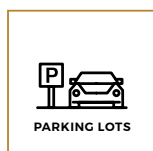


# BRISA

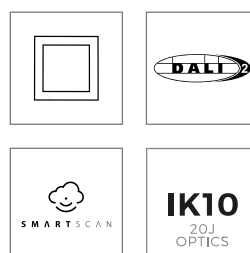


From residential street to access road: the BRISA lets you illuminate an entire living environment with a single range of luminaires. The BRISA was designed especially for residential streets and for small ring roads. The BRISA combines a sleek design with efficient lighting.

## STANDARD



## OPTION





## BENEFITS

- ▶ Choice of multiple light bundles and optics
- ▶ Long lifespan and light intensity retention
- ▶ Lighting solutions for better lighting comfort
- ▶ Uniform street scene thanks to the large lumen coverage
- ▶ Available in multiple colours

## SMART LIGHTING



**Zhaga-D4i** light management system

**SmartScan** for independent applications like for post heights up to 5 metres.



Want to speak to a specialist?  
**Click on / scan** the QR-code!

| GENERAL INFORMATION                    |                                                                                                                                      |                                                                                                       |
|----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| <b>Recommended installation height</b> | What is the recommended installation height?                                                                                         | <b>Up to 8 metres</b>                                                                                 |
| <b>Post diameter</b>                   | What is the post diameter?                                                                                                           | <b>Slide on: 48/60 mm<br/>Pole top: 48/60 or 76 mm</b>                                                |
| <b>Light control system</b>            | Which system is the luminaire suitable for?                                                                                          | <b>Zhaga-D4i light management system<br/>SmartScan</b>                                                |
| <b>CE Marking</b>                      | Does the product comply with the legal requirements for safety, health and the environment (CE marking)?                             | <b>Yes</b>                                                                                            |
| <b>RoHS certified</b>                  | Does the product comply with the requirements as stated in the RoHS guidelines? RoHS stands for Restriction of Hazardous Substances. | <b>Yes</b>                                                                                            |
| <b>ENEC certified</b>                  | Does the product comply with European safety standards ENEC?                                                                         | <b>Yes</b>                                                                                            |
| <b>ENEC+ certified</b>                 | Does the product comply with European safety standards ENEC+?                                                                        | <b>Yes</b>                                                                                            |
| <b>Zhaga-D4i certified</b>             | Is the luminaire Zhaga-D4i certified?                                                                                                | <b>Yes</b>                                                                                            |
| HOUSING AND FINISH                     |                                                                                                                                      |                                                                                                       |
| <b>Housing material</b>                | From what material is the luminaire's housing made?                                                                                  | <b>Aluminium</b>                                                                                      |
| <b>Light cover</b>                     | From what material is the light cover made?                                                                                          | <b>Toughened safety glass<br/>Polycarbonate (Optica model)</b>                                        |
| <b>Colours</b>                         | In which RAL colours is the product available?                                                                                       | <b>DB703 (Anthracite Grey)<br/>RAL 9007 (Grey Aluminium colour)<br/>RAL 9005 (Black)<br/>Uncoated</b> |
| <b>Dust and humidity tightness</b>     | Classification of resistance to dust and humidity?                                                                                   | <b>IP66</b>                                                                                           |
| <b>Impact resistant</b>                | What is the impact resistance of the luminaire?                                                                                      | <b>Housing: IK10 (20J)<br/>Glass: IK09 (10J)<br/>Optics: IK10 (20J)</b>                               |
| <b>Cable</b>                           | Which cable is supplied as standard?                                                                                                 | <b>H05BQ-F 3 x 1 mm<sup>2</sup></b>                                                                   |
| <b>Cable access</b>                    | Where is the cable access located?                                                                                                   | <b>Via the post adapter</b>                                                                           |
| OPERATING CONDITIONS                   |                                                                                                                                      |                                                                                                       |
| <b>Operating temperature range</b>     | What is the operating temperature range?                                                                                             | <b>- 40 °C to + 35 °C<br/>Protected from high temperatures</b>                                        |
| <b>Luminous flux tolerance</b>         | What is the LED module's luminous flux tolerance?                                                                                    | <b>+/- 5%</b>                                                                                         |
| <b>Power tolerance</b>                 | What is the tolerance for the system power?                                                                                          | <b>+/- 10%</b>                                                                                        |

#### OPERATING CONDITIONS - continued

|                                             |                                                                                                                                                                                          |                                                                                        |
|---------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| <b>Lifespan luminaire</b>                   | What is the specified number of burning hours?                                                                                                                                           | <b>At least 100,000 hours at Ta 25 °C<br/>25 years at 4,000 burning hours per year</b> |
| <b>Light intensity retention LED module</b> | After the number of burning hours, L(x) indicates the percentage of light retention and B(x) the percentage number of LEDs that have deteriorated by more than the specified percentage. | <b>L96/B10</b>                                                                         |
| <b>Failure classification luminaire</b>     | What is the maximum failure rate for the specified lifespan?                                                                                                                             | <b>F10 (90% survivors)</b>                                                             |

#### ELECTRICAL INFORMATION

|                         |                                                                  |                                                                   |         |
|-------------------------|------------------------------------------------------------------|-------------------------------------------------------------------|---------|
| Insulation class        | With which electrical safety class I does the luminaire comply?  | I<br>II (option)                                                  |         |
| Rated voltage           | What is the rated voltage in volts?                              | 230-240V AC                                                       |         |
| Inrush current overview | How many luminaires can be run on an MCB 16A B-type fuse?        | <6,000 lm                                                         | Number  |
|                         |                                                                  | Non dimming                                                       | 32 max. |
|                         |                                                                  | DALI dimming                                                      | 30 max. |
|                         |                                                                  | D4i                                                               | 30 max. |
|                         |                                                                  | 6,000 – 9,720 lm                                                  | Number  |
|                         |                                                                  | Non dimming                                                       | 10 max. |
|                         |                                                                  | DALI dimming                                                      | 10 max. |
|                         |                                                                  | D4i                                                               | 17 max. |
| Surge                   | To what level is the luminaire protected from surge as standard? | 10kV                                                              |         |
| Active surge protection | What is the optional protection for surge?                       | 15kV/7.5kA (Phase-Zero) (option)<br>10kV/5kA (F/N-Earth) (option) |         |
| Optional Sensor         | Is there an optional (presence) sensor?                          | Via Zhaga book-18<br>SmartScan                                    |         |
| Control protocols       | With which control protocol is the luminaire compatible?         | Zhaga-D4i (expansion of DALI-2)                                   |         |

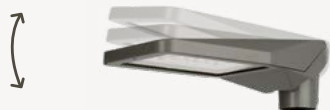
#### OPTICAL INFORMATION

|                                |                                                                                                                    |                                                                                                                                |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| <b>Lumen range (LED board)</b> | Various LED boards and with Lumen range (lumen dependent on optics) (power and lumen for each colour/CRI in annex) | <b>800 - 9,720 lm</b>                                                                                                          |
| <b>LED colour temperature</b>  | In which colour temperatures is the luminaire available?                                                           | <b>1,700K (amber)<br/>2,200K (candlelight)<br/>2,700K (very warm white)<br/>3,000K (warm white)<br/>4,000K (neutral white)</b> |

**OPTICAL INFORMATION- continued**

|                                     |                                                                                                     |                                                                                            |
|-------------------------------------|-----------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| <b>Colour rendering index (CRI)</b> | To what extent does the light source faithfully reproduce the colours of the objects (scale 0-100)? | <b>&gt;70</b><br><b>&gt;80 (option)</b>                                                    |
| <b>LED module</b>                   | With which light technology is the luminaire available?                                             | <b>LED2WELL Core</b><br><b>LED2WELL Pro</b><br><b>LED2WELL Max</b><br><b>LED2WELL Flex</b> |
| <b>Optics</b>                       | Which light bundles are possible?                                                                   | <b>See page 15</b>                                                                         |
| <b>Dark-sky possible?</b>           | Is there a maximum for stray light that shines upwards?                                             | <b>Yes, for specific light distribution and 3,000K or lower</b>                            |

### TILT ANGLE POLE TOP

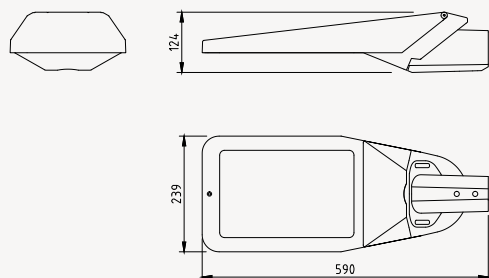


### TILT ANGLE SLIDE ON

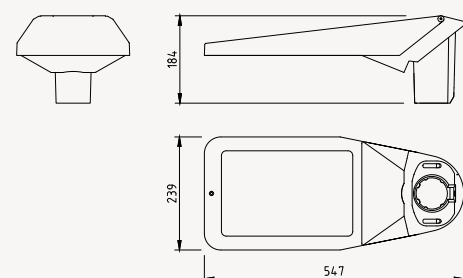


### DIMENSIONS WITH POLE SECTION

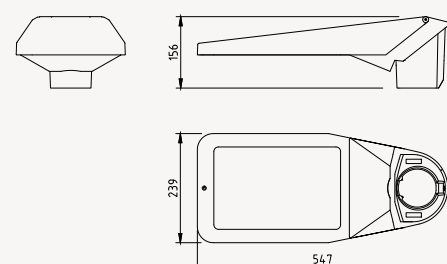
#### 48/60 slide on



#### 48/60 pole top



#### 76 pole top



### DIMENSIONS AND MOUNTING

|                               |                                                                    |
|-------------------------------|--------------------------------------------------------------------|
| L x W x H in mm               | 590 x 239 x 124 (slide on 48/60)                                   |
|                               | 547 x 239 x 184 (pole top 48/60)                                   |
|                               | 547 x 239 x 156 (pole top 76)                                      |
| Weight in kg<br>(basic model) | +/- 6 kg (depending on model)                                      |
| Mounting possibilities        | Pole top: 60 mm / 76 mm                                            |
|                               | Slide on: 48 mm / 60 mm                                            |
|                               | Tilt: pole top (60 mm) adjustable 0-15 degrees in 3 steps.         |
|                               | Tilt: pole top (76 mm) adjustable 0-10 degrees in 2 steps.         |
|                               | Tilt: pole top (48/60 mm) adjustable 0 to -15 degrees in 3 steps.* |

### MODEL



#### FLAT GLASS

The BRISA is supplied as standard with a clear light cover made from safety glass providing a uniform light scene.

#### OPTICA

The OPTICA version of the BRISA is supplied with a polycarbonate light cover for a diffused light scene that is very easy on the eyes.



#### SPHERICAL GLASS

For functional lighting with extra visual orientation a spherical glass is a good option.



\* Option: tilt angle 15 to -15 degrees using an insert, applies to both pole top as slide on (48/60mm)

### EASY LIGHT

In addition to using LED, even more energy can be saved or light pollution avoided employing BRISA luminaires supplied with a factory-set dimming schedule (1A, 2A, 3A, 4A or 5A). The BRISA luminaire will autonomously dim when appropriate once the night rhythm has been established and return to 100% in the morning.



*Disclaimer: whether the percentages of the relevant dimming regime are actually achieved depends in part on the chosen configuration of the luminaire.*

### CLO

All BRISA luminaires support the CLO facility, in other words the typical light degradation of about 10% over the lifespan can be continually compensated over the lifespan through gradually increasing the power to ensure the light intensity remains at L100.

### ZDI

BRISA luminaires are Zhaga-D4i Certified. This certificate guarantees that any Zhaga-D4i Light Management System recognises these luminaires - with their characteristics and can incorporate them in the system. BRISA luminaires can be supplied with one or two Zhaga-book 18 connectors so that, apart from a node, a sensor can also be connected. Thanks to this, BRISA luminaires are suitable for the latest developments in the fields of smart lighting and connectivity.

### SMARTSCAN

Employing SmartScan sensors, movement and lighting levels can be detected and via mutual communication and smart software luminaires can be harmonised to ensure optimum lighting levels. SmartScan can typically be employed for short pole distances (bicycle paths, car parking sites) or where the exterior lighting is combined with interior lighting. Additionally, the SmartScan monitor feature can ensure that the maintenance costs are kept in check.

**LED<sup>2</sup>WELL CORE** Our **energy-saving lighting solutions**

| Number of LEDs | Lumen | STANDARD<br><b>AMBER</b><br>System<br>capacity (W) | CRI 70 (Option: CRI 80)                            |                                                    |                                                    |                                                    | STANDARD<br><b>4000K</b><br>System<br>capacity (W) |
|----------------|-------|----------------------------------------------------|----------------------------------------------------|----------------------------------------------------|----------------------------------------------------|----------------------------------------------------|----------------------------------------------------|
|                |       |                                                    | STANDARD<br><b>2200K</b><br>System<br>capacity (W) | STANDARD<br><b>2700K</b><br>System<br>capacity (W) | STANDARD<br><b>3000K</b><br>System<br>capacity (W) | STANDARD<br><b>3500K</b><br>System<br>capacity (W) |                                                    |
| 8              | 800   | -                                                  | 7,4                                                | 6,0                                                | 5,7                                                |                                                    | 5,5                                                |
|                | 1050  | -                                                  | 9,6                                                | 7,8                                                | 7,4                                                |                                                    | 7,2                                                |
|                | 1200  | -                                                  | 10,9                                               | 8,9                                                | 8,3                                                |                                                    | 8,0                                                |
|                | 1350  | -                                                  | 12,4                                               | 9,9                                                | 9,2                                                |                                                    | 8,9                                                |
|                | 1500  | -                                                  | 12,7                                               | 10,6                                               | 9,7                                                |                                                    | 9,7                                                |
|                | 1600  | -                                                  | 13,5                                               | 11,5                                               | 10,4                                               |                                                    | 10,4                                               |
|                | 1800  | -                                                  | 15,2                                               | 12,8                                               | 11,7                                               |                                                    | 11,6                                               |
|                | 2000  | -                                                  | 16,8                                               | 14,2                                               | 13,1                                               |                                                    | 12,9                                               |
|                | 2150  | -                                                  | 18,1                                               | 15,3                                               | 14,2                                               |                                                    | 14,2                                               |
|                | 2300  | -                                                  | 19,4                                               | 16,6                                               | 15,3                                               |                                                    | 15,4                                               |
|                | 2500  | -                                                  | 21,2                                               | 18,5                                               | 16,8                                               |                                                    | 16,9                                               |
|                | 2750  | -                                                  | 23,3                                               | 20,8                                               | 18,9                                               |                                                    | 19,0                                               |
|                | 3000  | -                                                  | -                                                  | 23,2                                               | 20,9                                               |                                                    | 20,8                                               |
|                | 3240  | -                                                  | -                                                  | -                                                  | 22,8                                               |                                                    | 22,9                                               |
|                | 3500  | -                                                  | -                                                  | -                                                  | 25,2                                               |                                                    | 25,1                                               |

**LED<sup>2</sup>WELL CORE** Our **energy-saving lighting solutions**

|                |       |                                             | CRI 70 (Option: CRI 80)                     |                                             |                                             |                                             |
|----------------|-------|---------------------------------------------|---------------------------------------------|---------------------------------------------|---------------------------------------------|---------------------------------------------|
| Number of LEDs | Lumen | STANDARD<br>AMBER<br>System<br>capacity (W) | STANDARD<br>2200K<br>System<br>capacity (W) | STANDARD<br>2700K<br>System<br>capacity (W) | STANDARD<br>3000K<br>System<br>capacity (W) | STANDARD<br>4000K<br>System<br>capacity (W) |
| 12             | 1050  | -                                           | 8,1                                         | 7,4                                         | 7,1                                         | 6,8                                         |
|                | 1200  | -                                           | 9,1                                         | 8,4                                         | 8,0                                         | 7,6                                         |
|                | 1350  | -                                           | 10,2                                        | 9,5                                         | 8,9                                         | 8,4                                         |
|                | 1500  | -                                           | 11,5                                        | 10,5                                        | 9,7                                         | 9,0                                         |
|                | 1600  | -                                           | 12,3                                        | 11,2                                        | 10,2                                        | 9,5                                         |
|                | 1800  | -                                           | 13,9                                        | 12,5                                        | 11,6                                        | 10,6                                        |
|                | 2000  | -                                           | 15,5                                        | 13,9                                        | 12,9                                        | 11,8                                        |
|                | 2150  | -                                           | 16,3                                        | 15,0                                        | 14,2                                        | 12,5                                        |
|                | 2300  | -                                           | 16,6                                        | 16,0                                        | 15,1                                        | 13,4                                        |
|                | 2500  | -                                           | 18,3                                        | 17,5                                        | 16,5                                        | 14,6                                        |
|                | 2750  | -                                           | 20,5                                        | 19,3                                        | 18,3                                        | 16,0                                        |
|                | 3000  | -                                           | 23,0                                        | 21,1                                        | 19,9                                        | 17,5                                        |
|                | 3240  | -                                           | 25,1                                        | 23,2                                        | 21,8                                        | 19,4                                        |
|                | 3500  | -                                           | 27,5                                        | 24,0                                        | 23,0                                        | 21,2                                        |
|                | 3600  | -                                           | 28,4                                        | 24,7                                        | 23,9                                        | 22,0                                        |
|                | 3780  | -                                           | 29,8                                        | 26,0                                        | 25,3                                        | 23,3                                        |
|                | 4000  | -                                           | 32,2                                        | 27,5                                        | 27,1                                        | 24,9                                        |
|                | 4200  | -                                           | -                                           | 28,9                                        | 28,7                                        | 26,3                                        |
|                | 4320  | -                                           | -                                           | 29,7                                        | 29,7                                        | 27,2                                        |
|                | 4860  | -                                           | -                                           | -                                           | 34,2                                        | 31,1                                        |

**LED<sup>2</sup>WELL CORE** Our **energy-saving lighting solutions**

| Number of LEDs | Lumen | CRI 70 (Option: CRI 80)                            |                                                    |                                                    |                                                    |                                                    |
|----------------|-------|----------------------------------------------------|----------------------------------------------------|----------------------------------------------------|----------------------------------------------------|----------------------------------------------------|
|                |       | STANDARD<br><b>AMBER</b><br>System<br>capacity (W) | STANDARD<br><b>2200K</b><br>System<br>capacity (W) | STANDARD<br><b>2700K</b><br>System<br>capacity (W) | STANDARD<br><b>3000K</b><br>System<br>capacity (W) | STANDARD<br><b>4000K</b><br>System<br>capacity (W) |
| <b>16</b>      | 1200  | 12,4                                               | 9,0                                                | 8,1                                                | 8,2                                                | 8,3                                                |
|                | 1350  | -                                                  | 10,3                                               | 9,0                                                | 9,0                                                | 9,1                                                |
|                | 1500  | -                                                  | 11,4                                               | 9,9                                                | 9,8                                                | 9,9                                                |
|                | 1600  | 16,3                                               | 11,5                                               | 10,4                                               | 10,3                                               | 10,4                                               |
|                | 1800  | -                                                  | 12,7                                               | 11,5                                               | 11,4                                               | 11,4                                               |
|                | 2000  | -                                                  | 14,4                                               | 12,9                                               | 11,9                                               | 11,8                                               |
|                | 2150  | -                                                  | 15,4                                               | 13,8                                               | 12,8                                               | 12,6                                               |
|                | 2300  | -                                                  | 16,5                                               | 14,8                                               | 13,7                                               | 13,5                                               |
|                | 2500  | -                                                  | 17,9                                               | 16,3                                               | 14,9                                               | 14,7                                               |
|                | 2750  | -                                                  | 20,3                                               | 18,0                                               | 16,5                                               | 16,2                                               |
|                | 3000  | -                                                  | 23,0                                               | 19,6                                               | 17,8                                               | 17,9                                               |
|                | 3240  | -                                                  | 25,4                                               | 21,5                                               | 19,5                                               | 19,6                                               |
|                | 3500  | -                                                  | 28,0                                               | 23,6                                               | 21,2                                               | 21,2                                               |
|                | 3750  | -                                                  | 30,5                                               | 25,4                                               | 23,0                                               | 23,1                                               |
|                | 4000  | -                                                  | 33,1                                               | 27,0                                               | 24,5                                               | 24,5                                               |
|                | 4200  | -                                                  | 35,3                                               | 28,5                                               | 27,2                                               | 25,7                                               |
|                | 4320  | -                                                  | -                                                  | 30,1                                               | 27,9                                               | 26,6                                               |
|                | 4500  | -                                                  | -                                                  | 32,3                                               | 29,6                                               | 28,1                                               |
|                | 4860  | -                                                  | -                                                  | 34,51                                              | 32,0                                               | 30,1                                               |
|                | 5000  | -                                                  | -                                                  | 35,73                                              | 33,1                                               | 31,1                                               |
|                | 5200  | -                                                  | -                                                  | 37,3                                               | 34,6                                               | 32,4                                               |
|                | 5670  | -                                                  | -                                                  | -                                                  | 38,1                                               | 35,7                                               |
|                | 6000  | -                                                  | -                                                  | -                                                  | 40,6                                               | 38,0                                               |

**LED<sup>2</sup>WELL CORE** Our **energy-saving lighting solutions**

|                |       |                                             | CRI 70 (Option: CRI 80)                     |                                             |                                             |                                             |
|----------------|-------|---------------------------------------------|---------------------------------------------|---------------------------------------------|---------------------------------------------|---------------------------------------------|
| Number of LEDs | Lumen | STANDARD<br>AMBER<br>System<br>capacity (W) | STANDARD<br>2200K<br>System<br>capacity (W) | STANDARD<br>2700K<br>System<br>capacity (W) | STANDARD<br>3000K<br>System<br>capacity (W) | STANDARD<br>4000K<br>System<br>capacity (W) |
| 24             | 2000  | -                                           | 14,6                                        | 13,5                                        | 12,3                                        | 12,8                                        |
|                | 2350  | -                                           | 17,0                                        | 15,5                                        | 14,1                                        | 14,8                                        |
|                | 2500  | -                                           | 18,0                                        | 16,4                                        | 14,8                                        | 15,6                                        |
|                | 2750  | -                                           | 18,7                                        | 17,9                                        | 15,9                                        | 17,0                                        |
|                | 3000  | -                                           | 20,6                                        | 19,4                                        | 17,3                                        | 18,4                                        |
|                | 3240  | -                                           | 22,5                                        | 20,8                                        | 18,6                                        | 19,8                                        |
|                | 3500  | -                                           | 24,5                                        | 22,3                                        | 19,8                                        | 21,2                                        |
|                | 3750  | -                                           | 26,5                                        | 23,1                                        | 21,3                                        | 22,8                                        |
|                | 4000  | -                                           | 28,8                                        | 25,1                                        | 21,8                                        | 24,4                                        |
|                | 4320  | -                                           | 31,0                                        | 27,3                                        | 23,5                                        | 26,3                                        |
|                | 4500  | -                                           | 32,5                                        | 28,6                                        | 24,8                                        | 27,6                                        |
|                | 4860  | -                                           | 35,5                                        | 30,3                                        | 26,6                                        | 30,1                                        |
|                | 5000  | -                                           | 36,6                                        | 31,9                                        | 27,4                                        | 30,8                                        |
|                | 5200  | -                                           | 39,0                                        | 33,5                                        | 28,6                                        | 32,0                                        |
|                | 5670  | -                                           | 43,1                                        | 37,0                                        | 31,5                                        | 35,4                                        |
|                | 6000  | -                                           | 46,2                                        | 39,2                                        | 33,3                                        | 38,1                                        |
|                | 6480  | -                                           | -                                           | 46,8                                        | 37,9                                        | 40,9                                        |
|                | 6840  | -                                           | -                                           | 50,2                                        | 40,2                                        | 43,6                                        |
|                | 7290  | -                                           | -                                           | 55,0                                        | 43,5                                        | 42,6                                        |
|                | 7560  | -                                           | -                                           | 58,0                                        | 45,3                                        | 48,6                                        |

**LED<sup>2</sup>WELL CORE** Our **energy-saving lighting solutions**

|                |       |                                             | CRI 70 (Option: CRI 80)                     |                                             |                                             |                                             |
|----------------|-------|---------------------------------------------|---------------------------------------------|---------------------------------------------|---------------------------------------------|---------------------------------------------|
| Number of LEDs | Lumen | STANDARD<br>AMBER<br>System<br>capacity (W) | STANDARD<br>2200K<br>System<br>capacity (W) | STANDARD<br>2700K<br>System<br>capacity (W) | STANDARD<br>3000K<br>System<br>capacity (W) | STANDARD<br>4000K<br>System<br>capacity (W) |
| 32             | 2750  | -                                           | 19,3                                        | 17,2                                        | 17,2                                        | 16,0                                        |
|                | 3000  | 28,6                                        | 21,1                                        | 18,9                                        | 18,7                                        | 17,5                                        |
|                | 3240  | -                                           | 22,8                                        | 20,3                                        | 20,1                                        | 18,8                                        |
|                | 3500  | -                                           | 24,7                                        | 21,9                                        | 21,6                                        | 20,2                                        |
|                | 3780  | -                                           | 26,8                                        | 23,6                                        | 23,3                                        | 21,8                                        |
|                | 4000  | -                                           | 28,4                                        | 25,1                                        | 24,6                                        | 23,1                                        |
|                | 4320  | -                                           | 30,7                                        | 27,1                                        | 26,5                                        | 24,9                                        |
|                | 4860  | -                                           | 34,8                                        | 30,6                                        | 29,8                                        | 28,0                                        |
|                | 5200  | -                                           | 37,3                                        | 32,8                                        | 31,9                                        | 29,9                                        |
|                | 5670  | -                                           | 40,8                                        | 35,8                                        | 34,8                                        | 32,4                                        |
|                | 6000  | -                                           | 43,3                                        | 37,9                                        | 36,9                                        | 34,2                                        |
|                | 6480  | -                                           | 47,2                                        | 41,1                                        | 39,9                                        | 37,0                                        |
|                | 6840  | -                                           | 50,4                                        | 43,7                                        | 41,8                                        | 39,1                                        |
|                | 7290  | -                                           | 54,4                                        | 47,0                                        | 44,7                                        | 41,7                                        |
|                | 7560  | -                                           | 56,8                                        | 48,9                                        | 47,1                                        | 43,8                                        |
|                | 7800  | -                                           | 58,9                                        | 50,6                                        | 48,9                                        | 45,4                                        |
|                | 8000  | -                                           | 60,6                                        | 52,1                                        | 50,3                                        | 46,6                                        |
|                | 8100  | -                                           | -                                           | 52,8                                        | 51,0                                        | 47,2                                        |
|                | 8640  | -                                           | -                                           | 56,8                                        | 55,1                                        | 50,8                                        |
|                | 9720  | -                                           | -                                           | -                                           | 63,2                                        | 58,6                                        |

**LED<sup>2</sup>WELLPRO** Our energy-saving solutions for **ultimate lighting comfort**

| Number of LEDs | Lumen | CRI 80                                      |                                             |                                             |
|----------------|-------|---------------------------------------------|---------------------------------------------|---------------------------------------------|
|                |       | STANDARD<br>2200K<br>System<br>capacity (W) | STANDARD<br>2700K<br>System<br>capacity (W) | STANDARD<br>3000K<br>System<br>capacity (W) |
| 16             | 650   | 5,0                                         | -                                           | -                                           |
|                | 800   | 5,9                                         | 5,6                                         | 5,4                                         |
|                | 1050  | 7,6                                         | 7,1                                         | 6,9                                         |
|                | 1200  | 8,5                                         | 8,0                                         | 7,8                                         |
|                | 1350  | 9,4                                         | 8,8                                         | 8,5                                         |
|                | 1500  | 10,4                                        | 9,7                                         | 9,4                                         |
|                | 1600  | 11,1                                        | 10,4                                        | 10,1                                        |
|                | 1800  | -                                           | -                                           | 11,2                                        |
| 32             | 1050  | 7,5                                         | 7,0                                         | 6,7                                         |
|                | 1200  | 8,3                                         | 7,8                                         | 7,6                                         |
|                | 1350  | 9,1                                         | 8,6                                         | 8,4                                         |
|                | 1500  | 10,1                                        | 9,5                                         | 9,2                                         |
|                | 1600  | 10,6                                        | 10,1                                        | 9,7                                         |
|                | 1800  | 11,8                                        | 11,2                                        | 10,8                                        |
|                | 2000  | 13,0                                        | 12,3                                        | 11,9                                        |
|                | 2150  | 13,9                                        | 13,2                                        | 12,7                                        |
|                | 2200  | 14,2                                        | 13,5                                        | 13,0                                        |
|                | 2300  | 15,0                                        | 14,0                                        | 13,5                                        |
|                | 2500  | 16,3                                        | 15,3                                        | 14,7                                        |
|                | 2750  | 18,1                                        | 16,9                                        | 16,3                                        |
|                | 3000  | 19,8                                        | 18,6                                        | 17,9                                        |
|                | 3240  | -                                           | 20,2                                        | 19,4                                        |
|                | 3500  | -                                           | -                                           | 19,8                                        |

**LED<sup>2</sup>WELLPRO** Our energy-saving solutions for **ultimate lighting comfort**

| Number of LEDs | Lumen | CRI 80                                      |                                             |                                             |
|----------------|-------|---------------------------------------------|---------------------------------------------|---------------------------------------------|
|                |       | STANDARD<br>2200K<br>System<br>capacity (W) | STANDARD<br>2700K<br>System<br>capacity (W) | STANDARD<br>3000K<br>System<br>capacity (W) |
| 64             | 1600  | 11,1                                        | 11,0                                        | 11,2                                        |
|                | 1800  | 12,4                                        | 11,9                                        | 12,1                                        |
|                | 2000  | 13,7                                        | 13,1                                        | 13,2                                        |
|                | 2150  | 14,4                                        | 13,8                                        | 14,0                                        |
|                | 2200  | 14,7                                        | 14,0                                        | 14,1                                        |
|                | 2300  | 15,3                                        | 14,5                                        | 14,7                                        |
|                | 2500  | 16,7                                        | 15,5                                        | 15,8                                        |
|                | 3000  | 19,6                                        | 18,4                                        | 18,2                                        |
|                | 3240  | 21,1                                        | 19,7                                        | 19,5                                        |
|                | 3500  | 22,1                                        | 21,2                                        | 20,8                                        |
|                | 3780  | 24,3                                        | 22,7                                        | 22,2                                        |
|                | 4000  | 25,6                                        | 24,0                                        | 23,4                                        |
|                | 4200  | 26,9                                        | 25,1                                        | 24,4                                        |
|                | 4320  | 27,6                                        | 25,8                                        | 25,0                                        |
|                | 4860  | 31,5                                        | 39,2                                        | 28,3                                        |
|                | 5200  | 33,9                                        | 31,5                                        | 30,4                                        |
|                | 5670  | 37,1                                        | 34,6                                        | 33,3                                        |
|                | 6000  | 39,4                                        | 36,8                                        | 35,3                                        |
|                | 6480  | -                                           | 39,7                                        | 38,3                                        |
|                | 6840  | -                                           | -                                           | 40,0                                        |

LED<sup>2</sup>WELL MAX Maximum energy savings

| Number of LEDs | Lumen | CRI 70                                      |                                             |
|----------------|-------|---------------------------------------------|---------------------------------------------|
|                |       | STANDARD<br>3000K<br>System<br>capacity (W) | STANDARD<br>4000K<br>System<br>capacity (W) |
| 8              | 800   | 5,4                                         | 5,3                                         |
|                | 1050  | 6,8                                         | 6,7                                         |
|                | 1200  | 7,6                                         | 7,5                                         |
|                | 1350  | 8,5                                         | 8,3                                         |
|                | 1500  | 9,3                                         | 9,1                                         |
|                | 1600  | 9,8                                         | 9,6                                         |
|                | 1800  | 10,9                                        | 10,7                                        |
|                | 2000  | 12,1                                        | 11,8                                        |
|                | 2150  | 13,1                                        | 12,7                                        |
|                | 2300  | 14,0                                        | 13,5                                        |
|                | 2500  | 15,3                                        | 14,8                                        |
|                | 2750  | 17,0                                        | 16,4                                        |
|                | 3000  | 18,7                                        | 17,9                                        |
|                | 3240  | 20,4                                        | 19,5                                        |
|                | 3500  | 22,3                                        | 21,3                                        |

LED<sup>2</sup>WELL MAX Maximum energy savings

| Number of LEDs | Lumen | CRI 70                                      |                                             |
|----------------|-------|---------------------------------------------|---------------------------------------------|
|                |       | STANDARD<br>3000K<br>System<br>capacity (W) | STANDARD<br>4000K<br>System<br>capacity (W) |
| 12             | 1050  | 6,7                                         | 6,5                                         |
|                | 1200  | 7,6                                         | 7,3                                         |
|                | 1350  | 8,4                                         | 8,1                                         |
|                | 1500  | 9,1                                         | 8,8                                         |
|                | 1600  | 9,7                                         | 9,3                                         |
|                | 1800  | 10,8                                        | 10,3                                        |
|                | 2000  | 11,9                                        | 11,3                                        |
|                | 2150  | 12,7                                        | 12,1                                        |
|                | 2300  | 13,6                                        | 12,9                                        |
|                | 2500  | 14,7                                        | 14,0                                        |
|                | 2750  | 16,2                                        | 15,3                                        |
|                | 3000  | 17,6                                        | 16,8                                        |
|                | 3240  | 19,1                                        | 18,1                                        |
|                | 3500  | 20,7                                        | 19,7                                        |
|                | 3600  | 21,3                                        | 20,3                                        |
|                | 3780  | 22,5                                        | 21,4                                        |
|                | 4000  | 24,5                                        | 23,1                                        |
|                | 4200  | 26,0                                        | 24,3                                        |
|                | 4320  | 26,9                                        | 25,1                                        |
|                | 4860  | 30,9                                        | 28,6                                        |

LED<sup>2</sup>WELL MAX Maximum energy savings

| Number of LEDs | Lumen | CRI 70                                      |                                             |
|----------------|-------|---------------------------------------------|---------------------------------------------|
|                |       | STANDARD<br>3000K<br>System<br>capacity (W) | STANDARD<br>4000K<br>System<br>capacity (W) |
| 16             | 1200  | 7,7                                         | 7,6                                         |
|                | 1350  | 8,4                                         | 8,4                                         |
|                | 1500  | 9,3                                         | 9,2                                         |
|                | 1600  | 9,8                                         | 9,7                                         |
|                | 1800  | 10,9                                        | 10,8                                        |
|                | 2000  | 12,0                                        | 11,9                                        |
|                | 2150  | 12,7                                        | 12,7                                        |
|                | 2300  | 13,9                                        | 13,8                                        |
|                | 2500  | 14,7                                        | 14,6                                        |
|                | 2750  | 16,1                                        | 16,0                                        |
|                | 3000  | 17,5                                        | 17,4                                        |
|                | 3240  | 18,9                                        | 18,8                                        |
|                | 3500  | 20,3                                        | 20,3                                        |
|                | 3750  | 22,7                                        | 22,3                                        |
|                | 4000  | 24,2                                        | 23,7                                        |
|                | 4200  | 25,5                                        | 25,0                                        |
|                | 4320  | 26,3                                        | 25,8                                        |
|                | 4500  | 27,5                                        | 27,0                                        |
|                | 4860  | 29,9                                        | 29,3                                        |
|                | 5000  | 30,9                                        | 30,3                                        |
|                | 5200  | 32,2                                        | 31,6                                        |
|                | 5670  | 35,6                                        | 34,8                                        |
|                | 6000  | 37,9                                        | 37,2                                        |

LED<sup>2</sup>WELL MAX Maximum energy savings

| Number of LEDs | Lumen | CRI 70                                      |                                             |
|----------------|-------|---------------------------------------------|---------------------------------------------|
|                |       | STANDARD<br>3000K<br>System<br>capacity (W) | STANDARD<br>4000K<br>System<br>capacity (W) |
| 24             | 2000  | 11,9                                        | 11,5                                        |
|                | 2350  | 14,0                                        | 13,2                                        |
|                | 2500  | 14,7                                        | 14,0                                        |
|                | 2750  | 16,0                                        | 15,3                                        |
|                | 3000  | 17,3                                        | 16,6                                        |
|                | 3240  | 18,6                                        | 17,8                                        |
|                | 3500  | 20,0                                        | 19,1                                        |
|                | 3750  | 21,6                                        | 20,6                                        |
|                | 4000  | 22,8                                        | 21,8                                        |
|                | 4320  | 24,5                                        | 23,4                                        |
|                | 4500  | 25,5                                        | 24,5                                        |
|                | 4860  | 27,7                                        | 26,6                                        |
|                | 5000  | 28,6                                        | 27,4                                        |
|                | 5200  | 29,8                                        | 28,6                                        |
|                | 5670  | 32,6                                        | 31,5                                        |
|                | 6000  | 34,6                                        | 33,5                                        |
|                | 6480  | 37,5                                        | 36,4                                        |
|                | 6840  | 39,7                                        | 38,7                                        |
|                | 7290  | 42,3                                        | 41,5                                        |
|                | 7560  | 44,0                                        | 43,1                                        |

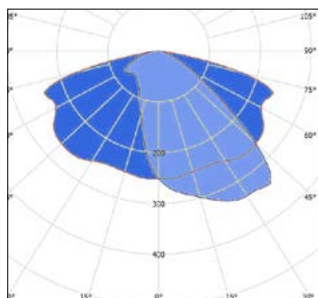
LED<sup>2</sup>WELL MAX Maximum energy savings

| Number of LEDs | Lumen | CRI 70                                      |                                             |
|----------------|-------|---------------------------------------------|---------------------------------------------|
|                |       | STANDARD<br>3000K<br>System<br>capacity (W) | STANDARD<br>4000K<br>System<br>capacity (W) |
| 32             | 2750  | 16,5                                        | 15,5                                        |
|                | 3000  | 17,8                                        | 16,8                                        |
|                | 3240  | 19,0                                        | 18,1                                        |
|                | 3500  | 20,3                                        | 19,6                                        |
|                | 3780  | 21,7                                        | 21,0                                        |
|                | 4000  | 22,9                                        | 22,2                                        |
|                | 4320  | 24,6                                        | 23,8                                        |
|                | 4860  | 27,5                                        | 26,6                                        |
|                | 5200  | 29,3                                        | 28,4                                        |
|                | 5670  | 31,8                                        | 31,0                                        |
|                | 6000  | 33,6                                        | 32,8                                        |
|                | 6480  | 36,2                                        | 35,4                                        |
|                | 6840  | 38,2                                        | 37,4                                        |
|                | 7290  | 40,7                                        | 39,9                                        |
|                | 7560  | 42,5                                        | 41,6                                        |
|                | 7800  | 43,9                                        | 43,0                                        |
|                | 8000  | 45,1                                        | 44,1                                        |
|                | 8100  | 45,7                                        | 44,7                                        |
|                | 8640  | 48,9                                        | 47,8                                        |
|                | 9720  | 55,6                                        | 54,2                                        |

For the remaining assets, we ask you to contact your account manager.

