

Module LLE FLEX 8mm 48V SNC3

Modules LLE FLEX essence

**Product description**

- _ Dimmable 48 V constant voltage LED flextape (SELV)
- _ Ideal for applications on aluminium extrusions but also for various decorative and ambient lighting solutions
- _ 1 reel = 10 m
- _ Made in Europe
- _ Long lifetime up to 102,000 hours
- _ 5 years guarantee (conditions at <https://www.tridonic.com/en/int/services/manufacturer-guarantee-conditions>)

Optical properties

- _ Colour temperatures 2,700, 3,000 and 4,000 K
- _ Useful luminous flux up to 4,310 lm/m at $t_p = 25^\circ\text{C}$
- _ Efficacy of the LED module up to 189 lm/W
- _ High colour rendering index CRI > 80 and CRI > 90 (on demand)
- _ Low colour temperature tolerances (MacAdam 3)

Mechanical properties

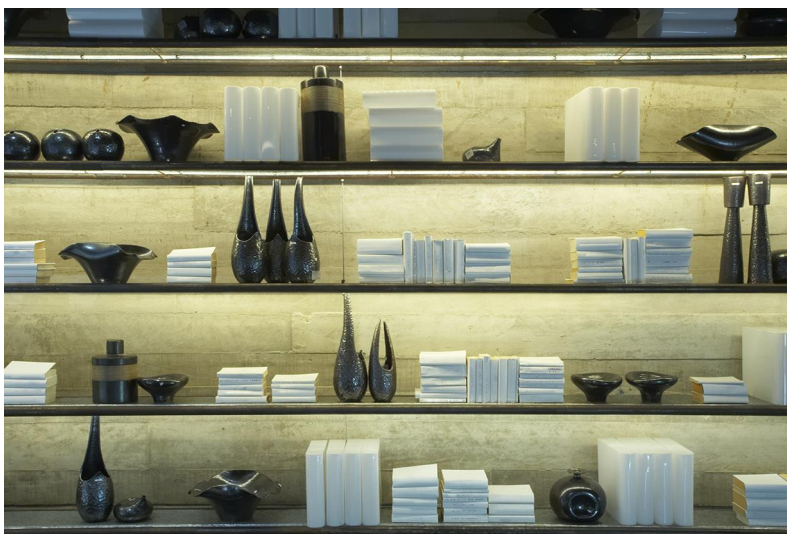
- _ High design freedom due to 6.25 cm cut-options and 128 LED light points per meter
- _ Self-adhesive 3M tape at the backside for simple mounting on different surfaces
- _ Available PCB to PCB and wire to PCB connectors for toolless handling and connection
- _ reel2reel – No solder joints on the tape, easy to separate and low length tolerances

System solution

- _ System solution in combination with Tridonic constant voltage LED driver (fixed output and dimmable)

Website

<http://www.tridonic.com/28006406>



Linear



High bay



Decorative



Downlights



Spotlights



Free-standing



Area



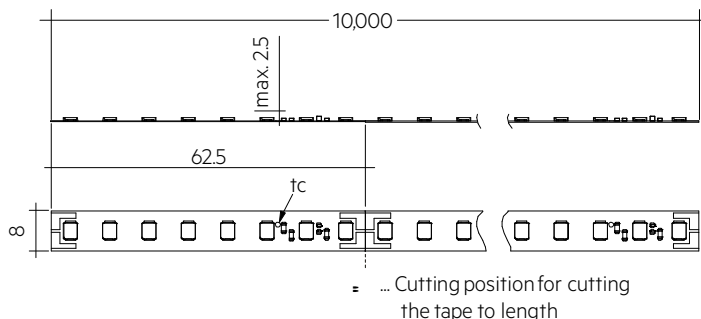
Floor | Wall



Street

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Ordering data

Type	Article number	Colour temperature	Packaging, carton	Weight per pc.
LLE FLEX 8mm 48V 8W 1200lm 827 SNC3 R10	28006406	2,700 K	1 pc(s).	0.153 kg
LLE FLEX 8mm 48V 8W 1200lm 830 SNC3 R10	28006407	3,000 K	1 pc(s).	0.153 kg
LLE FLEX 8mm 48V 8W 1200lm 840 SNC3 R10	28006408	4,000 K	1 pc(s).	0.153 kg
LLE FLEX 8mm 48V 10W 1200lm 930 SNC3 R10	28006409	3,000 K	1 pc(s).	0.153 kg
LLE FLEX 8mm 48V 10W 1200lm 940 SNC3 R10	28006410	4,000 K	1 pc(s).	0.153 kg
LLE FLEX 8mm 48V 12W 1800lm 827 SNC3 R10	28006414	2,700 K	1 pc(s).	0.153 kg
LLE FLEX 8mm 48V 12W 1800lm 830 SNC3 R10	28006415	3,000 K	1 pc(s).	0.153 kg
LLE FLEX 8mm 48V 12W 1800lm 840 SNC3 R10	28006416	4,000 K	1 pc(s).	0.153 kg
LLE FLEX 8mm 48V 14W 1800lm 930 SNC3 R10	28006417	3,000 K	1 pc(s).	0.153 kg
LLE FLEX 8mm 48V 14W 1800lm 940 SNC3 R10	28006418	4,000 K	1 pc(s).	0.153 kg
LLE FLEX 8mm 48V 17W 2500lm 827 SNC3 R10	28006422	2,700 K	1 pc(s).	0.153 kg
LLE FLEX 8mm 48V 17W 2500lm 830 SNC3 R10	28006423	3,000 K	1 pc(s).	0.153 kg
LLE FLEX 8mm 48V 17W 2500lm 840 SNC3 R10	28006424	4,000 K	1 pc(s).	0.153 kg
LLE FLEX 8mm 48V 20W 2500lm 930 SNC3 R10	28006425	3,000 K	1 pc(s).	0.153 kg
LLE FLEX 8mm 48V 20W 2500lm 940 SNC3 R10	28006426	4,000 K	1 pc(s).	0.153 kg
LLE FLEX 8mm 48V 20W 3000lm 827 SNC3 R10	28006430	2,700 K	1 pc(s).	0.153 kg
LLE FLEX 8mm 48V 20W 3000lm 830 SNC3 R10	28006431	3,000 K	1 pc(s).	0.153 kg
LLE FLEX 8mm 48V 20W 3000lm 840 SNC3 R10	28006432	4,000 K	1 pc(s).	0.153 kg
LLE FLEX 8mm 48V 22W 3000lm 930 SNC3 R10	28006433	3,000 K	1 pc(s).	0.153 kg
LLE FLEX 8mm 48V 22W 3000lm 940 SNC3 R10	28006434	4,000 K	1 pc(s).	0.153 kg
LLE FLEX 8mm 48V 26W 4000lm 827 SNC3 R10	28006438	2,700 K	1 pc(s).	0.153 kg
LLE FLEX 8mm 48V 26W 4000lm 830 SNC3 R10	28006439	3,000 K	1 pc(s).	0.153 kg
LLE FLEX 8mm 48V 26W 4000lm 840 SNC3 R10	28006440	4,000 K	1 pc(s).	0.153 kg
LLE FLEX 8mm 48V 30W 4000lm 930 SNC3 R10	28006441	3,000 K	1 pc(s).	0.153 kg
LLE FLEX 8mm 48V 30W 4000lm 940 SNC3 R10	28006442	4,000 K	1 pc(s).	0.153 kg

Technical data

Beam characteristic	120°
Ambient temperature ta	-25 ... +50 °C
tp rated	65 °C
tc	75 °C
Supply voltage DC	48 V
Supply voltage range DC ^①	46 – 51 V
Max. working voltage for insulation SELV	60 V
Insulation test voltage	0.5 kV
Colour tolerance	3 SDCM
ESD classification	Severity level 1
Risk group (IEC 62471)	RG0
Classification acc. to IEC 62031	Built-in
Type of protection	IP00
Lumen maintenance L70B50	102,000 h
Guarantee (conditions at www.tridonic.com)	5 Year(s)

Approval marks



Standards

IEC 62031, IEC 62471, IEC 62778, IEC 61000-4-2, IEC 61547, UL 8750

Specific technical data

Type	Article number	Photometric code	Useful luminous flux at $t_p = 25^\circ\text{C}$ ^②	Expected luminous flux at t_p rated ^③	Typ. current consumption at t_p rated	Power consumption P_{on} at $t_p = 25^\circ\text{C}$ ^④	Efficacy of the module at $t_p = 25^\circ\text{C}$	Expected efficacy of the module at t_p rated	Colour rendering index CRI
LLE FLEX 8mm 48V 8W 1200lm 827 SNC3 R10	28006406	827/359	1,140 lm/m	1,180 lm/m	155 mA/m	6.7 W/m	171 lm/W	158 lm/W	>80
LLE FLEX 8mm 48V 8W 1200lm 830 SNC3 R10	28006407	830/359	1,210 lm/m	1,250 lm/m	155 mA/m	6.7 W/m	181 lm/W	168 lm/W	>80
LLE FLEX 8mm 48V 8W 1200lm 840 SNC3 R10	28006408	840/359	1,260 lm/m	1,290 lm/m	155 mA/m	6.7 W/m	189 lm/W	173 lm/W	>80
LLE FLEX 8mm 48V 10W 1200lm 930 SNC3 R10	28006409	930/359	1,230 lm/m	1,260 lm/m	184 mA/m	7.9 W/m	155 lm/W	143 lm/W	>90
LLE FLEX 8mm 48V 10W 1200lm 940 SNC3 R10	28006410	940/359	1,330 lm/m	1,370 lm/m	184 mA/m	7.9 W/m	168 lm/W	155 lm/W	>90
LLE FLEX 8mm 48V 12W 1800lm 827 SNC3 R10	28006414	827/359	1,700 lm/m	1,750 lm/m	232 mA/m	10.0 W/m	170 lm/W	157 lm/W	>80
LLE FLEX 8mm 48V 12W 1800lm 830 SNC3 R10	28006415	830/359	1,810 lm/m	1,860 lm/m	232 mA/m	10.0 W/m	181 lm/W	167 lm/W	>80
LLE FLEX 8mm 48V 12W 1800lm 840 SNC3 R10	28006416	840/359	1,870 lm/m	1,930 lm/m	232 mA/m	10.0 W/m	187 lm/W	173 lm/W	>80
LLE FLEX 8mm 48V 14W 1800lm 930 SNC3 R10	28006417	930/359	1,770 lm/m	1,820 lm/m	266 mA/m	11.4 W/m	155 lm/W	143 lm/W	>90
LLE FLEX 8mm 48V 14W 1800lm 940 SNC3 R10	28006418	940/359	1,930 lm/m	1,980 lm/m	266 mA/m	11.4 W/m	169 lm/W	155 lm/W	>90
LLE FLEX 8mm 48V 17W 2500lm 827 SNC3 R10	28006422	827/359	2,480 lm/m	2,580 lm/m	344 mA/m	14.6 W/m	170 lm/W	156 lm/W	>80
LLE FLEX 8mm 48V 17W 2500lm 830 SNC3 R10	28006423	830/359	2,630 lm/m	2,740 lm/m	344 mA/m	14.6 W/m	180 lm/W	166 lm/W	>80
LLE FLEX 8mm 48V 17W 2500lm 840 SNC3 R10	28006424	840/359	2,720 lm/m	2,840 lm/m	344 mA/m	14.6 W/m	186 lm/W	172 lm/W	>80
LLE FLEX 8mm 48V 20W 2500lm 930 SNC3 R10	28006425	930/359	2,420 lm/m	2,500 lm/m	368 mA/m	15.7 W/m	154 lm/W	142 lm/W	>90
LLE FLEX 8mm 48V 20W 2500lm 940 SNC3 R10	28006426	940/359	2,630 lm/m	2,720 lm/m	368 mA/m	15.7 W/m	167 lm/W	154 lm/W	>90
LLE FLEX 8mm 48V 20W 3000lm 827 SNC3 R10	28006430	827/359	2,860 lm/m	2,990 lm/m	400 mA/m	16.9 W/m	169 lm/W	156 lm/W	>80
LLE FLEX 8mm 48V 20W 3000lm 830 SNC3 R10	28006431	830/359	3,030 lm/m	3,170 lm/m	400 mA/m	16.9 W/m	179 lm/W	165 lm/W	>80
LLE FLEX 8mm 48V 20W 3000lm 840 SNC3 R10	28006432	840/359	3,140 lm/m	3,290 lm/m	400 mA/m	16.9 W/m	186 lm/W	171 lm/W	>80
LLE FLEX 8mm 48V 22W 3000lm 930 SNC3 R10	28006433	930/359	3,070 lm/m	3,180 lm/m	472 mA/m	20.1 W/m	153 lm/W	140 lm/W	>90
LLE FLEX 8mm 48V 22W 3000lm 940 SNC3 R10	28006434	940/359	3,350 lm/m	3,460 lm/m	472 mA/m	20.1 W/m	166 lm/W	153 lm/W	>90
LLE FLEX 8mm 48V 26W 4000lm 827 SNC3 R10	28006438	827/359	3,920 lm/m	4,070 lm/m	552 mA/m	23.4 W/m	167 lm/W	154 lm/W	>80
LLE FLEX 8mm 48V 26W 4000lm 830 SNC3 R10	28006439	830/359	4,160 lm/m	4,320 lm/m	552 mA/m	23.4 W/m	178 lm/W	163 lm/W	>80
LLE FLEX 8mm 48V 26W 4000lm 840 SNC3 R10	28006440	840/359	4,310 lm/m	4,480 lm/m	552 mA/m	23.4 W/m	184 lm/W	169 lm/W	>80
LLE FLEX 8mm 48V 30W 4000lm 930 SNC3 R10	28006441	930/359	3,770 lm/m	3,910 lm/m	584 mA/m	24.8 W/m	152 lm/W	139 lm/W	>90
LLE FLEX 8mm 48V 30W 4000lm 940 SNC3 R10	28006442	940/359	4,100 lm/m	4,250 lm/m	584 mA/m	24.8 W/m	165 lm/W	152 lm/W	>90

① Exceeding the max. operating voltage leads to an overload on the LLE FLEX. This may in turn result in a significant reduction in lifetime or even in destruction.

② Tolerance of useful light flux - 0 / + 15 %. Measurement uncertainty 10 %. Values given for 1 m LLE FLEX.

③ Measurement uncertainty 10 %. Values given for 1 m LLE FLEX. Based on calculation.

④ Tolerance of power consumption $P_{on} \pm 15$ %. Measurement uncertainty ± 5 %. Values given for 1 m LLE FLEX.

1. Standards

IEC 62031
IEC 62471
IEC 62778
IEC 61000-4-2
IEC 61547
UL 8750 (for CLASS2 circuits and dry locations)

1.1 Photometric code

Key for photometric code, e. g. 830 / 349

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	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 Risk group

Type	Risk group
LLE FLEX 8mm 48V SNC3	RGO

1.3 Energy classification

Type	Colour temperature	Energy classification	Energy consumption
LLE FLEX 8mm 48V 8W 1200lm 827 SNC3 R10	2,700 K	D	7 kWh / 1,000 h
LLE FLEX 8mm 48V 8W 1200lm 830 SNC3 R10	3,000 K	C	7 kWh / 1,000 h
LLE FLEX 8mm 48V 8W 1200lm 840 SNC3 R10	4,000 K	C	7 kWh / 1,000 h
LLE FLEX 8mm 48V 12W 1800lm 827 SNC3 R10	2,700 K	D	10 kWh / 1,000 h
LLE FLEX 8mm 48V 12W 1800lm 830 SNC3 R10	3,000 K	C	10 kWh / 1,000 h
LLE FLEX 8mm 48V 12W 1800lm 840 SNC3 R10	4,000 K	C	10 kWh / 1,000 h
LLE FLEX 8mm 48V 17W 2500lm 827 SNC3 R10	2,700 K	D	15 kWh / 1,000 h
LLE FLEX 8mm 48V 17W 2500lm 830 SNC3 R10	3,000 K	C	15 kWh / 1,000 h
LLE FLEX 8mm 48V 17W 2500lm 840 SNC3 R10	4,000 K	C	15 kWh / 1,000 h
LLE FLEX 8mm 48V 20W 3000lm 827 SNC3 R10	2,700 K	D	17 kWh / 1,000 h
LLE FLEX 8mm 48V 20W 3000lm 830 SNC3 R10	3,000 K	C	17 kWh / 1,000 h
LLE FLEX 8mm 48V 20W 3000lm 840 SNC3 R10	4,000 K	C	17 kWh / 1,000 h
LLE FLEX 8mm 48V 26W 4000lm 827 SNC3 R10	2,700 K	D	24 kWh / 1,000 h
LLE FLEX 8mm 48V 26W 4000lm 830 SNC3 R10	3,000 K	C	24 kWh / 1,000 h
LLE FLEX 8mm 48V 26W 4000lm 840 SNC3 R10	4,000 K	C	24 kWh / 1,000 h
LLE FLEX 8mm 48V 10W 1200lm 930 SNC3 R10	3,000 K	D	8 kWh / 1,000 h
LLE FLEX 8mm 48V 10W 1200lm 940 SNC3 R10	4,000 K	D	8 kWh / 1,000 h
LLE FLEX 8mm 48V 14W 1800lm 930 SNC3 R10	3,000 K	D	12 kWh / 1,000 h
LLE FLEX 8mm 48V 14W 1800lm 940 SNC3 R10	4,000 K	D	12 kWh / 1,000 h
LLE FLEX 8mm 48V 20W 2500lm 930 SNC3 R10	3,000 K	D	16 kWh / 1,000 h
LLE FLEX 8mm 48V 20W 2500lm 940 SNC3 R10	4,000 K	D	16 kWh / 1,000 h
LLE FLEX 8mm 48V 22W 3000lm 930 SNC3 R10	3,000 K	D	21 kWh / 1,000 h
LLE FLEX 8mm 48V 22W 3000lm 940 SNC3 R10	4,000 K	D	21 kWh / 1,000 h
LLE FLEX 8mm 48V 30W 4000lm 930 SNC3 R10	3,000 K	D	25 kWh / 1,000 h
LLE FLEX 8mm 48V 30W 4000lm 940 SNC3 R10	4,000 K	D	25 kWh / 1,000 h

Energy label and further information at 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 LLE a tp temperature of 65°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	-25...+75°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 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 LLE will be greatly reduced or the LLE may be destroyed.

2.4 Heat sink values

LLE FLEX 8mm 48V 1200lm 8xx SNC3

ta	tp	R _{th, hs-a} ^①	Cooling area ^①
25°C	65°C	169.30 K/W	self cooling
35°C	65°C	126.94 K/W	5 cm ²
40°C	65°C	105.76 K/W	6 cm ²
45°C	65°C	84.58 K/W	8 cm ²
50°C	65°C	63.40 K/W	11 cm ²

LLE FLEX 8mm 48V 1800lm 8xx SNC3

ta	tp	R _{th, hs-a} ^①	Cooling area ^①
25°C	65°C	108.32 K/W	6 cm ²
35°C	65°C	81.21 K/W	8 cm ²
40°C	65°C	67.65 K/W	10 cm ²
45°C	65°C	54.09 K/W	12 cm ²
50°C	65°C	40.53 K/W	16 cm ²

LLE FLEX 8mm 48V 2500lm 8xx SNC3

ta	tp	R _{th, hs-a} ^①	Cooling area ^①
25°C	65°C	85.02 K/W	8 cm ²
35°C	65°C	63.73 K/W	10 cm ²
40°C	65°C	53.08 K/W	13 cm ²
45°C	65°C	42.44 K/W	16 cm ²
50°C	65°C	31.79 K/W	21 cm ²

LLE FLEX 8mm 48V 3000lm 8xx SNC3

ta	tp	R _{th, hs-a} ^①	Cooling area ^①
25°C	65°C	71.55 K/W	9 cm ²
35°C	65°C	53.64 K/W	12 cm ²
40°C	65°C	44.69 K/W	15 cm ²
45°C	65°C	35.73 K/W	19 cm ²
50°C	65°C	26.78 K/W	25 cm ²

LLE FLEX 8mm 48V 4000lm 8xx SNC3

ta	tp	R _{th, hs-a} ^①	Cooling area ^①
25°C	65°C	5312 K/W	13 cm ²
35°C	65°C	39.80 K/W	17 cm ²
40°C	65°C	3314 K/W	20 cm ²
45°C	65°C	26.49 K/W	25 cm ²
50°C	65°C	19.83 K/W	34 cm ²

LLE FLEX 8mm 48V 1200lm 9xx SNC3

ta	tp	R _{th, hs-a} ^①	Cooling area ^①
25°C	65°C	122.82 K/W	5 cm ²
35°C	65°C	92.08 K/W	7 cm ²
40°C	65°C	76.71 K/W	9 cm ²
45°C	65°C	61.34 K/W	11 cm ²
50°C	65°C	45.97 K/W	15 cm ²

LLE FLEX 8mm 48V 1800lm 9xx SNC3

ta	tp	R _{th, hs-a} ^①	Cooling area ^①
25°C	65°C	83.21 K/W	8 cm ²
35°C	65°C	62.37 K/W	11 cm ²
40°C	65°C	51.95 K/W	13 cm ²
45°C	65°C	41.54 K/W	16 cm ²
50°C	65°C	31.12 K/W	21 cm ²

LLE FLEX 8mm 48V 2500lm 9xx SNC3

ta	tp	R _{th, hs-a} ^①	Cooling area ^①
25°C	65°C	64.26 K/W	10 cm ²
35°C	65°C	48.16 K/W	14 cm ²
40°C	65°C	40.11 K/W	17 cm ²
45°C	65°C	32.06 K/W	21 cm ²
50°C	65°C	24.00 K/W	28 cm ²

LLE FLEX 8mm 48V 3000lm 9xx SNC3

ta	tp	R _{th, hs-a} ^①	Cooling area ^①
25°C	65°C	50.33 K/W	13 cm ²
35°C	65°C	37.71 K/W	18 cm ²
40°C	65°C	31.40 K/W	21 cm ²
45°C	65°C	25.09 K/W	27 cm ²
50°C	65°C	18.78 K/W	35 cm ²

LLE FLEX 8mm 48V 4000lm 9xx SNC3

ta	tp	R _{th, hs-a} ^①	Cooling area ^①
25°C	65°C	4110 K/W	16 cm ²
35°C	65°C	30.79 K/W	22 cm ²
40°C	65°C	25.63 K/W	26 cm ²
45°C	65°C	20.48 K/W	33 cm ²
50°C	65°C	15.32 K/W	44 cm ²

^① Values for a single segment of the LLE FLEX (62.5 mm).

Notes

The module has to be mounted on a heat sink and operated within the specified temperature range.

The actual cooling surface can differ because of the material, the structural shape, outside influences and the installation situation.
A heat transfer coefficient of 0,0015 is used for the calculation.

3. Installation / wiring**3.1 Electrical supply/choice of LED driver**

LLE 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 LLE 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:

- SELV
- Short-circuit protection
- Overload protection
- Overtemperature protection



LLE modules must be supplied by a constant voltage LED driver. Operation with a constant current LED driver will lead to an irreversible damage of the module.

Wrong polarity can damage the LLE FLEX.

3.2 Mounting instruction

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

The LLE FLEX is separable each 62.5 mm with the full function of each segment.

Insulation must be ensured at the contact area of the segments (e. g. by using additional insulation in the area of the solder connection).

The fixing/cooling surface must be cleaned before installing the LLE FLEX modules to remove all dirt, dust and grease.

Prevent shear- or peel forces

Min. bending radius of the LLE FLEX is 2 cm.

For details see Application Note: www.tridonic.com



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.

3.3 Soldering guidelines



The modules are suitable only for manual soldering (max. 275 °C, 2 seconds).

3.3 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

LLE FLEX 8mm 48V 1200lm CRI80 SNC3
 LLE FLEX 8mm 48V 1800lm CRI80 SNC3
 LLE FLEX 8mm 48V 2500lm CRI80 SNC3
 LLE FLEX 8mm 48V 3000lm CRI80 SNC3
 LLE FLEX 8mm 48V 4000lm CRI80 SNC3
 LLE FLEX 8mm 48V 1200lm CRI90 SNC3
 LLE FLEX 8mm 48V 1800lm CRI90 SNC3
 LLE FLEX 8mm 48V 2500lm CRI90 SNC3
 LLE FLEX 8mm 48V 3000lm CRI90 SNC3
 LLE FLEX 8mm 48V 4000lm CRI90 SNC3

Supply voltage	tp temperature	L90/B10	L90/B50	L80/B10	L80/B50	L70/B10	L70/B50
48 V	40 °C	41k h	47k h	82k h	100k h	> 102k h	> 102k h
	45 °C	41k h	47k h	82k h	100k h	> 102k h	> 102k h
	50 °C	41k h	47k h	82k h	100k h	> 102k h	> 102k h
	55 °C	41k h	47k h	82k h	100k h	> 102k h	> 102k h
	60 °C	35k h	40k h	70k h	85k h	> 102k h	> 102k h
	65 °C	35k h	40k h	70k h	85k h	> 102k h	> 102k h
	70 °C	35k h	40k h	70k h	85k h	> 102k h	> 102k h
	75 °C	35k h	40k h	70k h	85k h	> 102k h	> 102k h

L00C03 >102 kh. At tp 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 Imax

5. Photometric characteristics

5.1 Coordinates and tolerances according to CIE 1931

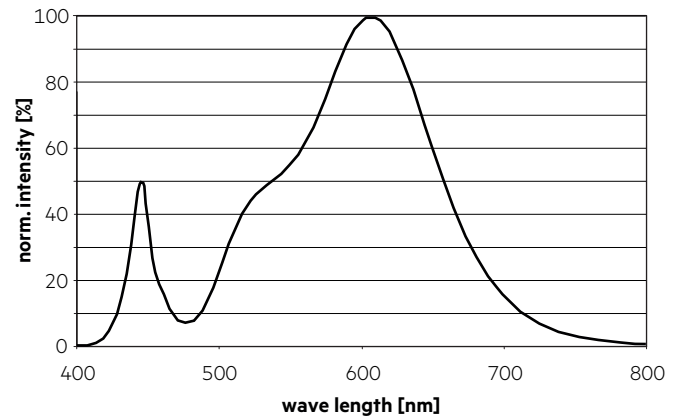
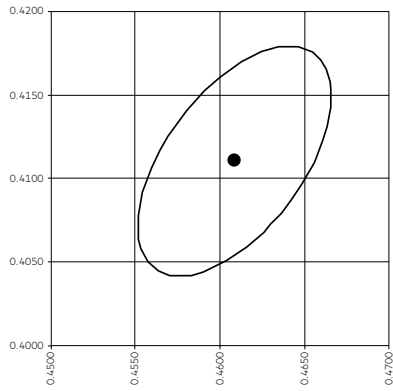
The specified colour coordinates are measured integral by a current impulse with typical values of module and a duration of 100 ms.

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

The measurement tolerance of the colour coordinates are ± 0.01 .

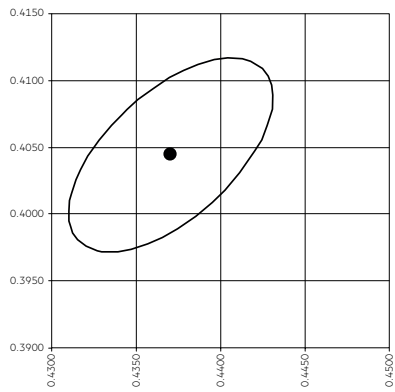
2,700 K – CR180

	x0	y0
Centre	0.4609	0.4110

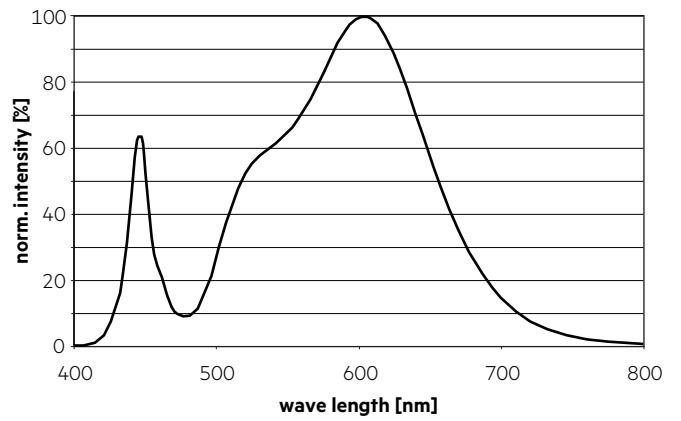


3,000 K – CRI80

	x0	y0
Centre	0.4371	0.4044

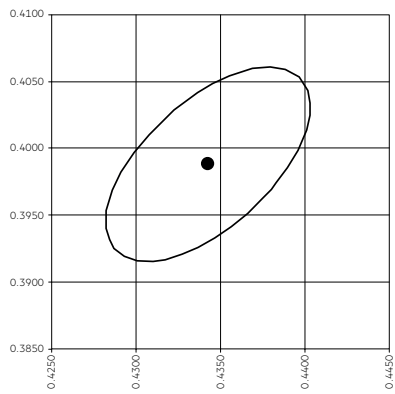


MacAdam Ellipse: 3SDCM

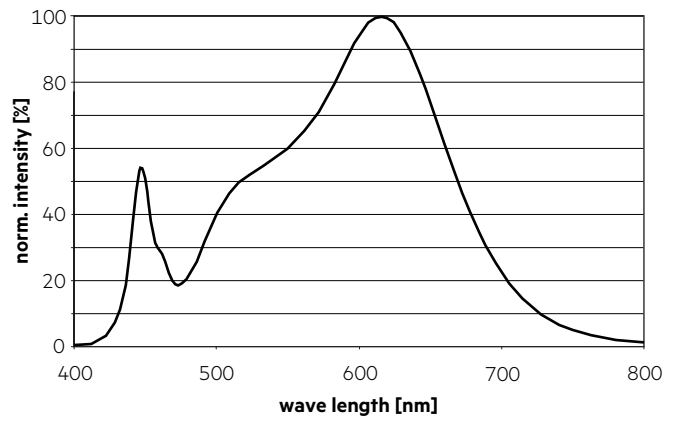


3,000 K – CRI90

	x0	y0
Centre	0.4343	0.3988

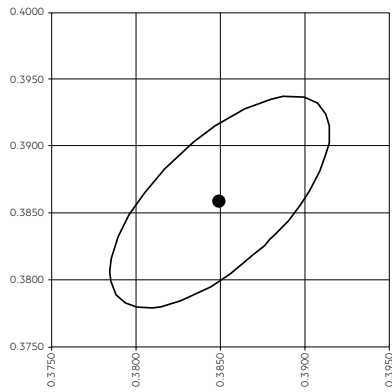


MacAdam Ellipse: 3SDCM

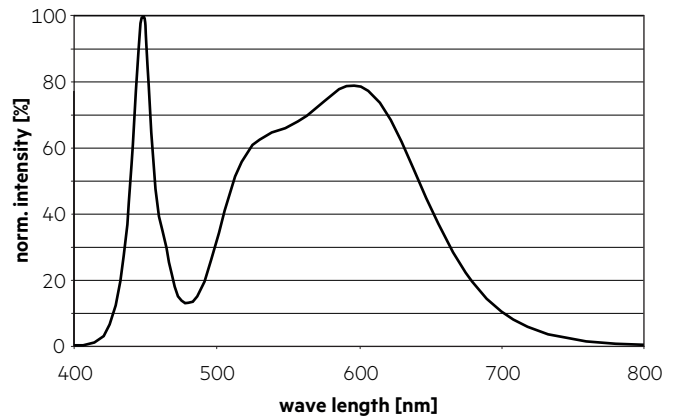


4,000 K – CRI80

	x0	y0
Centre	0.3850	0.3808

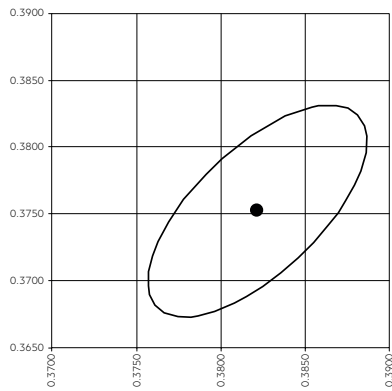


— MacAdam Ellipse: 3SDCM

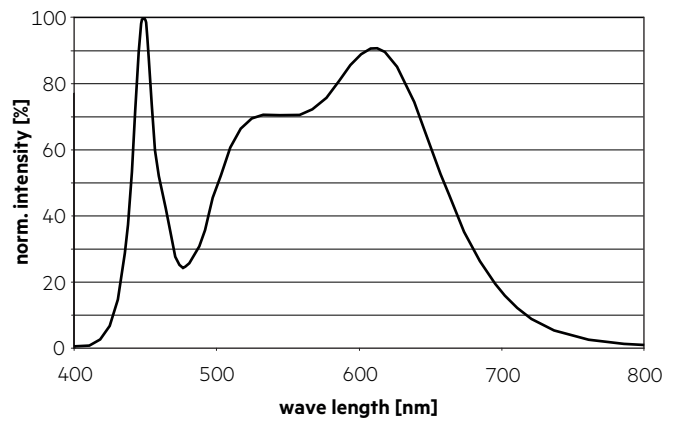


4,000 K – CRI90

	x0	y0
Centre	0.3822	0.3752

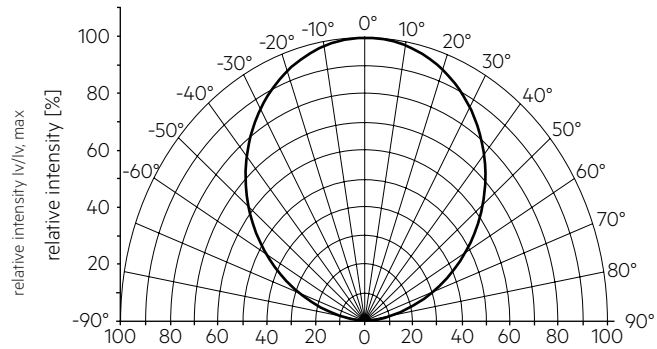


— MacAdam Ellipse: 3SDCM



5.2 Light distribution

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

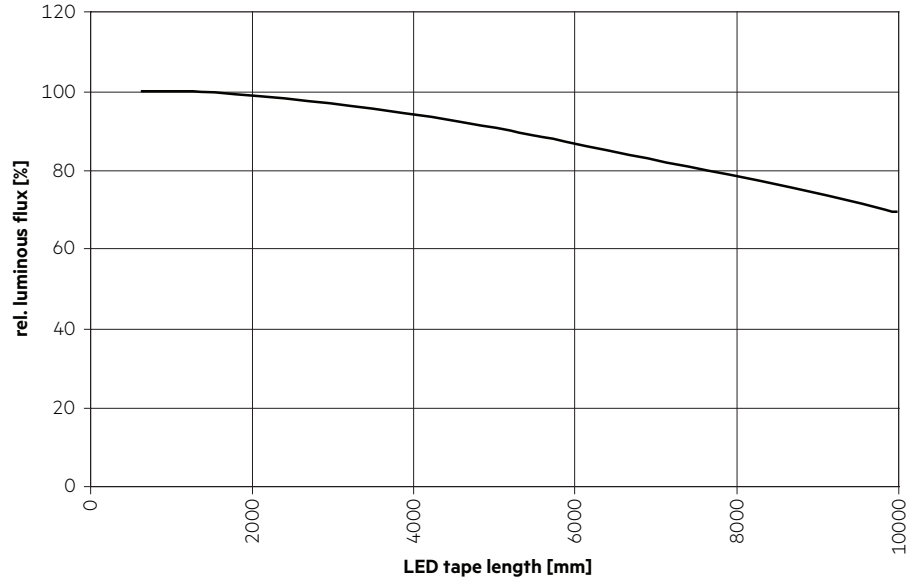


The colour temperature is measured over the complete module. To ensure an ideal mixture of colours and a homogeneous light distribution a suitable optic (e. g. PMMA diffuser) and a sufficient spacing between module and optic (typ. 1.5 cm) should be used.

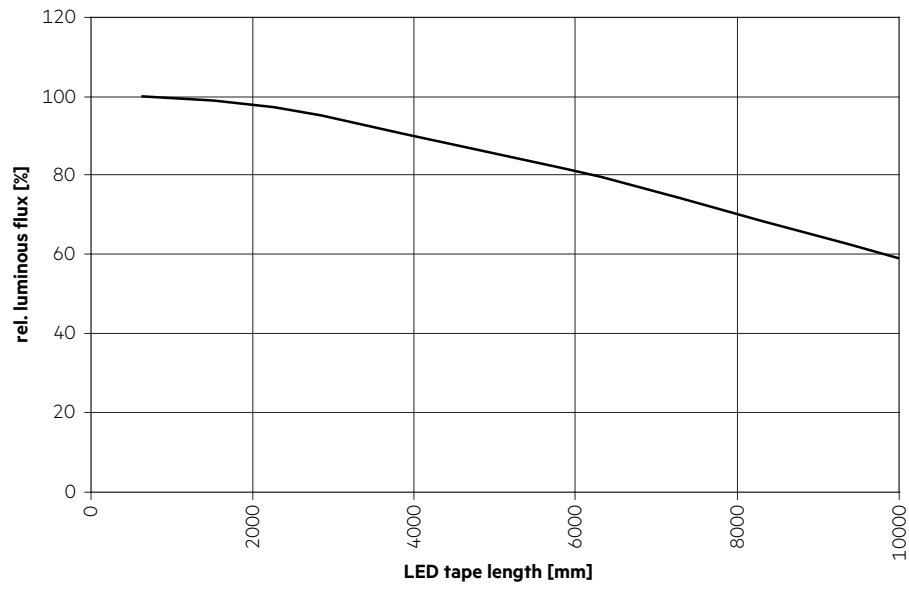
5.3 Relative luminous flux vs. LED tape length

The graphs show the luminous flux drop of the first compare to the last segment over the used tape length. Statistical values based on nominal supply voltage and tp rated.

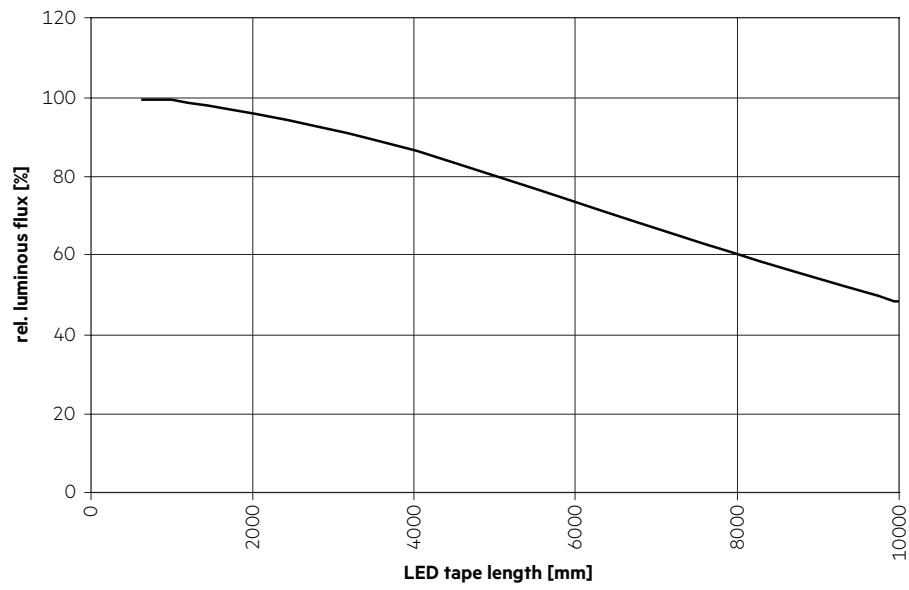
LLE FLEX 8mm 48V 1200lm SNC3



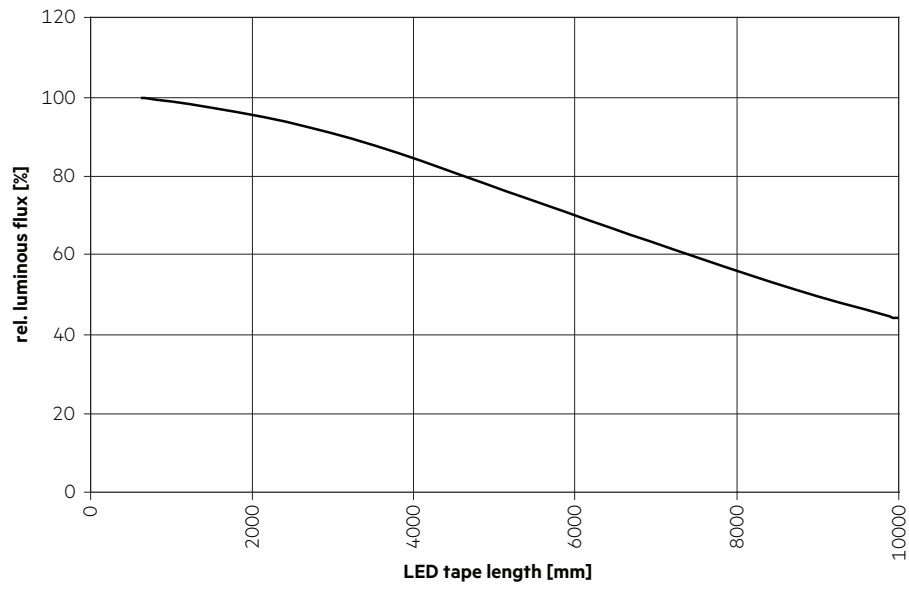
LLE FLEX 8mm 48V 1800lm SNC3



LLE FLEX 8mm 48V 2500lm SNC3



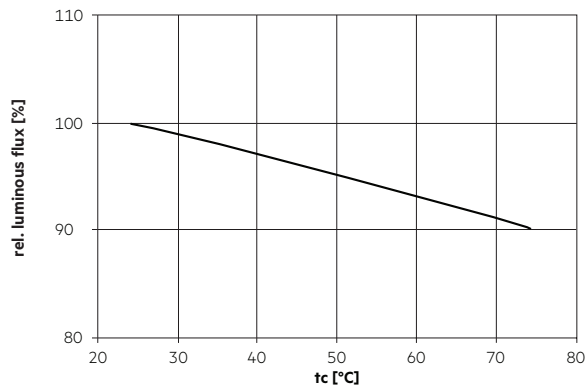
LLE FLEX 8mm 48V 3000lm SNC3



LLE FLEX 8mm 48V 4000lm SNC3



5.4 Relative luminous flux vs. tc temperature



6. Miscellaneous

6.1 Additional information

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

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

Lifetime declarations are informative and represent no warranty claim.