



arianna  
light looking forward



Discover

# Phileo

*pro*



**Phileo Pro is a LED street lighting luminaire with an innovative design, continuing the Phileo tradition.**

Ideal for both new roads and the replacement of existing systems, Phileo Pro combines **low costs, high-quality materials and energy savings**, all in compliance with current regulations.





# Design

## Phileo Pro



The body of Phileo Pro is developed around the **product's technological heart**, the total reflection LED elements, arranged in a line at the front.

The design integrates the wave profile concept in the upper part, paying homage to the success of the Phileo family and emphasising the **family feeling**, while the three volumes that represent the luminaire's functional blocks are merged together.

The taut surfaces at the top meet the essential lines at the bottom, creating a **compact** and elementary yet at the same time **highly-dynamic combination**.

In the same way, style and functional requirements meet to **create a versatile and contemporary product**, guided by innovation.

**Dario Martini**  
Industrial designer responsible for Phileo Pro





# The new Arianna family of street lighting luminaires.

It has been designed to **reduce production costs** while maintaining the high performance of the Phileo family.

Its **wave profile** disperses heat through its surface and increases the **convection of air** from below to carry the heat away to the outside.





# Strengths

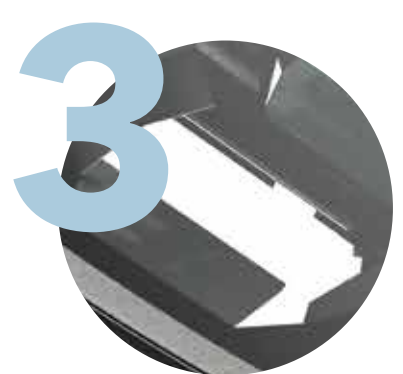
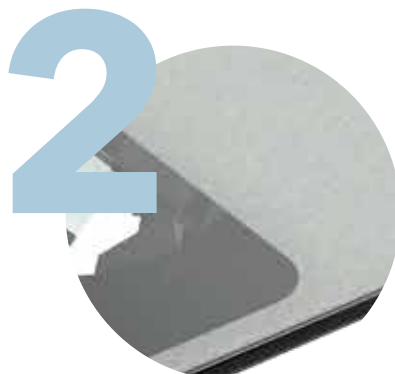
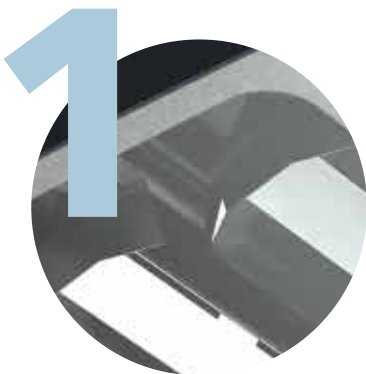
## Phileo Pro



The Phileo Pro **optical system** confirms the success of **Arianna's reflective optics**.

The **anodised aluminium reflectors** coated with a layer of pure silver guarantee **98% reflectivity**, maximising the performance of the LEDs and visual comfort, ensured by the **total reflection system**.

All models have enhanced **IK09 impact resistance**, thanks to the extra-clear 5 mm tempered glass, guaranteeing an extremely robust and safe fixture.





Phileo Pro is the **technological evolution** of Arianna luminaires

The new luminaire is suitable for all existing remote controls as well as future innovations, with the common goal of creating **connected, smart cities**.

# Connection Ready

The remote control can be installed together with the luminaire or later, exploiting the standard Zhaga connector that ensures easy connection of the infrastructure.

With Phileo PRO, virtual midnight can now be **remote-controlled**.

. The luminous flux of all the luminaires in this line can be **adjusted from the electrical panel** without wiring or fitting other devices on the luminaire, using a configurable remote control unit.

This innovative feature ensures an extremely flexible luminaire with the highest efficiency.





# Applications

## Phileo Pro

The **total reflection optical system**, which maximises the effectiveness of luminous flux and minimises wasted light off the roadway, combined with very high efficiency in terms of lumens/W, mean these luminaires can guarantee a **high system parametrised efficiency** index (IPEI) in all urban contexts.



### Pedestrian and cycle path

Typical road	Single road 4 mt
Width	4
Height PL	5
Distance PL	25
Position PL	50
Cat. Illumin	P

Phileo Pro  
13 W - 2000 LM  
Optic W1  
IPEI A5+



### Country road

Typical road	Single roadway 5,5 mt
Width	5,5
Height PL	7
Distance PL	35
Position PL	0
Cat. Illumin	M5

Phileo Pro  
20 W - 3000 LM  
Optic E1  
IPEI A4+



### City street

Typical road	Roadway 6 mt; parking area 2,5 mt; 2 footpaths 1mt
Width	10,5
Height PL	8
Distance PL	32
Position PL	0,5
Cat. Illumin	M4 - P3

Phileo Pro  
41 W - 6000 LM  
Optic L1  
IPEI A3+



### Highway

Typical road	Roadway 8 mt; centreline 3 mt; roadway 8 mt
Width	8+8
Height PL	9
Distance PL	36
Position PL	0
Cat. Illumin	M3 - M3

Phileo Pro  
55 W - 8000 LM  
Optic E1  
IPEI A4+

From 2020, the minimum environmental criteria threshold for public street lighting systems is class A, and will be raised to A+ starting from 2025. With Phileo PRO, this **minimum threshold is already easily surpassed**.





