

# 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:** 93ZFLD1230/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):	Yes
Colour-tuneable light source:	No	Envelope:	-
High luminance light source:	Yes		
Anti-glare shield:	No	Dimmable:	No

## Product parameters

Parameter	Value	Parameter	Value
<b>General product parameters:</b>			
Energy consumption in on-mode (kWh/1000 h), rounded up to the nearest integer	12	Energy efficiency class	E
Useful luminous flux ( $\phi_{use}$ ), indicating if it refers to the flux in a sphere (360°), in a wide cone (120°) or in a narrow cone (90°)	1 250 in Nar-row 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	3 000
On-mode power ( $P_{on}$ ), expressed in W	13,2	Standby power ( $P_{sb}$ ), expressed in W and rounded to the second decimal	0,20
Networked standby power ( $P_{net}$ ) for CLS, expressed in W and rounded to the second decimal	0,20	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	Spectral power distribution in the range 250 nm to 800 nm, at full-load	See image in last page
	Width		
	Depth		

parts and non-lighting control parts, if any (millimetre)				
Claim of equivalent power <sup>(a)</sup>	-	If yes, equivalent power (W)	-	
		Chromaticity coordinates (x and y)	0,440 0,406	
<b>Parameters for directional light sources:</b>				
Peak luminous intensity (cd)	1 321	Beam angle in degrees, or the range of beam angles that can be set	65	
<b>Parameters for LED and OLED light sources:</b>				
R9 colour rendering index value	4	Survival factor	0,50	
the lumen maintenance factor	0,95			
<b>Parameters for LED and OLED mains light sources:</b>				
displacement factor (cos $\phi_1$ )	0,50	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 Information

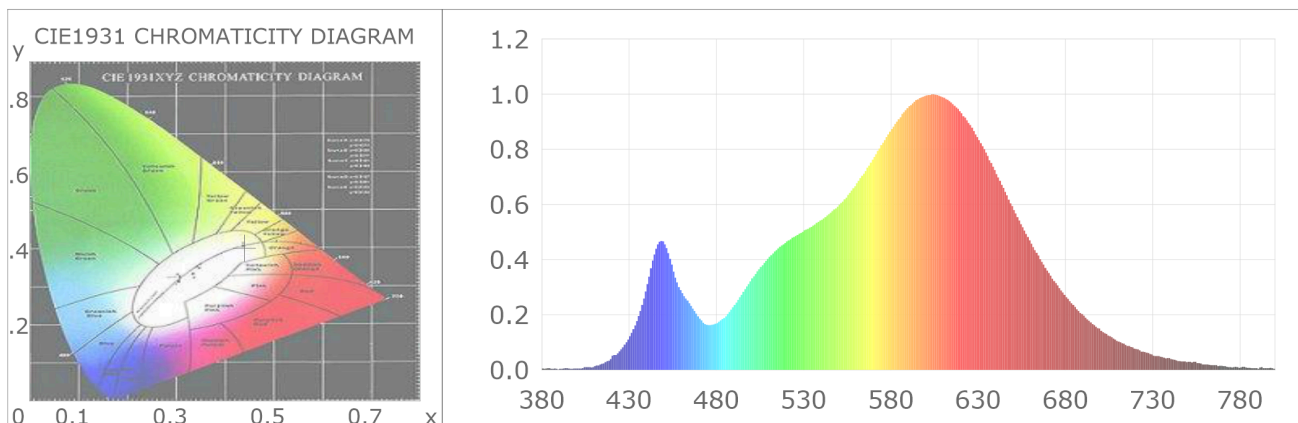
Product Number: 19

### CIE Colorimetric Parameters

Chromaticity coordinates:  $x=0.4402$   $y=0.4061$   $u(u')=0.2518$   $v=0.3484$   $v'=0.5227$   
 CCT:  $T_c=2962K$  ( $duv=0.00035$ ) Color Ratio:  $R=0.231$   $G=0.745$   $B=0.024$   
 Peak Wavelength: 604nm Half Bandwidth: 127.2nm  
 Dominant Wavelength: 582.9nm Color Purity: 0.540

CRI:  $R_i$ :  $R_a=82.5$

$R_1=81$	$R_2=90$	$R_3=97$	$R_4=82$	$R_5=81$	$R_6=89$	$R_7=82$	$R_8=58$
$R_9=6$	$R_{10}=78$	$R_{11}=82$	$R_{12}=74$	$R_{13}=83$	$R_{14}=99$	$R_{15}=73$	



### Photometric Parameters

Luminous Flux: 1233.4 lm

Efficiency: 93.44 lm/W

Radiant Power: 3.729 W

### Electric Parameters

Voltage: 220.60V

Current: 0.1020A

Power: 13.20W

Power Factor: 0.5840

Frequency: 50.00Hz

### Test Information

Scan Range: 380nm~800nm:1nm  
 Stabilization Time: 6 Sec  
 Max of Signal: 44814 (3120)

Photometric Method:  
 Photometric Condition: Sphere diameter: 1.50m, 4 $\pi$   
 CCD Integration Time: 757.93 ms

Condition:  $T_x=26.4^{\circ}C$ ,  $T_i=25.6^{\circ}C$   
 Test Lab:  
 Operator:

Test Device: Inventfine CMS-2S (Plus)  
 Test Time: 2022-03-31 19:56:26  
 Inspector: