

# 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:** 98LED012SW

## 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:	NMLS	Connected light source (CLS):	Yes
Colour-tuneable light source:	No	Envelope:	-
High luminance light source:	No		
Anti-glare shield:	No	Dimmable:	No

## Product parameters

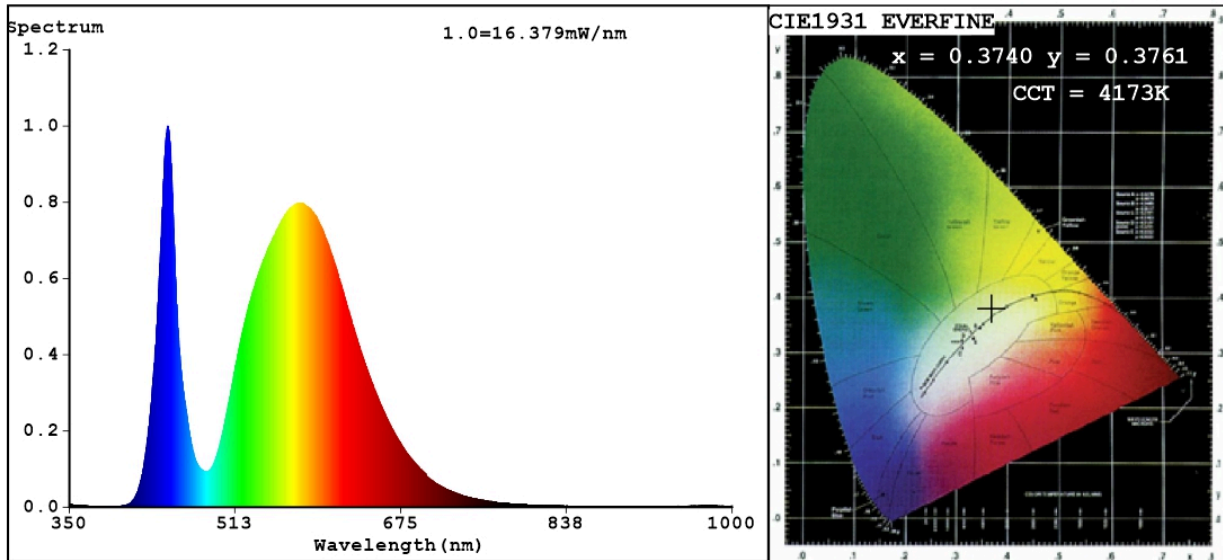
Parameter	Value	Parameter	Value
<b>General product parameters:</b>			
Energy consumption in on-mode (kWh/1000 h), rounded up to the nearest integer	12	Energy efficiency class	G
Useful luminous flux ( $\phi_{use}$ ), indicating if it refers to the flux in a sphere (360°), in a wide cone (120°) or in a narrow cone (90°)	720 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	12,0	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	0,20	Colour rendering index, rounded to the nearest integer, or the range of CRI-values that can be set	68
Outer dimensions without separate control gear, lighting control	Height	140	Spectral power distribution in the range 250 nm to 800 nm, at full-load
	Width	145	
	Depth	145	
			See image in last page

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)	0,374 0,376
<b>Parameters for directional light sources:</b>			
Peak luminous intensity (cd)	446	Beam angle in degrees, or the range of beam angles that can be set	60
<b>Parameters for LED and OLED light sources:</b>			
R9 colour rendering index value	0	Survival factor	0,56
the lumen maintenance factor	1,00		

(a) : not applicable;

(b) : not applicable;

**Spectrum Test Report**



**Color Parameters:**

Chromaticity Coordinate:  $x=0.3740$   $y=0.3761$  /  $u'=0.2211$   $v'=0.5003$

CCT=4173K (Duv=0.0016) Dominant WL:  $\lambda_d = 577.4\text{nm}$  Purity=25.1%

Ratio: R=15.6% G=82.1% B=2.2%; Peak WL:  $\lambda_p = 446.6\text{nm}$  FWHM=19.6nm

Render Index: Ra=68.2

R1 = 65	R2 = 75	R3 = 82	R4 = 67	R5 = 64	R6 = 64	R7 = 79	
R8 = 50	R9 = 0	R10 = 40	R11 = 61	R12 = 35	R13 = 66	R14 = 90	R15 = 59

**Photo Parameters:**

Flux = 725.7 lm Eff. : 57.81 lm/W Fe = 2.088 W

**Electrical parameters:**

V = 23.921 V I = 0.8372 A P = 12.55 W PF = 0.6268

WHITE: ANSI\_4000K

Status: Integral T = 51 ms Ip = 49969 (76%)

Model: UNDERWATER LED LIGHTS/12x1W  
 Tester: Petya Marinova  
 Temperature: 25.3Deg  
 Manufacturer: ELMARK

Number: 98LED012SW  
 Date: 2016-12-12 15:44  
 Humidity: 65.0%  
 Remarks: 016V037B\_3303