

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: 93TL291L10W/WH

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	10	Energy efficiency class	F
Useful luminous flux (ϕ_{use}), indicating if it refers to the flux in a sphere (360°), in a wide cone (120°) or in a narrow cone (90°)	900 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	10,3	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	93
Outer dimensions without	Height	Spectral power distribution in the	See image in last page
	Width		
	Depth		

separate control gear, lighting control parts and non-lighting control parts, if any (millimetre)			range 250 nm to 800 nm, at full-load	
Claim of equivalent power ^(a)	-	If yes, equivalent power (W)	-	
		Chromaticity coordinates (x and y)	0,381 0,380	
Parameters for directional light sources:				
Peak luminous intensity (cd)	449	Beam angle in degrees, or the range of beam angles that can be set	24	
Parameters for LED and OLED light sources:				
R9 colour rendering index value	75	Survival factor	0,50	
the lumen maintenance factor	0,93			
Parameters for LED and OLED mains light sources:				
displacement factor (cos ϕ_1)	0,50	Colour consistency in McAdam ellipses	6	
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)	0,0	

(a) - : not applicable;

(b) - : not applicable;

Lightsource Test Report

Product Information

Product Type: 93TL291L10W

Product Number: 18

CIE Colorimetric Parameters

Chromaticity coordinates: $x=0.3819$ $y=0.3809$ $u(u')=0.2244$ $v=0.3357$ $v'=0.5036$

CCT: $T_c=3992K$ ($duv=0.00152$)

Color Ratio: $R=0.197$ $G=0.765$ $B=0.039$

Peak Wavelength: 449nm

Half Bandwidth: 23.1nm

Dominant Wavelength: 578.3nm

Color Purity: 0.289

CRI: R_i : $R_a=93.2$

$R_1=94$

$R_2=94$

$R_3=93$

$R_4=94$

$R_5=93$

$R_6=91$

$R_7=96$

$R_8=91$

$R_9=75$

$R_{10}=84$

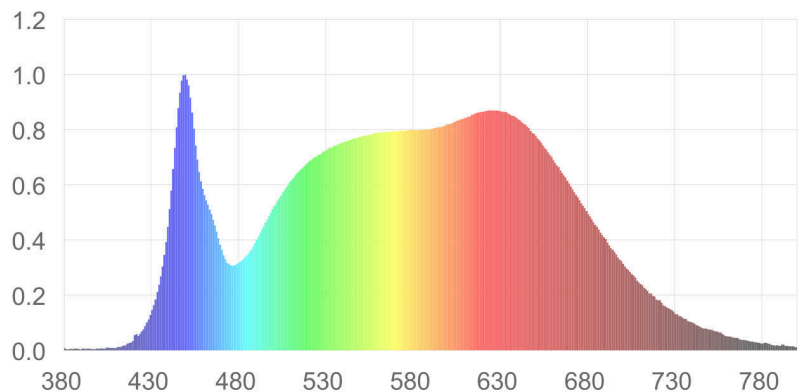
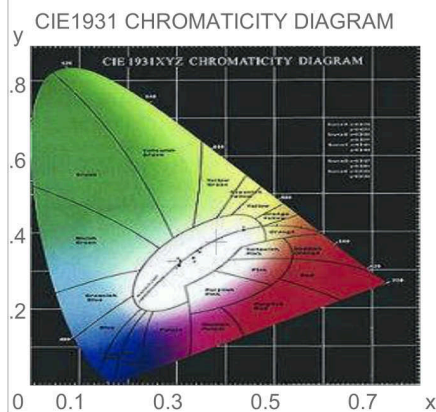
$R_{11}=93$

$R_{12}=72$

$R_{13}=93$

$R_{14}=95$

$R_{15}=93$



Photometric Parameters

Luminous Flux: 934.5 lm

Efficiency: 90.73 lm/W

Radiant Power: 3.243 W

Electric Parameters

Voltage: 220.50V

Current: 0.0890A

Power: 10.30W

Power Factor: 0.5250

Frequency: 50.00Hz

Test Information

Scan Range: 380nm~800nm:1nm

Stabilization Time: 5 Sec

Max of Signal: 50624 (3589)

Photometric Method:

Photometric Condition: Sphere diameter: 1.50m, 4

CCD Integration Time: 1263.60 ms

Condition: $T_x=29.1^{\circ}C$, $T_i=29.0^{\circ}C$

Test Lab:

Operator:

Test Device: Inventfine CMS-2S (Plus)

Test Time: 2021-11-05 16:09:19

Inspector: