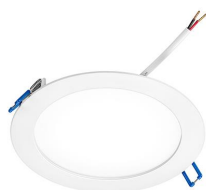


DLA flat SNC3

Module DLA essence



DLA flat 100mm 880lm 830-855 SNC3



DLA flat 150mm 1500lm 830-855 SNC3



DLA flat 200mm 2160lm 830-855 SNC3

Product description

- _ IP44 rating at front surface of the product makes it fit for bathroom application
- _ Backlit slim downlight for direct recessed mounting
- _ For ceiling cutout hole size of 100, 150 and 200 mm
- _ IK rating IK03
- _ Long lifetime: 50,000 hours
- _ 5 years guarantee (conditions at <https://www.tridonic.com/en/int/services/manufacture-guarantee-conditions>)

Optical properties

- _ Color temperatures 3000, 4000 and 5500k, choose by CCT switch on the back cover
- _ Efficacy up to 120 lm/W
- _ High colour rendering index CRI > 80
- _ Small colour tolerance (MacAdam 4/5)

Website

<http://www.tridonic.com/28004062>



Spotlights



Downlights



Linear



Area



Floor | Wall



Free-standing



Street



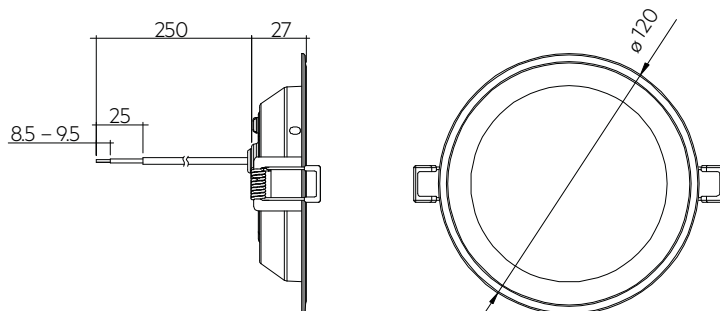
Decorative



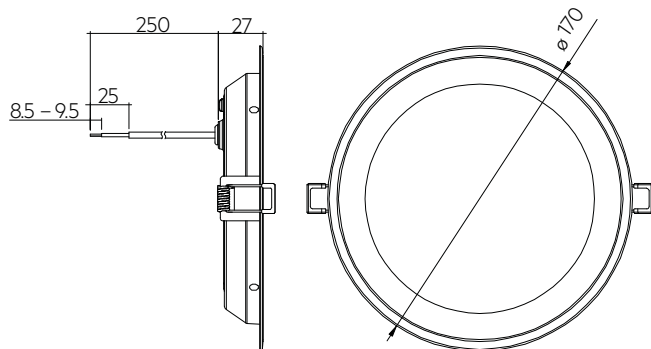
High bay

DLA flat SNC3

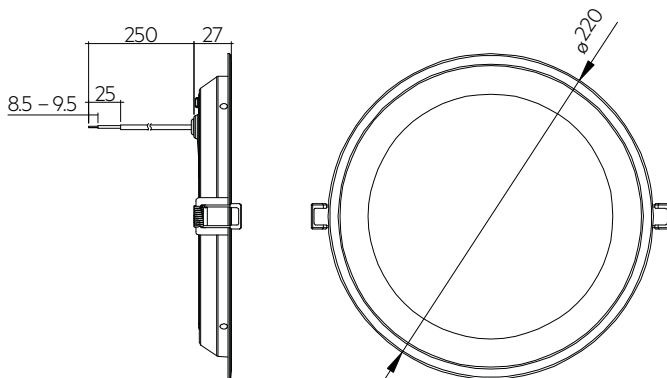
Module DLA essence



DLA flat 100mm 880lm 830-855 SNC3



DLA flat 150mm 1500lm 830-855 SNC3



DLA flat 200mm 2160lm 830-855 SNC3

Ordering data

Type	Article number	Colour temperature	Packaging, carton	Weight per pc.
DLA flat 100mm 880lm 830-855 SNC3	28004062	3,000 / 4,000 / 5,500 K	20 pc(s).	0.120 kg
DLA flat 150mm 1500lm 830-855 SNC3	28004063	3,000 / 4,000 / 5,500 K	20 pc(s).	0.205 kg
DLA flat 200mm 2160lm 830-855 SNC3	28004064	3,000 / 4,000 / 5,500 K	20 pc(s).	0.325 kg

Technical data

Beam characteristic	110°
Ambient temperature t_a	-20 ... +45 °C
Irated for 100mm	250 mA
Irated for 150mm	350 mA
Irated for 200mm	500 mA
I _{max} for 100mm	275 mA
I _{max} for 150mm	385 mA
I _{max} for 200mm	550 mA
Max. perm. LF current ripple for 100mm	300 mA
Max. perm. LF current ripple for 150mm	420 mA
Max. perm. LF current ripple for 200mm	600 mA
Max. perm. peak current for 100mm	325 mA / max. 10 ms
Max. perm. peak current for 150mm	495 mA / max. 10 ms
Max. perm. peak current for 200mm	891 mA / max. 10 ms
Max. working voltage for insulation SELV	60 V
Insulation test voltage	0.5 kV
Protection class	III
Risk group (IEC 62471)	RG0
Type of protection	IP20 (top) / IP44 (bottom)
Lumen maintenance L70B50	50,000 h
Guarantee (conditions at www.tridonic.com)	5 Year(s)

Approval marks**Standards**

EN 62471, EN 61547, EN 55015, EN 60598-1, EN 60598-2-2

Specific technical data

Type	Article number	Colour temperature	Typ. luminous flux at $t_a = 25^\circ\text{C}$ ^①	Forward current	Min. forward voltage at $t_a = 25^\circ\text{C}$	Typ. forward voltage at $t_a = 25^\circ\text{C}$	Max. forward voltage at $t_a = 25^\circ\text{C}$	Typ. power consumption at $t_a = 25^\circ\text{C}$ ^②	Efficacy of the luminaire at $t_a = 25^\circ\text{C}$	Beam characterist	Colour rendering index CRI
DLA flat 100mm 880lm 830-855 SNC3	28004062	3,000 K	880 lm	250 mA	33.8 V	35.2 V	37.7 V	8.8 W	90 lm/W	110°	>80
DLA flat 100mm 880lm 830-855 SNC3	28004062	5,500 K	880 lm	250 mA	33.8 V	35.2 V	37.7 V	8.8 W	100 lm/W	110°	>80
DLA flat 150mm 1500lm 830-855 SNC3	28004063	3,000 K	1,400 lm	350 mA	35.2 V	37.1 V	38.9 V	13.0 W	106 lm/W	110°	>80
DLA flat 150mm 1500lm 830-855 SNC3	28004063	5,500 K	1,500 lm	350 mA	35.2 V	37.1 V	38.9 V	13.0 W	115 lm/W	110°	>80
DLA flat 200mm 2160lm 830-855 SNC3	28004064	3,000 K	2,000 lm	500 mA	34.2 V	36.0 V	37.8 V	18.0 W	110 lm/W	110°	>80
DLA flat 200mm 2160lm 830-855 SNC3	28004064	5,500 K	2,160 lm	500 mA	34.2 V	36.0 V	37.8 V	18.0 W	120 lm/W	110°	>80

① Tolerance of typ. luminous flux $\pm 7.5\%$. Measurement uncertainty $\pm 10\%$.

② Tolerance of power consumption $P_{on} \pm 10\%$. Measurement uncertainty $\pm 5\%$.

1. Standards

EN 62471
 EN 61547
 EN 55015
 EN 60598-1
 EN 60598-2-2

1.1 Risk group

Type	Risk group (IEC 62471)
DLA SNC3	RG0

1.2 Energy classification

Type	Article number	These products contain
		a light source of energy efficiency class
DLA SNC3		
DLA flat 100mm 880lm 830-855 SNC3	28004062	D
DLA flat 150mm 1500lm 830-855 SNC3	28004063	D
DLA flat 200mm 2160lm 830-855 SNC3	28004064	D

2. Thermal details

2.1 ambient temperature and lifetime

Operation within the specified ambient temperature range is crucial for the light output and lifetime of a LED product. Within the specified ambient temperature range, a maximum casing temperature of 90 °C is not exceeded.

The LED product is intended to be used in downward operating position, for details see 3.4 Mounting instructions.

2.2 Storage and humidity

storage temperature	-20 ... +50 °C
---------------------	----------------

Storage only in non condensing environment, at a humidity < 85 %.

3. Installation / wiring

3.1 Electrical supply/choice of LED driver

DLA modules from Tridonic are not protected against overvoltages, overcurrents, overloads or short-circuit currents. Safe and reliable operation can only be guaranteed in conjunction with a LED driver which complies with the relevant standards. The use of LED drivers from Tridonic in combination with DLA modules guarantees the necessary protection for safe and reliable operation.

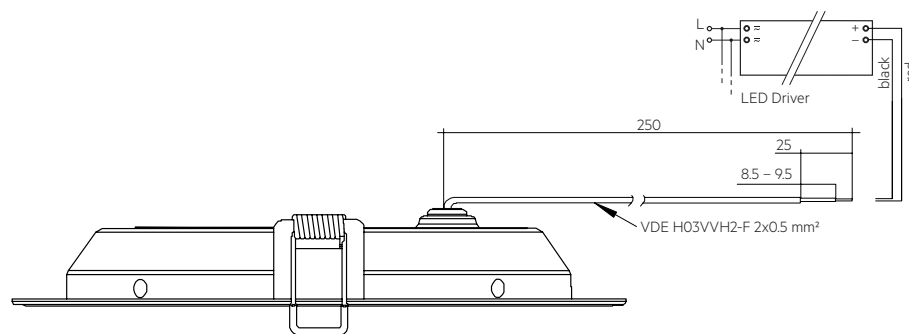
If a LED driver other than Tridonic is used, it must provide the following protection:

- Short-circuit protection
- Overload protection
- Overtemperature protection



DLA SNC3 have to be operated with a SELV LED driver.
DLA modules must be supplied by a constant current LED driver.
Operation with a constant voltage LED driver will lead to an irreversible damage of the module.
Wrong polarity can damage the DLA.

3.2 Wiring



3.3 Wiring type and cross section

Cable type: VDE H03VVH2-F 2x0.5 mm²

Cable length: 250 mm +/-10 mm

Stripping length: 9 mm +/-0.5 mm

3.4 Mounting instruction

None of the components of the DLA (substrate, LED, electronic components etc.) may be exposed to tensile or compressive stresses.

Recessed mounting for suspended ceilings with a diameter of 100 mm, 150 mm and 200 mm. Thickness of suspended ceiling 5 – 17 mm.

To prevent fingerprints we recommend to mount the DLA only with gloves.



Chemical substance may harm the LED module. Chemical reactions could lead to colour shift, reduced luminous flux or a total failure of the module caused by corrosion of electrical connections.

3.5 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.

For further information for EOS/ESD safety guidelines and the ESD classification please refer to the brochure entitled <http://www.tridonic.com/esd-protection>.

4. Lifetime

4.1 Lifetime, lumen maintenance and failure rate

The light output of an LED module decreases over the lifetime, this is characterized with the L value.

L70 means that the LED module will give 70 % of its initial luminous flux.

This value is always related to the number of operation hours and therefore defines the lifetime of an LED module.

As the L value is a statistical value and the lumen maintenance may vary over the delivered LED modules.

The B value defines the amount of modules which are below the specific L value, e.g. L70B10 means 10 % of the LED modules are below 70 % of the initial luminous flux, respectively 90 % will be above 70 % of the initial value.

In addition the percentage of failed modules (fatal failure) is characterized by the C value.

4.2 Lumen maintenance

Supply current	ta	L90F10	L90F50	L80F10	L80F50	L70F10	L70F50
250 mA	25 °C	34k h	44k h	74k h	92k h	118k h	147k h
	30 °C	34k h	44k h	74k h	92k h	118k h	147k h
	35 °C	34k h	44k h	74k h	92k h	118k h	147k h
	40 °C	31k h	41k h	68k h	85k h	110k h	136k h
350 mA	25 °C	34k h	44k h	74k h	92k h	118k h	147k h
	30 °C	34k h	44k h	74k h	92k h	118k h	147k h
	35 °C	34k h	44k h	74k h	92k h	118k h	147k h
	40 °C	31k h	41k h	68k h	85k h	110k h	136k h
500 mA	25 °C	34k h	44k h	74k h	92k h	118k h	147k h
	30 °C	34k h	44k h	74k h	92k h	118k h	147k h
	35 °C	34k h	44k h	74k h	92k h	118k h	147k h
	40 °C	31k h	41k h	68k h	85k h	110k h	136k h

4.3 Switching capability

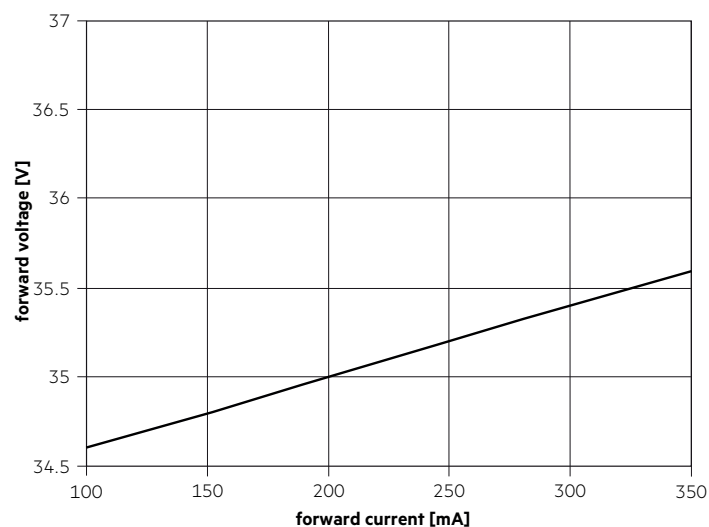
15,000 cycles

30 s on / 30 s off

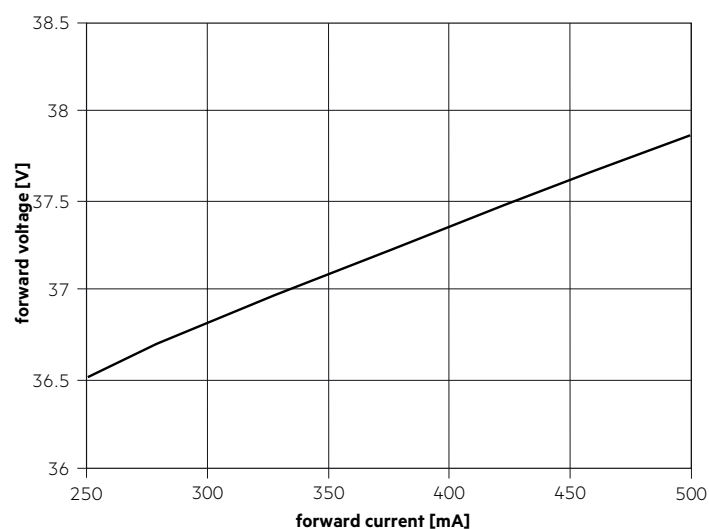
5. Electrical values

5.1 Typ. forward voltage vs. forward current

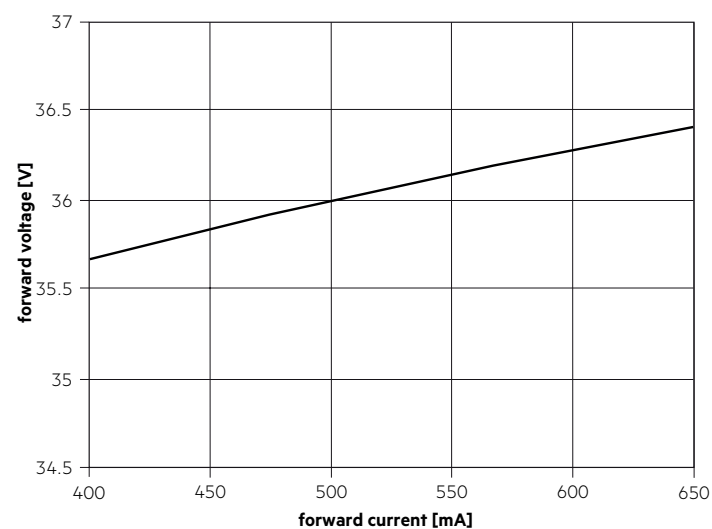
DLA flat 100mm 880lm 830-855 SNC3



DLA flat 150mm 1500lm 830-855 SNC3



DLA flat 200mm 2160lm 830-855 SNC3



6. Photometric characteristics

6.1 Coordinates and tolerances according to CIE 1931

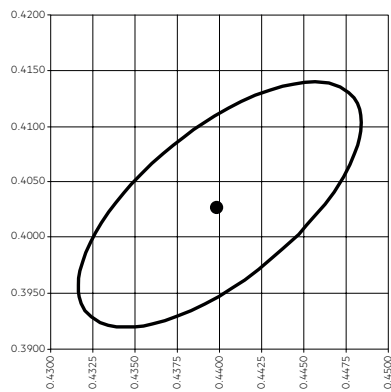
The specified colour coordinates are central measured in thermal saturated stage.

The ambient temperature of the measurement is $t_a = 25^\circ\text{C}$.

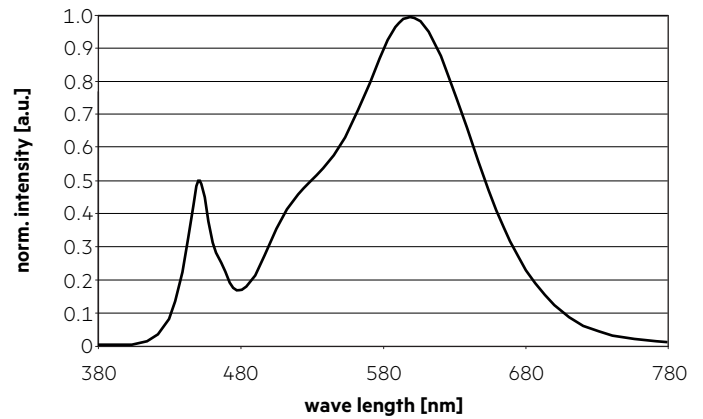
The measurement tolerance of the colour coordinates are ± 0.01 .

3,000 K

	x0	y0
Centre	0.4400	0.4030

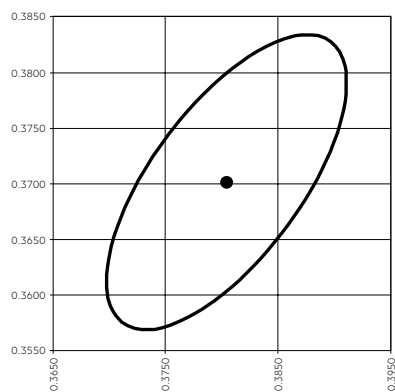


MacAdam ellipse: 4SDCM

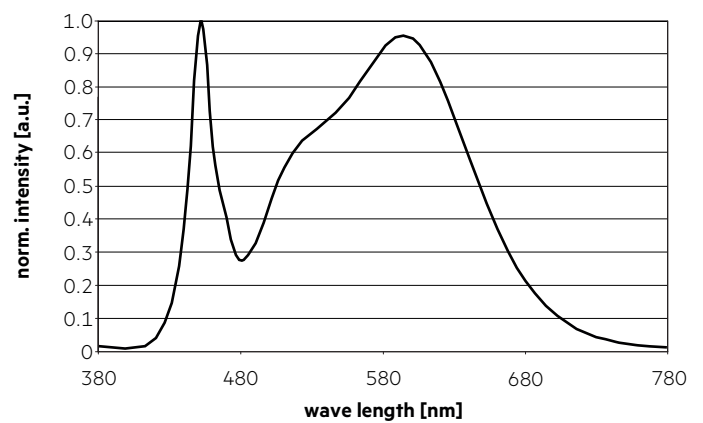


4,000 K

	x0	y0
Centre	0.3804	0.3702

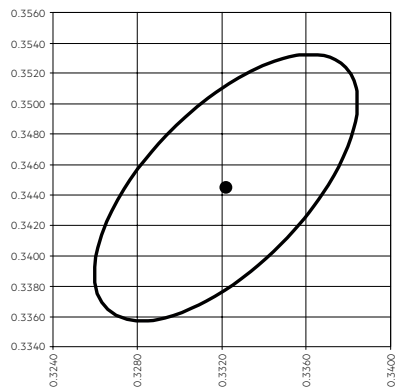


MacAdam ellipse: 5SDCM

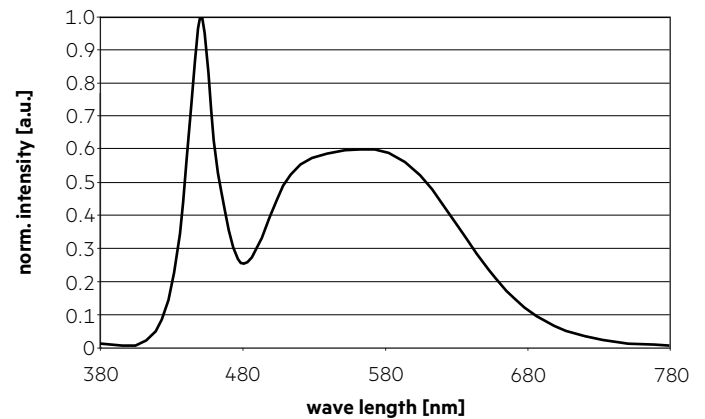


5,500 K

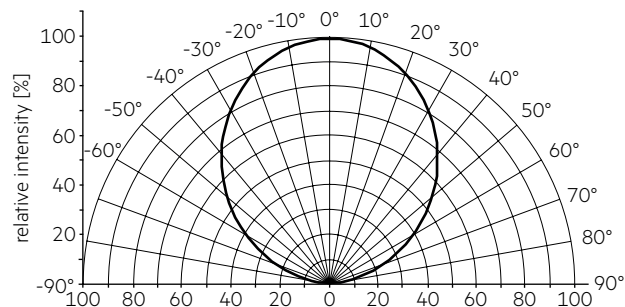
	x0	y0
Centre	0.3322	0.3445



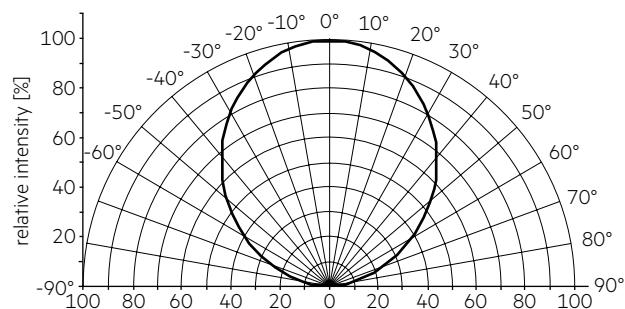
MacAdam ellipse: 4SDCM

**6.2 Light distribution**

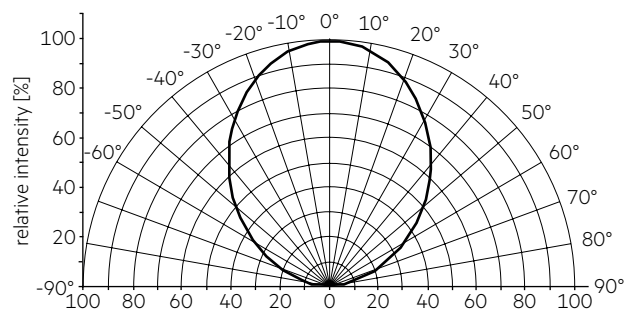
DLA flat 100mm 880lm 830-855 SNC3



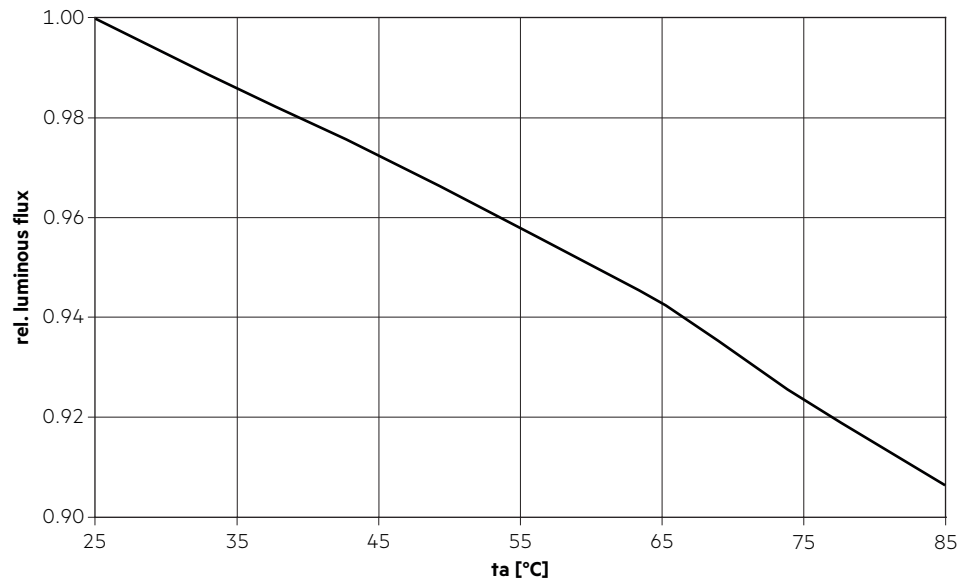
DLA flat 150mm 1500lm 830-855 SNC3



DLA flat 200mm 2160lm 830-855 SNC3

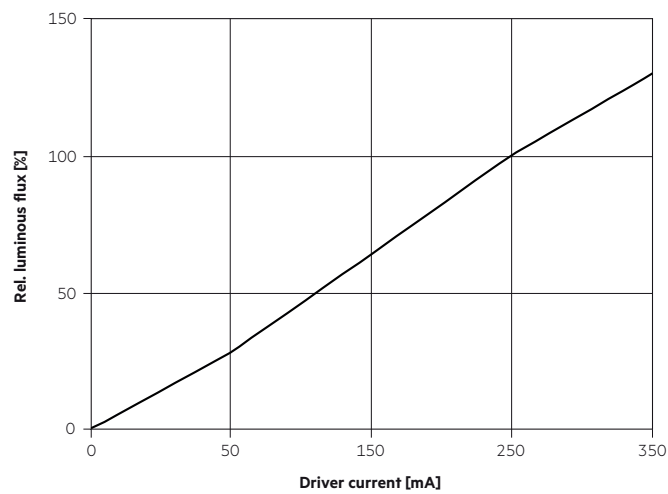


6.3 Relative luminous flux vs. t_a temperature

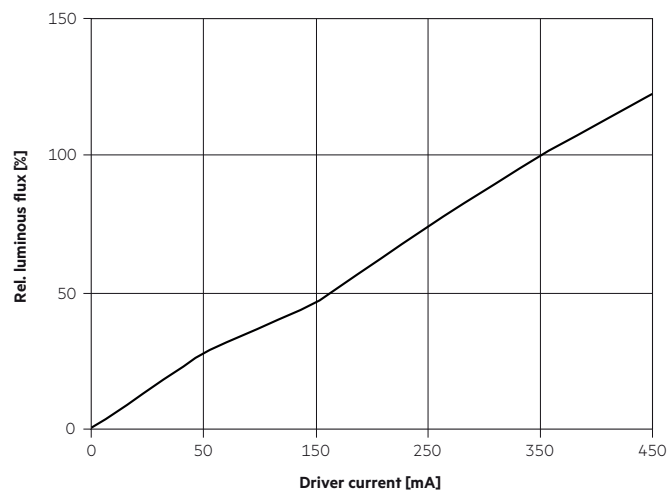


6.4 Relative luminous flux vs. operating current

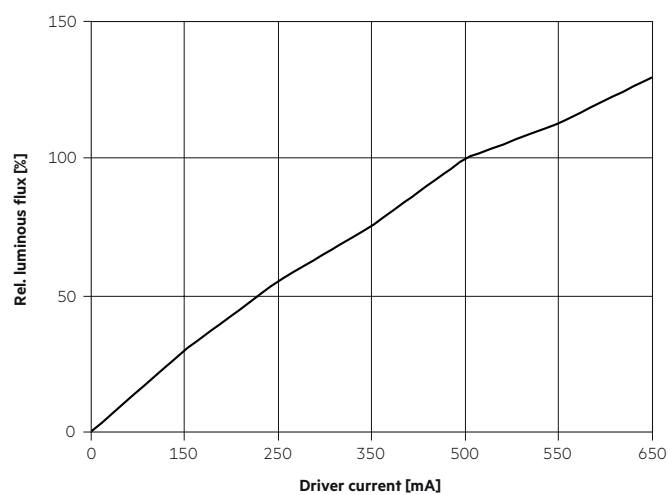
DLA flat 100mm 880lm 830-855 SNC3



DLA flat 150mm 1500lm 830-855 SNC3



DLA flat 200mm 2160lm 830-855 SNC3



7. Miscellaneous

7.1 Additional information

Additional technical information at www.tridonic.com → Technical Data

Guarantee conditions at www.tridonic.com → Services

Lifetime declarations are informative and represent no warranty claim.