

# 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:** 92PANEL022W/WH

## Type of light source:

Lighting technology used:	LED	Non-directional or directional:	NDLS
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:	No		
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	48	Energy efficiency class	G
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°)	4 044 in Wide cone (120°)	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	50,0	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	0,00	Colour rendering index, rounded to the nearest integer, or the range of CRI-values that can be set	83
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)	0,376 0,377	
<b>Parameters for LED and OLED light sources:</b>				
R9 colour rendering index value	11	Survival factor	0,50	
the lumen maintenance factor	0,95			
<b>Parameters for LED and OLED mains light sources:</b>				
displacement factor (cos $\phi_1$ )	0,90	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)	0,0	Stroboscopic effect metric (SVM)	0,2	

(a) '-': not applicable;

(b) '-': not applicable;

## Lightsource Test Report

### Product Information

Product Type: 595-595-48W

Product Number: 1

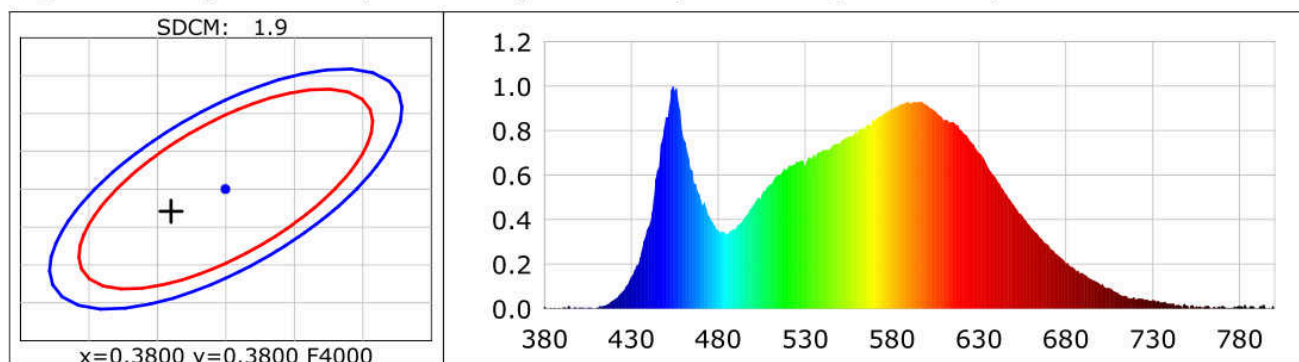
### CIE Colorimetric Parameters

Chromaticity coordinates:  $x=0.3760$   $y=0.3771$   $u(u')=0.2221$   $v=0.3340$   $v'=0.5011$   
 CCT:  $T_c=4126K$  ( $duv=0.00147$ ) Color Ratio:  $R=0.179$   $G=0.781$   $B=0.040$   
 Peak Wavelength: 453.9nm Half Bandwidth: 26.6nm  
 Dominant Wavelength: 577.8nm Color Purity: 0.260  
 CRI:  $R_a=83.9$  TM30:  $R_f=84$ ,  $R_g=94$   
 GAI:  $GAI\_BB\_8=89.6$ ,  $GAI\_BB\_15=96.6$ ,  $GAI\_EES=72.4$   

R1 =82	R2 =91	R3 =96	R4 =82	R5 =82	R6 =88	R7 =85	R8 =65
R9 =11	R10=78	R11=81	R12=63	R13=85	R14=98	R15=76	

 Color Quality Scale:  $Q_a=83.5$ ,  $Q_f=84.0$ ,  $Q_p=82.3$ ,  $Q_g=91.3$   

Q1 =82	Q2 =97	Q3 =83	Q4 =77	Q5 =81	Q6 =83	Q7 =85	Q8 =90
Q9 =98	Q10=91	Q11=87	Q12=86	Q13=85	Q14=74	Q15=77	



### Photometric Parameters

Luminous Flux: 4044.1 lm Efficiency: 80.85 lm/W Radiant Power: 12.241 W  
 EEI: 0.17 Energy Efficiency Class: A+ (EU 874-2012)

### Electric Parameters

Voltage: 230.40V Current: 0.2250A Power: 50.02W  
 Power Factor: 0.9660 Frequency: 49.99Hz

### Test Information

Scan Range: 380~800:1nm Photometric Method: sphere-spectroradiometer  
 Stabilization Time: 0 Sec ALC.: 0.9000 Photometric Condition: Sphere diameter: 2.00m, 4T  
 Max of Signal: 45730 (5225) CCD Integration Time: 1567.30 ms

Condition: Tx:29.4'C, Ti:26.8'C, R.H.:60%  
 Test Lab:  
 Operator:

Test Device: Inventfine CMS-2S (Plus)  
 Test Time: 2022-07-11 12:37:46  
 Inspector: