Opera
LED

Efficient LED luminaire for gardens and yards. Its anti-glare lighting is carefully directed to the illuminated area and the disturbing portion of scattered lighting has been minimized. Opera can be used in various outdoor applications like large gardens and market squares, pedestrian areas, parks, car parks and playgrounds.

Pearl grey

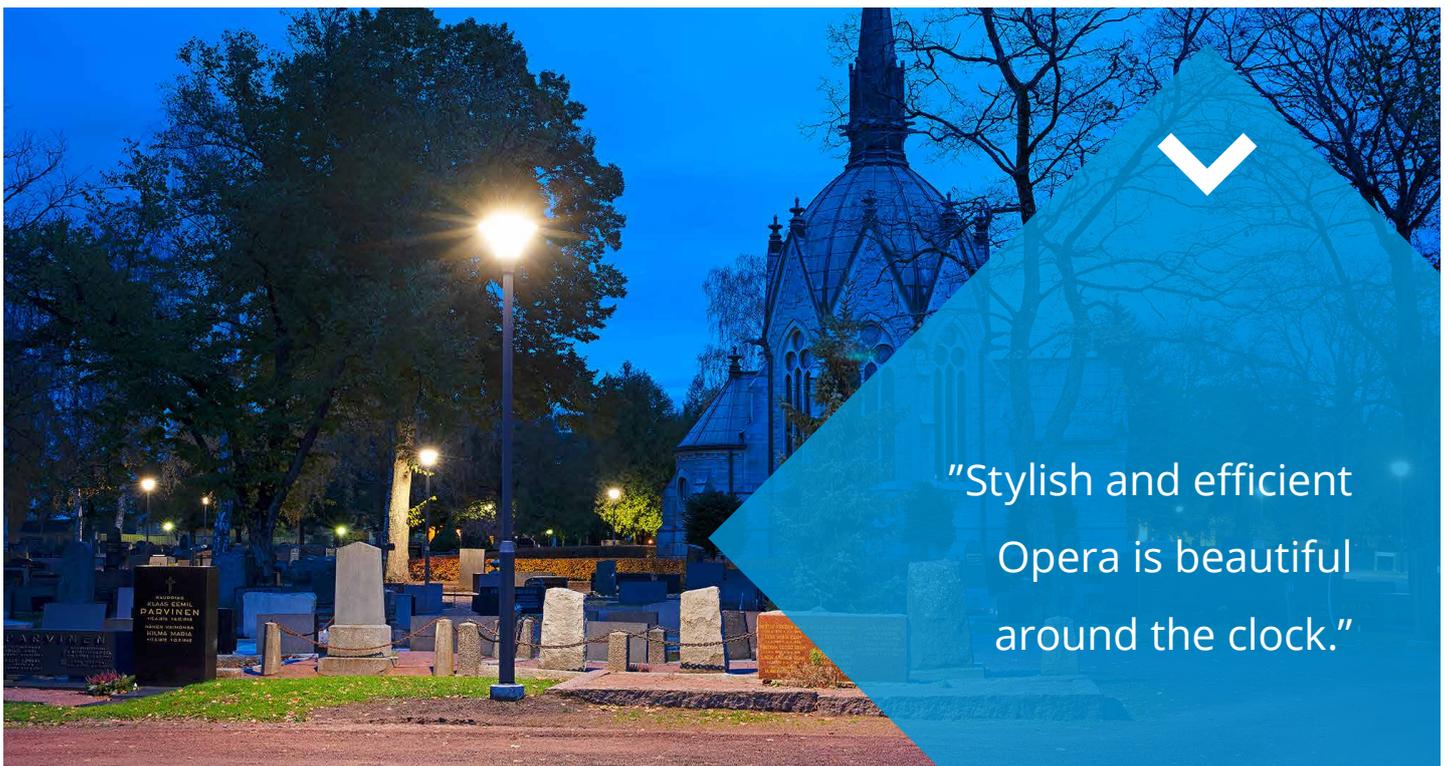**LIFETIME 100 000 h (L80)**

DALI

DALI drivers enable luminaires to be connected to DALI based control systems and Smart Buildings. Compared to a fixed output installation, the dimming and individual control capability provided by DALI enables considerable energy savings and control, depending on luminaire specifications.

BaseDim

Ensto BaseDim -solution makes energy saving easy without compromising safety or area lighting. BaseDim drops light output 50% during 8 hours in dark time. It's automatic and simple, but gives you benefits in energy saving.

SmartDim

Ensto SmartDim is a programmable dimming solution which gives you optimized energy saving and light output when and where it's needed. You can choose maximum of 5-steps and levels during the dark hours.

"Stylish and efficient Opera is beautiful around the clock."

ENSTO

Graphite grey

Structure

> Hat: powder-coated aluminium
> Base: powder-coated aluminium
> Colours: Graphite grey (Akzo900) and pearl grey (RAL 9006)
> Diffuser: ribbed, light-scattering uv resistant acrylic
> Opera 4000 K selection:
  connected load 18W, luminaire luminious flux 2890 lm
  connected load 30W, luminaire luminious flux 4500 lm
> Opera 3000 K selection:
  connected load 18W, luminaire luminious flux 2760 lm
  connected load 30W, luminaire luminious flux 4300 lm
> Ra > 80, power factor 0,98
> Ambient temperature -40 °C - +30 °C
> LED module lifespan T_a=25 °C:
  >100 000 h (L70)
  100 000 h (L80)
  54 000 h (L90)
> LED driver lifetime T_a=25 °C:
  100 000 h (max. 10 % failure rate)
> Opera LED with Bi-power function. The luminaire switches automatically (factory setting) to lower power level 50% for 8 hours (3 hours before and 5 hours after the calculated midnight)

Mounting

> On ø 60 mm column or on stepped column ø 60 mm
> Connection lead 4,5 m VSKN 3x1,5mm² included
> Recommended mounting height 3-5 m

Made to order
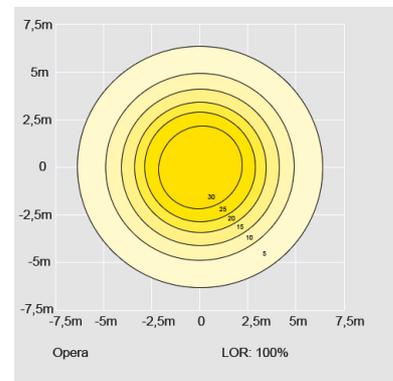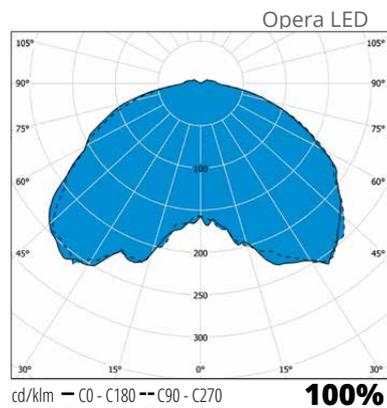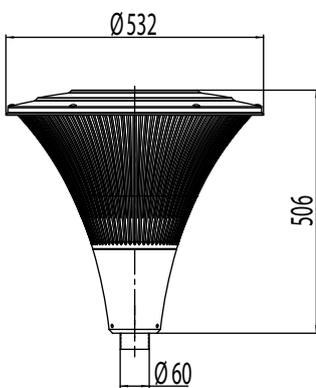
> DALI-controlled models
> Special colours
> Columns from Tehomet selection:
  Stepped columns   Conical columns
  OH3/108 + colour   KH3/108 + colour
  OH4/108 + colour   KH4/108 + colour
  OH5/108 + colour   KH5/121 + colour
  OH6/108 + colour   KH6/136 + colour
  Colours: RAL 9006 (pearl grey) and Akzo900 (graphite grey)
  O= stepped columns, K= conical columns
  H3 = height above the ground (f.ex. 3 m)
  /108 = diameter of the base
  Top of the column is always ø 60 mm Besides the height above the ground to the overall height of column an additional + 500 mm is calculated, which goes to base. All columns have a coupling space. Surface-treatment hot dip galvanized and power coated.
> Helvar NightDim

E Number	Type	Product name	Base	Colour	Luminous flux	Kg
Opera 4000 K						
45 030 71	OP530LED20GH	OP530LED20GH LED 18W/840 AC GH	LED	graphite grey	2890 lm	8,0
45 030 73	OP530LED20HH	OP530LED20HH LED 18W/840 AC HH	LED	pearl grey	2890 lm	8,0
45 030 62	OP530LEDGH	OP530LEDGH LED 30W/840 AC GH	LED	graphite grey	4500 lm	8,0
45 030 64	OP530LEDHH	OP530LEDHH LED 30W/840 AC HH	LED	pearl grey	4500 lm	8,0
Opera 4000 K with Bi-power power reduction						
45 030 68	OP530LED20BPGH	OP530LED20BPGH 18W/840 BP GH	LED	graphite grey	2890 lm	8,0
45 030 70	OP530LED20BPHH	OP530LED20BPHH 18W/840 BP HH	LED	pearl grey	2890 lm	8,0
45 030 65	OP530LEDBPGH	OP530LEDBPGH LED 30W/840 BP GH	LED	graphite grey	4500 lm	8,0
45 030 67	OP530LEDBPHH	OP530LEDBPHH LED 30W/840 BP HH	LED	pearl grey	4500 lm	8,0

![ENSTO]

E Number	Type	Product name	Base	Colour	Luminous flux	Kg
Opera 3000 K						
45 032 93	OP530LED20GH/3K	OP530LED20GH 18W/830 AC GH	LED	graphite grey	2760 lm	8,0
45 032 94	OP530LED20HH/3K	OP530LED20HH 18W/830 AC HH	LED	pearl grey	2760 lm	8,0
45 032 87	OP530LEDGH/3K	OP530LEDGH 30W/830 AC GH	LED	graphite grey	4300 lm	8,0
45 032 88	OP530LEDHH/3K	OP530LEDHH 30W/830 AC HH	LED	pearl grey	4300 lm	8,0
Opera 3000 K with Bi-power power reduction						
45 032 91	OP530LED20BPGH/3K	OP530LED20BPGH 18W/830 BP GH	LED	graphite grey	2760 lm	8,0
45 032 92	OP530LED20BPHH/3K	OP530LED20BPHH 18W/830 BP HH	LED	pearl grey	2760 lm	8,0
45 032 89	OP530LEDBPGH/3K	OP530LEDBPGH 30W/830 BP GH	LED	graphite grey	4300 lm	8,0
45 032 90	OP530LEDBPHH/3K	OP530LEDBPHH 30W/830 BP HH	LED	pearl grey	4300 lm	8,0
Glare Covers						
45 033 65	AVL961	Opera glare cover plate 120° GH		graphite grey		0,27
45 033 66	AVL962	Opera glare cover plate 120° HH		pearl grey		0,27

Ø 532

506

Ø 60

Opera LED

cd/klm — C0 - C180 -- C90 - C270   **100%**

Opera   LOR: 100%

We reserve the right to changes.

Opera brings style and dignity to their surroundings while illuminating the landscape.