

FOOD-SAFE Highbay Series



Features

- Extremely energy efficient – up to 140 lm/w High
- Luminous flux – up to 28,000 lm
- Unique internal thermal management structure
- Non-toxic corrosion resistant aluminum exterior
- Complete smooth surface for easy cleaning
- IP69K rated for most environmental conditions
- Suitable for high humidity, wash down capable
- High quality polycarbonate optics
- Notably low glare rating
- No exposed hardware as per FDA regulations
- Dual cable entry for optional dimming
- 5 years warranty

Options

- Integrated motion sensor available
- Optional 1–10V dimmable
- Optional honeycomb reflector for glare reduction
- CRI 90 Ra available upon request
- Zigbee is available

Area of application

- Food processing plants
- Flour, Sugar, Starch Processing
- Clean room applications

Certificates

UL, DLC Premium

LISTINGS

UL Listing:

UL code: E473338



IP65 waterproof rating

Exploded drawing

Lifting ring bolt; stainless steel with white electrophoretic paint

Top aluminum housing part completely enclosing the driver

Internal isolated power driver; well protected against water and humidity

Industrial rated cooling grease

High quality polycarbonate cover to protect the LED chips

Ring cover frame with stainless steel screws to hold the optic system in place

Dual cable entry for optional dimming

PC driver cover

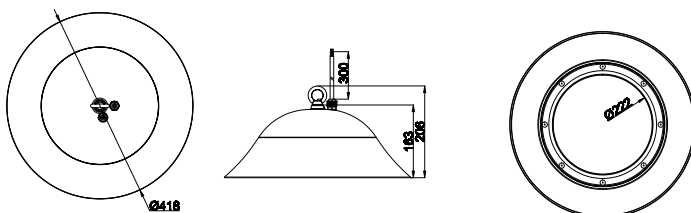
Driver bottom plate

Aluminum PCB with a high thermal conductivity rating for up to 336 pcs of EMC3030 chips

Industrial rated silicon gasket for an IP class of IP69K



Dimension (mm)



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Basic Specifications

Standard lumen (130~140lm/W)

Model	Nominal Wattages (W)	Nominal Voltage	Rated luminous efficacy (lm/w)	Nominal luminous flux (lumen)	Beam Angle	LED Quantity	CRI
KLHB05-100W	100	AC100~277V 50~60Hz	130±10	12880±1000	60°/110°	196 PCS EMC 3030	>80Ra
KLHB05-150W	150		130±10	19320±1500		252 PCS EMC 3030	
KLHB05-200W	200		130±10	25760±2000		336 PCS EMC 3030	

Electrical datas

Operating frequency	47-63Hz	Available light colors	Warm white; Natural white; daylight white
Type of current	AC100~277V	Available color temperatures	3000K; 4000K; 5000K; 6000K
Power factor λ	>0.9	Color rendering index Ra	>80 or >90 optional
Efficiency in %	>90%	Standard deviation of color matching	< 5
Start time (0.2s / 0.5s / ...)	0.1S	UGR (Uniformed Glare Rating)	<25 or <23 with Honeycomb Reflector
Warm-up time to 60 % (1.5s / 2s / ...)	0.5S	Available beam angles	60°/110°

Photometrical data

Standards & Certification

Type of protection	IP69K	Heatsink temperature	-20~+60 C
Tested dielectric strength	3.75KVac	Ambient temperature	-30~+ 50°C
Safety features	Open circuit protection; Short circuit protection; Overvoltage protection	Storage temperature	-40~+ 80°C
Certificates	UL, DLC Premium NFS Food Certificate		
Energy efficiency class	A+		

Temperatures & operating conditions

Lifespan

Rated nominal Lifetime	50.000 hours	Base/Socket	Directly wired
Switching cycles	100.000 times	Dimmable	1-10V dimmable, DALI dimmable
Lumen maintenance at e.o.l.	80%	Warranty	5 years warranty
LED Device Lifetime	L80 / B10		

Features/Capabilities and additional product data

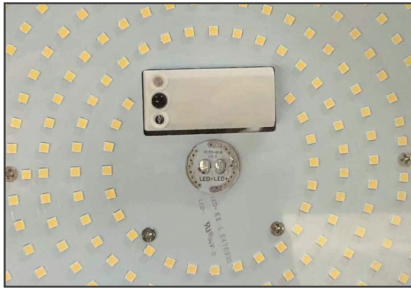
Order Information

KL — HB05 — Wattage — CCT

KL — HB05 —
 100 —
 150 —
 200 —
 30K: 3000K
 4K: 4000K
 5K: 5000K
 5K7: 5700K

KL — HB05 — [] — []

Optional accessories



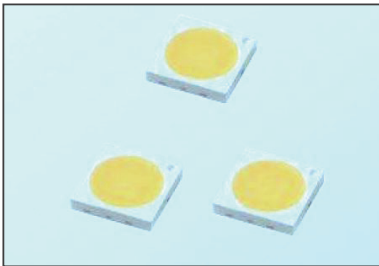
Optional internal motion sensor available



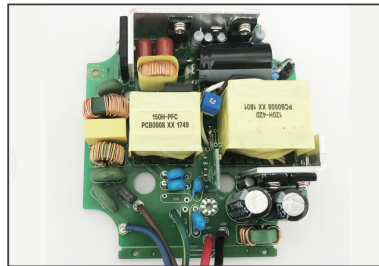
Optional Zigbee controller and gateway available



Optional Honeycomb Reflector to reduce glaring. Available with 60° /110° beam angle



Our standard for this product is CRI 80Ra but we can also provide CRI 90Ra



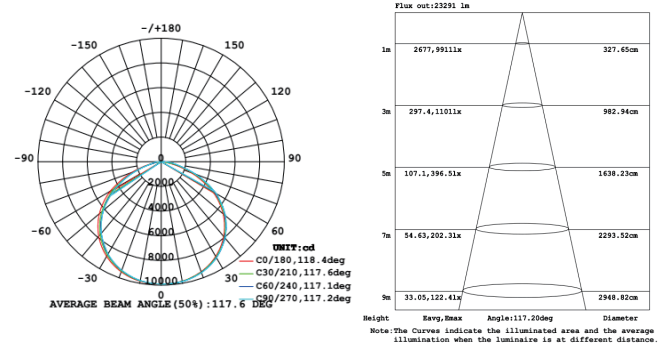
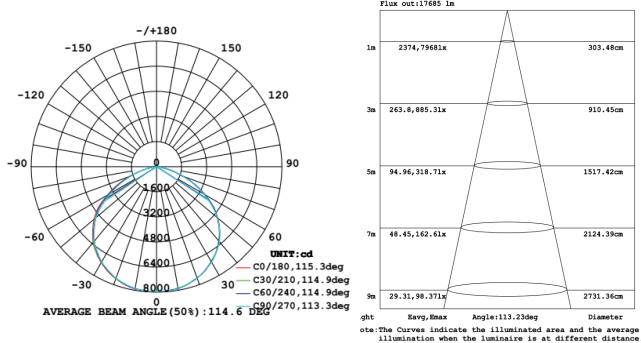
1-10V dimmable driver available

Lux Chart/Photometrics

Light Distribution Curve and Average E (LX) Figure---5000K

150W/110°

200W/110°



Packing Information

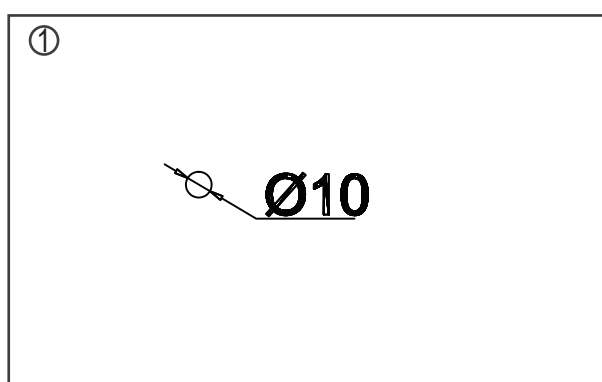
Model	Dimension	CTN SIZE(CM)	QTY/CTN	Net Weight/pcs (kg)	Gross Weight /CTN(kg)
HB05-100W/150W/200W	Φ420*206	49*46*24	1PCS	5.5	7

