

Datasheet

verticalis960 / verticalis960 Duo



SELF-SUFFICIENT SOLAR LED STREET LAMP

APPLICATION

The verticalis LED solar light impresses with its unusual, cubic design and guarantees maximum power supply reliability in practically all climate zones. The verticalis is a solar-powered LED street light that can be used wherever there is no power supply or where it would be uneconomical to install. It is used in places where maximum security of supply and the best quality of light are required, even in poor lighting conditions.

Thanks to the cubic aluminum structure with 24 photinus high-performance photovoltaic modules, sufficient energy can be generated via the diffuse light component, especially in bad weather regions (snow, fog, etc.). The vertically arranged modules prevent snow deposits in winter. Sophisticated energy management ensures reliable operation over several nights, even in bad weather. In accordance with DIN EN13201, the verticalis is ideal for roads, residential streets, side streets, cycle paths, footpaths and parking lots etc. due to its high light output.

FUNCTION

The integrated battery is charged during the day via the 24 photinus high-performance photovoltaic modules and this energy is used to operate the LED head efficiently at dusk.

The light output of a solar light is limited due to the available solar radiation at the respective location, which is why the quality of the individual components and their optimum interaction play a decisive role.

The LiFePo4 battery used in this solar light is anchored in the ground together with the light pole to ensure an optimum, constant temperature for a long service life. This also provides efficient theft protection.

GUARANTEE

5 Years

The warranty of the solar illumination is provided, as far as the illumination is installed like described in the installation instructions. The warranty is void, if the product settings haven't been changed by photinus authorized employees/partners and/or using non-photinus approved tools.

SOLAR LIGHT	verticalis 450 / verticalis 450 Duo
SOLAR MODULES	
Solar modules	Monocrystalline silicon cells with exeptional efficiency specially processed by photinus.
Efficiency	22,6%
Max. performance of the energy column Pmpp	960 Wp / 24 Solarmodule, they are also charged up in cloudy conditions.
BATTERY IN THE POLE	
Battery	2x LiFeP04 / 1152Wh (12,8 V 90Ah)
Operating temperature	-20°C bis +60°C
Life of battery	>10 Jahre
Protection class	IPX8
LIGHTS	
Max. luminous flux	Depending on the time program and the location of the light
Max. Efficiency	up to 200lm/W
LED module / max. watts	100 W
Colour temperature	3000K (By request changeable: Amber Light, 2200K, 2700K, 4000K, 5000K)
Life of LED	>100 000 h (L80)
Protection class	IP 67
MATERIALS	
Pole	galvanised steel
Metal parts	powder-coated aluminium „Sparkling iron effect dark“

DIMENSIONS	
Total height from ground level	8120 mm
Height of light from ground level	8020 mm
Height of vandalism protection	500 mm
Length of pole under ground	1500 mm
Total length of mast	9520 mm
Weight of solar light	180 kg
Wind load	windload 2 to 27 m/sec Terrain category 2

Salt spray test (ISO 9227:2012)

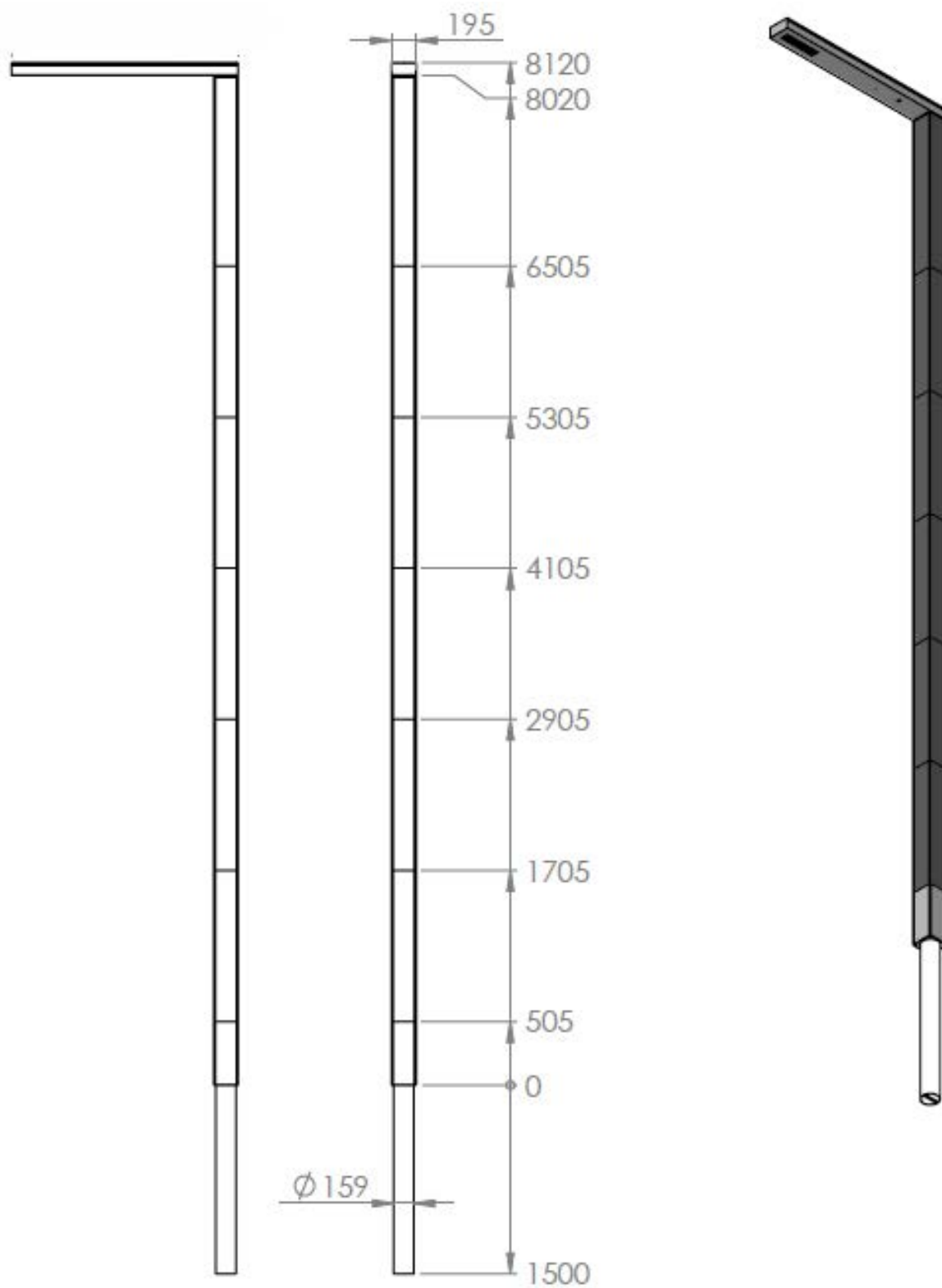
Corrosion test in artificial atmosphere - salt spray test (ISO 9227:2012)

All solar lights have successfully passed the salt spray test.

Details

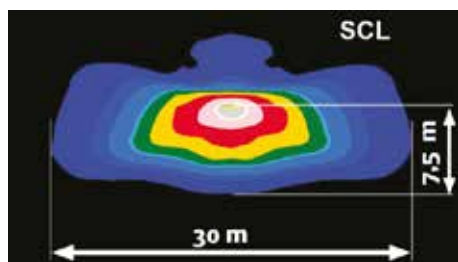
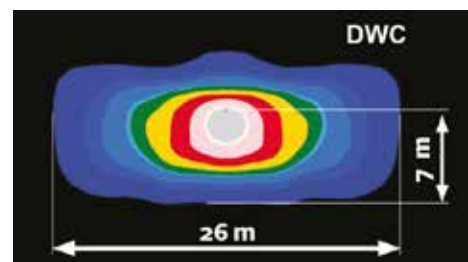
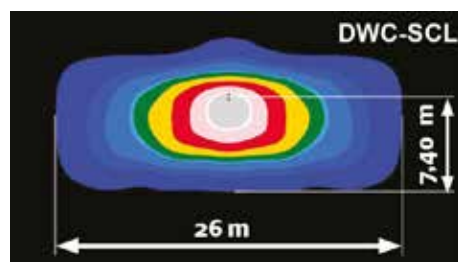
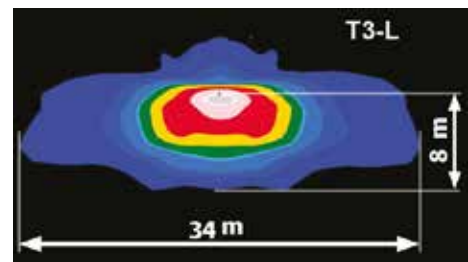
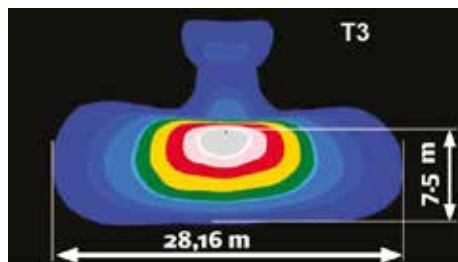
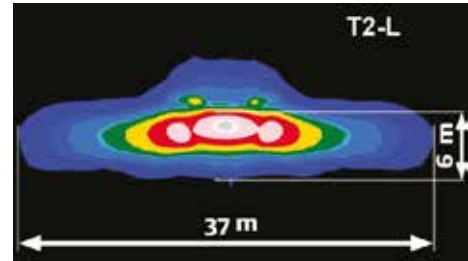
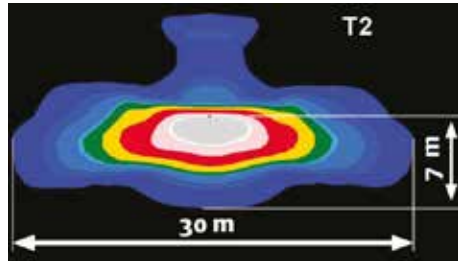


Dimensions

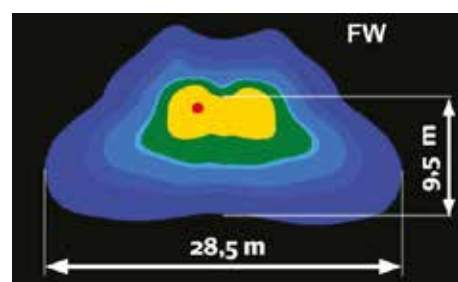
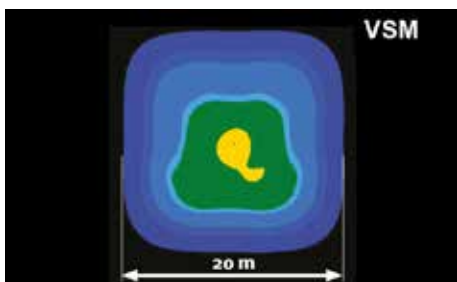
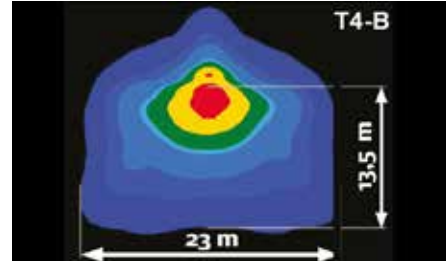
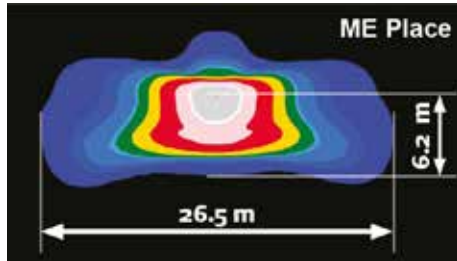


Optics

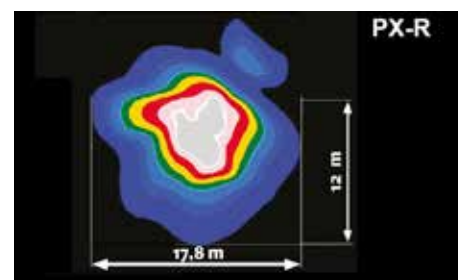
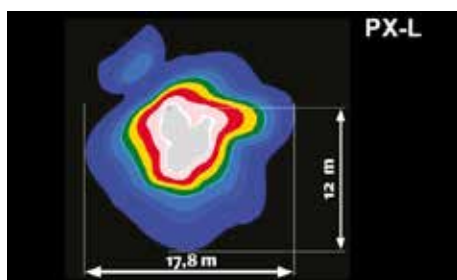
Path and street optics



