

# EOS Lantern Data Sheet

## AL20000 Series

**Abacus**<sup>®</sup>  
Leaders in Lighting

### EOS LED Lantern - Key Features

- Three lantern body sizes
- Wattage options ranging from 7 to 171W
- Six optic range
- Lumen range 1221lm - 25802lm (Net flux)
- 4000K colour temperature as standard 3000K option available upon request
- Electrical options: Class I & Class II
- Single or double Zhaga control socket options
- Two independent compartments for optics and electrical components
- Exceptional heat dissipation built into the sleek design
- High-grade powder coated finish tested for use in harsh environments - 3000hrs ISO 9227:2017/ EN47100 Alloy
- IP66 Ingress Protection
- Column top or side entry installation
- Ø60mm standard spigot size (Adaptable)
- Suitable for retro-fitting
- Optics protection from one complete 4mm tempered glass sealed unit
- Latched release electrical compartment
- Tool-less entry for quick & efficient maintenance



Three Lantern Body Sizes



Latched Release Electrical Compartment

### Product Applications

- **Railway Platforms**
- **Railway Stations**
- **Street Lights**
- **Car Parks**
- **Retail Parks**
- **Access Roads**

### EOS LED Lantern - Product Overview

The EOS lantern offers an LED lighting solution suitable for both rail and road applications. It has a wide range of wattages, unit sizes, optics, and fitting options to choose from.

With a wide range of lumen outputs and three lantern body sizes, the EOS provides a lighting solution for virtually any road or rail scheme. The EOS is IP66 ingress protected with a durable outer coating tested for use in harsh environments commonly found in the rail and highways industry.

The optics are protected by a tempered glass covered, sealed unit, and are separate from the electrics to prolong the product life-cycle.



#### EOS LED Lantern - Product Code Selector

Product Family:	Optic Option:	Number of LEDs	Body Type:	Wattage Options By Body Type:					Colour Temperature:	Electric Class I or Class II:	Zhaga Control Sockets:	Colour: (S = RAL9006 Standard & B = RAL9005)
AL200	01	12	1	007	008	011	013	016	4 = 4000K	1 = Class I	A = Top	S = Silver
	02			019	022	025	027	030	3 = *3000K	2 = *Class II	B = *Bottom	B = *Black
	03	24		028	031	034	037	040			C = *Dual	
	04			043	046	049	052	055			D = *None	
	05			057	060	-	-	-				
	06	36		059	063	068	072	076				
	081		085	089	-	-						
		36	2	085	087	090	092	094				
	096			098	-	-	-					
	48	098		102	107	116	117					
	60	64	3	120	124	-	-	-				
	121			126	132	138	-					
	124			132	138	144	150					
				156	162	167	171	-				

Product Selection Example:

Wattage Options by Body Type & Number of LEDs

Optic Option

Body Type

Electric Class

Body Colour

Product Family

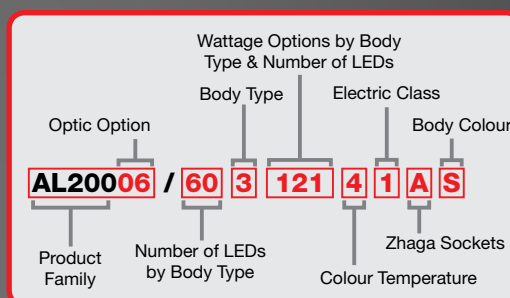
Number of LEDs by Body Type

Colour Temperature

Zhaga Sockets

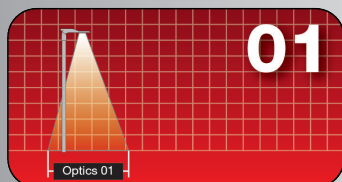
AL20006 / 60 3 121 4 1 A S

#### Product Selection Example:



\*Non-standard options may be subject to MOQs or longer lead times.

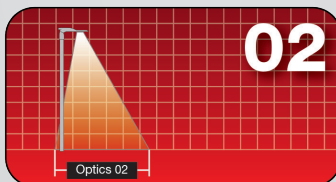
#### EOS LED Lantern - Optic Selection



01

##### Optic 01

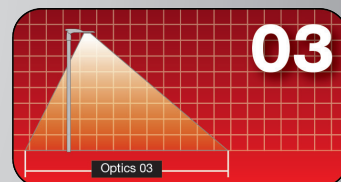
The 01 optic is for street lighting and is particularly suitable for situations where the installation height and the width of the carriageway ratio is less than 1



02

##### Optic 02

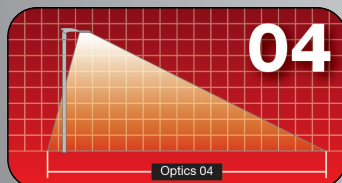
The 02 optic is suitable for street lighting situations where the installation height and the width of the carriageway ratio is less than 1. It is also appropriate for roads with very high inter-distances and an inter-distance/installation height ratio greater than 5



03

##### Optic 03

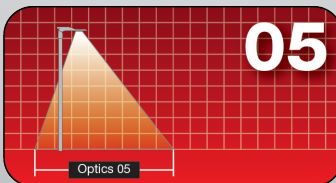
The 03 optic is used for street lighting when the height-to-width ratio is over 0.85. It has a back-flow feature that helps with installations involving outreaches



04

##### Optic 04

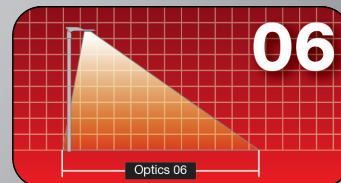
The 04 optic is typically used to provide light for yards, car parks, and urban areas. It is also used on the street when a significant amount of light is needed and the ratio between the depth of the area to be illuminated and the installation height of the light is considerably higher than 1. However, very high levels of lighting are not necessary



05

##### Optic 05

The 05 optic is for street lighting that can illuminate areas with varying distances and road widths equal to or less than the installation height



06

##### Optic 06

The 06 optic street lighting system is suitable for illuminating large areas with a ratio of installation height to track width equal to or greater than 1



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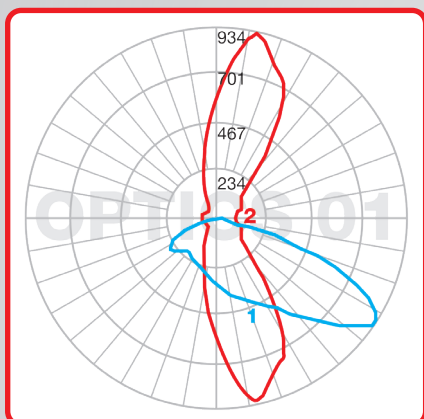
### EOS LED Lantern - Photometry Polar Diagrams

Polar curves are created using the candela values from the candela array. Plotting these values on a polar diagram illustrates the performance of the luminaire in two dimensions. The polar diagram is divided into four rings, with each ring representing a 25% increase in magnitude.

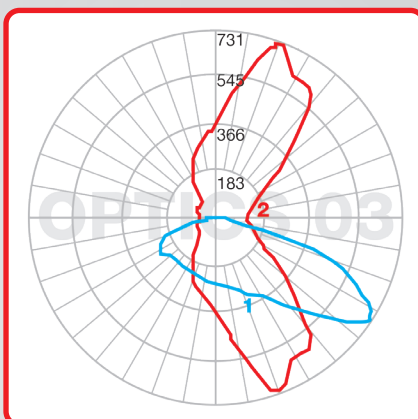
**Blue Line** - Vertical plane through horizontal angles (Through maximum Candela)

**Red Line** - Horizontal cone through vertical angle (Through maximum Candela)

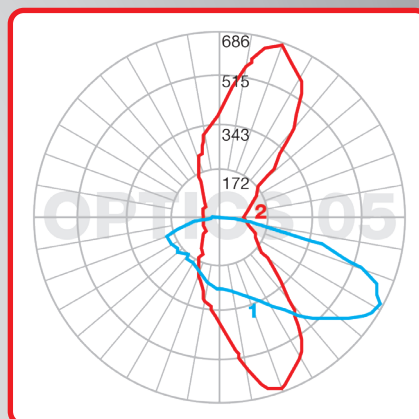
**OPTIC 01**



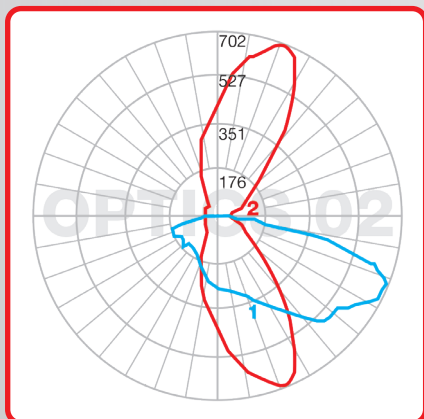
**OPTIC 03**



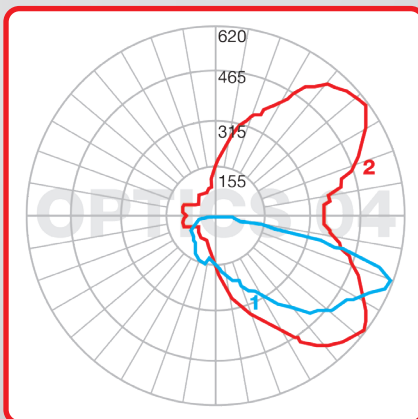
**OPTIC 05**



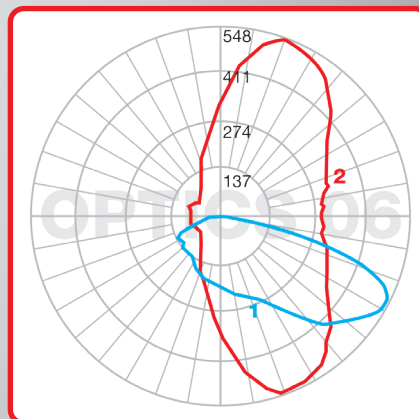
**OPTIC 02**



**OPTIC 04**



**OPTIC 06**



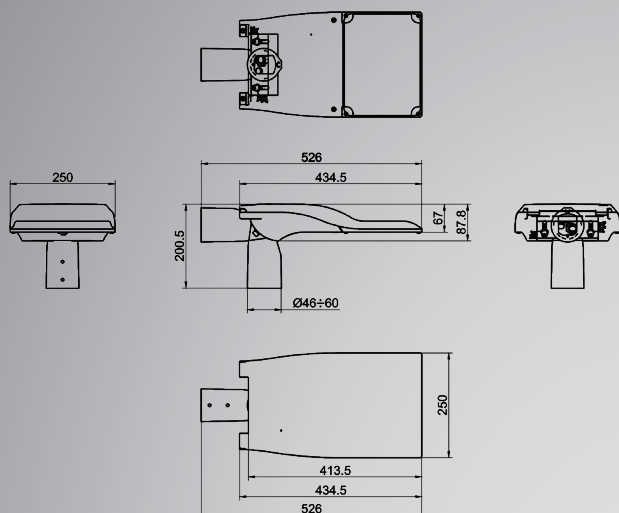
### EOS LED Lantern - General Product Information

EOS Body Type:	Max Dimensions With 60mm Pole Connection: (L x W x H)	Max Power (LED + Driver):	Max Weight Of Lantern:	Frontal Surface Exposed To Wind (0° Tilt)	Lateral Surface Exposed To Wind
EOS 1	526 x 250 x 200.5mm	89.3W	4.5Kg	0.020 m <sup>2</sup>	0.020 m <sup>2</sup>
EOS 2	576.8 x 250 x 200.5mm	131W	5.2Kg	0.020 m <sup>2</sup>	0.022 m <sup>2</sup>
EOS 3	652 x 265 x 200.5mm	171W	6.0Kg	0.021 m <sup>2</sup>	0.025 m <sup>2</sup>

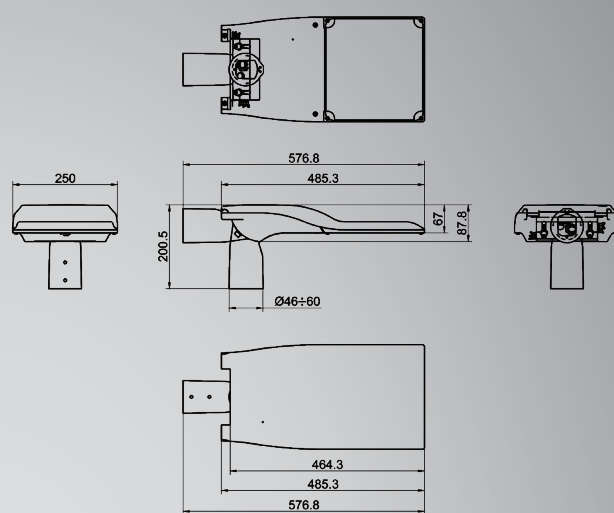


#### EOS LED Lantern - General Dimensions

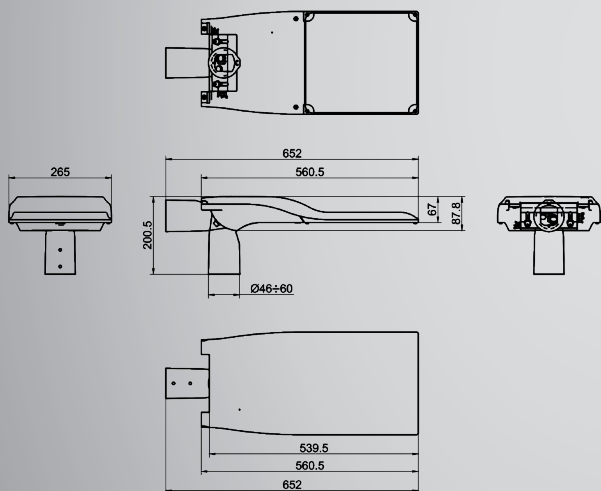
##### EOS Lantern Body Type 1:



##### EOS Lantern Body Type 2:



##### EOS Lantern Body Type 3:



Accessible electrics compartment for quick and easy maintenance, no tools required



#### EOS LED Lantern - Typical Column Suitability

- 1.) Static Column \*3 - 12m
- 2.) Base Hinge \*\*R/L Column \*3 - 12m
- 3.) York Hinge \*\*R/L Column \*3 - 6m

\*The Abacus Lighting columns mentioned above serve as examples for typical installations, but we are not restricted to these options. Abacus Lighting provides a comprehensive range of columns and masts that can accommodate virtually any new or retrofit lighting project.

\*\*Raise and Lower



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**CLICK or SCAN**



**For More Information**