

# 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:** 96RAY20/WW

## 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	20	Energy efficiency class	F
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°)	1 730 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	3 000
On-mode power ( $P_{on}$ ), expressed in W	19,2	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	80
Outer dimensions without separate control gear, lighting control	Height	95	Spectral power distribution in the range 250 nm to 800 nm, at full-load
	Width	250	
	Depth	250	
			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)	0,436 0,396
<b>Parameters for directional light sources:</b>			
Peak luminous intensity (cd)	1 475	Beam angle in degrees, or the range of beam angles that can be set	50
<b>Parameters for LED and OLED light sources:</b>			
R9 colour rendering index value	3	Survival factor	0,50
the lumen maintenance factor	0,95		
<b>Parameters for LED and OLED mains light sources:</b>			
displacement factor (cos $\phi_1$ )	0,50	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)	0,0	Stroboscopic effect metric (SVM)	0,0

(a) '-': not applicable;

(b) '-': not applicable;

# Lightsource Test Report

## Product Information

Product Number: JD-MDC200-20W

Submitted Unit: T

## CIE Colorimetric Parameters

Chromaticity coordinates:  $x=0.4365$   $y=0.3961$   $u(u')=0.2537$   $v=0.3454$   $v'=0.5181$

CCT:  $T_c=2994K$  ( $duv=-0.00313$ )

Color Ratio:  $R=0.220$   $G=0.765$   $B=0.015$

Peak Wavelength: 596nm

Half Bandwidth: 118.7nm

Dominant Wavelength: 584.2nm

Color Purity: 0.499

CRI:  $R_i$ :  $R_a=80.2$

$R_1=83$

$R_2=81$

$R_3=91$

$R_4=79$

$R_5=76$

$R_6=74$

$R_7=77$

$R_8=47$

$R_9=3$

$R_{10}=56$

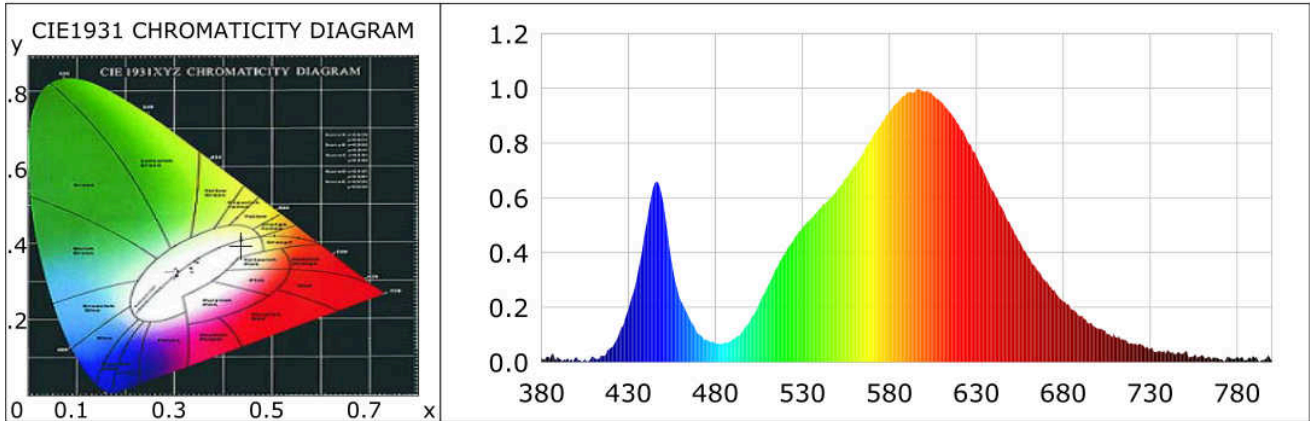
$R_{11}=74$

$R_{12}=49$

$R_{13}=71$

$R_{14}=94$

$R_{15}=63$



## Photometric Parameters

Luminous Flux: 1731.3 lm

Efficiency: 89.80 lm/W

Radiant Power: 4.970 W

## Electric Parameters

Voltage: 220.00V

Current: 0.1640A

Power: 19.28W

Power Factor: 0.5340

Frequency: 49.99Hz

## Test Information

Scan Range: 380nm~800nm:1nm Photometric Method: sphere-spectroradiometer

Stabilization Time: 0 Min

Photometric Condition: Sphere diameter: 1.50m, 4 $\pi$

Max of Signal: 45363 (3463)

CCD Integration Time: 293.92 ms

Condition:  $T_x=28.2^\circ C$ ,  $T_i=27.4^\circ C$ , R.H.:60%

Test Lab:

Operator:

Test Device: Inventfine CMS-2

Test Time: 2022-07-09 18:09:42

Inspector: