

Magicline Module High Bay

Highly energy efficient – up to 130 lm/w

100W/1220W/150W/180W/200W/240W/300W/400W/600W

Features

Highly energy efficient – up to 130 lm/w

High Luminous flux – up to 78000 lm

Available up to 600W

Installation heights up to 30 meters!

D-Mark tested for the use in paper production, wood processing etc.

5 Years warranty

Options

Various beam angle options: 30° ,60° ,90° ,30°x70° ,60°x90° ,40°x130°

Optional Mean well driver available

1–10V dimmable and DALI available

Microwave motion sensor available

Optional emergency power supply

Zigbee is available

End-caps available in blue and grey

Area of application

Factories and warehouses

Loading areas and freight yards

Exhibition- & showrooms

Certificates

American market: **UL**, **DLC Premium**, **cUL**

European market: **TUV**, **GS**, **CB**, **CE** (EMC, LVD, RoHS), **D-Mark**

Australian market: **SAA**, **C-Tick**, **RCM**



The T31B Magicline is a modern and energy efficient fixture designed for high rack warehouses and storage areas with narrow aisles. Several beam angle choices allow you to find a fitting solution for any situation. With a narrow beam angle like 30° or 30°x70° you can install the fixture in up to 35–40m height, while a wider 40°x130° lens would give you an optimal light distribution for long and narrow aisles.

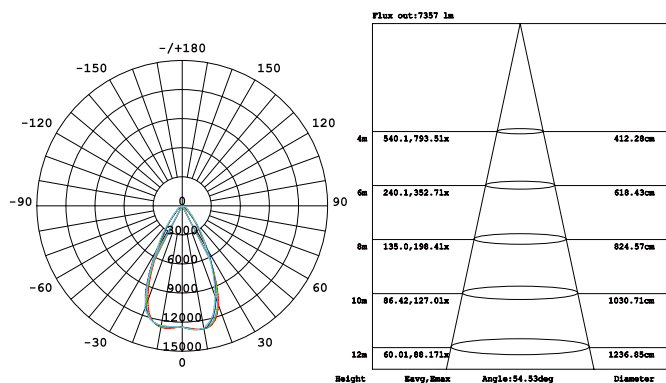


With a power range from 100W up to 600W and an efficiency of around 130lm/w, this fixture can maximize your governmental rebates and minimize your customer's power consumption. The robust and durable aluminum housing assures excellent heat distribution. Thanks to an ingress rating of IP 65 it is suitable for indoor and outdoor use under all conditions. Suspended or surface mounted it will provide a perfectly homogenous light distribution and therefore more safety in warehouse.

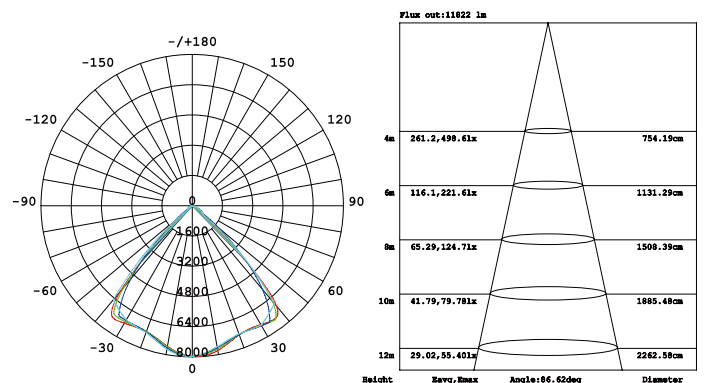


Light Distribution Curve and Average E (LX) Figure---5000K

600W/60°



600W/90°

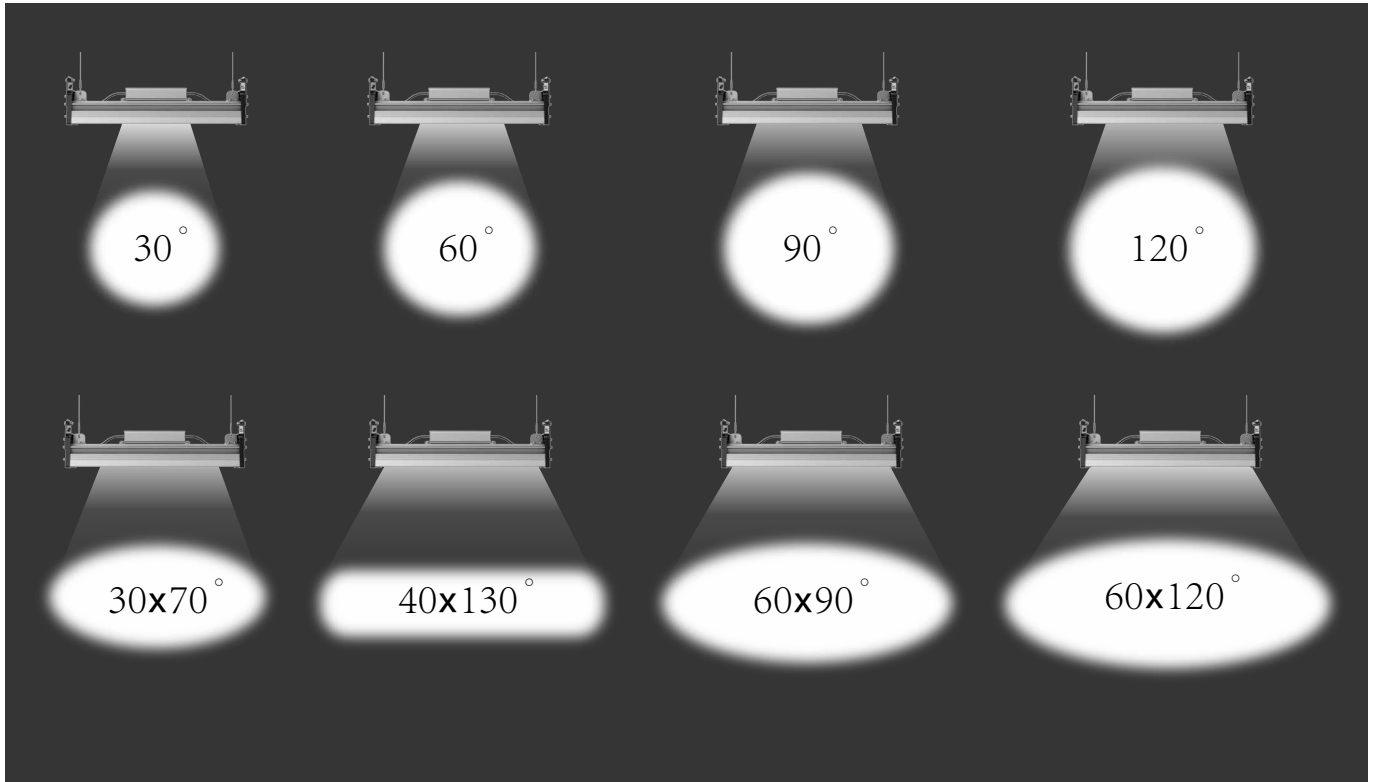


Beam Angles

The illustration below shows the different light distributions for our beam angle options. The symmetric beam angles are ideal for wide and open areas such as production halls or storage areas with lower racks. The light gets distributed very evenly across a circular area below the fixture.

For warehouses with high racks the asymmetric beam angles are the better choice. The emitted light is precisely spread out along the aisles without wasting it on top of the racks.

With currently 8 different beam angle options a fitting solution for every area of application can be easily found.



Simulation Reference

To better show you how the beam angles choice can influence the light distribution, we made a Dialux simulation to demonstrate the differences.

