TRIDONIC

Modul RLE 2x4 / 2x6 / 2x8 EXC3 OTD

Modules RLE excite

RLE 2x4 3000lm HP EXC3 OTD

RLE 2x6 4500lm HP EXC3 OTD

RLE 2x8 6000lm HP 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 tested (+/- to earth) 6 kV with Tridonic LED driver
_ Zhaga Book 15 certified
_ For use with standard 2x2 lenses (e.g. LEDiL STRADA 2x2)
_ Push-in terminals for simple and quick wiring
_ HE … High Efficiency, NM … Nominal Mode, HO … High Output
_ Long lifetime up to 100,000 hours
_ 8 years guarantee (conditions at https://www.tridonic.com/en/int/services/manufacturer-guarantee-conditions)

Optical properties
_ Colour temperatures 2,200K, 2,700 K, 3,000 K, 4,000 K, 5,000 K and 6,500 K
_ Efficacy of the LED module 209 lm/W at Irated and tp = 25 °C
_ Two colour rendering index to fit the application: CRI > 70 high efficency, CRI > 80 for high colour rendering
_ Small luminous flux tolerances ①

Mechanical properties
_ Module dimension 49.5 x 121.4 mm, 49.5 x 172.2 mm and 49.5 x 223 mm
_ Installation of the module together with lens in the luminaire by means of an M3 screw

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

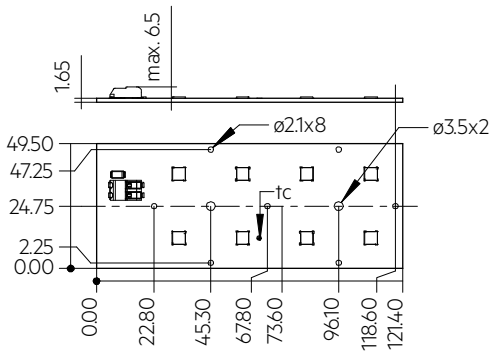
① Integral measurement over the complete module.

Website
http://www.tridonic.com/28005059

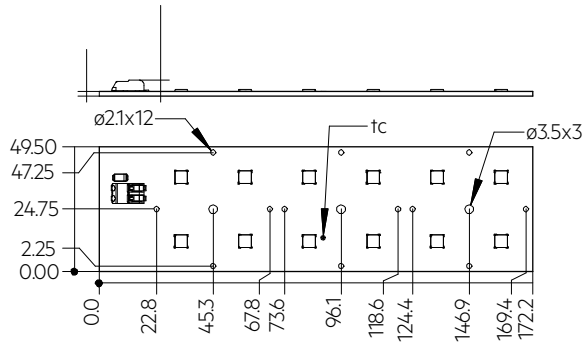
Linear | High bay | Decorative | Downlights | Spotlights | Free-standing | Area | Floor | Wall | Street

Modul RLE 2x4 / 2x6 / 2x8 EXC3 OTD

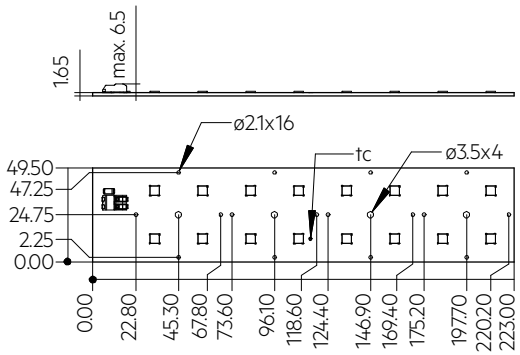
Modules RLE excite



RLE 2x4 3000lm HP EXC3 OTD



RLE 2x6 4500lm HP EXC3 OTD



RLE 2x8 6000lm HP EXC3 OTD

Ordering data

Type	Article number	Colour temperature	Packaging, carton	Packaging, carton	Weight per pc.
RLE 2x4 3000lm 722 HP HE EXC3 OTD	**28005059**	2,200 K	–	80 pc(s).	0.027 kg
RLE 2x4 3000lm 727 HP HE EXC3 OTD	**28005060**	2,700 K	–	80 pc(s).	0.027 kg
RLE 2x4 3000lm 730 HP HE EXC3 OTD	**28005061**	3,000 K	–	80 pc(s).	0.027 kg
RLE 2x4 3000lm 740 HP HE EXC3 OTD	**28005062**	4,000 K	–	80 pc(s).	0.027 kg
RLE 2x4 3000lm 750 HP HE EXC3 OTD	**28005732**	5,000 K	–	80 pc(s).	0.027 kg
RLE 2x4 3000lm 765 HP HE EXC3 OTD	**28005063**	6,500 K	–	80 pc(s).	0.027 kg
RLE 2x4 3000lm 822 HP HE EXC3 OTD	**28005064**	2,200 K	–	80 pc(s).	0.027 kg
RLE 2x4 3000lm 827 HP HE EXC3 OTD	**28005065**	2,700 K	–	80 pc(s).	0.027 kg
RLE 2x4 3000lm 830 HP HE EXC3 OTD	**28005066**	3,000 K	–	80 pc(s).	0.027 kg
RLE 2x4 3000lm 840 HP HE EXC3 OTD	**28005080**	4,000 K	–	80 pc(s).	0.027 kg
RLE 2x6 4500lm 722 HP HE EXC3 OTD	**28005098**	2,200 K	–	80 pc(s).	0.039 kg
RLE 2x6 4500lm 727 HP HE EXC3 OTD	**28005099**	2,700 K	–	80 pc(s).	0.039 kg
RLE 2x6 4500lm 730 HP HE EXC3 OTD	**28005100**	3,000 K	–	80 pc(s).	0.039 kg
RLE 2x6 4500lm 740 HP HE EXC3 OTD	**28005101**	4,000 K	–	80 pc(s).	0.039 kg
RLE 2x6 4500lm 750 HP HE EXC3 OTD	**28005734**	5,000 K	–	80 pc(s).	0.039 kg
RLE 2x8 6000lm 722 HP HE EXC3 OTD	**28005067**	2,200 K	–	80 pc(s).	0.050 kg
RLE 2x8 6000lm 727 HP HE EXC3 OTD	**28005068**	2,700 K	–	80 pc(s).	0.050 kg
RLE 2x8 6000lm 730 HP HE EXC3 OTD	**28005069**	3,000 K	–	80 pc(s).	0.050 kg
RLE 2x8 6000lm 740 HP HE EXC3 OTD	**28005070**	4,000 K	–	80 pc(s).	0.050 kg
RLE 2x8 6000lm 750 HP HE EXC3 OTD	**28005733**	5,000 K	–	80 pc(s).	0.050 kg
RLE 2x8 6000lm 765 HP HE EXC3 OTD	**28005071**	6,500 K	–	80 pc(s).	0.050 kg
RLE 2x8 6000lm 822 HP HE EXC3 OTD	**28005072**	2,200 K	–	80 pc(s).	0.050 kg
RLE 2x8 6000lm 827 HP HE EXC3 OTD	**28005073**	2,700 K	–	80 pc(s).	0.050 kg
RLE 2x8 6000lm 830 HP HE EXC3 OTD	**28005074**	3,000 K	–	80 pc(s).	0.050 kg
RLE 2x8 6000lm 840 HP HE EXC3 OTD	**28005075**	4,000 K	–	80 pc(s).	0.050 kg
RLE 2x4 3000lm 722 HP HE NTC EXC3 OTD	**28005526**	2,200 K	–	80 pc(s).	0.027 kg
RLE 2x4 3000lm 727 HP HE NTC EXC3 OTD	**28005527**	2,700 K	–	80 pc(s).	0.027 kg
RLE 2x4 3000lm 730 HP HE NTC EXC3 OTD	**28005528**	3,000 K	–	80 pc(s).	0.027 kg
RLE 2x4 3000lm 740 HP HE NTC EXC3 OTD	**28005529**	4,000 K	–	80 pc(s).	0.027 kg
RLE 2x4 3000lm 765 HP HE NTC EXC3 OTD	**28005530**	6,500 K	–	80 pc(s).	0.027 kg
RLE 2x4 3000lm 822 HP HE NTC EXC3 OTD	**28005531**	2,200 K	–	80 pc(s).	0.027 kg
RLE 2x4 3000lm 827 HP HE NTC EXC3 OTD	**28005532**	2,700 K	–	80 pc(s).	0.027 kg
RLE 2x4 3000lm 830 HP HE NTC EXC3 OTD	**28005533**	3,000 K	–	80 pc(s).	0.027 kg
RLE 2x4 3000lm 840 HP HE NTC EXC3 OTD	**28005534**	4,000 K	–	80 pc(s).	0.027 kg
RLE 2x6 4500lm 722 HP HE NTC EXC3 OTD	**28005544**	2,200 K	–	80 pc(s).	0.039 kg
RLE 2x6 4500lm 727 HP HE NTC EXC3 OTD	**28005545**	2,700 K	–	80 pc(s).	0.039 kg
RLE 2x6 4500lm 730 HP HE NTC EXC3 OTD	**28005546**	3,000 K	–	80 pc(s).	0.039 kg
RLE 2x6 4500lm 740 HP HE NTC EXC3 OTD	**28005547**	4,000 K	–	80 pc(s).	0.039 kg
RLE 2x8 6000lm 722 HP HE NTC EXC3 OTD	**28005535**	2,200 K	–	80 pc(s).	0.050 kg
RLE 2x8 6000lm 727 HP HE NTC EXC3 OTD	**28005536**	2,700 K	–	80 pc(s).	0.050 kg
RLE 2x8 6000lm 730 HP HE NTC EXC3 OTD	**28005537**	3,000 K	600 pc(s).	100 pc(s).	0.005 kg
RLE 2x8 6000lm 740 HP HE NTC EXC3 OTD	**28005538**	4,000 K	–	80 pc(s).	0.050 kg
RLE 2x8 6000lm 765 HP HE NTC EXC3 OTD	**28005539**	6,500 K	–	80 pc(s).	0.050 kg
RLE 2x8 6000lm 822 HP HE NTC EXC3 OTD	**28005540**	2,200 K	–	80 pc(s).	0.050 kg
RLE 2x8 6000lm 827 HP HE NTC EXC3 OTD	**28005541**	2,700 K	–	80 pc(s).	0.050 kg
RLE 2x8 6000lm 830 HP HE NTC EXC3 OTD	**28005542**	3,000 K	–	80 pc(s).	0.050 kg
RLE 2x8 6000lm 840 HP HE NTC EXC3 OTD	**28005543**	4,000 K	–	80 pc(s).	0.050 kg

Technical data

Beam characteristic	120°
Ambient temperature ta	-40 … +80 °C
tp rated	75 °C
tc	95 °C
Irated	700 mA
Imax	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 with lens ②	670 V
Insulation test voltage	2.34 kV
Colour tolerance	3 SDCM
ESD classification	Severity level 4
Risk group (IEC 62471)	RG2 (Ethr = 1050 lx, RG1 at d ≥ 57 cm (Imax)), RG1 (I ≤ 663 mA)
Classification acc. to IEC 62031	Built-in
Type of protection	IP00
Lumen maintenance L70B50	100,000 h
Guarantee (conditions at www.tridonic.com)	8 Year(s)

Approval marks

RoHS

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	Photometric code[3]	Useful luminous flux at tp = 25 °C [4]	Expected luminous flux at tp rated[5]	Typ. forward current	Min. forward voltage at tp rated	Max. forward voltage at tp = 25 °C	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											
RLE 2x4 3000lm 722 HP HE EXC3 OTD	**28005059**	722/359	–	1,560 lm	400 mA	20.9 V	23.2 V	–	–	179 lm/W	>70
RLE 2x4 3000lm 727 HP HE EXC3 OTD	**28005060**	727/359	–	1,710 lm	400 mA	20.9 V	23.2 V	–	–	196 lm/W	>70
RLE 2x4 3000lm 730 HP HE EXC3 OTD	**28005061**	730/359	–	1,740 lm	400 mA	20.9 V	23.2 V	–	–	199 lm/W	>70
RLE 2x4 3000lm 740 HP HE EXC3 OTD	**28005062**	740/359	–	1,840 lm	400 mA	20.9 V	23.2 V	–	–	210 lm/W	>70
RLE 2x4 3000lm 750 HP HE EXC3 OTD	**28005732**	750/359	–	1,790 lm	400 mA	20.9 V	23.2 V	–	–	206 lm/W	>70
RLE 2x4 3000lm 765 HP HE EXC3 OTD	**28005063**	765/359	–	1,760 lm	400 mA	20.9 V	23.2 V	–	–	202 lm/W	>70
RLE 2x4 3000lm 822 HP HE EXC3 OTD	**28005064**	822/359	–	1,280 lm	400 mA	20.9 V	23.2 V	–	–	147 lm/W	>80
RLE 2x4 3000lm 827 HP HE EXC3 OTD	**28005065**	827/359	–	1,480 lm	400 mA	20.9 V	23.2 V	–	–	170 lm/W	>80
RLE 2x4 3000lm 830 HP HE EXC3 OTD	**28005066**	830/359	–	1,560 lm	400 mA	20.9 V	23.2 V	–	–	179 lm/W	>80
RLE 2x4 3000lm 840 HP HE EXC3 OTD	**28005080**	840/359	–	1,660 lm	400 mA	20.9 V	23.2 V	–	–	190 lm/W	>80
RLE 2x6 4500lm 722 HP HE EXC3 OTD	**28005098**	722/359	–	2,340 lm	400 mA	31.3 V	34.8 V	–	–	179 lm/W	>70
RLE 2x6 4500lm 727 HP HE EXC3 OTD	**28005099**	727/359	–	2,570 lm	400 mA	31.3 V	34.8 V	–	–	196 lm/W	>70
RLE 2x6 4500lm 730 HP HE EXC3 OTD	**28005100**	730/359	–	2,600 lm	400 mA	31.3 V	34.8 V	–	–	199 lm/W	>70
RLE 2x6 4500lm 740 HP HE EXC3 OTD	**28005101**	740/359	–	2,750 lm	400 mA	31.3 V	34.8 V	–	–	210 lm/W	>70
RLE 2x6 4500lm 750 HP HE EXC3 OTD	**28005734**	750/359	–	2,690 lm	400 mA	31.3 V	34.8 V	–	–	206 lm/W	>70
RLE 2x8 6000lm 722 HP HE EXC3 OTD	**28005067**	722/359	–	3,120 lm	400 mA	41.8 V	46.4 V	–	–	179 lm/W	>70
RLE 2x8 6000lm 727 HP HE EXC3 OTD	**28005068**	727/359	–	3,420 lm	400 mA	41.8 V	46.4 V	–	–	196 lm/W	>70
RLE 2x8 6000lm 730 HP HE EXC3 OTD	**28005069**	730/359	–	3,470 lm	400 mA	41.8 V	46.4 V	–	–	199 lm/W	>70
RLE 2x8 6000lm 740 HP HE EXC3 OTD	**28005070**	740/359	–	3,670 lm	400 mA	41.8 V	46.4 V	–	–	210 lm/W	>70
RLE 2x8 6000lm 750 HP HE EXC3 OTD	**28005733**	750/359	–	3,590 lm	400 mA	41.8 V	46.4 V	–	–	206 lm/W	>70
RLE 2x8 6000lm 765 HP HE EXC3 OTD	**28005071**	765/359	–	3,520 lm	400 mA	41.8 V	46.4 V	–	–	202 lm/W	>70
RLE 2x8 6000lm 822 HP HE EXC3 OTD	**28005072**	822/359	–	2,570 lm	400 mA	41.8 V	46.4 V	–	–	147 lm/W	>80
RLE 2x8 6000lm 827 HP HE EXC3 OTD	**28005073**	827/359	–	2,970 lm	400 mA	41.8 V	46.4 V	–	–	170 lm/W	>80
RLE 2x8 6000lm 830 HP HE EXC3 OTD	**28005074**	830/359	–	3,120 lm	400 mA	41.8 V	46.4 V	–	–	179 lm/W	>80
RLE 2x8 6000lm 840 HP HE EXC3 OTD	**28005075**	840/359	–	3,320 lm	400 mA	41.8 V	46.4 V	–	–	190 lm/W	>80
RLE 2x4 3000lm 722 HP HE NTC EXC3 OTD	**28005526**	722/359	–	1,560 lm	400 mA	20.9 V	23.2 V	–	–	179 lm/W	>70
RLE 2x4 3000lm 727 HP HE NTC EXC3 OTD	**28005527**	727/359	–	1,710 lm	400 mA	20.9 V	23.2 V	–	–	196 lm/W	>70
RLE 2x4 3000lm 730 HP HE NTC EXC3 OTD	**28005528**	730/359	–	1,740 lm	400 mA	20.9 V	23.2 V	–	–	199 lm/W	>70
RLE 2x4 3000lm 740 HP HE NTC EXC3 OTD	**28005529**	740/359	–	1,840 lm	400 mA	20.9 V	23.2 V	–	–	210 lm/W	>70
RLE 2x4 3000lm 765 HP HE NTC EXC3 OTD	**28005530**	765/359	–	1,760 lm	400 mA	20.9 V	23.2 V	–	–	202 lm/W	>70
RLE 2x4 3000lm 822 HP HE NTC EXC3 OTD	**28005531**	822/359	–	1,280 lm	400 mA	20.9 V	23.2 V	–	–	147 lm/W	>80
RLE 2x4 3000lm 827 HP HE NTC EXC3 OTD	**28005532**	827/359	–	1,480 lm	400 mA	20.9 V	23.2 V	–	–	170 lm/W	>80
RLE 2x4 3000lm 830 HP HE NTC EXC3 OTD	**28005533**	830/359	–	1,560 lm	400 mA	20.9 V	23.2 V	–	–	179 lm/W	>80
RLE 2x4 3000lm 840 HP HE NTC EXC3 OTD	**28005534**	840/359	–	1,660 lm	400 mA	20.9 V	23.2 V	–	–	190 lm/W	>80
RLE 2x6 4500lm 722 HP HE NTC EXC3 OTD	**28005544**	722/359	–	2,340 lm	400 mA	31.3 V	34.8 V	–	–	179 lm/W	>70
RLE 2x6 4500lm 727 HP HE NTC EXC3 OTD	**28005545**	727/359	–	2,570 lm	400 mA	31.3 V	34.8 V	–	–	196 lm/W	>70
RLE 2x6 4500lm 730 HP HE NTC EXC3 OTD	**28005546**	730/359	–	2,600 lm	400 mA	31.3 V	34.8 V	–	–	199 lm/W	>70
RLE 2x6 4500lm 740 HP HE NTC EXC3 OTD	**28005547**	740/359	–	2,750 lm	400 mA	31.3 V	34.8 V	–	–	210 lm/W	>70
RLE 2x8 6000lm 722 HP HE NTC EXC3 OTD	**28005535**	722/359	–	3,120 lm	400 mA	41.8 V	46.4 V	–	–	179 lm/W	>70
RLE 2x8 6000lm 727 HP HE NTC EXC3 OTD	**28005536**	727/359	–	3,420 lm	400 mA	41.8 V	46.4 V	–	–	196 lm/W	>70
RLE 2x8 6000lm 730 HP HE NTC EXC3 OTD	**28005537**	730/359	–	3,470 lm	400 mA	41.8 V	46.4 V	–	–	199 lm/W	>70
RLE 2x8 6000lm 740 HP HE NTC EXC3 OTD	**28005538**	740/359	–	3,670 lm	400 mA	41.8 V	46.4 V	–	–	210 lm/W	>70
RLE 2x8 6000lm 765 HP HE NTC EXC3 OTD	**28005539**	765/359	–	3,520 lm	400 mA	41.8 V	46.4 V	–	–	202 lm/W	>70
RLE 2x8 6000lm 822 HP HE NTC EXC3 OTD	**28005540**	822/359	–	2,570 lm	400 mA	41.8 V	46.4 V	–	–	147 lm/W	>80
RLE 2x8 6000lm 827 HP HE NTC EXC3 OTD	**28005541**	827/359	–	2,970 lm	400 mA	41.8 V	46.4 V	–	–	170 lm/W	>80
RLE 2x8 6000lm 830 HP HE NTC EXC3 OTD	**28005542**	830/359	–	3,120 lm	400 mA	41.8 V	46.4 V	–	–	179 lm/W	>80
RLE 2x8 6000lm 840 HP HE NTC EXC3 OTD	**28005543**	840/359	–	3,320 lm	400 mA	41.8 V	46.4 V	–	–	190 lm/W	>80
Operating mode NM											
RLE 2x4 3000lm 722 HP HE EXC3 OTD	**28005059**	722/359	2,790 lm	2,630 lm	700 mA	21.7 V	24.1 V	16.1 W	177 lm/W	173 lm/W	>70
RLE 2x4 3000lm 727 HP HE EXC3 OTD	**28005060**	727/359	3,000 lm	2,890 lm	700 mA	21.7 V	24.1 V	16.1 W	194 lm/W	186 lm/W	>70
RLE 2x4 3000lm 730 HP HE EXC3 OTD	**28005061**	730/359	3,100 lm	2,930 lm	700 mA	21.7 V	24.1 V	16.1 W	197 lm/W	193 lm/W	>70
RLE 2x4 3000lm 740 HP HE EXC3 OTD	**28005062**	740/359	3,220 lm	3,100 lm	700 mA	21.7 V	24.1 V	16.1 W	209 lm/W	200 lm/W	>70
RLE 2x4 3000lm 750 HP HE EXC3 OTD	**28005732**	750/359	3,280 lm	3,030 lm	700 mA	21.7 V	24.1 V	16.1 W	204 lm/W	191 lm/W	>70
RLE 2x4 3000lm 765 HP HE EXC3 OTD	**28005063**	765/359	3,100 lm	2,970 lm	700 mA	21.7 V	24.1 V	16.1 W	200 lm/W	193 lm/W	>70
RLE 2x4 3000lm 822 HP HE EXC3 OTD	**28005064**	822/359	2,350 lm	2,160 lm	700 mA	21.7 V	24.1 V	16.1 W	146 lm/W	146 lm/W	>80
RLE 2x4 3000lm 827 HP HE EXC3 OTD	**28005065**	827/359	2,710 lm	2,500 lm	700 mA	21.7 V	24.1 V	16.1 W	169 lm/W	168 lm/W	>80
RLE 2x4 3000lm 830 HP HE EXC3 OTD	**28005066**	830/359	2,850 lm	2,630 lm	700 mA	21.7 V	24.1 V	16.1 W	177 lm/W	177 lm/W	>80
RLE 2x4 3000lm 840 HP HE EXC3 OTD	**28005080**	840/359	3,030 lm	2,800 lm	700 mA	21.7 V	24.1 V	16.1 W	189 lm/W	188 lm/W	>80
RLE 2x6 4500lm 722 HP HE EXC3 OTD	**28005098**	722/359	4,270 lm	3,950 lm	700 mA	32.6 V	36.1 V	24.1 W	177 lm/W	177 lm/W	>70
RLE 2x6 4500lm 727 HP HE EXC3 OTD	**28005099**	727/359	4,680 lm	4,330 lm	700 mA	32.6 V	36.1 V	24.1 W	194 lm/W	194 lm/W	>70
RLE 2x6 4500lm 730 HP HE EXC3 OTD	**28005100**	730/359	4,750 lm	4,390 lm	700 mA	32.6 V	36.1 V	24.1 W	197 lm/W	197 lm/W	>70
RLE 2x6 4500lm 740 HP HE EXC3 OTD	**28005101**	740/359	5,030 lm	4,650 lm	700 mA	32.6 V	36.1 V	24.1 W	209 lm/W	209 lm/W	>70
RLE 2x6 4500lm 750 HP HE EXC3 OTD	**28005734**	750/359	4,920 lm	4,540 lm	700 mA	32.6 V	36.1 V	24.1 W	204 lm/W	191 lm/W	>70
RLE 2x8 6000lm 722 HP HE EXC3 OTD	**28005067**	722/359	5,690 lm	5,260 lm	700 mA	43.4 V	48.1 V	32.1 W	177 lm/W	166 lm/W	>70
RLE 2x8 6000lm 727 HP HE EXC3 OTD	**28005068**	727/359	6,250 lm	5,770 lm	700 mA	43.4 V	48.1 V	32.1 W	195 lm/W	182 lm/W	>70
RLE 2x8 6000lm 730 HP HE EXC3 OTD	**28005069**	730/359	6,340 lm	5,860 lm	700 mA	43.4 V	48.1 V	32.1 W	198 lm/W	185 lm/W	>70

Type	Article number	Photometric code[3]	Useful luminous flux at tp = 25 °C [4]	Expected luminous flux[5] at tp rated	Typ. forward current	Min. forward voltage at tp rated	Max. forward voltage at tp = 25 °C	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
RLE 2x8 6000lm 740 HP HE EXC3 OTD	**28005070**	740/359	6,700 lm	6,200 lm	700 mA	43.4 V	48.1 V	32.1 W	209 lm/W	195 lm/W	>70
RLE 2x8 6000lm 750 HP HE EXC3 OTD	**28005733**	750/359	6,560 lm	6,060 lm	700 mA	43.4 V	48.1 V	32.1 W	204 lm/W	191 lm/W	>70
RLE 2x8 6000lm 765 HP HE EXC3 OTD	**28005071**	765/359	6,430 lm	5,940 lm	700 mA	43.4 V	48.1 V	32.1 W	200 lm/W	187 lm/W	>70
RLE 2x8 6000lm 822 HP HE EXC3 OTD	**28005072**	822/359	4,680 lm	4,330 lm	700 mA	43.4 V	48.1 V	32.1 W	146 lm/W	137 lm/W	>80
RLE 2x8 6000lm 827 HP HE EXC3 OTD	**28005073**	827/359	5,420 lm	5,010 lm	700 mA	43.4 V	48.1 V	32.1 W	169 lm/W	158 lm/W	>80
RLE 2x8 6000lm 830 HP HE EXC3 OTD	**28005074**	830/359	5,690 lm	5,260 lm	700 mA	43.4 V	48.1 V	32.1 W	177 lm/W	166 lm/W	>80
RLE 2x8 6000lm 840 HP HE EXC3 OTD	**28005075**	840/359	6,060 lm	5,600 lm	700 mA	43.4 V	48.1 V	32.1 W	189 lm/W	177 lm/W	>80
RLE 2x4 3000lm 722 HP HE NTC EXC3 OTD	**28005526**	722/359	2,790 lm	2,630 lm	700 mA	21.7 V	24.1 V	16.1 W	177 lm/W	173 lm/W	>70
RLE 2x4 3000lm 727 HP HE NTC EXC3 OTD	**28005527**	727/359	3,000 lm	2,890 lm	700 mA	21.7 V	24.1 V	16.1 W	194 lm/W	186 lm/W	>70
RLE 2x4 3000lm 730 HP HE NTC EXC3 OTD	**28005528**	730/359	3,100 lm	2,930 lm	700 mA	21.7 V	24.1 V	16.1 W	197 lm/W	193 lm/W	>70
RLE 2x4 3000lm 740 HP HE NTC EXC3 OTD	**28005529**	740/359	3,220 lm	3,100 lm	700 mA	21.7 V	24.1 V	16.1 W	209 lm/W	200 lm/W	>70
RLE 2x4 3000lm 765 HP HE NTC EXC3 OTD	**28005530**	765/359	3,100 lm	2,970 lm	700 mA	21.7 V	24.1 V	16.1 W	200 lm/W	193 lm/W	>70
RLE 2x4 3000lm 822 HP HE NTC EXC3 OTD	**28005531**	822/359	2,350 lm	2,160 lm	700 mA	21.7 V	24.1 V	16.1 W	146 lm/W	146 lm/W	>80
RLE 2x4 3000lm 827 HP HE NTC EXC3 OTD	**28005532**	827/359	2,710 lm	2,500 lm	700 mA	21.7 V	24.1 V	16.1 W	169 lm/W	168 lm/W	>80
RLE 2x4 3000lm 830 HP HE NTC EXC3 OTD	**28005533**	830/359	2,850 lm	2,630 lm	700 mA	21.7 V	24.1 V	16.1 W	177 lm/W	177 lm/W	>80
RLE 2x4 3000lm 840 HP HE NTC EXC3 OTD	**28005534**	840/359	3,030 lm	2,800 lm	700 mA	21.7 V	24.1 V	16.1 W	189 lm/W	188 lm/W	>80
RLE 2x6 4500lm 722 HP HE NTC EXC3 OTD	**28005544**	722/359	4,270 lm	3,950 lm	700 mA	32.6 V	36.1 V	24.1 W	177 lm/W	177 lm/W	>70
RLE 2x6 4500lm 727 HP HE NTC EXC3 OTD	**28005545**	727/359	4,680 lm	4,330 lm	700 mA	32.6 V	36.1 V	24.1 W	194 lm/W	194 lm/W	>70
RLE 2x6 4500lm 730 HP HE NTC EXC3 OTD	**28005546**	730/359	4,750 lm	4,390 lm	700 mA	32.6 V	36.1 V	24.1 W	167 lm/W	197 lm/W	>70
RLE 2x6 4500lm 740 HP HE NTC EXC3 OTD	**28005547**	740/359	5,030 lm	4,650 lm	700 mA	32.6 V	36.1 V	24.1 W	209 lm/W	209 lm/W	>70
RLE 2x8 6000lm 722 HP HE NTC EXC3 OTD	**28005535**	722/359	5,690 lm	5,260 lm	700 mA	43.4 V	48.1 V	32.1 W	177 lm/W	166 lm/W	>70
RLE 2x8 6000lm 727 HP HE NTC EXC3 OTD	**28005536**	727/359	6,250 lm	5,770 lm	700 mA	43.4 V	48.1 V	32.1 W	195 lm/W	182 lm/W	>70
RLE 2x8 6000lm 730 HP HE NTC EXC3 OTD	**28005537**	730/359	6,340 lm	5,860 lm	700 mA	43.4 V	48.1 V	32.1 W	198 lm/W	185 lm/W	>70
RLE 2x8 6000lm 740 HP HE NTC EXC3 OTD	**28005538**	740/359	6,700 lm	6,200 lm	700 mA	43.4 V	48.1 V	32.1 W	209 lm/W	195 lm/W	>70
RLE 2x8 6000lm 765 HP HE NTC EXC3 OTD	**28005539**	765/359	6,430 lm	5,940 lm	700 mA	43.4 V	48.1 V	32.1 W	200 lm/W	187 lm/W	>70
RLE 2x8 6000lm 822 HP HE NTC EXC3 OTD	**28005540**	822/359	4,680 lm	4,330 lm	700 mA	43.4 V	48.1 V	32.1 W	146 lm/W	137 lm/W	>80
RLE 2x8 6000lm 827 HP HE NTC EXC3 OTD	**28005541**	827/359	5,420 lm	5,010 lm	700 mA	43.4 V	48.1 V	32.1 W	169 lm/W	158 lm/W	>80
RLE 2x8 6000lm 830 HP HE NTC EXC3 OTD	**28005542**	830/359	5,690 lm	5,260 lm	700 mA	43.4 V	48.1 V	32.1 W	177 lm/W	166 lm/W	>80
RLE 2x8 6000lm 840 HP HE NTC EXC3 OTD	**28005543**	840/359	6,060 lm	5,600 lm	700 mA	43.4 V	48.1 V	32.1 W	189 lm/W	177 lm/W	>80
Operating mode HO											
RLE 2x4 3000lm 722 HP HE EXC3 OTD	**28005059**	722/359	–	5,290 lm	1,500 mA	23.6 V	26.0 V	–	–	144 lm/W	>70
RLE 2x4 3000lm 727 HP HE EXC3 OTD	**28005060**	727/359	–	5,800 lm	1,500 mA	23.6 V	26.0 V	–	–	158 lm/W	>70
RLE 2x4 3000lm 730 HP HE EXC3 OTD	**28005061**	730/359	–	5,890 lm	1,500 mA	23.6 V	26.0 V	–	–	160 lm/W	>70
RLE 2x4 3000lm 740 HP HE EXC3 OTD	**28005062**	740/359	–	6,230 lm	1,500 mA	23.6 V	26.0 V	–	–	169 lm/W	>70
RLE 2x4 3000lm 750 HP HE EXC3 OTD	**28005732**	750/359	–	6,090 lm	1,500 mA	23.6 V	26.0 V	–	–	166 lm/W	>70
RLE 2x4 3000lm 765 HP HE EXC3 OTD	**28005063**	765/359	–	5,970 lm	1,500 mA	23.6 V	26.0 V	–	–	162 lm/W	>70
RLE 2x4 3000lm 822 HP HE EXC3 OTD	**28005064**	822/359	–	4,350 lm	1,500 mA	23.6 V	26.0 V	–	–	118 lm/W	>80
RLE 2x4 3000lm 827 HP HE EXC3 OTD	**28005065**	827/359	–	5,030 lm	1,500 mA	23.6 V	26.0 V	–	–	137 lm/W	>80
RLE 2x4 3000lm 830 HP HE EXC3 OTD	**28005066**	830/359	–	5,290 lm	1,500 mA	23.6 V	26.0 V	–	–	144 lm/W	>80
RLE 2x4 3000lm 840 HP HE EXC3 OTD	**28005080**	840/359	–	5,630 lm	1,500 mA	23.6 V	26.0 V	–	–	153 lm/W	>80
RLE 2x6 4500lm 722 HP HE EXC3 OTD	**28005098**	722/359	–	7,940 lm	1,500 mA	35.3 V	39.0 V	–	–	144 lm/W	>70
RLE 2x6 4500lm 727 HP HE EXC3 OTD	**28005099**	727/359	–	8,700 lm	1,500 mA	35.3 V	39.0 V	–	–	158 lm/W	>70
RLE 2x6 4500lm 730 HP HE EXC3 OTD	**28005100**	730/359	–	8,830 lm	1,500 mA	35.3 V	39.0 V	–	–	160 lm/W	>70
RLE 2x6 4500lm 740 HP HE EXC3 OTD	**28005101**	740/359	–	9,340 lm	1,500 mA	35.3 V	39.0 V	–	–	169 lm/W	>70
RLE 2x6 4500lm 750 HP HE EXC3 OTD	**28005734**	750/359	–	9,140 lm	1,500 mA	35.3 V	39.0 V	–	–	166 lm/W	>70
RLE 2x8 6000lm 722 HP HE EXC3 OTD	**28005067**	722/359	–	10,580 lm	1,500 mA	47.1 V	52.0 V	–	–	144 lm/W	>70
RLE 2x8 6000lm 727 HP HE EXC3 OTD	**28005068**	727/359	–	11,600 lm	1,500 mA	47.1 V	52.0 V	–	–	158 lm/W	>70
RLE 2x8 6000lm 730 HP HE EXC3 OTD	**28005069**	730/359	–	11,780 lm	1,500 mA	47.1 V	52.0 V	–	–	160 lm/W	>70
RLE 2x8 6000lm 740 HP HE EXC3 OTD	**28005070**	740/359	–	12,460 lm	1,500 mA	47.1 V	52.0 V	–	–	169 lm/W	>70
RLE 2x8 6000lm 750 HP HE EXC3 OTD	**28005733**	750/359	–	12,180 lm	1,500 mA	47.1 V	52.0 V	–	–	165 lm/W	>70
RLE 2x8 6000lm 765 HP HE EXC3 OTD	**28005071**	765/359	–	11,950 lm	1,500 mA	47.1 V	52.0 V	–	–	162 lm/W	>70
RLE 2x8 6000lm 822 HP HE EXC3 OTD	**28005072**	822/359	–	8,700 lm	1,500 mA	47.1 V	52.0 V	–	–	118 lm/W	>80
RLE 2x8 6000lm 827 HP HE EXC3 OTD	**28005073**	827/359	–	10,070 lm	1,500 mA	47.1 V	52.0 V	–	–	137 lm/W	>80
RLE 2x8 6000lm 830 HP HE EXC3 OTD	**28005074**	830/359	–	10,580 lm	1,500 mA	47.1 V	52.0 V	–	–	144 lm/W	>80
RLE 2x8 6000lm 840 HP HE EXC3 OTD	**28005075**	840/359	–	11,260 lm	1,500 mA	47.1 V	52.0 V	–	–	153 lm/W	>80
RLE 2x4 3000lm 722 HP HE NTC EXC3 OTD	**28005526**	722/359	–	5,290 lm	1,500 mA	23.6 V	26.0 V	–	–	144 lm/W	>70
RLE 2x4 3000lm 727 HP HE NTC EXC3 OTD	**28005527**	727/359	–	5,800 lm	1,500 mA	23.6 V	26.0 V	–	–	158 lm/W	>70
RLE 2x4 3000lm 730 HP HE NTC EXC3 OTD	**28005528**	730/359	–	5,890 lm	1,500 mA	23.6 V	26.0 V	–	–	160 lm/W	>70
RLE 2x4 3000lm 740 HP HE NTC EXC3 OTD	**28005529**	740/359	–	6,230 lm	1,500 mA	23.6 V	26.0 V	–	–	169 lm/W	>70
RLE 2x4 3000lm 765 HP HE NTC EXC3 OTD	**28005530**	765/359	–	5,970 lm	1,500 mA	23.6 V	26.0 V	–	–	162 lm/W	>70
RLE 2x4 3000lm 822 HP HE NTC EXC3 OTD	**28005531**	822/359	–	4,350 lm	1,500 mA	23.6 V	26.0 V	–	–	118 lm/W	>80
RLE 2x4 3000lm 827 HP HE NTC EXC3 OTD	**28005532**	827/359	–	5,030 lm	1,500 mA	23.6 V	26.0 V	–	–	137 lm/W	>80
RLE 2x4 3000lm 830 HP HE NTC EXC3 OTD	**28005533**	830/359	–	5,290 lm	1,500 mA	23.6 V	26.0 V	–	–	144 lm/W	>80
RLE 2x4 3000lm 840 HP HE NTC EXC3 OTD	**28005534**	840/359	–	5,630 lm	1,500 mA	23.6 V	26.0 V	–	–	153 lm/W	>80
RLE 2x6 4500lm 722 HP HE NTC EXC3 OTD	**28005544**	722/359	–	7,940 lm	1,500 mA	35.3 V	39.0 V	–	–	144 lm/W	>70
RLE 2x6 4500lm 727 HP HE NTC EXC3 OTD	**28005545**	727/359	–	8,700 lm	1,500 mA	35.3 V	39.0 V	–	–	158 lm/W	>70
RLE 2x6 4500lm 730 HP HE NTC EXC3 OTD	**28005546**	730/359	–	8,830 lm	1,500 mA	35.3 V	39.0 V	–	–	160 lm/W	>70
RLE 2x6 4500lm 740 HP HE NTC EXC3 OTD	**28005547**	740/359	–	9,340 lm	1,500 mA	35.3 V	39.0 V	–	–	169 lm/W	>70

