ZETA MOLTO

heper

CONTROLLING
LIGHT & SHADOW
RECESSED LUMINAIRES FOR AN ARTISTIC EFFECT

In his book called “A Trick of the Light”, Louise Penny says “There is strong shadow, where there is much light.” Lighting has basic yet essential roles in our lives. Aside from stirring emotions such as security, spaciousness, awareness, lighting also gives character to its surroundings. This is actually what makes us fall in love with light every day for over two decades…

It needs to have an artistic approach to use the light and there comes the importance of lighting design; it enhances the aesthetic appeal and creates the mood and ambiance of a living space. After all, light can be used to define something from scratch, as well as fine-tune a tiny detail in a small object to highlight what is essential. Light in this sense, is the most important element of architectural lighting.

In the talented hands of a lighting designer, architectural lighting becomes a contemporary art piece. Lighting installations being exhibited in popular galleries nowadays is a proof of it. Architectural lighting is a form of art; a room, a statue, a bridge, a building, an area can all become the lighting designer’s canvas. Therefore, we always put our utmost efforts into developing products that can complement the artist’s “color pallet”.

Facade lighting is one essential subgenre of architectural lighting. Uniform vertical lighting is the only way to reflect the characteristics of the architectural structure in the absence of daylight. Furthermore, unique architectural features can be highlighted with precise accent lighting. Utilization of LEDs as light sources brought up new approaches on how to light up facades.

At Heper, we try to make the most of it by combining LEDs diverse characteristics with latest technology optical elements. This way light is targeted in a manner that only the intended part on a facade is illuminated evenly and homogenously.

Zeta and Molto are Heper’s **recessed facade lighting** products that are emerged upon our expertise and approach. These luminaires, with their unique features, are perfect match to be used in facade lighting applications

01

ZETA - MOLTO
OVERVIEW

Heper's Zeta and Molto products are both outcome of long term R&D work.
They contain exquisite optics to bring out the most in facade lighting. They both are recessed, in-ground fixtures being composed of highly corrosion resistant stainless steel body. (Zeta is also available in aluminum body for wall and ceiling mount) They are IP67 and IK08 graded walk over luminaires to be used in tough conditions.

Zeta uses Heper's DYNO Module, a shell-type reflector to introduce exceptional linear form of uniform light distribution. Whereas, Molto uses Heper's HYBRID Module to achieve exquisitely defined beam angles.

They both have three different sizes for different width of surfaces. Different sizes can be combined to meet intermediate measures. Also, even if the facade is too wide, multiple fixtures can be stacked next to one another to homogenously light up the whole surface. Optics in Zeta and Molto are aligned in a way that no homogeneity is lost when the fixtures are placed next to each other.

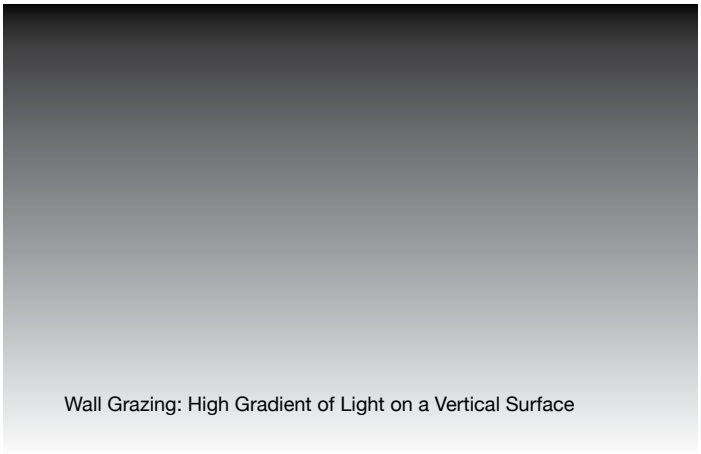
As opposed to their similarity in sizes, Zeta and Molto become distinct from one another due to their light distribution. Distribution for Zeta is through reflectors, in linear form, homogenously highlighted on the vertical surface. This makes it a perfect luminaire for wall-washing applications. Whereas, for Molto, light is burst upwards in certain angles and its intensity gradually reduces as it travels vertically. And that makes Molto a perfect luminaire for wall-grazing applications

ZETA - MOLTO
OVERVIEW

Wall-Washing
Wall-washing is an application when a surface is illuminated homogenously and evenly throughout. Light should reach the surface from the source at similar angles and intensity all around. It is a technique used mostly on non-textured surfaces to smooth out the defects. For a good wall-washing effect, high performance luminaires shall be preferred to be efficient and effective.

Wall Washing: Uniform Distribution of Light on a Vertical Surface

Wall-Grazing
Wall-grazing is an application when a surface is illuminated gradually from bottom to top or vice-versa. Light should reach the surface at steep angles and its intensity should be decreasing as it travels away from the light source. It is a technique used mostly on textured surfaces to highlight the texture.



Wall Grazing: High Gradient of Light on a Vertical Surface

02

ZETA WALL WASHER
DYNO MODULE

Zeta uses a unique reflector technology called DYNO. Throughout these reflectors, light is directed to the surface that is intended to be illuminated. Due to this alignment, there is no glare at all for the pass-byer. These shell-type microfaceted reflectors are combined with high-power, undomed, tight color consistency LED chips. And the outcome is a linear form of homogenous light distribution with no spot effect.

Light distribution in Zeta is pretty unique. Light is evenly spread around the surface with consistent level all around. The distance that the luminaire needs to be placed solely depends on the height of the wall to be illuminated. There is a 1 by 6 light distribution ratio meaning that; to light up a 6 meter long wall, the fixture needs to be placed at a 1 meter distance from the wall for an evenly wash. Depending on the project, different alignments are possible.

Another unique feature of the light distribution of Zeta is that, unlike the wall-washers with lenses, wall-washing experience starts at the ground level. This is again possible due to the reflector technology. Also, cross-fade between reflectors help that minimum level of light is lost in case of a plant growth over the luminaire or when someone walks on top of it.

Zeta has two versions for different applications: Zeta and ZetaSS. SS standing for stainless steel. For corrosion purposes during in-ground use, ZetaSS with its IP67 protection grade, is a fixture to be trusted. On the other hand, Lighter aluminum body Zeta is the perfect product for wall and ceiling-mount applications such as canopy lighting.

All this makes Zeta the perfect luminaire for your wall-washing facade lighting applications!

ZETA WALL WASHER
DYNO MODULE

Wall Mount Application

Ceiling Mount Application

Inground Application

03

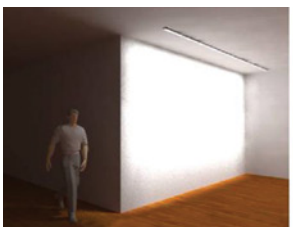
DYNO
PERFECT LINEAR FORM

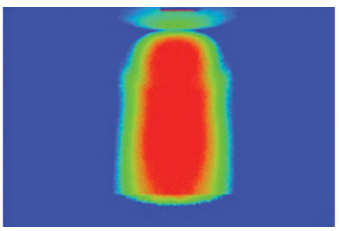
DYNO has unique lighting design with special micro-faceted reflector technology to ensure longitudinal glare control with optimized cut-off. Compared to the classical approach, light beams are distributed uniformly in an excellent way. Forward through distribution allows throwing the light 1x distance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

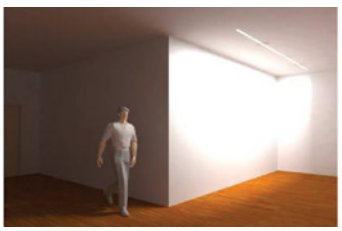
DYNO is used in such applications as wall washer, ceiling washer, area illumination, facade illumination, space and bollard illumination.

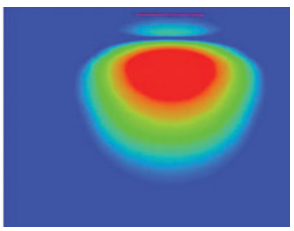
Comparison wallwasher longitudinal glare
DYNO to conventional system



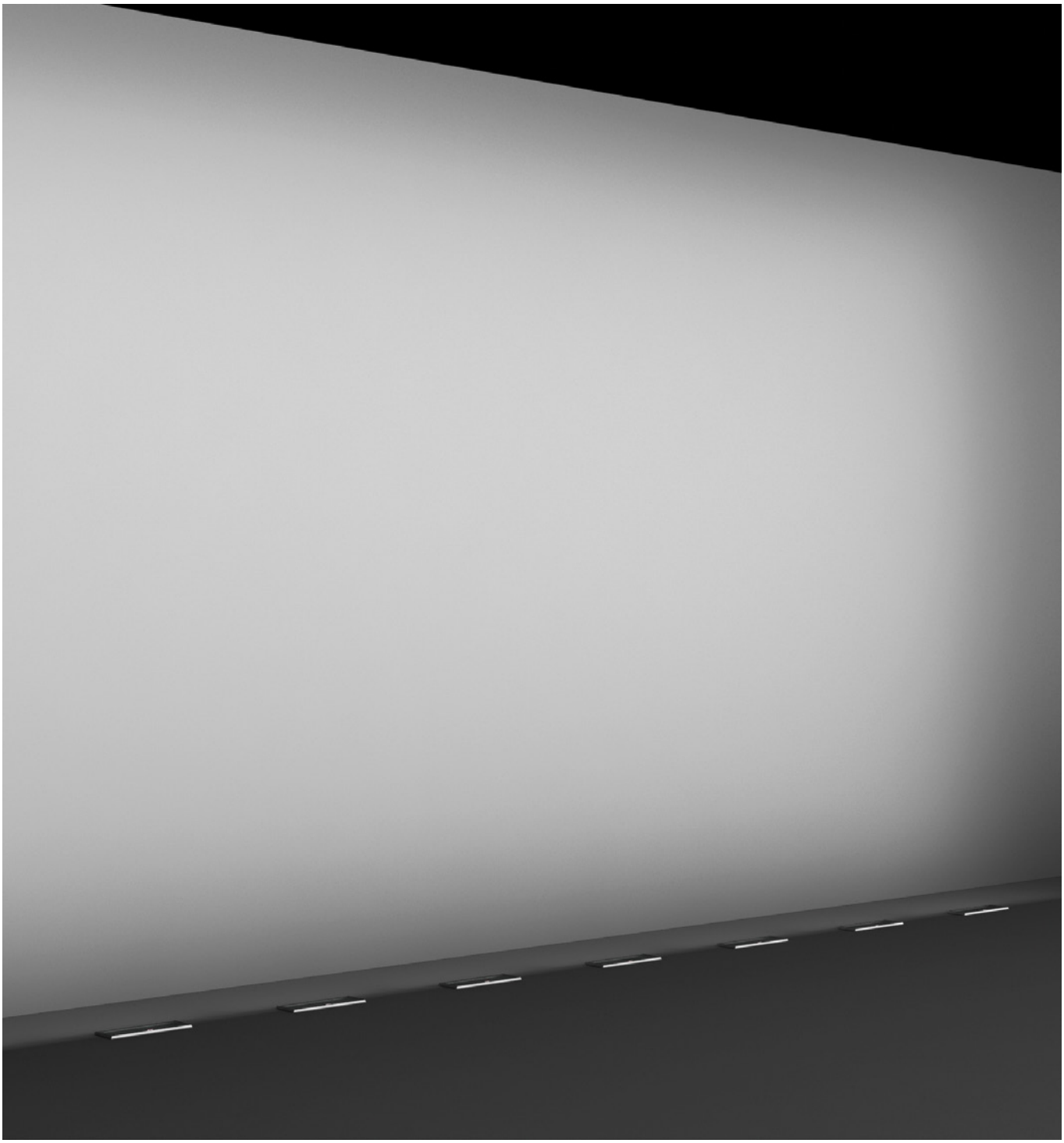


DYNO - Longitudinal Glare Control





Conventional System



04

ZETA
TECHNICAL SPECIFICATIONS

APPLICATION AREAS
- Facades
- Walls
- Floors
- Smooth surfaces

GENERAL HIGHLIGHTS
- Equipped with Heper's DYNO Module
- Optimized linear form of light distribution
- Operating temperature: -30°C / +55°C
- Exceptional thermal characteristics
- Easy installation with in-ground housing and IP rated connectors
- 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 I
- Input Voltage: 220-240V / 110-120V at 50/60Hz
- Control Type: On/Off, 1-10V, DALI
- Power usage: 10W - 30W

OPTICAL PROPERTIES
- Equipped with Heper's DYNO Module
- Indirect lighting with reflector technology
- Linear form wall-washing asymmetrical light distribution
- No glare with intended use
- High power, undomed LED chips
- MacAdam Ellipse 3
- Lumen output: 550lm - 2400lm (350mA)
- Color temperature: 3000K, 4000K
- CRI > 70(4000K), CRI > 80(3000K)
- Lumen depreciation: L90B50 > 40000h
- Photobiological safety: Risk group 0

BODY HOUSING & FINISH
- ZetaSS: Corrosion resistant stainless steel housing
- Zeta: Corrosion resistant aluminum housing
- Electrostatic powder coating (for aluminum body)
- Ingress Protection: IP67
- Impact Protection: IK08

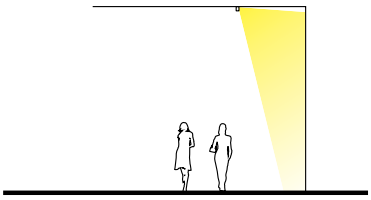
EXTRAS
- Higher CRI LED chips
- Different drive currents
- Different color temperatures

