

# 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:** Qualitätssicherung, Oberlaaerstraße 284, 1230 Wien, AT

**Model identifier:** LED 16d 16W SMD(80pcs) 373x4,8mm Band 3000K

## Type of light source:

Lighting technology used:	LED	Non-directional or directional:	NDLS
Light source cap-type (or other electric interface)	LED module		
Mains or non-mains:	NMLS	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	7	Energy efficiency class	E
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°)	900 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	3 000
On-mode power ( $P_{on}$ ), expressed in W	6,9	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	373	Spectral power distribution in the range 250 nm to 800 nm, at full-load
	Width	5	
	Depth	1	
			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)	0,440 0,403
<b>Parameters for LED and OLED light sources:</b>			
R9 colour rendering index value	3	Survival factor	0,90
the lumen maintenance factor	0,96		

(a) : not applicable;

(b) : not applicable;

Sample No.	Initial Φuse (lm)	3600H Φuse (lm)	X <sub>LUM,FMIN</sub> % at 3600H	Survival factor at 3600H	Measured beam angle (°)	Measured I <sub>max</sub> (cd)	Measured light output within π sr
1#	3672.4	3525.5	96.0%	Yes	-	-	-
2#	3655.8	3524.2	96.4%	Yes	-	-	-
3#	3670.6	3549.5	96.7%	Yes	-	-	-
4#	3693.2	3545.5	96.0%	Yes	-	-	-
5#	3668.9	3533.2	96.3%	Yes	-	-	-
6#	3665.3	3533.3	96.4%	Yes	-	-	-
7#	3704.9	3560.4	96.1%	Yes	-	-	-
8#	3685.2	3567.3	96.8%	Yes	-	-	-
9#	3653.8	3536.9	96.8%	Yes	-	-	-
10#	3627.8	3489.9	96.2%	Yes	-	-	-
Average	3669.8	3536.6	96.4%	Yes	-	-	-
Required	--	--	≥ 96%	≥ 90%	-	-	-

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#	229.9	153.5	32.5	29.5	90.8%	0.382	--	--
2#	230.1	155.4	33.1	29.5	89.1%	0.379	--	--
3#	230.1	152.2	32.4	29.6	91.2%	0.376	--	--
Average	230.1	153.7	32.7	29.5	90.4%	0.379	--	--
Required	--	--	--	--	≥81.8%	≤0.5	≤0.5	≤0.5