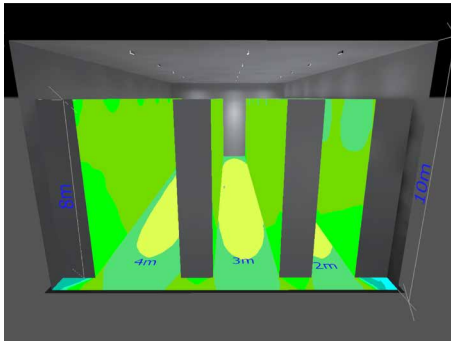
Below you find 3 similar scenarios of a warehouse with 10m ceiling height and 8m high racks. The aisles between the racks are 4m, 3m and 2m wide.

It becomes obvious that the 30x70° lens beams down the most light. For high ceilings and/or narrow aisles this is your best bet.

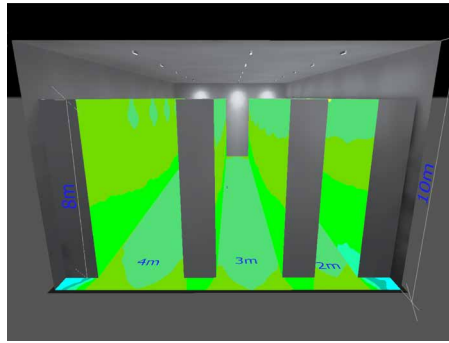
The 40x130° lens shows excellent results for midrange ceiling heights and long aisles. It will allow for near perfect light distribution in most warehouse types.

The 60x90° lens turn out to be a very good choice for wider aisles and midrange ceiling heights.

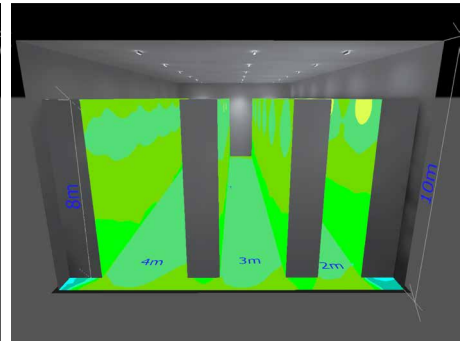
T31B-100W 30x70°



T31B-100W 40x130°



T31B-100W 60x90°



Basic Specifications

Standard lumen (lm) (130lm/W)

Model	Nominal Wattages (W)	Nominal Voltage	Rated luminous efficacy (lm/w)	Nominal luminous flux (lumen)	Beam Angle	LED Quantity	CRI
T31B-100W	100	AC100~277V 50~60Hz	130±5	13000±500	30°/60°/90°/ 30°70°/60°90°/ 40°130°	112pcsSMD3030	>70Ra
T31B-120W	120		130±5	15000±600		112pcsSMD3030	
T31B-150W	150		130±5	19500±750		168pcsSMD3030	
T31B-180W	180		130±5	23400±900		168pcsSMD3030	
T31B-200W	200		130±5	26000±1000		224pcsSMD3030	
T31B-240W	240		130±5	31000±1200		224pcsSMD3030	
T31B-300W	300		130±5	39000±1500		336pcsSMD3030	
T31B-400W	400		130±5	52000±2000		448pcsSMD3030	
T31B-600W	600		130±5	78000±3000		672pcsSMD3030	

Electrical Datas

Operating frequency	47-63HZ
Type of current	AC100~277V
Power factor λ	>0.9
Efficiency in %	>92%
Start time (0.2s / 0.5s / ...)	0.1S
Warm-up time to 60% (1.5s / 2s / ...)	0.5S

Photometrical Datas

Available light colors	Warm white; Natural white; daylight white
Available color temperatures	3000K;4000K;5000K;6000K
Color rendering index Ra	>70
Standard deviation of color matching	<3
UGR (Unified Glare Rating)	<27
Available beam angles	30°/60°/90°/30°70°/40°*130°

Standards & Certification

Type of protection	Ip65
Tested dielectric strength	3.75KVvac
Safety features features	Open circuit protection; Short circuit protection; Overvoltage protection
Certificates	American market: UL, DLC Premium, dJL European market: TUV, GS, CB, CE, D-Mark Australian market: SAA, Ctick, RCM
Energy efficiency class	A++

Temperatures & operating conditions

Heatsink temperature	-20~+68 °C
Ambient temperature	-30~+50 °C
Storage temperature	-40~+80 °C

Features/Capabilities and additional product data

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.	70%		
LED Device Lifetime	L80/B10		

Packing Information

Model	Dimension	CTN SIZE(CM)	QTY/CTN	Net Weight/pcs(kg)	Gross Weight /CTN(kg)
T31B-100W/120W	600*130*130	65*31*18	2PCS	4	9.6
T31B-150W/180W	890*130*130	94*31*18	2PCS	5.5	12.8
T31B-200W/240W	1180*130*130	123*31*18	2PCS	7	16.5
T31B-300W	890*130*130	94*31*18	1PCS	11.3	13.5
T31B-400W	1180*270*135	123*31*18	1PCS	14.3	16.8
T31B-600W	1180*405*135	123*45*18	1PCS	21.8	24.8

Exploded Drawing

The external driver is mounted on spacers to prevent an unnecessary heat transfer to the driver providing a longer lifespan

Reliable and stable mounting system for a safe and easy installation. The stainless steel hanging rope accessories (30KG weight capacity) are corrosion and aging resistant

The massive aluminum body provides excellent cooling abilities and assures a long lifespan

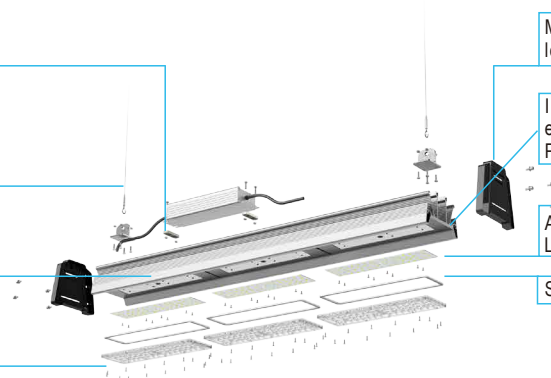
High grade lenses for various beams angles

Modern and stable end-caps provide a stylish look and enhance overall stability

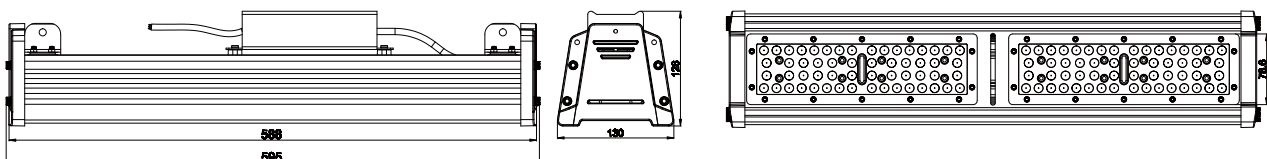
Industrial grade cooling paste provides an excellent heat transition from the aluminum LED PCB to the housing

Aluminum PCB boards containing the SMD2835 LED chips

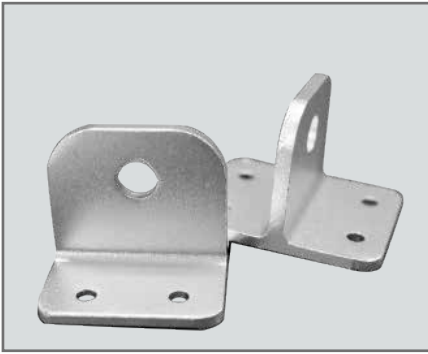
Silicone seal completely surrounding the PCB



Dimension (mm)



Included accessories



These corrosion and aging resistant brackets are included. The position can be adjusted by loosening the screws.



These stainless steel hanging ropes are also included. Its weight capacity is 30Kg.

