

RoHS

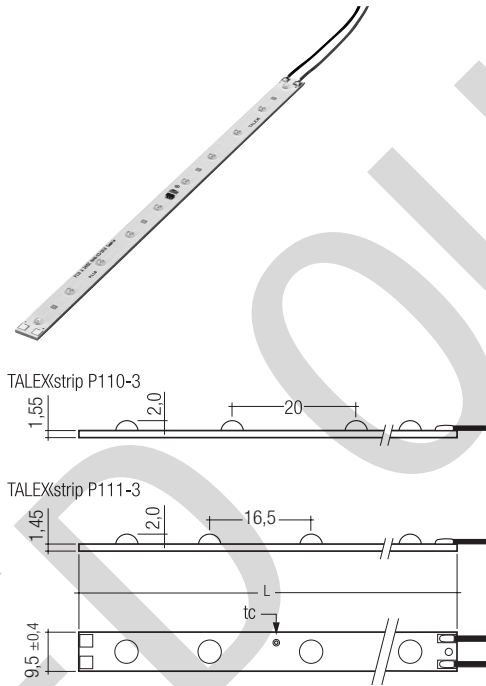
TALEXmodule STRIP P110-3 / 111-3 TALEXmodule STRIP

Product description

- LED strip module for highlighting lines and edges and for side injection
- For safety lighting, general lighting, effect lighting and shelf lighting
- Suitable for TALEXaccessory PROFILE Z200-2 / 201-2 / Z22W-2
- Edge injection of transparent or diffuse materials
- With maximum possible beam angle for uniform illumination
- Low profile
- Dimmable by pulse width modulation (PWM)
- Integrated current source to stabilise luminous flux
- Attached with premounted thermally conductive double-sided adhesive tape
- Connection: Cable 200 mm

Technical data

Beam characteristic	140°
Ambient temperature t_a	-25 ... +50 °C
Max. t_c point [®]	75 °C
Risk group (EN 62471:2008)	0



Colour temperatures and tolerances, page 4

Ordering data

Colour [®]	Wavelength	Colour temperature [®]	Type	Article number
10 light points per module				
Red	619 – 629 nm	–	P110-3 R	89601054
Amber	584 – 594 nm	–	P110-3 A	89601053
12 light points per module				
Daylight white	–	6,500 K	P111-3 DL	89601044
Neutral white	–	4,200 K	P111-3 NW	89601043
Warm white	–	3,000 K	P111-3 WW	89601042
Gold	–	2,700 K	P111-3 GOLD	89601443
Packed meat	–	–	P111-3 PM	89601444
Green	520 – 535 nm	–	P111-3 G	89601046
Blue	450 – 460 nm	–	P111-3 B	89601045

Packaging: 10 pieces/carton

Specific technical data

Type	Typ. luminous flux ^{② ④}	Supply voltage DC ^③	Power ^②	Colour rendering index CRI ^⑥	Total length
10 light points per module					
P110-3 R	54 lm	24 V	1.3 W	–	195 +/- 0.4 mm
P110-3 A	62 lm	24 V	1.3 W	–	195 +/- 0.4 mm
12 light points per module					
P111-3 DL	106 lm	24 V	1.8 W	70	195 +/- 0.4 mm
P111-3 NW	77 lm	24 V	1.8 W	80	195 +/- 0.4 mm
P111-3 WW	68 lm	24 V	1.8 W	80	195 +/- 0.4 mm
P111-3 GOLD	47 lm	24 V	1.8 W	> 90	195 +/- 0.4 mm
P111-3 PM	55 lm	24 V	1.8 W	80	195 +/- 0.4 mm
P111-3 G	41 lm	24 V	1.8 W	–	195 +/- 0.4 mm
P111-3 B	24 lm	24 V	1.8 W	–	195 +/- 0.4 mm

① If the max. temperature limits are exceeded, the life of the module will be reduced or the module may be damaged. The temperature of the TALEXmodule STRIP at the tc-point is to be measured in the thermally stable state. For tc-point see the above diagram.

② Tolerance range for optical and electrical data: ±15 %

③ Exceeding the max. operating voltage leads to an overload on the TALEXmodule STRIP. This may in turn result in a significant reduction in lifetime or even in destruction. Tolerance range for the supply voltage: 24 V: +2 V / -0 V

④ At tc = 45 °C

⑤ Colour coordinates and tolerances according to CIE 1964.

⑥ Colour temperature and CRI according to CIE 1931.

All values at ta = 25 °C.

Converter matrix – TALEX(module STRIP P110-3 / P111-3

		IN-BUILT LCU		REMOTE LCU														
Type	0010 K301 24V	0025 K201 24V	0025 K210 24V one4all	0025 K211 24V	LCU 035/24 E020	LCU 060/24 E020	LCU 100/24 E020	LCU 150/24 E020										
Article number	86456215	86453418	86455937	86455066	24166320	24166324	24166328	24166333										
		Assignable converter		Assignable converter														
Type	Article number	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Max. chaining
TALEX(module STRIP P110-3 R	89601054	1	6	1	12	1	12	1	12	1	17	x	x	x	x	x	x	20
TALEX(module STRIP P110-3 A	89601053	1	6	1	12	1	12	1	12	1	17	x	x	x	x	x	x	20
TALEX(module STRIP P111-3 DL	89601044	1	6	1	12	1	12	1	12	1	17	x	x	x	x	x	x	20
TALEX(module STRIP P111-3 NW	89601043	1	6	1	12	1	12	1	12	1	17	x	x	x	x	x	x	20
TALEX(module STRIP P111-3 WW	89601042	1	6	1	12	1	12	1	12	1	17	x	x	x	x	x	x	20
TALEX(module STRIP P111-3 GOLD	89601444	1	6	1	12	1	12	1	12	1	17	x	x	x	x	x	x	20
TALEX(module STRIP P111-3 PM	89601443	1	6	1	12	1	12	1	12	1	17	x	x	x	x	x	x	20
TALEX(module STRIP P111-3 G	89601046	1	6	1	12	1	12	1	12	1	17	x	x	x	x	x	x	20
TALEX(module STRIP P111-3 B	89601045	1	6	1	12	1	12	1	12	1	17	x	x	x	x	x	x	20

Controls-Matrix – TALEX(module STRIP P110-3 / P111-3

		REMOTE						IN-BUILT	
Type	C001	C002		C004		C003 DALI RGB			
Article number	86454974	86454968		24138760		86457912			
		Assignable controls						Assignable controls	
Type	Article number	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
TALEX(module STRIP P110-3 R	89601054	1	80	1	80	1	80	1	20
TALEX(module STRIP P110-3 A	89601053	1	80	1	80	1	80	1	20
TALEX(module STRIP P111-3 DL	89601044	1	80	1	80	1	80	1	20
TALEX(module STRIP P111-3 NW	89601043	1	80	1	80	1	80	1	20
TALEX(module STRIP P111-3 WW	89601042	1	80	1	80	1	80	1	20
TALEX(module STRIP P111-3 GOLD	89601444	1	80	1	80	1	80	1	20
TALEX(module STRIP P111-3 PM	89601443	1	80	1	80	1	80	1	20
TALEX(module STRIP P111-3 G	89601046	1	80	1	80	1	80	1	20
TALEX(module STRIP P111-3 B	89601045	1	80	1	80	1	80	1	20

Electrical supply/choice of converter

TALEXmodule STRIP from Tridonic is not protected against overvoltages, overcurrents, overloads or short-circuit currents. Safe and reliable operation can only be guaranteed in conjunction with a converter which complies with the relevant standards.

The use of TALEX converters from Tridonic in combination with TALEXmodule STRIP guarantees the necessary protection for safe and reliable operation.

The TALEXmodule STRIP is only for the operation with SELV < 60V.

The operation at converters with output voltage > 60V is with an additional preparations possible. Further information on request.

If a converter other than Tridonic TALEXconverter is used, it must provide the following protection:

- Short-circuit protection
- Overload protection



TALEXmodule STRIP P110-3/P111-3 must be supplied by a constant voltage converter.

Operation with a constant current converter will lead to an irreversible damage of the module. Reversed polarity can damage the TALEXmodule STRIP P110-3/P111-3.

