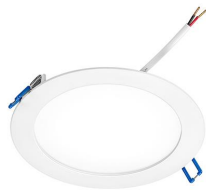


**DLA flat SNC3**

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**

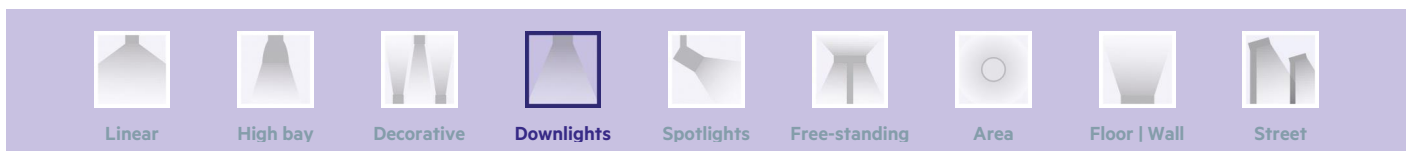
- \_ IP44 rating at front surface of the product makes it fit for bathroom application
- \_ Backlit slim downlight for direct recessed mouting
- \_ For ceiling cutout hole size of 100, 150 and 200 mm
- \_ IK rating IK03
- \_ Long lifetime: 50,000 hours
- \_ 5 years guarantee (conditions at <https://www.tridonic.com/en/int/services/manufacturer-guarantee-conditio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

**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)

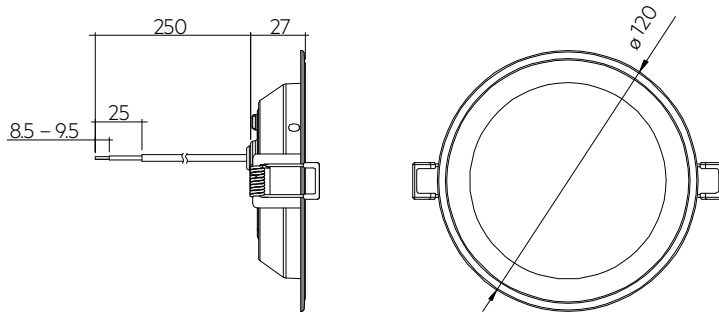
**Website**

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

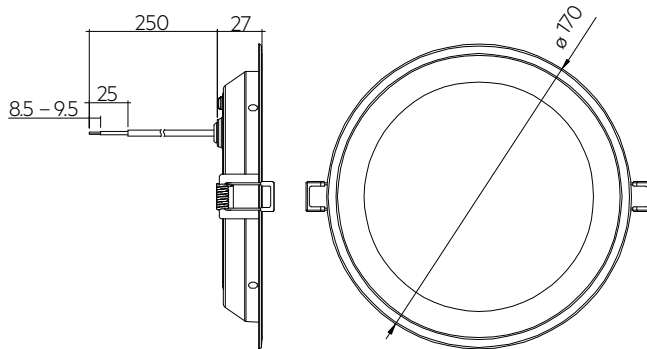


**DLA flat SNC3**

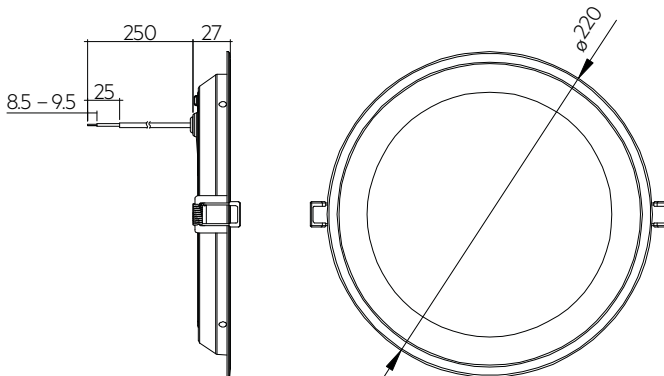
Module DLA essence



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 <sub>max</sub> for 100mm  | 275 mA                     |
| I <sub>max</sub> for 150mm  | 385 mA                     |
| I <sub>max</sub> 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 <a href="http://www.tridonic.com">www.tridonic.com</a> ) | 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 $t_a = 25^\circ\text{C}$ <sup>①</sup> | 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 $t_a = 25^\circ\text{C}$ <sup>②</sup> | Efficacy of the luminaire at $t_a = 25^\circ\text{C}$ | Beam characteristic | Colour rendering index CRI |
|---|-----------------|--------------------|---|-----------------|--|--|--|---|---|---------------------|----------------------------|
| <b>DLA flat 100mm 880lm 830-855 SNC3</b>  | <b>28004062</b> | 3,000 K            | 800 lm  | 250 mA          | 33.8 V   | 35.2 V   | 37.7 V   | 8.8 W   | 90 lm/W   | 110°                | >80                        |
| <b>DLA flat 100mm 880lm 830-855 SNC3</b>  | <b>28004062</b> | 5,500 K            | 880 lm  | 250 mA          | 33.8 V   | 35.2 V   | 37.7 V   | 8.8 W   | 100 lm/W  | 110°                | >80                        |
| <b>DLA flat 150mm 1500lm 830-855 SNC3</b> | <b>28004063</b> | 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                        |
| <b>DLA flat 150mm 1500lm 830-855 SNC3</b> | <b>28004063</b> | 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                        |
| <b>DLA flat 200mm 2160lm 830-855 SNC3</b> | <b>28004064</b> | 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                        |
| <b>DLA flat 200mm 2160lm 830-855 SNC3</b> | <b>28004064</b> | 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

| Typ                                | Article number | These products contain   |                  |
|------------------------------------|----------------|--------------------------|------------------|
|                                    |                | a light source of energy | efficiency class |
| <b>DLA SNC3</b>                    |                |                          |                  |
| 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.

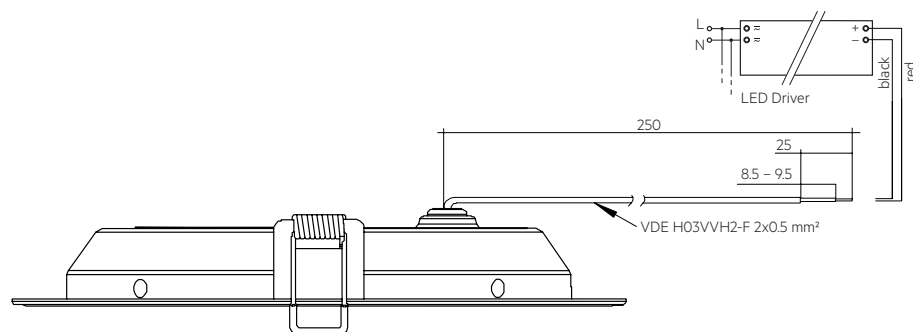
If a LED driver other than Tridonic is used, it must provide the following protection:

