HIGH EFFICIENT LED STREET LIGHTS

Aerolite LSL[®]90





 Brightest mo 	del
Drighteor mo	aur

- Cutting edge light performance
- Most aerodynamic robust housing for excellent durability
- Uniquely optimized heat dissipation extends life time
- Suitable for urban roads, high speed traffic roads, junctions, parking lots, more demanding industrial buildings

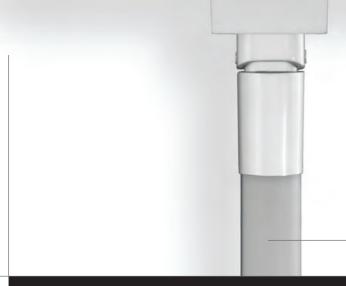






Aerolite LSL[®]9C





Aerolite LSL[®]90 excellent performance with best quality - price ratio

Patented Aerolite LSL®90 are one of the only LED street lights in the world produced under highest automotive production standard ISO/TS 16949.

Top quality materials, guaranteed lifetime, unique design, high energy efficiency and excellent lighting performance bring you numerous advantages for affordable price.



GRAH revolutionary 360° APPROACH™ to LED street lighting

By combining know-how and expertise from LED tehnology with our own integrated 360° APPROACH™, every single component of the luminaire is studied and constantly optimized from a totally new perspective to achieve unique innovative solutions, which are successfully solving all the challenges and are setting new standards in LED street lighting.

Aerolite LSL[®]90 - main characteristics:

- Luxeon Rebel LEDs top quality, awarded LEDs
- LED GENION bar™ optimized LED modules exploiting every LED source to the fullest extent
- QUADRUM opticsTM FULL CUTOFF optics (IES and IDA standards) with high efficient reflectors directs light beams exactly where needed for achieving cutting edge light performance
- I-NFINITY driver™ customized, intelligent driver for optimal operation with ultra energy efficient output
- MATRIX 3D lightTM unique light shape with asymmetric distribution of luminosity for best possible light uniformity / optimal covering of surfaces
- COOLVERTTM uniquely optimized heat dissipation extends life time and preserves light performance
- AEROCOMPACT housing[™] most aerodynamic, ultra slim luminaire with robust housing from aluminum alloy enabling increased overall performance and extended lifetime

- ULTRA COATING™ life time multi layer protection of casing for excellent durability
- ALL WEATHER RESISTANT IP66 ingress protection rate
- SHOCK AND IMPACT RESISTANT IKO8 impact rate
- self cleaning feature reducing maintenance costs
- complete electronic control of activity and LED light sources
- ability to use an ordinary regulation of the light current
- ability to regulate light current from 1-100% with a rudder signal from 1-10V (without multilevels regulation)
- acquired certificates: CE, RoHS, ENEC, VDE, IEC, IDA Approved
- produced under strictest standards: Automotive ISO/TS 16949, ISO 9001, ISO 14001
- 100% made in European Union
- environmentally friendly ECO technology
- prepared for a seamless upgrade of the system for different multifunction options

MOUNTING

 $\begin{array}{c} 2.2 \\ 2.0 \\ 1.8 \\ 1.6 \\ 1.4 \\ 1.2 \\ 1.0 \\ 0.8 \\ 0.6 \\ 0.4 \\ 0.2 \end{array}$

75-82

L [cd/m2]

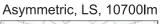
(m) 7 -4 -

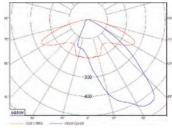
- fast and universal mounting to a lamp post with a diameter of 60 or 76 mm
- alternative mounting concepts possible on request
- possibility of setting the angle of mounting in the range of -15° to +15°
- the light can be adjusted in the horizontal position swing
- recommended mounting height is 7 12 m

APPLICATION

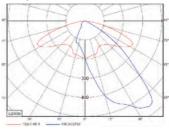
- urban roads, connected roads, high speed traffic roads, junctions
- wherever the required level of illumination is 1cd/m² (ME3 street category)
- suitable for parking lots and more demanding industrial buildings















10 15

20 25 30 35 [m] 1 500

Light source	90 LED high power by Lumileds		
Voltage	110 - 250 V (50-60 Hz)		
Luminaire flux	From 10.700 up to 12.700 lm		
Color temperature	4.200 K (other color temperatures on request)		
Power consumption	From 110 up to 134 W (depending on lumen package)		
Luminous efficiency	100 lm/W		
Lifetime	Min. 60.000 hours / up to 100.000 hours		
Protection rating	IP66		
Temperature range	-30° to +60°C		
Working temperature	+55°C		
Safety class	Class I or II		
Material	Housing: alluminium alloy Housing sealing: silicon, heat resistant Cover: PMMA		
Housing color	RAL 9006		
Weight	8,5 kg		
Dimensions (LxHxW)	720 mm x 465 mm x 139 mm		





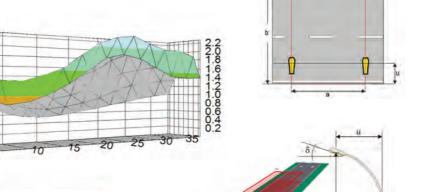






For more information visit **www.grahlighting.com**





HIGH EFFICIENT LED STREET LIGHTS

Aerolite LSL[®]90

Code / Order No.	Version	Luminaire flux	Power consumption	Driving current	LED type
1830811	Basic (no dimming)				
1830813	Power red.50%	10.700 lm	110 W	400 mA	LS
1830815	Dim. range 1-100%				
1800811	Basic (no dimming)				
1800813	Power red.50%	12.700 lm	134 W	500 mA	LS
1800815	Dim. range 1-100%				

Code / Order No.	Bracket
2601012	Fix angle 0° Ø 60
2601001	Variable angle +/-15° Ø 60
2601011	Variable angle +/-15° Ø 76

Your benefit is our leading priority

We are committed to constant and never ending improvement of people, sources, processes to achieve best possible products ' quality, efficiency, performance and bring high added value to satisfy our clients.

Preserving environment for future generations

Our production is without harmful substances and pollution free. We continually seek new ways to improve our activities in order to preserve our environment for future generation.



Trusted partner for leading car manufacturers

Grah Lighting was established as a fully specialized division for the LED street and industrial light program of the company SGA (Schefenacker Grah Automotive – SG Automotive d.o.o.), which is a trusted partner and supplier for leading car manufacturers such as, Mercedes Benz, BMW, Audi, Porsche, Ferrari, Maybach, Rolls Royce, VW, Ford, GM, Nissan, Volvo, Toyota, Cadillac, Chrysler,...

Pioneers of utilizing LED technology with 15 years of experience

Grah Lighting, as the integral part of Grah Group, has more than 15 years of experience in LED technology.

Grah Group is formed by integrated and subsidiary companies of Grah Automotive worlwide, employs more than 1000 people and was one of the first on the market utilizing LED technology in lighting and automotive signalization.



Distribution:



CARRERACAPTURE SRECKO FRATNII

Manufacture:



GRAH LIGHTING® SG Automotive d.o.o.

Mestni trg 5b SI-3210 Sl. Konjice Slovenia, EUROPEAN UNION

T +386 82 801 424 F +386 82 801 402 info@grahlighting.com www.grahlighting.com