Application and safety notes

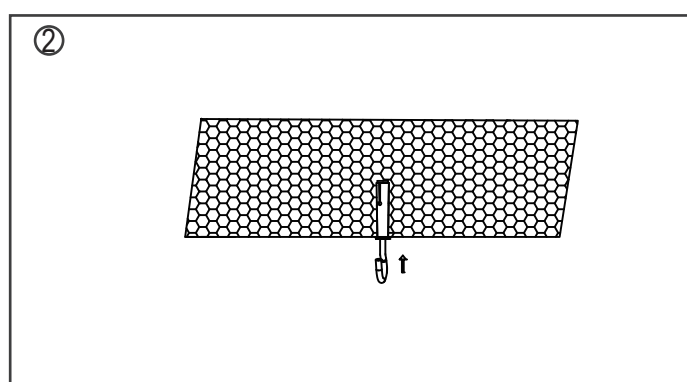
- Carefully read and follow all warnings and instructions before installing or servicing the luminaire.
- The installation should be done by an individual familiar with the construction and operation of the luminaire.
- The installation of this luminaire must be in accordance with national and local building and electrical codes.
- The product must not be damaged or operated in a damaged condition.
- This luminaire must be directly wired on line. Any ballast or other power device previously used with the replaced luminaire must be removed.
- Between the luminaire and any possibly flammable material must be an appropriate safety space (at least 20cm).
- The luminaire must not be covered with heat insulating materials.
- Always provide proper ventilation around the luminaire and do not exceed the maximum ambient temperature.
- Compared to traditional lights the characteristic light distribution of this LED luminaire may differ. In order to be sure to meet your lighting requirements a photometric check of the installation is recommended.

Installation Instructions for single use

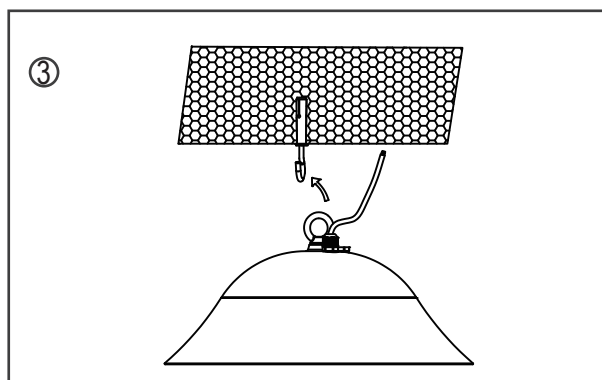
- Drill a hole at the position where you want to install the fixture
- Screw the installation hook into the hole
- Hang the fixture on the hook directly or by using a suspension chain
- Connect the cable to the power line



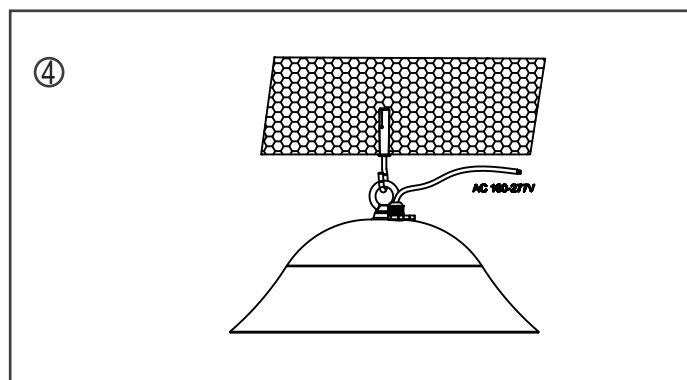
Drill a hole in the ceiling



Screw in the hook



Hang the fixture on the hook



Connect the fixture to the power line

Maintenance

- To avoid injuries, disconnect power to the light and allow the unit to cool down before performing maintenance.
- ⚠ **Warning:** No user serviceable parts inside. Risk of electric shock. Removal of the lens will void the warranty.
- Perform visual, mechanical and electrical inspections on a regular basis. We recommend routine checks to be made on an annual basis. Frequency of use and environment should determine this.
- The lens should be cleaned periodically as needed to ensure continued photometric performance. Clean the lens with a damp, non-abrasive, lint-free cloth. If not sufficient, use mild soap or a liquid cleaner. Do not use an abrasive, strong alkaline or acid cleaner as damage may occur.
- Inspect the cooling surfaces and fins on the luminaire to ensure that they are free of any obstructions or contamination (i.e. excessive dust build-up). Clean with a non-abrasive cloth if needed.

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