

Last information update: April 2024

Product configuration: M636

M636: Fixed circular recessed luminaire - Ø212 mm - warm white - medium optic - UGR<10

**Product code**

M636: Fixed circular recessed luminaire - Ø212 mm - warm white - medium optic - UGR<10

Technical description

Fixed round luminaire designed to use a LED lamp with C.O.B. technology. Version with rim for surface-mounting. Optic with supercomfort reflector vacuum-metallised with aluminium vapours and an anti-scratch protective layer. Die-cast aluminium body and passive dissipation system. Product complete with LED lamp in warm white colour tone CRI 90 (3000K). General light emission, with controlled luminance UGR<10 1500 cd/m² α>65° medium optic.

Installation

Recessed using torsion springs which allow easy installation in false ceilings with thicknesses ranging from 1 mm to 20 mm.

Colour

White / Aluminium (39)

Weight (Kg)

1.95

Mounting

ceiling recessed

Wiring

product complete with DALI components

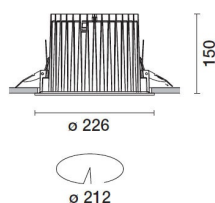
Complies with EN60598-1 and pertinent regulations



IP20

IP54

On the visible part of the product once installed

**Technical data**

| | | | |
|----------------------------------------------------|------|--------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
| lm system: | 5120 | Life Time LED 1: | > 50,000h - L90 - B10 (Ta 25°C) |
| W system: | 52.8 | Lamp code: | LED |
| lm source: | 6400 | Number of lamps for optical assembly: | 1 |
| W source: | 48 | ZVEI Code: | LED |
| Luminous efficiency (lm/W, real value): | 97 | Number of optical assemblies: | 1 |
| lm in emergency mode: | - | Power factor: | See installation instructions |
| Total light flux at or above an angle of 90° [Lm]: | 0 | Inrush current: | 30 A / 200 µs |
| Light Output Ratio (L.O.R.) [%]: | 80 | Maximum number of luminaires of this type per miniature circuit breaker: | B10A: 12 luminaires B16A: 20 luminaires C10A: 20 luminaires C16A: 34 luminaires |
| Beam angle [°]: | 18° | Minimum dimming %: | 1 |
| CRI (minimum): | 90 | Overvoltage protection: | 2kV Common mode & 2kV Differential mode |
| Colour temperature [K]: | 3000 | Control: | DALI-2 |
| MacAdam Step: | 2 | | |

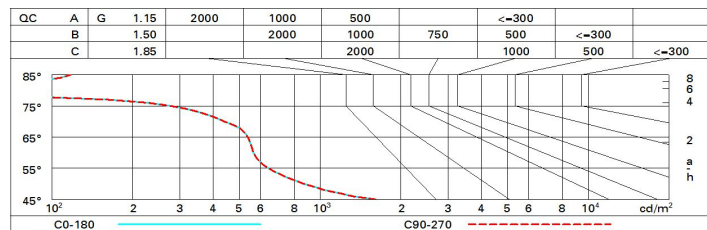
Polar

| Imax=33133 cd | | CIE | | Lux | | | |
|---------------|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-----|-----|------|------|
| | | | | h | d | Em | Emax |
| | | nL 0.80 99-100-100-100-80 UGR <10-<10 DIN A.61 UTE 0.80A+0.00T F*1=993 F*1+F*2=998 F*1+F*2+F*3=1000 CIBSE LG3 L<1500 cd/m ² at 65° UGR<10 L<1500 cd/m ² @65° | | 2 | 0.6 | 6479 | 8283 |
| | | | | 4 | 1.3 | 1620 | 2071 |
| | | | | 6 | 1.9 | 720 | 920 |
| | | | | 8 | 2.5 | 405 | 518 |

Utilisation factors

| R | 77 | 75 | 73 | 71 | 55 | 53 | 33 | 00 | DRR |
|------|----|----|----|----|----|----|----|----|-----|
| K0.8 | 72 | 68 | 66 | 64 | 68 | 65 | 65 | 62 | 78 |
| 1.0 | 75 | 72 | 69 | 68 | 71 | 69 | 69 | 66 | 83 |
| 1.5 | 79 | 76 | 74 | 73 | 76 | 74 | 73 | 71 | 88 |
| 2.0 | 81 | 80 | 78 | 77 | 79 | 77 | 76 | 74 | 93 |
| 2.5 | 83 | 82 | 81 | 80 | 80 | 79 | 79 | 76 | 96 |
| 3.0 | 84 | 83 | 82 | 81 | 82 | 81 | 80 | 78 | 98 |
| 4.0 | 85 | 84 | 84 | 83 | 83 | 83 | 81 | 79 | 99 |
| 5.0 | 85 | 85 | 85 | 84 | 84 | 83 | 82 | 80 | 100 |

Luminance curve limit



UGR diagram

| Corrected UGR values (at 0.400 lm bare lamp luminous flux) | | | | | | | | | | | |
|------------------------------------------------------------------|------|---------------------|-----|-----|-----|-----|-------------------|-----|-----|-----|-----|
| Reflect.: ceiling/cav walls work pl. Room dim x y | | viewed crosswise | | | | | viewed endwise | | | | |
| 2H | 2H | 2.3 | 4.4 | 2.7 | 4.7 | 5.1 | 2.3 | 4.4 | 2.7 | 4.7 | 5.1 |
| | 3H | 2.4 | 3.9 | 2.7 | 4.2 | 4.6 | 2.3 | 3.8 | 2.6 | 4.1 | 4.5 |
| | 4H | 2.4 | 3.6 | 2.7 | 4.0 | 4.3 | 2.2 | 3.5 | 2.6 | 3.8 | 4.2 |
| | 6H | 2.3 | 3.3 | 2.7 | 3.7 | 4.0 | 2.2 | 3.2 | 2.6 | 3.5 | 3.9 |
| | 8H | 2.3 | 3.3 | 2.7 | 3.6 | 4.0 | 2.1 | 3.2 | 2.5 | 3.5 | 3.9 |
| | 12H | 2.2 | 3.3 | 2.6 | 3.6 | 4.0 | 2.1 | 3.1 | 2.5 | 3.5 | 3.9 |
| 4H | 2H | 2.2 | 3.5 | 2.6 | 3.8 | 4.2 | 2.4 | 3.6 | 2.7 | 4.0 | 4.3 |
| | 3H | 2.3 | 3.4 | 2.7 | 3.7 | 4.1 | 2.3 | 3.4 | 2.7 | 3.7 | 4.1 |
| | 4H | 2.2 | 3.4 | 2.7 | 3.8 | 4.2 | 2.2 | 3.4 | 2.7 | 3.8 | 4.2 |
| | 6H | 1.9 | 3.6 | 2.4 | 4.1 | 4.6 | 1.9 | 3.7 | 2.4 | 4.1 | 4.6 |
| | 8H | 1.8 | 3.7 | 2.3 | 4.2 | 4.7 | 1.8 | 3.7 | 2.3 | 4.2 | 4.7 |
| | 12H | 1.7 | 3.6 | 2.2 | 4.1 | 4.6 | 1.7 | 3.7 | 2.2 | 4.1 | 4.7 |
| 8H | 4H | 1.8 | 3.7 | 2.3 | 4.2 | 4.7 | 1.8 | 3.7 | 2.3 | 4.2 | 4.7 |
| | 6H | 1.7 | 3.5 | 2.2 | 4.0 | 4.5 | 1.7 | 3.5 | 2.2 | 4.0 | 4.5 |
| | 8H | 1.7 | 3.2 | 2.2 | 3.7 | 4.3 | 1.7 | 3.2 | 2.2 | 3.7 | 4.3 |
| | 12H | 1.9 | 2.8 | 2.4 | 3.3 | 3.8 | 1.9 | 2.8 | 2.4 | 3.3 | 3.8 |
| 12H | 4H | 1.7 | 3.7 | 2.2 | 4.1 | 4.7 | 1.7 | 3.6 | 2.2 | 4.1 | 4.6 |
| | 6H | 1.7 | 3.2 | 2.2 | 3.7 | 4.3 | 1.7 | 3.2 | 2.3 | 3.7 | 4.3 |
| | 8H | 1.9 | 2.8 | 2.4 | 3.3 | 3.8 | 1.9 | 2.8 | 2.4 | 3.3 | 3.8 |
| Variations with the observer position at spacing: | | | | | | | | | | | |
| S = | 1.0H | 4.9 / -5.1 | | | | | 4.9 / -5.1 | | | | |
| | 1.5H | 7.6 / -5.8 | | | | | 7.6 / -5.8 | | | | |
| | 2.0H | 9.5 / -6.2 | | | | | 9.5 / -6.2 | | | | |