	> 50000 h	> 50000 h
Opticus Daisy T G1 L112 W24 8/9xx	1750 mA	80 °C	> 102000 h	> 102000 h	> 102000 h	> 102000 h	> 50000 h	> 50000 h

Technical drawings: Opticus Daisy T - Simple parallel connection

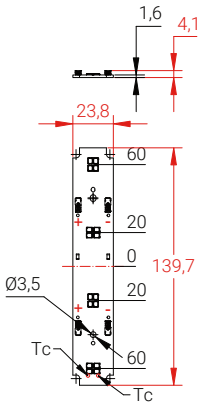
Opticus Daisy T 2x2

Opticus Daisy T G1 2x2



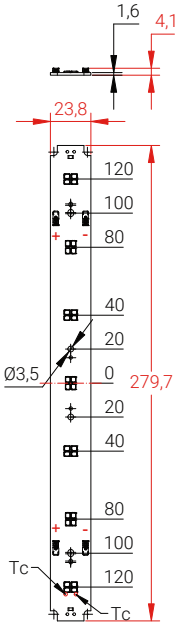
Opticus Daisy T L14

Opticus Daisy T G1 L14



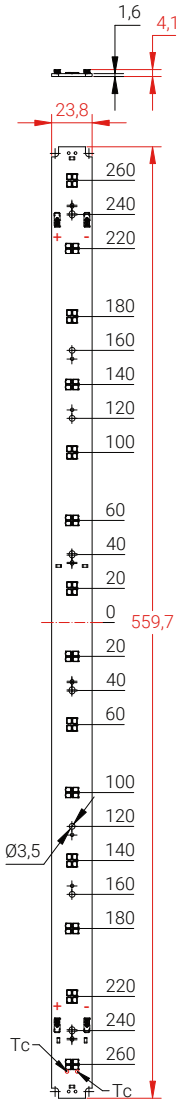
Opticus Daisy T L28

Opticus Daisy T G1 L28



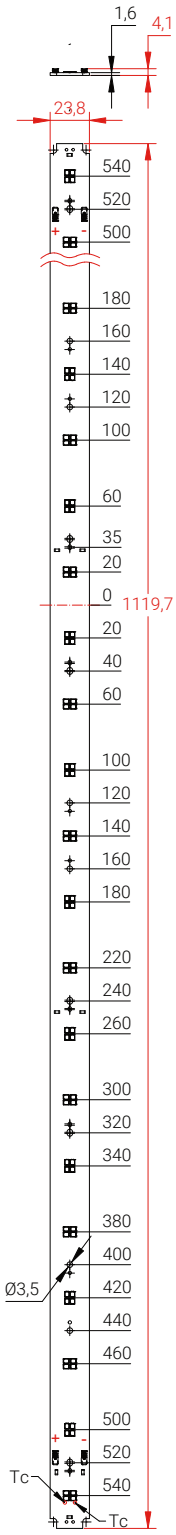
Opticus Daisy T L56

Opticus Daisy T G1 L56



Opticus Daisy T L112

Opticus Daisy T G1 L112



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Opticus Daisy Mini - Modules for Daisy Mini optics

Opticus Daisy Mini

Our LED modules Opticus Daisy Mini are optimally matched to the popular optics Daisy Mini from LEDiL.

LEDiL offers with the product family „Daisy Mini“ a further development of the popular Daisy system. It consists of linear optics made up of different lenses and louvre elements that can be combined with each other. Daisy Mini is significantly more compact than its predecessor Daisy.

You can choose between **clear and frosted lenses**. The following options are available to you:

- 65° lens
- 55° lens
- 30° lens

Combine these lenses with louvre elements. Choose between glossy or matte, as well as black, white and silver. You can choose from different dimensions for both the lenses and the louvre elements.

You are welcome to purchase the optics directly from us, just contact us.

With our LED modules Opticus Daisy, outputs of over 200 lm/W or 5000 lm are no problem. Choose between seven light colors: 2700 K, 3000 K, 3500 K, 4000 K, 5000 K, 5700 K and 6500 K and two color renderings: CRI 80 and CRI 90.

Details of our LED modules in conjunction with Ledil optics can be found at **www.ledil.com/product-landing/linear/daisy/**

What else can you expect from Opticus Daisy?
Our usual flexibility. Other variants are available on request - please feel free to contact us.

Our iX-led standard modules are available at short notice, even in small quantities, and are very advantageous in the overall concept.

Standard does not mean rigid and unchangeable!

Do you need different light colors, different color renderings or minimally shorter/longer versions of the modules? You need the assembly of soldering nuts as spacers or a threaded insert for simplified mounting of the module? No problem. Other terminals or soldered cables are also possible. With the **iX-led product family** we can adapt and individualize the standard to your needs.

Explore our exclusive module series with more than 1000 lighting possibilities.

LED module with mid-power LEDs for installation in luminaires.

Versatile with:

√ 2 linear modules: 280 mm and 560 mm x 24 mm
√ 2 color renderings: CRI 80 and CRI 90
√ 7 light colors: CCT 2700 K, 3000 K, 3500 K, 4000 K, 5000 K, 5700 K and 6500 K

Excellent color consistency in the module: 3 Step MacAdam LEDs.

Plug-in terminals for quick and easy mounting.

Connection also possible from below.

For operation on suitable constant current drivers.

Maximum working voltage	250 V
Ambient temperature	-20…+50 °C
Max. perm. operating temperature (Tc)	80 °C
EPREL database entry	yes
Beam angle	120°

Connections:

Terminals		4	
Connection direction		side	down
Connection type		rigid / flexible	rigid
Conductor cross section AWG		AWG 18-24	AWG 20
Conductor cross section	von	0.2 mm²	0.5 mm²
	bis	0.5 mm²	0.5 mm²
Stripping length		8 - 9 mm	>3 mm

Also available with other terminals on request.

Opticus Daisy Mini L28 - Modules for Daisy Mini Optics

√ linear module for installation in luminaires
√ for LEDiL Daisy Mini optics
√ 41 Mid-Power-LEDs
√ pitch distance 20 mm
√ length 280 mm
√ width 20 mm
√ 2 connection terminals
√ connection also possible from below
√ rated current 450 mA
√ maximum operating current 700 mA
√ maximum forward voltage 22.75 V
√ photometric details and EULUMDAT on www.mal-effekt.de

Please also refer to the technical data of the Opticus Daisy Mini family on page 110. Further technical data and drawings from page 113.

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 300 mA Tc = 25 °C		If = 450 mA Tc = 25 °C		If = 700 mA Tc = 25 °C			
≥80	2700	1057 lm	175 lm/W	1533 lm	164 lm/W	2260 lm	149 lm/W	7518-03101	Opticus Daisy Mini G1 L28 W20 827
	3000	1097 lm	187 lm/W	1591 lm	175 lm/W	2346 lm	159 lm/W	7518-03102	Opticus Daisy Mini G1 L28 W20 830
	3500	1097 lm	187 lm/W	1591 lm	175 lm/W	2346 lm	159 lm/W	7518-03103	Opticus Daisy Mini G1 L28 W20 835
	4000	1170 lm	200 lm/W	1697 lm	187 lm/W	2502 lm	170 lm/W	7518-03104	Opticus Daisy Mini G1 L28 W20 840
	5000	1170 lm	200 lm/W	1697 lm	187 lm/W	2502 lm	170 lm/W	7518-03105	Opticus Daisy Mini G1 L28 W20 850
	5700	1170 lm	200 lm/W	1697 lm	187 lm/W	2502 lm	170 lm/W	7518-03106	Opticus Daisy Mini G1 L28 W20 857
	6500	1170 lm	200 lm/W	1697 lm	187 lm/W	2502 lm	170 lm/W	7518-03107	Opticus Daisy Mini G1 L28 W20 865

Up to 2502 lm!

NEW: CRI 90 IN KSF-Technology

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 300 mA Tc = 25 °C		If = 450 mA Tc = 25 °C		If = 700 mA Tc = 25 °C			
≥90	2700	1037 lm	175 lm/W	1504 lm	164 lm/W	2216 lm	149 lm/W	7518-03108	Opticus Daisy Mini G1 L28 W20 927
	3000	1059 lm	179 lm/W	1535 lm	167 lm/W	2263 lm	152 lm/W	7518-03109	Opticus Daisy Mini G1 L28 W20 930
	3500	1073 lm	181 lm/W	1557 lm	170 lm/W	2294 lm	154 lm/W	7518-03110	Opticus Daisy Mini G1 L28 W20 935
	4000	1102 lm	186 lm/W	1599 lm	174 lm/W	2356 lm	158 lm/W	7518-03111	Opticus Daisy Mini G1 L28 W20 940
	5000	1102 lm	186 lm/W	1599 lm	174 lm/W	2356 lm	158 lm/W	7518-03112	Opticus Daisy Mini G1 L28 W20 950
	5700	1102 lm	186 lm/W	1599 lm	174 lm/W	2356 lm	158 lm/W	7518-03113	Opticus Daisy Mini G1 L28 W20 957
	6500	1088 lm	184 lm/W	1578 lm	172 lm/W	2325 lm	156 lm/W	7518-03114	Opticus Daisy Mini G1 L28 W20 965

Up to 2356 lm!

Opticus Daisy Mini L56 - Modules for Daisy Mini Optics

√ linear module for installation in luminaires
√ for LEDiL Daisy Mini optics
√ 28 Mid-Power-LEDs
√ pitch distance 20 mm
√ length 560 mm
√ width 20 mm
√ 2 connection terminals
√ connection also possible from below
√ rated current 450 mA
√ maximum operating current 700 mA
√ maximum forward voltage 45.5 V
√ photometric details and EULUMDAT on www.mal-effekt.de

Plea se also r efer to the technical data of the Opticus Daisy Mini family on page 110. Further technical data and drawings from page 113

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 300 mA Tc = 25 °C		If = 450 mA Tc = 25 °C		If = 700 mA Tc = 25 °C			
≥80	2700	2113 lm	175 lm/W	3065 lm	164 lm/W	4519 lm	149 lm/W	7518-03201	Opticus Daisy Mini G1 L56 W20 827
	3000	2194 lm	187 lm/W	3182 lm	175 lm/W	4692 lm	159 lm/W	7518-03202	Opticus Daisy Mini G1 L56 W20 830
	3500	2194 lm	187 lm/W	3182 lm	175 lm/W	4692 lm	159 lm/W	7518-03203	Opticus Daisy Mini G1 L56 W20 835
	4000	2339 lm	200 lm/W	3393 lm	187 lm/W	5004 lm	170 lm/W	7518-03204	Opticus Daisy Mini G1 L56 W20 840
	5000	2339 lm	200 lm/W	3393 lm	187 lm/W	5004 lm	170 lm/W	7518-03205	Opticus Daisy Mini G1 L56 W20 850
	5700	2339 lm	200 lm/W	3393 lm	187 lm/W	5004 lm	170 lm/W	7518-03206	Opticus Daisy Mini G1 L56 W20 857
	6500	2339 lm	200 lm/W	3393 lm	187 lm/W	5004 lm	170 lm/W	7518-03207	Opticus Daisy Mini G1 L56 W20 865

Up to
5004 lm!

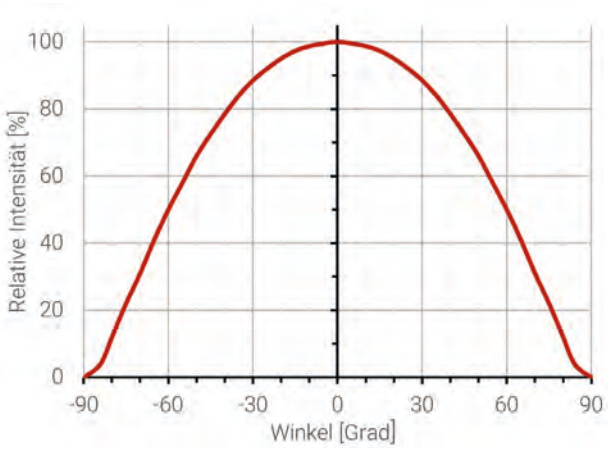
NEW:
CRI 90 IN
KSF-Techno-
logy

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 300 mA Tc = 25 °C		If = 450 mA Tc = 25 °C		If = 700 mA Tc = 25 °C			
≥90	2700	2074 lm	175 lm/W	3007 lm	164 lm/W	4431 lm	149 lm/W	7518-03208	Opticus Daisy Mini G1 L56 W20 927
	3000	2117 lm	179 lm/W	3071 lm	167 lm/W	4525 lm	152 lm/W	7518-03209	Opticus Daisy Mini G1 L56 W20 930
	3500	2147 lm	181 lm/W	3113 lm	170 lm/W	4587 lm	154 lm/W	7518-03210	Opticus Daisy Mini G1 L56 W20 935
	4000	2205 lm	186 lm/W	3198 lm	174 lm/W	4712 lm	158 lm/W	7518-03211	Opticus Daisy Mini G1 L56 W20 940
	5000	2205 lm	186 lm/W	3198 lm	174 lm/W	4712 lm	158 lm/W	7518-03212	Opticus Daisy Mini G1 L56 W20 950
	5700	2205 lm	186 lm/W	3198 lm	174 lm/W	4712 lm	158 lm/W	7518-03213	Opticus Daisy Mini G1 L56 W20 957
	6500	2176 lm	184 lm/W	3156 lm	172 lm/W	4650 lm	156 lm/W	7518-03214	Opticus Daisy Mini G1 L56 W20 965

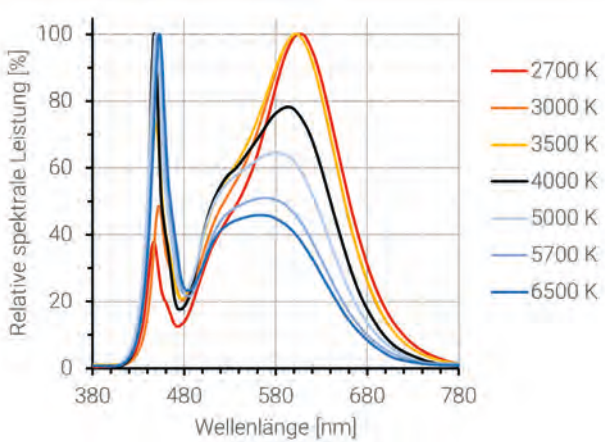
Up to
4712 lm!

Technical data: Opticus Daisy Mini - Modules for Daisy Mini Optics

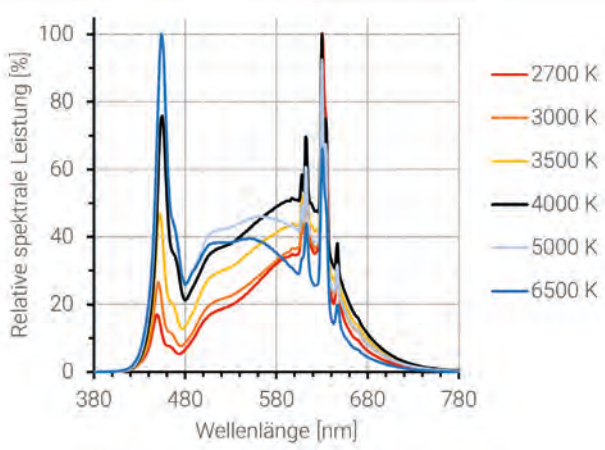
Light distribution curve



Spectrum CRI 80



Spectrum CRI 90



Lifetime of the LEDs used

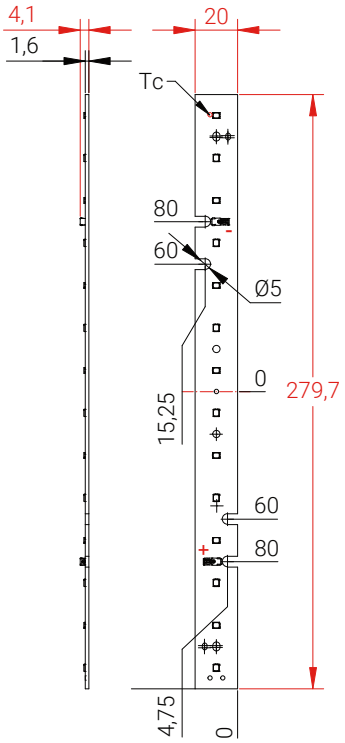
- The lifetime data is based on TM21 extrapolations of the available LM80 data of the LEDs used. They are to be regarded as purely informative data from which no warranty claim can be derived.

description	If	Tc	L70 B50	L70 B10	L80 B50	L80 B10	L90 B50	L90 B10
Opticus Daisy Mini G1 L... W20 8/9xx	700 mA	80 °C	> 102000 h	> 102000 h	> 102000 h	> 102000 h	> 50000 h	> 50000 h

Technical drawings: Opticus Daisy Mini - Modules for Daisy Mini Optics

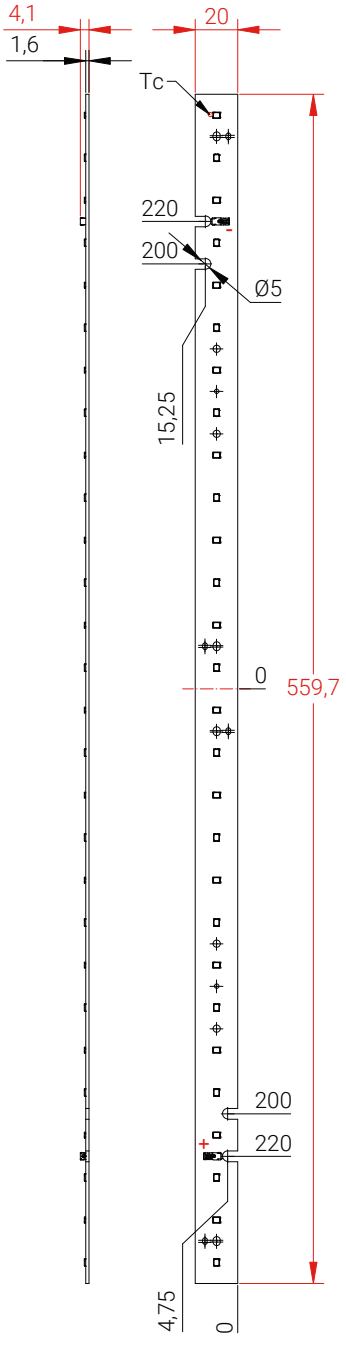
Opticus Daisy Mini L28

Opticus Daisy Mini G1 L28



Opticus Daisy Mini L56

Opticus Daisy Mini G1 L56



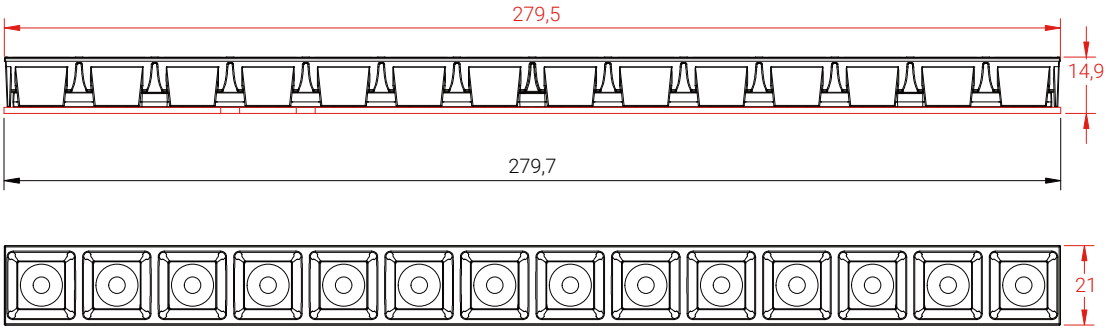
Suitable optics from LEDiL for our Opticus Daisy Mini modules

Our LED modules Opticus Daisy Mini are optimally matched to the glare control and light guiding system Daisy Mini from LEDiL.

LEDiL offers a wide range of lenses and shades, so-called louvre elements. Lenses in clear and matte optics, with different beam angles, perform the primary task of creating the luminous intensity distribution curve. The louvre elements in white, silver and black each in matt and high gloss take over the glare control.

Daisy Mini offers a minimalized appearance compared to Daisy.

The drawing shows the dimensions of the 14x1 version together with the LED module Opticus Daisy Mini. Also available is the 28x1 variant.



Source: https://www.ledil.com/search/?q=Daisy&q=Daisy

Opticus Louvre Mini — LED-modules for OptiLine Louvre Mini BJB optics

LED module with mid-power LEDs for installation in luminaires.
Compatible with OptiLine Louvre Mini 18 from BJB.

Versatile with:

√ 2 linear modules: 280 mm and 560 mm

√ 2 color renderings: CRI 80 and CRI 90 - NEW! CRI 90 in KSF technology

√ 7 light colors: 2700 K, 3000 K, 3500 K, 4000 K, 5000 K, 5700 K and 6500 K

1-row LED arrangement.

Excellent color consistency in the module: 3 Step MacAdam LEDs.

Plug-in terminals for quick and easy installation.

For operation with suitable constant current drivers.

Maximum working voltage	350 V
Ambient temperature	-20…+50 °C
Max. perm. operating temperature (Tc)	85 °C
EPREL database entry	yes
Beam angle	120°

Connections:

Terminals		4
Connection type 1		rigid
Conductor cross section AWG		AWG 18-24
Conductor cross section	min	0.2 mm²
	max	0.75 mm²
Stripping length		7.5 - 9.5 mm
Connection type 2		fine-stranded, tinned conductors
Conductor cross section AWG		AWG 20-24
Conductor cross section	min	0.2 mm²
	max	0.75 mm²
Stripping length		7.5 - 9.5 mm
Connection type 3		fine-stranded conductors
Conductor cross section AWG		AWG 18-24
Conductor cross section	min	0.2 mm²
	max	0.75 mm²
Stripping length		7.5 - 9.5 mm

Opticus Louvre Mini CC L28 - LED-modules for OptiLine Louvre Mini BJB optics

√ Linear module with LED for installation in luminaires
√ For BJB Optic System Louvre Mini
√ 16 Mid-Power LEDs
√ Pitch distance 17.5 mm
√ Length 279.2 mm
√ Width 18 mm
√ 4 connection terminals
√ Rated current 350 mA
√ Maximum operating current 700 mA
√ Maximum forward voltage 13 V
√ Photometric data on www.mal-effekt.de

Up to 213 lm/W!

Please also refer to the technical data for the Opticus Louvre Mini family on page 119. Further technical data and drawings from page 126.

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 175 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 700 mA Tc = 25 °C			
≥80	2700	358 lm	192 lm/W	700 lm	183 lm/W	1345 lm	168 lm/W	7518-06001	Opticus Louvre Mini CC G1 L28 W18 827
	3000	372 lm	200 lm/W	728 lm	190 lm/W	1398 lm	175 lm/W	7518-06002	Opticus Louvre Mini CC G1 L28 W18 830
	3500	385 lm	207 lm/W	753 lm	197 lm/W	1446 lm	181 lm/W	7518-06003	Opticus Louvre Mini CC G1 L28 W18 835
	4000	396 lm	213 lm/W	775 lm	203 lm/W	1489 lm	187 lm/W	7518-06004	Opticus Louvre Mini CC G1 L28 W18 840
	5000	396 lm	213 lm/W	775 lm	203 lm/W	1489 lm	187 lm/W	7518-06005	Opticus Louvre Mini CC G1 L28 W18 850
	5700	396 lm	213 lm/W	775 lm	203 lm/W	1489 lm	187 lm/W	7518-06006	Opticus Louvre Mini CC G1 L28 W18 857
	6500	396 lm	213 lm/W	775 lm	203 lm/W	1489 lm	187 lm/W	7518-06007	Opticus Louvre Mini CC G1 L28 W18 865

Up to 1489 lm!

NEW: CRI 90 IN KSF-Technology

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 175 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 700 mA Tc = 25 °C			
≥90	2700	363 lm	195 lm/W	711 lm	186 lm/W	1367 lm	171 lm/W	7518-06008	Opticus Louvre Mini CC G1 L28 W18 927
	3000	370 lm	199 lm/W	726 lm	190 lm/W	1396 lm	175 lm/W	7518-06009	Opticus Louvre Mini CC G1 L28 W18 930
	3500	375 lm	202 lm/W	736 lm	193 lm/W	1415 lm	177 lm/W	7518-06010	Opticus Louvre Mini CC G1 L28 W18 935
	4000	386 lm	207 lm/W	756 lm	198 lm/W	1453 lm	182 lm/W	7518-06011	Opticus Louvre Mini CC G1 L28 W18 940
	5000	386 lm	207 lm/W	756 lm	198 lm/W	1453 lm	182 lm/W	7518-06012	Opticus Louvre Mini CC G1 L28 W18 950
	5700	386 lm	207 lm/W	756 lm	198 lm/W	1453 lm	182 lm/W	7518-06013	Opticus Louvre Mini CC G1 L28 W18 957
	6500	381 lm	204 lm/W	746 lm	195 lm/W	1434 lm	180 lm/W	7518-06014	Opticus Louvre Mini CC G1 L28 W18 965

Up to 1453 lm!

Opticus Louvre Mini CC L56 - LED-modules for OptiLine Louvre Mini BJB optics

√ Linear module with LED for installation in luminaires
√ For BJB Optic System Louvre Mini
√ 32 Mid-Power-LEDs
√ Pitch distance 17.5 mm
√ Length 559.2 mm
√ Width 18 mm
√ 4 connection terminals
√ Rated current 350 mA
√ Maximum operating current 700 mA
√ Maximum forward voltage 26 V
√ Photometric data on www.mal-effekt.de

Please also refer to the technical data for the Opticus Louvre Mini family on page 119. Further technical data and drawings from page 126.

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 175 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 700 mA Tc = 25 °C			
≥80	2700	716 lm	192 lm/W	1401 lm	183 lm/W	2690 lm	168 lm/W	7518-06101	Opticus Louvre Mini CC G1 L56 W18 827
	3000	744 lm	200 lm/W	1456 lm	190 lm/W	2796 lm	175 lm/W	7518-06102	Opticus Louvre Mini CC G1 L56 W18 830
	3500	770 lm	207 lm/W	1506 lm	197 lm/W	2892 lm	181 lm/W	7518-06103	Opticus Louvre Mini CC G1 L56 W18 835
	4000	793 lm	213 lm/W	1551 lm	203 lm/W	2978 lm	187 lm/W	7518-06104	Opticus Louvre Mini CC G1 L56 W18 840
	5000	793 lm	213 lm/W	1551 lm	203 lm/W	2978 lm	187 lm/W	7518-06105	Opticus Louvre Mini CC G1 L56 W18 850
	5700	793 lm	213 lm/W	1551 lm	203 lm/W	2978 lm	187 lm/W	7518-06106	Opticus Louvre Mini CC G1 L56 W18 857
	6500	793 lm	213 lm/W	1551 lm	203 lm/W	2978 lm	187 lm/W	7518-06107	Opticus Louvre Mini CC G1 L56 W18 865

Up to 2978 lm!

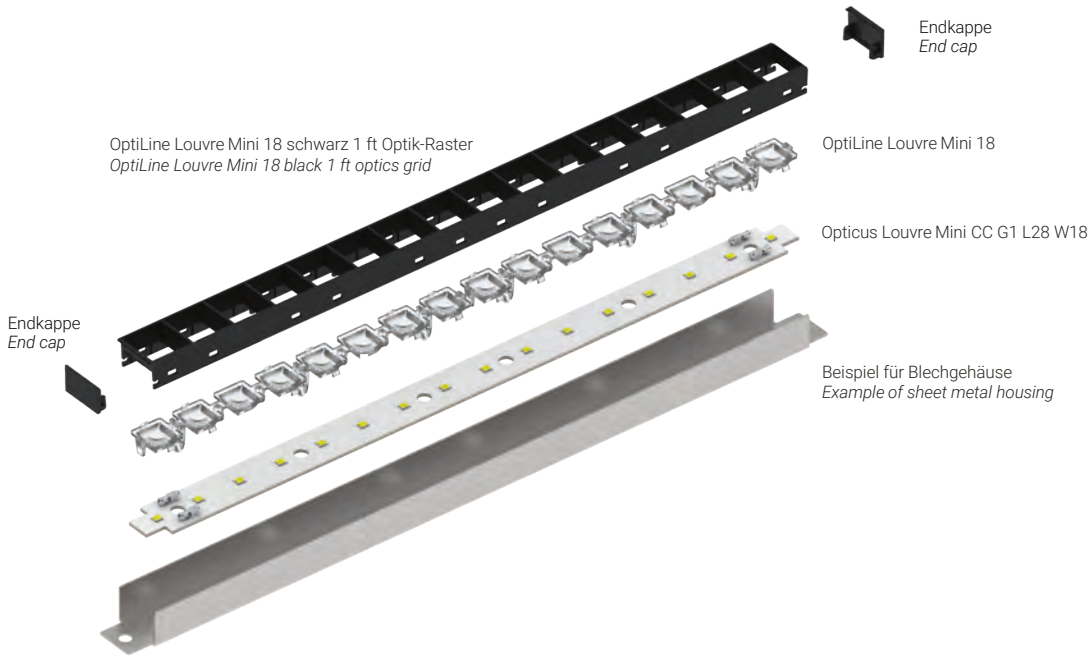
NEW: CRI 90 IN KSF-Technology

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 175 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 700 mA Tc = 25 °C			
≥90	2700	725 lm	195 lm/W	1422 lm	186 lm/W	2734 lm	171 lm/W	7518-06108	Opticus Louvre Mini CC G1 L56 W18 927
	3000	741 lm	199 lm/W	1452 lm	190 lm/W	2791 lm	175 lm/W	7518-06109	Opticus Louvre Mini CC G1 L56 W18 930
	3500	751 lm	202 lm/W	1472 lm	193 lm/W	2830 lm	177 lm/W	7518-06110	Opticus Louvre Mini CC G1 L56 W18 935
	4000	771 lm	207 lm/W	1512 lm	198 lm/W	2907 lm	182 lm/W	7518-06111	Opticus Louvre Mini CC G1 L56 W18 940
	5000	771 lm	207 lm/W	1512 lm	198 lm/W	2907 lm	182 lm/W	7518-06112	Opticus Louvre Mini CC G1 L56 W18 950
	5700	771 lm	207 lm/W	1512 lm	198 lm/W	2907 lm	182 lm/W	7518-06113	Opticus Louvre Mini CC G1 L56 W18 957
	6500	761 lm	204 lm/W	1492 lm	195 lm/W	2868 lm	180 lm/W	7518-06114	Opticus Louvre Mini CC G1 L56 W18 965

Up to 2907 lm!

Equipment – Overview:
Opticus Louvre Mini CC - LED-modules for OptiLine Louvre Mini BJB optics

OptiLine Louvre Mini 18 Series 35.316
for screwless mounting of optics and plate



The advantages of lens optics at a glance:

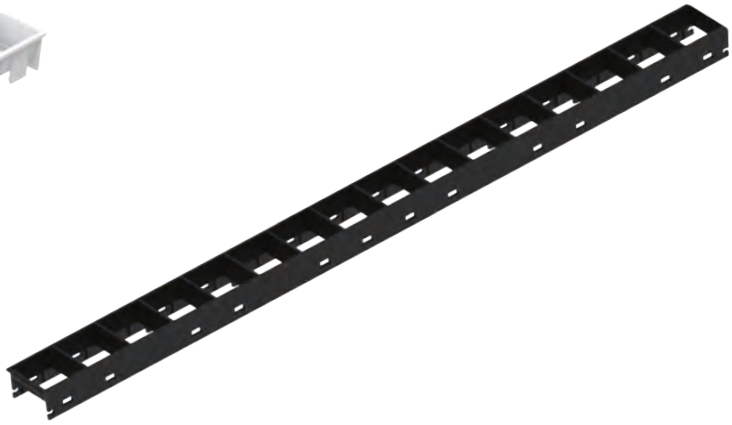
√ Particularly low glare:
Narrow = UGR<16
Wide = UGR<19
√ Tool-free installation thanks to proven 1-click locking elements
√ Centering pins for optimum alignment of LED module and optics in one step

The advantages of the grid at a glance:

√ Centering and positioning pins for correct positional alignment of the grid
√ Latching hooks for clipping in the optics
√ Latches for fixing in the luminaire sheet metal or aluminum profile
√ Overlap
√ To compensate for heat-related expansion: At the same time, this prevents the escape of scattered light
√ Seamless integration into the luminaire housing
√ 1-foot or 2-foot versions

Equipment — Components:
Opticus Louvre Mini CC - LED-modules for OptiLine Louvre Mini BJB optics

OptiLine Louvre Mini 18 black and white 1 ft optic-grid



Grid 1 ft, white

- √ For use with pitch-dependent linear lens arrangement:
  OptiLine Louvre Mini 18 Narrow
  OptiLine Louvre Mini 18 Wide
- √ Optics and louvres are only available separately
- √ Material: PC

Technical details

- √ Centering and positioning pins for aligning of the grid
- √ Locking hooks for fixing the grid in the optics optics
- √ Seamless integration into the luminaire housing

Grid 1 ft, black

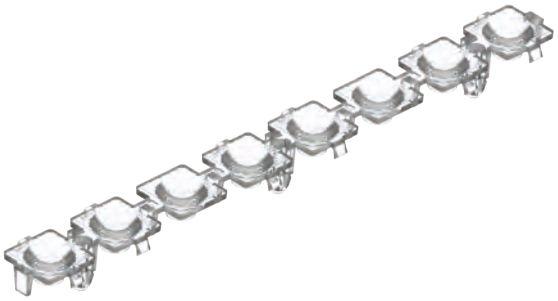
- √ For use with pitch-dependent linear lens arrangement:
  OptiLine Louvre Mini 18 Narrow
  OptiLine Louvre Mini 18 Wide
- √ Optics and louvres are only available separately
- √ Material: PC

Technical details

- √ Centering and positioning pins for aligning of the grid
- √ Locking hooks for fixing the grid in the optics optics
- √ Seamless integration into the luminaire housing

OptiLine Louvre Mini 18 Narrow

Pitch-dependent linear lens arrangement - Narrow



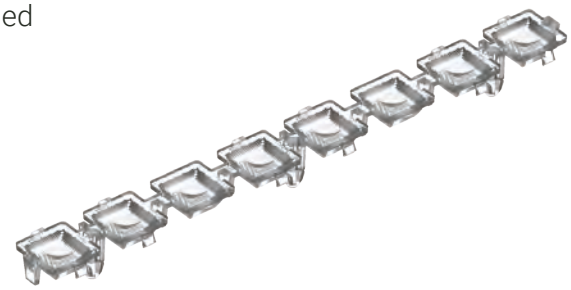
√ The OptiLine Louvre Mini 18 Narrow (1/2 ft) optics are designed for use with the OptiLine Louvre Mini 18 optics grid (1 ft) is intended.
Two optics per grid.
√ Optics and grid are only available separately.
√ Material: PMMA

Technical data

√ Centering and fixing of the printed circuit board by optics with latching pins. Locking pins designed for package thickness.
(PCB + sheet) from 2.0 mm - 2.2 mm.
PCB thickness Opticus Louvre Mini CC G1 1.5 mm.
Possible sheet thickness 0.5 mm - 0.6 mm.
√ The distance to the printed circuit board is ensured by the spacers on the optics.

OptiLine Louvre Mini 18 Wide

Pitch-dependent linear lens arrangement - Wide



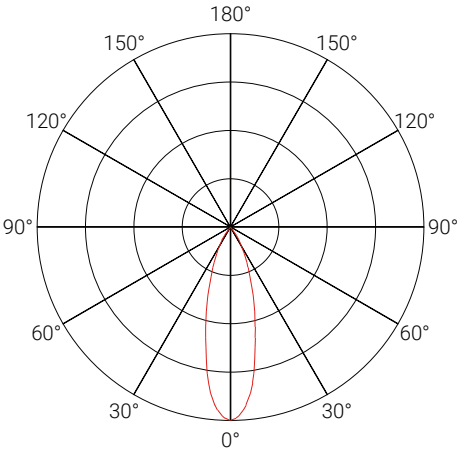
√ The OptiLine Louvre Mini 18 Wide (1/2 ft) optic is designed for use with use with the OptiLine Louvre Mini 18 optical grid (1 ft) is intended.
Two optics per grid.
√ Optics and grid are only available separately.
√ Material: PMMA

Technical data

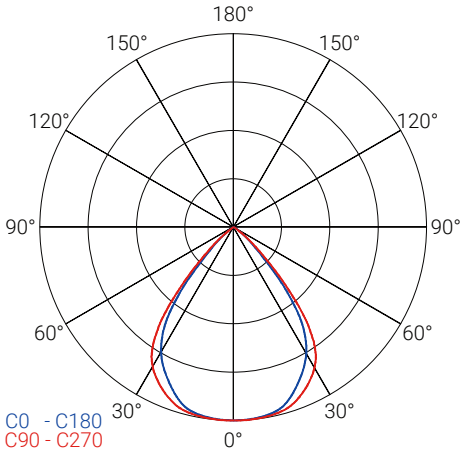
√ Centering and fixing of the PCB using optics with locking pins. Locking pins designed for package thickness.
(PCB + sheet) from 2.0 mm - 2.2 mm.
PCB thickness Opticus Louvre Mini CC G1 1.5 mm.
Possible sheet thickness 0.5 mm - 0.6 mm.
√ The distance to the printed circuit board is ensured by the spacers on the optics.

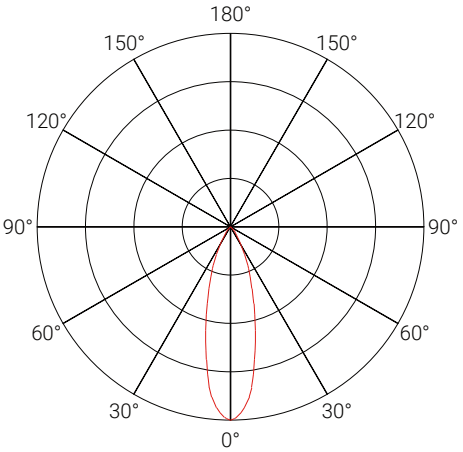
Light distribution OptiLine Louvre Mini 18

Black - Narrow

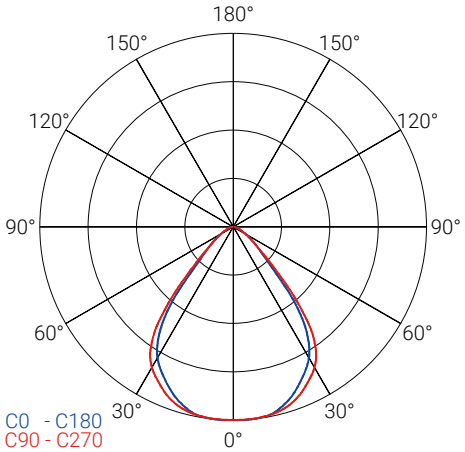


Black - Wide





White - Narrow



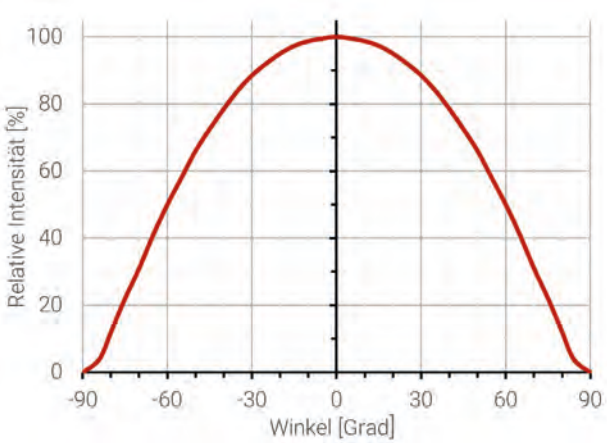
White - Wide

OptiLine Louvre Mini 18 End caps left and right, in white and black

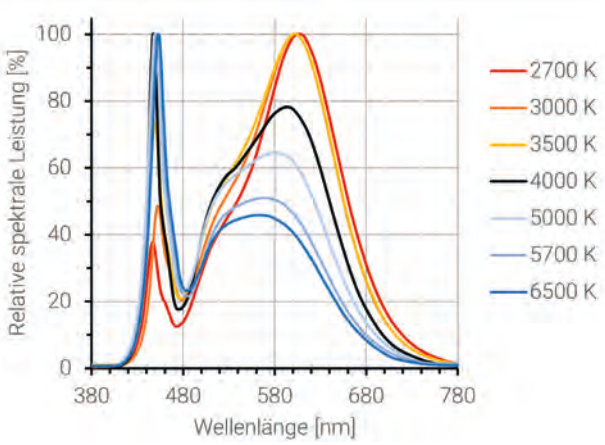
- √ For use with Louvre Mini 18
- √ Clip-on end caps provide a neat finish at the clean finish at the end of the luminaire
- √ Prevents stray light
- √ Can be clipped onto the Louvre Mini without tools
- √ Material: PC

Technical data: Opticus Louvre Mini - LED-modules for OptiLine Louvre Mini BJB optics

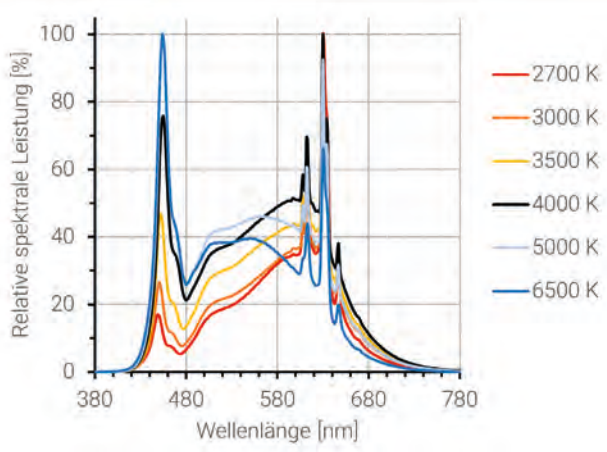
Light distribution curve



Spectrum CRI 80



Spectrum CRI 90



Lifetime of the LEDs used

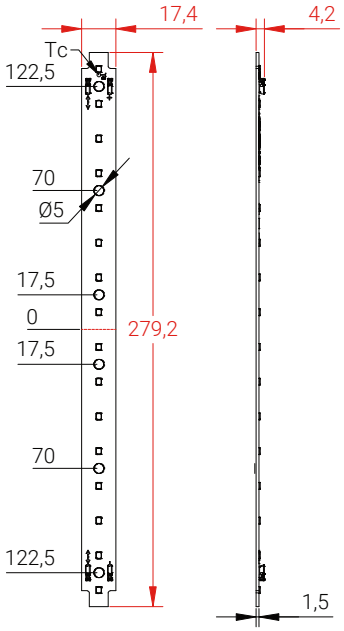
- The lifetime data is based on TM21 extrapolations of the available LM80 data of the LEDs used. They are to be regarded as purely informative data from which no warranty claim can be derived.

description	If	Tc	L70 B50	L70 B10	L80 B50	L80 B10	L90 B50	L90 B10
Opticus Louvre Mini CC G1 L28 W18	700 mA	85 °C	> 60000 h	> 60000 h	> 60000 h	> 60000 h	53000 h	52000 h
Opticus Louvre Mini CC G1 L56 W18	700 mA	85 °C	> 60000 h	> 60000 h	> 60000 h	> 60000 h	53000 h	52000 h

Technical drawings: Opticus Louvre Mini - LED-modules for OptiLine Louvre Mini BJB optics

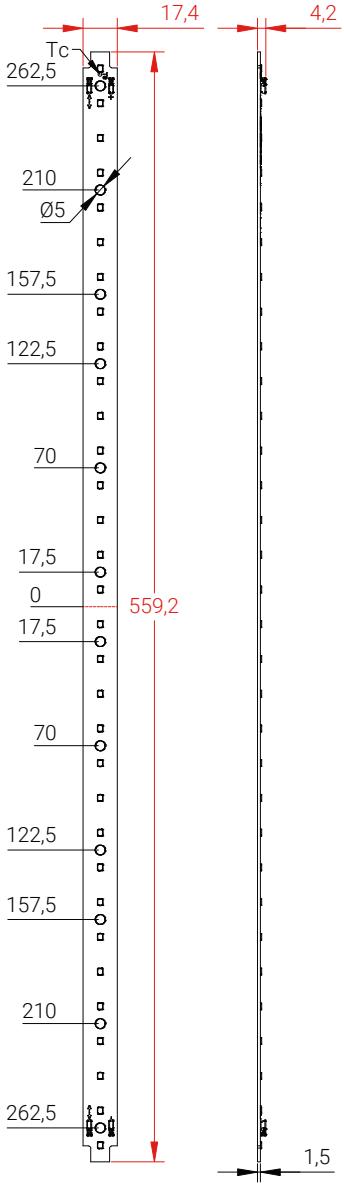
Opticus Louvre Mini CC L28

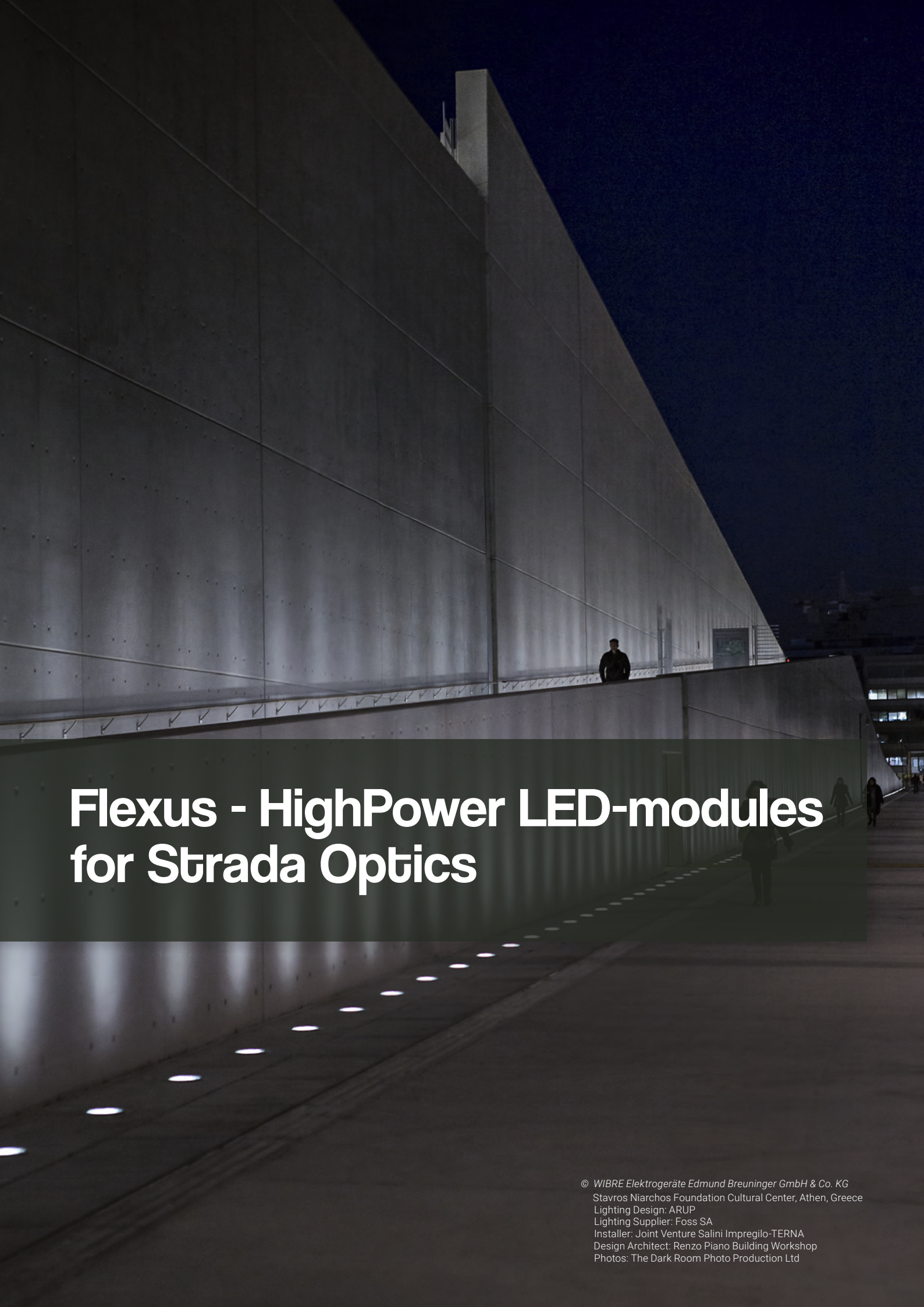
Opticus Louvre Mini CC G1 L28 W18



Opticus Louvre Mini CC L56

Opticus Louvre Mini CC G1 L56 W18





Flexus - HighPower LED-modules for Strada Optics

Stavros Niarchos Foundation Cultural Center, Athen, Greece
Lighting Design: ARUP
Lighting Supplier: Foss SA
Installer: Joint Venture Salini Impregilo-TERNA
Design Architect: Renzo Piano Building Workshop
Photos: The Dark Room Photo Production Ltd

Flexus HighPower

iX-LED Flexus combines sustainable thermal management and medium to high performance, e.g. for street lighting.

The Flexus modules are available in **two basic variants:**

iX-led Flexus HighPower

- 2-row LED module with HighPower LEDs
- efficiency of over 220 lm/W or 10000 lm
- optimized thermal management and temperature monitoring by aluminum core PCB, as well as NTC
- on request also available with LED shunt to increase module reliability

iX-led Flexus MidPower

- 4-row LED module with MidPower LEDs
- efficiency of nearly 210 lm/W or almost 6000 lm
- optimized thermal management and temperature monitoring by aluminum core PCB, as well as NTC

You can choose from a **variety of lengths, LED arrangements and light colors**.

Our Flexus modules offer high compatibility with multiple optics and plug-in terminals from many manufacturers, allowing for quick and easy installation. Our Flexus series is therefore ideally suited for installation in street lighting.

Standard does not mean rigid and unchangeable!

Do you need different light colors, different color renderings or minimally shorter/longer versions of the modules? You need the assembly of soldering nuts as spacers or a threaded insert for simplified mounting of the module? No problem. Other terminals or soldered cables are also possible. With the **iX-led product family** we can adapt and individualize the standard to your needs.

Explore our exclusive module series with more than 1000 lighting possibilities.

LED module with high-power LEDs for installation in luminaires.
Compatible with optics from various manufacturers.

Versatile with:

√ Square modules in 4 lengths: 71 mm, 121 mm, 172 mm and 223 mm x 50 mm
√ 2 color renderings: CRI 70 and CRI 80
√ 3 light colors: 3000 K, 4000 K and 5000 K

2-row LED arrangement.

Plug-in terminals for easy and quick mounting.

For operation with suitable constant current drivers.

Maximum working voltage	250 V
Ambient temperature	-20…+50 °C
Max. perm. operating temperature (Tc)	80 °C
EPREL database entry	yes
Beam angle	120°

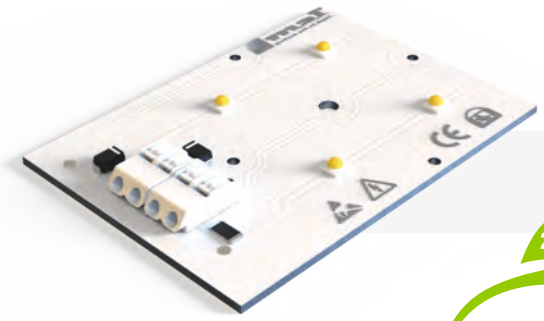
Connections:

Terminals		4
Connection type		rigid / flexible
Conductor cross section AWG		AWG 18-24
Conductor cross section	min	0.2 mm²
	max	0.75 mm²
Stripping length		8 - 9 mm

Also available with other terminals on request.

Flexus 2x2 - HighPower LED-modules for Strada optics

√ square module for installation in luminaires
√ designed for 2x2 optics from various manufacturers
√ 4 High-Power LEDs
√ pitch distance along and across 25 mm
√ length 71 mm
√ width 50 mm
√ 4 connection terminals
√ aluminum core PCB for perfect thermal management
√ rated current 350 mA
√ maximum operating current 1500 mA
√ maximum forward voltage 13.6 V
√ with NTC for temperature monitoring, reverse polarity protection and TVS diode



Up to 224 lm/W!

Please also refer to the technical data of the Flexus HighPower family on page 130. Further technical data and drawings from page 136.

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 100 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 1.500 mA Tc = 25 °C			
≥70	3000	223 lm	209 lm/W	727 lm	187 lm/W	2472 lm	136 lm/W	7550-03000	Flexus G2 2x2 P0 730
	4000	240 lm	224 lm/W	780 lm	201 lm/W	2652 lm	146 lm/W	7550-03002	Flexus G2 2x2 P0 740
	5000	240 lm	224 lm/W	780 lm	201 lm/W	2652 lm	146 lm/W	7550-03004	Flexus G2 2x2 P0 750

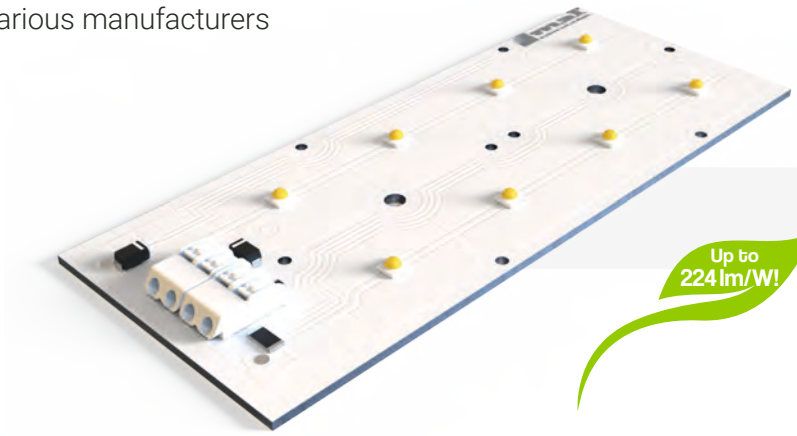
Up to 2652 lm!

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 100 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 1.500 mA Tc = 25 °C			
≥80	3000	190 lm	174 lm/W	616 lm	154 lm/W	1940 lm	103 lm/W	7550-03001	Flexus G2 2x2 P0 830
	4000	203 lm	186 lm/W	656 lm	164 lm/W	2068 lm	109 lm/W	7550-03003	Flexus G2 2x2 P0 840
	5000	203 lm	186 lm/W	656 lm	164 lm/W	2068 lm	109 lm/W	7550-03005	Flexus G2 2x2 P0 850

Up to 2068 lm!

Flexus 2x4 - HighPower LED-modules for Strada optics

√ square module for installation in luminaires
√ designed for 2x2 and 2x4 optics from various manufacturers
√ 8 High-Power LEDs
√ pitch distance along and across 25 mm
√ length 121 mm
√ width 50 mm
√ 4 connection terminals
√ aluminum core PCB for perfect thermal management
√ rated current 350 mA
√ maximum operating current 1500 mA
√ maximum forward voltage 27.2 V
√ with NTC for temperature monitoring, reverse polarity protection and TVS diode



Please also refer to the technical data of the Flexus HighPower family on page 130. Further technical data and drawings from page 136

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 100 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 1.500 mA Tc = 25 °C			
≥70	3000	446 lm	209 lm/W	1454 lm	187 lm/W	4944 lm	136 lm/W	7550-03006	Flexus G2 2x4 P0 730
	4000	479 lm	224 lm/W	1560 lm	201 lm/W	5304 lm	146 lm/W	7550-03008	Flexus G2 2x4 P0 740
	5000	479 lm	224 lm/W	1560 lm	201 lm/W	5304 lm	146 lm/W	7550-03010	Flexus G2 2x4 P0 750

Up to 5304 lm!

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 100 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 1.500 mA Tc = 25 °C			
≥80	3000	381 lm	174 lm/W	1232 lm	154 lm/W	3880 lm	103 lm/W	7550-03007	Flexus G2 2x4 P0 830
	4000	406 lm	186 lm/W	1312 lm	164 lm/W	4136 lm	109 lm/W	7550-03009	Flexus G2 2x4 P0 840
	5000	406 lm	186 lm/W	1312 lm	164 lm/W	4136 lm	109 lm/W	7550-03011	Flexus G2 2x4 P0 850

Up to 4136 lm!

Flexus 2x6 - HighPower LED-modules for Strada optics

√ square module for installation in luminaires
√ designed for 2x6 optics from various manufacturers
√ 12 High-Power LEDs
√ pitch distance along and across 25 mm
√ length 172 mm
√ width 50 mm
√ 4 connection terminals
√ aluminum core PCB for perfect thermal management
√ rated current 350 mA
√ maximum operating current 1500 mA
√ maximum forward voltage 40.8 V
√ with NTC for temperature monitoring, reverse polarity protection and TVS diode

Please also refer to the technical data of the Flexus HighPower family on page 130. Further technical data and drawings from page 136

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 100 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 1.500 mA Tc = 25 °C			
≥70	3000	670 lm	209 lm/W	2181 lm	187 lm/W	7416 lm	136 lm/W	7550-03012	Flexus G2 2x6 P0 730
	4000	719 lm	224 lm/W	2340 lm	201 lm/W	7956 lm	146 lm/W	7550-03014	Flexus G2 2x6 P0 740
	5000	719 lm	224 lm/W	2340 lm	201 lm/W	7956 lm	146 lm/W	7550-03016	Flexus G2 2x6 P0 750

Up to 7956 lm!

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 100 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 1.500 mA Tc = 25 °C			
≥80	3000	571 lm	174 lm/W	1848 lm	154 lm/W	5820 lm	103 lm/W	7550-03013	Flexus G2 2x6 P0 830
	4000	608 lm	186 lm/W	1968 lm	164 lm/W	6204 lm	109 lm/W	7550-03015	Flexus G2 2x6 P0 840
	5000	608 lm	186 lm/W	1968 lm	164 lm/W	6204 lm	109 lm/W	7550-03017	Flexus G2 2x6 P0 850

Up to 6204 lm!

Flexus 2x8 - HighPower LED-modules for Strada optics

√ square module for installation in luminaires
√ designed for 2x2 and 2x8 optics from various manufacturers
√ 16 High-Power LEDs
√ pitch distance along and across 25 mm
√ length 223 mm
√ width 50 mm
√ 4 connection terminals
√ aluminum core PCB for perfect thermal management
√ rated current 350 mA
√ maximum operating current 1500 mA
√ maximum forward voltage 54.4 V
√ with NTC for temperature monitoring, reverse polarity protection and TVS diode

Please also refer to the technical data of the Flexus HighPower family on page 130. Further technical data and drawings from page 136

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 100 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 1.500 mA Tc = 25 °C			
≥70	3000	893 lm	209 lm/W	2908 lm	187 lm/W	9888 lm	136 lm/W	7550-03018	Flexus G2 2x8 P0 730
	4000	958 lm	224 lm/W	3120 lm	201 lm/W	10608 lm	146 lm/W	7550-03020	Flexus G2 2x8 P0 740
	5000	958 lm	224 lm/W	3120 lm	201 lm/W	10608 lm	146 lm/W	7550-03022	Flexus G2 2x8 P0 750

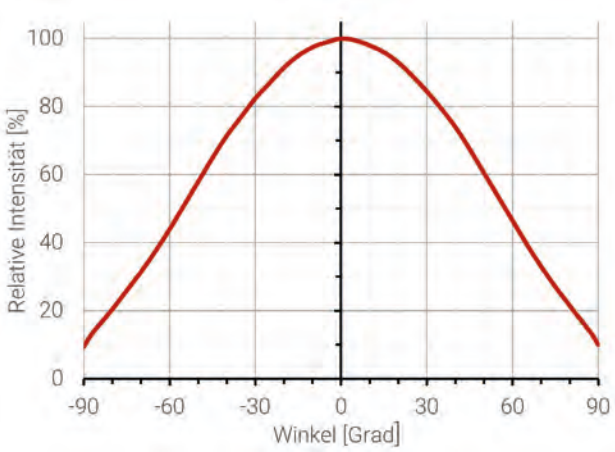
Up to 10608 lm!

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 100 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 1.500 mA Tc = 25 °C			
≥80	3000	762 lm	174 lm/W	2464 lm	154 lm/W	7760 lm	103 lm/W	7550-03019	Flexus G2 2x8 P0 830
	4000	811 lm	186 lm/W	2624 lm	164 lm/W	8272 lm	109 lm/W	7550-03021	Flexus G2 2x8 P0 840
	5000	811 lm	186 lm/W	2624 lm	164 lm/W	8272 lm	109 lm/W	7550-03023	Flexus G2 2x8 P0 850

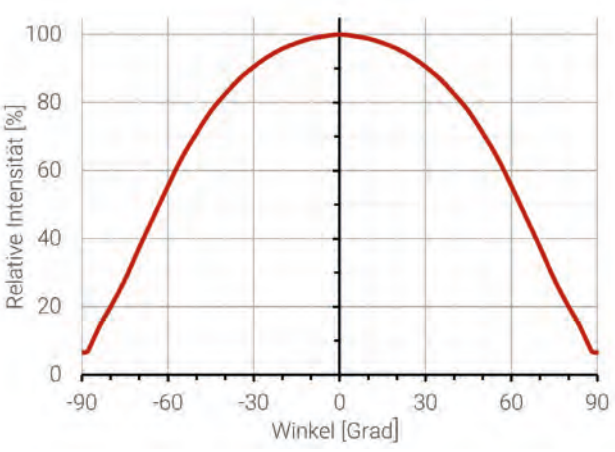
Up to 8272 lm!

Technical data: Flexus - HighPower LED-modules for Strada Optics

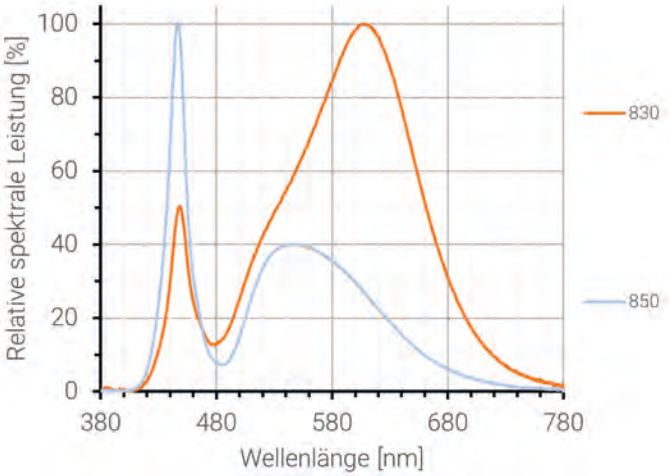
Light distribution curve CRI 80



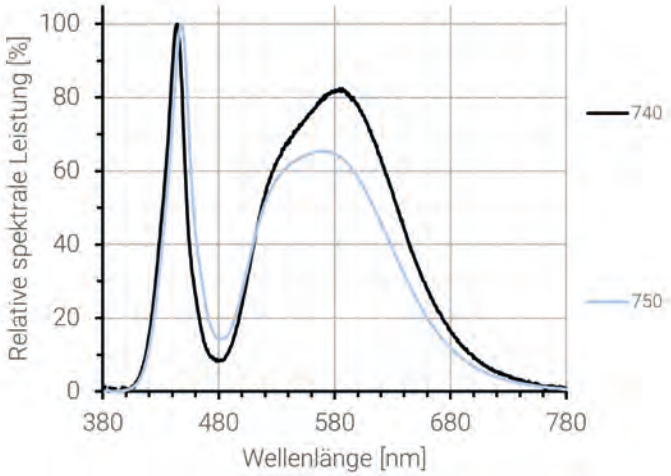
Light distribution curve CRI 70



Spectrum CRI 80



Spectrum CRI 70



Lifetime of the LEDs used

- The lifetime data is based on TM21 extrapolations of the available LM80 data of the LEDs used. They are to be regarded as purely informative data from which no warranty claim can be derived.

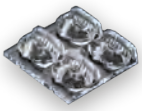
description	If	Tc	L70 B50	L70 B10	L80 B50	L80 B10	L90 B50	L90 B10
Flexus G2 2x... PO 8xx	500 mA	85 °C	> 109.000 h	> 109.000 h	> 109.000 h	> 109.000 h	> 109.000 h	> 109.000 h
		95 °C	> 109.000 h	> 109.000 h	> 109.000 h	> 109.000 h	> 109.000 h	> 109.000 h
	1000 mA	55 °C	> 109.000 h	> 109.000 h	> 87.000 h	> 88.000 h	> 45.000 h	> 46.000 h
		85 °C	> 60.000 h	> 60.000 h	> 60.000 h	> 60.000 h	> 60.000 h	> 60.000 h
		95 °C	> 60.000 h	> 60.000 h	> 60.000 h	> 60.000 h	> 60.000 h	> 60.000 h
	1250 mA	85 °C	> 60.000 h	> 60.000 h	> 60.000 h	> 60.000 h	> 45.000 h	> 46.000 h
		95 °C	> 54.000 h	> 54.000 h	> 40.000 h	> 41.000 h	> 19.000 h	> 19.000 h
Flexus G2 2x... PO 7xx	500 mA	85 °C	> 60.000 h	> 60.000 h	> 60.000 h	> 60.000 h	> 60.000 h	> 60.000 h
		95 °C	> 36.000 h	> 36.000 h	> 36.000 h	> 36.000 h	> 36.000 h	> 36.000 h
	700 mA	95 °C	> 60.000 h	> 60.000 h	> 60.000 h	> 60.000 h	> 60.000 h	> 60.000 h
	1000 mA	85 °C	> 109.000 h	> 109.000 h	> 87.000 h	> 88.000 h	> 45.000 h	> 46.000 h
		95 °C	> 60.000 h	> 60.000 h	> 60.000 h	> 60.000 h	> 51.000 h	> 51.000 h
	1500 mA	85 °C	> 60.000 h	> 60.000 h	> 44.000 h	> 45.000 h	> 23.000 h	> 24.000 h

Matching example standard optics from LEDiL

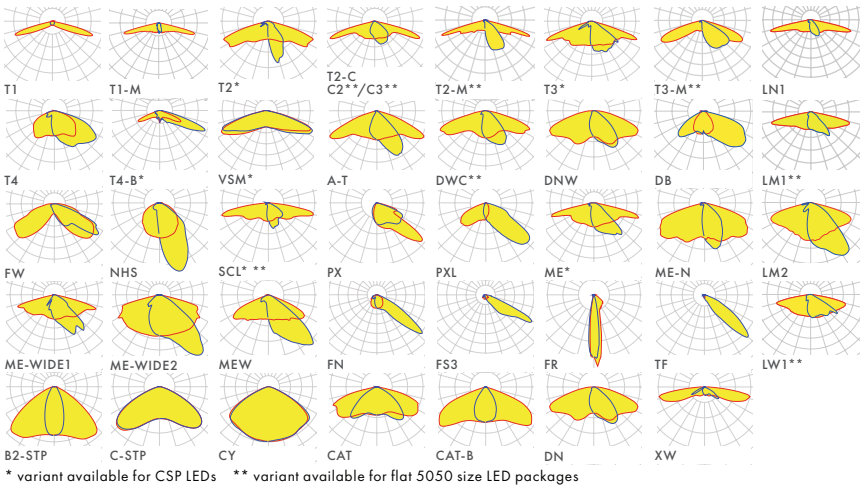
STRADA

The most versatile modular product family especially designed for street lighting.

PATENTED



2X2
– 50 x 50 mm
Compatibility: up to 5050 size LED packages



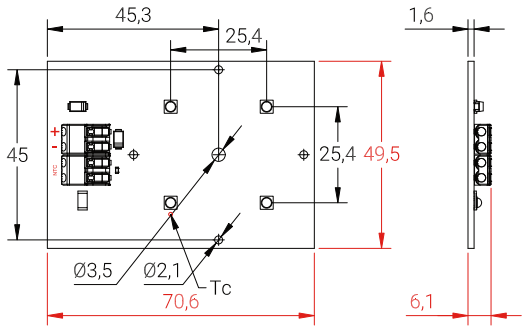
* variant available for CSP LEDs ** variant available for flat 5050 size LED packages

Source: https://www.ledil.com/wp-content/uploads/2022/09/Guide_for_Street_lighting_optics_v1.0_2022_WEB.pdf

Technical drawings: Flexus - HighPower LED-modules for Strada Optics

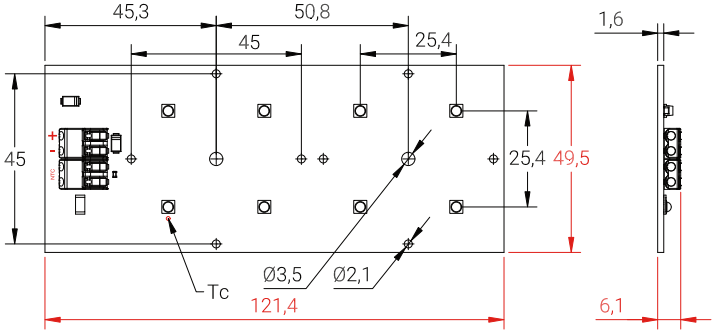
Flexus 2x2

Flexus G2 2x2 P0



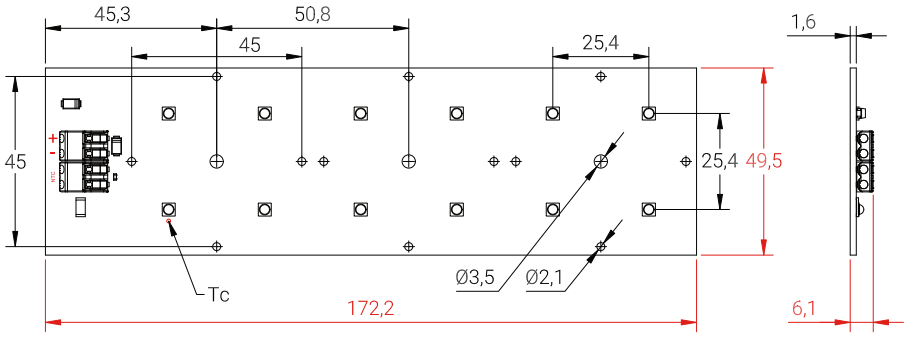
Flexus 2x4

Flexus G2 2x4 P0



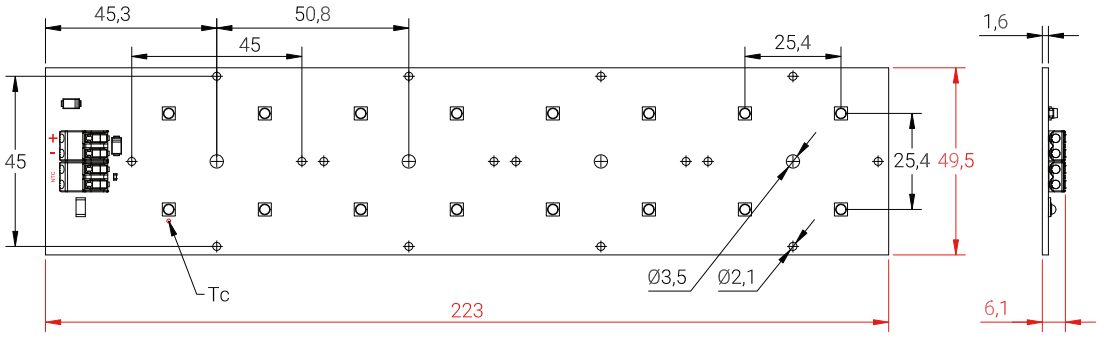
Flexus 2x6

Flexus G2 2x6 P0



Flexus 2x8

Flexus G2 2x8 P0




TOMMY HILFIGER
CALVIN KLEIN

Flexus - MidPower LED-modules for Stradella Optics

Flexus MidPower

LED module with mid-power LEDs for installation in luminaires.

Compatible with optics from various manufacturers.

Versatile with:

√ square module in four lenghts: 71 mm, 121 mm, 172 mm and 223 mm x 50 mm
√ color rendering: CRI 80
√ 7 light colors: CCT 2700 K, 3000 K, 3500 K, 4000 K, 5000 K, 5700 K and 6500 K

4-row LED arrangement. NTC for temperature monitoring.

Plug-in terminals for easy and fast mounting.

For operation with suitable constant current drivers.

Maximum working voltage	250 V
Ambient temperature	-20…+50 °C
Max. perm. operating temperature (Tc)	85 °C
EPREL database entry	yes
Beam angle	120°

Connections:

Terminals		4
Connection type		rigid / flexible
Conductor cross section AWG		AWG 18-24
Conductor cross section	min	0.2 mm²
	max	0.75 mm²
Stripping length		8 - 9 mm

Also available with other terminals on request.

Flexus 4x4 - MidPower LED-modules for Stradella Optics

- √ square module for installation in luminaires
- √ for 4x4 optics from various manufacturers
- √ 16 Mid-Power LEDs
- √ pitch distance along and across 12.5 mm
- √ length 71 mm
- √ width 50 mm
- √ 4 connection terminals
- √ rated current 350 mA
- √ maximum operating current 700 mA
- √ maximum forward voltage 12.4 V
- √ with NTC for temperature monitoring

Please also refer to the technical data of the Flexus MidPower family on page 143. Further technical data and drawings from page 148.

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 200 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 700 mA Tc = 25 °C			
≥80	2700	402 lm	186 lm/W	689 lm	178 lm/W	1311 lm	162 lm/W	7550-03024	Flexus G2 4x4 P0 827
	3000	428 lm	199 lm/W	734 lm	190 lm/W	1397 lm	174 lm/W	7550-03025	Flexus G2 4x4 P0 830
	3500	428 lm	199 lm/W	734 lm	190 lm/W	1397 lm	174 lm/W	7550-03026	Flexus G2 4x4 P0 835
	4000	445 lm	209 lm/W	763 lm	200 lm/W	1452 lm	182 lm/W	7550-03027	Flexus G2 4x4 P0 840
	5000	445 lm	209 lm/W	763 lm	200 lm/W	1452 lm	182 lm/W	7550-03028	Flexus G2 4x4 P0 850
	5700	445 lm	209 lm/W	763 lm	200 lm/W	1452 lm	182 lm/W	7550-03029	Flexus G2 4x4 P0 857
	6500	445 lm	209 lm/W	763 lm	200 lm/W	1452 lm	182 lm/W	7550-03030	Flexus G2 4x4 P0 865

Up to
1452 lm!

Flexus 4x8 - MidPower LED-modules for Stradella Optics

- √ square module for installation in luminaires
- √ for 4x4 and 4x8 optics from various manufacturers
- √ 32 Mid-Power LEDs
- √ pitch distance along and across 12.5 mm
- √ length 121 mm
- √ width 50 mm
- √ 4 connection terminals
- √ rated current 350 mA
- √ maximum operating current 700 mA
- √ maximum forward voltage 24.8 V
- √ with NTC for temperature monitoring

Please also refer to the technical data of the Flexus MidPower family on page 143. Further technical data and drawings from page 148.

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 200 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 700 mA Tc = 25 °C			
≥80	2700	804 lm	186 lm/W	1378 lm	178 lm/W	2622 lm	162 lm/W	7550-03031	Flexus G2 4x8 P0 827
	3000	857 lm	199 lm/W	1468 lm	190 lm/W	2794 lm	174 lm/W	7550-03032	Flexus G2 4x8 P0 830
	3500	857 lm	199 lm/W	1468 lm	190 lm/W	2794 lm	174 lm/W	7550-03033	Flexus G2 4x8 P0 835
	4000	891 lm	209 lm/W	1526 lm	200 lm/W	2903 lm	182 lm/W	7550-03034	Flexus G2 4x8 P0 840
	5000	891 lm	209 lm/W	1526 lm	200 lm/W	2903 lm	182 lm/W	7550-03035	Flexus G2 4x8 P0 850
	5700	891 lm	209 lm/W	1526 lm	200 lm/W	2903 lm	182 lm/W	7550-03036	Flexus G2 4x8 P0 857
	6500	891 lm	209 lm/W	1526 lm	200 lm/W	2903 lm	182 lm/W	7550-03037	Flexus G2 4x8 P0 865

Up to
2903 lm!

Flexus 4x12 - MidPower LED-modules for Stradella Optics

- √ square module for installation in luminaires
- √ for 4x4, 4x8 and 4x12 optics from various manufacturers
- √ 48 Mid-Power LEDs
- √ pitch distance along and across 12.5 mm
- √ length 172 mm
- √ width 50 mm
- √ 4 connection terminals
- √ rated current 350 mA
- √ maximum operating current 700 mA
- √ maximum forward voltage 37.2 V
- √ with NTC for temperature monitoring

Please also refer to the technical data of the Flexus MidPower family on page 143. Further technical data and drawings from page 148.

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 200 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 700 mA Tc = 25 °C			
≥80	2700	1206 lm	186 lm/W	2067 lm	178 lm/W	3932 lm	162 lm/W	7550-03038	Flexus G2 4x12 P0 827
	3000	1285 lm	199 lm/W	2202 lm	190 lm/W	4191 lm	174 lm/W	7550-03039	Flexus G2 4x12 P0 830
	3500	1285 lm	199 lm/W	2202 lm	190 lm/W	4191 lm	174 lm/W	7550-03040	Flexus G2 4x12 P0 835
	4000	1336 lm	209 lm/W	2289 lm	200 lm/W	4355 lm	182 lm/W	7550-03041	Flexus G2 4x12 P0 840
	5000	1336 lm	209 lm/W	2289 lm	200 lm/W	4355 lm	182 lm/W	7550-03042	Flexus G2 4x12 P0 850
	5700	1336 lm	209 lm/W	2289 lm	200 lm/W	4355 lm	182 lm/W	7550-03043	Flexus G2 4x12 P0 857
	6500	1336 lm	209 lm/W	2289 lm	200 lm/W	4355 lm	182 lm/W	7550-03044	Flexus G2 4x12 P0 865

Up to
4355 lm!

Flexus 4x16 - MidPower LED-modules for Stradella Optics

- √ square module for installation in luminaires
- √ for 4x4, 4x8 and 4x16 optics from various manufacturers
- √ 64 Mid-Power LEDs
- √ pitch distance along and across 12.5 mm
- √ length 223 mm
- √ width 50 mm
- √ 4 connection terminals
- √ rated current 350 mA
- √ maximum operating current 700 mA
- √ maximum forward voltage 49.6 V
- √ with NTC for temperature monitoring

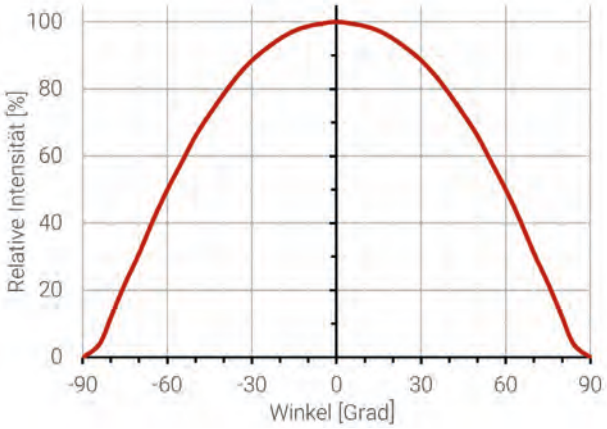
Please also refer to the technical data of the Flexus MidPower family on page 143. Further technical data and drawings from page 148.

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 200 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 700 mA Tc = 25 °C			
≥80	2700	1609 lm	186 lm/W	2756 lm	178 lm/W	5243 lm	162 lm/W	7550-03045	Flexus G2 4x16 P0 827
	3000	1714 lm	199 lm/W	2936 lm	190 lm/W	5587 lm	174 lm/W	7550-03046	Flexus G2 4x16 P0 830
	3500	1714 lm	199 lm/W	2936 lm	190 lm/W	5587 lm	174 lm/W	7550-03047	Flexus G2 4x16 P0 835
	4000	1781 lm	209 lm/W	3052 lm	200 lm/W	5806 lm	182 lm/W	7550-03048	Flexus G2 4x16 P0 840
	5000	1781 lm	209 lm/W	3052 lm	200 lm/W	5806 lm	182 lm/W	7550-03049	Flexus G2 4x16 P0 850
	5700	1781 lm	209 lm/W	3052 lm	200 lm/W	5806 lm	182 lm/W	7550-03050	Flexus G2 4x16 P0 857
	6500	1781 lm	209 lm/W	3052 lm	200 lm/W	5806 lm	182 lm/W	7550-03051	Flexus G2 4x16 P0 865

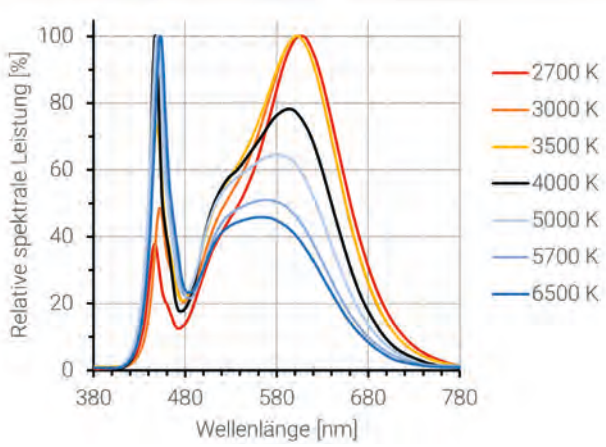
Up to
5806 lm!

Technical data: Flexus - MidPower LED-modules Stradella Optics

Light distribution curve



Spectrum



Lifetime of the LEDs used

- The lifetime data is based on TM21 extrapolations of the available LM80 data of the LEDs used. They are to be regarded as purely informative data from which no warranty claim can be derived.

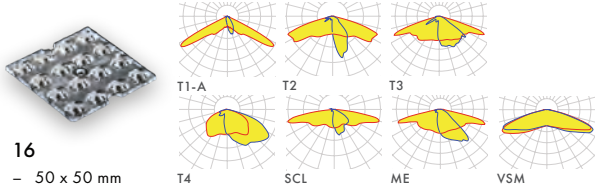
description	If	Tc	L70 B50	L70 B10	L80 B50	L80 B10	L90 B50	L90 B10
Flexus G2 4x... P0 8xx	700 mA	85 °C	> 102.000 h	> 102.000 h	> 102.000 h	> 102.000 h	> 50.000 h	> 50.000 h

Matching example standard optics from LEDiL

STRADELLA

Cost-efficient product family of single lenses and dense lens arrays.

PATENTED



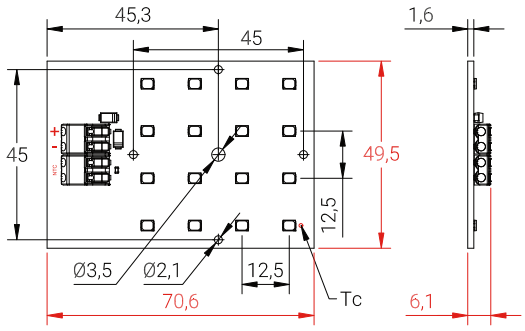
16
– 50 x 50 mm

Source: https://www.ledil.com/wp-content/uploads/2022/09/Guide_for_Street_lighting_optics_v1.0_2022_WEB.pdf

Technical drawings: Flexus - MidPower LED-modules for Stradella Optics

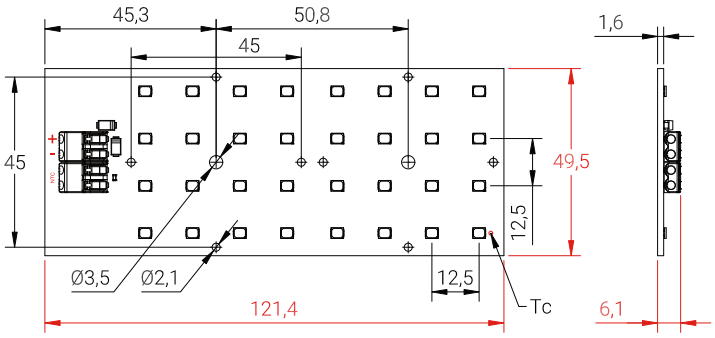
Flexus 4x4

Flexus G2 4x4 P0



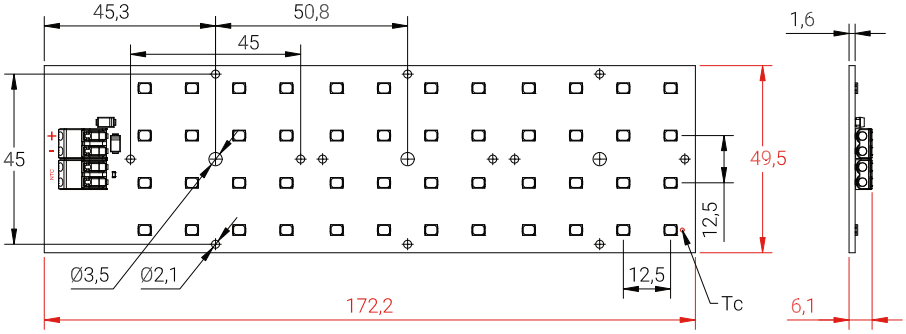
Flexus 4x8

Flexus G2 4x8 P0



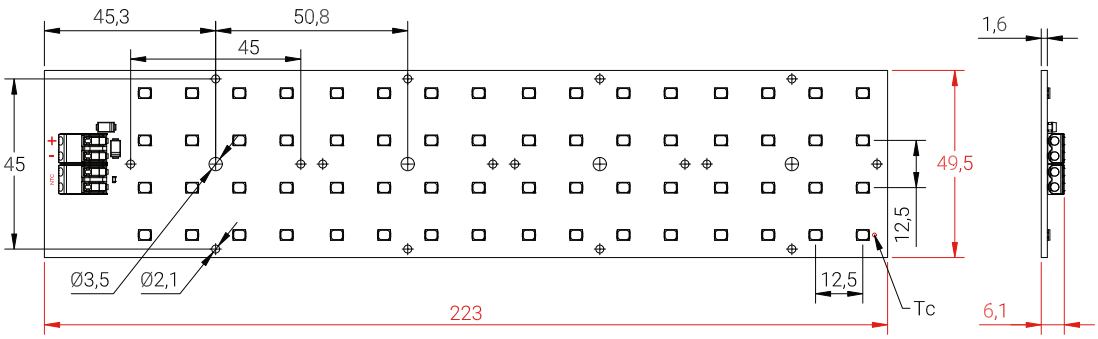
Flexus 4x12

Flexus G2 4x12 P0



Flexus 4x16

Flexus G2 4x16 P0



Flexus 5050 — LED-modules for street and outdoor-lighting

© Meyer Lighting GmbH & Co.KG - National Museum Finland Helsinki

Flexus 5050

New LED developments on the market mean the development of new LED modules for us. Especially when the new LEDs achieve such outstanding technical values.

The new generation of 5050 LEDs from a well-known manufacturer not only offer unrivalled efficiency, but also other advantages. For example, they offer higher intensity thanks to secondary optics, a better color transition angle and trend-setting corrosion resistance. And, of course, a long service life.

In addition, the new generation of 5050 LEDs is available with CRI 70, CRI 80 and CRI 90 in three color renderings. The light colors range from 2200 K to 6500 K.

This means that lighting solutions can be realised not only in urban environments, but also in offices, for example.

We have therefore expanded our iX-led Flexus family and developed the following new modules for outdoor and street lighting for the new LED generation:

Flexus 5050 HP Flexus High Performance - It couldn‘t be better

Flexus 5050 PP Outstanding price-performance ratio

Flexus 5050 CT Extremely compact high-performance modules

Standard does not mean rigid and unchangeable!

Do you need different light colors, different color renderings or minimally shorter/longer versions of the modules? You need the assembly of soldering nuts as spacers or a threaded insert for simplified mounting of the module? No problem. Other terminals or soldered cables are also possible. With the **iX-led product family** we can adapt and individualize the standard to your needs.

Explore our exclusive module series with more than 1000 lighting possibilities.

Flexus 5050 HP — LED-modules for street and outdoor-lighting

Flexus 5050 HP

iX-led Flexus 5050 HighPerformance is a further development of the proven Flexus LED-module family.

The Flexus 5050 HP is equipped with an LED with the highest performance currently available. Efficiencies of up to 237 lm/W are achieved. Or luminous fluxes of up to 13700 lm.

We offer the Flexus 5050 HP with or without an NTC for temperature monitoring. When using several LED modules in a luminaire, a single module with temperature monitoring is usually sufficient. This enables you to design cost-efficient lighting systems.

The Flexus 5050 HP is available in four lengths with 2x2, 2x4, 2x6 and 2x8 LEDs.

With CRI 70, CRI 80 and CRI 90, three color renderings are available. We also offer eight light colors in the range from 2200 K to 6500 K.

The Flexus 5050 HP is compatible with multiple optics from many manufacturers. This enables a high degree of flexibility in the lighting task. Far beyond the field of street lighting.

The family is rounded off by these LED modules:

Flexus 5050 PP	Outstanding price-performance ratio
Flexus 5050 CT	Extremely compact high-performance modules
Flexus HighPower	LED module with robust high-power LEDs
Flexus MidPower	Mid Power performance in a compact design
Flexus Color	Flexus in 11 colors from Far-Red to Royal-Blue

Our iX-led standard modules are available at short notice, even in small quantities, and are very advantageous in the overall concept.

Standard does not mean rigid and unchangeable!

Do you need different light colors, different color renderings or minimally shorter/longer versions of the modules? You need the assembly of soldering nuts as spacers or a threaded insert for simplified mounting of the module? No problem. Other terminals or soldered cables are also possible. With the **iX-led product family** we can adapt and individualize the standard to your needs. Explore our exclusive module series with more than 1000 lighting possibilities.

LED module with high performance high-power LEDs for installation in luminaires.

Compatible with optics from various manufacturers.

Versatile with:

√ Square modules in 4 lengths: 71 mm, 121 mm, 172 mm and 223 mm x 50 mm
√ 3 color renderings: CRI 70, CRI 80 and CRI 90
√ 8 light colors: 2200 K, 2700 K, 3000 K, 3500 K, 4000 K, 5000 K, 5700 K and 6500 K

2-row LED arrangement.

Plug-in terminals for quick and easy installation.

2 variants: with and without NTC for temperature monitoring.

For operation with suitable constant current drivers.

Optimum thermal management through aluminium core PCB.

Rated current	250 V
Maximum operating current	-20…+50 °C
Maximum working voltage	95 °C
EPREL database entry	yes
Beam angle	120°

Connections:

Terminals		2 / 4
Connection type		rigid / flexible
Conductor cross-section AWG		AWG 18-24
Conductor cross-section	from	0.2 mm²
	to	0.75 mm²
Stripping length		8 - 9 mm

Did you already know? Our **Flexus 5050 HP-modules** are **ENEC-certified!**


P
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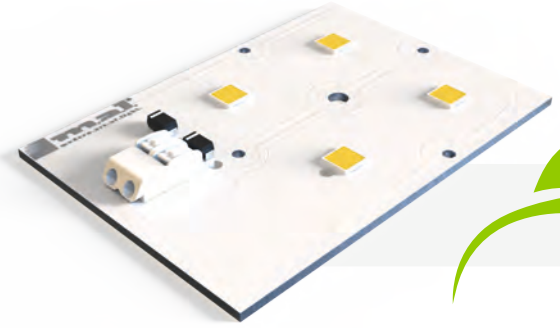
Flexus 5050 HP 2x2 – LED-modules for street- and outdoor-lighting

√ 4 high performance high-power-LEDs
√ square module for installation in luminaires
√ designed for 2x2 optics from various manufacturers
√ pitch distance along and across 25 mm
√ length 71 mm
√ width 50 mm
√ aluminium core PCB for perfect thermal management
√ rated current 350 mA
√ maximum operating current 1500 mA
√ maximum forward voltage 12.3 V



Flexus 5050 HP G1 2x2 … NTC
√ 4 connection terminals
√ with NTC for temperature monitoring

Flexus 5050 HP G1 2x2 …
√ 2 connection terminals

Please also refer to the technical data of the Flexus 5050 HP-Family on page 154. Further technical data and drawings from page 164.

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 100 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 1500 mA Tc = 25 °C			
≥70	2200	198 lm	188 lm/W	685 lm	181 lm/W	2705 lm	153 lm/W	7550-00468 7550-00564	Flexus 5050 HP G1 2x2 722 Flexus 5050 HP G1 2x2 722 NTC
	2700	227 lm	216 lm/W	788 lm	208 lm/W	3111 lm	176 lm/W	7550-00469 7550-00565	Flexus 5050 HP G1 2x2 727 Flexus 5050 HP G1 2x2 727 NTC
	3000	240 lm	228 lm/W	831 lm	220 lm/W	3282 lm	186 lm/W	7550-00470 7550-00566	Flexus 5050 HP G1 2x2 730 Flexus 5050 HP G1 2x2 730 NTC
	3500	242 lm	230 lm/W	839 lm	221 lm/W	3310 lm	187 lm/W	7550-00471 7550-00567	Flexus 5050 HP G1 2x2 735 Flexus 5050 HP G1 2x2 735 NTC
	4000	250 lm	237 lm/W	866 lm	229 lm/W	3417 lm	193 lm/W	7550-00472 7550-00568	Flexus 5050 HP G1 2x2 740 Flexus 5050 HP G1 2x2 740 NTC
	5000	250 lm	237 lm/W	866 lm	229 lm/W	3417 lm	193 lm/W	7550-00473 7550-00569	Flexus 5050 HP G1 2x2 750 Flexus 5050 HP G1 2x2 750 NTC
	5700	250 lm	237 lm/W	866 lm	229 lm/W	3417 lm	193 lm/W	7550-00474 7550-00570	Flexus 5050 HP G1 2x2 757 Flexus 5050 HP G1 2x2 757 NTC
	6500	246 lm	233 lm/W	851 lm	225 lm/W	3360 lm	190 lm/W	7550-00475 7550-00571	Flexus 5050 HP G1 2x2 765 Flexus 5050 HP G1 2x2 765 NTC

Up to
3417 lm!

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 100 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 1500 mA Tc = 25 °C			
≥80	2200	182 lm	173 lm/W	631 lm	167 lm/W	2491 lm	141 lm/W	7550-00476	Flexus 5050 HP G1 2x2 822
								7550-00572	Flexus 5050 HP G1 2x2 822 NTC
	2700	212 lm	202 lm/W	736 lm	194 lm/W	2904 lm	164 lm/W	7550-00477	Flexus 5050 HP G1 2x2 827
								7550-00573	Flexus 5050 HP G1 2x2 827 NTC
	3000	221 lm	210 lm/W	765 lm	202 lm/W	3018 lm	171 lm/W	7550-00478	Flexus 5050 HP G1 2x2 830
								7550-00574	Flexus 5050 HP G1 2x2 830 NTC
	3500	227 lm	215 lm/W	786 lm	208 lm/W	3104 lm	176 lm/W	7550-00479	Flexus 5050 HP G1 2x2 835
								7550-00575	Flexus 5050 HP G1 2x2 835 NTC
	4000	233 lm	221 lm/W	808 lm	213 lm/W	3189 lm	181 lm/W	7550-00480	Flexus 5050 HP G1 2x2 840
								7550-00576	Flexus 5050 HP G1 2x2 840 NTC
	5000	233 lm	221 lm/W	808 lm	213 lm/W	3189 lm	181 lm/W	7550-00481	Flexus 5050 HP G1 2x2 850
								7550-00577	Flexus 5050 HP G1 2x2 850 NTC
	5700	233 lm	221 lm/W	808 lm	213 lm/W	3189 lm	181 lm/W	7550-00482	Flexus 5050 HP G1 2x2 857
								7550-00578	Flexus 5050 HP G1 2x2 857 NTC
	6500	230 lm	219 lm/W	799 lm	211 lm/W	3153 lm	179 lm/W	7550-00483	Flexus 5050 HP G1 2x2 865
								7550-00579	Flexus 5050 HP G1 2x2 865 NTC

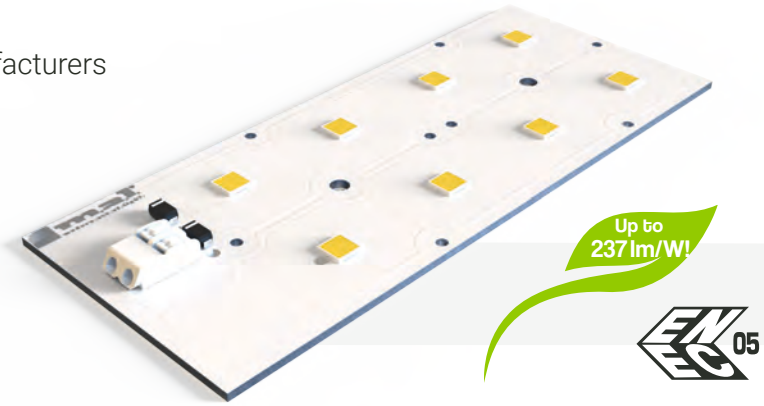
Up to 3189 lm!

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 100 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 1500 mA Tc = 25 °C			
≥90	2200	153 lm	146 lm/W	532 lm	140 lm/W	2100 lm	119 lm/W	7550-00484	Flexus 5050 HP G1 2x2 922
								7550-00580	Flexus 5050 HP G1 2x2 922 NTC
	2700	180 lm	171 lm/W	622 lm	164 lm/W	2456 lm	139 lm/W	7550-00485	Flexus 5050 HP G1 2x2 927
								7550-00581	Flexus 5050 HP G1 2x2 927 NTC
	3000	185 lm	175 lm/W	640 lm	169 lm/W	2527 lm	143 lm/W	7550-00486	Flexus 5050 HP G1 2x2 930
								7550-00582	Flexus 5050 HP G1 2x2 930 NTC
	3500	190 lm	180 lm/W	658 lm	174 lm/W	2598 lm	147 lm/W	7550-00487	Flexus 5050 HP G1 2x2 935
								7550-00583	Flexus 5050 HP G1 2x2 935 NTC
	4000	196 lm	186 lm/W	678 lm	179 lm/W	2677 lm	152 lm/W	7550-00488	Flexus 5050 HP G1 2x2 940
								7550-00584	Flexus 5050 HP G1 2x2 940 NTC
	5000	196 lm	186 lm/W	678 lm	179 lm/W	2677 lm	152 lm/W	7550-00489	Flexus 5050 HP G1 2x2 950
								7550-00585	Flexus 5050 HP G1 2x2 950 NTC
	5700	196 lm	186 lm/W	678 lm	179 lm/W	2677 lm	152 lm/W	7550-00490	Flexus 5050 HP G1 2x2 957
								7550-00586	Flexus 5050 HP G1 2x2 957 NTC
	6500	195 lm	185 lm/W	674 lm	178 lm/W	2662 lm	151 lm/W	7550-00491	Flexus 5050 HP G1 2x2 965
								7550-00587	Flexus 5050 HP G1 2x2 965 NTC

Up to 2677 lm!

Flexus 5050 HP 2x4 – LED-modules for street- and outdoor-lighting

√ 8 high performance high-power-LEDs
√ square module for installation in luminaires
√ designed for 2x2 optics from various manufacturers
√ pitch distance along and across 25 mm
√ length 121 mm
√ width 50 mm
√ aluminium core PCB for perfect thermal management
√ rated current 350 mA
√ maximum operating current 1500 mA
√ maximum forward voltage 24.5 V



Flexus 5050 HP G1 2x4 … NTC
√ 4 connection terminals
√ with NTC for temperature monitoring

Flexus 5050 HP G1 2x4 …
√ 2 connection terminals

Please also refer to the technical data of the Flexus 5050 HP-Family on page 154. Further technical data and drawings from page 164.

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 100 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 1500 mA Tc = 25 °C			
≥70	2200	395 lm	188 lm/W	1370 lm	181 lm/W	5410 lm	153 lm/W	7550-00492	Flexus 5050 HP G1 2x4 722
								7550-00588	Flexus 5050 HP G1 2x4 722 NTC
	2700	455 lm	216 lm/W	1576 lm	208 lm/W	6221 lm	176 lm/W	7550-00493	Flexus 5050 HP G1 2x4 727
								7550-00589	Flexus 5050 HP G1 2x4 727 NTC
	3000	480 lm	228 lm/W	1663 lm	220 lm/W	6563 lm	186 lm/W	7550-00494	Flexus 5050 HP G1 2x4 730
								7550-00590	Flexus 5050 HP G1 2x4 730 NTC
	3500	484 lm	230 lm/W	1677 lm	221 lm/W	6620 lm	187 lm/W	7550-00495	Flexus 5050 HP G1 2x4 735
								7550-00591	Flexus 5050 HP G1 2x4 735 NTC
	4000	499 lm	237 lm/W	1731 lm	229 lm/W	6834 lm	193 lm/W	7550-00496	Flexus 5050 HP G1 2x4 740
								7550-00592	Flexus 5050 HP G1 2x4 740 NTC
	5000	499 lm	237 lm/W	1731 lm	229 lm/W	6834 lm	193 lm/W	7550-00497	Flexus 5050 HP G1 2x4 750
								7550-00593	Flexus 5050 HP G1 2x4 750 NTC
	5700	499 lm	237 lm/W	1731 lm	229 lm/W	6834 lm	193 lm/W	7550-00498	Flexus 5050 HP G1 2x4 757
								7550-00594	Flexus 5050 HP G1 2x4 757 NTC
	6500	491 lm	233 lm/W	1702 lm	225 lm/W	6720 lm	190 lm/W	7550-00499	Flexus 5050 HP G1 2x4 765
								7550-00595	Flexus 5050 HP G1 2x4 765 NTC

Up to
6834 lm!

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 100 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 1500 mA Tc = 25 °C			
≥80	2200	364 lm	173 lm/W	1262 lm	167 lm/W	4983 lm	141 lm/W	7550-00500	Flexus 5050 HP G1 2x4 822
								7550-00596	Flexus 5050 HP G1 2x4 822 NTC
	2700	425 lm	202 lm/W	1471 lm	194 lm/W	5809 lm	164 lm/W	7550-00501	Flexus 5050 HP G1 2x4 827
								7550-00597	Flexus 5050 HP G1 2x4 827 NTC
	3000	441 lm	210 lm/W	1529 lm	202 lm/W	6036 lm	171 lm/W	7550-00502	Flexus 5050 HP G1 2x4 830
								7550-00598	Flexus 5050 HP G1 2x4 830 NTC
	3500	454 lm	215 lm/W	1572 lm	208 lm/W	6207 lm	176 lm/W	7550-00503	Flexus 5050 HP G1 2x4 835
								7550-00599	Flexus 5050 HP G1 2x4 835 NTC
	4000	466 lm	221 lm/W	1616 lm	213 lm/W	6378 lm	181 lm/W	7550-00504	Flexus 5050 HP G1 2x4 840
								7550-00600	Flexus 5050 HP G1 2x4 840 NTC
	5000	466 lm	221 lm/W	1616 lm	213 lm/W	6378 lm	181 lm/W	7550-00505	Flexus 5050 HP G1 2x4 850
								7550-00601	Flexus 5050 HP G1 2x4 850 NTC
	5700	466 lm	221 lm/W	1616 lm	213 lm/W	6378 lm	181 lm/W	7550-00506	Flexus 5050 HP G1 2x4 857
								7550-00602	Flexus 5050 HP G1 2x4 857 NTC
	6500	461 lm	219 lm/W	1598 lm	211 lm/W	6307 lm	179 lm/W	7550-00507	Flexus 5050 HP G1 2x4 865
								7550-00603	Flexus 5050 HP G1 2x4 865 NTC

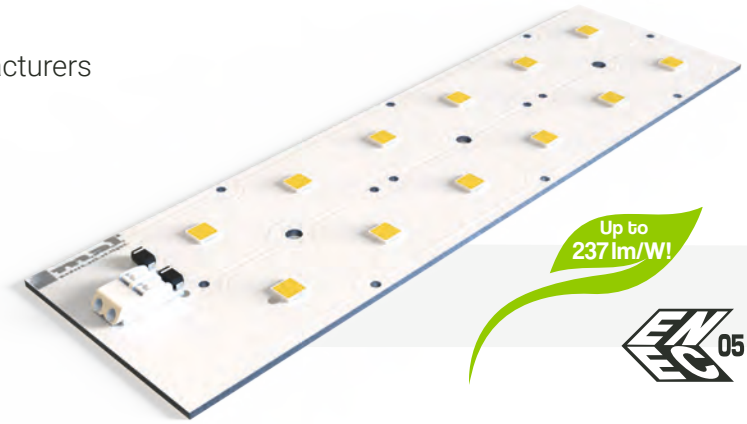
Up to 6378 lm!

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 100 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 1500 mA Tc = 25 °C			
>=90	2200	307 lm	146 lm/W	1064 lm	140 lm/W	4200 lm	119 lm/W	7550-00508	Flexus 5050 HP G1 2x4 922
								7550-00604	Flexus 5050 HP G1 2x4 922 NTC
	2700	359 lm	171 lm/W	1244 lm	164 lm/W	4912 lm	139 lm/W	7550-00509	Flexus 5050 HP G1 2x4 927
								7550-00605	Flexus 5050 HP G1 2x4 927 NTC
	3000	369 lm	175 lm/W	1280 lm	169 lm/W	5054 lm	143 lm/W	7550-00510	Flexus 5050 HP G1 2x4 930
								7550-00606	Flexus 5050 HP G1 2x4 930 NTC
	3500	380 lm	180 lm/W	1316 lm	174 lm/W	5196 lm	147 lm/W	7550-00511	Flexus 5050 HP G1 2x4 935
								7550-00607	Flexus 5050 HP G1 2x4 935 NTC
	4000	391 lm	186 lm/W	1356 lm	179 lm/W	5353 lm	152 lm/W	7550-00512	Flexus 5050 HP G1 2x4 940
								7550-00608	Flexus 5050 HP G1 2x4 940 NTC
	5000	391 lm	186 lm/W	1356 lm	179 lm/W	5353 lm	152 lm/W	7550-00513	Flexus 5050 HP G1 2x4 950
								7550-00609	Flexus 5050 HP G1 2x4 950 NTC
	5700	391 lm	186 lm/W	1356 lm	179 lm/W	5353 lm	152 lm/W	7550-00514	Flexus 5050 HP G1 2x4 957
								7550-00610	Flexus 5050 HP G1 2x4 957 NTC
	6500	389 lm	185 lm/W	1349 lm	178 lm/W	5325 lm	151 lm/W	7550-00515	Flexus 5050 HP G1 2x4 965
								7550-00611	Flexus 5050 HP G1 2x4 965 NTC

Up to 5353 lm!

Flexus 5050 HP 2x6 – LED-modules for street- and outdoor-lighting

√ 12 high performance high-power-LEDs
√ square module for installation in luminaires
√ designed for 2x2 optics from various manufacturers
√ pitch distance along and across 25 mm
√ length 172 mm
√ width 50 mm
√ aluminium core PCB for perfect thermal management
√ rated current 350 mA
√ maximum operating current 1500 mA
√ maximum forward voltage 36.8 V



Flexus 5050 HP G1 2x6 … NTC
√ 4 connection terminals
√ with NTC for temperature monitoring

Flexus 5050 HP G1 2x6 …
√ 2 connection terminals

Please also refer to the technical data of the Flexus 5050 HP-Family on page 154. Further technical data and drawings from page 164.

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 100 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 1500 mA Tc = 25 °C			
≥70	2200	593 lm	188 lm/W	2056 lm	181 lm/W	8115 lm	153 lm/W	7550-00516	Flexus 5050 HP G1 2x6 722
								7550-00612	Flexus 5050 HP G1 2x6 722 NTC
	2700	682 lm	216 lm/W	2364 lm	208 lm/W	9332 lm	176 lm/W	7550-00517	Flexus 5050 HP G1 2x6 727
								7550-00613	Flexus 5050 HP G1 2x6 727 NTC
	3000	720 lm	228 lm/W	2494 lm	220 lm/W	9845 lm	186 lm/W	7550-00518	Flexus 5050 HP G1 2x6 730
								7550-00614	Flexus 5050 HP G1 2x6 730 NTC
	3500	726 lm	230 lm/W	2516 lm	221 lm/W	9930 lm	187 lm/W	7550-00519	Flexus 5050 HP G1 2x6 735
								7550-00615	Flexus 5050 HP G1 2x6 735 NTC
	4000	749 lm	237 lm/W	2597 lm	229 lm/W	10250 lm	193 lm/W	7550-00520	Flexus 5050 HP G1 2x6 740
								7550-00616	Flexus 5050 HP G1 2x6 740 NTC
	5000	749 lm	237 lm/W	2597 lm	229 lm/W	10250 lm	193 lm/W	7550-00521	Flexus 5050 HP G1 2x6 750
								7550-00617	Flexus 5050 HP G1 2x6 750 NTC
	5700	749 lm	237 lm/W	2597 lm	229 lm/W	10250 lm	193 lm/W	7550-00522	Flexus 5050 HP G1 2x6 757
								7550-00618	Flexus 5050 HP G1 2x6 757 NTC
	6500	737 lm	233 lm/W	2553 lm	225 lm/W	10080 lm	190 lm/W	7550-00523	Flexus 5050 HP G1 2x6 765
								7550-00619	Flexus 5050 HP G1 2x6 765 NTC

Up to 10250 lm!

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 100 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 1500 mA Tc = 25 °C			
≥80	2200	546 lm	173 lm/W	1893 lm	167 lm/W	7474 lm	141 lm/W	7550-00524	Flexus 5050 HP G1 2x6 822
								7550-00620	Flexus 5050 HP G1 2x6 822 NTC
	2700	637 lm	202 lm/W	2207 lm	194 lm/W	8713 lm	164 lm/W	7550-00525	Flexus 5050 HP G1 2x6 827
								7550-00621	Flexus 5050 HP G1 2x6 827 NTC
	3000	662 lm	210 lm/W	2294 lm	202 lm/W	9055 lm	171 lm/W	7550-00526	Flexus 5050 HP G1 2x6 830
								7550-00622	Flexus 5050 HP G1 2x6 830 NTC
	3500	681 lm	215 lm/W	2359 lm	208 lm/W	9311 lm	176 lm/W	7550-00527	Flexus 5050 HP G1 2x6 835
								7550-00623	Flexus 5050 HP G1 2x6 835 NTC
	4000	699 lm	221 lm/W	2424 lm	213 lm/W	9567 lm	181 lm/W	7550-00528	Flexus 5050 HP G1 2x6 840
								7550-00624	Flexus 5050 HP G1 2x6 840 NTC
	5000	699 lm	221 lm/W	2424 lm	213 lm/W	9567 lm	181 lm/W	7550-00529	Flexus 5050 HP G1 2x6 850
								7550-00625	Flexus 5050 HP G1 2x6 850 NTC
	5700	699 lm	221 lm/W	2424 lm	213 lm/W	9567 lm	181 lm/W	7550-00530	Flexus 5050 HP G1 2x6 857
								7550-00626	Flexus 5050 HP G1 2x6 857 NTC
	6500	691 lm	219 lm/W	2397 lm	211 lm/W	9460 lm	179 lm/W	7550-00531	Flexus 5050 HP G1 2x6 865
								7550-00627	Flexus 5050 HP G1 2x6 865 NTC

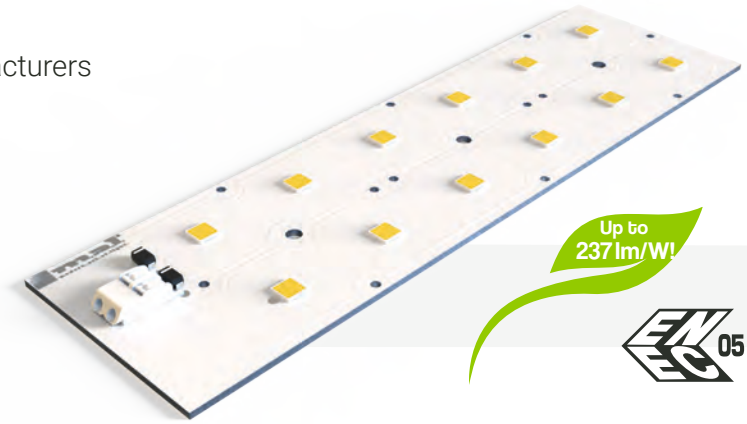
Up to 9567 lm!

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 100 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 1500 mA Tc = 25 °C			
≥90	2200	460 lm	146 lm/W	1596 lm	140 lm/W	6300 lm	119 lm/W	7550-00532	Flexus 5050 HP G1 2x6 922
								7550-00628	Flexus 5050 HP G1 2x6 922 NTC
	2700	539 lm	171 lm/W	1866 lm	164 lm/W	7367 lm	139 lm/W	7550-00533	Flexus 5050 HP G1 2x6 927
								7550-00629	Flexus 5050 HP G1 2x6 927 NTC
	3000	554 lm	175 lm/W	1920 lm	169 lm/W	7581 lm	143 lm/W	7550-00534	Flexus 5050 HP G1 2x6 930
								7550-00630	Flexus 5050 HP G1 2x6 930 NTC
	3500	570 lm	180 lm/W	1975 lm	174 lm/W	7795 lm	147 lm/W	7550-00535	Flexus 5050 HP G1 2x6 935
								7550-00631	Flexus 5050 HP G1 2x6 935 NTC
	4000	587 lm	186 lm/W	2034 lm	179 lm/W	8030 lm	152 lm/W	7550-00536	Flexus 5050 HP G1 2x6 940
								7550-00632	Flexus 5050 HP G1 2x6 940 NTC
	5000	587 lm	186 lm/W	2034 lm	179 lm/W	8030 lm	152 lm/W	7550-00537	Flexus 5050 HP G1 2x6 950
								7550-00633	Flexus 5050 HP G1 2x6 950 NTC
	5700	587 lm	186 lm/W	2034 lm	179 lm/W	8030 lm	152 lm/W	7550-00538	Flexus 5050 HP G1 2x6 957
								7550-00634	Flexus 5050 HP G1 2x6 957 NTC
	6500	584 lm	185 lm/W	2023 lm	178 lm/W	7987 lm	151 lm/W	7550-00539	Flexus 5050 HP G1 2x6 965
								7550-00635	Flexus 5050 HP G1 2x6 965 NTC

Up to 8030 lm!

Flexus 5050 HP 2x8 – LED-modules for street- and outdoor-lighting

√ 16 high performance high-power-LEDs
√ square module for installation in luminaires
√ designed for 2x2 optics from various manufacturers
√ pitch distance along and across 25 mm
√ length 223 mm
√ width 50 mm
√ aluminium core PCB for perfect thermal management
√ rated current 350 mA
√ maximum operating current 1500 mA
√ maximum forward voltage 49.0 V



Flexus 5050 HP G1 2x8 … NTC
√ 4 connection terminals
√ with NTC for temperature monitoring

Flexus 5050 HP G1 2x8 …
√ 2 connection terminals

Please also refer to the technical data of the Flexus 5050 HP-Family on page 154. Further technical data and drawings from page 164.

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 100 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 1500 mA Tc = 25 °C			
≥70	2200	791 lm	188 lm/W	2741 lm	181 lm/W	10820 lm	153 lm/W	7550-00540	Flexus 5050 HP G1 2x8 722
								7550-00636	Flexus 5050 HP G1 2x8 722 NTC
	2700	910 lm	216 lm/W	3152 lm	208 lm/W	12443 lm	176 lm/W	7550-00541	Flexus 5050 HP G1 2x8 727
								7550-00637	Flexus 5050 HP G1 2x8 727 NTC
	3000	959 lm	228 lm/W	3325 lm	220 lm/W	13126 lm	186 lm/W	7550-00542	Flexus 5050 HP G1 2x8 730
								7550-00638	Flexus 5050 HP G1 2x8 730 NTC
	3500	968 lm	230 lm/W	3354 lm	221 lm/W	13240 lm	187 lm/W	7550-00543	Flexus 5050 HP G1 2x8 735
								7550-00639	Flexus 5050 HP G1 2x8 735 NTC
	4000	999 lm	237 lm/W	3462 lm	229 lm/W	13667 lm	193 lm/W	7550-00544	Flexus 5050 HP G1 2x8 740
								7550-00640	Flexus 5050 HP G1 2x8 740 NTC
	5000	999 lm	237 lm/W	3462 lm	229 lm/W	13667 lm	193 lm/W	7550-00545	Flexus 5050 HP G1 2x8 750
								7550-00641	Flexus 5050 HP G1 2x8 750 NTC
	5700	999 lm	237 lm/W	3462 lm	229 lm/W	13667 lm	193 lm/W	7550-00546	Flexus 5050 HP G1 2x8 757
								7550-00642	Flexus 5050 HP G1 2x8 757 NTC
	6500	982 lm	233 lm/W	3405 lm	225 lm/W	13439 lm	190 lm/W	7550-00547	Flexus 5050 HP G1 2x8 765
								7550-00643	Flexus 5050 HP G1 2x8 765 NTC

Up to
13667 lm!

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 100 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 1500 mA Tc = 25 °C			
≥80	2200	728 lm	173 lm/W	2525 lm	167 lm/W	9966 lm	141 lm/W	7550-00548	Flexus 5050 HP G1 2x8 822
								7550-00644	Flexus 5050 HP G1 2x8 822 NTC
	2700	849 lm	202 lm/W	2943 lm	194 lm/W	11617 lm	164 lm/W	7550-00549	Flexus 5050 HP G1 2x8 827
								7550-00645	Flexus 5050 HP G1 2x8 827 NTC
	3000	882 lm	210 lm/W	3058 lm	202 lm/W	12073 lm	171 lm/W	7550-00550	Flexus 5050 HP G1 2x8 830
								7550-00646	Flexus 5050 HP G1 2x8 830 NTC
	3500	907 lm	215 lm/W	3145 lm	208 lm/W	12414 lm	176 lm/W	7550-00551	Flexus 5050 HP G1 2x8 835
								7550-00647	Flexus 5050 HP G1 2x8 835 NTC
	4000	932 lm	221 lm/W	3231 lm	213 lm/W	12756 lm	181 lm/W	7550-00552	Flexus 5050 HP G1 2x8 840
								7550-00648	Flexus 5050 HP G1 2x8 840 NTC
	5000	932 lm	221 lm/W	3231 lm	213 lm/W	12756 lm	181 lm/W	7550-00553	Flexus 5050 HP G1 2x8 850
								7550-00649	Flexus 5050 HP G1 2x8 850 NTC
	5700	932 lm	221 lm/W	3231 lm	213 lm/W	12756 lm	181 lm/W	7550-00554	Flexus 5050 HP G1 2x8 857
								7550-00650	Flexus 5050 HP G1 2x8 857 NTC
	6500	922 lm	219 lm/W	3195 lm	211 lm/W	12614 lm	179 lm/W	7550-00555	Flexus 5050 HP G1 2x8 865
								7550-00651	Flexus 5050 HP G1 2x8 865 NTC

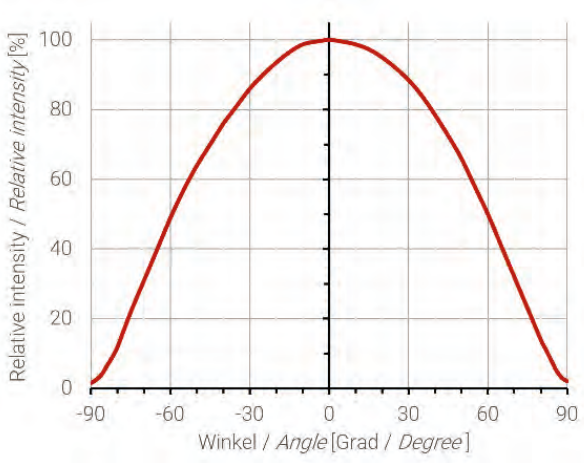
Up to 12756 lm!

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 100 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 1500 mA Tc = 25 °C			
≥90	2200	614 lm	146 lm/W	2128 lm	140 lm/W	8400 lm	119 lm/W	7550-00556	Flexus 5050 HP G1 2x8 922
								7550-00652	Flexus 5050 HP G1 2x8 922 NTC
	2700	718 lm	171 lm/W	2488 lm	164 lm/W	9823 lm	139 lm/W	7550-00557	Flexus 5050 HP G1 2x8 927
								7550-00653	Flexus 5050 HP G1 2x8 927 NTC
	3000	739 lm	175 lm/W	2561 lm	169 lm/W	10108 lm	143 lm/W	7550-00558	Flexus 5050 HP G1 2x8 930
								7550-00654	Flexus 5050 HP G1 2x8 930 NTC
	3500	760 lm	180 lm/W	2633 lm	174 lm/W	10393 lm	147 lm/W	7550-00559	Flexus 5050 HP G1 2x8 935
								7550-00655	Flexus 5050 HP G1 2x8 935 NTC
	4000	783 lm	186 lm/W	2712 lm	179 lm/W	10706 lm	152 lm/W	7550-00560	Flexus 5050 HP G1 2x8 940
								7550-00656	Flexus 5050 HP G1 2x8 940 NTC
	5000	783 lm	186 lm/W	2712 lm	179 lm/W	10706 lm	152 lm/W	7550-00561	Flexus 5050 HP G1 2x8 950
								7550-00657	Flexus 5050 HP G1 2x8 950 NTC
	5700	783 lm	186 lm/W	2712 lm	179 lm/W	10706 lm	152 lm/W	7550-00562	Flexus 5050 HP G1 2x8 957
								7550-00658	Flexus 5050 HP G1 2x8 957 NTC
	6500	778 lm	185 lm/W	2698 lm	178 lm/W	10649 lm	151 lm/W	7550-00563	Flexus 5050 HP G1 2x8 965
								7550-00659	Flexus 5050 HP G1 2x8 965 NTC

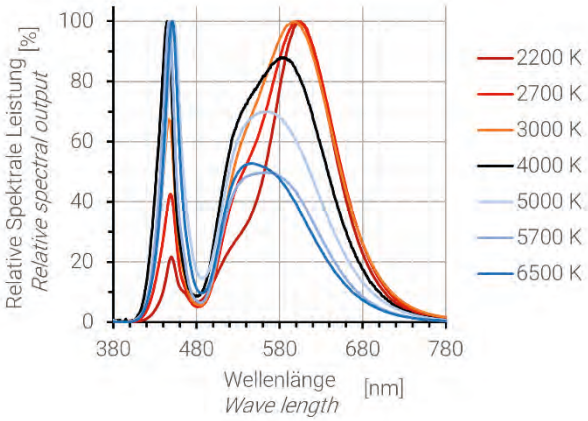
Up to 10706 lm!

Technical data: Flexus 5050 HP

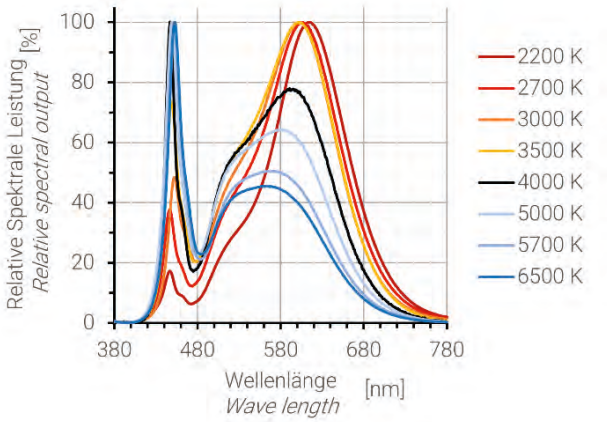
Light distribution curve



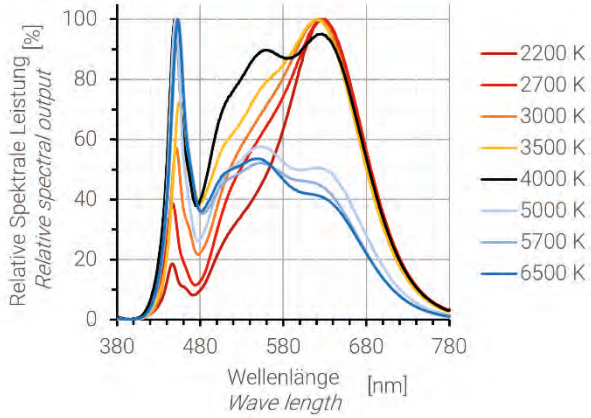
Spectrum 70



Spectrum 80



Spectrum 90



Lifetime of the used LEDs

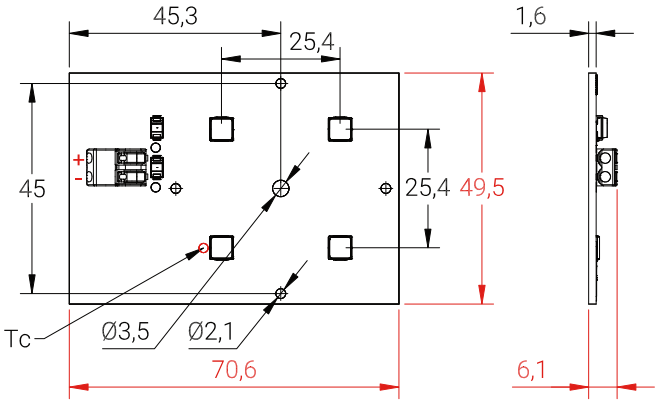
- The service life information is based on the TM21 extrapolations of the available LM80 data of the LEDs used. They are to be regarded as purely informative data from which no warranty claims can be derived.

description	If	Tc	L70 B50	L70 B10	L80 B50	L80 B10	L90 B50	L90 B10
Flexus 5050 HP G1 2x...	800 mA	55 °C	> 36.000 h	> 36.000 h	> 36.000 h	> 36.000 h	> 36.000 h	> 36.000 h
Flexus 5050 HP G1 2x... NTC	800 mA	85 °C	> 36.000 h	> 36.000 h	> 36.000 h	> 36.000 h	> 36.000 h	> 36.000 h

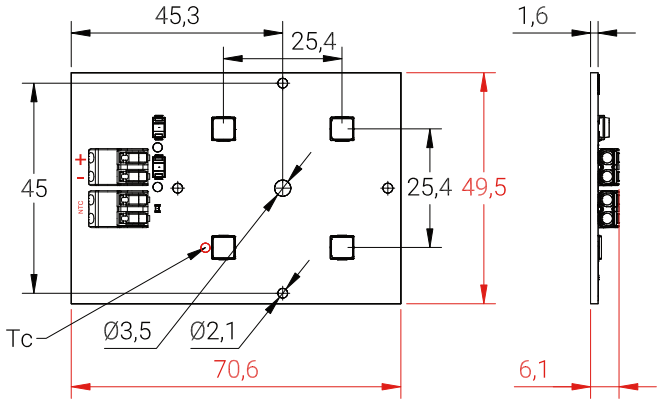
Technical drawings: Flexus 5050 HP

Flexus 5050 HP 2x2

Flexus 5050 HP G1 2x2

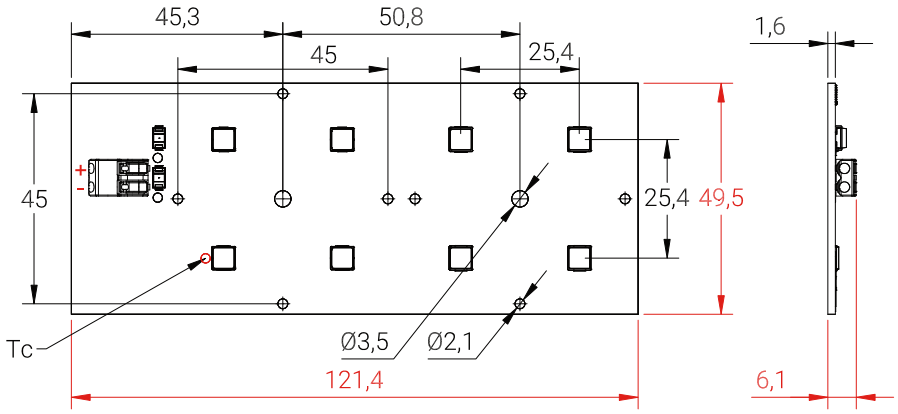


NTC

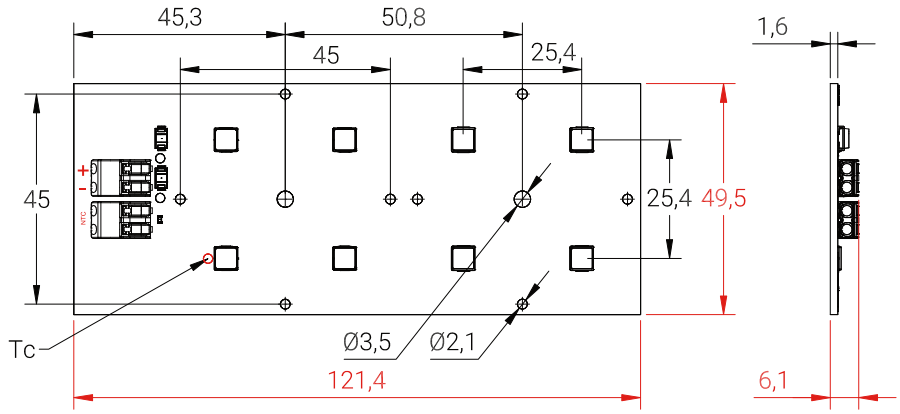


Flexus 5050 HP 2x4

Flexus 5050 HP G1 2x4

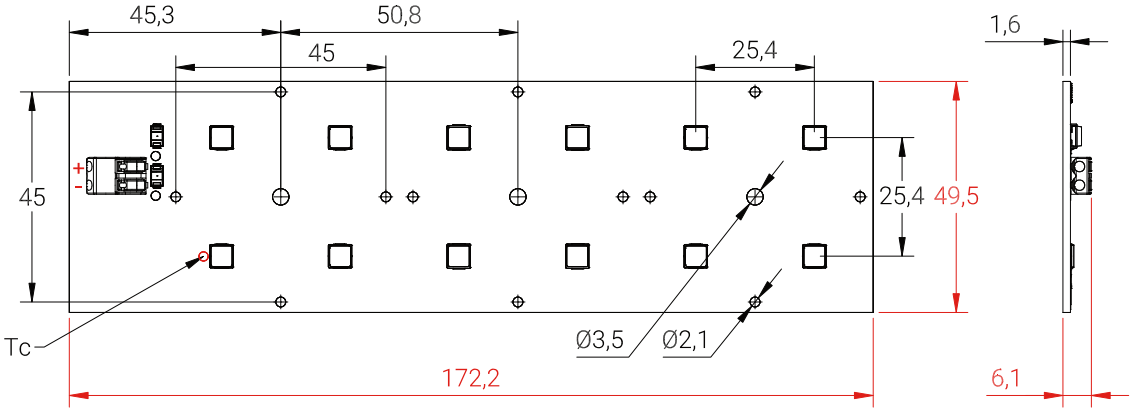


NTC

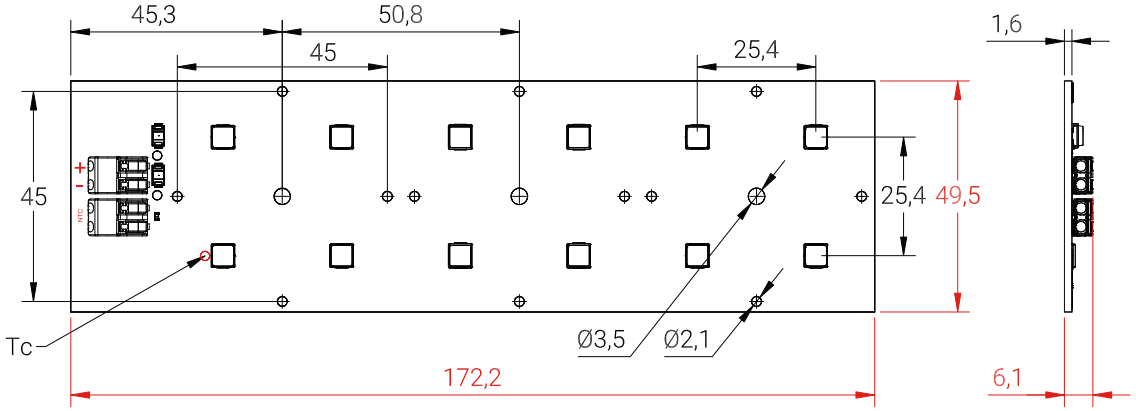


Flexus 5050 HP 2x6

Flexus 5050 HP G1 2x6

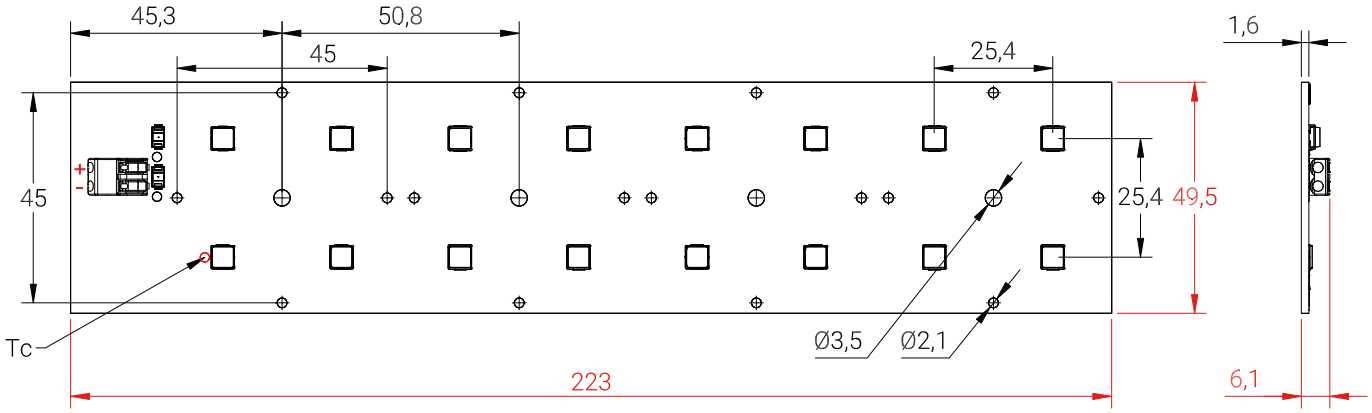


NTC

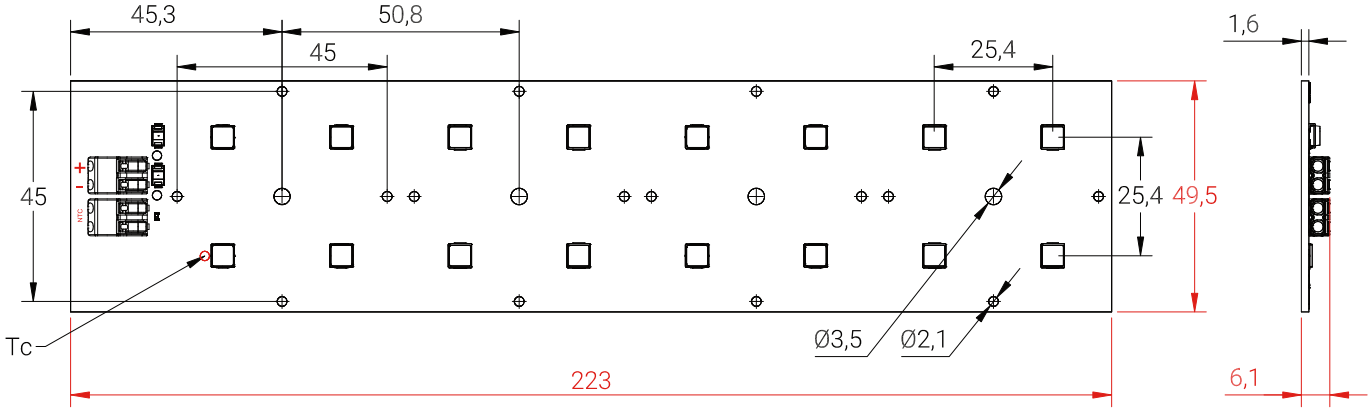


Flexus 5050 HP 2x8

Flexus 5050 HP G1 2x8



NTC



Flexus 5050 PP — LED-modules for street- and outdoor-lighting

Flexus 5050 PP

iX-led Flexus 5050 PricePerformance is a further development of the proven Flexus LED module family.

For the Flexus 5050 PP, we use an LED with an outstanding price-performance ratio. The result is impressive with up to 224 lm/W or 12700 lm.

We offer the Flexus 5050 PP with or without an NTC for temperature monitoring. When using several LED modules in a luminaire, a single module with temperature monitoring is usually sufficient. This enables you to design cost-efficient lighting systems.

The Flexus 5050 PP is available in four lengths with 2x2, 2x4, 2x6 and 2x8 LEDs.
With CRI 70, CRI 80 and CRI 90, three color renderings are available. We also offer seven light colors in the range from 2700 K to 6500 K.

The Flexus 5050 PP is compatible with multiple optics from many manufacturers. This enables a high degree of flexibility in the lighting task. Far beyond the field of street lighting.

The family is rounded off by these LED modules:

Flexus 5050 HP	Flexus High Performance – It couldn‘t be better
Flexus 5050 CT	Extremely compact high-performance modules
Flexus HighPower	LED module with robust high-power LEDs
Flexus MidPower	Mid-power performance in a compact design
Flexus Color	Flexus in 11 colors from Far-Red bis Royal-Blue

Our iX-led standard modules are available at short notice, even in small quantities, and are very advantageous in the overall concept.

Standard does not mean rigid and unchangeable!

Do you need different light colors, different color renderings or minimally shorter/longer versions of the modules? You need the assembly of soldering nuts as spacers or a threaded insert for simplified mounting of the module? No problem. Other terminals or soldered cables are also possible. With the **iX-led product family** we can adapt and individualize the standard to your needs. Explore our exclusive module series with more than 1000 lighting possibilities.

LED module with high-power LEDs for installation in luminaires.

Compatible with optics from various manufacturers.

Versatile with:

√ Square modules in 4 lengths: 71 mm, 121 mm, 172 mm and 223 mm x 50 mm

√ 3 color renderings: CRI 70, CRI 80 and CRI 90

√ 7 light colors: 2700 K, 3000 K, 3500 K, 4000 K, 5000 K, 5700 K and 6500 K

2-row LED arrangement.

Plug-in terminals for quick and easy installation.

2 variants: with and without NTC for temperature monitoring.

For operation with suitable constant current drivers.

Optimum thermal management through aluminium core PCB.

Maximum working voltage	250 V
Ambient temperature	-20… + 50 °C
Max. perm. operating temperature (Tc)	80 °C
EPREL database entry	yes
Beam angle	120°

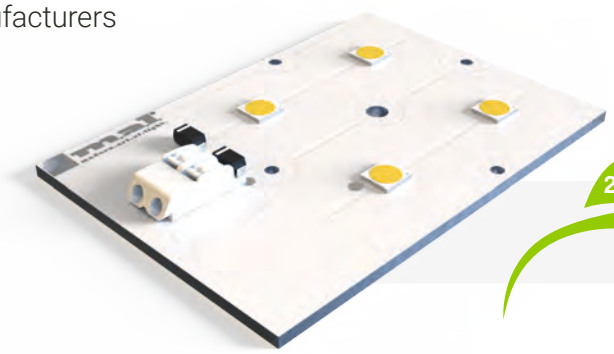
Connections:

Terminals		2 / 4
Connection type		rigid / flexible
Conductor cross-section AWG		AWG 18-24
Conductor cross-section	min	0.2 mm²
	max	0.75 mm²
Stripping length		8 - 9 mm

Did you already know? Our **Flexus 5050 PP-modules** are **ENEC-certified!**

Flexus 5050 PP 2x2 - LED-modules for street- and outdoor-lighting

√ 4 high-power-LEDs
√ square module for installation in luminaires
√ designed for 2x2 optics from various manufacturers
√ pitch distance along and across 25 mm
√ length 71 mm
√ width 50 mm
√ aluminium core PCB for perfect thermal management
√ rated current 350 mA
√ maximum operating current 1500 mA
√ maximum forward voltage 12.5 V



Flexus 5050 PP G1 2x2 … NTC
√ 4 connection terminals
√ with NTC for temperature monitoring

Flexus 5050 PP G1 2x2 …
√ 2 connection terminals

Please also refer to the technical data of the Flexus 5050 PP-Family on page 172. Further technical data and drawings from page 182.

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 200 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 1500 mA Tc = 25 °C			
≥70	2700	432 lm	203 lm/W	746 lm	197 lm/W	2883 lm	161 lm/W	7550-00300	Flexus 5050 PP G1 2x2 727
								7550-00384	Flexus 5050 PP G1 2x2 727 NTC
	3000	454 lm	213 lm/W	784 lm	207 lm/W	3030 lm	170 lm/W	7550-00301	Flexus 5050 PP G1 2x2 730
								7550-00385	Flexus 5050 PP G1 2x2 730 NTC
	3500	462 lm	217 lm/W	796 lm	210 lm/W	3079 lm	172 lm/W	7550-00302	Flexus 5050 PP G1 2x2 735
								7550-00386	Flexus 5050 PP G1 2x2 735 NTC
	4000	477 lm	224 lm/W	823 lm	217 lm/W	3184 lm	178 lm/W	7550-00303	Flexus 5050 PP G1 2x2 740
								7550-00387	Flexus 5050 PP G1 2x2 740 NTC
	5000	477 lm	224 lm/W	823 lm	217 lm/W	3184 lm	178 lm/W	7550-00304	Flexus 5050 PP G1 2x2 750
								7550-00388	Flexus 5050 PP G1 2x2 750 NTC
	5700	477 lm	224 lm/W	823 lm	217 lm/W	3184 lm	178 lm/W	7550-00305	Flexus 5050 PP G1 2x2 757
								7550-00389	Flexus 5050 PP G1 2x2 757 NTC
	6500	477 lm	224 lm/W	823 lm	217 lm/W	3184 lm	178 lm/W	7550-00306	Flexus 5050 PP G1 2x2 765
								7550-00390	Flexus 5050 PP G1 2x2 765 NTC

Up to
3184 lm!

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 200 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 1500 mA Tc = 25 °C			
≥80	2700	408 lm	192 lm/W	704 lm	186 lm/W	2722 lm	152 lm/W	7550-00307	Flexus 5050 PP G1 2x2 827
								7550-00391	Flexus 5050 PP G1 2x2 827 NTC
	3000	424 lm	199 lm/W	731 lm	193 lm/W	2827 lm	158 lm/W	7550-00308	Flexus 5050 PP G1 2x2 830
								7550-00392	Flexus 5050 PP G1 2x2 830 NTC
	3500	435 lm	205 lm/W	751 lm	198 lm/W	2904 lm	163 lm/W	7550-00309	Flexus 5050 PP G1 2x2 835
								7550-00393	Flexus 5050 PP G1 2x2 835 NTC
	4000	446 lm	210 lm/W	769 lm	203 lm/W	2974 lm	167 lm/W	7550-00310	Flexus 5050 PP G1 2x2 840
								7550-00394	Flexus 5050 PP G1 2x2 840 NTC
	5000	446 lm	210 lm/W	769 lm	203 lm/W	2974 lm	167 lm/W	7550-00311	Flexus 5050 PP G1 2x2 850
								7550-00395	Flexus 5050 PP G1 2x2 850 NTC
	5700	446 lm	210 lm/W	769 lm	203 lm/W	2974 lm	167 lm/W	7550-00312	Flexus 5050 PP G1 2x2 857
								7550-00396	Flexus 5050 PP G1 2x2 857 NTC
	6500	446 lm	210 lm/W	769 lm	203 lm/W	2974 lm	167 lm/W	7550-00313	Flexus 5050 PP G1 2x2 865
								7550-00397	Flexus 5050 PP G1 2x2 865 NTC

Up to 2974 lm!

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 200 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 1500 mA Tc = 25 °C			
≥90	2700	343 lm	161 lm/W	592 lm	156 lm/W	2288 lm	128 lm/W	7550-00314	Flexus 5050 PP G1 2x2 927
								7550-00398	Flexus 5050 PP G1 2x2 927 NTC
	3000	354 lm	166 lm/W	610 lm	161 lm/W	2358 lm	132 lm/W	7550-00315	Flexus 5050 PP G1 2x2 930
								7550-00399	Flexus 5050 PP G1 2x2 930 NTC
	3500	364 lm	171 lm/W	628 lm	166 lm/W	2428 lm	136 lm/W	7550-00316	Flexus 5050 PP G1 2x2 935
								7550-00400	Flexus 5050 PP G1 2x2 935 NTC
	4000	374 lm	176 lm/W	646 lm	170 lm/W	2498 lm	140 lm/W	7550-00317	Flexus 5050 PP G1 2x2 940
								7550-00401	Flexus 5050 PP G1 2x2 940 NTC
	5000	374 lm	176 lm/W	646 lm	170 lm/W	2498 lm	140 lm/W	7550-00318	Flexus 5050 PP G1 2x2 950
								7550-00402	Flexus 5050 PP G1 2x2 950 NTC
	5700	374 lm	176 lm/W	646 lm	170 lm/W	2498 lm	140 lm/W	7550-00319	Flexus 5050 PP G1 2x2 957
								7550-00403	Flexus 5050 PP G1 2x2 957 NTC
	6500	374 lm	176 lm/W	646 lm	170 lm/W	2498 lm	140 lm/W	7550-00320	Flexus 5050 PP G1 2x2 965
								7550-00404	Flexus 5050 PP G1 2x2 965 NTC

Up to 2498 lm!

Flexus 5050 PP 2x4 - LED-modules for street- and outdoor-lighting

√ 8 high-power-LEDs
√ square module for installation in luminaires
√ designed for 2x2 optics from various manufacturers
√ pitch distance along and across 25 mm
√ length 121 mm
√ width 50 mm
√ aluminium core PCB for perfect thermal management
√ rated current 350 mA
√ maximum operating current 1500 mA
√ maximum forward voltage 24.9 V

Flexus 5050 PP G1 2x4 … NTC
√ 4 connection terminals
√ with NTC for temperature monitoring

Flexus 5050 PP G1 2x4 …
√ 2 connection terminals

Please also refer to the technical data of the Flexus 5050 PP-Family on page 172. Further technical data and drawings from page 182.

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 200 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 1500 mA Tc = 25 °C			
≥70	2700	864 lm	203 lm/W	1491 lm	197 lm/W	5766 lm	161 lm/W	7550-00321	Flexus 5050 PP G1 2x4 727
								7550-00405	Flexus 5050 PP G1 2x4 727 NTC
	3000	908 lm	213 lm/W	1567 lm	207 lm/W	6060 lm	170 lm/W	7550-00322	Flexus 5050 PP G1 2x4 730
								7550-00406	Flexus 5050 PP G1 2x4 730 NTC
	3500	923 lm	217 lm/W	1592 lm	210 lm/W	6158 lm	172 lm/W	7550-00323	Flexus 5050 PP G1 2x4 735
								7550-00407	Flexus 5050 PP G1 2x4 735 NTC
	4000	955 lm	224 lm/W	1647 lm	217 lm/W	6368 lm	178 lm/W	7550-00324	Flexus 5050 PP G1 2x4 740
								7550-00408	Flexus 5050 PP G1 2x4 740 NTC
	5000	955 lm	224 lm/W	1647 lm	217 lm/W	6368 lm	178 lm/W	7550-00325	Flexus 5050 PP G1 2x4 750
								7550-00409	Flexus 5050 PP G1 2x4 750 NTC
	5700	955 lm	224 lm/W	1647 lm	217 lm/W	6368 lm	178 lm/W	7550-00326	Flexus 5050 PP G1 2x4 757
								7550-00410	Flexus 5050 PP G1 2x4 757 NTC
	6500	955 lm	224 lm/W	1647 lm	217 lm/W	6368 lm	178 lm/W	7550-00327	Flexus 5050 PP G1 2x4 765
								7550-00411	Flexus 5050 PP G1 2x4 765 NTC

Up to
6368 lm!

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 200 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 1500 mA Tc = 25 °C			
≥80	2700	816 lm	192 lm/W	1408 lm	186 lm/W	5444 lm	152 lm/W	7550-00328	Flexus 5050 PP G1 2x4 827
								7550-00412	Flexus 5050 PP G1 2x4 827 NTC
	3000	848 lm	199 lm/W	1462 lm	193 lm/W	5654 lm	158 lm/W	7550-00329	Flexus 5050 PP G1 2x4 830
								7550-00413	Flexus 5050 PP G1 2x4 830 NTC
	3500	871 lm	205 lm/W	1502 lm	198 lm/W	5808 lm	163 lm/W	7550-00330	Flexus 5050 PP G1 2x4 835
								7550-00414	Flexus 5050 PP G1 2x4 835 NTC
	4000	892 lm	210 lm/W	1538 lm	203 lm/W	5948 lm	167 lm/W	7550-00331	Flexus 5050 PP G1 2x4 840
								7550-00415	Flexus 5050 PP G1 2x4 840 NTC
	5000	892 lm	210 lm/W	1538 lm	203 lm/W	5948 lm	167 lm/W	7550-00332	Flexus 5050 PP G1 2x4 850
								7550-00416	Flexus 5050 PP G1 2x4 850 NTC
	5700	892 lm	210 lm/W	1538 lm	203 lm/W	5948 lm	167 lm/W	7550-00333	Flexus 5050 PP G1 2x4 857
								7550-00417	Flexus 5050 PP G1 2x4 857 NTC
	6500	892 lm	210 lm/W	1538 lm	203 lm/W	5948 lm	167 lm/W	7550-00334	Flexus 5050 PP G1 2x4 865
								7550-00418	Flexus 5050 PP G1 2x4 865 NTC

Up to 5948 lm!

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 200 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 1500 mA Tc = 25 °C			
≥90	2700	686 lm	161 lm/W	1183 lm	156 lm/W	4577 lm	128 lm/W	7550-00335	Flexus 5050 PP G1 2x4 927
								7550-00419	Flexus 5050 PP G1 2x4 927 NTC
	3000	707 lm	166 lm/W	1220 lm	161 lm/W	4717 lm	132 lm/W	7550-00336	Flexus 5050 PP G1 2x4 930
								7550-00420	Flexus 5050 PP G1 2x4 930 NTC
	3500	728 lm	171 lm/W	1256 lm	166 lm/W	4857 lm	136 lm/W	7550-00337	Flexus 5050 PP G1 2x4 935
								7550-00421	Flexus 5050 PP G1 2x4 935 NTC
	4000	749 lm	176 lm/W	1292 lm	170 lm/W	4997 lm	140 lm/W	7550-00338	Flexus 5050 PP G1 2x4 940
								7550-00422	Flexus 5050 PP G1 2x4 940 NTC
	5000	749 lm	176 lm/W	1292 lm	170 lm/W	4997 lm	140 lm/W	7550-00339	Flexus 5050 PP G1 2x4 950
								7550-00423	Flexus 5050 PP G1 2x4 950 NTC
	5700	749 lm	176 lm/W	1292 lm	170 lm/W	4997 lm	140 lm/W	7550-00340	Flexus 5050 PP G1 2x4 957
								7550-00424	Flexus 5050 PP G1 2x4 957 NTC
	6500	749 lm	176 lm/W	1292 lm	170 lm/W	4997 lm	140 lm/W	7550-00341	Flexus 5050 PP G1 2x4 965
								7550-00425	Flexus 5050 PP G1 2x4 965 NTC

Up to 4997 lm!

Flexus 5050 PP 2x6 - LED-modules for street- and outdoor-lighting

√ 12 high-power-LEDs
√ square module for installation in luminaires
√ designed for 2x2 optics from various manufacturers
√ pitch distance along and across 25 mm
√ length 172 mm
√ width 50 mm
√ aluminium core PCB for perfect thermal management
√ rated current 350 mA
√ maximum operating current 1500 mA
√ maximum forward voltage 37.4 V

Flexus 5050 PP G1 2x6 … NTC
√ 4 connection terminals
√ with NTC for temperature monitoring

Flexus 5050 PP G1 2x6 …
√ 2 connection terminals

Please also refer to the technical data of the Flexus 5050 PP-Family on page 172. Further technical data and drawings from page 182.

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 200 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 1500 mA Tc = 25 °C			
≥70	2700	1297 lm	203 lm/W	2237 lm	197 lm/W	8650 lm	161 lm/W	7550-00342	Flexus 5050 PP G1 2x6 727
								7550-00426	Flexus 5050 PP G1 2x6 727 NTC
	3000	1363 lm	213 lm/W	2351 lm	207 lm/W	9090 lm	170 lm/W	7550-00343	Flexus 5050 PP G1 2x6 730
								7550-00427	Flexus 5050 PP G1 2x6 730 NTC
	3500	1385 lm	217 lm/W	2389 lm	210 lm/W	9237 lm	172 lm/W	7550-00344	Flexus 5050 PP G1 2x6 735
								7550-00428	Flexus 5050 PP G1 2x6 735 NTC
	4000	1432 lm	224 lm/W	2470 lm	217 lm/W	9552 lm	178 lm/W	7550-00345	Flexus 5050 PP G1 2x6 740
								7550-00429	Flexus 5050 PP G1 2x6 740 NTC
	5000	1432 lm	224 lm/W	2470 lm	217 lm/W	9552 lm	178 lm/W	7550-00346	Flexus 5050 PP G1 2x6 750
								7550-00430	Flexus 5050 PP G1 2x6 750 NTC
	5700	1432 lm	224 lm/W	2470 lm	217 lm/W	9552 lm	178 lm/W	7550-00347	Flexus 5050 PP G1 2x6 757
								7550-00431	Flexus 5050 PP G1 2x6 757 NTC
	6500	1432 lm	224 lm/W	2470 lm	217 lm/W	9552 lm	178 lm/W	7550-00348	Flexus 5050 PP G1 2x6 765
								7550-00432	Flexus 5050 PP G1 2x6 765 NTC

Up to
9552 lm!

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 200 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 1500 mA Tc = 25 °C			
≥80	2700	1224 lm	192 lm/W	2112 lm	186 lm/W	8167 lm	152 lm/W	7550-00349	Flexus 5050 PP G1 2x6 827
								7550-00433	Flexus 5050 PP G1 2x6 827 NTC
	3000	1271 lm	199 lm/W	2193 lm	193 lm/W	8482 lm	158 lm/W	7550-00350	Flexus 5050 PP G1 2x6 830
								7550-00434	Flexus 5050 PP G1 2x6 830 NTC
	3500	1306 lm	205 lm/W	2253 lm	198 lm/W	8712 lm	163 lm/W	7550-00351	Flexus 5050 PP G1 2x6 835
								7550-00435	Flexus 5050 PP G1 2x6 835 NTC
	4000	1337 lm	210 lm/W	2307 lm	203 lm/W	8922 lm	167 lm/W	7550-00352	Flexus 5050 PP G1 2x6 840
								7550-00436	Flexus 5050 PP G1 2x6 840 NTC
	5000	1337 lm	210 lm/W	2307 lm	203 lm/W	8922 lm	167 lm/W	7550-00353	Flexus 5050 PP G1 2x6 850
								7550-00437	Flexus 5050 PP G1 2x6 850 NTC
	5700	1337 lm	210 lm/W	2307 lm	203 lm/W	8922 lm	167 lm/W	7550-00354	Flexus 5050 PP G1 2x6 857
								7550-00438	Flexus 5050 PP G1 2x6 857 NTC
	6500	1337 lm	210 lm/W	2307 lm	203 lm/W	8922 lm	167 lm/W	7550-00355	Flexus 5050 PP G1 2x6 865
								7550-00439	Flexus 5050 PP G1 2x6 865 NTC

Up to 8922 lm!

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 200 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 1500 mA Tc = 25 °C			
≥90	2700	1029 lm	161 lm/W	1775 lm	156 lm/W	6865 lm	128 lm/W	7550-00356	Flexus 5050 PP G1 2x6 927
								7550-00440	Flexus 5050 PP G1 2x6 927 NTC
	3000	1061 lm	166 lm/W	1829 lm	161 lm/W	7075 lm	132 lm/W	7550-00357	Flexus 5050 PP G1 2x6 930
								7550-00441	Flexus 5050 PP G1 2x6 930 NTC
	3500	1092 lm	171 lm/W	1884 lm	166 lm/W	7285 lm	136 lm/W	7550-00358	Flexus 5050 PP G1 2x6 935
								7550-00442	Flexus 5050 PP G1 2x6 935 NTC
	4000	1123 lm	176 lm/W	1938 lm	170 lm/W	7495 lm	140 lm/W	7550-00359	Flexus 5050 PP G1 2x6 940
								7550-00443	Flexus 5050 PP G1 2x6 940 NTC
	5000	1123 lm	176 lm/W	1938 lm	170 lm/W	7495 lm	140 lm/W	7550-00360	Flexus 5050 PP G1 2x6 950
								7550-00444	Flexus 5050 PP G1 2x6 950 NTC
	5700	1123 lm	176 lm/W	1938 lm	170 lm/W	7495 lm	140 lm/W	7550-00361	Flexus 5050 PP G1 2x6 957
								7550-00445	Flexus 5050 PP G1 2x6 957 NTC
	6500	1123 lm	176 lm/W	1938 lm	170 lm/W	7495 lm	140 lm/W	7550-00362	Flexus 5050 PP G1 2x6 965
								7550-00446	Flexus 5050 PP G1 2x6 965 NTC

Up to 7495 lm!

Flexus 5050 PP 2x8 - LED-modules for street- and outdoor-lighting

√ 16 high-power-LEDs
√ square module for installation in luminaires
√ designed for 2x2 optics from various manufacturers
√ pitch distance along and across 25 mm
√ length 223 mm
√ width 50 mm
√ aluminium core PCB for perfect thermal management
√ rated current 350 mA
√ maximum operating current 1500 mA
√ maximum forward voltage 49.9 V

Flexus 5050 PP G1 2x8 … NTC
√ 4 connection terminals
√ with NTC for temperature monitoring

Flexus 5050 PP G1 2x8 …
√ 2 connection terminals

Please also refer to the technical data of the Flexus 5050 PP-Family on page 172. Further technical data and drawings from page 182.

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 200 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 1500 mA Tc = 25 °C			
≥70	2700	1729 lm	203 lm/W	2982 lm	197 lm/W	11533 lm	161 lm/W	7550-00363	Flexus 5050 PP G1 2x8 727
								7550-00447	Flexus 5050 PP G1 2x8 727 NTC
	3000	1817 lm	213 lm/W	3134 lm	207 lm/W	12121 lm	170 lm/W	7550-00364	Flexus 5050 PP G1 2x8 730
								7550-00448	Flexus 5050 PP G1 2x8 730 NTC
	3500	1846 lm	217 lm/W	3185 lm	210 lm/W	12316 lm	172 lm/W	7550-00365	Flexus 5050 PP G1 2x8 735
								7550-00449	Flexus 5050 PP G1 2x8 735 NTC
	4000	1909 lm	224 lm/W	3293 lm	217 lm/W	12736 lm	178 lm/W	7550-00366	Flexus 5050 PP G1 2x8 740
								7550-00450	Flexus 5050 PP G1 2x8 740 NTC
	5000	1909 lm	224 lm/W	3293 lm	217 lm/W	12736 lm	178 lm/W	7550-00367	Flexus 5050 PP G1 2x8 750
								7550-00451	Flexus 5050 PP G1 2x8 750 NTC
	5700	1909 lm	224 lm/W	3293 lm	217 lm/W	12736 lm	178 lm/W	7550-00368	Flexus 5050 PP G1 2x8 757
								7550-00452	Flexus 5050 PP G1 2x8 757 NTC
	6500	1909 lm	224 lm/W	3293 lm	217 lm/W	12736 lm	178 lm/W	7550-00369	Flexus 5050 PP G1 2x8 765
								7550-00453	Flexus 5050 PP G1 2x8 765 NTC

Up to
12736 lm!

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 200 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 1500 mA Tc = 25 °C			
≥80	2700	1632 lm	192 lm/W	2816 lm	186 lm/W	10889 lm	152 lm/W	7550-00370	Flexus 5050 PP G1 2x8 827
								7550-00454	Flexus 5050 PP G1 2x8 827 NTC
	3000	1695 lm	199 lm/W	2924 lm	193 lm/W	11309 lm	158 lm/W	7550-00371	Flexus 5050 PP G1 2x8 830
								7550-00455	Flexus 5050 PP G1 2x8 830 NTC
	3500	1741 lm	205 lm/W	3004 lm	198 lm/W	11617 lm	163 lm/W	7550-00372	Flexus 5050 PP G1 2x8 835
								7550-00456	Flexus 5050 PP G1 2x8 835 NTC
	4000	1783 lm	210 lm/W	3076 lm	203 lm/W	11897 lm	167 lm/W	7550-00373	Flexus 5050 PP G1 2x8 840
								7550-00457	Flexus 5050 PP G1 2x8 840 NTC
	5000	1783 lm	210 lm/W	3076 lm	203 lm/W	11897 lm	167 lm/W	7550-00374	Flexus 5050 PP G1 2x8 850
								7550-00458	Flexus 5050 PP G1 2x8 850 NTC
	5700	1783 lm	210 lm/W	3076 lm	203 lm/W	11897 lm	167 lm/W	7550-00375	Flexus 5050 PP G1 2x8 857
								7550-00459	Flexus 5050 PP G1 2x8 857 NTC
	6500	1783 lm	210 lm/W	3076 lm	203 lm/W	11897 lm	167 lm/W	7550-00376	Flexus 5050 PP G1 2x8 865
								7550-00460	Flexus 5050 PP G1 2x8 865 NTC

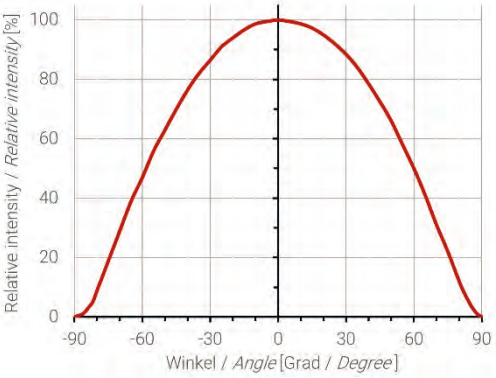
Up to 11897 lm!

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 200 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 1500 mA Tc = 25 °C			
≥90	2700	1372 lm	161 lm/W	2367 lm	156 lm/W	9153 lm	128 lm/W	7550-00377	Flexus 5050 PP G1 2x8 927
								7550-00461	Flexus 5050 PP G1 2x8 927 NTC
	3000	1414 lm	166 lm/W	2439 lm	161 lm/W	9433 lm	132 lm/W	7550-00378	Flexus 5050 PP G1 2x8 930
								7550-00462	Flexus 5050 PP G1 2x8 930 NTC
	3500	1456 lm	171 lm/W	2512 lm	166 lm/W	9713 lm	136 lm/W	7550-00379	Flexus 5050 PP G1 2x8 935
								7550-00463	Flexus 5050 PP G1 2x8 935 NTC
	4000	1498 lm	176 lm/W	2584 lm	170 lm/W	9993 lm	140 lm/W	7550-00380	Flexus 5050 PP G1 2x8 940
								7550-00464	Flexus 5050 PP G1 2x8 940 NTC
	5000	1498 lm	176 lm/W	2584 lm	170 lm/W	9993 lm	140 lm/W	7550-00381	Flexus 5050 PP G1 2x8 950
								7550-00465	Flexus 5050 PP G1 2x8 950 NTC
	5700	1498 lm	176 lm/W	2584 lm	170 lm/W	9993 lm	140 lm/W	7550-00382	Flexus 5050 PP G1 2x8 957
								7550-00466	Flexus 5050 PP G1 2x8 957 NTC
	6500	1498 lm	176 lm/W	2584 lm	170 lm/W	9993 lm	140 lm/W	7550-00383	Flexus 5050 PP G1 2x8 965
								7550-00467	Flexus 5050 PP G1 2x8 965 NTC

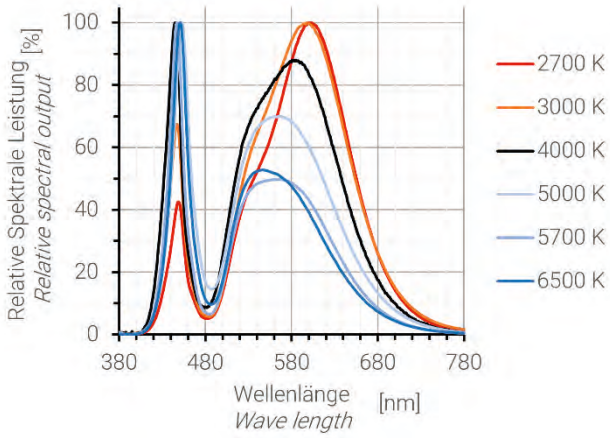
Up to 9993 lm!

Technical data: Flexus 5050 PP - LED-modules for street- and outdoor-lighting

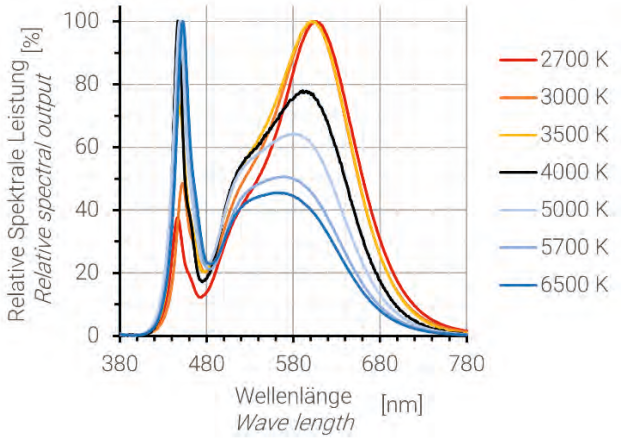
Light distribution curve



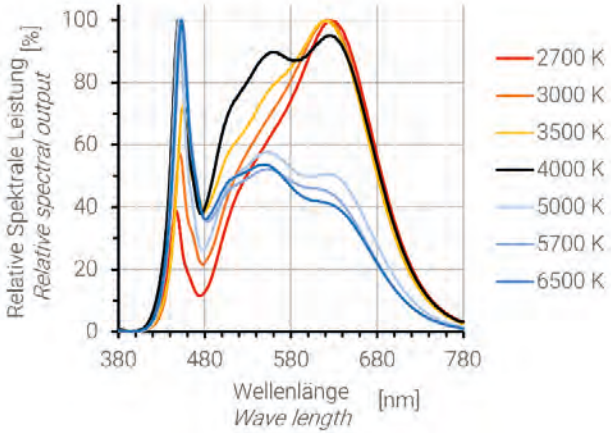
Spectrum 70



Spectrum 80



Spectrum 90



Lifetime of the used LEDs

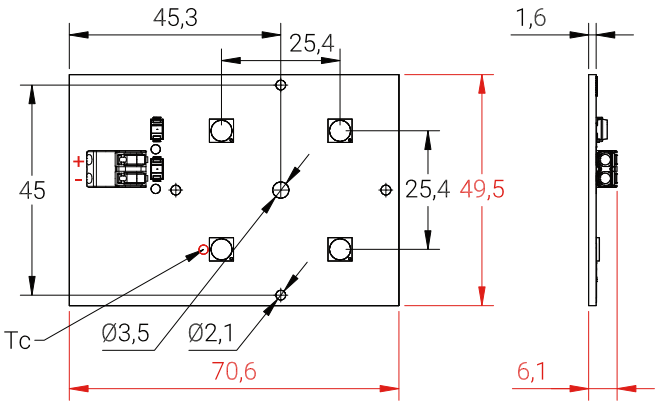
- The service life information is based on the TM21 extrapolations of the available LM80 data of the LEDs used. They are to be regarded as purely informative data from which no warranty claims can be derived.

description	If	Tc	L70 B50	L70 B10	L80 B50	L80 B10	L90 B50	L90 B10
Flexus 5050 PP G1 2x...	950 mA	85 °C	> 109.000 h	> 109.000 h	> 109.000 h	> 109.000 h	> 109.000 h	> 109.000 h
Flexus 5050 PP G1 2x... NTC	1500 mA	85 °C	> 109.000 h	> 109.000 h	> 109.000 h	> 109.000 h	> 109.000 h	> 109.000 h

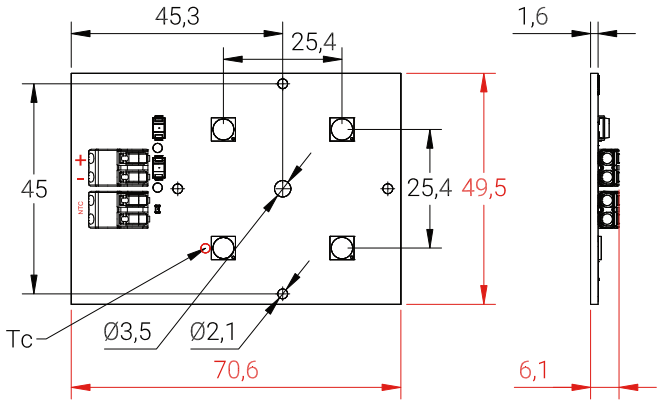
Technical drawings: Flexus 5050 PP

Flexus 5050 PP 2x2

Flexus 5050 PP G1 2x2

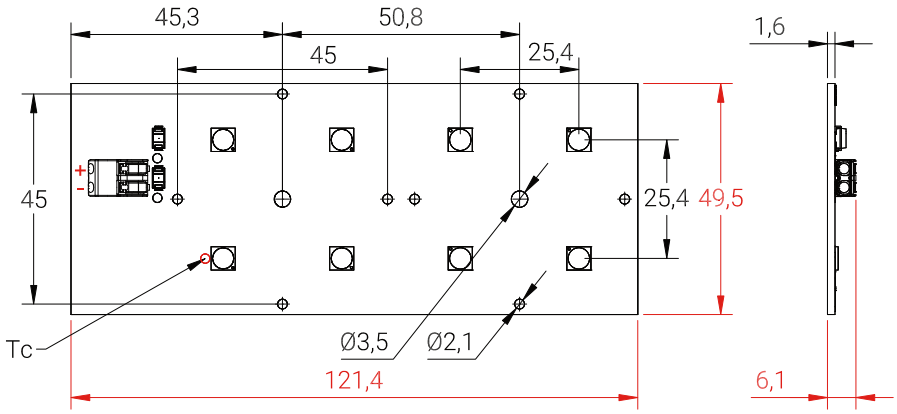


NTC

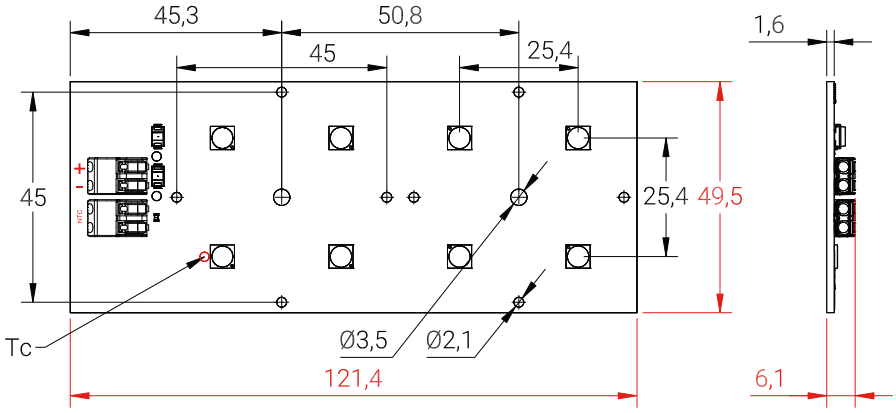


Flexus 5050 PP 2x4

Flexus 5050 PP G1 2x4

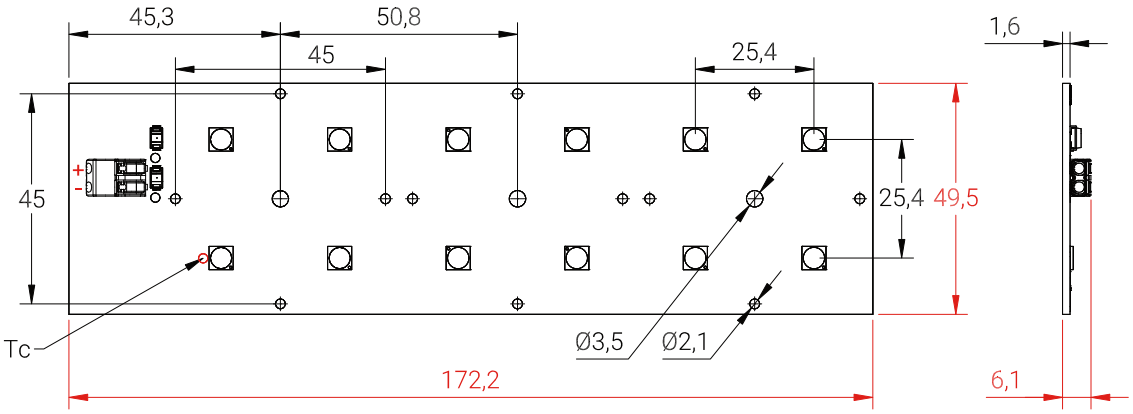


NTC

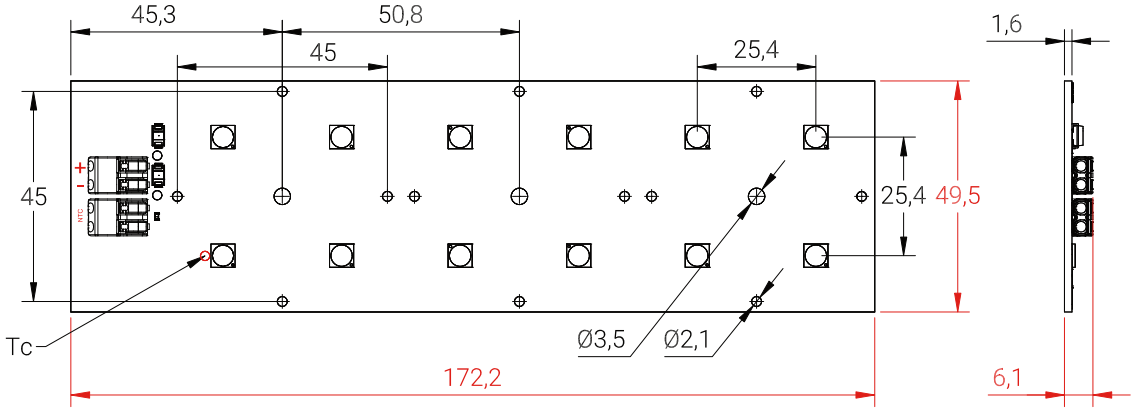


Flexus 5050 PP 2x6

Flexus 5050 PP G1 2x6

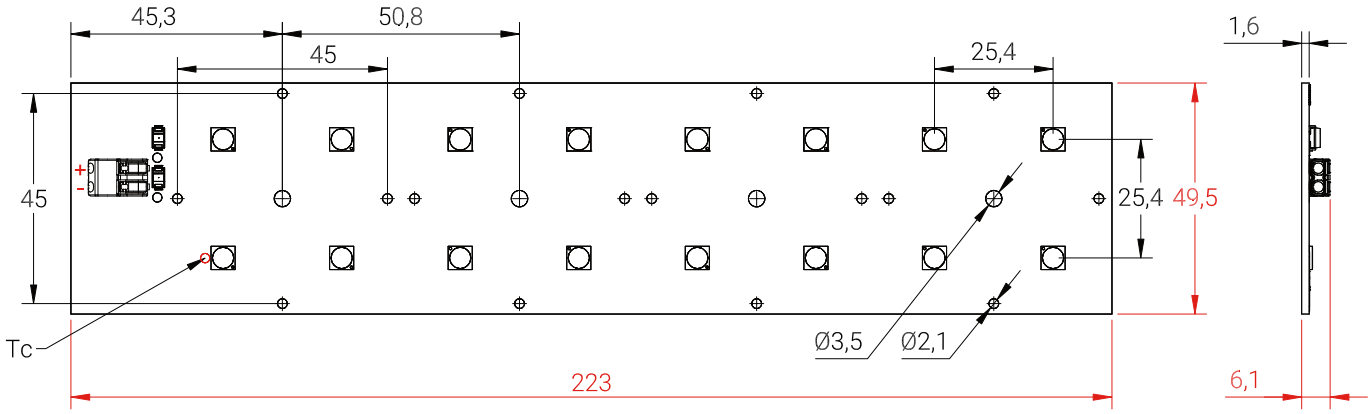


NTC

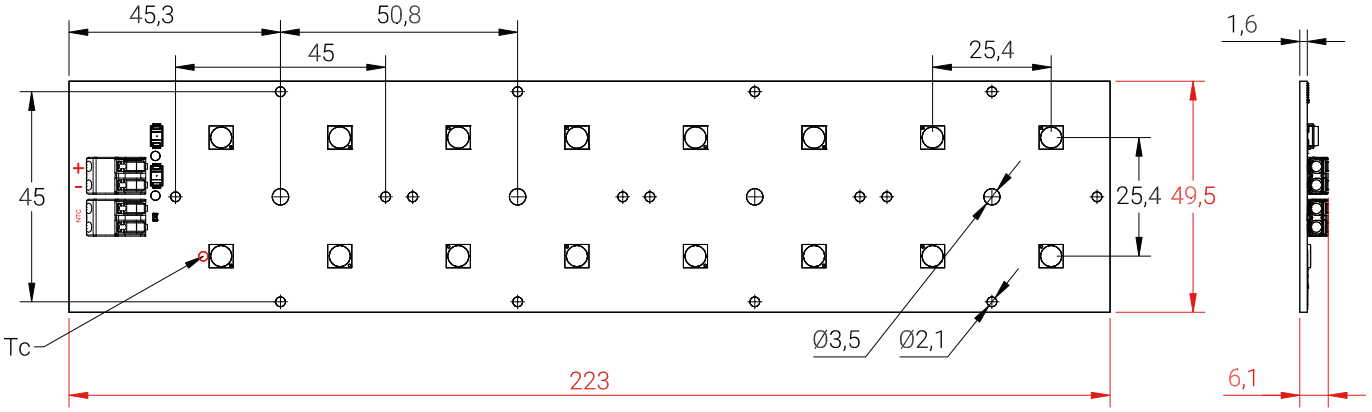


Flexus 5050 PP 2x8

Flexus 5050 PP G1 2x8



NTC



Flexus 5050 CT — Extremely compact high-performance modules

Flexus 5050 CT

iX-led Flexus CT is a geometric variant of the Flexus family. Instead of two separate rows that are optimised for the use of optics, the light generation here is concentrated on one line that is as compact as possible.

LEDs with the highest performance currently available are used. Efficiencies up to 237 lm/W are achieved. Or luminous fluxes up to just under 18000 lm.

The Flexus 5050 CT is equipped with an NTC for temperature monitoring. Two versions of the Flexus 5050 CT are available: CT2 with 8 LEDs and CT3 with 16 LEDs. With CRI 70, CRI 80 and CRI 90, three color renderings are available. We also offer eight light colors in the range from 2200 K to 6500 K.

The family is rounded off by these LED modules:

Flexus 5050 HP	Flexus High Performance – It couldn‘t be better
Flexus 5050 PP	Outstanding price-performance ratio
Flexus HighPower	LED module with robust high-power LEDs
Flexus MidPower	Mid-power performance in a compact design
Flexus Color	Flexus in 11 colors from Far-Red bis Royal-Blue

Our iX-led standard modules are available at short notice, even in small quantities, and are very advantageous in the overall concept.

Standard does not mean rigid and unchangeable!

Do you need different light colors, different color renderings or minimally shorter/longer versions of the modules? You need the assembly of soldering nuts as spacers or a threaded insert for simplified mounting of the module? No problem. Other terminals or soldered cables are also possible. With the **iX-led product family** we can adapt and individualize the standard to your needs. Explore our exclusive module series with more than 1000 lighting possibilities.

LED module with high-power LEDs for installation in luminaires.

Compatible with optics from various manufacturers.

Versatile with:

√ Square modules in 2 versions: 1x8 LEDs und 2x8 LEDs

√ 3 color renderings: CRI 70, CRI 80 and CRI 90

√ 8 light colors: 2200 K, 2700 K, 3000 K, 3500 K, 4000 K, 5000 K, 5700 K and 6500 K

2-row LED arrangement.

Plug-in terminals for quick and easy installation.

2 variants: with and without NTC for temperature monitoring.

For operation with suitable constant current drivers.

Optimum thermal management through aluminium core PCB.

Maximum working voltage	250 V
Ambient temperature	-20… + 50 °C
Max. perm. operating temperature (Tc)	80 °C
EPREL database entry	yes
Beam angle	120°

Connections:

Terminals		2
Connection type		rigid / flexible
Conductor cross-section AWG		AWG 18-24
Conductor cross-section	min	0.2 mm²
	max	0.75 mm²
Stripping length		8 - 9 mm

Flexus 5050 CT2 - Extremly compact high-performance modules

√ 8 high-performance high-power-LEDs
√ square module for installation in luminaires
√ pitch distance along 5.3 mm
√ length 95 mm
√ width 39 mm
√ aluminium core PCB for perfect thermal management
√ rated current 350 mA
√ maximum operating current 1000 mA
√ maximum forward voltage 49.9 V
√ 4 connection terminals
√ with NTC for temperature monitoring

Please also refer to the technical data of the Flexus 5050 CT-Family on page 190. Further technical data and drawings from page 196.

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 50 mA Tc = 25 °C		If = 500 mA Tc = 25 °C		If = 1000 mA Tc = 25 °C			
≥70	2200	395 lm	188 lm/W	3733 lm	164 lm/W	6993 lm	144 lm/W	7550-00660	Flexus 5050 CT2 G1 722
	2700	455 lm	216 lm/W	4293 lm	188 lm/W	8041 lm	166 lm/W	7550-00661	Flexus 5050 CT2 G1 727
	3000	480 lm	228 lm/W	4529 lm	198 lm/W	8483 lm	175 lm/W	7550-00662	Flexus 5050 CT2 G1 730
	3500	484 lm	230 lm/W	4569 lm	200 lm/W	8557 lm	177 lm/W	7550-00663	Flexus 5050 CT2 G1 735
	4000	499 lm	237 lm/W	4716 lm	207 lm/W	8833 lm	182 lm/W	7550-00664	Flexus 5050 CT2 G1 740
	5000	499 lm	237 lm/W	4716 lm	207 lm/W	8833 lm	182 lm/W	7550-00665	Flexus 5050 CT2 G1 750
	5700	499 lm	237 lm/W	4716 lm	207 lm/W	8833 lm	182 lm/W	7550-00666	Flexus 5050 CT2 G1 757
	6500	491 lm	233 lm/W	4637 lm	203 lm/W	8686 lm	179 lm/W	7550-00667	Flexus 5050 CT2 G1 765

Up to 8833 lm!

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 50 mA Tc = 25 °C		If = 500 mA Tc = 25 °C		If = 1000 mA Tc = 25 °C			
≥80	2200	364 lm	173 lm/W	3439 lm	151 lm/W	6441 lm	133 lm/W	7550-00668	Flexus 5050 CT2 G1 822
	2700	425 lm	202 lm/W	4009 lm	176 lm/W	7508 lm	155 lm/W	7550-00669	Flexus 5050 CT2 G1 827
	3000	441 lm	210 lm/W	4166 lm	182 lm/W	7802 lm	161 lm/W	7550-00670	Flexus 5050 CT2 G1 830
	3500	454 lm	215 lm/W	4284 lm	188 lm/W	8023 lm	166 lm/W	7550-00671	Flexus 5050 CT2 G1 835
	4000	466 lm	221 lm/W	4401 lm	193 lm/W	8244 lm	170 lm/W	7550-00672	Flexus 5050 CT2 G1 840
	5000	466 lm	221 lm/W	4401 lm	193 lm/W	8244 lm	170 lm/W	7550-00673	Flexus 5050 CT2 G1 850
	5700	466 lm	221 lm/W	4401 lm	193 lm/W	8244 lm	170 lm/W	7550-00674	Flexus 5050 CT2 G1 857
	6500	461 lm	219 lm/W	4352 lm	191 lm/W	8152 lm	168 lm/W	7550-00675	Flexus 5050 CT2 G1 865

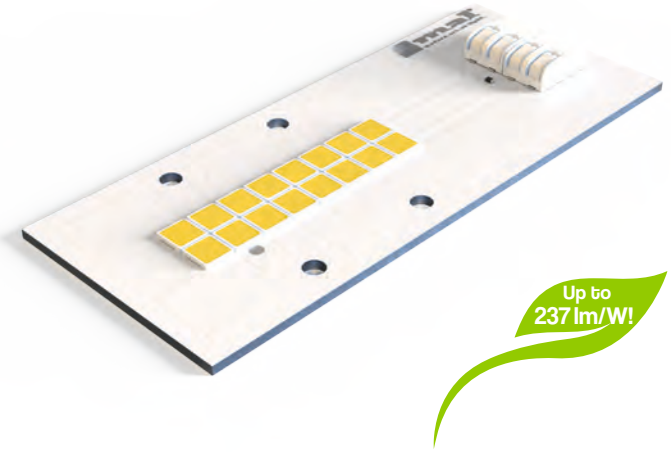
Up to 8244 lm!

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 50 mA Tc = 25 °C		If = 500 mA Tc = 25 °C		If = 1000 mA Tc = 25 °C			
≥90	2200	307 lm	146 lm/W	2898 lm	127 lm/W	5428 lm	112 lm/W	7550-00676	Flexus 5050 CT2 G1 922
	2700	359 lm	171 lm/W	3390 lm	148 lm/W	6349 lm	131 lm/W	7550-00677	Flexus 5050 CT2 G1 927
	3000	369 lm	175 lm/W	3488 lm	153 lm/W	6533 lm	135 lm/W	7550-00678	Flexus 5050 CT2 G1 930
	3500	380 lm	180 lm/W	3586 lm	157 lm/W	6717 lm	139 lm/W	7550-00679	Flexus 5050 CT2 G1 935
	4000	391 lm	186 lm/W	3694 lm	162 lm/W	6919 lm	143 lm/W	7550-00680	Flexus 5050 CT2 G1 940
	5000	391 lm	186 lm/W	3694 lm	162 lm/W	6919 lm	143 lm/W	7550-00681	Flexus 5050 CT2 G1 950
	5700	391 lm	186 lm/W	3694 lm	162 lm/W	6919 lm	143 lm/W	7550-00682	Flexus 5050 CT2 G1 957
	6500	389 lm	185 lm/W	3674 lm	161 lm/W	6882 lm	142 lm/W	7550-00683	Flexus 5050 CT2 G1 965

Up to 6919 lm!

Flexus 5050 CT3 - Extremly compact high-performance modules

√ 16 high-performance high-power-LEDs
√ square module for installation in luminaires
√ pitch distance along 5.3 mm
√ length 95 mm
√ width 39 mm
√ aluminium core PCB for perfect thermal management
√ rated current 350 mA
√ maximum operating current 1000 mA
√ maximum forward voltage 99.8 V
√ 4 connection terminals
√ with NTC for temperature monitoring



Please also refer to the technical data of the Flexus 5050 CT-Family on page 190. Further technical data and drawings from page 196.

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 50 mA Tc = 25 °C		If = 500 mA Tc = 25 °C		If = 1000 mA Tc = 25 °C			
≥70	2200	791 lm	188 lm/W	7467 lm	164 lm/W	13985 lm	144 lm/W	7550-00684	Flexus 5050 CT3 G1 722
	2700	910 lm	216 lm/W	8587 lm	188 lm/W	16083 lm	166 lm/W	7550-00685	Flexus 5050 CT3 G1 727
	3000	959 lm	228 lm/W	9058 lm	198 lm/W	16966 lm	175 lm/W	7550-00686	Flexus 5050 CT3 G1 730
	3500	968 lm	230 lm/W	9137 lm	200 lm/W	17113 lm	177 lm/W	7550-00687	Flexus 5050 CT3 G1 735
	4000	999 lm	237 lm/W	9432 lm	207 lm/W	17665 lm	182 lm/W	7550-00688	Flexus 5050 CT3 G1 740
	5000	999 lm	237 lm/W	9432 lm	207 lm/W	17665 lm	182 lm/W	7550-00689	Flexus 5050 CT3 G1 750
	5700	999 lm	237 lm/W	9432 lm	207 lm/W	17665 lm	182 lm/W	7550-00690	Flexus 5050 CT3 G1 757
	6500	982 lm	233 lm/W	9275 lm	203 lm/W	17371 lm	179 lm/W	7550-00691	Flexus 5050 CT3 G1 765

Up to 17655 lm!

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 100 mA Tc = 25 °C		If = 500 mA Tc = 25 °C		If = 1000 mA Tc = 25 °C			
≥80	2200	728 lm	173 lm/W	6877 lm	151 lm/W	12881 lm	133 lm/W	7550-00692	Flexus 5050 CT3 G1 822
	2700	849 lm	202 lm/W	8017 lm	176 lm/W	15016 lm	155 lm/W	7550-00693	Flexus 5050 CT3 G1 827
	3000	882 lm	210 lm/W	8331 lm	182 lm/W	15604 lm	161 lm/W	7550-00694	Flexus 5050 CT3 G1 830
	3500	907 lm	215 lm/W	8567 lm	188 lm/W	16046 lm	166 lm/W	7550-00695	Flexus 5050 CT3 G1 835
	4000	932 lm	221 lm/W	8803 lm	193 lm/W	16488 lm	170 lm/W	7550-00696	Flexus 5050 CT3 G1 840
	5000	932 lm	221 lm/W	8803 lm	193 lm/W	16488 lm	170 lm/W	7550-00697	Flexus 5050 CT3 G1 850
	5700	932 lm	221 lm/W	8803 lm	193 lm/W	16488 lm	170 lm/W	7550-00698	Flexus 5050 CT3 G1 857
	6500	922 lm	219 lm/W	8705 lm	191 lm/W	16304 lm	168 lm/W	7550-00699	Flexus 5050 CT3 G1 865

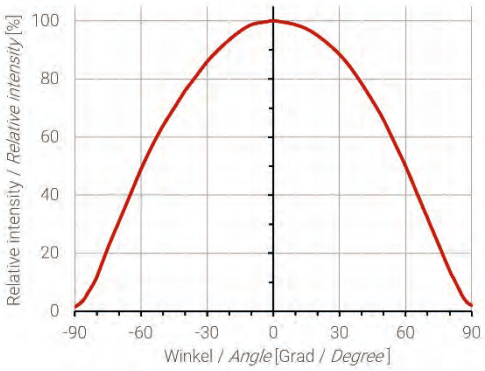
Up to 16488 lm!

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 100 mA Tc = 25 °C		If = 500 mA Tc = 25 °C		If = 1000 mA Tc = 25 °C			
≥90	2200	614 lm	146 lm/W	5797 lm	127 lm/W	10857 lm	112 lm/W	7550-00700	Flexus 5050 CT3 G1 922
	2700	718 lm	171 lm/W	6779 lm	148 lm/W	12697 lm	131 lm/W	7550-00701	Flexus 5050 CT3 G1 927
	3000	739 lm	175 lm/W	6976 lm	153 lm/W	13065 lm	135 lm/W	7550-00702	Flexus 5050 CT3 G1 930
	3500	760 lm	180 lm/W	7172 lm	157 lm/W	13433 lm	139 lm/W	7550-00703	Flexus 5050 CT3 G1 935
	4000	783 lm	186 lm/W	7388 lm	162 lm/W	13838 lm	143 lm/W	7550-00704	Flexus 5050 CT3 G1 940
	5000	783 lm	186 lm/W	7388 lm	162 lm/W	13838 lm	143 lm/W	7550-00705	Flexus 5050 CT3 G1 950
	5700	783 lm	186 lm/W	7388 lm	162 lm/W	13838 lm	143 lm/W	7550-00706	Flexus 5050 CT3 G1 957
	6500	778 lm	185 lm/W	7349 lm	161 lm/W	13764 lm	142 lm/W	7550-00707	Flexus 5050 CT3 G1 965

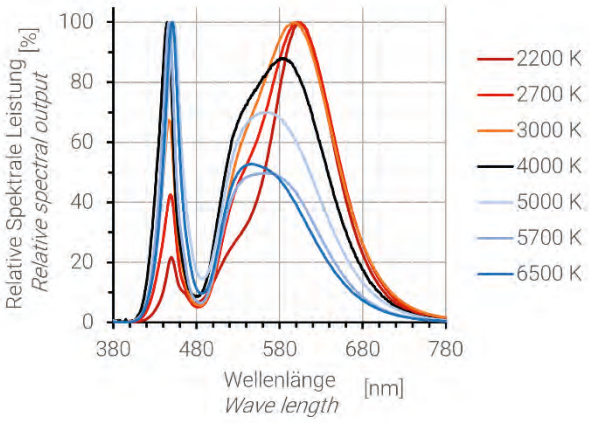
Up to 13838 lm!

Technical data: Flexus 5050 CT - Extremly compact high-performance modules

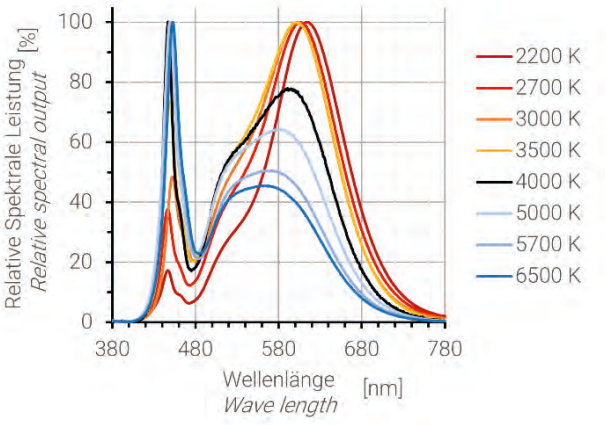
Light distribution curve



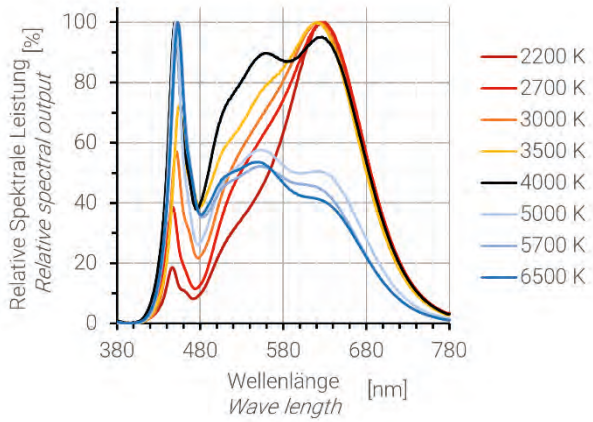
Spectrum 70



Spectrum 80



Spectrum 90



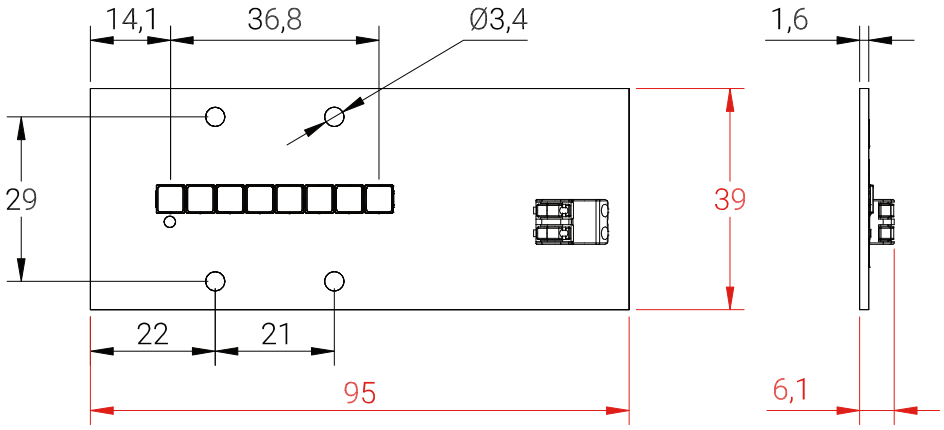
Lifetime of the used LEDs

- The service life information is based on the TM21 extrapolations of the available LM80 data of the LEDs used. They are to be regarded as purely informative data from which no warranty claims can be derived.

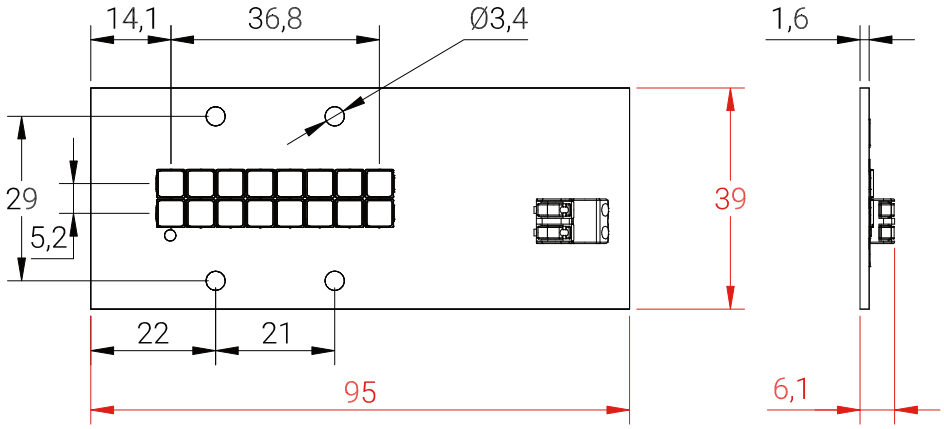
description	If	Tc	L70 B50	L70 B10	L80 B50	L80 B10	L90 B50	L90 B10
Flexus 5050 CT... G1...	400 mA	55 °C	> 36.000 h	> 36.000 h	> 36.000 h	> 36.000 h	> 36.000 h	> 36.000 h
	400 mA	85 °C	> 36.000 h	> 36.000 h	> 36.000 h	> 36.000 h	> 36.000 h	> 36.000 h

Technical drawings: Flexus 5050 CT - Extremly compact high-performance modules

Flexus 5050 CT2



Flexus 5050 CT3



Lucidus - Lens modules for wide-area backlighting

Lucidus

Lucidus is one of our latest product developments. These linear boards have been developed for uniform, flat backlighting. They are optimized for a small distance between LED module and cover or foil.

By using highly efficient, wide-beam individual lenses made of PMMA, significantly smaller distances for uniform illumination can be realized than it would be possible with free-beam LEDs.

With three lengths from 110 mm to 452 mm, Lucidus enables homogeneous illumination of round surfaces as well as free-form surfaces.

With up to 215 lm/W our modules are highly efficient and with up to 1400 lm they can cope with demanding tasks.

Choose between seven light colors: 2700 K, 3000 K, 3500K, 4000 K, 5000 K, 5700 K and 6500 K. Color rendering: CRI 80, CRI 90 is available on request.

The interconnection is in series, allowing easy scaling without sacrificing uniformity.

The Lucidus is therefore an excellent standard module for mastering a wide range of backlighting tasks.

Are you interested in an HCL solution in this area? We have also realized this in this form factor.

Standard does not mean rigid and unchangeable!

Do you need different light colors, different color renderings or minimally shorter/longer versions of the modules? You need the assembly of soldering nuts as spacers or a threaded insert for simplified mounting of the module? No problem. Other terminals or soldered cables are also possible. With the **iX-led product family** we can adapt and individualize the standard to your needs.

Explore our exclusive module series with more than 1000 lighting possibilities.

iX-led for wide-area backlighting

LED module with mid-power LEDs and single lenses for installation in luminaires.

Versatile with:

√ linear module in 3 lengths: 110 mm, 220 mm and 460 mm x 20 mm

√ color rendering: CRI 80 — CRI 90 on request

√ 7 light colors: CCT 2700 K, 3000 K, 3500 K, 4000 K, 5000 K, 5700 K and 6500 K

Excellent color consistency in the module: 3 Step MacAdam LEDs.

Plug-in terminals for easy and quick mounting.

For operation on suitable constant current drivers.

Maximum working voltage	250 V
Ambient temperature	-20…+50 °C
Max. perm. operating temperature (Tc)	80 °C
EPREL database entry	yes
Beam angle	extremely wide beam

Connections:

Terminals		2
Connection type		rigid / flexible
Conductor cross section AWG		AWG 18-24
Conductor cross section	min	0.2 mm²
	max	0.75 mm²
Stripping length		8 - 9 mm

Also available with other terminals on request.

Lucidus L11 - Lens modules for wide-area backlighting

- √ linear module for backlighting
- √ equipped with high-precision, extremely wide-beam lenses
- √ 2 Mid-Power LEDs
- √ pitch distance 60 mm
- √ length 110 mm
- √ width 20 mm
- √ 2 connection terminals
- √ rated current 350 mA
- √ maximum operating current 700 mA
- √ maximum forward voltage 3.25 V
- √ Intended for mounting by means of push-in clip (accessories), see page 210.

Please also refer to the technical data of the Lucidus family on page 202. Further technical data and drawings from page 206.

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 100 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 700 mA Tc = 25 °C			
≥80	2700	51 lm	189 lm/W	169 lm	167 lm/W	314 lm	145 lm/W	7519-00000	Lucidus G1 L11 W20 340 827
	3000	53 lm	202 lm/W	176 lm	178 lm/W	326 lm	155 lm/W	7519-00001	Lucidus G1 L11 W20 340 830
	3500	53 lm	202 lm/W	176 lm	178 lm/W	326 lm	155 lm/W	7519-00002	Lucidus G1 L11 W20 340 835
	4000	57 lm	215 lm/W	188 lm	190 lm/W	348 lm	165 lm/W	7519-00003	Lucidus G1 L11 W20 340 840
	5000	57 lm	215 lm/W	188 lm	190 lm/W	348 lm	165 lm/W	7519-00004	Lucidus G1 L11 W20 340 850
	5700	57 lm	215 lm/W	188 lm	190 lm/W	348 lm	165 lm/W	7519-00005	Lucidus G1 L11 W20 340 857
	6500	57 lm	215 lm/W	188 lm	190 lm/W	348 lm	165 lm/W	7519-00006	Lucidus G1 L11 W20 340 865

Up to
348 lm!

Lucidus L22 - Lens modules for wide-area backlighting

- √ linear module for backlighting
- √ equipped with high-precision, extremely wide-beam lenses
- √ 4 Mid-Power LEDs
- √ pitch distance 60 mm
- √ length 220 mm
- √ width 20 mm
- √ 2 connection terminals
- √ rated current 350 mA
- √ maximum operating current 700 mA
- √ maximum forward voltage 6.5 V
- √ Intended for mounting by means of push-in clip (accessories), see page 210.

Please also refer to the technical data of the Lucidus family on page 202. Further technical data and drawings from page 206.

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 100 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 700 mA Tc = 25 °C			
≥80	2700	103 lm	189 lm/W	339 lm	167 lm/W	628 lm	145 lm/W	7519-00007	Lucidus G1 L22 W20 670 827
	3000	107 lm	202 lm/W	352 lm	178 lm/W	652 lm	155 lm/W	7519-00008	Lucidus G1 L22 W20 670 830
	3500	107 lm	202 lm/W	352 lm	178 lm/W	652 lm	155 lm/W	7519-00009	Lucidus G1 L22 W20 670 835
	4000	114 lm	215 lm/W	375 lm	190 lm/W	696 lm	165 lm/W	7519-00010	Lucidus G1 L22 W20 670 840
	5000	114 lm	215 lm/W	375 lm	190 lm/W	696 lm	165 lm/W	7519-00011	Lucidus G1 L22 W20 670 850
	5700	114 lm	215 lm/W	375 lm	190 lm/W	696 lm	165 lm/W	7519-00012	Lucidus G1 L22 W20 670 857
	6500	114 lm	215 lm/W	375 lm	190 lm/W	696 lm	165 lm/W	7519-00013	Lucidus G1 L22 W20 670 865

Up to
696 lm!

Lucidus L46 - Lens modules for wide-area backlighting

√ linear module for backlighting
√ equipped with high-precision, extremely wide-beam lenses
√ 8 Mid-Power-LEDs
√ pitch distance 60 mm
√ length 460 mm
√ width 20 mm
√ 2 connection terminals
√ rated current 350 mA
√ maximum operating current 700 mA
√ maximum forward voltage 13 V
√ Intended for mounting by means of push-in clip (accessories), see page 210.

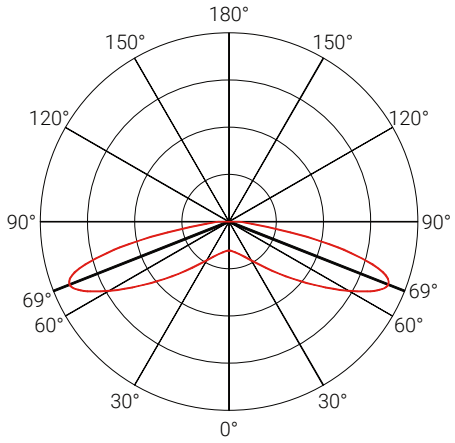
Please also refer to the technical data of the Lucidus family on page 202. Further technical data and drawings from page 206.

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 100 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 700 mA Tc = 25 °C			
≥80	2700	205 lm	189 lm/W	678 lm	167 lm/W	1256 lm	145 lm/W	7519-00014	Lucidus G1 L46 W20 1340 827
	3000	213 lm	202 lm/W	703 lm	178 lm/W	1304 lm	155 lm/W	7519-00015	Lucidus G1 L46 W20 1340 830
	3500	213 lm	202 lm/W	703 lm	178 lm/W	1304 lm	155 lm/W	7519-00016	Lucidus G1 L46 W20 1340 835
	4000	227 lm	215 lm/W	750 lm	190 lm/W	1391 lm	165 lm/W	7519-00017	Lucidus G1 L46 W20 1340 840
	5000	227 lm	215 lm/W	750 lm	190 lm/W	1391 lm	165 lm/W	7519-00018	Lucidus G1 L46 W20 1340 850
	5700	227 lm	215 lm/W	750 lm	190 lm/W	1391 lm	165 lm/W	7519-00019	Lucidus G1 L46 W20 1340 857
	6500	227 lm	215 lm/W	750 lm	190 lm/W	1391 lm	165 lm/W	7519-00020	Lucidus G1 L46 W20 1340 865

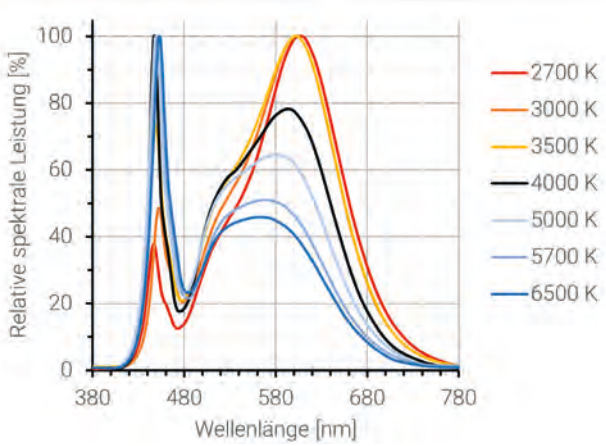
Up to
1391 lm!

Technical data: Lucidus - Lens modules for wide-area backlighting

Light distribution curve



Spectrum



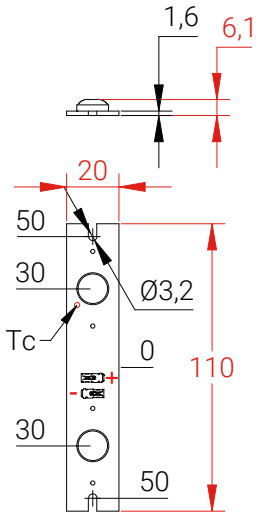
Lifetime of the LEDs used

- The lifetime data is based on TM21 extrapolations of the available LM80 data of the LEDs used. They are to be regarded as purely informative data from which no warranty claim can be derived.

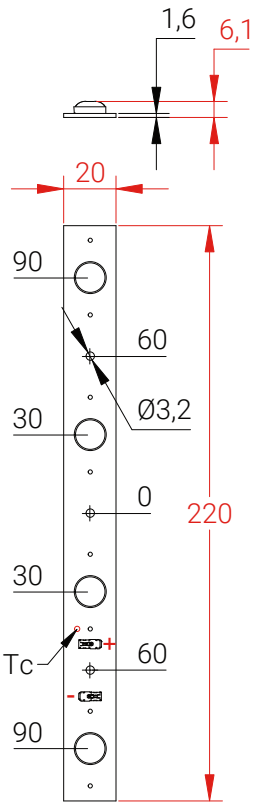
description	If	Tc	L70 B50	L70 B10	L80 B50	L80 B10	L90 B50	L90 B10
Lucidus G1 L... W20 ... 8xx	700 mA	80 °C	> 102.000 h	> 102.000 h	> 102.000 h	> 102.000 h	> 50.000 h	> 50.000 h

Technical drawings: Lucidus - Lens modules for wide-area backlighting

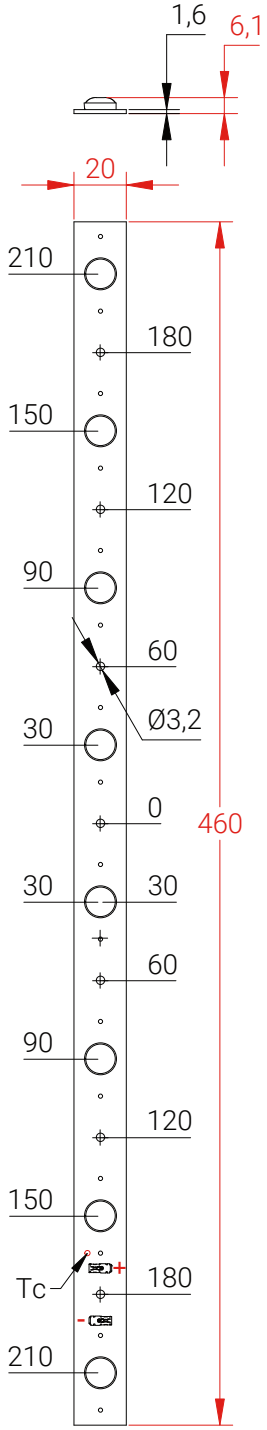
Lucidus L11



Lucidus L22

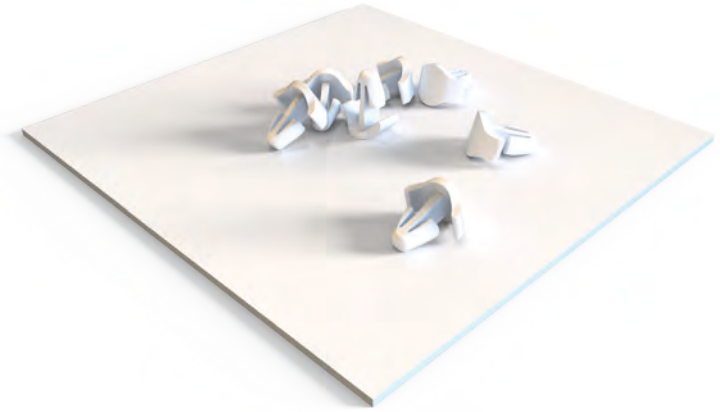


Lucidus L46



Fixing clip for LED modules

- Push-in-clip
- for fast, secure and tool-free mounting of LED modules
- material: PA6.6
- color: white
- flammability: V0 (UL94)
- temperature range: -35°C … +85°C



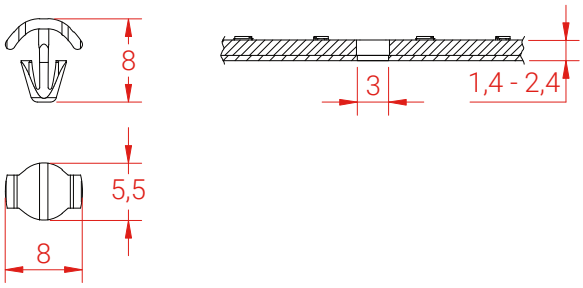
borehole	material strength	order-nr.	description
Ø 3 mm	1.4 mm – 2.4 mm	2720-00005	Push-in-Clip D3.0 T1.4-2.4
	2.5 mm – 3.5 mm	2720-00006	Push-in-Clip D3.0 T2.5-3.5
Ø 4 mm	1.4 mm – 2.4 mm	2720-00007	Push-in-Clip D4.0 T1.4-2.4
	2.5 mm – 3.5 mm	2720-00008	Push-in-Clip D4.0 T2.5-3.5

Application example

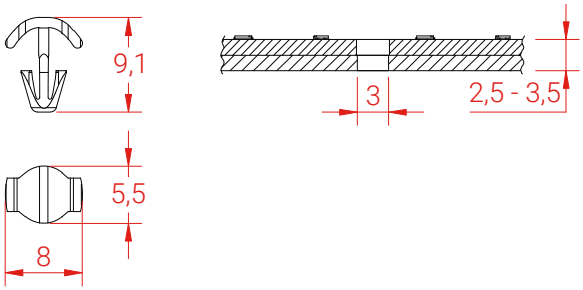
- for fast, safe and tool-free mounting of LED modules

Technical drawings: Fixing clip for LED modules

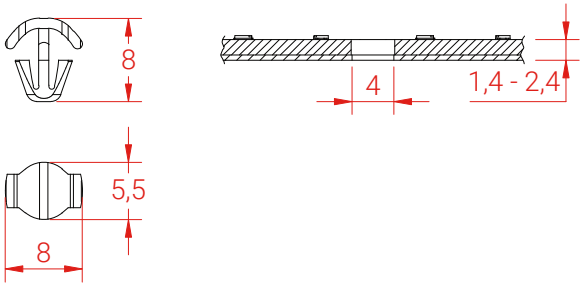
2720-00005 Push-in-Clip D3,0 T1,4-2,4



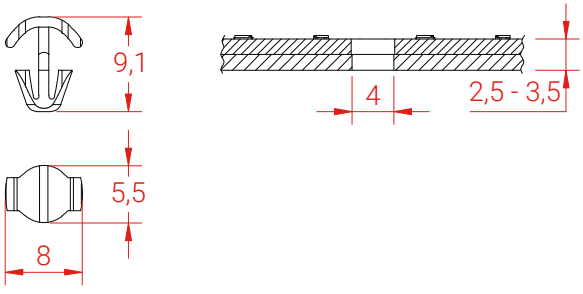
2720-00006 Push-in-Clip D3,0 T2,5-3,5



2720-00007 Push-in-Clip D4,0 T1,4-2,4



2720-00008 Push-in-Clip D9,1 T2,5-3,5



Quadrus — Area modules square

Quadrus

Quadrus is an LED module for square and rectangular area luminaires. With an LED spacing of only 34 mm both lengthwise and crosswise, compact dimensions can be realized.

The layout is designed as a „comb“ to conserve resources.

The modules are available in two sizes.

The square LED module offers high flexibility in geometry, as well as low mounting and wiring effort.

Carefully selected LEDs allow our modules to achieve operating currents of over 215 lm/W or nearly 9000 lm.

If you need an HCL solution, we can also realize it for you. Please do not hesitate to contact us.

Our iX-led standard modules are also available in small quantities at short notice and very advantageous in the overall concept.

Standard does not mean rigid and unchangeable!

Do you need different light colors, different color renderings or minimally shorter/longer versions of the modules? You need the assembly of soldering nuts as spacers or a threaded insert for simplified mounting of the module? No problem. Other terminals or soldered cables are also possible. With the **iX-led product family** we can adapt and individualize the standard to your needs.

Explore our exclusive module series with more than 1000 lighting possibilities.

LED module with mid-power LEDs for installation in luminaires.

Versatile with:

√ LED-module in two lenghts: 253 mm x 264 mm and 525 mm x 264 mm
√ color rendering: CRI 80 — CRI 90 on request
√ 7 light colors: CCT 2700 K, 3000 K, 3500 K, 4000 K, 5000 K, 5700 K and 6500 K

Excellent color consistency in the module: 3 Step MacAdam LEDs.

Plug-in terminals for easy and quick mounting.

For operation on suitable constant current drivers.

Maximum working voltage	250 V
Ambient temperature	-20…+50 °C
Max. perm. operating temperature (Tc)	80 °C
EPREL database entry	yes
Beam angle	120°

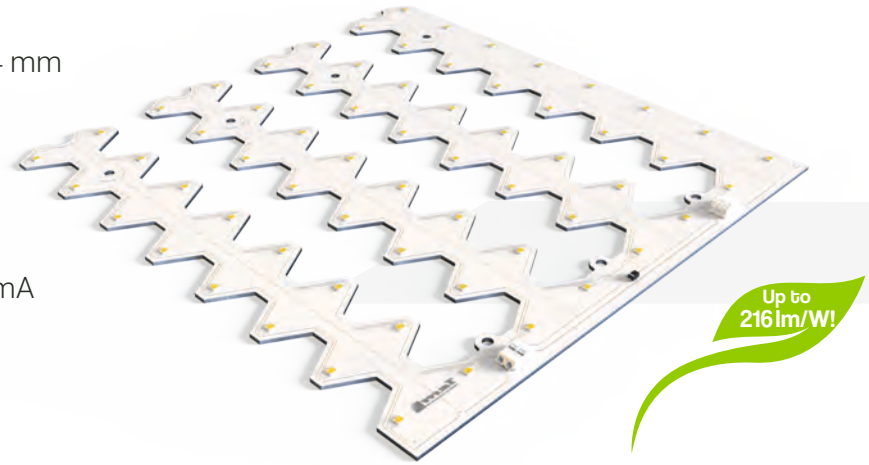
Connections:

Terminals		4
Connection type		rigid / flexible
Conductor cross section AWG		AWG 18-24
Conductor cross section	min	0.2 mm²
	max	0.75 mm²
Stripping length		8 - 9 mm

Also available with other terminals on request.

Quadrus 1250 - Area modules square

- √ LED module for area luminaires
- √ 64 Mid-Power-LEDs
- √ pitch distance along and across 34 mm
- √ length 265 mm
- √ width 253 mm
- √ 4 connection terminals
- √ rated current 350 mA
- √ maximum operating current 1050 mA
- √ maximum vorward voltage 24.8 V



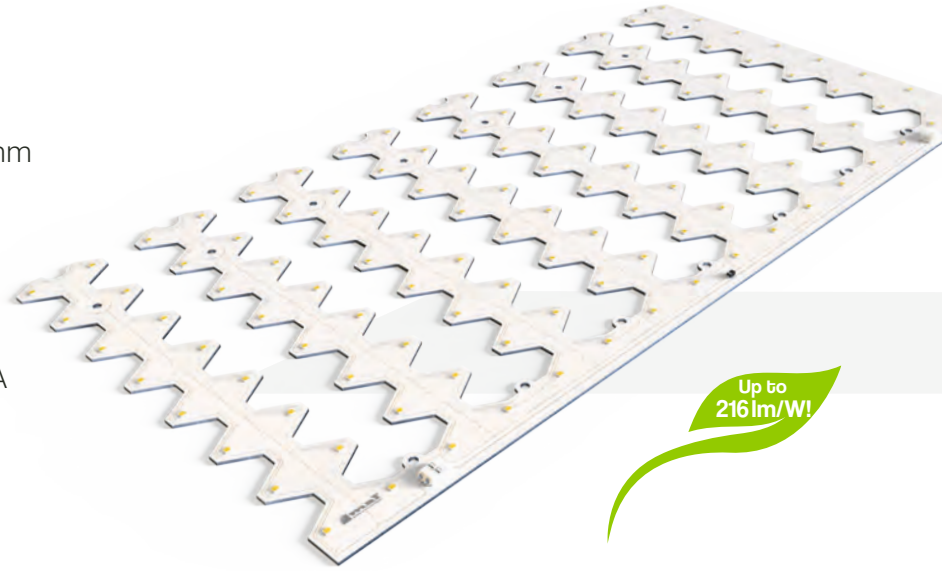
Please also refer to the technical data of the Quadrus family on page 214. Further technical data and drawings from page 218.

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 200 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 1.050 mA Tc = 25 °C			
≥80	2700	816 lm	192 lm/W	1412 lm	188 lm/W	4032 lm	170 lm/W	7503-10000	Quadrus G2 1250 827
	3000	869 lm	206 lm/W	1505 lm	201 lm/W	4296 lm	181 lm/W	7503-10001	Quadrus G2 1250 830
	3500	869 lm	206 lm/W	1505 lm	201 lm/W	4296 lm	181 lm/W	7503-10002	Quadrus G2 1250 835
	4000	903 lm	216 lm/W	1564 lm	211 lm/W	4465 lm	191 lm/W	7503-10003	Quadrus G2 1250 840
	5000	903 lm	216 lm/W	1564 lm	211 lm/W	4465 lm	191 lm/W	7503-10004	Quadrus G2 1250 850
	5700	903 lm	216 lm/W	1564 lm	211 lm/W	4465 lm	191 lm/W	7503-10005	Quadrus G2 1250 857
	6500	903 lm	216 lm/W	1564 lm	211 lm/W	4465 lm	191 lm/W	7503-10006	Quadrus G2 1250 865

Up to
4465 lm!

Quadrus 2500 - Area modules square

√ LED module ideal for area luminaires
√ 128 Mid-Power LEDs
√ pitch distance along and across 34 mm
√ length 525 mm
√ width 265 mm
√ 4 connection terminals
√ rated current 700 mA
√ maximum operating current 2100 mA
√ maximum forward voltage 24.8 V



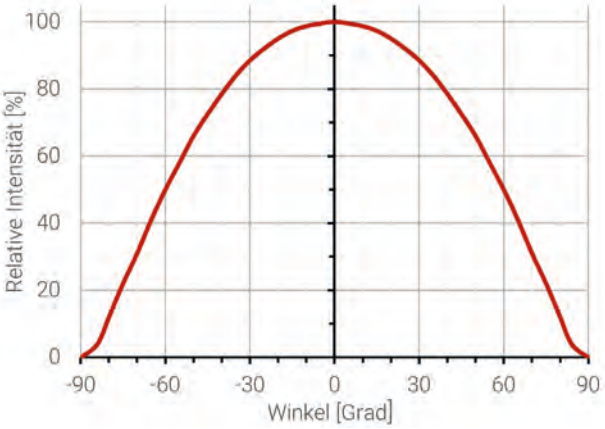
Please also refer to the technical data of the Quadrus family on page 214. Further technical data and drawings from page 218.

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 400 mA Tc = 25 °C		If = 700 mA Tc = 25 °C		If = 2.100 mA Tc = 25 °C			
≥80	2700	1632 lm	192 lm/W	2825 lm	188 lm/W	8064 lm	170 lm/W	7503-10007	Quadrus G2 2500 827
	3000	1738 lm	206 lm/W	3010 lm	201 lm/W	8593 lm	181 lm/W	7503-10008	Quadrus G2 2500 830
	3500	1738 lm	206 lm/W	3010 lm	201 lm/W	8593 lm	181 lm/W	7503-10009	Quadrus G2 2500 835
	4000	1806 lm	216 lm/W	3128 lm	211 lm/W	8929 lm	191 lm/W	7503-10010	Quadrus G2 2500 840
	5000	1806 lm	216 lm/W	3128 lm	211 lm/W	8929 lm	191 lm/W	7503-10011	Quadrus G2 2500 850
	5700	1806 lm	216 lm/W	3128 lm	211 lm/W	8929 lm	191 lm/W	7503-10012	Quadrus G2 2500 857
	6500	1806 lm	216 lm/W	3128 lm	211 lm/W	8929 lm	191 lm/W	7503-10013	Quadrus G2 2500 865

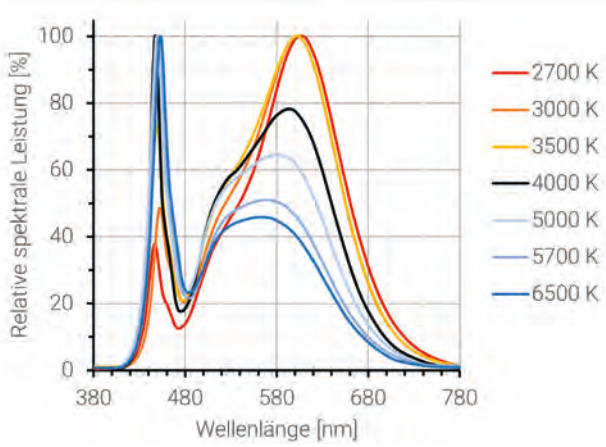
Up to
8929 lm!

Technical data: Quadrus - Area modules square

Light distribution curve



Spectrum



Lifetime of the LEDs used

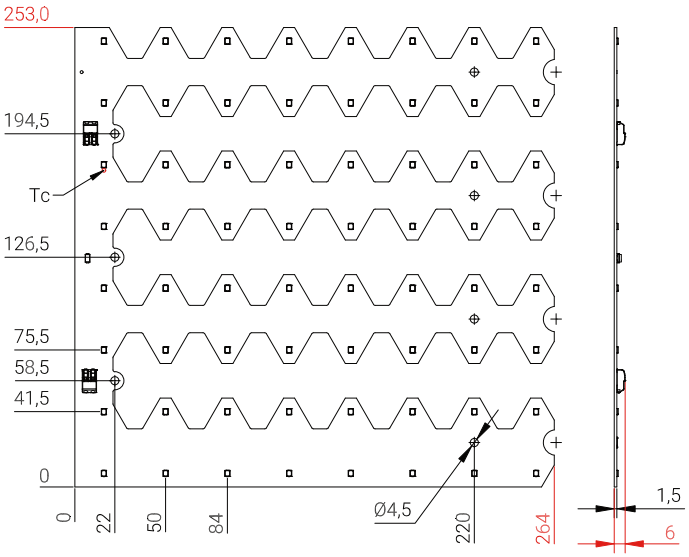
- The service life data is based on TM21 extrapolations of the available LM80 data of the LEDs used. They are to be regarded as purely informative data from which no warranty claim can be derived.

description	If	Tc	L70 B50	L70 B10	L80 B50	L80 B10	L90 B50	L90 B10
Quadrus G2 1250 8xx	1050 mA	80 °C	> 102.000 h	> 102.000 h	> 102.000 h	> 102.000 h	> 50.000 h	> 50.000 h
Quadrus G2 2500 8xx	2100 mA	80 °C	> 102.000 h	> 102.000 h	> 102.000 h	> 102.000 h	> 50.000 h	> 50.000 h

Technical drawings: Quadrus - Area modules square

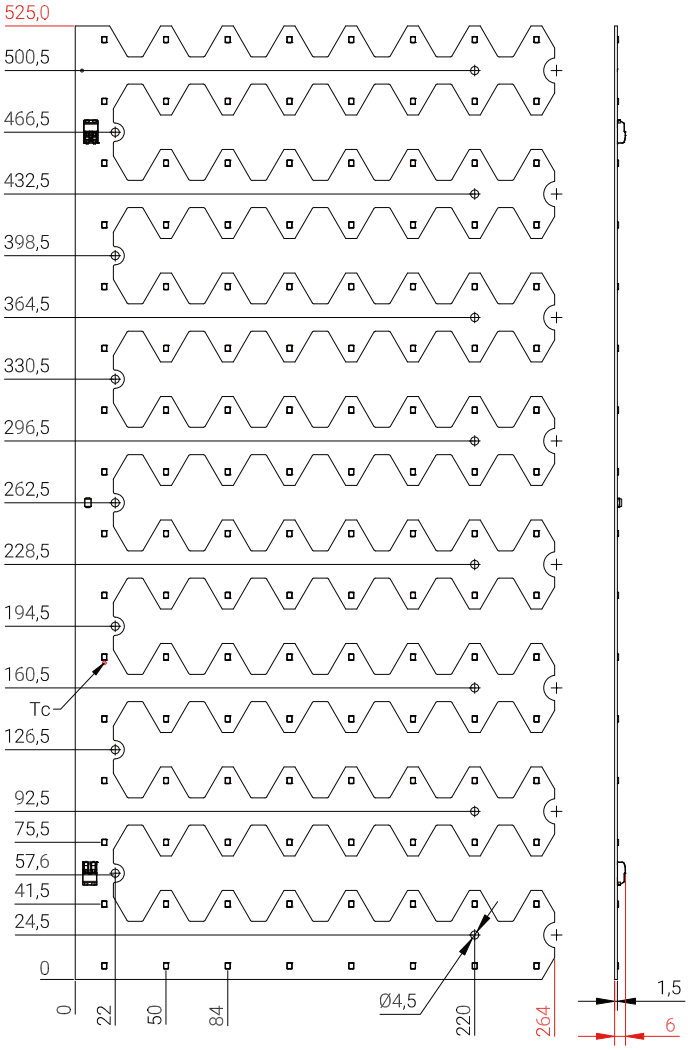
Quadrus 1250

Quadrus G2 1250



Quadrus 2500

Quadrus G2 2500



Curvus — Area modules round

You don‘t always achieve an optimal solution with „the square has to go in the round“. That is why we have developed our round Curvus surface modules.

Our smallest module is the Curvus 155 with a module diameter of 155 mm. The largest module is our Curvus R401, a quarter circle with a radius of 401 mm. This can be combined with four pieces to a full circle with a diameter of 802 mm. Three other Curvus models with diameters of 195 mm, 240 mm and 380 mm complete our program.

By using the latest generation of MidPower LEDs, our Curuvs modules achieve 220 lm/W or over 17000 lm.

A small LED spacing allows a compact luminaire dimension, favoring an LED pitch with an area per LED starting from 2 cm².

Our iX-led standard modules are available at short notice even in small quantities and are very advantageous in the overall concept.

Standard does not mean rigid and unchangeable!

Do you need different light colors, different color renderings or minimally shorter/longer versions of the modules? You need the assembly of soldering nuts as spacers or a threaded insert for simplified mounting of the module? No problem. Other terminals or soldered cables are also possible. With the **iX-led product family** we can adapt and individualize the standard to your needs.

Explore our exclusive module series with more than 1000 lighting possibilities.

LED module with mid-power LEDs for installation in luminaires.

Versatile with:

√ LED module in 5 different diameters:
Ø 155 mm, Ø 195 mm, Ø 240 mm, Ø 380 mm and quarter circle R 401 mm

√ color rendering: CRI 80 — CRI 90 on request

√ 7 light colors: CCT 2700 K, 3000 K, 3500 K, 4000 K, 5000 K, 5700 K and 6500 K

Excellent color consistency in the module: 3 Step MacAdam LEDs.

Plug-in terminals for easy and quick mounting.

For operation on suitable constant current drivers.

Maximum working voltage	250 V
Ambient temperature	-20…+50 °C
Max. perm. operating temperature (Tc)	80 °C
EPREL database entry	yes
Beam angle	120°

Connections:

Terminals		2
Connection type		rigid / flexible
Conductor cross section AWG		AWG 18-24
Conductor cross section	min	0.2 mm²
	max	0.75 mm²
Stripping length		8 - 9 mm

Also available with other terminals on request.

Curvus 155 - Area modules round

- √ round LED module for installation in area luminaires
- √ 96 Mid-Power-LEDs
- √ pitch distance 5 rings at a distance of 14 mm
- √ diameter 155 mm
- √ 2 connection terminals
- √ rated current 450 mA
- √ maximum operating current 1400 mA
- √ maximum forward voltage 24.8 V

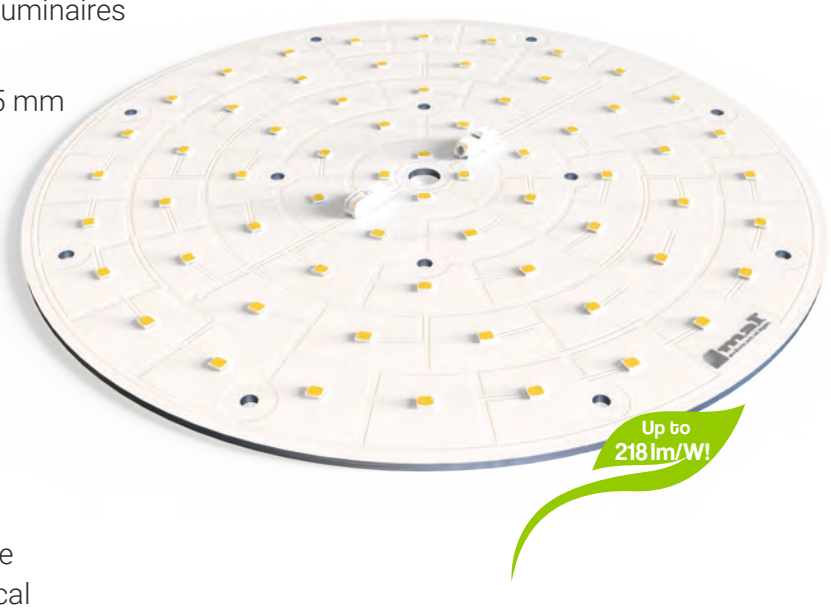
Please also refer to the technical data of the Curvus family on page 224. Further technical data and drawings from page 230.

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 150 mA Tc = 25 °C		If = 450 mA Tc = 25 °C		If = 1.400 mA Tc = 25 °C			
≥80	2700	616 lm	196 lm/W	1822 lm	189 lm/W	5421 lm	172 lm/W	7542-01000	Curvus G2 D155 827
	3000	656 lm	209 lm/W	1942 lm	202 lm/W	5776 lm	184 lm/W	7542-01001	Curvus G2 D155 830
	3500	656 lm	209 lm/W	1942 lm	202 lm/W	5776 lm	184 lm/W	7542-01002	Curvus G2 D155 835
	4000	682 lm	220 lm/W	2018 lm	213 lm/W	6003 lm	193 lm/W	7542-01003	Curvus G2 D155 840
	5000	682 lm	220 lm/W	2018 lm	213 lm/W	6003 lm	193 lm/W	7542-01004	Curvus G2 D155 850
	5700	682 lm	220 lm/W	2018 lm	213 lm/W	6003 lm	193 lm/W	7542-01005	Curvus G2 D155 857
	6500	682 lm	220 lm/W	2018 lm	213 lm/W	6003 lm	193 lm/W	7542-01006	Curvus G2 D155 865

Up to
6003 lm!

Curvus 195 - Area modules round

√round LED module for installation in area luminaires
√64 Mid-Power-LEDs
√pitch distance 5 rings at a distance of 13.5 mm
√diameter 195 mm
√2 connection terminals
√rated current 700 mA
√maximum operating current 1050 mA
√maximum forward voltage 24.8 V



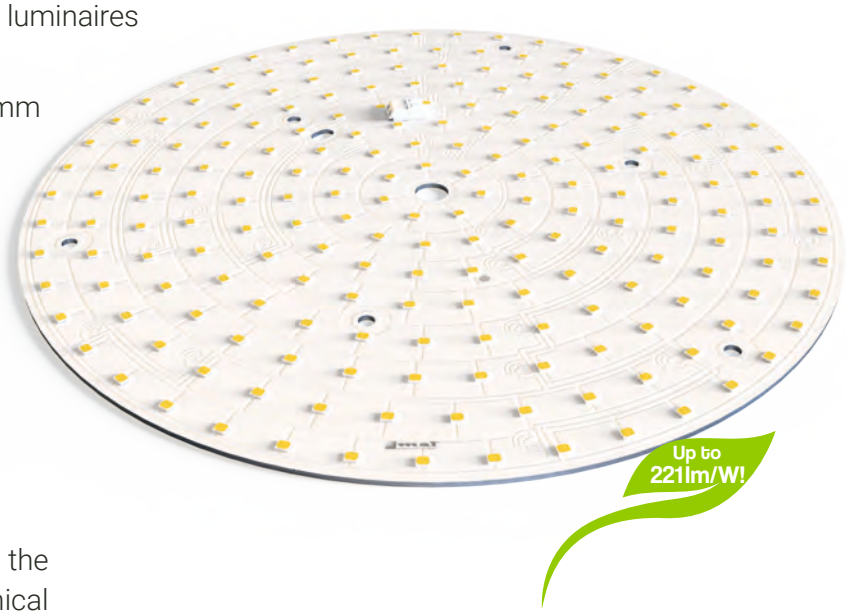
Please also refer to the technical data of the Curvus family on page 224. Further technical data and drawings from page 230.

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 150 mA Tc = 25 °C		If = 700 mA Tc = 25 °C		If = 1.050 mA Tc = 25 °C			
≥80	2700	614 lm	194 lm/W	2756 lm	178 lm/W	4032 lm	170 lm/W	7542-01007	Curvus G2 D195 827
	3000	654 lm	208 lm/W	2936 lm	190 lm/W	4296 lm	181 lm/W	7542-01008	Curvus G2 D195 830
	3500	654 lm	208 lm/W	2936 lm	190 lm/W	4296 lm	181 lm/W	7542-01009	Curvus G2 D195 835
	4000	680 lm	218 lm/W	3052 lm	200 lm/W	4465 lm	191 lm/W	7542-01010	Curvus G2 D195 840
	5000	680 lm	218 lm/W	3052 lm	200 lm/W	4465 lm	191 lm/W	7542-01011	Curvus G2 D195 850
	5700	680 lm	218 lm/W	3052 lm	200 lm/W	4465 lm	191 lm/W	7542-01012	Curvus G2 D195 857
	6500	680 lm	218 lm/W	3052 lm	200 lm/W	4465 lm	191 lm/W	7542-01013	Curvus G2 D195 865

Up to
4465 lm!

Curvus 240 - Area modules round

√round LED module for installation in area luminaires
√208 Mid-Power-LEDs
√pitch distance 8 rings at a distance of 7 mm
√diameter 240 mm
√2 connection terminals
√rated current 1050 mA
√maximum operating current 2800 mA
√maximum forward voltage 24.8 V



Please also refer to the technical data of the Curvus family on page 224. Further technical data and drawings from page 230.

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 250 mA Tc = 25 °C		If = 1.050 mA Tc = 25 °C		If = 2.800 mA Tc = 25 °C			
≥80	2700	1028 lm	197 lm/W	4245 lm	188 lm/W	10897 lm	174 lm/W	7542-01014	Curvus G2 D240 827
	3000	1096 lm	210 lm/W	4523 lm	202 lm/W	11611 lm	186 lm/W	7542-01015	Curvus G2 D240 830
	3500	1096 lm	210 lm/W	4523 lm	202 lm/W	11611 lm	186 lm/W	7542-01016	Curvus G2 D240 835
	4000	1139 lm	221 lm/W	4701 lm	212 lm/W	12067 lm	195 lm/W	7542-01017	Curvus G2 D240 840
	5000	1139 lm	221 lm/W	4701 lm	212 lm/W	12067 lm	195 lm/W	7542-01018	Curvus G2 D240 850
	5700	1139 lm	221 lm/W	4701 lm	212 lm/W	12067 lm	195 lm/W	7542-01019	Curvus G2 D240 857
	6500	1139 lm	221 lm/W	4701 lm	212 lm/W	12067 lm	195 lm/W	7542-01020	Curvus G2 D240 865

Up to
12067lm!

Curvus 380 - Area modules round

√round LED module for installation in area luminaires
√296 Mid-Power-LEDs
√pitch distance 9 rings at a distance of 10.5 mm
√diameter 380 mm
√2 connection terminals
√rated current 2400 mA
√maximum operating current 4000 mA
√maximum forward voltage 24.8 V

Please also refer to the technical data of the Curvus family on page 224. Further technical data and drawings from page 230.

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 500 mA Tc = 25 °C		If = 2.400 mA Tc = 25 °C		If = 4.000 mA Tc = 25 °C			
≥80	2700	2052 lm	196 lm/W	9570 lm	183 lm/W	15564 lm	174 lm/W	7542-01021	Curvus G2 D380 827
	3000	2186 lm	209 lm/W	10198 lm	195 lm/W	16583 lm	186 lm/W	7542-01022	Curvus G2 D380 830
	3500	2186 lm	209 lm/W	10198 lm	195 lm/W	16583 lm	186 lm/W	7542-01023	Curvus G2 D380 835
	4000	2272 lm	220 lm/W	10598 lm	205 lm/W	17235 lm	195 lm/W	7542-01024	Curvus G2 D380 840
	5000	2272 lm	220 lm/W	10598 lm	205 lm/W	17235 lm	195 lm/W	7542-01025	Curvus G2 D380 850
	5700	2272 lm	220 lm/W	10598 lm	205 lm/W	17235 lm	195 lm/W	7542-01026	Curvus G2 D380 857
	6500	2272 lm	220 lm/W	10598 lm	205 lm/W	17235 lm	195 lm/W	7542-01027	Curvus G2 D380 865

Bis zu
17.235 lm!

Curvus R401 - Area modules round

√ round LED module for installation in area luminaires
√ 176 Mid-Power-LEDs
√ pitch distance 15 ring segments at a distance of 10.7 mm
√ diameter quadrant R 401 mm
√ 2 connection terminals
√ rated current 550 mA
√ maximum operating current 1750 mA
√ maximum forward voltage 34.1 V

Up to 221lm/W!

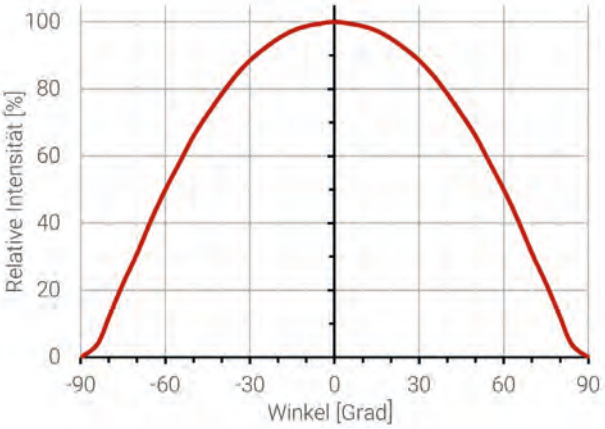
Please also refer to the technical data of the Curvus family on page 224. Further technical data and drawings from page 230.

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 175 mA Tc = 25 °C		If = 550 mA Tc = 25 °C		If = 1.750 mA Tc = 25 °C			
≥80	2700	989 lm	196 lm/W	3068 lm	190 lm/W	9356 lm	174 lm/W	7542-01028	Curvus G2 Q401 827
	3000	1054 lm	210 lm/W	3269 lm	203 lm/W	9968 lm	186 lm/W	7542-01029	Curvus G2 Q401 830
	3500	1054 lm	210 lm/W	3269 lm	203 lm/W	9968 lm	186 lm/W	7542-01030	Curvus G2 Q401 835
	4000	1095 lm	221 lm/W	3397 lm	214 lm/W	10361 lm	195 lm/W	7542-01031	Curvus G2 Q401 840
	5000	1095 lm	221 lm/W	3397 lm	214 lm/W	10361 lm	195 lm/W	7542-01032	Curvus G2 Q401 850
	5700	1095 lm	221 lm/W	3397 lm	214 lm/W	10361 lm	195 lm/W	7542-01033	Curvus G2 Q401 857
	6500	1095 lm	221 lm/W	3397 lm	214 lm/W	10361 lm	195 lm/W	7542-01034	Curvus G2 Q401 865

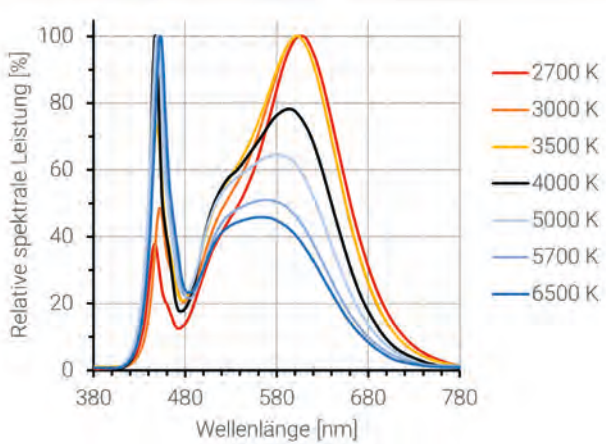
Up to 10361lm!

Technical data: Cuvrus - Area modules round

Light distribution curve



Spectrum



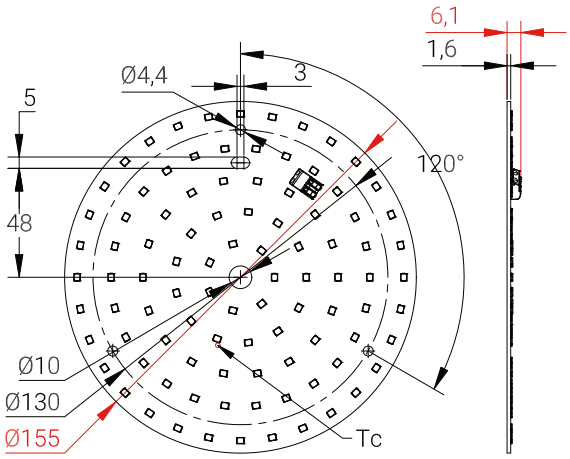
Lifetime of the LEDs used

- The lifetime data is based on TM21 extrapolations of the available LM80 data of the LEDs used. They are to be regarded as purely informative data from which no warranty claim can be derived.

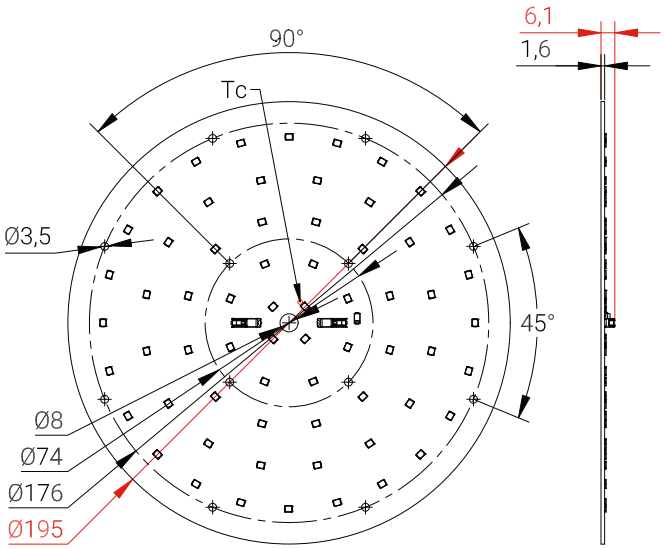
Description	If	Tc	L70 B50	L70 B10	L80 B50	L80 B10	L90 B50	L90 B10
Curvus G2 D155 8xx	1400 mA	80 °C	> 102.000 h	> 102.000 h	> 102.000 h	> 102.000 h	> 50.000 h	> 50.000 h
Curvus G2 D195 8xx	1050 mA	80 °C	> 102.000 h	> 102.000 h	> 102.000 h	> 102.000 h	> 50.000 h	> 50.000 h
Curvus G2 D240 8xx	2800 mA	80 °C	> 102.000 h	> 102.000 h	> 102.000 h	> 102.000 h	> 50.000 h	> 50.000 h
Curvus G2 D380 8xx	4000 mA	80 °C	> 102.000 h	> 102.000 h	> 102.000 h	> 102.000 h	> 50.000 h	> 50.000 h
Curvus G2 DR401 8xx	1750 mA	80 °C	> 102.000 h	> 102.000 h	> 102.000 h	> 102.000 h	> 50.000 h	> 50.000 h

Technical drawings: Cuvrus - Area modules round

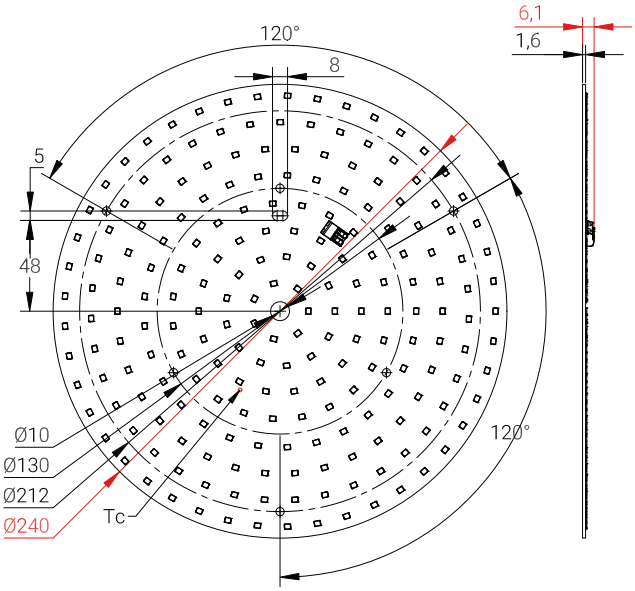
Curvus 155



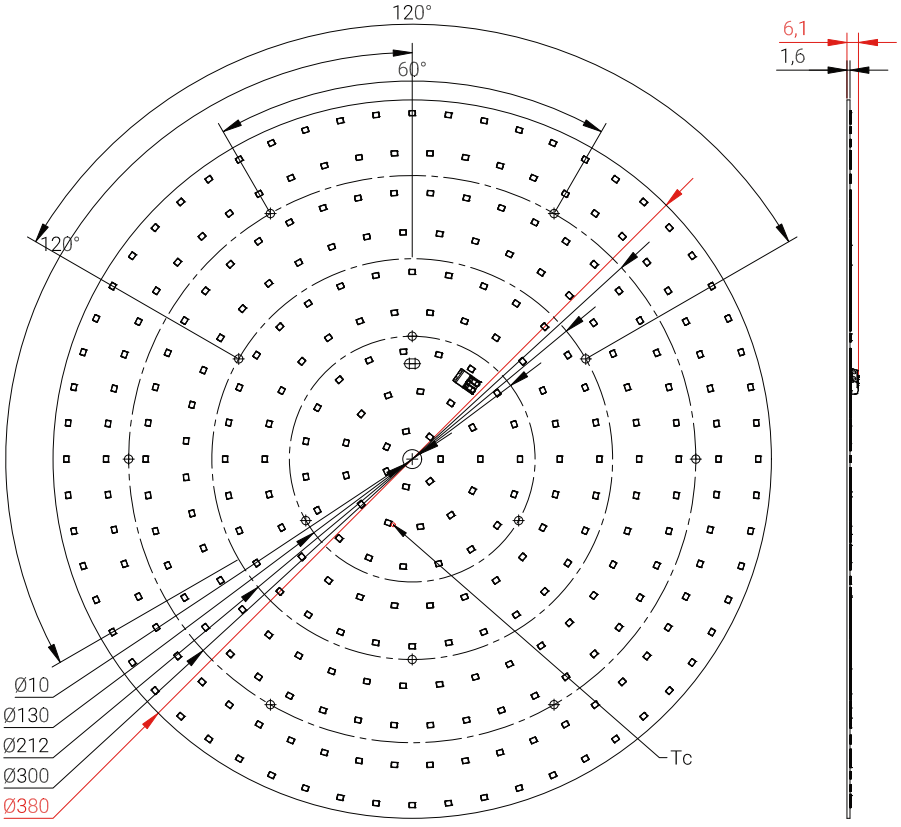
Curvus 195



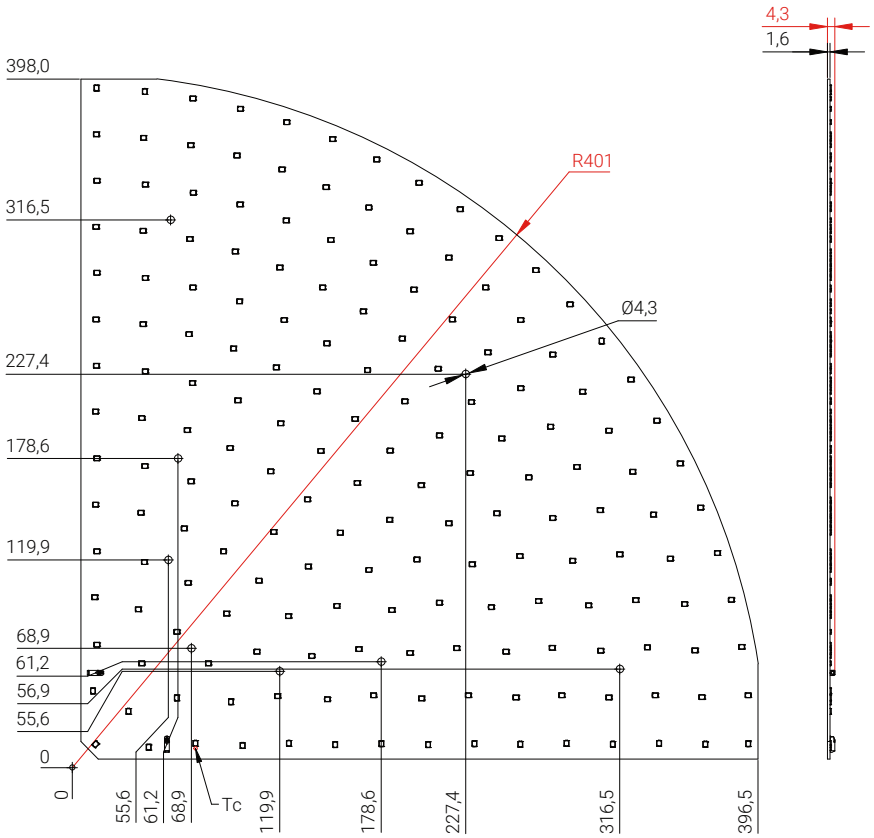
Curvus 240



Curvus 380



Curvus R401


4,3
1,6
398,0
316,5
227,4
178,6
119,9
68,9
61,2
56,9
55,6
0
R401
Ø4,3
0
55,6
61,2
68,9
Tc
119,9
178,6
227,4
316,5
396,5

Circulus – Ring modules

Circulus

With our Circulus LED modules, we offer, in addition to our round Curvus modules, ring-shaped LED modules.

You can choose from five different diameters: Circulus D50, Circulus D105, Circulus D160, Circulus D215 and Circulus D270.

All five diameters have a uniform ring width of 25 mm. For optimal thermal management and high efficiency with a long lifetime, all Circulus modules are based on high-quality aluminum core PCBs. The cutting-edge LED gives the Circulus modules efficiencies of up to 220 lm/W or light quantities of over 10000 lm.

The LED pitch is almost the same for all modules and is very small at 6.5 mm.

Do you need colored modules?

We also offer the Circulus equipped with colored LEDs.

Circulus is also the right solution for dynamic lighting: Circular LED modules equipped with warm white and cool white LEDs in two separate channels for HCL / Tuneable White applications.

Our iX-led standard modules are available at short notice and are favorable in the overall concept.

Standard does not mean rigid and unchangeable!

Do you need different light colors, different color renderings or minimally shorter/longer versions of the modules? You need the assembly of soldering nuts as spacers or a threaded insert for simplified mounting of the module? No problem. Other terminals or soldered cables are also possible. With the **iX-led product family** we can adapt and individualize the standard to your needs.

Explore our exclusive module series with more than 1000 lighting possibilities.

LED module with mid-power LEDs for installation in luminaires.

Versatile with:

√ LED module in 5 different diameters:
Ø 50 mm, Ø 105 mm, Ø 160 mm, Ø 215 mm and Ø 270 mm

√ 2 color renderings: CRI 80 and CRI 90

√ 7 light colors: CCT 2700 K, 3000 K, 3500 K, 4000 K, 5000 K, 5700 K and 6500 K

Excellent color consistency in the module: 3 Step MacAdam LEDs.

Plug-in terminals for easy and quick mounting.

For operation on suitable constant current drivers.

Maximum working voltage	250 V
Ambient temperature	-20…+50 °C
Maximal zulässige Betriebstemperatur (Tc)	80 °C
EPREL database entry	yes
Beam angle	120°

Connections:

Terminals		2
Connection type		rigid / flexible
Conductor cross section AWG		AWG 18-24
Conductor cross section	min	0.2 mm²
	max	0.75 mm²
Stripping length		8 - 9 mm

Also available with other terminals on request.

Circulus 50 - Ring modules

√ ring-shaped LED module for installation in luminaires
√ 24 Mid-Power-LEDs
√ pitch distance 6.5 mm
√ diameter outside 75 mm and inside 25 mm
√ two connection terminals
√ aluminum core PCB for perfect thermal management
√ rated current 350 mA
√ maximum operating current 2100 mA
√ maximum forward voltage 6.2 V
√ the five ring modules can be arranged inside each other

Please also refer to the technical data of the Circulus family on page 238. Further technical data and drawings from page 244.

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 150 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 2.100 mA Tc = 25 °C			
≥80	2700	154 lm	196 lm/W	356 lm	191 lm/W	1966 lm	162 lm/W	7543-20000	Circulus G2 D50 827
	3000	164 lm	209 lm/W	379 lm	205 lm/W	2095 lm	174 lm/W	7543-20001	Circulus G2 D50 830
	3500	164 lm	209 lm/W	379 lm	205 lm/W	2095 lm	174 lm/W	7543-20002	Circulus G2 D50 835
	4000	272 lm	218 lm/W	394 lm	215 lm/W	2177 lm	182 lm/W	7543-20003	Circulus G2 D50 840
	5000	171 lm	220 lm/W	394 lm	215 lm/W	2177 lm	182 lm/W	7543-20004	Circulus G2 D50 850
	5700	171 lm	220 lm/W	394 lm	215 lm/W	2177 lm	182 lm/W	7543-20005	Circulus G2 D50 857
	6500	171 lm	220 lm/W	394 lm	215 lm/W	2177 lm	182 lm/W	7543-20006	Circulus G2 D50 865

Up to
2177 lm!

NEW:
CRI 90 IN
KSF-Techno-
logy

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 150 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 2.100 mA Tc = 25 °C			
≥90	2700	153 lm	195 lm/W	357 lm	193 lm/W	1979 lm	164 lm/W	7543-20007	Circulus G2 D50 927
	3000	156 lm	199 lm/W	365 lm	197 lm/W	2022 lm	168 lm/W	7543-20008	Circulus G2 D50 930
	3500	160 lm	204 lm/W	374 lm	202 lm/W	2072 lm	172 lm/W	7543-20009	Circulus G2 D50 935
	4000	161 lm	206 lm/W	378 lm	204 lm/W	2093 lm	174 lm/W	7543-20010	Circulus G2 D50 940
	5000	161 lm	206 lm/W	378 lm	204 lm/W	2093 lm	174 lm/W	7543-20011	Circulus G2 D50 950
	5700	161 lm	206 lm/W	378 lm	204 lm/W	2093 lm	174 lm/W	7543-20012	Circulus G2 D50 957
	6500	160 lm	204 lm/W	374 lm	202 lm/W	2072 lm	172 lm/W	7543-20013	Circulus G2 D50 965

Up to
2093 lm!

Circulus 105 - Ring modules

√ ring-shaped LED module for installation in luminaires
√ 48 Mid-Power LEDs
√ pitch distance 6.9 mm
√ diameter outside 130 mm and inside 80 mm
√ two connection terminals
√ aluminum core PCB for perfect thermal management
√ rated current 350 mA
√ maximum operating current 2100 mA
√ maximum forward voltage 12.4 V
√ the five ring modules can be arranged inside each other

Please also refer to the technical data of the Circulus family on page 238. Further technical data and drawings from page 244.

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 150 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 2.100 mA Tc = 25 °C			
≥80	2700	308 lm	196 lm/W	712 lm	191 lm/W	3932 lm	162 lm/W	7543-20014	Circulus G2 D105 827
	3000	328 lm	209 lm/W	759 lm	205 lm/W	4191 lm	174 lm/W	7543-20015	Circulus G2 D105 830
	3500	328 lm	209 lm/W	759 lm	205 lm/W	4191 lm	174 lm/W	7543-20016	Circulus G2 D105 835
	4000	543 lm	218 lm/W	788 lm	215 lm/W	4355 lm	182 lm/W	7543-20017	Circulus G2 D105 840
	5000	341 lm	220 lm/W	788 lm	215 lm/W	4355 lm	182 lm/W	7543-20018	Circulus G2 D105 850
	5700	341 lm	220 lm/W	788 lm	215 lm/W	4355 lm	182 lm/W	7543-20019	Circulus G2 D105 857
	6500	341 lm	220 lm/W	788 lm	215 lm/W	4355 lm	182 lm/W	7543-20020	Circulus G2 D105 865

Up to 4355 lm!

NEW: CRI 90 IN KSF-Technology

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 150 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 2.100 mA Tc = 25 °C			
≥90	2700	305 lm	195 lm/W	714 lm	193 lm/W	3958 lm	164 lm/W	7543-20021	Circulus G2 D105 927
	3000	312 lm	199 lm/W	730 lm	197 lm/W	4044 lm	168 lm/W	7543-20022	Circulus G2 D105 930
	3500	319 lm	204 lm/W	748 lm	202 lm/W	4144 lm	172 lm/W	7543-20023	Circulus G2 D105 935
	4000	323 lm	206 lm/W	756 lm	204 lm/W	4186 lm	174 lm/W	7543-20024	Circulus G2 D105 940
	5000	323 lm	206 lm/W	756 lm	204 lm/W	4186 lm	174 lm/W	7543-20025	Circulus G2 D105 950
	5700	323 lm	206 lm/W	756 lm	204 lm/W	4186 lm	174 lm/W	7543-20026	Circulus G2 D105 957
	6500	319 lm	204 lm/W	748 lm	202 lm/W	4144 lm	172 lm/W	7543-20027	Circulus G2 D105 965

Up to 4186 lm!

Circulus 160 - Ring modules

√ ring-shaped LED module for installation in luminaires
√ 72 Mid-Power LEDs
√ pitch distance 7 mm
√ diameter outside 185 mm and inside 135 mm
√ two connection terminals
√ aluminum core PCB for perfect thermal management
√ rated current 350 mA
√ maximum operating current 2100 mA
√ maximum forward voltage 18.6 V
√ the five ring modules can be arranged inside each other

Please also refer to the technical data of the Circulus family on page 238. Further technical data and drawings from page 244.

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 150 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 2.100 mA Tc = 25 °C			
≥80	2700	462 lm	196 lm/W	1068 lm	191 lm/W	5899 lm	162 lm/W	7543-20028	Circulus G2 D160 827
	3000	492 lm	209 lm/W	1138 lm	205 lm/W	6286 lm	174 lm/W	7543-20029	Circulus G2 D160 830
	3500	492 lm	209 lm/W	1138 lm	205 lm/W	6286 lm	174 lm/W	7543-20030	Circulus G2 D160 835
	4000	815 lm	218 lm/W	1183 lm	215 lm/W	6532 lm	182 lm/W	7543-20031	Circulus G2 D160 840
	5000	512 lm	220 lm/W	1183 lm	215 lm/W	6532 lm	182 lm/W	7543-20032	Circulus G2 D160 850
	5700	512 lm	220 lm/W	1183 lm	215 lm/W	6532 lm	182 lm/W	7543-20033	Circulus G2 D160 857
	6500	512 lm	220 lm/W	1183 lm	215 lm/W	6532 lm	182 lm/W	7543-20034	Circulus G2 D160 865

Up to 6532 lm!

NEW: CRI 90 IN KSF-Technology

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 150 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 2.100 mA Tc = 25 °C			
≥90	2700	458 lm	195 lm/W	1072 lm	193 lm/W	5938 lm	164 lm/W	7543-20035	Circulus G2 D160 927
	3000	468 lm	199 lm/W	1095 lm	197 lm/W	6066 lm	168 lm/W	7543-20036	Circulus G2 D160 930
	3500	479 lm	204 lm/W	1122 lm	202 lm/W	6215 lm	172 lm/W	7543-20037	Circulus G2 D160 935
	4000	484 lm	206 lm/W	1133 lm	204 lm/W	6279 lm	174 lm/W	7543-20038	Circulus G2 D160 940
	5000	484 lm	206 lm/W	1133 lm	204 lm/W	6279 lm	174 lm/W	7543-20039	Circulus G2 D160 950
	5700	484 lm	206 lm/W	1133 lm	204 lm/W	6279 lm	174 lm/W	7543-20040	Circulus G2 D160 957
	6500	479 lm	204 lm/W	1122 lm	202 lm/W	6215 lm	172 lm/W	7543-20041	Circulus G2 D160 965

Up to 6279 lm!

Circulus 215 - Ring modules

√ ring-shaped LED module for installation in luminaires
√ 96 Mid-Power LEDs
√ pitch distance 7 mm
√ diameter outside 240 mm and inside 190 mm
√ two connection terminals
√ aluminum core PCB for perfect thermal management
√ rated current 350 mA
√ maximum operating current 2100 mA
√ maximum forward voltage 24.8 V
√ the five ring modules can be arranged inside each other

Please also refer to the technical data of the Circulus family on page 238. Further technical data and drawings from page 244.

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 150 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 2.100 mA Tc = 25 °C			
≥80	2700	616 lm	196 lm/W	1424 lm	191 lm/W	7865 lm	162 lm/W	7543-20042	Circulus G2 D215 827
	3000	656 lm	209 lm/W	1517 lm	205 lm/W	8381 lm	174 lm/W	7543-20043	Circulus G2 D215 830
	3500	656 lm	209 lm/W	1517 lm	205 lm/W	8381 lm	174 lm/W	7543-20044	Circulus G2 D215 835
	4000	1087 lm	218 lm/W	1577 lm	215 lm/W	8710 lm	182 lm/W	7543-20045	Circulus G2 D215 840
	5000	682 lm	220 lm/W	1577 lm	215 lm/W	8710 lm	182 lm/W	7543-20046	Circulus G2 D215 850
	5700	682 lm	220 lm/W	1577 lm	215 lm/W	8710 lm	182 lm/W	7543-20047	Circulus G2 D215 857
	6500	682 lm	220 lm/W	1577 lm	215 lm/W	8710 lm	182 lm/W	7543-20048	Circulus G2 D215 865

Up to
8710 lm!

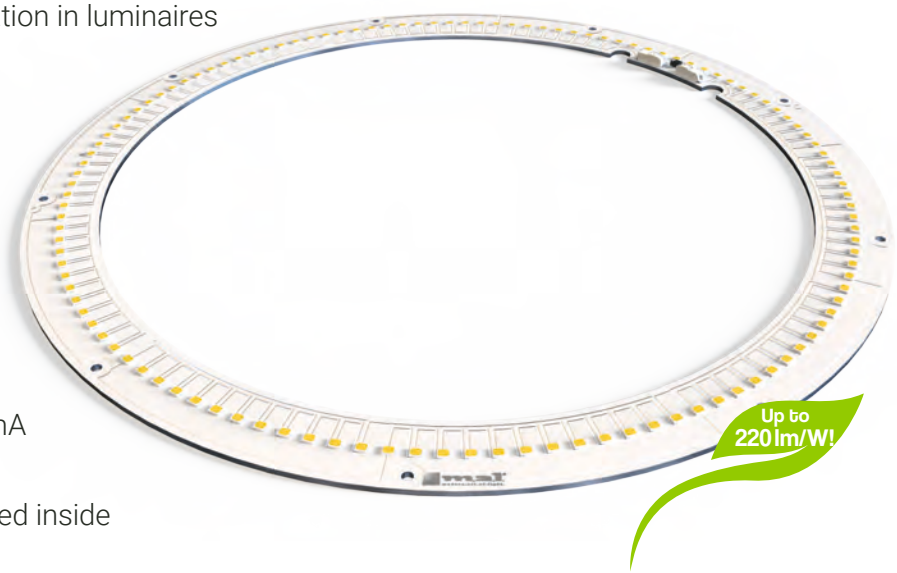
NEW:
CRI 90 IN
KSF-Techno-
logy

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 150 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 2.100 mA Tc = 25 °C			
≥90	2700	610 lm	195 lm/W	1429 lm	193 lm/W	7917 lm	164 lm/W	7543-20049	Circulus G2 D215 927
	3000	624 lm	199 lm/W	1460 lm	197 lm/W	8088 lm	168 lm/W	7543-20050	Circulus G2 D215 930
	3500	639 lm	204 lm/W	1496 lm	202 lm/W	8287 lm	172 lm/W	7543-20051	Circulus G2 D215 935
	4000	646 lm	206 lm/W	1511 lm	204 lm/W	8372 lm	174 lm/W	7543-20052	Circulus G2 D215 940
	5000	646 lm	206 lm/W	1511 lm	204 lm/W	8372 lm	174 lm/W	7543-20053	Circulus G2 D215 950
	5700	646 lm	206 lm/W	1511 lm	204 lm/W	8372 lm	174 lm/W	7543-20054	Circulus G2 D215 957
	6500	639 lm	204 lm/W	1496 lm	202 lm/W	8287 lm	172 lm/W	7543-20055	Circulus G2 D215 965

Up to
8372 lm!

