

# 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:** 99LED448MHE

## Type of light source:

Lighting technology used:	LED	Non-directional or directional:	NDLS
Light source cap-type (or other electric interface)	T8 G13		
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

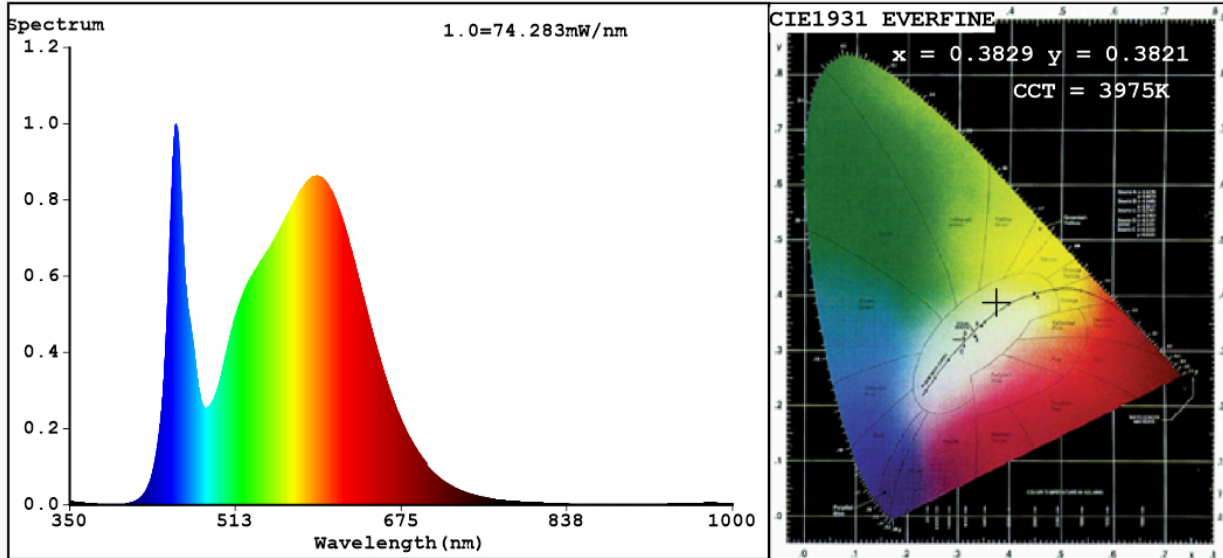
Parameter	Value	Parameter	Value
<b>General product parameters:</b>			
Energy consumption in on-mode (kWh/1000 h), rounded up to the nearest integer	24	Energy efficiency class	D
Useful luminous flux ( $\phi_{use}$ ), indicating if it refers to the flux in a sphere (360°), in a wide cone (120°) or in a narrow cone (90°)	3 600 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	4 000
On-mode power ( $P_{on}$ ), expressed in W	24,1	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	1 514	Spectral power distribution in the range 250 nm to 800 nm, at full-load
	Width	28	
	Depth	28	
			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)	0,382 0,382
<b>Parameters for LED and OLED light sources:</b>			
R9 colour rendering index value	1	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.	Yes <sup>(b)</sup>	If yes then replacement claim (W)	200
Flicker metric (Pst LM)	0,0	Stroboscopic effect metric (SVM)	0,2

(a)-: not applicable;

(b)-: not applicable;

### Spectrum Test Report



**Color Parameters:**

Chromaticity Coordinate:  $x=0.3829$   $y=0.3821$  /  $u'=0.2246$   $v'=0.5043$   
 CCT=3975K (Duv=0.0018) Dominant WL:Ld =578.2nm WL:Lc = --nm Purity=29.6%  
 Ratio:R=18.1% G=78.3% B=3.6% ; Peak WL:Lp=454.3nm FWHM=21.2nm  
 Render Index:Ra=81.3

R1 =79    R2 =89    R3 =95    R4 =78    R5 =79    R6 =84    R7 =85  
 R8 =61    R9 =1    R10=73    R11=76    R12=55    R13=82    R14=98    R15=73

**Photo Parameters:**

Flux = 3659 lm    Eff. : 151.53 lm/W    Fe = 10.97 W

**Electrical parameters:**

V = 229.39 V    I = 0.1104 A    P = 24.15 W PF = 0.9537

WHITE:ANSI\_4000K

Status: Integral T = 13 ms    Ip = 40482 (62%)

Model:LED TUBE  
 Tester:Atanas DAKOV  
 Temperature:25.3Deg  
 Manufacturer:ELMARK

Number:99LED448MHE  
 Date:2022-08-24 09:19:30  
 Humidity:65.0%  
 Remarks:8756