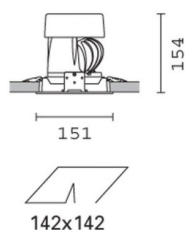
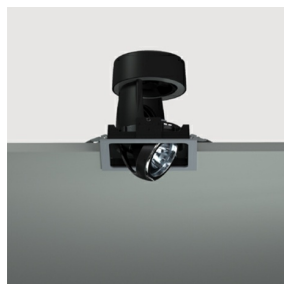


Last information update: May 2024

Product configuration: ML16+LED

ML16: square recessed luminaire - neutral white active dissipation - integrated electronic control gear - wide flood

**Product code**ML16: square recessed luminaire - neutral white active dissipation - integrated electronic control gear - wide flood **Attention! Code no longer in production****Technical description**

Recessed adjustable removable luminaire for LED lamp with active heat dissipation system. Square sheet steel perimeter frame. Main structure and lamp body made of die-cast aluminium. Steel rotation hinges. Chrome-plated aluminium lamp body closing ring. Forced heat dissipation using fan with magnetic anti-friction operation guaranteeing lasting efficiency and quietness, keeping LED lamp performance unchanged. The fan has an anti-dust protection system; safety thermal breaker and is set up for fast, easy replacement. Reflector with high efficiency super-pure aluminium optic - wide flood beam angle. Body adjusted using manually operated device: internal 29° - external 75° - rotation about axis 355°. Supplied with electronic control gear connected to the luminaire. Neutral white high efficiency LED.

Installation

recessed using steel springs for false ceilings with thicknesses starting at 1 mm; preparation slot 142 x 142 mm

Colour

White / Aluminium (39) | Grey / Black / Aluminium (E1)

Mounting

ceiling recessed

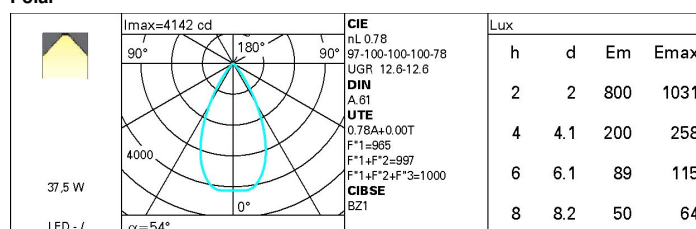
Wiring

on control gear box with quick-coupling connections

Complies with EN60598-1 and pertinent regulations

**Technical data**

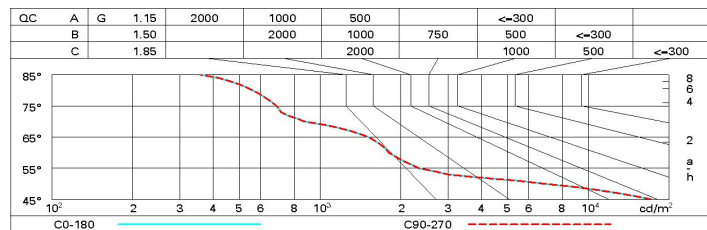
| | | | |
|--|--------|---------------------------------------|-------------------------------|
| Im system: | 3117,2 | CRI: | 80 |
| W system: | 37,5 | Colour temperature [K]: | 4000 |
| Im source: | 4000 | MacAdam Step: | 3 |
| W source: | 32 | Life Time LED 1: | 50.000h - L80 - B10 (Ta 25°C) |
| Luminous efficiency (Im/W, real value): | 83,1 | Lamp code: | LED |
| Im in emergency mode: | - | Number of lamps for optical assembly: | 1 |
| Total light flux at or above an angle of 90° [Lm]: | 0 | ZVEI Code: | LED |
| Light Output Ratio (L.O.R.) [%]: | 78 | Number of optical assemblies: | 1 |
| Beam angle [°]: | 54° | | |

Polar

Utilisation factors

| R | 77 | 75 | 73 | 71 | 55 | 53 | 33 | 00 | DRR |
|------|----|----|----|----|----|----|----|----|-----|
| K0.8 | 69 | 65 | 63 | 60 | 65 | 62 | 62 | 59 | 76 |
| 1.0 | 72 | 69 | 66 | 65 | 68 | 66 | 66 | 63 | 81 |
| 1.5 | 76 | 74 | 72 | 70 | 73 | 71 | 70 | 68 | 87 |
| 2.0 | 79 | 77 | 75 | 74 | 76 | 75 | 74 | 71 | 92 |
| 2.5 | 80 | 79 | 78 | 77 | 78 | 77 | 76 | 74 | 95 |
| 3.0 | 81 | 80 | 80 | 79 | 79 | 78 | 77 | 75 | 97 |
| 4.0 | 83 | 82 | 81 | 81 | 80 | 80 | 79 | 77 | 98 |
| 5.0 | 83 | 82 | 82 | 82 | 81 | 81 | 79 | 78 | 99 |

Luminance curve limit



UGR diagram

| | | | | | | | | | | | |
|---|------|------|------|------|-------|------|------|------|-------|------|------|
| Photometric curve code: 01800000.RV1 | | | | | | | | | | | |
| Uncorrected UGR values (at 1000 lm bare lamp luminous flux) | | | | | | | | | | | |
| Reflect.: | | | | | | | | | | | |
| ceiling | 0.70 | 0.70 | 0.50 | 0.50 | 0.30 | 0.70 | 0.70 | 0.50 | 0.50 | 0.30 | |
| walls | 0.50 | 0.30 | 0.50 | 0.30 | 0.30 | 0.50 | 0.30 | 0.50 | 0.30 | 0.30 | |
| work pl. | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | |
| Room dim | | | | | | | | | | | |
| x | y | | | | | | | | | | |
| | | | | | | | | | | | |
| 2H | 2H | 13.1 | 13.8 | 13.4 | 14.0 | 14.2 | 13.1 | 13.8 | 13.4 | 14.0 | 14.2 |
| | 3H | 13.0 | 13.6 | 13.3 | 13.8 | 14.1 | 13.0 | 13.6 | 13.3 | 13.8 | 14.1 |
| | 4H | 12.9 | 13.5 | 13.3 | 13.8 | 14.1 | 12.9 | 13.5 | 13.3 | 13.8 | 14.1 |
| | 6H | 12.9 | 13.3 | 13.2 | 13.7 | 14.0 | 12.9 | 13.3 | 13.2 | 13.7 | 14.0 |
| | 8H | 12.8 | 13.3 | 13.2 | 13.6 | 14.0 | 12.8 | 13.3 | 13.2 | 13.6 | 14.0 |
| | 12H | 12.8 | 13.2 | 13.2 | 13.6 | 13.9 | 12.8 | 13.2 | 13.2 | 13.6 | 13.9 |
| 4H | 2H | 12.9 | 13.5 | 13.3 | 13.8 | 14.1 | 12.9 | 13.5 | 13.3 | 13.8 | 14.1 |
| | 3H | 12.8 | 13.2 | 13.2 | 13.6 | 13.9 | 12.8 | 13.2 | 13.2 | 13.6 | 13.9 |
| | 4H | 12.7 | 13.1 | 13.1 | 13.5 | 13.9 | 12.7 | 13.1 | 13.1 | 13.5 | 13.9 |
| | 6H | 12.6 | 13.0 | 13.1 | 13.4 | 13.8 | 12.6 | 13.0 | 13.1 | 13.4 | 13.8 |
| | 8H | 12.6 | 12.9 | 13.0 | 13.3 | 13.7 | 12.6 | 12.9 | 13.0 | 13.3 | 13.7 |
| | 12H | 12.5 | 12.8 | 13.0 | 13.2 | 13.7 | 12.5 | 12.8 | 13.0 | 13.2 | 13.7 |
| 8H | 4H | 12.6 | 12.9 | 13.0 | 13.3 | 13.7 | 12.6 | 12.9 | 13.0 | 13.3 | 13.7 |
| | 6H | 12.5 | 12.8 | 13.0 | 13.2 | 13.7 | 12.5 | 12.8 | 13.0 | 13.2 | 13.7 |
| | 8H | 12.4 | 12.7 | 12.9 | 13.1 | 13.6 | 12.4 | 12.7 | 12.9 | 13.1 | 13.6 |
| | 12H | 12.4 | 12.6 | 12.9 | 13.1 | 13.6 | 12.4 | 12.6 | 12.9 | 13.1 | 13.6 |
| 12H | 4H | 12.5 | 12.8 | 13.0 | 13.2 | 13.7 | 12.5 | 12.8 | 13.0 | 13.2 | 13.7 |
| | 6H | 12.4 | 12.7 | 12.9 | 13.1 | 13.6 | 12.4 | 12.7 | 12.9 | 13.1 | 13.6 |
| | 8H | 12.4 | 12.6 | 12.9 | 13.1 | 13.6 | 12.4 | 12.6 | 12.9 | 13.1 | 13.6 |
| Variations with the observer position at spacing: | | | | | | | | | | | |
| S = | 1.0H | | 5.1 | / | -13.5 | | 5.1 | / | -13.5 | | |
| | 1.5H | | 7.9 | / | -14.7 | | 7.9 | / | -14.7 | | |
| | 2.0H | | 9.9 | / | -15.9 | | 9.9 | / | -15.9 | | |