Type	Article number	Photometric code[3]	Useful luminous flux at tp = 25 °C [4]	Expected luminous flux[5] at tp rated	Typ. forward current	Min. forward voltage at tp rated	Max. forward voltage at tp = 25 °C	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
RLE 2x8 6000lm 722 HP HE NTC EXC3 OTD	**28005535**	722/359	–	10,580 lm	1,500 mA	47.1 V	52.0 V	–	–	144 lm/W	>70
RLE 2x8 6000lm 727 HP HE NTC EXC3 OTD	**28005536**	727/359	–	11,600 lm	1,500 mA	47.1 V	52.0 V	–	–	158 lm/W	>70
RLE 2x8 6000lm 730 HP HE NTC EXC3 OTD	**28005537**	730/359	–	11,780 lm	1,500 mA	47.1 V	52.0 V	–	–	160 lm/W	>70
RLE 2x8 6000lm 740 HP HE NTC EXC3 OTD	**28005538**	740/359	–	12,460 lm	1,500 mA	47.1 V	52.0 V	–	–	169 lm/W	>70
RLE 2x8 6000lm 765 HP HE NTC EXC3 OTD	**28005539**	765/359	–	11,950 lm	1,500 mA	47.1 V	52.0 V	–	–	162 lm/W	>70
RLE 2x8 6000lm 822 HP HE NTC EXC3 OTD	**28005540**	822/359	–	8,700 lm	1,500 mA	47.1 V	52.0 V	–	–	118 lm/W	>80
RLE 2x8 6000lm 827 HP HE NTC EXC3 OTD	**28005541**	827/359	–	10,070 lm	1,500 mA	47.1 V	52.0 V	–	–	137 lm/W	>80
RLE 2x8 6000lm 830 HP HE NTC EXC3 OTD	**28005542**	830/359	–	10,580 lm	1,500 mA	47.1 V	52.0 V	–	–	144 lm/W	>80
RLE 2x8 6000lm 840 HP HE NTC EXC3 OTD	**28005543**	840/359	–	11,260 lm	1,500 mA	47.1 V	52.0 V	–	–	153 lm/W	>80

② Lens shape like LEDIL Strada 2x2.
③ The detailed explanation, see data sheet section 1.1.
④ Tolerance of useful light flux - 0 % / + 15 %. Measurement uncertainty ± 10 %.
⑤ Measurement uncertainty ± 10 %. Based on calculation.
⑥ Tolerance of power consumption Pon ± 10 %. Measurement uncertainty ± 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

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

Type	Risk group (IEC 62471)
RLE HP HE EXC3 OTD at I ≤ 663 mA	RG1
RLE HP HE EXC3 OTD at Imax	RG2 (Ethr = 1050 lx, RG1 at d ≥ 57 cm)

1.3 Energy classification

Type	Colour temperature	Forward current	Energy classification	Energy consumption
RLE 2x4 3000lm xxx HP HE (NTC) EXC3 OTD				
RLE 2x4 3000lm 722 HP HE EXC3 OTD	2,200 K	700 mA	C	17 kWh / 1,000 h
RLE 2x4 3000lm 727 HP HE EXC3 OTD	2,700 K	700 mA	C	17 kWh / 1,000 h
RLE 2x4 3000lm 730 HP HE EXC3 OTD	3,000 K	700 mA	C	17 kWh / 1,000 h
RLE 2x4 3000lm 740 HP HE EXC3 OTD	4,000 K	700 mA	B	17 kWh / 1,000 h
RLE 2x4 3000lm 750 HP HE EXC3 OTD	5,000 K	700 mA	B	17 kWh / 1,000 h
RLE 2x4 3000lm 765 HP HE EXC3 OTD	6,500 K	700 mA	C	17 kWh / 1,000 h
RLE 2x4 3000lm 822 HP HE EXC3 OTD	2,200 K	700 mA	D	17 kWh / 1,000 h
RLE 2x4 3000lm 827 HP HE EXC3 OTD	2,700 K	700 mA	D	17 kWh / 1,000 h
RLE 2x4 3000lm 830 HP HE EXC3 OTD	3,000 K	700 mA	C	17 kWh / 1,000 h
RLE 2x4 3000lm 840 HP HE EXC3 OTD	4,000 K	700 mA	C	17 kWh / 1,000 h
RLE 2x6 4500lm xxx HP HE (NTC) EXC3 OTD				
RLE 2x6 4500lm 722 HP HE EXC3 OTD	2,200 K	700 mA	C	25 kWh / 1,000 h
RLE 2x6 4500lm 727 HP HE EXC3 OTD	2,700 K	700 mA	C	25 kWh / 1,000 h
RLE 2x6 4500lm 730 HP HE EXC3 OTD	3,000 K	700 mA	C	25 kWh / 1,000 h
RLE 2x6 4500lm 740 HP HE EXC3 OTD	4,000 K	700 mA	B	25 kWh / 1,000 h
RLE 2x6 4500lm 750 HP HE EXC3 OTD	5,000 K	700 mA	B	25 kWh / 1,000 h
RLE 2x8 6000lm xxx HP HE (NTC) EXC3 OTD				
RLE 2x8 6000lm 722 HP HE EXC3 OTD	2,200 K	700 mA	C	33 kWh / 1,000 h
RLE 2x8 6000lm 727 HP HE EXC3 OTD	2,700 K	700 mA	C	33 kWh / 1,000 h
RLE 2x8 6000lm 730 HP HE EXC3 OTD	3,000 K	700 mA	C	33 kWh / 1,000 h
RLE 2x8 6000lm 740 HP HE EXC3 OTD	4,000 K	700 mA	B	33 kWh / 1,000 h
RLE 2x8 6000lm 750 HP HE EXC3 OTD	5,000 K	700 mA	B	33 kWh / 1,000 h
RLE 2x8 6000lm 765 HP HE EXC3 OTD	6,500 K	700 mA	B	33 kWh / 1,000 h
RLE 2x8 6000lm 822 HP HE EXC3 OTD	2,200 K	700 mA	D	33 kWh / 1,000 h
RLE 2x8 6000lm 827 HP HE EXC3 OTD	2,700 K	700 mA	D	33 kWh / 1,000 h
RLE 2x8 6000lm 830 HP HE EXC3 OTD	3,000 K	700 mA	C	33 kWh / 1,000 h
RLE 2x8 6000lm 840 HP HE EXC3 OTD	4,000 K	700 mA	C	33 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 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

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 2x4 3000lm EXC3 OTD				
ta	**tp**	**Forward current**	**$R_{th, hs-a}$**	**Cooling area**
25 °C	75 °C	400 mA	11.88 K/W	self cooling
25 °C	75 °C	700 mA	5.99 K/W	111 cm²
25 °C	75 °C	1,500 mA	2.22 K/W	301 cm²
35 °C	75 °C	400 mA	9.50 K/W	70 cm²
35 °C	75 °C	700 mA	4.79 K/W	139 cm²
35 °C	75 °C	1,500 mA	1.77 K/W	377 cm²
40 °C	75 °C	400 mA	8.31 K/W	80 cm²
40 °C	75 °C	700 mA	4.19 K/W	159 cm²
40 °C	75 °C	1,500 mA	1.55 K/W	431 cm²
45 °C	75 °C	400 mA	7.12 K/W	94 cm²
45 °C	75 °C	700 mA	3.59 K/W	186 cm²
45 °C	75 °C	1,500 mA	1.32 K/W	503 cm²
50 °C	75 °C	400 mA	5.94 K/W	112 cm²
50 °C	75 °C	700 mA	2.99 K/W	223 cm²
50 °C	75 °C	1,500 mA	1.10 K/W	605 cm²
55 °C	75 °C	400 mA	4.75 K/W	140 cm²
55 °C	75 °C	700 mA	2.39 K/W	279 cm²
55 °C	75 °C	1,500 mA	0.88 K/W	758 cm²
60 °C	75 °C	400 mA	3.56 K/W	187 cm²
60 °C	75 °C	700 mA	1.79 K/W	372 cm²
60 °C	75 °C	1,500 mA	0.66 K/W	1,015 cm²

RLE 2x6 4500lm EXC3 OTD

ta	tp	Forward current	$R_{th, hs-a}$	Cooling area
25 °C	75 °C	400 mA	7.79 K/W	86 cm²
25 °C	75 °C	700 mA	4.00 K/W	167 cm²
25 °C	75 °C	1,500 mA	1.48 K/W	451 cm²
35 °C	75 °C	400 mA	6.23 K/W	107 cm²
35 °C	75 °C	700 mA	3.20 K/W	208 cm²
35 °C	75 °C	1,500 mA	1.18 K/W	564 cm²
40 °C	75 °C	400 mA	5.45 K/W	122 cm²
40 °C	75 °C	700 mA	2.80 K/W	238 cm²
40 °C	75 °C	1,500 mA	1.03 K/W	645 cm²
45 °C	75 °C	400 mA	4.67 K/W	143 cm²
45 °C	75 °C	700 mA	2.40 K/W	278 cm²
45 °C	75 °C	1,500 mA	0.88 K/W	754 cm²
50 °C	75 °C	400 mA	3.89 K/W	171 cm²
50 °C	75 °C	700 mA	2.00 K/W	334 cm²
50 °C	75 °C	1,500 mA	0.74 K/W	906 cm²
55 °C	75 °C	400 mA	3.11 K/W	214 cm²
55 °C	75 °C	700 mA	1.60 K/W	418 cm²
55 °C	75 °C	1,500 mA	0.59 K/W	1,136 cm²
60 °C	75 °C	400 mA	2.33 K/W	286 cm²
60 °C	75 °C	700 mA	1.19 K/W	558 cm²
60 °C	75 °C	1,500 mA	0.44 K/W	1,521 cm²

RLE 2x8 6000lm EXC3 OTD

ta	tp	Forward current	$R_{th, hs-a}$	Cooling area
25 °C	75 °C	400 mA	5.87 K/W	114 cm²
25 °C	75 °C	700 mA	3.11 K/W	214 cm²
25 °C	75 °C	1,500 mA	1.11 K/W	602 cm²
35 °C	75 °C	400 mA	4.69 K/W	142 cm²
35 °C	75 °C	700 mA	2.49 K/W	268 cm²
35 °C	75 °C	1,500 mA	0.88 K/W	754 cm²
40 °C	75 °C	400 mA	4.10 K/W	162 cm²
40 °C	75 °C	700 mA	2.17 K/W	307 cm²
40 °C	75 °C	1,500 mA	0.77 K/W	862 cm²
45 °C	75 °C	400 mA	3.52 K/W	190 cm²
45 °C	75 °C	700 mA	1.86 K/W	358 cm²
45 °C	75 °C	1,500 mA	0.66 K/W	1,007 cm²
50 °C	75 °C	400 mA	2.93 K/W	228 cm²
50 °C	75 °C	700 mA	1.55 K/W	430 cm²
50 °C	75 °C	1,500 mA	0.55 K/W	1,211 cm²
55 °C	75 °C	400 mA	2.34 K/W	285 cm²
55 °C	75 °C	700 mA	1.24 K/W	538 cm²
55 °C	75 °C	1,500 mA	0.44 K/W	1,518 cm²
60 °C	75 °C	400 mA	1.76 K/W	380 cm²
60 °C	75 °C	700 mA	0.93 K/W	718 cm²
60 °C	75 °C	1,500 mA	0.33 K/W	2,033 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.

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.