- 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 mm<sup>2</sup>

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

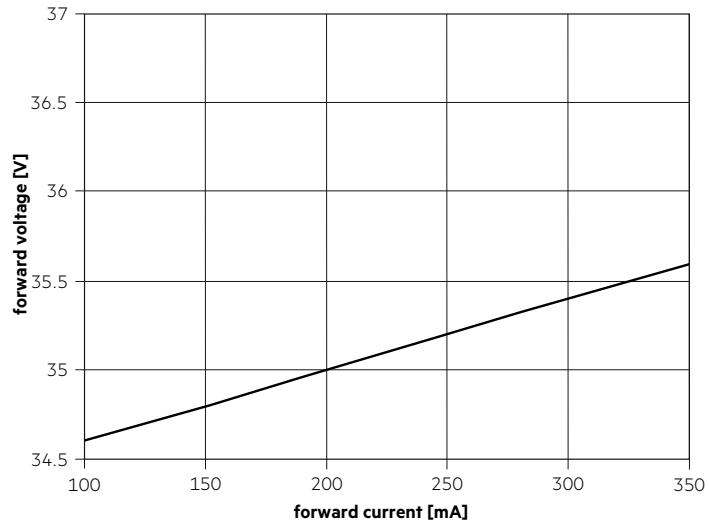
15,000 cycles

30 s on / 30 s off

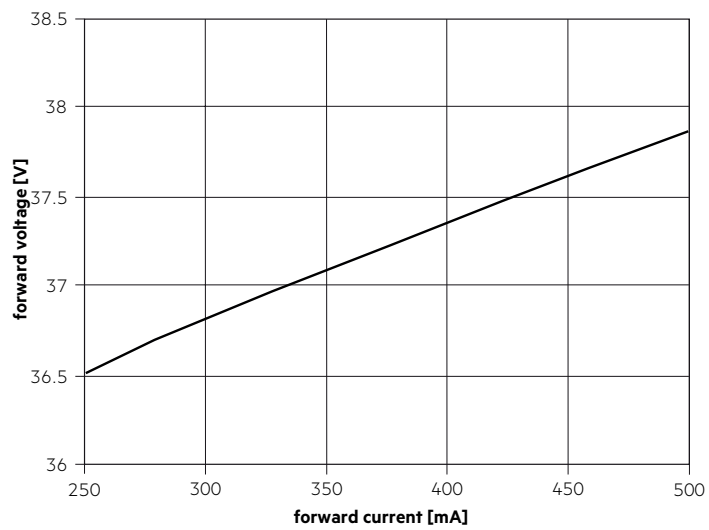
## 5. Electrical values

### 5.1 Typ. forward voltage vs. forward current

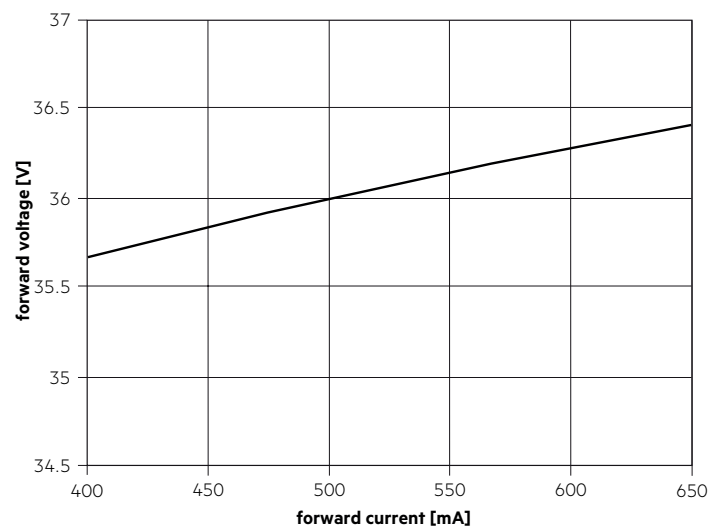
DLA flat 100mm 880lm 830-855 SNC3



DLA flat 150mm 1500lm 830-855 SNC3



DLA flat 200mm 2160lm 830-855 SNC3



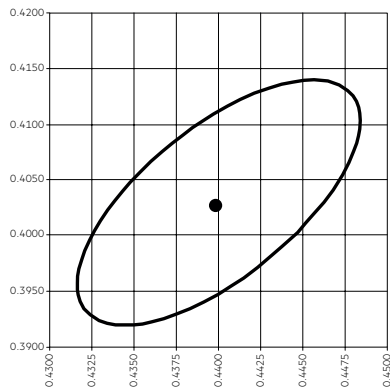
## 6. Photometric characteristics

### 6.1 Coordinates and tolerances according to CIE 1931

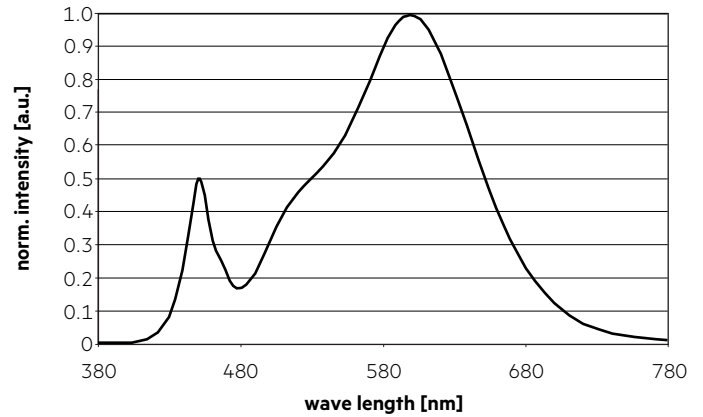
The specified colour coordinates are central measured in thermal saturated stage.  
The ambient temperature of the measurement is  $t_a = 25^\circ\text{C}$ .  
The measurement tolerance of the colour coordinates are  $\pm 0.01$ .

#### 3,000 K

|        | x0     | y0     |
|--------|--------|--------|
| Centre | 0.4400 | 0.4030 |

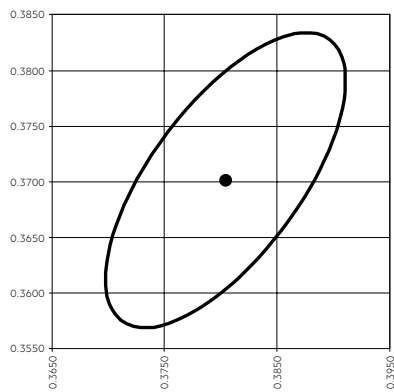


MacAdam ellipse: 4SDCM

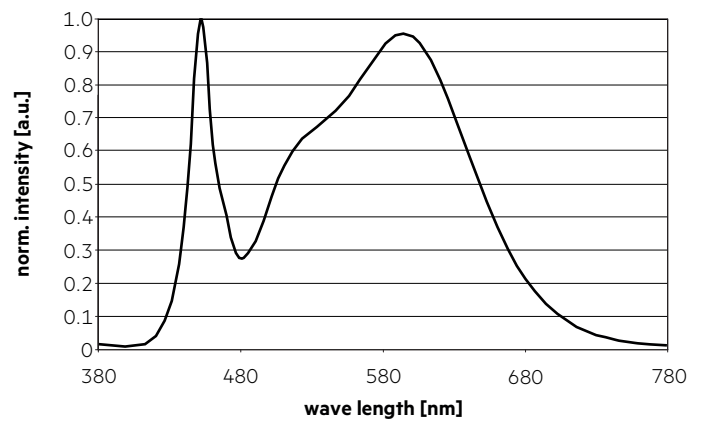


#### 4,000 K

|        | x0     | y0     |
|--------|--------|--------|
| Centre | 0.3804 | 0.3702 |

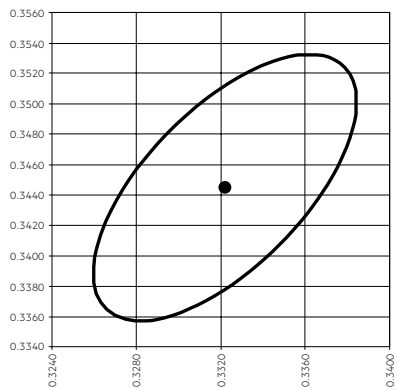


MacAdam ellipse: 5SDCM

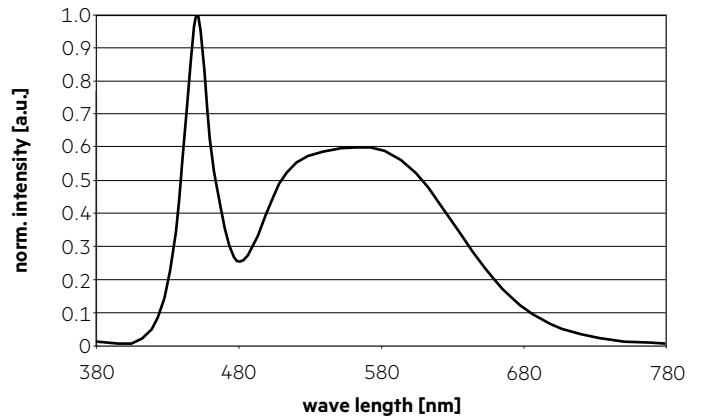


5,500 K

|        | x0     | y0     |
|--------|--------|--------|
| Centre | 0.3322 | 0.3445 |

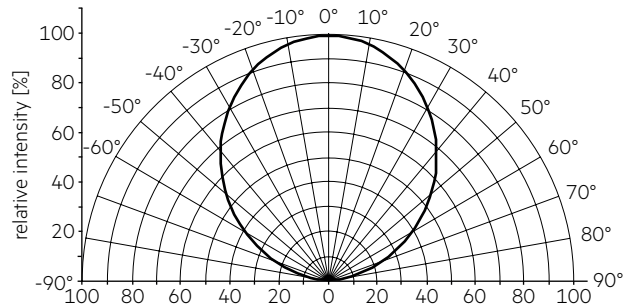


MacAdam ellipse: 4SDCM

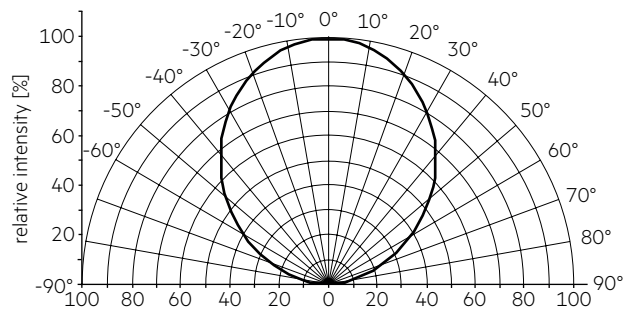


6.2 Light distribution

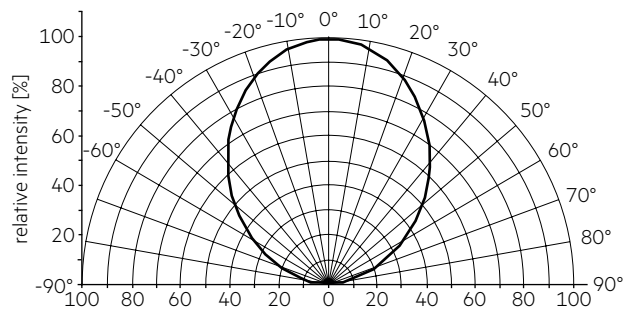
DLA flat 100mm 880lm 830-855 SNC3



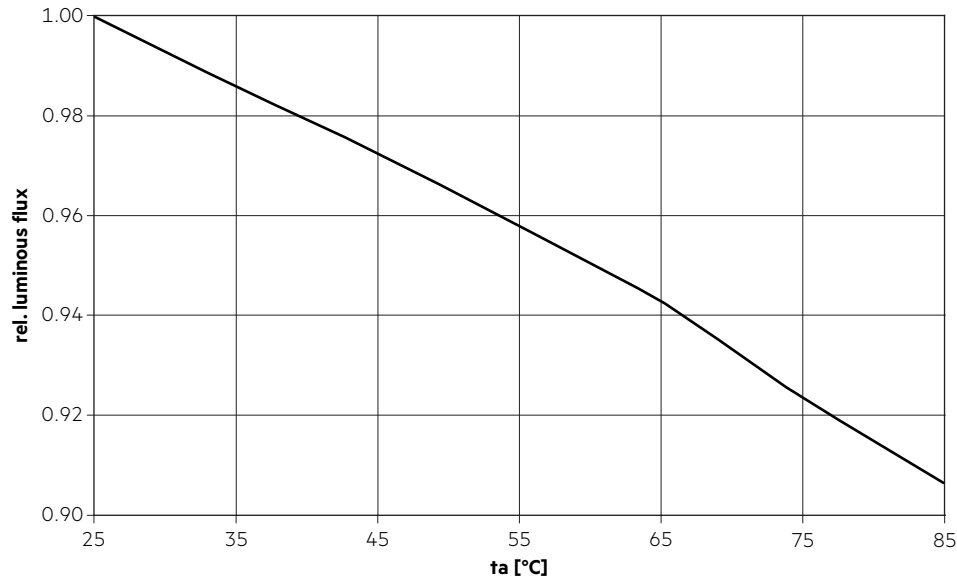
DLA flat 150mm 1500lm 830-855 SNC3



DLA flat 200mm 2160lm 830-855 SNC3

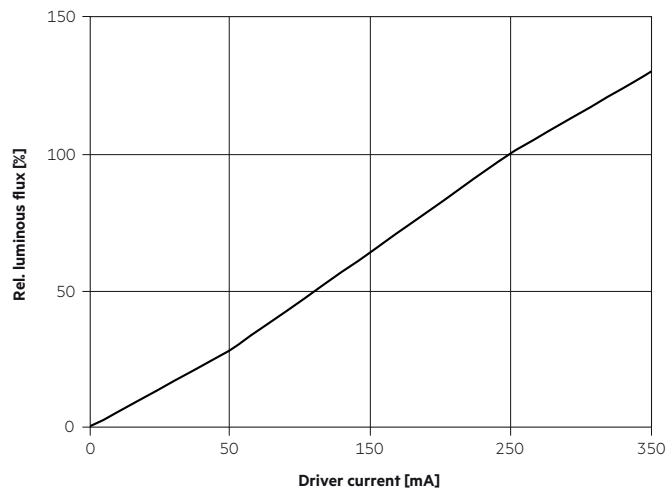


6.3 Relative luminous flux vs.  $t_a$  temperature

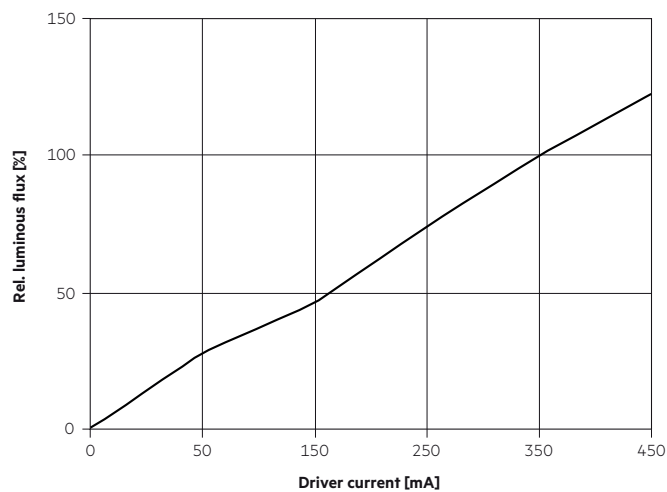


6.4 Relative luminous flux vs. operating current

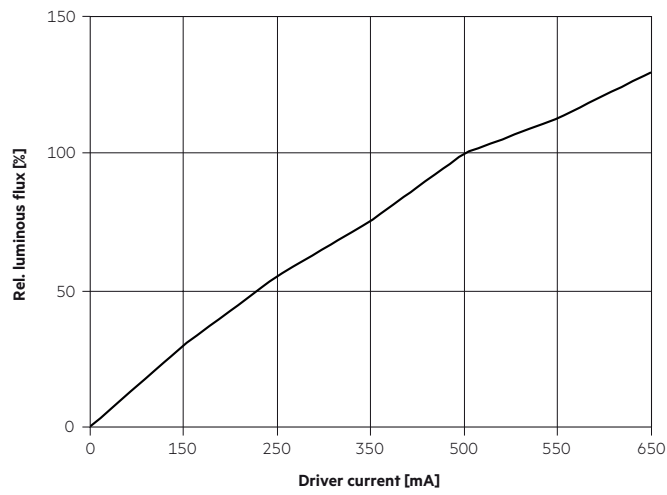
DLA flat 100mm 880lm 830-855 SNC3



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](http://www.tridonic.com) → Technical Data

Guarantee conditions at [www.tridonic.com](http://www.tridonic.com) → Services

Lifetime declarations are informative and represent no warranty claim.