

# Product Information Sheet

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

**Supplier's name or trade mark:** TWINSTAR

**Supplier's address:** TWINSTAR, 492-11, Cheonggang-ri, Gijang-eup, Gijang-gun, Busan, Republic of Korea

**Model identifier:** TWINSTAR LIGHT III 450SA

## Type of light source:

Lighting technology used:	LED	Non-directional or directional:	DLS
Light source cap-type (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:	Yes

## Product parameters

Parameter	Value	Parameter	Value
-----------	-------	-----------	-------

### General product parameters:

Energy consumption in on-mode (kWh/1000 h), rounded up to the nearest integer	29	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°)	1 812 in Wide cone (120°)	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	9 024
On-mode power ( $P_{on}$ ), expressed in W	28,8	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	90
Outer dimensions	Height	Spectral power distribution in the	See image in last page
	Width		

without separate control gear, lighting control parts and non-lighting control parts, if any (millimetre)	Depth	95	range 250 nm to 800 nm, at full-load	
Claim of equivalent power <sup>(a)</sup>		-	If yes, equivalent power (W)	-
			Chromaticity coordinates (x and y)	0,291 0,285
<b>Parameters for directional light sources:</b>				
Peak luminous intensity (cd)		1 812	Beam angle in degrees, or the range of beam angles that can be set	120
<b>Parameters for LED and OLED light sources:</b>				
R9 colour rendering index value		91	Survival factor	1,00
the lumen maintenance factor		0,90		
<b>Parameters for LED and OLED mains light sources:</b>				
displacement factor (cos $\phi_1$ )		0,95	Colour consistency in McAdam ellipses	1
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)		1,0	Stroboscopic effect metric (SVM)	0,4

(a)-: not applicable;

(b)-: not applicable;