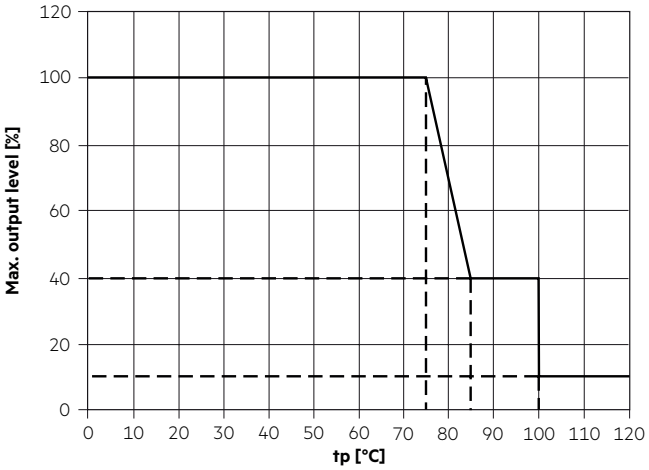
RLE modules are basic insulated up to 670 V if mounted with M3 screws and lens (e.g. LEDiL Strada 2x2) against ground and can be mounted directly on earthed metal parts of the luminaire. If the max. output voltage of the LED driver (also against earth) is above 670 V, an additional insulation between LED module and heat sink is required (for example by insulated thermal pads) or by a suitable luminaire construction.
At voltages > 60 V an additional protection against direct touch (test finger) to the light emitting side of the module has to be guaranteed. This is typically achieved by means of a non removable light distributor over the module.

3.2 Integrated protection

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

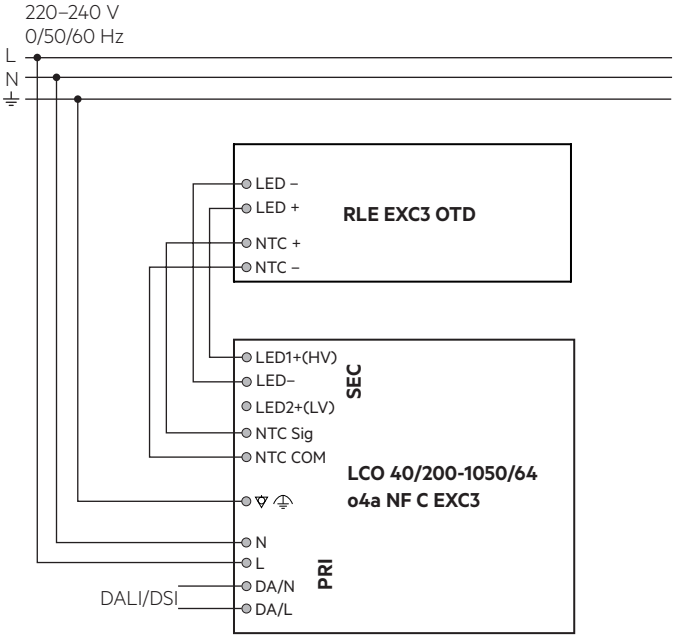
The NTC is designed to work with the LCO EXC3 drivers supporting NTC functionality (for more details see LED driver data sheet).

NTC type: 100kΩ / 4100K



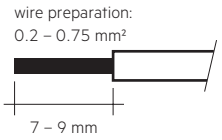
3.3 Wiring

3.4 Wiring examples



3.5 Wiring type and cross section

For wiring use stranded wire with ferrules or solid wire from 0.2 to 0.75 mm². For the push-wire connection you have to strip the insulation (7–9 mm).



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

3.6 Mounting instruction

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

Max. torque for fixing: 0.5 Nm.

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

Chemical substance may harm the LED module. Chemical reactions could lead to colour shift, reduced luminous flux or a total failure of the module caused by corrosion of electrical connections.

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

3.7 EOS/ESD safety guidelines

The device / module contains components that are sensitive to electrostatic discharge and may only be installed in the factory and on site if appropriate EOS/ESD protection measures have been taken. No special measures need be taken for devices/modules with enclosed casings (contact with the pc board not possible), just normal installation practice. Please note the requirements set out in the document EOS / ESD guidelines (Guideline_EOS_ESD.pdf) at: http://www.tridonic.com/esd-protection

4. Lifetime

4.1 Lifetime, lumen maintenance and failure rate

The light output of an LED module decreases over the lifetime, this is characterized with the L value.
L70 means that the LED module will give 70 % of its initial luminous flux. This value is always related to the number of operation hours and therefore defines the lifetime of an LED module.

As the L value is a statistical value and the lumen maintenance may vary over the delivered LED modules.
The B value defines the amount of modules which are below the specific L value, e.g. L70B10 means 10 % of the LED modules are below 70 % of the initial luminous flux, respectively 90 % will be above 70 % of the initial value. In addition the percentage of failed modules (fatal failure) is characterized by the C value.

4.2 Lumen maintenance

Typ. forward current	tp temperature	L90 / B10	L90 / B50	L80 / B10	L80 / B50	L70 / B10	L70 / B50
400 mA	45 °C	>100k h	>100k h	>100k h	>100k h	>100k h	>100k h
	55 °C	>100k h	>100k h	>100k h	>100k h	>100k h	>100k h
	65 °C	>100k h	>100k h	>100k h	>100k h	>100k h	>100k h
	75 °C	>100k h	>100k h	>100k h	>100k h	>100k h	>100k h
	85 °C	>100k h	>100k h	>100k h	>100k h	>100k h	>100k h
	95 °C	>100k h	>100k h	>100k h	>100k h	>100k h	>100k h
700 mA	45 °C	>100k h	>100k h	>100k h	>100k h	>100k h	>100k h
	55 °C	>100k h	>100k h	>100k h	>100k h	>100k h	>100k h
	65 °C	>100k h	>100k h	>100k h	>100k h	>100k h	>100k h
	75 °C	>100k h	>100k h	>100k h	>100k h	>100k h	>100k h
	85 °C	>100k h	>100k h	>100k h	>100k h	>100k h	>100k h
	95 °C	>100k h	>100k h	>100k h	>100k h	>100k h	>100k h
1,500 mA	45 °C	>100k h	>100k h	>100k h	>100k h	>100k h	>100k h
	55 °C	>100k h	>100k h	>100k h	>100k h	>100k h	>100k h
	65 °C	>100k h	>100k h	>100k h	>100k h	>100k h	>100k h
	75 °C	>100k h	>100k h	>100k h	>100k h	>100k h	>100k h
	85 °C	>100k h	>100k h	>100k h	>100k h	>100k h	>100k h
	95 °C	>100k h	>100k h	>100k h	>100k h	>100k h	>100k h

L0C10 >100k h. At tp rated and Irated, based on 10 swichting cycles per day.

4.3 Switching capability

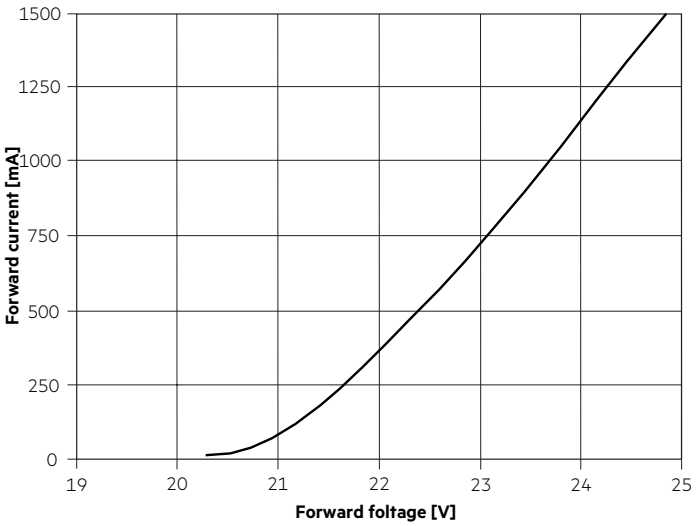
100,000 cycles

Tridonic test according to IEC 62717 Cl 10.3.3
30 s on / 30 s off at a forward current of 700 mA

