



Design LED's award-winning solutions offer designers, architects and artists, the opportunity to create ultra-thin, flexible backlighting. The Light Tiles can be easily integrated into walls, ceilings and different types of furniture. Doing so will enhance the visual impact of architectural or retail applications producing edge to edge, homogeneous luminous surfaces. It's now possible to have single or double-sided illumination from a single Light Tile.

'Morar' is a backlighting module engineered for cost and power savings. Its ability to be installed indoors and outdoors offers integration in applications such as ambient illumination, material backlighting, façade decoration, branding and public art.

### Why Morar:

- Energy efficient, edge to edge uniform backlighting for mounting depths between 30 - 65mm
- On site customisation allows cut to fit in challenging installations, ensuring seamless integration
- Indoor or outdoor use via IDC plug & play water resistant connector (IP67)
- Modular design allows simple and quick installation with standard mountings / fixings
- No complex additional accessories required
- Flexible & thin profile allows curved or complex shapes
- Cost optimised design, with low energy consumption and maintenance
- Compatible with all 24V DC standard power supplies, including dimmable



# Technical Specification

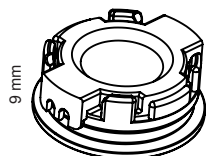
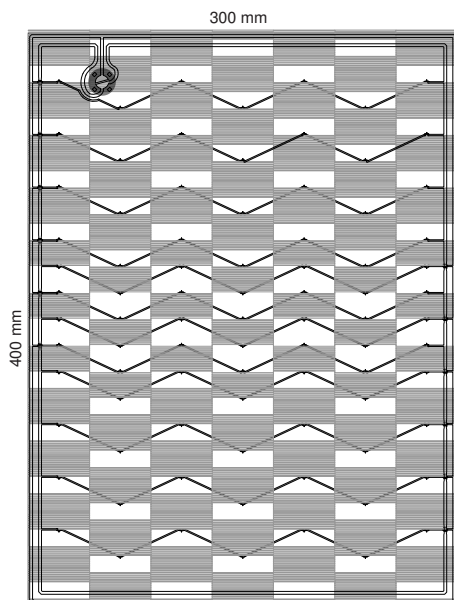
Design LED Products offers a technical consulting service to ensure light and colour quality match your project specifications.

| Electrical data                           |            | Photometric data  |                                |
|---|------------|-------------------|--------------------------------|
| Power consumption                         | 6.5 W      | Luminous flux     | 600 lm                         |
| Input voltage                             | 24 V DC    | Module efficacy   | 92 lm/W                        |
| Cable required                            | AWG 22-24  | CCT               | 3000 K, 4000 K, 6500 K         |
| Max. number of serially connected modules | 14 modules | CRI               | 85 Ra                          |
|   |            | Lumen maintenance | L70, B50 @ +25 °C > 50,000 hrs |

| Certifications & Safety        |                    | Physical data                    |                   |
|--------------------------------|--------------------|----------------------------------|-------------------|
| Standards                      | CE                 | Length                           | 400 mm            |
| Module IP Rating <sup>a)</sup> | 67                 | Width                            | 300 mm            |
| Energy efficiency class        | A+                 | Module height / Assembled height | 2 mm / 9 mm       |
| Module material                | PET + PU (UL94-HB) | Weight                           | 270 g             |
| Connector material             | PBT (UL94 HB)      | Min. Bend radius <sup>b)</sup>   | 100 mm            |
|                                |                    | Operating temperatures           | -20 °C ... +50 °C |

## Dimensions



Outdoor Connector

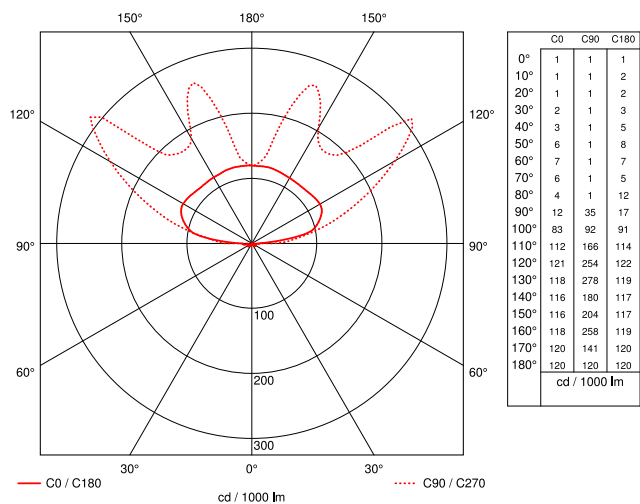
<sup>a)</sup> Tested to EN 60598-1:2008+A11:2011 with IDC connector (temporary submersion).

<sup>b)</sup> Ideal for a 1D curve. Contact us for design assistance.

Subject to change without notice. Errors and omissions excepted.

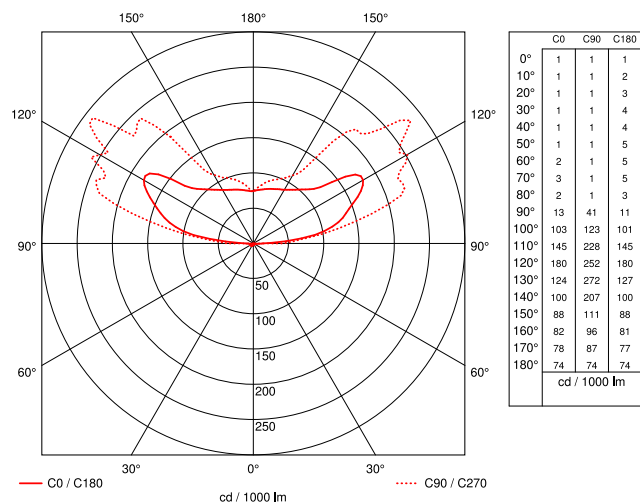
# Photometrics

## Side A with reflector\*



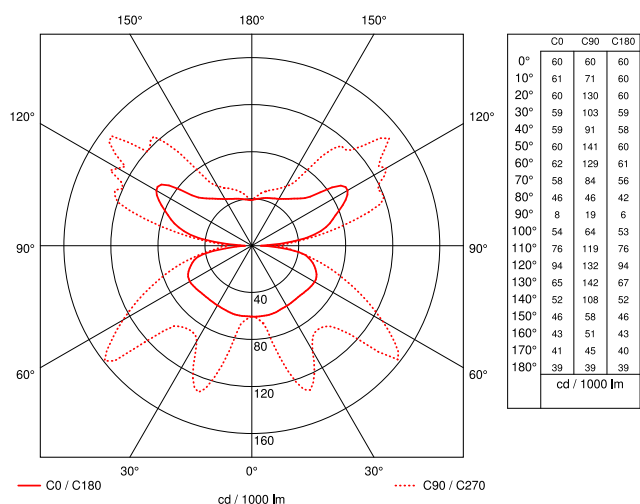
Lumens: 600 lm

## Side B with reflector\*



Lumens: 600 lm

## Double-sided



Lumens: 600 lm

Side A: Top Connector Side

Side B: Bottom Connector Side

\*High efficiency white reflector (Furukawa Electric MCPET E3)

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## Product Order Codes

| Plug & Play Sample Kit                       | Product Order Codes | EAN Number    |
|--|---------------------|---------------|
| Morar, 3000K, Cables + Plug Top Power Supply | KITMO01OD3085       | 5060433681141 |
| Morar, 4000K, Cables + Plug Top Power Supply | KITMO01OD4085       | 5060433681059 |
| Morar, 6500K, Cables + Plug Top Power Supply | KITMO01OD6585       | 5060433681134 |

| Backlighting Solutions | Product Order Codes | EAN Number    |
|------------------------|---------------------|---------------|
| Morar, 3000K, 85 CRI   | MO01OD3085          | 5060433680953 |
| Morar, 4000K, 85 CRI   | MO01OD4085          | 5060433680861 |
| Morar, 6500K, 85 CRI   | MO01OD6585          | 5060433680960 |

| Power Supplies*  | Product Order Codes | EAN Number    |
|--|---------------------|---------------|
| Osram 240W 24V IP67                                    | PS2402467ND         | 5060433680625 |
| Meanwell 120W 24V IP65                                 | PS1202465ND         | 5060433680632 |
| Osram 75W 24V IP64                                     | PS752464ND          | 5060433680724 |
| Osram 50W 24V IP66                                     | PS502466ND          | 5060433680533 |
| Osram 50W 24V IP20                                     | PS502420ND          | 5060433680823 |
| Osram 30W 24V IP66                                     | PS302466ND          | 5060433680526 |
| Meanwell 25W 24V IP42 (US compatible)                  | PS252442ND          | 5060433680816 |
| Osram 20W 24V IP20                                     | PS202420ND          | 5060433680618 |
| Power Pax Plug Top 15W 24V IP20 (requires ODPCA2300BC) | PS152420ND          | 5060433680540 |

\*Guidance on Power Supplies & Controls available upon request

| Cables & Connectors                                     | Product Order Codes | EAN Number    |
|---|---------------------|---------------|
| Outdoor Input Power Cable, twin core wire, 1m           | ODPCA21000          | 5060433680786 |
| Outdoor Input Power Cable with barrel connector, 300 mm | ODPCA2300BC         | 5060433680809 |
| Outdoor Connector IP67                                  | ODCON01             | 5060433680793 |

| Installation Systems    | Product Order Codes | EAN Number    |
|-------------------------|---------------------|---------------|
| 4 ways Mounting Bracket | ISBL014MB           | 5060433680335 |
| 2 Ways Mounting Bracket | ISBL012MB           | 5060433680342 |
| Push Fastener           | ISBL01PF            | 5060433680352 |
| Signage Grip            | ISBL01SG            | 5060433680366 |
| Stand-off Fastener      | ISBL01SF            | 5060433680377 |
| Wire Termination Cap    | ISBL01WT            | 5060433680830 |

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