

DOGO DRAGO



CONTROLLING THE DISTRIBUTION OF LIGHT *WITHIN* *SPACES.*

Architectural and landscape lighting is a field where the abilities correspond; architecture, electrical engineering and design. Therefore, multi-disciplinary approach and experience is necessary.

Architectural lighting design process is for creating the experience for the human being according to many criteria ; the field of activity, the amount of light required, the color temperature and effects, etc. On the other side, a lighting designer needs to fulfil the tasks; the aesthetic appeal, ergonomic aspect and energy efficiency.

As Heper, we understand the essence of architectural lighting and work constantly to bring out new tools to help designers fulfil their tasks. **Dogo** and **Drago** products, being outcomes of this perspective, are innovative fixtures with unique optics.

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DOGO - DRAGO

OVERVIEW

Dogo and Drago are from Heper’s exterior architectural line. They are powered by the same optics but they differentiate from one another due to their application areas. While Dogo is a surface-mount product mainly used for accent lighting, Drago is the bollard version being used in landscapes. Design-wise, they complement each other leading to the enhancement of the project.

Dyno optical system is being utilized in Dogo and Drago luminaires. It is a result of latest technology optical elements combined with Heper’s expertise in R&D. Introducing indirect lighting concept using specially designed reflector technology, the lighting distribution in Dogo and Drago series is linear, well-directed, glare-free and spotless.

Being flexible, they are well-suited products to be used in variety of projects. Different alignments of the products emerge more opportunities for creative accent lighting. Different light distribution options gives even more flexibility. Both Dogo and Drago have linear forward or linear side light distribution with excellent cut-off.

02

DYNO

PERFECT LINEAR FORM

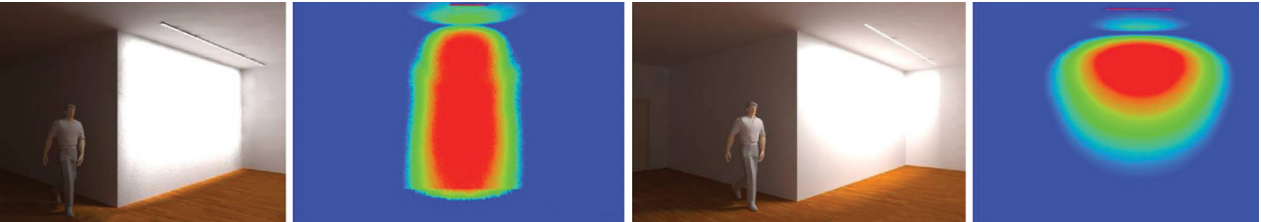


DYNO has unique lighting design with special micro-faceted reflector technology to ensure longitudinal glare control with optimized cut-off. Compared to the classical approach, light beams are distributed uniformly in an excellent way. Forward through distribution allows throwing the light 1x distance in horizontal position and 6x distances in vertical position.

The special design of DYNO allows to color mixing homogeneously in one reflector cell. High efficiency optical system can be used to mix two different color temperatures in a very precise way to obtain dynamic white and the system is compatible with RGBW color mixing.

DYNO is used in such applications as wall washer, ceiling washer, area illumination, facade illumination, space and bollard illumination.

Comparison wallwasher longitudinal glare DYNO to conventional system



DYNO - Longitudinal Glare Control

Conventional System

03

DOGO

SIZE CONTRADICTING FUNCTION

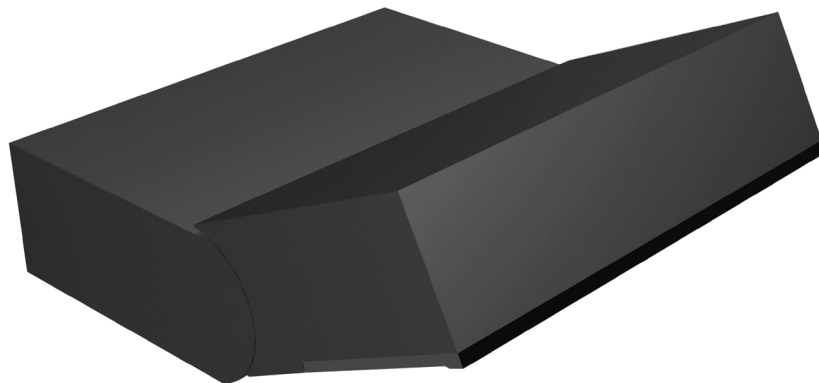
With its minimalistic design and exceptional lighting characteristics, Dogo is a prominent product. Although being size-wise a tiny luminaire, the effect of it can help to accent the prestigious lighting projects. Reflector technology combined with latest high power LED chips assures well-directed, homogenous light distribution without compromising high life-time values.

We made it possible to integrate a driver to this small fixture making it an adaptable product for different applications. Dogo is a surface mount product and in the hands of a talented lighting designer, it can be used in different areas in a project. The light distribution with its homogeneity, is suitable for surface illumination. It can be placed on a wall to evenly light up the floor. Or by placing it upside down, it can be used to light up the ceiling as well. Likewise, the fixture can be mounted on the ceiling or the floor to provide an evenly wall-wash.

Thanks to its Dyno optical module, the light distribution is exceptional for Dogo. Light coming out of the reflector is directed linearly with optimized cut-off. Getting rid of the stray light due to shell type small reflectors, light is laid out longitudinally with utmost homogeneity without any spot effect. There is a “1 to 6 ratio” lighting distribution meaning that when the fixture is placed at a distance of 1x from the surface to be illuminated, it is possible to light up 6x distance on that surface longitudinally and homogeneously. Moreover, since there is no direct eye contact with the light source, glare is not a problem.

Dogo line is composed of two fixtures; Dogo and Dogo Side. Dogo has linear forward light distribution whereas Dogo Side has linear side light distribution. They are both great products mainly for facade accent lighting, under balconies, arcs, building entrances and so on. The fixture is also available with external juncture with DALI driver housing and angle setting mechanism, making it even more flexible.

All in all, Dogo is a small, powerful fixture that designers can get creative with!



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DOGO TECHNICAL SPECIFICATIONS

APPLICATION AREAS

- Facades
- Walls
- Floors
- Smooth surfaces
- Accent lighting

GENERAL HIGHLIGHTS

- Equipped with Heper's Dyno Module
- Optimized linear forward or Side light distribution
- Operating temperature: -30°C / +55°C
- Exceptional thermal characteristics
- Surface mount installation with integrated driver
- In compliance with EN 60598
- CE Certified, ENEC and UL pending

ELECTRICAL PROPERTIES

- Drive current: 350mA
(different drive currents are available)
- Optimized PCB design for better heat management
- Energy Class: A
- Insulation Class: CLASS II
- Input Voltage: 220-240V / 110-120V at 50/60Hz
- Control Type: On/Off, DALI (Optional)
- Power usage: 5W - 10W

OPTICAL PROPERTIES

- Equipped with Heper's Dyno Module
- Indirect lighting with reflector technology
- Linear form asymmetrical light distribution
- No glare with intended use
- High power, undomed LED chips
- MacAdam Ellipse 3
- Lumen output: 200lm - 750lm (350mA)
- Color temperature: 3000K, 4000K
- CRI > 70(4000K), CRI > 80(3000K)
- Lumen depreciation: L90B50 > 40000h
- Photobiological safety: Risk group 0

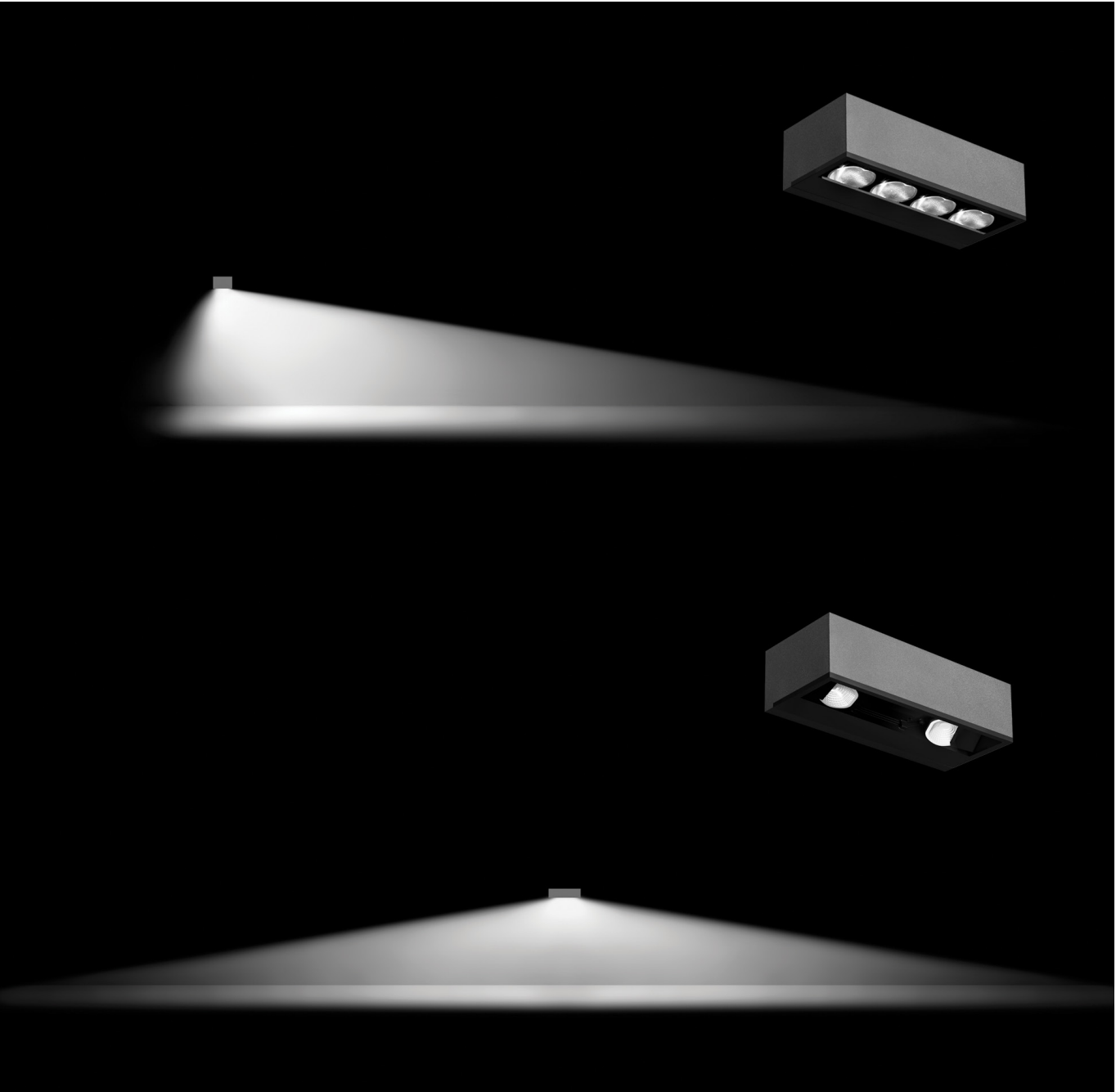
BODY HOUSING & FINISH

- Corrosion resistant die-cast aluminum housing
- Electrostatic powder coating
- HM1 - HM5 body color with optional RAL codes available.
- Ingress Protection: IP65
- Impact Protection: IK08

EXTRAS

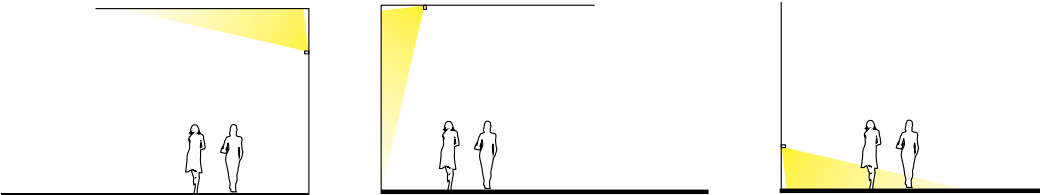
- Higher CRI LED chips
- Different drive currents
- Different color temperatures
- DALI driver housing with angle setting mechanism

CE EN60598, IP65, IK08

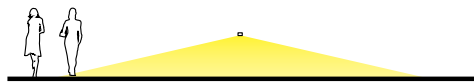


DOGO

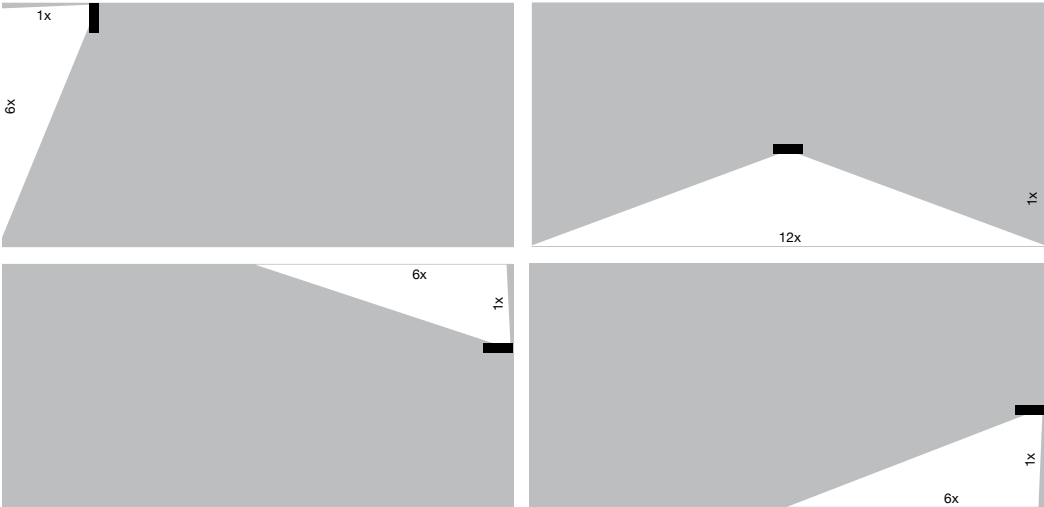
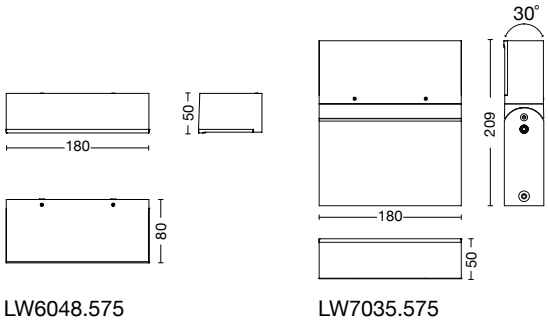
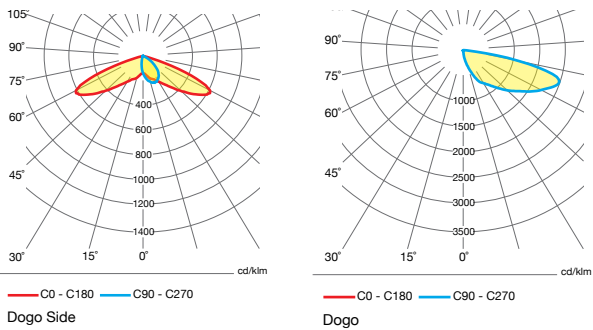
PRODUCT SPECIFICATIONS