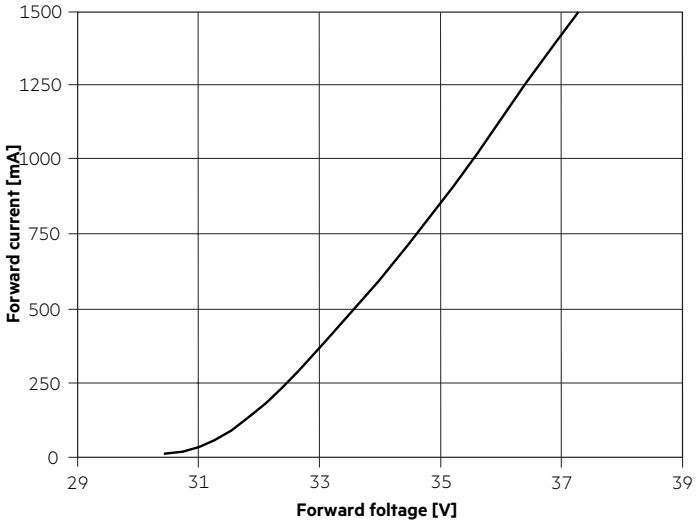
5. Electrical values

5.1 Typ. forward voltage vs. forward current

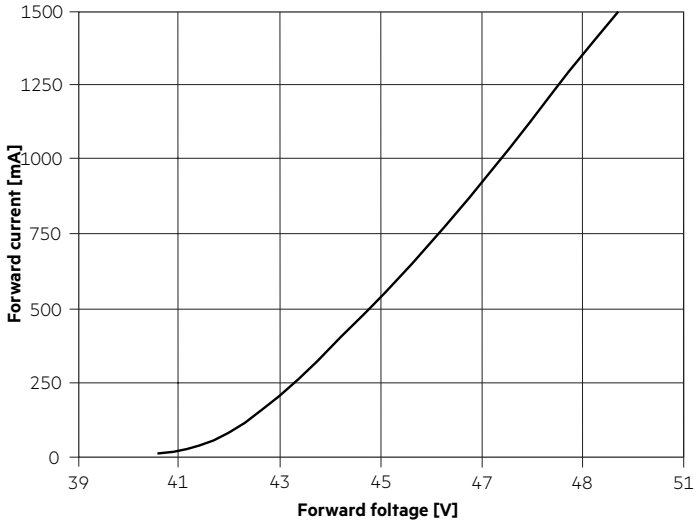
RLE 2x4 3000lm xxx HP EXC3 OTD



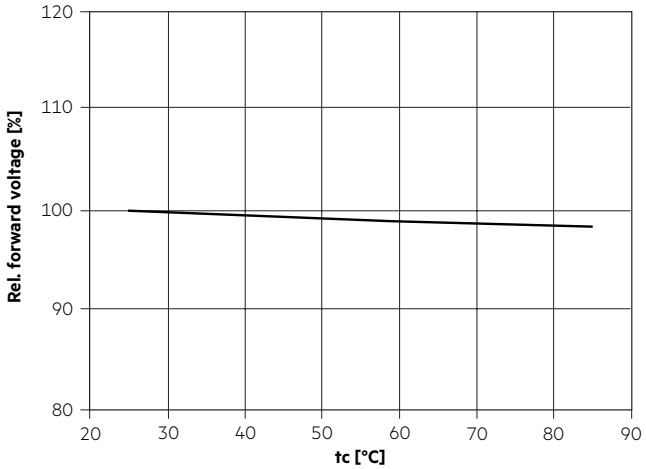
RLE 2x6 4500lm xxx HP EXC3 OTD



RLE 2x8 6000lm xxx HP EXC3 OTD



5.2 Forward voltage vs. tc temperature



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

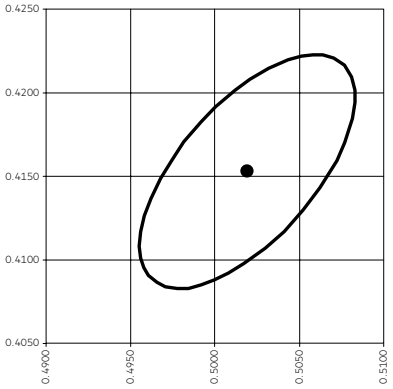
6. Photometric characteristics

6.1 Coordinates and tolerances according to CIE 1931

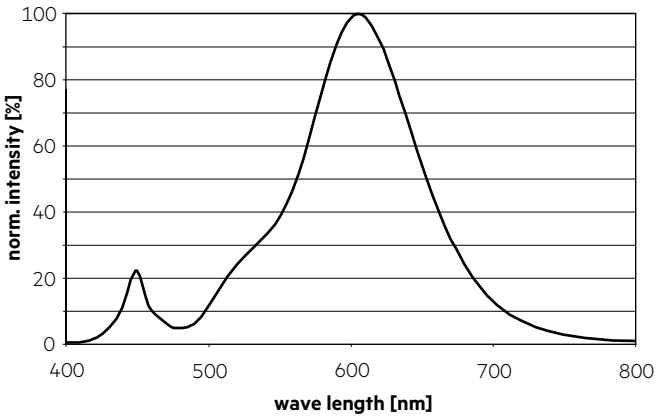
The specified colour coordinates are integral measured by current impulse of 1,280 mA and a duration of < 2 s.
The ambient temperature of the measurement is 25 °C.
The measurement tolerance of the colour coordinates are ± 0.01.

