

LEDLUME

LED solution for an optimised investment

SA PAT. 2012/07685



LEDLUME 1



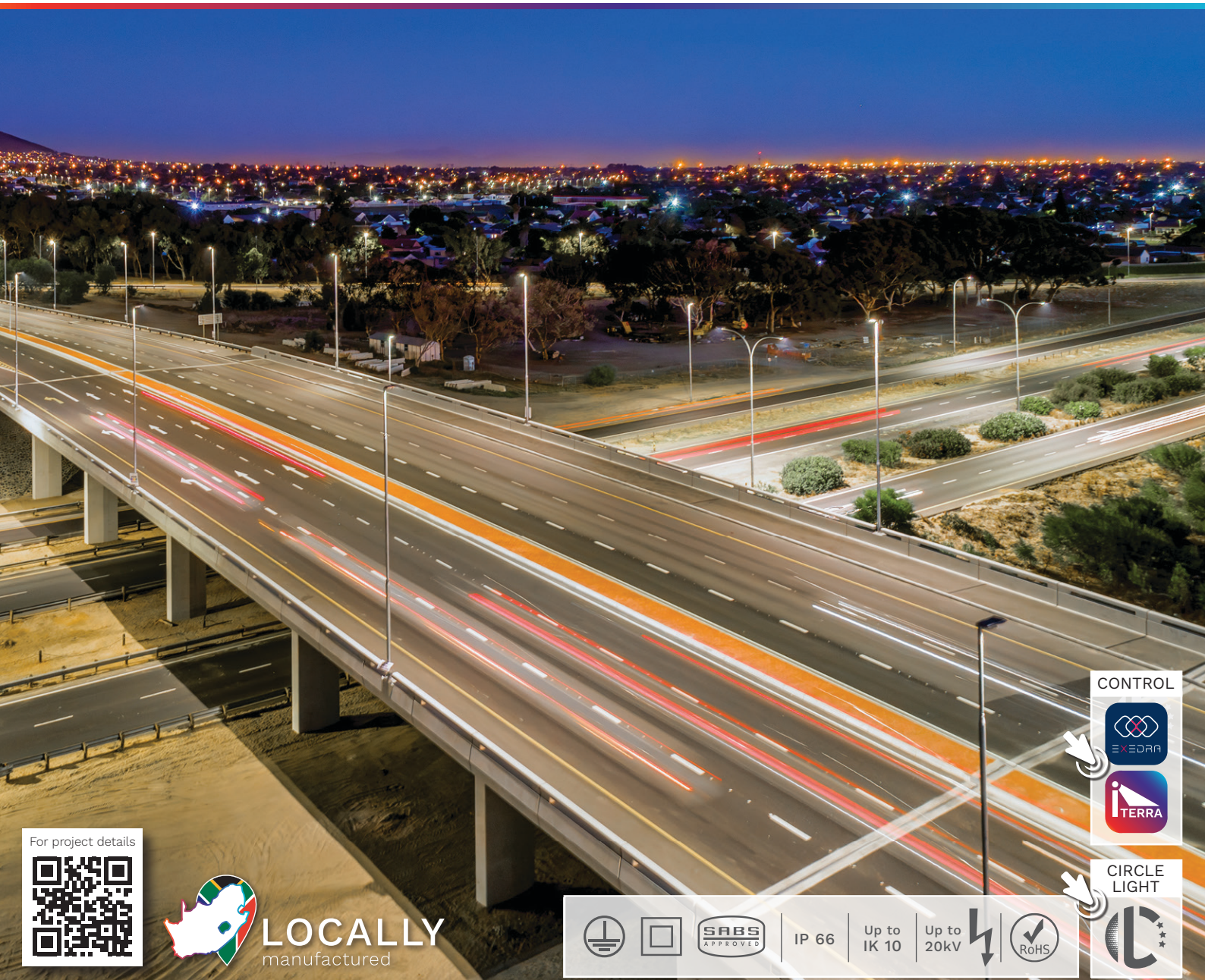
LEDLUME 2



LEDLUME 3



LEDLUME 4



For project details



LOCALLY
manufactured

			IP 66	Up to IK 10	Up to 20kV			
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CONTROL

CIRCLE LIGHT

Key advantages

- Designed and manufactured in South Africa
- Designed to operate LED light sources of up to 317W 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 30% (L90B10)
- Possible energy savings of more than 70% (*)
- Designed to easily upgrade or replace the surge protection device, LEDs or drivers
- Easy to install
- Unsurpassed light uniformity
- Circular economy 3-star rating
- 5-year warranty (Terms and conditions apply)






(*) Combined with controls

Characteristics

GENERAL INFORMATION

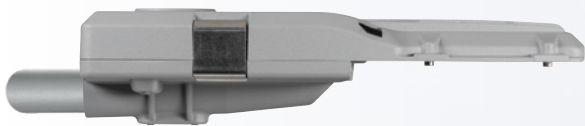
Testing standard	SANS 475, SANS 60598, SANS 62262			
Housing	Marine grade high-pressure die-cast aluminium (EN 1706 AC-44300)			
Protector	High-impact clear glass	High-impact polycarbonate (optional)		
Housing finish	Unpainted aluminium			
Aerodynamic resistance (CxS)	1: 0.046m ²	2: 0.057m ²	3: 0.072m ²	4: 0.088m ²
Standard mounting	Slip-over side-entry Ø42mm			
Spigot length	≥ 125mm			
Nominal voltage	198-264V – 50Hz			
Surge protection	10kV / 10kA	20kV / 20kA (optional)		
Operating temperature range (T _a)	-35°C up to +40°C			

LEDLUME	1	2	3	4
Wattage (up to)	76W	103W	174W	317W
Nominal flux (up to)	12,444lm	17,811lm	30,579lm	56,320lm
Luminaire output flux (up to)	10,951lm	15,674lm	26,910lm	49,562lm
Luminaire efficacy (up to)	158lm/W	164lm/W	162lm/W	162lm/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 - L90B10			
Lifetime of the Driver @T _q 25°C	100,000h ≤10% failure rate			

STREETS		ROADS		MOTORWAYS
Residential streets	Shared zones, commercial streets in urban areas	Rural & urban roads	Motorways and ring roads	Motorways
				

Please consult your sales representative for more information.

Case Study: 150W HPS Comparison



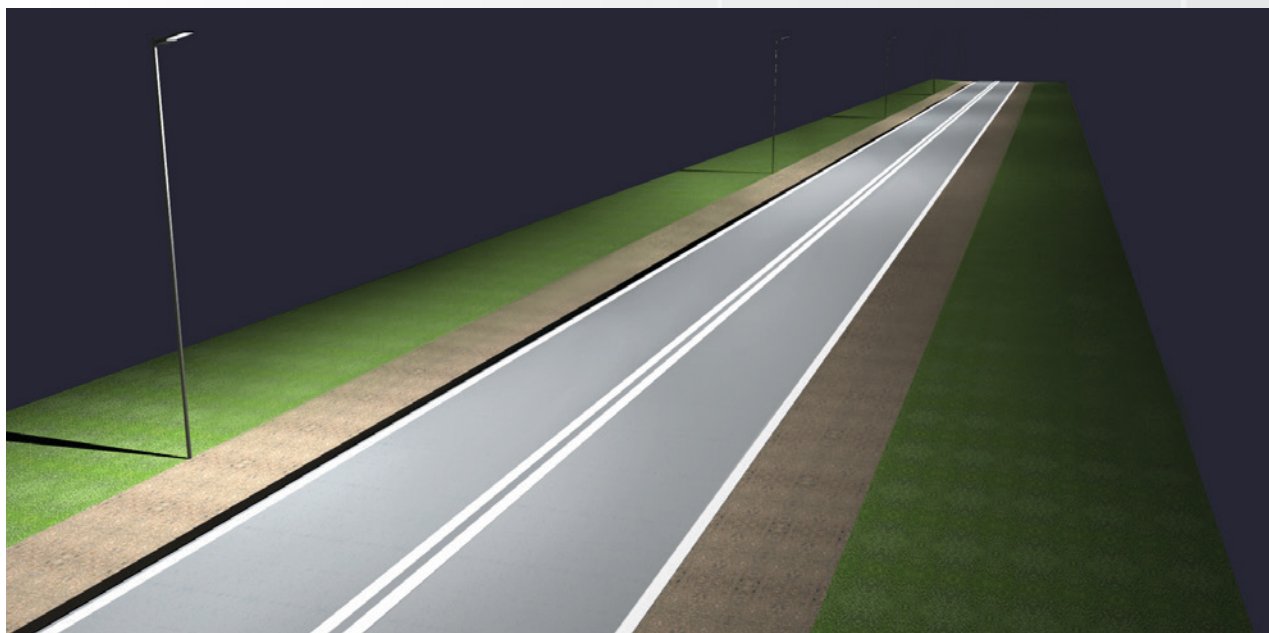
Specifications

Road: B1 classified road + 2m setback
Luminaire spacing: 47m
Road width: 7m + 2*2m sidewalks
Height: 7m

Comparing a 150W HPS to a LEDLUME 1 streetlight installation

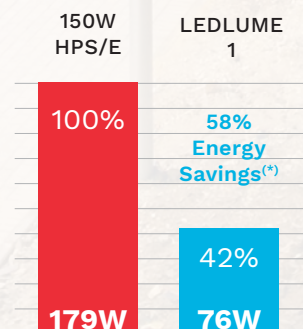
The LEDLUME 1 provides a 76% energy saving compared to a 150W high-pressure sodium luminaire, while fully meeting the road light level requirements.

