Technical Documentation Sheet

Commission Regulation (EU) 2019/2020 - implementing Directive 2009/125/EC regarding ecodesign requirements for light sources and separate control gears
Commission Delegated Regulation (EU) 2019/2015 - implementing Regulation 2017/1369 regarding Energy Labeling of light sources

General Information

Report Number	7340191103115C
Date of issue	21-NOV-2023
Manufacturer Name	Coop Sverige AB Coop Norge SA
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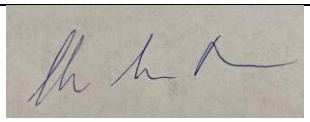
Name and Signature of Authorized Approver	christina.aagaard.rasmussen 

Product identification

Product Model Identifier	7340191103115C
Product Name (Optional)	Xtra LED 25W P45 E14 WW FR ND 1PF/10
Trademark	Xtra
Base Model	NA

Reference to harmonized standards and/or other standards

IEC 62612: Self-ballasted LED lamps for general lighting services with supply voltages > 50 V – Performance requirements
IEC TR 61547-1: Equipment for general lighting purposes – EMC immunity requirements – Part 1: Objective light flickermeter and voltage fluctuation immunity test method
IEC TR 63158: Equipment for general lighting purposes – Objective test method for stroboscopic effects of lighting equipment

Type of Light Source

Lighting Technology Used	LED
Directional or Non-Directional	NDLS
Mains or Non-Mains	MLS
Connected Light Source	No
Colour-Tunable Light Source	No
Envelope	No
High Luminance Light Source	No
With Anti-Glare Shield	No
Dimmable	No

Light Source Properties

Rated Voltage [V]	220-240
Rated Frequency [Hz]	50/60
Rated Current [mA]	30
Rated Ambient Temperature (T_a) [°C]	25
Additional information on test condition	NA
Additional information on lighting control part or non-lighting part	NA
Pre-cautions regarding light source assemble, install, maintain, or test.	NA

Exemptions

Exemption description	NA
Technical parameters that make the product design specific to qualify for the exemption	NA

Product parameters - Declared values

General product parameters

Energy consumption in On-mode	[kWh/1000hrs]	4	
Energy efficiency class	[A/B/C/D/E/F/G]	G	
Useful luminous flux (Φ_{use})	[lm]	250	*Sphere*
Correlated colour temperature (CCT)	[K]	2700	*Single*
Correlated colour temperature at reference control setting	[K]	NA	
On-mode power (P_{on})	[W]	3.2	
Standby power (P_{sb})	[W]	NA	
Networked standby power (P_{net})	[W]	NA	
Colour rendering index	[-]	80	
Chromaticity coordinates	x	0.458	
	y	0.410	
Outer dimensions	Height [mm]	84	
	Width [mm]	45	
	Depth [mm]	45	

Parameters for directional light sources

Peak luminous intensity	[Cd]	NA
(Range of) Beam angle(s)	[°]	NA

Parameters for LED and OLED light sources

R9 colour rendering index value	[-]	0
Indicative lifetime L70B50	[hrs]	15000
Survival factor	[-]	0.90
Lumen maintenance factor	[-]	0.93

Parameters for LED and OLED mains light sources

Displacement factor cos φ1	[-]	0.50
Colour consistency	[SDCM]	6
Replacement claim	for Fluorescent [W]	No
	for Halogen/Incandescent [W]	25
Flicker metric (P_{st} LM)	[-]	1.0
Stroboscopic effect metric (SVM)	[-]	0.4

Product parameters - Measured values (*)

General product parameters

On-mode power (P_{on})	[W]	2.5	
Standby power (P_{sb})	[W]	NA	
Networked standby power (P_{net})	[W]	NA	
Useful luminous flux (Φ_{use})	[lm]	254	*Sphere*
Colour rendering index	[-]	82	
Correlated colour temperature	[K]	2711	

Parameters for directional light sources

Peak luminous intensity	[Cd]	NA
(Range of) Beam angle(s)	[°]	NA

Parameters for LED and OLED light sources

R9 colour rendering index value	5

Parameters for LED and OLED mains light sources

Displacement factor cos φ1		0.69
Colour consistency	[SDCM]	2
Flicker metric (P_{st} LM)		0.1
Stroboscopic effect metric (SVM)		0.0

Parameters for colour tunable LED and OLED light sources

Excitation Purity Index	Blue	NA
	Green	NA
	Red	NA

(*) Values as measured under reference control setting.

Reference control setting:

NA

Calculation Explanation

Calculation of Energy Efficiency Class

On-mode power (P_{on})	[W]	3.2	
Useful luminous flux (Φ_{use})	[lm]	250	
Factor total mains (F_{TM})	[-]	1.000	*According to Table 2, Annex II of EU 2019/2015*
Total mains efficacy (η_{TM})	[lm/W]	78.125	$\eta_{TM} = (\Phi_{use}/P_{on}) \times F_{TM}$
Energy Efficiency Class	[A/B/C/D/E/F/G]	G	*According to Table 1, Annex II of EU 2019/2015*

Calculation of Energy Consumption

On-mode power (P_{on})	[W]	3.2	
Energy consumption in On-mode	[kWh/1000hrs]	4	*Rounded up to integer base on P_{on}*

Calculation of P_{onmax}

Useful luminous flux (Φ_{use})	[lm]	250	
Threshold efficacy (η)	[lm/W]	120.0	*According to Table 1, Annex II of EU 2019/2020*
End loss factor (L)	[W]	1.5	*According to Table 1, Annex II of EU 2019/2020*
Correction factor (C)	[-]	1.08	*According to Table 2, Annex II of EU 2019/2020*
Bonus on C:	None	0.00	*According to Table 2, Annex II of EU 2019/2020*
Efficacy factor (F)	[-]	1.00	*1.00 for NDLS, 0.85 for DLS*
CRI factor (R)	[-]	1.00	*0.65 for CRI<=25;* *(CRI+80)160 for CRI >25, rounded to 2 decimals*
P_{onmax}	[W]	3.87	$P_{onmax} = C \times (L + \Phi_{use}/(F \times \eta)) \times R$