

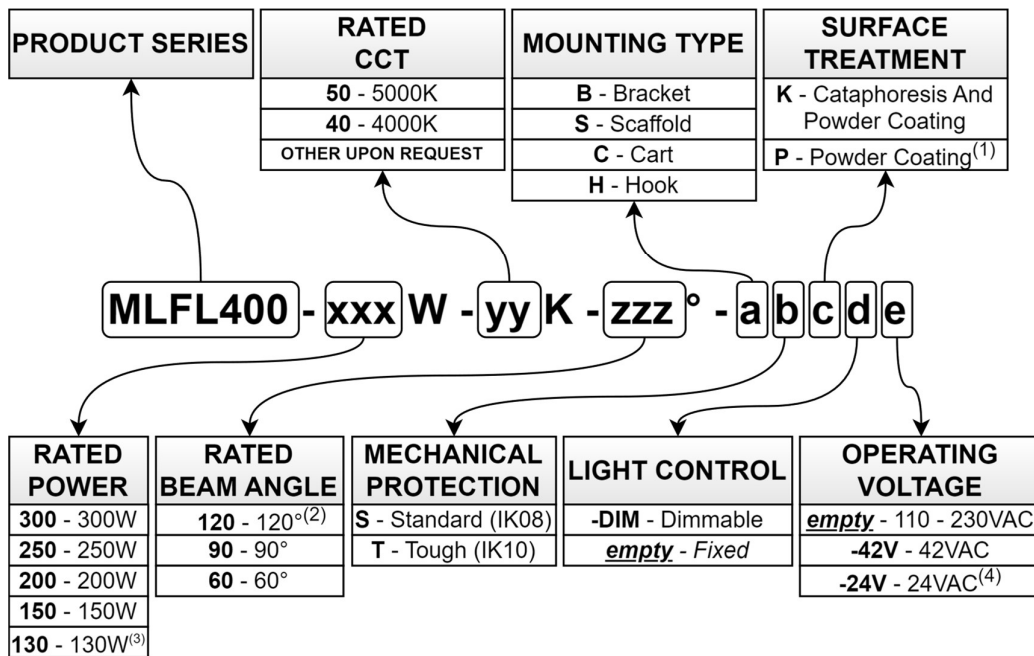
Technical details and specification

MLFL400

110 - 230VAC

Key Features

- New generation luminaire offering enhanced efficiency and performance.
- Higher power output for superior brightness.
- Lighter-weight design for easier installation and maintenance.



⁽¹⁾Available for special order
⁽²⁾Available only in Tough (IK10) version
⁽³⁾Available only for 42VAC version
⁽⁴⁾Available soon

MLFL400

Electrical Characteristics

Nominal Voltage	110 – 230VAC	
Operating Voltage (AC)	90 – 305VAC	
Operating Voltage (DC)	127 – 300VDC (127 – 250VDC for MLFL400-300W)	
Nominal Current (at 230VAC)	MLFL400-300W	1.30A
	MLFL400-250W	1.09A
	MLFL400-200W	0.87A
	MLFL400-150W	0.65A
Frequency	50 – 60Hz	
Power factor	> 0.95	
Operating Temperature	MLFL400-300W	-40°C... +40°C
	MLFL400-250W	
	MLFL400-200W	-40°C... +50°C
	MLFL400-150W	

Luminaire data

Luminous flux	21800 – 49000lm	
CCT	5000K (other on request)	
Luminous efficacy	Up to 165lm/W	
CRI	>80	
Protective cover	PC lens, Peel-off foil (only on Tough (IK10))	
PC lens	Standard (IK08)	Tough (IK10)

Protections

Electrical	OVP, OCP, SCP, OTP	
Input Surge Protection	6kV (4kV for MLFL400-300W)	
Mechanical	IP66, Standard(IK08) or Tough(IK10)	
Surface Treatment	Cataphoresis And Powder Coating*	

*Upon request the Surface Treatment can be made with only Powder Coating

Controls And Dimming

Autonomous Control	Traditional-Timer, Self Adapt-Midnight, Self Adapt-Percentage (not available for MLFL400-300W)
Dimming	0-10VDC, 10V PWM, Time Dimming (Time Dimming is not available for MLFL400-300W)
Control Range	10 – 100%
Dim-to-off	Yes (Not available for MLFL400-300W)

Standard (IK08)

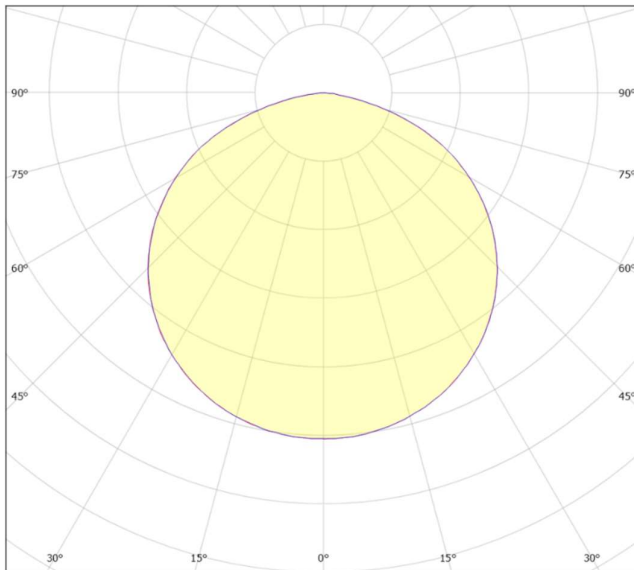
Model	Beam Angle	Number of LEDs	Initial Total Lumens
MLFL400-300W	90°	660	49000lm
MLFL400-300W	60°	660	48000lm
MLFL400-250W	90°	540	40800lm
MLFL400-250W	60°	540	40000lm
MLFL400-200W	90°	420	32700lm
MLFL400-200W	60°	420	32000lm
MLFL400-150W	90°	330	24500lm
MLFL400-150W	60°	330	24000lm

Tough (IK10)

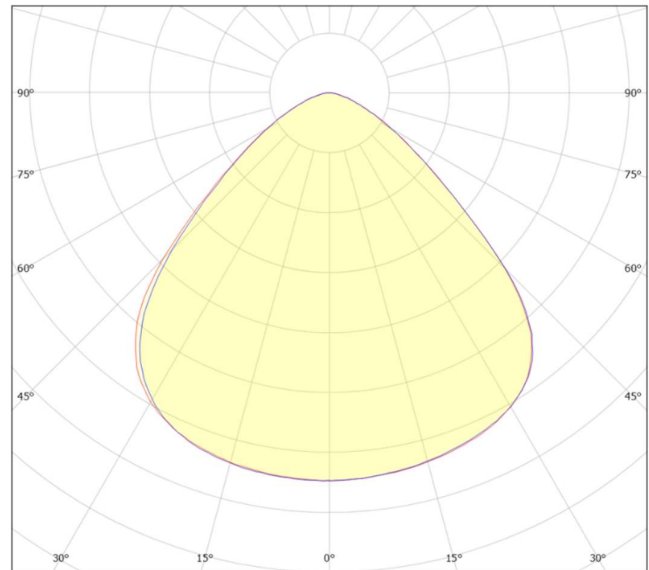
Model	Beam Angle	Number of LEDs	Initial Total Lumens
MLFL400-300W	120°	660	48000lm
MLFL400-300W	90°	660	45100lm
MLFL400-300W	60°	660	44200lm
MLFL400-250W	120°	540	40000lm
MLFL400-250W	90°	540	37600lm
MLFL400-250W	60°	540	36800lm
MLFL400-200W	120°	420	32000lm
MLFL400-200W	90°	420	30100lm
MLFL400-200W	60°	420	29500lm
MLFL400-150W	120°	330	24000lm
MLFL400-150W	90°	330	22600lm
MLFL400-150W	60°	330	22100lm