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



	Luminaire fitted with 150W High-Pressure Sodium Lamp	LEDLUME 1 24 LED
Luminaire power consumption	179W	76W
Spacing between luminaires	27m	47m
Average illuminance sidewalk left	17lx	15.7lx
Minimum sidewalk left	6.1lx	2.5lx
Average illuminance lanes	12.4lx	12.5lx
Minimum sidewalk lanes	6.2lx	2.7lx
Average illuminance sidewalk right	5lx	5lx
Minimum sidewalk right	3.7lx	1.9lx
Power consumption per km	6623W	1596W
Percentage saving per km		76%

Energy Savings



(*)Optic 5424, optimised design based on specifications. Additional savings can be generated by integrating Schröder EXEDRA smart control systems.

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

Case Study: 400W HPS Comparison



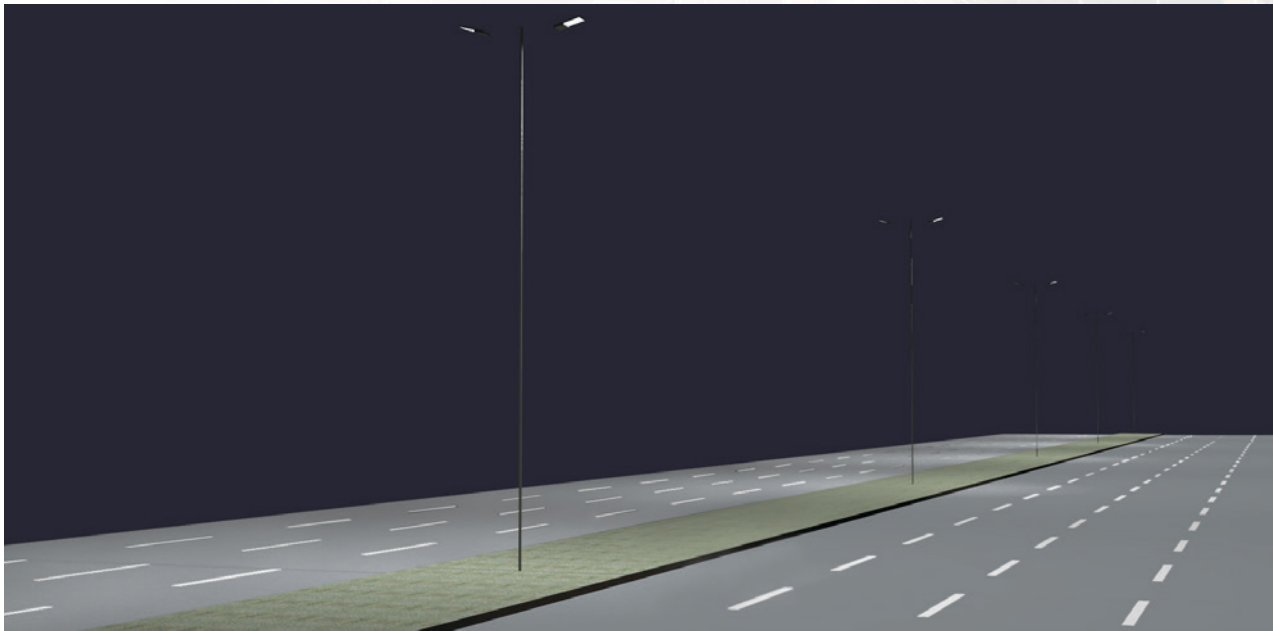
Specifications

Road: A2 classified road + 2.5m setback
Luminaire spacing: 44m
Road width: 33m (4 x 3.5m lanes either side of 5m median)
Height: 12m

Comparing a 400W HPS to a LEDLUME 3 streetlight installation

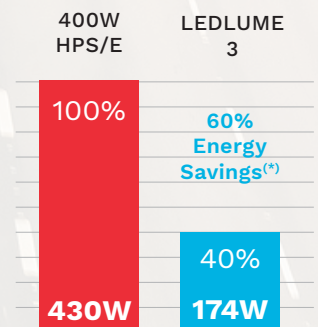
The LEDLUME 3 provides a 52% energy saving compared to a 400W high-pressure sodium luminaire, while fully meeting the road light level requirements.

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



	A2 Requirements (with median 600)	Luminaire fitted with 400W High-Pressure Sodium Lamp	LEDLUME 3 96 LED
Luminaire power consumption	-	430W x 2	174W x 2
Spacing between luminaires	-	27m	44m
Average luminance	At least 1.0 cd/m ²	2.15 cd/m ²	1.09 cd/m ²
Global uniformity - U ₀	40%	40%	40%
Longitudinal uniformity - U _l	60%	93%	73%
Glare - TI	Less than 20%	7.7%	5.2%
Power consumption per km	-	31820W	15312W
Percentage saving per km			52%

Energy Savings



(*Optic 5428, optimised design based on specifications. Additional savings can be generated by integrating Schröder EXEDRA smart control systems.

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

BEKA Schröder

Experts in lightability™

SABS
ISO 9001



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Designed and manufactured by BEKA Schröder (Pty) Ltd



LOCALLY
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