

**Modul RLE ADV2 OTD new variant**

Modules RLE advanced

**Product description**

- \_ High efficiency outdoor modules
- \_ Suitable for harsh and humid outdoor conditions
- \_ Huge performance temperature range from -40 ... +95 °C
- \_ Surge tested (+/- to earth) 6 kV with Tridonic LED driver
- \_ Integrated NTC for overtemperature protection
- \_ For use with x16 lenses (e.g. LEDiL STRADELLA 16)
- \_ Push-in terminals for simple and quick wiring
- \_ HE ... High Efficiency, NM ... Nominal Mode, HO ... High Output
- \_ Long lifetime up to 75,000 hours
- \_ 5 years guarantee (conditions at <https://www.tridonic.com/en/int/services/manufacturer-guarantee-conditions>)

**Optical properties**

- \_ Colour temperatures 2,200K, 2,700 K, 3,000 K, 4,000 K, 5,000 K and 6,500 K
- \_ Efficacy of the LED module up to 216 lm/W
- \_ High colour rendering index CRI > 80
- \_ Small luminous flux tolerances

**Mechanical properties**

- \_ Module dimension 49.5 x 121.4 mm and 49.5 x 223 mm
- \_ Installation of the module together with lens in the luminaire by means of an M3 screw

**System solution**

- \_ Integrate compatible partner products into your final system solution: <https://www.tridonic.com/en/int/products/accessories#partner>

**Website**

<http://www.tridonic.com/28006330>



Linear



High bay



Decorative



Downlights



Spotlights



Free-standing



Area



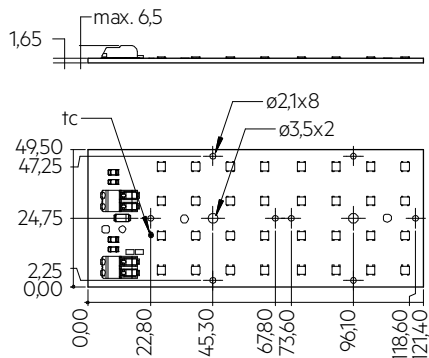
Floor | Wall



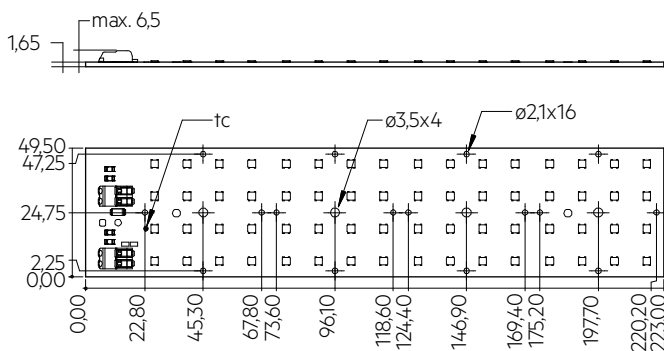
Street

**Modul RLE ADV2 OTD new variant**

Modules RLE advanced



RLE 4x8 2000lm MP ADV2 OTD



RLE 4x16 4000lm MP ADV2 OTD

**Ordering data**

Type	Article number	Colour temperature	Packaging, carton	Weight per pc.
RLE 4x16 4000lm 822 MP ADV2 OTD	28006330	2,200 K	80 pc(s).	0.039 kg
RLE 4x16 4000lm 827 MP ADV2 OTD	28006331	2,700 K	80 pc(s).	0.039 kg
RLE 4x16 4000lm 830 MP ADV2 OTD	28006332	3,000 K	80 pc(s).	0.039 kg
RLE 4x16 4000lm 840 MP ADV2 OTD	28006333	4,000 K	80 pc(s).	0.039 kg
RLE 4x16 4000lm 850 MP ADV2 OTD	28006334	5,000 K	80 pc(s).	0.039 kg
RLE 4x16 4000lm 865 MP ADV2 OTD	28006335	6,500 K	80 pc(s).	0.039 kg
RLE 4x8 2000lm 822 MP ADV2 OTD	28006336	2,200 K	80 pc(s).	0.021 kg
RLE 4x8 2000lm 827 MP ADV2 OTD	28006337	2,700 K	80 pc(s).	0.021 kg
RLE 4x8 2000lm 830 MP ADV2 OTD	28006338	3,000 K	80 pc(s).	0.021 kg
RLE 4x8 2000lm 840 MP ADV2 OTD	28006339	4,000 K	80 pc(s).	0.021 kg
RLE 4x8 2000lm 850 MP ADV2 OTD	28006340	5,000 K	80 pc(s).	0.021 kg
RLE 4x8 2000lm 865 MP ADV2 OTD	28006341	6,500 K	80 pc(s).	0.021 kg

**Technical data**

Beam characteristic	120°
Ambient temperature $t_a$	-40 ... +80 °C
$t_p$ rated	75 °C
$t_c$	95 °C
$I_{rated}$	500 mA
$I_{max}$	720 mA
Max. permissible LF current ripple	800 mA
Max. permissible peak current	1,200 mA / max. 10 ms
Max. working voltage for insulation <sup>①</sup>	410 V
Max. working voltage for insulation with lens <sup>②</sup>	570 V
Insulation test voltage	2.14 kV
CTI of the printed circuit board	> 600
Colour tolerance	3 SDCM
ESD classification	Severity level 2
Risk group (IEC 62471)	RG1
Classification acc. to IEC 62031	Built-in
Type of protection	IP00
Lumen maintenance L70B50	75,000 h
Guarantee (conditions at <a href="http://www.tridonic.com">www.tridonic.com</a> )	5 Year(s)

**Approval marks****Standards**

IEC 62031, IEC 62778, IEC 62471, IEC 61000-4-2, UL 8750

## Specific technical data

Type	Article number	Photometric code	Useful luminous flux at $t_p = 25\text{ }^\circ\text{C}$ <sup>③</sup>	Expected luminous flux at $t_p$ rated <sup>④</sup>	Typ. forward current	Min. forward voltage at $t_p$ rated	Max. forward voltage at $t_p = 25\text{ }^\circ\text{C}$	Power consumption $P_{on}$ at $t_p = 25\text{ }^\circ\text{C}$ <sup>⑤</sup>	Efficacy of the module at $t_p = 25\text{ }^\circ\text{C}$	Expected efficacy of the module at $t_p$ rated	Colour rendering index CRI
<b>RLE 4x16 4000lm ADV2 OTD – Operating mode HE</b>											
RLE 4x16 4000lm 822 MP ADV2 OTD	28006330	822/359	-	2,559 lm	350 mA	41.4 V	44.5 V	-	-	173 lm/W	>80
RLE 4x16 4000lm 827 MP ADV2 OTD	28006331	827/359	-	2,856 lm	350 mA	41.4 V	44.5 V	-	-	193 lm/W	>80
RLE 4x16 4000lm 830 MP ADV2 OTD	28006332	830/359	-	3,014 lm	350 mA	41.4 V	44.5 V	-	-	203 lm/W	>80
RLE 4x16 4000lm 840 MP ADV2 OTD	28006333	840/359	-	3,182 lm	350 mA	41.4 V	44.5 V	-	-	215 lm/W	>80
RLE 4x16 4000lm 850 MP ADV2 OTD	28006334	850/359	-	3,182 lm	350 mA	41.4 V	44.5 V	-	-	215 lm/W	>80
RLE 4x16 4000lm 865 MP ADV2 OTD	28006335	865/359	-	3,117 lm	350 mA	41.4 V	44.5 V	-	-	210 lm/W	>80
<b>RLE 4x16 4000lm ADV2 OTD – Operating mode NM</b>											
RLE 4x16 4000lm 822 MP ADV2 OTD	28006330	822/359	3,796 lm	3,609 lm	500 mA	42.0 V	45.2 V	21.9 W	173 lm/W	168 lm/W	>80
RLE 4x16 4000lm 827 MP ADV2 OTD	28006331	827/359	4,237 lm	4,028 lm	500 mA	42.0 V	45.2 V	21.9 W	193 lm/W	188 lm/W	>80
RLE 4x16 4000lm 830 MP ADV2 OTD	28006332	830/359	4,470 lm	4,250 lm	500 mA	42.0 V	45.2 V	21.9 W	204 lm/W	198 lm/W	>80
RLE 4x16 4000lm 840 MP ADV2 OTD	28006333	840/359	4,720 lm	4,488 lm	500 mA	42.0 V	45.2 V	21.9 W	216 lm/W	209 lm/W	>80
RLE 4x16 4000lm 850 MP ADV2 OTD	28006334	850/359	4,720 lm	4,488 lm	500 mA	42.0 V	45.2 V	21.9 W	216 lm/W	209 lm/W	>80
RLE 4x16 4000lm 865 MP ADV2 OTD	28006335	865/359	4,623 lm	4,396 lm	500 mA	42.0 V	45.2 V	21.9 W	211 lm/W	205 lm/W	>80
<b>RLE 4x16 4000lm ADV2 OTD – Operating mode HO</b>											
RLE 4x16 4000lm 822 MP ADV2 OTD	28006330	822/359	-	4,975 lm	700 mA	42.7 V	45.9 V	-	-	163 lm/W	>80
RLE 4x16 4000lm 827 MP ADV2 OTD	28006331	827/359	-	5,553 lm	700 mA	42.7 V	45.9 V	-	-	182 lm/W	>80
RLE 4x16 4000lm 830 MP ADV2 OTD	28006332	830/359	-	5,858 lm	700 mA	42.7 V	45.9 V	-	-	192 lm/W	>80
RLE 4x16 4000lm 840 MP ADV2 OTD	28006333	840/359	-	6,186 lm	700 mA	42.7 V	45.9 V	-	-	202 lm/W	>80
RLE 4x16 4000lm 850 MP ADV2 OTD	28006334	850/359	-	6,186 lm	700 mA	42.7 V	45.9 V	-	-	202 lm/W	>80
RLE 4x16 4000lm 865 MP ADV2 OTD	28006335	865/359	-	6,060 lm	700 mA	42.7 V	45.9 V	-	-	198 lm/W	>80
<b>RLE 4x8 2000lm ADV2 OTD – Operating mode HE</b>											
RLE 4x8 2000lm 822 MP ADV2 OTD	28006336	822/359	-	1,280 lm	350 mA	20.7 V	22.3 V	-	-	173 lm/W	>80
RLE 4x8 2000lm 827 MP ADV2 OTD	28006337	827/359	-	1,428 lm	350 mA	20.7 V	22.3 V	-	-	193 lm/W	>80
RLE 4x8 2000lm 830 MP ADV2 OTD	28006338	830/359	-	1,507 lm	350 mA	20.7 V	22.3 V	-	-	203 lm/W	>80
RLE 4x8 2000lm 840 MP ADV2 OTD	28006339	840/359	-	1,591 lm	350 mA	20.7 V	22.3 V	-	-	215 lm/W	>80
RLE 4x8 2000lm 850 MP ADV2 OTD	28006340	850/359	-	1,591 lm	350 mA	20.7 V	22.3 V	-	-	215 lm/W	>80
RLE 4x8 2000lm 865 MP ADV2 OTD	28006341	865/359	-	1,559 lm	350 mA	20.7 V	22.3 V	-	-	210 lm/W	>80
<b>RLE 4x8 2000lm ADV2 OTD – Operating mode NM</b>											
RLE 4x8 2000lm 822 MP ADV2 OTD	28006336	822/359	1,898 lm	1,805 lm	500 mA	21.0 V	22.6 V	11.0 W	173 lm/W	168 lm/W	>80
RLE 4x8 2000lm 827 MP ADV2 OTD	28006337	827/359	2,118 lm	2,014 lm	500 mA	21.0 V	22.6 V	11.0 W	193 lm/W	188 lm/W	>80
RLE 4x8 2000lm 830 MP ADV2 OTD	28006338	830/359	2,235 lm	2,125 lm	500 mA	21.0 V	22.6 V	11.0 W	203 lm/W	198 lm/W	>80
RLE 4x8 2000lm 840 MP ADV2 OTD	28006339	840/359	2,360 lm	2,244 lm	500 mA	21.0 V	22.6 V	11.0 W	215 lm/W	209 lm/W	>80
RLE 4x8 2000lm 850 MP ADV2 OTD	28006340	850/359	2,360 lm	2,244 lm	500 mA	21.0 V	22.6 V	11.0 W	215 lm/W	209 lm/W	>80
RLE 4x8 2000lm 865 MP ADV2 OTD	28006341	865/359	2,312 lm	2,198 lm	500 mA	21.0 V	22.6 V	11.0 W	210 lm/W	205 lm/W	>80
<b>RLE 4x8 2000lm ADV2 OTD – Operating mode HO</b>											
RLE 4x8 2000lm 822 MP ADV2 OTD	28006336	822/359	-	2,488 lm	700 mA	21.4 V	23.0 V	-	-	163 lm/W	>80
RLE 4x8 2000lm 827 MP ADV2 OTD	28006337	827/359	-	2,776 lm	700 mA	21.4 V	23.0 V	-	-	182 lm/W	>80
RLE 4x8 2000lm 830 MP ADV2 OTD	28006338	830/359	-	2,929 lm	700 mA	21.4 V	23.0 V	-	-	191 lm/W	>80
RLE 4x8 2000lm 840 MP ADV2 OTD	28006339	840/359	-	3,093 lm	700 mA	21.4 V	23.0 V	-	-	202 lm/W	>80
RLE 4x8 2000lm 850 MP ADV2 OTD	28006340	850/359	-	3,093 lm	700 mA	21.4 V	23.0 V	-	-	202 lm/W	>80
RLE 4x8 2000lm 865 MP ADV2 OTD	28006341	865/359	-	3,030 lm	700 mA	21.4 V	23.0 V	-	-	198 lm/W	>80

① If mounted with M3 screws with 6 mm head diameter and plastic washer.

② If mounted with M3 screws in combination with lens.

③ Tolerance of useful light flux - 0 % / + 15 %. Measurement uncertainty  $\pm 10\%$ .

④ Tolerance of expected light flux - 0 % / + 15 %. Measurement uncertainty  $\pm 10\%$ . Based on calculation.

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

## 1. Standards

EC 62031  
IEC 62778  
IEC 62471  
IEC 61000-4-2  
UL 8750 (for dry and damp locations)

### 1.1 Photometric code

Key for photometric code, e. g. 830 / 459

1 <sup>st</sup> digit	2 <sup>nd</sup> + 3 <sup>rd</sup> digit	4 <sup>th</sup> digit	5 <sup>th</sup> digit	6 <sup>th</sup> digit
Code CRI	Colour temperature in Kelvin x 100	MacAdam initial	MacAdam after 25% of the lifetime (max.6000h)	Luminous flux after 25% of the lifetime (max.6000h)
7 70 – 79				Code Luminous flux
8 80 – 89				7 ≥ 70 %
9 ≥90				8 ≥ 80 % 9 ≥ 90 %

### 1.2 Energy classification

Type	Colour temperature	Forward current	Energy classification	Energy consumption
<b>RLE 4x8 2000lm</b>				
RLE 4x8 2000lm 822 MP ADV2 OTD	2,200 K	500 mA	D	11 kWh / 1,000 h
RLE 4x8 2000lm 827 MP ADV2 OTD	2,700 K	500 mA	C	11 kWh / 1,000 h
RLE 4x8 2000lm 830 MP ADV2 OTD	3,000 K	500 mA	B	11 kWh / 1,000 h
RLE 4x8 2000lm 840 MP ADV2 OTD	4,000 K	500 mA	B	11 kWh / 1,000 h
RLE 4x8 2000lm 850 MP ADV2 OTD	5,000 K	500 mA	B	11 kWh / 1,000 h
RLE 4x8 2000lm 865 MP ADV2 OTD	6,500 K	500 mA	B	11 kWh / 1,000 h
<b>RLE 4x16 4000lm</b>				
RLE 4x16 4000lm 822 MP ADV2 OTD	2,200 K	500 mA	C	22 kWh / 1,000 h
RLE 4x16 4000lm 827 MP ADV2 OTD	2,700 K	500 mA	C	22 kWh / 1,000 h
RLE 4x16 4000lm 830 MP ADV2 OTD	3,000 K	500 mA	B	22 kWh / 1,000 h
RLE 4x16 4000lm 840 MP ADV2 OTD	4,000 K	500 mA	B	22 kWh / 1,000 h
RLE 4x16 4000lm 850 MP ADV2 OTD	5,000 K	500 mA	B	22 kWh / 1,000 h
RLE 4x16 4000lm 865 MP ADV2 OTD	6,500 K	500 mA	B	22 kWh / 1,000 h

Energy label and further information at [www.tridonic.com](http://www.tridonic.com) in the certificates tab of the corresponding product page and at the EPREL data base <https://eprel.ec.europa.eu/>

## 2. Thermal details

### 2.1 tc point, ambient temperature and lifetime

The temperature at tp reference point is crucial for the light output and lifetime of a LED product.

For RLE a tp temperature of 75 °C has to be complied in order to achieve an optimum between heat sink requirements, light output and lifetime.

Compliance with the maximum permissible reference temperature at the tc point must be checked under operating conditions in a thermally stable state. The maximum value must be determined under worst-case conditions for the relevant application.

The tc and tp temperature of LED modules from Tridonic are measured at the same reference point.

### 2.2 Storage and humidity

Storage temperature	-40...+80 °C
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Operation only in non condensing environment.

Humidity during processing of the module should be between 0 to 70 %.

### 2.3 Thermal design and heat sink

The rated life of LED products depends to a large extent on the temperature. If the permissible temperature limits are exceeded, the life of the RLE will be greatly reduced or the RLE may be destroyed.

### 2.4 Heat sink values

#### RLE 4x8 2000lm ADV2 OTD

ta	tp	Forward current	R <sub>th, hs-a</sub>	Cooling area
25 °C	75 °C	350 mA	15.08 K/W	44 cm <sup>2</sup>
25 °C	75 °C	500 mA	10.38 K/W	64 cm <sup>2</sup>
25 °C	75 °C	700 mA	7.18 K/W	93 cm <sup>2</sup>
35 °C	75 °C	350 mA	11.90 K/W	56 cm <sup>2</sup>
35 °C	75 °C	500 mA	8.15 K/W	82 cm <sup>2</sup>
35 °C	75 °C	700 mA	5.59 K/W	119 cm <sup>2</sup>
40 °C	75 °C	350 mA	10.32 K/W	65 cm <sup>2</sup>
40 °C	75 °C	500 mA	7.03 K/W	95 cm <sup>2</sup>
40 °C	75 °C	700 mA	4.79 K/W	139 cm <sup>2</sup>
45 °C	75 °C	350 mA	8.73 K/W	76 cm <sup>2</sup>
45 °C	75 °C	500 mA	5.91 K/W	113 cm <sup>2</sup>
45 °C	75 °C	700 mA	3.99 K/W	167 cm <sup>2</sup>
50 °C	75 °C	350 mA	7.14 K/W	93 cm <sup>2</sup>
50 °C	75 °C	500 mA	4.79 K/W	139 cm <sup>2</sup>
50 °C	75 °C	700 mA	3.19 K/W	209 cm <sup>2</sup>
55 °C	75 °C	350 mA	5.55 K/W	120 cm <sup>2</sup>
55 °C	75 °C	500 mA	3.67 K/W	181 cm <sup>2</sup>
55 °C	75 °C	700 mA	2.39 K/W	278 cm <sup>2</sup>
60 °C	75 °C	350 mA	3.96 K/W	168 cm <sup>2</sup>
60 °C	75 °C	500 mA	2.56 K/W	261 cm <sup>2</sup>
60 °C	75 °C	700 mA	1.60 K/W	418 cm <sup>2</sup>

#### RLE 4x16 4000lm ADV2 OTD

ta	tp	Forward current	R <sub>th, hs-a</sub>	Cooling area
25 °C	75 °C	350 mA	6.67 K/W	100 cm <sup>2</sup>
25 °C	75 °C	500 mA	4.57 K/W	146 cm <sup>2</sup>
25 °C	75 °C	700 mA	3.14 K/W	212 cm <sup>2</sup>
35 °C	75 °C	350 mA	5.25 K/W	127 cm <sup>2</sup>
35 °C	75 °C	500 mA	3.57 K/W	187 cm <sup>2</sup>
35 °C	75 °C	700 mA	2.43 K/W	275 cm <sup>2</sup>
40 °C	75 °C	350 mA	4.54 K/W	147 cm <sup>2</sup>
40 °C	75 °C	500 mA	3.07 K/W	217 cm <sup>2</sup>
40 °C	75 °C	700 mA	2.07 K/W	322 cm <sup>2</sup>
45 °C	75 °C	350 mA	3.83 K/W	174 cm <sup>2</sup>
45 °C	75 °C	500 mA	2.57 K/W	259 cm <sup>2</sup>
45 °C	75 °C	700 mA	1.71 K/W	389 cm <sup>2</sup>
50 °C	75 °C	350 mA	3.12 K/W	214 cm <sup>2</sup>
50 °C	75 °C	500 mA	2.07 K/W	322 cm <sup>2</sup>
50 °C	75 °C	700 mA	1.35 K/W	492 cm <sup>2</sup>
55 °C	75 °C	350 mA	2.41 K/W	277 cm <sup>2</sup>
55 °C	75 °C	500 mA	1.57 K/W	425 cm <sup>2</sup>
55 °C	75 °C	700 mA	1.00 K/W	669 cm <sup>2</sup>
60 °C	75 °C	350 mA	1.70 K/W	393 cm <sup>2</sup>
60 °C	75 °C	500 mA	1.07 K/W	624 cm <sup>2</sup>
60 °C	75 °C	700 mA	0.64 K/W	1,044 cm <sup>2</sup>

### Notes

The actual cooling surface can differ because of the material, the structural shape, outside influences and the installation situation. Depending on the heat sink a heat conducting paste or heat conducting film might be necessary to keep the specified tp temperature.

### 3. Installation / wiring

#### 3.1 Electrical supply/choice of LED driver

RLE 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 driver from Tridonic in combination with RLE 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



RLE 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.

The max. permissible output current of the LED driver for parallel wiring is 1.2 A.

RLE modules can be operated either from SELV LED drivers or from LED drivers with LV output voltage.



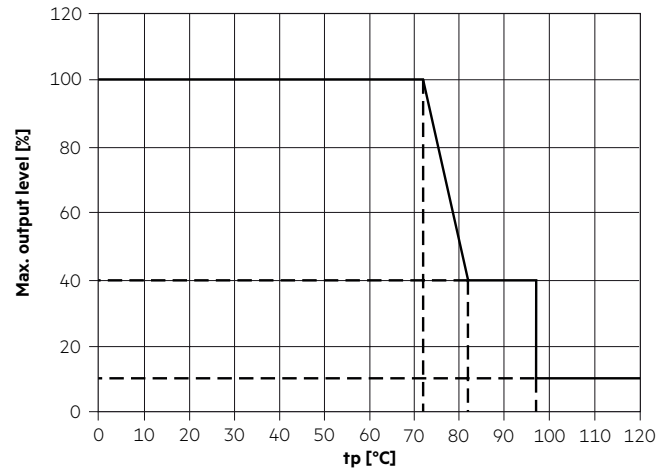
RLE modules are basic insulated up to 410 V if mounted with M3 screws with max. 6 mm head diameter and plastic washer or 570 V if mounted with M3 screws and lens (e.g. LEDIL Stradella 16) against ground and can be mounted directly on earthed metal parts of the luminaire. If the max. output voltage of the LED driver (also against earth) is above 410 V / 570 V, an additional insulation between LED module and heat sink is required (for example by insulated thermal pads) or by a suitable luminaire construction. At voltages > 60 V an additional protection against direct touch (test finger) to the light emitting side of the module has to be guaranteed. This is typically achieved by means of a non removable light distributor over the module.

#### 3.2 Integrated protection

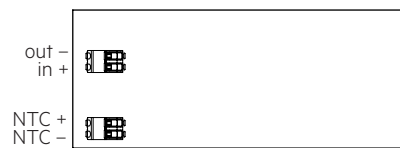
The basic protection level consists of protection against reverse polarity and an NTC for overtemperature protection of the module.

The NTC is designed to work with the Tridonic LED drivers supporting NTC functionality (for more details see LED driver data sheet).

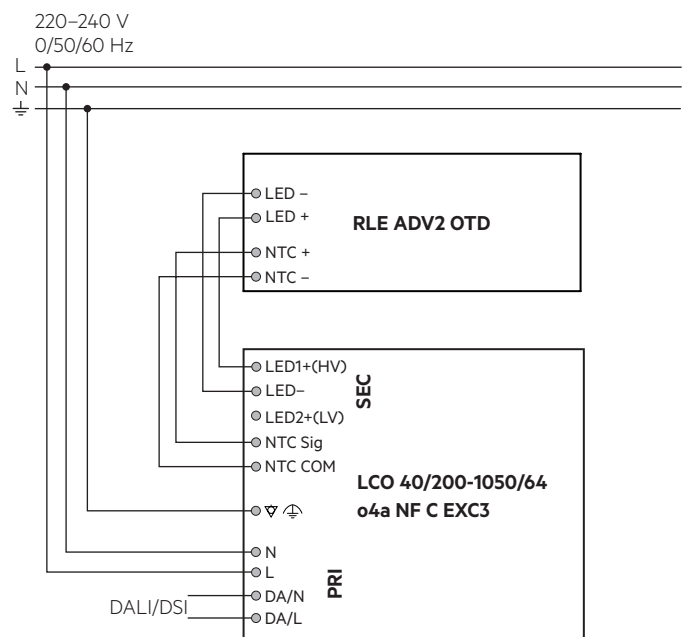
NTC type: 100kΩ / 4100K



#### 3.3 Wiring

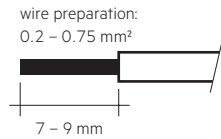


#### 3.4 Wiring examples



### 3.5 Wiring type and cross section

For wiring use stranded wire with ferrules or solid wire from 0.2 to 0.75 mm<sup>2</sup>.  
For the push-wire connection you have to strip the insulation (7–9 mm).



Inserting stranded wires / removing wires by lightly pressing on the push button.

### 3.6 Mounting instruction



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

Max. torque for fixing: 0.5 Nm.

The LED modules are mounted onto a heat sink with M3 screws per module.



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.

Materials which are used in LED applications (e.g. sealings, adhesives) must not produce dissolver gas. They must not be condensation curing based, acetate curing based or contain sulfur, chlorine or phthalate.

Avoid corrosive atmosphere during usage and storage.

### 3.7 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/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

Typ. forward current	tp temperature	L90 / B10	L90 / B50	L80 / B10	L80 / B50	L70 / B10	L70 / B50
500 mA	75 °C	> 75k h	> 75k h	> 75k h	> 75k h	> 75k h	> 75k h
	85 °C	> 75k h	> 75k h	> 75k h	> 75k h	> 75k h	> 75k h

L00C03 > 102k h. At tp rated and I rated, based on 10 switching cycles per day.

### 4.3 Switching capability

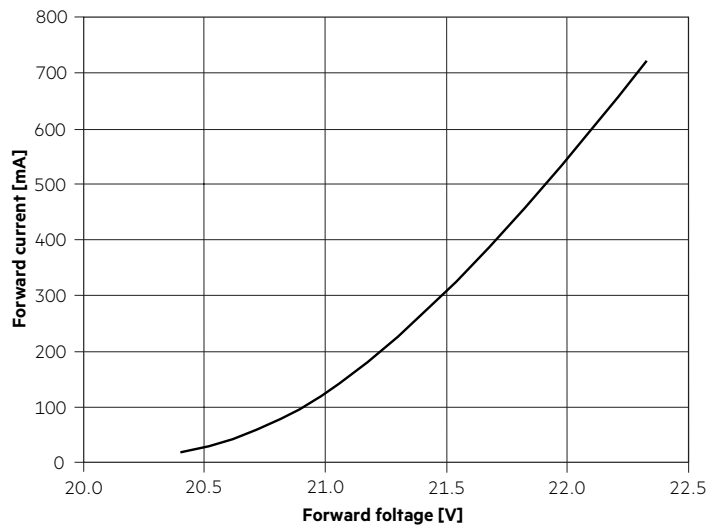
100,000 cycles

Tridonic test according to IEC 62717 Cl 10.3.3  
30 s on / 30 s off at I<sub>max</sub>

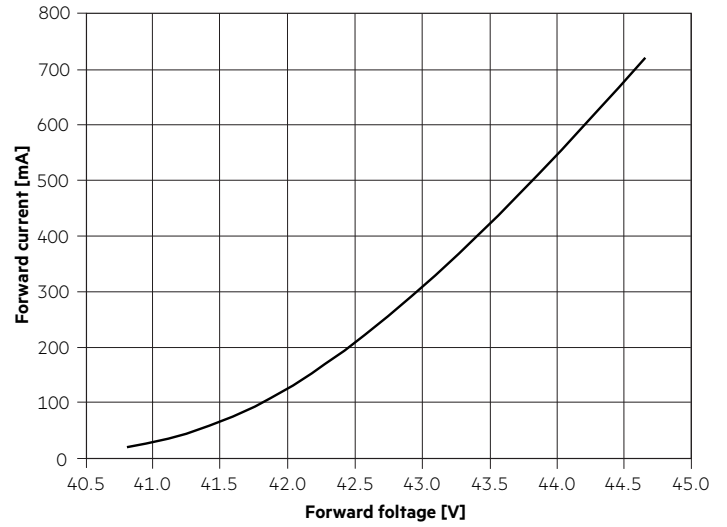
## 5. Electrical values

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

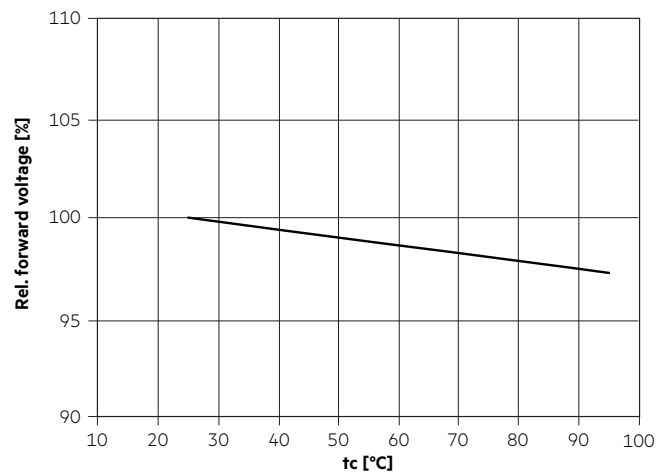
RLE 4x8 2000lm xxx MP ADV2 OTD



RLE 4x16 4000lm xxx MP ADV2 OTD



### 5.2 Forward voltage vs. tc temperature



The diagrams are based on statistic values.

The real values can be different.

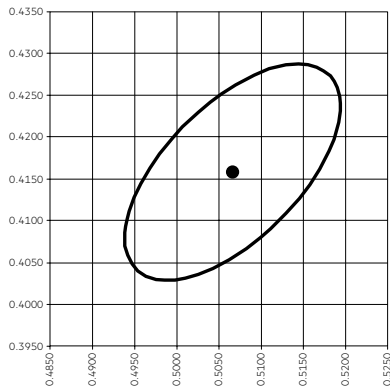
## 6. Photometric characteristics

### 6.1 Coordinates and tolerances according to CIE 1931

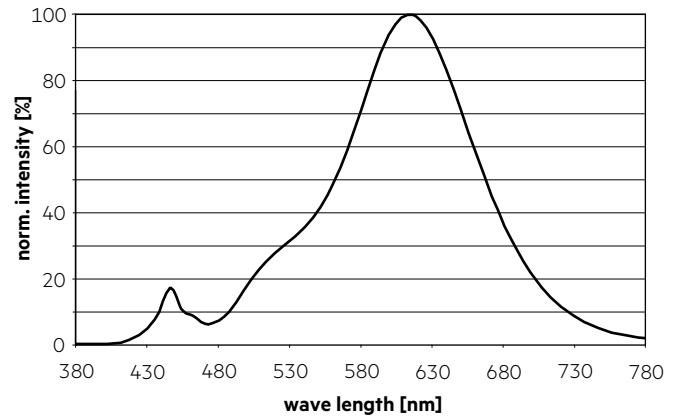
The specified colour coordinates are integral measured by current impulse of 220 mA and a duration of 100 ms.  
 The ambient temperature of the measurement is  $t_a = 25^\circ\text{C}$ .  
 The measurement tolerance of the colour coordinates are  $\pm 0.01$ .

#### 2,200 K

	x0	y0
Centre	0.5066	0.4158

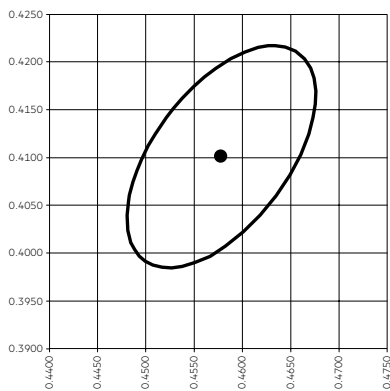


— MacAdam Ellipse: 3SDCM

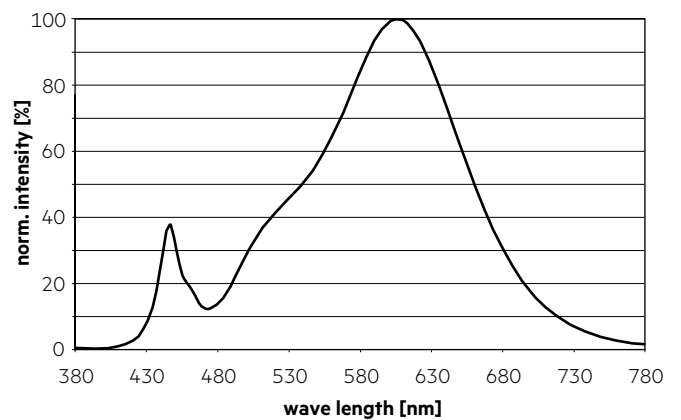


#### 2,700 K

	x0	y0
Centre	0.4578	0.4101

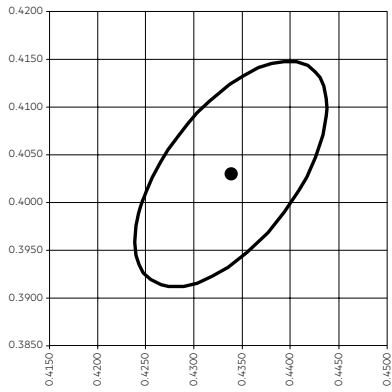


— MacAdam Ellipse: 3SDCM

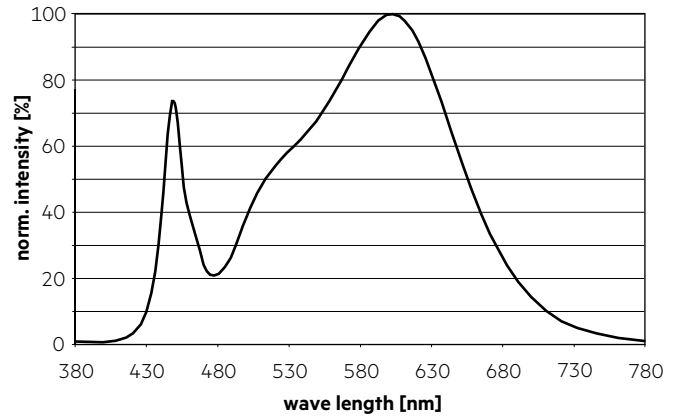


**3,000 K**

	x0	y0
Centre	0.4338	0.4030

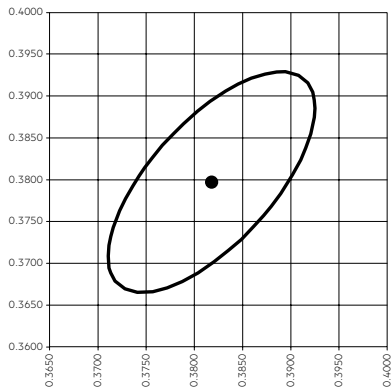


— MacAdam Ellipse: 3SDCM

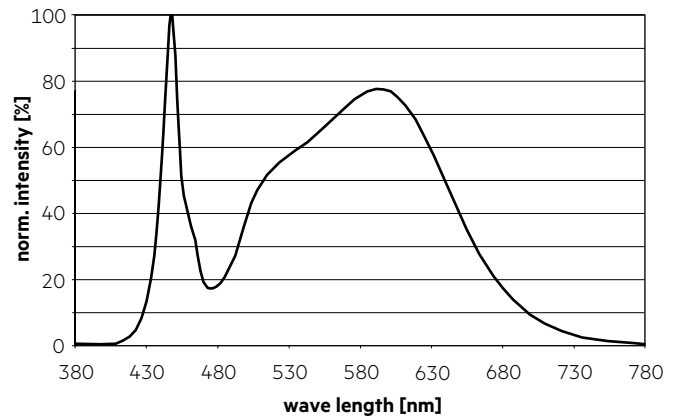


**4,000 K, CRI 80**

	x0	y0
Centre	0.3818	0.3797

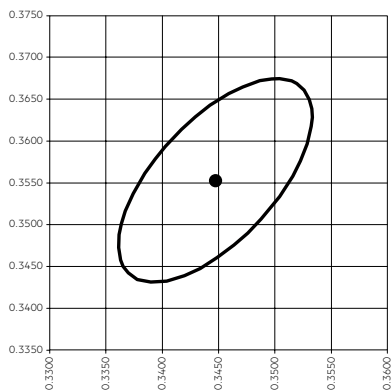


— MacAdam Ellipse: 3SDCM

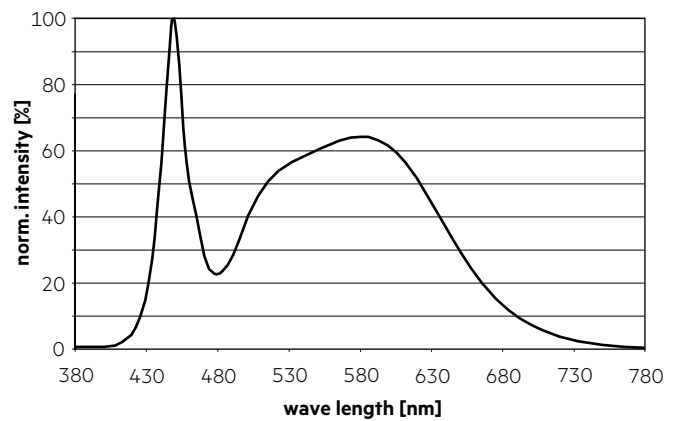


**5,000 K**

	x0	y0
Centre	0.3447	0.3533

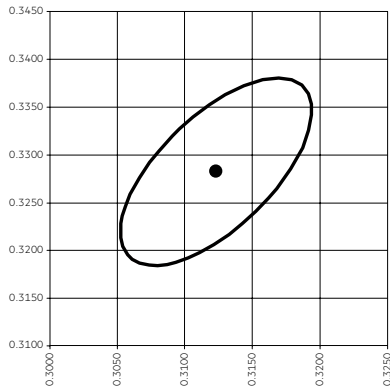


— MacAdam Ellipse: 3SDCM

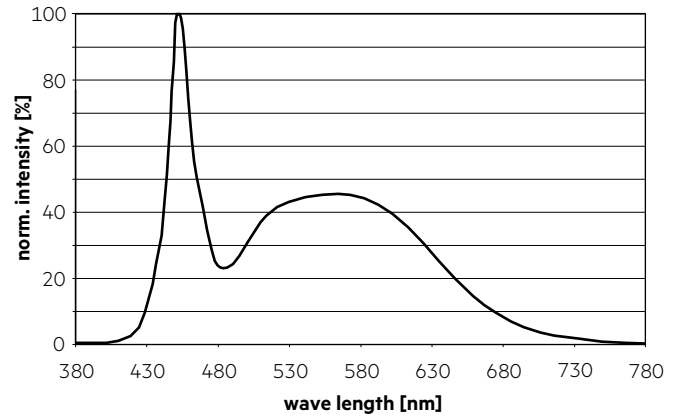


6,500 K

	x0	y0
Centre	0.3123	0.3282

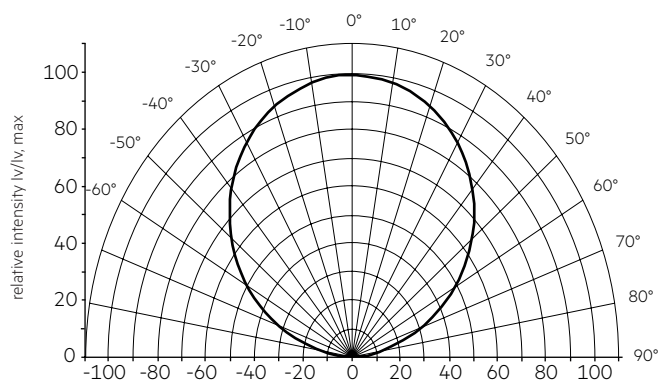


— MacAdam Ellipse: 3SDCM



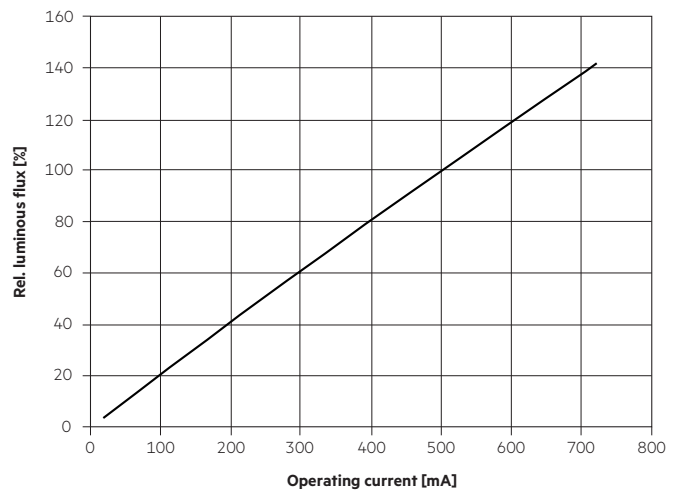
6.2 Light distribution

RLE ADV2 modules are designed to be compatible with x16 lenses (e.g. LEDiL STRADELLA 16). This allows multiple light distributions.



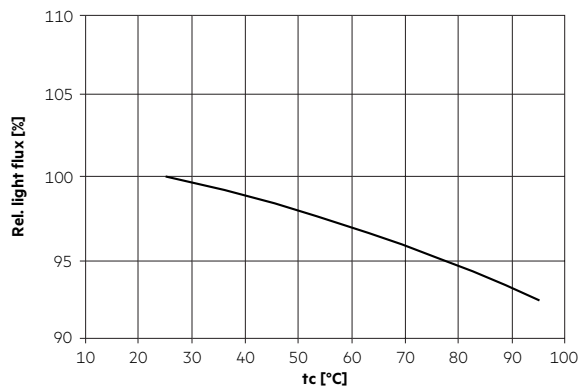
**!** The colour temperature is measured integral over the complete module. The single LED light points can have deviations in the colour coordinates within MacAdam 5.

6.4 Relative luminous flux vs. operating current



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

6.3 Relative luminous flux vs. tc temperature



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.