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 16c 16W SMD(80pcs) 596x4,8mm 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
General product parameters:				
Energy consumption in on-mode (kWh/1000 h), rounded up to the nearest integer		14	Energy efficiency class	F
Useful luminous flux (ϕuse), indicating if it refers to the flux in a sphere (360º), in a wide cone (120º) or in a narrow cone (90º)		1 600 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		13,8	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	80
Outer dimensions without separate control gear, lighting control	Height	596	Spectral power distribution in the range 250 nm to 800 nm, at full-load	See image in last page
	Width	5		
	Depth	1		

parts and non-lighting control parts, if any (millimetre)				
Claim of equivalent power[(a)]		-	If yes, equivalent power (W)	-
			Chromaticity coordinates (x and y)	0,440 0,403
Parameters for LED and OLED light sources:				
R9 colour rendering index value		4	Survival factor	0,90
the lumen maintenance factor		0,96		

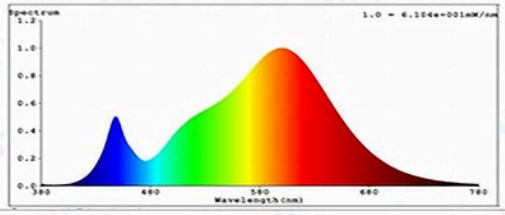
[(a)] '-' : not applicable;

[(b)] '-' : not applicable;

Table 3 : DL 7-644/40 weiß(LED30W/2850lm/3000K)-M							
Sample No.	Initial Φuse (lm)	3600H Φuse (lm)	$X_{UMF,MN}$% at 3600H	Survival factor at 3600H	Measured beam angle (°)	Measured Imax (cd)	Measured light output within π sr
1#	3214.0	3101.5	96.5%	Yes	-	-	-
2#	3220.4	3091.6	96.0%	Yes	-	-	-
3#	3205.8	3103.2	96.8%	Yes	-	-	-
4#	3202.2	3086.9	96.4%	Yes	-	-	-
5#	3255.1	3150.9	96.8%	Yes	-	-	-
6#	3249.8	3136.1	96.5%	Yes	-	-	-
7#	3226.9	3107.5	96.3%	Yes	-	-	-
8#	3262.8	3158.4	96.8%	Yes	-	-	-
9#	3231.8	3115.5	96.4%	Yes	-	-	-
10#	3225.0	3118.6	96.7%	Yes	-	-	-
Average	3229.4	3117.0	96.5%	Yes	-	-	-
Required	--	--	**≥ 96%**	**≥ 90%**	-	-	-

Table 4 for model QP-TG30W _LED driver								
Sample No.	Measured voltage(V)	Measured current (mA)	Input wattage (W)	Output wattage (W)	Energy efficiency	Pno (W)	Psb (W)	Pnet (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**

Table 5: Spectrum & Polar Plot of 3000K



Spectrum