PRODUCT DATASHEET
HQL LED FILAMENT PERFORMANCE 5400LM 29.1W 827 E40

HQL LED FILAMENT PERFORMANCE | LED replacement for HQL lamps in demanding outdoor applications



PERFOR-
MANCE
CLASS

Areas of application

- Streets
- Area lighting
- Pedestrian zones
- Parks
- Outdoor applications only in suitable luminaires

Product benefits

- Same design as traditional HQL lamps with frosted, ellipsoid full glass bulb
- Saves up to 82 % energy when used as replacement for mercury vapor lamps (HQL)
- Full use of reflector of existing luminaire thanks to 360 degree beam angle
- Very light weight product
- Low maintenance costs thanks to long lifetime
- Instant 100 % light, no warm-up time

Product features

- Replacement for HQL: Suitable for operation with conventional control gear (CCG) for HQL or 230 V mains
- Replacement for other HID: Suitable for operation with line voltage without control gear
- Luminous efficacy: up to 185 lm/W
- Power factor: 0.9
- Type of protection: IP65
- High surge protection: up to 4 kV (L-N)
- Very wide ambient temperature range of -20...+60 °C
- ENEC-certified safety





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TECHNICAL DATA

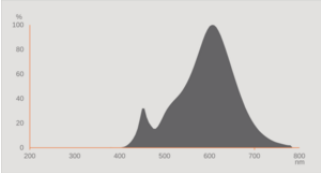
Electrical data

Nominal wattage	29.1 W
Construction wattage	29.10 W
Nominal voltage	220…240 V
Operating mode	CCG, AC Mains
Claimed equiv. conventional lamp power	125 W
Nominal current	140 mA
Type of current	AC
Inrush current	41.2 A
Operating frequency	50/60 Hz
Mains frequency	50/60 Hz
Max. lamp number on MCB B10 A	18
Max. lamp number on MCB B10 A - CCG without compensation	33
Max. lamp number on MCB B10 A - CCG with compensation	5
Max. lamp number on MCB B16 A	30
Max. lamp number on MCB B16 A - CCG without compensation	53
Max. lamp number on MCB B16 A - CCG with compensation	6
Maximum total harmonic distortion	< 20 %
Power factor λ	> 0.90
Surge capability (L-N)	4 kV

Photometrical data

Luminous flux	5400 lm
Nominal useful luminous flux 90°	5400 lm
Luminous efficacy	185 lm/W
Lumen main.fact.at end of nom.life time	0.70
Light color (designation)	Warm White
Color temperature	2700 K
Color rendering index Ra	80
Light color	827
Standard deviation of color matching	≤6 sdcm
Rated LLMF at 6,000 h	0.80
Flickering metric (Pst LM)	1
Stroboscope effect metric (SVM)	0,4

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EPREL data spectral diagram PROF LEDr 2700K

Light technical data

Beam angle	360 °
Warm-up time (60 %)	‹ 0.50 s
Starting time	< 0.5 s

Dimensions & Weight



Overall length	214.00 mm
Diameter	90.00 mm
Maximum diameter	90 mm
Product weight	185.00 g

Temperatures & operating conditions

Ambient temperature range	-20…+60 °C [1)]
Maximum temperature at tc test point	94 °C

1) Temperature surrounding the lamp - for enclosed luminaires: temperature inside of the luminaire

Lifespan

Lifespan L70/B50 at 25 °C	60000 h
Number of switching cycles	100000
Lumen maintenance at end of service lifetime	0.70
Rated lamp survival factor at 6,000 h	≥ 0.90

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Additional product data

Base (standard designation)	E40
Mercury content	0.0 mg
Mercury-free	Yes

Capabilities

Dimmable	No

Certificates & Standards

Energy efficiency class	B [1)]
Energy consumption	30.00 kWh/1000h
Type of protection	IP65
Standards	CE / UKCA / EAC / ENEC
Photobiological safety group acc. to EN62778	RG1

1) Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (lowest efficiency)

Country-specific categorizations

Order reference	HQL LED FIL P 5

LOGISTICAL DATA

Temperature range at storage	-20…+80 °C

Energy labelling regulation data acc EU 2019/2015

Lighting technology used	LED
Non-directional or directional	NDLS
Mains or non-mains	MLS
Light source cap-type (or other electric interface)	E40
Connected light source (CLS)	No
Color-tuneable light source	No
Envelope	No
High luminance light source	No
Anti-glare shield	No
Correlated colour temperature type	SINGLE_VALUE
Claim of equivalent power	No
Length	214.00 mm
Height	90.00 mm
Width	90.00 mm

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Chromaticity coordinate x	0.458
Chromaticity coordinate y	0.41
R9 Colour rendering index	1
Beam angle correspondence	SPHERE_360
Survival factor	0.9
Displacement factor	0.9
LED light source replaces a fluorescent light source	No
EPREL ID	2295934
Model number	AC69409

Safety advice

- Not suitable for operation with ignitors.
- Operation on the capacitor can lead to a reduction of the power factor of the system.
- When installed horizontally, the t_c point of the lamp is located on the top side of the lamp.
- Use in tight luminaires and luminaires with tight reflectors not recommended.
- Only suitable for temperatures of up to 60 °C inside of the luminaire. Use in tight luminaires and luminaires with tight reflectors not recommended.
- All electrical connections must be made by a qualified person.

DOWNLOAD DATA

	Documents and certificates	Document name
PDF	User instruction / safety instructions	
PDF	Legal information	Informationstext 18 Abs 4 ElektroG
PDF	Legal information	Safety Insert G11201307
PDF	Declarations of conformity	FIL P lamp
PDF	Declarations of conformity UKCA	FIL P lamp

	Photometric and lighting design files	Document name
IES	IES file (IES)	HQL LED FIL P 5400LM 29.1W 827 E40
LDT	LDT file (Eulumdat)	HQL LED FIL P 5400LM 29.1W 827 E40
	UGR file (UGR table)	HQL LED FIL P 5400LM 29.1W 827 E40
	Light distribution curve type polar	HQL LED FIL P 5400LM 29.1W 827 E40

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	Photometric and lighting design files	Document name
	Spectral power distribution	EPREL data spectral diagram PROF LEDr 2700K

	Tender texts	Document name
	Tender documents	HQL LED FILAMENT PERFORMANCE 5400LM 29.1W 827 E40-en

LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4099854470066	Folding box 1	102 mm x 102 mm x 239 mm	278.00 g	2.49 dm^3
4099854470073	Shipping box 6	322 mm x 221 mm x 265 mm	2003.00 g	18.86 dm^3

The mentioned product code describes the smallest quantity unit which can be ordered. One shipping unit can contain one or more single products. When placing an order, for the quantity please enter single or multiples of a shipping unit.

References / Links

– For Guarantee see www.ledvance.com/guarantee

DISCLAIMER

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