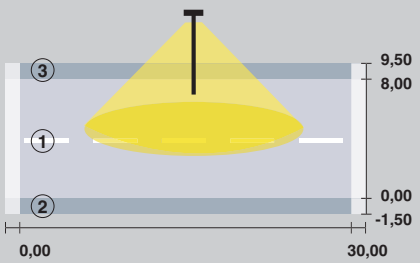
Advantages in installing new projects:

using Sella LED lights instead of high-pressure sodium luminaires enables you to obtain the same lighting results, reducing power and consumptions by 40%-50% depending on the type of road.
Compared to high pressure sodium, LED technology 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), Sella LED fixtures can be used along roads and keeping the same distance between poles, like for high-pressure sodium lamps. In this way you can save energy without increasing the number of light fixtures.

Example of a lighting system:
3291 Sella 1 - 16 LED
Tot. power consumption @700mA P=84W



Maintenance factor 0,9
Pole height 8m

Area of evaluation: roadW totay	①
Length: 30m - Width 8m	
Grid	10 x 6 points
Street elements	roadway 1
Road surface	C2, q0: 0,070
Selected lighting class	ME3a

Lighting design results	L_m [cd/m²]	U0	UI	TI(%)	SR
Obtained values	1,28	0,44	0,70	10	0,52
Target values	≥1,00	≥0,40	≥0,70	≤15	≥0,50
Compliant / non-compliant	√	√	√	√	√

Area of evaluation: pavement	②
Length: 30m - Width 1,5m	
Grid	10 x 3 points
Street elements	pavement 2
Selected lighting class	S1

Lighting design results	E_m [lx]	E_{min} [lx]
Obtained values	19,24	9,59
Target values	≥15,00	≥5,00
Compliant / non-compliant	√	√

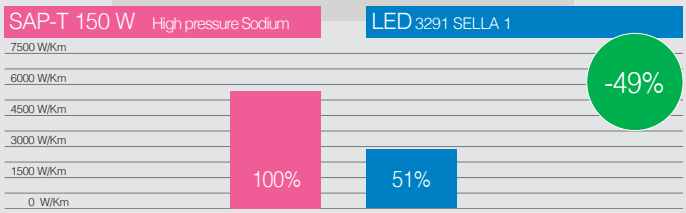
Area of evaluation: pavement	③
Length: 30m - Width 1,5m	
Grid	10 x 3 points
Street elements	pavement 3
Selected lighting class	S2

Lighting design results	E_m [lx]	E_{min} [lx]
Obtained values	11,37	7,02
Target values	≥10,00	≥3,00
Compliant / non-compliant	√	√

Energy efficiency: consuming less energy without giving up the benefits of technological progress. This is the great challenge for the future of our planet. This is because greater energy efficiency means lower consumption without compromising light quality. Being able to distinguish colours and perceive clear details when transiting on urban streets help improve the safety of drivers and pedestrians. In addition, lights that mimic daylight will improve the perception of faces and increase our sense of safety. Thanks to white LED light, cities are safer and more liveable even after dusk.

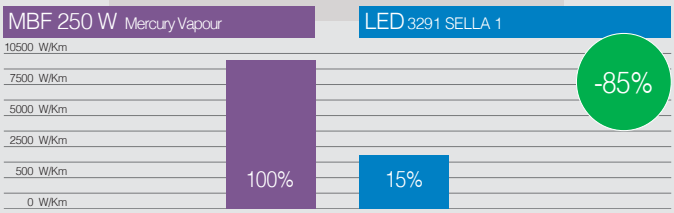
	width	H	distance	Cd/m²	P(W)	W/Km
SAP-T 150 W	8 m	8 m	30 m	1,25	168	5600
SELLA 1 3291 (700mA)	8 m	8 m	30 m	1,28	85	2833

Comparison of consumptions on a ME3a road (C2 type of asphalt):

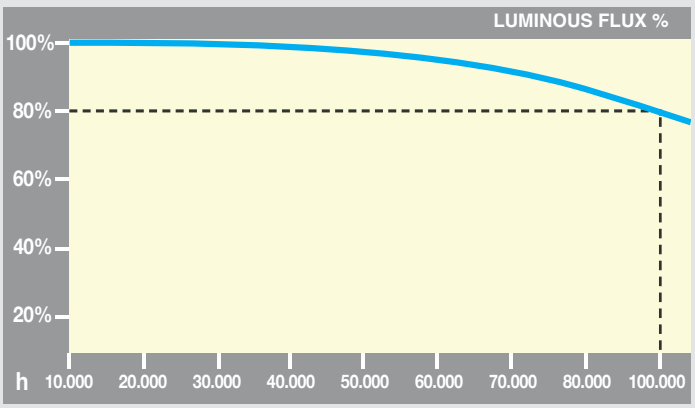


	width	H	distance	Cd/m²	P(W)	W/Km
MBF 250 W	8 m	8 m	27 m	0,75	275	10185
SELLA 1 3291 (350mA)	8 m	8 m	27 m	0,76	41	1519

Comparison of consumptions on a ME4b road (C2 type of asphalt):



Life expectancy: LEDs, unlike traditional sources, will not turn off suddenly when their working life ends, but will slowly fade their initial luminous flux until they turn off completely. In fact, LEDs do not break (except for manufacturing damages) but decay gradually and constantly. The decrease of LED flux is defined by the working life and is represented by the L80 mark (see chart), which means that the flux is kept up to 80%:. The “B” letter followed by a number ranging between 10 and 50 indicates the quality of the fixture and defines the LED percentage that doesn’t keep the declared characteristics when it reaches 100,000 working hours.



LED: LUMINOUS FLUX MAINTENANCE
(including end-of-life failure)

Sella 1: art. 3290 - 3291		L80B10 @ta+25°C	L80B10 @ta+50°C	L90B10 @ta+25°C	L90B10 @ta+50°C
n.LED	W tot				
8	42 (700mA)	>100.000h	>100.000h	70.000h	50.000h
16	84 (700mA)				
24	126 (700mA)				

The products of the Sella 1 family are compliant with all applicable tests (third-party certification) pursuant to standard **ANSI C136.31: Street Lighting – Luminaire Vibration.**
- Test level: 3.0G Level 2 for bridge/overpass applications.

Low Flicker: product with a very low flicker; uniform light for greater eye protection.

Energy-saving:
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.

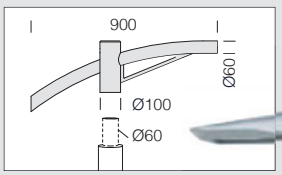
On request	Power supply	n.LED	W tot	ølm
Sella 1 art. 3290	350mA - **4000K**	8	**21**	2714m
		16	**41**	5440lm
		24	**61**	8092lm
Sella 1 art. 3290	530mA - **4000K**	8	**32**	3753lm
		16	**64**	7528lm
		24	**97**	11150lm

On request	Power supply	n.LED	W tot	ølm
Sella 1 art. 3291	350mA - **4000K**	8	**21**	2697lm
		16	**41**	5404lm
		24	**61**	8077lm
Sella 1 art. 3291	530mA - **4000K**	8	**32**	3732lm
		16	**64**	7476lm
		24	**97**	11128lm

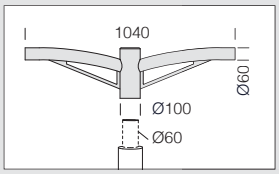
Sella 1 art. 3290	350mA - **3000K**	8	**21**	2524lm
		16	**41**	5059lm
		24	**61**	7528lm
Sella 1 art. 3290	530mA - **3000K**	8	**32**	3490lm
		16	**64**	7001lm
		24	**97**	10370lm

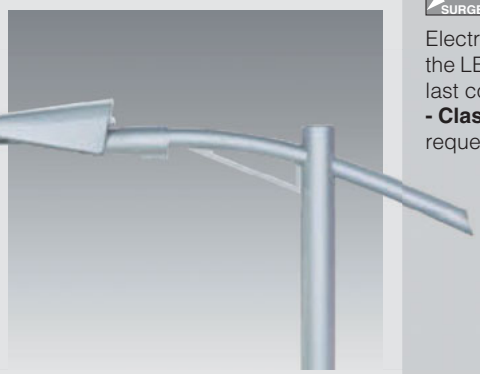
Sella 1 art. 3291	350mA - **3000K**	8	**21**	2508lm
		16	**41**	5026m
		24	**61**	7511lm
Sella 1 art. 3291	530mA - **3000K**	8	**32**	3470m
		16	**64**	6953lm
		24	**97**	10350lm

acc. 504 single arm	
grey	991262-00
graphite	991263-00
Suited for poles with a diameter 60mm.	



acc. 508 double arm	
grey	991266-00
graphite	991267-00
Suited for poles with a diameter 60mm.	





Housing and cover: in die-cast aluminium and designed with a very small surface exposed to wind. Cooling fins are integrated into the cover.

Heat sink: the heat dissipation system is specially designed and made to allow the operation of the LED lights with temperatures ensuring excellent performance/efficiency and durability.

Pole connection: in die-cast aluminium and with gaskets to secure the frame according to different inclinations. Adjustable ranges: between 0° and 20° for side mount; and between 0° and 20° for mast-top mounting. Inclination pace: 5°. Suited for poles with a diameter 42-76mm.

Diffuser: extra-clear, tempered glass, 4 mm thick, resistant to thermal shock and impacts (UNI-EN12150-1: 2001).

Coating: the standard powder coating consists of a first metal surface pre-treatment stage and of single layer of UV-stabilised, corrosion and salt resistant polyester powder coating.
The SELLA luminaire **is declared** to have passed the 2000 hours of salt corrosion resistance test in accordance with ASTM B 117 standard and the 2000 hours of UV condensation test in accordance with the ASTM G 154 standard.

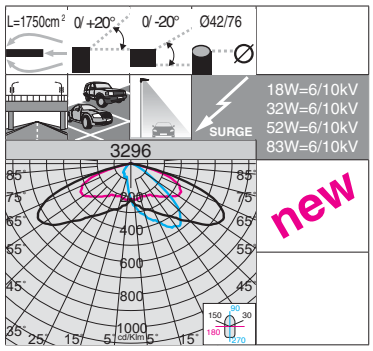
On request: coating compliant with UNI EN ISO 9227 Corrosion tests in artificial atmospheres for aggressive environments.

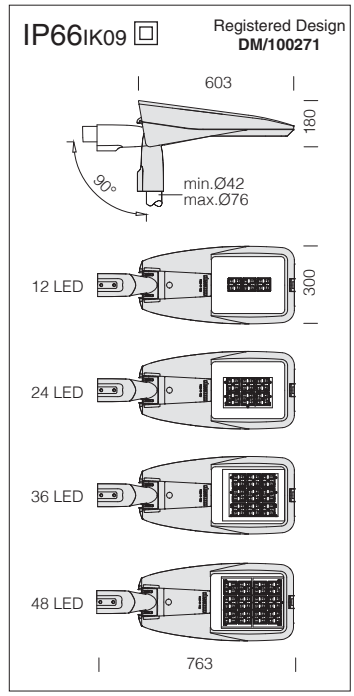
Standard supply: double insulation switch that cuts off electricity when the cover is opened. Complete with quick connection.

With dedicated electronic device to protect the LED module.
Electronic safety device to protect the LED module and the related ballast compliant with EN 61547:
- Class 2: protection up to 10KV (on request).

Table for the various options for managing the supply point

1-10V dimming	Virtual midnight	PLC remote control	Nema Socket	Wi-Fi remote control (to be agreed upon)
Adjustment range from 10%-100% with 1-10V	Stand alone system with reduction of luminous flux and surge protector 6/10 KV	Point-to-point and system management and diagnosis system	It can be installed directly onto the luminaire's body, ideal for the remote control of lights	Point-to-point and system management and diagnosis system with Wi-Fi system
Ordered with **sub-code -12**	Ordered with **sub-code -30**	Ordered with **sub-code -0078**	Ordered with **sub-code -40**	**on request**

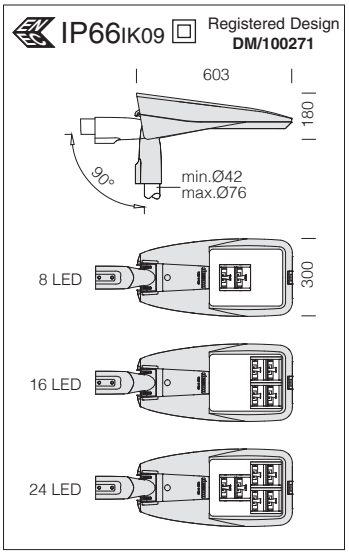


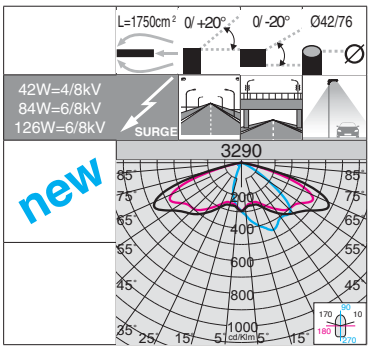


3296 Sella 1 - HP					
		CLD CELL			LUMEN OUTPUT (tq= 25 °C)
wattage	colour	weight	code	W tot	K - ølm - CRI
LED	grey	7.20	330900-00	**18**	4000K - **2722lm** - CRI 70
	graphite		330901-00		
LED	grey	7.20	330902-00	**32**	4000K - **4900lm** - CRI 70
	graphite		330903-00		
LED	grey	7.20	330904-00	**52**	4000K - **8000lm** - CRI 70
	graphite		330905-00		
LED	grey	7.20	330906-00	**83**	4000K - **12900lm** - CRI 70
	graphite		330907-00		
On request: possibility to control each individual light point (see table on p. 343).					

Optics: in PMMA, highly resistant to temperature and UV radiation.

LED: Power factor ≥0,9.
Luminous flux maintenance 80%: 80.000h (L80B20).





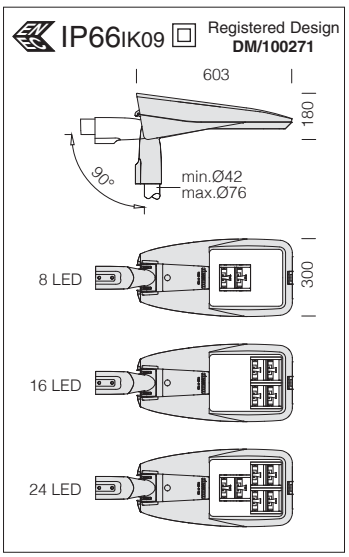
Optics: in aluminium coated with very high purity (99.99%) silver using physical vapour deposition (PVD).

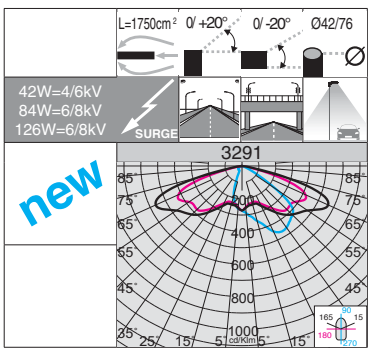
LED: Power factor ≥0.92.
Luminous flux maintenance 80%: >100.000h (L80B10).

3290 Sella 1 - ST

wattage (700mA)	colour	CLD CELL weight	CLD CELL code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm 700mA - CRI
LED	grey	7.20	330603-00	42	4000K - 4888lm - CRI 70
	graphite		330600-00		
LED	grey	7.20	330603-39	42	3000K - **4546lm** - CRI 70
	graphite		330600-39		
LED	grey	7.20	330604-00	84	4000K - 9777lm - CRI 70
	graphite		330601-00		
LED	grey	7.20	330604-39	84	3000K - **9093lm** - CRI 70
	graphite		330601-39		
LED	grey	7.20	330605-00	126	4000K - 14567lm - CRI 70
	graphite		330602-00		
LED	grey	7.20	330605-39	126	3000K - **13547lm** - CRI 70
	graphite		330602-39		

On request: possibility to control each individual light point (see table on p. 343).





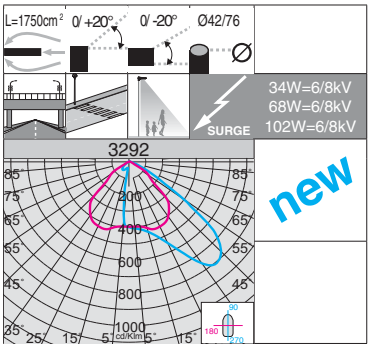
Optics: in aluminium coated with very high purity (99.99%) silver using physical vapour deposition (PVD).

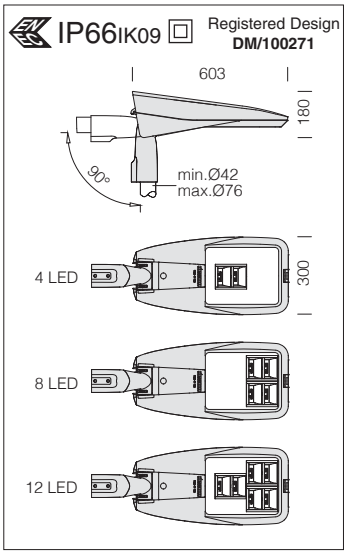
LED: Power factor ≥0.92.
Luminous flux maintenance 80%: >100.000h (L80B10).

3291 Sella 1 - STWB

wattage (700mA)	colour	CLD CELL weight	CLD CELL code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm 700mA - CRI
LED	grey	7.20	330613-00	42	4000K - 4887lm - CRI 70
	graphite		330610-00		
LED	grey	7.20	330613-39	42	3000K - **4545lm** - CRI 70
	graphite		330610-39		
LED	grey	7.20	330614-00	84	4000K - 9710lm - CRI 70
	graphite		330611-00		
LED	grey	7.20	330614-39	84	3000K - **9030lm** - CRI 70
	graphite		330611-39		
LED	grey	7.20	330615-00	126	4000K - 14539lm - CRI 70
	graphite		330612-00		
LED	grey	7.20	330615-39	126	3000K - **13521lm** - CRI 70
	graphite		330612-39		

On request: possibility to control each individual light point (see table on p. 343).





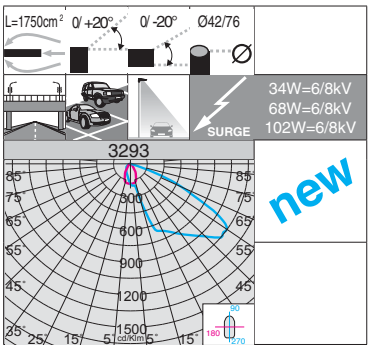
3292 Sella 1 - asymmetric 45°

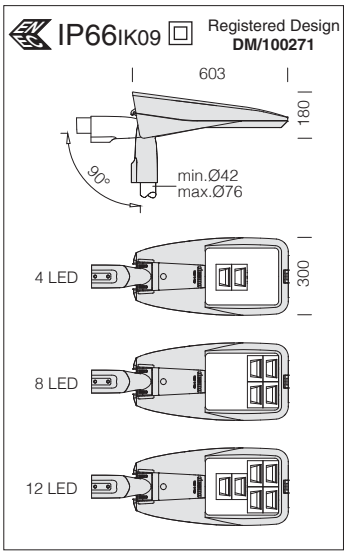
wattage (700mA)	colour	CLD CELL weight	CLD CELL code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm 700mA - CRI
LED	grey	7.20	330664-00	34	4000K - 3654lm - CRI 70
	graphite		330660-00		
LED	grey	7.20	330664-39	34	3000K - **3398lm** - CRI 70
	graphite		330660-39		
LED	grey	7.20	330665-00	68	4000K - 7308lm - CRI 70
	graphite		330661-00		
LED	grey	7.20	330665-39	68	3000K - **6796lm** - CRI 70
	graphite		330661-39		
LED	grey	7.20	330666-00	102	4000K - 10962lm - CRI 70
	graphite		330662-00		
LED	grey	7.20	330666-39	102	3000K - **10195lm** - CRI 70
	graphite		330662-39		

On request: possibility to control each individual light point (see table on p. 343).

Optics: in aluminium coated with very high purity (99.99%) silver using physical vapour deposition (PVD).

LED: Power factor ≥0.92.
Luminous flux maintenance 80%: 80.000h (L80B10).





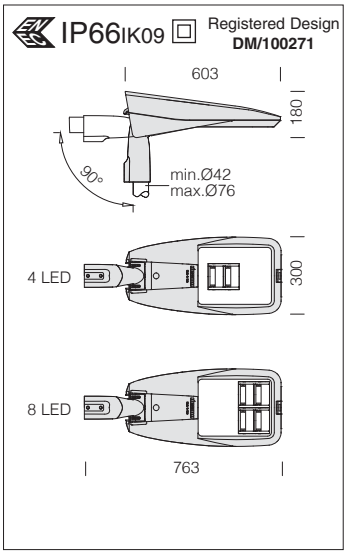
3293 Sella 1 - asymmetric 60°

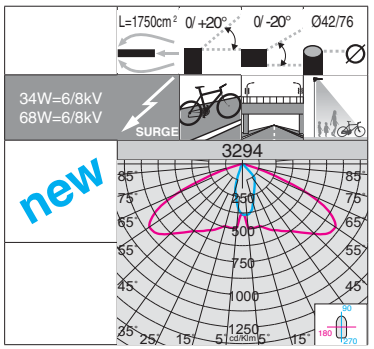
wattage (700mA)	colour	CLD CELL weight	CLD CELL code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm 700mA - CRI
LED	grey	7.20	330684-00	34	4000K - 3045lm - CRI 70
	graphite		330680-00		
LED	grey	7.20	330684-39	34	3000K - **2832lm** - CRI 70
	graphite		330680-39		
LED	grey	7.20	330685-00	68	4000K - 6130lm - CRI 70
	graphite		330681-00		
LED	grey	7.20	330685-39	68	3000K - **5701lm** - CRI 70
	graphite		330681-39		
LED	grey	7.20	330686-00	102	4000K - 9395lm - CRI 70
	graphite		330682-00		
LED	grey	7.20	330686-39	102	3000K - **8737lm** - CRI 70
	graphite		330682-39		

On request: possibility to control each individual light point (see table on p. 343).

Optics: in aluminium coated with very high purity (99.99%) silver using physical vapour deposition (PVD).

LED: Power factor ≥0.92.
Luminous flux maintenance 80%: 80.000h (L80B10).





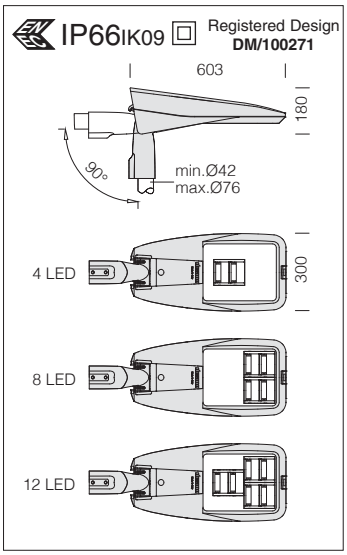
Optics: in aluminium coated with very high purity (99.99%) silver using physical vapour deposition (PVD).

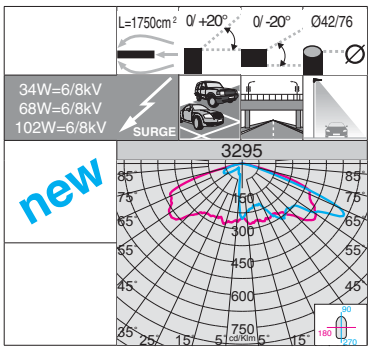
LED: Power factor ≥0.92.
Luminous flux maintenance 80%: 80.000h (L80B10).

3294 Sella 1 - cycleways

wattage (700mA)	colour	CLD CELL weight	CLD CELL code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm 700mA - CRI
LED	grey	7.20	330702-00	34	4000K - 3011lm - CRI 70
	graphite		330700-00		
LED	grey	7.20	330702-39	34	3000K - **2800lm** - CRI 70
	graphite		330700-39		
LED	grey	7.20	330703-00	68	4000K - 6015lm - CRI 70
	graphite		330701-00		
LED	grey	7.20	330703-39	68	3000K - **5594lm** - CRI 70
	graphite		330701-39		

On request: possibility to control each individual light point (see table on p. 343).





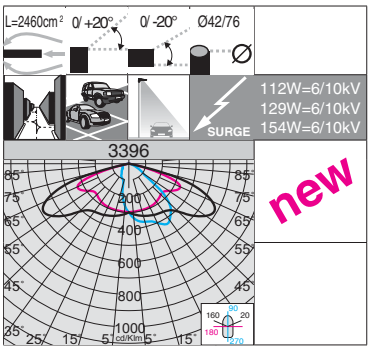
Optics: in aluminium coated with very high purity (99.99%) silver using physical vapour deposition (PVD).

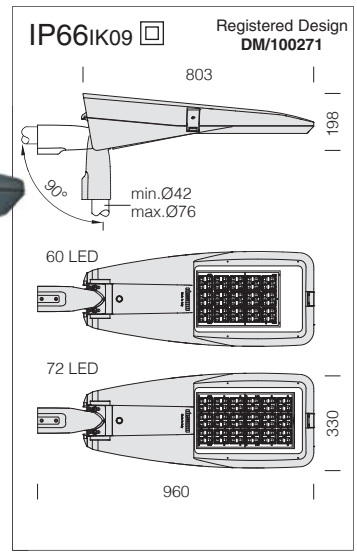
LED: Power factor ≥0.92.
Luminous flux maintenance 80%: 80.000h (L80B10).

3295 Sella 1 - large areas

wattage (700mA)	colour	CLD CELL weight	CLD CELL code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm 700mA - CRI
LED	grey	7.20	330724-00	34	4000K - 2862lm - CRI 70
	graphite		330720-00		
LED	grey	7.20	330724-39	34	3000K - **2662lm** - CRI 70
	graphite		330720-39		
LED	grey	7.20	330725-00	68	4000K - 5725lm - CRI 70
	graphite		330721-00		
LED	grey	7.20	330725-39	68	3000K - **5324lm** - CRI 70
	graphite		330721-39		
LED	grey	7.20	330726-00	102	4000K - 8587lm - CRI 70
	graphite		330722-00		
LED	grey	7.20	330726-39	102	3000K - **7986lm** - CRI 70
	graphite		330722-39		

On request: possibility to control each individual light point (see table on p. 343).

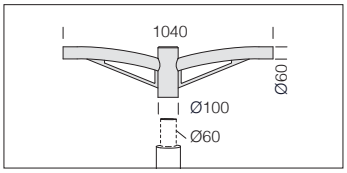




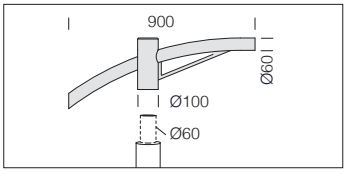
3396 Sella 2 - HP					
		CLD CELL			LUMEN OUTPUT (tq= 25 °C)
wattage	colour	weight	code	W tot	K - ølm - CRI
LED	grey	11.00	330830-00	112	4000K - **17186lm** - CRI 70
	graphite		330831-00		
LED	grey	11.50	330832-00	129	4000K - **20050lm** - CRI 70
	graphite		330833-00		
LED	grey	11.50	330834-00	154	4000K - **23068lm** - CRI 70
	graphite		330835-00		
On request: possibility to control each individual light point (see table on p. 343).					

Optics: in PMMA, highly resistant to temperature and UV radiation.

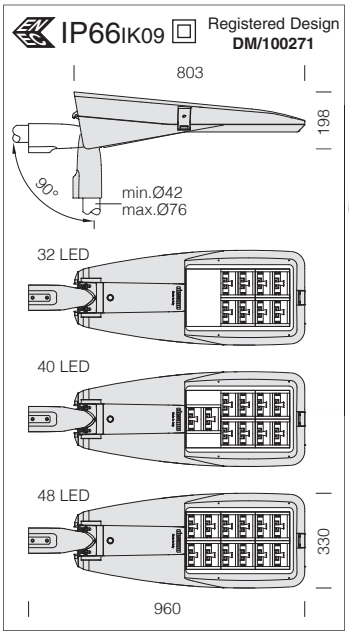
LED: Power factor ≥0,9.
Luminous flux maintenance 80%: 80.000h (L80B20).



acc. 508 double arm	
grey	991266-00
graphite	991267-00
Suited for poles with a diameter 60mm.	

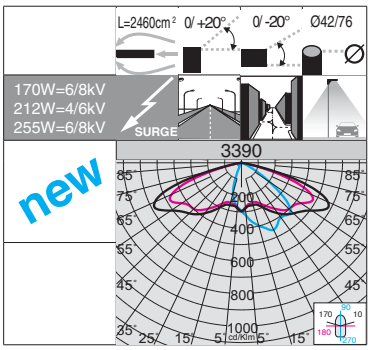


acc. 504 single arm	
grey	991262-00
graphite	991263-00
Suited for poles with a diameter 60mm.	



Optics: in aluminium coated with very high purity (99.99%) silver using physical vapour deposition (PVD).

LED: Power factor ≥0.92.
Luminous flux maintenance 80%: >100.000h (L80B10).



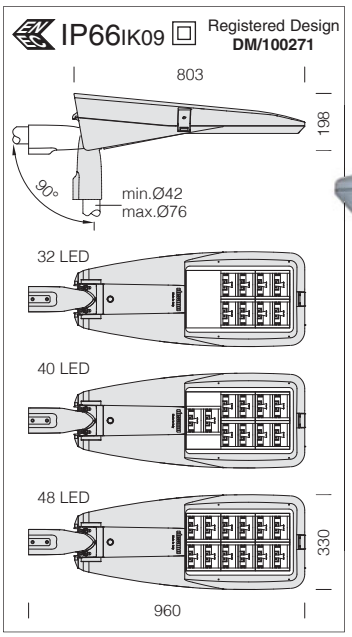
LED: LUMINOUS FLUX MAINTENANCE
(including end-of-life failure)

n. LED	W tot	L80B10 @ta+25°C	L80B10 @ta+50°C	L90B10 @ta+25°C	L90B10 @ta+50°C
32	170 (700mA)	>100.000h	>100.000h	70.000h	50.000h
40	212 (700mA)	>100.000h	>100.000h	70.000h	50.000h
48	255 (700mA)	>100.000h	>100.000h	60.000h	40.000h

3390 Sella 2 - ST

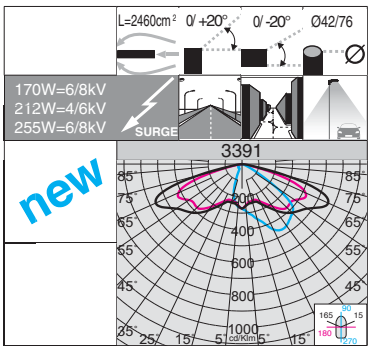
wattage (700mA)	colour	CLD CELL weight	CLD CELL code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm 700mA - CRI
LED	grey	11.00	330803-00	170	4000K - 20634lm - CRI 70
	graphite		330800-00		
LED	grey	11.00	330803-39	170	3000K - **19190lm** - CRI 70
	graphite		330800-39		
LED	grey	11.00	330804-00	212	4000K - 25792lm - CRI 70
	graphite		330801-00		
LED	grey	11.00	330804-39	212	3000K - **23987lm** - CRI 70
	graphite		330801-39		
LED	grey	11.00	330805-00	255	4000K - 30950lm - CRI 70
	graphite		330802-00		
LED	grey	11.00	330805-39	255	3000K - **28784lm** - CRI 70
	graphite		330802-39		

On request: possibility to control each individual light point (see table on p. 343).