Typical Light Distributions

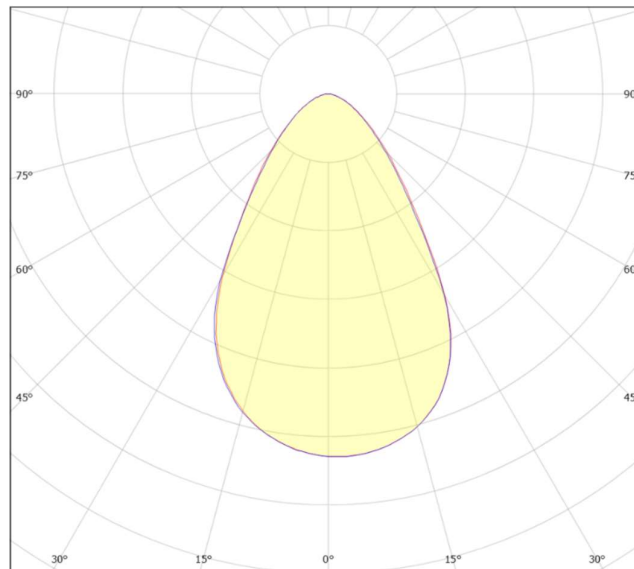
120° PC LENS



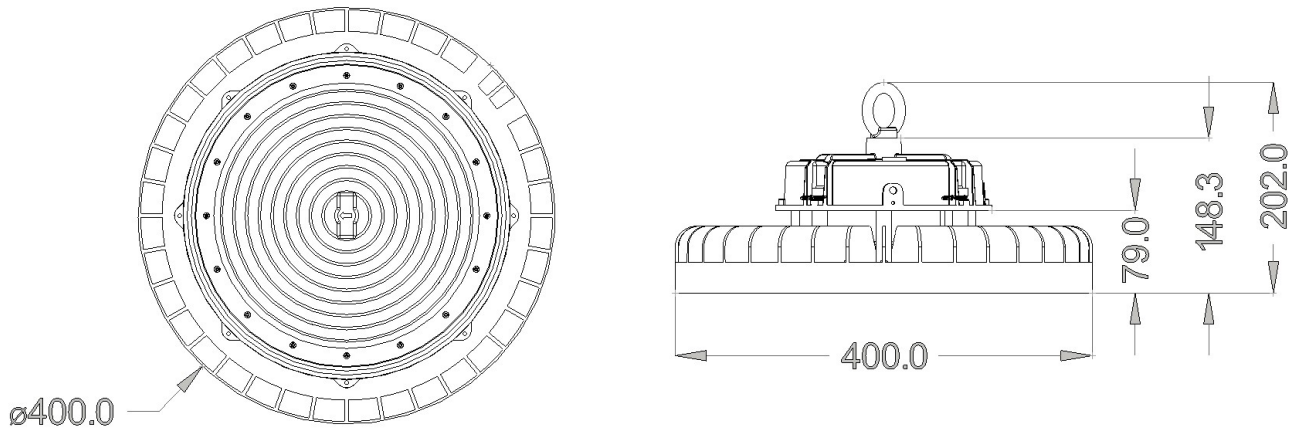
90° PC LENS



60° PC LENS



Dimensions



Mechanical Characteristics

Diameter	400mm
Weight	7.2kg (MLFL400-300W, IK08, Hook mount)
Mounting Type	Hook
	Bracket
	Scaffold
	Cart

Installation and Wiring Guide

Hook Mount Installation

1. Preparation:

- **Power Off:** Ensure that the power supply to the installation site is turned off to avoid any electrical hazards.
- **Check Support Structure:** Verify that the ceiling or support structure where the luminaire will be mounted can support its weight. This is critical to ensure the safety and stability of the installation.

2. Hanging the Luminaire:

- **Lift and Attach:** Carefully lift and secure the luminaire to the existing ceiling hook. Ensure that the connection is firm and that the luminaire is held securely.

3. Connecting to Power:

- **Follow the Wiring Guide:** Once the luminaire is securely mounted, connect it to the power supply as described in the Wiring Guide.

4. Final Checks:

- **Inspect Installation:** Perform a thorough inspection to confirm that the luminaire is securely attached and that all electrical connections are properly made and insulated.
- **Power On and Test:** Restore power to the luminaire and test it to verify proper operation. Ensure that the luminaire operates without any issues such as flickering, which might indicate a loose connection.

Bracket Mount Installation

1. Preparation:

- **Power Off:** Ensure that the power supply to the installation site is turned off to prevent any electrical hazards.
- **Mark Mounting Points:** Identify and mark the mounting points on the wall or ceiling where the bracket with the attached luminaire will be installed. Ensure these points are aligned and suitable for supporting the luminaire.

