# Product Information Sheet

COMMISSION DELEGATED REGULATION (EU) 2019/2015 with regard to energy labelling of light sources

**Supplier's name or trade mark:** ELMARK

**Supplier's address:** ELMARK INDUSTRIES SC, bul.Dobrudja 2, 9300 Dobrich Dobrich, BG

**Model identifier:** 93ZFLD2040/BL

**Type of light source:**

| | | | |
|---|---|---|---|
| Lighting technology used: | LED | Non-directional or directional: | DLS |
| Light source cap-type (or other electric interface) | Integrated LED | | |
| Mains or non-mains: | MLS | Connected light source (CLS): | No |
| Colour-tuneable light source: | No | Envelope: | - |
| High luminance light source: | No | | |
| Anti-glare shield: | No | Dimmable: | No |

**Product parameters**

| Parameter | | Value | Parameter | Value |
|---|---|---|---|---|
| **General product parameters:** | | | | |
| Energy consumption in on-mode (kWh/1000 h), rounded up to the nearest integer | | 20 | Energy efficiency class | E |
| Useful luminous flux (ϕuse), indicating if it refers to the flux in a sphere (360º), in a wide cone (120º) or in a narrow cone (90º) | | 2 200 in Narrow cone (90°) | Correlated colour temperature, rounded to the nearest 100 K, or the range of correlated colour temperatures, rounded to the nearest 100 K, that can be set | 4 000 |
| On-mode power ($P_{on}$), expressed in W | | 19,5 | Standby power ($P_{sb}$), expressed in W and rounded to the second decimal | 0,00 |
| Networked standby power ($P_{net}$) for CLS, expressed in W and rounded to the second decimal | | - | Colour rendering index, rounded to the nearest integer, or the range of CRI-values that can be set | 82 |
| Outer dimensions without separate control gear, lighting control | Height | 278 | Spectral power distribution in the range 250 nm to 800 nm, at full-load | See image in last page |
| | Width | 33 | | |
| | Depth | 66 | | |

| | | | | |
|---|---|---|---|---|
| parts and non-lighting control parts, if any (millimetre) | | | | |
| Claim of equivalent power[(a)] | | - | If yes, equivalent power (W) | - |
| | | | Chromaticity coordinates (x and y) | 0,379<br>0,380 |
| **Parameters for directional light sources:** | | | | |
| Peak luminous intensity (cd) | | 454 | Beam angle in degrees, or the range of beam angles that can be set | 30 |
| **Parameters for LED and OLED light sources:** | | | | |
| R9 colour rendering index value | | 0 | Survival factor | 0,50 |
| the lumen maintenance factor | | 0,95 | | |
| **Parameters for LED and OLED mains light sources:** | | | | |
| displacement factor (cos ϕ1) | | 0,30 | Colour consistency in McAdam ellipses | 4 |
| Claims that an LED light source replaces a fluorescent light source without integrated ballast of a particular wattage. | | -[(b)] | If yes then replacement claim (W) | - |
| Flicker metric (Pst LM) | | 0,5 | Stroboscopic effect metric (SVM) | 0,2 |

[(a)] '-' : not applicable;

[(b)] '-' : not applicable;

# Lightsource Test Report

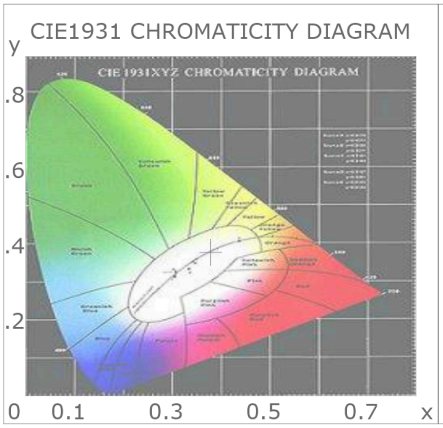
## Product Infomation

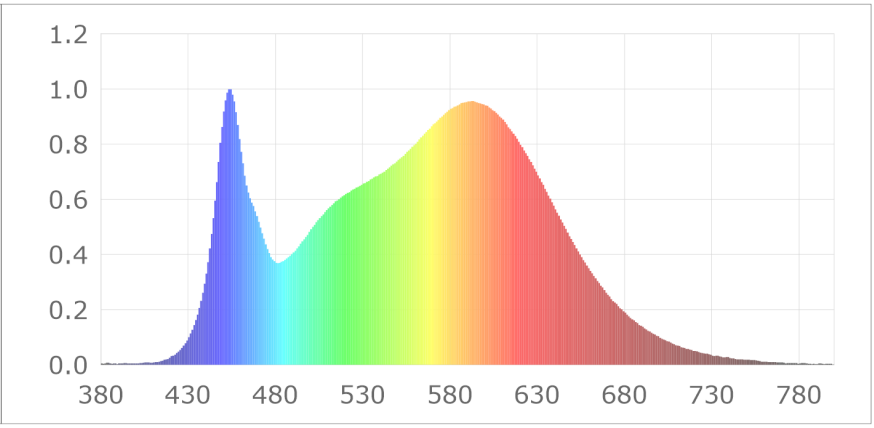
Product Number: 22

## CIE Colorimetric Parameters

Chromaticity coordinates: x=0.3795 y=0.3807 u(u')=0.2229 v=0.3354 v'=0.5032
CCT: Tc=4056K (duv=0.00213) Color Ratio: R=0.180 G=0.778 B=0.042
Peak Wavelength: 454nm Half Bandwidth: 26.7nm
Dominant Wavelength: 577.7nm Color Purity: 0.281
CRI: Ri: Ra= 82.8

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| R1 =81 | R2 =92 | R3 =96 | R4 =80 | R5 =81 | R6 =89 | R7 =83 | R8 =61 |
| R9 =3 | R10=80 | R11=79 | R12=63 | R13=84 | R14=98 | R15=74 | |




## Photometric Parameters

Luminous Flux: 2207.4 lm Efficiency: 113.20 lm/W Radiant Power: 6.606 W

## Electric Parameters

Voltage: 220.50V Current: 0.1770A Power: 19.50W
Power Factor: 0.4970 Frequency: 50.00Hz

Test Infomation
Scan Range: 380nm~800nm:1nm Photometric Method:
Stabilization Time: 6 Sec Photometric Condition: Sphere diameter: 1.50m, 4∏
Max of Signal: 49953 (3067) CCD Integration Time: 497.92 ms

Condition: Tx:26.6'C, Ti:25.6'C Test Device: Inventfine CMS-2S (Plus)
Test Lab: Test Time: 2022-03-31 20:01:14
Operator: Inspector: