# **PHILIPS** Lighting



# **Cleanroom LED**

# CR444B LED48/940 PSD W60L60 AC-MLO PI

Led Cleanroom mod. 600 lay-out, LED Module 4800 lm, 940 neutral white, Power supply unit with DALI interface, Acrylate micro-lens optic, Push-in connector 5-pole

Customers operating highly hygienic facilities require special IP65, easy-to-clean, dust-free luminaires that meet all lighting requirements and norms. Moreover, to ensure the integrity of these areas (and stay within budget), they also need to minimize costly downtime and maintenance. With the latest LED engine on board, this LED cleanroom luminaire represents the ideal solution, delivering market-leading energy performance – far beyond fluorescent solutions – over 50,000 hours of maintenance-free operation. This means extremely low operational cost over the total lifetime of the luminaire, and so an excellent financial return on investment. The luminaire's high colour rendering properties ensure the top class optical performance required in e.g clinical areas in hospitals.

## Product data

| LED48 [LED Module 4800 lm]                       |
|--|
| - [-]  |
| No   |
| Unit   |
| Yes  |
| *- According to the Lighting Europe              |
| guidance paper 'Evaluating performance of        |
| LED based luminaires – January 2018':            |
| statistically there is no relevant difference in |
| lumen maintenance between the B50 and,           |
| for example, the B10. Therefore, the median      |
|  |

|                     | useful life (B50) value also represents the |
|---------------------|---|
|                     | B10 value.                                  |
| Product family code | CR444B [Led Cleanroom mod. 600 lay-out]     |
| Lighting Technology | LED   |
| Value ladder        | Specification                               |
| CE mark             | Yes   |
| Warranty period     | 5 years                                     |
| Flammability mark   | For mounting on normally flammable          |
|                     | surfaces                                    |
| ENEC mark           | -   |
| Glow-wire test      | Temperature 850 °C, duration 5 s            |

#### Datasheet, 2023, April 29

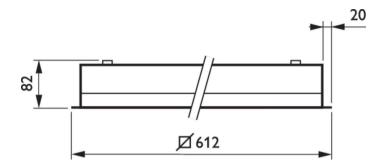
# **Cleanroom LED**

| EU RoHS compliant                      | Yes                                   |
|--|---------------------------------------|
|  |                                       |
| Light Technical                        |                                       |
| Luminous Flux                          | 3,900 lm                              |
| Correlated Colour Temperature          | 4000 K                                |
| Luminous efficacy (rated) (nom.)       | 96 lm/W                               |
| Colour rendering index (CRI)           | ≥80                                   |
| Light source colour                    | 940 neutral white                     |
| Optic type                             | -                                     |
| Optical cover type                     | Acrylate micro-lens optic             |
| Luminaire light beam spread            | 120°                                  |
| Unified Glare Rating (CEN)             | 16                                    |
|  |                                       |
| Operating and Electrical               |                                       |
| Input Voltage                          | 220 to 240 V                          |
| Line Frequency                         | 50 to 60 Hz                           |
| Inrush current                         | 22 A                                  |
| Inrush time                            | 0.275 ms                              |
| Power Consumption                      | 56 W                                  |
| Power Factor (Fraction)                | 0.95                                  |
| Connection                             | Push-in connector 5-pole              |
| Cable                                  | -                                     |
| Number of products on MCB of 16 A type | 24                                    |
| В                                      |                                       |
|  |                                       |
| Temperature                            |                                       |
| Ambient temperature range              | -20 to +40 °C                         |
|  |                                       |
| Controls and Dimming                   |                                       |
| Dimmable                               | Yes                                   |
| Driver/power unit/transformer          | Power supply unit with DALI interface |
| Control interface                      | DALI                                  |
| Constant light output                  | No                                    |
|  |                                       |
| Mechanical and Housing                 |                                       |
| Housing material                       | Steel                                 |
| Reflector material                     | Aluminium                             |
| Optic material                         | -                                     |
| Optical cover/lens material            | Acrylate                              |
| Fixation material                      | -                                     |
| Housing Colour                         | White                                 |
| Optical cover/lens finish              | Textured                              |
| optical cover/tens milisii             | TCARGEO                               |

| Overall length  | 612 mm   |
|---|--|
| Overall width   | 612 mm   |
| Overall height  | 74 mm  |
| Dimensions (height x width x depth)   | 74 x 612 x 612 mm  |
|   |  |
| Approval and Application  |  |
| Ingress protection code   | IP64/65 Dust penetration-protected,  |
|   | splashproof/Jet-proof  |
| Mech. impact protection code  | IK02/05  |
| Sustainability rating   | -  |
| Protection class IEC  | Safety class I   |
|   |  |
| Initial Performance (IEC Compliant)   |  |
| Luminous flux tolerance   | +/-10%   |
| Initial chromaticity  | (0.38, 0.38) SDCM <3   |
| Power consumption tolerance   | +/-10%   |
| Over Time Performance (IEC Complia  | ant)   |
|   | anu)   |
|   | F %  |
| Control gear failure rate at median useful  | 5 %  |
| Control gear failure rate at median useful<br>life 50,000 h   |  |
| Control gear failure rate at median useful<br>life 50,000 h<br>Lumen maintenance at median useful life*   |  |
| Control gear failure rate at median useful<br>life 50,000 h   |  |
| Control gear failure rate at median useful<br>life 50,000 h<br>Lumen maintenance at median useful life*<br>50,000 h   |  |
| Control gear failure rate at median useful<br>life 50,000 h<br>Lumen maintenance at median useful life*   | L80  |
| Control gear failure rate at median useful<br>life 50,000 h<br>Lumen maintenance at median useful life*<br>50,000 h   |  |
| Control gear failure rate at median useful<br>life 50,000 h<br>Lumen maintenance at median useful life*<br>50,000 h<br>Application Conditions   | L80  |
| Control gear failure rate at median useful<br>life 50,000 h<br>Lumen maintenance at median useful life*<br>50,000 h<br>Application Conditions<br>Performance ambient temperature Tq   | L80<br>25 °C   |
| Control gear failure rate at median useful<br>life 50,000 h<br>Lumen maintenance at median useful life*<br>50,000 h<br>Application Conditions<br>Performance ambient temperature Tq<br>Maximum dim level<br>Suitable for random switching   | L80<br>25 °C<br>1%   |
| Control gear failure rate at median useful<br>life 50,000 h<br>Lumen maintenance at median useful life*<br>50,000 h<br>Application Conditions<br>Performance ambient temperature Tq<br>Maximum dim level<br>Suitable for random switching<br>Product Data   | L80<br>25 °C<br>1%<br>No   |
| Control gear failure rate at median useful<br>life 50,000 h<br>Lumen maintenance at median useful life*<br>50,000 h<br>Application Conditions<br>Performance ambient temperature Tq<br>Maximum dim level<br>Suitable for random switching   | L80<br>25 °C<br>1%<br>No<br>CR444B LED48/940 PSD W60L60 AC-ML0   |
| Control gear failure rate at median useful<br>life 50,000 h<br>Lumen maintenance at median useful life*<br>50,000 h<br>Application Conditions<br>Performance ambient temperature Tq<br>Maximum dim level<br>Suitable for random switching<br>Product Data   | L80<br>25 °C<br>1%<br>No<br>CR444B LED48/940 PSD W60L60 AC-ML0<br>PI   |
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| Control gear failure rate at median useful<br>life 50,000 h<br>Lumen maintenance at median useful life*<br>50,000 h<br>Application Conditions<br>Performance ambient temperature Tq<br>Maximum dim level<br>Suitable for random switching<br>Product Data<br>Order product name<br>Full product name<br>Full EOC<br>Order code  | L80<br>25 °C<br>1%<br>No<br>CR444B LED48/940 PSD W60L60 AC-MLO<br>PI<br>CR444B LED48/940 PSD W60L60 AC-MLO<br>PI<br>871794311139800<br>11139800                      |
| Control gear failure rate at median useful<br>life 50,000 h<br>Lumen maintenance at median useful life*<br>50,000 h<br>Application Conditions<br>Performance ambient temperature Tq<br>Maximum dim level<br>Suitable for random switching<br>Product Data<br>Order product name<br>Full product name<br>Full EOC<br>Order code<br>Material no. (12 NC)                                      | L80<br>25 °C<br>1%<br>No<br>CR444B LED48/940 PSD W60L60 AC-MLO<br>PI<br>CR444B LED48/940 PSD W60L60 AC-MLO<br>PI<br>871794311139800<br>11139800<br>910502032803      |
| Control gear failure rate at median useful<br>life 50,000 h<br>Lumen maintenance at median useful life*<br>50,000 h<br>Application Conditions<br>Performance ambient temperature Tq<br>Maximum dim level<br>Suitable for random switching<br>Product Data<br>Order product name<br>Full product name<br>Full EOC<br>Order code<br>Material no. (12 NC)<br>SAP numerator – quantity per pack | L80<br>25 °C<br>1%<br>No<br>CR444B LED48/940 PSD W60L60 AC-MLO<br>PI<br>CR444B LED48/940 PSD W60L60 AC-MLO<br>PI<br>871794311139800<br>11139800<br>910502032803<br>1 |

# **Cleanroom LED**

## Dimensional drawing





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