



solar light



technical
data

series 60
mira

190-2400
190-3600

dimensions

product specification

mira 190 is a stand-alone solar light conceived for outdoor residential and municipal lighting. Equipped with advanced modern LED and photo-voltaic technology, mira 190 provides uniform light distribution ideal for street, pedestrian areas and roadway applications. Due to its unique energy management system, mira 190 ensures high performance and reliability in all weather conditions and in the most challenging solar radiance environments.

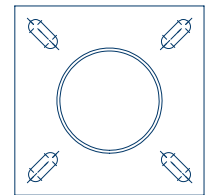
mira 190 is available with 24 or 36 LEDs and the following additional options:

- Motion detector for customer-specific light distribution
- Part-solar, hybrid version with power supply for locations with poor lighting conditions
- Remote maintenance and remote control (from 2011)

light pole versions

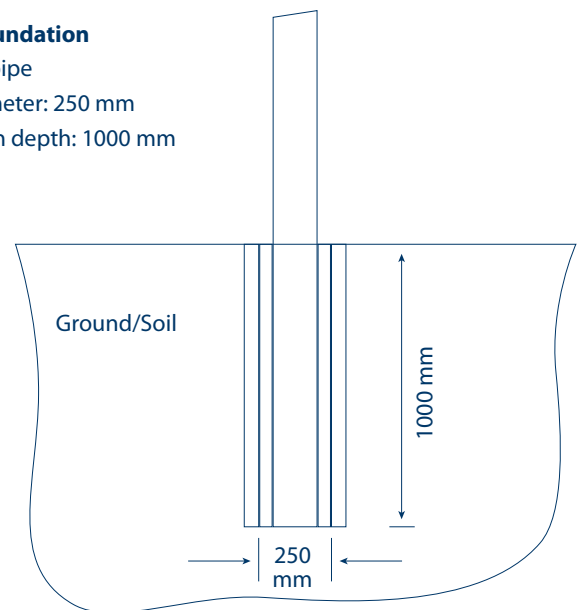
Square ground plate

according to EN 40-5
 dimensions: 330 x 330 x 25 mm
 hole spacing: 200 to 250 mm



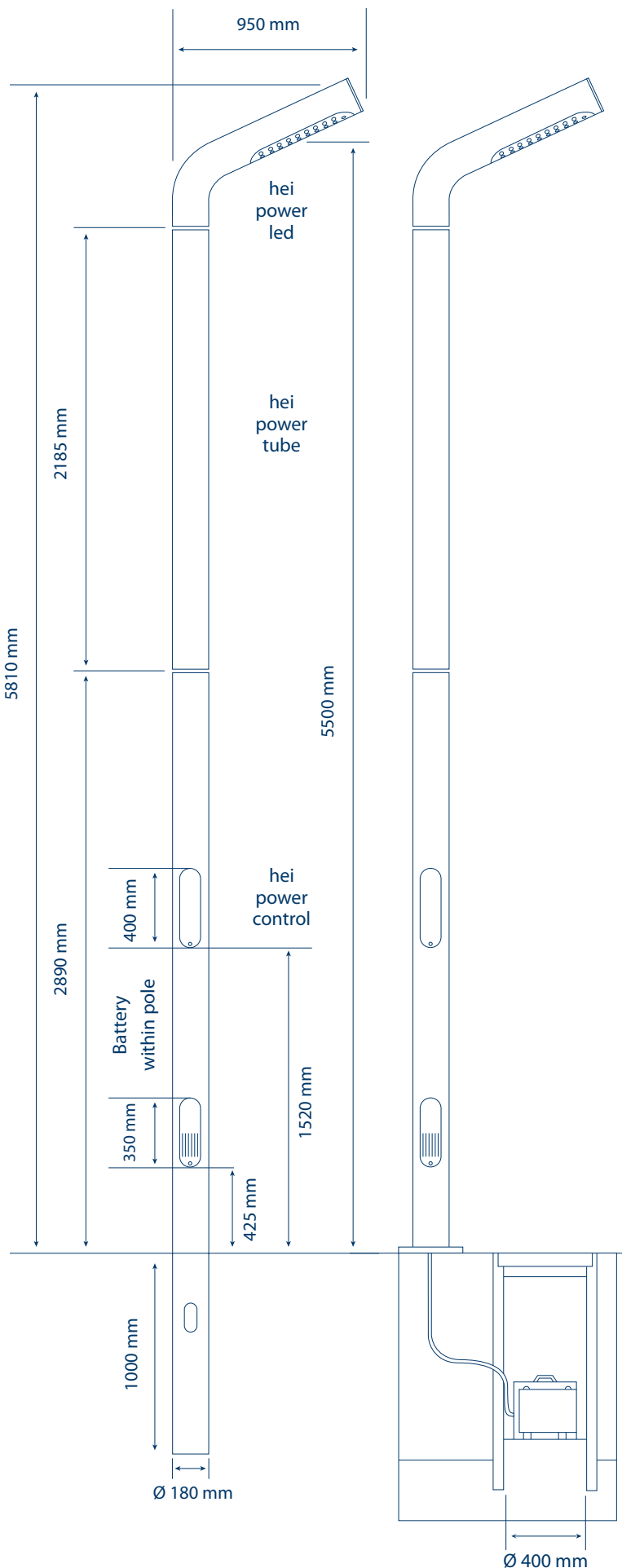
Sleeve foundation

concrete pipe
 inner diameter: 250 mm
 installation depth: 1000 mm



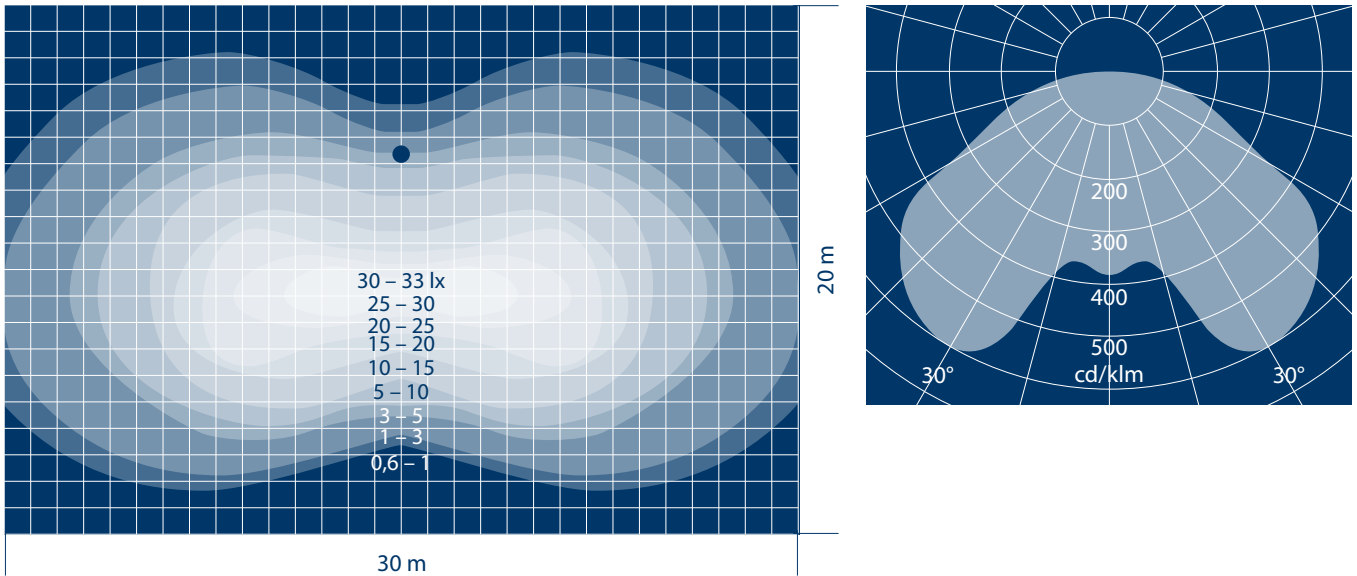
Battery enclosure

In very hot or cold regions, we recommend to position the battery in an underground enclosure rather than in the light pole.