CE EN60598, IP67, IK08

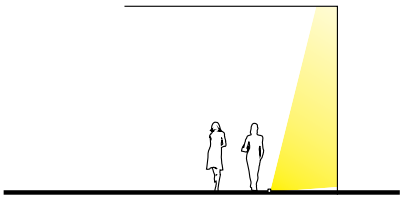
heper+

ZETA

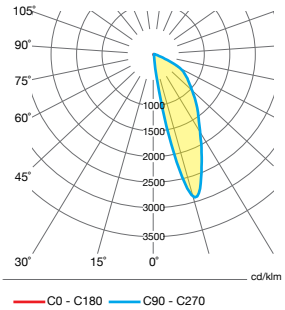
RECESSED WALL-WASHER

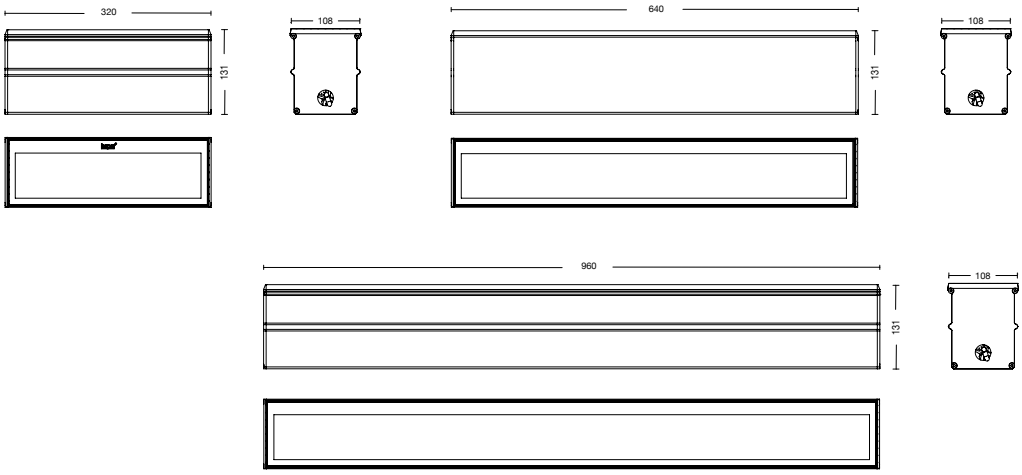


Zeta



Zeta SS





CODE	DESCRIPTION	POWER (350 mA)	LUMEN OUTPUT	CCT
LR9011.582	Zeta 4 Dyno	10W	550 lm - 800 lm	3000K / 4000K
LR9011.583	Zeta 8 Dyno	20W	1100 lm - 1600 lm	3000K / 4000K
LR9011.584	Zeta 12 Dyno	30W	1650 lm - 2400 lm	3000K / 4000K
LR9012.582	Zeta SS 4 Dyno	10W	550 lm - 800 lm	3000K / 4000K
LR9012.583	Zeta SS 8 Dyno	20W	1100 lm - 1600 lm	3000K / 4000K
LR9012.584	Zeta SS 12 Dyno	30W	1850 lm - 2400 lm	3000K / 4000K

Zeta S - 2.6kg
Zeta - 4.7kg
Zeta L - 6.8kg
Zeta SS S - 3kg
Zeta SS - 5.7kg
Zeta SS L - 8kg

05

MOLTO WALL-GRAZER
HYBRID MODULE

Optical technology in Molto wall-grazer luminaire is called HYBRID, in which special lens and reflector is combined. Its outcome is a symmetrical, exceptionally well defined beam with minimal scattering.

The well-defined and directed light upbrings high candela values even at greater heights. Thus, making the fixture adequate for lighting up high walls and columns. Different sizes combined with 7 degree or 26 degree beam angle optics, makes Molto a flexible product for different projects. Allowed tilt angle on the module base only adds more to this flexibility.

Molto can be used for surface lighting as well as an uplight. It can be placed even too close to the surface to be illuminated.

This steep angle and gradual light distribution makes Molto a perfect luminaire for wall-grazing applications!

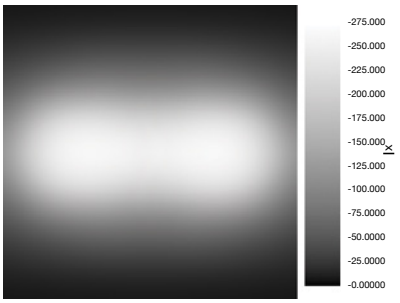
HYBRID
PERFECT BEAM ANGLE

HYBRID is a special designed optical system which combines the reflector with an additional lens which provides several advantages compared to the classical approach.

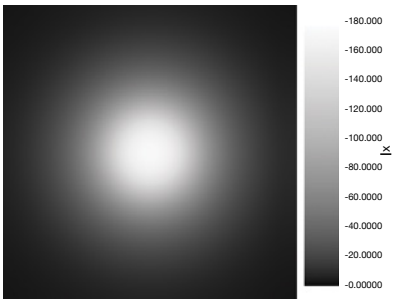
The system combines high efficiency with minimized luminance in cut-off area. Comparing with the traditional lenses and reflectors, the optics is removable without harming the LEDs. In addition to that, the HYBRID is removable without any tool.

HYBRID has narrow and medium light distribution combining with ancillary lenses and micro-facetted reflector technology. The system is used in facade illumination, ambient lighting and accent lighting.

0% scattering



0% scattering with secondary coverglass



5% scattering

20% scattering

06

MOLTO
TECHNICAL SPECIFICATIONS

APPLICATION AREAS
- Facades
- Walls
- Columns
- Textured surfaces

GENERAL HIGHLIGHTS
- Equipped with Heper's HYBRID Module
- Optimized beam angles for narrow and medium distribution
- Operating temperature: -30C° / +55°
- Exceptional thermal characteristics
- Easy installation with in-ground housing and IP rated connectors
- In compliance with EN 60598
- CE Certified

ELECTRICAL PROPERTIES
- Drive current: 350mA (different drive currents are available)
- Optimized PCB design for better heat management
- Energy Class: A
- Insulation Class: CLASS I
- Input Voltage: 220-240V at 50/60Hz
- Control Type: On/Off, 1-10V, DALI
- Power usage: 17W - 70W

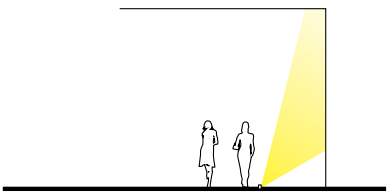
OPTICAL PROPERTIES
- Equipped with Heper's HYBRID Module
- Well defined beam angles with reflector and lens combined
- No scattering of light
- Symmetrical form wall-grazing light distribution
- Minimized glare
- High power, multi LED chips
- MacAdam Ellipse 3
- Lumen output: 900lm - 4900lm (350mA)
- Color temperature: 3000K, 4000K
- CRI > 70(4000K), CRI > 80(3000K)
- Lumen depreciation: L90B50 > 40000h
- Photobiological safety: Risk group 0

BODY HOUSING & FINISH
- Corrosion resistant stainless steel housing
- Ingress Protection: IP67
- Impact Protection: IK08

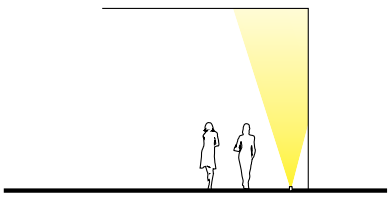
EXTRAS
- Higher CRI LED chips
- Different drive currents
- Different color temperatures
- RGBW with DMX control

CE EN60598, IP67, IK08

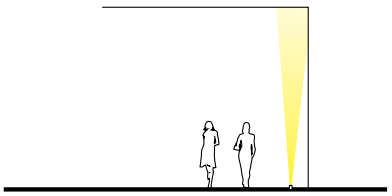
MOLTO
RECESSED WALL-GRAZER



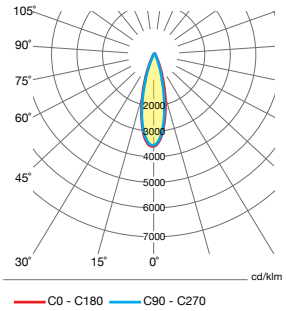
Molto Tilted Base

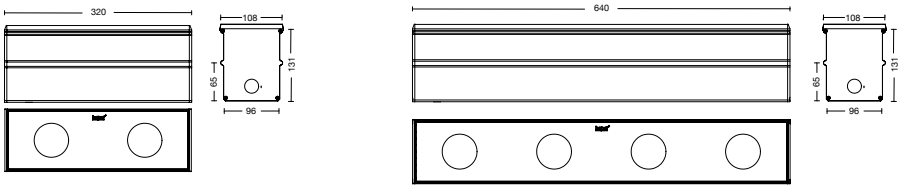


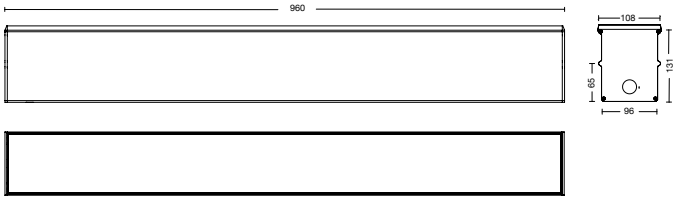
Molto 26°



Molto 7°







CODE	DESCRIPTION	POWER (350 mA)	LUMEN OUTPUT	CCT
LR9012.690	Molto S	17W	900 lm - 1250 lm	3000K / 4000K
LR9011.583	Molto	35W	1800 lm - 2450 lm	3000K / 4000K
LR9011.584	Molto L	70W	3600 lm - 4900 lm	3000K / 4000K

Molto S - 3kg
Molto - 5kg
Molto L - 8.5kg

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*Heper withholds the right to make modifications on
declared information without prior notice.

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