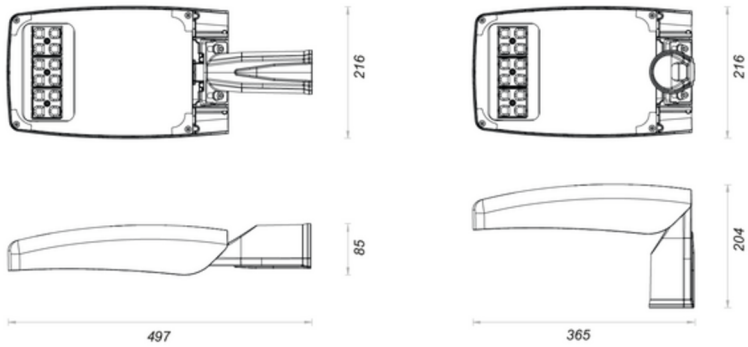


# phLUMINAELP2XS



| MAIN CHARACTERISTICS               |  |
|------------------------------------|--|
| Applications                       | Roadways, Car parks, Parks and Squares, Pathways and Bike Paths, Railway Platforms, etc. |
| Material                           | High-pressure die cast aluminium UNI EN 46100  |
| Color                              | Anthracite (optional RAL 7037). Epoxy powder coating after phosphating                   |
| Product sizes                      | 497 (365) x 216 x 85 (204) mm  |
| Exposed surface                    | Windage: 0.09 m² - 0.045 m²  |
| Weight                             | 4.0 Kg   |
| Mounting                           | Side entry/ Post-top: Ø 60 mm  |
| Tilt Angle                         | Bracket: 5°, 0°, -5°, -10°, -15°, -20°<br>Post-top: 0°, +5°, +10°, +15°, +20°            |
| Insulation Class                   | CL II   CL I (on request)  |
| Protection degree                  | IP 66   IK08   |
| No. LEDs                           | 4, 8, 12, 18 LEDs  |
| LED Efficacy <sup>(1)</sup>        | 236 lm/W - CRI ≥ 70 - @ 180 mA, T = 25 °C   CRI≥80 on request                            |
| Color temperature                  | 3000K - 730/669   4000K - 740/669   5700K - 757/669   Other (K) available upon request   |
| LED lifetime <sup>(2)</sup>        | ≥ 100.000hr L90B10 LM 80, TM-21  |
| Optics                             | PMMA street optics in high-performance optical grade                                     |
| Operating voltages and frequencies | 220-240 V~ 50/60 Hz  |
| Power factor                       | Cosφ ≥ 0.98 (at full load)   |
| Surge protection (DM/CM)           | 6/10 kV   SPD (optional) 8kV / 10kV   SPD (optional) with higher capacity                |
| Control system (options)           | 0-100%, 0-10V signal, PWM, DALI, AstroDIM, MainsDIM, Wireless, NEMA, ZHAGA               |
| Programming (options)              | On-site driver reprogramming through NFC and related app.                                |
| Dimming (options)                  | Optional module for seasonal, weekly, and daily dimming.                                 |
| Operating temperature              | -40 / +55 °C   |



## DESCRIPTION

Made of a die-cast aluminum body measuring 497x365x85mm, with adjustable tilt support for post-top or arm mounting. Equipped with a transparent, tempered glass cover resistant to impacts and thermal shocks, secured with stainless steel screws.

The internal structure houses an LED circuit with roadway optics, providing luminous flux values in lumens/Watt at varying current intensities (mA). Optical efficiency exceeds 93%, and the light is available in 3000K, 4000K, and 5700K color temperatures, with a CRI of ≥70.

Designed for reduced maintenance, each LED has an average lifetime exceeding 100,000 hours (L90B10). Multiple light output dimming options are available.

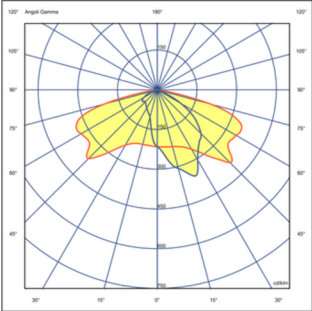
## STANDARD COMPLIANTS

EN 60598-1: Luminaires - Part 1: General requirements and tests.  
EN 60598-2-3: Particular requirements - Luminaires for road and street lighting.  
IEC/TR 62778: Application of IEC 62471 for the assessment of blue light hazard to light sources and luminaires.  
EN 55015: Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment.  
EN 61000-3-2: Electromagnetic compatibility (EMC) Part 3-2: Limits - Limits for harmonic current emissions.  
EN 61000-3-3: Electromagnetic compatibility (EMC) Part 3-3: Limitation of voltage changes, voltage fluctuations, and flicker.  
EN 61547: Equipment for general lighting purposes - EMC immunity requirements.  
EN 13032-1: Light and lighting: Measurement and presentation of photometric data of lamps and luminaires - Part 1: Measurement and file format.  
Technical data sheet according to IEC/PAS 62717 and IEC/PAS 62722

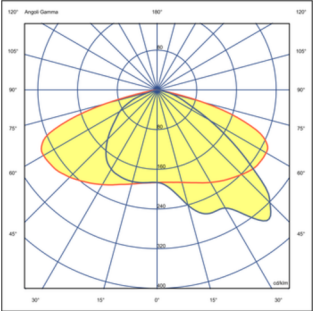


## STREET OPTICS

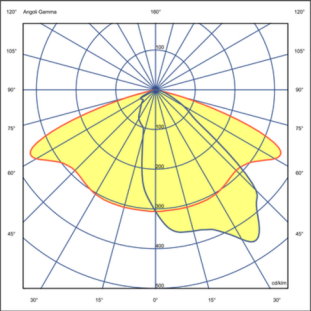
Optics SCL



Optics 406

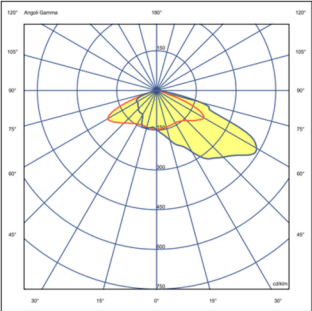


Optics ME

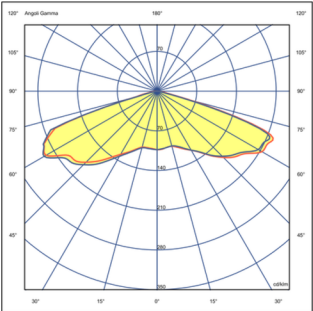


## LARGE AREAS OPTICS

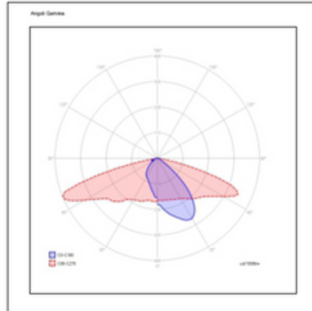
Optics T4-B



Optics VSM

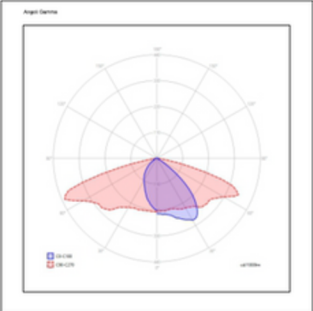


Optics 601



Available only for phLuminaELP2XS-18

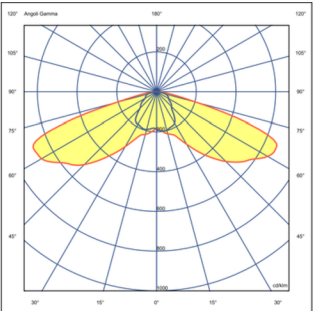
Optics 602



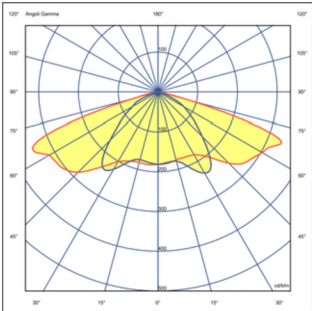
Available only for phLuminaELP2XS-18

## NARROW ALLEY OPTICS

Optics 403



Optics CAT



phLuminaELP2XS - 12 / 40 / 500 / SCL

- Product serie
- No. LEDs
- Light colour
- Power supply current
- Optic type

Photometric curves performed in the PHAENOMENA photometric laboratory.  
NOTE: Other types of photometries are available upon request

