

Name and address of the supplier

Hagen Deutschland GmbH & Co.KG

Lehmweg 99-105 D-25488 Holm

Name and signature of the person empowered to bind the supplier


Tino Protz (General Manager)

Product

Itemnumber	PT2378	Item description	EX Natural Light T8 30W
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Technical Parameters

	measurement values	
	specified	measured
useful luminous flux (Φ_{use})	1650 lm	1678 lm
color rendering index (CRI)	NA RA	71.5 RA
on-mode power (P_{on})	30 W	26.7 W
beam angel for directional light sources (DLS)	NA °	NA °
correlated color temperature (CCT) for FL and HID light sources	6300 K	6323 K
standby power (P_{sb}), including when it is zero	NA W	NA W
network standby power (P_{net}) for connected light sources (CLS)	NA W	NA W
displacement factor ($\cos\phi$) for LED / OLED main light sources	NA	NA
color consistency in MacAdam ellipse steps for LED and OLED light sources	NA	NA
luminance-HLLS (only for HLLS)	NA cd/mm ²	NA cd/mm ²
flicker metric (P_{stLM}) for LED and OLED light sources	NA	NA
stroboscopic effect metric (SVM) for LED and OLED light sources	NA	NA
excitation purity, only for CTLS, for the following colors and dominant wavelength within the given range:		
Color Dominant wave-length range		
blue 440 nm – 490 nm	NA nm	NA nm
green 520 nm – 570 nm	NA nm	NA nm
red 610 nm – 670 nm	NA nm	NA nm

calculations performed with the parameters, including the determination of the energy efficiency class

$\eta_{TM}(\Phi_{use}/P_{on}) \cdot F_{TM}(lm/W)$ $1678LM/26.7W \cdot 0.926 = 58.19LM/W$ Energy efficiency class: G

references to the harmonized standards applied or other standards used

(EU) 2019/2020

(EU) 2017/1369

(EU) 2019/2015

testing conditions if not described sufficiently under harmonized standards applied or other standards used

CIE 84:1989: The Measurement of Luminous Flux

CIE 13.3-1995: Method of Measuring and Specifying Color Rendering of Light Sources

CIE 15:2004: Colorimetry, 3rd edition

CIE 63:1984: The Spectroradiometric Measurement of Light Sources

reference control settings, and instructions on how they could be implemented, where applicable

NA

instructions on how to remove lighting control parts and/or non-lighting parts, if any, or how to switch them off or minimize their power consumption during light source testing

NA

specific precautions that shall be taken when the model is assembled, installed, maintained or tested

Glass products, please avoid collision and impact.

Avoid direct contact with skin during use, Wear protective gloves.

Please disconnect the power supply before installation or maintenance.

In the process of using, not be used as voltage higher than specification.

Do not use with dimmer.