TRIDONIC

Module LLE 55mm HV ADV6

Modules LLE advanced

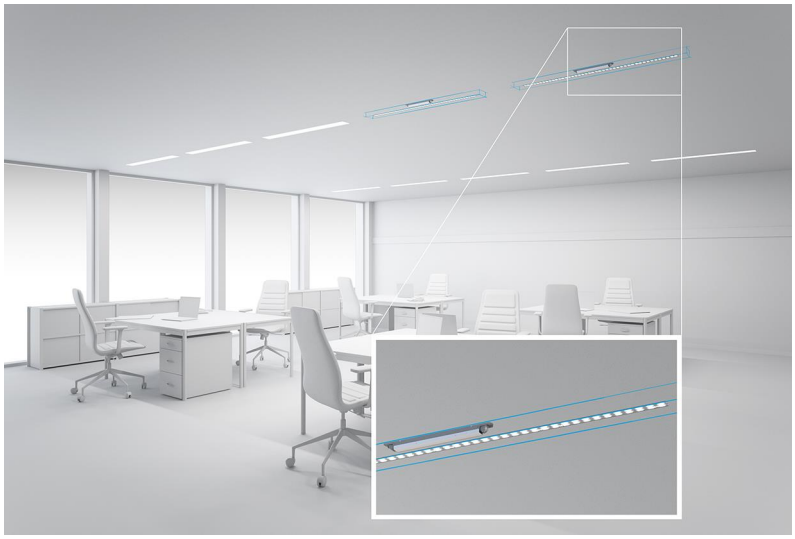
Product description
_ Ideal for linear and panel lights
_ Perfectly uniform light, even if several LED modules are used together in a line
_ Push terminals for quick and simple wiring of LED module to LED module
_ HE ... High Efficiency, NM ... Nominal Mode, HO ... High Output
_ Long lifetime up to 102,000 hours
_ 5 years guarantee (conditions at https://www.tridonic.com/en/int/services/manufacturer-guarantee-conditions)

Optical properties
_ Colour temperatures 3,000, 3,500, 4,000 and 5,000 K
_ Efficacy of the LED module 207 lm/W at Irated and tp = 25 °C
_ High colour rendering index CRI > 80
_ High colour consistency (MacAdam 3)
_ Small luminous flux tolerances

Mechanical properties
_ Module dimension 55 x 280 mm and 55 x 566 mm
_ Simple installation via clips or screws

System solution
_ Combine Tridonic's LED modules and dimmable drivers to achieve an outstanding system efficacy (configuration possible via https://setbuilder.tridonic.com/)

Website
http://www.tridonic.com/28005980

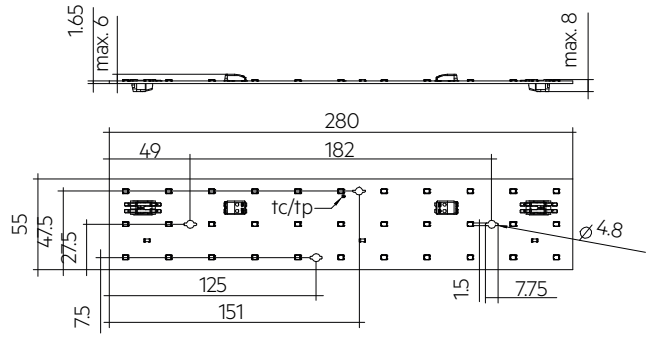


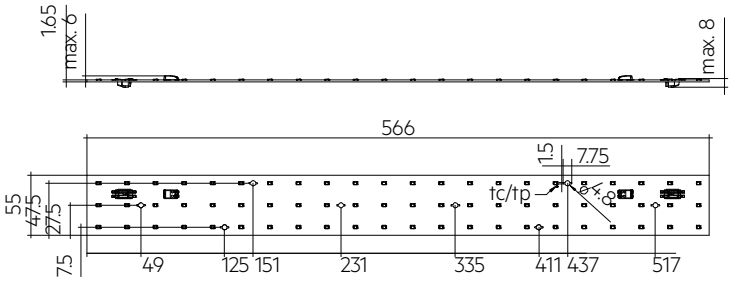
Linear | High bay | Decorative | Downlights | Spotlights | Free-standing | Area | Floor | Wall | Street

TRIDONIC

Module LLE 55mm HV ADV6

Modules LLE advanced





Ordering data

Type	Article number	Colour temperature	Packaging, carton	Weight per pc.
LLE 55x280mm 2000lm 830 HV ADV6	**28005980**	3,000 K	128 pc(s).	0.059 kg
LLE 55x280mm 2000lm 840 HV ADV6	**28005981**	4,000 K	128 pc(s).	0.059 kg
LLE 55x280mm 2000lm 850 HV ADV6	**28005982**	5,000 K	128 pc(s).	0.059 kg
LLE 55x566mm 4000lm 830 HV ADV6	**28005986**	3,000 K	96 pc(s).	0.099 kg
LLE 55x566mm 4000lm 840 HV ADV6	**28005987**	4,000 K	96 pc(s).	0.099 kg
LLE 55x566mm 4000lm 850 HV ADV6	**28005988**	5,000 K	96 pc(s).	0.099 kg
LLE 55x280mm 2000lm 830 HV ADV6 BT	**28006141**	3,000 K	64 pc(s).	0.059 kg
LLE 55x280mm 2000lm 835 HV ADV6 BT	**28006142**	3,500 K	64 pc(s).	0.059 kg
LLE 55x280mm 2000lm 840 HV ADV6 BT	**28006143**	4,000 K	64 pc(s).	0.059 kg
LLE 55x280mm 2000lm 850 HV ADV6 BT	**28006663**	5,000 K	64 pc(s).	0.059 kg
LLE 55x566mm 4000lm 830 HV ADV6 BT	**28006144**	3,000 K	48 pc(s).	0.099 kg
LLE 55x566mm 4000lm 835 HV ADV6 BT	**28006145**	3,500 K	48 pc(s).	0.099 kg
LLE 55x566mm 4000lm 840 HV ADV6 BT	**28006146**	4,000 K	48 pc(s).	0.099 kg
LLE 55x566mm 4000lm 850 HV ADV6 BT	**28006664**	5,000 K	48 pc(s).	0.099 kg

Technical data

Beam characteristic	120°
Ambient temperature ta	-25 … +50 °C
tp rated	65 °C
tc	95 °C
Irated	325 mA
Imax	720 mA
Max. permissible LF current ripple	900 mA
Max. permissible peak current	1,350 mA / max. 10 ms
Max. working voltage for insulation ①	450 V
Insulation test voltage	1.9 kV
Colour tolerance	3 SDCM
ESD classification	Severity level 2
Risk group (IEC 62471)	RG1 (≤ 720 mA (Imax))
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

RoHS

Standards

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

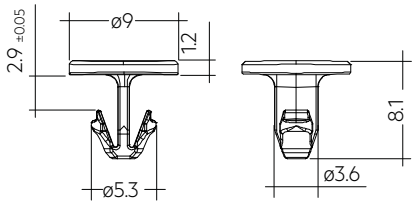
Specific technical data

Type	Article number	Photometric code②	Useful luminous flux at tp = 25 °C ③	Expected luminous flux at tp rated ④	Typ. forward current	Min. forward voltage at tp rated⑤	Max. forward voltage at tp = 25 °C⑤	Power consumption Pon at tp = 25 °C ⑥	Efficacy of the module at tp = 25 °C	Expected efficacy of the module at tp rated	Colour rendering index CRI
Operating mode HE											
LLE 55x280mm 2000lm 830 HV ADV6	**28005980**	830/359	–	1,149 lm	200 mA	28.4 V	31.0 V	–	–	196 lm/W	>80
LLE 55x280mm 2000lm 840 HV ADV6	**28005981**	840/359	–	1,210 lm	200 mA	28.4 V	31.0 V	–	–	207 lm/W	>80
LLE 55x280mm 2000lm 850 HV ADV6	**28005982**	850/359	–	1,210 lm	200 mA	28.4 V	31.0 V	–	–	207 lm/W	>80
LLE 55x566mm 4000lm 830 HV ADV6	**28005986**	830/359	–	2,298 lm	200 mA	56.7 V	62.0 V	–	–	197 lm/W	>80
LLE 55x566mm 4000lm 840 HV ADV6	**28005987**	840/359	–	2,421 lm	200 mA	56.7 V	62.0 V	–	–	207 lm/W	>80
LLE 55x566mm 4000lm 850 HV ADV6	**28005988**	850/359	–	2,421 lm	200 mA	56.7 V	62.0 V	–	–	207 lm/W	>80
LLE 55x280mm 2000lm 830 HV ADV6 BT	**28006141**	830/359	–	1,149 lm	200 mA	28.4 V	31.0 V	–	–	196 lm/W	>80
LLE 55x280mm 2000lm 835 HV ADV6 BT	**28006142**	835/359	–	1,179 lm	200 mA	28.4 V	31.0 V	–	–	202 lm/W	>80
LLE 55x280mm 2000lm 840 HV ADV6 BT	**28006143**	840/359	–	1,210 lm	200 mA	28.4 V	31.0 V	–	–	207 lm/W	>80
LLE 55x280mm 2000lm 850 HV ADV6 BT	**28006663**	850/359	–	1,210 lm	200 mA	28.4 V	31.0 V	–	–	207 lm/W	>80
LLE 55x566mm 4000lm 830 HV ADV6 BT	**28006144**	830/359	–	2,298 lm	200 mA	56.7 V	62.0 V	–	–	197 lm/W	>80
LLE 55x566mm 4000lm 835 HV ADV6 BT	**28006145**	835/359	–	2,359 lm	200 mA	56.7 V	62.0 V	–	–	202 lm/W	>80
LLE 55x566mm 4000lm 840 HV ADV6 BT	**28006146**	840/359	–	2,421 lm	200 mA	56.7 V	62.0 V	–	–	207 lm/W	>80
LLE 55x566mm 4000lm 850 HV ADV6 BT	**28006664**	850/359	–	2,421 lm	200 mA	56.7 V	62.0 V	–	–	207 lm/W	>80
Operating mode NM											
LLE 55x280mm 2000lm 830 HV ADV6	**28005980**	830/359	1,920 lm	1,835 lm	325 mA	29.1 V	31.7 V	9.9 W	194 lm/W	189 lm/W	>80
LLE 55x280mm 2000lm 840 HV ADV6	**28005981**	840/359	2,023 lm	1,933 lm	325 mA	29.1 V	31.7 V	9.9 W	204 lm/W	199 lm/W	>80
LLE 55x280mm 2000lm 850 HV ADV6	**28005982**	850/359	2,023 lm	1,933 lm	325 mA	29.1 V	31.7 V	9.9 W	204 lm/W	199 lm/W	>80
LLE 55x566mm 4000lm 830 HV ADV6	**28005986**	830/359	3,841 lm	3,669 lm	325 mA	58.1 V	63.5 V	19.8 W	194 lm/W	189 lm/W	>80
LLE 55x566mm 4000lm 840 HV ADV6	**28005987**	840/359	4,046 lm	3,865 lm	325 mA	58.1 V	63.5 V	19.8 W	204 lm/W	199 lm/W	>80
LLE 55x566mm 4000lm 850 HV ADV6	**28005988**	850/359	4,046 lm	3,865 lm	325 mA	58.1 V	63.5 V	19.8 W	204 lm/W	199 lm/W	>80
LLE 55x280mm 2000lm 830 HV ADV6 BT	**28006141**	830/359	1,920 lm	1,835 lm	325 mA	29.1 V	31.7 V	19.8 W	194 lm/W	189 lm/W	>80
LLE 55x280mm 2000lm 835 HV ADV6 BT	**28006142**	835/359	1,971 lm	1,883 lm	325 mA	29.1 V	31.7 V	19.8 W	199 lm/W	194 lm/W	>80
LLE 55x280mm 2000lm 840 HV ADV6 BT	**28006143**	840/359	2,023 lm	1,933 lm	325 mA	29.1 V	31.7 V	19.8 W	204 lm/W	199 lm/W	>80
LLE 55x280mm 2000lm 850 HV ADV6 BT	**28006663**	850/359	2,023 lm	1,933 lm	325 mA	29.1 V	31.7 V	9.9 W	204 lm/W	199 lm/W	>80
LLE 55x566mm 4000lm 830 HV ADV6 BT	**28006144**	830/359	3,841 lm	3,669 lm	325 mA	58.1 V	63.5 V	19.8 W	194 lm/W	189 lm/W	>80
LLE 55x566mm 4000lm 835 HV ADV6 BT	**28006145**	835/359	3,942 lm	3,766 lm	325 mA	58.1 V	63.5 V	19.8 W	199 lm/W	194 lm/W	>80
LLE 55x566mm 4000lm 840 HV ADV6 BT	**28006146**	840/359	4,046 lm	3,865 lm	325 mA	58.1 V	63.5 V	19.8 W	204 lm/W	199 lm/W	>80
LLE 55x566mm 4000lm 850 HV ADV6 BT	**28006664**	850/359	4,046 lm	3,865 lm	325 mA	58.1 V	63.5 V	19.8 W	204 lm/W	199 lm/W	>80
Operating mode HO											
LLE 55x280mm 2000lm 830 HV ADV6	**28005980**	830/359	–	2,746 lm	500 mA	29.9 V	32.6 V	–	–	178 lm/W	>80
LLE 55x280mm 2000lm 840 HV ADV6	**28005981**	840/359	–	2,892 lm	500 mA	29.9 V	32.6 V	–	–	188 lm/W	>80
LLE 55x280mm 2000lm 850 HV ADV6	**28005982**	850/359	–	2,892 lm	500 mA	29.9 V	32.6 V	–	–	188 lm/W	>80
LLE 55x566mm 4000lm 830 HV ADV6	**28005986**	830/359	–	5,492 lm	500 mA	59.8 V	65.2 V	–	–	179 lm/W	>80
LLE 55x566mm 4000lm 840 HV ADV6	**28005987**	840/359	–	5,785 lm	500 mA	59.8 V	65.2 V	–	–	188 lm/W	>80
LLE 55x566mm 4000lm 850 HV ADV6	**28005988**	850/359	–	5,785 lm	500 mA	59.8 V	65.2 V	–	–	188 lm/W	>80
LLE 55x280mm 2000lm 830 HV ADV6 BT	**28006141**	830/359	–	2,746 lm	500 mA	29.9 V	32.6 V	–	–	178 lm/W	>80
LLE 55x280mm 2000lm 835 HV ADV6 BT	**28006142**	835/359	–	2,819 lm	500 mA	29.9 V	32.6 V	–	–	183 lm/W	>80
LLE 55x280mm 2000lm 840 HV ADV6 BT	**28006143**	840/359	–	2,892 lm	500 mA	29.9 V	32.6 V	–	–	188 lm/W	>80
LLE 55x280mm 2000lm 850 HV ADV6 BT	**28006663**	850/359	–	2,892 lm	500 mA	29.9 V	32.6 V	–	–	188 lm/W	>80
LLE 55x566mm 4000lm 830 HV ADV6 BT	**28006144**	830/359	–	5,492 lm	500 mA	59.8 V	65.2 V	–	–	179 lm/W	>80
LLE 55x566mm 4000lm 835 HV ADV6 BT	**28006145**	835/359	–	5,637 lm	500 mA	59.8 V	65.2 V	–	–	183 lm/W	>80
LLE 55x566mm 4000lm 840 HV ADV6 BT	**28006146**	840/359	–	5,785 lm	500 mA	59.8 V	65.2 V	–	–	188 lm/W	>80
LLE 55x566mm 4000lm 850 HV ADV6 BT	**28006664**	850/359	–	5,785 lm	500 mA	59.8 V	65.2 V	–	–	188 lm/W	>80

① If mounted with M4 screws with 7 mm head diameter.
② The detailed explanation, see data sheet section 1.1.
③ Tolerance of useful light flux - 0 % / + 15 %. Measurement uncertainty ± 10 %.
④ Tolerance of expected light flux - 0 % / + 15 %. Measurement uncertainty ± 10 %. Based on calculation.
⑤ Measurement tolerance forward voltage: ±0.1 V.
⑥ Tolerance of power consumption Pon ± 10 %. Measurement uncertainty ± 5 %.

ACL CLIP 4.3mm

Accessory



Product description

_ Clip for fixation of LED modules with 4.3 mm holes
_ Fast snap on mounting (sheet thickness 0.5 – 1.0 mm for PUSH-FIX and 1 – 2 mm for PUSH-FIX Long)
_ For drilling hole 4 mm
_ Clip made of polycarbonate
_ Minimum sales quantity 500 pcs.

Website

http://www.tridonic.com/28001036

Ordering data

Type	Article number	Colour	Packaging, bag ①	Weight per pc.
ACL CLIP 4.3mm PUSH-FIX	**28001036**	White	500 pc(s).	0.001 kg
ACL CLIP 4,3mm PUSH-FIX Long	**28002314**	Transparent	500 pc(s).	0.001 kg

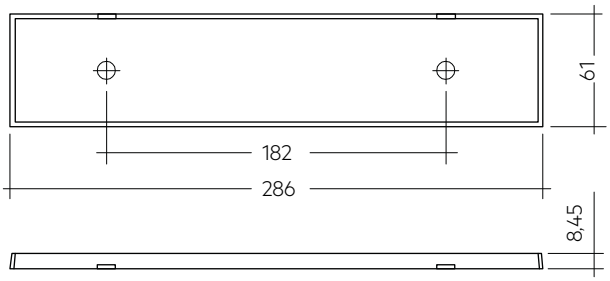
① Minimum sales quantity 500 pcs.

ACL LENS 55x280mm

Accessory

Product description
_ ACL LENS for LLE 55x280mm
_ Available with different beam characteristics
_ Easy mounting with M4 screws
_ ACL SHADE to reduce UGR
_ ACL LENS made of PMMA, ACL SHADE made of ABS
_ Max. permissible temperature 80 °C
_ Max. permissible tc temperature 75 °C at the LED module
_ Photometric data available on website

Website
http://www.tridonic.com/28002206



Ordering data

Type	Article number	Length L	Beam characteristic	Efficiency	Packaging, carton	Weight per pc.
ACL LENS 55X280mm 60°	**28002206**	286.00 mm	60°	91 %	72 pc(s).	0.088 kg
ACL LENS 55X280mm 90°	**28002207**	286.00 mm	90°	90 %	72 pc(s).	0.092 kg
ACL LENS 55X280mm 90x45°	**28002208**	286.00 mm	90x45°	90 %	72 pc(s).	0.091 kg
ACL LENS 55X280mm DA25°	**28002209**	286.00 mm	double asymmetric 25°	94 %	60 pc(s).	0.072 kg
ACL LENS 55X280mm A20°	**28002210**	286.00 mm	asymmetric 20°	93 %	60 pc(s).	0.058 kg
ACL SHADE 55X280mm UGR	**28002211**	290.58 mm	UGR improving	–	60 pc(s).	0.027 kg

1. Standards

IEC 62031
IEC 62471
IEC 61000-4-2
IEC 62778
IEC 61547

1.1 Photometric code

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

1st digit		2nd + 3rd digit	4th digit	5th digit	6th 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)	
					Code	Luminous flux
7	70 – 79				7	≥ 70 %
8	80 – 89				8	≥ 80 %
9	≥90				9	≥ 90 %

1.2 Risk group

Forward current	Risk group (IEC 62471)
< 720 mA (Imax)	RG1

1.3 Energy classification

Type	Colour temperature	Forward current	Energy classification	Energy consumption
LLE 55x280mm 2000lm 830 HV ADV6	3,000 K	325 mA	C	10 kWh / 1,000 h
LLE 55x280mm 2000lm 840 HV ADV6	4,000 K	325 mA	B	10 kWh / 1,000 h
LLE 55x280mm 2000lm 850 HV ADV6	5,000 K	325 mA	B	10 kWh / 1,000 h
LLE 55x566mm 4000lm 830 HV ADV6	3,000 K	325 mA	C	20 kWh / 1,000 h
LLE 55x566mm 4000lm 840 HV ADV6	4,000 K	325 mA	B	20 kWh / 1,000 h
LLE 55x566mm 4000lm 850 HV ADV6	5,000 K	325 mA	B	20 kWh / 1,000 h
LLE 55x280mm 2000lm 830 HV ADV6 BT	3,000 K	325 mA	C	10 kWh / 1,000 h
LLE 55x280mm 2000lm 835 HV ADV6 BT	3,500 K	325 mA	C	10 kWh / 1,000 h
LLE 55x280mm 2000lm 840 HV ADV6 BT	4,000 K	325 mA	B	10 kWh / 1,000 h
LLE 55x280mm 2000lm 850 HV ADV6 BT	5,000 K	325 mA	B	10 kWh / 1,000 h
LLE 55x566mm 4000lm 830 HV ADV6 BT	3,000 K	325 mA	C	20 kWh / 1,000 h
LLE 55x566mm 4000lm 835 HV ADV6 BT	3,500 K	325 mA	C	20 kWh / 1,000 h
LLE 55x566mm 4000lm 840 HV ADV6 BT	4,000 K	325 mA	B	20 kWh / 1,000 h
LLE 55x566mm 4000lm 850 HV ADV6 BT	5,000 K	325 mA	B	20 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 50 °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 … +85 °C

Operation only in non condensing environment.
Humidity during processing of the module should be between 30 to 70 %.

2.3 Heat sink values

LLE 55x280mm 2000lm ADV6

ta	tp	Forward current	$R_{th, hs-a}$	Cooling area
25 °C	65 °C	325 mA	self cooling	
25 °C	65 °C	720 mA	self cooling	
35 °C	65 °C	325 mA	self cooling	
35 °C	65 °C	720 mA	self cooling	
40 °C	65 °C	325 mA	self cooling	
40 °C	65 °C	720 mA	self cooling	
45 °C	65 °C	325 mA	self cooling	
45 °C	65 °C	720 mA	4,30 K/W	155 cm²
50 °C	65 °C	325 mA	self cooling	
50 °C	65 °C	720 mA	3,14 K/W	212 cm²

LLE 55x566mm 4000lm ADV6

ta	tp	Forward current	$R_{th, hs-a}$	Cooling area
25 °C	65 °C	325 mA	self cooling	
25 °C	65 °C	720 mA	self cooling	
35 °C	65 °C	325 mA	self cooling	
35 °C	65 °C	720 mA	self cooling	
40 °C	65 °C	325 mA	self cooling	
40 °C	65 °C	720 mA	self cooling	
45 °C	65 °C	325 mA	self cooling	
45 °C	65 °C	720 mA	self cooling	
50 °C	65 °C	325 mA	self cooling	
50 °C	65 °C	720 mA	1.57 K/W	424 cm²

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.

For applications with a small distance between LED module and lens, screw mounting is recommended to ensure a reliable thermal connection between LED module and cooling surface.

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:
- Short-circuit protection
- Overload protection
- Overtemperature protection

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

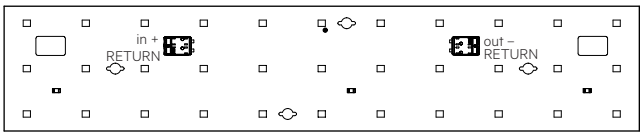
Wrong polarity can damage the LLE.

The LLE module is designed for serial wiring.

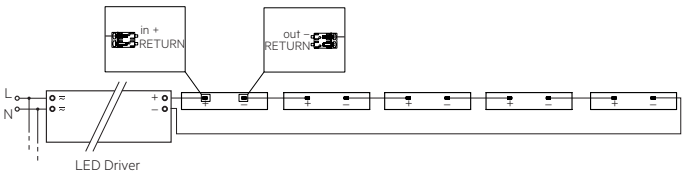
LLE can be operated either from SELV LED drivers or from LED drivers with LV output voltage.

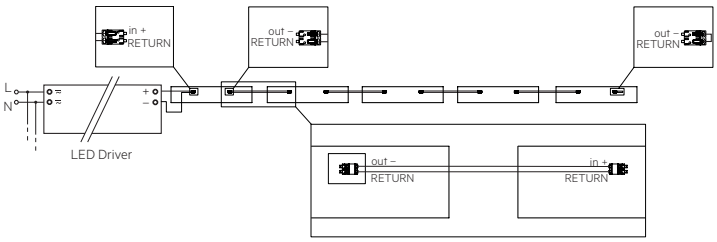
LLE are basic insulated up to 450 V (if mounted with M4 screws with head diameter 7 mm) against ground and can be mounted directly on earthed metal parts of the luminaire. If the max. output voltage of the LED driver (also against earth) is above 450 V, an additional insulation between LED module and 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 Wiring



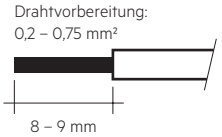
Wiring examples





3.3 Wiring type and cross section

For wiring use stranded wire or solid wire from 0.2 to 0.75 mm².
For the push-wire connection you have to strip the insulation (8–9 mm).



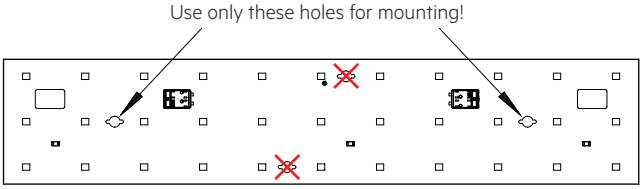
To remove the wires use a suitabel tool (e.g. Microcon release pin) or through twist and pull .

3.4 Mounting instruction

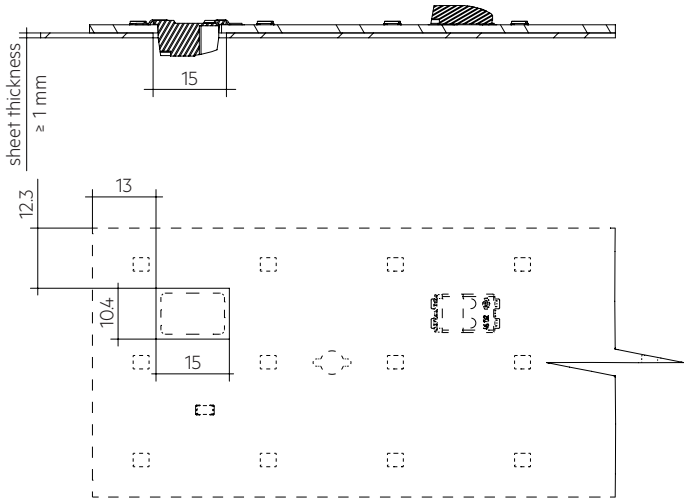
None of the components of the LLE (substrate, LED, electronic components etc.) may be exposed to tensile or compressive stresses.

Max. torque for fixing: 0.5 Nm.

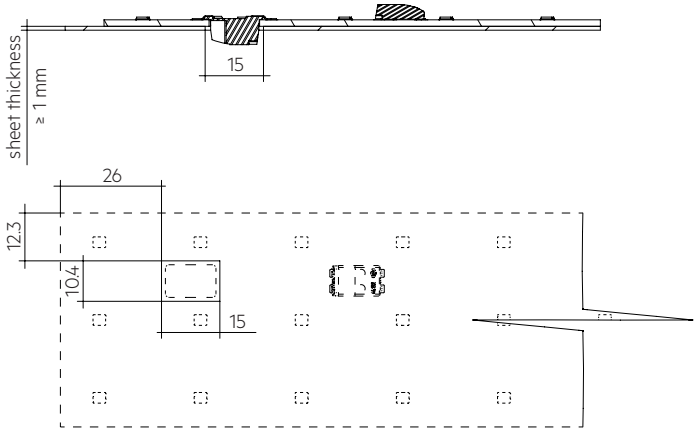
The LED modules are mounted onto a heat sink with min. 2 screws per module or ACL CLIP 4.3mm.



Cut out on gear tray for backside terminal for 280 mm:



Cut out on gear tray for backside terminal for 566 mm:



The distance between the terminal and the luminaire sheet must be at least 1.2 mm.

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. 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 for LLE 55mm HV ADV6

Forward current	tp temperature	L90 / B10	L90 / B50	L80 / B10	L80 / B50	L70 / B10	L70 / B50
720 mA	55 °C	52k h	52k h	> 102k h	> 102k h	> 102k h	> 102k h
	85 °C	52k h	52k h	> 102k h	> 102k h	> 102k h	> 102k h

L00C03 > 102k h. At tp rated and I rated, based on 10 swichting 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 a forward current of 165 mA

5. Electrical values

5.1 Declaration of electrical parameters

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

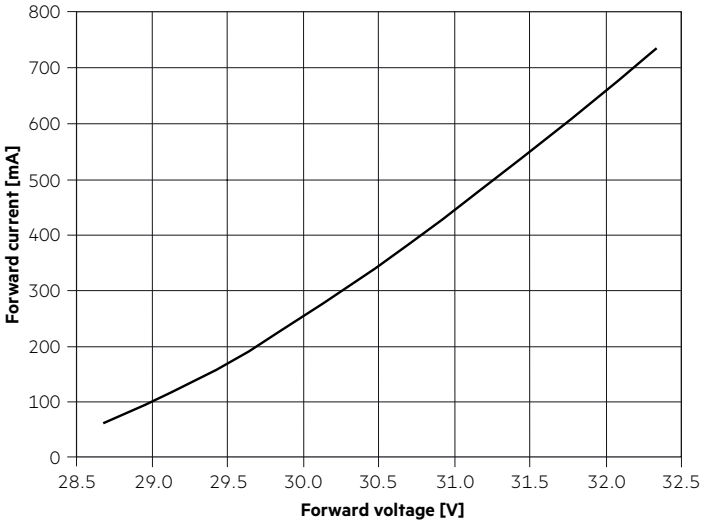
Imax ... Max. permissible continuous operating current incl. The tolerances of the LED driver.

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

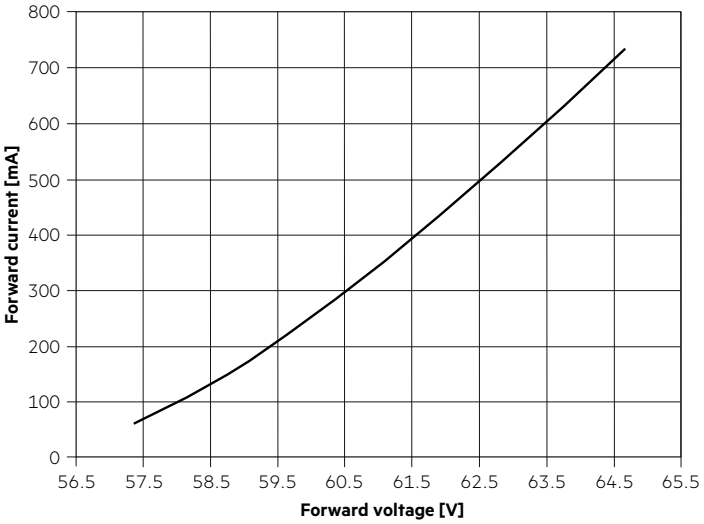
Max. permissible peak current ... The max. output peak current of the LED driver must not exceed this value.

