

# 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:** 98TIVOLI200SMD

## 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:	Yes		
Anti-glare shield:	No	Dimmable:	No

## Product parameters

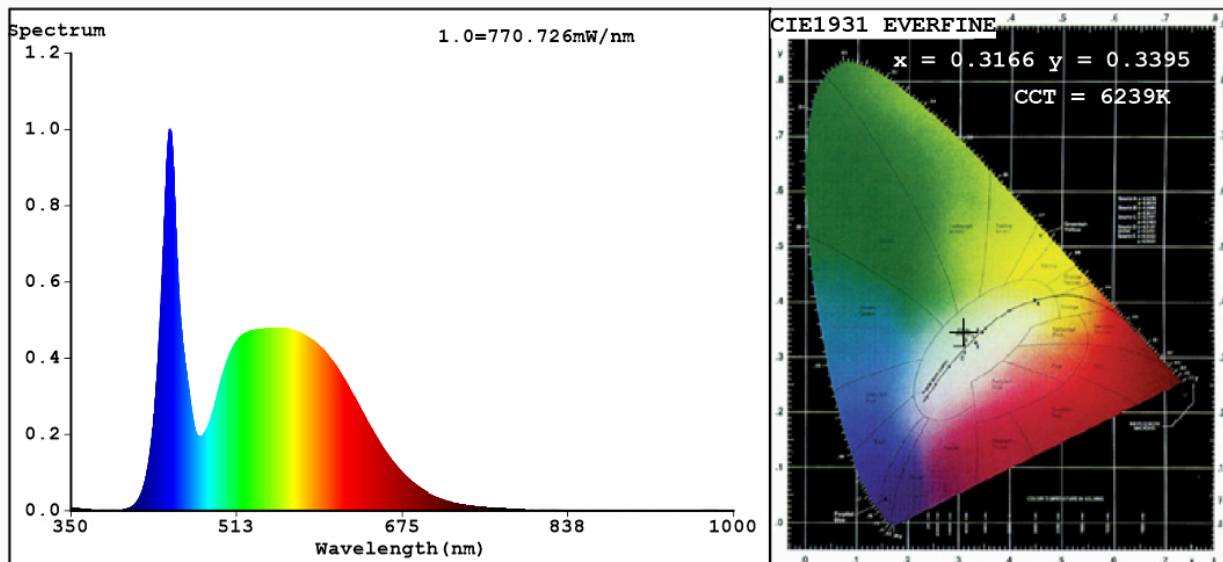
Parameter	Value	Parameter	Value
<b>General product parameters:</b>			
Energy consumption in on-mode (kWh/1000 h), rounded up to the nearest integer	200	Energy efficiency class	E
Useful luminous flux ( $\phi_{use}$ ), indicating if it refers to the flux in a sphere (360°), in a wide cone (120°) or in a narrow cone (90°)	22 000 in Sphere (360°)	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	6 200
On-mode power ( $P_{on}$ ), expressed in W	203,2	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	81
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)	0,316 0,339	
<b>Parameters for directional light sources:</b>				
Peak luminous intensity (cd)	9 811	Beam angle in degrees, or the range of beam angles that can be set	94	
<b>Parameters for LED and OLED light sources:</b>				
R9 colour rendering index value	2	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)	0,4	Stroboscopic effect metric (SVM)	0,2	

(a) - : not applicable;

(b) - : not applicable;

## Spectrum Test Report



### Color Parameters:

Chromaticity Coordinate:  $x=0.3166$   $y=0.3395$  /  $u'=0.1966$   $v'=0.4744$   
 CCT=6239K (Duv=0.0066) Dominant WL:  $L_d = 496.5\text{nm}$  WL:  $L_c = \text{--nm}$  Purity=5.3%  
 Ratio: R=13.3% G=81.7% B=5.0%; Peak WL:  $L_p = 446.6\text{nm}$  FWHM=20.0nm  
 Render Index:  $R_a = 81.5$  AvgR=73.9 TM30:  $R_f = 83$   $R_g = 95$   $L_{av} = 540.3\text{nm}$

R1 =79	R2 =84	R3 =89	R4 =83	R5 =81	R6 =80	R7 =87
R8 =69	R9 =2	R10=63	R11=83	R12=61	R13=80	R14=94 R15=73

### Photo Parameters:

Flux = 24057 lm Eff. : 118.41 lm/W Fe = 76.58 W

### Electrical parameters:

V = 229.87 V I = 0.9248 A P = 203.2 W PF = 0.9557

WHITE: ANSI\_6500K

Status: Integral T = 1 ms Ip = 31686 (48%)

Model: LED STREET LITHG  
 Tester: Atanas DAKOV  
 Temperature: 25.3Deg  
 Manufacturer: ELMARK

Number: 98TIVOLI200SMD  
 Date: 2022-04-12 14:34:38  
 Humidity: 65.0%  
 Remarks: MOSTRA