

## COMPASS 1 S

### MAIN CHARACTERISTICS

|                                 |   |
|---------------------------------|---|
| <b>Applications</b>             | Street and urban lighting.  |
| <b>Optic</b>                    | <p>STU-S: Asymmetrical optic for street, urban and cycle-path lighting (narrow emission).<br/>                 STU-M: Asymmetrical optic for street, urban and cycle-path lighting (medium emission).<br/>                 STU-W: Asymmetrical optic for wide urban and suburban road lighting.<br/>                 S03: Asymmetrical optic for wide urban and suburban road lighting.<br/>                 S: Symmetrical optic for urban lighting and green areas.<br/>                 STA: Asymmetrical optic for long interdistance and wide roads, V and P class.<br/>                 Colour temperature: 4000K (3000K optional)   CRI ≥ 70<br/>                 LOR= 100%, DLOR= 100%, ULOR= 0%<br/>                 Photobiological safety class: EXEMPT GROUP<br/>                 LED source efficiency: 174 lm/W @ 400mA, Tj=85°C, 4000K</p> |
| <b>Insulation class</b>         | II, I   |
| <b>Protection degree</b>        | IP66   IK08 total   |
| <b>LED Modules</b>              | Removable / Replaceable   |
| <b>Dimensions</b>               | See the drawing   |
| <b>Weight</b>                   | max 10.5 kg   |
| <b>Exposed surface</b>          | Side: 0.05m <sup>2</sup> – Top: 0.25m <sup>2</sup>  |
| <b>Mounting</b>                 | Suspended installation on bracket 1/2" GAS.   |
| <b>Gear tray</b>                | Removable plate.  |
| <b>Operating temp.</b>          | -40°C / +50°C   |
| <b>Storage temperature</b>      | -40°C / +80°C   |
| <b>Main reference standards</b> | EN 60598-1, EN 60598-2-3, EN 62471, EN 55015, EN 61547, EN 61000-3-2, EN-61000-3-3  |



### ELECTRICAL CHARACTERISTICS

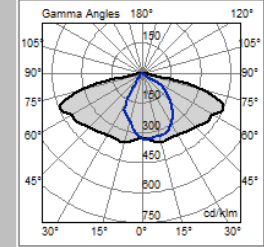
|                         |  |
|-------------------------|--|
| <b>Rated voltage</b>    | 220÷240V 50/60Hz   |
| <b>Power factor</b>     | >0,9 (at full load, F, DA, DAC)  |
| <b>On-load switch</b>   | Included, with integrated cable clamp.   |
| <b>Mains connection</b> | Cable H07RN-F nx1.5mm <sup>2</sup><br>Optional: connector M/F IP66/68 for cables max. 2.5mm <sup>2</sup> , Ø max. 12mm |
| <b>Surge protection</b> | Up to 10kV   With SPD (optional) 10kV / 10kV CM/DM   |
| <b>SPD (optional)</b>   | 10kV-10kA, type 2+3, with LED signal and thermo fuse to disconnect load at the end of life.                            |

|                                 |   |
|---------------------------------|---|
| <b>Control system (options)</b> | <p>F: Fixed power not dimmable.<br/>                 DA: Automatic dimming (virtual midnight) with default profile.<br/>                 DAC: Custom DA profile.<br/>                 FLC: Constant light flux.<br/>                 WL: Wireless single point communication system.<br/>                 DALI: Digital dimming interface DALI.<br/>                 NEMA: Socket 7 pin (ANSI C136.41).<br/>                 ZHAGA: Socket 4 pin (ZHAGA Book 18).</p> |
|---------------------------------|---|

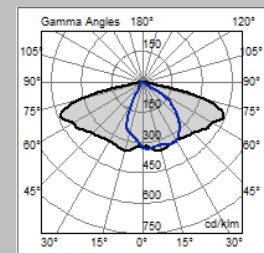
|   |  |
|---|--|
| <b>Optical unit lifetime (Tq=25°C, 500mA)</b> | <p>&gt;100.000hr L90B10<br/>                 &gt;100.000hr L90, TM21</p> |
|---|--|

### MATERIALS

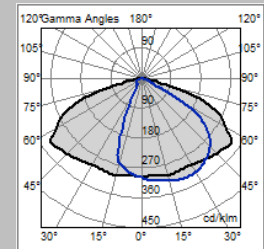
|                     |   |
|---------------------|---|
| <b>Fixing</b>       | Stainless steel.  |
| <b>Body</b>         | Die-cast aluminum UNI EN1706 powder painted.  |
| <b>Closure hook</b> |   |
| <b>Optic</b>        | 99.85% aluminum with a surface finish in 99.95% with vacuum-sealed deposition. Aluminum grade class A+ (DIN EN 16268) |
| <b>Screen</b>       | Flat tempered glass, 5mm thickness high transparency.   |
| <b>Gasket</b>       | Polyurethane  |
| <b>Colour</b>       | Graphite - Cod. 01  |



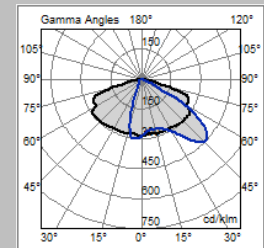
STU-S Optic



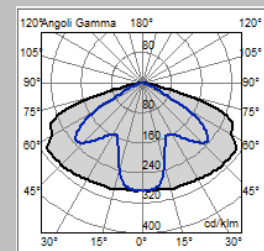
STU-M Optic



STU-W Optic



S03 Optic



S Optic

All the published photometrical data has been obtained according to applicable international standards



| LUMINAIRE               | OPTIC                   | LED CURRENT (mA) | RATED LUMINAIRE FLUX* (Tq=25°C, 4000K, lm) | RATED LUMINAIRE POWER* (Tq=25°C, Vin=230Vac, F/DA/DAC, W) | LUMINAIRE EFFICACY (Tq=25°C, lm/W) | RATED LED FLUX* (Tj=85°C, 4000K, lm) | RATED LED POWER* (Tj=85°C, W) |
|-------------------------|-------------------------|------------------|--|---|------------------------------------|--------------------------------------|-------------------------------|
| COMPASS 1 S 2Z8 4.40-1M | STU-M<br>STU-S<br>STU-W | 400              | 2830                                       | 21.5  | 131                                | 3175                                 | 18                            |
| COMPASS 1 S 2Z8 4.40-2M |                         |                  | 5700                                       | 40.5  | 140                                | 6351                                 | 36                            |
| COMPASS 1 S 2Z8 4.40-3M |                         |                  | 8490                                       | 59.5  | 142                                | 9526                                 | 54                            |
| COMPASS 1 S 2Z8 4.40-4M |                         |                  | 11180                                      | 79.5  | 140                                | 12701                                | 72                            |
| COMPASS 1 S 2Z8 4.50-1M | STU-M<br>STU-S<br>STU-W | 500              | 3420                                       | 27  | 126                                | 3896                                 | 23                            |
| COMPASS 1 S 2Z8 4.50-2M |                         |                  | 6950                                       | 51.5  | 134                                | 7792                                 | 46                            |
| COMPASS 1 S 2Z8 4.50-3M |                         |                  | 10250                                      | 75.5  | 135                                | 11688                                | 68                            |
| COMPASS 1 S 2Z8 4.50-4M |                         |                  | 13370                                      | 100   | 133                                | 15585                                | 91                            |
| COMPASS 1 S 2Z8 4.40-1M | S03                     | 400              | 2780                                       | 21.5  | 129                                | 3175                                 | 18                            |
| COMPASS 1 S 2Z8 4.40-2M |                         |                  | 5590                                       | 40.5  | 138                                | 6351                                 | 36                            |
| COMPASS 1 S 2Z8 4.40-3M |                         |                  | 8320                                       | 59.5  | 139                                | 9526                                 | 54                            |
| COMPASS 1 S 2Z8 4.40-4M |                         |                  | 10950                                      | 79.5  | 137                                | 12701                                | 72                            |
| COMPASS 1 S 2Z8 4.50-1M | S03                     | 500              | 3350                                       | 27  | 124                                | 3896                                 | 23                            |
| COMPASS 1 S 2Z8 4.50-2M |                         |                  | 6820                                       | 51.5  | 132                                | 7792                                 | 46                            |
| COMPASS 1 S 2Z8 4.50-3M |                         |                  | 10050                                      | 75.5  | 133                                | 11688                                | 68                            |
| COMPASS 1 S 2Z8 4.50-4M |                         |                  | 13100                                      | 100   | 131                                | 15585                                | 91                            |
| COMPASS 1 S 2Z6 4.40-1M | STA                     | 400              | 2070                                       | 17  | 121                                | 2382                                 | 13                            |
| COMPASS 1 S 2Z6 4.40-2M |                         |                  | 4080                                       | 31.5  | 129                                | 4763                                 | 27                            |
| COMPASS 1 S 2Z6 4.40-3M |                         |                  | 6090                                       | 46  | 132                                | 7145                                 | 40                            |
| COMPASS 1 S 2Z6 4.40-4M |                         |                  | 8110                                       | 60  | 135                                | 9526                                 | 54                            |
| COMPASS 1 S 2Z6 4.50-1M | STA                     | 500              | 2510                                       | 21.5  | 116                                | 2922                                 | 17                            |
| COMPASS 1 S 2Z6 4.50-2M |                         |                  | 4930                                       | 40  | 123                                | 5844                                 | 34                            |
| COMPASS 1 S 2Z6 4.50-3M |                         |                  | 7350                                       | 58.5  | 125                                | 8766                                 | 51                            |
| COMPASS 1 S 2Z6 4.50-4M |                         |                  | 9780                                       | 76.5  | 127                                | 11688                                | 68                            |



| LUMINAIRE               | OPTIC | LED CURRENT<br>(mA) | RATED LUMINAIRE<br>FLUX*<br>(Tq=25°C, 4000K, lm) | RATED LUMINAIRE<br>POWER*<br>(Tq=25°C, Vin=230Vac,<br>F/DA/DAC, W) | LUMINAIRE<br>EFFICACY<br>(Tq=25°C, lm/W) | RATED LED<br>FLUX*<br>(Tj=85°C, 4000K,<br>lm) | RATED LED<br>POWER*<br>(Tj=85°C, W) |
|-------------------------|-------|---------------------|--|--|--|---|-------------------------------------|
| COMPASS 1 S 2Z8 4.40-2M | S     | 400                 | 5590   | 40.5   | 138                                      | 6351  | 36                                  |
| COMPASS 1 S 2Z8 4.40-4M |       |                     | 10950  | 79.5   | 137                                      | 12701   | 72                                  |
| COMPASS 1 S 2Z8 4.50-2M | S     | 500                 | 6820   | 51.5   | 132                                      | 7792  | 46                                  |
| COMPASS 1 S 2Z8 4.50-4M |       |                     | 13100  | 100  | 131                                      | 15585   | 91                                  |

\*RATED LUMINAIRE FLUX / RATED LUMINAIRE POWER: Rated data obtained in laboratory.

\*RATED LED FLUX / RATED LED POWER: Rated data extrapolated from LED manufacturer datasheet.

Values indicated in this technical sheet are to be considered rated values. Flux tolerance: ±7%. Power tolerance: ±5%.

Power tolerance with ZHAGA version or power supply D4i/SR: ±10%.

The characteristics of the product listed above are subjected to change without notice.



