

LED



MITRA LED 480

Industrial LED luminaire



Product Line 036-2011

Modern lighting for industry

MITRA LED is designed for lighting industrial spaces, with proven and reliable technical solutions, equipped with ultra modern, energy-saving and high durable light sources - LEDs.

Versatile

- MITRA LED 480 is designed for lighting industrial objects:
 - production halls
 - storage facilities and shelters
 - workshops and ancillary rooms
 - loading docks, etc.
- Models equipped with tempered glass are dedicated for lighting places with higher dust and humidity level.
- Models equipped with tempered glass and protection grid should be used for lighting places where mechanical strokes are highly probable.





Life span - 50,000 h

LEDs - extremely durable and energy-saving

As a light source LED, in the luminaire MITRA LED 480 has been used 60 pcs of Power LEDs by company Cree, types XP-G and XP-E. Their expected life span, amounting to up to 50,000 hours, allows for more than 13 years of operation without replacement necessity. The electricity savings are at the same or higher level as in the case of discharge lamps.

Low power consumption

The use of LEDs with the top level of technical progress has provided a high energy efficient of the luminaire and has reduced electricity consumption.

Diferent colours of white light

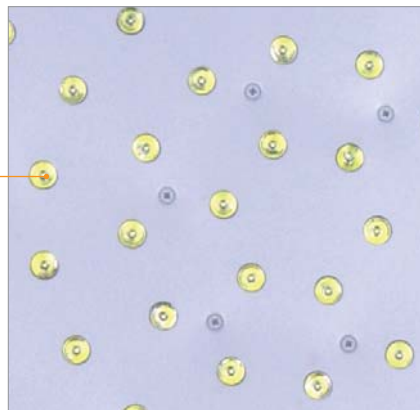
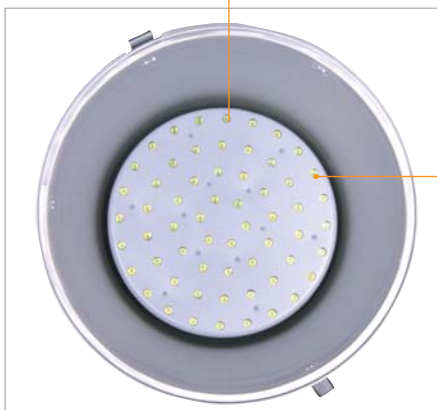
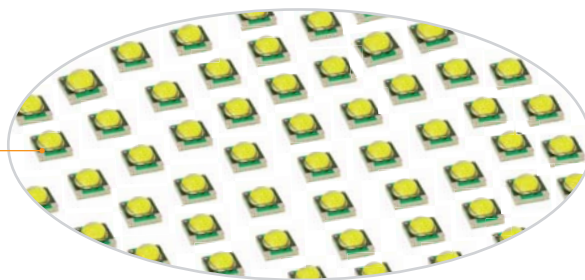
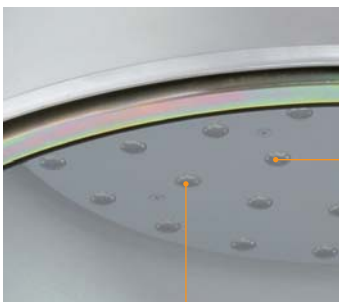
Depending on type of used LEDs, luminaires MITRA LED 480 provide the light:

LEDs type XP-G:

- neutral white, 3,700 ÷ 5,000K, Ra = 75
- daylight, 5,000 ÷ 8,300K, Ra = 75

LEDs type XP-E:

- warm white, 2,600 ÷ 3,700K, Ra = 80
- neutral white, 3,700 ÷ 5,000K, Ra = 75



Panel with diodes

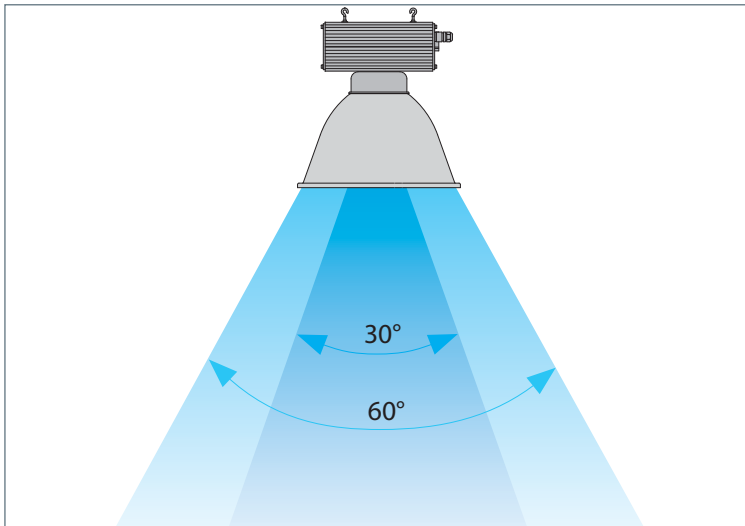
As a light source has been used system of sixty diodes manufactured by Cree - model XP-G or XP-E, placed on a round, a flat panel by using surface mount technology (SMT).

Tight and durable

High tightness and mechanical protection

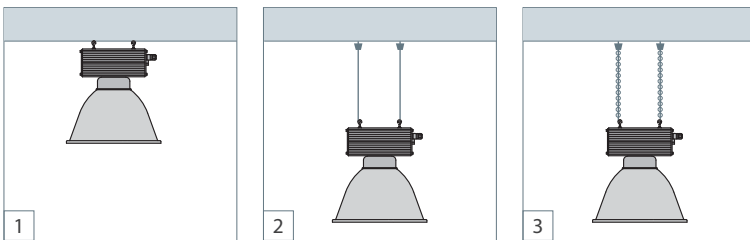
The gear compartment of MITRA LED 480 characterised by high tightness level - IP 65. The open luminaires (without glass) characterised by IP equal 23. The protection tempered glass, equipped with gasket, is fixed to the reflector by means of a clamping ring allows for obtaining IP rating of optical system at the level of 54. Thanks to this fact the models with protection glass can be applied in places with high level of dust and humidity.

The impact resistance of MITRA LED 480 luminaires is IK 10. Models with tempered glass and protection grid are strongly recommended for lighting places where mechanical strokes are highly probable.



Two different beam angles

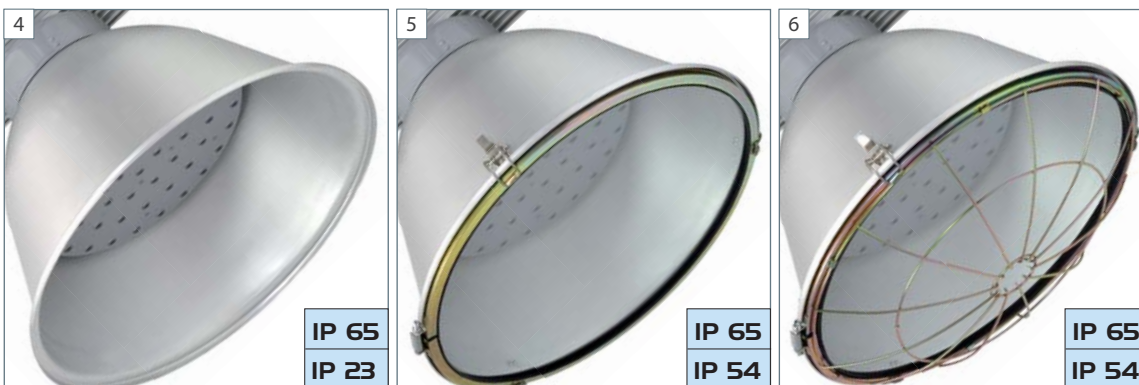
In the simplest variant of MITRA LED 480 the optical system make chemically polished aluminum reflector with symmetrical light distribution. In the luminaires with protection glass as well as with glass and grid, diodes are equipped with individual lenses that limit the light distribution angle up to 60° or 30°.



System of assembly

Possibility of different ways of fixing:

- 1 mount directly to the ceiling,
- 2 suspension on cords
- 3 suspension on chains.



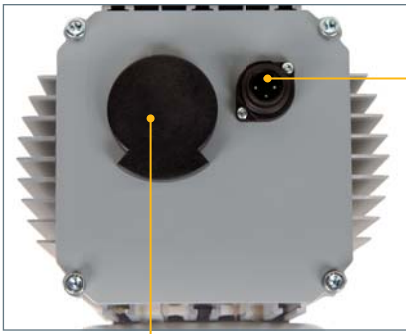
Mechanical protection of the cover

- 4 open reflector, without protection
- 5 reflector with tempered glass
- 6 reflector with tempered glass and protection grid

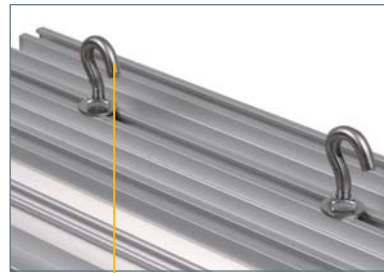
IP 65
IP 23

IP 65
IP 54

IP 65
IP 54



special connector
for power connection in the
side of gear compartment

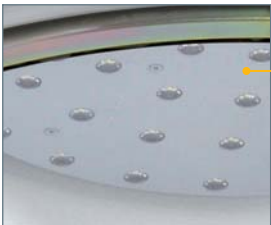


hooks for mounting luminaires
with adjustable spacing

special filter take precautions
against pollution suction during
cooling of the luminaire



**side closures of the gear
compartment**, made of
aluminium die-casts with laid
polyutethane gasket, fixed
to the housing by means of
screws.



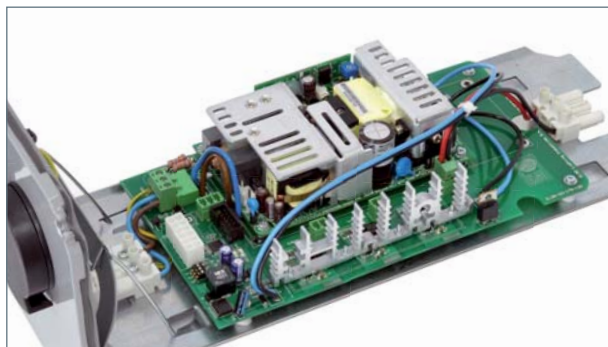
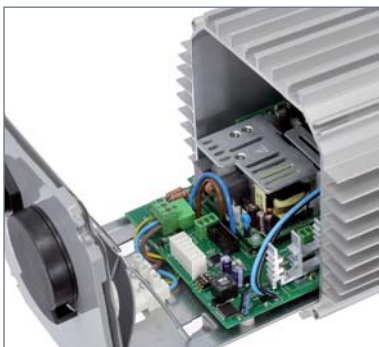
panel
with LEDs



gear compartment
made of aluminum profile
with a cross section similar
to the square, with a ribs
that provides efficient
coolings

intermediate part
connecting the gear
compartment with a
reflector

optical system
in the form of chemically
polished aluminium
reflector, with a symmetric
light distribution.



Control gear

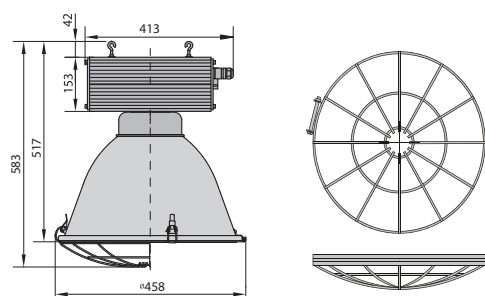
Easily exchangeable, movable panel
with electronic power supply unit.

Technical data

Index	Model	Light source	Summary power of LEDs	Luminaire power*	Number of LEDs [pcs.]	Distribution angle	Light colour	Correlated colour temperature	Total luminous flux of LEDs**	Versions		
										open luminaire	tempered glass	protection grid
YW-WO0071-50	MITRA LED 480	Cree XP-E LED diodes	65W	76W	60	30°	warm white	2,600 ÷ 3,700K	5,640 lm	•		
YW-WO0071-51	MITRA LED 480		65W		60	30°	neutral white	3,700 ÷ 5,000K	6,840 lm	•		
YW-WO0071-54	MITRA LED 480		65W		60	60°	warm white	2,600 ÷ 3,700K	5,640 lm	•		
YW-WO0071-55	MITRA LED 480		65W		60	60°	neutral white	3,700 ÷ 5,000K	6,840 lm	•		
YW-WO0071-52	MITRA LED 480	Cree XP-G LED diodes	65W	70W	60	30°	neutral white	3,700 ÷ 5,000K	7,800 lm	•		
YW-WO0071-53	MITRA LED 480		65W		60	30°	daylight white	5,000 ÷ 8,300K	8,340 lm	•		
YW-WO0071-56	MITRA LED 480		65W		60	60°	neutral white	3,700 ÷ 5,000K	7,800 lm	•		
YW-WO0071-57	MITRA LED 480		65W		60	60°	daylight white	5,000 ÷ 8,300K	8,340 lm	•		
YW-WO0071-62	MITRA LED 480	Cree XP-E LED diodes	65W	76W	60	30°	warm white	2,600 ÷ 3,700K	5,640 lm		•	
YW-WO0071-63	MITRA LED 480		65W		60	30°	neutral white	3,700 ÷ 5,000K	6,840 lm		•	
YW-WO0071-66	MITRA LED 480		65W		60	60°	warm white	2,600 ÷ 3,700K	5,640 lm		•	
YW-WO0071-67	MITRA LED 480		65W		60	60°	neutral white	3,700 ÷ 5,000K	6,840 lm		•	
YW-WO0071-64	MITRA LED 480	Cree XP-G LED diodes	65W	70W	60	30°	neutral white	3,700 ÷ 5,000K	7,800 lm		•	
YW-WO0071-65	MITRA LED 480		65W		60	30°	daylight white	5,000 ÷ 8,300K	8,340 lm		•	
YW-WO0071-68	MITRA LED 480		65W		60	60°	neutral white	3,700 ÷ 5,000K	7,800 lm		•	
YW-WO0071-69	MITRA LED 480		65W		60	60°	daylight white	5,000 ÷ 8,300K	8,340 lm		•	
YW-WO0071-74	MITRA LED 480	Cree XP-E LED diodes	65W	76W	60	30°	warm white	2,600 ÷ 3,700K	5,640 lm		•	•
YW-WO0071-75	MITRA LED 480		65W		60	30°	neutral white	3,700 ÷ 5,000K	6,840 lm		•	•
YW-WO0071-78	MITRA LED 480		65W		60	60°	warm white	2,600 ÷ 3,700K	5,640 lm		•	•
YW-WO0071-79	MITRA LED 480		65W		60	60°	neutral white	3,700 ÷ 5,000K	6,840 lm		•	•
YW-WO0071-76	MITRA LED 480	Cree XP-G LED diodes	65W	70W	60	30°	neutral white	3,700 ÷ 5,000K	7,800 lm		•	•
YW-WO0071-77	MITRA LED 480		65W		60	30°	daylight white	5,000 ÷ 8,300K	8,340 lm		•	•
YW-WO0071-80	MITRA LED 480		65W		60	60°	neutral white	3,700 ÷ 5,000K	7,800 lm		•	•
YW-WO0071-81	MITRA LED 480		65W		60	60°	daylight white	5,000 ÷ 8,300K	8,340 lm		•	•