Mounting instruction



TALEXmodule EOS from Tridonic which have to be installed on a heat sink are equipped as standard with thermally conductive adhesive tape on the back of the pc board.

These TALEX products must be installed with this adhesive tape. To ensure permanent adhesion the fixing/cooling surface must be cleaned before installing the TALEX modules to remove all dirt, dust and grease.

The contact adhesion surface must have a surface energy of at least 38 mNm. The contact pressure must be at least 10 kg/cm² (ideally: 40 kg/cm²) for at least 3 seconds.

Processing must take place at an ambient temperature of 23 +/- 5°C.

A dwell time of 24 hours is required after adhesion.

To avoid damaging the modules during processing you must not touch the components or the glob top. A suitable tool must be used.

For more information please call or email your Tridonic contact.



EOS/ESD safety guidelines

The device / module contains components that are sensitive to electrostatic discharge and may only be installed in the factory and on site if appropriate EOS/ESD protection measures have been taken. No special measures need be taken for devices/modules with enclosed casings (contact with the pc board not possible), just normal installation practice. Please note the requirements set out in the document EOS / ESD guidelines (Guideline_EOS_ESD.pdf) at: <http://www.tridonic.com/com/en/technical-docs.asp>

Wiring

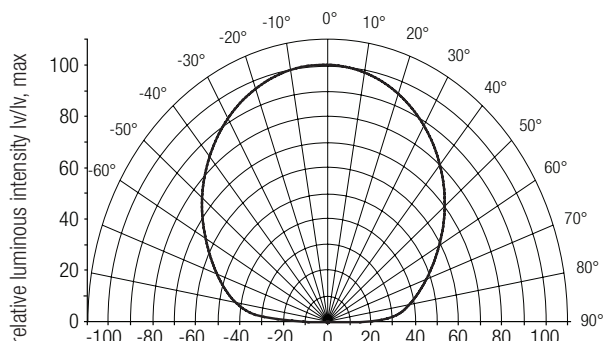
Cable: AWG24; length 200 mm

Colour	red	black
Function	+	-

Optical characteristics TALEX(module STRIP P110-3/P111-3

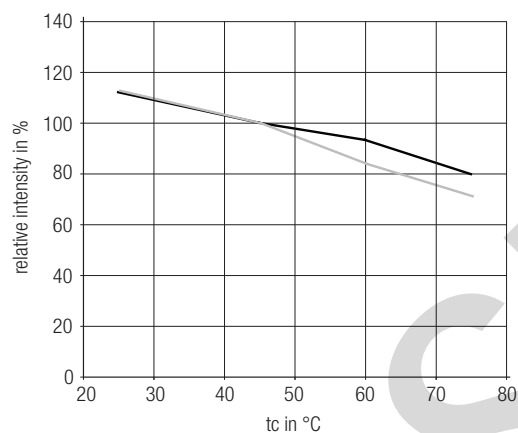
The optical design of the TALEX(module STRIP lens system ensures an optimum of homogeneity for the light distribution.

Light distribution

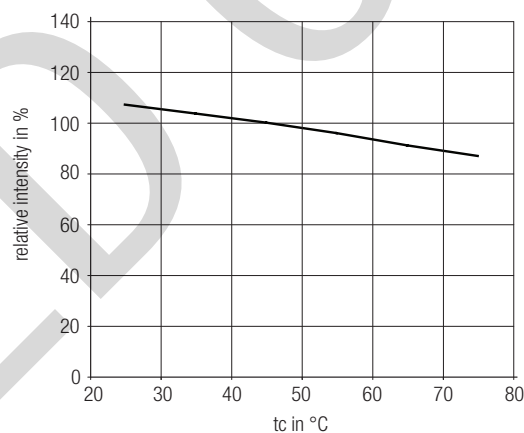


The diagrams based on statistic values.
The real values can be different.

relative luminous flux vs. tc-Punkt



relative luminous flux vs. tc point



The evaluation to the eye safety is according to the EN 62471:2008

(Photobiological safety of lamps and lamp systems)