# Phileo Pro

## Code structure

PHILEO PRO's CODE COMPOSITION			
POSITIONS 1,2,3	FAMILY PREFIX	PHP	Phileo PRO
POSITION 4,5,6,7	FLUX	00A0	2000 lm
		00B0	3000 lm
		00B3	4000 lm
		00B6	5000 lm
		00C0	6000 lm
		00C5	7000 lm
		00D0	8000 lm
		00E0	9000 lm
		00F0	12000 lm
		00G0	13000 lm
POSITION 8	POWER SUPPLY PROGRAM	P	Standard Night Cycle
		F	Fixed
		N	Nema-Socket
		D	DALI
		1	1 - 10 V
		Z	Zhaga/D4i24V
		T	TLC PLC
		R	TLC Radio
POSITION 9	CT + CRI	M	2200K - CRI 70
		N	2200K - CRI 80
		P	2700K - CRI 70
		Q	2700K - CRI 80
		H	3000K - CRI 70
		W	3000K - CRI 80
		I	4000K - CRI 70
		L	4000K - CRI 80
POSITION 10,11,12,13	OPTIC	00E1	Optic E1
		00L1	Optic L1
		00W1	Optic W1
POSITION 14	COLOUR	A	Anthracite
POSITION 15,16	NB. OF LED (12,18,24,36)	12	12 LED
POSITION 17	FIXING MODE/APPLICATION	P	Pole
		Y	Pole Class I

EXAMPLE: PHILEO PRO pole version 18 LED, anthracite 6000 lm - 3000K CRI 80, optic W1 and DALI

COD.	P	H	P	0	0	C	0	D	W	0	0	W	1	A	1	8	P
POS.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

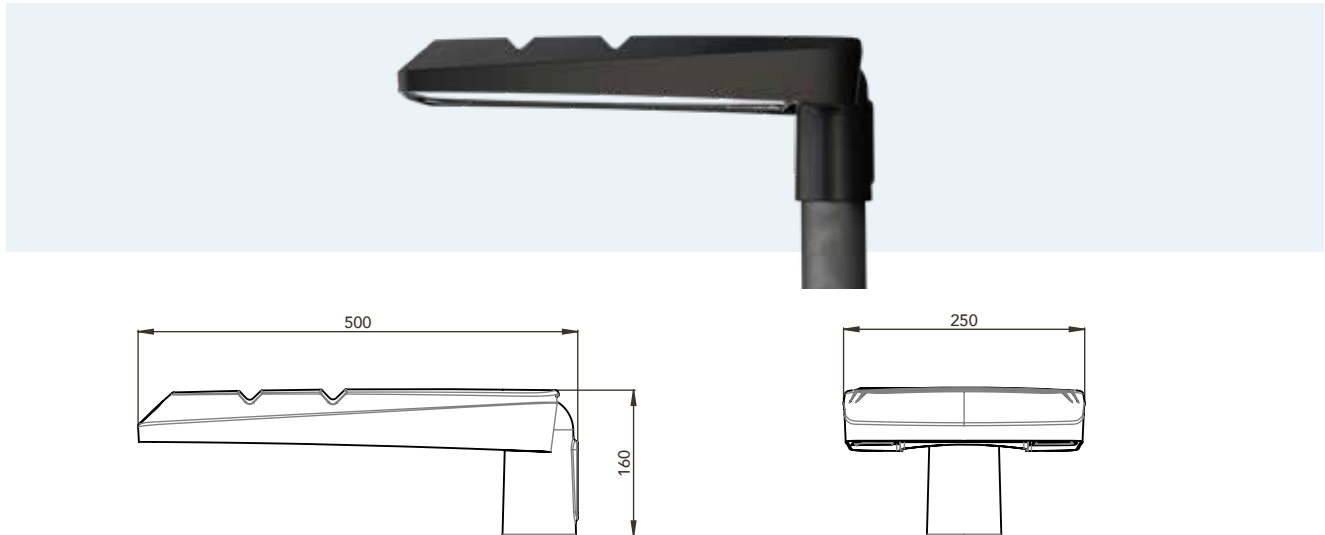
The resulting code is: **PHP00C0DW00W1A18P**