* possible performance in power range 40 ÷ 80W (detailed arrangements with the manufacturer)

** based on data supplied by the manufacturer of LEDs, the luminous flux depends on the luminaire power consumption (detailed arrangements with the manufacturer)



Basic technical parameters

Supply voltage: 230V

Frequency: 50Hz

Luminaire power: 40 ÷ 80W

Power factor (cosφ): 0,96

Beam angle: 30°, 60°

Correlated colour temperature: 2,600 ÷ 8,300K

Efficacy of LEDs: 115-135 lm/W

* concerns the versions with LEDs by Cree type XP-G

Luminaire efficiency (η)*:

- open lumiares (without glass) – 66,0%
- luminares with glass / with glass and grid – 56,0%

Colour rendering index (CRI):

- Ra = 80, warm white
- Ra = 75, neutral white
- Ra = 75, daylight

Protection class against electric shock: I

Ingress protection:

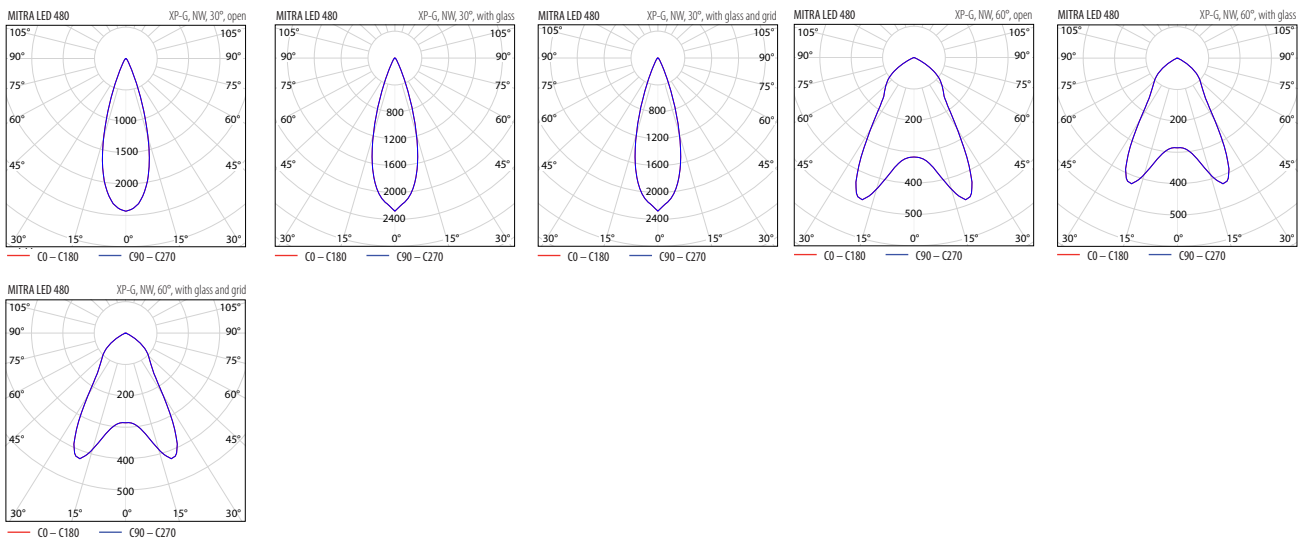
- open lumiares (without glass) – IP 65/23
- luminares with glass / with glass and grid – IP 65/54

Wieght:

- open lumiares (without glass) – 6,58kg
- luminares with glass – 8,88kg
- luminares with glass and grid – 9,15kg

Impact resistance rating: IK 10

Light distribution curves



Use the project support