Place optics



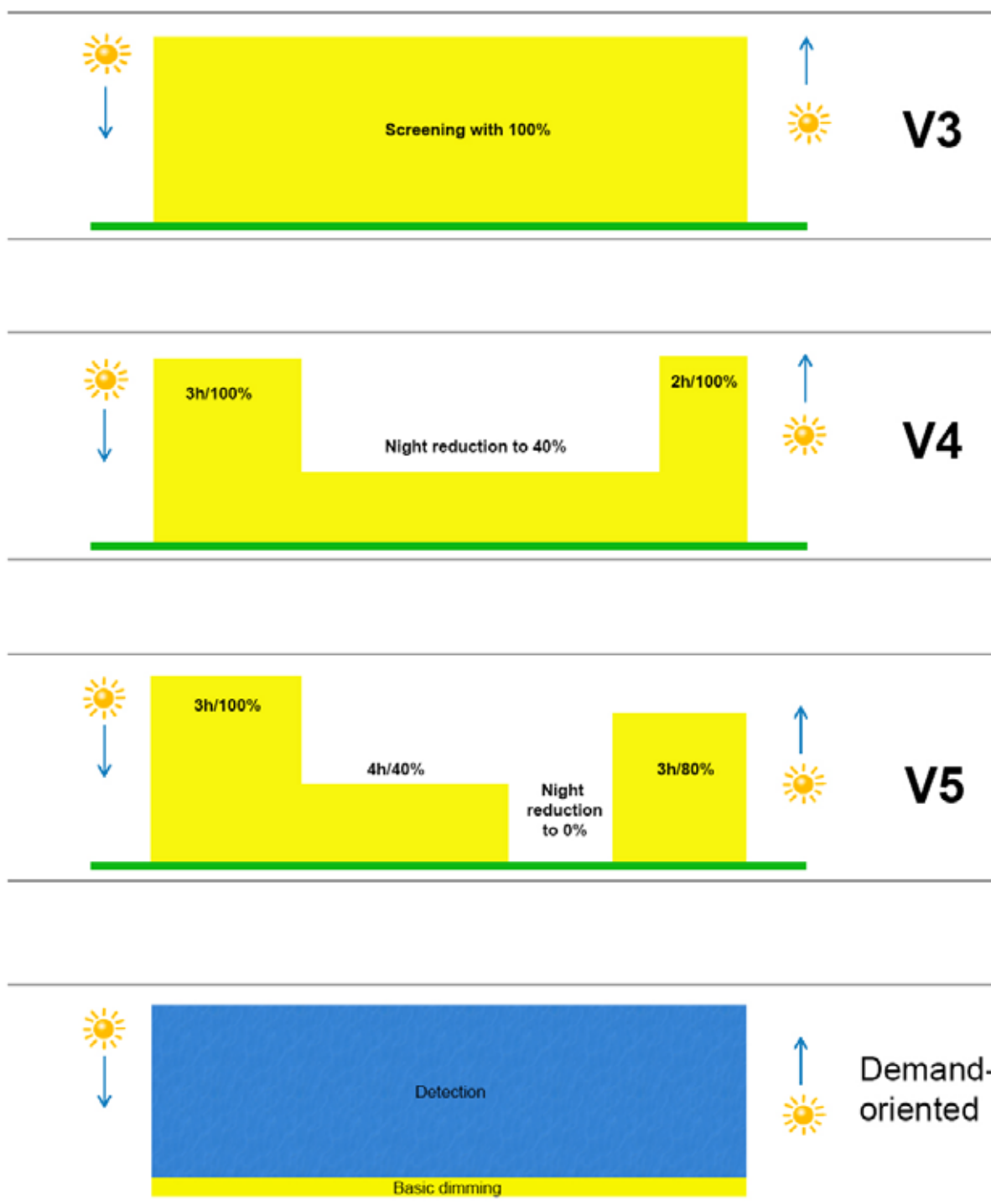
Special optics crosswalk



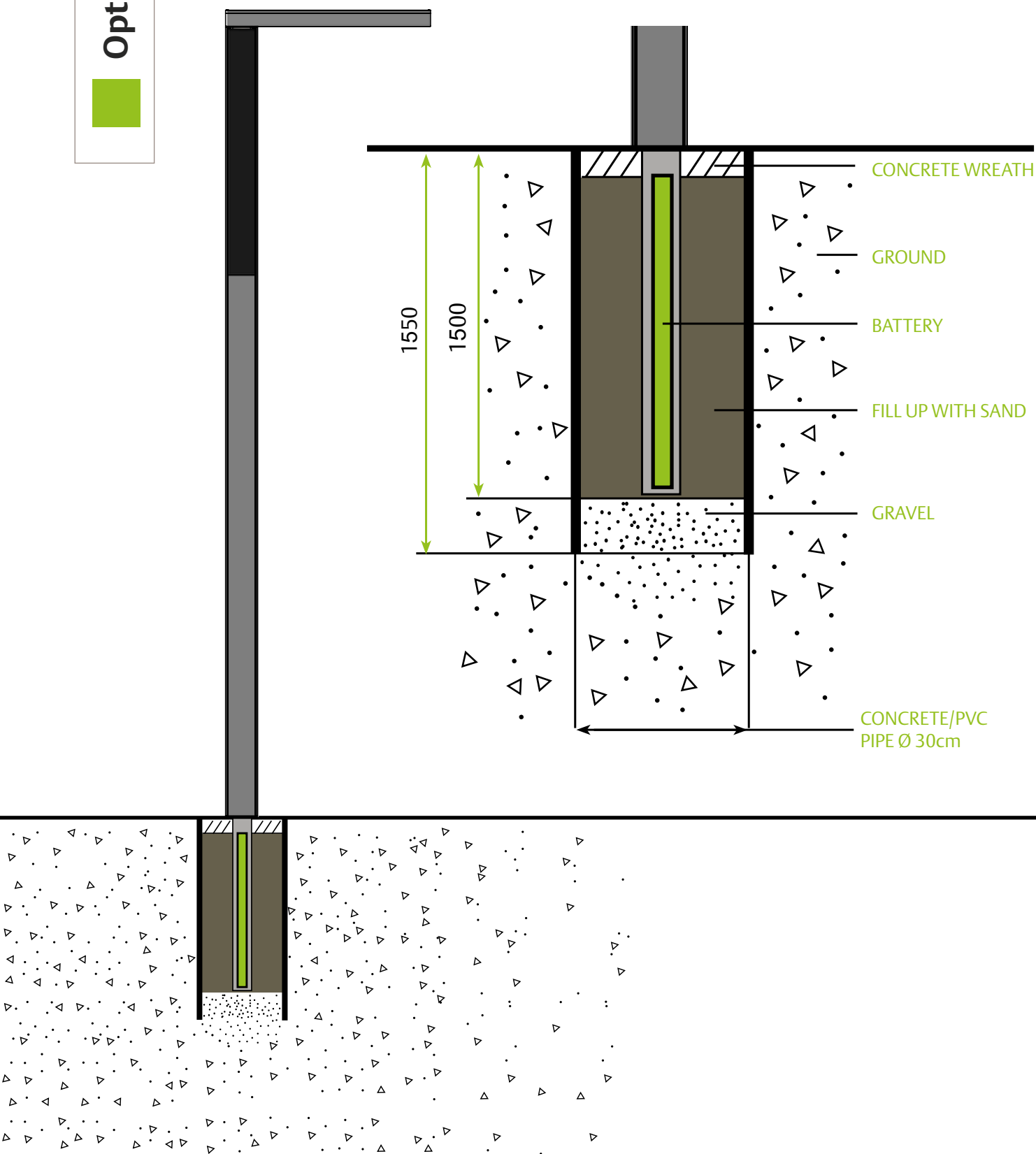
ENERGY AND TIMEMANAGEMENT

Standard factory setting V5

TIME MANAGEMENT PHOTINUS SOLAR LIGHTS



PIPE FOUNDATION



References

verticalis
 Gehweg Hausham / DE



verticalis
 Holmenkollen / NOR

verticalis
 Stadtviertel Adliya / BHR



References



verticalis
 Rad-Gehweg / PL

verticalis
 Neuschwanstein / DE



verticalis
 Eching / DE