

Stelvio / Ministelvio

LED street lighting



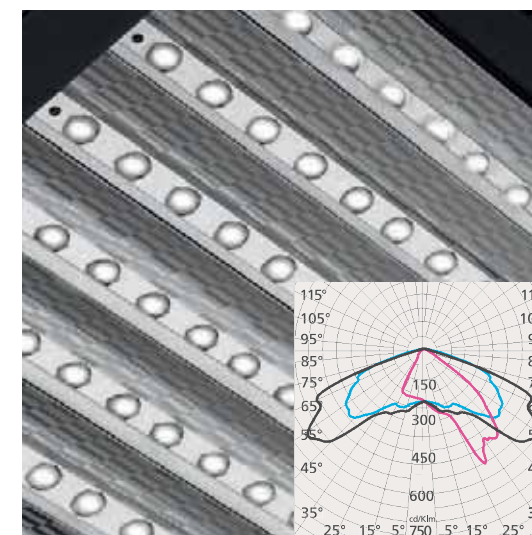
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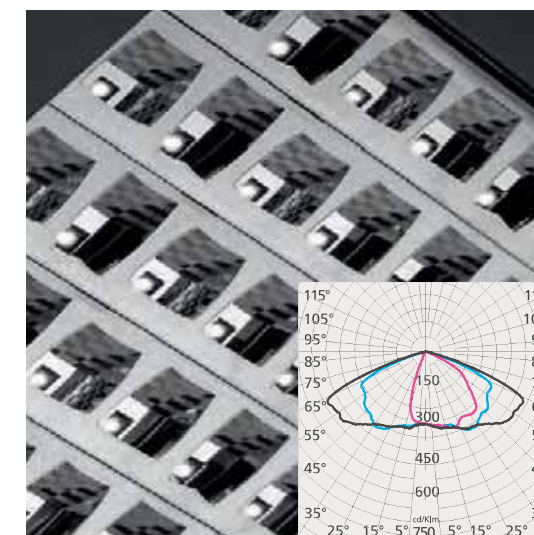
Stelvio / Ministelvio Designed for maximum reliability

The Stelvio / Ministelvio family of products was designed without the constraints imposed by conventional technology, but rather with an approach that focuses on tangible application results and the technological possibilities offered by modern semiconductors and their electronic supply and control systems. The photometric measurements to be used for lighting calculations can be downloaded from our website at www.disano.it



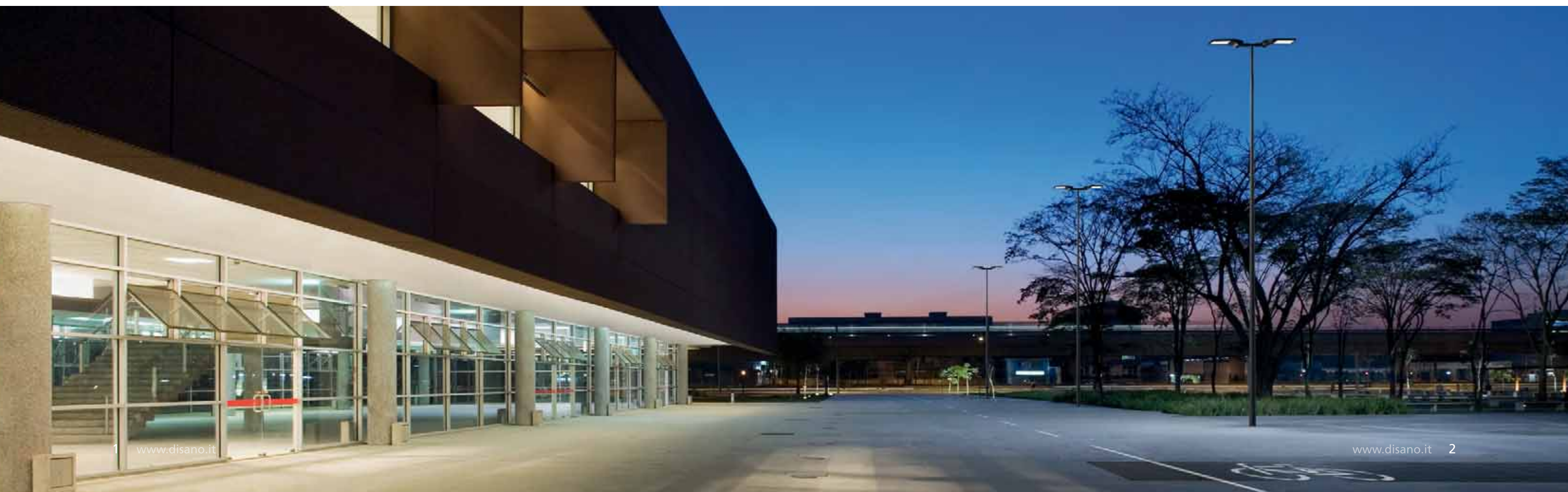
Modular optical design with or without auxiliary lens

The modular optical design is available in two versions (with or without auxiliary lens). The entire concept includes specific solutions in the electronic circuit design and in the control of operating temperatures, making the Stelvio line a highly professional, flexible and reliable product, capable of guaranteeing huge application advantages in several situations.



Outstanding photometric performance

This product was designed with an optical system capable of controlling the potential glare created by the growing light intensity of LEDs while achieving high photometric performance. This allows the application in street lighting schemes where there is a significant distance between the poles respecting all parameters required by the norms. In these cases, greater light control is reached with the optics equipped with auxiliary lens. The Ministelvio version is especially suited for bicycle lane lighting.



Electrical safety switch

Modular optical system with bypass circuit

Safety mechanism against accidental closing

Fast connectors

Dimmable ballast with temperature sensor and self-protection function. Virtual midnight option available

Aadjustable universal connector (top or side mount)

Suited to accommodate photocell

Fall-proof fasteners

Horizontal tempered glass, 4mm thick, 100% shock-resistant for cut-off UNI EN 12150-1 2001

Anti-condensation valve

IP 67 connector for quick installation

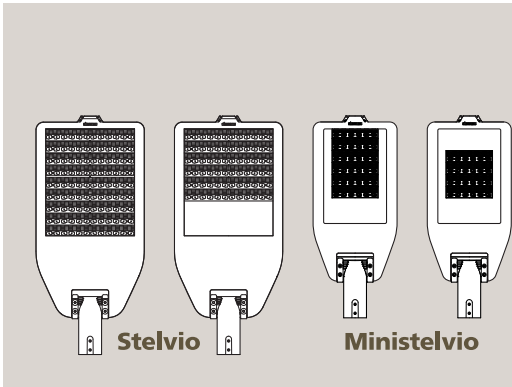
Always use the power you need

The modular optical system and the possibility to choose the correct drive current for LEDs will always allow you to have the right power under specific design conditions, and also help you deal with maintenance and retrofitting problems.

Using a lower current will improve the efficiency of fixtures and therefore increase energy savings, whilst a higher current will result in a higher light flux so that you can reduce the number of fixtures.



Modular optical design



Three drive currents for LEDs

Stelvio / Ministelvio 1 Plus L			
3270 3271 3275 3276			
	350 mA	530 mA	700 mA
24 LED	4680 lm	4416 lm	5520 lm
36 LED	4680 lm	6624 lm	8280 lm
48 LED	6240 lm	8832 lm	11040 lm
72 LED	9360 lm	13248 lm	16560 lm
96 LED	12480 lm	17664 lm	22080 lm
108 LED	14040 lm	19872 lm	24840 lm
+ efficiency		+ emission	

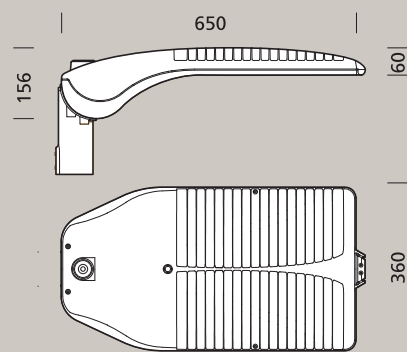
Stelvio Plus S			
3273 3274			
	350 mA	530 mA	700 mA
*27 LED	4968 lm	4968 lm	6210 lm
36 LED	4680 lm	6624 lm	8280 lm
54 LED	7020 lm	9936 lm	12420 lm
63 LED	8190 lm	11592 lm	14490 lm
81 LED	10530 lm	14904 lm	18630 lm
*not supplied as standard			
+ efficiency		+ emission	

About photometric and lighting design calculations

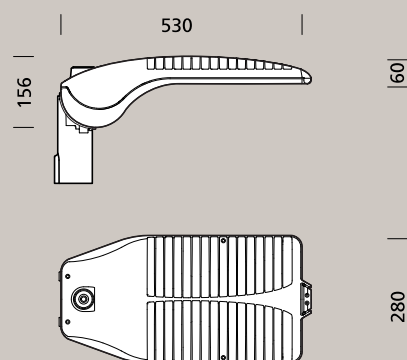
All Stelvio / Ministelvio fixtures have a photometric curve measured in the labs of DISANO ILLUMINAZIONE. The complete database can be downloaded at www.disano.it or using the link in the Dialux software. Please note that the technical specifications regarding LED fixtures highlight several differences compared to traditional products owing to the specific features of this new technology. According to the UNI 13256 standard, the photometric performance of a LED fixture should be expressed based on a theoretical fixture having a luminaire output ratio (LOR) of 100%. Actually this is not the case, the output ratio of a LED fixture is expressed as the difference between the luminous flux value as reported in the photometric files (which represents the actual flux emitted by the entire fixture) and the nominal flux value of the LEDs. In the DISANO catalogues we show the nominal flux of LEDs applied in each specific luminaire, being the typical values of the light source. In this way, it is possible to understand the category and the quality of the semiconductors used.



Stelvio



Ministelvio

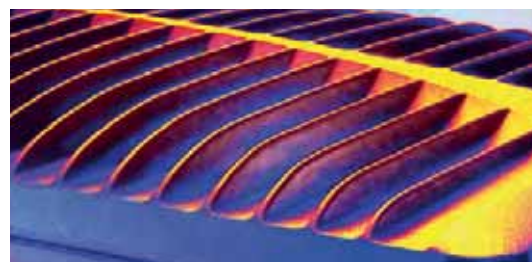


Over 50,000 hours life

The Stelvio / Ministelvio line of products was designed with a series of features and solutions to maximise the duration of the lamp's life span:

- Use of the best available LEDs and power supplies
- Modular optics with electronic circuits equipped with bypass circuit (in case of defects in single semiconductors)
- Overheating control system with automatic reduction of current
- Anti-condensation valve
- Version with improved surge protection is available upon request
- Low temperature electronics

All these features help to extend lamp life past 50,000 hours



Light flux dimming

Further energy savings are possible thanks to the dimming function.

The standard power supply used in all Stelvio products includes this function, through a low voltage (1-10V) signal. This type of dimming input control is normally used when a central control infrastructure is present in the installation. These devices are capable of controlling the light flux with any kind of signal.

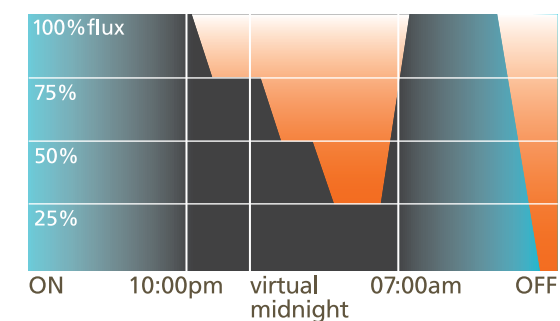


Programmable lighting control systems

At the customer's request, the Stelvio / Ministelvio range of products can be equipped with a special device to dim the lighting flux during night-time without the need to install any additional cables in the infrastructure.

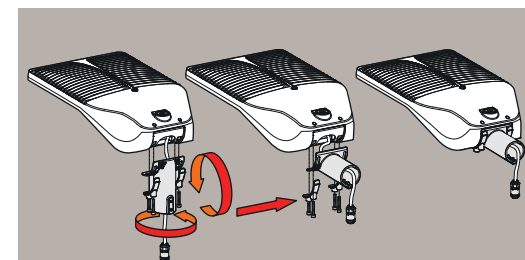
The device is capable of performing up to 5 night-time dimming steps; the system is supplied already programmed by Disano illuminazione and the user does not need to perform any type of programming during installation.

Example of night-time programming



Easy installation

Accessories for both top and side mounting.



Reduced resistance to wind

The fixture's design is configured to minimise wind-exposed surfaces.

400 sqcm of side surfaces for Ministelvio, 470 sqcm for Stelvio.



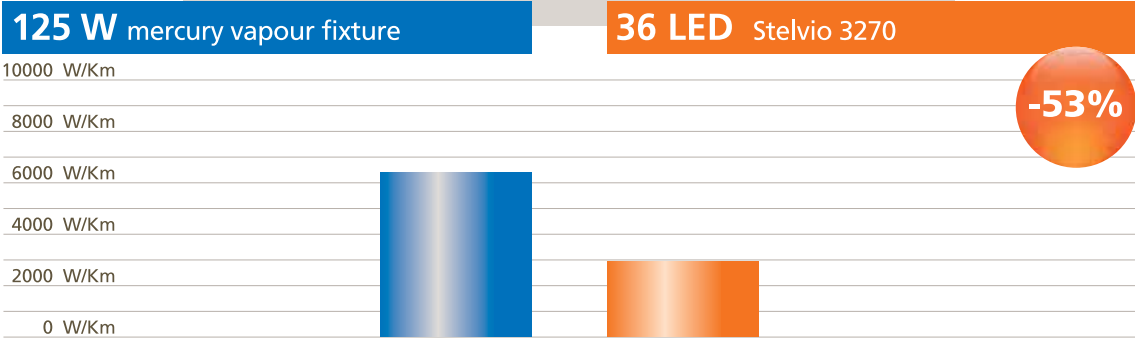
Advantages in replacing old luminaires

The replacement of obsolete lighting systems based on mercury vapour fixtures (still very common in residential zones despite being outdated and poorly efficient), enable to reduce energy consumptions by 50-60%, while increasing the light output to the levels currently required by applicable legislation, without the

need to modify neither the poles nor the systems. With the modularity offered by Stelvio fixtures you can always choose the exact amount of power necessary to deliver the right lighting levels without over-dimensioning and therefore wasting energy.

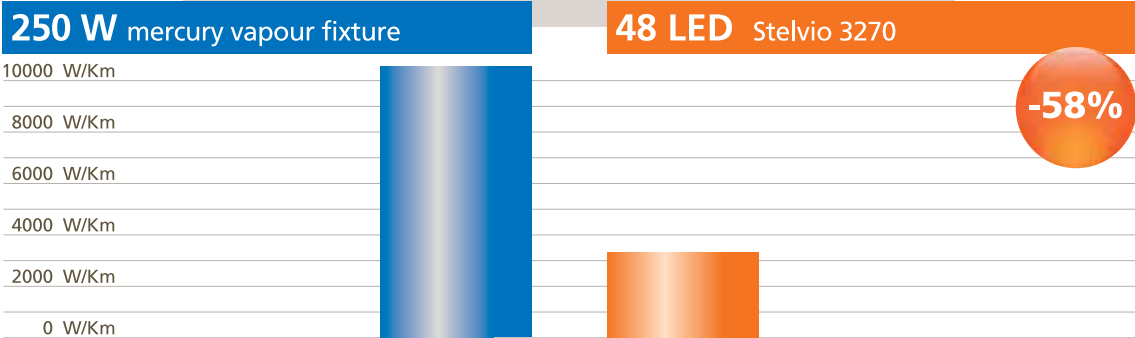
	width	distance	d/h	poles/km	Cd/m²	P(w)	P/km
HG 125	6	22.0	2.75	46	0.74	137	6364
36 LED Stelvio 3270	6	22.0	2.75	46	0.75	64	2973

Consumptions comparison of a ME4b street with 8-meters poles:



	width	distance	d/h	poles/km	Cd/m²	P(w)	P/km
HG 250	8	26.0	2.6	39	0.67	268	10576
48 LED Stelvio 3270	8	26.0	2.6	39	0.75	85	3354

Consumptions comparison of a ME4b street with 10-meters poles:



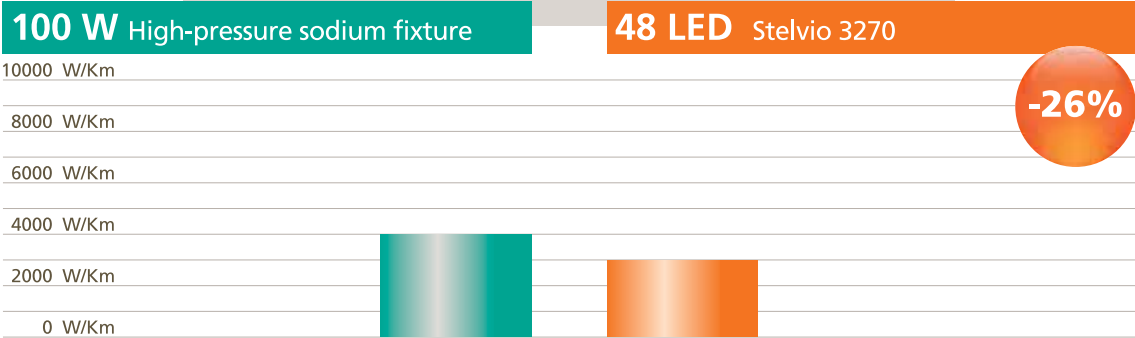
Advantages in installing new projects

Using Stelvio LED lights instead of state-of-the art, high-pressure sodium luminaires enables you to obtain the same lighting results, reducing power and consumptions by 25%-30% depending on the type of road. LED technology, compared to high pressure sodium, will significantly improve both the quality of the light (which is white and not yellow) and the colour rendering; moreover regular maintenance

is no longer needed. Thanks to high performance LED optics (reflector + auxiliary lens), LED Stelvio fixtures can be used along roads and keeping the same distance between poles, like for state-of-the art, high-pressure sodium lamps. In this way you can save energy without increasing the number of light fixtures.

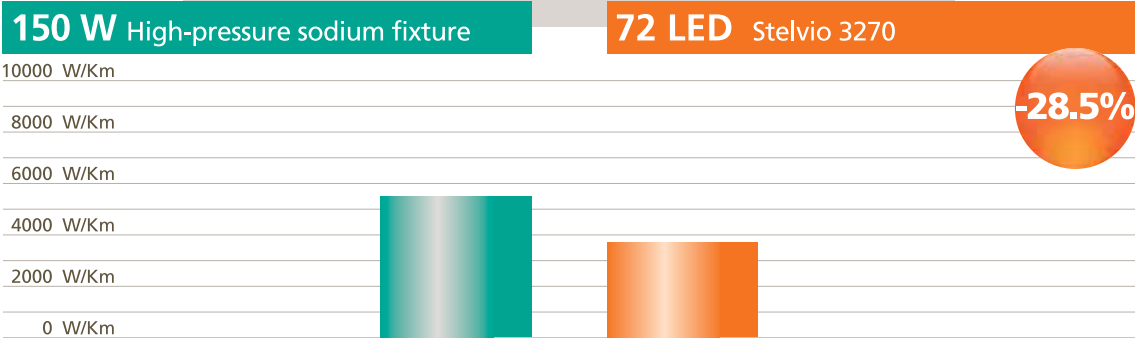
	width	distance	d/h	poles/km	Cd/m²	P(w)	P/km
SAPT 100	8	29.6	3.7	35	0.75	115	4000
48 LED Stelvio 3270	8	29.6	3.7	35	0.76	83	3000

Consumptions comparison of a M4a street with 8-meters poles:



	width	distance	d/h	poles/km	Cd/m²	P(w)	P/km
SAPT 150	8	32.0	4.00	32	1.2	168	5420
72 LED Stelvio 3270	8	34.0	4.25	30	1.0	124	3850

Consumptions comparison of a ME3c street with 8-meters poles:



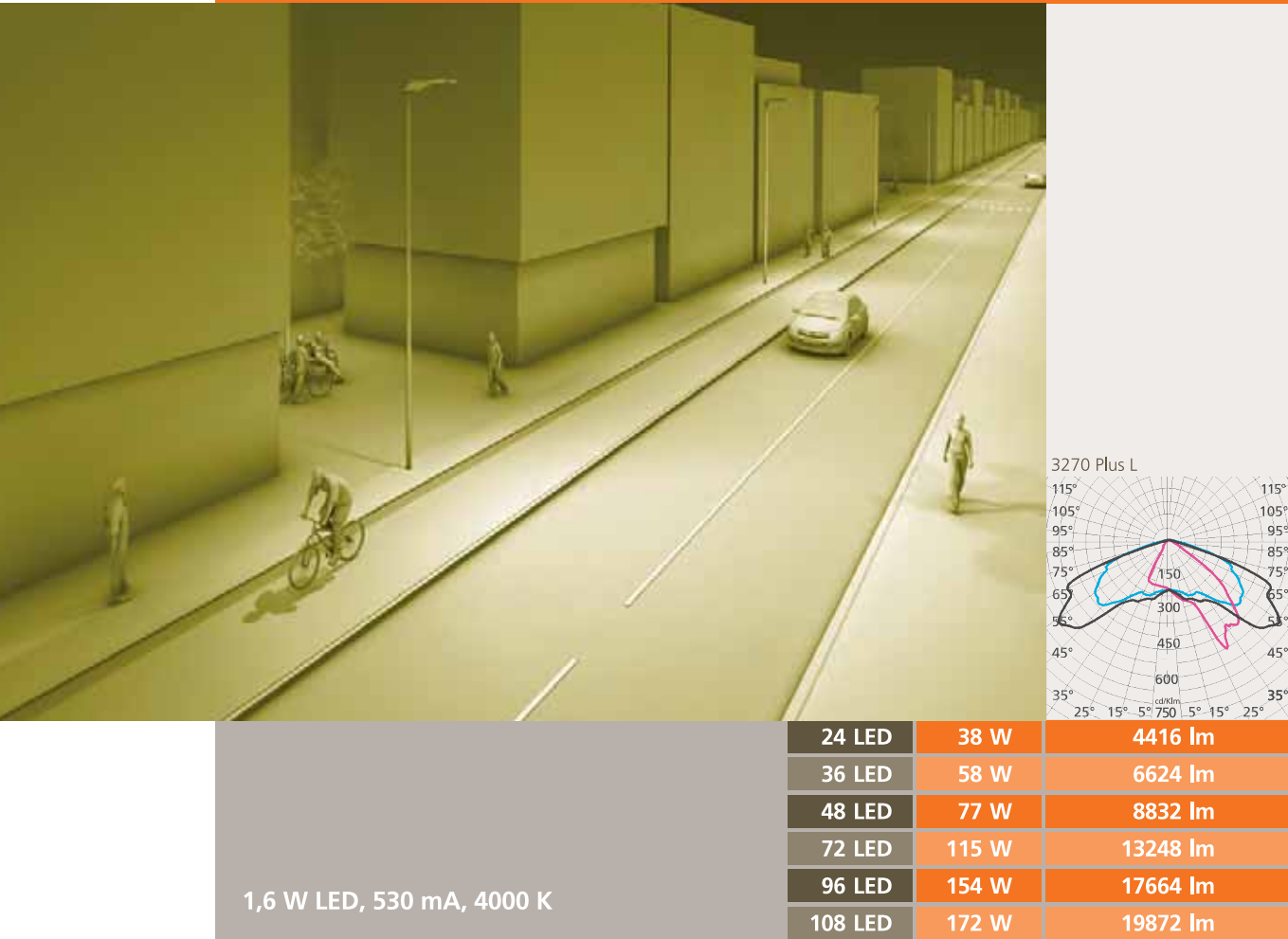
Installation along extra-urban roads and bicycle lanes

LED optics with auxiliary lens for improved light distribution.
 Modular optics with 6/12 LEDs in high performance metallic VO polycarbonate, micro-faceted.
 Dimmable electronic driver for 1-10 V systems.

Installation along urban roads and roundabouts

Modular optics with 9 LEDs in high performance metallic VO polycarbonate, micro-faceted, matt.
 Single-LED optics for an improved control of light.
 Dimmable electronic driver for 1-10 V systems.

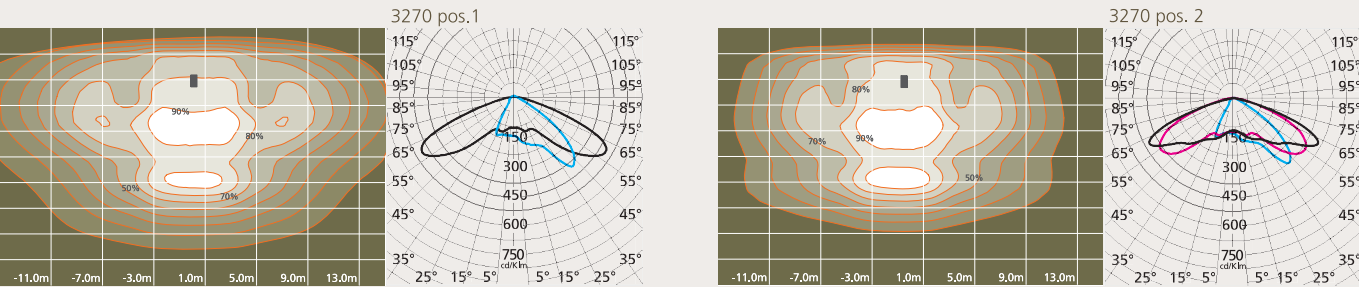
Stelvio / Ministelvio 1 Plus L symmetric



Stelvio 1 Plus S symmetric



Customized installations



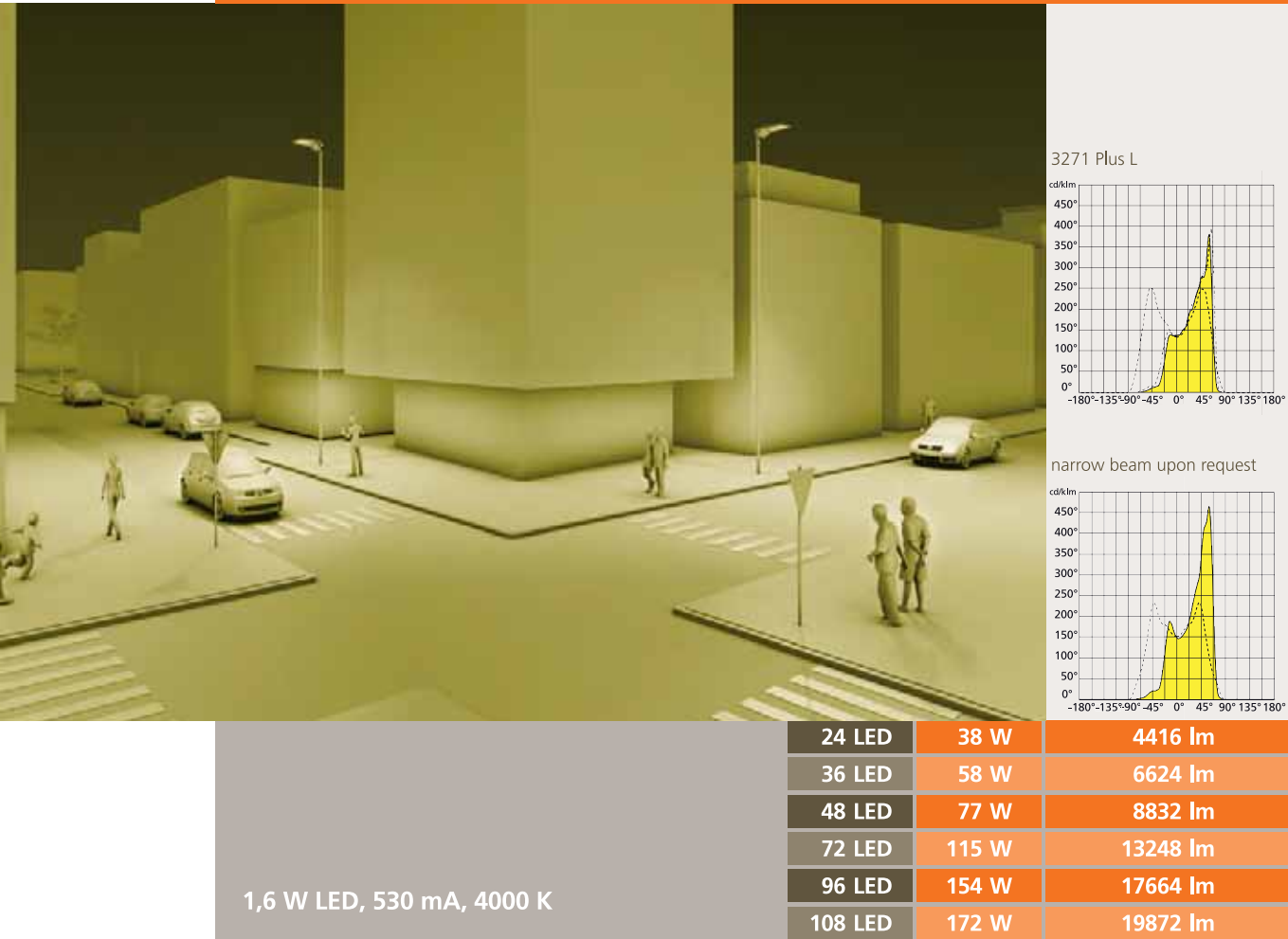
Installation along urban roads and pedestrian crossings

LED optic with auxiliary lens for an improved light distribution.
 Modular optics with 6/12 LEDs in high performance metallic VO polycarbonate, micro-faceted.
 Dimmable electronic driver for 1-10 V systems.

Installations in parking areas

Modular optics with 9 LEDs in high performance metallic VO polycarbonate, micro-faceted, matt.
 Single-LED optics for an improved control of light.
 Dimmable electronic driver for 1-10 V systems.

Stelvio / Ministelvio 1 Plus L asymmetric



Stelvio 2 Plus S asymmetric



Customized installations

