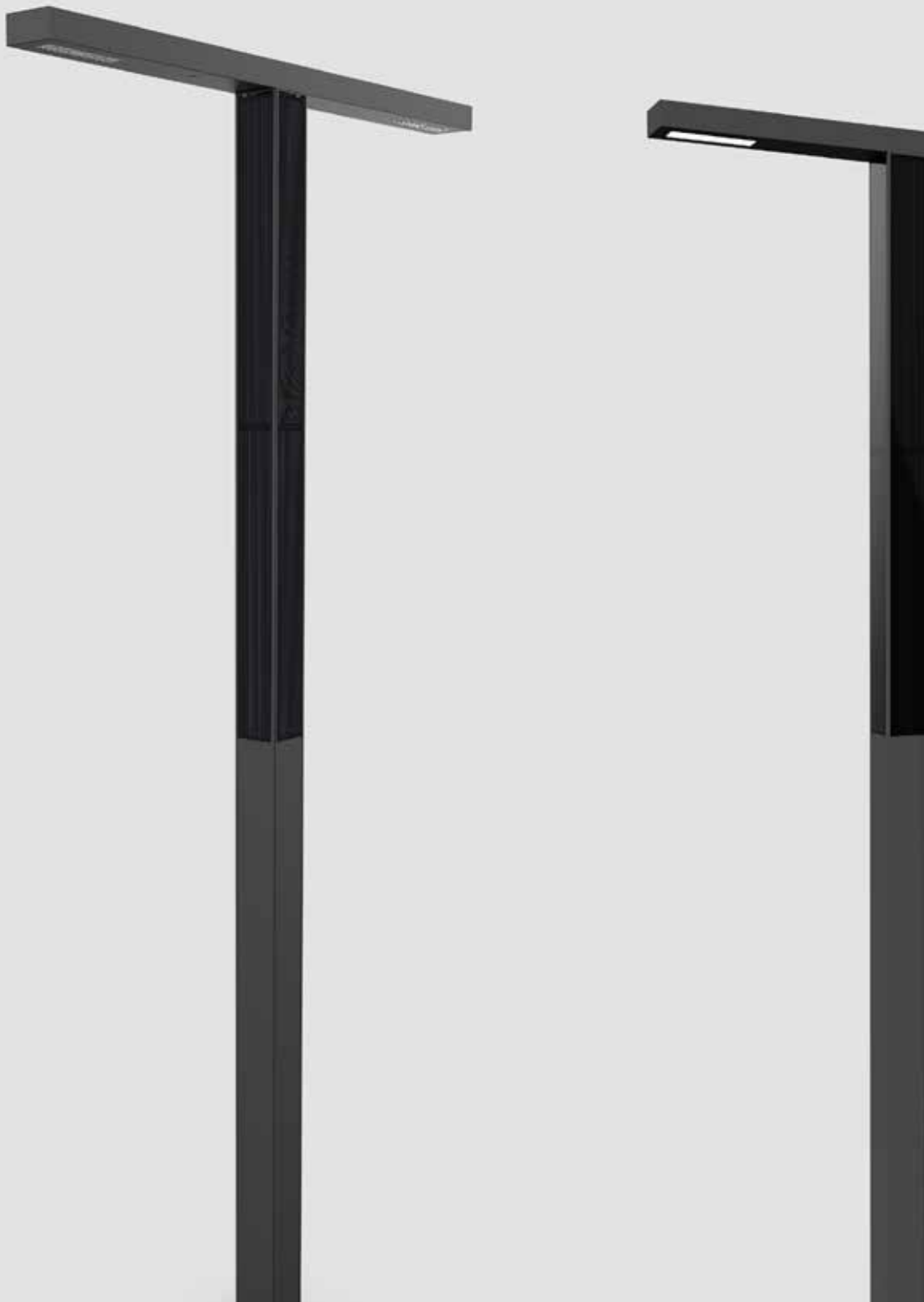


brilliance in solar lighting
photinus

Datasheet

verticalis300 / verticalis300 Duo



SELF-SUFFICIENT SOLAR LED STREET LAMP

APPLICATION

The verticalis300 stands out for its exceptional, cubic design and guarantees a secure supply in all different climate zones. The verticalis300 solar light is a solar powered LED street lamp, which is used in regions without electrical infrastructure or in which it would not be economically feasible to implement one. The luminaire is especially used in areas that demand a secure supply and excellent light quality even in dim conditions.

