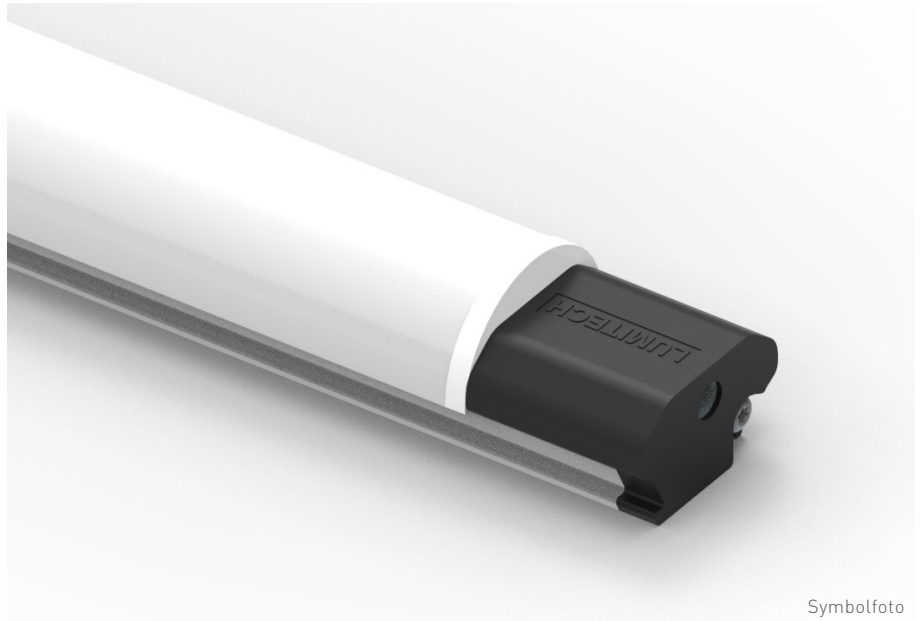


LUMITECH DATASHEET - Architectural Line



Symbolfoto

■ PRODUCT DESCRIPTION

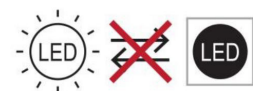
- High efficient architectural lighting
- Available in a variety of light colours
- Easy plug & play solution due to the Cinch Connection System
- High performance due to perfect thermal management
- Excellent illumination due to use of innovative linear optics
- Safe-use operation due to safety extra-low voltage (SELV)
- Easy mounting by use of FIXING PLATES
- Heat sink made of anodised, extruded aluminium
- Sustainable protection against humidity and corrosion by sealing of LED modules
- End caps made of PBT
- Lens made of PMMA, or PC
- Dimmable

■ TECHNICAL DATA

| | |
|---|-----------------------------------|
| Supply voltage | 24 VDC |
| Ambient temperature t_a | -30 ... +55 °C |
| Max. surface temperature on profile t_c | 60 °C |
| Type of protection | IP54 (only with „PROTECTION KIT“) |
| Protection class | III |
| Risk group (EN 62471:2008) | 1 |



