# **Product Information Sheet**

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

<b>Supplier's name or trade mark:</b> ELMARK	
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Supplier's address: ELMARK INDUSTRIES SC, bul.Dobrudja 2, 9300 Dobrich Dobrich, BG

Model identifier: 93TL291L15W/BL

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Typa	Λt	liaht	source:
IVDE	VI.	IIKIIL	source.

Lighting technology used:	LED	Non-directional or directional:	DLS
Light source cap-type	Integrated LED		
(or other electric interface)			
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			

Product parameters					
Parameter		Value	Parameter	Value	
General product parameters:					
_ ·	nption in on- 00 h), rounded st integer	15	Energy efficiency class	Е	
Useful luminous flux (фuse), indicating if it refers to the flux in a sphere (360°), in a wide cone (120°) or in a narrow cone (90°)		1 500 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	4 000	
On-mode power (P <sub>on</sub> ), expressed in W		15,1	Standby power (P <sub>sb</sub> ), expressed in W and rounded to the sec- ond decimal	0,00	
Networked standby power (P <sub>net</sub> ) for CLS, expressed in W and rounded to the second decimal		-	Colour rendering in- dex, rounded to the nearest integer, or the range of CRI-val- ues that can be set	93	
Outer dimensions without separate control gear, lighting control	Height	300	Spectral power dis-	See image	
	Width	300	tribution in the	in last page	
	Depth	60	range 250 nm to 800 nm, at full-load		

parts and non- lighting con- trol parts, if any (millime- tre)				
Claim of equivalent power <sup>(a)</sup>	-	If yes, equivalent power (W)	-	
		Chromaticity coordinates (x and y)	0,382 0,338	
Parameters for directional light	sources:			
Peak luminous intensity (cd)	450	Beam angle in degrees, or the range of beam angles that can be set	24	
Parameters for LED and OLED lig	Parameters for LED and OLED light sources:			
R9 colour rendering index value	78	Survival factor	0,50	
the lumen maintenance factor	0,93			
Parameters for LED and OLED m	ains light sources:	1		
displacement factor (cos φ1)	0,50	Colour consistency in McAdam ellipses	5	
Claims that an LED light source replaces a fluorescent light source without integrated ballast of a particular wattage.	_(b)	If yes then replace- ment claim (W)	-	
Flicker metric (Pst LM)	0,0	Stroboscopic effect metric (SVM)	0,0	

(a)<sub>'-'</sub> : not applicable;

(b)<sub>'-'</sub> : not applicable;

## **Lightsource Test Report**

### **Product Infomation**

Product Type: 93TL291L15W Product Number: 19

#### **CIE Colorimetric Parameters**

Chromaticity coordinates: x=0.3826 y=0.3813 u(u')=0.2247 v=0.3359 v'=0.5039

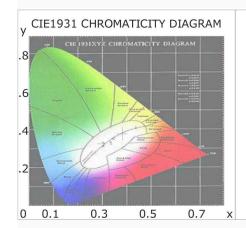
CCT: Tc=3976K (duv=0.00150) Color Ratio: R=0.198 G=0.763 B=0.039

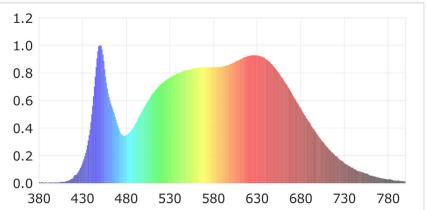
Peak Wavelength: 450nm Half Bandwidth: 25.5nm Dominant Wavelength: 578.4nm Color Purity: 0.293

CRI: Ri: Ra= 93.8

R1 =94 R2 =94 R3 =93 R4 =95 R5 =93 R6 =91 R7 =97 R8 =92

R9 = 78 R10 = 86 R11 = 94 R12 = 72 R13 = 94 R14 = 96 R15 = 93





#### **Photometric Parameters**

Luminous Flux: 1452.1 lm Efficiency: 96.17 lm/W Radiant Power: 5.067 W

#### **Electric Parameters**

Voltage: 220.60V Current: 0.1220A Power: 15.10W

Power Factor: 0.5570 Frequency: 50.00Hz

Test Infomation

Scan Range: 380nm~800nm:1nm Photometric Method:

Stabilization Time: 5 Sec Photometric Condition: Sphere diameter: 1.50m,  $4\Pi$ 

Max of Signal: 45692 (3498) CCD Integration Time: 767.87 ms

Condition: Tx:29.1'C, Ti:28.9'C Test Device: Inventfine CMS-2S (Plus) Test Lab: Test Time: 2021-11-05 16:14:43

Operator: Inspector: