

Module SLE G6 SNC

Modules SLE ESSENCE

Product description

- For spotlights and downlights
- Luminous flux up to 5,530 lm at $t_p = 65^\circ\text{C}$
- High efficacy up to 160 lm/W for the LED module at $t_p = 25^\circ\text{C}$
- High system efficacy up to 136 lm/W at $t_p = 65^\circ\text{C}$
- High colour consistency (MacAdam 3)
- Small LES (light emitting surface) diameter enables small beam angle for spotlights
- Excellent thermal management by COB technology
- Uniform radiation with Dam&Fill technology
- Fixing holes for M3 screws
- Integrated LED module
- Cooling required
- Flexible operating modes
- 5-year guarantee



Standards, page 5

Colour temperatures and tolerances, page 10



LES17



LES15



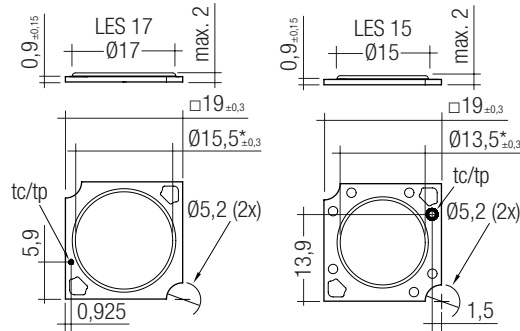


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Technical data

Beam characteristic	115°
Ambient temperature range	-25 ... +50 °C
tp rated	65 °C
tc ^①	Up to 100 °C
Max. allowed Silicon temperature	150 °C
Irated for LES15	500 mA
Irated for LES17	900 mA
Imax for LES15	900 mA
Imax for LES17	1,200 mA
Max. DC forward current for LES15 ^②	1,200 mA
Max. DC forward current for LES17 ^②	1,440 mA
Max. permissible LF current ripple for LES15	1,200 mA
Max. permissible LF current ripple for LES17	1,440 mA
Max. permissible peak current for LES15	1,800 mA / max. 8 ms
Max. permissible peak current for LES17	2,160 mA / max. 8 ms
Max. working voltage for insulation for LES15 ^③	50 V
Max. working voltage for insulation for LES17 ^③	50 V
Insulation test voltage for LES15	0.5 kV
Insulation test voltage for LES17	0.5 kV
CTI of the printed circuit board	< 600 V
ESD classification	Severity level 4
Risk group (EN 62471:2008) for LES15	RG1
Risk group (EN 62471:2008) for LES17	RG1
Type of protection	IPO0



Dimensions in mm, *optical LES

Ordering data

Type	Article number	Colour temperature	Colour rendering index CRI	Connection cable	Packaging	Weight per pc.
SLE G6 15mm 3000lm 830 R SNC	28001684	3,000 K	> 80	no	25 pc(s).	0.001 kg
SLE G6 15mm 3000lm 840 R SNC	28001685	4,000 K	> 80	no	25 pc(s).	0.001 kg
SLE G6 15mm 3000lm 930 R SNC	28001686	3,000 K	> 90	no	25 pc(s).	0.001 kg
SLE G6 15mm 3000lm 935 R SNC	28002040	3,500 K	> 90	no	25 pc(s).	0.001 kg
SLE G6 15mm 3000lm 940 R SNC	28001687	4,000 K	> 90	no	25 pc(s).	0.001 kg
SLE G6 17mm 4000lm 830 R SNC	28001688	3,000 K	> 80	no	25 pc(s).	0.001 kg
SLE G6 17mm 4000lm 840 R SNC	28001689	4,000 K	> 80	no	25 pc(s).	0.001 kg
SLE G6 17mm 4000lm 930 R SNC	28001690	3,000 K	> 90	no	25 pc(s).	0.001 kg
SLE G6 17mm 4000lm 935 R SNC	28002041	3,500 K	> 90	no	25 pc(s).	0.001 kg
SLE G6 17mm 4000lm 940 R SNC	28001691	4,000 K	> 90	no	25 pc(s).	0.001 kg

Specific technical data

Type ^①	Photo-metric code	Forward current	Luminous flux at tp = 25 °C ^②	Luminous flux at tp = 65 °C ^②	Power consumption ^③	Min. forward voltage at tp = 65 °C	Max. forward voltage at tp = 25 °C	Luminous efficacy module at tp = 25 °C	Luminous efficacy module at tp = 65 °C	Luminous efficacy system at tp = 65 °C ^④	Colour rendering index CRI
SLE 15mm 3000lm – Operating mode HE at 350 mA											
SLE G6 15mm 3000lm 830 SNC	830/359	350 mA	1,890 lm	1,780 lm	12.2 W	31.8 V	38.6 V	154 lm/W	146 lm/W	131 lm/W	> 80
SLE G6 15mm 3000lm 840 SNC	840/359	350 mA	1,970 lm	1,850 lm	12.2 W	31.8 V	38.6 V	160 lm/W	152 lm/W	136 lm/W	> 80
SLE G6 15mm 3000lm 930 SNC	930/359	350 mA	1,600 lm	1,510 lm	12.2 W	31.8 V	38.6 V	130 lm/W	124 lm/W	111 lm/W	> 90
SLE G6 15mm 3000lm 935 SNC	935/359	350 mA	1,670 lm	1,570 lm	12.2 W	31.8 V	38.6 V	136 lm/W	129 lm/W	116 lm/W	> 90
SLE G6 15mm 3000lm 940 SNC	940/359	350 mA	1,720 lm	1,610 lm	12.2 W	31.8 V	38.6 V	140 lm/W	132 lm/W	119 lm/W	> 90
SLE 15mm 3000lm – Operating mode NM at 500 mA											
SLE G6 15mm 3000lm 830 SNC	830/359	500 mA	2,590 lm	2,440 lm	17.8 W	32.7 V	39.7 V	144 lm/W	137 lm/W	123 lm/W	> 80
SLE G6 15mm 3000lm 840 SNC	840/359	500 mA	2,700 lm	2,540 lm	17.8 W	32.7 V	39.7 V	150 lm/W	143 lm/W	128 lm/W	> 80
SLE G6 15mm 3000lm 930 SNC	930/359	500 mA	2,200 lm	2,070 lm	17.8 W	32.7 V	39.7 V	122 lm/W	116 lm/W	105 lm/W	> 90
SLE G6 15mm 3000lm 935 SNC	935/359	500 mA	2,290 lm	2,150 lm	17.8 W	32.7 V	39.7 V	127 lm/W	121 lm/W	109 lm/W	> 90
SLE G6 15mm 3000lm 940 SNC	940/359	500 mA	2,360 lm	2,210 lm	17.8 W	32.7 V	39.7 V	131 lm/W	124 lm/W	112 lm/W	> 90
SLE 15mm 3000lm – Operating mode HO at 900 mA											
SLE G6 15mm 3000lm 830 SNC	830/359	900 mA	4,250 lm	4,000 lm	34.8 W	35.4 V	43.0 V	121 lm/W	115 lm/W	103 lm/W	> 80
SLE G6 15mm 3000lm 840 SNC	840/359	900 mA	4,430 lm	4,170 lm	34.8 W	35.4 V	43.0 V	126 lm/W	120 lm/W	108 lm/W	> 80
SLE G6 15mm 3000lm 930 SNC	930/359	900 mA	3,600 lm	3,390 lm	34.8 W	35.4 V	43.0 V	102 lm/W	97 lm/W	88 lm/W	> 90
SLE G6 15mm 3000lm 935 SNC	935/359	900 mA	3,760 lm	3,530 lm	34.8 W	35.4 V	43.0 V	107 lm/W	101 lm/W	91 lm/W	> 90
SLE G6 15mm 3000lm 940 SNC	940/359	900 mA	3,860 lm	3,630 lm	34.8 W	35.4 V	43.0 V	110 lm/W	104 lm/W	94 lm/W	> 90
SLE 17mm 4000lm – Operating mode HE at 500 mA											
SLE G6 17mm 4000lm 830 SNC	830/359	500 mA	2,690 lm	2,530 lm	17.4 W	31.8 V	38.7 V	153 lm/W	145 lm/W	131 lm/W	> 80
SLE G6 17mm 4000lm 840 SNC	840/359	500 mA	2,800 lm	2,630 lm	17.4 W	31.8 V	38.7 V	159 lm/W	151 lm/W	136 lm/W	> 80
SLE G6 17mm 4000lm 930 SNC	930/359	500 mA	2,280 lm	2,140 lm	17.4 W	31.8 V	38.7 V	130 lm/W	123 lm/W	111 lm/W	> 90
SLE G6 17mm 4000lm 935 SNC	935/359	500 mA	2,370 lm	2,230 lm	17.4 W	31.8 V	38.7 V	135 lm/W	128 lm/W	115 lm/W	> 90
SLE G6 17mm 4000lm 940 SNC	940/359	500 mA	2,440 lm	2,290 lm	17.4 W	31.8 V	38.7 V	139 lm/W	132 lm/W	118 lm/W	> 90
SLE 17mm 4000lm – Operating mode NM at 900 mA											
SLE G6 17mm 4000lm 830 SNC	830/359	900 mA	4,480 lm	4,210 lm	33.5 W	34.1 V	41.4 V	132 lm/W	126 lm/W	113 lm/W	> 80
SLE G6 17mm 4000lm 840 SNC	840/359	900 mA	4,670 lm	4,390 lm	33.5 W	34.1 V	41.4 V	138 lm/W	131 lm/W	118 lm/W	> 80
SLE G6 17mm 4000lm 930 SNC	930/359	900 mA	3,790 lm	3,570 lm	33.5 W	34.1 V	41.4 V	112 lm/W	107 lm/W	96 lm/W	> 90
SLE G6 17mm 4000lm 935 SNC	935/359	900 mA	3,960 lm	3,720 lm	33.5 W	34.1 V	41.4 V	117 lm/W	111 lm/W	100 lm/W	> 90
SLE G6 17mm 4000lm 940 SNC	940/359	900 mA	4,070 lm	3,820 lm	33.5 W	34.1 V	41.4 V	120 lm/W	114 lm/W	103 lm/W	> 90
SLE 17mm 4000lm – Operating mode HO at 1,200 mA											
SLE G6 17mm 4000lm 830 SNC	830/359	1,200 mA	5,640 lm	5,300 lm	46.8 W	35.7 V	43.4 V	119 lm/W	113 lm/W	102 lm/W	> 80
SLE G6 17mm 4000lm 840 SNC	840/359	1,200 mA	5,880 lm	5,530 lm	46.8 W	35.7 V	43.4 V	124 lm/W	118 lm/W	106 lm/W	> 80
SLE G6 17mm 4000lm 930 SNC	930/359	1,200 mA	4,780 lm	4,490 lm	46.8 W	35.7 V	43.4 V	101 lm/W	96 lm/W	86 lm/W	> 90
SLE G6 17mm 4000lm 935 SNC	935/359	1,200 mA	4,980 lm	4,690 lm	46.8 W	35.7 V	43.4 V	105 lm/W	100 lm/W	90 lm/W	> 90
SLE G6 17mm 4000lm 940 SNC	940/359	1,200 mA	5,120 lm	4,820 lm	46.8 W	35.7 V	43.4 V	108 lm/W	103 lm/W	93 lm/W	> 90

① See derating curves in data sheet section 2.3.

② Max. DC forward current varies over the temperature of the LED module. See derating curves in data sheet section 2.3.

③ The detailed explanation, see data sheet section 3.1.

④ Tolerance range for optical and electrical data: ±10 %.

⑤ Assumed efficiency for the LED Driver is 0.9.

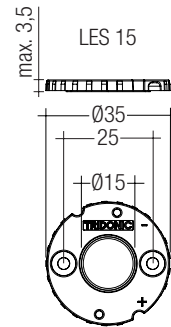
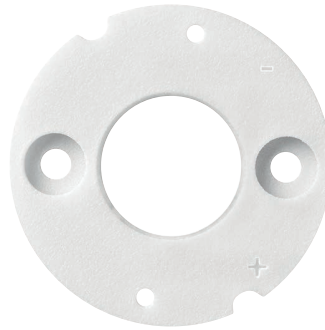
⑥ All values at tp = 65 °C.

⑦ HE ... high efficiency, NM ... nominal mode, HO ... high output.

SLE housing for LES 15

Product description

- Housing for LES 15
- Diameter: 35 mm
- Material: Lexan Resin 943



Ordering data

Type	Article number	Packaging bag	Weight per pc.
SLE housing for LES 15	28001039	100 pc(s).	0.002 kg

1. Standards

EN 62031
 EN 62471
 IEC 62717
 IEC 61000-4-2
 UL 8750 - certificate number: E366084

1.1 Photometric code

Key for photometric code, e. g. 830 / 359

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

1.2 Energy classification

Type	Forward current	Energy classification
	350 mA	A++
SLE G6 15mm 3000lm 830 SNC	500 mA	A++
	900 mA	A+
	350 mA	A++
SLE G6 15mm 3000lm 840 SNC	500 mA	A++
	900 mA	A+
	350 mA	A+
SLE G6 15mm 3000lm 930 SNC	500 mA	A+
	900 mA	A+
	350 mA	A+
SLE G6 15mm 3000lm 935 SNC	500 mA	A+
	900 mA	A+
	350 mA	A+
SLE G6 15mm 3000lm 940 SNC	500 mA	A+
	900 mA	A+
	500 mA	A++
SLE G6 17mm 4000lm 830 SNC	900 mA	A+
	1,200 mA	A+
	500 mA	A++
SLE G6 17mm 4000lm 840 SNC	900 mA	A+
	1,200 mA	A+
	500 mA	A+
SLE G6 17mm 4000lm 930 ADV	900 mA	A+
	1,200 mA	A+
	500 mA	A+
SLE G6 17mm 4000lm 935 ADV	900 mA	A+
	1,200 mA	A+
	500 mA	A+
SLE G6 17mm 4000lm 940 ADV	900 mA	A+
	1,200 mA	A+

2. Thermal details

2.1 tp point, ambient temperature and life-time

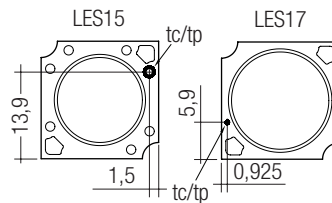
The temperature at tp reference point is crucial for the light output and life-time of a LED product.

For SLE G6 a tp temperature of 65 °C has to be complied in order to achieve an optimum between heat sink requirements, light output and life-time.

Compliance with the maximum permissible reference temperature at the tp 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.

To check the tc / tp temperature, the temperature sensor has to be mounted on the PCB at the marked position as stated in the drawing.



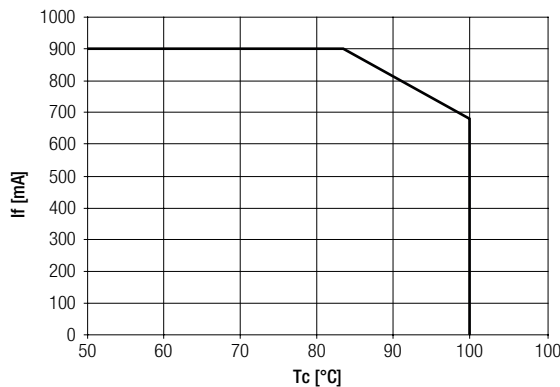
2.2 Storage and humidity

storage temperature	-30...+80 °C
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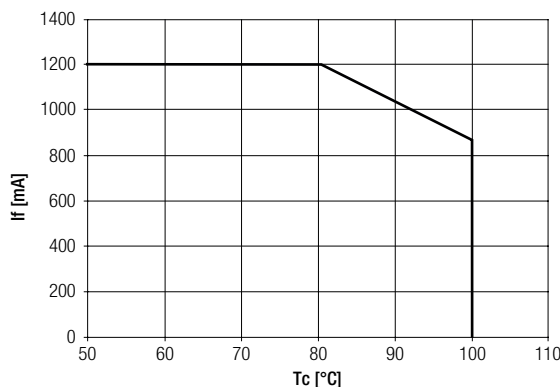
Operation only in non condensing environment. Humidity during processing of the module should be between 30 to 70 %.

2.3 Derating curves

SLE G6 15mm 3000lm xxx ESSENCE



SLE G6 17mm 4000lm xxx ESSENCE



2.4 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 SLE G6 will be greatly reduced or the SLE G6 may be destroyed.

2.5 Heat sink values

SLE G6 15mm 3000lm 8xx ESSENCE, CRI80

ta	tp	Operating current	R _{th, hs-a}
25°C	65°C	350 mA	5.89 K/W
30°C	65°C	350 mA	5.15 K/W
40°C	65°C	350 mA	3.68 K/W
50°C	65°C	350 mA	2.21 K/W
25°C	65°C	500 mA	3.81 K/W
30°C	65°C	500 mA	3.32 K/W
40°C	65°C	500 mA	2.38 K/W
50°C	65°C	500 mA	1.43 K/W
25°C	65°C	900 mA	1.75 K/W
30°C	65°C	900 mA	1.53 K/W
40°C	65°C	900 mA	1.10 K/W
50°C	65°C	900 mA	0.66 K/W

SLE G6 15mm 3000lm 9xx ESSENCE, CRI90

ta	tp	Operating current	R _{th, hs-a}
25°C	65°C	350 mA	5.69 K/W
30°C	65°C	350 mA	4.98 K/W
40°C	65°C	350 mA	3.56 K/W
50°C	65°C	350 mA	2.13 K/W
25°C	65°C	500 mA	3.70 K/W
30°C	65°C	500 mA	3.23 K/W
40°C	65°C	500 mA	2.31 K/W
50°C	65°C	500 mA	1.39 K/W
25°C	65°C	900 mA	1.71 K/W
30°C	65°C	900 mA	1.50 K/W
40°C	65°C	900 mA	1.07 K/W
50°C	65°C	900 mA	0.64 K/W

SLE G6 17mm 4000lm 8xx ESSENCE, CRI80

ta	tp	Operating current	R _{th, hs-a}
25°C	65°C	500 mA	4.05 K/W
30°C	65°C	500 mA	3.55 K/W
40°C	65°C	500 mA	2.53 K/W
50°C	65°C	500 mA	1.52 K/W
25°C	65°C	900 mA	1.90 K/W
30°C	65°C	900 mA	1.67 K/W
40°C	65°C	900 mA	1.19 K/W
50°C	65°C	900 mA	0.71 K/W
25°C	65°C	1,200 mA	1.29 K/W
30°C	65°C	1,200 mA	1.13 K/W
40°C	65°C	1,200 mA	0.80 K/W
50°C	65°C	1,200 mA	0.48 K/W

SLE G6 17mm 4000lm 9xx ESSENCE, CRI90

ta	tp	Operating current	R _{th, hs-a}
25°C	65°C	500 mA	3.92 K/W
30°C	65°C	500 mA	3.43 K/W
40°C	65°C	500 mA	2.45 K/W
50°C	65°C	500 mA	1.47 K/W
25°C	65°C	900 mA	2.58 K/W
30°C	65°C	900 mA	2.25 K/W
40°C	65°C	900 mA	1.61 K/W
50°C	65°C	900 mA	0.97 K/W
25°C	65°C	1,200 mA	1.26 K/W
30°C	65°C	1,200 mA	1.10 K/W
40°C	65°C	1,200 mA	0.79 K/W
50°C	65°C	1,200 mA	0.47 K/W

Notes

The actual cooling can differ because of the material, the structural shape, outside influences and the installation situation. A thermal connection between SLE G6 and heat sink with heat-conducting paste or heat conducting adhesive film is absolutely necessary.

Additionally the SLE G6 has to be fixed on the heat sink with M3 screws to optimise the thermal connection.

Use of thermal interface material with thermal conductivity of $\lambda > 1$ W/mK and layer thickness of interface material with max. 50 μm or a similar interface material where the quotient of layer thickness and thermal conductivity $b < 50$ $\mu\text{mmK/W}$.

3. Installation / wiring

3.1 Electrical supply/choice of LED Driver

SLE G6 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 SLE G6 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



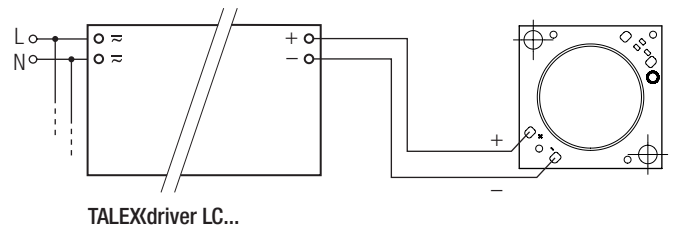
SLE G6 must be supplied by a constant current LED Driver. Operation with a constant voltage LED Driver will lead to an irreversible damage of the module. Wrong polarity can damage the SLE G6.



SLE G6 are basic isolated up to 50 V 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 50 V, an additional isolation between LED module and heat sink is required (for example by isolated 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 Wiring

Wiring example



TALEX(driver LC...

3.4 Mounting instruction



SLE G6 from Tridonic which have to be installed on a heat sink have to be connected with heat-conducting paste or heat conducting adhesive film and fixed with M3 screws. The fixing/cooling surface must be cleaned by removing all dirt, dust and grease before installing the LED modules.

None of the components of the SLE G6 (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 with 2 screws per module. In order not to damage the modules only rounded head screws and an additional plastic flat washer should be used for LED modules without housing.

For further information please refer to the brochure entitled "Technical Design-In-Guide SLE GEN6".



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.

3.5 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. Life-time

4.1 Life-time, lumen maintenance and failure rate

The light output of an LED Module decreases over the life-time, 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 life-time 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.

The F value is the combination of the B and C value. That means for F degradation and complete failures are considered, e.g. L70F10 means 10 % of the LED modules may fail or be below 70 % of the initial luminous flux.

4.2 Lumen maintenance

Life-time declarations are informative and represent no warranty claim. Preliminary calculated lifetime data until LM80 test reports are available.

SLE G6 15mm 3000lm ESSENCE

Operating current	tp temperature	L80 / F10	L80 / F50	L70 / F10	L70 / F50
350 mA	65 °C	51,000 h	>60,000 h	>60,000 h	>60,000 h
	75 °C	44,000 h	>60,000 h	>60,000 h	>60,000 h
	85 °C	39,000 h	58,000 h	>60,000 h	>60,000 h
500 mA	65 °C	48,000 h	>60,000 h	>60,000 h	>60,000 h
	75 °C	42,000 h	>60,000 h	>60,000 h	>60,000 h
	85 °C	37,000 h	55,000 h	58,000 h	>60,000 h
900 mA	65 °C	39,000 h	59,000 h	>60,000 h	>60,000 h
	75 °C	34,000 h	51,000 h	54,000 h	>60,000 h
	85 °C	30,000 h	45,000 h	48,000 h	>60,000 h

SLE G6 17mm 4000lm ESSENCE

Operating current	tp temperature	L80 / F10	L80 / F50	L70 / F10	L70 / F50
500 mA	65 °C	49,000 h	>60,000 h	>60,000 h	>60,000 h
	75 °C	43,000 h	>60,000 h	>60,000 h	>60,000 h
	85 °C	38,000 h	57,000 h	>60,000 h	>60,000 h
700 mA	65 °C	46,000 h	>60,000 h	>60,000 h	>60,000 h
	75 °C	40,000 h	>60,000 h	>60,000 h	>60,000 h
	85 °C	35,000 h	53,000 h	56,000 h	>60,000 h
1,200 mA	65 °C	37,000 h	55,000 h	59,000 h	>60,000 h
	75 °C	32,000 h	48,000 h	51,000 h	>60,000 h
	85 °C	28,000 h	42,000 h	45,000 h	>60,000 h

5. Electrical values

5.1 Declaration of electrical parameters

Irated ... Nominal operating current the module is designed for.

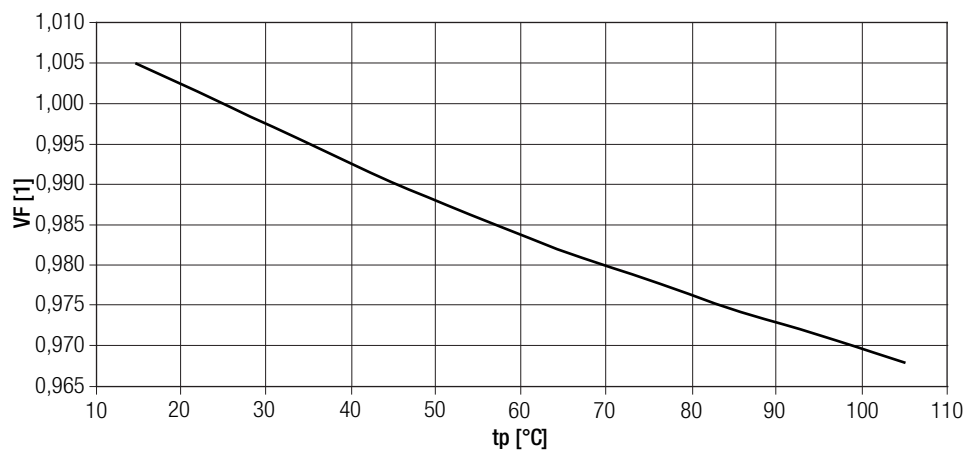
I_{max} ... Max. permissible continuous operating current.

I_{max} DC forward current ... Max. permissible continuous operating current incl. The tolerances of the LED driver. LED module may be destroyed if this value is exceeded.

I_{max} permissible LF current ripple ... Max. output current of the LED driver incl. Tolerances and LF current ripple must not exceed this value.

I_{max} permissible peak current ... The max. output peak current of the LED driver must not exceed this value.

5.2 Forward voltage vs. tp temperature



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

6. Photometric characteristics

6.1 Coordinates and tolerances according to CIE 1931

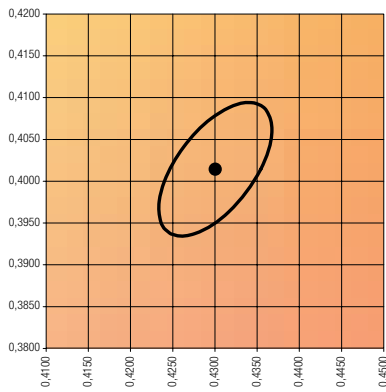
The specified colour coordinates are measured integral after a settling time of 100 ms. The current impuls depends on the module type.

Module type	Current impulse
SLE G6 15mm 3000lm xxx SNC	500 mA
SLE G6 17mm 4000lm xxx SNC	900 mA

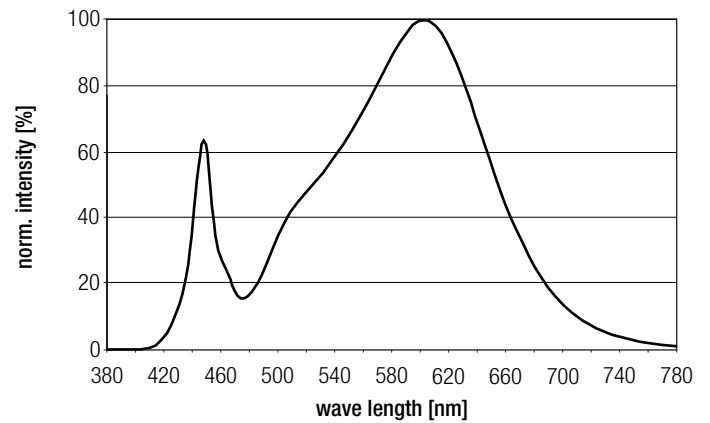
The ambient temperature of the measurement is $t_a = 25^\circ\text{C}$.
The measurement tolerance of the colour coordinates are ± 0.01 .

3,000 K

	x0	y0
Centre	0.4300	0.4016

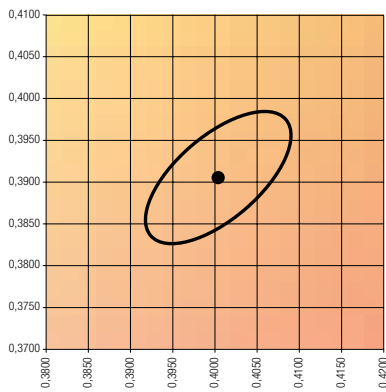


MacAdam ellipse: 3SDCM

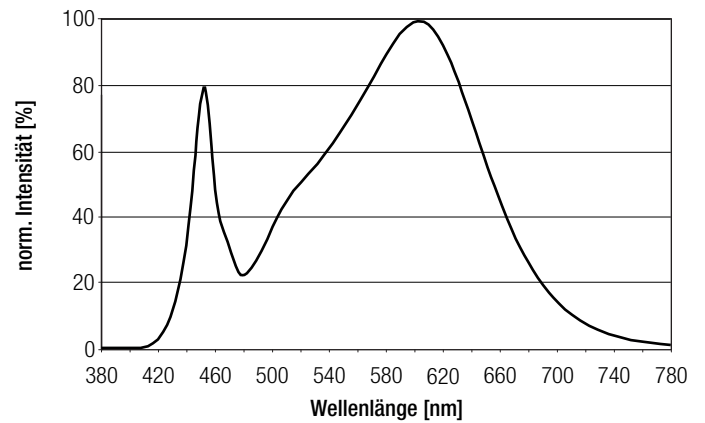


3,500 K

	x0	y0
Centre	0.4053	0.3907

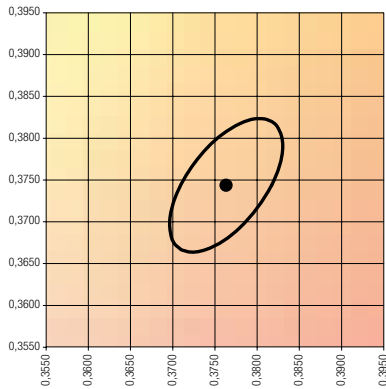


MacAdam ellipse: 3SDCM

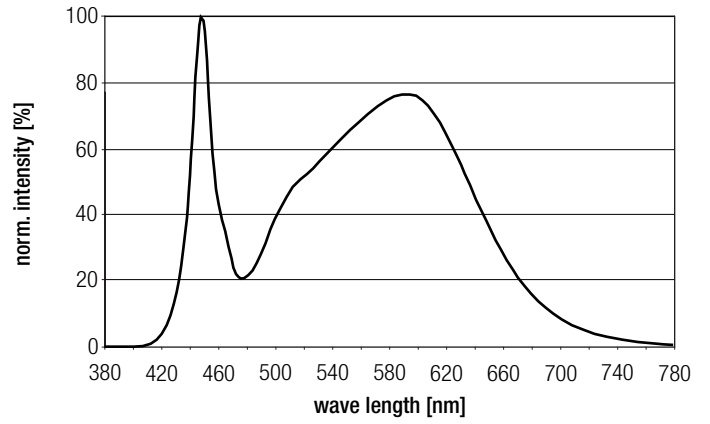


4,000 K

	x0	y0
Centre	0.3761	0.3740

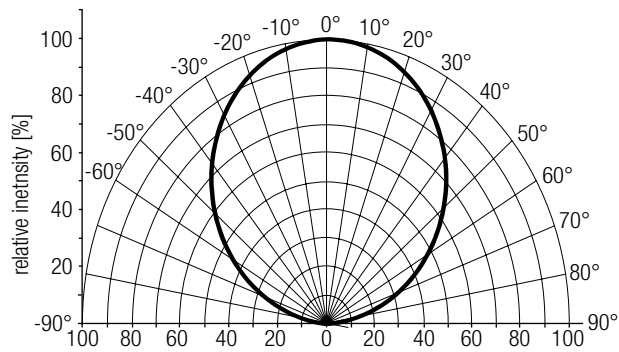


MacAdam ellipse: 3SDCM



6.2 Light distribution

The optical design of the SLE product line ensures optimum homogeneity for the light distribution.



For further information see Design-in Guide, 3D data and photometric data on www.tridonic.com or on request.

6.3 Relative luminous flux vs. tp temperature