Non-replaceable light source



LUMITECH DATASHEET - Architectural Line

■ TECHNICAL DATA | ORDER DATA

| Art. No. | Type* | Version* | Length | No. of LED modules | Supply | CRI |
|----------|--|----------|--------|--------------------|--------|-----|
| 9146xxxx | LED LE205 xx 1L14-UHD 24V/xxmA Lens 8DY | Lens | 205mm | 1 | 24V DC | ≥90 |
| 9146xxxx | LED LE205 xx 1L14-UHD 24V/xxmA Cover 8DY | Cover | 205mm | 1 | 24V DC | ≥90 |
| 9146xxxx | LED LE345 xx 2L14-UHD 24V/xxmA Lens 8DY | Lens | 345mm | 2 | 24V DC | ≥90 |
| 9146xxxx | LED LE345 xx 2L14-UHD 24V/xxmA Cover 8DY | Cover | 345mm | 2 | 24V DC | ≥90 |
| 9146xxxx | LED LE485 xx 3L14-UHD 24V/xxmA Lens 8DY | Lens | 485mm | 3 | 24V DC | ≥90 |
| 9146xxxx | LED LE485 xx 3L14-UHD 24V/xxmA Cover 8DY | Cover | 485mm | 3 | 24V DC | ≥90 |
| 9146xxxx | LED LE625 xx 4L14-UHD 24V/xxmA Lens 8DY | Lens | 625mm | 4 | 24V DC | ≥90 |
| 9146xxxx | LED LE625 xx 4L14-UHD 24V/xxmA Cover 8DY | Cover | 625mm | 4 | 24V DC | ≥90 |
| 9146xxxx | LED LE770 xx 5L14-UHD 24V/xxmA Lens 8DY | Lens | 770mm | 5 | 24V DC | ≥90 |
| 9146xxxx | LED LE770 xx 5L14-UHD 24V/xxmA Cover 8DY | Cover | 770mm | 5 | 24V DC | ≥90 |
| 9146xxxx | LED LE905 xx 6L14-UHD 24V/xxmA Lens 8DY | Lens | 905mm | 6 | 24V DC | ≥90 |
| 9146xxxx | LED LE905 xx 6L14-UHD 24V/xxmA Cover 8DY | Cover | 905mm | 6 | 24V DC | ≥90 |
| 9146xxxx | LED LE1050 xx 7L14-UHD 24V/xxmA Lens 8DY | Lens | 1050mm | 7 | 24V DC | ≥90 |
| 9146xxxx | LED LE1050 xx 7L14-UHD 24V/xxmA Cover 8DY | Cover | 1050mm | 7 | 24V DC | ≥90 |
| 9146xxxx | LED LE1190 xx 8L14-UHD 24V/xxmA Lens 8DY | Lens | 1190mm | 8 | 24V DC | ≥90 |
| 9146xxxx | LED LE1190 xx 8L14-UHD 24V/xxmA Cover 8DY | Cover | 1190mm | 8 | 24V DC | ≥90 |
| 9146xxxx | LED LE1330 xx 9L14-UHD 24V/xxmA Lens 8DY | Lens | 1330mm | 9 | 24V DC | ≥90 |
| 9146xxxx | LED LE1330 xx 9L14-UHD 24V/xxmA Cover 8DY | Cover | 1330mm | 9 | 24V DC | ≥90 |
| 9146xxxx | LED LE1470 xx 10L14-UHD 24V/xxmA Lens 8DY | Lens | 1470mm | 10 | 24V DC | ≥90 |
| 9146xxxx | LED LE1470 xx 10L14-UHD 24V/xxmA Cover 8DY | Cover | 1470mm | 10 | 24V DC | ≥90 |
| 9146xxxx | LED LE1610 xx 11L14-UHD 24V/xxmA Lens 8DY | Lens | 1610mm | 11 | 24V DC | ≥90 |
| 9146xxxx | LED LE1610 xx 11L14-UHD 24V/xxmA Cover 8DY | Cover | 1610mm | 11 | 24V DC | ≥90 |
| 9146xxxx | LED LE1750 xx 12L14-UHD 24V/xxmA Lens 8DY | Lens | 1750mm | 12 | 24V DC | ≥90 |
| 9146xxxx | LED LE1750 xx 12L14-UHD 24V/xxmA Cover 8DY | Cover | 1750mm | 12 | 24V DC | ≥90 |
| 9146xxxx | LED LE1890 xx 13L14-UHD 24V/xxmA Lens 8DY | Lens | 1890mm | 13 | 24V DC | ≥90 |
| 9146xxxx | LED LE1890 xx 13L14-UHD 24V/xxmA Cover 8DY | Cover | 1890mm | 13 | 24V DC | ≥90 |
| 9146xxxx | LED LE2030 xx 14L14-UHD 24V/xxmA Lens 8DY | Lens | 2030mm | 14 | 24V DC | ≥90 |
| 9146xxxx | LED LE2030 xx 14L14-UHD 24V/xxmA Cover 8DY | Cover | 2030mm | 14 | 24V DC | ≥90 |
| 9146xxxx | LED LE2175 xx 15L14-UHD 24V/xxmA Lens 8DY | Lens | 2175mm | 15 | 24V DC | ≥90 |
| 9146xxxx | LED LE2175 xx 15L14-UHD 24V/xxmA Cover 8DY | Cover | 2175mm | 15 | 24V DC | ≥90 |
| 9146xxxx | LED LE2315 xx 16L14-UHD 24V/xxmA Lens 8DY | Lens | 2315mm | 16 | 24V DC | ≥90 |
| 9146xxxx | LED LE2315 xx 16L14-UHD 24V/xxmA Cover 8DY | Cover | 2315mm | 16 | 24V DC | ≥90 |
| 9146xxxx | LED LE2455 xx 17L14-UHD 24V/xxmA Lens 8DY | Lens | 2455mm | 17 | 24V DC | ≥90 |
| 9146xxxx | LED LE2455 xx 17L14-UHD 24V/xxmA Cover 8DY | Cover | 2455mm | 17 | 24V DC | ≥90 |
| 9146xxxx | LED LE2600 xx 18L14-UHD 24V/xxmA Lens 8DY | Lens | 2600mm | 18 | 24V DC | ≥90 |
| 9146xxxx | LED LE2600 xx 18L14-UHD 24V/xxmA Cover 8DY | Cover | 2600mm | 18 | 24V DC | ≥90 |
| 9146xxxx | LED LE2735 xx 19L14-UHD 24V/xxmA Lens 8DY | Lens | 2735mm | 19 | 24V DC | ≥90 |
| 9146xxxx | LED LE2735 xx 19L14-UHD 24V/xxmA Cover 8DY | Cover | 2735mm | 19 | 24V DC | ≥90 |

Packaging: 12 pieces/carton, 360 pieces/pallet

LUMITECH DATASHEET - Architectural Line

TECHNICAL DATA | ORDER DATA

| Art. No. | Type* | Version* | Length | No. of LED modules | Supply | CRI |
|----------|--|----------|--------|--------------------|--------|-----|
| 9146xxxx | LED LE2875 xx 20L14-UHD 24V/xxmA Lens 8DY | Lens | 2875mm | 20 | 24V DC | ≥90 |
| 9146xxxx | LED LE2875 xx 20L14-UHD 24V/xxmA Cover 8DY | Cover | 2875mm | 20 | 24V DC | ≥90 |
| 9146xxxx | LED LE3015 xx 21L14-UHD 24V/xxmA Lens 8DY | Lens | 3015mm | 21 | 24V DC | ≥90 |
| 9146xxxx | LED LE3015 xx 21L14-UHD 24V/xxmA Cover 8DY | Cover | 3015mm | 21 | 24V DC | ≥90 |
| 9146xxxx | LED LE3155 xx 22L14-UHD 24V/xxmA Lens 8DY | Lens | 3155mm | 22 | 24V DC | ≥90 |
| 9146xxxx | LED LE3155 xx 22L14-UHD 24V/xxmA Cover 8DY | Cover | 3155mm | 22 | 24V DC | ≥90 |
| 9146xxxx | LED LE3295 xx 23L14-UHD 24V/xxmA Lens 8DY | Lens | 3295mm | 23 | 24V DC | ≥90 |
| 9146xxxx | LED LE3295 xx 23L14-UHD 24V/xxmA Cover 8DY | Cover | 3295mm | 23 | 24V DC | ≥90 |
| 9146xxxx | LED LE3435 xx 24L14-UHD 24V/xxmA Lens 8DY | Lens | 3435mm | 24 | 24V DC | ≥90 |
| 9146xxxx | LED LE3435 xx 24L14-UHD 24V/xxmA Cover 8DY | Cover | 3435mm | 24 | 24V DC | ≥90 |

Packaging: 12 pieces/carton, 360 pieces/pallet

- All typical values for Ta=25°C +/- 2°C
- Luminous flux min. value = typ. value - 20%
- Tolerance mechanical dimensions +/- 1mm
- Tolerance electrical data +/- 15%
- Tolerance optical data for CW,WW & NW +/-15% (LED Modul @ 60mA string current)
- Tolerance optical data for PC, BP +/-15% (LED Modul @ 100mA string current)
- Tolerance min. value CRI -1

***xx = light colour (see colour key below)**
***xxmA = Current rating (see current rating variants on page 4 / table 2)**

***Version:**
Lenses & Cover (see page 4 / table 3)

CONVERTER

| | |
|-----------------------------|---|
| Output voltage | 24 VDC +10 % |
| Power LED driver | = sum of typical power of light engines + 20 % |
| Daisy chaining (luminaires) | 100mA: max 24 L14-UHD modules 80mA: max 28 L14-UHD modules 60mA: max 33 L14-UHD modules 40mA: max 40 L14-UHD modules |

Electrical supply/choice of LED driver

Architectural Line products from Lumitech are not protected against overvoltages, overcurrents, overloads or short-circuit currents. Reliable and safe operation of the Architectural Line can only be ensured by using LED drivers that comply with the relevant regulations. When selecting the LED driver, the following protective functions should be ensured:

- SELV
- Short-circuit protection
- Overload protection
- Overtemperature protection
- Protection against environmental influences

The Architectural Line must be operated on 24V constant voltage LED drivers.

Operation on a constant current LED driver will result in irreversible damage to the luminaire. Reverse polarity can damage the luminaire.

COLOUR KEY*

| Code | CW | NW | WW | PC | BP |
|------|-------|-------|-------|-------|-------|
| CCT | 5000K | 4000K | 3000K | 2700K | 2400K |

ENERGY EFFICIENT CLASS - LIGHT SOURCE

| Current (mA) | CW | NW | WW | PC | BP |
|--------------|----|----|----|----|----|
| 40mA | F | F | F | F | G |
| 60mA | F | F | F | F | F |
| 80mA | E | E | F | F | F |
| 100mA | E | E | F | F | F |

LUMITECH DATASHEET - Architectural Line

MODULES & LENGTHS

| No. of LED modules | Length of luminaire |
|--------------------|---------------------|
| 1 | 205mm |
| 2 | 345mm |
| 3 | 485mm |
| 4 | 625mm |
| 5 | 770mm |
| 6 | 905mm |
| 7 | 1050mm |
| 8 | 1190mm |
| 9 | 1330mm |
| 10 | 1470mm |
| 11 | 1610mm |
| 12 | 1750mm |
| 13 | 1890mm |
| 14 | 2030mm |
| 15 | 2175mm |
| 16 | 2315mm |
| 17 | 2455mm |
| 18 | 2600mm |
| 19 | 2735mm |
| 20 | 2875mm |
| 21 | 3015mm |
| 22 | 3155mm |
| 23 | 3295mm |
| 24 | 3435mm |

Table 1

LED MODULE - COLOURS, CURRENTS & LIGHT OUTPUTS

| Light colour | | Power & luminous flux p. module | | | |
|--------------|--------|---------------------------------|--------------|--------------|---------------|
| (Kelvin) | (Code) | @40mA / 1,0W | @60mA / 1,5W | @80mA / 1,9W | @100mA / 2,5W |
| 5000K | CW | 114lm | 175lm | 235lm | 296lm |
| 4000K | NW | 114lm | 175lm | 235lm | 296lm |
| 3000K | WW | 103lm | 158lm | 213lm | 268lm |
| 2700K | PC | 100lm | 153lm | 206lm | 260lm |
| 2400K | BP | 95lm | 145lm | 196lm | 246lm |

Table 2

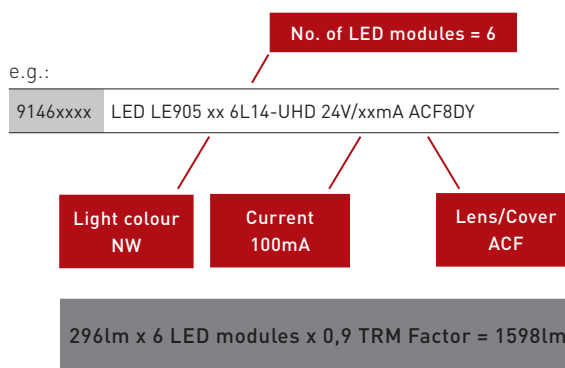
TRANSMISSION & FACTOR

| Lens/Cover | Code | Transmission | TRM Factor |
|--------------------|------|--------------|------------|
| 10° frosted | 10F | 84% | 0,84 |
| 30° frosted | 30F | 85% | 0,85 |
| 90° frosted | 90F | 90% | 0,9 |
| 85° asym. frosted | ACF | 90% | 0,9 |
| Cover frosted | COF | 92% | 0,92 |
| Cover white | COW | 75% | 0,75 |
| Cover flat frosted | CFF | 87% | 0,87 |
| Cover flat white | CFW | 70% | 0,7 |

Table 3

CALCULATION OF THE LUMINOUS FLUX

Number of LED modules x luminous flux x transmission factor



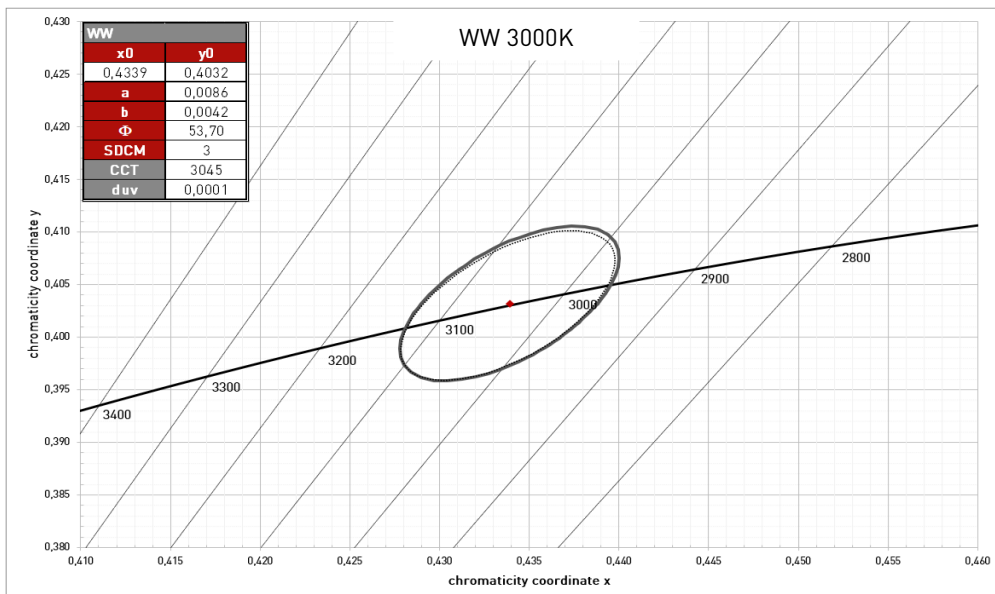
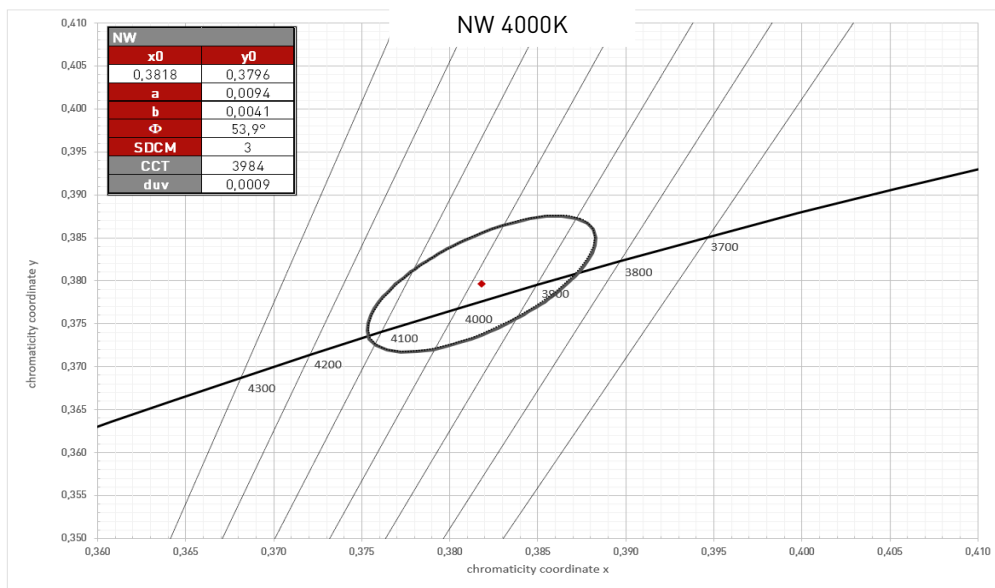
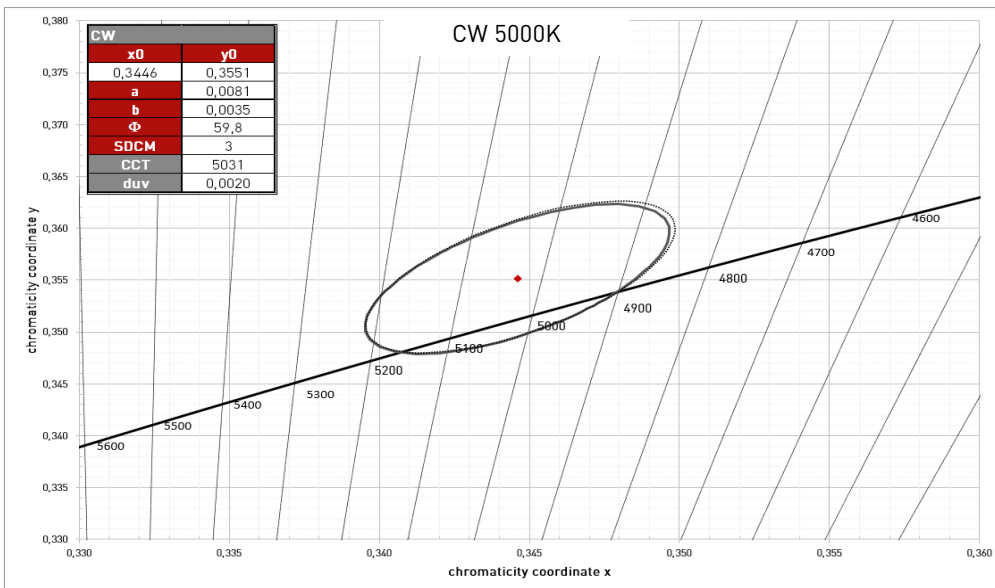
CALCULATION OF THE POWER