5.2 Typ. forward voltage vs. forward current

LLE 55x280mm 2000lm ADV6

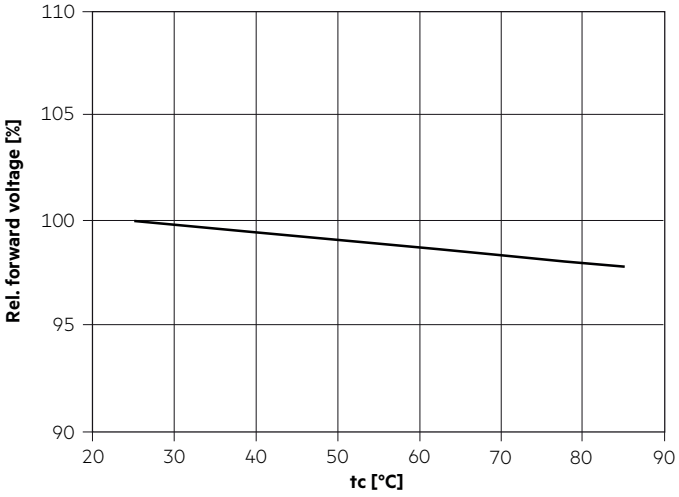


LLE 55x566mm 4000lm ADV6



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

5.3 Forward voltage vs. tc temperature



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

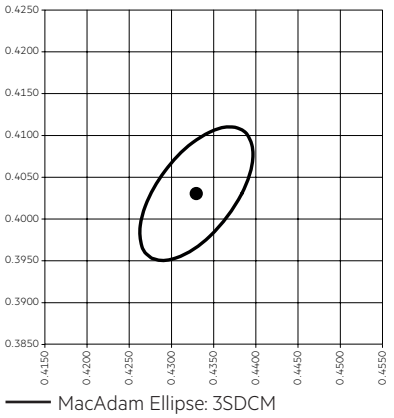
6. Photometric characteristics

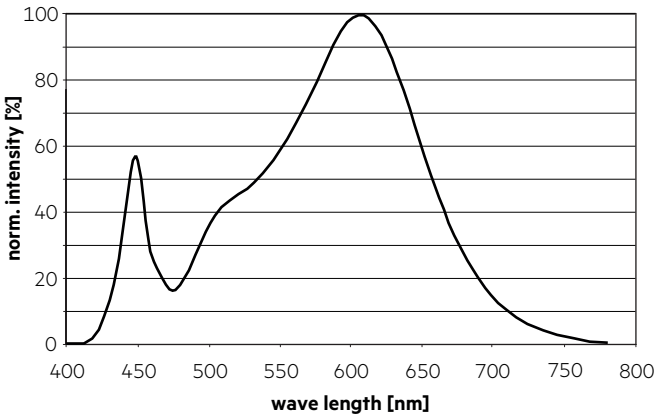
6.1 Coordinates and tolerances according to CIE 1931

The specified colour coordinates are integral measured by current impulse of 165 mA and a duration of 100 ms.
The ambient temperature of the measurement is ta = 25 °C.
The measurement tolerance of the colour coordinates are ± 0.01.

