

# Premium Panel range

TUNG Panel "P"



DATA SHEET

LED IP20 CLASS II CE UK CA

## Product information

Our Premium panel range have superior efficiency and extralong lifetime. We made installation super easy, making the fixtures ultra-thin and ultra-light and by pre-installing the holder for the safety cable. The special prismatic diffuser spreads the light evenly and reduces the glaring effect dramatically.

## Features

- Power: 24W, 30W, 33W and 38W versions
- Luminous flux: from 3000 to 4560 lm
- Efficiency: Up to 125 lm/W
- Control: Tungsram static driver
- BOKE DALI 2 driver with Push-Dim function
- CCT: 3000K, 4000K and 6500K
- Lifetime: 50.000 hours at L80/B20
- 5 years Warranty
- IP20
- Flicker free operation
- Easy installation with Loop in-Loop out connection- and preinstalled hook for safety cable
- Light weight
- IK03 Impact protection rate

## Application areas



Office



Public buildings



Retail and commercial buildings



Healthcare

## Specification summary

Parameters below are the same for all luminaires in the range:

|                                                |                              |
|------------------------------------------------|------------------------------|
| Light Technology used                          | LED                          |
| Light source                                   | Non-replaceable light source |
| Mains / Non-mains                              | Non-mains                    |
| Directional / Non-directional                  | Directional                  |
| Colour-tuneable                                | No                           |
| Anti-glare shield                              | Yes                          |
| Correlated color temperature (CCT)             | 3000K, 4000K, 6500K          |
| Colour rendering index (CRI) (Ra) min          | 80                           |
| R9 colour rendering index value                | 0                            |
| SDCM (Standard Deviation or Color Maintenance) | ≤4                           |
| Beam angle                                     | 90°                          |
| Flicker metric                                 | ≤1                           |
| Stroboscopic effect metric                     | 0,9                          |

|                                |                       |
|--------------------------------|-----------------------|
| Input Voltage & Frequency      | 220-240V(AC), 50/60Hz |
| Light source output voltage DC | 30-40 V               |
| Power factor                   | ≥0,9                  |
| Displacement factor            | 0,90                  |
| Lifetime (L80B20)              | 50.000                |
| Survival factor at 3000h       | 1                     |
| Lumen maintenance at 3000h     | 0,96                  |
| Ingress protection (IP)        | IP20                  |
| Protection Class               | Class II              |
| Color of Housing               | White - RAL9003       |
| UGR                            | <19                   |

Parameters below are specific for each of the product codes:

|              |                                      | ELECTRICAL DATA     |                                |                              |                                       |             | PHOTOMETRICAL DATA   |                                      |                             | DIMENSIONS & WEIGHTS    |                     |
|--------------|--------------------------------------|---------------------|--------------------------------|------------------------------|---------------------------------------|-------------|----------------------|--------------------------------------|-----------------------------|-------------------------|---------------------|
| Product code | Description                          | Luminaire power (W) | Light source On-mode power (W) | Luminaire input current (mA) | Light source constant current DC (mA) | Dimmable    | Luminaire lumen (lm) | Light source Useful lumen (90°) (lm) | Luminaire Efficiency (lm/W) | Dimensions (LxWxH) (mm) | Product weight (kg) |
| STATIC RANGE |                                      |                     |                                |                              |                                       |             |                      |                                      |                             |                         |                     |
| 93120523     | Tung Panel P 2X2 S 24W 840 19        | 24                  | 21,6                           | 112                          | 620                                   | No (Static) | 3000                 | 1980                                 | 125                         | 595x595x9               | 2,25                |
| 93120524     | Tung Panel P 1X4 S 24W 840 19        | 24                  | 21,6                           | 112                          | 620                                   | No (Static) | 3000                 | 1980                                 | 125                         | 295x1195x10             | 2,25                |
| 93118676     | Tung Panel P 2x2 S 30W 830 19        | 30                  | 26,5                           | 137                          | 770                                   | No (Static) | 3450                 | 2280                                 | 115                         | 595x595x9               | 2,25                |
| 93118677     | Tung Panel P 2x2 S 30W 840 19        | 30                  | 26,5                           | 137                          | 770                                   | No (Static) | 3600                 | 2380                                 | 120                         | 595x595x9               | 2,25                |
| 93118759     | Tung Panel P 2x2 S 30W 840 19 DS     | 30                  | 26,5                           | 137                          | 770                                   | No (Static) | 3600                 | 2380                                 | 120                         | 595x595x9               | 2,25                |
| 93118678     | Tung Panel P 2x2 S 30W 865 19        | 30                  | 26,5                           | 137                          | 770                                   | No (Static) | 3600                 | 2380                                 | 120                         | 595x595x9               | 2,25                |
| 93118760     | Tung Panel P 2x2 S 30W 865 19 DS     | 30                  | 26,5                           | 137                          | 770                                   | No (Static) | 3600                 | 2380                                 | 120                         | 595x595x9               | 2,25                |
| 93118679     | Tung Panel P 1x4 S 30W 830 19        | 30                  | 26,5                           | 137                          | 750                                   | No (Static) | 3450                 | 2280                                 | 115                         | 295x1195x10             | 2,25                |
| 93118680     | Tung Panel P 1x4 S 30W 840 19        | 30                  | 26,5                           | 137                          | 750                                   | No (Static) | 3600                 | 2380                                 | 120                         | 295x1195x10             | 2,25                |
| 93118761     | Tung Panel P 1x4 S 30W 840 19 DS     | 30                  | 26,5                           | 137                          | 750                                   | No (Static) | 3600                 | 2380                                 | 120                         | 295x1195x10             | 2,25                |
| 93118681     | Tung Panel P 1x4 S 30W 865 19        | 30                  | 26,5                           | 137                          | 750                                   | No (Static) | 3600                 | 2380                                 | 120                         | 295x1195x10             | 2,25                |
| 93118762     | Tung Panel P 1x4 S 30W 865 19 DS     | 30                  | 26,5                           | 137                          | 750                                   | No (Static) | 3600                 | 2380                                 | 120                         | 295x1195x10             | 2,25                |
| 93118682     | Tung Panel P 2x2 S 38W 830 19        | 38                  | 34,2                           | 175                          | 1020                                  | No (Static) | 4370                 | 2880                                 | 115                         | 595x595x9               | 2,25                |
| 93118683     | Tung Panel P 2x2 S 38W 840 19        | 38                  | 34,2                           | 175                          | 1020                                  | No (Static) | 4560                 | 3010                                 | 120                         | 595x595x9               | 2,25                |
| 93118763     | Tung Panel P 2x2 S 38W 840 19 DS     | 38                  | 34,2                           | 175                          | 1020                                  | No (Static) | 4560                 | 3010                                 | 120                         | 595x595x9               | 2,25                |
| 93118684     | Tung Panel P 2x2 S 38W 865 19        | 38                  | 34,2                           | 175                          | 1020                                  | No (Static) | 4560                 | 3010                                 | 120                         | 595x595x9               | 2,25                |
| 93118764     | Tung Panel P 2x2 S 38W 865 19 DS     | 38                  | 34,2                           | 175                          | 1020                                  | No (Static) | 4560                 | 3010                                 | 120                         | 595x595x9               | 2,25                |
| 93118685     | Tung Panel P 1x4 S 38W 830 19        | 38                  | 34,2                           | 175                          | 1020                                  | No (Static) | 4370                 | 2880                                 | 115                         | 295x1195x10             | 2,25                |
| 93118686     | Tung Panel P 1x4 S 38W 840 19        | 38                  | 34,2                           | 175                          | 1020                                  | No (Static) | 4560                 | 3010                                 | 120                         | 295x1195x10             | 2,25                |
| 93118765     | Tung Panel P 1x4 S 38W 840 19 DS     | 38                  | 34,2                           | 175                          | 1020                                  | No (Static) | 4560                 | 3010                                 | 120                         | 295x1195x10             | 2,25                |
| 93118687     | Tung Panel P 1x4 S 38W 865 19        | 38                  | 34,2                           | 175                          | 1020                                  | No (Static) | 4560                 | 3010                                 | 120                         | 295x1195x10             | 2,25                |
| 93118766     | Tung Panel P 1x4 S 38W 865 19 DS     | 38                  | 34,2                           | 175                          | 1020                                  | No (Static) | 4560                 | 3010                                 | 120                         | 295x1195x10             | 2,25                |
| 93119509     | Tung Panel P 2x2 S 33W 830 19        | 33                  | 29,7                           | 150                          | 850                                   | No (Static) | 3800                 | 2510                                 | 115                         | 595x595x9               | 2,25                |
| 93119510     | Tung Panel P 2x2 S 33W 840 19        | 33                  | 29,7                           | 150                          | 850                                   | No (Static) | 4000                 | 2640                                 | 121                         | 595x595x9               | 2,25                |
| 93119511     | Tung Panel P 2x2 S 33W 865 19        | 33                  | 29,7                           | 150                          | 850                                   | No (Static) | 4000                 | 2640                                 | 121                         | 595x595x9               | 2,25                |
| 93119512     | Tung Panel P 1x4 S 33W 830 19        | 33                  | 29,7                           | 150                          | 850                                   | No (Static) | 3800                 | 2510                                 | 115                         | 295x1195x10             | 2,25                |
| 93119513     | Tung Panel P 1x4 S 33W 840 19        | 33                  | 29,7                           | 150                          | 850                                   | No (Static) | 4000                 | 2640                                 | 121                         | 295x1195x10             | 2,25                |
| 93119514     | Tung Panel P 1x4 S 33W 865 19        | 33                  | 29,7                           | 150                          | 850                                   | No (Static) | 4000                 | 2640                                 | 121                         | 295x1195x10             | 2,25                |
| 93119515     | Tung Panel P 2x2 S 33W 840 19 DS     | 33                  | 29,7                           | 150                          | 850                                   | No (Static) | 4000                 | 2640                                 | 121                         | 595x595x9               | 2,25                |
| 93119536     | Tung Panel P 2x2 S 33W 865 19 DS     | 33                  | 29,7                           | 150                          | 850                                   | No (Static) | 4000                 | 2640                                 | 121                         | 595x595x9               | 2,25                |
| 93119537     | Tung Panel P 1x4 S 33W 840 19 DS     | 33                  | 29,7                           | 150                          | 850                                   | No (Static) | 4000                 | 2640                                 | 121                         | 295x1195x10             | 2,25                |
| 93119538     | Tung Panel P 1x4 S 33W 865 19 DS     | 33                  | 29,7                           | 150                          | 850                                   | No (Static) | 4000                 | 2640                                 | 121                         | 295x1195x10             | 2,25                |
| DALI RANGE   |                                      |                     |                                |                              |                                       |             |                      |                                      |                             |                         |                     |
| 93118671     | Tung Panel P 2x2 D 38W 840 19        | 38                  | 34,2                           | 175                          | 950                                   | Yes (DALI)  | 4560                 | 3010                                 | 120                         | 595x595x9               | 2,25                |
| 93118758     | Tung Panel P 2x2 D 38W 840 19 DS     | 38                  | 34,2                           | 175                          | 950                                   | Yes (DALI)  | 4560                 | 3010                                 | 120                         | 595x595x9               | 2,25                |
| 93118708     | Tung Panel P 2x2 D 38W 830 19        | 38                  | 34,2                           | 175                          | 950                                   | Yes (DALI)  | 4370                 | 2880                                 | 115                         | 595x595x9               | 2,25                |
| 93118672     | Tung Panel P 1x4 D 38W 840 19        | 38                  | 34,2                           | 175                          | 1000                                  | Yes (DALI)  | 4560                 | 3010                                 | 120                         | 295x1195x10             | 2,25                |
| ACCESSORIES  |                                      |                     |                                |                              |                                       |             |                      |                                      |                             |                         |                     |
| 93117380     | Surface mounting Kit 2x2 R9003 P     |                     |                                |                              |                                       |             |                      |                                      |                             | 601x601x43              |                     |
| 93117381     | Surface mounting Kit 1x4 R9003 P     |                     |                                |                              |                                       |             |                      |                                      |                             | 301x1201x43             |                     |
| 93117658     | Surface mounting Kit 2x2 DS R9003 P  |                     |                                |                              |                                       |             |                      |                                      |                             | 601x601x43              |                     |
| 93117659     | Surface mounting Kit 1x4 DS R9003 P  |                     |                                |                              |                                       |             |                      |                                      |                             | 301x1201x43             |                     |
| 93118779     | SUSPENSION KIT 2X2 LED PANEL P       |                     |                                |                              |                                       |             |                      |                                      |                             | 1000                    |                     |
| 93118780     | Edgelit LED Panel Safety Kit P       |                     |                                |                              |                                       |             |                      |                                      |                             | 1000                    |                     |
| 93118781     | SUSPENSION KIT 1X4 LED PANEL P       |                     |                                |                              |                                       |             |                      |                                      |                             | 1000                    |                     |
| 93118782     | Plasterboard Mount KIT for Edgelit P |                     |                                |                              |                                       |             |                      |                                      |                             | 40x17x29                |                     |

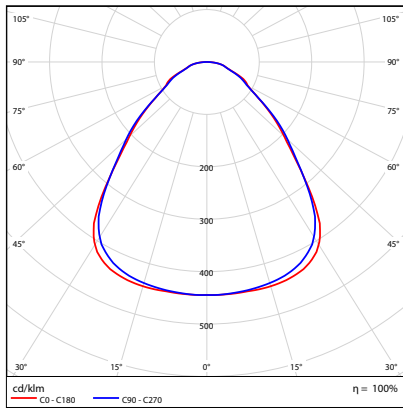
Accessories

The whole range is compatible with our Emergency Converter Kits: SKU 93100237 and 93100238 with static control products and 93100239 with the DALI control products.

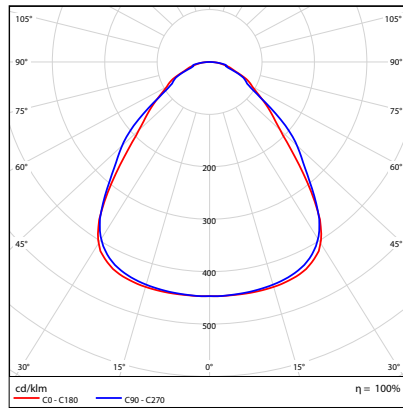
Energy efficiency class (A-G)\*



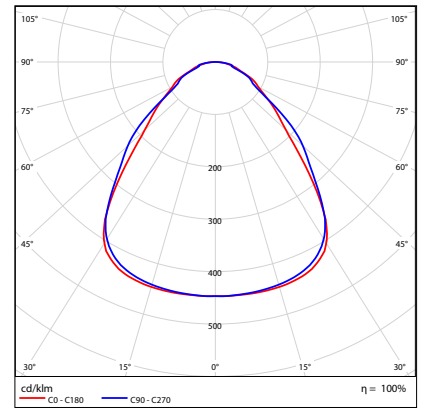
## Photometric data



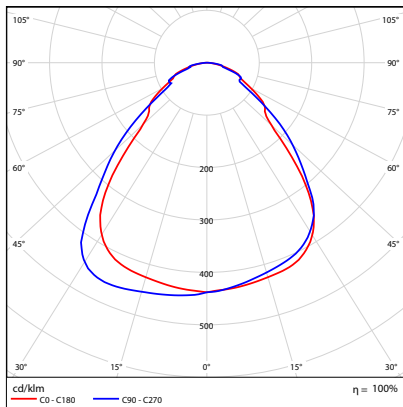
2x2 30W 3000K



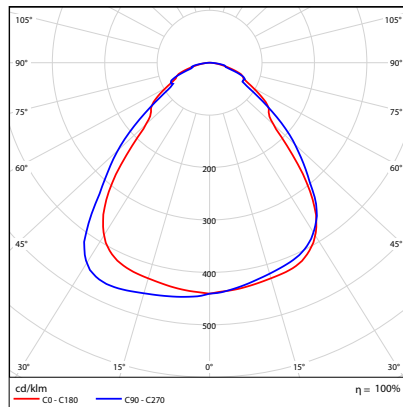
2x2 30W 4000K



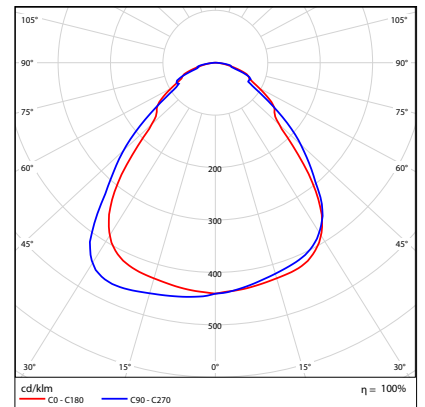
2x2 30W 6500K



1x4 30W 3000K



1x4 30W 4000K

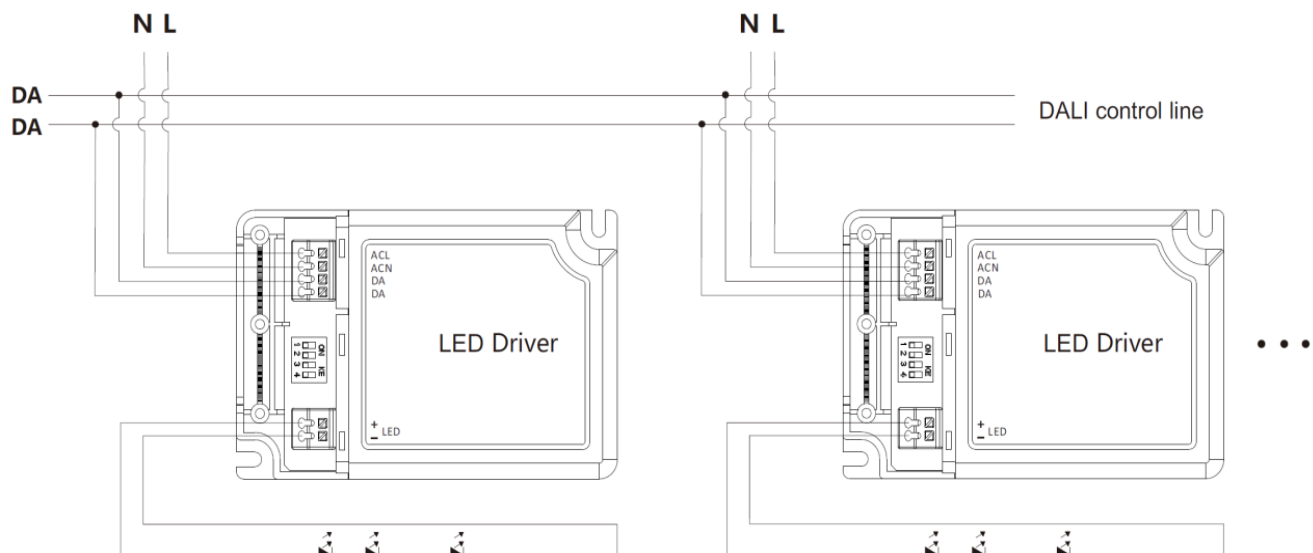


1x4 30W 6500K

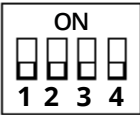
Only for indicative purpose. For lighting design, please use the ldt photometry files available for the products.

## DAI driver setting and performance

### Wiring diagram



DIP-SWITCH SETTINGS FOR DRIVER OUTPUT CURRENT

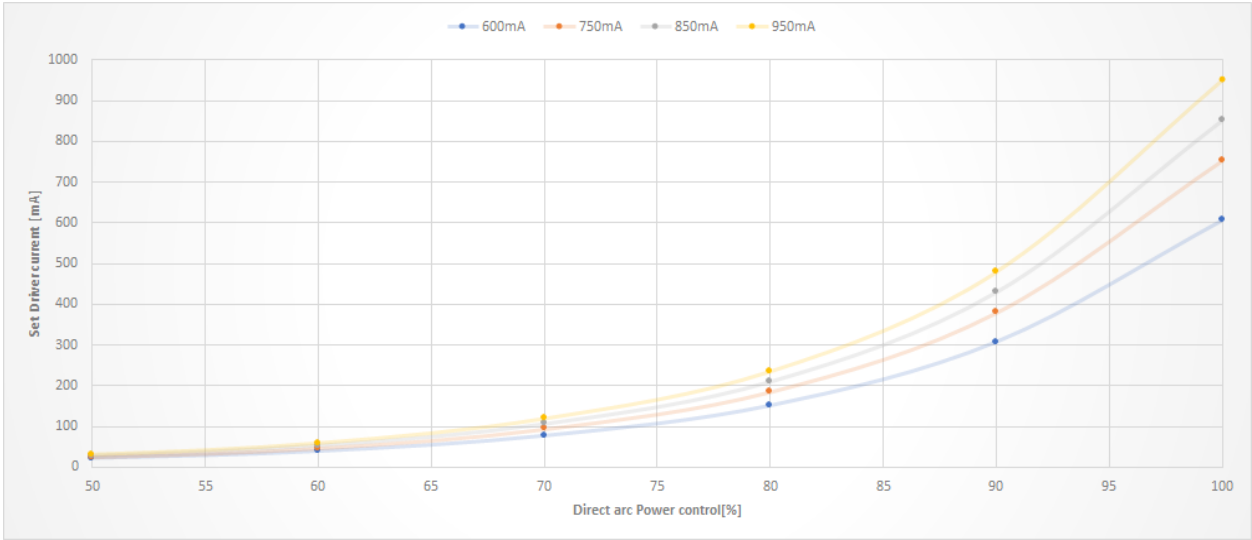


| DIP SWITCH SETTING ON DRIVER |    |    |    |    |
|------------------------------|----|----|----|----|
| I-set [mA]                   | 1  | 2  | 3  | 4  |
| 600                          | -  | ON | ON | ON |
| 700                          | ON | -  | ON | ON |
| 750                          | -  | -  | ON | ON |
| 800                          | -  | ON | -  | ON |
| 850                          | -  | -  | -  | ON |
| 900                          | ON | ON | ON | -  |
| 950*                         | -  | -  | ON | -  |

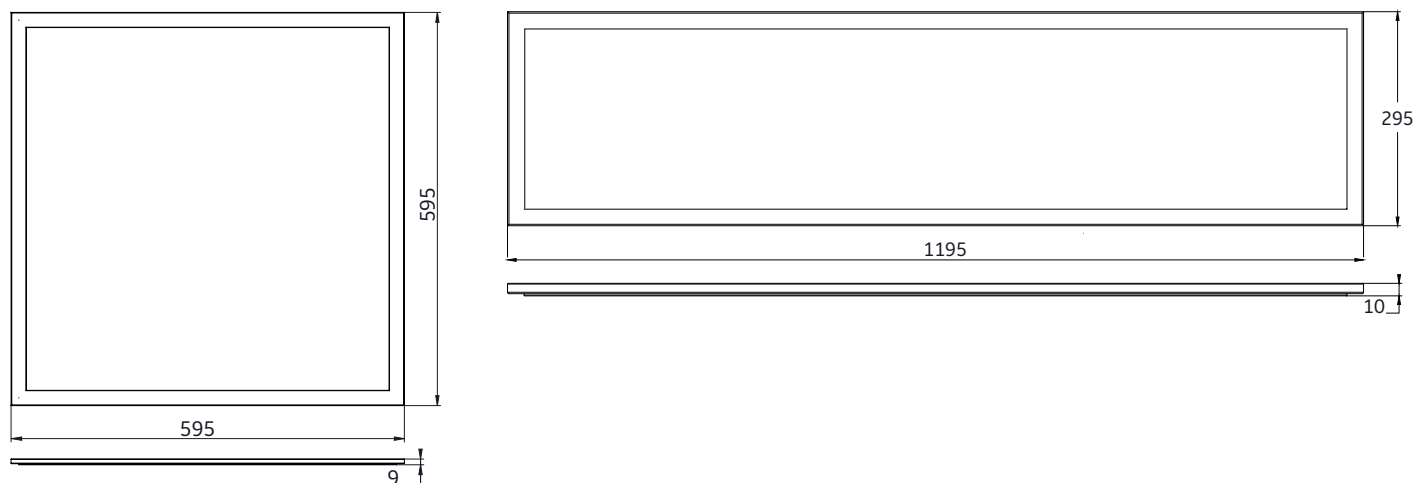
950\* -original setting for 38W options

| DRIVER OUTPUT |      |      |      | SYSTEM PERFORMANCE |     |         |               |
|---------------|------|------|------|--------------------|-----|---------|---------------|
| Irated        | Iout | Uout | Pout | Iin                | Uin | Psystem | Luminous Flux |
| [mA]          | [mA] | [V]  | [W]  | [mA]               | [V] | [W]     | [lm]          |
| 600           | 606  | 33.0 | 20.0 | 109                | 230 | 23.3    | 2968          |
| 700           | 705  | 33.3 | 23.5 | 125                | 230 | 27.1    | 3423          |
| 750           | 754  | 33.5 | 25.2 | 133                | 230 | 29.1    | 3651          |
| 800           | 804  | 33.6 | 27.0 | 142                | 230 | 31.0    | 3878          |
| 850           | 853  | 33.7 | 28.8 | 150                | 230 | 33.0    | 4105          |
| 900           | 903  | 33.9 | 30.6 | 159                | 230 | 35.0    | 4333          |
| 950*          | 952  | 34.0 | 32.4 | 167                | 230 | 37.1    | 4560          |

DALI-DIM DIAGRAM



## Dimensions (mm)



## Ordering information

| Internal Code | Range       | Feature size scale | Control                | System Wattage           | CRI    | CCT                                    | UGR            | Shipment                     |
|---------------|-------------|--------------------|------------------------|--------------------------|--------|----------------------------------------|----------------|------------------------------|
| Tung Panel    | P - Premium | 2x2<br>1x4         | S - Static<br>D - DALI | 24W<br>30W<br>33W<br>38W | 8 - 80 | 30 - 3000K<br>40 - 4000K<br>65 - 6500K | 19 -<br>UGR<19 | DS -<br>Direct Shipment<br>- |

**Example:** Tung Panel P 2x2 S 30W 830 19

Premium Tung Panel with 2x2 dimension scale, Static control, 30W, 80 color rendering index, 3000K correlated color temperature and <19 UGR

## Regulatory and standards

**Regulatory mark:** CE, UKCA, Morocco

**Regulations:** 2014/35/EU, 2014/30/EU, 2011/65/EU, (framework 2009/125/EC) EU 2019/2020, (framework EU/2017/1369) EU 2019/2015\*

**Harmonized standards:** EN 60598, EN 62493, EN 61547, EN55015, EN 61000, look for CE Declaration of Conformity and Technical File for details

Photobiological risk assessment is maximum group 1. The product is considered safe, does not pose any photobiological hazard

\*not on DOC