Optional accessories



This linear High bay series is available with 1-10V dimmable drivers from FYT or from Meanwell. Upon request we can also provide DALI compatible drivers.



The Optional Merrytek microwave motion sensor has a detection range of around 15m and an IP grade of IP65. Pricing upon request.



We can provide emergency-power-supplies for up to 180 minutes emergency-lighting-time for this product. Technical details and pricing upon request.



We can provide Zigbee controller & receiver for this product. Technical details and pricing upon request.



These optional brackets allow for wall or ceiling installation where the installation angle needs to be adjusted.



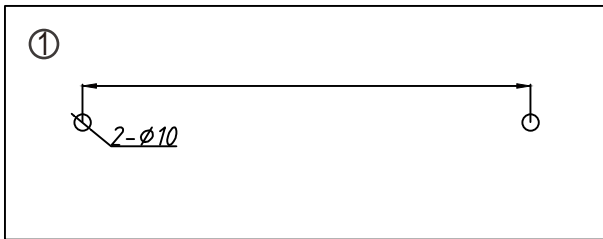
The standard end-caps color is grey. Upon request we can also provide end-caps in a nice shade of blue

Application and safety notes

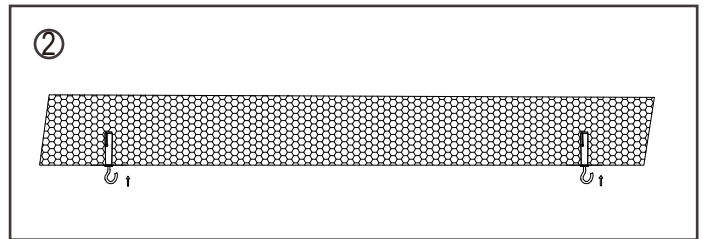
- Carefully read and follow all warnings and instructions before installing or servicing the luminaire.
- The installation should be done by an individual familiar with the construction and operation of the luminaire.
- The installation of this luminaire must be in accordance with national and local 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 suspended use

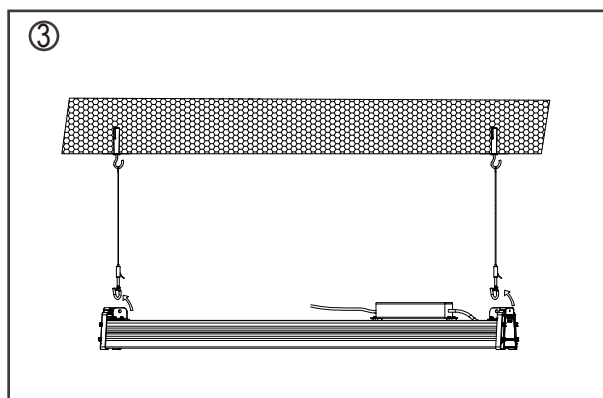
- The modification must be done by qualified personal
- Before you start make sure that the supply voltage is disconnected so you can work safely
- Drill two 10mm holes in the ceiling at the position you want the light to be installed and put in the screws
- Place the hanging ropes on the clivers of the expansion screws and adjust the ropes to the suitable length
- Hang the luminaire on the hooks of the ropes make sure the safety clip is completely closed
- Connect the driver to the power line.



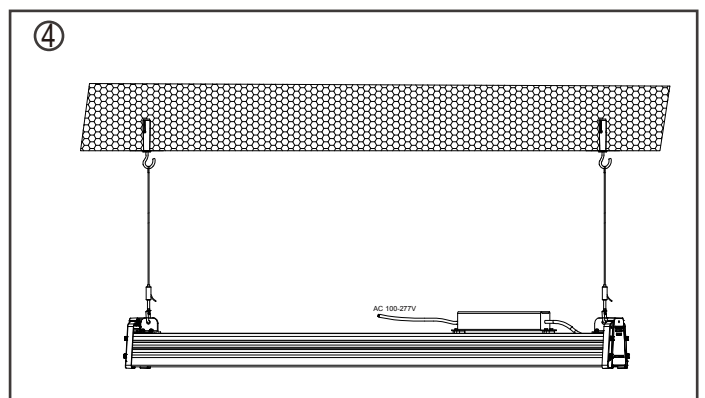
Adjust the spacing between the holes according to your installation situation



