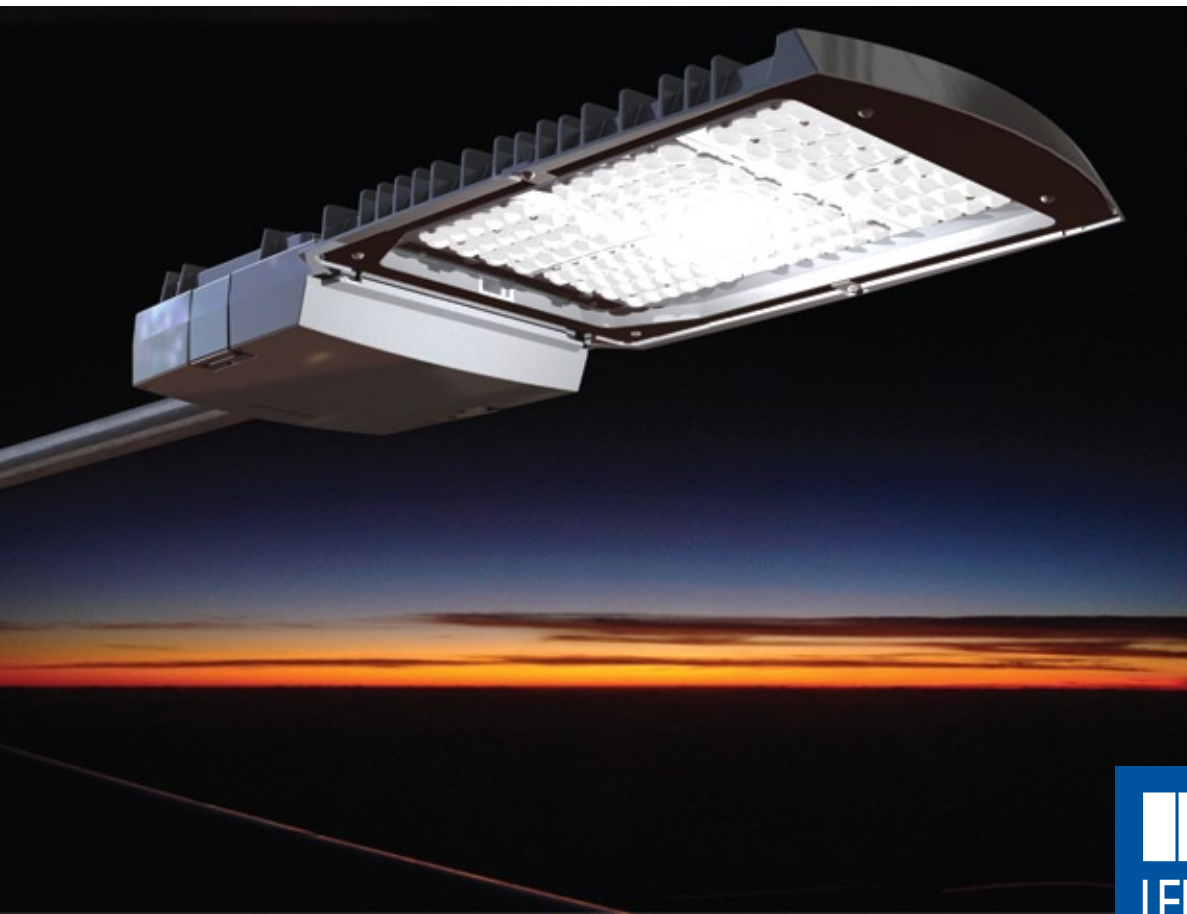
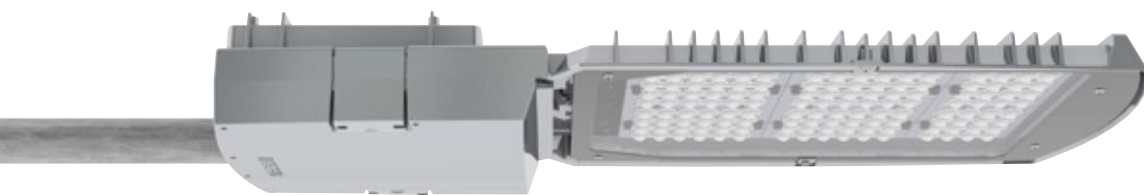


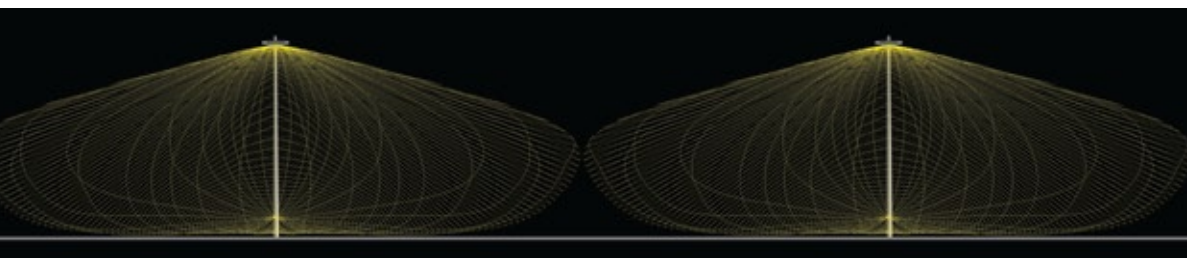
BEKA LEDlume-maxi
HIGH-PERFORMANCE LED STREET LIGHT



BEKA
LEDlume-maxi



SA Pat. Appl. 2011/07074 and 2011/04836

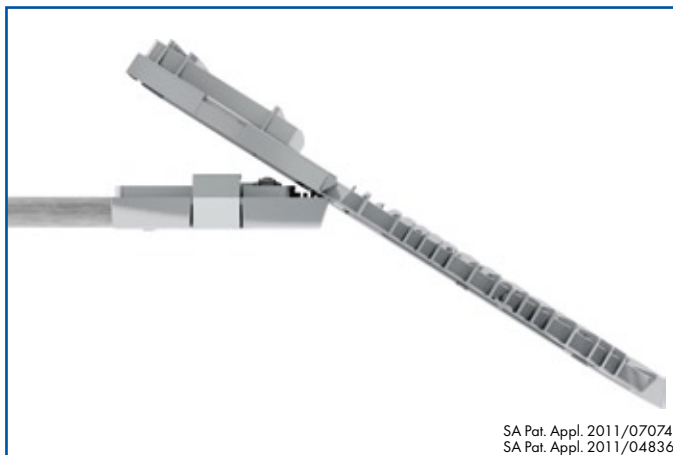


Visualisation of photometric distribution



BEKA LEDlume-maxi

HIGH-PERFORMANCE LED STREET LIGHT



SA Pat. Appl. 2011/07074
SA Pat. Appl. 2011/04836

BEKA LEDlume-maxi

DESIGNED FOR FUNCTIONAL LIGHTING OF GROUP A ROADS WHERE ENERGY SAVING, LOW MAINTENANCE AND PRECISE LIGHT CONTROL CONSIDERATIONS ARE IMPORTANT FACTORS

APPLICATIONS

- DESIGNED FOR LIGHTING OF MAJOR ROADS INCLUDING HIGHWAYS UP TO GROUP A1
- OUTDOOR LIGHTING IN ECO-FRIENDLY APPLICATIONS

FEATURES

- MANUFACTURED IN SOUTH AFRICA
- DESIGNED TO OPERATE LED LIGHT SOURCES OF UP TO 300W IN AN AMBIENT TEMPERATURE ENVIRONMENT OF UP TO 35°C, WITHOUT REDUCING THE LED LIFETIME OF 15-25 YEARS, AT A LUMEN DEPRECIATION OF NOT MORE THAN 20% (L80)
- SLIM, AESTHETICAL DESIGN OPTIMISED FOR LED CHARACTERISTICS
- PROVIDES ENERGY SAVINGS OF UP TO 70%
- EASY TO INSTALL
- NO LAMP OR COMPONENT REPLACEMENTS FOR MORE THAN 10 YEARS
- DESIGNED FOR EASY TECHNOLOGY UPGRADE (FUTUREPROOF)
- INTERCHANGEABLE WITHIN THE BEKA LEDlume PRODUCT RANGE
- UNSURPASSED LIGHT UNIFORMITY
- DESIGNED TO REPLACE CONVENTIONAL HID STREETLIGHT LUMINAIRES (UP TO 400W HPS)
- MARINE GRADE (LM6) HIGH PRESSURE DIE CAST ALUMINIUM HOUSING
- NO INGRESS OF DUST AND MOISTURE INTO THE LED AND CONTROLLER COMPARTMENT - IP66
- THREE-COMPARTMENT HOUSING, ENSURES RELIABLE INGRESS PROTECTION

- AUTOMATIC DISCONNECTION OF POWER WHEN OPENED
- AVAILABLE IN WHITE LIGHT, 5 000K
- FLICKER-FREE LIGHTING
- COLOUR RENDERING INDEX ≥ 70
- SURGE PROTECTION 10kA
- OPTIONAL DIMMING
- OPTIONAL VANDAL AND THEFT PROOF VERSION
- OPTIONAL DAYLIGHT SWITCH VERSION
- AVAILABLE IN OWLET *nightshift* TELEMANAGEMENT VERSION

CONSTRUCTION DETAILS

The luminaire consists of an LED engine, power supply and spigot compartment. This allows the easy installation of the LED engine by means of a hinging action onto a spigot base casting, with incorporated leveling device. It is secured by stainless steel latches and an access screw. The LED engine, consisting of the LED light source and the power supply, can be easily replaced or upgraded (FUTUREPROOF). Both compartments are rated IP66. The power supply is automatically disengaged when opening the luminaire. The luminaire housing is manufactured of LM6, marine-grade aluminium. It is designed for LED light sources between 92W and 300W.

SABS MARKS

The luminaire bears the SANS 60598 mark. Luminaire spigot entry complies with SANS 1088 - Table 1. Side entry $\varnothing 42\text{mm} \times 125\text{mm}$ Adaptors for $\varnothing 60\text{mm}$ side entry or $\varnothing 76\text{mm}$ bottom entry are available.

LED

- Designed for ambient temperatures of 35°C, resulting in a lifetime of approximately 15-25 years.
- Effective high-power OSRAM LED, 5 000K at a colour rendering index ≥ 70 .

LEDSAFE®

- To maximize the reliability of the LEDs, the photometrical engine is completely sealed to IP66. This ensures that the photometric performance is maintained over time.

LENSOFLEX®

- Each LED is equipped with a lens to provide the desired light distribution.
- This offers a great diversity of light distributions for different applications, making it highly efficient compared to conventional light sources.

THERMIX®

- Electronic temperature monitoring prevents overheating of LEDs and power supply, positioned directly next to LEDs.

PROTECTOR

- The protector is manufactured from high-impact clear flat glass or vandal resistant high-impact acrylic (IK10). It is seamless and smooth on both the inside and outside.

CONTROL GEAR

- The electronic power supply is suitable for operation with a 198-265V 50Hz single phase system. (DC versions are available)
- The power factor is rated at $>0,95$.
- The efficiency is rated $>89\%$.

SURGE PROTECTION

- A fused surge protection device rated to 10kA is provided inside the gear compartment and is easily replaceable upon its end of life.

ADDITIONAL OPTIONAL FEATURES:

Daylight Switch Version

- A daylight switch version is available on request.

Vandal Resistant

- A tamper-proof screw ensures controlled access by means of a special coded tool.
- A theft-proof version is available which makes the forced removal of the luminaires from the pole spigot impossible.

Spigot Adaptors

- A special spigot adaptor enables the installation of the BEKA LEDlume-maxi at the designed rake angle on an existing pole.
- Spigot adaptors for $\varnothing 60\text{mm}$ side entry or $\varnothing 76\text{mm}$ bottom entry are available, always ensuring mounting at the designed rake angle.

VERSIONS/DIMENSIONS IN MM

The power supply is automatically disengaged when opening the luminaire.

The luminaire consists of an LED engine, power supply and spigot compartment. This allows the easy installation of the LED engine by means of a hinging action onto a spigot base casting.

Leveling device

Side entry $\varnothing 42\text{mm} \times 125\text{mm}$.

Secured by stainless steel latches and access screw.

To maximize the reliability of the LEDs, the photometric engine is completely sealed to IP66. This ensures that the photometric performance is maintained over time.

Optional: A tamper-proof screw ensures controlled access by means of a special coded tool.

The electronic power supply is suitable for operation with a 198-265V 50Hz single phase system. (DC versions are available) The power factor is rated at $>0,95$. The efficiency is rated $>89\%$.

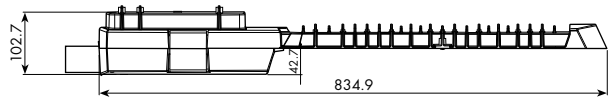
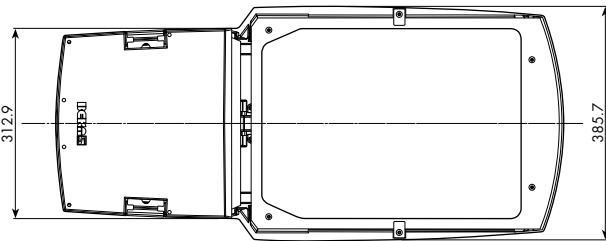
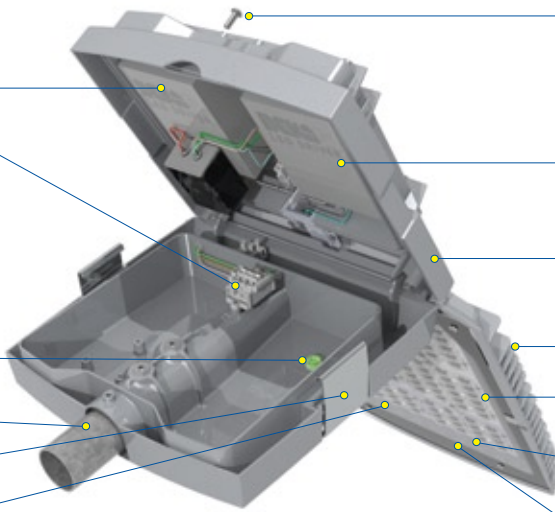
The LED engine, consisting of the LED light source and the power supply, can be easily replaced or upgraded.

The luminaire housing is manufactured of LM6, marine-grade aluminium.

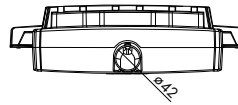
Each LED is equipped with a lens to provide the desired light distribution.

Electronic temperature monitoring, prevents overheating of LEDs and power supply.

The protector is manufactured from high-impact clear flat glass or high-impact acrylic (IK10).



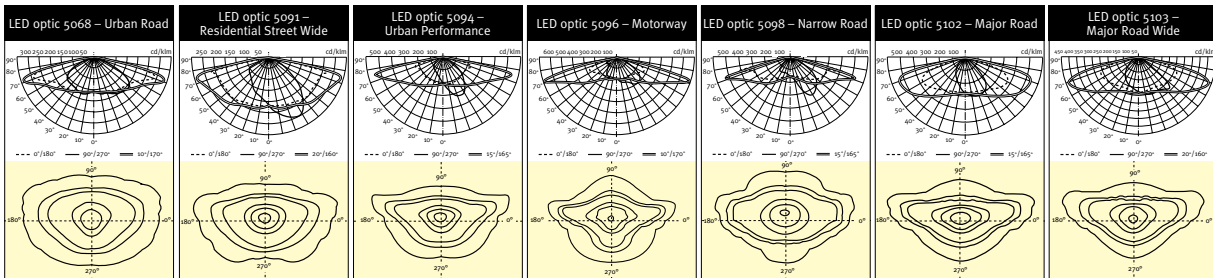
Windage Area: 0.045m²



PHOTOMETRIC DATA

ELECTRONIC DATA FILES CAN BE DOWNLOADED FROM www.beka.co.za/knowledge-base

High-Power white LEDs						
LED Type: OSRAM/Maintained luminous flux at $T_a = 35^\circ\text{C}$ /Lifetime: 60 000 hours - at L80 (*)						
OVERVIEW					Lifetime residual flux @ $t_a 25^\circ\text{C}$	
Number of LEDs	Neutral white (5000K)	80 LEDs	96 LEDs	128 LEDs	@60.000h	@100.000h
Current: 350mA***	Nominal flux (lm)**	10720	12860	17150	90%	70%
	Power consumption (W)	92	110	148		
Current: 500mA***	Nominal flux (lm)**	15120	18140	24190		
	Power consumption (W)	133	160	212		
Current: 700mA***	Nominal flux (lm)**	20240	24280	32380		
	Power consumption (W)	185	222	300		



(*) L80 means that after the number of hours indicated, the luminaire maintains 80% of its initial luminous flux.

(**) The type of LED used is subject to change due to the ongoing rapid progress taking place in LED technology.

(***) LED current



BEKA LEDlume-maxi HIGH-PERFORMANCE LED STREET LIGHT

ORDERING DATA

DESCRIPTION	LEDS	CURRENT (mA)	LUMEN	MASS (KG)
BEKA LEDlume-maxi 92W	80	350	10 720	12.4
BEKA LEDlume-maxi 133W	80	500	15 120	12.4
BEKA LEDlume-maxi 185W	80	700	20 240	12.4
BEKA LEDlume-maxi 110W	96	350	12 860	12.6
BEKA LEDlume-maxi 160W	96	500	18 140	12.6
BEKA LEDlume-maxi 222W	96	700	24 280	12.6
BEKA LEDlume-maxi 148W	128	350	17 150	13
BEKA LEDlume-maxi 212W	128	500	24 190	13
BEKA LEDlume-maxi 300W	128	700	32 380	13

Standard finish: Unpainted Aluminium, Pearl Light Grey (RAL 9022)
Any other colour available on request.

OPTIONS

SUFFIX	DESCRIPTION
/ OPTIC 5068	URBAN ROAD
/ OPTIC 5091	RESIDENTIAL STREET WIDE
/ OPTIC 5094	URBAN PERFORMANCE
/ OPTIC 5096	MOTORWAY
/ OPTIC 5098	NARROW ROAD
/ OPTIC 5102	MAJOR ROAD
/ OPTIC 5103	MAJOR ROAD WIDE
/ DLS	INCORPORATED DAYLIGHT SWITCH
/ OWLET	INCORPORATED OWLET TELEMANAGEMENT MODULE
/ OPTIDIM	PRE-PROGRAMMABLE STAND-ALONE DIMMING DEVICE
/ HIIMPACT	PROTECTOR MADE OF IMPACT-RESISTANT MATERIAL
/ VR	VANDAL-RESISTANT VERSION, PREVENTING UNAUTHORISED ACCESS TO THE LUMINAIRE BY MEANS OF A SPECIAL CODED ACCESS SCREW
/ TP	THEFT-PROOF VERSION, PREVENTING REMOVAL OF THE LUMINAIRE ON A Ø42mm SPIGOT (THIS REQUIRES A PRE-DRILLED SPIGOT)
/ 20kA	SURGE PROTECTION 20kA

ACCESSORIES

DESCRIPTION
ADAPTOR TO ENABLE LEVEL ADJUSTMENT ON Ø42mm SPIGOTS
ADAPTOR TO ENABLE LEVEL ADJUSTMENT ON Ø60mm SPIGOTS
ADAPTOR TO ENABLE LEVEL ADJUSTMENT ON Ø60mm BE POLE
ADAPTOR TO ENABLE LEVEL ADJUSTMENT ON Ø76mm BE POLE
TOOL TO OPEN ACCESS SCREW FOR VANDAL RESISTANT AND THEFT-PROOF VERSION
JIG FOR DRILLING Ø42mm POLE SPIGOT TO MAKE IT SUITABLE FOR / TP VERSION

BEKA reserves the right to change any technical detail of this product, if it results in an improvement of the product.

DESIGNED AND MANUFACTURED BY
BEKA (PTY) LTD - SOUTH AFRICA
MANUFACTURERS OF LUMINAIRES AND GLASS FIBRE POLES

10/13



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