



L I G H T I N G
R O A D A N D P A R K



Lena Lighting production halls in Środa Wielkopolska

MADE IN POLAND

We are a lighting manufacturer present on the market for 36 years, thanks to which luminaires and systems lighting, we know everything: we design them, we comprehensively test and produce. We connect practice with modernity.

Advanced production facilities

Our modern infrastructure provides a high level of flexibility and operational efficiency.

Lighting market leader

Every year, we produce millions of luminaires, strengthening our position in the country and in the world.

Innovative design

We use the latest advances in technology to create modern and energy-efficient solutions.

Cooperation with global leaders

We cooperate with leading manufacturers of electrotechnical components, which allows us to implement unique solutions.

Energy saving and luminous quality

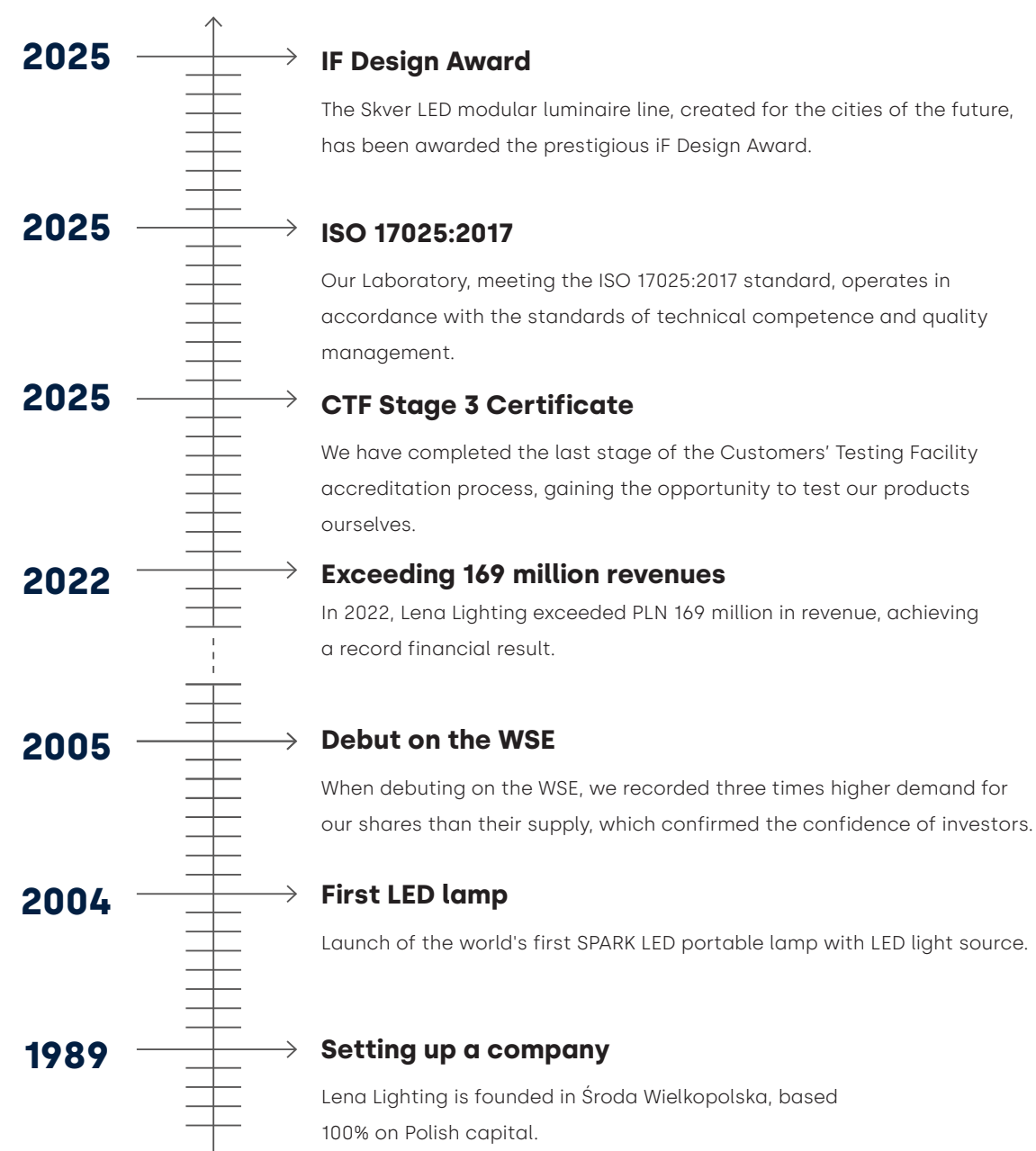
Our technologies reduce energy consumption while improving light parameters.

Continuous improvement of technology

We are constantly developing our know-how by implementing the latest LED technologies and lighting control systems.

COMPANY HISTORY

Our lighting is the result of decades of experience in design and production. Our brand is made up of people full of passion. The company's mission is to create innovative lamps and lighting control systems that inspire to change towards sustainable development.



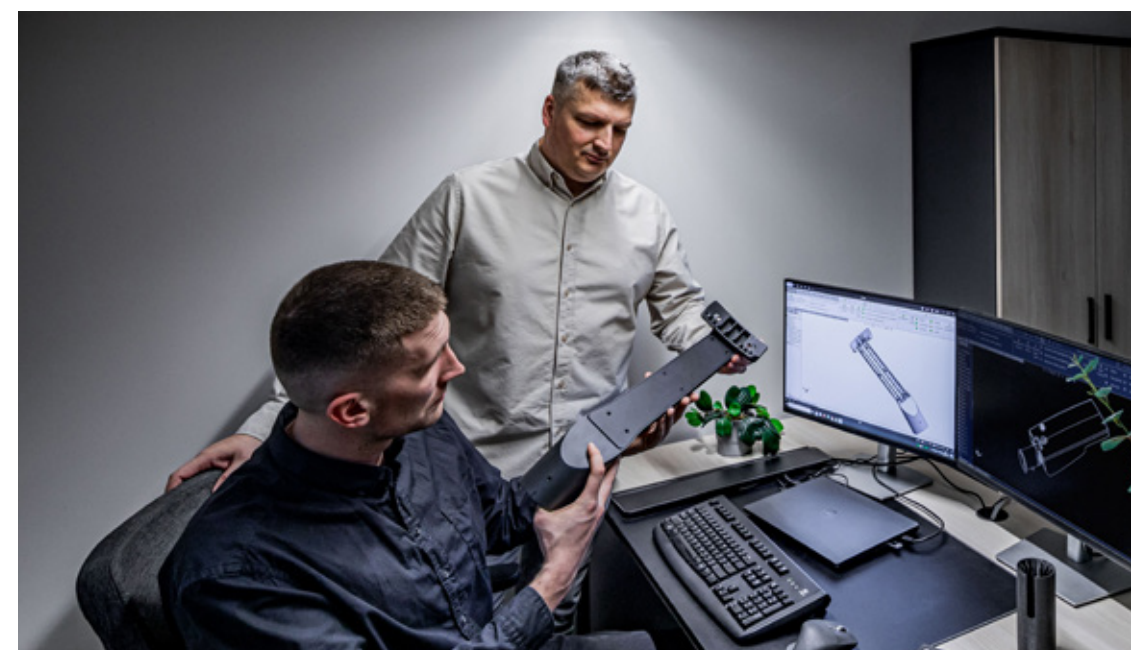
Passion and professionalism

Our company was born out of a fascination with light. Over the years, we have gained the knowledge and competences thanks to which we can design and manufacture even the most complex lighting systems.



Inspiration and design

We make sure that our products stand out not only with the best parameters, but also with a unique design. We believe that the space that surrounds us has a real impact on how we feel. With this in mind, we create our products.



Innovation and development

We offer technologically advanced solutions. We are constantly investing in the development of our research center and state-of-the-art production lines. We are developing dynamically with the progress of technology.



Sustainable development

We have placed environmental management at the heart of our business, implementing a system that minimizes any negative impact on the environment. We hold BIO Certificate ISO 14001.

CERTIFIED LIGHTING

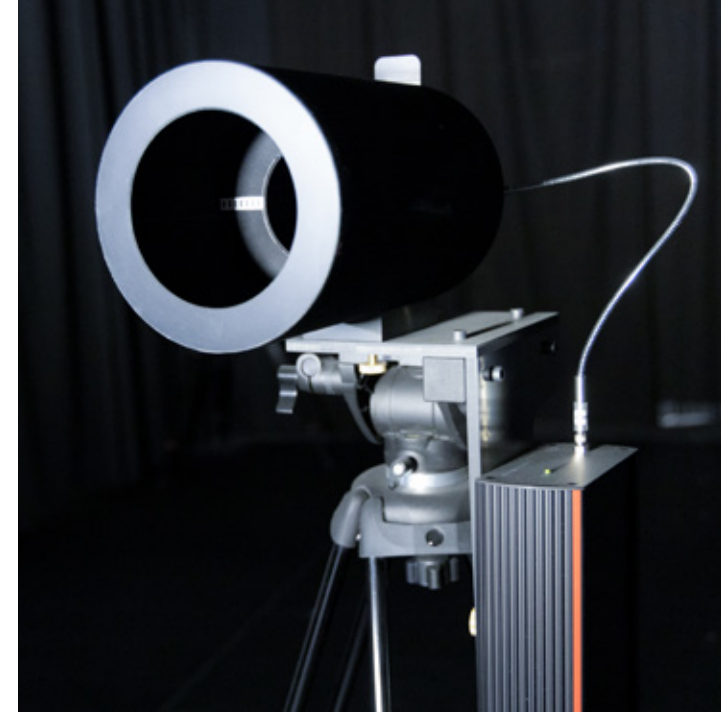
The quality of our products is not only a confirmation of our competence as a leading Polish lighting manufacturer. It is also a matter of our pro-ecological approach.

Features such as reliability, durability, service life or good product design are extremely important in the context of sustainable production and environmental protection. It is the high quality of lighting that Lena Lighting is one of the main factors that allowed us to acquire a group of regular customers all over the world.

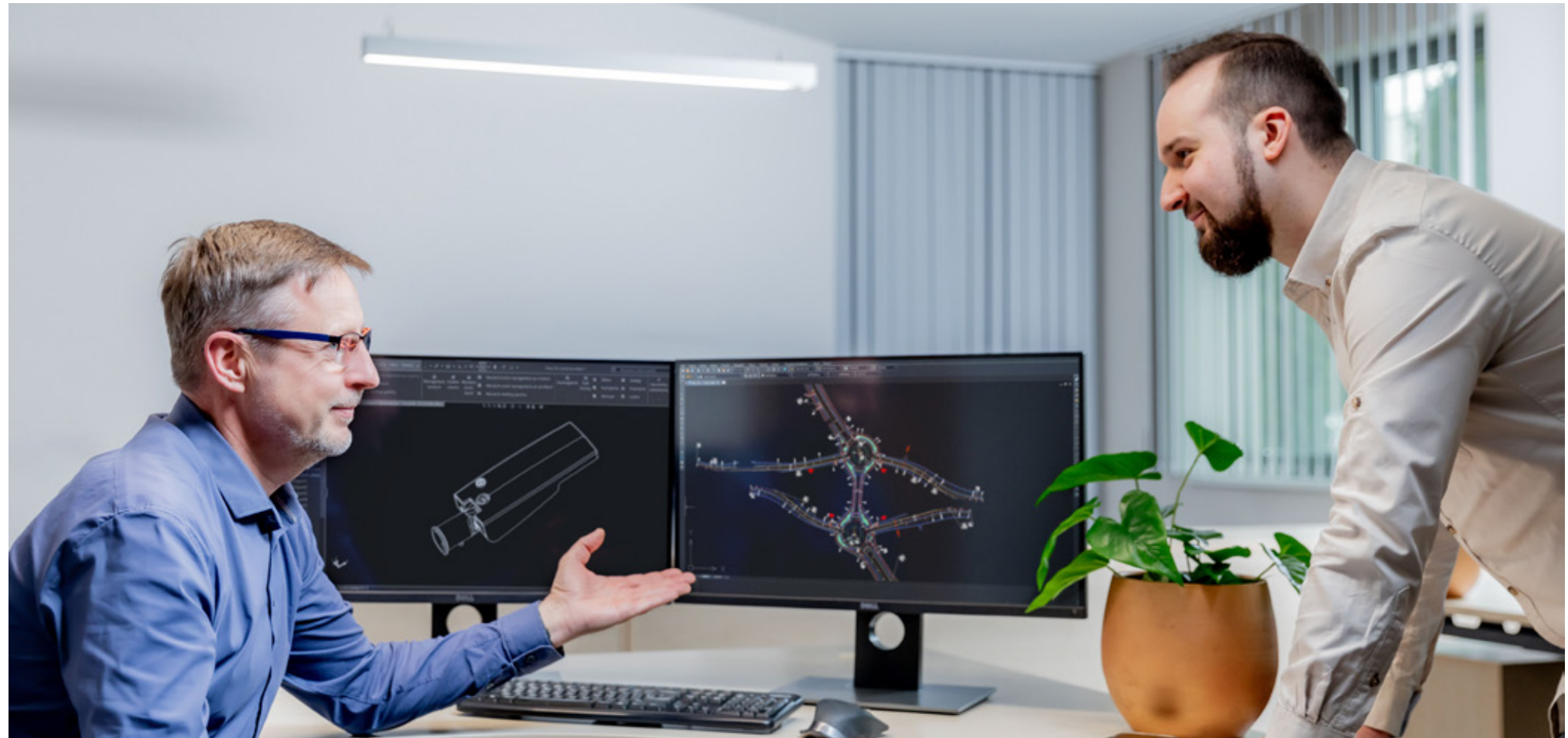
Our competence:



Our Awards



DESIGN
✓
FINANCE
✓
BUILD
✓
OPERATE



SUPPORT OVER ALL OF THEM STAGE OF IMPLEMENTATION PROJECT

Support flourishes here like a well-planned lighting upgrade. From the first sketch and inventory, through the audit and selection of state-of-the-art solutions, to full financial guidance and the use of available support programs.

When the project gains power, we ensure effective implementation, control of progress and acceptance like the last refinements of a masterful structure. And then we stay on board, taking care of service, flexible expansion and readiness for future challenges, so that the infrastructure shines as an example for many years.



ECOLOGY

EPD

Park and urban luminaires of our production have a Product Environmental Declaration (EPD), confirming their compliance with the principles of sustainable development. This document details the environmental impact of luminaires throughout their life cycle – from production to disposal. It is available on the Eco Portal at: <https://eco-portal.eco-platform.org/>

For our customers, it is a guarantee of transparency, quality and ecological responsibility. EPD luminaires support the implementation of projects in accordance with environmental standards. By choosing products from EPD, customers actively contribute to creating a more welcoming urban space.

Dark Sky Certificate

Our certified Dark Sky luminaires reduce light pollution while protecting the natural night environment. They direct light only where it is needed – on sidewalks, alleys and streets – without emissions upwards or towards the windows of residents and animals. This solution increases comfort and safety, while maintaining a dark, friendly sky. Dark Sky luminaires promote energy savings and CO₂ reduction, supporting the idea of sustainable development and creating greener and more harmonious cities.

HCL

We design our lighting in accordance with the Human Centric Lighting concept, focused on individual human needs. Thanks to the light, it supports the daily sense of balance, matching the color and intensity to the time of day – cool light in the morning stimulates and increases concentration, warmer in the afternoon promotes calmness. HCL solutions harmonize with natural lighting and help minimize the effects of shorter, darker days.

Backshields

The housings can be freely modified with several special canopies and backshields, changing the light distribution and eliminating uncontrolled LED lighting large areas. This is done expressly, by quickly clicking accessory.



LIGHTING
ROAD AND STREET



Tiara 2 LED luminaires, MPK Poznań depot

SAFE AND ALWAYS TO THE GOAL

Street and road luminaires from the Polish manufacturer Lena Lighting are modern solutions, energy efficiency, durability and safety. They provide both effective and effective lighting.

Our luminaires are characterized by

- Excellent quality at a competitive price
- Construction created by our own R&D department
- Polish production and branded components
- Efficiency up to 184 lm/W
- Power range 8 to 330 W
- Luminous flux range from 900 - 42275 lm
- High resistance IP66
- SP10kV protection as standard
- Impact resistance IK07-IK09
- Variety of available broadcasts
- ULOR = 0.0%
- Green production

IP
66

IK
10



TIARA 2 LED



TIARA 2 LED is the most flexible item in the Lena Lighting road luminaire range.

These fixtures can be used both on motorways, expressways and expressways, as well as on national, municipal, local and residential roads. The variety of optics available also allows them to be used to illuminate pedestrian crossings, sidewalks and bicycle paths.

AVAILABLE VERSIONS



Tiara 2 LED
XS

Tiara 2 LED
S

Tiara 2 LED
M

Tiara 2 LED
L

TIARA 2 LED XS 13200lm 740 RMW IP66 II cl. DALI NEMA IK10 (109W) RAL7016

1 2 3 4 5 6 7 8 9 10 11

1 **Model**

Tiara 2 LED XS

Tiara 2 LED S
Tiara 2 LED M
Tiara 2 LED L
Tiara LED M PRO
Tiara LED L PRO

2 **Luminous flux [lm]**

Value in [lm] in steps of 25

3 **CRI/CCT**

722, 727, 730, 735, **740**, 750, 757,765, 822, 827,
830, 835, 840, 850,857, 865, 922, 927, 930, 935,
940, 950, 957, 965

4 **Optics**

AS-asymmetrical, R-road, P pedestrian crossings,
RP - parking, RMW - for **wet surfaces**,N - narrow,
M - medium wide, W - wide, L-left, P-right, 0-99
optic numbering, HE-high efficiency + LED type II

5 **IP**

IP65, **IP66**

6 **Protection class**

I class **II class**

7 **Controls**

none
1DIM
2DIM
DALI
ON/OFF

8 **Connector / Sensor**

NEMA
NEMA-7P
ZG
ZG-DN
2xZG
RCR

9 **Impact resistance**

IK09, **IK10**

10 **Power [W]**

Value [W]
in steps of 1W

11 **Colour**

RALxxxx
PI- lacquered interior of
the chambers

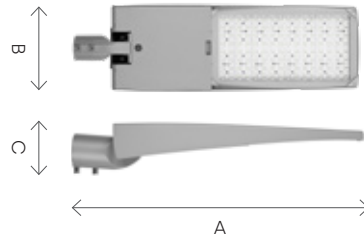


Tiara 2 LED L

Rated power [W]	8 - 330
Luminous flux [lm]	850 - 43375
Mounting method	side to boom, top to pole
body material	high-pressure aluminium powder coated
Body color:	
shade material	glass, tempered glass
type of lampshade	transparent lens
Dimensions [mm]	870/262/122

IP	IK	lm/W
66	09	169

- Certificates: ENEC, ENEC+, CE, Zhaga (ZD4i)
- Wide range of broadcasts
- High luminous efficiency
- Tool-free access to the attachment chamber
- Compatible with ClueCITY system (NEMA, ZHAGA connectors)
- LED durability: 100,000 h (L90B10)



Road lighting Toruń



Tiara 2 LED M

IP

66

IK

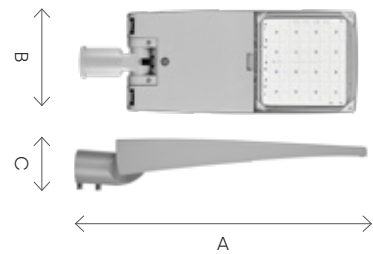
10

lm/W

184

Rated power [W]	8 - 175
Luminous flux [lm]	875 - 25925
Mounting method	to pole -30°+30° on the boom -30°+30° on DarkSky boom +10° -0°
body material	powder-coated aluminum
Body color:	RAL
shade material	toughened glass
type of lampshade	transparent lens
Dimensions [mm]	597/265/105

- Tool-free access to the accessory compartment
- Compatible with ClueCITY system (NEMA, ZHAGA connectors)
- Thermal protection of the voltage
- Quick disassembly of the optical-electrical part without removing the luminaire



Pitch angle adjustment

The mounting bracket is attached to housing with two screws, by loosening these screws we have the possibility of adjusting the angle of the housing -30°+30°.



Fast, innovative assembly

Tool-free access to the interior of the Tiara luminaire translates into ease of servicing.



More efficient sources

LED lights

The use of even newer and more efficient LED light sources translates directly to higher energy efficiency settings.



Heavy Duty Construction

Tiara 2 LED luminaires are made of the highest quality materials. Reliable and resistant to extreme weather conditions.



Lighting Tiara 2 LED S



Tiara 2 LED S

Rated power [W]	3 - 109
Luminous flux [lm]	300 - 15600
Mounting method	to pole -30°+30° on the boom -30°+30° on DarkSky boom +10° -0°
body material	high-pressure aluminium powder coated
Body color:	
shade material	toughened glass
type of lampshade	transparent lens
Dimensions [mm]	424/251/105

IP

66

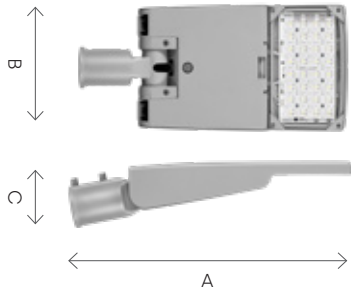
IK

10

lm/W

182

- Tool-free access to the accessory compartment
- Compatible with ClueCITY system (NEMA, ZHAGA connectors)
- Thermal protection of the voltage
- Quick disassembly of the optical-electrical part without removing the luminaire





Tiara 2 LED XS

Rated power [W]	3 - 65
Luminous flux [lm]	300 - 9000
Mounting method	to pole -30 to +120 on boom -120 to +30 on DarkSky boom +10° -0°
body material	high-pressure aluminium powder coated
Body color:	
shade material	toughened glass
type of lampshade	transparent lens
Dimensions [mm]	424/186/105

IP

66

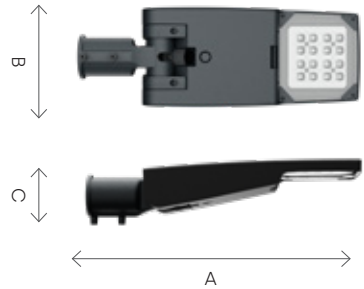
IK

10

lm/W

168

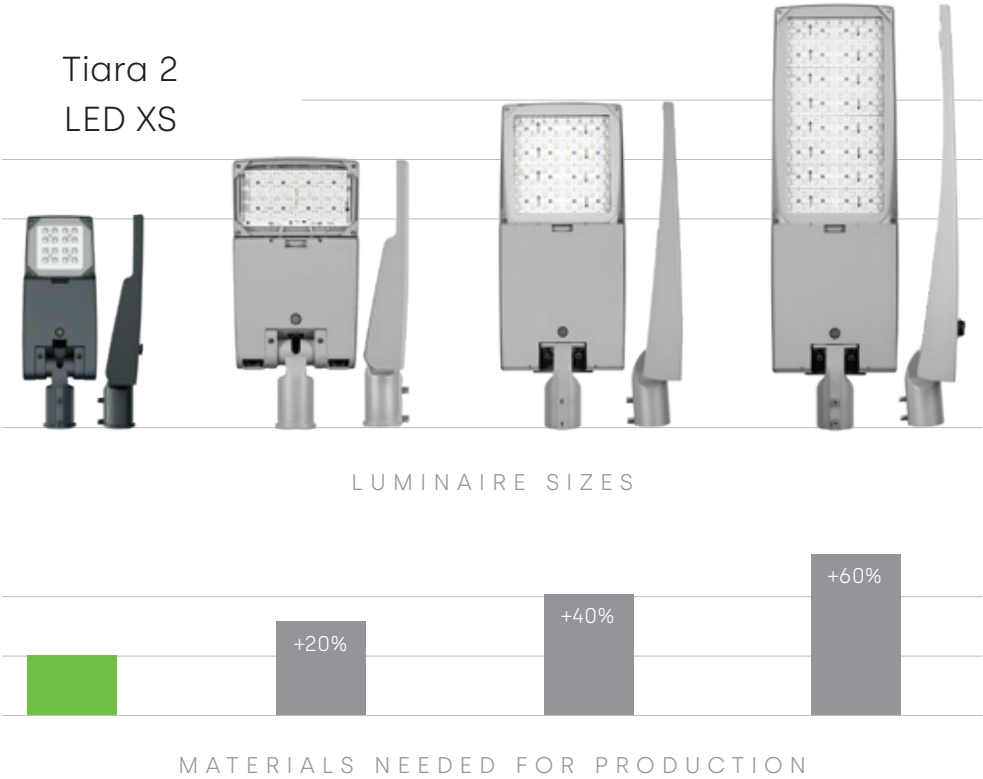
- Tool-free access to the accessory compartment
- Compatible with ClueCITY system (NEMA, ZHAGA connectors)
- Thermal protection of the voltage
- Quick disassembly of the optical-electrical part without removing the luminaire



OPTIMIZED DESIGN

TIARA 2 LED XS is an optimized design and smaller overall size, allowing you to illuminate even more efficiently the most popular traffic situations - reducing both CAPEX and OPEX .

High efficiency, the best urban distribution and proven technical solutions enclosed in an optimal body mean lower total costs associated with the modernization of infrastructure, but also translate into a significant reduction in the carbon footprint. It pays off!

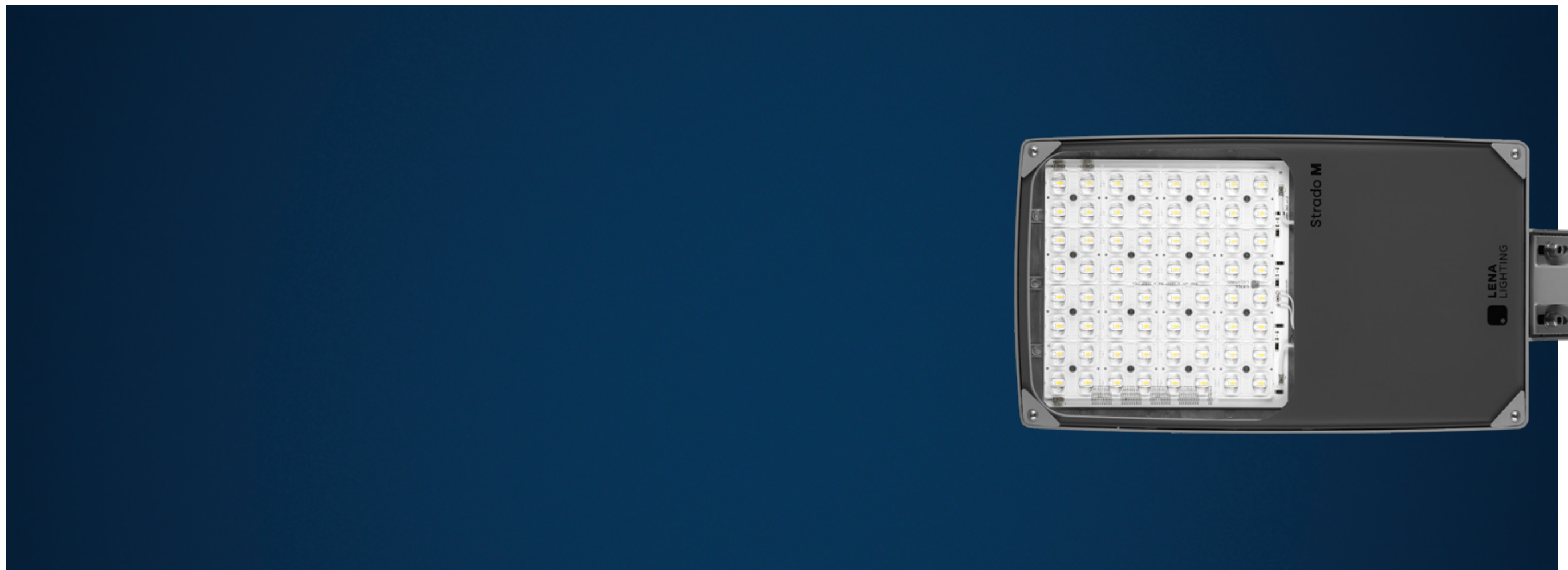


IP
66

IK
10



STRADO LED



STRADO LED is a modern family of road luminaires, combining high luminous efficiency, durability, easy service and reliability for years to come.

Thanks to the use of dedicated optics, it is possible to illuminate objects such as: motorways, expressways, national, provincial, poviát, municipal, urban, housing estate, area lighting. Optics are also available to illuminate: pedestrian crossings, sidewalks and bicycle paths.

AVAILABLE VERSIONS



Strado LED
XS

Strado LED
S

Strado LED
M

STRADO LED XS 975LM 740 RM7 IP66 II cl. 2DIM IK09 NEMA (8W) RAL7016

1 2 3 4 5 6 7 8 9 10 11

1 Model

STRADO LED XS
STRADO LED S
STRADO LED M

2 Luminous flux [lm]

Value in [lm] in steps of 25

3 CRI/CCT

722, 727, 730, 735, **740**, 750, 757,765, 822, 827,
830, 835, 840, 850,857, 865, 922, 927, 930, 935,
940, 950, 957, 965

4 Optics

AS-asymmetrical, R-road, P pedestrian crossings,
RP - parking, **RMW - for wet surfaces**, N - narrow,
M - medium wide, W - wide, L-left, P-right, 0-99
optic numbering, HE-high efficiency + LED type II

5 IP

IP66

6 Protection class

I class **II class**

7 Controls

none
1DIM
2DIM
DALI
ON/OFF

8 Impact
resistance

IK09, **IK10**

9 Connector

NEMA
NEMA-7P
ZG
none

10 Power [W]

Value [W]
in steps of 1W

11 Colour

RALxxxx
PI- lacquered interior of
the chambers

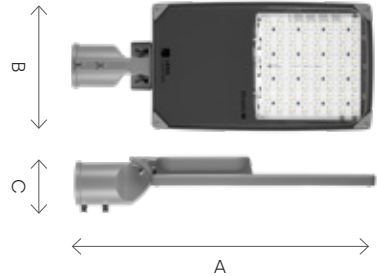


Strado LED M

IP 66 | IK 10 | lm/W 165

Rated power [W]	8 - 157
Luminous flux [lm]	975 - 24350
Mounting method	to the pole, on the boom
body material	painted aluminium powder coated
Body color:	
shade material	toughened glass
type of lampshade	transparent
Dimensions [mm]	505/265/60

- Components of reputable manufacturers
- Directional multilens PMMA dies
- Programmable with DALI DRIVER
- Constant luminous flux (CLO) function
- 5-stage power reduction
- Thermal protection of the voltage

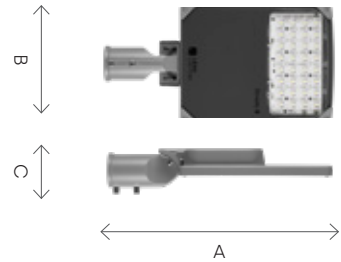


Strado LED S

IP 66 | IK 10 | lm/W 165

Rated power [W]	8 - 109
Luminous flux [lm]	975 - 16150
Mounting method	to the pole, on the boom
body material	painted aluminium powder coated
Body color:	
shade material	toughened glass
type of lampshade	transparent
Dimensions [mm]	385/265/60

- Components of reputable manufacturers
- Directional multilens PMMA dies
- Programmable with DALI DRIVER
- Constant luminous flux (CLO) function
- 5-stage power reduction
- Thermal protection of the voltage



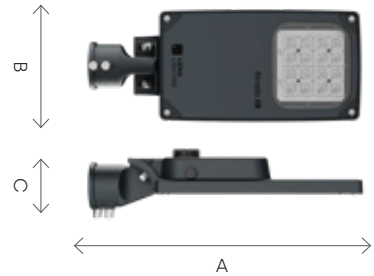


Strado LED XS

Rated power [W]	8 - 54
Luminous flux [lm]	975 - 8275
Mounting method	to the pole, on the boom
body material	painted aluminium powder coated
Body color:	
shade material	toughened glass
type of lampshade	transparent
Dimensions [mm]	449/185/85

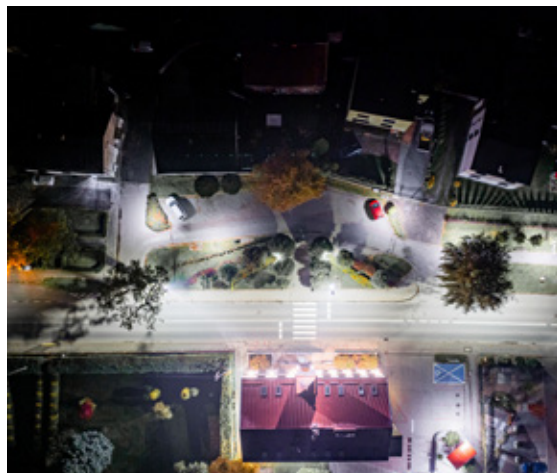
IP	IK	lm/W
66	10	165

- Components of reputable manufacturers
- Directional multilens PMMA dies
- Programmable with DALI DRIVER
- Constant luminous flux (CLO) function
- 5-stage power reduction
- Thermal protection of the voltage



Poznań road lighting





GIERŁATOWICE BRIGHTER AND SAFER

In Gierłatowice, the municipality lit the streets with a new quality of light — thanks to investment in modern road luminaires and an intelligent lighting management system, the municipality is introducing solutions for the future.

Number of luminaires:	1042 pcs.
types of luminaires:	Tiara LED XS Skver LED S R
value of investment:	947,178 PLN
Primary power:	109,353 kW
Power after modernization:	38,256 kW
ROI	<4,1 years
CO ₂ reduction 10 years	169 tonnes

65%
of savings

IP⁶⁶ IK⁰⁸  

ASTRA LED



ASTRA LED is a modern road luminaire with energy-saving LED module and high luminous efficiency. Integrated quick coupler and power cord allow for easy installation.

Recommended for use in open areas for lighting: streets, local roads, bicycle paths, alleys, sidewalks, parking lots and squares.



Astra LED

Rated power [W]	17 - 93
Luminous flux [lm]	2100 - 15450
Mounting method	side to boom, top to pole
body material	PP + FG
Body color:	
shade material	PC
type of lampshade	transparent lens
Dimensions [mm]	640/233/113/60 (76)

IP

66

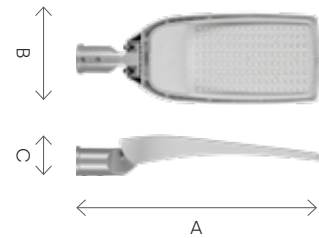
IK

08

lm/W

171

- Basic and budget version of VD with sequential power supply
- Compact size, low weight
- SP10kV protection
- H07RN-F cable (0.7m)
- Quick connector IP66 – quick installation
- Self-cleaning fiberglass (FG) polypropylene body



Quick installation

Thanks to the use of a tight quick connector and a power cable connected to the luminaire, its assembly is more efficient.



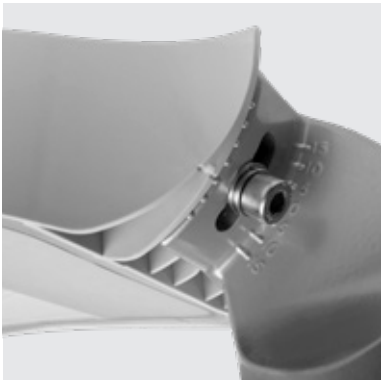
Self-cleaning body

Self-cleaning, uniform body made of polypropylene (PP) reinforced with glass fiber (GF), which guarantees protection against uV radiation.



Lens matrices

Directional dies are used in the luminaire lenticular (made of PC polycarbonate).



Easy adjustment of the housing inclination

The integrated, adjustable handle allows for setting the luminaire at an angle: -5° to +15° (top mounting, on pole), -5° to +15° (side mounting, on the boom).



Astra LED S

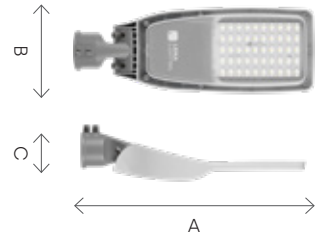


Astra LED S

Rated power [W]	12 - 34
Luminous flux [lm]	2050 - 5500
Mounting method	side to boom, top to pole
body material	PP+15% GF
Body color:	
shade material	PC
type of lampshade	transparent lens
Dimensions [mm]	500/175/75

IP	IK	lm/W
66	08	171

- Self-cleaning body made of polypropylene
- The integrated handle, adjustable in steps of 5 degrees, allows adjustment in the range of:
-5° to +15° (top, on the pole);
-5° to +15° (side, on the boom)
- H07RN-F cable with a length of 0.7 m



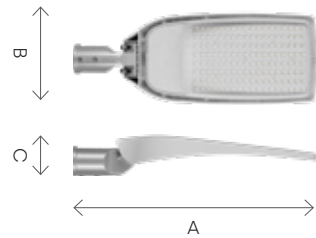


Astra LED Alu

Rated power [W]	17 - 125
Luminous flux [lm]	2100 - 20000
Mounting method	side to boom, top to pole
body material	powder-coated aluminum
Body color:	
shade material	PC
type of lampshade	transparent lens
Dimensions [mm]	640/233/113/60 (76)

IP	IK	lm/W
66	08	171

- Compact size and lightweight design
- SP10kV surge protection
- H07RN-F cable, length 0.7 m
- Quick connector IP66 for quick installation
- Self-cleaning aluminium body



The use of Astra LED Alu luminaires



PARK - URBAN
LIGHTING

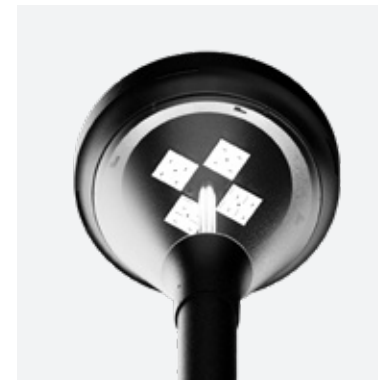
IP
66IK
10DESIGN
AWARD
2025

A number of modern solutions, significantly expanding the possibilities of park and urban luminaires. These luminaires can be modified with the help of a dozen or so canopies changing the light distribution and design. The modular design used makes daily service and maintenance easier than ever!



Tool-free access to attachments

To access the electrical and optical components, simply unscrew two screws without using any tools and open the housing cover.



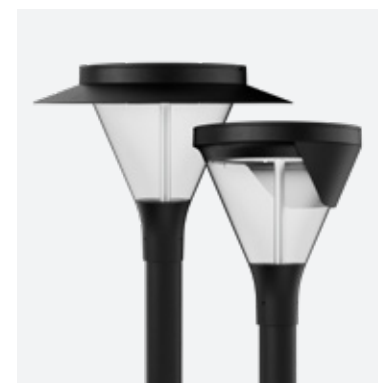
Omnidirectional and lenticular variants

The Skver LED luminaire can be equipped with both omnidirectional lighting modules and targeted sensors equipped with lenses.



Knife disconnect switch

Knife disconnecter used in some versions cuts the power supply to the luminaire when the lid is opened. Thanks to this, the person making the modification is fully protected.



No pollution effect and play

Skver luminaires, whose ULOR = 0 or ULOR < 1 coefficient was created in the spirit of the Nature Centric Lighting concept, with a view to the ecology and safety of both humans and animals.

AVAILABLE VERSIONS



Skver LED S
A

Skver LED S
F

Skver LED S
L

Skver LED S
Z2 WJ

Skver LED S
Z2 MF

Skver LED S
R WJ

Skver LED S
R MF

Skver LED S
Z1 WJ

Skver LED S
Z1 MF



Skver LED S (A)

Rated power [W]	16 - 54
Luminous flux [lm]	2100 - 7400
Mounting method	post
body material	Aluminium (powder coated)
Body color:	■
shade material	PC
type of lampshade	PMMA lens
Dimensions [mm]	427/360/360

IP 66 | IK 10 | lm/W 145

- Universal park light distribution with all-round lighting
- Increased CRI80 color rendering index
- Simple installation on poles fi 48–76, 1.5 m cable as standard

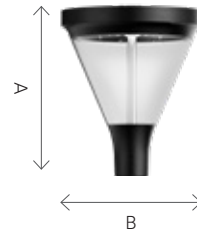


Skver LED S (F)

Rated power [W]	8 - 54
Luminous flux [lm]	1125 - 7400
Mounting method	post
body material	Aluminium (powder coated)
Body color:	■
shade material	PC
type of lampshade	PMMA lens
Dimensions [mm]	427/360/360

IP 66 | IK 10 | lm/W 159

- Omni-directional and targeted distributions to match lighting to a variety of spaces
- Available CRI70 and elevated CRI80 versions
- Tool-free access to the attachment chamber significantly facilitating operation and service





Skver LED S (L)

Rated power [W]	14 - 54
Luminous flux [lm]	2150 - 7650
Mounting method	post
body material	Aluminium (powder coated)
Body color:	
shade material	PC
type of lampshade	PMMA lens
Dimensions [mm]	427/360/360

IP

66

IK

10

lm/W

159

- Omni-directional and targeted broadcasts adapted to illuminate parks, streets and urban spaces
- Available CRI70 and elevated CRI80 versions
- Tool-free service plate compliant with ZhagaBook13/15 standard for faster service



Skver LED lighting in the port

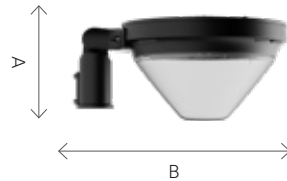


Skver LED S (Z1 WJ)

Rated power [W]	8 - 54
Luminous flux [lm]	1075 - 7650
Mounting method	post
body material	Aluminium (powder coated)
Body color:	■
shade material	PC
type of lampshade	PMMA lens
Dimensions [mm]	461/360/216

IP	IK	lm/W
66	10	170

- Urban design of the luminaire giving the space a modern twist
- and aesthetic character
- Architectural quality of workmanship for durability and attractive appearance
- Tool-free service plate in ZhagaBook13/15 standard for easy service

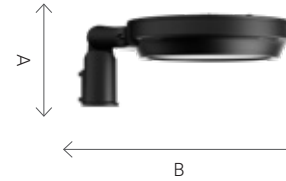


Skver LED S (Z1 MF)

Rated power [W]	8 - 54
Luminous flux [lm]	975 - 7025
Mounting method	post
body material	Aluminium (powder coated)
Body color:	■
shade material	PC
type of lampshade	PMMA lens
Dimensions [mm]	461/360/188

IP	IK	lm/W
66	10	156

- Round luminaire with an urban design, distinguished by its elegant form and total ULR = 0
- Architectural quality of workmanship allowing for aesthetic integration into the space
- Adjustable mounting bracket for installation on poles and booms fi 48–76



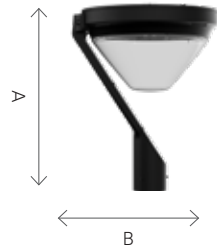


Skver LED S (Z2 WJ)

Rated power [W]	8 - 54
Luminous flux [lm]	1075 - 7650
Mounting method	post
body material	Aluminium (powder coated)
Body color:	■
shade material	PC
type of lampshade	PMMA lens
Dimensions [mm]	386/360/476

IP 66 | IK 10 | lm/W 170

- Distinctive urban luminaire design
- Architectural workmanship for reliability and a sleek look
- Tool-free service plate compliant with the ZhagaBook13/15 standard facilitating technical work

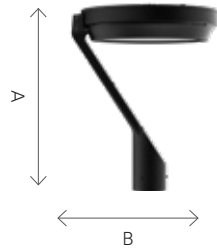


Skver LED S (Z2 MF)

Rated power [W]	8 - 54
Luminous flux [lm]	975 - 7025
Mounting method	post
body material	Aluminium (powder coated)
Body color:	■
shade material	PC
type of lampshade	PMMA lens
Dimensions [mm]	386/360/476

IP 66 | IK 10 | lm/W 156

- Modern urban luminaire design, ULR = 0
- Architectural workmanship for durability and high product aesthetics
- Tool-free service plate compliant with ZhagaBook13/15 standard for simple service



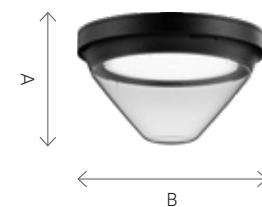


Skver LED S (R WJ)

Rated power [W]	13 - 54
Luminous flux [lm]	1700 - 7650
Mounting method	suspended
body material	Aluminium (powder coated)
Body color:	■
shade material	PC
type of lampshade	PMMA lens
Dimensions [mm]	316/363/363

IP 66 | IK 10 | lm/W 163

- Architectural workmanship for an aesthetic look in urban space
- Omni-directional and targeted distributions offering versatility in applications
- Tool-free service plate in ZhagaBook13/15 standard facilitating service work

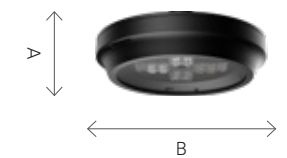


Skver LED S (R MF)

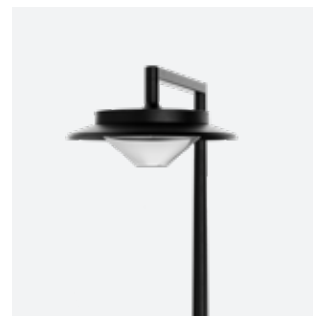
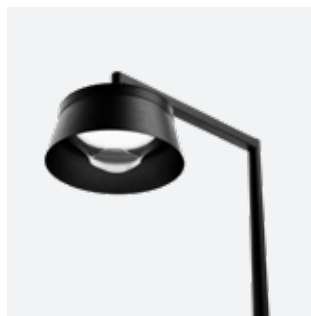
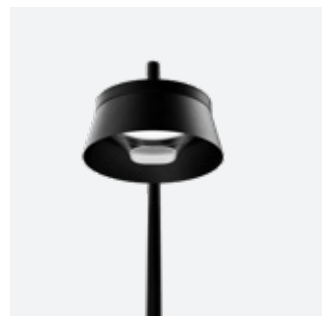
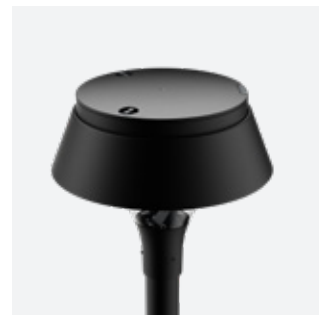
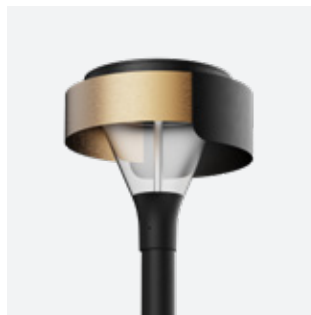
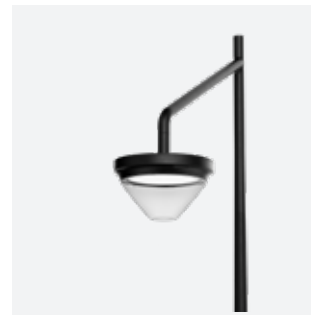
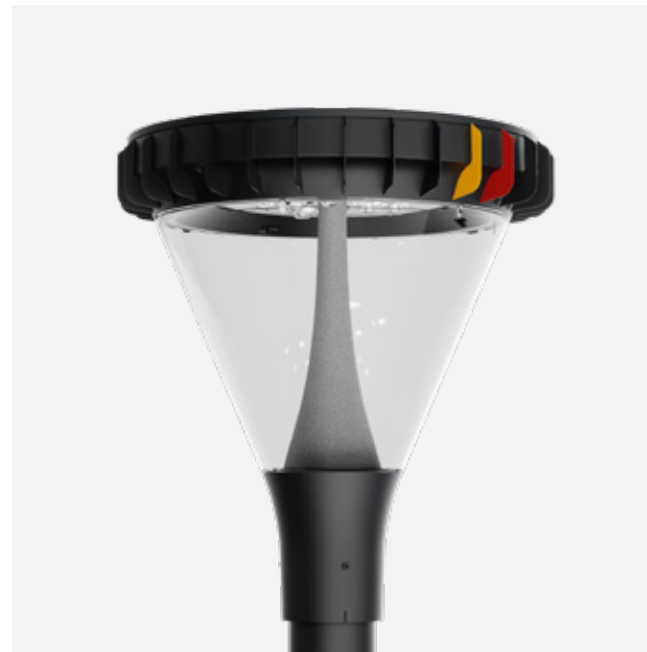
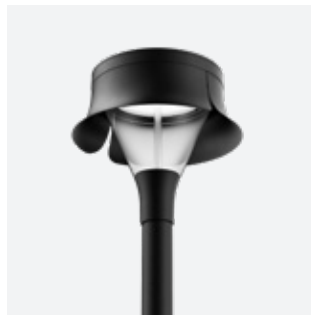
Rated power [W]	19 - 50
Luminous flux [lm]	2250 - 6700
Mounting method	suspended
body material	Aluminium (powder coated)
Body color:	■
shade material	PC
type of lampshade	PMMA lens
Dimensions [mm]	427/360

IP 66 | IK 10 | lm/W 138

- Architectural workmanship, ULR = 0
- Omni-directional and targeted distributions to match the lighting effect to the installation site
- Tool-free service plate in ZhagaBook13/15 standard facilitating service work

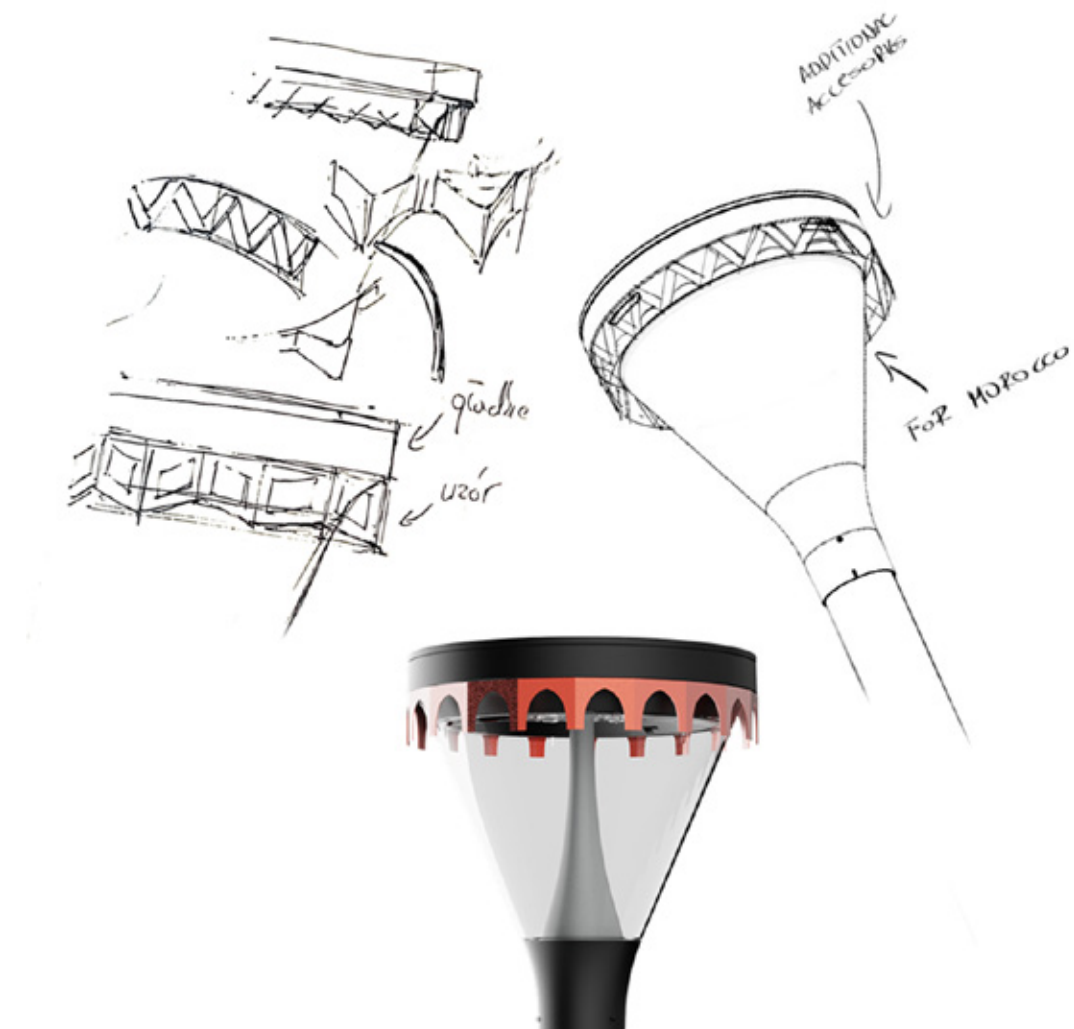


BESPOKE VARIANTS



Skver road luminaires in the Bespoke version are synonymous with an individual approach and the highest quality. In the catalogue, we present many ready-made variants that make it easier to choose the perfect solution. For customers looking for unique solutions, we have also prepared the Bespoke offer, allowing you to fully adjust the luminaire to the needs of the project.

Each project is created in close cooperation with the customer, fully taking into account their expectations and the specificity of the place where the luminaires will be used.





435515
SKVER Backshield RAL9005



435522
SKVER Hood example 1
RAL9005



421518
SKVER Hood ULR example 2
RAL9005



449017
Drilling Jig



804427
SKVER R adapter male thread
M20x40 (stroke 2.5)



804328
SKVER R male adaptor thread
ad ¾ in x 40 (gas)



804434
SKVER R male adapter thread
ad 1 inch x40 (gas)



804335
SKVER R ¾ "x 40" female
thread adapter (gas)



804441
SKVER R female thread adapter
1 inch x40 (gas)



804571
SKVER external adapter fi48



804588
SKVER external adapter fi60

ACCESSORIES TRAPPINGS

SKVER S L 7100lm 840 RM7 IP66 II cl. DALI ZG B 0 (50W)

1 Model
Skver LED S

2 Version
A Inseparable version
F Detachable version
L Removable version with knife switch
R Suspended version
Z1 Inseparable version "7"
Z2 Detachable version with knife switch "7"

3 Luminous flux [lm]
Value in [lm] in steps of 5

4 CRI/CCT
722 724 727 730 735 740 750 757 822 824
827 830 835 **840** 850 857 857

5 Optics
AS-asymmetrical, R-road, P pedestrian crossings,
RP - parking, **RMW - for wet surfaces**, N - narrow,
M - medium wide, W - wide, L - left, P - right, 0-99
optic numbering, HE - high efficiency + LED type II

6 IP
IP66

7 Protection class
II cl.

8 Controls
1DIM
Dim
DALI

9 Connector / Sensor
NEMA
ZG ZHAGA
RCR

10 Colour
B black
G grey
W White
RALxxxx

11 Accessories
0 No Aperture
1 with Aperture No. 1
2 with Aperture # 2
3 with Aperture # 3

12 Power
Value [W]
in steps of 1W





CASE STUDY

Darłowo

Number of luminaires:	734
types of luminaires:	SKVER F, L and R, TIARA 2 LED S
value of investment:	873,838 PLN
Primary power:	54,7 kW
Power after modernization:	17,45 kW
ROI	< 3,6 years
CO ₂ reduction 10 years	1046 tonnes

68%
of savings

163k PLN
savings/year



PREMIERES COMING SOON

SKVER LED PRO – a new, improved version of the valued SKVER street luminaire. The new model is a response to the growing requirements in terms of efficiency, durability.

SKVER LED PRO offers more power, higher luminous efficiency and a modern design optimized for operation in demanding outdoor conditions. The applied optical and electronic solutions provide excellent lighting parameters with even lower energy consumption.

It is a proposition for investors looking for reliable, efficient and future-oriented lighting of streets, parking lots and public spaces. SKVER LED PRO – the next step towards a smart, energy-efficient city.

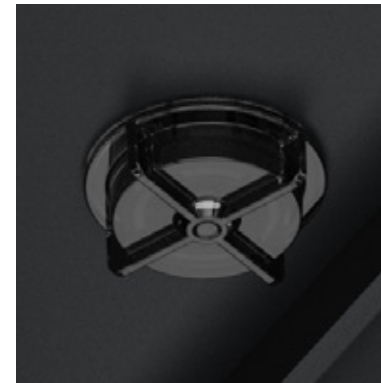


IP
66

IK
10

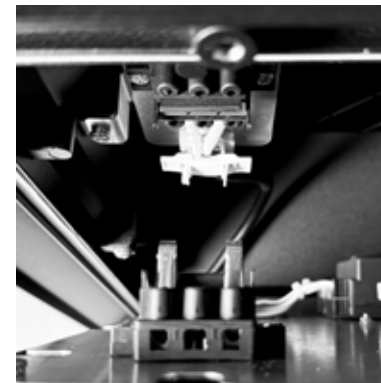


Constelia LED is an elegant park-urban luminaire that combines classic design with modern technology. Thanks to its multi-variant design solutions, it fits perfectly into a variety of urban spaces, offering the flexibility to adapt to any architecture.



NEMA/Zhaga connector

To reach electrical components and optical ones are enough without the use of tools remove the two screws and open the housing cover.



Knife disconnect switch

Knife disconnect used in some versions cuts the power supply to the luminaire when the lid is opened. Thanks to this, the person making the modification is fully protected.



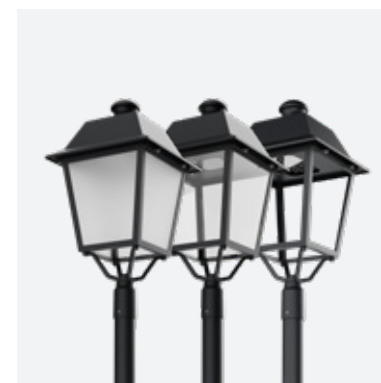
4 colour temperatures

2200K

2700K

3000K

4000K



3 types of lampshade

frosted

milky white

transparent



Constelia LED R

Rated power [W]	8 - 76
Luminous flux [lm]	975 - 10650
Mounting method	post
body material	Aluminium (powder coated)
Body color:	
shade material	toughened glass
type of lampshade	transparent
Dimensions [mm]	425/425/827

IP

66

IK

09

lm/W

150

- Built-in knife disconnecter for easy and safe operation
- Quick module replacement without disassembly and soldering
- Heavy Duty Enclosure IP66, IK09, Powder Coated
- Options: DALI, ZHAGA, CLO, SP10kV, RAL



Constelia LED, Darłowo



Constelia LED R, Dartowo



Constelia LED R

IP 66 | IK 09 | lm/W 150

Rated power [W]	8 - 76
Luminous flux [lm]	975 - 10650
Mounting method	suspended
body material	Aluminium (powder coated)
Body color:	■
shade material	toughened glass
type of lampshade	transparent
Dimensions [mm]	425/425/765

- Stylized and durable LED park-urban luminaire
- Quick module replacement without disassembly and soldering
- Rugged housing IP66, IK09, powder coating
- Options: DALI, ZHAGA, CLO, SP10kV, RAL



SOLUTIONS TRAINING



Altezzo and Mitra LED luminaires provide a new dimension of functionality and visual layer of the environment. Additional mounting elements and modern control systems increase the flexibility of their applications. Such solutions emphasize the modern character of the lamps, while increasing the comfort of use and energy efficiency of the infrastructure.



Altezzo L100 / L150

Rated power [W]	6 - 82
Luminous flux [lm]	650 - 10700
Mounting method	on the foundation
body material	aluminium
Body color:	
shade material	PC
type of lampshade	transparent lens
Dimensions [mm]	600, 900, 1200, 1500/100/40/200, 2500, 3000, 3500, 4000, 5000/150/150/800

IP

65

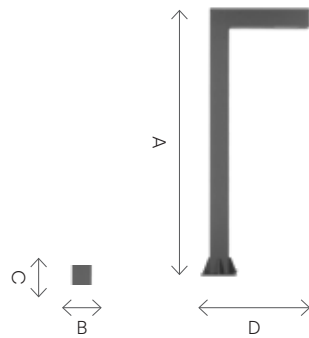
IK

09

lm/W

122

- Customizable height
- From low pole luminaires to 6m poles
- Beam angle 110°
- Various streams and broadcasts
- Operating at -30°C to +50°C and harsh environments



CUSTOMIZATION

The design of Altezzo L provides for the possibility of customizing the lamp in accordance with the guidelines of the designer or architect. The lamp element comprising the light module may be directed parallel to the illuminated plane or at an angle.

In addition, the profile itself may fork, which increases the possibilities of arrangement. Thanks to the option of customizing the height – from low post luminaires to 6 m poles – the solution works in many types of space. As a result, as many as four elements with a light module can be mounted on one post, one on each plane, at the same or different heights.





Altezzo L 100 K lighting on the facade of the building

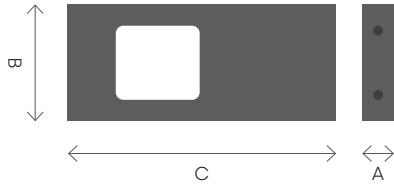


Altezzo L100K / L150K

IP 65 | IK 08 | lm/W 130

Rated power [W]	5 - 40
Luminous flux [lm]	600 - 5200
Mounting method	on the facade
body material	aluminium
Body color:	
shade material	PC
type of lampshade	PMMA lens
Dimensions [mm]	40/100/250

- The lamps are designed to work in very low and high temperatures from -30°C to +50°C and in difficult weather conditions
- No light pollution effect





Altezzo A120 / A150

Rated power [W]	8 - 42
Luminous flux [lm]	850 - 4000
Mounting method	on the foundation
body material	aluminium
Body color:	
shade material	PC
type of lampshade	transparent lens
Dimensions [mm]	120/120/600, 900, 1200, 1500 150/150/600, 900, 1200, 1500, 2000, 2500, 3000

IP

65

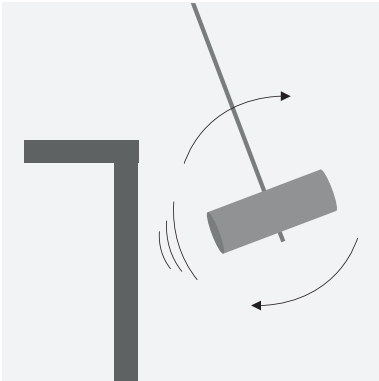
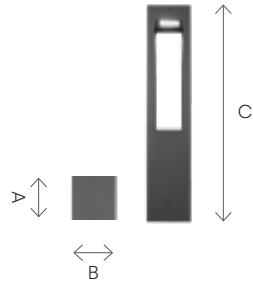
IK

08

lm/W

109

- They can work in very low and high temperatures
- The light module consists of high durability LEDs with a durable polycarbonate screen
- They will work well in parks and gardens for illuminating small architecture



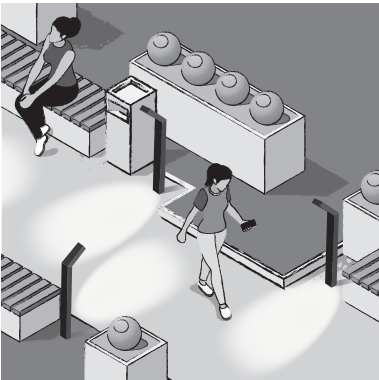
Damage resistance mechanical

The profile of Altezzo lamps is durable on impacts IK09 / IK08.



Different angles of light

The lamp element comprising the light module may be directed parallel to the illuminated plane or at an angle.



Altezzo low lamps

They will perfectly fit into the garden infrastructure and park. They will precisely illuminate the path and selected elements of small architecture, without causing the effect of light pollution.



Durability

The light module consists of LEDs with a durability of up to 196,000 h.



Mitra LED luminaires in the park

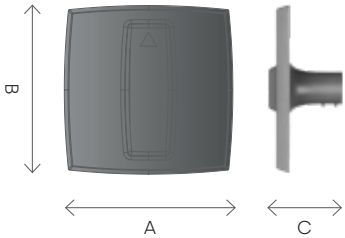


Mitra LED

IP 66 | IK 07 | lm/W 132

Rated power [W]	13 - 62
Luminous flux [lm]	1550 - 7250
Mounting method	gable to pole
body material	PP + FG
Body color:	
shade material	PC
type of lampshade	transparent lens
Dimensions [mm]	398/398/175

- Two types of shade – iridescent and transparent
- Over Voltage Protection
- Cable H07RN-F 0.6m
- Smooth, dirt-resistant surface
- The use of a tight IP66 quick connector allows for instant assembly





LIGHTING
TRAINING

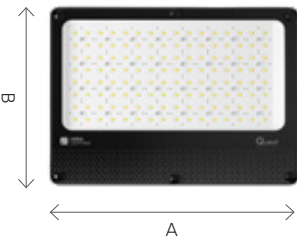


Quest LED EVO L

IP 67 | IK 10 | lm/W 191

Rated power [W]	81 - 297
Luminous flux [lm]	14550 - 48900
Mounting method	surface-mounted, suspended
body material	aluminium
Body color:	
shade material	Tempered glass
type of lampshade	transparent
Dimensions [mm]	550/434/57

- Wide range of power and light distribution (including asymmetrical)
- Resistance to extreme humidity, dust and high temperatures
- Meets the requirements of PN-EN 60598-2 part 5, resistance to strong wind

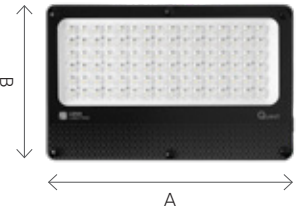


Quest LED EVO M

IP 67 | IK 10 | lm/W 189

Rated power [W]	56 - 185
Luminous flux [lm]	9950 - 29550
Mounting method	surface-mounted, suspended
body material	aluminium
Body color:	
shade material	Tempered glass
type of lampshade	transparent
Dimensions [mm]	550/383/57

- Wide range of power and light distribution (including asymmetrical)
- Resistance to extreme humidity, dust and high temperatures
- Meets the requirements of PN-EN 60598-2 part 5, resistance to strong wind





Quest LED EVO XS

IP	IK	lm/W
67	10	171

Rated power [W]	20 - 56
Luminous flux [lm]	2800 - 9000
Mounting method	surface-mounted, suspended
body material	aluminium
Body color:	■
shade material	Tempered glass
type of lampshade	transparent
Dimensions [mm]	240/280

- 7.5° graduated steel arm attached to the body
- Die-cast aluminium body in corrosion class C5
- A wide selection of optics, including asymmetric, providing great freedom of configuration
- Tight quick coupling
- Meets the requirements of PN-EN 60598-2 part 5 per floodlight



Quest LED Evo XS in the warehouse



Lighting of the Słotwiny Arena ski slope

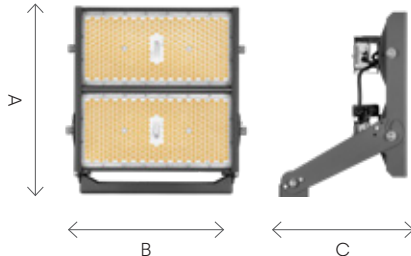


Factor LED

Rated power [W]	101 - 1124
Luminous flux [lm]	14600 - 150800
Mounting method	on a pole, for a construction partition, flat surface, boom
body material	Aluminium (powder coated)
Body color:	
shade material	Tempered glass
type of lampshade	lens matrix transparent
Dimensions [mm]	191/425/217, 385/425/340, 580/425/340, 774/425/340

IP 66 | IK 09 | lm/W 158

- Premium economic efficiency
- High tightness IP66 and impact resistance IK09
- Passive lamp cooling system
- Ability to work at elevated temperatures





Module
Power supply
solar

Efficient photovoltaic panel

Adjustable mounting to fully meet
lighting requirements

Adjustable mount for precise
adjustment to the sun position



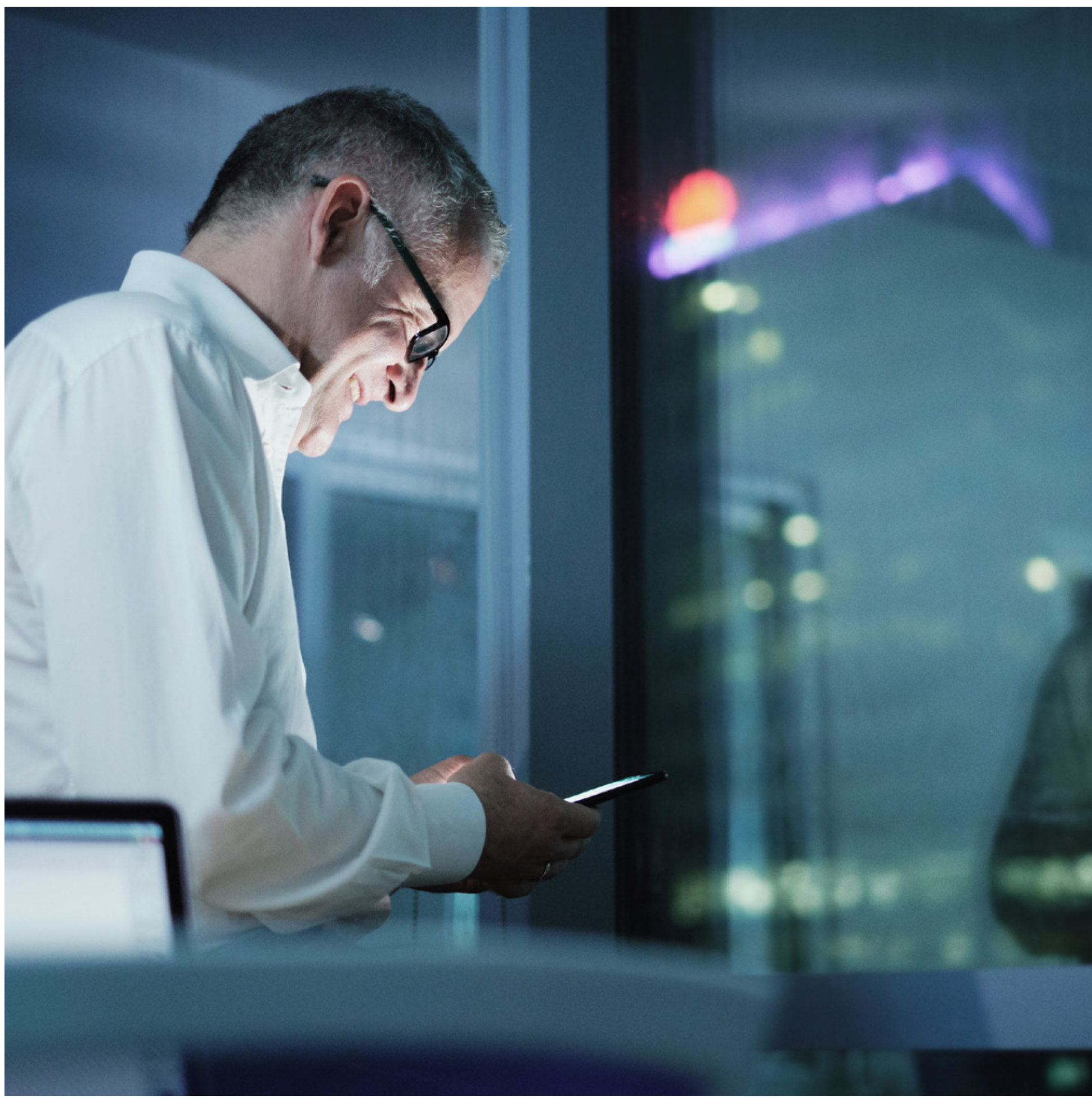
Solar systems

SOLAR MODULE

lifetime	25 years
guarantee	12 years
power	up to 400Wp
IP protection tops	IP68
capacity	20 - 50%
operating tempera- ture	-40°C to +85°C

FIXTURE

degree of protection	IP66
impact resistance	IK09
rated power of the device [W]	3 - 65
luminous flux [lm]	500 - 10500
temperature coloured [K]	2200 - 5700
CRI/Ra	>70



SMART CONTROLLING
THE LIGHT

Programming in the driver

- Cheapest way to control lighting
- No additional components, just the right DALI DRIVER
- Possibility to add motion sensors

Power reduction control

- Economical and simple solution
- Possible installation of components inside the distribution box
- Alternatively, mounting the modules in a NEMA connector

ICU2 (U6Me2 protocol)

- No subscription or settlement fees
- No need for additional controllers and controllers in luminaires
- Remote control via Gateway in the control cabinet
- Access from iOS and Android apps

LENA LIGHTING

- No subscription or settlement fees
- Control from iOS and Android apps
- Possibility of mounting light and motion sensors
- Remote control via Gateway in IP67 box



LIGHT UNDER CONTROL

**Lena Lighting Clue City +**

- Independent control and grouping of luminaires
- Alert and inventory system with marking of luminaires for service
- Navigation to service points
- On-premises or certified cloud operation



Clue is a flexible street lighting management system that adapts to the specifics of each municipality and city – from small towns to modern metropolises.

The Clue system is distinguished by its flexibility and adaptability to the needs different users. The IoT department creates solutions that work with other urban systems, and a well-thought-out architecture reduces costs – thanks to SIM cards only in gateways or working in a mesh network without fees. ClueCITY+ will work in large cities requiring advanced control, and ClueCITY with a gateway – in smaller municipalities with distributed infrastructure. It is a modern and economical lighting for every local government.

Lena Lighting S.A.

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