we-ef



CATENARY MOUNTED LUMINAIRES

City

DAS100 ZFS400 ZFS400-FT

TABLE OF CONTENTS

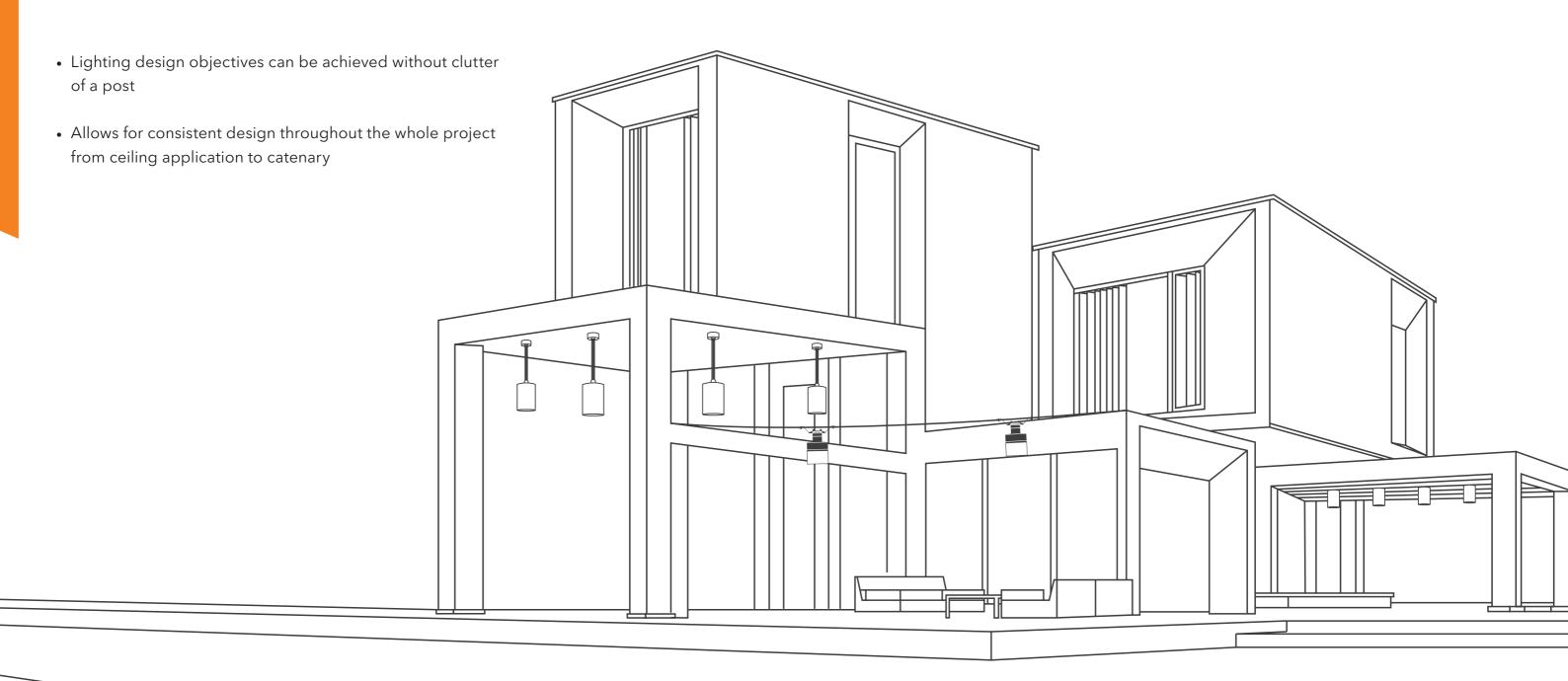
DAS100

Designer's solution	4
Product line philosophy	6
Features & benefits	10
Construction	14
Product overview	16
Light distribution overview	18
Internal optical accessories	28

ZFS400

Design evolution	36
Features & benefits	38
Construction	42
Product overview	44
Connectivity	46
Light distribution overview	48

DESIGNER'S SOLUTION



PRODUCT LINE PHILOSOPHY

Simple modular system means that the same luminaire can be transformed from a ceiling luminaire to a pendant mounted luminaire and a catenary or...



ZFT400 ZFS400

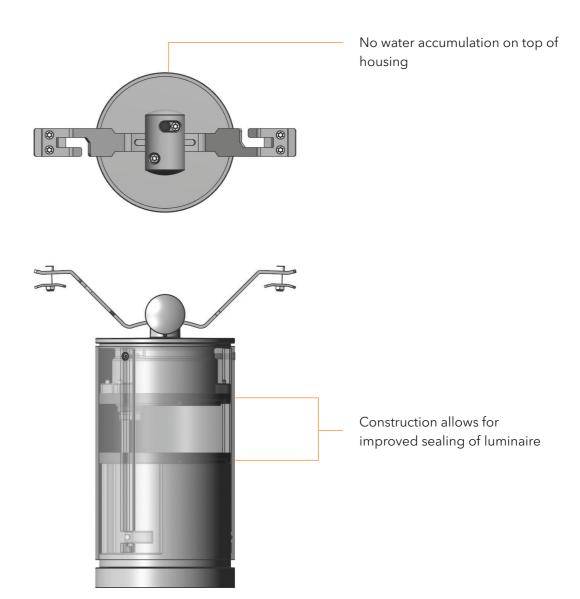


street and area lighting to catenary.

DAS100 CATENARY

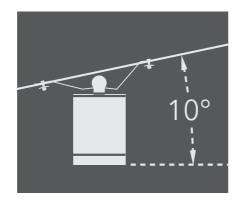
FEATURES & BENEFITS





FEATURES & BENEFITS

- Ability to vary the length in 100 mm increment
- Coherent design across product groups



Suspension adjustable +/-10°







5CE +PRIMER

Quality checks on finish part up to 3,000 hours salt spray exposure test

5CE + Primer is suitable for coastal and aggressive environments

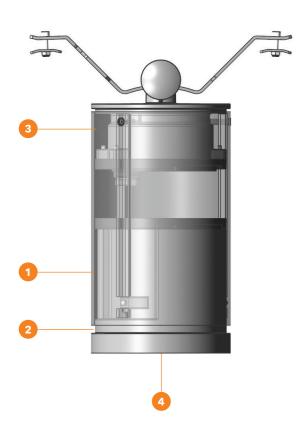




PCS

Polymer coated stainless steel hardware protect against galvanic corrosion and ensures longevity

CONSTRUCTION



Luminaire housing:

- Marine-grade, die-cast aluminium alloy for inner housing
- Aluminium extrusion for outer body









1 Driver

Integral EC electronic converter, thermally separated

2 LED lens

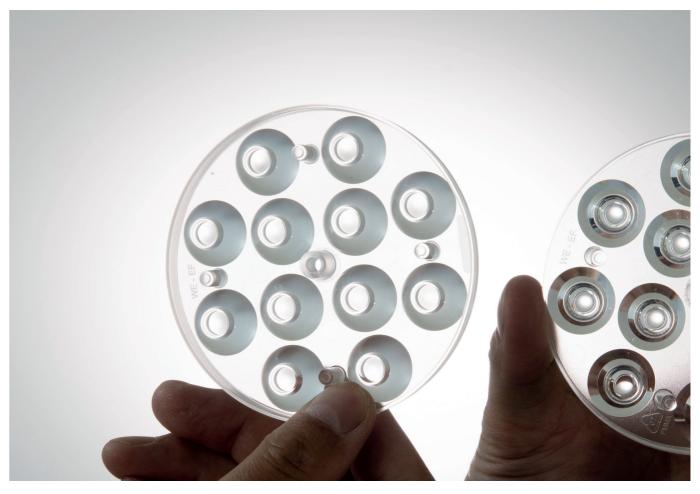
PMMA lens

Gasketing

Silicone CCG® Controlled Compression Gasket

4 Main lens

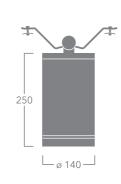
Safety glass



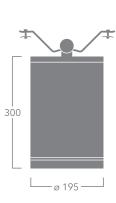
WE-EF LED boards fitted with high-quality LEDs, which have narrowly-defined binning tolerances, guarantee high visual comfort.

PRODUCT OVERVIEW









Control options: 1-10 V / DALI









'sharp cut-off'

Control options: 1-10 V / DALI







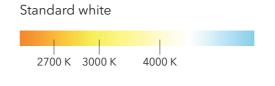




'sharp cut-off'

DAS100 Wattage **Light distribtion Rated lumens** DAS120 24 W 2170-2680 lm [B] [M] [EE] [EES]

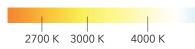
DAS100 Wattage **Light distribtion Rated lumens** 48 W DAS140 [B] [M] [EE] [EES] 4480-5270 lm 42 W 4340-4790 lm DAS140 TW [B] [M] [E]





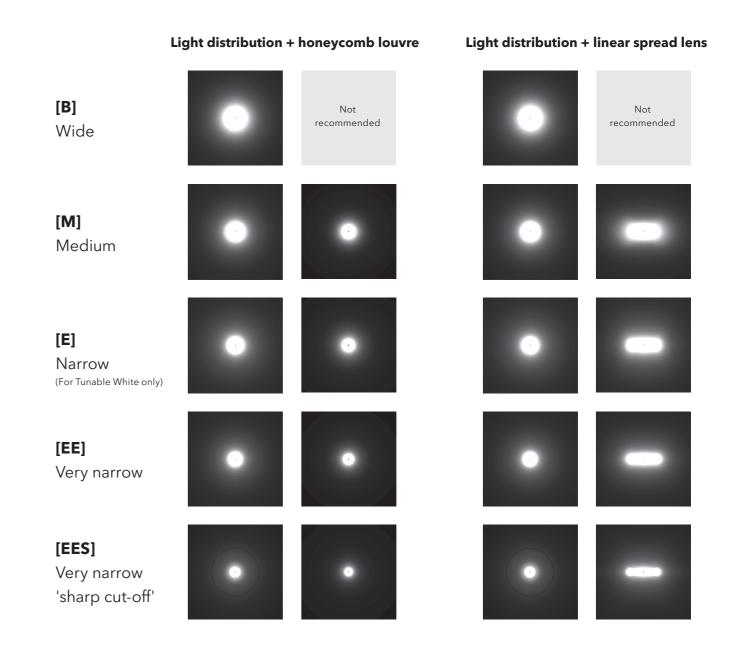
2200 K on request

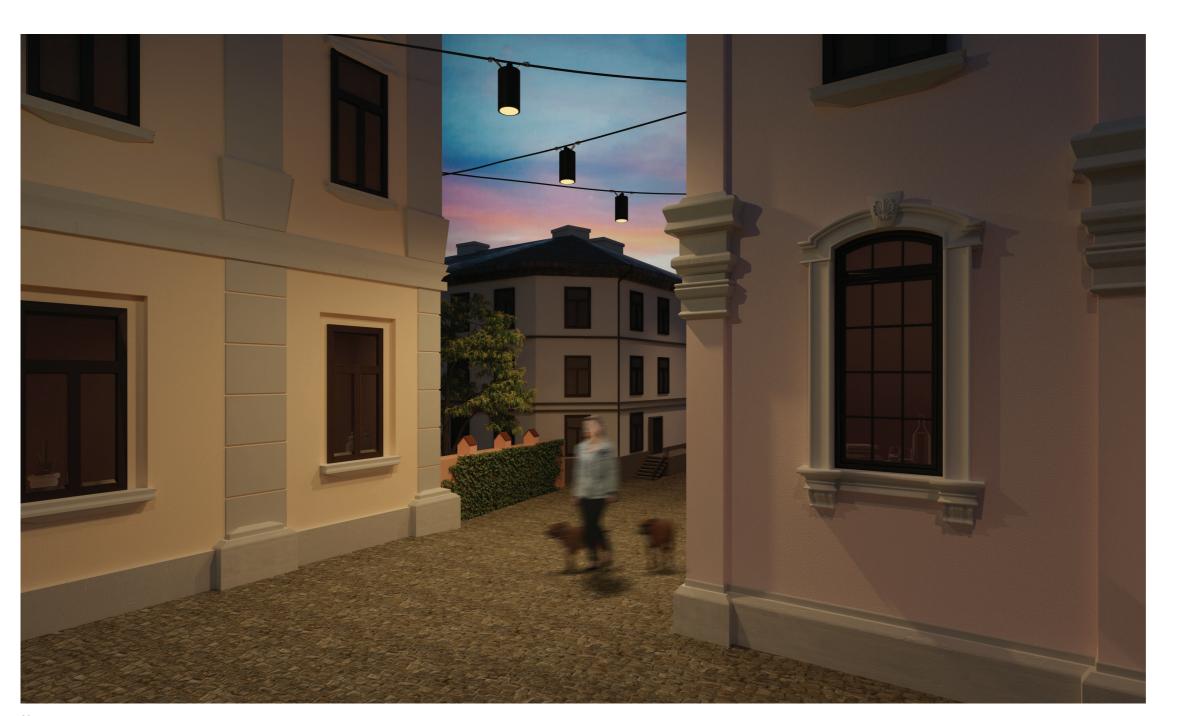
Standard white

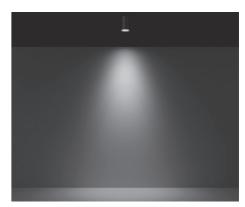


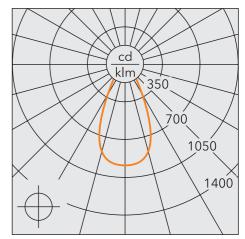
2200 K on request

SYMMETRIC LIGHT DISTRIBUTION OVERVIEW





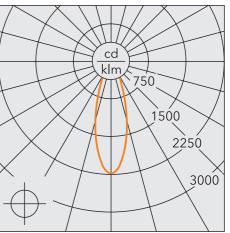




[B] Wide (23° / 23°)

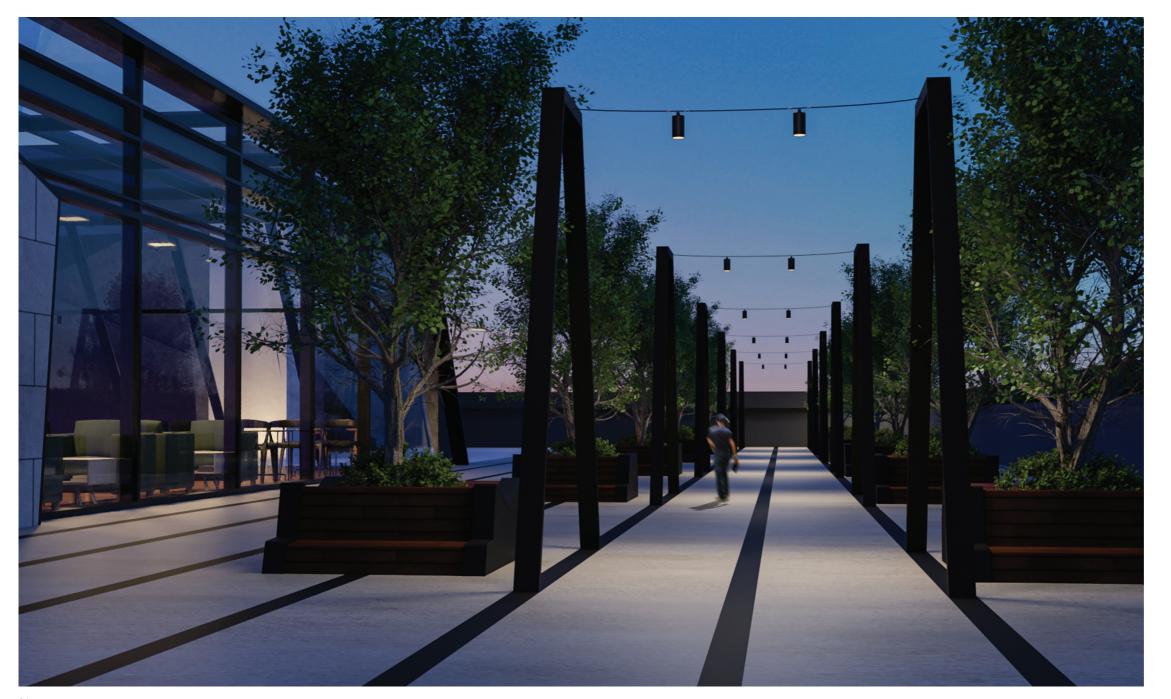




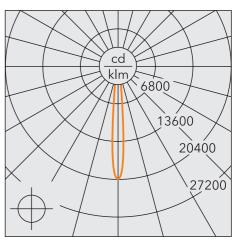


[**M**] Medium (16° / 16°)









[EES] Very narrow, 'sharp cut-off' (5° / 5°)

INTERNAL OPTICAL ACCESSORIES

Internal optical accessories are factory-installed and must be specified at the time of ordering

1 Honeycomb louvre for [M] [E] [EE] [EES]

Suitable for:

Reducing effects of glare at 45° angle with minimal loss of light output. It can also be used in application such as wall grazing to cut-off stray light (glare) from the beam centre. It decreases centre beam brightness by about 30%. Most commonly used to address glare control.

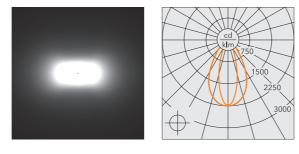
2 Linear spread lens for [M] [E] [EE] [EES]

Suitable for:

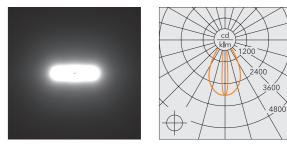
Spreading light horizontally or vertically with a 55°-60° spread. Ideal for diffusing and elongating a beam of light to structures such as columns, illuminating passages and corridor. Providing an extra level of control in lighting applications.



Max. 1 internal accessory

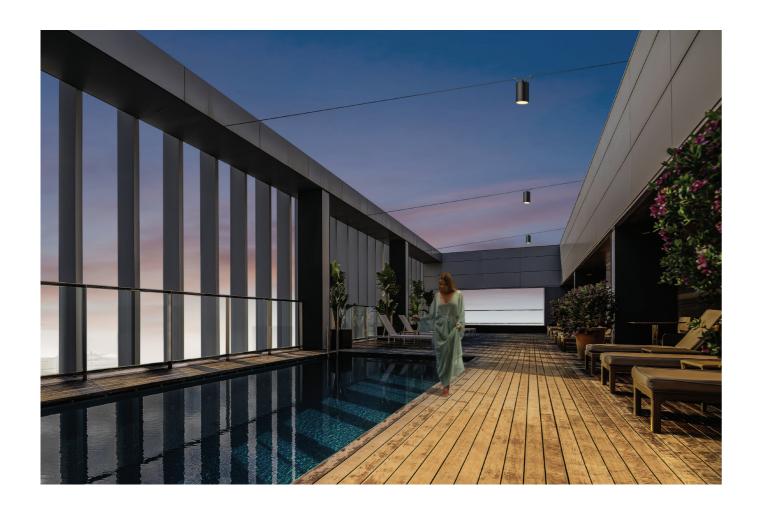


[M] Medium + linear spread lens (34° / 34°)

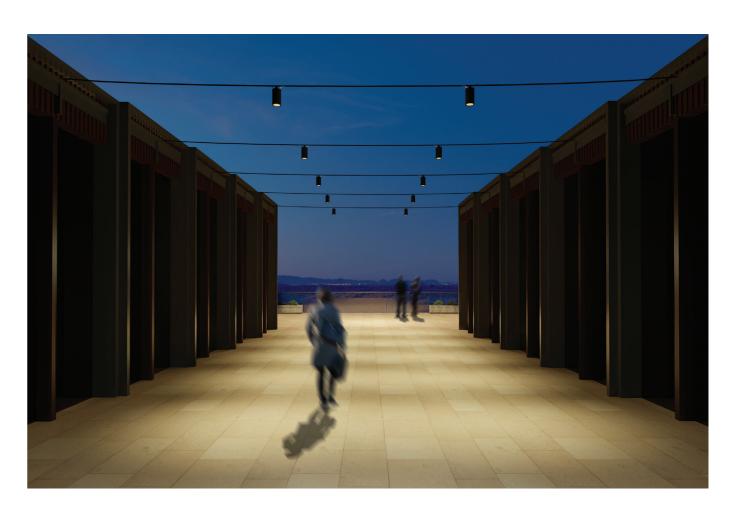


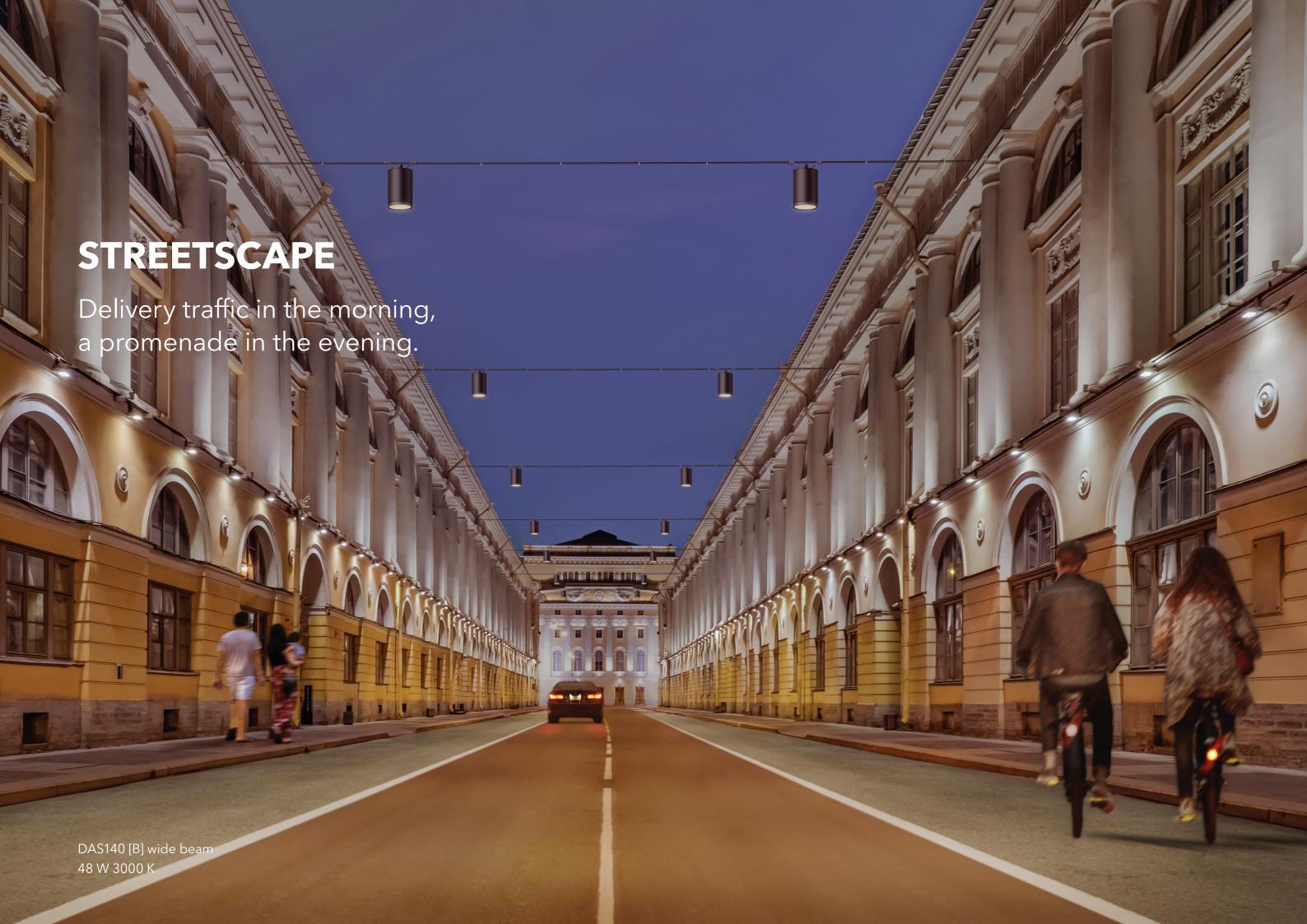
[EES] Very narrow, 'sharp cut-off' + linear spread lens (30° / 30°)

[M] + LINEAR SPREAD LENS



[EES] + LINEAR SPREAD LENS

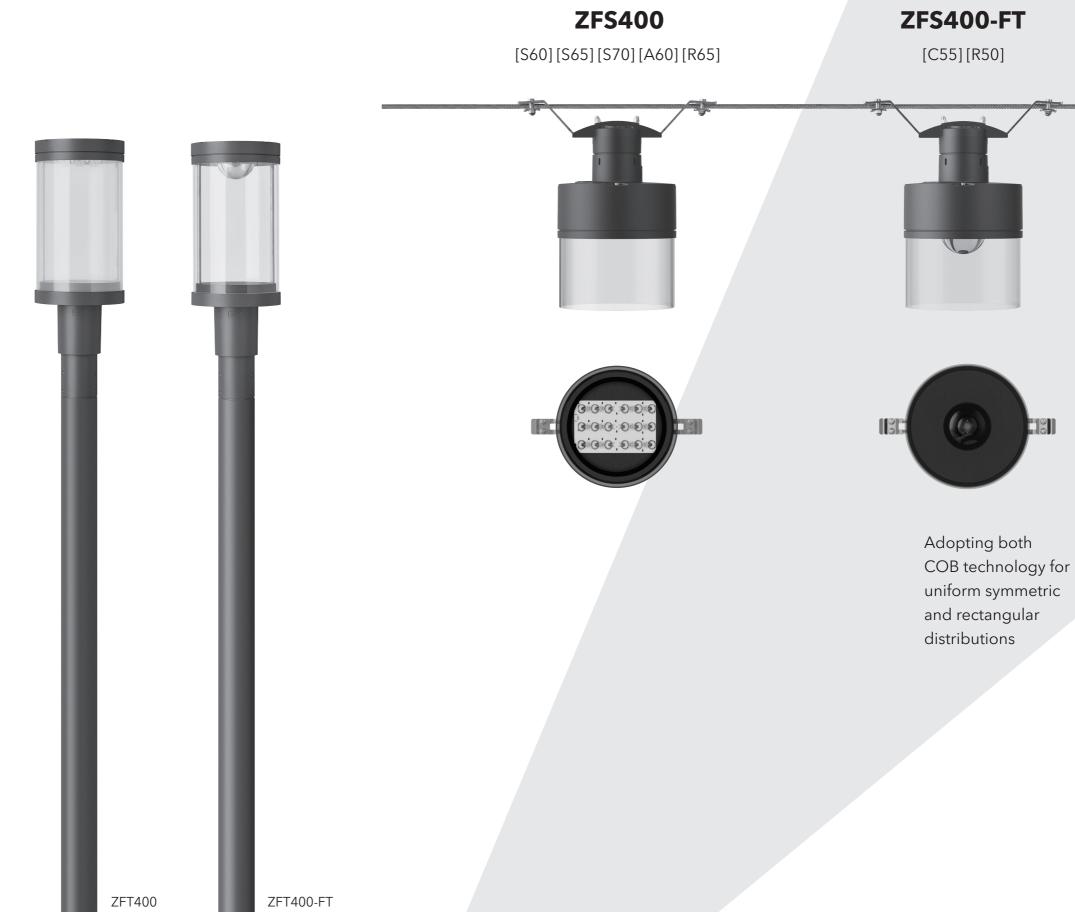




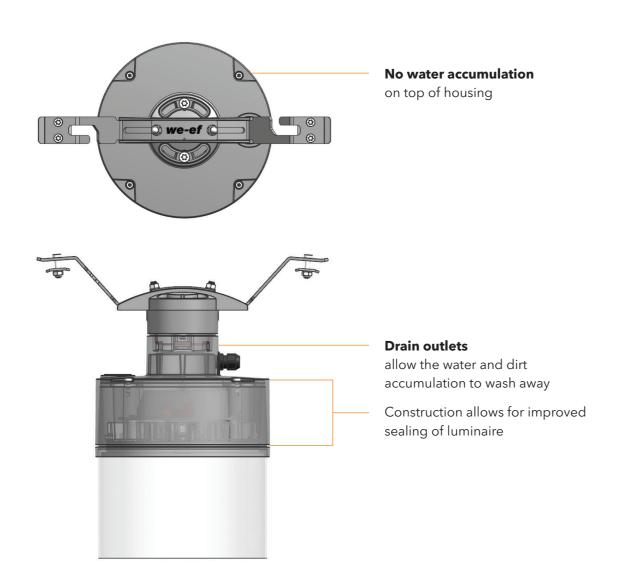
ZFS400 CATENARY

DESIGN EVOLUTION

ZFS400 catenary is a product line extension from the original ZFT400 street and area lighting



FEATURES & BENEFITS



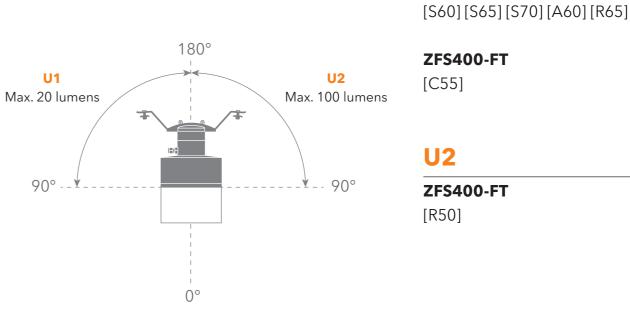


- 1 Robustly engineered and uncompromising durability a single piece of etched stainless steel connection mechanism
- 2 Dark sky compliance clear outer lens direct the light downward, below 90°

U1

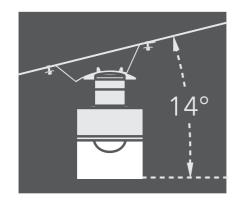
ZFS400

BUG rating system

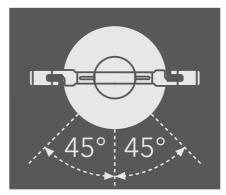


FEATURES & BENEFITS

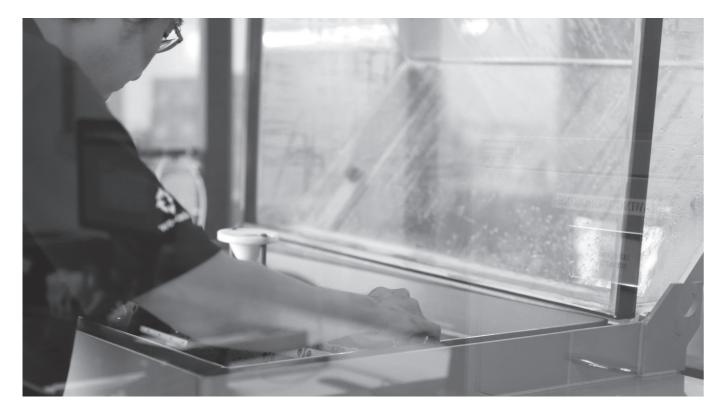
- Coherent design across product groups
- Highly versatile aiming abilities for asymmetric light distributions







Can be rotated 45° left and right









5CE +PRIMER

Quality checks on finish part up to 3,000 hours salt spray exposure test

5CE + Primer is suitable for coastal and aggressive environments





PCS

Polymer coated stainless steel hardware protect against galvanic corrosion and ensures longevity

CONSTRUCTION



Luminaire housing:

Marine-grade, die-cast aluminium alloy













1 Driver

Integral EC electronic converter, thermally separated



2 LED lens

PMMA lens



3 Gasketing

Silicone CCG® Controlled Compression Gasket



PMMA

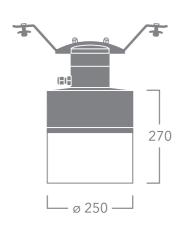




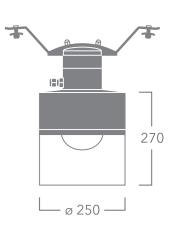
ZFS460-FT [C55] symmetric distribution 37W 4000 K

PRODUCT OVERVIEW





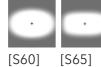




Connectivity:

- Prepare to connect (P2C)
- Ready to connect (R2C)
- Eco Step Dim®

Control options: 1-10 V / DALI



Streetlighting

Light distribtion

[S60] [S65] [S70] [A60] [R65]









[A60]

Rectangular 'forward throw' 'side throw'

Rated lumens

3720-6360 lm

Control options: 1-10 V / DALI

• Prepare to connect (P2C)

• Ready to connect (R2C)





Rectangular 'controlled'

Connectivity:

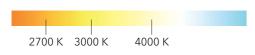
• Eco Step Dim®

ZFS400-FT	Wattage	Light distribtion	Rated lumens
ZFS460-FT	24 W I 37 W	[C55] [R50]	3360-5520 lm

Standard white

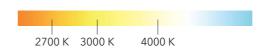
ZFS400

ZFS460



2200 K on request

Standard white



2200 K on request

Wattage

36 W I 54 W

CONNECTIVITY

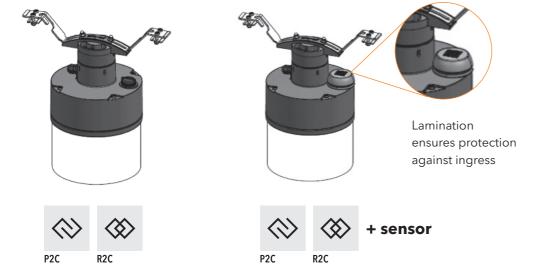
WE-EF's P2C -Prepare to Connect and R2C - Ready to Connect offer unlimited freedom in deciding when to install new luminaires as well as apply retrofit solutions. Luminaires that follow these concepts are extremely well-made and ready for anything.

P2C Prepare to Connect

- The products are designed to accommodate the necessary equipment for integration into a light management system
- The interface is covered with a robust protective cap, and protection class IPX6 is maintained
- The luminaires are completely pre-wired and equipped with a DALI LED driver
- A Zhaga Book 18 interface is already installed ex-works. The interface is covered with a robust protective cap, and protection class IPX6 is maintained
- After choosing the light management system, a suitable 'intelligent' LED driver needs to be installed in the luminaire

R2C Ready to Connect

- R2C products are equipped with interfaces, ready for integration into a light management system
- A Zhaga Book 18 interface is installed ex-works.
 The interface is covered with a robust protective cap, and protection class IPX6 is maintained
- The luminaires are completely pre-wired and equipped with a DALI LED driver



Additional option

- Surge protection SP10
- Integral PV-photocell

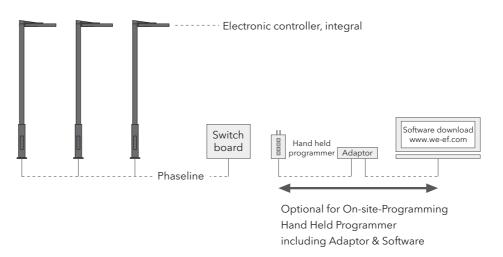


ECO STEP DIM®

ECO STEP DIM® Basic

An electronic controller is fitted in the luminaire to reduce luminous flux and power to a preset value, ex-factory.

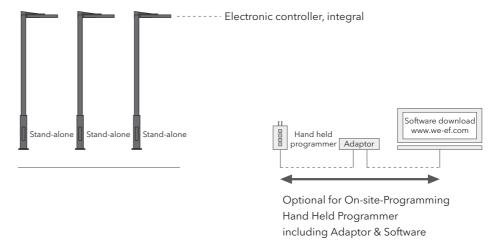
Schematic



ECO STEP DIM® Advanced

A factory-programmed, multi-step electronic controller is fitted in the luminaire for reducing the luminous flux and input.

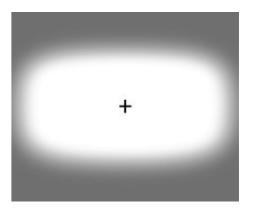
Schematic

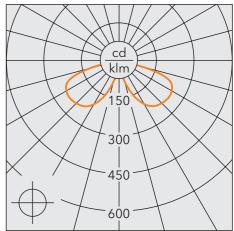


LIGHT DISTRIBUTION OVERVIEW

ASYMMETRIC DISTRIBUTION







Streetlighting

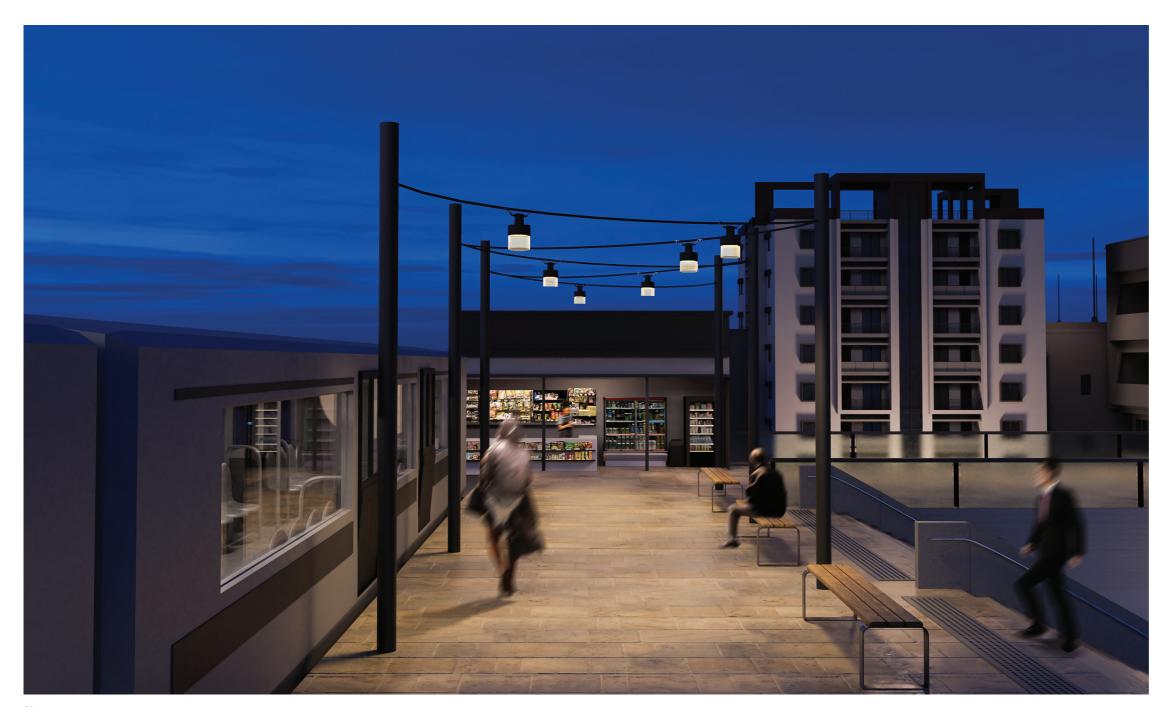
[\$60] (53° / 53°) (70° / 70°)

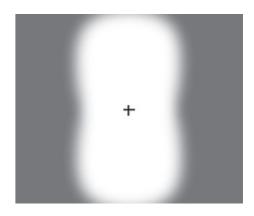
[\$65] (53° / 53°) (72° / 72°)

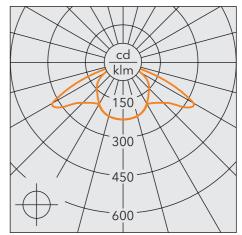
[\$70] (47° / 47°) (76° / 76°)

Shown footprint and photometric are for [\$65]

ASYMMETRIC DISTRIBUTION

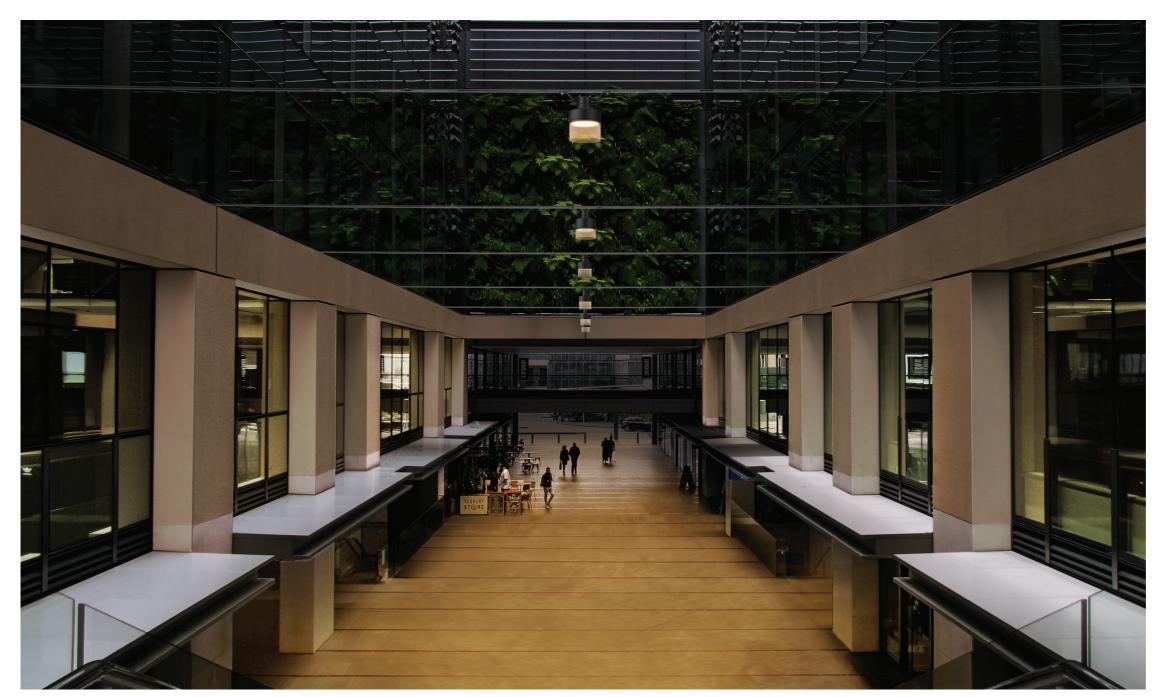


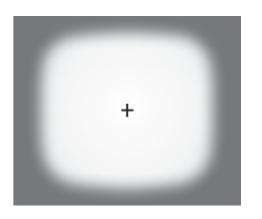


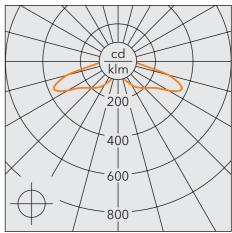


[A60] Asymmetric 'forward throw' (58° / 58°) (70° / 70°)

ASYMMETRIC DISTRIBUTION

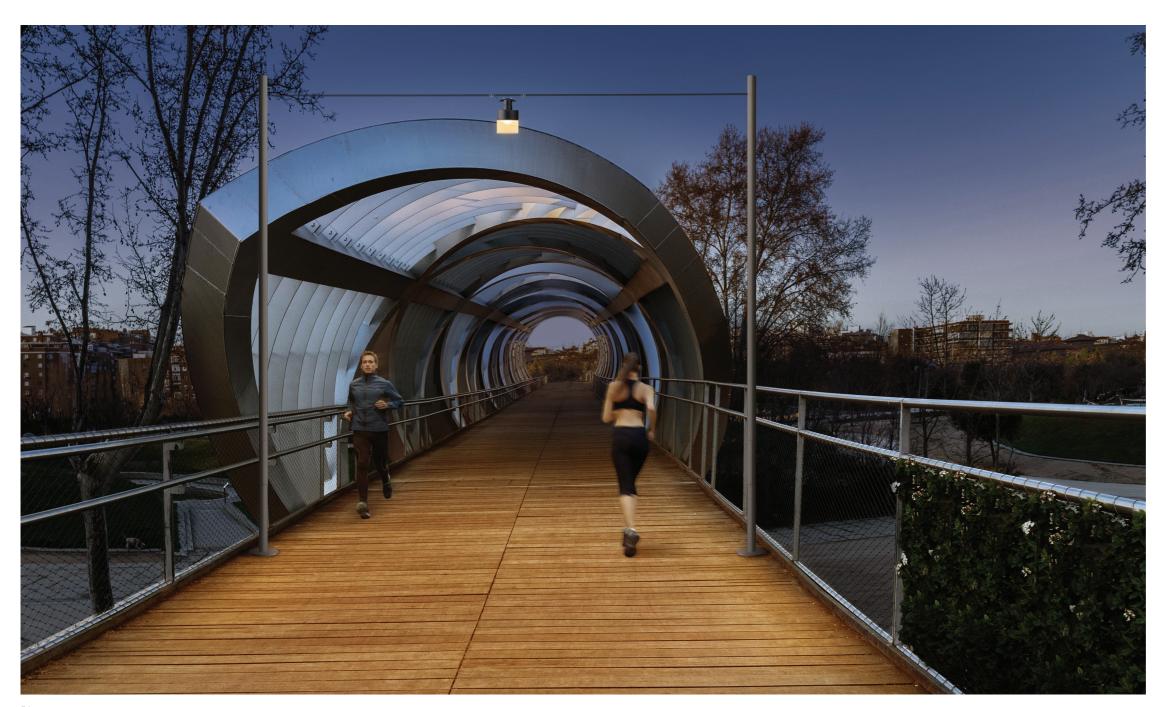


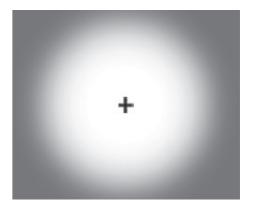


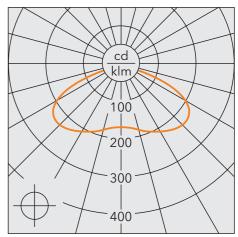


[**R65**] Rectangular 'side throw' (71° / 71°) (75° / 75°)

CONTROLLED DISTRIBUTION

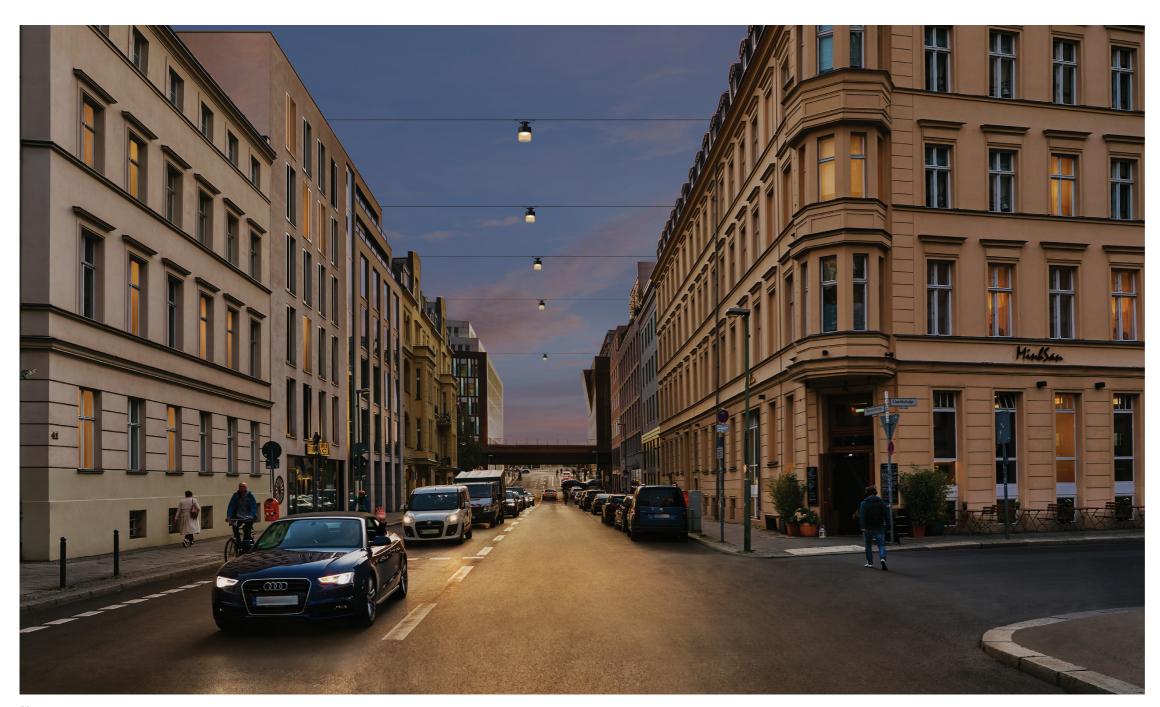


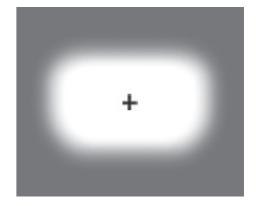


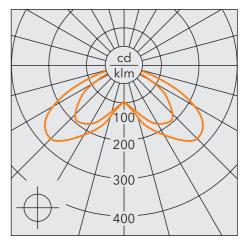


[C55] Symmetric 'controlled' (68° / 68°)

RECTANGULAR DISTRIBUTION







[**R50**] Rectangular (60° / 60°) (67° / 67°)



WE-EF LEUCHTEN GmbH

Toepinger Strasse 16 D-29646 Bispingen Germany

+49 5194 909 0



we-ef.com