

PRODUCT DATASHEET HQI HIGHBAY 400 120 ° 140 W/4000 K E40

HQI LED HIGHBAY | LED replacement for HID lamps for high-bay luminaires



Areas of application

- LED alternative for applications requiring a high luminous flux
- Industrial and storage facilities
- Outdoor applications only in suitable luminaires

Product benefits

- Direct replacement for traditional HQI and NAV lamps thanks to CCG and ignitor compatibility
- Energy savings of up to 68 % when replacing traditional HQI lamps
- Effective thermal management for wide operating temperature range
- Low maintenance costs thanks to long lifetime
- Instant 100 % light, no warm-up time

Product features

- Type of protection: IP40
- High surge protection: up to 4 kV (L-N)



TECHNICAL DATA

Electrical data

Nominal wattage	140 W
Construction wattage	140.00 W
Nominal voltage	110 V
Operating mode	Conventional control gear (CCG), Conventional control gear (CCG) and ignitor
Claimed equiv. conventional lamp power	400 W
Nominal current	3.6 A
Type of current	AC
Inrush current	50 A
Operating frequency	50 Hz
Mains frequency	50 Hz
Max. lamp number on MCB B10 A	11
Max. lamp number on MCB B10 A - CCG without compensation	11
Max. lamp number on MCB B10 A - CCG with compensation	3
Max. lamp number on MCB B16 A	18
Max. lamp number on MCB B16 A - CCG without compensation	18
Max. lamp number on MCB B16 A - CCG with compensation	5
Total harmonic distortion	< 80 %
Power factor λ	0.70

Photometrical data

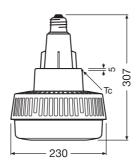
Nominal useful luminous flux 90° 20000 lm Luminous efficacy 142 lm/W Lumen main.fact.at end of nom.life time 0.70 Light color (designation) Cool White Color temperature 4000 K Color rendering index Ra ≥80 Light color 840 Standard deviation of color matching ≤6 sdcm Rated LLMF at 6,000 h 0.80	Luminous flux	20000 lm
Lumen main.fact.at end of nom.life time 0.70 Light color (designation) Cool White Color temperature 4000 K Color rendering index Ra ≥80 Light color 840 Standard deviation of color matching ≤6 sdcm	Nominal useful luminous flux 90°	20000 lm
Light color (designation) Cool White Color temperature 4000 K Color rendering index Ra ≥80 Light color 840 Standard deviation of color matching ≤6 sdcm	Luminous efficacy	142 lm/W
Color temperature 4000 K Color rendering index Ra ≥80 Light color 840 Standard deviation of color matching ≤6 sdcm	Lumen main.fact.at end of nom.life time	0.70
Color rendering index Ra ≥80 Light color 840 Standard deviation of color matching ≤6 sdcm	Light color (designation)	Cool White
Light color 840 Standard deviation of color matching ≤6 sdcm	Color temperature	4000 K
Standard deviation of color matching ≤6 sdcm	Color rendering index Ra	≥80
	Light color	840
Rated LLMF at 6,000 h 0.80	Standard deviation of color matching	≤6 sdcm
	Rated LLMF at 6,000 h	0.80

Light technical data

Beam angle	120 °
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Warm-up time (60 %)	< 0.50 s
Starting time	< 0.5 s

Dimensions & Weight



Overall length	307.00 mm
Diameter	230 mm
Maximum diameter	230 mm
Product weight	1150.00 g

Temperatures & operating conditions

Ambient temperature range	-20+50 °C
Maximum temperature at tc test point	75 °C

Lifespan

Number of switching cycles	100000
Lumen maintenance at end of service lifetime	0.70
Rated lamp survival factor at 6,000 h	≥ 0.90

Additional product data

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

Capabilities

Dimmable	No
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Certificates & Standards

Energy consumption	140.00 kWh/1000h
Type of protection	IP40
Standards	CE
Photobiological safety group acc. to EN62778	RG1

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

Country-specific categorizations

Order reference	HQILEDH20000 14	
Energy labelling regulation data acc EU 2019/2015		
Light source cap-type (or other electric interface)	E40	
Length	307.00 mm	
Height	230 mm	
Width	230 mm	

EQUIPMENT / ACCESSORIES

- Safety sling for lamp included

Safety advice

- The bulb may be larger and heavier than the replaced bulb. Before installation it must be checked, if the luminaire and especially the holder is capable of carrying the weight of the lamp.
- Safety sling has to be installed.
- To ensure full light efficiency and product lifetime, it is recommended to detach any glass or cover of the luminaire.
- Only suitable for temperatures of up to 50 °C inside of the luminaire.
- Not suitable for operation with 230 V line voltage or electronic control gear.

DOWNLOAD DATA

	Documents and certificates	Document name		
PDF	User instruction / safety instructions	HQI LED Highbay		
	Photometric and lighting design files	Document name		
	IES file (IES)	AC18723_HQILEDH20000 140W840 110V E4		
	LDT file (Eulumdat)	AC18723_HQILEDH20000 140W840 110V E4		

Photometric and lighting design files	Document name
Light distribution curve type polar	AC18723_HQILEDH20000 140W840 110V E4
Light distribution curve type polar	AC18723 HQILEDH20000 140W840 110V E4

LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4058075284746	Folding box 1	247 mm x 247 mm x 333 mm	1371.00 g	20.32 dm ³
4058075284753	Shipping box 4	515 mm x 515 mm x 355 mm	6161.00 g	94.15 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.

DISCLAIMER

Subject to change without notice. Errors and omission excepted. Always make sure to use the most recent release.