Type	Article number	Colour	Actinic UV	near UV	blue light	retinal thermal	IR radiation, eye
			E_s	E_{UVA}	L_B	L_R	E_{IR}
			200–400 nm	315–400 nm	300–700 nm	380–1,400 nm	780–3,000 nm
P110-3 A	89601053	Amber	exempt	exempt	exempt	exempt	exempt
P110-3 R	89601054	Red	exempt	exempt	exempt	exempt	exempt
P111-3 WW	89601042	Warm white	exempt	exempt	exempt	exempt	exempt
P111-3 NW	89601043	Neutral white	exempt	exempt	exempt	exempt	exempt
P111-3 DL	89601044	Daylight white	exempt	exempt	exempt	exempt	exempt
P111-3 G	89601046	Green	exempt	exempt	exempt	exempt	exempt
P111-3 B	89601045	Blue	exempt	exempt	exempt	exempt	exempt

Exempt:

The LED does not pose any photobiological hazard.

Low risk:

The LED does not pose a hazard due to normal behavioral limitations on exposure.

Moderate risk:

The LED does not pose a hazard due to the aversion response to very bright light sources or due to thermal discomfort.

High risk:

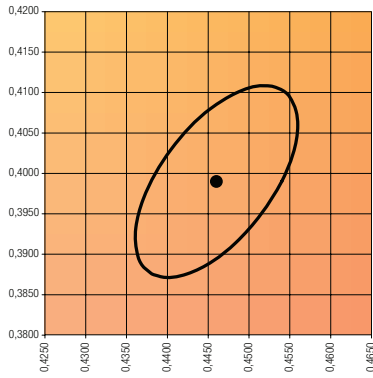
The LED may pose a hazard even for momentary or brief exposure.

Coordinates and tolerances according to CIE 1964

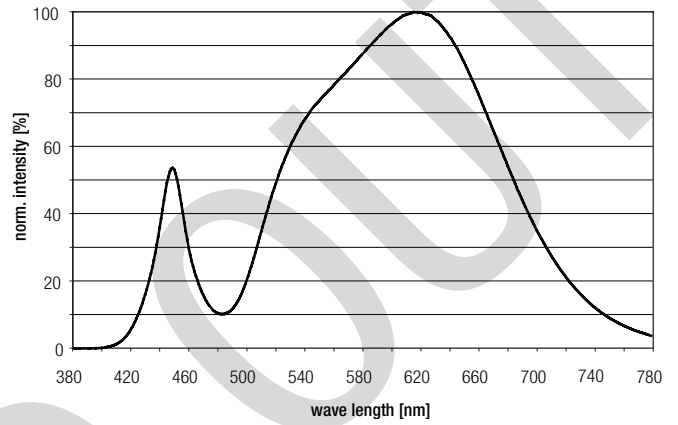
The specified colour coordinates are measured by a voltage impulse of 24V and a duration of 100 ms.
The ambient temperature of the measurement is $t_a = 25\text{ }^\circ\text{C}$.