3,000 K

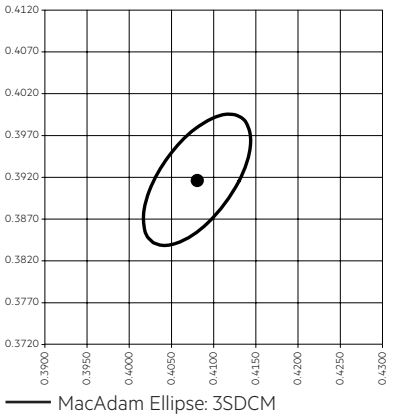
	x0	y0
Centre	0.4338	0.4030

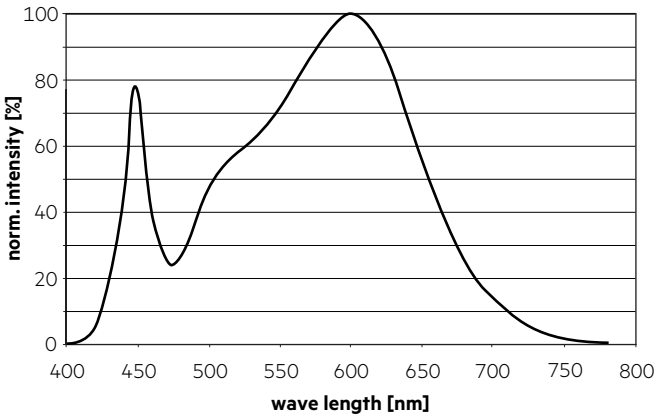




3,500 K

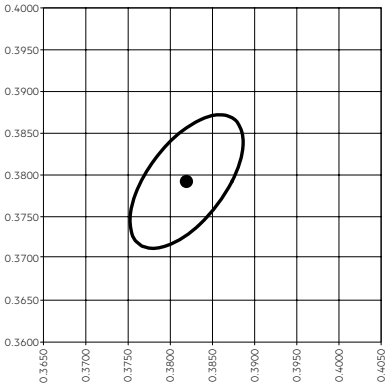
	x0	y0
Centre	0.4073	0.3917



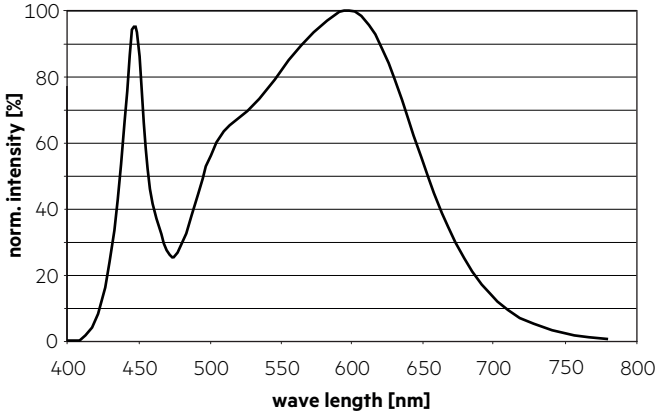


4,000 K

	x0	y0
Center	0.3818	0.3797

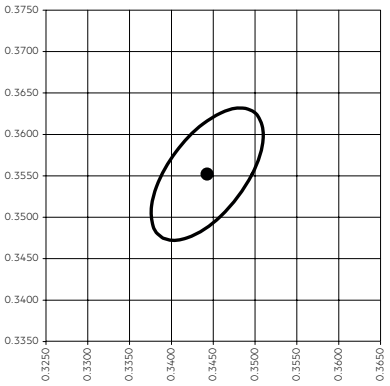


MacAdam Ellipse: 3SDCM

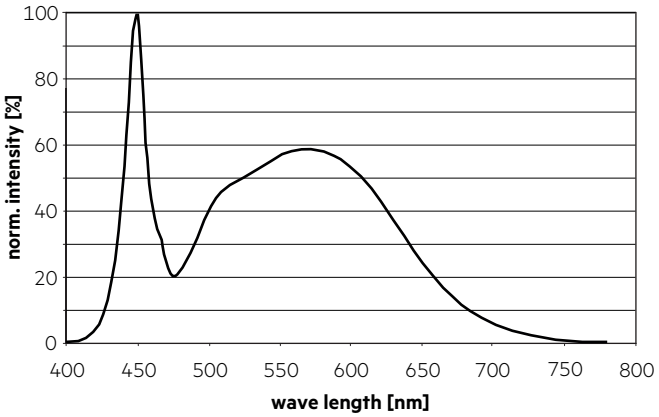


5,000 K

	x0	y0
Center	0.3447	0.3553

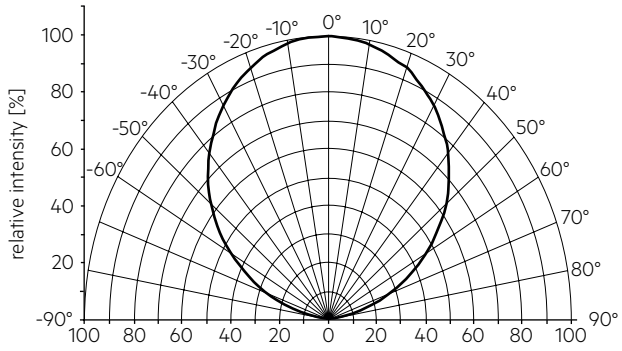


MacAdam Ellipse: 3SDCM



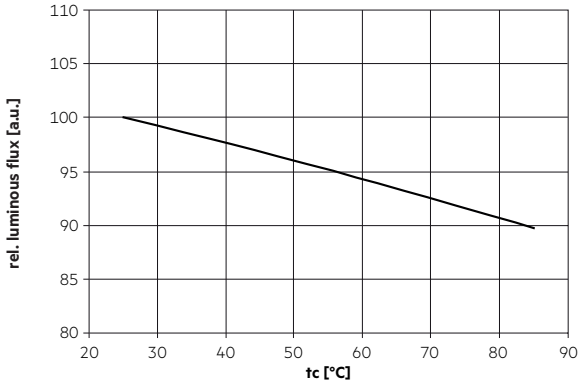
6.2 Light distribution

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

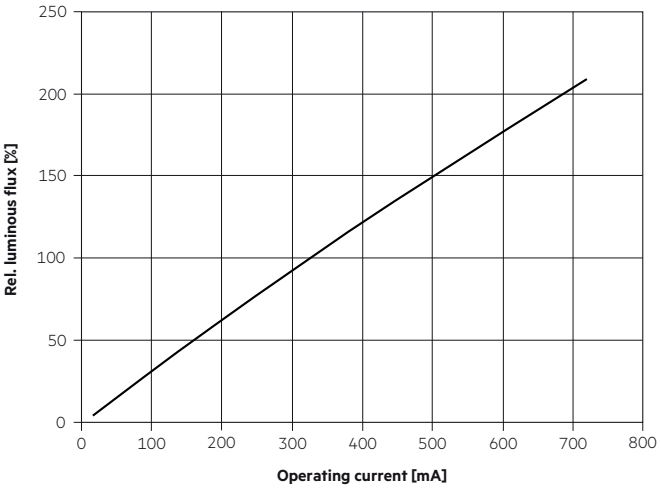


The colour temperature is measured integral over the complete module. The single LED light points can have deviations in the colour coordinates within MacAdam 5.
To ensure an ideal mixture of colours and a homogeneous light distribution a suitable optic (e. g. PMMA diffuser) and a sufficient spacing between module and optic (typ. 4 cm) should be used.

6.3 Relative luminous flux vs. tc temperature



6.4 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 → 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/

Guarantee conditions at www.tridonic.com → Services

Lifetime declarations are informative and represent no warranty claim.