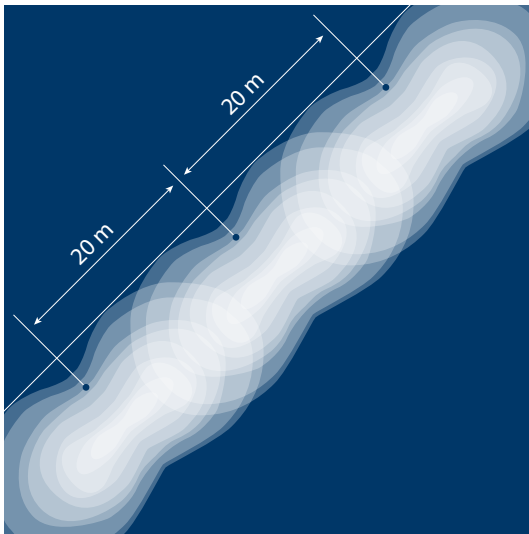
light distribution

Light distribution: lengthwise aligned Light spot height: 5.50 m 36 LEDs / 3.600 lm



installation example

Distance between lights: 20 m Average illuminance: 15 lx



illuminance

36 LEDs / 3.600 lm at full operation path-width: 7 m

distance [m]	area [sqm]	E_{av} [lx]	E_{min} [lx]
10	60	27	13
15	90	18	8.4
20	120	15	5.5
25	150	11	3.1
30	180	8.8	1.7
40	240	6.6	0.6
50	300	5.3	0.3

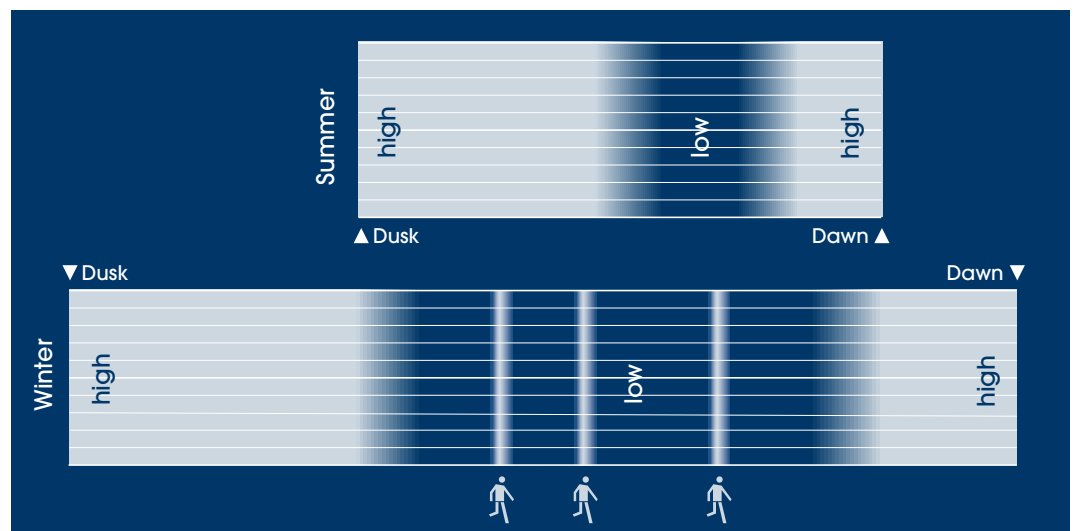
E_{av} [lx]: average illuminance

E_{min} [lx]: minimum illuminance

Illuminance in operation depending on local site conditions (average daylight available) and customer-specific lighting times.

illumination management

Lighting times can be individually adjusted with program-selection-switch.



Model	mira 190
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	System
Installation height	5.80 m
Light spot height	5.50 m
Diameter of light pole	180 mm
Light pole	steel, hot-dip galvanized, paint-coated, (stainless steel, aluminium op2488g)