2,200 K, CRI 70

	x0	y0
Centre	0.5019	0.4153

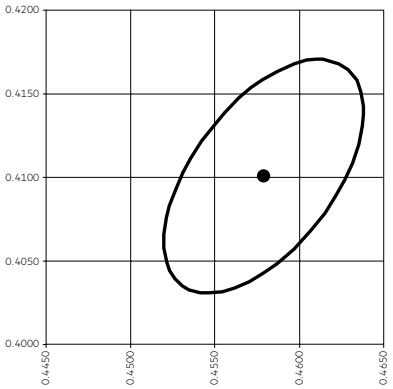


MacAdam Ellipse: 3SDCM

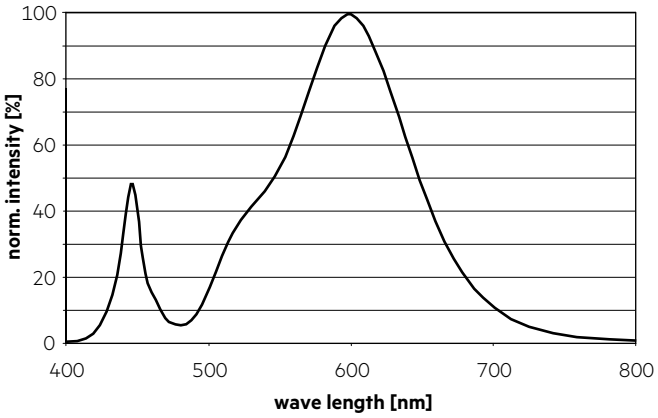


2,700 K, CRI 70

	x0	y0
Centre	0.4578	0.4101

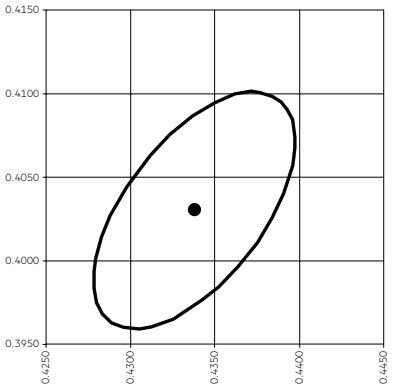


MacAdam Ellipse: 3SDCM

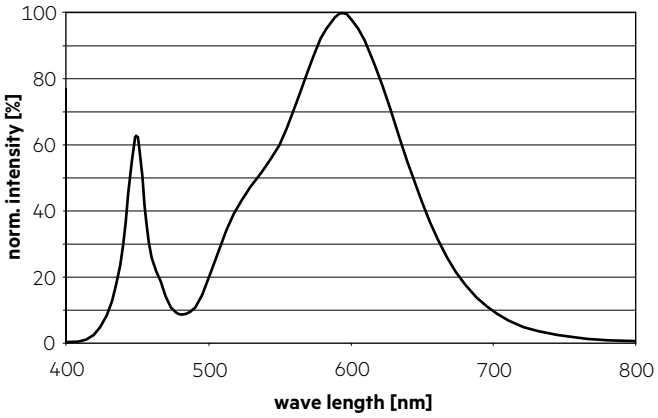


3,000 K, CRI 70

	x0	y0
Centre	0.4338	0.4030

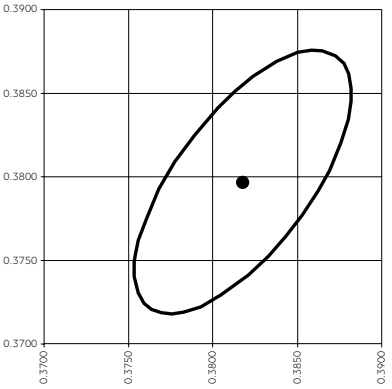


MacAdam Ellipse: 3SDCM

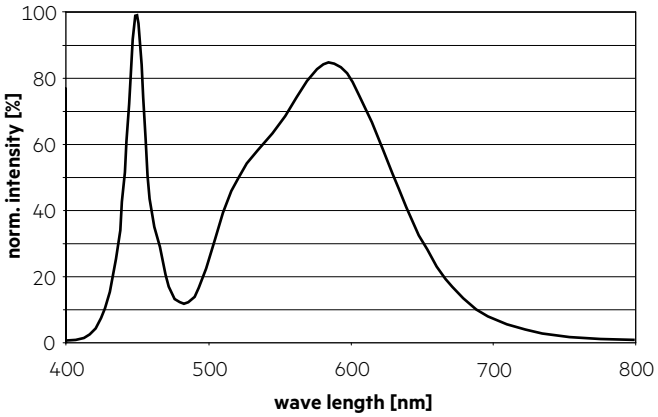


4,000 K, CRI 70

	x0	y0
Centre	0.3818	0.3797

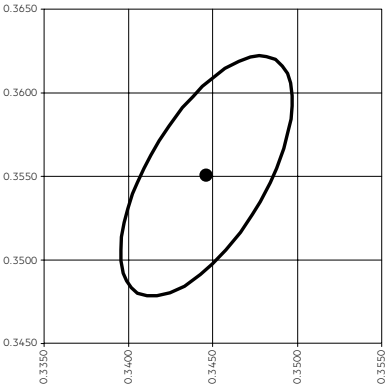


MacAdam Ellipse: 3SDCM

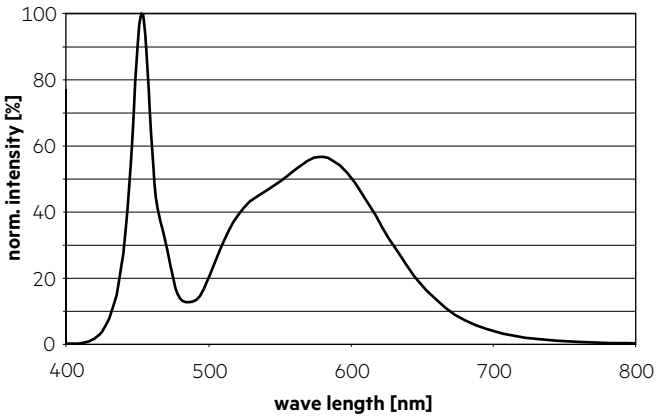


5,000 K, CRI 70

	x0	y0
Centre	0.3446	0.3551

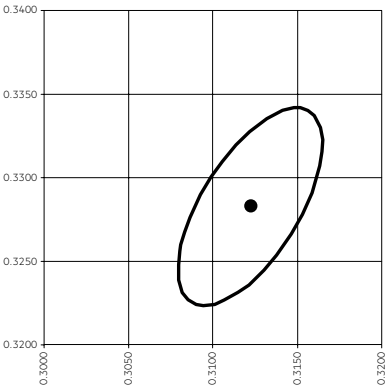


MacAdam Ellipse: 3SDCM

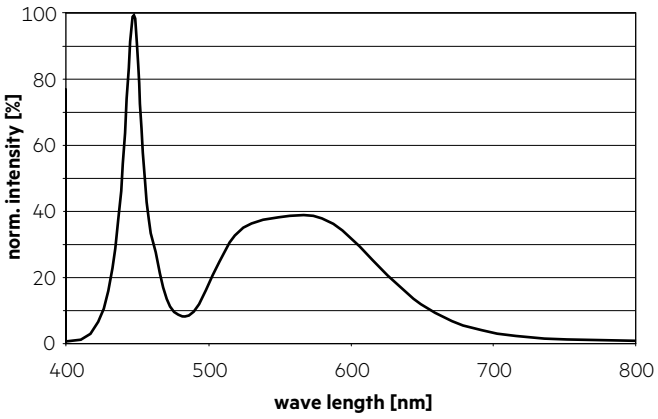


6,500 K, CRI 70

	x0	y0
Centre	0.3123	0.3282

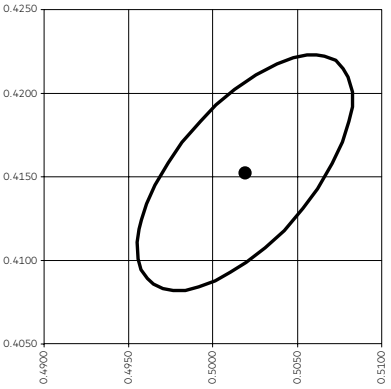


MacAdam Ellipse: 3SDCM

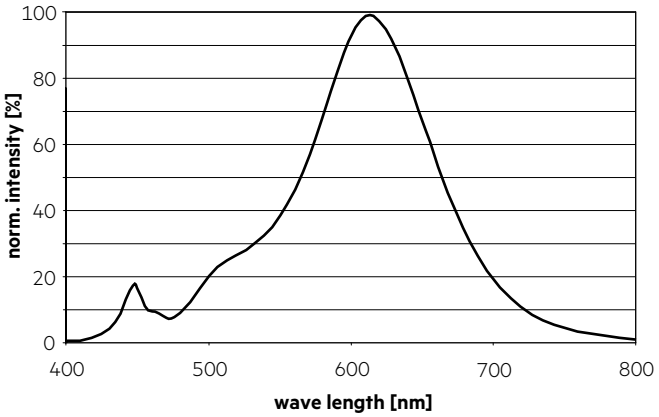


2,200 K, CRI 80

	x0	y0
Centre	0.5019	0.4153

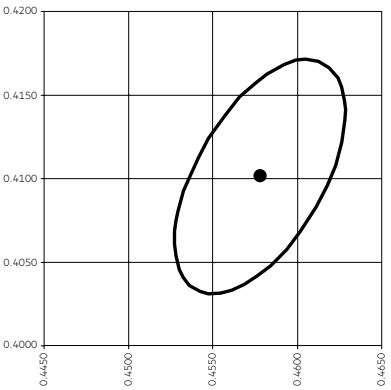


MacAdam Ellipse: 3SDCM

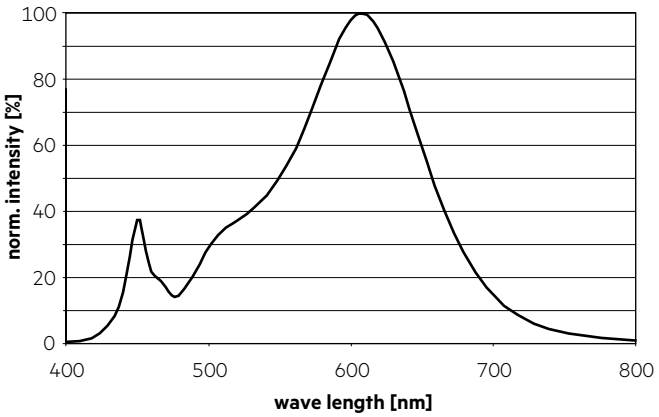


2,700 K, CRI 80

	x0	y0
Centre	0.4578	0.4101

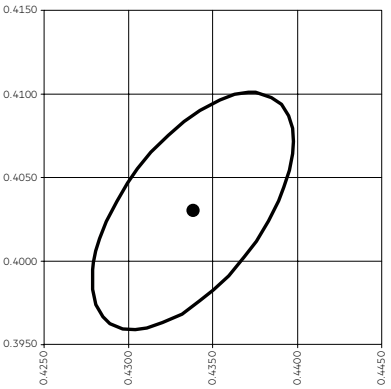


MacAdam Ellipse: 3SDCM

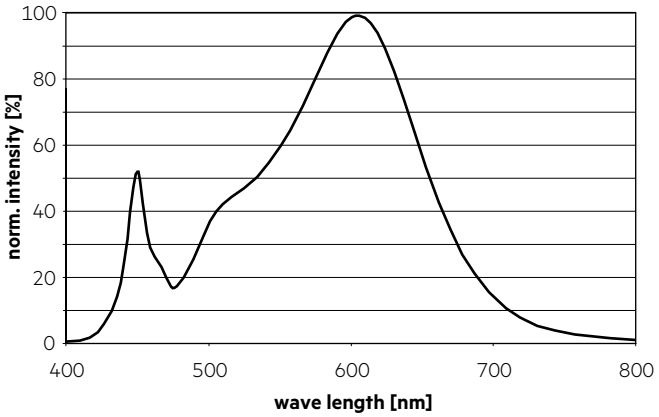


3,000 K, CRI 80

	x0	y0
Centre	0.4338	0.4030

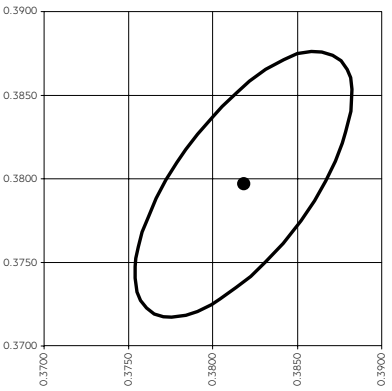


MacAdam Ellipse: 3SDCM

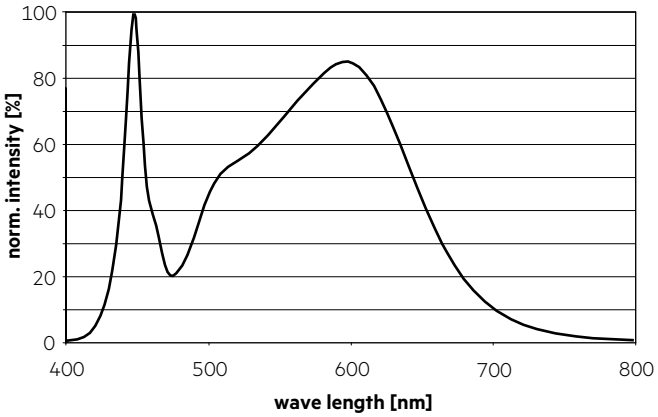


4,000 K, CRI 80

	x0	y0
Centre	0.3818	0.3797



MacAdam Ellipse: 3SDCM



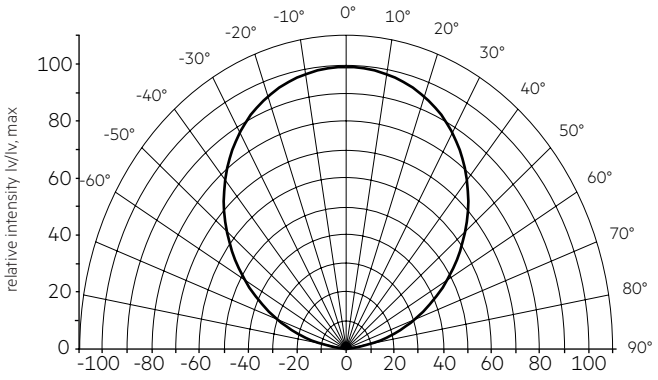
6.2 Spectral G-Index

CCT	CRI	G-Index
2,200 K	70	2.2
2,700 K	70	1.8
3,000 K	70	1.5
4,000 K	70	1.1
5,000 K	70	0.7
6,500 K	70	0.4
2,200 K	80	2.1
2,700 K	80	1.6
3,000 K	80	1.4
4,000 K	80	0.9

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

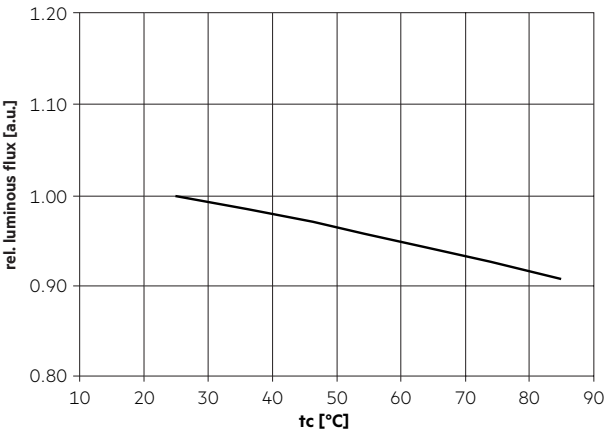
6.3 Light distribution

RLE modules are designed to be compatible with 50 x 50 mm lense arrays with 25.4 mm pitch distance. This allows multiple light distributions.

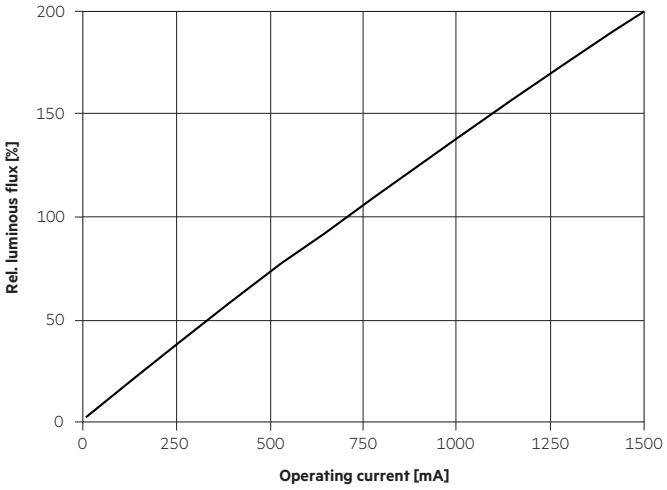


The colour temperature is measured integral over the complete module. The single LED light points can have deviations in the colour coordinates within MacAdam 4.

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 → Technical Data

Guarantee conditions at www.tridonic.com → Services

Lifetime declarations are informative and represent no warranty claim.