The verticalis300 is able to generate sufficient energy via the diffuse light component in regions with poor weather (snow, fog, etc.) due to the cubic aluminium construction with 8 photonus High Performance photovoltaic modules. The vertically arranged modules prevent snow from accumulating on it in winter. A sophisticated energy management system guarantees secure functionality over several nights even in poor weather conditions. The verticalis300 is best suited for residential streets, side streets, cycle routes and footpaths as well as car parks etc. in accordance with DIN EN13201 due to its light output.

FUNCTION

The integrated battery is charged during daytime by the efficient photovoltaic solar modules. At nightfall, the LED light module is automatically activated.

The light output of a solar lamp is defined by the incident solar irradiation 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 lamp is shored in the ground together with the post so that an optimum, constant temperature is achieved. The long service life of the battery and efficient theft protection are the results.

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 photonus authorized employees/partners and/or using non-photonus approved tools.

SOLAR LIGHT	verticalis 300 / verticalis 300 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	320 Wp / 8 solar modules, they are also charged up in cloudy conditions.
Protection class	IK06
BATTERY IN THE POLE	
Battery	LiFeP04 / 474 Wh (12,8 V 37Ah) or LiFeP04 / 1152Wh (12,8 V 90Ah) (depending on location/latitude)
Operating temperature	-20°C to +60°C
Life of battery	>10 years
Protection class	IPX8
LIGHTS	
Max. luminous flux	Depending on the location where the light is staying.
Max. Efficiency	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	4900 mm
Height of light from ground level	4800 mm
Height of vandalism protection	2400 mm
Height of energy column	2400 mm
Total length of pole	6000 mm
Length of pole under ground	1000 mm
Weight of solar light	110 kg
Wind load	windload 2 to 27 m/sec Terrain category 2

Salt spray test (ISO 9227:2012)

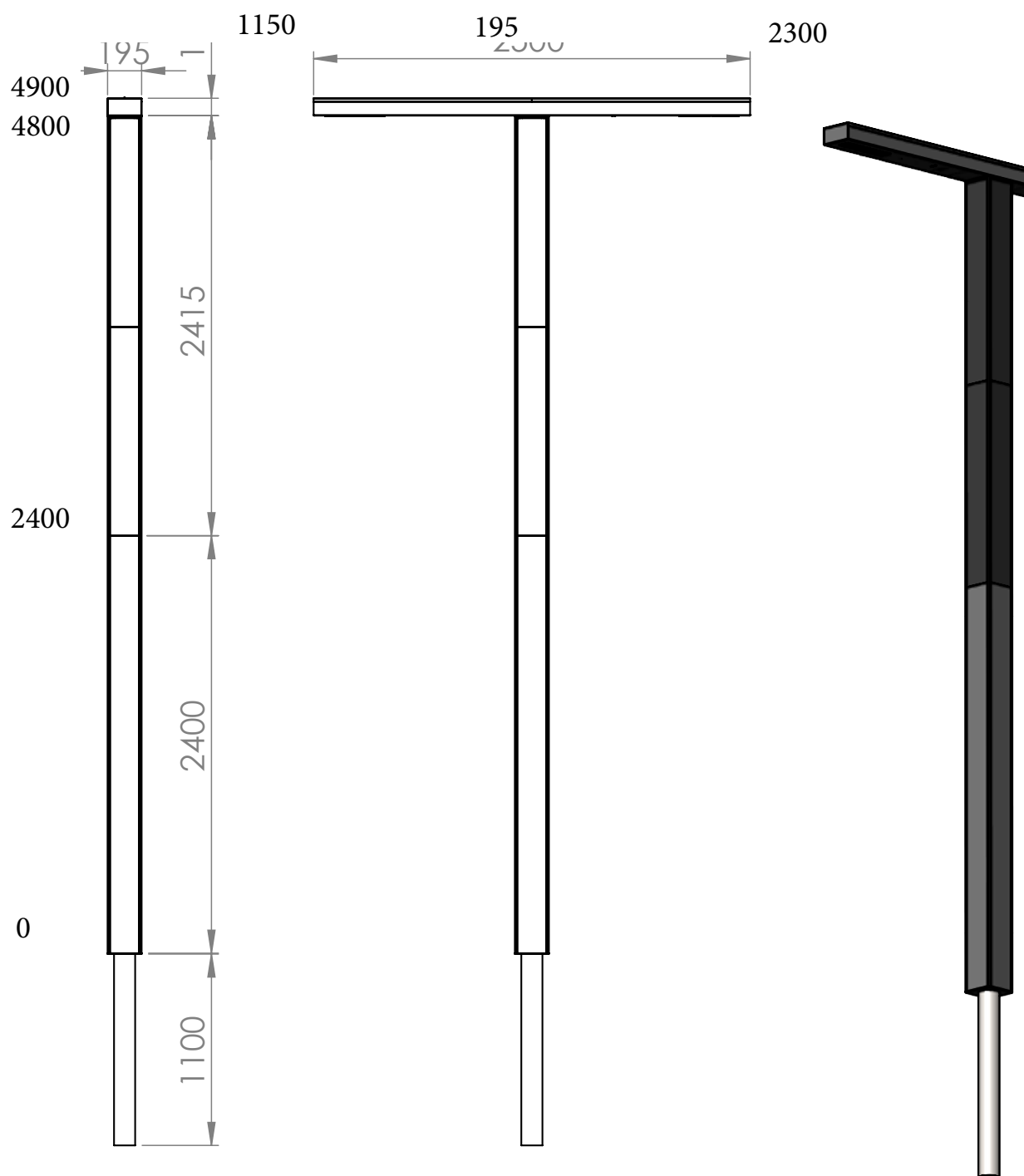
Corrosion test in artificial atmosphere - salt spray test (ISO 9227:2012)

All solar lights have successfully passed the salt spray test.

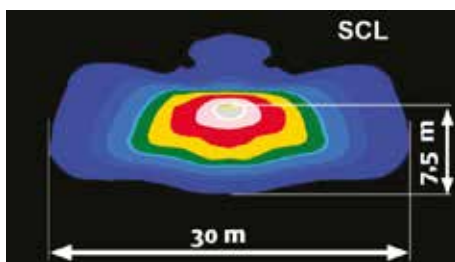
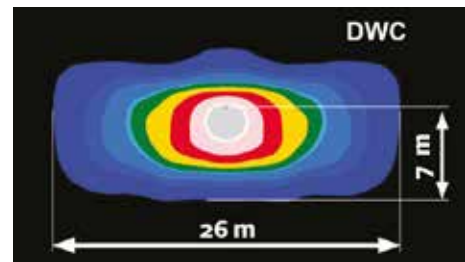
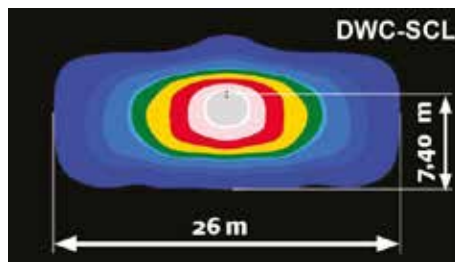
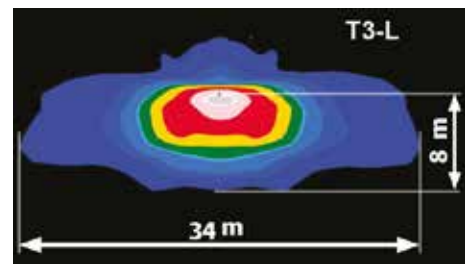
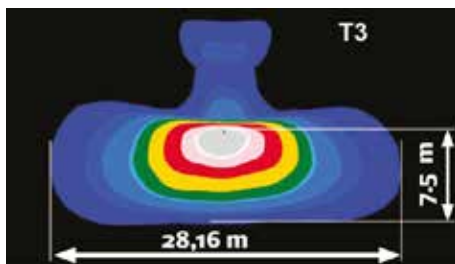
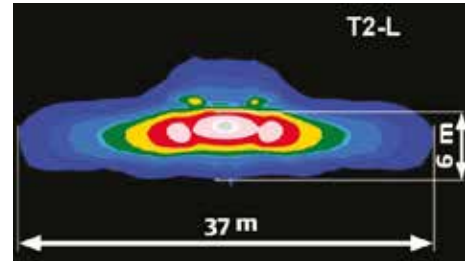
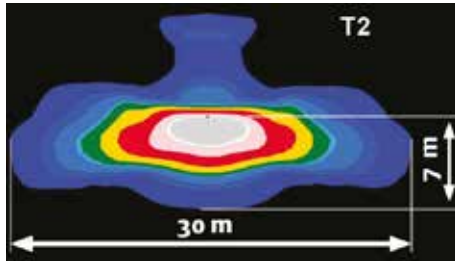
Details



Dimensions

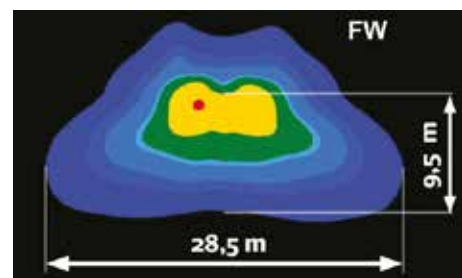
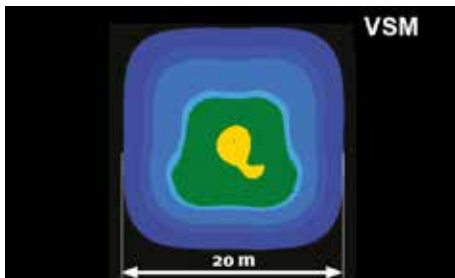
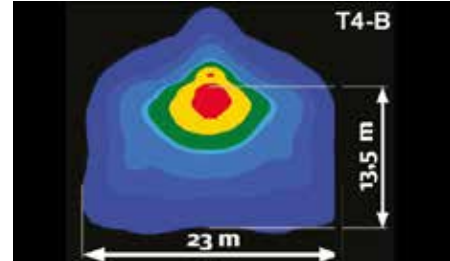
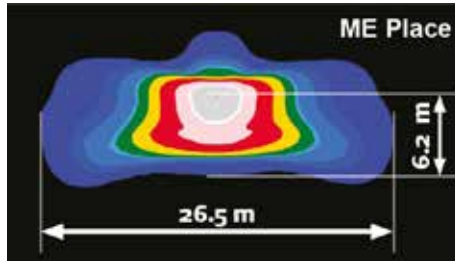


Path and street optics

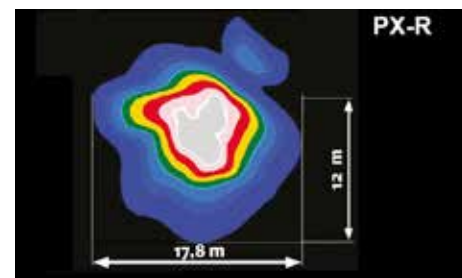
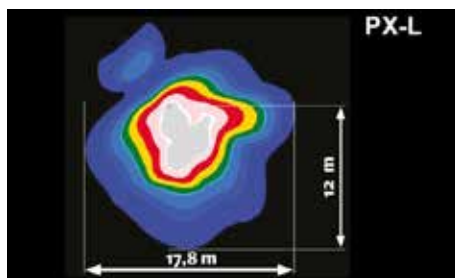


Optics

Place optics



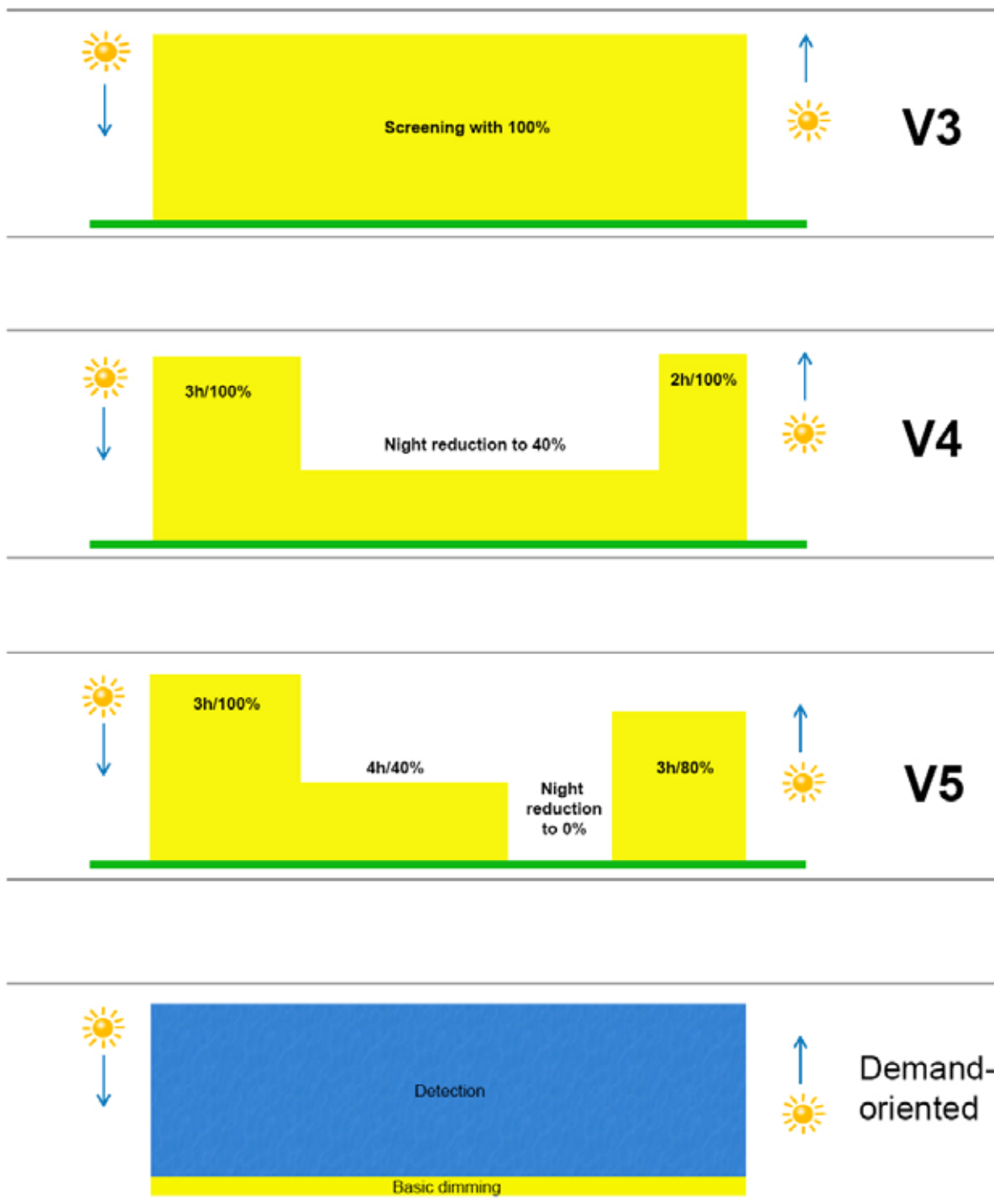
Special optics crosswalk



ENERGY AND TIMEMANAGEMENT

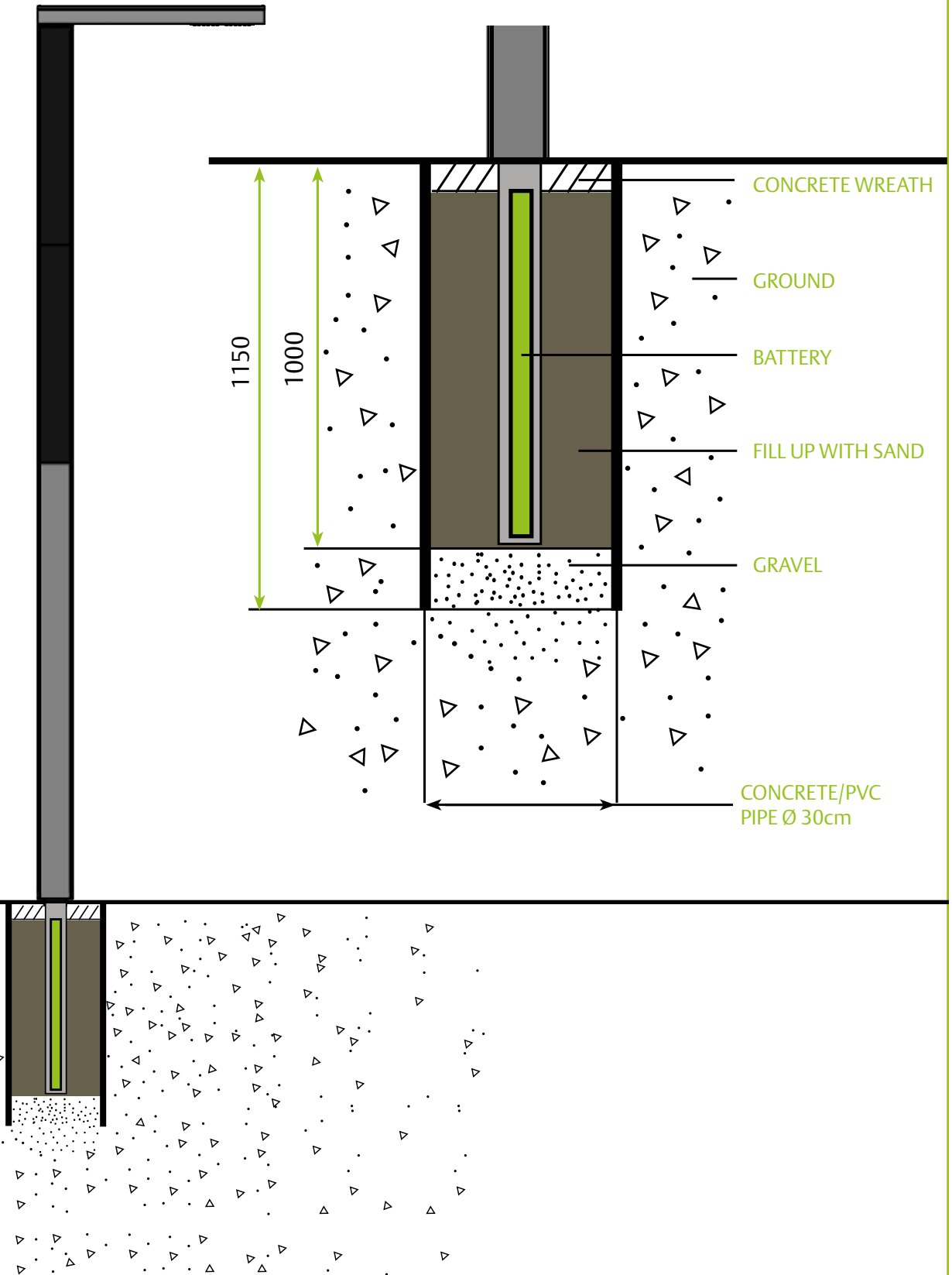
Standard factory setting V5

TIME MANAGEMENT PHOTINUS SOLAR LIGHTS



Option for assembly

PIPE FOUNDATION



References

verticalis
 Footpath Hausham / DE



verticalis
 Holmenkollen / NOR

verticalis
 Neighborhood Adliya / BHR



References



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 Cycle- Footpath / PL

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 Neuschwanstein / DE



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