



PRODUCTS

SUSTAINABLE | LIGHTING | SOLUTIONS

HEAVY DUTY & INDUSTRIAL LIGHTING



MEET THE LIGHTS THAT DRIVE OUR
SUSTAINABLE | LIGHTING | SOLUTIONS



THE COMPANY

JEL Products is a European Lighting Company with research and development based in the Netherlands and manufacturing in Shanghai. We combine excellence from these regions to deliver the most cost-effective and innovative high-end luminaires to the international lighting market.

JEL Products her brands were established along with its Dutch lighting industry history. The Woelders family from Holland have been in lighting for two generations now. The family has a deep understanding and commitment to the international lighting industry. Its focus in 2015 was to research and design innovative European quality luminaires and manufacture them in their new world class production facility.

OUR PRODUCTION

DCbright, a brand of JEL Products has production carried out under extremely strict management by its European management team. Every component has been strategically hand selected and tested to maximize the performance and reliability. The most advanced equipment and methods are adopted for the soldering and assembling of the products to ensure stable and reliable quality. Every product has passed burn-in test and thermal test and every detail is strictly checked by our QC before shipping to guarantee that we deliver the best products to our customers.

PRODUCT RANGE

Since 2015, the company has made great strides. The product range has been greatly expanded. We have shifted our focus from mining broadly to industrial in general. With this we currently provide construction cranes, haul trucks, construction sites, ports, asphalt paver machines, storage locations, industrial sites and mine lighting.

With this background, we've started developing DarkSky compliant lighting in 2019. Lamps that are innovative and will last for years. After a period of research and development, Dark Licht was released in 2021. The Dark Licht Series of light fittings were developed to meet the increasing market demand for optimum flexibility and efficiency in glare free cut-off outdoor lighting applications.

DCbright Industrial LED Solutions

World's highest performing industrial LED light solutions for heavy duty industries

DCbright sees quality as a habit. We only work with the highest quality materials, so that the end products meet our high standards. DCbright's standard manufacturing quality starts where most end. Only with our quality and safety standards we can provide you with the best lighting and the highest service. The following quality points are standard on all our products and ensure that the products last longer and can be used in the toughest conditions.

DCbright standard production quality: discover more of DCbright's production quality and all used production methods at www.jelproducts.nl

Reversed polarity protection: DCbright products with polarity protection are protected against accidentally wrong connecting the polarity.

Active polarity protection: see www.jelproducts.nl

Over voltage protection: This is a protection that interrupts the power supply when the occurring voltage exceeds a preset voltage margin.

Transil protection: The light is protected against static voltage discharges on the connection wires.

Thermal management: DCbright uses a system for thermal management that, with the help of a temperature sensor, prevents the maximum permissible temperature to be exceeded.

Dump load transient: A "dump load transient" is a component that can absorb power when the voltage exceeds a preset point.

Active dump load protection: see www.jelproducts.nl

Surge protection: Surge protection protects electronic components against voltage spikes.

Inrush current limiter: An inrush current limiter is a component used to limit the inrush current to prevent gradual damage to components and to prevent fuses or circuit breakers.

Heat transfer PCB: DCbright is focused to use the best for our customers. So we use circuit board with the heat conductance of up to 390wmk.

Short circuit protection: The short-circuit protection switches off the voltage supply if a short-circuit occurs in the lamp.

Flicker free lighting: DCbright uses completely flicker-free lamps! This is achieved by applying a frequency of 1 MHz for example. In addition, a capacitor is used to smooth out wrinkles.

Anti vibration: In order to make the lamps as vibration-resistant as possible, the heavier components are soldered and glued onto the PCB.

EMV - EMC: DCbright lamps have a component that suppresses interference.

Low glare: In order to prevent light pollution or 'glare' (light that falls outside the desired distribution angle), there are "low-glare" variants available for the vast majority of the products that DCbright offers.

DCbright Product Specifications*

IP-rating :	IP69K
Impact rating :	IK10 (PC) - IK09 (glass)
CRI :	> 70
Temperature range :	-30 ~ +50°C (HT up to 120°C)
Lamp body material :	Aluminum alloy (low copper)
Lamp body paint :	Conversion coating & 2 layers titanium based e-coating
Lamp bracket material :	Steel
Lamp bracket paint :	2 layer powder paint
Front cover material :	UV coated PC or High impact glass
Luminaire colour :	Titanium grey / black

*Specifications apply to the following products unless otherwise stated: orca, shark, barracuda, snapper, moray, piranha

Dark Light

GLARE FREE LIGHTING
by DCbright

Patented Glare Free & Highly Efficient Reflector System®

Powerful LED light sources are hidden in the back of the reflector system. Outside the field of view the light source becomes invisible and glare-free. The Dark light faces the ground and pushes light forward, stopping glare.

Safer Lighting on road and industrial sites

The glare from the LED light source can cause temporary blindness or impair the vision of drivers, causing a road safety hazard. In order to prevent dangerous situations DCbright designed the Dark Light series to be Glare-Free.

Eco-Friendly Lighting

Light pollution is an unwanted consequence of outdoor lighting and includes such effects as sky glow, light trespass, and glare. There is no unwanted or offensive light when using Dark Light series.

Cost Saving Lighting

Because Dark Light does not produce light pollution, yet all the available light is precisely where you need it, Dark Light saves up to 30-50% of energy consumption for any project compared to other LED light brands. When compared to a large terminal for instance this can result in saving extra thousands in energy costs.



Save 50% energy with Dark Light



GLARE FREE LIGHTING BY DARK LIGHT

The Dark Light Series of light fittings were developed to meet the increasing market demand for optimum flexibility and efficiency in glare free cut-off flood lighting applications.

The two body types of Dark Light light fittings share the base marine grade high pressure cast aluminum body. The wedge shape aesthetic Dark Light is for Architectural and Commercial projects. Industrial applications use the standard Dark Light model which has slightly higher ambient thermal performance and can have a marine application kit fitted, if required. This dynamic modular transformation is the most economical solution for industrial, commercial, and architectural lighting applications.



Unique Highly Efficient Reflector System®

The Patent innovative high performance reflector design maximizes luminaire efficiency, providing 160 lumen per watt fixture light output.

Unique Adjustable full Cut-Off® from 63° to 75°

Unique patented adjustable forward asymmetric light distribution from 63° to 75°. Adjustments of the forward beam can be made by the installation contractor, before installation to meet the requirements of the lighting application.

Unique Modular Rotating Reflectors®

The square unique parabolic internal high performance reflector modules in the fitting can rotate in both directions by 90° to completely alter the light distribution of the fitting.

Unique Glare Free Optic®

The powerful LED light sources are concealed inside the patented highly efficient deep parabolic reflector system. Outside the full cut-off there is no light visible.

HIGHLY EFFICIENT REFLECTOR SYSTEM[®]

The Dark Light Series uses the highest quality LED's, reflector material, electronics, and glass available worldwide. This patented break-through technology produces 160 fixture lumen per watt.

The patented unique optical / reflector system controls the light so precisely there is no light lost outside of the area of illumination. This increases the efficiency of the fitting and in many cases a lower wattage Dark Light fitting can be used in an application.

The use of a flat glass lens seals the fitting providing a static free optical system. The much lower dust and dirt build up on the glass lens greatly improves light output of the fitting over the life of the product.

63° TO 75° ADJUSTABLE LIGHT CUT-OFF[®]

The Dark Light series has an adjustable 5 step forward throw reflector system. This simultaneously adjusts the light cut-off. The Dark Light light sources are not visible outside the cut-off for both forward and side light distribution. There is no light emitted past the cut-off.

At the maximum forward throw setting of 54°, the full cut-off is 75°. The low brightness of the fitting and light cut-off is so precise past 75° that the fitting can be tilted if required a further 15° and there will be no light above 90° horizontal.



THE DARK LIGHT IS ABLE TO ADJUST
IT'S CUT-OFF BASED ON THE PROJECT

DARK LIGHT SPECIFICATIONS

Brand	Dark Light
Limited warranty	5 Years

ELECTRICAL

Voltage range	180-528Vac / 250-740Vdc
Voltage range (320W, D200)	90-305Vac / 127-420Vdc
Frequency	50 / 60 Hz
Power factor	> 0.95

PERFORMANCE

Fixture lumen efficiency	160 lm/W
Dimming input	0 - 10V
Temperature control	Yes
Light distribution	Asymmetrical - adjustable cut-off
Light adjustment range	63° - 75° Full cut-off
CRI	Standard: >70 Optional: >80, >90
LED chip binning	3 Step MacAdam Ellipse LED's
Light color:	Standard: 5000k Optional: 2200k, 2700k, 4000k
Operation temp range	-40°C - +50°C
Waterproof rating	Standard = IP67 DL-S60 = IP69K
Impact rating	IK07 (IK08 on request)
Wireless control system	Available

MATERIALS

Lamp body	Aluminum alloy (low copper)
Lamp body finish	13 stage pretreatment + dual layers titanium based e-coating (Grey)
Mounting arm	High tensile steel
Mounting arm finish	Zinc plated + dual layers titanium based e-coating (Grey)
Hardware	Aluminium



UNIQUE GLARE-FREE OPTIC®

LED light sources are hidden in the back of the reflector system. Inside the field of view the actual light source is hidden back inside the parabolic reflector system. Outside the field of view the light source becomes invisible. This single feature provides lighting designers with confidence to install the Dark Light and know the light fitting will not be visible by neighboring properties near the lighting installation. This means there will be no complaints that the lights and LED light sources are visible from the general public.

DARK LIGHT CRANE BRACKET

The Dark Light Construction Crane Bracket is a versatile lighting solution that easily mounts on a crane beam. The bracket securely holds the luminaire and power supply, stackable on a euro pallet with 2 rows and 4 high capacity. Brackets slide and lock together, minimizing shipping costs. Designed for construction site toughness, the luminaire folds out for ample illumination. Its protective enclosure ensures durability in harsh weather. The LED luminaire on the crane bracket is an excellent lighting solution, offering transport ease, durability, and flexibility—a smart investment for construction companies improving work site lighting.

Crane bracket luminaire + driver

Material	5 mm, hot dip galvanized steel
Model	DL-CCB-600
Luminaire type	DL1-AC-600W-96
Driver type	DR1-AC-600W-BOX
Bracket + lamp weight	45.4 kg
Lamp tilt-drop settings	0° - 10° - 20° - 90°
Europallet transport	2 rows - 4 high - locked
Warranty	3 years



CRANE DISTRIBUTION SET

The Dark Light Crane Bracket is available as a set comprising 4 light brackets and 1 distribution bracket. It comes with 60 meters of cable. This set is perfect for stacking on a Euro pallet, making it an ideal solution.

Crane bracket luminaire + driver

4x Crane bracket luminaire + driver
1x Crane Bracket distribution box
1x 60 meter 5x2.5mm neoprene cable



DARK LIGHT ONE



DARK LIGHT TWO



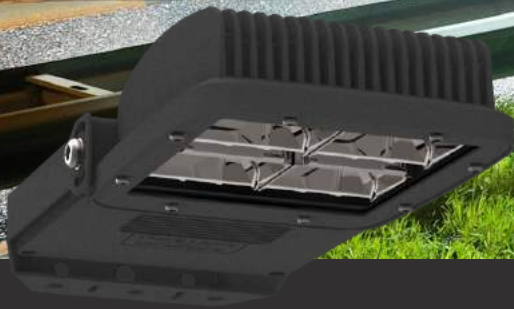
DARK LIGHT THREE

Model:	Power:	Lumen output:	Life Span	Lamp Weight	Lamp Dimensions	Driver / Voltage
DL1-AC-320W-51	320W	51.000 lm	82.241 hrs - L80B10	14.9 kg	365 x 550 x 160 mm	Internal
DL1-AC-400W-64	400W	64.000 lm	196.013 hrs - L80B10	15.0 kg	365 x 550 x 160 mm	Remote - Back
DL1-AC-600W-96	600W	96.000 lm	196.030 hrs - L80B10	14.0 kg	365 x 550 x 160 mm	Remote - Back
DL1-DC-600W-90	600W	90.000 lm	196.030 hrs - L80B10	14.0 kg	365 x 550 x 160 mm	24V (20-32V)
DL2-AC-800W-128	800W	128.000 lm	196.013 hrs - L80B10	24.5 kg	635 x 550 x 160 mm	Remote - Back
DL2-AC-1200W-192	1200W	192.000 lm	196.030 hrs - L80B10	25.4 kg	635 x 550 x 160 mm	Remote - Back
DL3-AC-1800W-288	1800W	288.000 lm	196.030 hrs - L80B10	33.5 kg	905 x 550 x 160 mm	Remote - Back

100% GLARE FREE



THE DARK LIGHT LED SOURCE IS ONLY VISIBLE FROM THE ILLUMINATED AREA.



DARK LICHT D200

Model:	Power:	Lumen output:	Life Span	Lamp Weight	Lamp Dimensions	Driver / Voltage
DL-S60-DC-60W-10	60W	9.600 lm	196.030 hrs - LM80	2.3 kg	260 x 200 x 130 mm	24V (20-32V)
DL-S60-DC-60W-10	60W	9.600 lm	196.030 hrs - LM80	2.3 kg	260 x 200 x 130 mm	12-24V (10-32V)
DL-S60-DC-75W-12	75W	12.000 lm	196.030 hrs - LM80	2.3 kg	260 x 200 x 130 mm	24V (20-32V)
DL-S60-AC-75W-12	75W	12.000 lm	196.030 hrs - LM80	2.3 kg*	260 x 200 x 130 mm*	Remote
DL-D200-AC-200W-32	200W	32.000 lm	82.241 hrs - LM80	8.5 kg	540 x 270 x 110 mm	Internal
DL-D120-AC-120W-19	120W	19.200 lm	82.241 hrs - LM80	7.1 kg	440 x 270 x 110 mm	Internal
DL-D60-AC-60W-10	60W	9.600 lm	82.241 hrs - LM80	6.9 kg	440 x 270 x 110 mm	Internal

*Exclusive driver weight & dimensions

PROVIDING A BEACON OF LIGHT
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NOTES



INTERNATIONAL SALES INQUIRIES

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Dark Licht

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