| LUMINAIRE               | OPTIC                   | LED CURRENT<br>(mA) | RATED LUMINAIRE<br>FLUX*<br>(Tq=25°C, 3000K, lm) | RATED LUMINAIRE<br>POWER*<br>(Tq=25°C, Vin=230Vac,<br>F/DA/DAC, W) | LUMINAIRE<br>EFFICACY<br>(Tq=25°C, lm/W) | RATED LED<br>FLUX*<br>(Tj=85°C, 3000K,<br>lm) | RATED LED<br>POWER*<br>(Tj=85°C, W) |
|-------------------------|-------------------------|---------------------|--|--|--|---|-------------------------------------|
| COMPASS 1 S 2Z8 3.40-1M | STU-M<br>STU-S<br>STU-W | 400                 | 2780   | 21.5   | 129                                      | 3112  | 18                                  |
| COMPASS 1 S 2Z8 3.40-2M |                         |                     | 5590   | 40.5   | 138                                      | 6224  | 36                                  |
| COMPASS 1 S 2Z8 3.40-3M |                         |                     | 8320   | 59.5   | 139                                      | 9336  | 54                                  |
| COMPASS 1 S 2Z8 3.40-4M |                         |                     | 10950  | 79.5   | 137                                      | 12447   | 72                                  |
| COMPASS 1 S 2Z8 3.50-1M | STU-M<br>STU-S<br>STU-W | 500                 | 3350   | 27   | 124                                      | 3818  | 23                                  |
| COMPASS 1 S 2Z8 3.50-2M |                         |                     | 6820   | 51.5   | 132                                      | 7636  | 46                                  |
| COMPASS 1 S 2Z8 3.50-3M |                         |                     | 10050  | 75.5   | 133                                      | 11455   | 68                                  |
| COMPASS 1 S 2Z8 3.50-4M |                         |                     | 13100  | 100  | 131                                      | 15273   | 91                                  |
| COMPASS 1 S 2Z8 3.40-1M | S03                     | 400                 | 2720   | 21.5   | 126                                      | 3112  | 18                                  |
| COMPASS 1 S 2Z8 3.40-2M |                         |                     | 5480   | 40.5   | 135                                      | 6224  | 36                                  |
| COMPASS 1 S 2Z8 3.40-3M |                         |                     | 8150   | 59.5   | 136                                      | 9336  | 54                                  |
| COMPASS 1 S 2Z8 3.40-4M |                         |                     | 10730  | 79.5   | 134                                      | 12447   | 72                                  |
| COMPASS 1 S 2Z8 3.50-1M | S03                     | 500                 | 3280   | 27   | 121                                      | 3818  | 23                                  |
| COMPASS 1 S 2Z8 3.50-2M |                         |                     | 6680   | 51.5   | 129                                      | 7636  | 46                                  |
| COMPASS 1 S 2Z8 3.50-3M |                         |                     | 9840   | 75.5   | 130                                      | 11455   | 68                                  |
| COMPASS 1 S 2Z8 3.50-4M |                         |                     | 12840  | 100  | 128                                      | 15273   | 91                                  |
| COMPASS 1 S 2Z6 3.40-1M | STA                     | 400                 | 2030   | 17   | 119                                      | 2334  | 13                                  |
| COMPASS 1 S 2Z6 3.40-2M |                         |                     | 4000   | 31.5   | 126                                      | 4668  | 27                                  |
| COMPASS 1 S 2Z6 3.40-3M |                         |                     | 5970   | 46   | 129                                      | 7002  | 40                                  |
| COMPASS 1 S 2Z6 3.40-4M |                         |                     | 7950   | 60   | 132                                      | 9336  | 54                                  |
| COMPASS 1 S 2Z6 3.50-1M | STA                     | 500                 | 2460   | 21.5   | 114                                      | 2864  | 17                                  |
| COMPASS 1 S 2Z6 3.50-2M |                         |                     | 4830   | 40   | 120                                      | 5727  | 34                                  |
| COMPASS 1 S 2Z6 3.50-3M |                         |                     | 7200   | 58.5   | 123                                      | 8591  | 51                                  |
| COMPASS 1 S 2Z6 3.50-4M |                         |                     | 9590   | 76.5   | 125                                      | 11455   | 68                                  |



| LUMINAIRE               | OPTIC | LED CURRENT<br>(mA) | RATED LUMINAIRE<br>FLUX*<br>(Tq=25°C, 3000K, lm) | RATED LUMINAIRE<br>POWER*<br>(Tq=25°C, Vin=230Vac,<br>F/DA/DAC, W) | LUMINAIRE<br>EFFICACY<br>(Tq=25°C, lm/W) | RATED LED<br>FLUX*<br>(Tj=85°C, 3000K,<br>lm) | RATED LED<br>POWER*<br>(Tj=85°C, W) |
|-------------------------|-------|---------------------|--|--|--|---|-------------------------------------|
| COMPASS 1 S 2Z8 3.40-2M | S     | 400                 | 5480   | 40.5   | 135                                      | 6224  | 36                                  |
| COMPASS 1 S 2Z8 3.40-4M |       |                     | 10730  | 79.5   | 134                                      | 12447   | 72                                  |
| COMPASS 1 S 2Z8 3.50-2M | S     | 500                 | 6680   | 51.5   | 129                                      | 7636  | 46                                  |
| COMPASS 1 S 2Z8 3.50-4M |       |                     | 12840  | 100  | 128                                      | 15273   | 91                                  |

\*RATED LUMINAIRE FLUX / RATED LUMINAIRE POWER: Rated data obtained in laboratory.

\*RATED LED FLUX / RATED LED POWER: Rated data extrapolated from LED manufacturer datasheet.

Values indicated in this technical sheet are to be considered rated values. Flux tolerance: ±7%. Power tolerance: ±5%.

Power tolerance with ZHAGA version or power supply D4i/SR: ±10%.

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