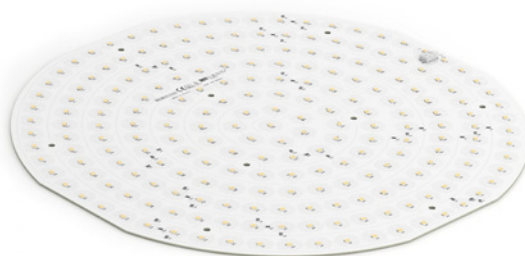


## Round LED modules 350mm FLAT

### Product description

- Long life-time
- Built-in, constant current LED module
- Re-workable push-in terminals enabling easy connection
- Compliance and approval: CE, ENEC
- Available CCT from 2700K to 6500K and CRI 80, 90



### RdLED CRI 80 CJ G4

| Product name                           | Ordering code  | Colour temperature [K] | Current nominal<br>If nom [mA] | Luminous flux <sup>1</sup><br>Φ [lm] | Useful luminous flux <sup>2</sup> [lm] | Voltage<br>Vf [V] | Power <sup>1</sup><br>P [W] | Efficacy <sup>1</sup><br>[lm/W] | Current minimum<br>If min <sup>3</sup> [mA] | Current maximum<br>If max [mA] | Energy Efficiency Class |
|----------------------------------------|----------------|------------------------|--------------------------------|--------------------------------------|----------------------------------------|-------------------|-----------------------------|---------------------------------|---------------------------------------------|--------------------------------|-------------------------|
| RdLED 350mm 4000lm 830 36V FLAT CJ G4  | 1010 147 75146 | 3000                   | 630                            | 3926                                 | 4027                                   | 32                | 20                          | 196                             | 180                                         | 3600                           | B                       |
| RdLED 350mm 4000lm 830 108V FLAT CJ G4 | 1010 147 75346 |                        | 210                            | 3926                                 | 4027                                   | 95                | 20                          | 196                             | 60                                          | 1200                           | B                       |
| RdLED 350mm 4000lm 840 36V FLAT CJ G4  | 1010 147 75246 | 4000                   | 630                            | 4083                                 | 4188                                   | 32                | 20                          | 204                             | 180                                         | 3600                           | B                       |
| RdLED 350mm 4000lm 840 108V FLAT CJ G4 | 1010 147 75446 |                        | 210                            | 4083                                 | 4188                                   | 95                | 20                          | 204                             | 60                                          | 1200                           | B                       |

### RdLED CRI 80 CN G3

| Product name                           | Ordering code  | Colour temperature [K] | Current nominal<br>If nom [mA] | Luminous flux <sup>1</sup><br>Φ [lm] | Useful luminous flux <sup>2</sup> [lm] | Voltage<br>Vf [V] | Power <sup>1</sup><br>P [W] | Efficacy <sup>1</sup><br>[lm/W] | Current minimum<br>If min <sup>3</sup> [mA] | Current maximum<br>If max [mA] | Energy Efficiency Class |
|----------------------------------------|----------------|------------------------|--------------------------------|--------------------------------------|----------------------------------------|-------------------|-----------------------------|---------------------------------|---------------------------------------------|--------------------------------|-------------------------|
| RdLED 350mm 4000lm 830 36V FLAT CN G3  | 1010 147 74746 | 3000                   | 660                            | 3935                                 | 4072                                   | 32                | 21                          | 187                             | 180                                         | 2700                           | C                       |
| RdLED 350mm 4000lm 830 108V FLAT CN G3 | 1010 147 74946 |                        | 220                            | 3935                                 | 4072                                   | 95                | 21                          | 187                             | 60                                          | 900                            | C                       |
| RdLED 350mm 4000lm 840 36V FLAT CN G3  | 1010 147 74846 | 4000                   | 660                            | 4151                                 | 4296                                   | 32                | 21                          | 198                             | 180                                         | 2700                           | B                       |
| RdLED 350mm 4000lm 840 108V FLAT CN G3 | 1010 147 75046 |                        | 220                            | 4151                                 | 4296                                   | 95                | 21                          | 198                             | 60                                          | 900                            | B                       |

### RdLED CRI 80 LG G2

| Product name                           | Ordering code  | Colour temperature [K] | Current nominal<br>If nom [mA] | Luminous flux <sup>1</sup><br>Φ [lm] | Useful luminous flux <sup>2</sup> [lm] | Voltage<br>Vf [V] | Power <sup>1</sup><br>P [W] | Efficacy <sup>1</sup><br>[lm/W] | Current minimum<br>If min <sup>3</sup> [mA] | Current maximum<br>If max [mA] | Energy Efficiency Class |
|----------------------------------------|----------------|------------------------|--------------------------------|--------------------------------------|----------------------------------------|-------------------|-----------------------------|---------------------------------|---------------------------------------------|--------------------------------|-------------------------|
| RdLED 350mm 4000lm 830 36V FLAT LG G2  | 1010 147 74346 | 3000                   | 660                            | 3907                                 | 4029                                   | 32                | 21                          | 183                             | 180                                         | 2700                           | C                       |
| RdLED 350mm 4000lm 830 108V FLAT LG G2 | 1010 147 74546 |                        | 220                            | 3907                                 | 4029                                   | 97                | 21                          | 183                             | 60                                          | 900                            | C                       |
| RdLED 350mm 4000lm 840 36V FLAT LG G2  | 1010 147 74446 | 4000                   | 660                            | 4152                                 | 4281                                   | 32                | 21                          | 194                             | 180                                         | 2700                           | C                       |
| RdLED 350mm 4000lm 840 108V FLAT LG G2 | 1010 147 74646 |                        | 220                            | 4152                                 | 4281                                   | 97                | 21                          | 194                             | 60                                          | 900                            | C                       |

### RdLED CRI 90 EH1.1 G3

| Product name                          | Ordering code  | Colour temperature [K] | Current nominal<br>If nom [mA] | Luminous flux <sup>1</sup><br>Φ [lm] | Useful luminous flux <sup>2</sup> [lm] | Voltage<br>Vf [V] | Power <sup>1</sup><br>P [W] | Efficacy <sup>1</sup><br>[lm/W] | Current minimum<br>If min <sup>3</sup> [mA] | Current maximum<br>If max [mA] | Energy Efficiency Class |
|---------------------------------------|----------------|------------------------|--------------------------------|--------------------------------------|----------------------------------------|-------------------|-----------------------------|---------------------------------|---------------------------------------------|--------------------------------|-------------------------|
| RdLED 350mm 4000lm 927 36V FLAT EH1.1 | 1010 147 91446 | 2700                   | 680                            | 3905                                 | 4024                                   | 33                | 23                          | 174                             | 180                                         | 2700                           | C                       |
| G3 RdLED 350mm 4000lm 930 36V FLAT    | 1010 127 69746 | 3000                   | 680                            | 3905                                 | 4024                                   | 33                | 23                          | 174                             | 180                                         | 2700                           | C                       |
| EH1.1 G3 RdLED 350mm 4000lm 940 36V   | 1010 127 11346 | 4000                   | 680                            | 4149                                 | 4275                                   | 33                | 23                          | 184                             | 180                                         | 2700                           | C                       |

FLAT EH1.1 G3

<sup>1</sup>At nominal current and T<sub>p</sub>

<sup>2</sup>At nominal current and 25°C

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

Tolerance range for optical and electrical ±10%

## Round LED modules 350mm FLAT

## Temperature &amp; humidity

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

Tp - Temperature related to the performance parameters of the LED modules  
 Tp rated - Maximum operating temperature to which the rated performance characteristics are declared  
 Tc - Highest permissible value for safe operation

## 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 | CIE <sub>x</sub> | CIE <sub>y</sub> |
|--------------------|------------------|------------------|
| 2700K              | 0.4578           | 0.4101           |
| 3000K              | 0.4338           | 0.4030           |
| 4000K              | 0.3818           | 0.3797           |
| 6500K              | 0.3123           | 0.3282           |

## Certificates &amp; standards

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

## Lumen maintenance

for LE G5, LG G2, LA G3

| 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 | >100 000 | >100 000 | >100 000 |
|                 | 55°C>100 000 | >100 000 | >100 000 | >100 000 | >100 000 | >100 000 | >100 000 |
|                 | 65°C>100 000 | >100 000 | >100 000 | >100 000 | >100 000 | >100 000 | >100 000 |
|                 | 75°C>100 000 | >100 000 | >100 000 | >100 000 | >100 000 | 98 000   | 98 000   |
|                 | 85°C>100 000 | >100 000 | >100 000 | >100 000 | 81 000   | 73 000   | 73 000   |
| If max          | 45°C>100 000 | >100 000 | 92 000   | 87 000   | 45 000   | 42 000   | 42 000   |
|                 | 55°C>100 000 | >100 000 | 92 000   | 87 000   | 45 000   | 42 000   | 42 000   |
|                 | 65°C>100 000 | >100 000 | 92 000   | 87 000   | 45 000   | 42 000   | 42 000   |
|                 | 75°C>100 000 | >100 000 | 92 000   | 87 000   | 45 000   | 42 000   | 42 000   |
|                 | 85°C>100 000 | >100 000 | 92 000   | 87 000   | 45 000   | 42 000   | 42 000   |

Calculated data based on LM80 LED data (12 000h)

for CJ G4, CN G3

| Forward current | Tp temp.     | L70 [h]  |          | L80 [h]  |          | L90 [h]  |          |
|-----------------|--------------|----------|----------|----------|----------|----------|----------|
|                 |              | B50      | B10      | B50      | B10      | B50      | B10      |
| If nom          | 45°C>102 000 | >102 000 | >102 000 | >102 000 | >102 000 | >102 000 | >102 000 |
|                 | 55°C>102 000 | >102 000 | >102 000 | >102 000 | >102 000 | >102 000 | >102 000 |
|                 | 65°C>102 000 | >102 000 | >102 000 | >102 000 | >102 000 | 89 000   | 88 000   |
|                 | 75°C>102 000 | >102 000 | >102 000 | >102 000 | >102 000 | 75 000   | 74 000   |
|                 | 85°C>102 000 | >102 000 | >102 000 | >102 000 | >102 000 | 64 000   | 63 000   |
| If max          | 45°C>102 000 | >102 000 | >102 000 | >102 000 | >102 000 | >102 000 | >102 000 |
|                 | 55°C>102 000 | >102 000 | >102 000 | >102 000 | >102 000 | 97 000   | 96 000   |
|                 | 65°C>102 000 | >102 000 | >102 000 | >102 000 | >102 000 | 82 000   | 81 000   |
|                 | 75°C>102 000 | >102 000 | >102 000 | >102 000 | >102 000 | 69 000   | 68 000   |
|                 | 85°C>102 000 | >102 000 | >102 000 | >102 000 | >102 000 | 59 000   | 58 000   |

Reported data based on LM80 LED data (17 000h)

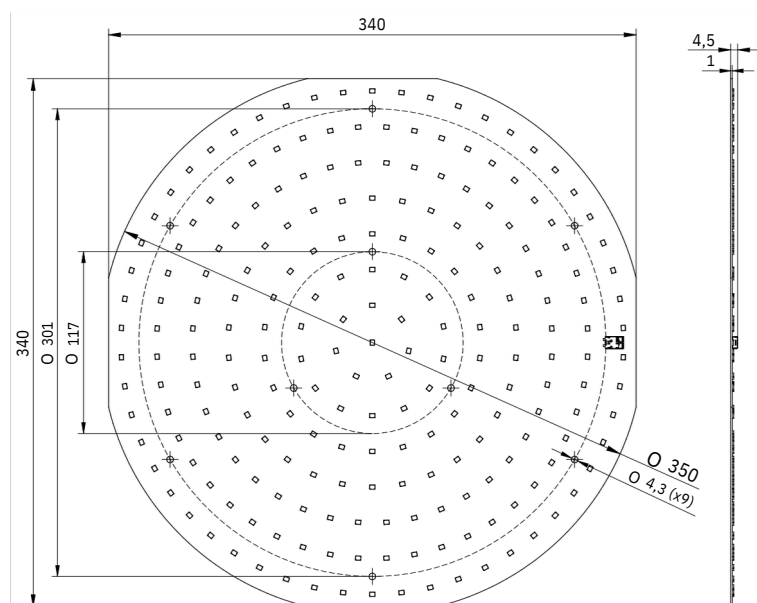
## Round LED modules 350mm FLAT

### Lumen maintenance

| current | Tp temp. | L70 [h] |         | L80 [h] |         | L90 [h] |         |
|---------|----------|---------|---------|---------|---------|---------|---------|
|         |          | B50     | B10     | B50     | B10     | B50     | B10     |
| If nom  | 45°C     | >72 000 | >72 000 | >72 000 | >72 000 | >72 000 | >72 000 |
|         | 55°C     | >72 000 | >72 000 | >72 000 | >72 000 | >72 000 | >72 000 |
|         | 65°C     | >72 000 | >72 000 | >72 000 | >72 000 | >72 000 | >72 000 |
|         | 75°C     | >72 000 | >72 000 | >72 000 | >72 000 | >72 000 | >72 000 |
|         | 85°C     | >72 000 | >72 000 | >72 000 | >72 000 | >72 000 | >72 000 |
| If max  | 45°C     | >72 000 | >72 000 | 67 000  | 62 000  | 30 000  | 29 000  |
|         | 55°C     | >72 000 | >72 000 | 66 000  | 61 000  | 30 000  | 28 000  |
|         | 65°C     | >72 000 | >72 000 | 65 000  | 60 000  | 29 000  | 27 000  |
|         | 75°C     | >72 000 | >72 000 | 65 000  | 59 000  | 29 000  | 26 000  |
|         | 85°C     | >72 000 | >72 000 | 64 000  | 58 000  | 28 000  | 26 000  |

Calculated data based on LM80 LED data (12 000h)

### Dimensions



### Mounting

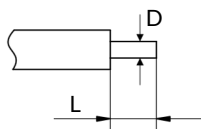
LED Modules cannot be exposed to tensile or compressive stresses. For this purpose it is necessary that the modules are assembled to a flat surface by only rounded head screws. Additionally plastic flat washer should be used to ensure creepage distance between screw's head and surface of the pcb. Max.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

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

## Round LED modules 350mm FLAT

### Wiring

Wirecrosssection and strip length:



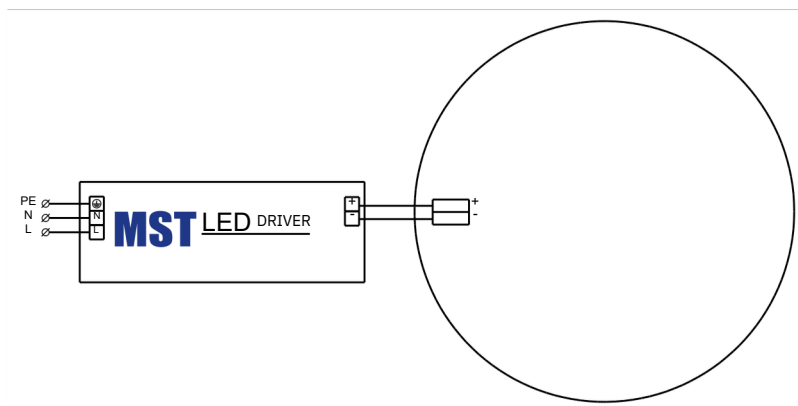
| D - wire cross section<br>(solid and flexible wires) | Min                | Max                 |
|------------------------------------------------------|--------------------|---------------------|
|                                                      | 0.2mm <sup>2</sup> | 0.75mm <sup>2</sup> |
|                                                      | 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:



### Connections



### 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.

## Round LED modules 350mm FLAT

### Ordering codes

| Product name                                      | Ordering code  | Pieces per box | Pieces per pallet | Box dimensions [mm] |
|---------------------------------------------------|----------------|----------------|-------------------|---------------------|
| RdLED 350mm 4000lm 830 36V FLAT CJ G4             | 1010 147 75146 | 12             | 1008              | 363 x 363 x 58      |
| RdLED 350mm 4000lm 830 108V FLAT CJ G4            | 1010 147 75346 | 12             | 1008              | 363 x 363 x 58      |
| RdLED 350mm 4000lm 840 36V FLAT CJ G4             | 1010 147 75246 | 12             | 1008              | 363 x 363 x 58      |
| RdLED 350mm 4000lm 840 108V FLAT CJ G4            | 1010 147 75446 | 12             | 1008              | 363 x 363 x 58      |
| RdLED 350mm 4000lm 830 36V FLAT CN G3             | 1010 147 74746 | 12             | 1008              | 363 x 363 x 58      |
| RdLED 350mm 4000lm 830 108V FLAT CN G3            | 1010 147 74946 | 12             | 1008              | 363 x 363 x 58      |
| RdLED 350mm 4000lm 840 36V FLAT CN G3             | 1010 147 74846 | 12             | 1008              | 363 x 363 x 58      |
| RdLED 350mm 4000lm 840 108V FLAT CN G3            | 1010 147 75046 | 12             | 1008              | 363 x 363 x 58      |
| RdLED 350mm 4000lm 830 36V FLAT LG G2             | 1010 147 74346 | 12             | 1008              | 363 x 363 x 58      |
| RdLED 350mm 4000lm 830 108V FLAT LG G2            | 1010 147 74546 | 12             | 1008              | 363 x 363 x 58      |
| RdLED 350mm 4000lm 840 36V FLAT LG G2             | 1010 147 74446 | 12             | 1008              | 363 x 363 x 58      |
| RdLED 350mm 4000lm 840 108V FLAT LG G2            | 1010 147 74646 | 12             | 1008              | 363 x 363 x 58      |
| RdLED 350mm 4000lm 927 36V FLAT EH1.1             | 1010 147 91446 | 12             | 1008              | 363 x 363 x 58      |
| G3 RdLED 350mm 4000lm 930 36V FLAT                | 1010 127 69746 | 12             | 1008              | 363 x 363 x 58      |
| EH1.1 G3 RdLED 350mm 4000lm 940 36V FLAT EH1.1 G3 | 1010 127 11346 | 12             | 1008              | 363 x 363 x 58      |