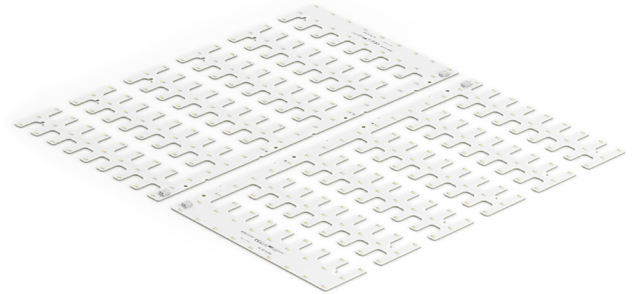


Rectangular LED modules 519x261mm non-SELV

Product description

- Long life-time
- Built-in, constant current LED module
- Re-workable push-in terminals enabling easy connection
- Compliance and approval: CE, ENEC
- Other CCT and CRI on request



RecLED CRI 80 Optimum G3.1

| Product name | Ordering code | Colour temperature [K] | Current nominal If nom [mA] | Luminous flux ¹ φ [lm] | Useful luminous flux ² [lm] | Voltage ¹ Vf [V] | Power ¹ P [W] | Efficacy ¹ [lm/W] | Current minimum If min ³ [mA] | Current maximum If max [mA] | Energy Efficiency Class |
|--|----------------|------------------------|-----------------------------|-----------------------------------|--|-----------------------------|--------------------------|------------------------------|--|-----------------------------|-------------------------|
| RecLED 519x261mm 2500lm 830 81V Opt G3.1 | 1010 127 84746 | 3000 | 180 | 2477 | 2568 | 72 | 13 | 191 | 60 | 900 | C |
| RecLED 519x261mm 2500lm 840 81V Opt G3.1 | 1010 127 84846 | 4000 | 180 | 2584 | 2679 | 72 | 13 | 199 | 60 | 900 | B |

RecLED CRI 80 Optimum G1

| Product name | Ordering code | Colour temperature [K] | Current nominal If nom [mA] | Luminous flux ¹ φ [lm] | Useful luminous flux ² [lm] | Voltage ¹ Vf [V] | Power ¹ P [W] | Efficacy ¹ [lm/W] | Current minimum If min ³ [mA] | Current maximum If max [mA] | Energy Efficiency Class |
|--|----------------|------------------------|-----------------------------|-----------------------------------|--|-----------------------------|--------------------------|------------------------------|--|-----------------------------|-------------------------|
| RecLED 519x261mm 2500lm 830 81V Opt G1 | 1010 117 47046 | 3000 | 185 | 2473 | 2558 | 73 | 13 | 184 | 60 | 900 | C |
| RecLED 519x261mm 2500lm 840 81V Opt G1 | 1010 117 47146 | 4000 | 185 | 2597 | 2687 | 73 | 13 | 193 | 60 | 900 | C |

RecLED CRI 90 Optimum G1

| Product name | Ordering code | Colour temperature [K] | Current nominal If nom [mA] | Luminous flux ¹ φ [lm] | Useful luminous flux ² [lm] | Voltage ¹ Vf [V] | Power ¹ P [W] | Efficacy ¹ [lm/W] | Current minimum If min ³ [mA] | Current maximum If max [mA] | Energy Efficiency Class |
|--|----------------|------------------------|-----------------------------|-----------------------------------|--|-----------------------------|--------------------------|------------------------------|--|-----------------------------|-------------------------|
| RecLED 519x261mm 2500lm 927 81V Opt G1 | 1010 117 73246 | 2700 | 210 | 2289 | 2372 | 74 | 15 | 148 | 60 | 900 | D |
| RecLED 519x261mm 2500lm 930 81V Opt G1 | 1010 117 67546 | 3000 | 210 | 2543 | 2635 | 74 | 15 | 164 | 60 | 900 | D |
| RecLED 519x261mm 2500lm 940 81V Opt G1 | 1010 117 52446 | 4000 | 210 | 2628 | 2723 | 74 | 15 | 170 | 60 | 900 | C |