Optics: in aluminium coated with very high purity (99.99%) silver using physical vapour deposition (PVD).

LED: Power factor ≥0.92.
Luminous flux maintenance 80%: >100.000h (L80B10).



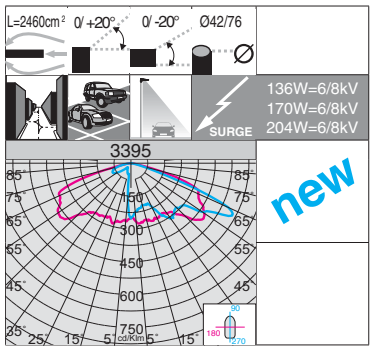
LED: LUMINOUS FLUX MAINTENANCE
(including end-of-life failure)

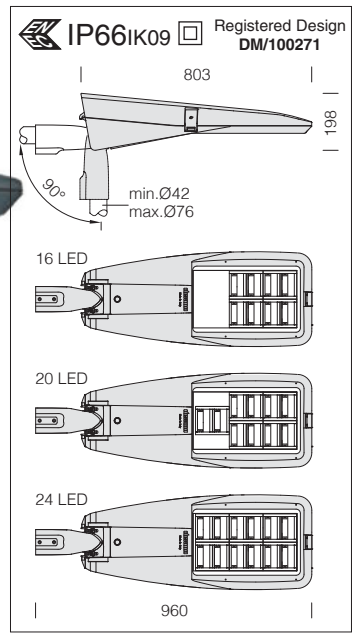
n. LED	W tot	L80B10 @ta+25°C	L80B10 @ta+50°C	L90B10 @ta+25°C	L90B10 @ta+50°C
32	170 (700mA)	>100.000h	>100.000h	70.000h	50.000h
40	212 (700mA)	>100.000h	>100.000h	70.000h	50.000h
48	255 (700mA)	>100.000h	>100.000h	60.000h	40.000h

3391 Sella 2 - STWB

wattage (700mA)	colour	CLD CELL weight	CLD CELL code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm 700mA - CRI
LED	grey	11.00	330813-00	170	4000K - 20495lm - CRI 70
	graphite		330810-00		
LED	grey	11.00	330813-39	170	3000K - **19060lm** - CRI 70
	graphite		330810-39		
LED	grey	11.00	330814-00	212	4000K - 25618lm - CRI 70
	graphite		330811-00		
LED	grey	11.00	330814-39	212	3000K - **23825lm** - CRI 70
	graphite		330811-39		
LED	grey	11.00	330815-00	255	4000K - 30742lm - CRI 70
	graphite		330812-00		
LED	grey	11.00	330815-39	255	3000K - **28591lm** - CRI 70
	graphite		330812-39		

On request: possibility to control each individual light point (see table on p. 343).





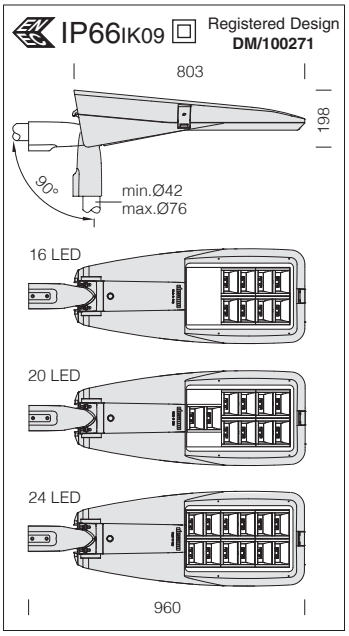
3395 Sella 2 - large areas

		CLD CELL			LUMEN OUTPUT (tq= 25 °C)
wattage (700mA)	colour	weight	code	W tot	K - ølm 700mA - CRI
LED	grey	11.00	330824-00	**136**	4000K - 11450lm - CRI 70
	graphite		330820-00		
LED	grey	11.00	330824-39	**136**	3000K - **10649lm** - CRI 70
	graphite		330820-39		
LED	grey	11.00	330825-00	**170**	4000K - 14312lm - CRI 70
	graphite		330821-00		
LED	grey	11.00	330825-39	**170**	3000K - **13310lm** - CRI 70
	graphite		330821-39		
LED	grey	11.00	330826-00	**204**	4000K - 17175lm - CRI 70
	graphite		330822-00		
LED	grey	11.00	330826-39	**204**	3000K - **15973lm** - CRI 70
	graphite		330822-39		

On request: possibility to control each individual light point (see table on p. 343).

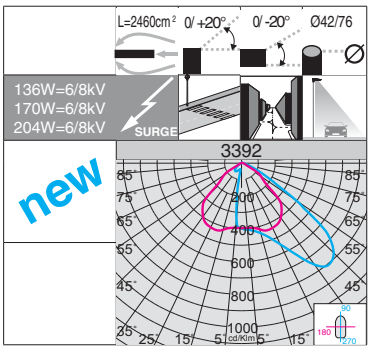
Optics: in aluminium coated with very high purity (99.99%) silver using physical vapour deposition (PVD).

LED: Power factor ≥0.92.
Luminous flux maintenance 80%: >100.000h (L80B10).



Optics: in aluminium coated with very high purity (99.99%) silver using physical vapour deposition (PVD).

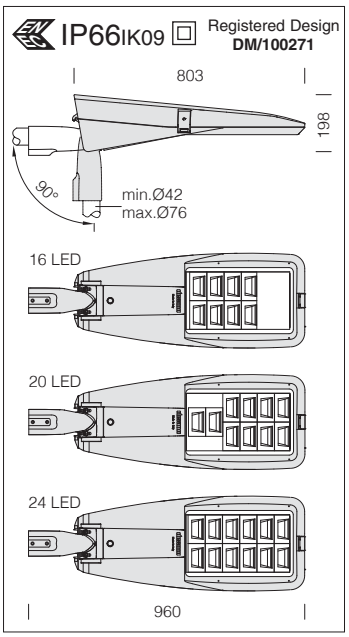
LED: Power factor ≥0.92.
Luminous flux maintenance 80%: >100.000h (L80B10).



3392 Sella 2 - asymmetric 45°

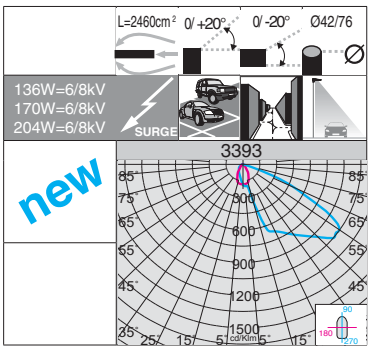
wattage (700mA)	colour	CLD CELL weight	CLD CELL code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm 700mA - CRI
LED	grey	11.00	330864-00	136	4000K - 14610lm - CRI 70
	graphite		330860-00		
LED	grey	11.00	330864-39	136	3000K - **13587lm** - CRI 70
	graphite		330860-39		
LED	grey	11.00	330865-00	170	4000K - 18262lm - CRI 70
	graphite		330861-00		
LED	grey	11.00	330865-39	170	3000K - **16984lm** - CRI 70
	graphite		330861-39		
LED	grey	11.00	330866-00	204	4000K - 21915lm - CRI 70
	graphite		330862-00		
LED	grey	11.00	330866-39	204	3000K - **20381lm** - CRI 70
	graphite		330862-39		

On request: possibility to control each individual light point (see table on p. 343).



Optics: in aluminium coated with very high purity (99.99%) silver using physical vapour deposition (PVD).

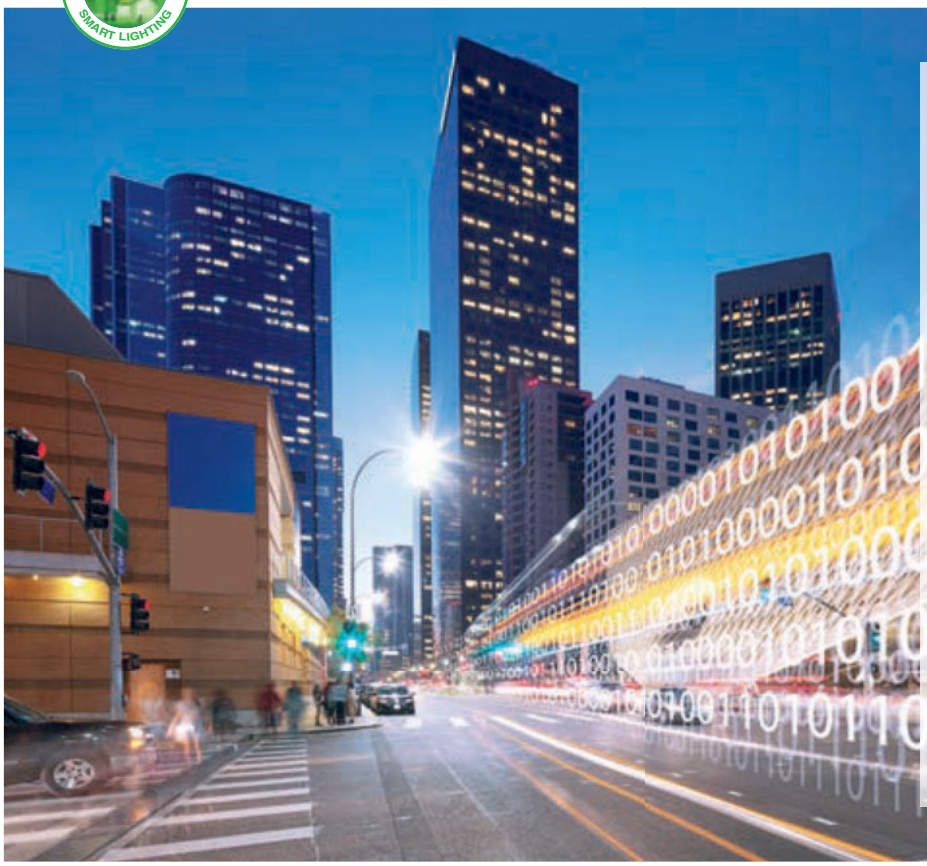
LED: Power factor ≥0.92.
Luminous flux maintenance 80%: >100.000h (L80B10).



3393 Sella 2 - asymmetric 60°

wattage (700mA)	colour	CLD CELL weight	CLD CELL code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm 700mA - CRI
LED	grey	11.00	330884-00	136	4000K - 12260lm - CRI 70
	graphite		330880-00		
LED	grey	11.00	330884-39	136	3000K - **11402lm** - CRI 70
	graphite		330880-39		
LED	grey	11.00	330885-00	170	4000K - 15325lm - CRI 70
	graphite		330881-00		
LED	grey	11.00	330885-39	170	3000K - **14252lm** - CRI 70
	graphite		330881-39		
LED	grey	11.00	330886-00	204	4000K - 18390lm - CRI 70
	graphite		330882-00		
LED	grey	11.00	330886-39	204	3000K - **17103lm** - CRI 70
	graphite		330882-39		

On request: possibility to control each individual light point (see table on p. 343).



What is a smart city?
A smart city is a city where there is a better quality of life and where public spaces can help citizens achieve their full potential and move more freely, while saving time and respecting the environment.
The intelligence of a «Smart City» is a distributed, shared, horizontal and social intelligence. It is an intelligence that promotes the participation of citizens and the organization of the city towards a greater optimization of resources and results. Energy consumption, public resource use and time are all optimized.
With the Web and the new technologies, access to services is easier and public spaces can be organized to favour mobility, save time and turn our cities smarter.
Remote management systems make objects more intelligent and recognizable, so that they can communicate data and provide access to aggregated information.
Thanks to a more efficient use of the Web, everything within a city (urban fittings, public buildings, monuments, etc.) can play an active role and become collectors and distributors of information about traffic, energy consumption, services and assistance to citizens, cultural and touristic attractions and much more.

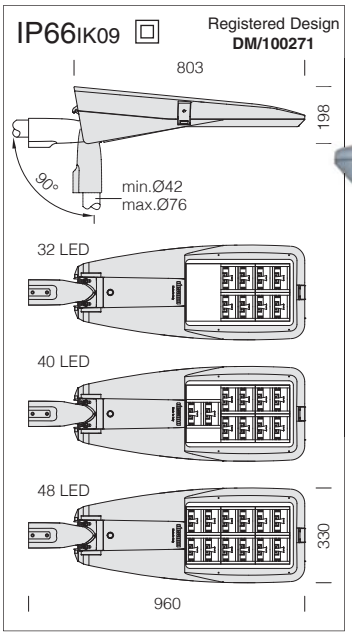
The fixture can be equipped with a **control system which provides lighting managers with the ability to improve the performance of urban and street lighting** installations while saving costs by lowering energy usage, optimising operation and reducing CO_2 emissions. The system incorporates the latest technologies in power electronics, communications and IoT. This makes possible, among other features, an on/off scheduled switching, a dynamic programming of lighting levels, map-based visualizations, automatic alarm reports, real-time fixture monitoring and maintenance scheduling of every single luminaire of multiple installations at once.
The system has a friendly and secure web-based user interface which can be operated anywhere and anytime from any web-connected device such as computers, smartphones and tablets providing real time and accurate control of the lighting infrastructure.

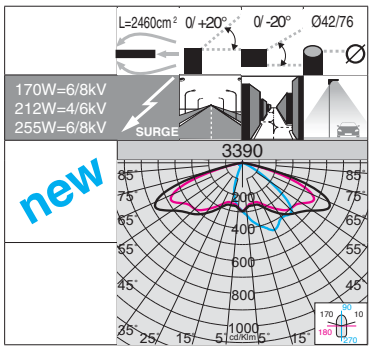
System Highlights

- Flexible solution
  - Valid for new installations as well as for lighting renovation
  - Autonomous system but integrable with other city services platforms
  - Valid worldwide
  - Compatible with most Smart City services platforms
- Values and revenues
  - Better lighting performance
  - Money savings
  - Energy costs reduction
  - Operation costs reduction
- Users
  - Municipalities and County Councils
  - Smart City platforms operators
  - Managers of large infrastructure
- Applications
  - Street and residential lighting (streets, roads)
  - Urban & architectural lighting (monuments, public spaces)
  - Large infrastructure lighting (airports, ports)
  - Large areas and sport lighting (car parks, stadiums)
  - Urban events lighting (celebrations, demostrations)

System Architecture & Components

- System architecture
  - Smart power electronics: LED drivers
  - Wireless network hardware
  - RF Nodes and GSM Gateways
  - Cloud-based data acquisition and network management
  - Management software suite (Network & data management)
  - Web-based multi-device user friendly interface
- Technical aspects
  - Fully programmable electrical parameters and functionalities
  - Connectivity of sensors
  - Self-diagnosis, notification of alarms
  - Mains voltage and frecuency monitoring
  - High efficiency
- Lighting network nodes
  - Multi-hop wireless mesh network
  - IP-based protocol, broad coverage
  - Automatic neighbour discovery, self-organization, ad hoc configuration
  - Extensibility, interoperability, open standards
  - Robust link, reliable and high-performance network
  - Additional sensor data acquisition (optional)
- Gateway
  - Mesh network concentrator
  - 2G/3G/LTE network gateway
  - Time and date precise synch
- Central host and database
  - Local or cloud hosting available
  - End-to-end secured system
  - Smart City and other horizontal management platforms integrability
  - Multi-level data interchange capabilities, app interfaces
  - Business Intelligence and data analytics
- Management Software Suite
  - Lighting configuration, management and maintenance
  - Easy installation, test capabilities
  - Data network management and configuration
  - Reports, statistics and data visualization tools
- Fast commissioning
  - Ease of installation
  - Assembling outside fitting
  - Remote configuration
  - Reliable, outdoor-proof
- Accuracy
  - GPS accurate location
  - Point-to-point management
  - Real-time operation





Optics: in aluminium coated with very high purity (99.99%) silver using physical vapour deposition (PVD).

3390 Sella 2 - ST

wattage (700mA)	colour	CLD CELL weight	CLD CELL code	W tot	LUMEN OUTPUT (tq= 25 °C) K - ølm 700mA - CRI
LED	grey / graphite		On request	170	4000K - 20634lm - CRI 70
LED	grey / graphite		On request	170	3000K - **19190lm** - CRI 70
LED	grey / graphite		On request	212	4000K - 25792lm - CRI 70
LED	grey / graphite		On request	212	3000K - **23987lm** - CRI 70
LED	grey / graphite		On request	255	4000K - 30950lm - CRI 70
LED	grey / graphite		On request	255	3000K - **28784lm** - CRI 70

On request: possibility to control each individual light point (see table on p. 343).

Smart City Lighting

- Flexible and avant-garde lighting
  - Programmable lighting
  - Dynamic lighting
  - Reactive to events
  - Makes possible a human centric lighting
  - Increases citizen satisfaction
  - Helps to improve safety on streets
  - Compatible with most existing Smart City & urban services management platforms and easily adaptable thanks to its open architecture
- Environmental sustainability
  - Energy savings
  - Reduction of CO_2 footprint
  - Lower lighting pollution
- Data-enabled lighting
  IoT technology enables scalable, site-based or cloud-based street lights connectivity through a robust, self-healing, wireless mesh network

User Friendly Web-based Interface

- Main functionalities
  - Easy lighting levels & timing configuration
  - Creation of customised lighting schedules
  - Energy consumption monitoring
  - Power supply monitoring
  - Alarms and events reporting
  - Operation time recording
  - Geolocation and mapping of luminaires (multiple map choice)
  - Easy allocation of luminaires by town, street, coordenates, type
  - Manteinance planning
  - Multiple users administration
- Optimum lighting maintenance
  - Possibility of preventive maintenance
  - Optimization of reactive maintenance
- Privacy and security commitment
  - Encrypted communications
  - Safe communications exchange through highest encryptation levels
  - Database access security
  - Secure hosting
  - Cloud protection and data confidentiality
  - Safe access with authentication
  - Highest protection against unauthorized access