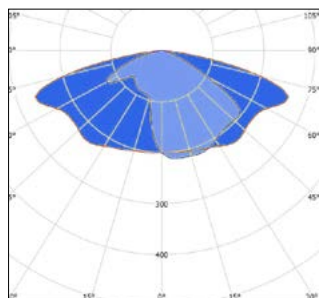
**LED<sup>2</sup>WELL CORE** A selection of the possibilities

BRISA CA01 (LC-N)


**A-SYMMETRIC**

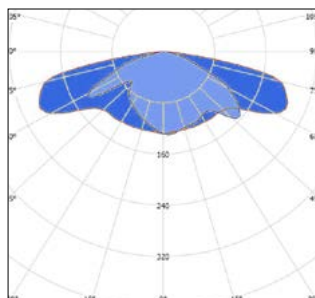
Average wide road

BRISA CA02 (LC-R)


**WIDE BEAM**

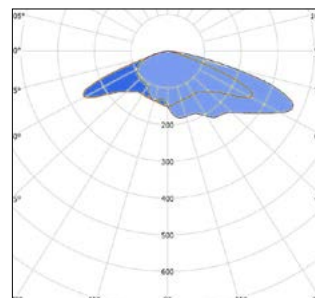
Stray light

BRISA CA07 (LC-A3)


**WIDE BEAM**

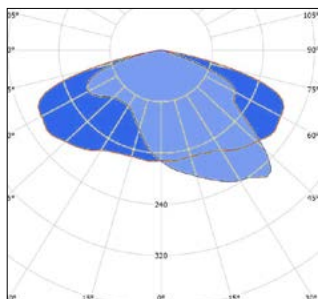
High uniformity

BRISA CA10 (LC-O3)


**A-SYMMETRIC**

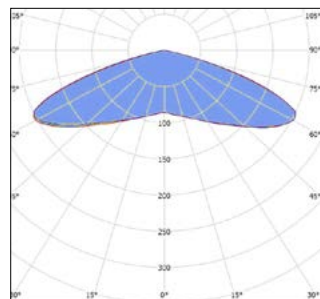
Deep-beaming large terrain

BRISA CA04 (LC-M)


**STRAY LIGHT**

 Wide beam,  
High uniformity

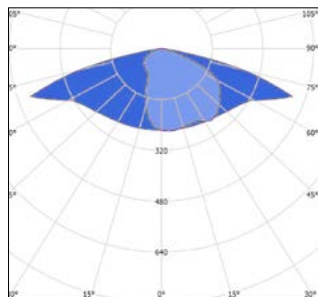
BRISA CR01 (LC-S)


**CIRCULAR BEAM**

 High uniformity, Glare  
reduction

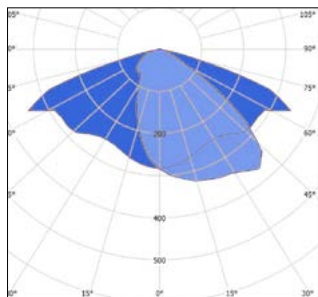
## LED<sup>2</sup>WELLPRO A selection of the possibilities

BRISA PA01



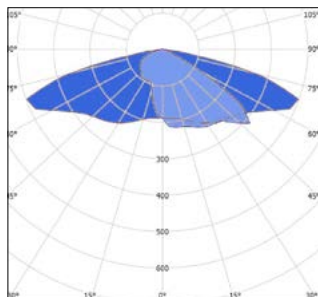
**A-SYMMETRIC**  
Average wide road

BRISA PA02



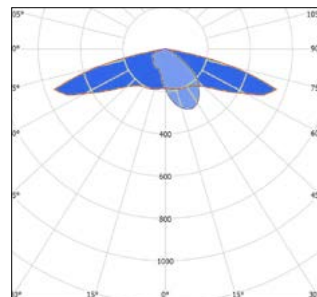
**WIDE BEAM**  
Stray light

BRISA PA03



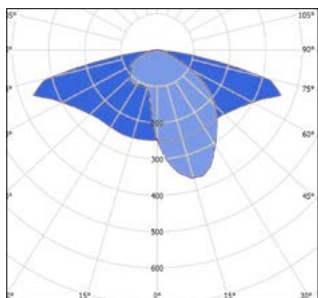
**WIDE BEAM**  
High uniformity

BRISA PA04



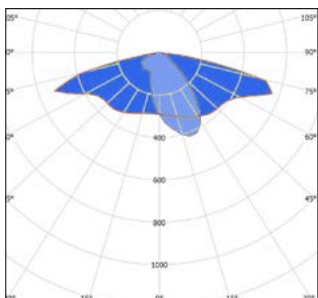
**A-SYMMETRIC**  
Narrow profile

BRISA PA05



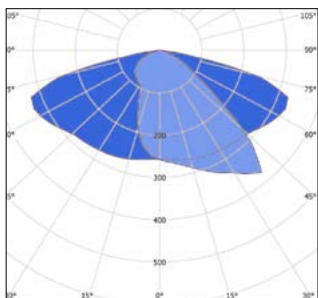
**A-SYMMETRIC**  
Narrow profile

BRISA PA06



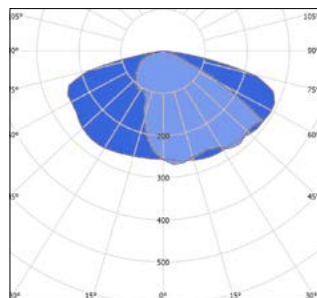
**A-SYMMETRIC**  
Narrow profile

BRISA PA07



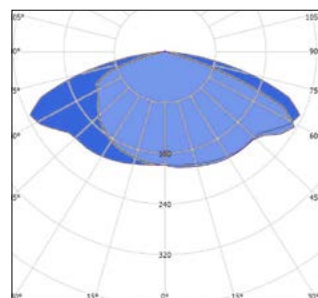
**STRAY LIGHT**  
Wide beam, medium  
traffic road

BRISA PA08



**CIRCULAR BEAM**  
High uniformity, Glare  
reduction

BRISA PA09



**A-SYMMETRIC**  
High uniformity, Glare  
reduction