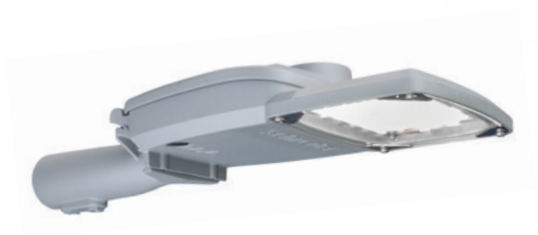


PICOLUM

Versatile LED streetlighting solution



LOCALLY
manufactured



IP 66

Up to
IK 10

Up to
20kV



CONTROL



CIRCLE
LIGHT



Key advantages

- Designed and manufactured in South Africa (SADC Class S > 87% local manufacture)
- Designed to operate LED light sources of up to 82W in an ambient temperature (T_q) environment of up to 25°C, without reducing the useful lifetime of 100 000 hours, at a lumen depreciation of not more than 5% (L95B10)
- Adjustable spigot options:
 - Side entry Ø42mm (+20° to -20°)
 - Bottom entry Ø76mm (0° to +20°)
- New generation of LensoFlex®4 or HiFlex™ photometric engine, providing maximum spacings for compliance with SANS 10098 road lighting classification, while maintaining comfort and safety
- Marine grade, high-pressure die-cast aluminium housing
- Maximised savings in energy (more than 70% possible) and maintenance costs
- Designed for easy technology upgrade (FutureProof)
- Easy to install
- Unsurpassed light uniformity
- Surge protection 10kV/10kA
- Circular economy 4-star rating
- 5-year warranty (Terms and conditions apply)

Characteristics

GENERAL INFORMATION

Testing standard	SANS 475, SANS 60598, SANS 62262	
Housing	Marine grade high-pressure die-cast aluminium (EN 1706 AC-44300)	
Protector	High-impact clear glass	High-impact polycarbonate (optional)
Housing finish	Unpainted aluminium	
Aerodynamic resistance (CxS)	0.06m ²	
Standard mounting	Side entry Ø42mm (+20° to -20° adjustable)	Bottom entry Ø76mm (0° to +20° adjustable)
Spigot length	≥ 100mm	
Nominal voltage	198-264V – 50Hz	
Surge protection	10kV / 10kA	20kV / 20kA (optional)
Operating temperature range (Ta)	-35°C up to +40°C	

PICOLUM 1

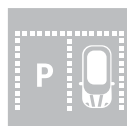
Wattage (up to)	82W
Nominal flux (up to)	12,396lm
Luminaire output flux (up to)	10,908lm
Luminaire efficacy (up to)	170lm/W
Colour temperature	4000K (Neutral white 740); 3000K (Warm white 730); 5700K (Cool white 757) CRI ≥70
Lifetime of the LEDs @T _q 25°C	100,000h - L95B10
Lifetime of the Driver @T _q 25°C	75,000h ≤10% failure rate



ROADS & MOTORWAYS



URBAN & RESIDENTIAL STREETS



CAR PARKS



BIKE & PEDESTRIAN PATHS



SECURITY LIGHTING



INDUSTRIAL HARBOUR



LOADING BAY



SQUARES & PEDESTRIAN AREAS

Case Study: 70W HPS Comparison



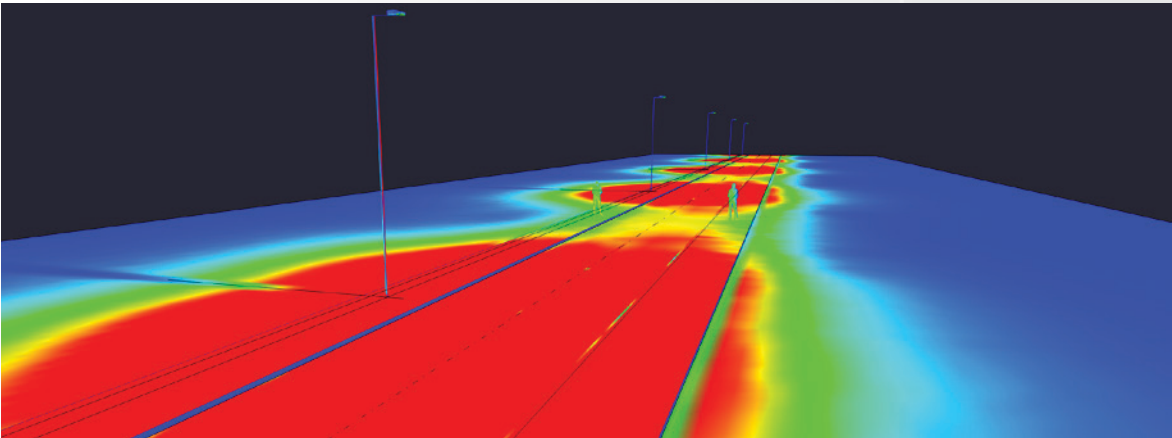
Specifications

Road: B1 classified road + 1.5m setback
Luminaire spacing: 40m
Road width: 7m + 2*2m sidewalks
Height: 7m

Comparing a 70W HPS to a PICOLUM 1 streetlight installation

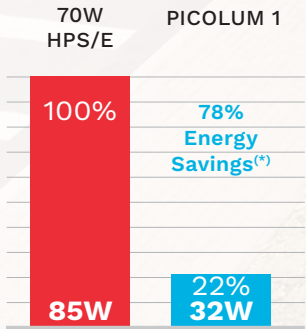
The PICOLUM 1 provides a 78% energy saving compared to a 70W high-pressure sodium luminaire, while fully meeting the road light level requirements.

Furthermore, a much better colour rendering index is provided, thereby enhancing the safety and visibility of pedestrians and road users.



	Luminaire fitted with 70W High-Pressure Sodium Lamp	PICOLUM 1 24 LED
Luminaire power consumption	85W	32W
Spacing between luminaires	23m	40m
Average illuminance sidewalk left	9.1lx	8lx
Minimum sidewalk left	6.2lx	2.4lx
Average illuminance lanes	8.3lx	6.7lx
Minimum illuminance lanes	5.5lx	3.4lx
Semi-cylindrical illuminance	5.1lx	3.9lx
Average illuminance sidewalk right	5.1lx	5.1lx
Minimum sidewalk right	3.7lx	2.6lx
Power consumption per km	3696W	800W
Percentage saving per km		78%

Energy Savings



(*) Optic 5305, optimised design based on specifications. Additional savings can be generated by integrating Schröder EXEDRA smart control systems.

Design Criteria - 5lx (Eh), 1.5lx (Emin), 2lx (ESCmin)
Using PICOLUM 32W OPTIC 5305 at 7m HM with no outreach, 0° rake, 1.5m setback and 40m spacing in order to achieve the design criteria above

Please note: Detail on lighting design comparison available on request.

BEKA Schröder

Experts in lightability™

SABS
ISO 9001



www.beka-schreder.co.za

Designed and manufactured by BEKA Schröder (Pty) Ltd



LOCALLY
manufactured

2025-10

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