

# Astral LI Comfort



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High-Impact Tropicalized Transparent Thermo-Polymer T5



Lighting performance superior to glass, and 200 times more resistant.

Chemical polishing for maximum transparency and transmittance.

Exceeds impact tests above 50 joules –more than twice the standard set by IK EN 62262–

## Reinforced Engineering Technical Polymer S7



Immune to corrosion and degradation caused by atmospheric agents.

Withstands tropical storms, constant humidity, electrocution, salt exposure, and even fire.

The material has been subjected to 3000 hours of UV radiation without showing any color alteration.

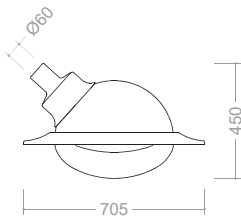
# Astral LI Comfort



## Standard colors (\*)



## Dimensions



## Power configurations

|       |       |        |
|-------|-------|--------|
| LED15 | LED25 | LED35  |
| LED55 | LED75 | LED100 |

## Technical characteristics

|                                   |                      |
|-----------------------------------|----------------------|
| Maximum recommended height        | 12 m                 |
| Weight                            | 7.2 kg               |
| Wind surface                      | 1670 cm <sup>2</sup> |
| Coupling                          | 60 mm                |
| Insulation class                  | Class II             |
| Full warranty                     | 10 years             |
| IK protection rating              | IK10                 |
| IP protection rating              | IP66+IPX9            |
| Laminar Heatsink®                 | Yes                  |
| Photocell option                  | Yes                  |
| Zhaga / Nema compatible connector | Yes                  |
| Diffuser type                     | Comfort Diffuser®    |

## Optics (\*\*)

|                  |                  |                  |                  |
|------------------|------------------|------------------|------------------|
| A4<br>FHS: 0.85% | A5<br>FHS: 0.13% | A7<br>FHS: 0.14% | A9<br>FHS: 0.13% |
| A12<br>FHS: N/D  | S2<br>FHS: 1.29% | A11<br>FHS: N/D  | A10<br>FHS: N/D  |
| A30<br>FHS: N/D  |                  |                  |                  |

## Color temperature / CRI

|                 |                   |
|-----------------|-------------------|
| 1800 K / IRC 70 | 2200 K / IRC 70   |
| 2700 K / IRC 70 | 3000 K / IRC 70   |
| 4000 K / IRC 70 | PC AMBAR / IRC 58 |

\* OTHER COLORS AVAILABLE ON REQUEST  
\*\* OTHER OPTIONS AVAILABLE ON REQUEST

# Astral LI Comfort



## Certificates and Approvals

| Technical                   | Values                                                                                                                                                                                                                                                                                             |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Manufacturing materials     | Non-conductive and stainless housing materials, resistant to 3,000 hours in a UV chamber (according to UNE 53104) without showing any color alteration. Tropicalized transparent high-impact T5 polymer diffuser, UV-stabilized. Confort® Diffuser specially designed to prevent LED glare issues. |
| Dimensions                  | 700 x 700 x 440                                                                                                                                                                                                                                                                                    |
| Isolation class             | Electrical insulation level of the luminaire: Class II according to UNE-EN 60598 standard.                                                                                                                                                                                                         |
| Upward flux fraction (UFF)  | 1.29%                                                                                                                                                                                                                                                                                              |
| Lifetime                    | Luminaire lifespan of 100,000 hours when operating at an average ambient temperature of 25°C.                                                                                                                                                                                                      |
| Operating temperature range | Operating temperature range from -30 to +35°C.                                                                                                                                                                                                                                                     |
| IP degree                   | Protection rating of the entire enclosure, including the optical assembly, IP66 + IPX9 (15°C) according to UNE-EN 60598 standard.                                                                                                                                                                  |
| IK degree                   | IK10 rating across the entire luminaire, resistant to 20-joule impacts according to UNE-EN 62262 standard.                                                                                                                                                                                         |
| Light source                | Light source with high-power LEDs.                                                                                                                                                                                                                                                                 |
| Available optics            | A4, A5, A7, A9, A12, S2, A11, A10, A30                                                                                                                                                                                                                                                             |
| CCT and CRI                 | 1800 K IRC>70, 2200 K IRC>70, 2700 K IRC>70, 3000 K IRC>70, 4000 K IRC>70, PC AMBAR IRC>58                                                                                                                                                                                                         |
| Certifications              | CE, UKCA, NOM, N, IECEE, ENEC, ISSOP, Zhaga, NEMA                                                                                                                                                                                                                                                  |

|                                                                                     |                                                                    |                                                                                      |                                                                                                                                                                                  |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------|--------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | European Conformity Mark.                                          |   | NOM: Official Mexican Standards.                                                                                                                                                 |
|  | N: Spanish Association for Standardization and Certification.      |   | IECEE CB: IIEC System of Conformity Assessment Schemes for Electrotechnical Equipment and Components (Conformity assessment of systems for electronic equipment and components). |
|  | ENEC: European Norms Electrical Certification.                     |   | UK Conformity Assessed                                                                                                                                                           |
|  | ISSOP: Seal (Sustainable Innovation without Planned Obsolescence). |  | Zhaga Community Member.                                                                                                                                                          |

# Astral LI Comfort



## Technical specifications

Non-conductive and stainless housing materials, resistant to 3,000 hours in a UV chamber (according to UNE 53104) without showing any color alteration. Tropicalized transparent high-impact T5 polymer diffuser, UV-stabilized. Confort® Diffuser specially designed to prevent LED glare issues. One-piece lenticular diffuser that provides a complete seal over the LED optics. Tool-free luminaire opening. IK10 rating across the entire luminaire, resistant to 20-joule impacts according to UNE-EN 62262 standard. Protection rating of the entire enclosure, including the optical assembly, IP66 + IPX9 (15°C) according to UNE-EN 60598 standard. Electrical insulation level of the luminaire: Class II according to UNE-EN 60598 standard. Hydrophobic pressure compensation membrane. Seamless polyurethane gasket without degradable adhesive. Minimum diffuser thickness of 3.5 mm or greater in all areas. Connection system using double-insulated (reinforced insulation) cable of 2x0.75 mm<sup>2</sup> or 2x1.5 mm<sup>2</sup> upon request. At the end, an IP68 watertight connector compliant with International Standard IEC 60529, UNE-EN 60598-1, or equivalent ANSI standard. Stainless steel screws. Luminaire external dimensions: 700 x 700 x 440 mm (Length x Width x Height). Minimum luminaire efficiency: 82.11. Upper hemisphere flux (FHS) lower than 1.29%. Photometric information available in American electronic format (IES) or European format (LDT). 100% recyclable luminaire. Standard available color temperatures and CRI: 1800 K IRC>70, 2200 K IRC>70, 2700 K IRC>70, 3000 K IRC>70, 4000 K IRC>70, PC AMBAR IRC>58. Light source with high-power LEDs. Luminaire lifespan of 100,000 hours when operating at an average ambient temperature of 25°C. Operating temperature range from -30 to +35°C. LED module luminous flux maintenance: L90 > 100,000h at 25°C ambient temperature and drive currents of 700mA or lower. Standard available optics: A4, A5, A7, A9, A12, S2, A11,

A10, A30. Nominal input voltage range: 220~240VAC (supports 198~264VAC). Line frequency: 50/60Hz. Power factor: ≥0.98 (@ 230VAC). THD (@ 230VAC) < 8%. LED drive current: constant current. Programmable electronic control gear. Constant current driver capable of storing a profile to autonomously regulate the luminaire's power. This profile can be modified either through external programming via PWM pulses by accessing the column junction box, or from the control panel using network pulses, allowing the behavior of all luminaires connected to the same line to be changed. Surge protection of 6kV/3kA in differential mode (between line and neutral) in accordance with EN 61547-5-7 standard. CE, UKCA, NOM, N, IECCE, ENEC, ISSOP, Zhaga, NEMA Node with a Zhaga/NEMA-based telemanagement system inside the luminaire; it does not alter the product certifications since there is no modification to the luminaire's enclosure, and it provides additional protection for the node. The polymer enclosure does not interfere with radio frequency or Bluetooth communication systems.

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## Photometric data

| Fluxes and power @ 1800 K - IRC 70 (A5) | LED15      | LED25      | LED35      | LED55      | LED75      | LED100     |
|-----------------------------------------|------------|------------|------------|------------|------------|------------|
| Total luminous flux at 25°C (Lm)        | 1266 Lm    | 2109 Lm    | 3250 Lm    | 4295 Lm    | 5250 Lm    | 8591 Lm    |
| Luminaire efficacy (Lm/W)               | 76.73 Lm/W | 78.13 Lm/W | 85.53 Lm/W | 81.04 Lm/W | 69.99 Lm/W | 84.22 Lm/W |
| Total luminaire power (W)               | 16.5 W     | 27.0 W     | 38.0 W     | 53.0 W     | 75.0 W     | 102.0 W    |
| Number of LED modules                   | 12 LED     | 12 LED     | 24 LED     | 24 LED     | 24 LED     | 48 LED     |
| LED driving current                     | 400 mA     | 700 mA     | 500 mA     | 700 mA     | 980 mA     | 700 mA     |

| Fluxes and power @ 2200 K - IRC 70 (A5) | LED15      | LED25      | LED35      | LED55      | LED75      | LED100     |
|-----------------------------------------|------------|------------|------------|------------|------------|------------|
| Total luminous flux at 25°C (Lm)        | 1525 Lm    | 2502 Lm    | 3798 Lm    | 5064 Lm    | 6668 Lm    | 10127 Lm   |
| Luminaire efficacy (Lm/W)               | 92.41 Lm/W | 92.67 Lm/W | 99.93 Lm/W | 95.54 Lm/W | 88.91 Lm/W | 99.29 Lm/W |
| Total luminaire power (W)               | 16.5 W     | 27.0 W     | 38.0 W     | 53.0 W     | 75.0 W     | 102.0 W    |
| Number of LED modules                   | 12 LED     | 12 LED     | 24 LED     | 24 LED     | 24 LED     | 48 LED     |
| LED driving current                     | 400 mA     | 700 mA     | 500 mA     | 700 mA     | 980 mA     | 700 mA     |

| Fluxes and power @ 2700 K - IRC 70 (A5) | LED15       | LED25      | LED35       | LED55       | LED75      | LED100      |
|-----------------------------------------|-------------|------------|-------------|-------------|------------|-------------|
| Total luminous flux at 25°C (Lm)        | 1660 Lm     | 2693 Lm    | 4102 Lm     | 5452 Lm     | 7172 Lm    | 10903 Lm    |
| Luminaire efficacy (Lm/W)               | 100.58 Lm/W | 99.75 Lm/W | 107.95 Lm/W | 102.86 Lm/W | 95.63 Lm/W | 106.89 Lm/W |
| Total luminaire power (W)               | 16.5 W      | 27.0 W     | 38.0 W      | 53.0 W      | 75.0 W     | 102.0 W     |
| Number of LED modules                   | 12 LED      | 12 LED     | 24 LED      | 24 LED      | 24 LED     | 48 LED      |
| LED driving current                     | 400 mA      | 700 mA     | 500 mA      | 700 mA      | 980 mA     | 700 mA      |

| Fluxes and power @ 3000 K - IRC 70 (A5) | LED15       | LED25       | LED35       | LED55       | LED75       | LED100      |
|-----------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Total luminous flux at 25°C (Lm)        | 1771 Lm     | 2899 Lm     | 4442 Lm     | 5902 Lm     | 7742 Lm     | 11804 Lm    |
| Luminaire efficacy (Lm/W)               | 107.31 Lm/W | 107.36 Lm/W | 116.89 Lm/W | 111.36 Lm/W | 103.22 Lm/W | 115.73 Lm/W |
| Total luminaire power (W)               | 16.5 W      | 27.0 W      | 38.0 W      | 53.0 W      | 75.0 W      | 102.0 W     |
| Number of LED modules                   | 12 LED      | 12 LED      | 24 LED      | 24 LED      | 24 LED      | 48 LED      |
| LED driving current                     | 400 mA      | 700 mA      | 500 mA      | 700 mA      | 980 mA      | 700 mA      |

| Fluxes and power @ 4000 K - IRC 70 (A5) | LED15       | LED25       | LED35       | LED55       | LED75       | LED100      |
|-----------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Total luminous flux at 25°C (Lm)        | 1798 Lm     | 2934 Lm     | 4469 Lm     | 5974 Lm     | 7823 Lm     | 11949 Lm    |
| Luminaire efficacy (Lm/W)               | 108.99 Lm/W | 108.68 Lm/W | 117.60 Lm/W | 112.72 Lm/W | 104.30 Lm/W | 117.14 Lm/W |
| Total luminaire power (W)               | 16.5 W      | 27.0 W      | 38.0 W      | 53.0 W      | 75.0 W      | 102.0 W     |
| Number of LED modules                   | 12 LED      | 12 LED      | 24 LED      | 24 LED      | 24 LED      | 48 LED      |
| LED driving current                     | 400 mA      | 700 mA      | 500 mA      | 700 mA      | 980 mA      | 700 mA      |

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## Photometric data

| Fluxes and power @ PC AMBAR - IRC 58 (A5) | LED15      | LED25      | LED35      | LED55      | LED75      | LED100     |
|-------------------------------------------|------------|------------|------------|------------|------------|------------|
| Total luminous flux at 25°C (Lm)          | 1153 Lm    | 1869 Lm    | 2812 Lm    | 3805 Lm    | 4876 Lm    | 7611 Lm    |
| Luminaire efficacy (Lm/W)                 | 69.91 Lm/W | 69.22 Lm/W | 74.01 Lm/W | 71.80 Lm/W | 65.01 Lm/W | 74.62 Lm/W |
| Total luminaire power (W)                 | 16.5 W     | 27.0 W     | 38.0 W     | 53.0 W     | 75.0 W     | 102.0 W    |
| Number of LED modules                     | 12 LED     | 12 LED     | 24 LED     | 24 LED     | 24 LED     | 48 LED     |
| LED driving current                       | 400 mA     | 700 mA     | 500 mA     | 700 mA     | 980 mA     | 700 mA     |



10-year warranty immune to corrosion street lighting



Quality  
Management



Environmental  
Management



Occupational Health and  
Safety Management

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