3,000 K

	x0	y0
Centre	0.4460	0.3990

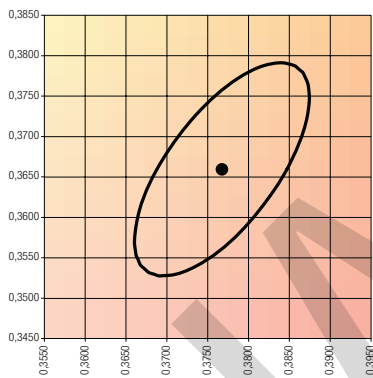


MacAdam ellipse: 5SDCM

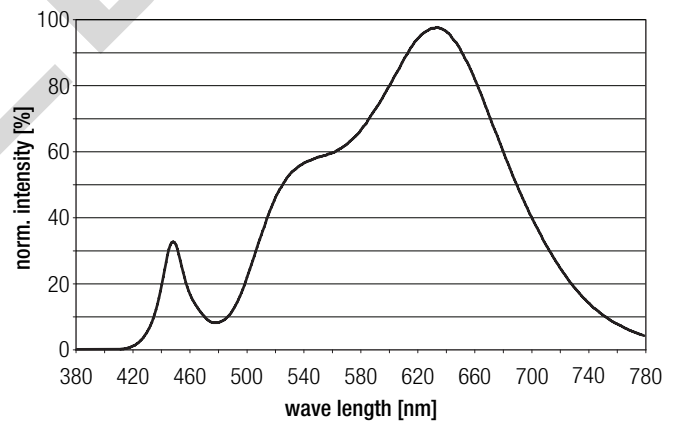


4,200 K

	x0	y0
Centre	0.3770	0.3660

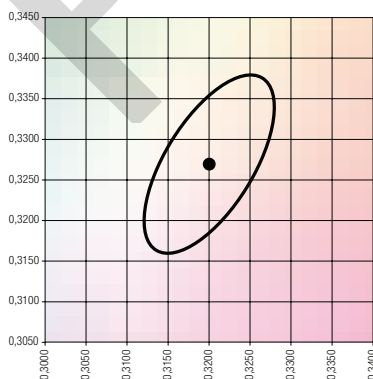


MacAdam ellipse: 5SDCM

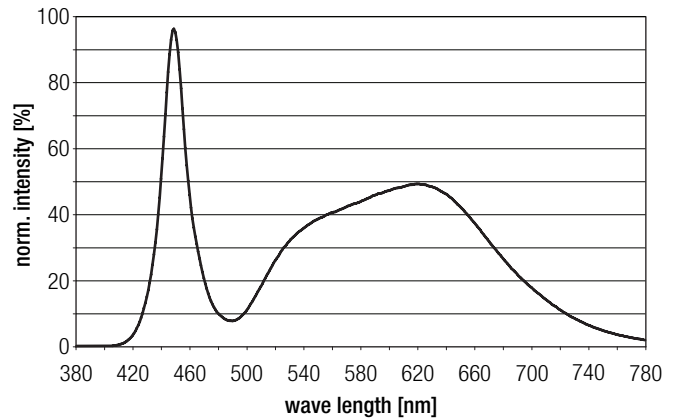


6,500 K

	x0	y0
Centre	0.3200	0.3270

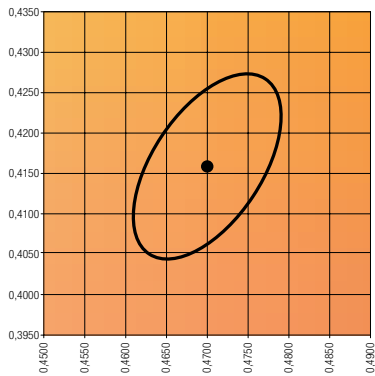


MacAdam ellipse: 5SDCM

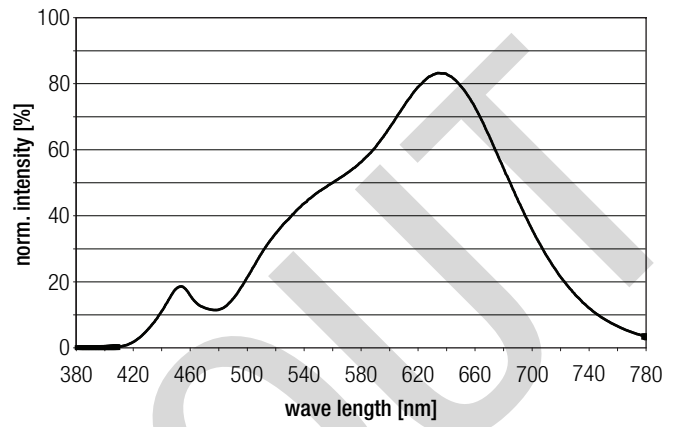


GOLD

	x0	y0
Centre	0.4700	0.4160

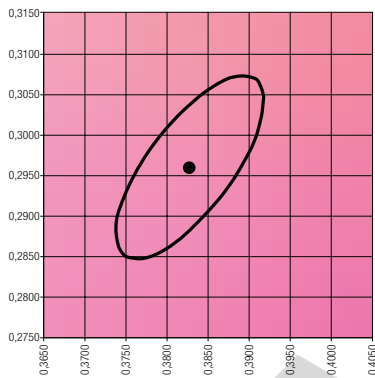


MacAdam ellipse: 5SDCM



Packed meat

	x0	y0
Centre	0.3827	0.2960



MacAdam ellipse: 5SDCM