Number of LED modules x power p. LED module

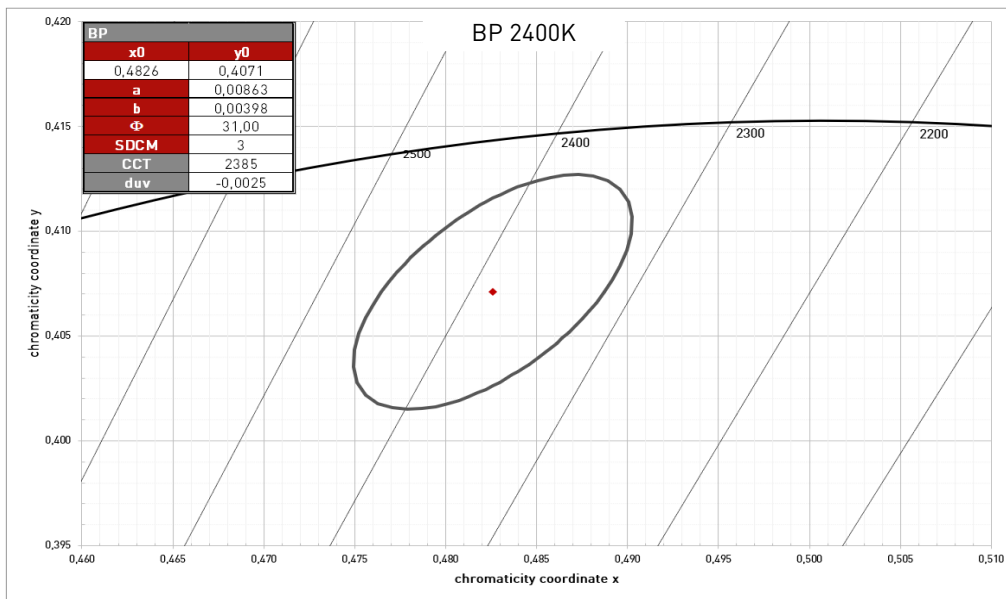
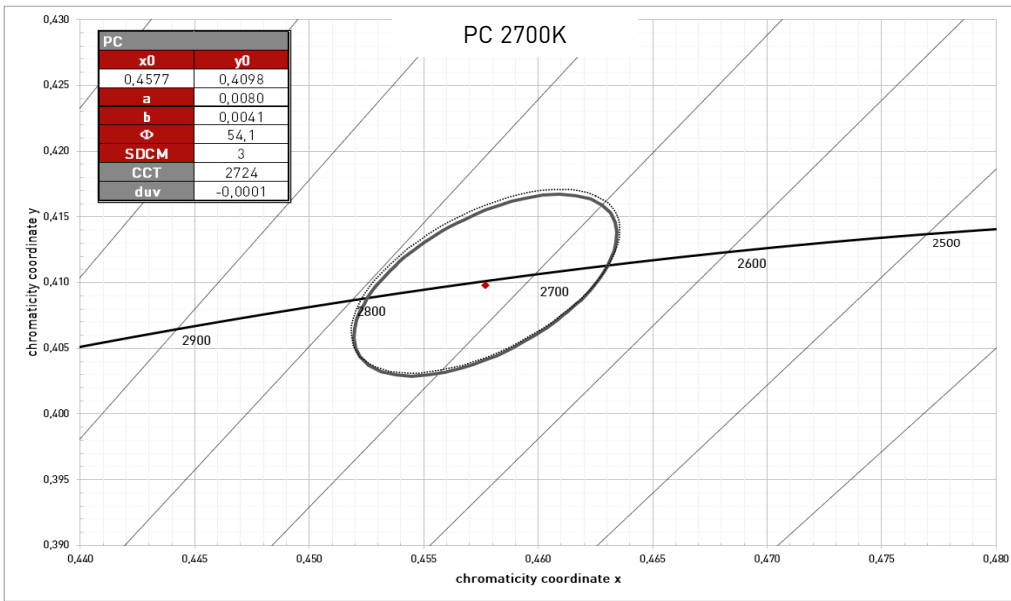
| Current & Power p. module |
|---------------------------|
| @40mA / 1,0W |
| @60mA / 1,5W |
| @80mA / 1,9W |
| @100mA / 2,5W |

