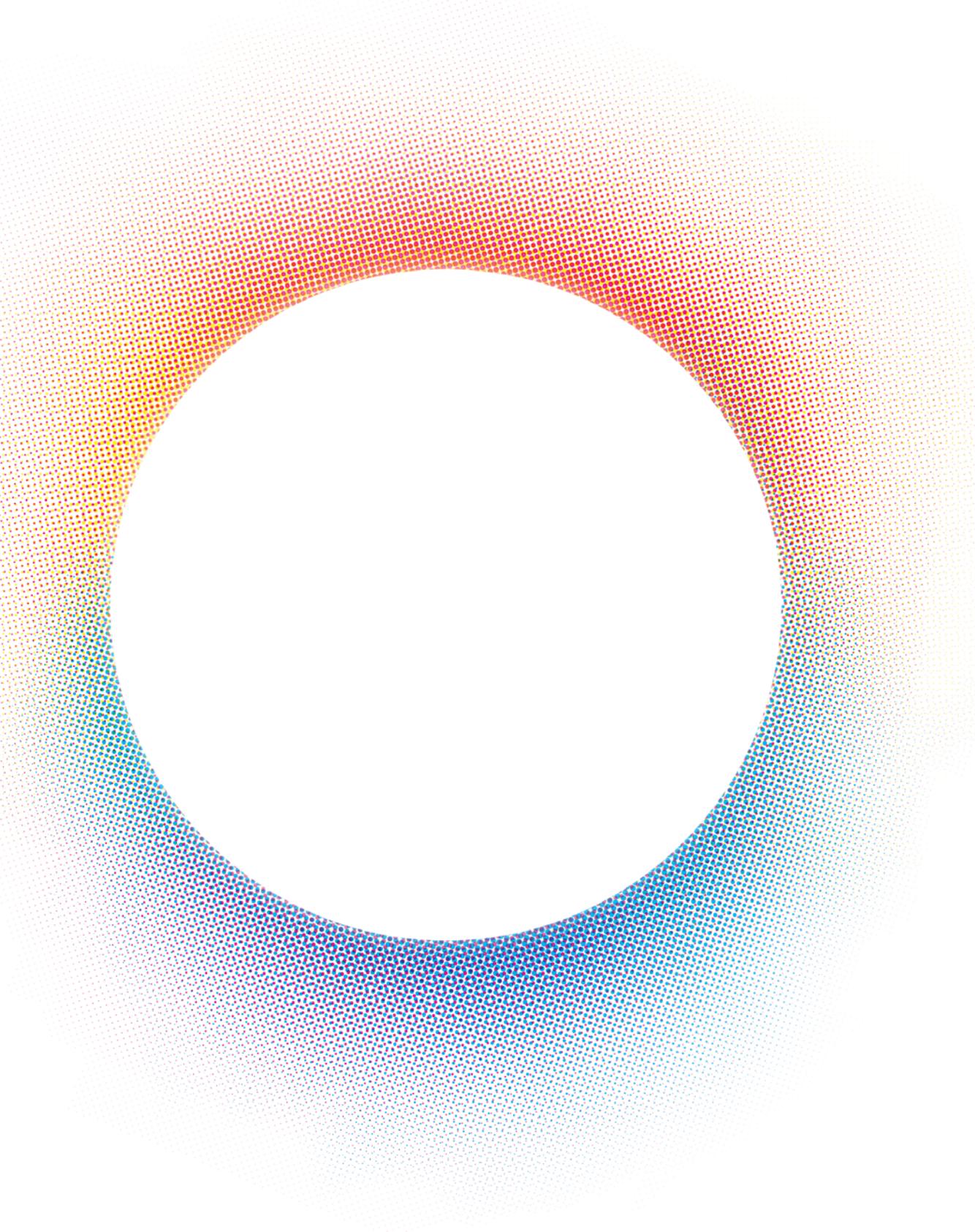


Cariboni
group



News 2023

Cariboni Group S.p.A.

SALES OFFICE AND WAREHOUSE

Via della Tecnica, 19
38375 Osnago (Lc)
Tel. +39 039 95211
info@caribonigroup.com

REGISTERED OFFICE AND FACTORY

Via G.A. Prato, 22
38068 Rovereto (Tn)
Tel. +39 0464 422247
info@caribonigroup.com



CARIBONI LITE FRANCE

Z.A DU Pré de la Dame Jeanne,
Avenue de la Dame Jeanne,
Zone 2 — Bât J
60128 Plailly
Tel. +33 3 44740380
cariboni.lite@cariboni.fr



General index

Company	6
Eco-Centric Lighting	10
Color Changing	14
Spoon	18
Kono zoom	40
Kinetic	54
Levante 2.0	66
Bamboo mini	88
Grapho mini	96

Product index

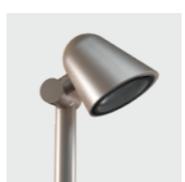
CREDITS

MARKETING DEPARTMENT

Anna Magni
Francesca Mauri

ART DIRECTION AND LAYOUT

Gag Srl Società Benefit



Spoon
→ 18



Kono zoom
→ 40



Kinetic
→ 54



Levante 2.0
→ 66



Bamboo mini
→ 88



Grapho mini
→ 96

Una forte passione per la luce e un costante impegno nella ricerca e nell'innovazione

Cariboni è stata fondata da Osvaldo Cariboni nel 1908 in Lombardia per produrre accessori per linee elettriche. Dal 1965 sviluppiamo con originalità importanti innovazioni tecnologiche nel settore dell'illuminazione e abbiamo acquisito nel tempo profonda esperienza nella gestione dei corpi illuminanti.

Offriamo soluzioni per l'illuminazione di piccoli borghi e grandi città: piste ciclabili e pedonali, percorsi veicolari, piazze, aree verdi e architetture; spazi per il lavoro e il tempo libero, per la cultura e il benessere, per lo sport e la mobilità.

A genuine passion for lighting
and a constant commitment to
research and innovation

Cariboni was founded by Osvaldo Cariboni in 1908 in Lombardy to produce accessories for power lines. Since 1965 we have developed numerous important and original technological lighting sector innovations, as well as gained in-depth experience in light system management.

We offer solutions for lighting small towns and big cities: cycle and pedestrian paths, vehicle routes, squares, parks and gardens, architectures; workspaces and areas for leisure, culture and well-being, for sport and mobility.



La luce è il nostro mestiere

Da oltre un secolo siamo impegnati nel settore elettrotecnico e abbiamo una lunga esperienza nella progettazione e realizzazione di soluzioni professionali per l'illuminazione di ambienti esterni. Dialoghiamo quotidianamente con i progettisti di tutto il mondo per donare la migliore luce possibile ad ogni architettura, ad ogni spazio e ad ogni percorso. Ricerchiamo costantemente soluzioni innovative per offrire nuove opportunità d'uso degli spazi urbani e per tutelare il benessere e la sicurezza di chi li abita.

Light is our trade

For over a century we have been involved in the electrotechnical sector and have extensive experience in designing and implementing professional outdoor lighting solutions. We dialogue daily with designers from all over the world in order to light every architecture, every space and every path in the best possible way. We are continually looking for innovative solutions to offer new opportunities for using urban spaces and to protect the well-being and security of those living in them.



Made in Italy

Tutte le fasi di progettazione e produzione si svolgono da sempre in Italia, negli stessi luoghi in cui abbiamo iniziato nel 1908, e in sinergia con una fitta rete di imprese locali con cui abbiamo instaurato nel tempo solide relazioni di fiducia. Consideriamo importante circoscrivere le attività nel nostro territorio per poter incontrare i nostri collaboratori.

Made in Italy

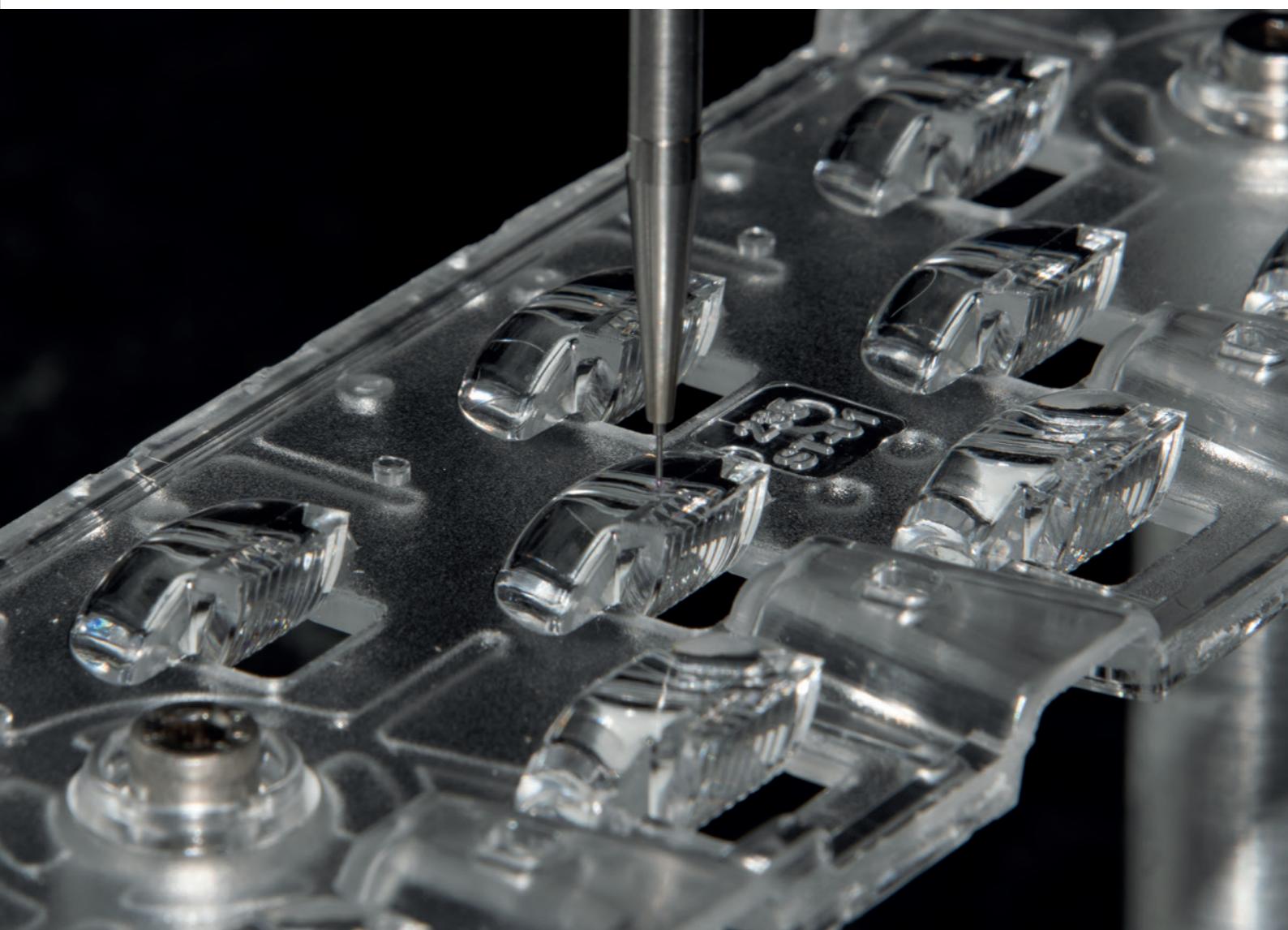
All stages of design and production have always taken place in Italy, in the same places where we started in 1908, in synergy with a tight network of local companies with which we have established solid relationships of trust over time. We consider it important to limit activities to the local area so that we can meet with our collaborators.

La luce giusta dove e quando serve

Sviluppiamo ottiche dedicate alle differenti geometrie urbane e siamo attenti alle esigenze di ogni area geografica di nostro interesse. Il progetto di ogni sistema ottico è seguito da un team interno composto da risorse specializzate in ottica, optoelettronica e ricerca di materiali.

The right light where and when needed

We develop optics dedicated to the different urban geometries and are sensitive to the needs of every geographical area we are involved in. The design of each optical system is followed by an internal team made up of resources specialising in optics, optoelectronics and material research.



ECO-CENTRIC LIGHTING

Eco-Centric Lighting è l'approccio alla progettazione illuminotecnica degli spazi esterni che mira a tutelare la biodiversità e il benessere umano. Le nostre soluzioni limitano l'inquinamento luminoso e garantiscono la sicurezza e il comfort visivo delle persone.

Eco-Centric Lighting is the approach to the lighting design of outdoor spaces that aims to protect biodiversity and human well-being. Our solutions limit light pollution and ensure people's safety and visual comfort.

DARK FRIENDLY LIGHT

L'illuminazione artificiale notturna è una necessità per l'uomo ma è anche una vera minaccia per i ritmi biologici naturali di flora e fauna. Le soluzioni Dark Friendly possono preservare il buio della notte e limitare l'inquinamento luminoso offrendo

- luce calda secondo necessità: dal bianco neutro all'ambra
- luce quando serve: intelligente e adattiva
- luce dove serve: diretta verso il basso
- luce quanto serve: regolabile e minimizzata

Artificial lighting at night is a need for humans but is also a real threat to the natural biological rhythms of flora and fauna. Dark Friendly solutions can preserve the darkness of the night and limit light pollution offering to designer:

- light warm as needed: from neutral white to amber
- light when is needed: smart and adaptive
- light where is needed: downward directed
- light how much is needed: adjustable and minimized

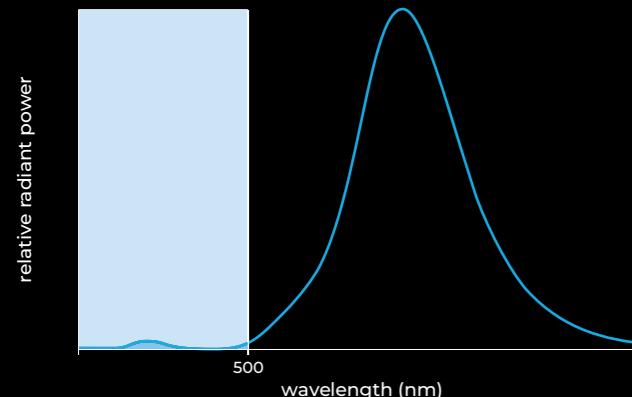


BLUE FREE LIGHT

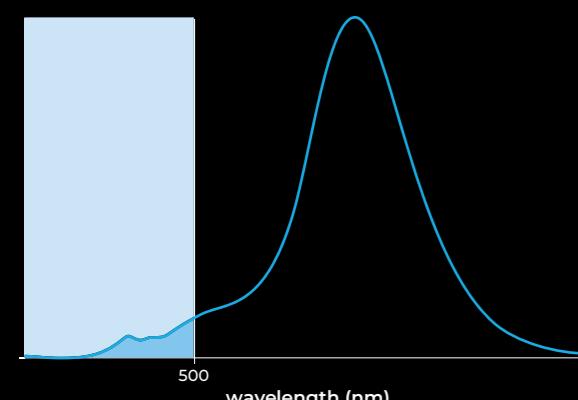
I sistemi ottici Blue Free riducono il contenuto di blu della luce bianca e generano un'atmosfera calda e accogliente per le persone. Sono ideali per illuminare spazi e percorsi di notevole interesse ecologico e prevalentemente frequentati da pedoni o ciclisti.

Blue Free optical systems reduce the blue content of white light and generate a warm and welcoming atmosphere for people. They are ideal for lighting spaces and paths of significant ecological interest and mainly used by pedestrians or cyclists.

PHOSPHOR CONVERTED AMBER (PCA) LED



1800K LED

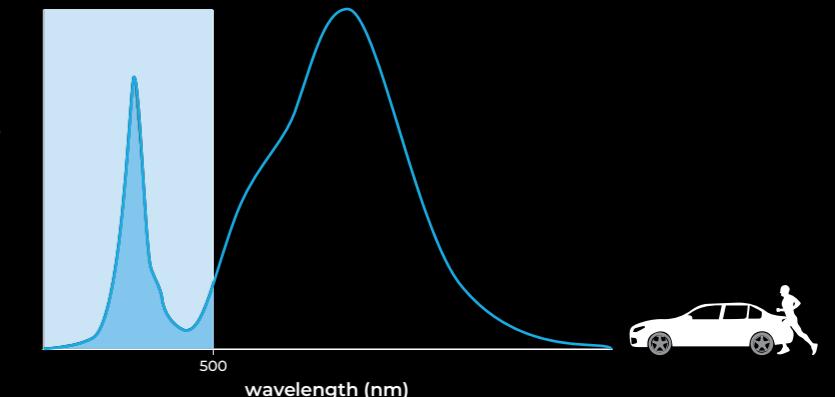


SWITCHABLE WHITE LIGHT

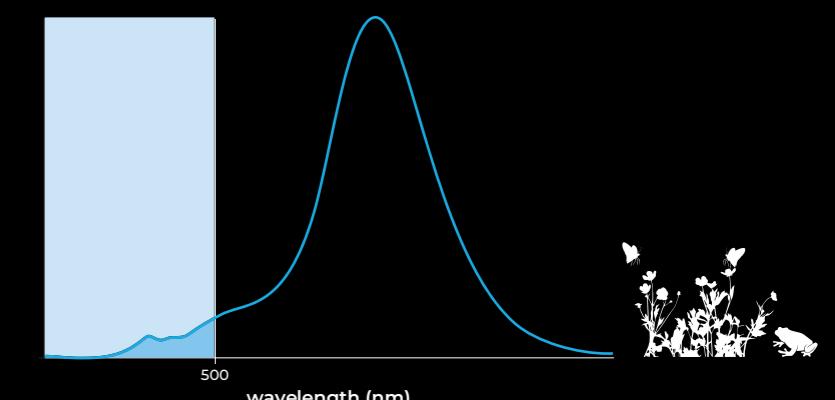
I sistemi ottici Switchable White alternano una luce ambra priva di blu (CCT=1800K), che protegge la flora e la fauna, con una luce bianca calda (CCT=3000K), che migliora le prestazioni visive umane quando il traffico è più pesante. Questa soluzione è ideale per illuminare spazi e percorsi ibridi, ecologicamente interessanti ma anche percorribili da veicoli.

The Switchable White optical systems alternate a blue-free amber light (CCT=1800K), which protects the flora and fauna, with a warm white light (CCT=3000K), which improves human visual performance when traffic is heavier. This solution is ideal for lighting hybrid spaces and paths, which are ecologically interesting but also traveled by vehicles.

3000K LED



1800K LED



COLORFUL URBAN NIGHTS

I colori strutturano lo spazio e cambiano la percezione di un ambiente, con effetti sulla nostra reazione emotiva e risposta comportamentale. La luce colorata nel contesto urbano, se ben progettata, è un efficace strumento narrativo. Durante le ore di buio può svelare uno spazio urbano enfatizzando i suoi elementi costitutivi, alterare la realtà trasformando un paesaggio o raccontare storie attraverso l'eloquente dimensione semantica del colore. I colori comunicano infatti valori e significati che, pur variando nel tempo e nello spazio, rappresentano un linguaggio condiviso capace di attribuire nuovi significati allo spazio e alle architetture.

Colors structure space and change the perception of an environment, with effects on our emotional reaction and behavioral response. Colored light in an urban context, if well designed, is an effective narrative tool. During the hours of darkness it can reveal an urban space by emphasizing its constituent elements, alter reality by transforming a landscape or tell stories through the eloquent semantic dimension of color. In fact, colors communicate values and meanings which, although they change over time and space, represent a shared language that can give new meanings to space and architecture.

COLOR CHANGING

La luce che cambia colore attribuisce ad un luogo un'identità dinamica declinabile in base a necessità. Il colore della luce può cambiare per adeguarsi alle variazioni cromatiche stagionali, per promuovere eventi, per valorizzare un'architettura, per rendere più attrattivo uno spazio urbano o semplicemente per offrire al progettista l'opportunità di scegliere una precisa gradazione cromatica o tonale della luce. I nuovi sistemi ottici Cariboni cambiano il colore della luce attraverso due differenti tipi di tecnologie:



- Color changing RGBW 3000K: la tecnologia RGB+W utilizza chip led di colore rosso, verde, blu e bianco (4 chip led in 1) per creare una vasta gamma di opzioni di colore. Il chip bianco caldo (3000K) può essere miscelato con gli altri tre colori per creare colori precisi e vibranti o una luce bianca più luminosa e pura. La tecnologia RGBW può essere controllata in Digital Multiplex (DMX).



- Tunable White 2200K-4000K: La tecnologia di illuminazione Tunable White consente di controllare la temperatura colore della luce bianca. Si può regolare la luce da un colore bianco freddo, che è un po' bluastro (4000K), fino a un colore bianco caldo, che è più giallastro (2200K). I sistemi ottici Tunable White possono essere controllati tramite DALI.



COLOR CHANGING

The light that changes color gives the space a dynamic identity that can be declined according to need. The color of the light can change to adapt to seasonal chromatic variations, to promote events, to enhance an architecture, to make an urban space more attractive or simply to offer the designer the opportunity to choose a precise chromatic or tonal gradation of the light. The new Cariboni optical systems change the color of light through two different types of technologies:



- Color changing RGBW 3000K: RGB+W technology uses Red, Green, Blue and White LED chips (4 in 1 LED chips) to create a wide array of color. The warm White chip (3000K) can be mixed with the other three colors to create more precise and vibrant colors or a brighter and more pure white light. RGBW technology can be controlled by Digital Multiplex (DMX) controls.



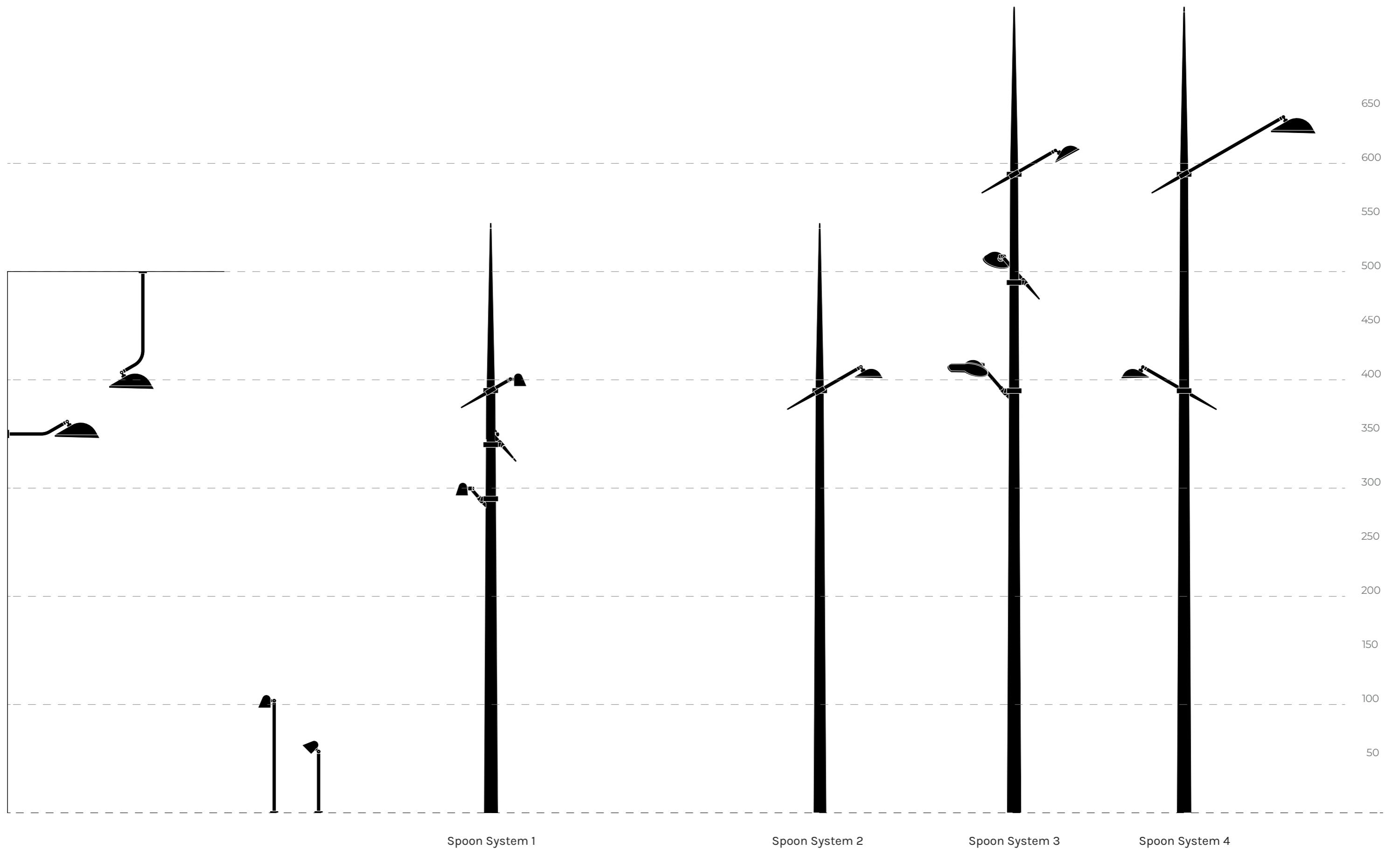
- Tunable White 2200K-4000K: Tunable white lighting technology means that you are able to control the white light's colour temperature. You can tune from a cool color of white, which is a little bit bluish (4000K), down to a warm color of white, which is more yellowish (2200K). Tunable White optical system can be controlled by DALI.

SPOON

SPOON è un nuovo sistema per l'illuminazione urbana, declinabile a diverse scale e coerente ai mutevoli scenari urbani contemporanei. Design by Alfonso Femia /AF*Design.

SPOON is a new urban lighting system that can be adapted to different scales and is consistent with the changing contemporary urban scenarios. Design by Alfonso Femia /AF*Design.





220-240V	50	CL II	IP65	IK08	ta -30°C +50°C
24V (RGBW / TW)	60Hz				



DATI PRESTAZIONALI / PERFORMANCE DATA

Flusso apparecchio / Fitting flux:
800 - 6700 lm

Potenza apparecchio / Fitting power:
15 -50 W

Indice di resa cromatica / Colour Rendering Index:
≥ 70, SDCM ≤ 4 (ottiche stradali) / (street optics)
≥ 80/90, SDCM ≤ 3 (ottiche proiezione) / (flood optics)

Illuminazione intelligente / Smart lighting:
mezzanotte virtuale, DALI. Su richiesta ZHAGA UP/ virtual
midnight, DALI. On request ZHAGA UP

MATERIALI / MATERIALS

Corpo e sistemi di fissaggio / Body and fitting system:
presso-fusione di lega d'alluminio UNI EN AB 47100
(contenuto rame < 1%) / die-cast aluminium alloy UNI EN
AB 47100 (copper content < 1%)

Schermo / Screen:
vetro piano temprato / tempered flat glass

Gruppo ottico / Optical unit:
lente in tecnopolimero ad alta trasparenza (versione
bollard), lenti in PMMA ad alta trasparenza (altre
versioni) / highly transparent technopolymer lens
(bollard version), PMMA high transparent lenses
(other versions)

Finitura / Finish:
fosfocromatazione e verniciatura in polveri di poliestere
realizzata in 16 fasi per la miglior resistenza agli
agenti atmosferici / phospho-chromatation treated
and polyester powder-coated in 16 phases to increase
weather resistance

ECO-CENTRIC LIGHTING
(ONLY FOR STREET OPTICS)

BLUE FREE LIGHT:
PC-AMBER 0,7% $\sum R$ ($\lambda < 500\text{NM}$) — CRI 40
1800 K 4,3% $\sum R$ ($\lambda < 500\text{NM}$) — CRI 70

SWITCHABLE WHITE LIGHT:
1800 K / 3000 K

COLORI / COLOURS

- SABLÉ 100 NOIR
- CHAMPAGNE

CARATTERISTICHE / FEATURES

Peso massimo / Max weight:
6 kg (bollard); 4,5 kg small; 7 kg (medium); 9 kg (large)

Alimentazione elettronica / Electronic power supply:
inclusa / included

Precablaggio / Pre-wiring:
prodotto precablatto con cavo e connettore / pre-wired
product with cable and connector

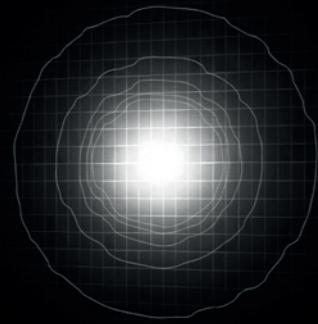
Resistenza sovrattensioni / Surge Protection Device:
10kV MC/MD (medium, large)

Installazione / Installation:
terra, palo, parete, sottoportico
ground, pole, wall, arcade

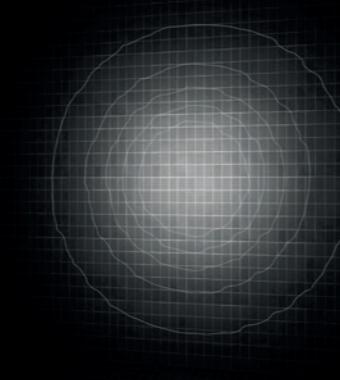


OTTICHE / OPTICS

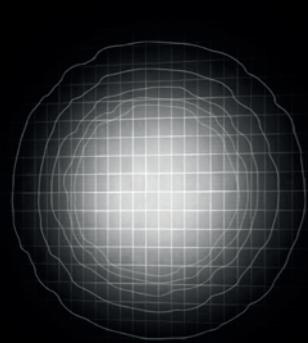
C 10° Concentrante / Narrow beam



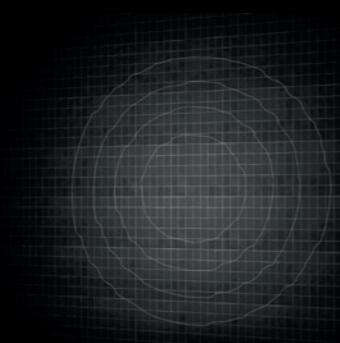
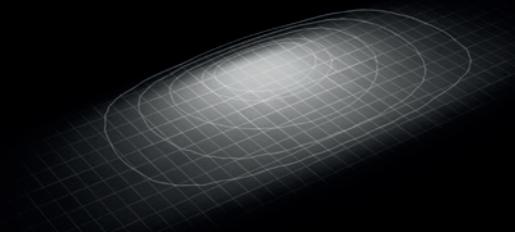
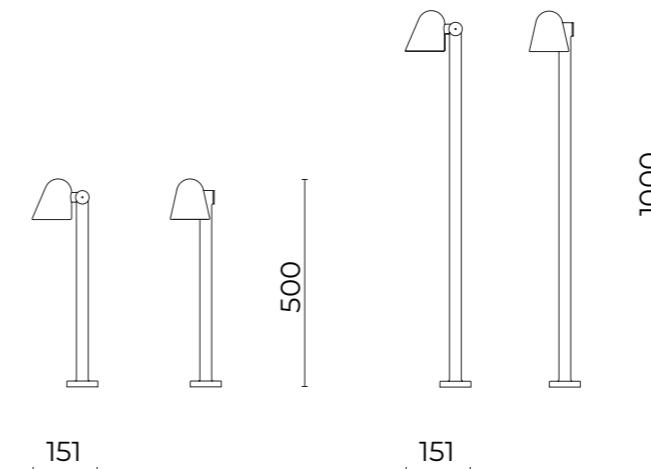
D 45° Diffondente / Wide beam



M 25° Fascio medio / Medium beam



U-D 90° Ultra-diffondente / Diffuse beam

AS-D Asimmetrica diffondente /
Asymmetrical wide beamSpoon
BollardBOLLARD
1000

DATI TECNICI / TECHNICAL DATA

Installazione / Installation:
terra / ground**Inclinazione** / Inclination:
0° ÷ 180° / +90° ÷ -45°, rotation ±30°TEMPERATURA COLORE
COLOUR TEMPERATURE

- 3000 K
- 4000 K

BOLLARD
500

Spoon

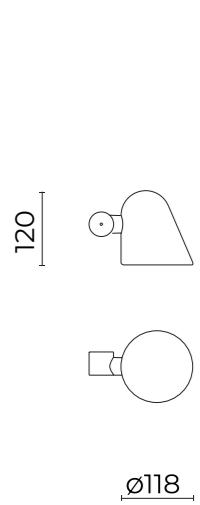
System

DATI TECNICI / TECHNICAL DATA

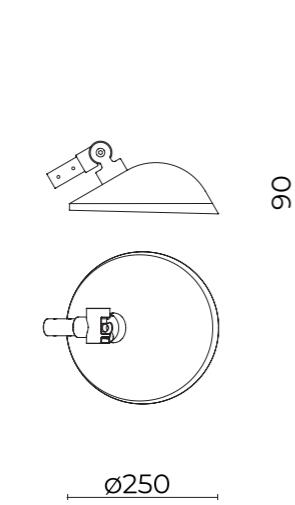
Installazione / Installation:
palo conico con puntale / conical pole with rod

Inclinazione / Inclination:
+120° ÷ -60° (small)
0° ÷ +90° (medium / large)

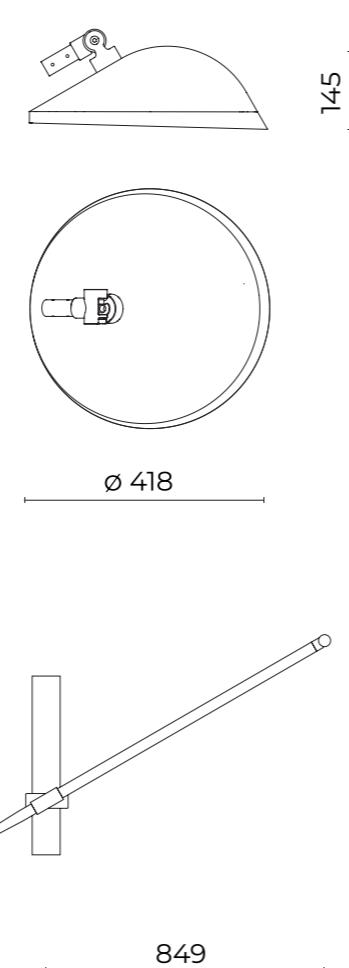
SMALL



MEDIUM



LARGE

**TEMPERATURA COLORE
COLOUR TEMPERATURE**

2200 K

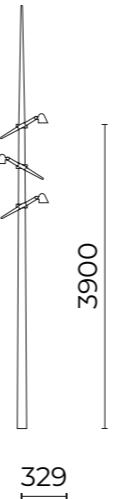
3000 K

4000 K

RGB+W 3000 K

CONFIGURAZIONI / CONFIGURATIONS:**Spoon System 1**

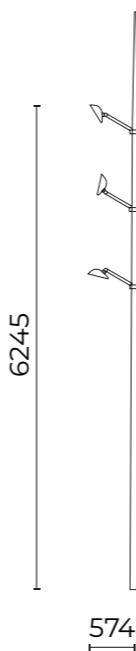
Palo con puntale h. tot. 5400 mm, 3 Spoon Small
Palo with rod h. tot. 5400 mm, N.3 Spoon Small

**Spoon System 2**

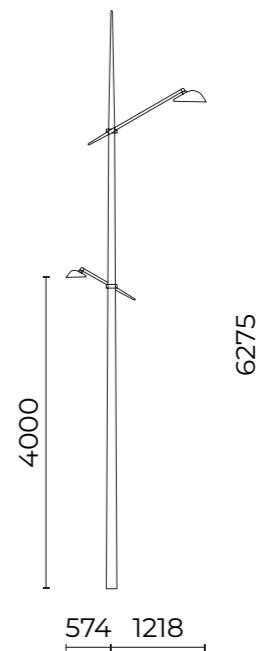
Palo con puntale h. tot. 5400 mm, 1 Spoon Medium
Palo with rod h. tot. 5400 mm, 1 Spoon Medium

**Spoon System 3**

Palo con puntale h. tot. 7400 mm, 3 Spoon Medium
Palo with rod h. tot. 7400 mm, 3 Spoon Medium

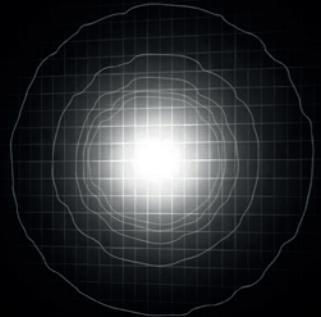
**Spoon System 4**

Palo con puntale h. tot. 7400 mm, 1 Spoon Medium, 1 Spoon Large
Palo with rod h. tot. 7400 mm, 3 Spoon Medium, 1 Spoon Large



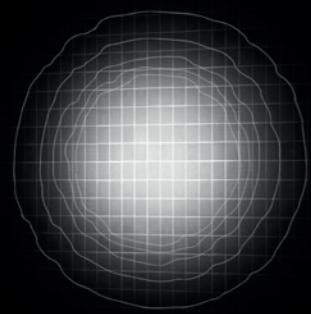
OTTICHE / OPTICS

C 10° Concentrante / Narrow beam

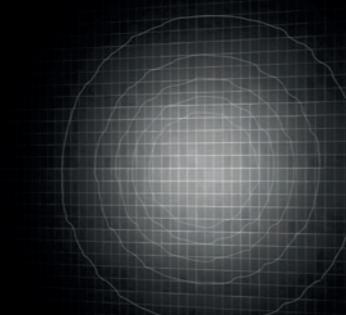


SPOON SMALL

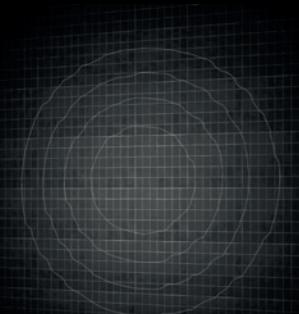
M 25° Fascio medio / Medium beam



D 45° Diffondente / Diffuse beam



U-D 90° Ultra-diffondente / Ultra-wide beam



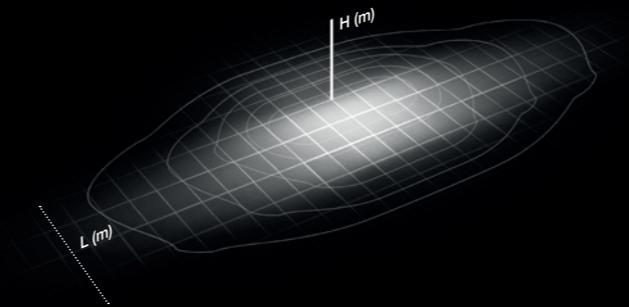
Spoon
System



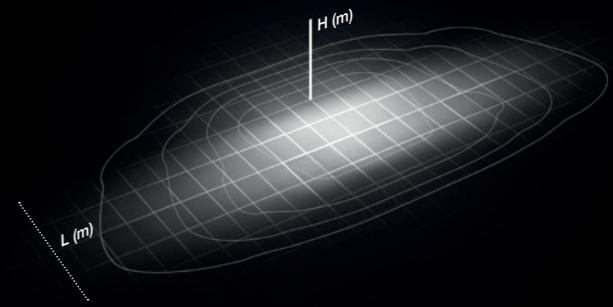
OTTICHE / OPTICS

SPOON MEDIUM / LARGE

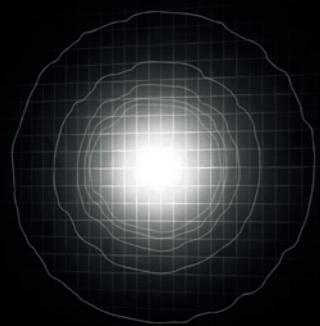
ST-02 Strade strette / Narrow street
L / H = 0,75



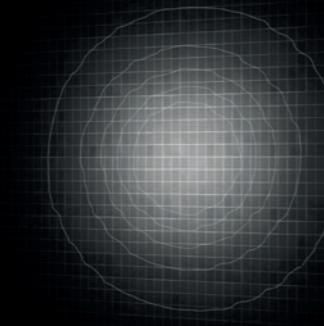
ME-06 Strade medie / Medium street
L / H = 1



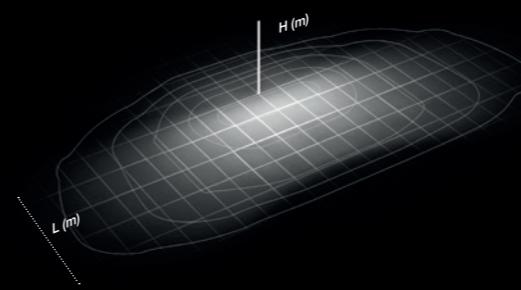
C 11° Concentrante / Narrow beam



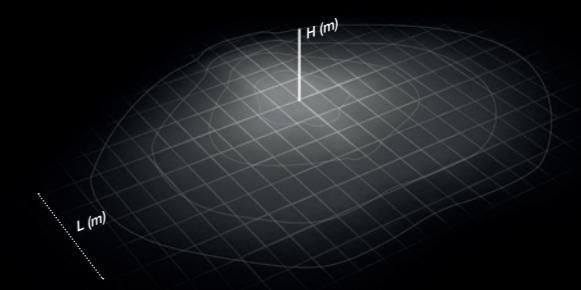
D 40° Diffondente / Diffuse beam



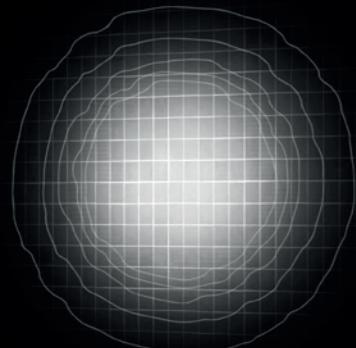
LA-03 Strade larghe / Wide street
L / H = 1,25



PB-01 Pali bassi / Low Pole
L / H = 2



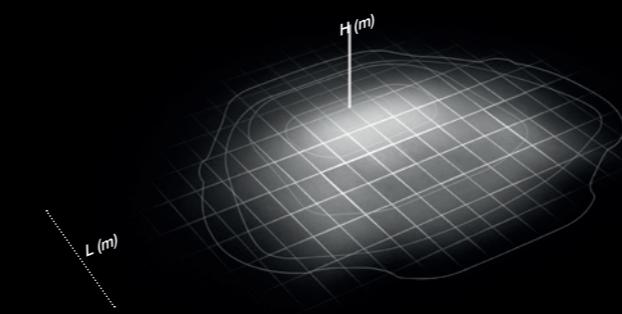
M 25° Fascio medio / Medium beam



U-D 90° Ultra-diffondente / Diffuse beam

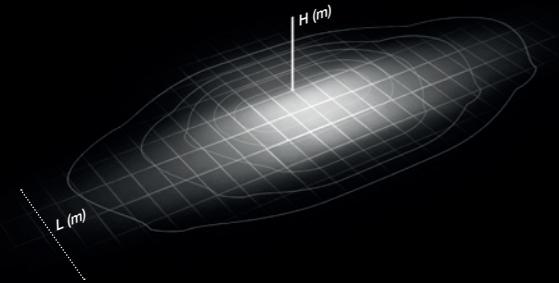


LT-64 Asimmetrica / Asymmetrical
L / H = 2

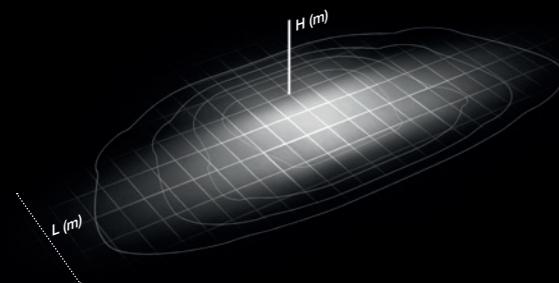
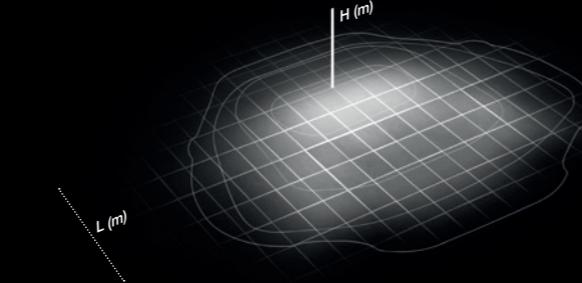


OTTICHE / OPTICS

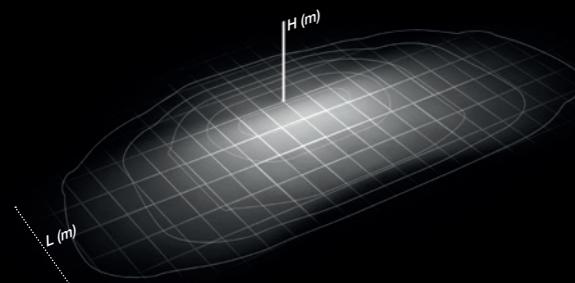
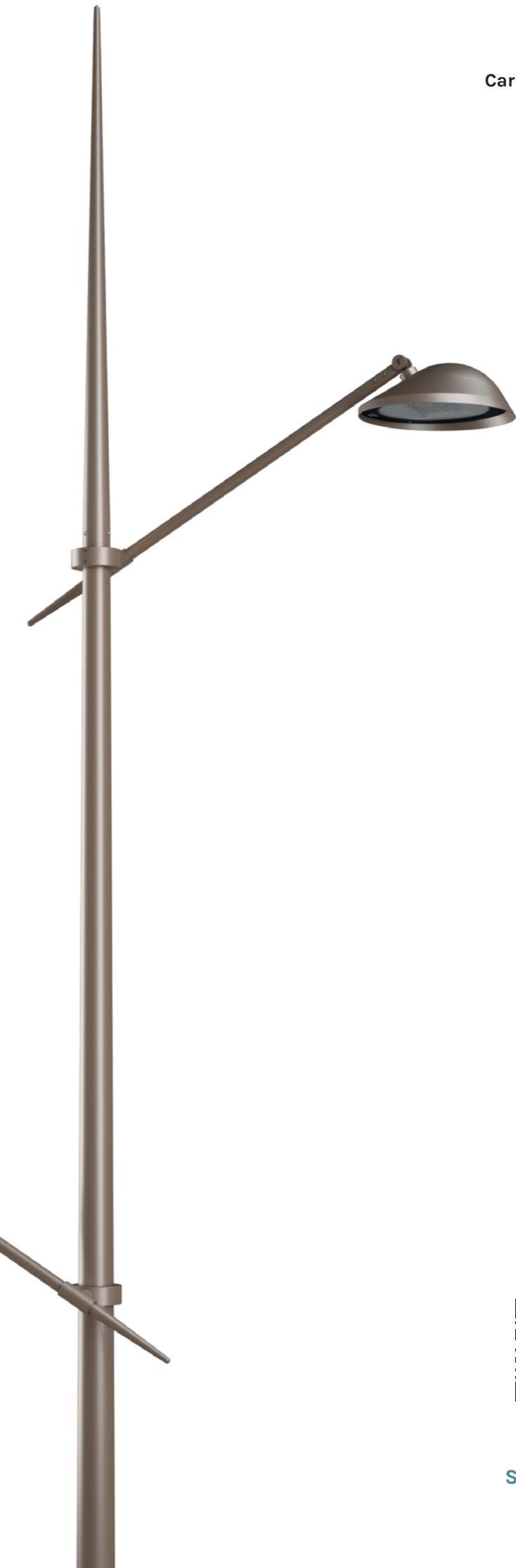
ST-01 Strade strette / Narrow street

 $L / H = 0,75$ 

ME-01 Strade medie / Medium street

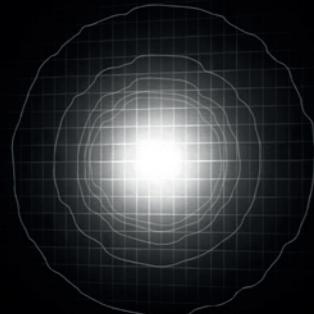
 $L / H = 1$ **LT-06 Asimmetrica / Asymmetrical**
 $L / H = 2$ 

LA-01 Strade larghe / Wide street

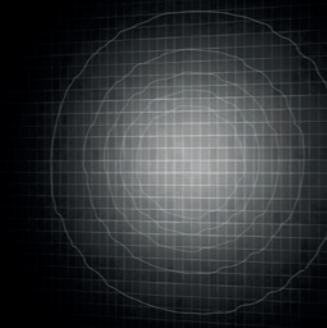
 $L / H = 1,25$ **Spoon**
System

OTTICHE / OPTICS

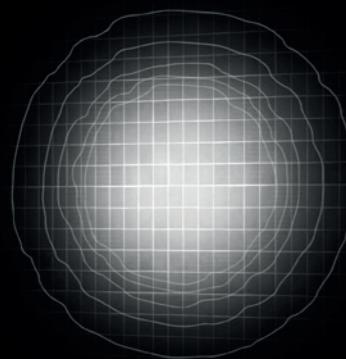
C 11° Concentrante / Narrow beam



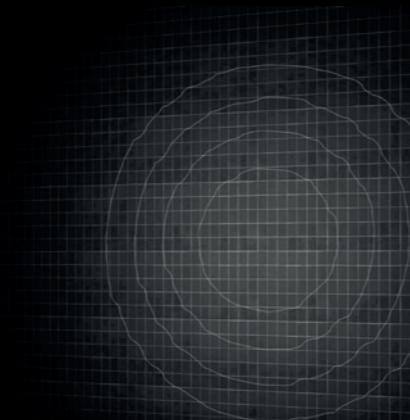
D 40° Diffondente / Wide beam



M 25° Fascio medio / Medium beam



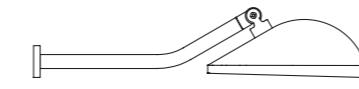
U-D 90° Ultra-diffondente / Ultra-wide beam



Spoon

Wall

DATI TECNICI / TECHNICAL DATA

Installazione / Installation:
parete / wall**Inclinazione** / Inclination:
0° ÷ 90°

852

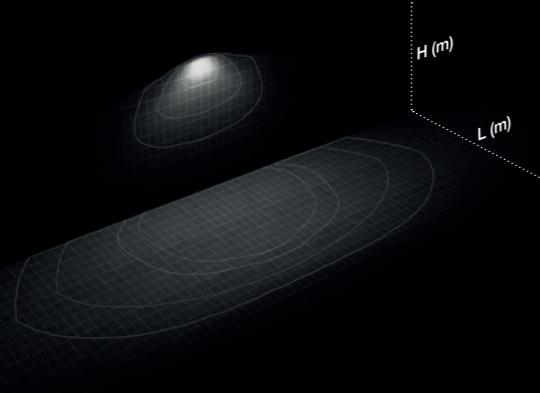
TEMPERATURA COLORE
COLOUR TEMPERATURE

- 2200 K
- 3000 K
- 4000 K
- RGB+W 3000 K

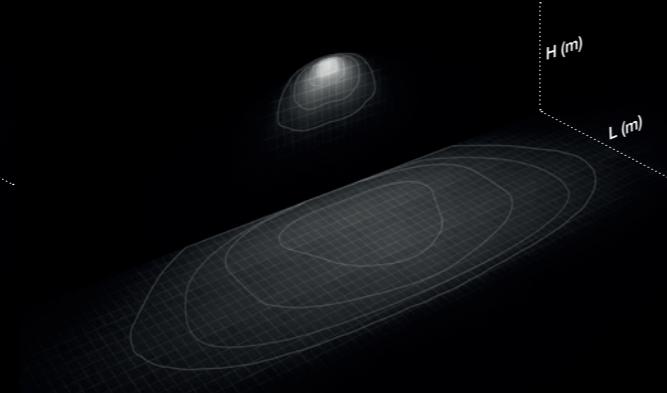


OTTICHE / OPTICS

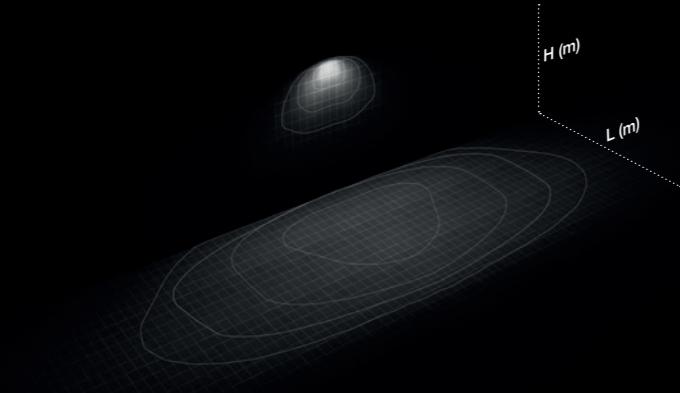
ST-01 Strade strette / Narrow street
 $L / H = 0,75$



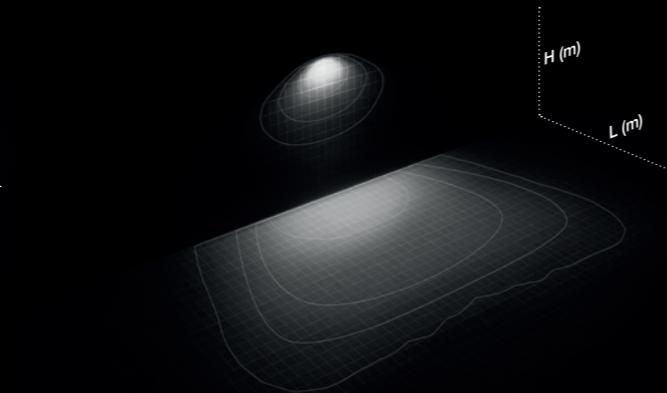
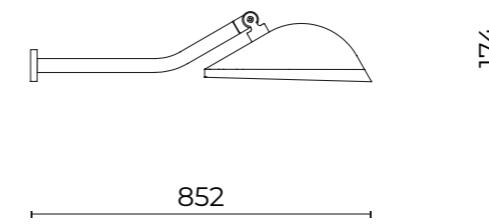
LA-01 Strade medie / Medium street
 $L / H = 1,25$



ME-01 Strade medie / Medium street
 $L / H = 1$



LT-06 Strade larghe / Wide street
 $L / H = 2$

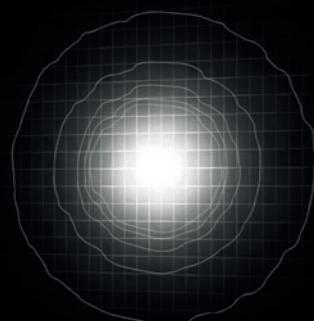
**Spoon
Wall****BRACCI / ARMS:**

06SP901G60
Braccio parete / Wall bracket

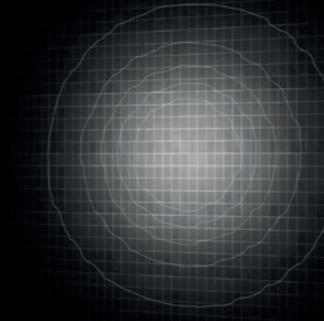


OTTICHE / OPTICS

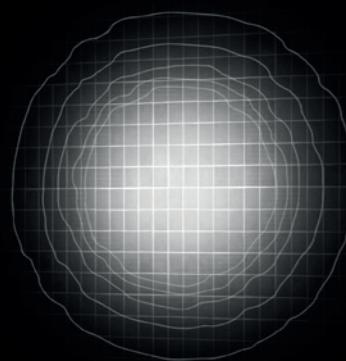
C 11° Concentrante / Narrow beam



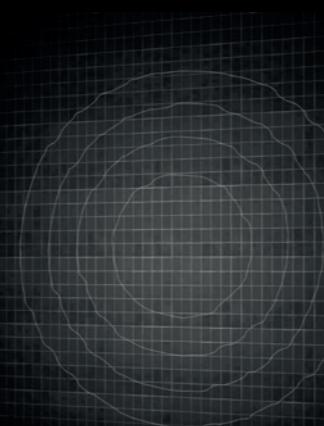
D 40° Diffondente / Wide beam



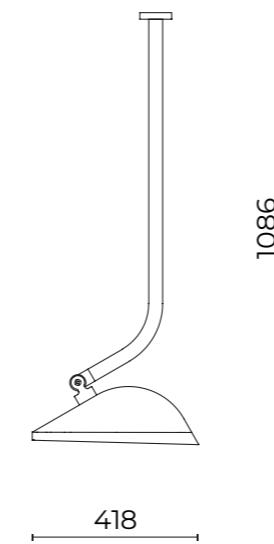
M 25° Fascio medio / Medium beam



U-D 90° Ultra-diffondente / Ultra-wide beam

Spoon
Ceiling

DATI TECNICI / TECHNICAL DATA

Installazione / Installation:
parete / wall**Inclinazione** / Inclination:
0° ÷ 90°

BRACCI / ARMS:

06GN902G60
Tige soffitto / Ceiling bracketTEMPERATURA COLORE
COLOUR TEMPERATURE

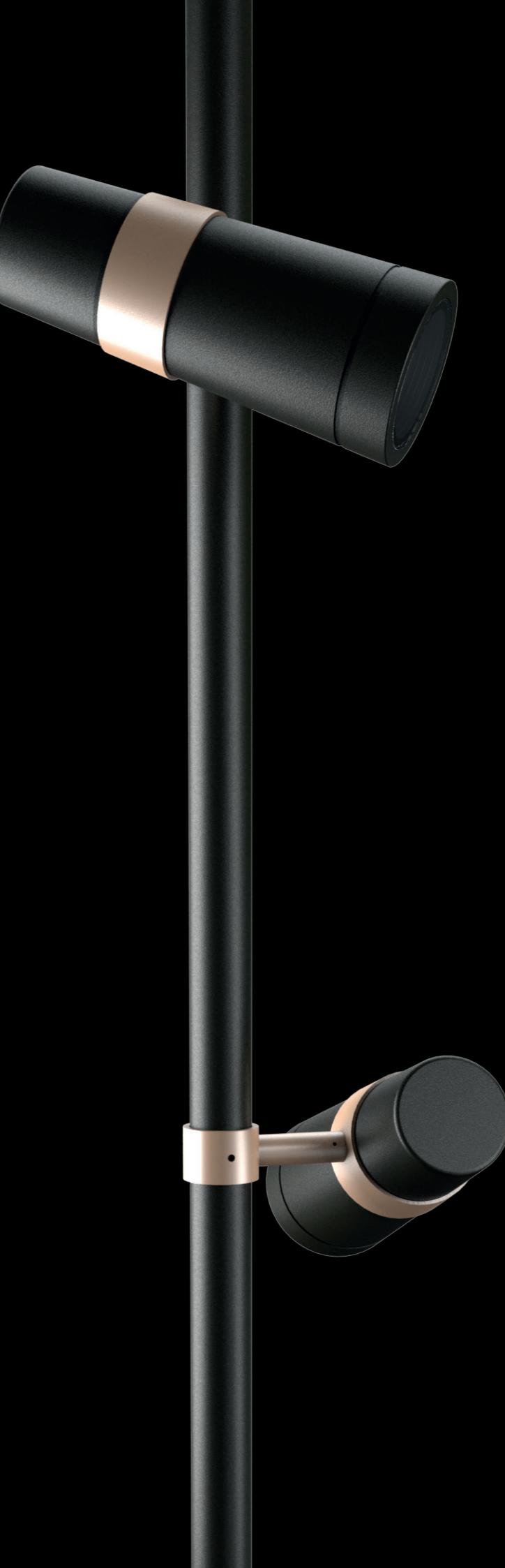
- 2200 K
- 3000 K
- 4000 K

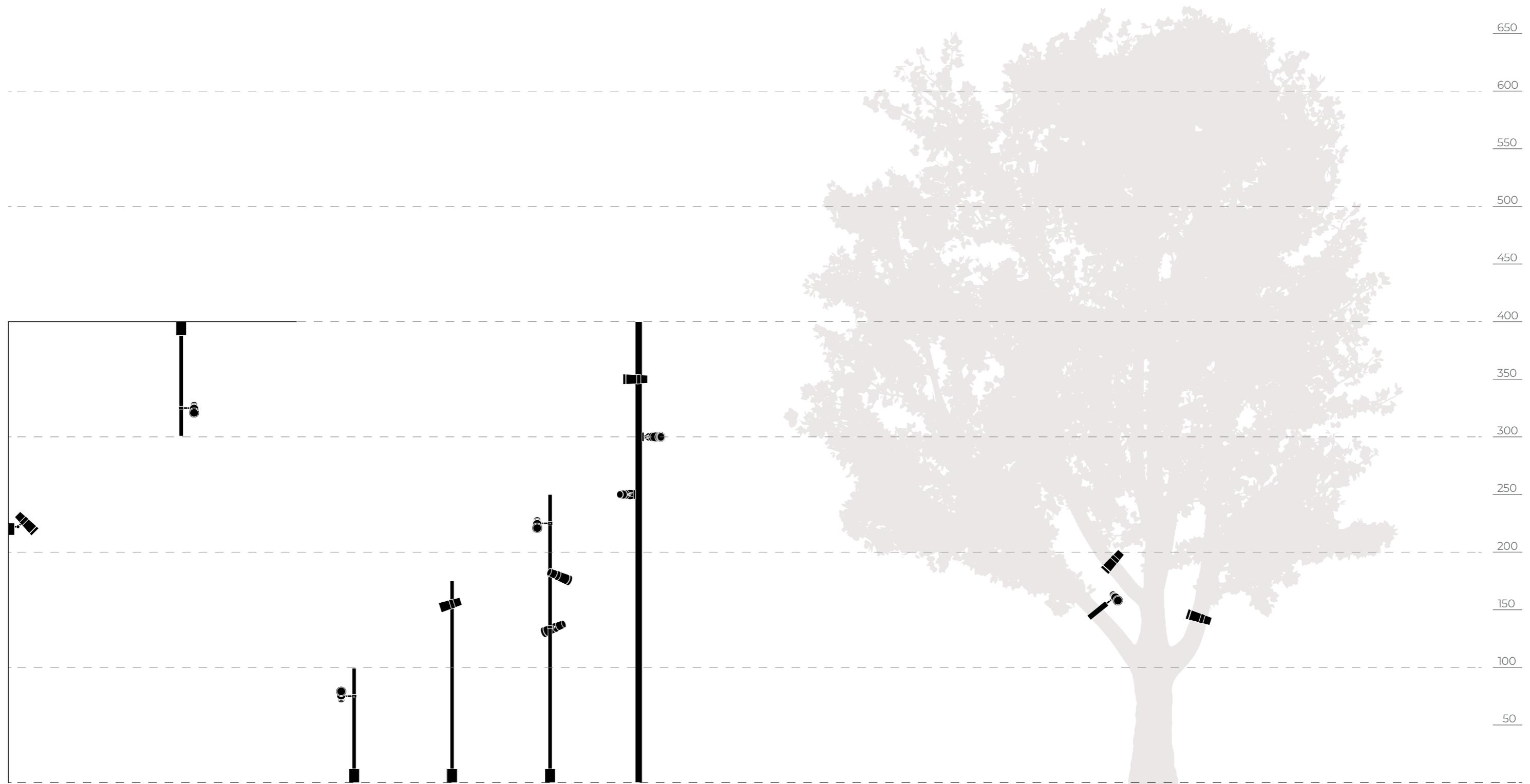


KONO ZOOM

Kono Zoom è un proiettore che si distingue per una sofisticata tecnologia ottica e una raffinata ricerca estetica. E' ideale per l'illuminazione d'accento e diffusa di spazi esterni d'interesse artistico e architettonico.

Kono Zoom is a floodlight characterised by sophisticated optical technology and refined aesthetic research. It is ideal for accent and diffused lighting of outdoor spaces of artistic and architectural interest.





220-240V 24V (RGBW / TW)	50 60Hz	CL II	IP66	IK07	ta -30°C +50°C
-----------------------------	------------	-------	------	------	----------------------

**DATI PRESTAZIONALI / PERFORMANCE DATA**

Flusso apparecchio / Fitting flux:
72 - 474 lm

Potenza apparecchio / Fitting power:
10W

Indice di resa cromatica / Colour Rendering Index:
CRI ≥ 80, SMCD ≤ 3

Illuminazione intelligente / Smart lighting:
DALI, driver esterno / DALI, external driver

**TEMPERATURA COLORE
COLOUR TEMPERATURE**

- 3000 K
- 4000 K
- RGB+W 3000 K
- TUNABLE WHITE 2200 K ÷ 4000 K

MATERIALI / MATERIALS

Corpo e sistemi di fissaggio / Body and fitting system:
pressofusione di lega d'alluminio UNI EN AB 47100
(contenuto rame < 1%) / die-cast aluminum alloy UNI EN
AB 47100 (copper content < 1%)

Schermo / Screen:
vetro piano temprato
tempered flat glass

Gruppo ottico / Optical unit:
lente in vetro stampato
moulded glass lens

Finitura / Finish:
fosfocromatazione e verniciatura in polveri di poliestere
realizzata in 16 fasi per la miglior resistenza agli
agenti atmosferici / phospho-chromatation treated
and polyester powder-coated in 16 phases to increase
weather resistance

CARATTERISTICHE / FEATURES

Peso massimo / Max weight:
1 kg

Alimentazione elettronica / Electronic power supply:
inclusa (versione ON-OFF) / included (ON-OFF version)

Precablaggio / pre-wiring:
versioni con sostegni fornite con cavo e connettore
versions with rod supplied with cable and connector

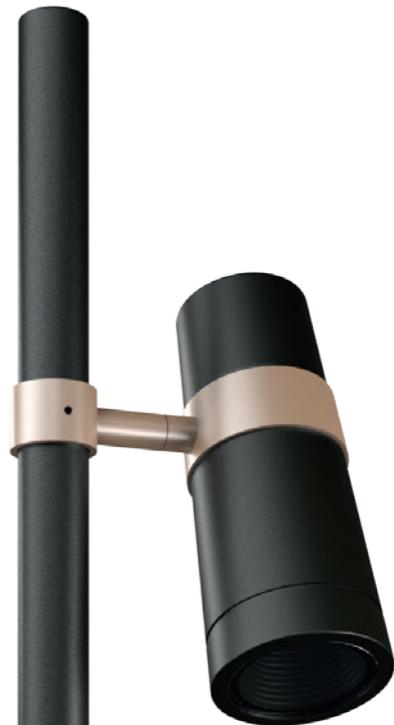
Installazione / Installation:
parete, soffitto, terra / wall, ceiling, ground

COLORI / COLOURS

- SABLE' 100 NOIR (*) / CHAMPAGNE (**)
- BIANCO RAL 9003 (*) / CHAMPAGNE (**)
- CORTEN (*) / CHAMPAGNE (**)

* **Corpo / Body**

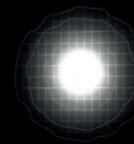
** **Sistema di fissaggio e anello**
Fitting system and ring



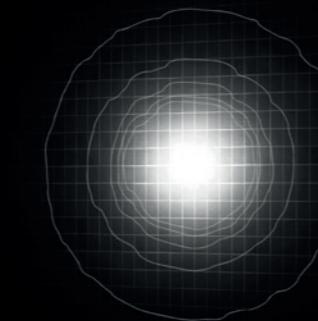
OTTICHE / OPTICS

Zoom circolare (10° ÷ 45°) / Round zoom (10° ÷ 45°)

Min.



Max.

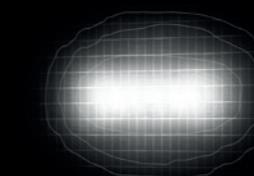


Zoom ellissoidale (10° ÷ 45°) - 90° / Ellipsoidal zoom (10° to 45°) - 90°

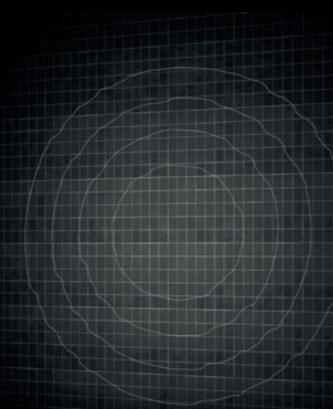
Min.



Max.

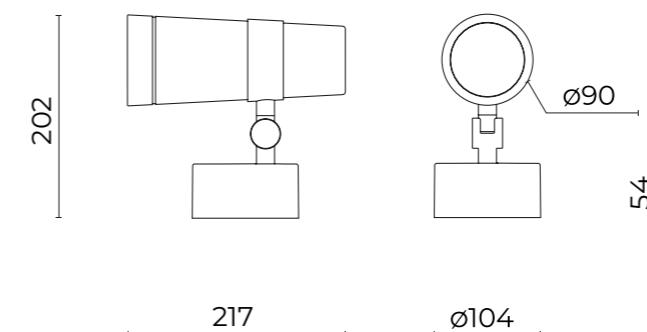


U-D 90° Ultra-diffondente / Ultra-wide beam



Kono Zoom

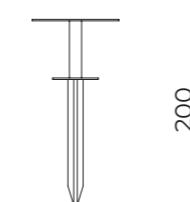
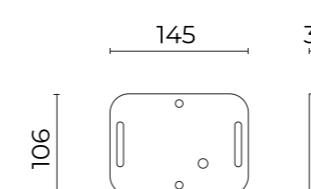
Flood



DATI TECNICI / TECHNICAL DATA

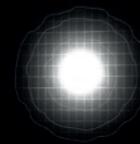
Installazione / Installation:
parete, terra / wall, ground**Inclinazione** / Inclination:
-60° ÷ +90°; rotazione + 359°
-60° ÷ +90°; rotation + 359°**Ottiche Zoom** / Zoom optics:
possibilità di regolazione del fascio luminoso
dall'esterno, ruotando la ghiera posteriore, con il
prodotto installato e acceso per l'ottimizzazione del
puntamento / the light beam can be adjusted from
outside, by turning the rear ring , while product is
installed and switched on for pointing optimisation.

ACCESSORI / ACCESSORIES

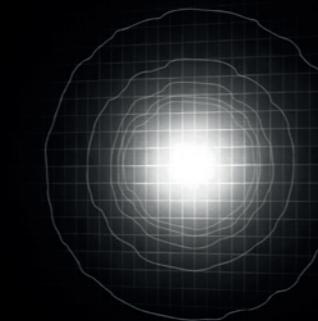
060M901C0
B135 - Picchetto per interramento
Picket for ground installation**06KN901C0**
B233 Cinghia di ancoraggio per alberi
Ø150-600 mm / Tree lashing strap
Ø150-600 mm

Zoom circolare (10° ÷ 45°) / Round zoom (10° ÷ 45°)

Min.



Max.

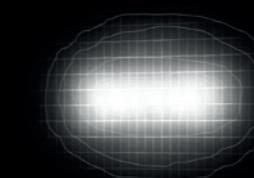


Zoom ellissoidale (10° ÷ 45°) - 90° / Ellipsoidal zoom (10° to 45°) - 90°

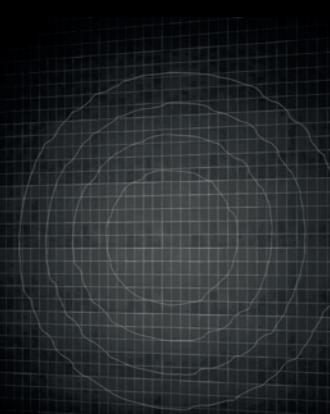
Min.



Max.

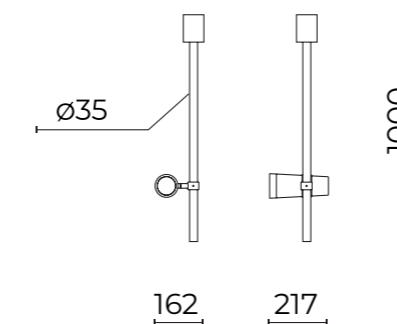


U-D 90° Ultra-diffondente / Ultra-wide beam



Kono Zoom

Wall, Ceiling



DATI TECNICI / TECHNICAL DATA

Installazione / Installation:
parete, soffitto / wall, ceiling

Inclinazione / Inclination:
+/- 359°

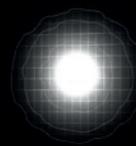
Ottiche Zoom / Zoom optics:
possibilità di regolazione del fascio luminoso
dall'esterno, ruotando la ghiera posteriore,
con il prodotto installato e acceso per
l'ottimizzazione del puntamento / the light
beam can be adjusted from outside, by turning
the rear ring , while product is installed and
switched on for pointing optimisation.



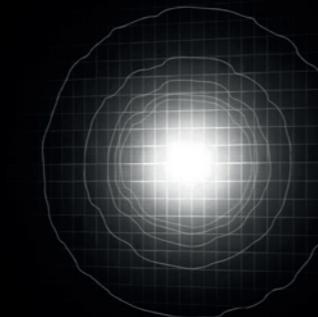
OTTICHE / OPTICS

Zoom circolare (10° ÷ 45°) / Round zoom (10° ÷ 45°)

Min.



Max.

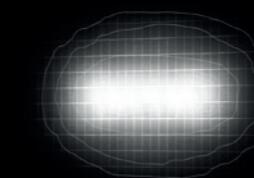


Zoom ellisoidale (10° ÷ 45°) - 90° / Ellipsoidal zoom (10° to 45°) - 90°

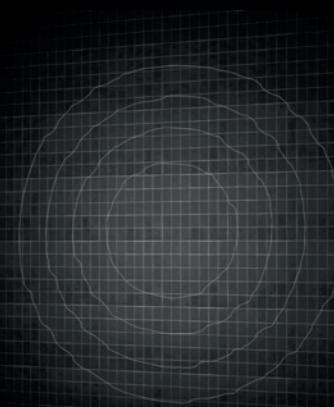
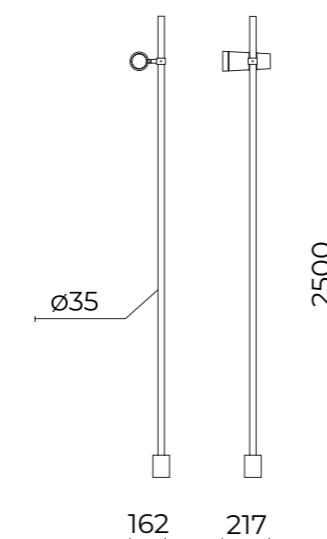
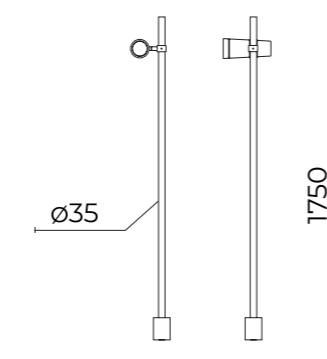
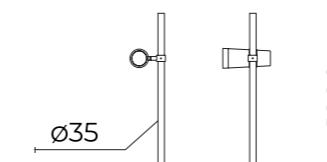
Min.



Max.



U-D 90° Ultra-diffondente / Ultra-wide beam

Kono Zoom
Bollard

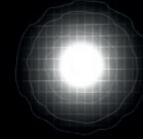
DATI TECNICI / TECHNICAL DATA

Installazione / Installation:
terra / ground**Inclinazione** / Inclination:
+/- 359°**Ottiche Zoom** / Zoom optics:
possibilità di regolazione del fascio
luminoso dall'esterno, ruotando la
ghiera posteriore, con il prodotto
installato e acceso per l'ottimizzazione
del puntamento / the light beam can be
adjusted from outside, by turning the
rear ring , while product is installed and
switched on for pointing optimisation.

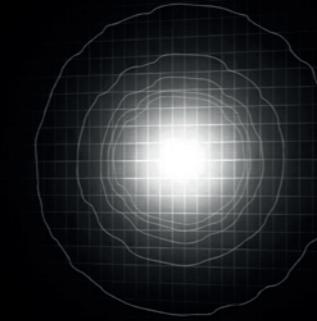
OTTICHE / OPTICS

Zoom circolare (10° ÷ 45°) / Round zoom (10° ÷ 45°)

Min.

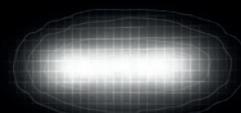


Max.

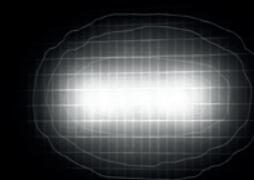


Zoom ellissoidale (10° ÷ 45°) - 90° / Ellipsoidal zoom (10° to 45°) - 90°

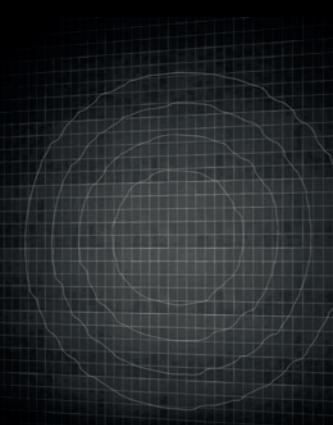
Min.



Max.



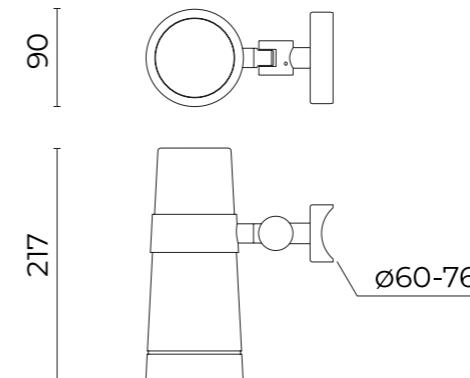
U-D 90° Ultra-diffondente / Ultra-wide beam



Kono Zoom

Pole

162



DATI TECNICI / TECHNICAL DATA

Installazione / Installation:
terra / ground**Inclinazione** / Inclination:
+/- 359°

ACCESSORI / ACCESSORIES

06KN905C0
Palo H = 4000 mm Ø 60 mm per installazione
di max N. 3 Kono / Pole H = 4000 mm Ø 60 mm
 for the installation of maximum N. 3 Kono Flood



KINETIC

Ogni luogo è diverso ed ogni luogo merita la propria luce: KINETIC è una soluzione professionale ed estremamente flessibile che offre nuovi modi di raccontare la città e le sue architetture.

Every place is different and deserves its own light: KINETIC is a professional and extremely flexible solution that offers new ways of telling the story of the city and its architecture.



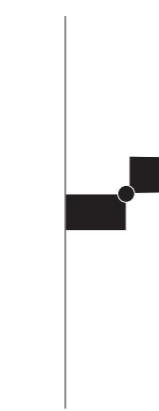
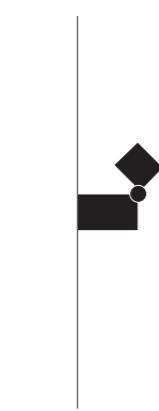
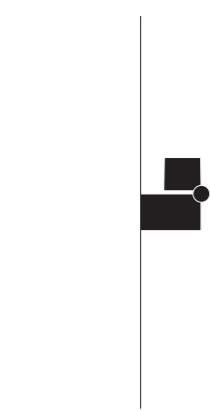
MONOEMISSION

CEILING

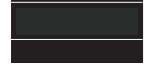


GROUND

WALL



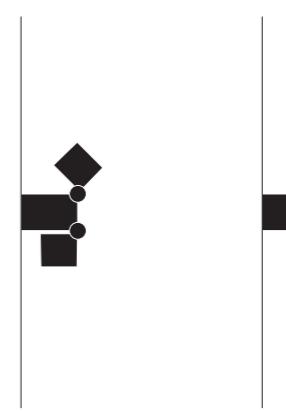
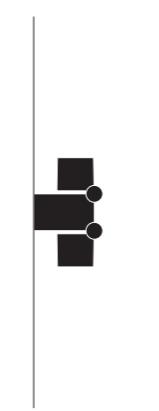
GROUND



CEILING



WALL



GROUND



220-240V 24VDC (RGBW / TW)	50 60Hz	CL II	IP65	IK07	ta -30°C +40°C
-------------------------------	------------	-------	------	------	----------------------



DATI PRESTAZIONALI / PERFORMANCE DATA

Flusso apparecchio / Fitting flux:
400 - 2800 lm

Potenza apparecchio / Fitting power:
5 - 46 W

Indice di resa cromatica / Colour Rendering Index:
CRI ≥ 80, SMCD ≤ 3

Illuminazione intelligente / Smart lighting:
DALI

TEMPERATURA COLORE COLOUR TEMPERATURE

- 2200 K
- 3000 K
- 4000 K
- RGB+W 3000 K
- TUNABLE WHITE 2200 K ÷ 4000 K

MATERIALI / MATERIALS

Corpo e sistemi di fissaggio / Body and fitting system:
presso-fusione di lega d'alluminio UNI EN AB 47100
(contenuto rame < 1%) / die-cast aluminium alloy UNI EN
AB 47100 (copper content < 1%)

Schermo / Screen:
vetro piano temprato / tempered flat glass

Gruppo ottico / Optical unit:
lenti PMMA ad alta trasparenza
PMMA high transparent lenses

Finitura / Finish:
fosfocromatazione e verniciatura in polveri di poliestere
realizzata in 16 fasi per la miglior resistenza agli
agenti atmosferici / phospho-chromatation treated
and polyester powder-coated in 16 phases to increase
weather resistance

COLORI / COLOURS

- SABLÉ 100 NOIR
- RAL9006
- CORTEN
- RAL9003



CARATTERISTICHE / FEATURES

Peso massimo / Max weight:
5 kg (mono-emissione), 6,5 kg (bi-emissione)
5 kg (mono-emission), 6,5 kg (bi-emission)

Alimentazione elettronica / Electronic power supply:
inclusa (versioni ON-OFF, DALI), esclusa (versioni
RGBW, TW) / included (ON-OFF, DALI versions),
external (RGBW, TW versions)

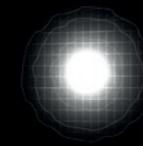
Installazione / Installation:
parete, soffitto, terra
wall, ceiling, ground

Fissaggio / Fixing system:
con tassellia
with plug

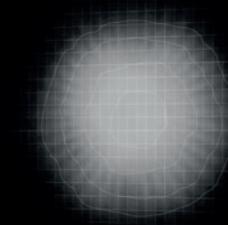
OTTICHE / OPTICS

PROJECTION LIGHT

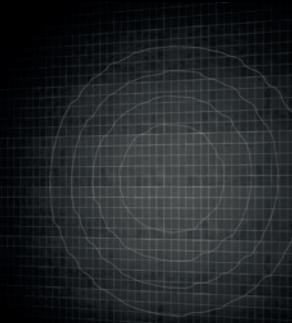
M 18" Fascio medio / Medium Beam



D 40° Diffondente / Wide beam

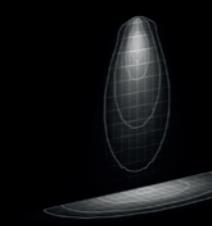


U-D 90° Ultra-diffondente / Diffuse beam

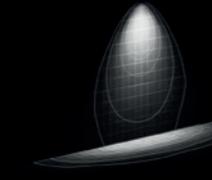


GRAZING LIGHTING

18° Grazer



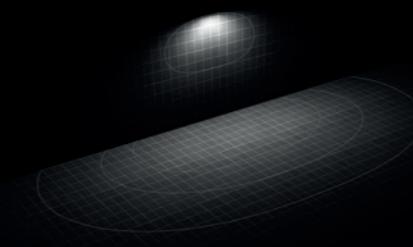
40°x 20°x A7,5° Grazer



U-D 75°x 18°x A11° Grazer



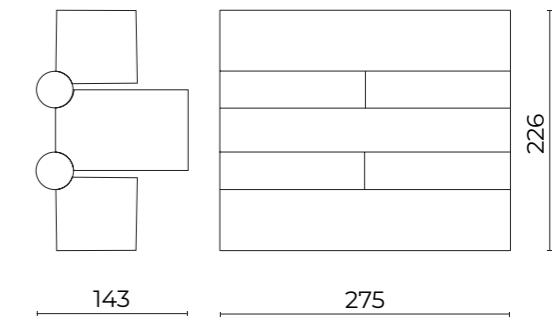
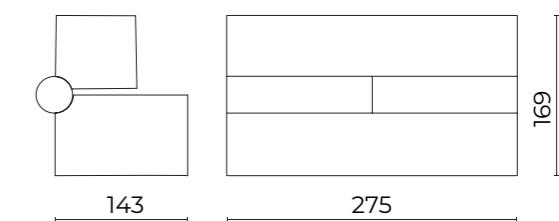
ASYMMETRICAL LIGHTING

AS-D 80°x 70°x A33°
Asimmetrica diffondente
Asymmetrical wide beam

* Le ottiche sono combinabili per le versioni bi-emissione.
* The optics are combinable for bi-emission versions.

Kinetic

Wall



DATI TECNICI / TECHNICAL DATA

Installazione / Installation:
parete / wall

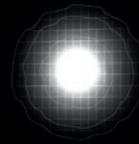
Inclinazione / Inclination:
-5° ÷ +165°



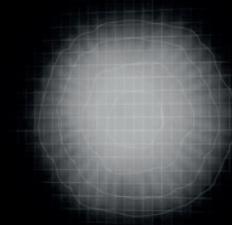
OTTICHE / OPTICS

PROJECTION LIGHT

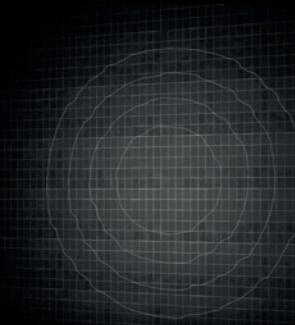
M 18" Fascio medio / Medium Beam



D 40° Diffondente / Wide beam

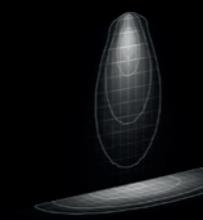


U-D 90° Ultra-diffondente / Diffuse beam

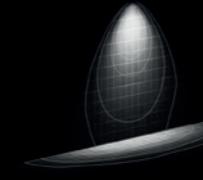


GRAZING LIGHTING

18° Grazer



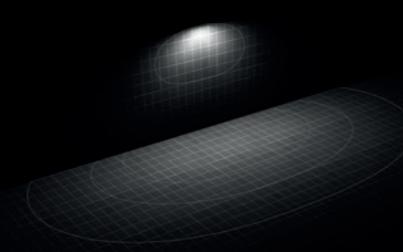
40°x 20°x A7,5° Grazer



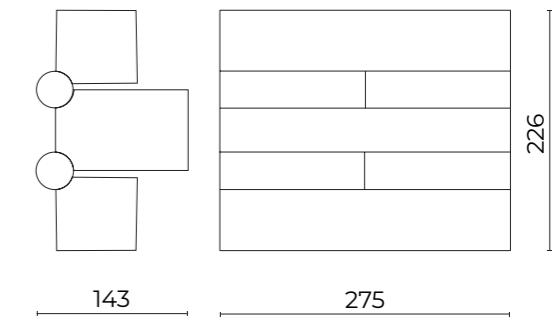
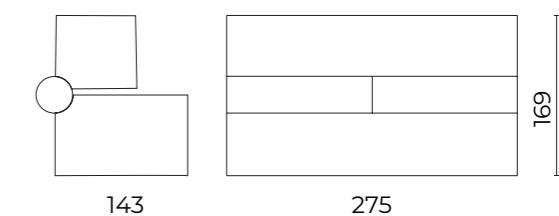
U-D 75°x 18°x A11° Grazer



ASYMMETRICAL LIGHTING

AS-D 80°x 70°x A33°
Asimmetrica diffondente
Asymmetrical wide beam

* Le ottiche sono combinabili per le versioni bi-emissione.
* The optics are combinable for bi-emission versions.

Kinetic
Ceiling

DATI TECNICI / TECHNICAL DATA

Installazione / Installation:
soffitto / ceiling

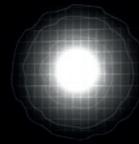
Inclinazione / Inclination:
-5° ÷ +165°



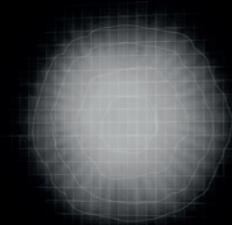
OTTICHE / OPTICS

PROJECTION LIGHT

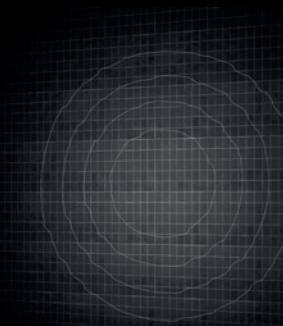
M 18" Fascio medio / Medium Beam



D 40° Diffondente / Wide beam

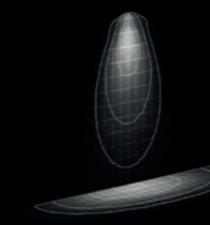


U-D 90° Ultra-diffondente / Diffuse beam

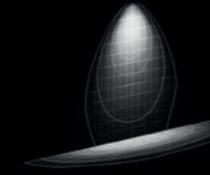


GRAZING LIGHTING

18° Grazer



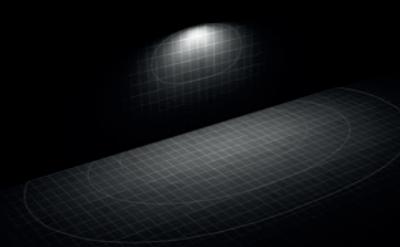
40°x 20°x A7,5° Grazer



U-D 75°x 18°x A11° Grazer

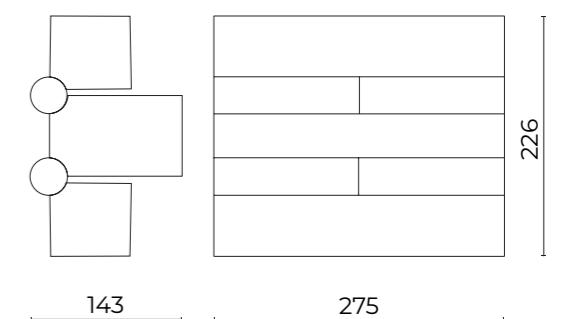
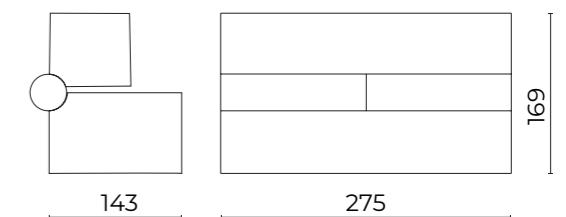


ASYMMETRICAL LIGHTING

AS-D 80°x 70°x A33°
Asimmetrica diffondente
Asymmetrical wide beam

* Le ottiche sono combinabili per le versioni bi-emissione.

* The optics are combinable for bi-emission versions.

Kinetic
Ground

DATI TECNICI / TECHNICAL DATA

Installazione / Installation:
terra / ground**Inclinazione** / Inclination:
-5° ÷ +165°

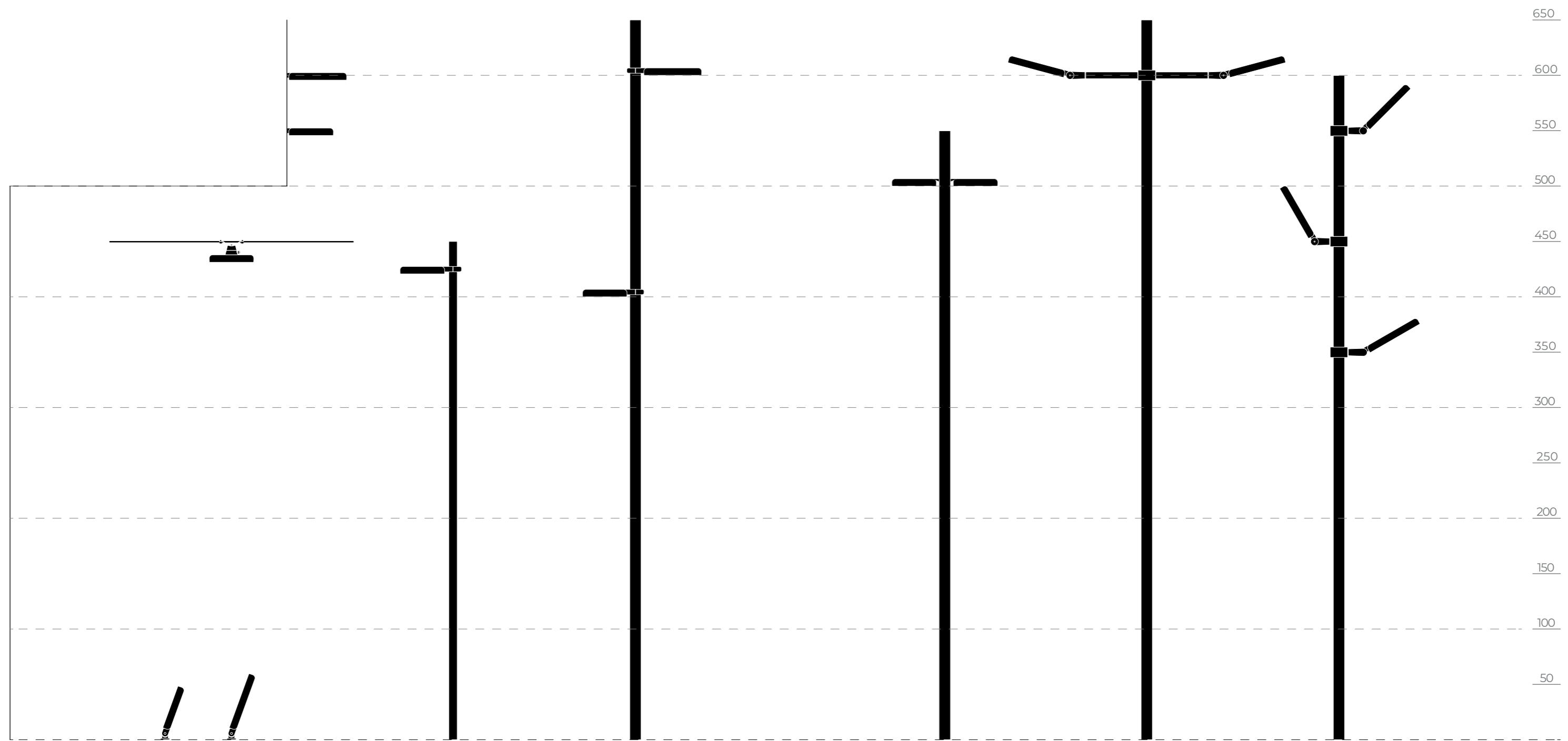
LEVANTE

2.0

Levante 2.0 è un sistema completo e flessibile per l'illuminazione di vuoti e pieni urbani: percorsi, spazi e architetture.

Levante 2.0 is a complete flexible system for lighting empty and full urban locations: pathways, spaces and architecture.





220-240V	50
24V (RGBW / TW)	60Hz
CL II	
IP66	
IK08 (U-D 90°)	IK09
ta -30°C +50°C	



DATI PRESTAZIONALI / PERFORMANCE DATA

Flusso apparecchio / Fitting flux:
1200 - 22500 lm

Potenza apparecchio / Fitting power:
12 - 155 W

Indice di resa cromatica / Colour Rendering Index:
≥ 70, SDCM ≤ 4 (ottiche stradali) / (street optics)
≥ 80, SDCM ≤ 3 (ottiche proiezione) / (projection optics)

Illuminazione intelligente / Smart lighting:
mezzanotte virtuale, DALI. Su richiesta ZHAGA UP&DOWN, CLO, PLC, telegestione wireless, sensori / virtual midnight, DALI. On request ZHAGA UP&DOWN, CLO, PLC, wireless telemanagement, detectors

MATERIALI / MATERIALS

Corpo e sistemi di fissaggio / Body and fitting system:
presso-fusione di lega d'alluminio UNI EN AB 47100
(contenuto rame < 1%) / die-cast aluminium alloy UNI EN AB 47100 (copper content < 1%)

Schermo / Screen:
vetro piano temprato / tempered flat glass

Gruppo ottico / Optical unit:
lenti PMMA ad alta trasparenza
PMMA high transparent lenses

Finitura / Finish:
fosfocromatazione e verniciatura in polveri di poliestere realizzata in 16 fasi per la miglior resistenza agli agenti atmosferici / phospho-chromatation treated and polyester powder-coated in 16 phases to increase weather resistance

TEMPERATURA COLORE COLOUR TEMPERATURE

- 2200 K
- 3000 K
- 4000 K
- RGB+W 3000 K

ECO-CENTRIC LIGHTING (ONLY FOR STREET OPTICS)

BLUE FREE LIGHT:
PC-AMBER 0,7% ΣR ($\lambda < 500\text{NM}$) — CRI 40
1800 K 4,3% ΣR ($\lambda < 500\text{NM}$) — CRI 70

SWITCHABLE WHITE LIGHT:
1800K ÷ 3000K

COLORI / COLOURS

- SABLÉ 100 NOIR
- RAL9006

CARATTERISTICHE / FEATURES

Peso massimo / Max weight:
6 kg (small), 9 kg (medium)

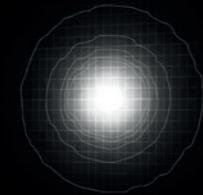
Alimentazione elettronica / Electronic power supply:
inclusa / included

Installazione / Installation:
parete, soffitto, terra, palo, sospensione tesata
wall, ceiling, ground, pole, string suspension

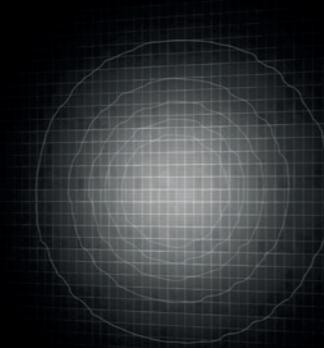


OTTICHE / OPTICS

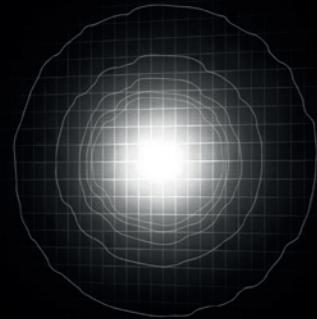
U-C 6° Ultra-concentrante / Ultra-narrow beam



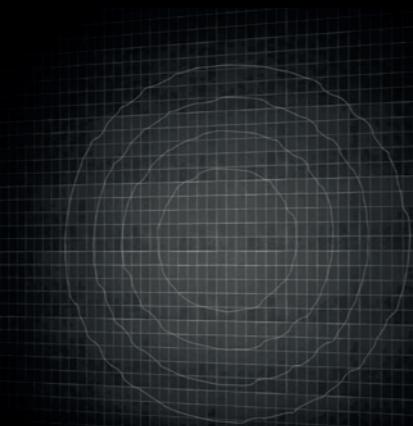
D 40° Diffondente / Wide beam



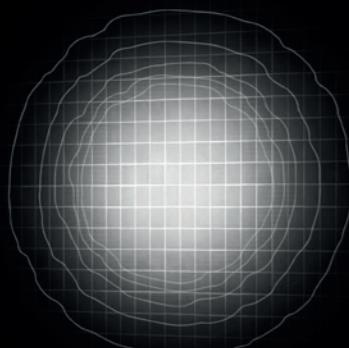
C 11° Concentrante / Narrow beam



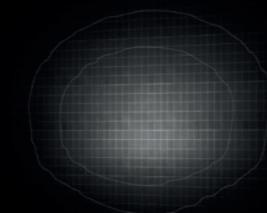
U-D 90° Ultra-diffondente / Diffuse beam



M 25° Fascio medio / Medium beam



W-W Wall washer

ECO-CENTRIC LIGHTING
SWITCHABLE WHITE LIGHT

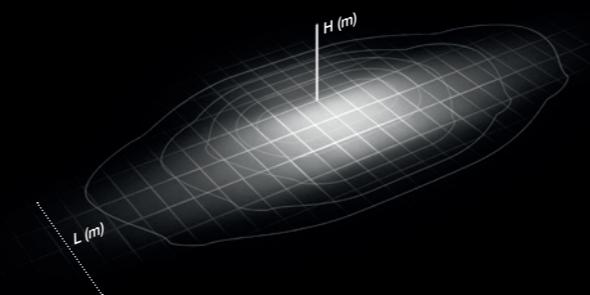
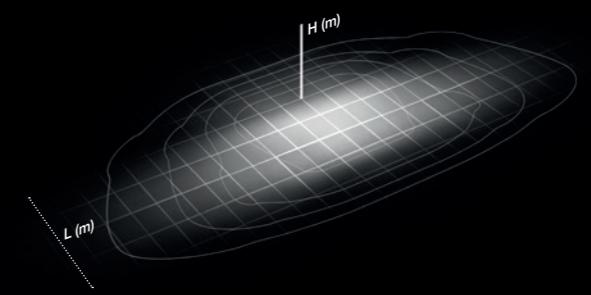
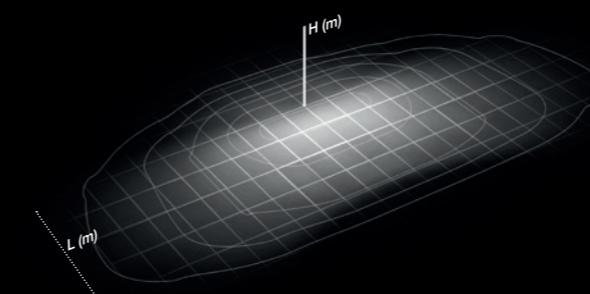
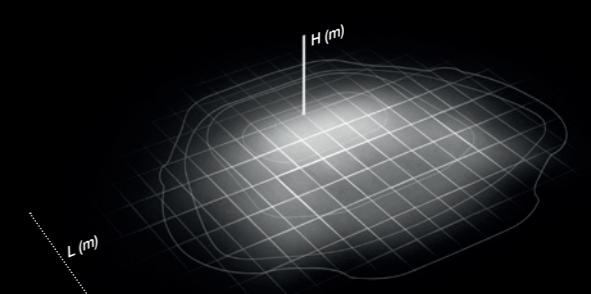
1800 K / 3000 K

BLUE FREE LIGHT

1800 K PC-AMBER

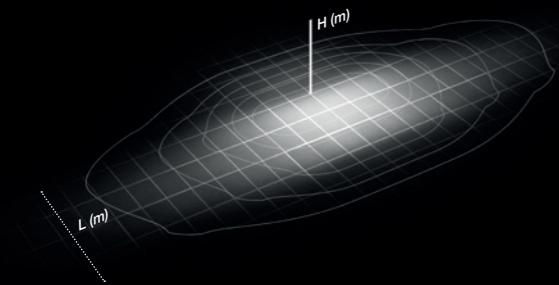
*Levante 2.0 è un sistema modulare e componibile. Il progettista può combinare qualsiasi distribuzione luminosa con ognuno dei sistemi di fissaggio per realizzare configurazioni originali e flessibili ad ogni contesto.

* Levante 2.0 is a modular and combinable system. The designer can combine any light distribution with each of the fixing systems to create original and flexible configurations for any context.

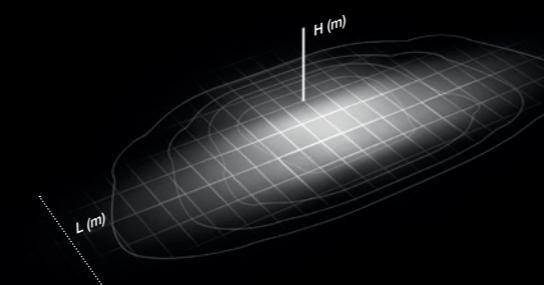
ST-01 Asimmetrica stradale / Street asymmetrical
 $L / H = 0,75$ ME-01 Asimmetrica stradale / Street asymmetrical
 $L / H = 1$ LA-01 Asimmetrica stradale / Street asymmetrical
 $L / H = 1,25$ LT-06 Asimmetrica / Asymmetrical
 $L / H = 2$ 

OTTICHE / OPTICS

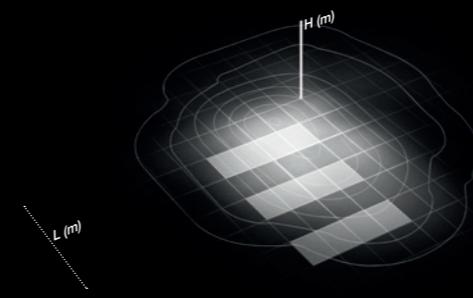
ST-02 Strade strette / Narrow street
 $L / H = 0,75$



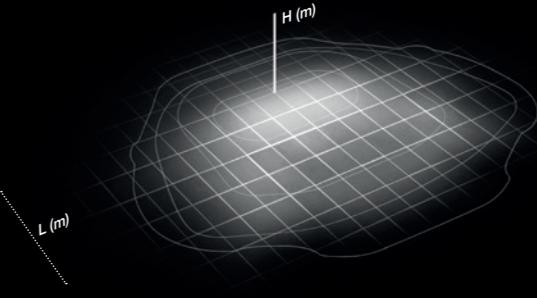
ME-05 Strade medie / Medium street
 $L / H = 1$



AP-01 DX - Attraversamenti pedonali
Pedestrian crossing

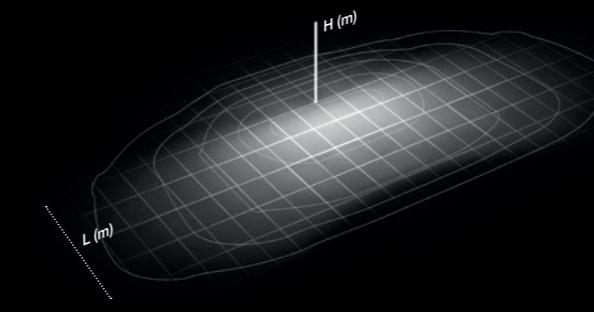
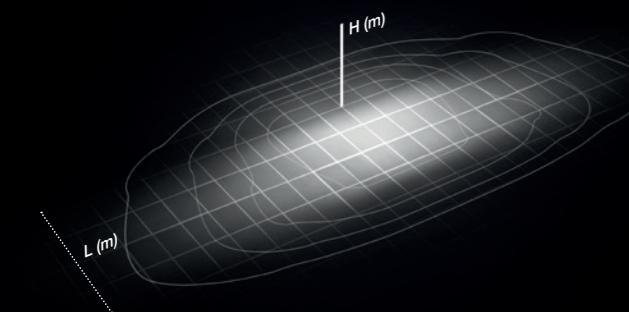


LT-64 Asimmetrica / Asymmetrical
 $L / H = 2$

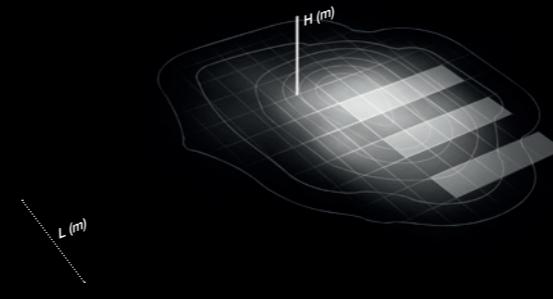


ME-06 Strade medie / Medium street
 $L / H = 1$

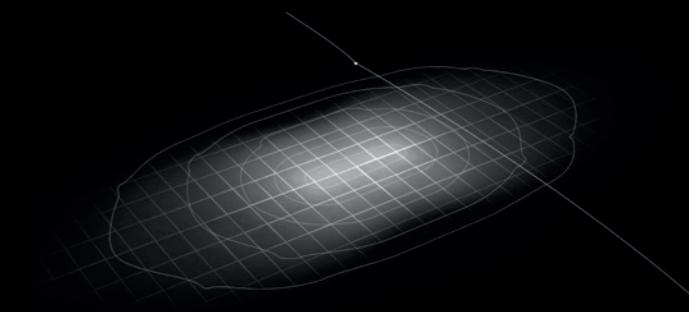
LA-03 Strade larghe / Wide street
 $L / H = 1,25$



AP-01 SX - Attraversamenti pedonali
Pedestrian crossing

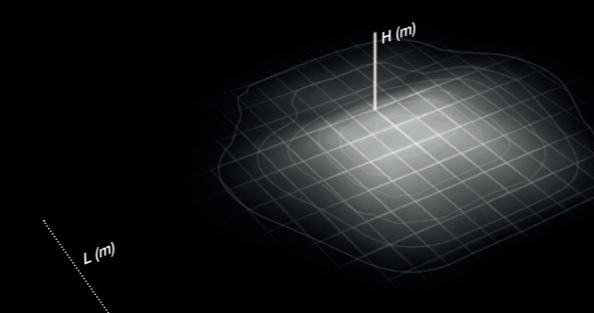
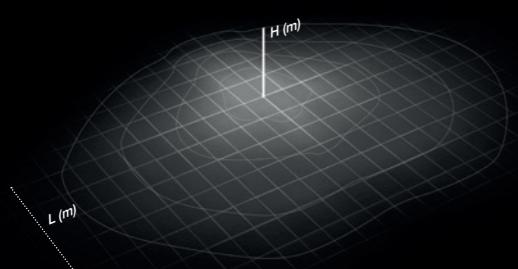


SO-02 Simmetrica stradale / Street



PB-01 Pali bassi / Low Pole
 $L / H = 2$

LT-63 Asimmetrica / Asymmetrical
 $L / H = 2$



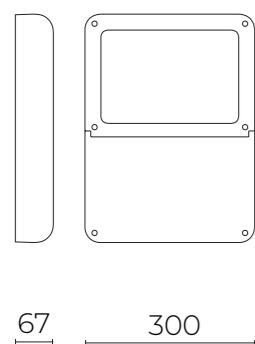
*Levante 2.0 è un sistema modulare e componibile. Il progettista può combinare qualsiasi distribuzione luminosa con ognuno dei sistemi di fissaggio per realizzare configurazioni originali e flessibili ad ogni contesto.

* Levante 2.0 is a modular and combinable system. The designer can combine any light distribution with each of the fixing systems to create original and flexible configurations for any context.

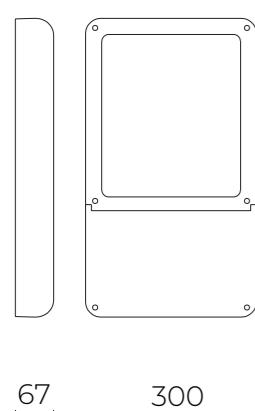
Levante 2.0

Wall

SMALL



MEDIUM



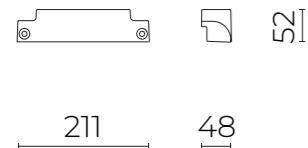
DATI TECNICI / TECHNICAL DATA

Installazione / Installation:
parete / wall

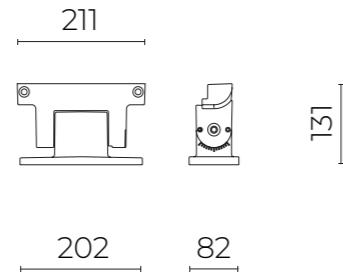
Orientabilità / Orientability:
con giunto inclinazione $\pm 90^\circ$, rotazione $\pm 15^\circ$
with joint tilt $\pm 90^\circ$, rotation $\pm 15^\circ$

ACCESSORI / ACCESSORIES

06LN900CO
Staffa fissa
Fixed bracket



06LN901CO
Giunto orientabile
Adjustable joint



Levante 2.0

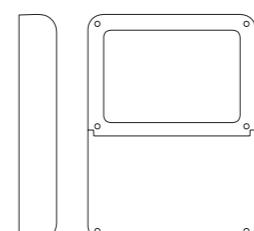
Flood

DATI TECNICI / TECHNICAL DATA

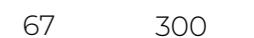
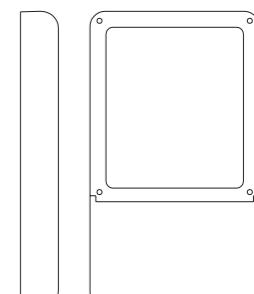
Installazione / Installation:
parete, soffitto, terra con accessori
wall, ceiling, ground with accessories

Orientabilità / Orientability:
con giunto inclinazione $\pm 90^\circ$, rotazione $\pm 15^\circ$ / with joint tilt $\pm 90^\circ$,
rotation $\pm 15^\circ$

SMALL

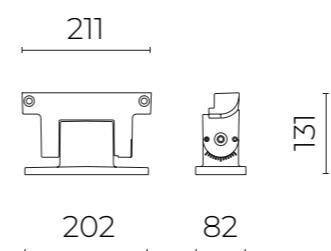


MEDIUM

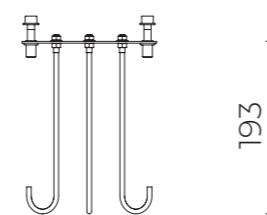


ACCESSORI / ACCESSORIES

06LN901CO
Giunto orientabile
Adjustable joint



06LT909J0
B118 - Ancore per calcestruzzo
Anchor for concrete



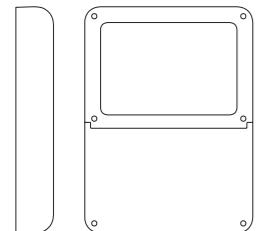
Levante 2.0

Poles

DATI TECNICI / TECHNICAL DATA**Installazione / Installation:**

palo Ø 60 - 76 - 102 mm

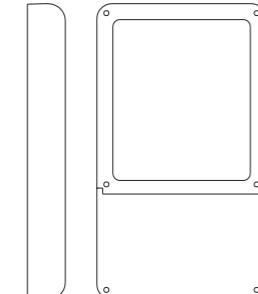
pole Ø 60 - 76 - 102 mm

SMALL

67

300

400

MEDIUM

67

300

400

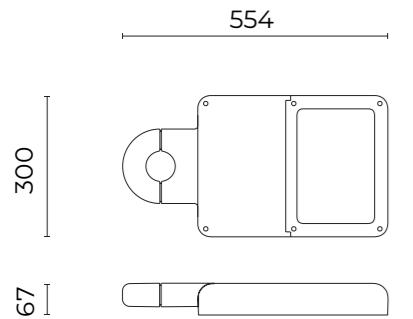
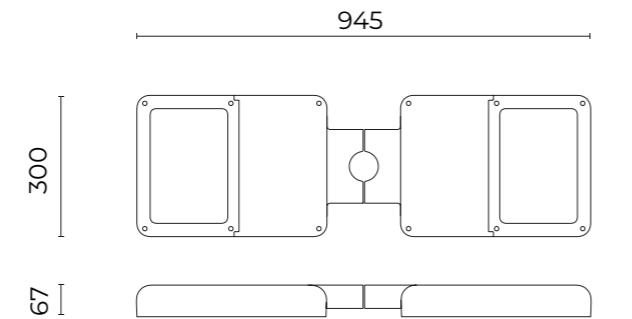
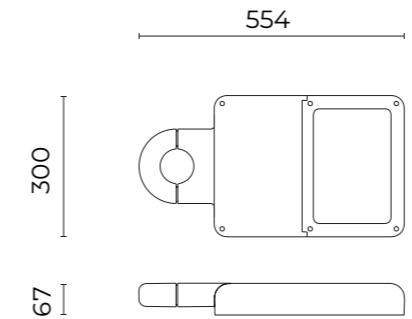
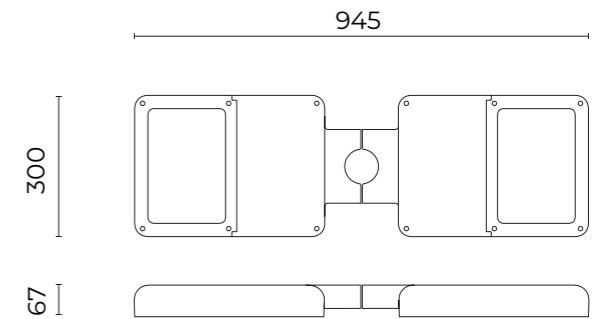
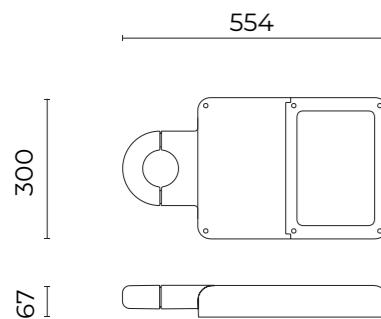
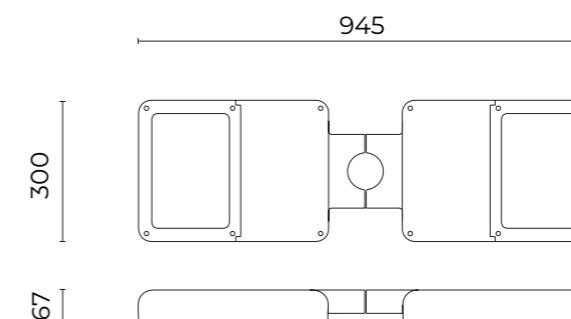
Levante 2.0

Poles



Levante 2.0

Poles

ACCESSORI / ACCESSORIES**06LN902AO - RAL9006****06LN902CO - Sablè 100 Noir**B226 - Collare singolo per pali Ø 60 mm
Single collar for poles Ø 60 mm**06LN905AO - RAL9006****06LN905CO - Sablè 100 Noir**B229 - Collare doppio per pali Ø 60 mm
Double collar for poles Ø 60 mm**06LN903AO - RAL9006****06LN903CO - Sablè 100 Noir**B227 - Collare singolo per pali Ø 76 mm
Single collar for poles Ø 76 mm**06LN906AO - RAL9006****06LN906CO - Sablè 100 Noir**B230 - Collare doppio per pali Ø 76 mm
Single collar for poles Ø 76 mm**06LN904CO - RAL9006****06LN904CO - Sablè 100 Noir**B228 - Collare singolo per pali Ø 102 mm
Single collar for poles Ø 102 mm**06LN907AO - RAL9006****06LN907CO - Sablè 100 Noir**B231 - Collare doppio per pali Ø 102 mm
Single collar for poles Ø 102 mm

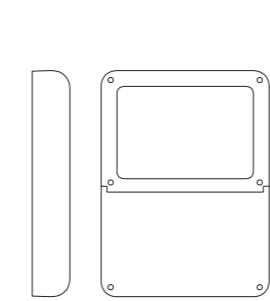
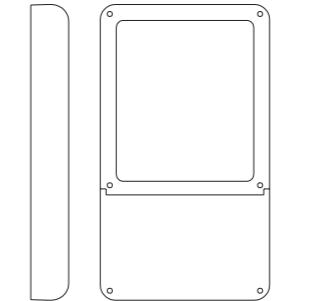
Levante 2.0

Brackets & poles

DATI TECNICI / TECHNICAL DATA

Installazione / Installation:
 palo Ø 60 - 76 - 102 mm
 pole Ø 60 - 76 - 102 mm

Orientabilità / Orientability:
 con giunto inclinazione -70° ÷ +90°,
 rotazione 0° / 180°
 with joint tilt -70° ÷ +90°;
 rotation 0° / 180°

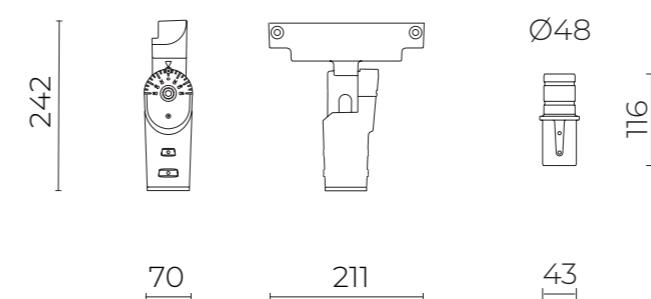
**SMALL****MEDIUM**

67 300

67 300

ACCESSORI / ACCESSORIES

06LN908AO - RAL9006
06LN908CO - Sablè 100 Noir
 B232 - Giunto orientabile per bracci e pali Ø 60 mm
 Adjustable joint for arm and poles Ø 60 mm

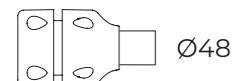


Levante 2.0

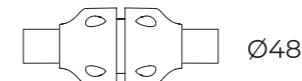
Brackets and poles

ACCESSORI E BRACCI / ACCESSORIES AND ARMS:

06AK903AO - RAL9006
06AK903CO - Sablè 100 Noir
L3 - Kit giunto per palo
 Joint kit for pole

Ø60-76**Ø48****143**

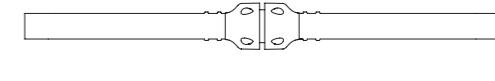
06AK904AO - RAL9006
06AK904CO - Sablè 100 Noir
L4 - Kit giunto doppio per palo
 Double joint kit for pole

Ø60-76**Ø48****173**

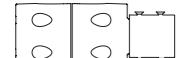
06AK921AO - RAL9006
06AK921CO - Sablè 100 Noir
B1 - Braccio per pali
 Arm for poles

Ø60-76**550**

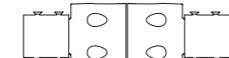
06AK922AO - RAL9006
06AK922CO - Sablè 100 Noir
B2 - Braccio doppio per pali
 Double arm for poles

Ø60-76**550****550**

06AK916AO - RAL9006
06AK916CO - Sablè 100 Noir
B139 - Anello per pali
 Ring for poles

Ø102**225**

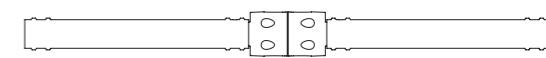
06AK917AO - RAL9006
06AK917CO - Sablè 100 Noir
B140 - Anello doppio per pali
 Double ring for poles

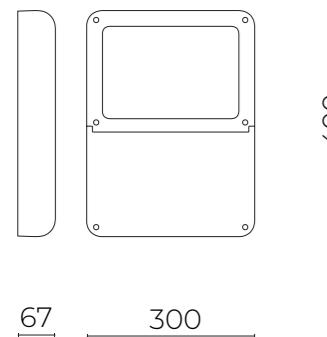
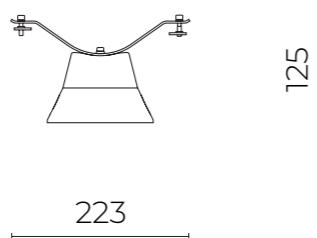
Ø102**292**

06AK907AO - RAL9006
06AK907CO - Sablè 100 Noir
B155 - Braccio per pali
 Arm for poles

Ø102**550**

06AK909AO - RAL9006
06AK909CO - Sablè 100 Noir
B157 - Braccio doppio per pali
 Double arm for poles

Ø102**550****550**

Levante 2.0
String suspension**SMALL****DATI TECNICI / TECHNICAL DATA****Installazione / Installation:**
sospensione tesata / string suspension**Inclinazione / Inclination:**
orizzontale $\pm 15^\circ$ / horizontal $\pm 15^\circ$ **Orientabilità / Adjustability:**
 $0^\circ \div 360^\circ$ **ACCESSORI / ACCESSORIES****06KS902CO**
Kit sospensione su fune tesata Ø 6-12 mm
Suspension kit for string Ø 6-12 mm**Levante 2.0**
String suspension

BAMBOO

MINI

Paletti con distribuzione luminosa e
rotosimmetrica ideale per l'illuminazione
di aree verdi.

Bollards with rotosymmetrical light
distribution, ideal for lighting green areas.



220 240V	50 60Hz	CL II	IP65	IK09	ta -30°C +50°C
-------------	------------	-------	------	------	----------------------

**DATI PRESTAZIONALI / PERFORMANCE DATA****Flusso apparecchio / Fitting flux:**

475 - 500 lm

Potenza apparecchio / Fitting power:

7,6 W

Indice di resa cromatica / Colour Rendering Index:

CRI ≥ 80, SDCM ≤ 3

Illuminazione intelligente / Smart lighting:

DALI, driver esterno / DALI, external driver

MATERIALI / MATERIALS**Corpo, collimatore e flangia di base**

Body, collimator and fixing base:

presso-fusione di lega d'alluminio UNI EN AB 47100

(contenuto rame < 1%) / die-cast aluminum alloy UNI

EN AB 47100 (copper content < 1%)

Fusto / Stem pole:

alluminio estruso

extruded aluminium alloy

Gruppo ottico / Optical unit:

policarbonato opale diffondente

wide opal polycarbonate

Finitura / Finish:

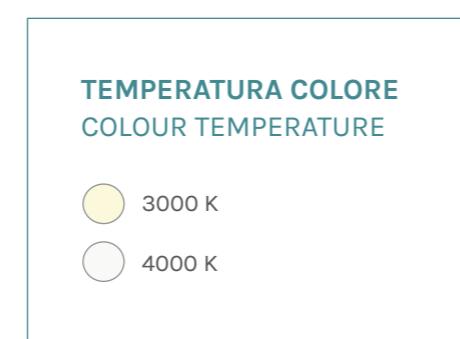
fosfocromatazione e verniciatura in polveri di

poliestere realizzata in 16 fasi per la miglior resistenza

agli agenti atmosferici / phospho-chromatation

treated and polyester powder-coated in 16 phases to

increase weather resistance

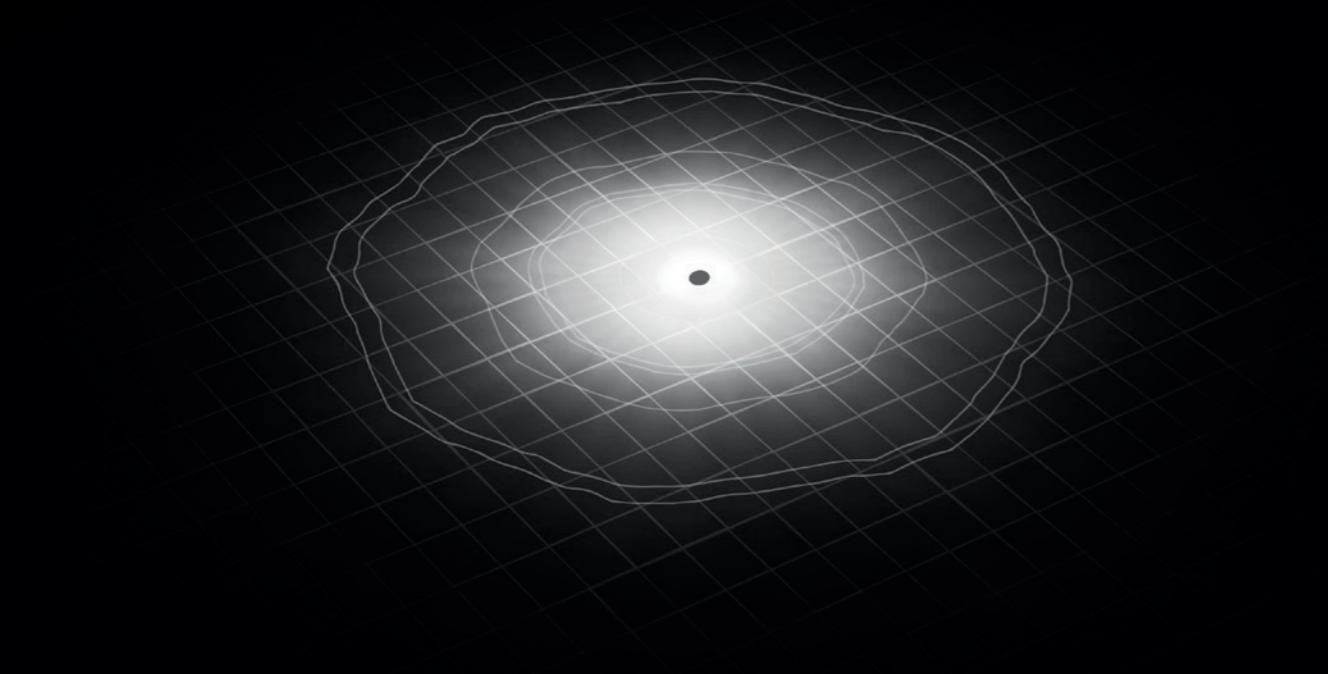
**CARATTERISTICHE / FEATURES****Peso massimo / Max weight:**

0,8 kg (grazer), 1,6 kg (bollard H 375 mm), 2,5 kg (bollard H 895 mm)

**BOLLARD
900****Alimentazione elettronica / Electronic power supply:**
inclusa (opzione ON-OFF) / included (ON-OFF option)**Precablaggio / pre-wiring:**versione bollard fornita con cavo e connettore;
predisposizione entra-esci / bollard version is supplied
with cable and connector; in and out setup**Installazione / Installation:**
terra, parete / ground, wall**Fissaggio / Fixing system:**
con tirafondi (fornibili) o tasselli / with metal anchors
(available) or plug**BOLLARD
400****GRAZER**

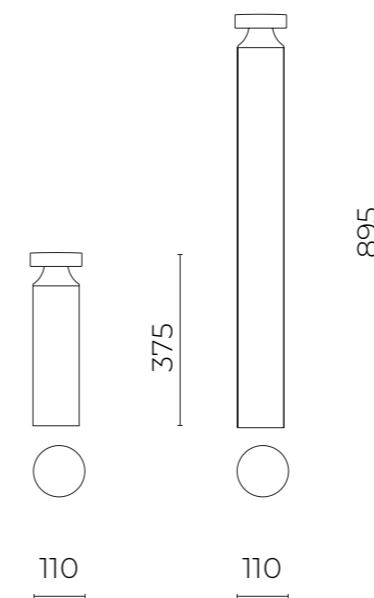
OTTICHE / OPTICS

RS-D 360° Rotosimmetrica diffondente
Rotosymmetrical wide beam



Bamboo mini

Bollard

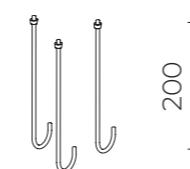


BOLLARD
900



ACCESSORI / ACCESSORIES

06PY999X0
Kit tirafondi
Anchoring bolts kit



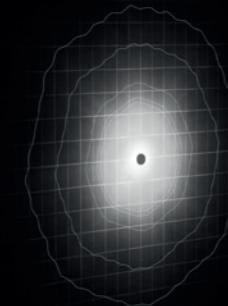
BOLLARD
400



OTTICHE / OPTICS

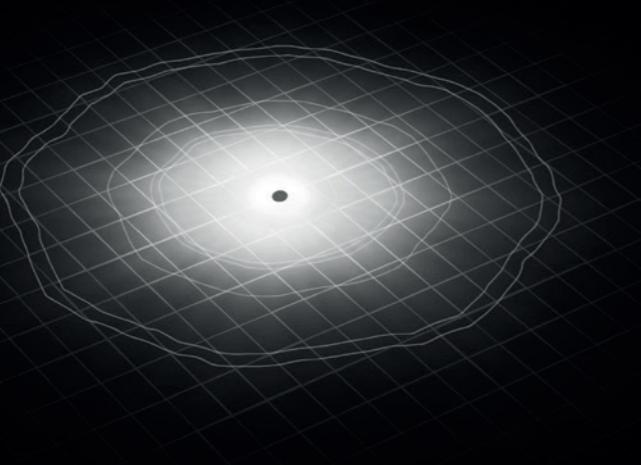
WALL

RS-D 360° Rotosimmetrica diffondente
Rotosymmetrical wide beam



GRAZER

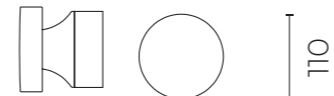
RS-D 360° Rotosimmetrica diffondente
Rotosymmetrical wide beam



Bamboo mini

Wall

110



Grazer



110



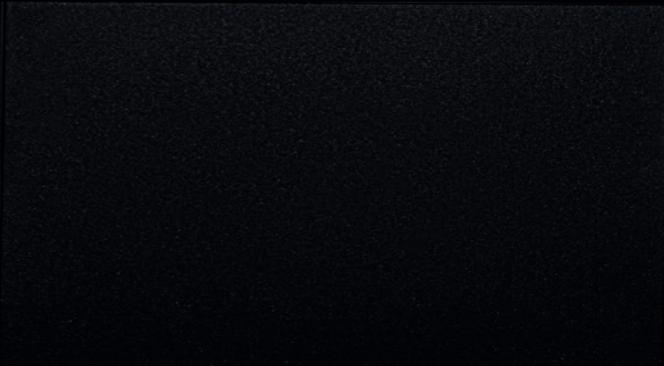
110



GRAPHO MINI

GRAPHO MINI è la soluzione per l'illuminazione d'accento delle facciate, pensata per disegnare con la luce gli scenari urbani notturni.

GRAPHO MINI is the solution for accent lighting of facades, designed to draw urban night scenes with light.



220 240V	50 60Hz	CL I	IP66	IK08	ta -30°C +50°C
-------------	------------	------	------	------	----------------------

**DATI PRESTAZIONALI / PERFORMANCE DATA****Flusso apparecchio / Fitting flux:**

140 - 365 lm

Potenza apparecchio / Fitting power:

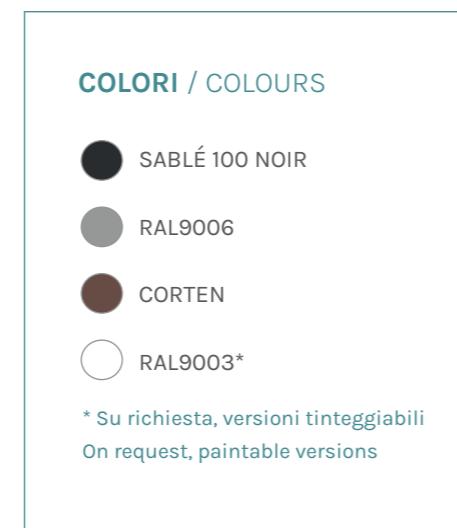
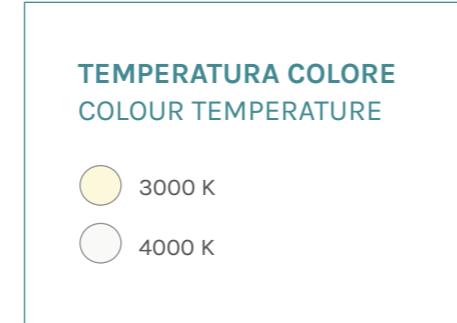
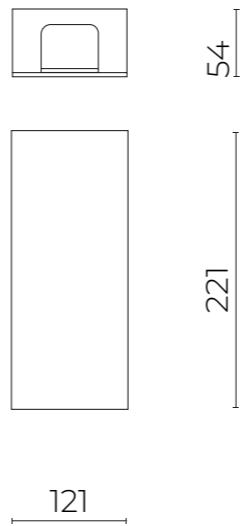
5 - 9 W

Indice di resa cromatica / Colour Rendering Index:

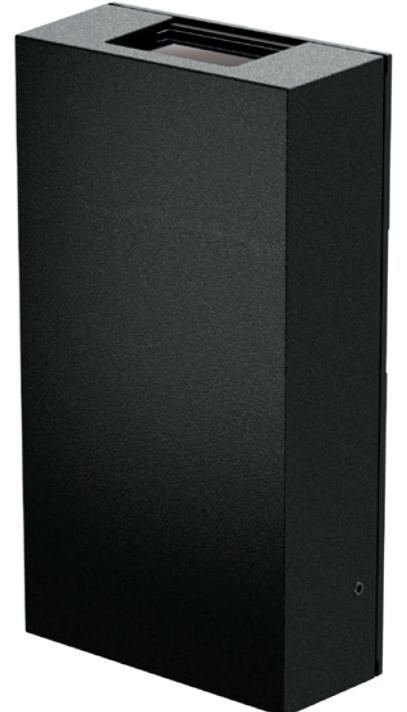
CRI ≥ 80, SDCM ≤ 3

Illuminazione intelligente / Smart lighting:

DALI, incluso / DALI, included

**MATERIALI / MATERIALS****Corpo e fissaggio / Body and fastening:**presso-fusione di lega di alluminio UNI EN AB 47100
(contenuto rame < 1%) / die-cast aluminum alloy UNI EN AB 47100 (copper content < 1%)**Schermo / Screen:**tecnopolimero stabilizzato ai raggi UV
UV stabilized technopolymer**Gruppo ottico / Optical unit:**lenti PMMA ad alta trasparenza
high-transparency PMMA lenses**Finitura / Finish:**fosfocromatazione e verniciatura in polveri di poliestere
realizzata in 16 fasi per la miglior resistenza agli
agenti atmosferici / phospho-chromatation treated
and polyester powder-coated in 16 phases to increase
weather resistance**CARATTERISTICHE / FEATURES****Peso massimo / Max weight:**

1 kg

Alimentazione elettronica / Electronic power supply:
inclusa / included**Installazione / Installation:**
parete, soffitto. Ingresso cavo posteriore, / wall-mounted, ceiling. Rear cable entry**Sistema antivandalismo / Vandal-proof system:**
previsti grani antivandalici
anti-vandalism grains provided

OTTICHE / OPTICS

1x blade 4°x17°



2x blade 4°x17°



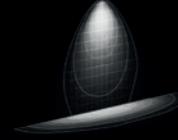
1x spot 21°x19°



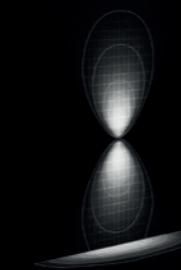
2x spot 21°x19°



1x wide beam 50°x20°



2x wide beam 50°x20°



1x ultra wide beam 100°x60°

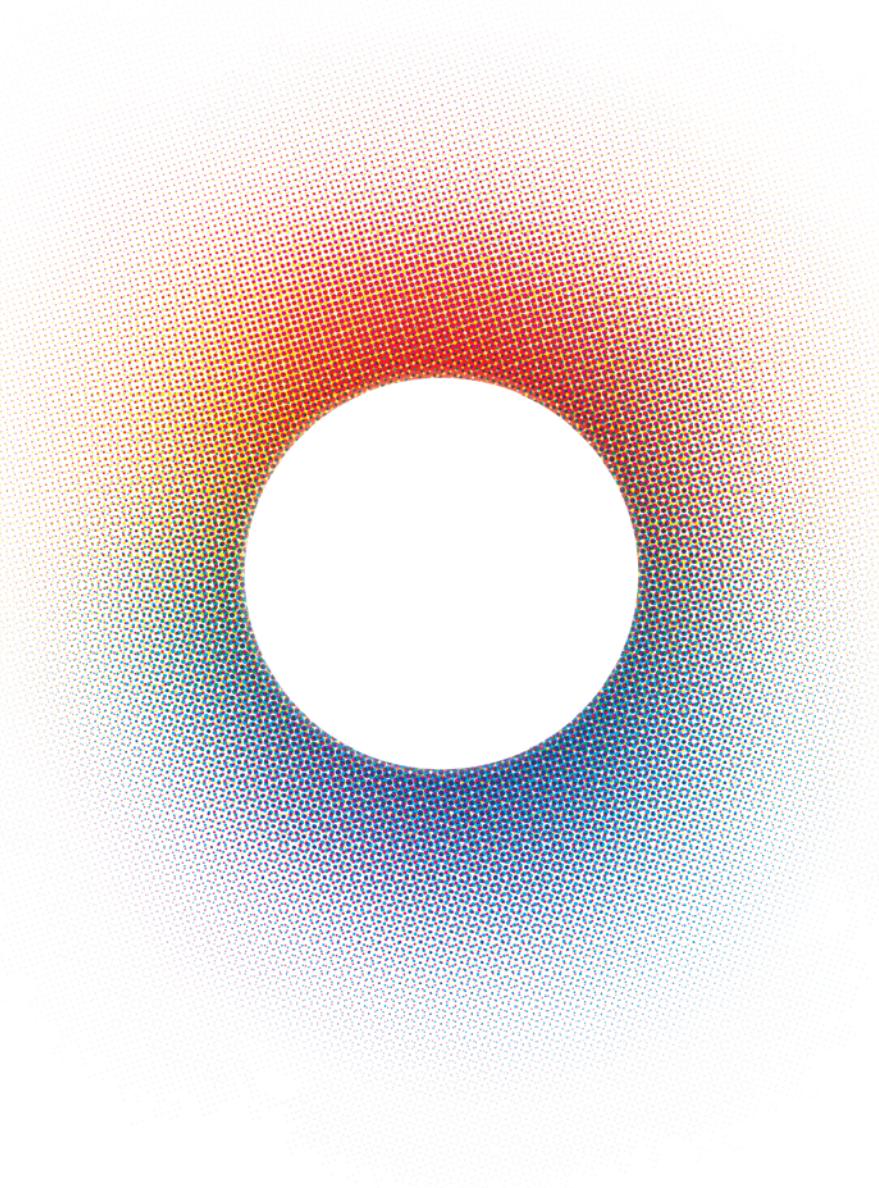


2x ultra wide beam 100°x60°

1x blade 4°x17°
+ 1x spot 21°x19°1x blade 4°x17° + 1x ultra
wide beam 100°x60°

Notes





caribonigroup.com

