

# Product Information Sheet

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

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

**Supplier's address:** QC/LABOR, Oberlaaerstraße 284, 1230 Wien, AT

**Model identifier:** LM E27/4,5W i.m. (Standard/2700K/470lm)

## Type of light source:

Lighting technology used:	LED	Non-directional or directional:	NDLS
Light source cap-type (or other electric interface)	E27		
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
<b>General product parameters:</b>			
Energy consumption in on-mode (kWh/1000 h), rounded up to the nearest integer	5	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°)	470 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	2 700
On-mode power ( $P_{on}$ ), expressed in W	4,5	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	Height	Spectral power distribution in the	See image in last page
	Width		
	Depth		

separate control gear, lighting control parts and non-lighting control parts, if any (millimetre)			range 250 nm to 800 nm, at full-load	
Claim of equivalent power <sup>(a)</sup>	Yes	If yes, equivalent power (W)	40	
		Chromaticity coordinates (x and y)	0,463 0,420	
<b>Parameters for LED and OLED light sources:</b>				
R9 colour rendering index value	5	Survival factor	0,90	
the lumen maintenance factor	0,94			
<b>Parameters for LED and OLED mains light sources:</b>				
displacement factor (cos $\phi_1$ )	0,50	Colour consistency in McAdam ellipses	6	
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;

**Table 3 : DIM-A60-E27-4.5W-Frost 2700K**

Sample No.	Initial Flux (lm)	3600H Flux (lm)	$X_{LMF,MIN}\%$ at 3600H	Survival factor at 3600H	Measured beam angle (°)	Measured I <sub>max</sub> (cd)	Measured light output within $\pi$ sr
1#	477.3	449.1	94.1%	Yes	-	-	-
2#	477.1	448.6	94.0%	Yes	-	-	-
3#	487.4	458.9	94.1%	Yes	-	-	-
4#	484.8	456.7	94.2%	Yes	-	-	-
5#	482.5	453.8	94.0%	Yes	-	-	-
6#	487.1	460.2	94.5%	Yes	-	-	-
7#	477.6	449.2	94.1%	Yes	-	-	-
8#	479.9	452.9	94.4%	Yes	-	-	-
9#	481.8	454.0	94.2%	Yes	-	-	-
10#	474.2	446.7	94.2%	Yes	-	-	-
Average	481.0	453.0	94.2%	Yes	-	-	-
Required	--	--	≥ 94%	≥ 90%	-	-	-

**Table 4 for model LED driver**

Sample No.	Measured voltage(V)	Measured current (mA)	Input wattage (W)	Output wattage (W)	Energy efficiency	P <sub>no</sub> (W)	P <sub>sb</sub> (W)	P <sub>net</sub> (W)
1#	--	--	--	--	--	--	--	--
2#	--	--	--	--	--	--	--	--
3#	--	--	--	--	--	--	--	--
Average	--	--	--	--	--	--	--	--
Required	--	--	--	--	--	--	--	--

**Table 5: Spectrum & Polar Plot of DIM-A60-E27-4.5W-Frost 2700K**