LUMITECH DATASHEET - Architectural Line

III COORDINATES AND TOLERANCES - LED MODULES

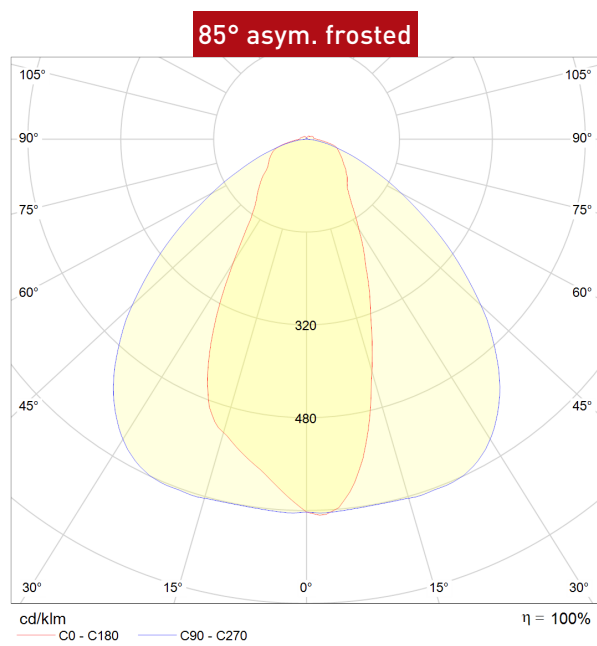
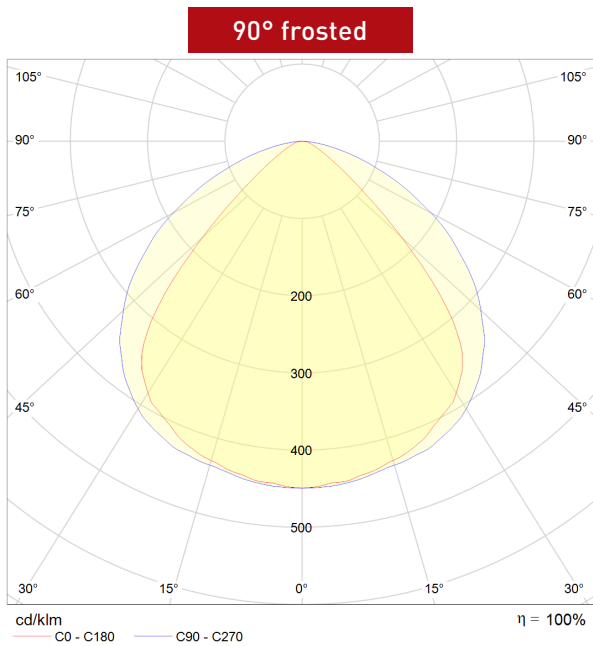
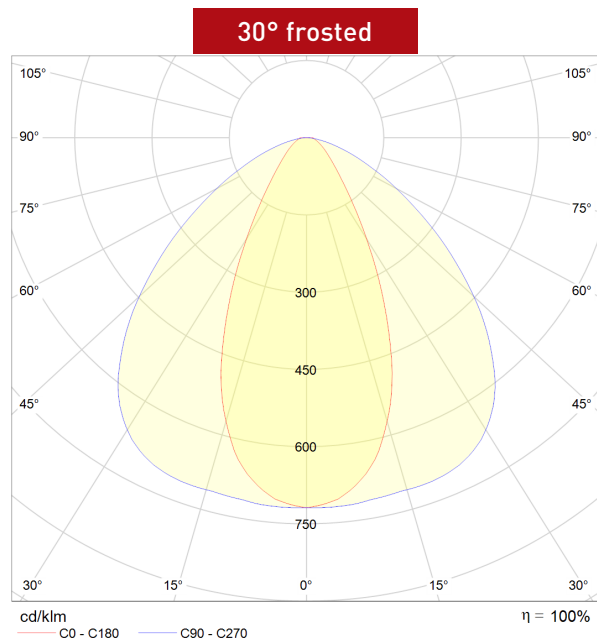
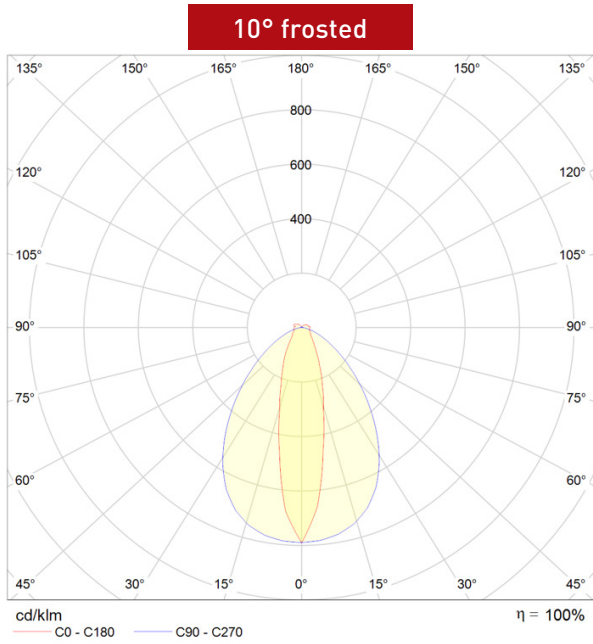


