

**Module RLE 3x8 EXC3 OTD new variant**

Modules RLE excite



RLE 3x8 6000lm HP HE EXC3 OTD

**Product description**

- \_ High efficiency outdoor modules
- \_ Suitable for harsh and humid outdoor conditions
- \_ Tested acc. to salt spray test (IEC 60068-2-52) and harmful gas test (GR-1217-CORE)
- \_ Huge performance temperature range from -40 ... +95 °C
- \_ Surge capability (+/- to earth) 6 kV with Tridonic Outdoor LED driver
- \_ For use with IP6x lenses (e.g. LEDiL STRADA-IP-24)
- \_ Push-in terminals for simple and quick wiring
- \_ HE ... High Efficiency, NM ... Nominal Mode, HO ... High Output
- \_ Long lifetime up to 102,000 hours
- \_ 8 years guarantee (conditions at <https://www.tridonic.com/en/int/services/manufacturer-guarantee-conditions>)

**Optical properties**

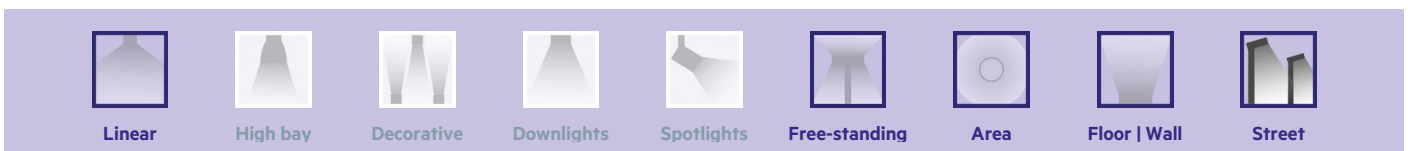
- \_ Colour temperatures 2,200 K, 2,700 K, 3,000 K, 3,500 K, 4,000 K and 5,000 K
- \_ Efficacy of the LED module up to 207 lm/W
- \_ Efficacy of the LED module 218 lm/W at 4,000 K, Irated and tp = 25 °C
- \_ Colour rendering index CRI > 70
- \_ Small luminous flux tolerances

**Mechanical properties**

- \_ Module dimension 47 x 148 mm
- \_ Installation of the module together with lens in the luminaire by means of an M3 screw

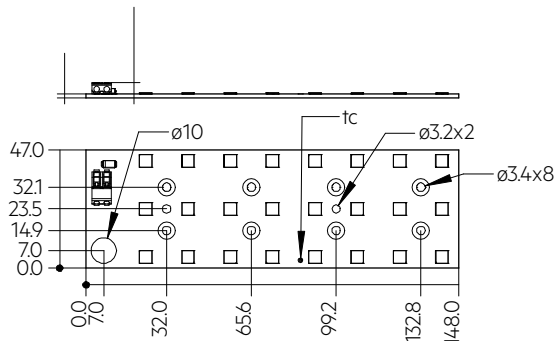
**Website**

<http://www.tridonic.com/28006229>



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RLE 3x8 6000lm HP HE EXC3 OTD

Ordering data

Type	Article number	Colour temperature	Packaging, carton	Weight per pc.
RLE 3x8 6000lm 722 HP HE EXC3 OTD	28006229	2,200 K	80 pc(s).	0.033 kg
RLE 3x8 6000lm 727 HP HE EXC3 OTD	28006230	2,700 K	80 pc(s).	0.033 kg
RLE 3x8 6000lm 730 HP HE EXC3 OTD	28006232	3,000 K	80 pc(s).	0.033 kg
RLE 3x8 6000lm 735 HP HE EXC3 OTD	28006387	3,500 K	80 pc(s).	0.033 kg
RLE 3x8 6000lm 740 HP HE EXC3 OTD	28006234	4,000 K	80 pc(s).	0.033 kg
RLE 3x8 6000lm 750 HP HE EXC3 OTD	28006236	5,000 K	80 pc(s).	0.033 kg
RLE 3x8 6000lm 822 HP HE EXC3 OTD	28006388	2,200 K	80 pc(s).	0.033 kg
RLE 3x8 6000lm 827 HP HE EXC3 OTD	28006389	2,700 K	80 pc(s).	0.033 kg
RLE 3x8 6000lm 830 HP HE EXC3 OTD	28006390	3,000 K	80 pc(s).	0.033 kg
RLE 3x8 6000lm 835 HP HE EXC3 OTD	28006391	3,500 K	80 pc(s).	0.033 kg
RLE 3x8 6000lm 840 HP HE EXC3 OTD	28006392	4,000 K	80 pc(s).	0.033 kg
RLE 3x8 6000lm 850 HP HE EXC3 OTD	28006393	5,000 K	80 pc(s).	0.033 kg

Technical data

Beam characteristic	120°
Ambient temperature $t_a$	-40 ... +80 °C
$t_p$ rated	75 °C
$t_c$	95 °C
$I_{rated}$	700 mA
$I_{max}$	1,800 mA
Max. permissible LF current ripple	2,000 mA
Max. permissible peak current	2,500 mA / max. 10 ms
Max. working voltage for insulation <sup>①</sup>	350 V
Insulation test voltage	1.7 kV
Colour tolerance <sup>②</sup>	3 SDCM
ESD classification	Severity level 2
Risk group (IEC 62471)	RG2 (E <sub>thr</sub> = 1055 lx, RG1 at d ≥ 80 cm)
Classification acc. to IEC 62031	Built-in
Type of protection	IP00
Lumen maintenance L70B50	102,000 h
Guarantee (conditions at <a href="http://www.tridonic.com">www.tridonic.com</a> )	8 Year(s)

Approval marks



Standards

IEC 62031, IEC 62778, IEC 62471, IEC 61000-4-2, IEC 60068-2-52, UL 8750, GR-1217-CORE

## Specific technical data

Type	Article number	Colour temperature	Photometric code	Useful luminous flux at $t_p = 25^\circ\text{C}$	Expected luminous flux at $t_p$ rated	Typ. forward current	Min. forward voltage at $t_p$ rated	Max. forward voltage at $t_p = 25^\circ\text{C}$	Power consumption $P_{on}$ at $t_p = 25^\circ\text{C}$	Efficacy of the module at $t_p = 25^\circ\text{C}$	Expected efficacy of the module at $t_p$ rated	Colour rendering index CRI
<b>Operating mode HE</b>												
RLE 3x8 6000lm 722 HP HE EXC3 OTD	28006229	2,200 K	722/359	-	3,042 lm	400 mA	41.3 V	46.2 V	-	-	178 lm/W	>70
RLE 3x8 6000lm 727 HP HE EXC3 OTD	28006230	2,700 K	727/359	-	3,360 lm	400 mA	41.3 V	46.2 V	-	-	197 lm/W	>70
RLE 3x8 6000lm 730 HP HE EXC3 OTD	28006232	3,000 K	730/359	-	3,627 lm	400 mA	41.3 V	46.2 V	-	-	212 lm/W	>70
RLE 3x8 6000lm 735 HP HE EXC3 OTD	28006387	3,500 K	735/359	-	3,678 lm	400 mA	41.3 V	46.2 V	-	-	215 lm/W	>70
RLE 3x8 6000lm 740 HP HE EXC3 OTD	28006234	4,000 K	740/359	-	3,761 lm	400 mA	41.3 V	46.2 V	-	-	220 lm/W	>70
RLE 3x8 6000lm 750 HP HE EXC3 OTD	28006236	5,000 K	750/359	-	3,778 lm	400 mA	41.3 V	46.2 V	-	-	221 lm/W	>70
RLE 3x8 6000lm 822 HP HE EXC3 OTD	28006388	2,200 K	822/359	-	2,875 lm	400 mA	41.3 V	46.2 V	-	-	168 lm/W	>80
RLE 3x8 6000lm 827 HP HE EXC3 OTD	28006389	2,700 K	827/359	-	3,076 lm	400 mA	41.3 V	46.2 V	-	-	180 lm/W	>80
RLE 3x8 6000lm 830 HP HE EXC3 OTD	28006390	3,000 K	830/359	-	3,226 lm	400 mA	41.3 V	46.2 V	-	-	189 lm/W	>80
RLE 3x8 6000lm 835 HP HE EXC3 OTD	28006391	3,500 K	835/359	-	3,276 lm	400 mA	41.3 V	46.2 V	-	-	192 lm/W	>80
RLE 3x8 6000lm 840 HP HE EXC3 OTD	28006392	4,000 K	840/359	-	3,393 lm	400 mA	41.3 V	46.2 V	-	-	199 lm/W	>80
RLE 3x8 6000lm 850 HP HE EXC3 OTD	28006393	5,000 K	850/359	-	3,410 lm	400 mA	41.3 V	46.2 V	-	-	200 lm/W	>80
<b>Operating mode NM</b>												
RLE 3x8 6000lm 722 HP HE EXC3 OTD	28006229	2,200 K	722/359	5,520 lm	5,279 lm	700 mA	42.6 V	47.5 V	31.3 W	176 lm/W	172 lm/W	>70
RLE 3x8 6000lm 727 HP HE EXC3 OTD	28006230	2,700 K	727/359	6,000 lm	5,830 lm	700 mA	42.6 V	47.5 V	31.3 W	192 lm/W	190 lm/W	>70
RLE 3x8 6000lm 730 HP HE EXC3 OTD	28006232	3,000 K	730/359	6,600 lm	6,294 lm	700 mA	42.6 V	47.5 V	31.3 W	211 lm/W	205 lm/W	>70
RLE 3x8 6000lm 735 HP HE EXC3 OTD	28006387	3,500 K	735/359	6,810 lm	6,381 lm	700 mA	42.6 V	47.5 V	31.3 W	218 lm/W	208 lm/W	>70
RLE 3x8 6000lm 740 HP HE EXC3 OTD	28006234	4,000 K	740/359	6,720 lm	6,526 lm	700 mA	42.6 V	47.5 V	31.3 W	215 lm/W	212 lm/W	>70
RLE 3x8 6000lm 750 HP HE EXC3 OTD	28006236	5,000 K	750/359	6,730 lm	6,555 lm	700 mA	42.6 V	47.5 V	31.3 W	215 lm/W	213 lm/W	>70
RLE 3x8 6000lm 822 HP HE EXC3 OTD	28006388	2,200 K	822/359	5,322 lm	4,989 lm	700 mA	42.6 V	47.5 V	31.3 W	170 lm/W	162 lm/W	>80
RLE 3x8 6000lm 827 HP HE EXC3 OTD	28006389	2,700 K	827/359	5,695 lm	5,337 lm	700 mA	42.6 V	47.5 V	31.3 W	182 lm/W	174 lm/W	>80
RLE 3x8 6000lm 830 HP HE EXC3 OTD	28006390	3,000 K	830/359	5,973 lm	5,598 lm	700 mA	42.6 V	47.5 V	31.3 W	191 lm/W	182 lm/W	>80
RLE 3x8 6000lm 835 HP HE EXC3 OTD	28006391	3,500 K	835/359	6,065 lm	5,685 lm	700 mA	42.6 V	47.5 V	31.3 W	194 lm/W	185 lm/W	>80
RLE 3x8 6000lm 840 HP HE EXC3 OTD	28006392	4,000 K	840/359	6,282 lm	5,888 lm	700 mA	42.6 V	47.5 V	31.3 W	201 lm/W	191 lm/W	>80
RLE 3x8 6000lm 850 HP HE EXC3 OTD	28006393	5,000 K	850/359	6,315 lm	5,917 lm	700 mA	42.6 V	47.5 V	31.3 W	202 lm/W	192 lm/W	>80
<b>Operating mode HO</b>												
RLE 3x8 6000lm 722 HP HE EXC3 OTD	28006229	2,200 K	722/359	-	10,793 lm	1,500 mA	45.2 V	50.2 V	-	-	154 lm/W	>70
RLE 3x8 6000lm 727 HP HE EXC3 OTD	28006230	2,700 K	727/359	-	11,919 lm	1,500 mA	45.2 V	50.2 V	-	-	170 lm/W	>70
RLE 3x8 6000lm 730 HP HE EXC3 OTD	28006232	3,000 K	730/359	-	12,868 lm	1,500 mA	45.2 V	50.2 V	-	-	184 lm/W	>70
RLE 3x8 6000lm 735 HP HE EXC3 OTD	28006387	3,500 K	735/359	-	13,046 lm	1,500 mA	45.2 V	50.2 V	-	-	186 lm/W	>70
RLE 3x8 6000lm 740 HP HE EXC3 OTD	28006234	4,000 K	740/359	-	13,343 lm	1,500 mA	45.2 V	50.2 V	-	-	191 lm/W	>70
RLE 3x8 6000lm 750 HP HE EXC3 OTD	28006236	5,000 K	750/359	-	13,402 lm	1,500 mA	45.2 V	50.2 V	-	-	192 lm/W	>70
RLE 3x8 6000lm 822 HP HE EXC3 OTD	28006388	2,200 K	822/359	-	10,200 lm	1,500 mA	45.2 V	50.2 V	-	-	146 lm/W	>80
RLE 3x8 6000lm 827 HP HE EXC3 OTD	28006389	2,700 K	827/359	-	10,911 lm	1,500 mA	45.2 V	50.2 V	-	-	156 lm/W	>80
RLE 3x8 6000lm 830 HP HE EXC3 OTD	28006390	3,000 K	830/359	-	11,445 lm	1,500 mA	45.2 V	50.2 V	-	-	164 lm/W	>80
RLE 3x8 6000lm 835 HP HE EXC3 OTD	28006391	3,500 K	835/359	-	11,623 lm	1,500 mA	45.2 V	50.2 V	-	-	166 lm/W	>80
RLE 3x8 6000lm 840 HP HE EXC3 OTD	28006392	4,000 K	840/359	-	12,038 lm	1,500 mA	45.2 V	50.2 V	-	-	172 lm/W	>80
RLE 3x8 6000lm 850 HP HE EXC3 OTD	28006393	5,000 K	850/359	-	12,097 lm	1,500 mA	45.2 V	50.2 V	-	-	173 lm/W	>80

① If mounted with M3 countersunk screws.

② Integral measurement over the complete module.

③ The detailed explanation, see data sheet section 1.1.

④ Tolerance of useful light flux - 0 % / + 15 %. Measurement uncertainty  $\pm 10\%$ .

⑤ Measurement uncertainty  $\pm 10\%$ . Based on calculation.

⑥ Tolerance of power consumption  $P_{on} \pm 10\%$ . Measurement uncertainty  $\pm 5\%$ .

## 1. Standards

EC 62031  
IEC 62778  
IEC 62471  
IEC 61000-4-2  
IEC 60068-2-52  
UL 8750 (for dry and damp locations)  
GR-1217-CORE

### 1.1 Photometric code

Key for photometric code, e. g. 830 / 579

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
RLE 3x8 6000lm 722 HP HE EXC3 OTD	2,200 K	700 mA	C	32 kWh / 1,000 h
RLE 3x8 6000lm 727 HP HE EXC3 OTD	2,700 K	700 mA	C	32 kWh / 1,000 h
RLE 3x8 6000lm 730 HP HE EXC3 OTD	3,000 K	700 mA	B	32 kWh / 1,000 h
RLE 3x8 6000lm 735 HP HE EXC3 OTD	3,500 K	700 mA	B	32 kWh / 1,000 h
RLE 3x8 6000lm 740 HP HE EXC3 OTD	4,000 K	700 mA	B	32 kWh / 1,000 h
RLE 3x8 6000lm 750 HP HE EXC3 OTD	5,000 K	700 mA	B	32 kWh / 1,000 h
RLE 3x8 6000lm 822 HP HE EXC3 OTD	2,200 K	700 mA	D	32 kWh / 1,000 h
RLE 3x8 6000lm 827 HP HE EXC3 OTD	2,700 K	700 mA	C	32 kWh / 1,000 h
RLE 3x8 6000lm 830 HP HE EXC3 OTD	3,000 K	700 mA	C	32 kWh / 1,000 h
RLE 3x8 6000lm 835 HP HE EXC3 OTD	3,500 K	700 mA	C	32 kWh / 1,000 h
RLE 3x8 6000lm 840 HP HE EXC3 OTD	4,000 K	700 mA	B	32 kWh / 1,000 h
RLE 3x8 6000lm 850 HP HE EXC3 OTD	5,000 K	700 mA	B	32 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 3x8 6000lm HP HE EXC3 OTD

ta	tp	Forward current	Rth, hs-a	Cooling area
25 °C	75 °C	400 mA	6.69 K/W	100 cm <sup>2</sup>
25 °C	75 °C	700 mA	3.46 K/W	193 cm <sup>2</sup>
25 °C	75 °C	1500 mA	1.37 K/W	485 cm <sup>2</sup>
35 °C	75 °C	400 mA	5.35 K/W	125 cm <sup>2</sup>
35 °C	75 °C	700 mA	2.77 K/W	241 cm <sup>2</sup>
35 °C	75 °C	1500 mA	1.10 K/W	607 cm <sup>2</sup>
40 °C	75 °C	400 mA	4.68 K/W	143 cm <sup>2</sup>
40 °C	75 °C	700 mA	2.42 K/W	275 cm <sup>2</sup>
40 °C	75 °C	1500 mA	0.96 K/W	695 cm <sup>2</sup>
45 °C	75 °C	400 mA	4.01 K/W	166 cm <sup>2</sup>
45 °C	75 °C	700 mA	2.07 K/W	322 cm <sup>2</sup>
45 °C	75 °C	1500 mA	0.82 K/W	812 cm <sup>2</sup>
50 °C	75 °C	400 mA	3.34 K/W	200 cm <sup>2</sup>
50 °C	75 °C	700 mA	1.73 K/W	386 cm <sup>2</sup>
50 °C	75 °C	1500 mA	0.68 K/W	977 cm <sup>2</sup>
55 °C	75 °C	400 mA	2.67 K/W	250 cm <sup>2</sup>
55 °C	75 °C	700 mA	1.38 K/W	483 cm <sup>2</sup>
55 °C	75 °C	1500 mA	0.54 K/W	1225 cm <sup>2</sup>
60 °C	75 °C	400 mA	2.00 K/W	333 cm <sup>2</sup>
60 °C	75 °C	700 mA	1.03 K/W	646 cm <sup>2</sup>
60 °C	75 °C	1500 mA	0.41 K/W	1643 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 1.8 A.

If RLE modules are wired in parallel and a wire breaks or a complete module fails then the current passing through the other module increases. This may reduce its life considerably. In addition there can be slight differences in light output caused by tolerances.

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 350 V if mounted with M3 countersunk screws 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 350 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.

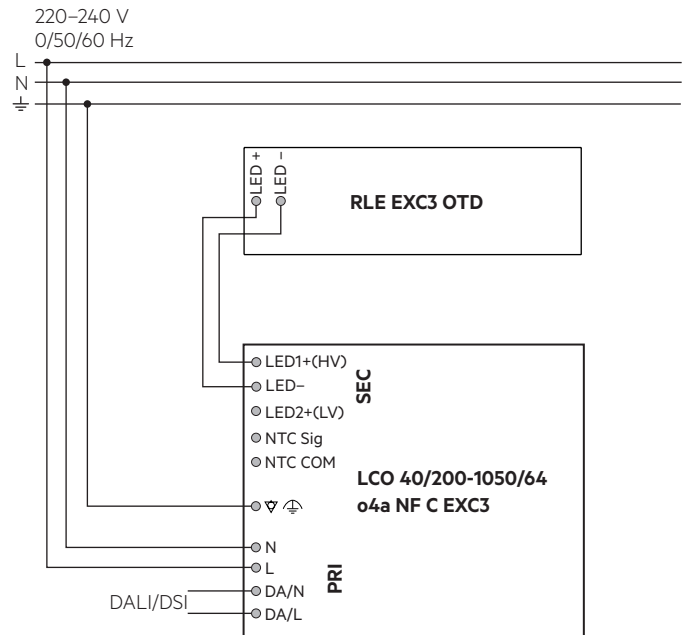
#### 3.2 Integrated protection

The basic protection level consists of protection against reverse polarity.

#### 3.3 Wiring

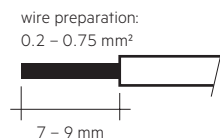


#### 3.4 Wiring examples



### 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 countersunk screws according to DIN 965 / ISO 7046.



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 ture	L90 / B10	L90 / B50	L80 / B10	L80 / B50	L70 / B10	L70 / B50
400 mA	55 °C	>102k h	>102k h	>102k h	>102k h	>102k h	>102k h
	60 °C	>102k h	>102k h	>102k h	>102k h	>102k h	>102k h
	65 °C	>102k h	>102k h	>102k h	>102k h	>102k h	>102k h
	70 °C	>102k h	>102k h	>102k h	>102k h	>102k h	>102k h
	75 °C	101k h	>102k h	>102k h	>102k h	>102k h	>102k h
	80 °C	100k h	>102k h	>102k h	>102k h	>102k h	>102k h
	85 °C	100k h	>102k h	>102k h	>102k h	>102k h	>102k h
	90 °C	86k h	91k h	>102k h	>102k h	>102k h	>102k h
	95 °C	75k h	78k h	>102k h	>102k h	>102k h	>102k h
	1,500 mA	55 °C	>102k h	>102k h	>102k h	>102k h	>102k h
60 °C		>102k h	>102k h	>102k h	>102k h	>102k h	>102k h
65 °C		>102k h	>102k h	>102k h	>102k h	>102k h	>102k h
70 °C		>102k h	>102k h	>102k h	>102k h	>102k h	>102k h
75 °C		101k h	>102k h	>102k h	>102k h	>102k h	>102k h
80 °C		100k h	>102k h	>102k h	>102k h	>102k h	>102k h
85 °C		100k h	>102k h	>102k h	>102k h	>102k h	>102k h
90 °C		86k h	91k h	>102k h	>102k h	>102k h	>102k h
95 °C		75k h	78k h	>102k h	>102k h	>102k h	>102k h

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

### 4.3 Switching capability

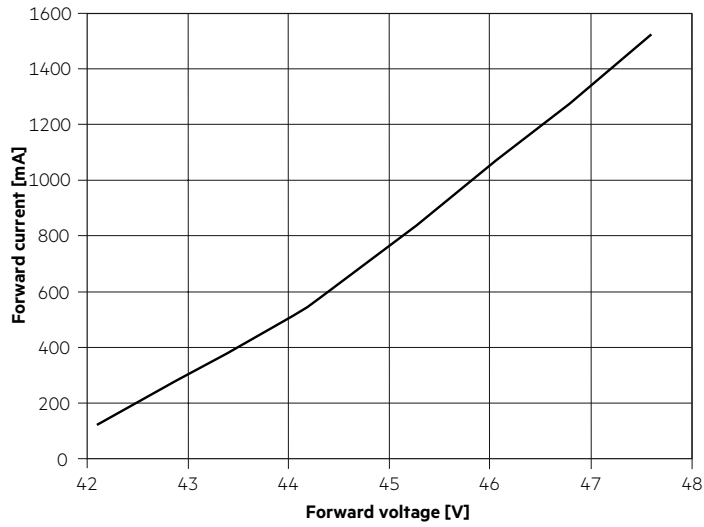
100,000 cycles

Test according to IEC 62717 Cl 10.3.3

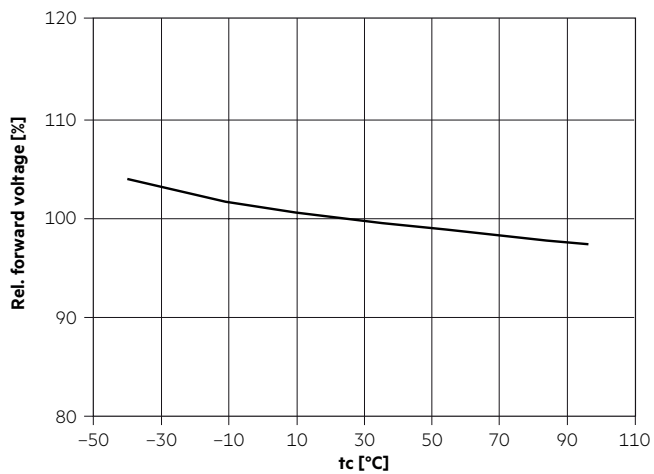
30 s on / 30 s off at a forward current of 1000 mA

## 5. Electrical values

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



### 5.2 Forward voltage vs. tc temperature



The diagrams are based on statistic values.

The real values can be different.

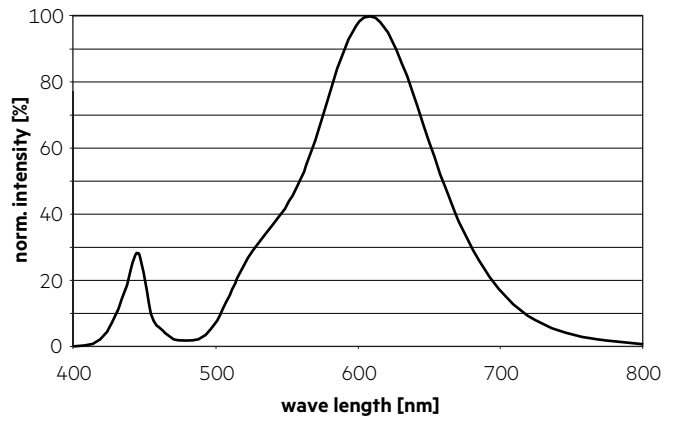
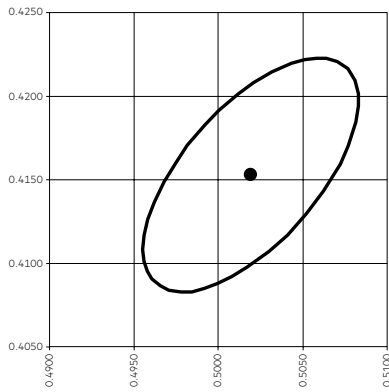
## 6. Photometric characteristics

### 6.1 Coordinates and tolerances according to CIE 1931

The specified colour coordinates are integral measured by current impulse of 540 mA and a duration of 100 ms.  
 The ambient temperature of the measurement is 25 °C.  
 The measurement tolerance of the colour coordinates are  $\pm 0.01$ .

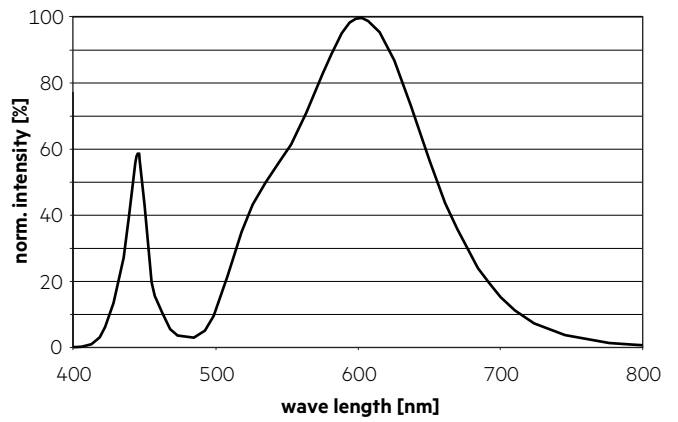
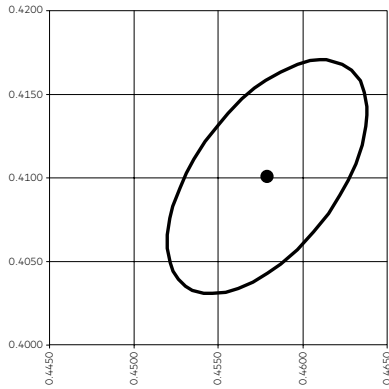
#### 2,200 K, CRI 70

	x0	y0
Centre	0.5020	0.4156



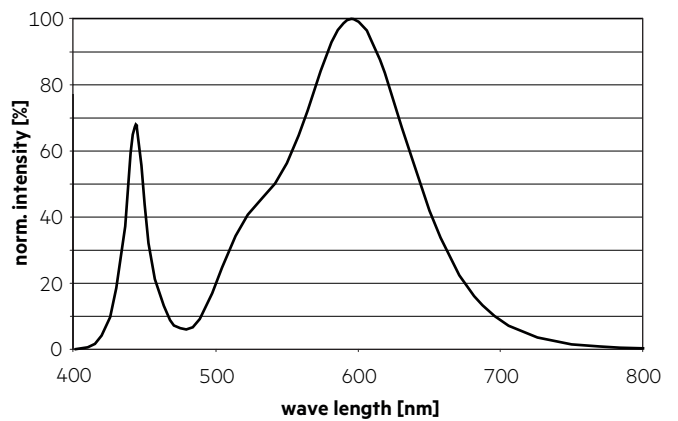
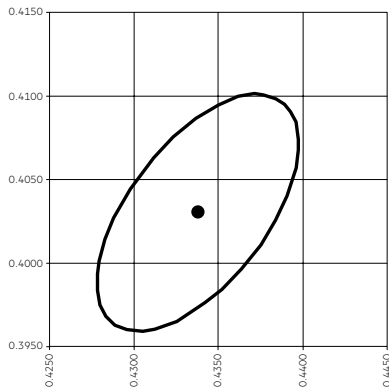
#### 2,700 K, CRI 70

	x0	y0
Centre	0.4577	0.4098



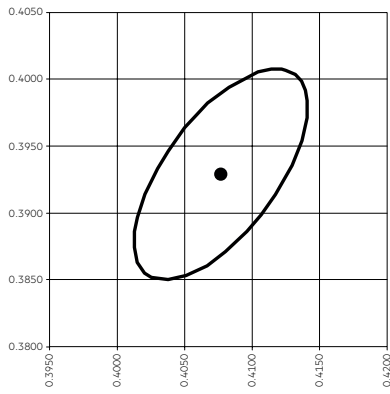
#### 3,000 K, CRI 70

	x0	y0
Centre	0.4339	0.4032

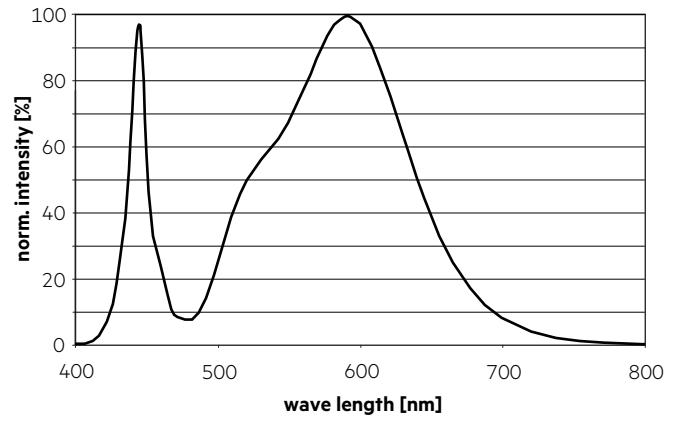


**3,500 K, CRI 70**

	x0	y0
Centre	0.4077	0.3929

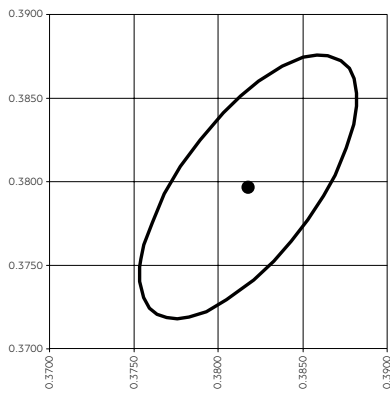


— MacAdam Ellipse: 3SDCM

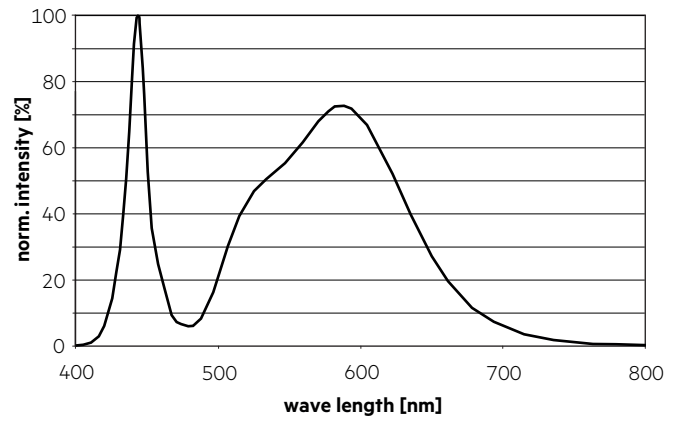


**4,000 K, CRI 70**

	x0	y0
Centre	0.3818	0.3796

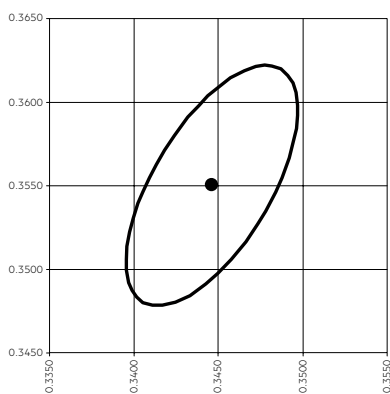


— MacAdam Ellipse: 3SDCM

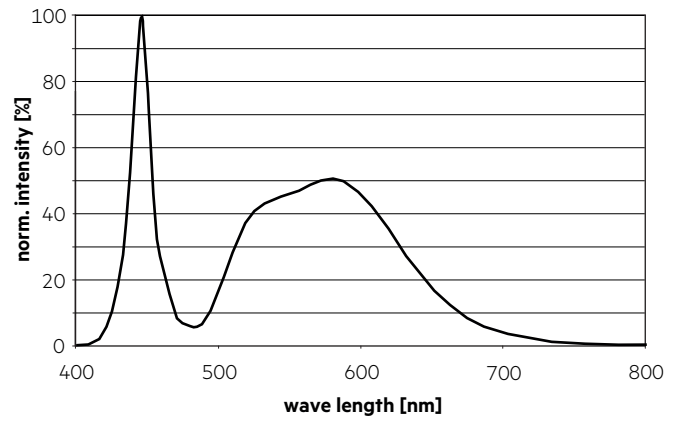


**5,000 K, CRI 70**

	x0	y0
Centre	0.3446	0.3551

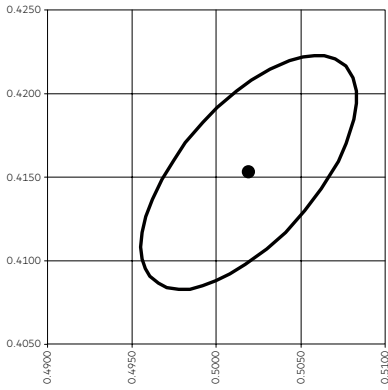


— MacAdam Ellipse: 3SDCM

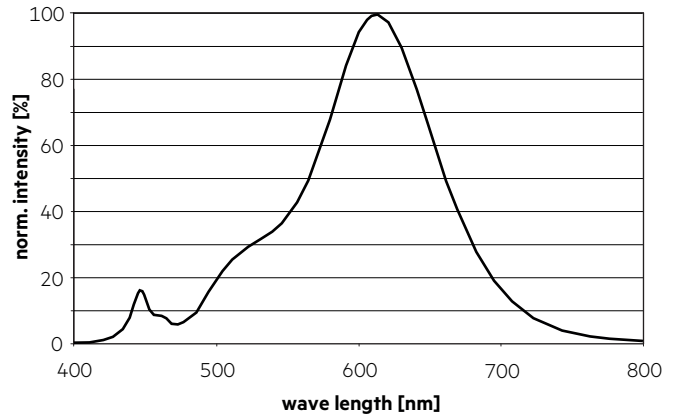


**2,200 K, CRI 80**

	x0	y0
Centre	0.5020	0.4156

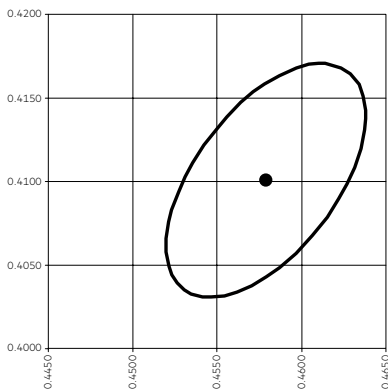


— MacAdam Ellipse: 3SDCM

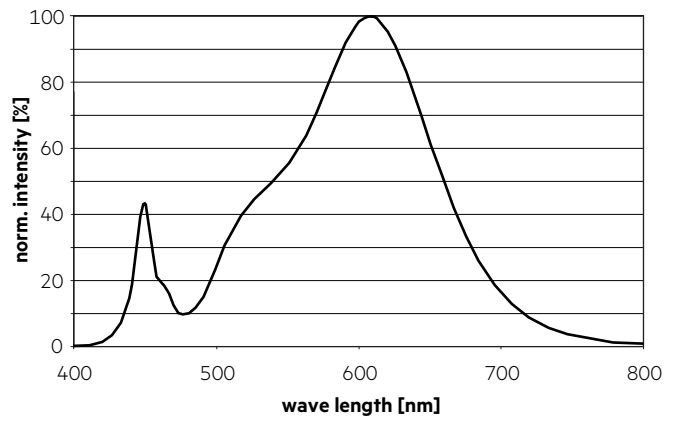


**2,700 K, CRI 80**

	x0	y0
Centre	0.4577	0.4098

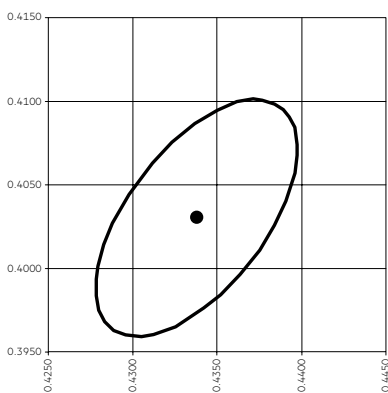


— MacAdam Ellipse: 3SDCM

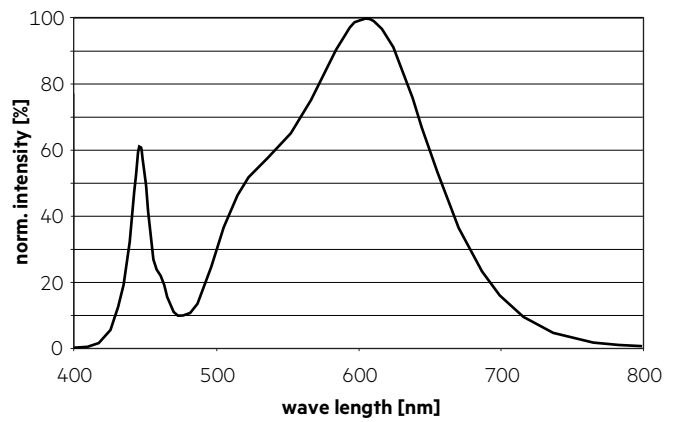


**3,000 K, CRI 80**

	x0	y0
Centre	0.4339	0.4032

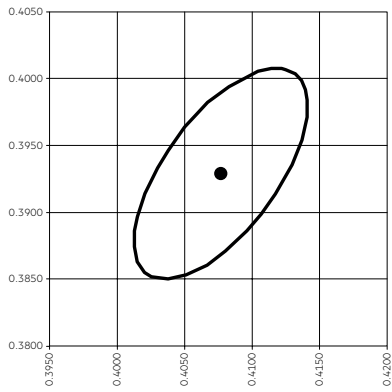


— MacAdam Ellipse: 3SDCM

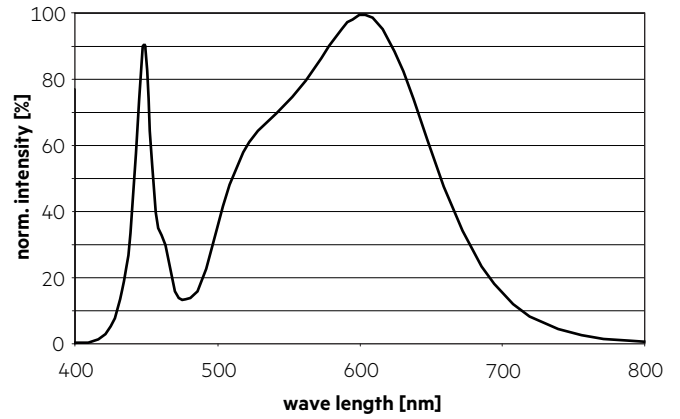


**3,500 K, CRI 80**

	x0	y0
Centre	0.4077	0.3929

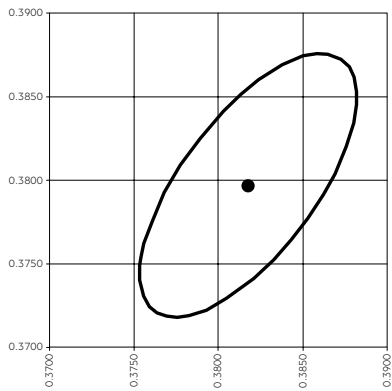


— MacAdam Ellipse: 3SDCM

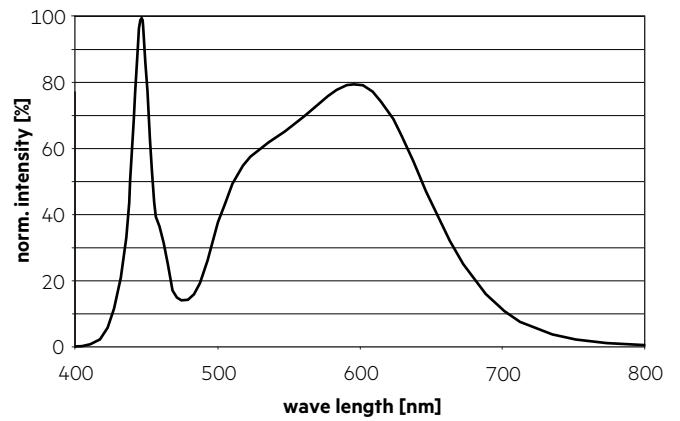


**4,000 K, CRI 80**

	x0	y0
Centre	0.3818	0.3796

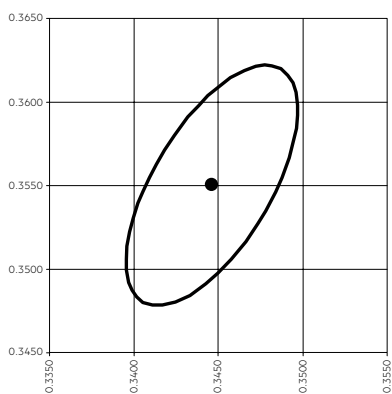


— MacAdam Ellipse: 3SDCM

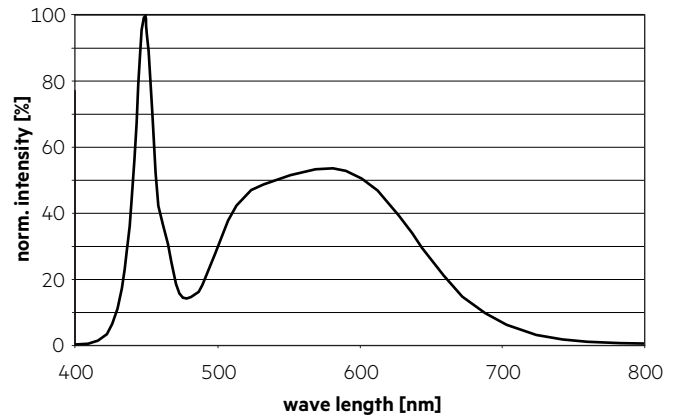


**5,000 K, CRI 80**

	x0	y0
Centre	0.3446	0.3551



— MacAdam Ellipse: 3SDCM



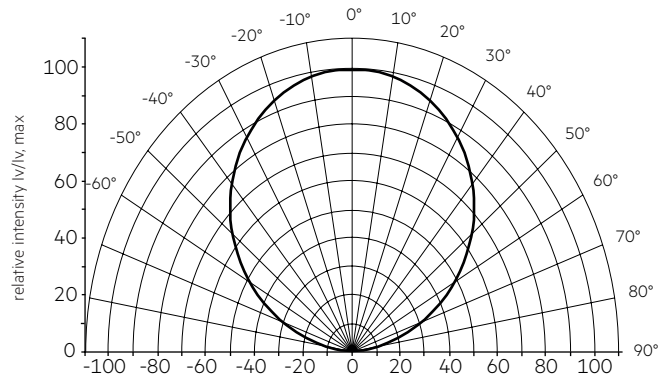
6.2 Spectral G-Index

CCT	CRI	G-Index
2,200 K	70	2.3
2,700 K	70	1.7
3,000 K	70	1.4
3,500 K	70	1.3
4,000 K	70	1.0
5,000 K	70	0.7
2,200 K	80	2.2
2,700 K	80	1.7
3,000 K	80	1.5
3,500 K	80	1.3
4,000 K	80	1.0
5,000 K	80	0.7

Based on typical spectral distribution measured at 25°C and Irated.

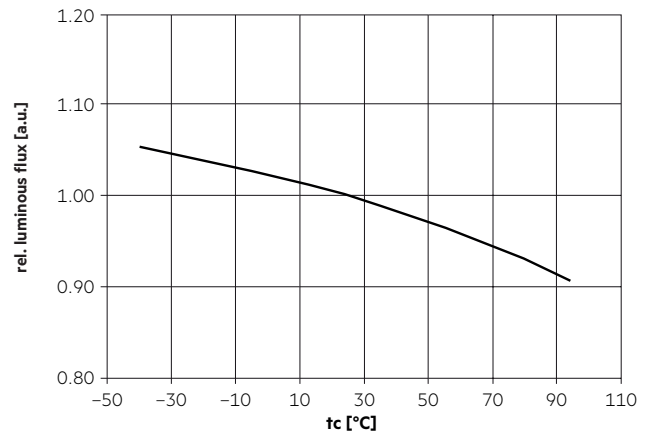
6.3 Light distribution

RLE 3x8 6000lm HP HE EXC3 OTD modules are designed to be compatible with IP6x lenses (e.g. LEDiL Strada-IP-24). This allows multiple light distributions.

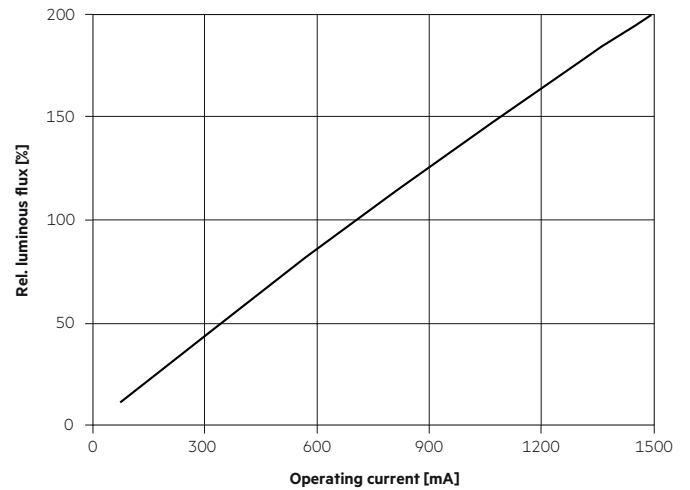


**!** The colour temperature is measured integral over the complete module. The single LED light points can have deviations in the colour coordinates within MacAdam 4.

6.4 Relative luminous flux vs. tc temperature



6.5 Relative luminous flux vs. operating current



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

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.