RecLED CRI 80 Basic G1

| Product name | Ordering code | Colour temperature [K] | Current nominal If nom [mA] | Luminous flux ¹ φ [lm] | Useful luminous flux ² [lm] | Voltage ¹ Vf [V] | Power ¹ P [W] | Efficacy ¹ [lm/W] | Current minimum If min ³ [mA] | Current maximum If max [mA] | Energy Efficiency Class |
|--|----------------|------------------------|-----------------------------|-----------------------------------|--|-----------------------------|--------------------------|------------------------------|--|-----------------------------|-------------------------|
| RecLED 519x261mm 2500lm 830 81V Bsc G1 | 1010 117 45846 | 3000 | 210 | 2528 | 2615 | 74 | 16 | 163 | 60 | 900 | D |

¹At nominal current and T_p

²At nominal current and 25°C

³It is recommended not to operate below minimum current in order to avoid un-even brightness

Tolerance range for optical and electrical ±10%

Temperature & humidity

| Specification item | Unit | Value |
|--|------|-------------|
| T _p | [°C] | 45 |
| T _p rated | [°C] | 65 |
| T _c | [°C] | 85 |
| Relative humidity (non-condensing) | [%] | 5 ... 85 |
| Storage ambient temperature | [°C] | -25 ... +85 |
| Storage relative humidity (non-condensing) | [%] | 5 ... 85 |

T_p - Temperature related to the performance parameters of the LED modules

T_p rated - Maximum operating temperature to which the rated performance characteristics are declared

T_c - Highest permissible value for safe operation

Rectangular LED modules 519x261mm non-SELV

Technical data

| Specification item | Unit | Value |
|----------------------------------|--------|---------------|
| Classification acc. to IEC 62031 | | built-in |
| Working voltage | [Vdc] | 350 |
| Beam angle | [deg] | 120 |
| Initial color consistency | [SDCM] | 3 |
| Photobiological safety | | RG1 unlimited |

Color coordinates

According to CIE 1931

| Specification item | CIEx | CIEy |
|--------------------|--------|--------|
| 2700K | 0.4578 | 0.4101 |
| 3000K | 0.4338 | 0.4030 |
| 4000K | 0.3818 | 0.3797 |
| 6500K | 0.3123 | 0.3282 |

Certificates & standards

| Specification item | Compliant |
|--------------------|--------------|
| ENEC | Yes |
| CE | Yes |
| RoHS | Yes |
| REACH | Yes |
| Zhaga | No |
| IP rating | No IP rating |

Lumen maintenance

RecLED CRI 80

| Forward current | Tp temp. | L70 [h] | | L80 [h] | | L90 [h] | |
|-----------------|----------|----------|----------|----------|----------|---------|--------|
| | | B50 | B10 | B50 | B10 | B50 | B10 |
| If nom | 45°C | >100 000 | >100 000 | >100 000 | >100 000 | 80 000 | 70 000 |
| | 55°C | >100 000 | >100 000 | >100 000 | >100 000 | 80 000 | 70 000 |
| | 65°C | >100 000 | >100 000 | >100 000 | >100 000 | 78 000 | 70 000 |
| | 75°C | >100 000 | >100 000 | >100 000 | >100 000 | 78 000 | 69 000 |
| | 85°C | >100 000 | >100 000 | >100 000 | >100 000 | 77 000 | 69 000 |
| If max | 45°C | >100 000 | >100 000 | >100 000 | >100 000 | 51 000 | 39 000 |
| | 55°C | >100 000 | >100 000 | >100 000 | >100 000 | 51 000 | 39 000 |
| | 65°C | >100 000 | >100 000 | >100 000 | >100 000 | 48 000 | 37 000 |
| | 75°C | >100 000 | >100 000 | >100 000 | >100 000 | 45 000 | 35 000 |
| | 85°C | >100 000 | >100 000 | >100 000 | 69 000 | 43 000 | 34 000 |

calculated data based on LM80 LED data (@65mA 17000h / @160mA & 200mA 12000h)

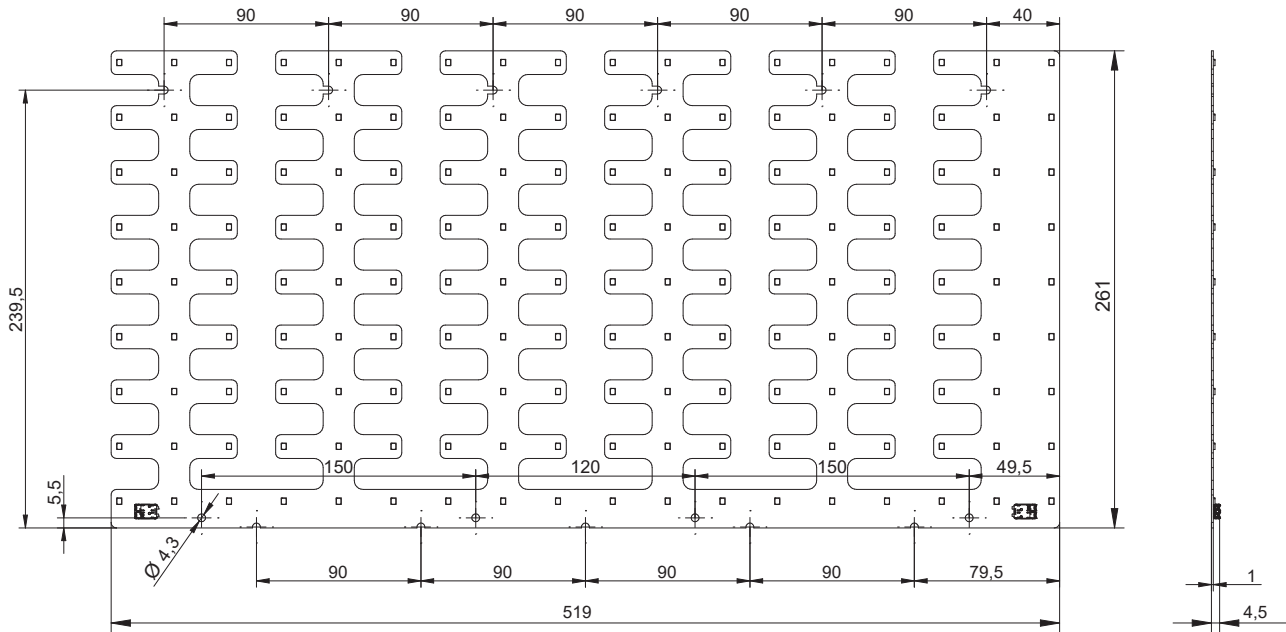
RecLED CRI 90

| Forward current | Tp temp. | L70 [h] | | L80 [h] | | L90 [h] | |
|-----------------|----------|----------|----------|----------|----------|---------|---------|
| | | B50 | B10 | B50 | B10 | B50 | B10 |
| If nom | 45°C | >100 000 | >100 000 | >100 000 | >100 000 | 81 000 | >60 000 |
| | 65°C | >100 000 | >100 000 | >100 000 | >100 000 | >60 000 | >60 000 |
| | 85°C | >100 000 | >100 000 | >100 000 | 97 000 | 50 000 | 44 000 |
| If max | 45°C | 82 000 | 69 000 | 52 000 | 49 000 | 29 000 | 28 000 |
| | 65°C | 73 000 | 63 000 | 47 000 | 44 000 | 25 000 | 24 000 |
| | 85°C | 64 000 | 58 000 | 41 000 | 38 000 | 22 000 | 19 000 |

calculated data based on LM80 LED data (10 000h)

Rectangular LED modules 519x261mm non-SELV

Dimensions



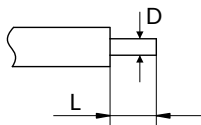
Mounting

LED Modules cannot be exposed to tensile or compressive stresses. For this purpose it is necessary that the modules are assembled to a flat surface by only rounded head screws. Additionally plastic flat washer should be used to ensure creepage distance between screw's head and surface of the pcb. Max. torque for fixing: 0,5Nm.

LED modules are sensitive to electrostatic discharge (ESD). Follow safety regulations according to IEC 61340-5-1.

Wiring

Wire cross section and strip length:



| D - wire cross section (solid and flexible wires) | Min | Max |
|--|--------------------|---------------------|
| | 0.2mm ² | 0.75mm ² |
| | AWG 24 | AWG 18 |

| L - strip length | Min | Max |
|------------------|-----|-----|
| | 8mm | 9mm |

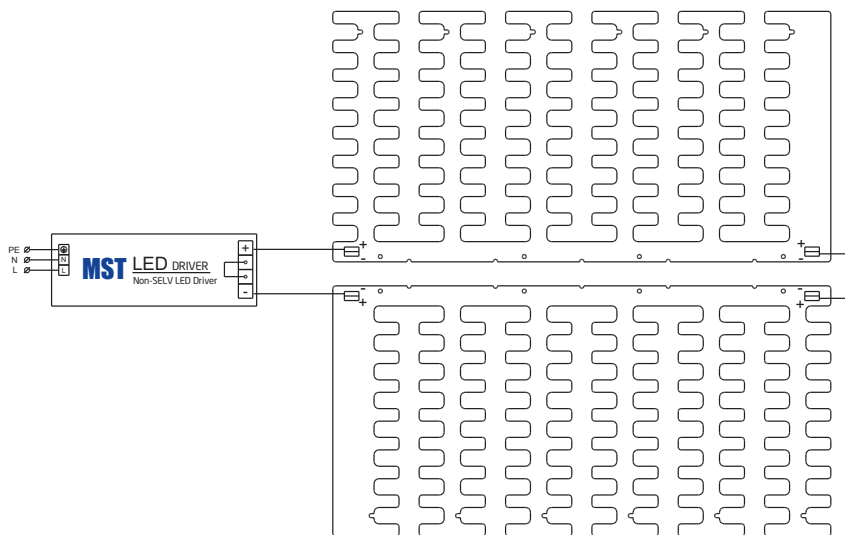
Opening for the release of wires from the top with release pin Electroterminal art. 881 167 884:



Rectangular LED modules 519x261mm non-SELV

Connections

Wiring for series connection system



Energy Label / EPREL database

To obtain Energy Label for this product visit <https://eprel.ec.europa.eu/> and enter model identifier

Model identifier consists of 10 digits XXXX XXX XXX. It is printed directly on the LED module or on product label. This is the number you can see in EPREL database.

Ordering code consist of 12 digits XXXX XXX XXX46. Additional last two digits means packaging of the product.

Ordering codes

| Product name | Ordering code | Pieces per box | Pieces per pallet | Box dimensions [mm] |
|--|----------------|----------------|-------------------|---------------------|
| RecLED 519x261mm 2500lm 830 81V Opt G3.1 | 1010 127 84746 | 12 | 672 | 553 x 283 x 58 |
| RecLED 519x261mm 2500lm 840 81V Opt G3.1 | 1010 127 84846 | 12 | 672 | 553 x 283 x 58 |
| RecLED 519x261mm 2500lm 830 81V Opt G1 | 1010 117 47046 | 12 | 672 | 553 x 283 x 58 |
| RecLED 519x261mm 2500lm 840 81V Opt G1 | 1010 117 47146 | 12 | 672 | 553 x 283 x 58 |
| RecLED 519x261mm 2500lm 927 81V Opt G1 | 1010 117 73246 | 12 | 672 | 553 x 283 x 58 |
| RecLED 519x261mm 2500lm 930 81V Opt G1 | 1010 117 67546 | 12 | 672 | 553 x 283 x 58 |
| RecLED 519x261mm 2500lm 940 81V Opt G1 | 1010 117 52446 | 12 | 672 | 553 x 283 x 58 |
| RecLED 519x261mm 2500lm 830 81V Bsc G1 | 1010 117 45846 | 12 | 672 | 553 x 283 x 58 |