LUMITECH DATASHEET - Architectural Line



LUMITECH DATASHEET - Architectural Line

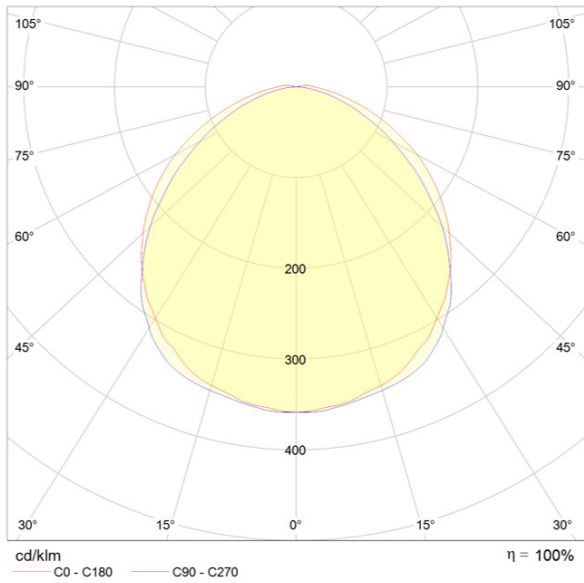
III OPTICAL PROPERTIES - LUMINAIRES



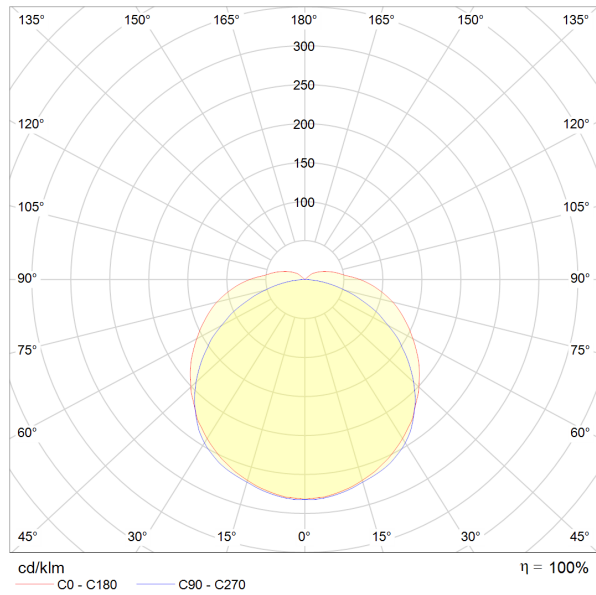
LUMITECH DATASHEET - Architectural Line

OPTICAL PROPERTIES - LUMINAIRES

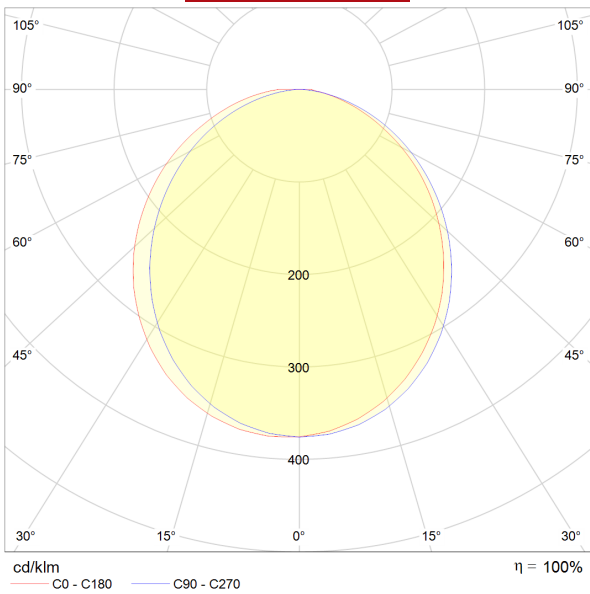
Cover frosted



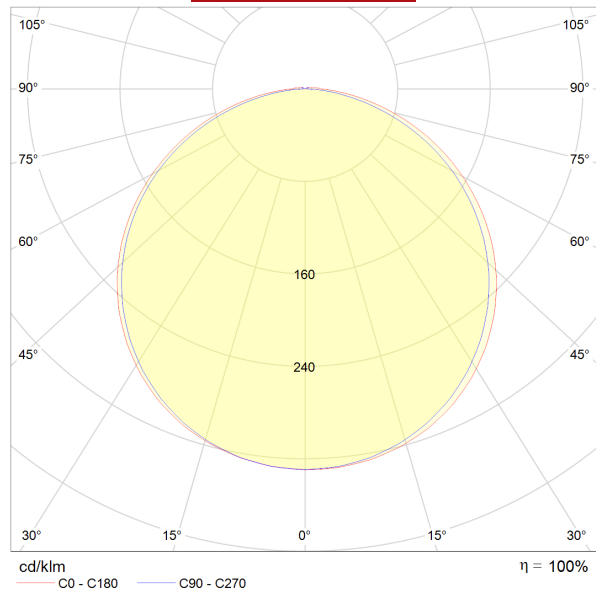
Cover white



Cover flat frosted



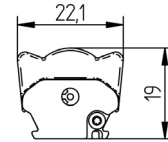
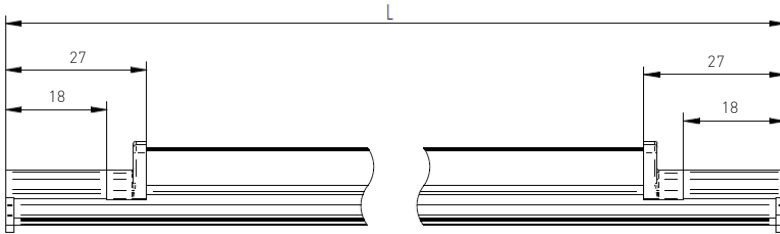
Cover flat white