2. Mounting the Bracket with Luminaire:

- **Drill and Secure:** Drill holes at the marked points and insert wall plugs if necessary. Attach the bracket (with the luminaire already secured) to the wall or ceiling, ensuring it is firmly secured.
- **Ensure Stability:** Confirm that the entire assembly is stable and securely fastened to the mounting surface.

3. Connecting to Power:

- **Follow the Wiring Guide:** Once the luminaire is securely mounted, connect it to the power supply as described in the Wiring Guide.

4. Final Checks:

- **Inspect Installation:** Perform a thorough inspection to confirm that the bracket and luminaire are securely attached and that all electrical connections are properly made and insulated.
- **Power On and Test:** Restore power to the luminaire and test it to verify proper operation. Ensure that the luminaire operates without any issues such as flickering, which might indicate a loose connection.

Scaffold Mount Installation

1. Preparation:

- **Power Off:** Ensure that the power supply to the installation site is turned off to avoid any electrical hazards.
- **Check Scaffold Stability:** Ensure that the scaffold is stable and positioned correctly at the installation site, ready to support the installation process.

2. Mounting the Luminaire:

- **Position and Secure:** With the scaffold securely in place, position the luminaire at the desired height and attach it to the scaffold using the provided mounting hardware. Ensure that the luminaire is securely fastened and stable.

3. Connecting to Power:

- **Follow the Wiring Guide:** Once the luminaire is securely mounted, connect it to the power supply as described in the Wiring Guide.

4. Final Checks:

- **Inspect Installation:** Perform a thorough inspection to confirm that the luminaire is securely attached to the scaffold and that all electrical connections are properly made and insulated.
- **Power On and Test:** Restore power to the luminaire and test it to verify proper operation. Ensure that the luminaire operates without any issues such as flickering, which might indicate a loose connection.

Cart Mount Installation

1. Preparation:

- **Inspect the Cart:** Ensure that the cart is stable and positioned on a flat, level surface to prevent tipping or movement during operation. Verify that the luminaire is securely placed on the cart.

2. Power Connection:

- **Plug in the Luminaire:** Locate the power outlet and plug the luminaire's pre-wired Schuko plug into the mains.
- **Cable Management:** Ensure the power cable is neatly routed and secured to avoid any tripping hazards or damage during movement.

3. Final Checks:

- **Inspect Setup:** Perform a quick inspection to confirm that the luminaire is properly positioned on the cart and that the power cable is safely managed.

Wiring Guide

1. Power Off:

- **Ensure Safety:** Before beginning any wiring work, make sure the power supply to the installation site is turned off to prevent any electrical hazards.

2. Inserting the Cable:

- **Insert Cable Through Connector:** Before wiring, insert the power supply cable through the connector housing. This step is crucial to ensure that the connector can be properly assembled and sealed for waterproofing after the wiring is completed.

3. Cable & Wires Preparation:

- **Strip Cable:** Carefully strip approximately 30-35 mm of the outer insulation from the power supply cable to expose the inner wires. Be cautious not to damage the insulation of the individual wires inside.
- **Strip Wires:** Strip approximately 10 mm of insulation from the ends of the power supply wires to expose the conductors. Ensure the stripped length matches the requirements for secure connections.

4. Connecting Wires Using the Connector:

- **Identify Terminals:** The connector features color-coded and labeled terminals for easy identification:
 - **Red Terminal (L):** Connect the live wire from the power supply (usually brown or black) to the Red input terminal.
 - **Blue Terminal (N):** Connect the neutral wire from the power supply (usually blue) to the Blue input terminal.
 - **Yellow Terminal (\perp):** Connect the ground wire from the power supply (usually green/yellow) to the Yellow input terminal.
- **Secure Connections:** Once the wires are inserted into the appropriate terminals, ensure they are tightly secured within the connector to prevent any loose connections.

5. Assembling the Connector for Waterproofing:

- **Close and Seal the Connector:** After the wires are connected, carefully align the connector parts and screw them together tightly. This assembly process ensures the connector is waterproof and protects it from environmental factors.

6. Final Checks:

- **Restore Power and Test:** Turn the power back on and test the luminaire to verify it is operating correctly. Check for any signs of loose connections, such as flickering or intermittent operation.