# Phileo Pro

## Technical data sheet



Product features	
Voltage	220 ÷ 240 V ac
Frequency	50/60 Hz
Electrical safety class	I - II
Control options	P=Standard Night Cycle max 4 levels (standard version) F=Fixed N=NEMA 7 pin D=DALI 1=1-10V Z=ZHAGA/D4i 24V T=TLC PLC R=TLC radio
Constant Lumen Output (CLO)	Connectable on request
Night - time dimming	Profile settable up to 4 levels
Service environment temperature	-30° ÷ +50° up to 12000 lm -30° ÷ +40° for 13300 lm
Storage room temperature	-40° ÷ +80°
Driving current	Up to 500 mA
Certifications	CE, RoHS, EN60598-1, EN60598-2-3 ENEC
System efficiency	Up to 154 lm/W
Surge protection	10 kV com - 10 kV diff
Luminous flux emitted directly towards the upper hemisphere	≤ 0,49 cd/Klm

Driver feature	
Power factor (full-load)	> 0,9
Lifetime	> 100.000 h
Power supply failure rate for 50,000 hours	< 10%

Mechanical features	
Body	Die-cast aluminium EN 47100
Total weight	6.5Kg
Exposed wind area	0,04 m2 - 0,02 m2 - 0,13 m2
Ingress protection	IP66
Shock protection	IK09
Painting	Polyester powder paint thickness: 80 µm resistant to 1000 hours in salt spray (2500 on request)
Gasket	Silicone based gasket
Colour	Anthractive gray RAL 7016 (other colors on request)
Diffuser	Glass tempered extra clear 5 mm
External screws	A2 stainless steel
Supply connection	H07RN-F Class II: 2x1.5 Class I: 3x1.5
External cable diameter	Max 13 mm
Mounting	Lateral or pole head diameter 60 mm 42/76 mm (optional)
Inclination	Pole head -15°÷ +25°; outreach -15°÷ +5°

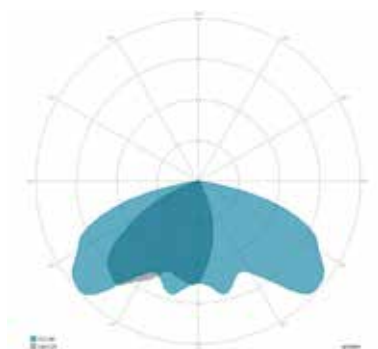
LED module feature	
LED	Power LED
Color temperature	4000 K (2200/2700/3000 K optional)
Color rendering index	> 70 (80 optional)
LED modules' luminous efficiency with optical system @CRI70 4000K* Tc85°C/l=700mA	155 lm/W
LED modules' luminous efficiency without optical system @CRI70 4000K* Tc85°C/l=700mA	177 lm/W
LEDs' chromatic positioning	McAdam's step ≤ 5
Lifetime L80B10 (25°C T amb)	> 100.000 h
Optical system	Multilayer reflection optics full cut-off



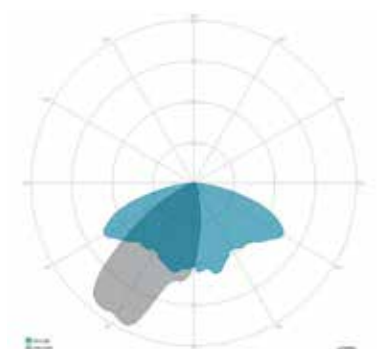
# Phileo Pro

## Technical data sheet

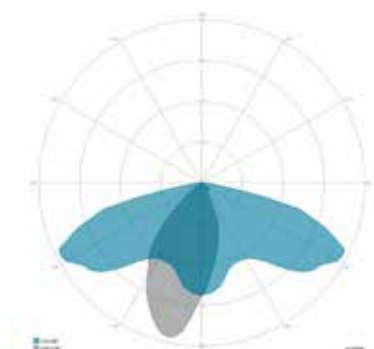
### Available optics



**Optic L1**



**Optic E1**



**Optic W1**

### \*\* L1, E1, W1

CODE	N. REFLECTORS	FLUX (lm)	POWER (W)	EFFICIENCY (lm/W)	IPEA
PHP00A0PI00**A12P	1	2002	13	154	A10+
PHP00B0PI00**A12P	1	3060	20	153	A9+
PHP00B3PI00**A12P	1	3956	27	147	A9+
PHP00B6PI00**A18P	1	5010	33	152	A9+
PHP00C0PI00**A18P	1	6020	41	147	A9+
PHP00C5PI00**A24P	2	7037	47	150	A9+
PHP00D0PI00**A24P	2	8040	55	146	A9+
PHP00E0PI00**A36P	2	9800	65	151	A9+
PHP00F0PI00**A36P	2	11910	82	145	A8+
PHP00G0PI00**A36P	2	13300	94	141	A6+

Flux data refers to devices with CRI 70 and 4000 K (740).

To get different combinations of CRI and CCT multiply the luminous flux by the following conversion factors K:

730 = 0,96

840 = 0,91

830 = 0,87

727 = 0,93

722 - 827 = 0,83

822 = 0,76





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