LUMITECH DATASHEET - Architectural Line

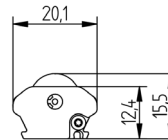
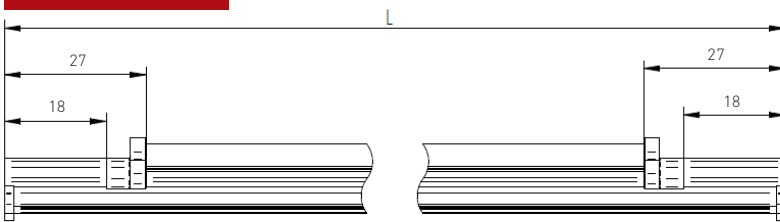
III DIMENSIONS - LUMINAIRE

10° Lens



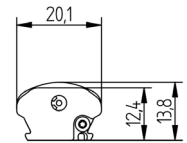
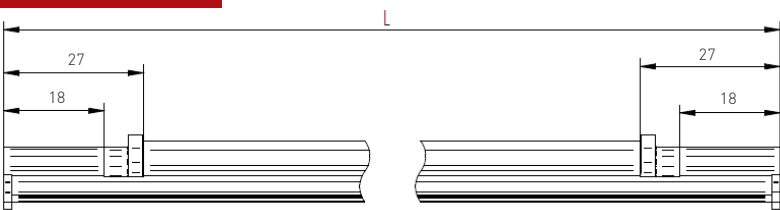
10°

30° Lens



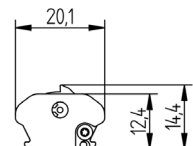
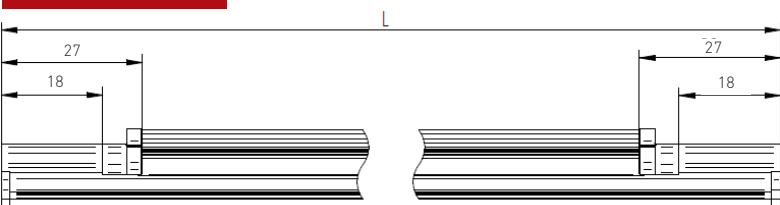
30°

90° Lens



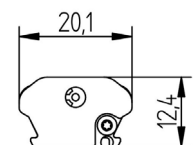
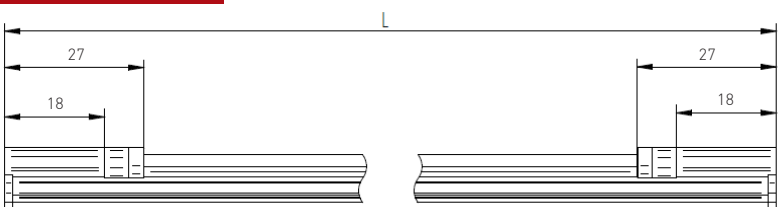
90°

ACF Lens



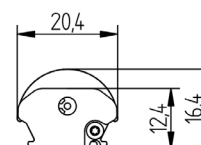
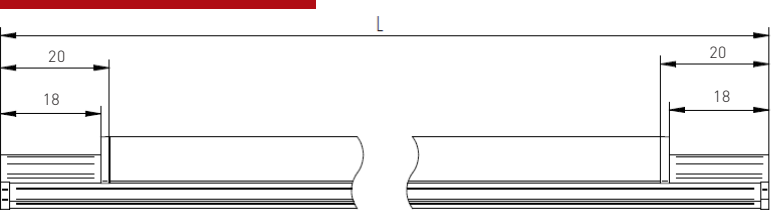
ACF

Cover Flat



Cover flat

Cover frosted/white



COW / COF

LUMITECH DATASHEET - Architectural Line

■ LIFETIME

50.000h (L80 B10)

■ THERMAL BEHAVIOUR

| | | |
|---|----|----------------|
| Operating temperature (operation, no defects) | ta | -30 ... +55 °C |
| Storage temperature | ts | -30 ... +60 °C |
| Temperature cooling profile ¹² | tc | -30 ... +60 °C |

¹ Values apply to operation at 100% output, natural convection.

² If the maximum temperature limits are exceeded, the lifetime of the module will be greatly reduced or the module may be destroyed. The tc point temperature at the profile of the light engine should be measured in the thermally stable state and under operating conditions by means of a temperature sensor or temperature-sensitive sticker (available for example from conrad.com or rs-components.com) in accordance with EN60598-1. The entire profile can be used as the tc point.

■ STANDARDS

- EN 60598-1
- EN 60598-2-1
- EN 62031
- EN 62471



Note

- Installation should only be conducted by a licensed electrician.
- Reversing the polarity can damage the product!
- Make sure the converter has been switched off prior to connecting the light engine. If this is not observed, the light engine may be damaged!
- Connection or operation is only permitted when using the specified converters. Higher voltages result in damage to or failure of the light engine.