Circulus 270 - Ring modules

√ ring-shaped LED module for installation in luminaires
√ 120 Mid-Power LEDs
√ pitch distance 7.1 mm
√ diameter outside 295 mm and inside 245 mm
√ two connection terminals
√ aluminum core PCB for perfect thermal management
√ rated current 350 mA
√ maximum operating current 2100 mA
√ maximum forward voltage 31 V
√ the five ring modules can be arranged inside each other



Please also refer to the technical data of the Circulus family on page 238. Further technical data and drawings from page 244.

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 150 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 2.100 mA Tc = 25 °C			
≥80	2700	770 lm	196 lm/W	1780 lm	191 lm/W	9831 lm	162 lm/W	7543-20056	Circulus G2 D270 827
	3000	820 lm	209 lm/W	1897 lm	205 lm/W	10476 lm	174 lm/W	7543-20057	Circulus G2 D270 830
	3500	820 lm	209 lm/W	1897 lm	205 lm/W	10476 lm	174 lm/W	7543-20058	Circulus G2 D270 835
	4000	1359 lm	218 lm/W	1971 lm	215 lm/W	10887 lm	182 lm/W	7543-20059	Circulus G2 D270 840
	5000	853 lm	220 lm/W	1971 lm	215 lm/W	10887 lm	182 lm/W	7543-20060	Circulus G2 D270 850
	5700	853 lm	220 lm/W	1971 lm	215 lm/W	10887 lm	182 lm/W	7543-20061	Circulus G2 D270 857
	6500	853 lm	220 lm/W	1971 lm	215 lm/W	10887 lm	182 lm/W	7543-20062	Circulus G2 D270 865

Up to 10887 lm!

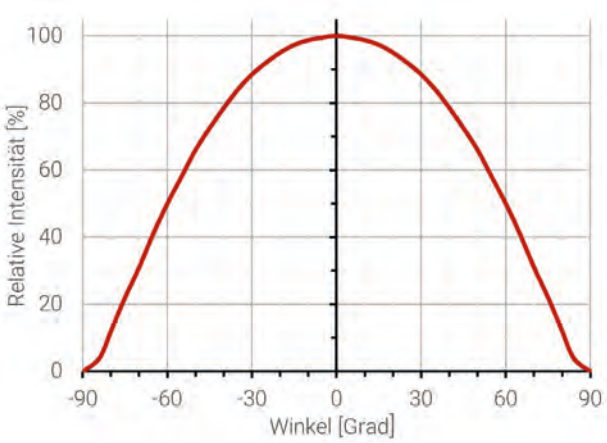
NEW: CRI 90 IN KSF-Technology

CRI	CCT	Flux typ.	LPW typ.	Flux typ.	LPW typ.	Flux typ.	LPW typ.	order-nr.	description
		If = 150 mA Tc = 25 °C		If = 350 mA Tc = 25 °C		If = 2.100 mA Tc = 25 °C			
≥90	2700	763 lm	195 lm/W	1786 lm	193 lm/W	9896 lm	164 lm/W	7543-20063	Circulus G2 D270 927
	3000	779 lm	199 lm/W	1825 lm	197 lm/W	10110 lm	168 lm/W	7543-20064	Circulus G2 D270 930
	3500	799 lm	204 lm/W	1870 lm	202 lm/W	10359 lm	172 lm/W	7543-20065	Circulus G2 D270 935
	4000	807 lm	206 lm/W	1889 lm	204 lm/W	10466 lm	174 lm/W	7543-20066	Circulus G2 D270 940
	5000	807 lm	206 lm/W	1889 lm	204 lm/W	10466 lm	174 lm/W	7543-20067	Circulus G2 D270 950
	5700	807 lm	206 lm/W	1889 lm	204 lm/W	10466 lm	174 lm/W	7543-20068	Circulus G2 D270 957
	6500	799 lm	204 lm/W	1870 lm	202 lm/W	10359 lm	172 lm/W	7543-20069	Circulus G2 D270 965

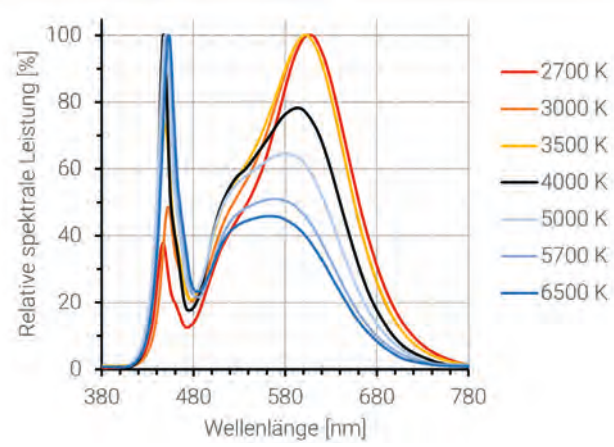
Up to 10466 lm!

Technical data: Circulus - Ring modules

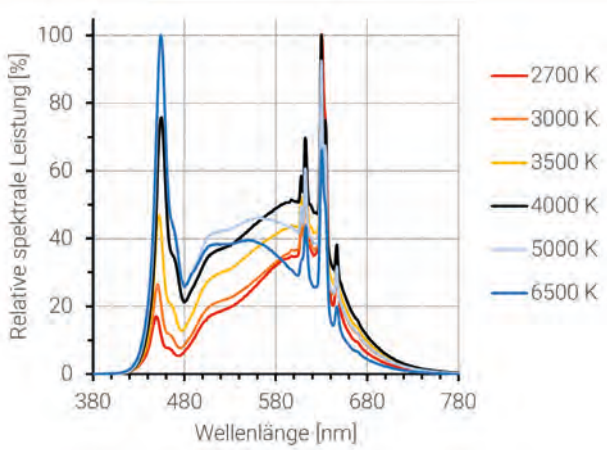
Light distribution curve



Spectrum CRI 80



Spectrum CRI 90



Lifetime of the LEDs used

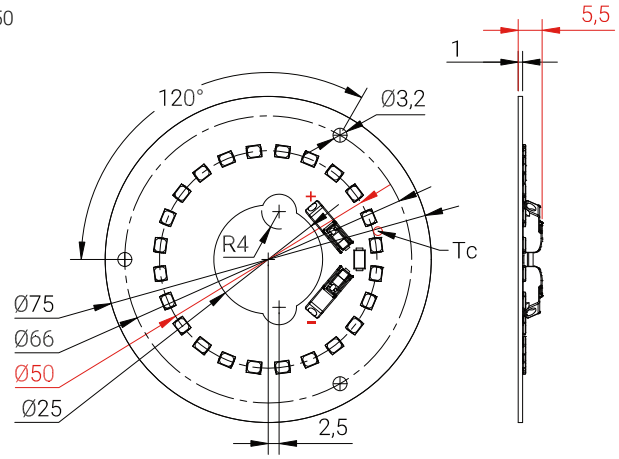
- The lifetime data is based on TM21 extrapolations of the available LM80 data of the LEDs used. They are to be regarded as purely informative data from which no warranty claim can be derived.

Description	If	Tc	L70 B50	L70 B10	L80 B50	L80 B10	L90 B50	L90 B10
Circulus G2 D... 8/9xx	2100 mA	80 °C	> 102.000 h	> 102.000 h	> 102.000 h	> 102.000 h	> 50.000 h	> 50.000 h

Technical drawings: Circulus - Ring modules

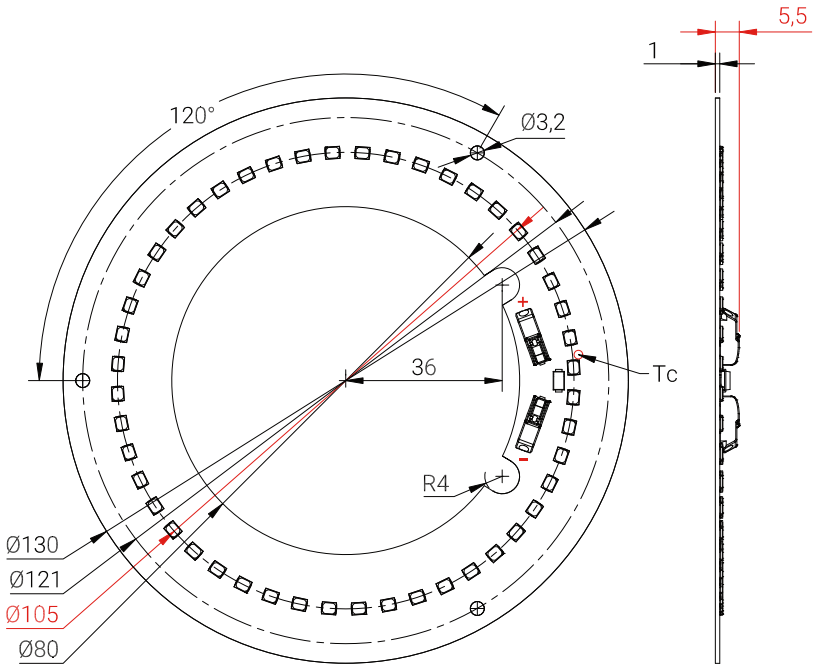
Circulus 50

Circulus G2 D50



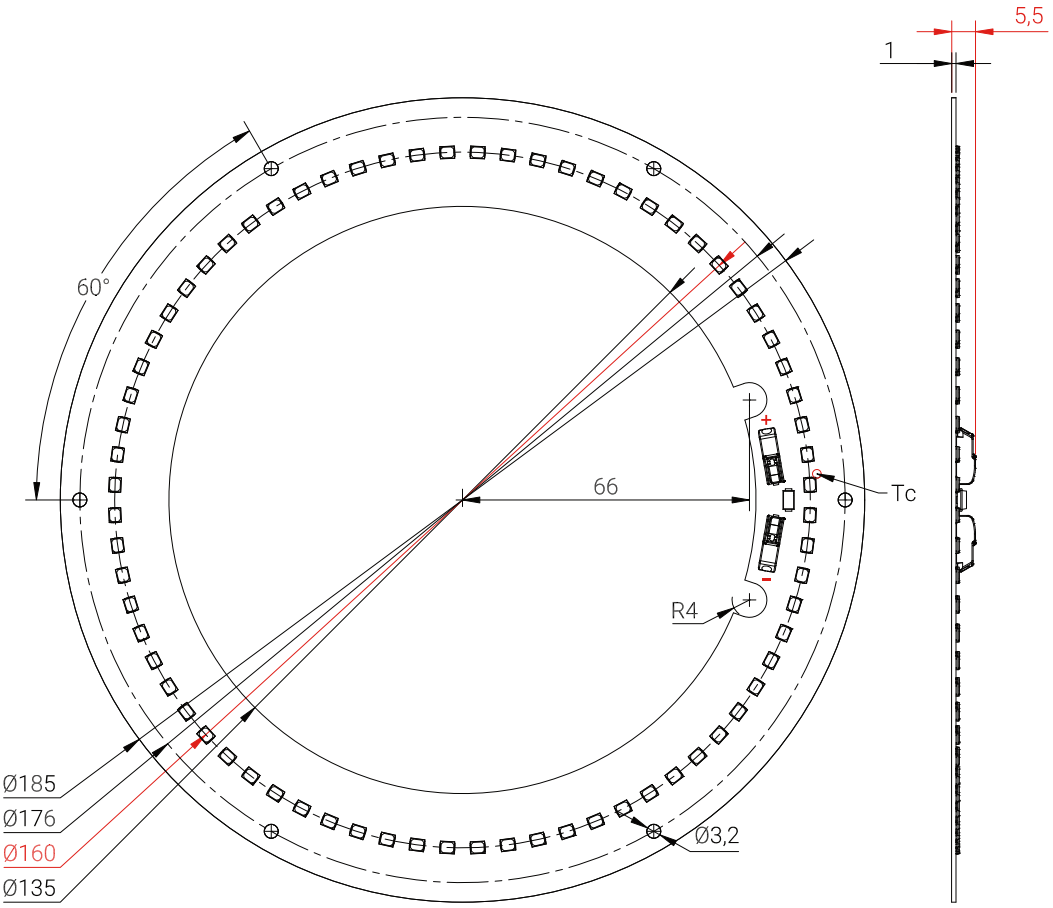
Circulus 105

Circulus G2 D105



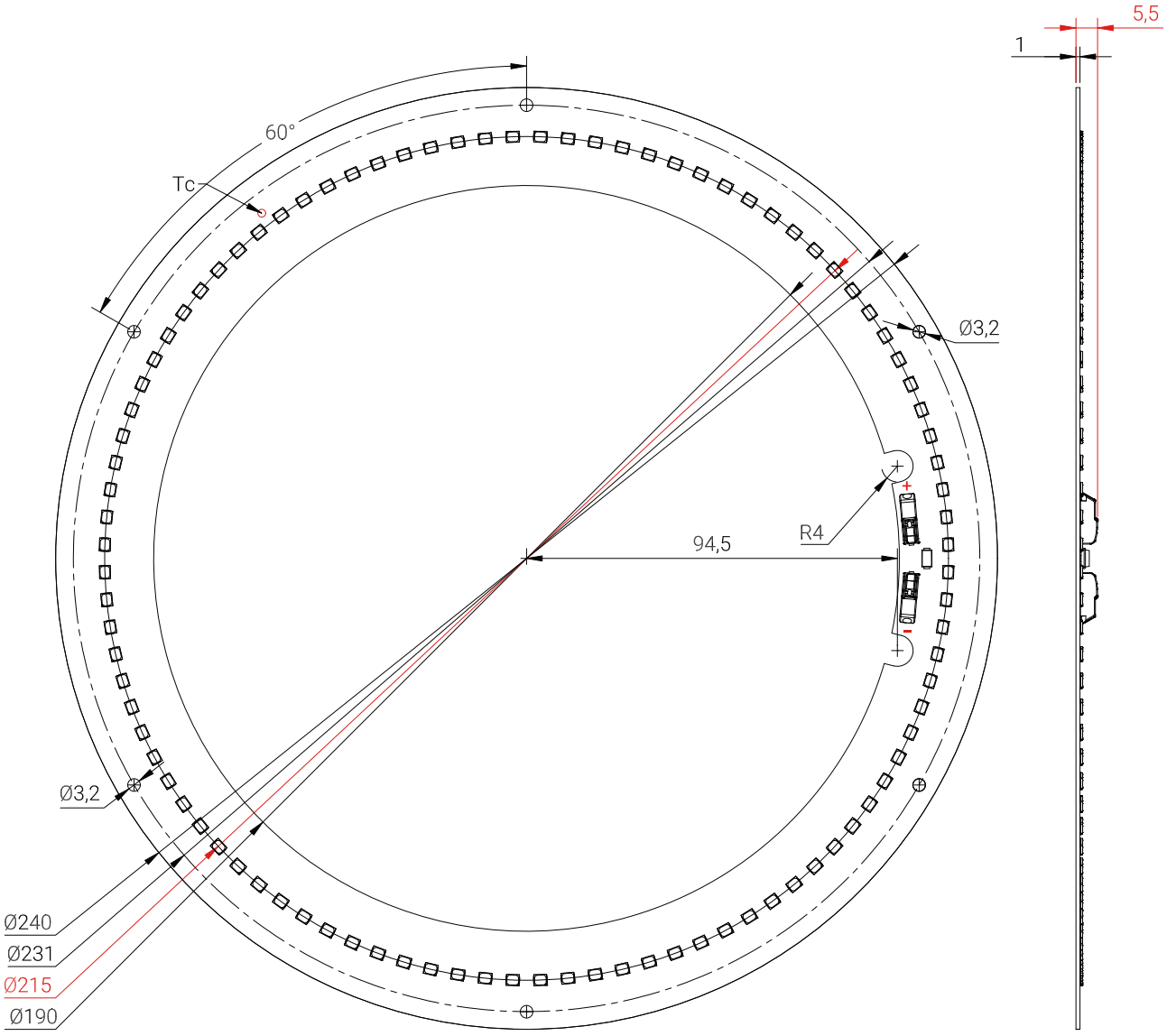
Circulus 160

Circulus G2 D160



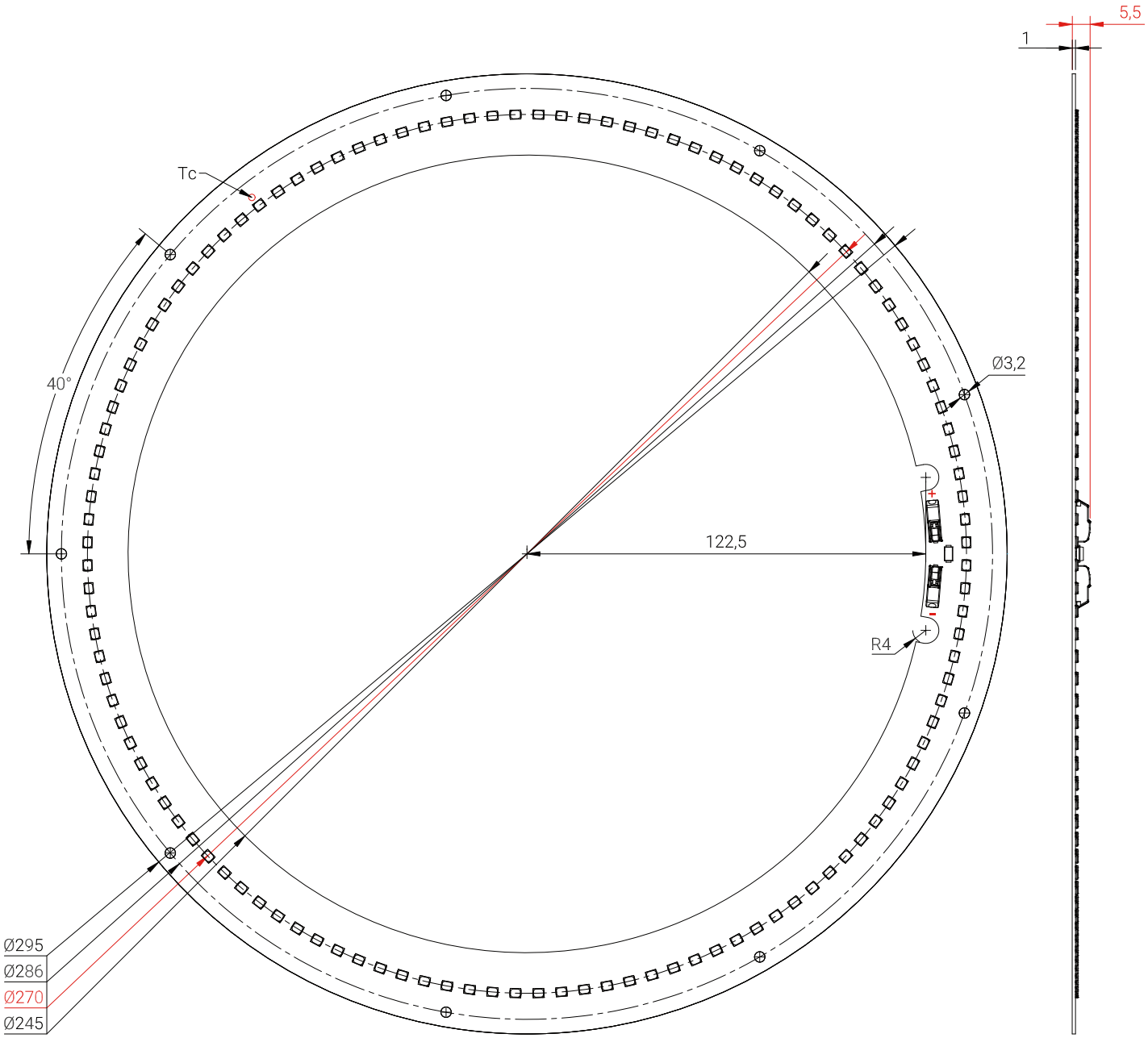
Circulus 215

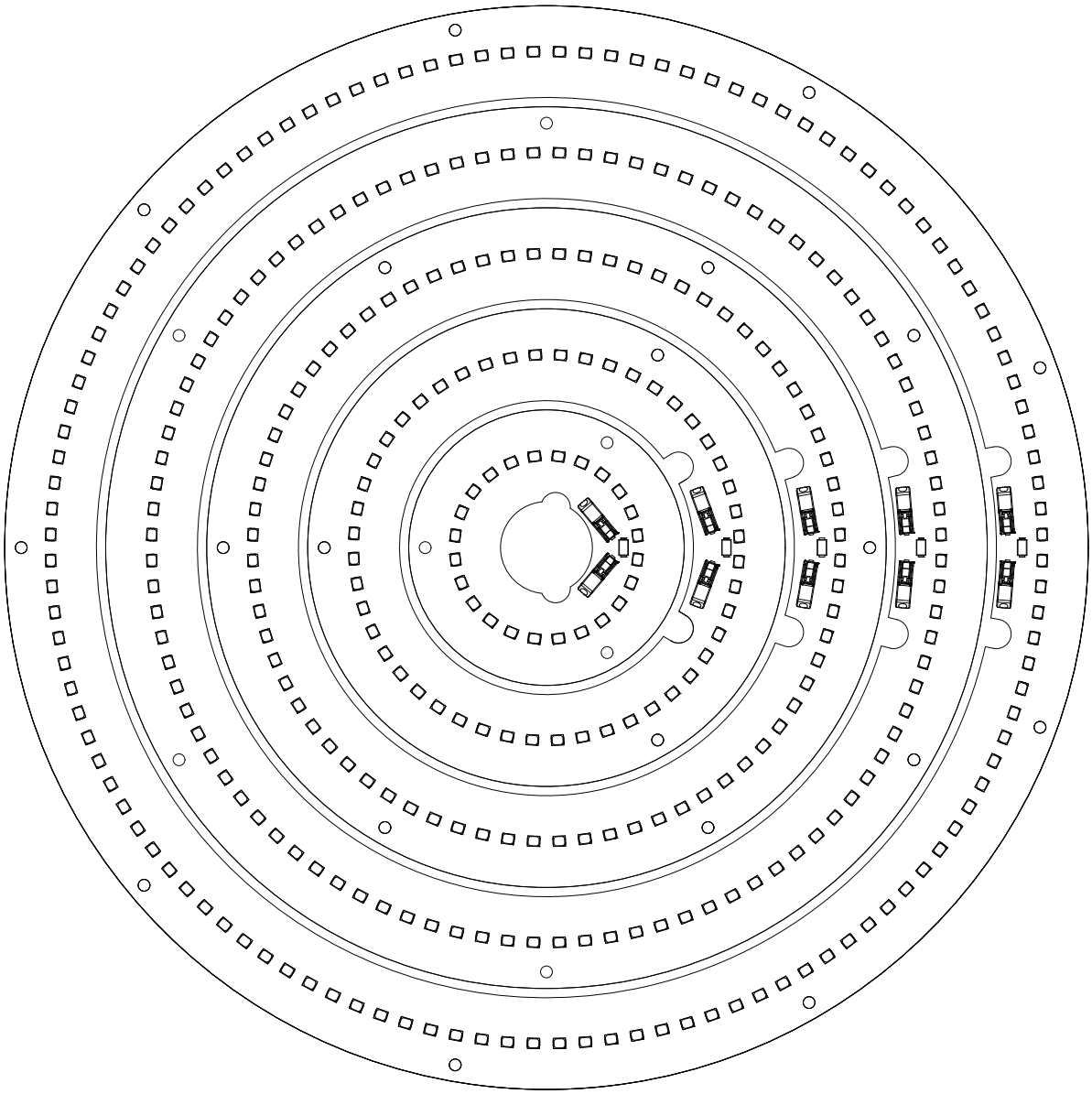
Circulus G2 D215

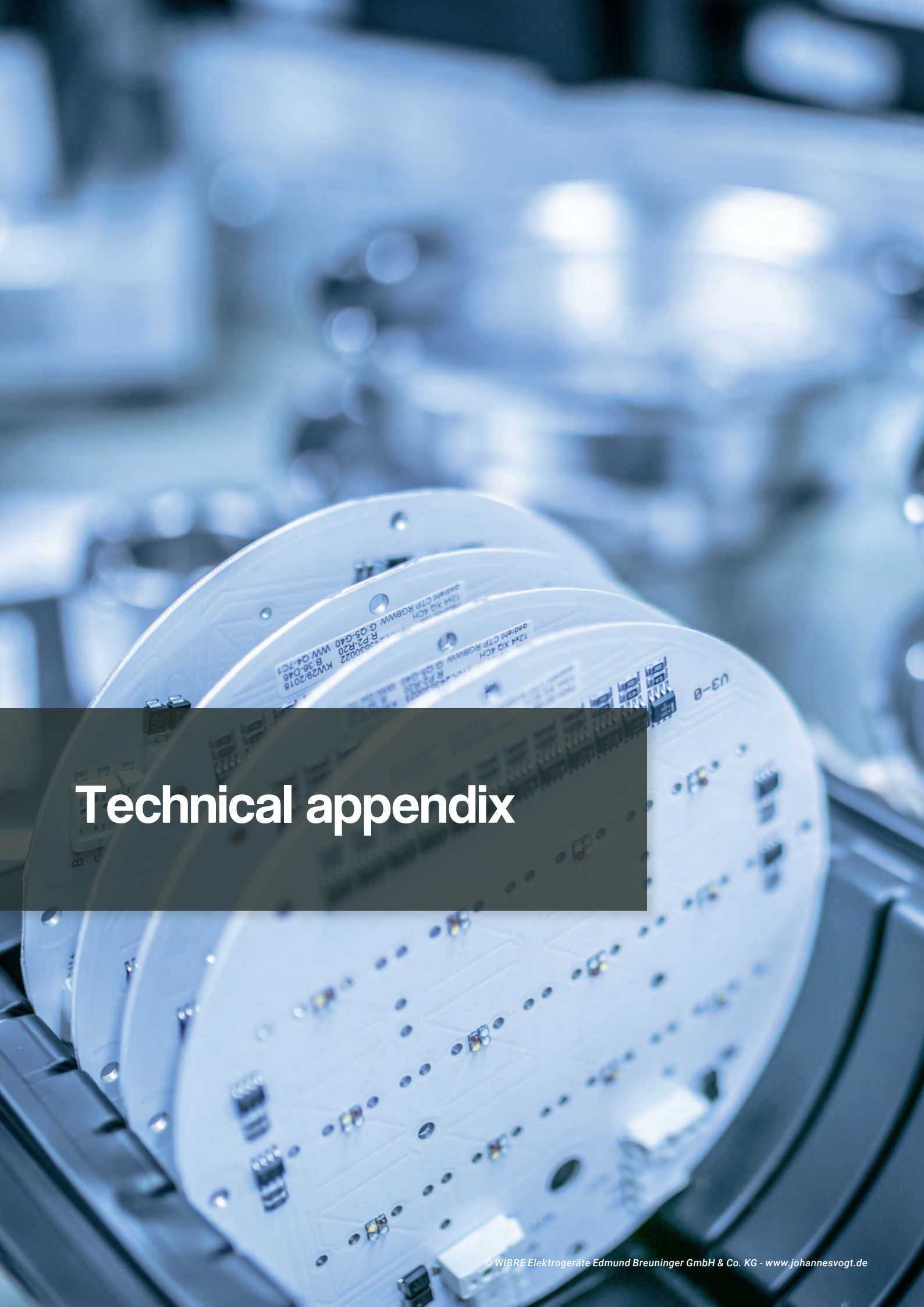


Circulus 270

Circulus G2 D270







Technical appendix

Sorry, there is not always enough space for all the values... You need more data? We will gladly provide you with our data sheets.

For quick solutions: On this way you can calculate more data by yourself:

Power input LED-Modul Pmod [W]:

$$Pmod\ [W] = \frac{Flux\ [lm]}{LPW\ [lm/W]}$$

Forward voltage Vf [V]:

$$Vf\ [V] = \frac{Flux\ [lm]}{LPW\ [lm/W]} * \frac{1000}{If\ [mA]}$$

Agenda:

CCT	Color temperature, the color of light. Unit Kelvin (K) Example: 2700 K
CRI	Designates the color rendering index Ra. The value range is 0 to 100. Sunlight has CRI 100. A good color rendering is achieved with CRI 80, a very good color rendering is CRI 90. Some LEDs can even achieve a color rendering of CRI 95.
Flux	Luminous flux. Unit lumen (lm)
If	(Forward) current. Unit ampere (A). We express this value in milliamperes (mA).
Vf	Forward voltage. Unit Volt (V)
Pmod	Power consumption of the LED module. Unit Watt (W).
LPW	Abbreviation for lumens per watt. It is also called efficiency or luminous efficacy. Unit lumens per watt (lm/W).

The specified maximum operating currents are informative and must be verified in the application and luminaire by measuring the temperature at the Tc point.

Service life specifications

! The service life specifications are defined via statistical values and calculations.

! The luminous flux of LEDs decreases over time. The L70 value indicates the point in time at which the luminous flux has reduced to 70% of the initial luminous flux. L80 and L90 define the 80% and 90% values respectively.

! The B value, usually B10 or B50, defines how many LEDs fall below the L value. L80B10 thus means that 10% of the LEDs have fallen below and 90% above the 80% value of the initial luminous flux.

! L80B10 50.000h defines e.g. with it:
After 50,000h, 90% of the LEDs produce more than 80% of the initial luminous flux.

General mounting and securing instructions

Handling of the LED modules

! iX-led LED modules are sensitive electronic components that can be damaged or destroyed by improper handling!

! The modules may only be mounted in an electrostatic protected area (EPA). Dissipative tools and bases must be used for mounting. The grounding of persons must be ensured by means of suitable ESD footwear, as well as standard-compliant ESD flooring and/or standard-compliant grounding by means of a wrist strap.

! LED modules may only be touched at the edges of the circuit board. Do not touch the surface of the circuit board.

! The LEDs themselves must never be touched with pointed objects or fingers, as this may destroy or damage the silicone and alter the light image.

! If necessary, cleaning may only be carried out with pure isopropyl alcohol/isopropanol (IPA).

! If possible, the modules should not come into contact with chemicals during storage, operation or installation, as this can lead to destruction or massive reduction in luminous flux. This applies in particular, but not exclusively, to:

- Cyanoacrylate adhesives ("super glue")
- Solvents containing acetone and solvents in general
- Various, unsuitable cleaners, such as petroleum ether, glass cleaner, etc.
- Products containing sulfur (this may include cardboard boxes)
- All substances from which volatile organic compounds (VOC) may be emitted.

! Any modification of the modules that has not been approved by **m.a.l.** is not permitted.

! If possible, the modules are to be stored only in the sealed original packaging. If this is not possible, it must at least be ensured that the modules are packaged in an ESD-compliant manner and are protected from dust and moisture.

! Direct storage in cardboard boxes without additional outer packaging can lead to damage to the LEDs, depending on the LED installed.

Mounting of LED modules

! Use a suitable heat-conducting material to ensure good heat transfer between the LED module and the heat sink.

! Mounting must only be carried out using suitable screws or other fastening elements.

! When selecting screws and other fastening elements, it must be ensured that the air and creepage distances of the the screw heads or other conductive elements do not fall below clearance and creepage distances.
In case of doubt, plastic washers with suitable dimensions or plastic screws must be used.

! As an alternative or in addition to a screw connection, the assembly can be carried out with suitable thermally conductive adhesive tapes. In this case, it is essential to check the material compatibility!

! Any mechanical stress on the module must be avoided, as this can lead to damage or destruction.

! Sufficient heat dissipation must be ensured by the luminaire design and correct mounting. The maximum temperature at the Tc point must not be exceeded during operation. For this purpose, measurements must be carried out with the complete luminaire and the permissible operating temperature range of the finished luminaire must be determined accordingly.

Connection of LED modules

! All LED modules listed in this catalog are intended for connection to a constant current LED driver. Safe operation can only be ensured with an LED driver that complies with all relevant regulations. Operation with constant voltage LED drivers is not permitted and can lead to the destruction of the LED module.

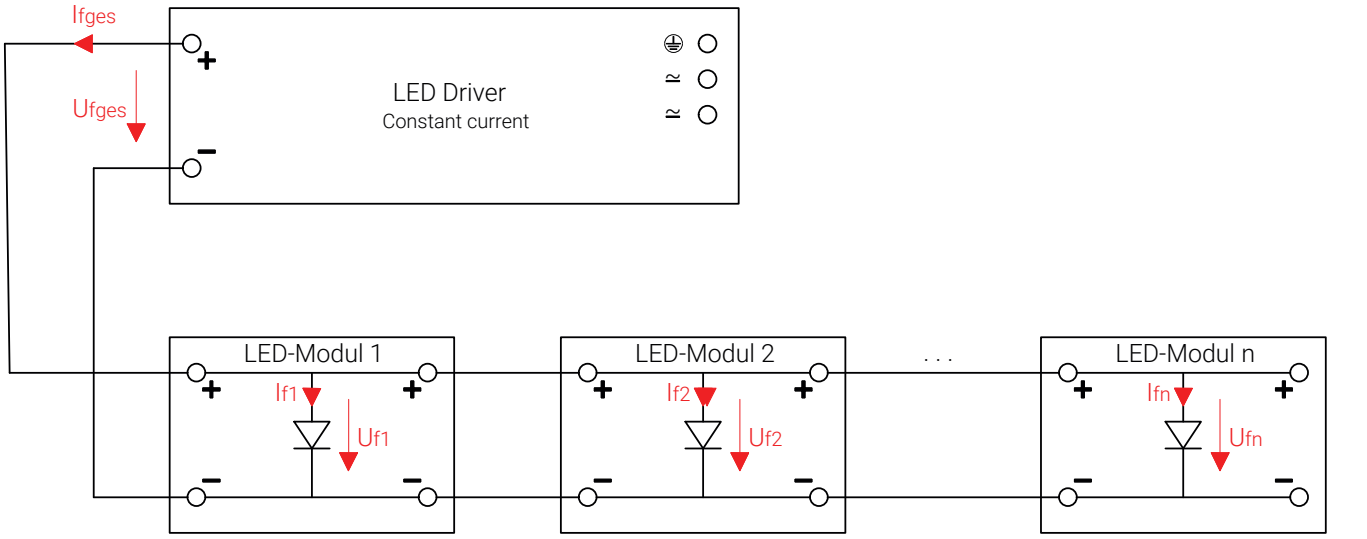
! Please refer to the data sheet of your LED driver and check if the current and voltage range fits to the LED modules.

! Reversing the polarity of the LED module (swapping plus and minus) can damage the LED module.

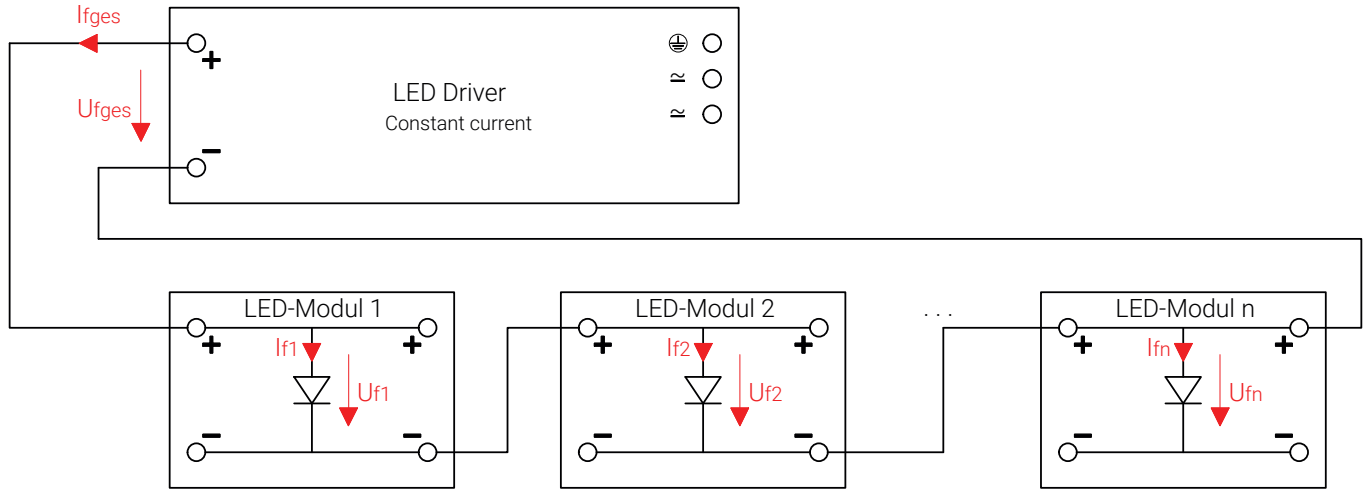
! Multiple LED modules can be connected in series or parallel. The following must be observed:

- Parallel connection:
  A parallel connection of the modules is not recommended, because due to manufacturing tolerances and different thermal loads different module currents and thus differences in brightness up to overload of modules can occur. Exceptions are modules of the Opticus Daisy T series. In the event of a fault such as an electrical interruption to a module, there is a higher current to the remaining modules. This leads to a reduction in lifetime up to failure.
- Series connection:
  In a series connection, the forward voltages of the individual modules add up. Please consider the necessary measures in your luminaire design if they leave the SELV range. If the resulting voltage is >60 V, the modules must be installed isolated and protected against accidental contact.
- The maximum working voltage of the insulation (see data sheets) must never be exceeded even by series connection.

Parallel connection



Series connection



! In any case, compliance with the applicable standards and regulations must be ensured.

! Before connecting the modules, the operating device must be disconnected from the mains.

! Connecting modules under voltage will destroy the modules.

Privacy policy

! You can find our current privacy policy at: **www.mal-effekt.de/datenschutz**

Copyright

Technical data available for download

The data shown are excerpts. The complete data sheets are available on our website **www.mal-effekt.de**.

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