Fix the expansions screws in the wholes you prepared



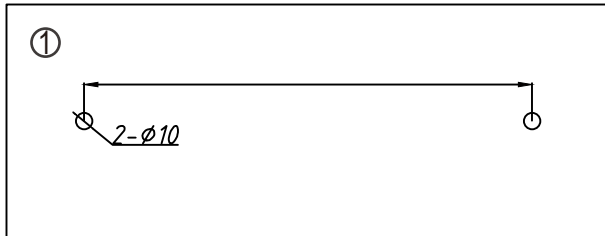
Connect the fixture to the rope and make sure the safety clip is closed



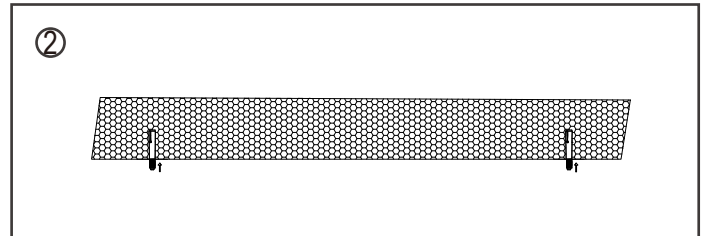
L – Brown N – Neutral PE – Green-Yellow

Installation Instructions for Surface mounting

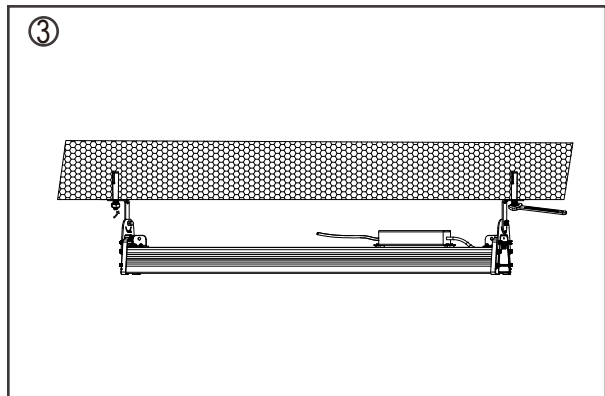
- The modification must be done by qualified personal
- Before you start make sure that the supply voltage is disconnected so you can work safely
- Drill two 10mm holes in the ceiling at the position you want the light to be installed and put in the screws
- Hang the luminaire on the clivers of the expansion screws
- Connect the driver to the power line.



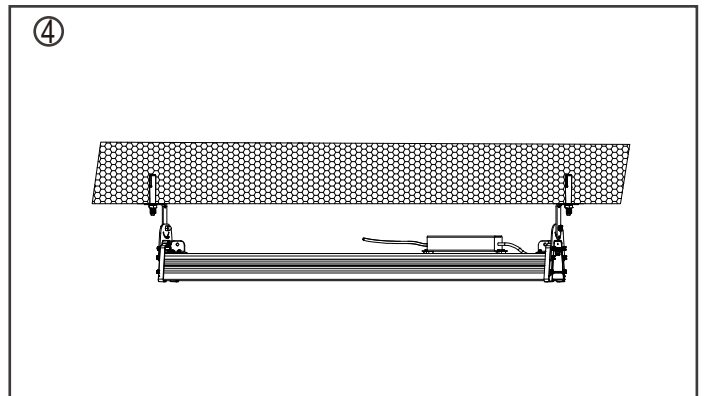
Adjust the spacing between the holes according to your installation situation



Fix the bolts in the wholes you prepared



Screw the fixture to the ceiling



L – Brown N – Neutral PE – Green-Yellow

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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