Dogo



Dogo Side



CODE	DESCRIPTION	POWER (350 mA)	LUMEN OUTPUT	CCT
LW6048.575	Dogo	10W	550 lm - 750 lm	3000K / 4000K
LW6048.585	Dogo Side	5W	200 lm - 270 lm	3000K / 4000K
LW7035.575	Dogo Ex	10W	550 lm - 750 lm	3000K / 4000K
LW7035.585	Dogo Ex Side	5W	200 lm - 270 lm	3000K / 4000K

Dogo
Weight: 1,5 kg

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DRAGO

A DIFFERENT APPROACH ON A BOLLARD

Drago is basically the bollard version of Dogo. It also has two versions; Drago and Drago Side. The light distribution is the same as Dogo and Dogo Side but the intended use differs by their nature. Containing the same optical technology, Dyno module has other advantages in the use of outdoor areas as well. Light coming out of the multifaceted reflectors maintain a beautifully illuminated zone. This well directed light is easy on the eye without any spot effect.

With their simplistic design and unique lighting distribution, Drago bollard is an exceptional fixture to complement high-end landscape projects. While Drago is a great product for illuminating entrances and highlight zones, Drago Side with its side throw, is a perfect bollard to illuminate narrow paths such as walkways.

1 to 6 ratio of the Dyno module makes it possible to space out the bollards more than 10 meters without losing homogeneity! With optimized cut-off, there is no stray light. Thus, light pollution is prevented.



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DRAGO TECHNICAL SPECIFICATIONS

APPLICATION AREAS

- Landscape areas
- Walkways

GENERAL HIGHLIGHTS

- Equipped with Heper's Dyno Module
- Optimized linear forward or Side light distribution
- Operating temperature: -30°C / +55°C
- Exceptional thermal characteristics
- Surface mount installation with integrated driver
- In compliance with EN 60598
- CE Certified, ENEC and UL pending

ELECTRICAL PROPERTIES

- Drive current: 350mA
(different drive currents are available)
- Optimized PCB design for better heat management
- Energy Class: A
- Insulation Class: CLASS II
- Input Voltage: 220-240V / 110-120V at 50/60Hz
- Control Type: On/Off, DALI (Optional)
- Power usage: 5W - 10W

OPTICAL PROPERTIES

- Equipped with Heper's Dyno Module
- Indirect lighting with reflector technology
- Linear form asymmetrical light distribution
- No glare with intended use
- High power, undomed LED chips
- MacAdam Ellipse 3
- Lumen output: 200lm - 750lm (350mA)
- Color temperature: 3000K, 4000K
- CRI > 70(4000K), CRI > 80(3000K)
- Lumen depreciation: L90B50 > 40000h
- Photobiological safety: Risk group 0

BODY HOUSING & FINISH

- Corrosion resistant die-cast aluminum housing
- Electrostatic powder coating
- HM1 - HM5 body color with optional RAL codes available.
- Ingress Protection: IP65
- Impact Protection: IK08

Extras

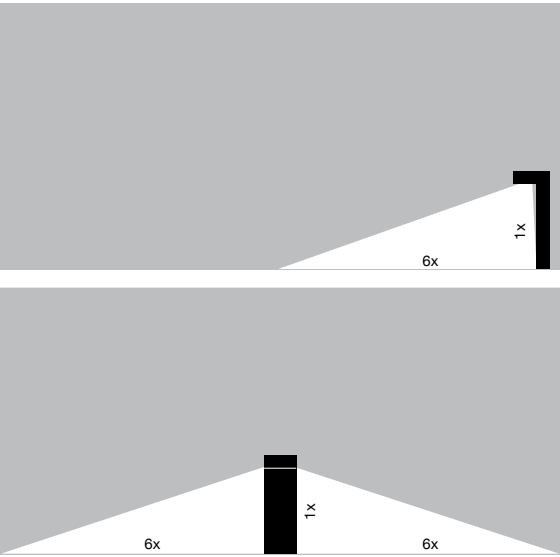
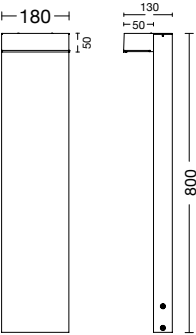
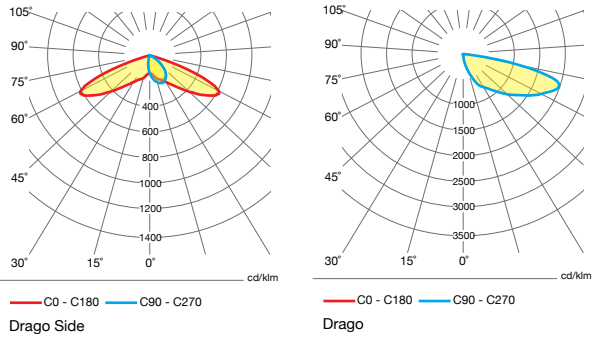
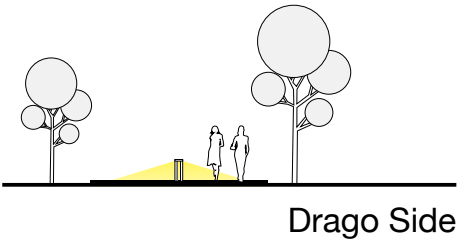
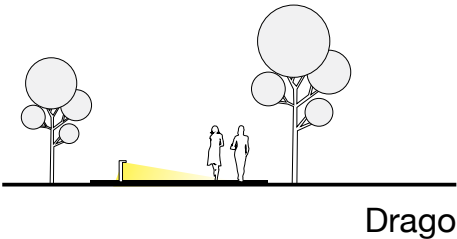
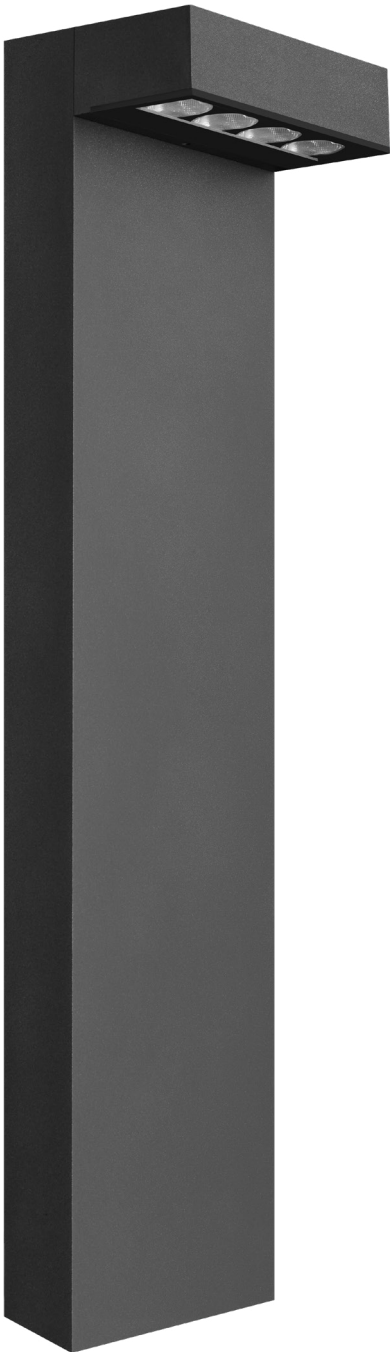
- Higher CRI LED chips
- Different drive currents
- Different color temperatures
- DALI driver housing with angle setting mechanism

CE EN60598, IP65, IK08



DRAGO

PRODUCT SPECIFICATIONS



CODE	DESCRIPTION	POWER (350 mA)	LUMEN OUTPUT	CCT
LB6048.575	Drago	10W	550 lm - 750 lm	3000K / 4000K
LB6048.585	Drago Side	5W	200 lm - 270 lm	3000K / 4000K

Drago
Weight: 4 kg

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*Heper withholds the right to make modifications on
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