

PRODUCT FAMILY DATASHEET

HQL LED PRO

LED replacement for HID lamps for outdoor application



AREAS OF APPLICATION

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

PRODUCT BENEFITS

- Replacement for HQL: Suitable for operation with conventional control gear for HQL
- Replacement for other HID: Suitable for operation with line voltage without control gear
- Saves up to 78 % energy when used as replacement for mercury vapor lamps (HQL)
- Effective thermal management for wide operating temperature range
- Low maintenance costs thanks to long lifetime
- Instant 100 % light, no warm-up time

PRODUCT FEATURES

- LED alternative for applications requiring a high luminous flux
- Power factor: 0.9
- Type of protection: IP65
- High surge protection: up to 4 kV (L-N)



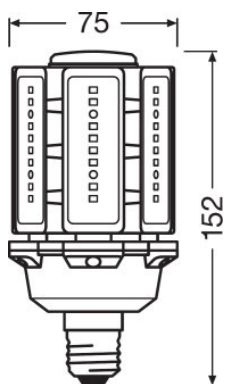
TECHNICAL DATA

Product description	Electrical data						Photometrical data	
	Nominal wattage	Nominal voltage	Max. lamp no. on circuit break. B10 A - CCG without compensation	Max. lamp no. on circuit break. 10 A (B)	Max. lamp no. on circuit break. B16 A - CCG without compensation	Max. lamp no. on circuit break. 16 A (B)	Nominal luminous flux	Rated luminous flux
HQL LED 1800 lm 16 W/2700K E27	16.00 W	220...240 V	80	80	128	128	1800 lm	1800 lm
HQL LED 2000 lm 16 W/4000K E27	16.00 W	220...240 V	80	80	128	128	2000 lm	2000 lm
HQL LED 2700 lm 23 W/2700K E27	23.00 W	220...240 V	56	56	90	90	2700 lm	2700 lm
HQL LED 3000 lm 23 W/4000K E27	23.00 W	220...240 V	56	56	90	90	3000 lm	3000 lm
HQL LED 3600 lm 30 W/2700K E27	30.00 W	220...240 V	42	42	68	68	3600 lm	3600 lm
HQL LED 4000 lm 30 W/4000K E27	30.00 W	220...240 V	42	42	68	68	4000 lm	4000 lm
HQL LED 5400 lm 46 W/2700K E27	46.00 W	220...240 V	23	23	36	36	5400 lm	5400 lm
HQL LED 5400 lm 46 W/2700K E40	46.00 W	220...240 V	23	23	36	36	5400 lm	5400 lm
HQL LED 6000 lm 46 W/4000K E27	46.00 W	220...240 V	23	23	36	36	6000 lm	6000 lm
HQL LED 6000 lm 46 W/4000K E40	46.00 W	220...240 V	23	23	36	36	6000 lm	6000 lm
HQL LED 11700 lm 95 W/2700K E40	95.00 W	220...240 V	13	13	20	20	11700 lm	11700 lm
HQL LED 13000 lm 95 W/4000K E40	95.00 W	220...240 V	13	13	20	20	13000 lm	13000 lm

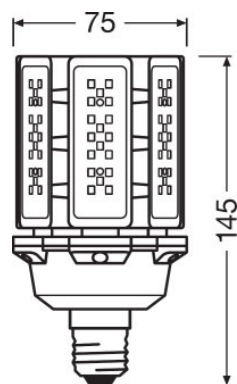
Product description	Lumen main.fact.at end of nom.life time	Light color (designation)	Color temperature	Luminous flux	Color rendering index Ra	Light technical data		Dimensions & weight		Temperatures & operating conditions
						Warm-up time (60 %)	Beam angle	Overall length	Diameter	Ambient temperature range
HQL LED 1800 lm 16 W/2700K E27	0.70	Warm White	2700 K	1800 lm	≥80	< 0.50 s	360 °	153.0 mm	75.0 mm	-20...+60 °C
HQL LED 2000 lm 16 W/4000K E27	0.70	Cool White	4000 K	2000 lm	≥80	< 0.50 s	360 °	153.0 mm	75.0 mm	-20...+60 °C
HQL LED 2700 lm 23 W/2700K E27	0.70	Warm White	2700 K	2700 lm	≥80	< 0.50 s	360 °	145.0 mm	75.0 mm	-20...+60 °C
HQL LED 3000 lm 23 W/4000K E27	0.70	Cool White	4000 K	3000 lm	≥80	< 0.50 s	360 °	145.0 mm	75.0 mm	-20...+60 °C
HQL LED 3600 lm 30 W/2700K E27	0.70	Warm White	2700 K	3600 lm	≥80	< 0.50 s	360 °	170.0 mm	75.0 mm	-20...+60 °C
HQL LED 4000 lm 30 W/4000K E27	0.70	Cool White	4000 K	4000 lm	≥80	< 0.50 s	360 °	170.0 mm	75.0 mm	-20...+60 °C
HQL LED 5400 lm 46 W/2700K E27	0.70	Warm White	2700 K	5400 lm	≥80	< 0.50 s	360 °	195.0 mm	80.0 mm	-20...+50 °C
HQL LED 5400 lm 46 W/2700K E40	0.70	Warm White	2700 K	5400 lm	≥80	< 0.50 s	360 °	204.0 mm	80.0 mm	-20...+50 °C
HQL LED 6000 lm 46 W/4000K E27	0.70	Cool White	4000 K	6000 lm	≥80	< 0.50 s	360 °	195.0 mm	80.0 mm	-20...+50 °C
HQL LED 6000 lm 46 W/4000K E40	0.70	Cool White	4000 K	6000 lm	≥80	< 0.50 s	360 °	204.0 mm	80.0 mm	-20...+50 °C

						Light technical data		Dimensions & weight		Temperatures & operating conditions
Product description	Lumen main.fact.at end of nom.life time	Light color (designation)	Color temperature	Luminous flux	Color rendering index Ra	Warm-up time (60 %)	Beam angle	Overall length	Diameter	Ambient temperature range
HQL LED 11700 lm 95 W/2700K E40	0.70	Warm White	2700 K	11700 lm	≥80	< 0.50 s	360 °	270.0 mm	110.0 mm	-20...+50 °C
HQL LED 13000 lm 95 W/4000K E40	0.70	Cool White	4000 K	13000 lm	≥80	< 0.50 s	360 °	270.0 mm	110.0 mm	-20...+50 °C

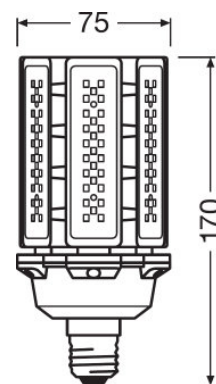
Product description	Lifespan		Additional product data			Capabilities	Certificates & standards
	Nominal lamp life time	Number of switching cycles	Base (standard designation)	Mercury content	Mercury-free	Dimmable	Photobiological safety group EN62778
HQL LED 1800 lm 16 W/2700K E27	50000 h	100000	E27	0.0 mg	Yes	No	
HQL LED 2000 lm 16 W/4000K E27	50000 h	100000	E27	0.0 mg	Yes	No	RG1
HQL LED 2700 lm 23 W/2700K E27	50000 h	100000	E27	0.0 mg	Yes	No	
HQL LED 3000 lm 23 W/4000K E27	50000 h	100000	E27	0.0 mg	Yes	No	
HQL LED 3600 lm 30 W/2700K E27	50000 h	100000	E27	0.0 mg	Yes	No	
HQL LED 4000 lm 30 W/4000K E27	50000 h	100000	E27	0.0 mg	Yes	No	RG1
HQL LED 5400 lm 46 W/2700K E27	50000 h	100000	E27	0.0 mg	Yes	No	
HQL LED 5400 lm 46 W/2700K E40	50000 h	100000	E40	0.0 mg	Yes	No	
HQL LED 6000 lm 46 W/4000K E27	50000 h	100000	E27	0.0 mg	Yes	No	RG1
HQL LED 6000 lm 46 W/4000K E40	50000 h	100000	E40	0.0 mg	Yes	No	RG1
HQL LED 11700 lm 95 W/2700K E40	50000 h	100000	E40	0.0 mg	Yes	No	
HQL LED 13000 lm 95 W/4000K E40	50000 h	100000	E40	0.0 mg	Yes	No	RG1



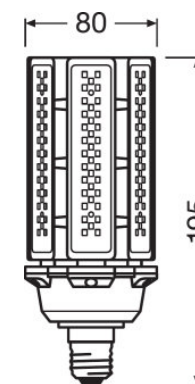
HQL LED 1800 lm 16 W/2700K E27,
HQL LED 2000 lm 16 W/4000K E27



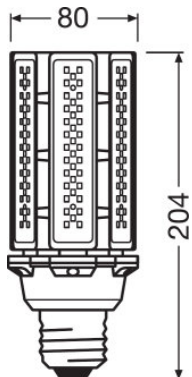
HQL LED 2700 lm 23 W/2700K E27,
HQL LED 3000 lm 23 W/4000K E27



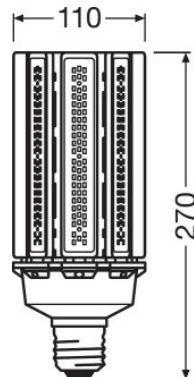
HQL LED 3600 lm 30 W/2700K E27,
HQL LED 4000 lm 30 W/4000K E27



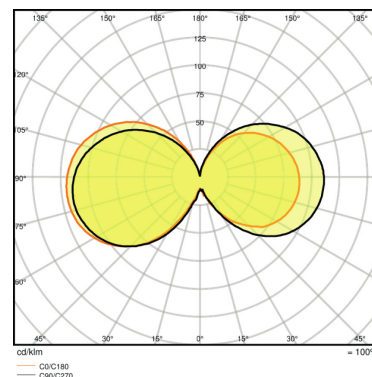
HQL LED 5400 lm 46 W/2700K E27,
HQL LED 6000 lm 46 W/4000K E27



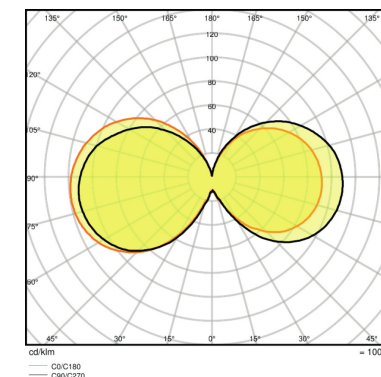
HQL LED 5400 lm 46 W/2700K E40,
HQL LED 6000 lm 46 W/4000K E40



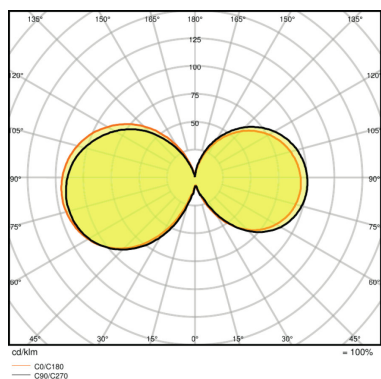
HQL LED 11700 lm 95 W/2700K E40,
HQL LED 13000 lm 95 W/4000K E40



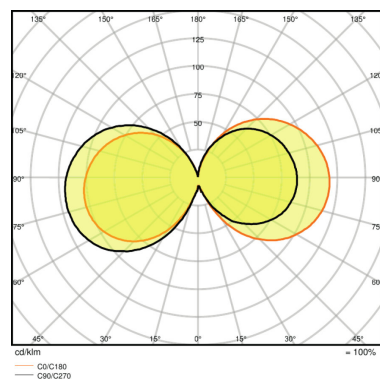
HQL LED 2700 lm 23 W/2700K E27



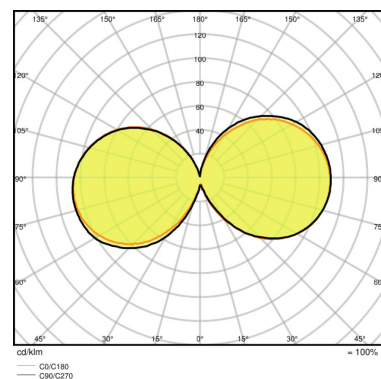
HQL LED 3000 lm 23 W/4000K E27



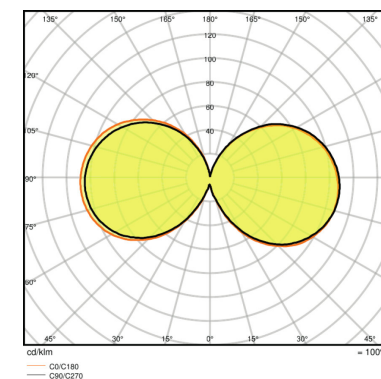
HQL LED 3600 lm 30 W/2700K E27



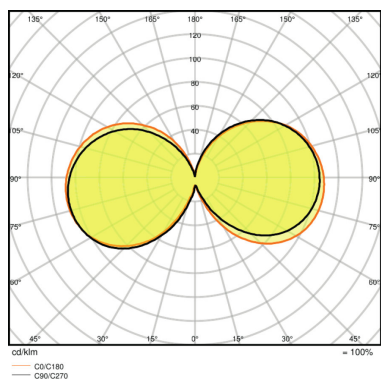
HQL LED 4000 lm 30 W/4000K E27



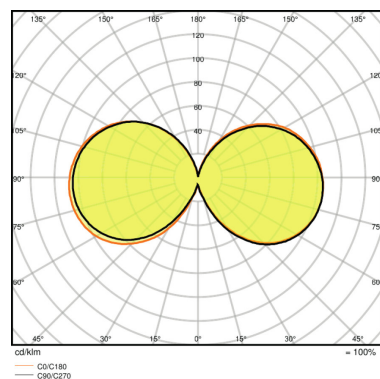
HQL LED 5400 lm 46 W/2700K E27



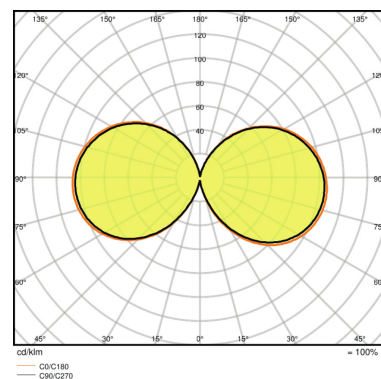
HQL LED 5400 lm 46 W/2700K E40



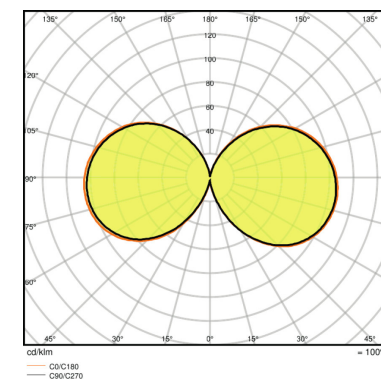
HQL LED 6000 lm 46 W/4000K E27



HQL LED 6000 lm 46 W/4000K E40



HQL LED 11700 lm 95 W/2700K E40



HQL LED 13000 lm 95 W/4000K E40

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.

Not suitable for operation with ignitors

Operation on the capacitor can lead to a reduction of the power factor of the system.

APPLICATION ADVICE

For more detailed application information and graphics please see product datasheet.

LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4058075362956	Shipping carton box 6	255 mm x 175 mm x 201 mm	3351.00 g	8.97 dm ³
4058075362970	Shipping carton box 6	255 mm x 175 mm x 201 mm	3351.00 g	8.97 dm ³
4058075124813	Shipping carton box 6	266 mm x 183 mm x 209 mm	3057.00 g	10.17 dm ³
4058075124790	Shipping carton box 6	266 mm x 183 mm x 209 mm	3057.00 g	10.17 dm ³
4058075124851	Shipping carton box 6	255 mm x 175 mm x 226 mm	3514.00 g	10.09 dm ³
4058075124837	Shipping carton box 6	255 mm x 175 mm x 226 mm	3514.00 g	10.09 dm ³
4058075124875	Shipping carton box 6	270 mm x 185 mm x 256 mm	4746.00 g	12.79 dm ³
4058075124974	Shipping carton box 6	270 mm x 185 mm x 256 mm	4866.00 g	12.79 dm ³
4058075127241	Shipping carton box 6	270 mm x 185 mm x 256 mm	4746.00 g	12.79 dm ³
4058075124950	Shipping carton box 6	270 mm x 185 mm x 256 mm	4866.00 g	12.79 dm ³

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4058075125018	Shipping carton box 6	360 mm x 245 mm x 326 mm	9524.00 g	28.75 dm ³
4058075124998	Shipping carton box 6	360 mm x 245 mm x 326 mm	9524.00 g	28.75 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.