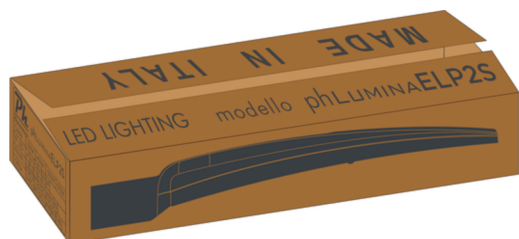
| Model              | LED power supply | Nominal Power (W) | Nominal Luminous Flux LED (lm) | Nominal Luminous Flux Fixture (lm) | Efficiency (lm/W) |
|--------------------|------------------|-------------------|--------------------------------|------------------------------------|-------------------|
| phLuminaELP2XS-4   | 350              | 10,5              | 1500                           | 1350                               | 158,9             |
| phLuminaELP2XS-6*  |                  | 14,4              | 2250                           | 2025                               |                   |
| phLuminaELP2XS-8   |                  | 17,5              | 3090                           | 2781                               |                   |
| phLuminaELP2XS-12  |                  | 26,5              | 4670                           | 4203                               |                   |
| phLuminaELP2XS-18* |                  | 39,7              | 7000                           | 6300                               |                   |
| phLuminaELP2XS-4   | 400              | 11,0              | 1680                           | 1512                               | 151,2             |
| phLuminaELP2XS-6*  |                  | 15,8              | 2580                           | 2322                               |                   |
| phLuminaELP2XS-8   |                  | 20,0              | 3370                           | 3033                               |                   |
| phLuminaELP2XS-12  |                  | 30,0              | 5040                           | 4536                               |                   |
| phLuminaELP2XS-18* |                  | 45,3              | 7580                           | 6822                               |                   |
| phLuminaELP2XS-4   | 450              | 11,5              | 1900                           | 1710                               | 148,7             |
| phLuminaELP2XS-6*  |                  | 17,5              | 2850                           | 2565                               |                   |
| phLuminaELP2XS-8   |                  | 23,0              | 3800                           | 3420                               |                   |
| phLuminaELP2XS-12  |                  | 34,5              | 5700                           | 5130                               |                   |
| phLuminaELP2XS-18* |                  | 51,6              | 8540                           | 7686                               |                   |
| phLuminaELP2XS-4   | 500              | 13,0              | 2100                           | 1890                               | 145,4             |
| phLuminaELP2XS-6*  |                  | 19,3              | 3140                           | 2826                               |                   |
| phLuminaELP2XS-8   |                  | 26,0              | 4200                           | 3780                               |                   |
| phLuminaELP2XS-12  |                  | 39,0              | 6300                           | 5670                               |                   |
| phLuminaELP2XS-18* |                  | 58,0              | 9400                           | 8460                               |                   |
| phLuminaELP2XS-4   | 550              | 14,4              | 2290                           | 2061                               | 143,3             |
| phLuminaELP2XS-6*  |                  | 21,5              | 3430                           | 3087                               |                   |
| phLuminaELP2XS-8   |                  | 28,7              | 4570                           | 4113                               |                   |
| phLuminaELP2XS-12  |                  | 43,0              | 6850                           | 6165                               |                   |
| phLuminaELP2XS-18* |                  | 64,5              | 10270                          | 9243                               |                   |
| phLuminaELP2XS-4   | 600              | 15,8              | 2640                           | 2376                               | 140,2             |
| phLuminaELP2XS-6*  |                  | 23,6              | 3850                           | 3465                               |                   |
| phLuminaELP2XS-8   |                  | 31,5              | 5280                           | 4752                               |                   |
| phLuminaELP2XS-12  |                  | 47,5              | 7400                           | 6660                               |                   |
| phLuminaELP2XS-18* |                  | 71,0              | 11530                          | 10377                              |                   |
| phLuminaELP2XS-4   | 650              | 17,3              | 2640                           | 2376                               | 137,1             |
| phLuminaELP2XS-6*  |                  | 25,9              | 3960                           | 3564                               |                   |
| phLuminaELP2XS-8   |                  | 34,5              | 5280                           | 4752                               |                   |
| phLuminaELP2XS-12  |                  | 52,0              | 7920                           | 7128                               |                   |
| phLuminaELP2XS-18* |                  | 77,6              | 11880                          | 10692                              |                   |
| phLuminaELP2XS-4   | 700              | 19,0              | 2830                           | 2547                               | 134,2             |
| phLuminaELP2XS-6*  |                  | 28,4              | 4250                           | 3825                               |                   |
| phLuminaELP2XS-8   |                  | 38,0              | 5660                           | 5094                               |                   |
| phLuminaELP2XS-12  |                  | 57,0              | 8500                           | 7650                               |                   |
| phLuminaELP2XS-18* |                  | 84,0              | 12750                          | 11475                              |                   |

\* Only with optics 601 and 602

NOTE: The values indicated in this data sheet are nominal and should be considered with a tolerance of +/- 10%.  
For the nominal luminous flux, the minimum value emitted by the LED GW P9LR35.PM(G5) IN M5 - A was considered.  
(1) Efficiency extrapolated from the LED manufacturer's datasheet.  
(2) Useful life according to report LM-80\_DURIS S 8 - GW P9LR35.PM\_4000K\_600mA\_6000h\_180260W1.  
(3) Values measured in the laboratory with Ta = 25 °C.  
(4) Values extrapolated from the LED manufacturer's datasheet.  
In order to support continuous product updates, Phaenomena reserves the right to make changes without prior notice.  
Except for errors or omissions. Always ensure you are using the most recent version.  
The product characteristics listed are subject to change and will be confirmed at the time of order

# phLUMINAELP2XS

## PACKAGING



Dimensions: 530x240x120 mm  
Weight: 5 Kg

## DESIGN

