

# *LIGHTING SOLUTIONS*

**PRODUCT  
CATALOGUE**



## WHO WE ARE

Since 2012, residents and businesses across South Africa have benefitted from Ramika Projects' high-quality lighting products. It has been established that crime is reduced, productivity is enhanced, and people feel safer, in well-lit areas.

Ramika Projects plays an important role in the development and upliftment of previously underserved areas by helping to improve the infrastructure in such areas. The provision of high-quality luminaires aids the development of local infrastructure.

The company's range of lighting expertise covers commercial and industrial applications, underground lighting, and luminaires for use in hazardous environments. For this reason, the company supplies luminaires to municipalities, mines, oil refineries and hospitals.

The company's custom-designed and locally manufactured luminaires offer energy-saving and long operational life. These characteristics are particularly important considerations in modern electrical installations since the equipment must offer optimum performance at lowest cost for as long as possible. Local

design and manufacture ensure maximum flexibility, enabling the company to offer its clients custom-made products to match their precise requirements.

To ensure the best possible illumination in any application, Ramika Projects offers lighting audits to help its clients determine whether sufficient light is available. This has a significant impact on productivity because insufficient lighting can lead to accidents and poor workmanship. To achieve the best results, the company's expert design team uses the latest lighting design software under the watchful eye of a professional lighting practitioner who has been accredited by the Illumination Engineering Society of South Africa (IESSA).

Ramika Projects is a Level 2 broad-based black empowered enterprise with a 51% black women ownership. The company is partnered with Nordland Lighting, which holds a 49% shareholding, and has more than 50 years' experience in the lighting industry.

For more information, contact Ramika Projects, Tel 010 443-9149, [sales@ramika.co.za](mailto:sales@ramika.co.za), [www.ramika.co.za](http://www.ramika.co.za)





**AREA ZONING** – We set ourselves apart from our competitors by offering our Customer's area zoning to ensure the correct lighting is used in the right area. It is imperative to distinguish between different zones and the different lighting requirements to maintain ISO and OHS accreditations.



**CUSTOM SOLUTIONS** – We understand that not all our Customers are the same and we want to ensure that each one of our Customer's individual requirements are met by offering them custom lighting solutions in conjunction with our sales and technical team.



**LIGHTING AUDITS** – It is in our Customer's best interest to identify if there are a sufficient number of lights as per the required standards per square meter and the amount of Luminaires being utilised for that specific area and make recommendations thereof. We also assist our Customer's with the option to reduce their total output to ensure a more cost-effective solution.



**LIGHTING DESIGNS** – With more than 50 years' experience in the lighting industry Ramika Projects also offers lighting design for both industrial and commercial projects, both new and old, as per the specifications to ensure the lighting is both aesthetically pleasing and ISO and OHS accredited.



**PRODUCT DEVELOPMENT** – Ramika Projects is equipped with an in-house R&D test laboratory where we continuously review international trends and test new and innovative ideas to continually be at the forefront of lighting design and quality performance.



**LOCALLY MANUFACTURED** – We don't only supply world-class lighting products and services, but we also proudly manufacture our products locally in South Africa, in the heart of Muldersdrift with a staff compliment of 90 employees.



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The background image shows a dimly lit underground tunnel under construction. A large, rough rock pillar stands in the center-left foreground. In the background, a tunnel opening is visible, with a small structure and some equipment inside. The walls of the tunnel are uneven and rocky.

# **UNDERGROUND SOLUTIONS**



### Ex ia Zone 0

The **Ex ia Zone 0** Area Light is a specialised Intrinsically safe Hazardous area luminaire for use in Zone 0 applications underground at the rock face. It consists of three 3W LED lamps with special optics for area distribution. It is designed to be hung on roof bolts spaced according to the installation manual. The Ex ia Zone 0 Area Light continues the proud heritage of NORDLAND LIGHTING's quality standards.

**Application:** Zone 0 Ex ia Areas

**Ex-mark:** Ex ia I/IIC T4

**Body:** Manufactured from injection moulded Polycarbonate and housed in a powder coated Mild steel cage.

**Optic:** LED's are diffused and spread with special optics for area lighting.

**Lamps:** Consists of three 3W LED lamps.

**Control Gear:** Electronic control gear running from Battery power to supply the LED's with power constantly for 30 hours on a full charge.

**Charging:** Charges from a standard Cap Lamp charger.

**Mounting:** The cage houses a permanent hook for hanging the luminaire on roof bolts. The installation is done by elevating the light with a charge stick to the mounting point.

**Ingress Protection Rating:** IP68



### EzeSafe - Ex d

The **EzeSafe - Ex d** luminaire is certified for Zone 1 & 2 hazardous areas and designed to provide superb light distribution with its specially placed array of LED's and clear polycarbonate lens. The robust water and dust proof design makes the luminaire suitable for underground and surface areas. The luminaire can be supplied pre-wired on Steel Wire Armoured (SWA) cable in various spacings and cable lengths to suit any customers need. The EzeSafe - Ex d continues the proud heritage of NORDLAND LIGHTING's quality standards.

**Applications:** Zone 1 & 2 hazardous areas. Haulage, Walkway, Conveyor, Substation, Wash Bay & Underground roadway Lighting

**Housing:** Body manufactured from polycarbonate with a UV stabilized smooth clear flame retardant polycarbonate lens. The clear lens allows for maximum 360° light output.

**Gasket:** The rubber gasket between the lens and body provides a IP66 seal.

**Steel Cage:** Available separately on request.

**Lamps:** Available in T8 fluorescent lamps, PL compact fluorescent lamps, T8 LED tubes and a 22W LED option.

**Control Gear:**

**LED:** 12VDC, 24VDC, 30VAC - 36VAC, 100VAC/250VAC, 50/60Hz

**Mounting:** The installation is done via a power connection box.

**Rated Lifetime:** LED Rated 50 000 Hr.



### Ezelite

The **Ezelite** luminaire has a robust water and dust proof design which makes it suitable for use in underground and surface areas. It provides excellent 360° light output through the clear UV stabilized polycarbonate lens. The luminaire can be supplied with a lead and 5 amp plug in various lengths to suit any customers need. The Ezelite continues the proud heritage of NORDLAND LIGHTING's quality standards.

**Applications:** Haulage, Walkway, Conveyor, Substation, Wash Bay & Underground roadway Lighting.

**Housing:** Body manufactured from polycarbonate with a UV stabilized smooth clear polycarbonate lens. The clear lens allows for maximum 360° light output.

**Gasket:** The rubber gasket between the lens and body provides a IP66 seal.

**Lamps:** Available in T8 fluorescent lamps, PL compact

fluorescent lamps and T8 LED tubes.

**Control Gear:**

**Fluorescent and Energy Savers:** 12V DC, 24V DC, 24V AC, 32V AC, 110V-220V AC, 50/60Hz

**LED:** 110V DC, 90V-220V AC, 50/60Hz

**Connection:** Connect using slide plate junction box, 5 amp plug or direct into other junction



### MiniLite - LED Double

The **MiniLite - LED Double** continues the proud heritage of NORDLAND LIGHTING's Ex safety standards whilst utilizing the latest technology.

The **MiniLite - LED Double** water and dust proof luminaire, consists of a polycarbonate body with UV stabilized polycarbonate lenses and is attached to the main body, allowing maximum light output.

Available in double 12W GU10 LED corn globes.

Rubber gaskets are fitted between the lenses and main body to ensure the IP66 protection rating.

Voltage Rating from 110V to 220V AC.

The installation is done via a power connection box and is suitable for all non-hazardous underground and surface areas.

Applications include Lighting for Haulage, Walkway, Conveyor Belts, Sub Stations and Wash Bay areas.

The luminaire can be prewired to any configuration, to suite any specific area.





### MiniLite - LED

**PLEASE NOTE:** To ensure a proper connection, make sure the feeler lines are aligned.

The **MiniLite – LED** luminaire is designed to provide superb light distribution with its specially placed array of LED's and clear polycarbonate lens. The robust water and dust proof design makes the luminaire suitable for underground and surface areas. It has built-in Anti-Theft electronics that ensures the MiniLite – LED will only function while connected to a paired power connection box. The MiniLite - LED can be supplied pre-wired on Steel Wire Armoured (SWA) cable in various spacings and cable lengths to suit any customers need.

**Applications:** Haulage, Walkway, Conveyor, Substation & Wash Bay Lighting

**Housing:** Body manufactured from polycarbonate with a UV stabilized smooth clear polycarbonate lens, fitted into the body. The body is fitted with 6 steel screws which hold the lens in position.

**Gasket:** The rubber gasket between the lens and body provides a IP65 seal.

**Control Gear:** Constant Current LED driver 12VDC, 24VDC,

30VAC - 36VAC & 100V/240VAC, 50/60Hz

**Mounting:** The MiniLite installation is done via a power connection box.

**Anti-Theft:** The MiniLite is fitted with electronics that pair with a power connection box. This ensures that the MiniLite will only function while connected to said power box.

**Emergency mode:** Emergency option available on request.

**Rated Lifetime:** 50 000 Hr.



### Minilite - Charge

The **Minilite - Charge** is a specialised rechargeable luminaire for use in areas where portable light is needed for extended periods. It consists of a 3.8W LED lamp for area distribution in dark unpowered areas. It is suitable for mounting or hanging using the hook supplied. It's fast recharge time (12 hours to charge to full) will provide the Minilite-Charge with enough power to run uninterrupted for 10 hours.

**Application:** Unpowered areas where light is needed for long periods of time

**Housing:** Body manufactured from polycarbonate with a UV stabilized smooth clear polycarbonate lens, fitted into the body. The body is fitted with 6 steel screws which hold the lens in position.

**Gasket:** The rubber gasket between the lens and body provides a IP65 seal.

**Optic:** LEDs are spaced in an array and spread for area lighting

(180°).

**Control Gear:** Electronic control gear running from Battery power to supply the LEDs with power constantly for up to 10 hours on a full charge.

**Mounting:** The body houses a permanent hook for hanging the luminaire.

The **Minilite - Charge** continues the proud heritage of NORDLAND LIGHTING's safety standards whilst utilizing the latest technology.



### MiniLite - LED Handheld

The **MiniLite – LED Handheld** luminaire is designed to provide superb light distribution with its specially placed array of LED's and clear polycarbonate lens. The robust water and dust proof design makes the luminaire suitable for underground and surface areas. The MiniLite - LED Handheld is supplied with a 1.5m Cabtyre as standard.

**Applications:** Areas where there is no permanent lighting installation.

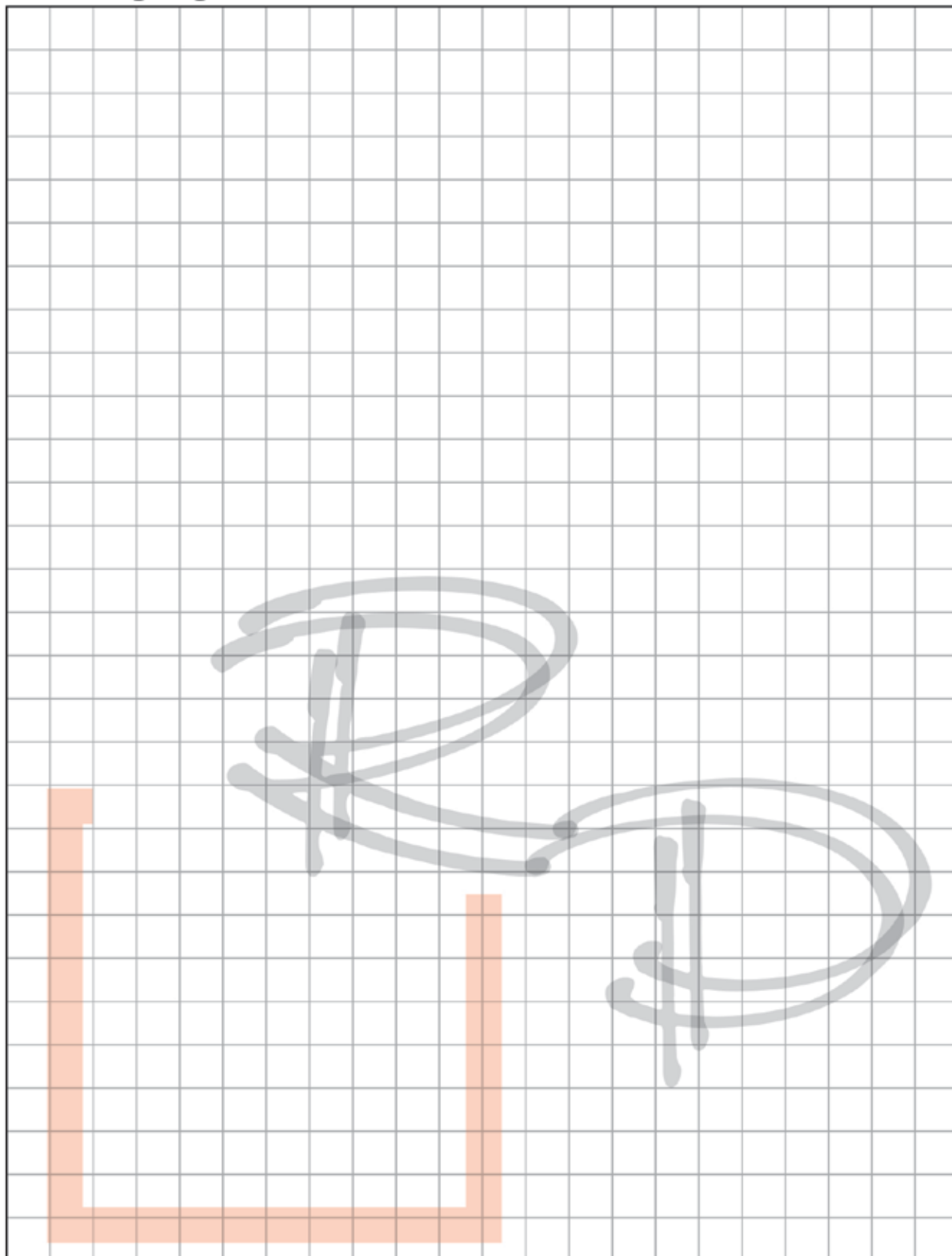
**Housing:** Body manufactured from polycarbonate with a UV stabilized smooth clear polycarbonate lens, fitted into the body. The body is fitted with 6 steel screws which hold the lens in position.

**Gasket:** The rubber gasket between the lens and body provides a IP65 seal.

**Control Gear:** Constant Current LED driver 240VAC, 50/60Hz

**Rated Lifetime:** 50 000 Hr.

**Connection:** The MiniLite will be supplied with a 1.5m Cabtyre as standard. Other Lengths will be available on request.



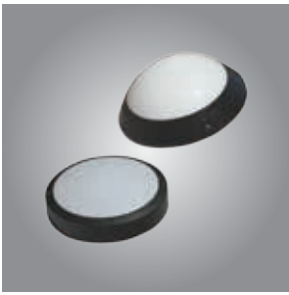




# **INDUSTRIAL/ COMMERCIAL LIGHTING**



## BULKHEAD



### NBR Bulkhead

The **NBRF Bulkhead** with flat diffuser and **NBRD Bulkhead** with dome diffuser are architecturally designed bulkheads for use with compact fluorescent lamps and LED modules. The clean modular design of these vandal resistant bulkheads makes them ideal features to form interesting architectural lighting design elements along walkways, facades and stairs.

**Applications:** Retail Lighting, Commercial and Housing Developments, Public Lighting, Indoor and Outdoor Applications

**Body Housing:** Manufactured from LM6 die cast aluminium base and trim ring. Finished in black or white epoxy powder coated.

**Diffuser:** Injection-moulded, one-piece non-discolouring high impact and thermal resistance UV stabilized with high impact acrylic diffuser smooth interior and exterior opal visor, to SABS specifications.

**Gasket:** Captive silicone gasket provides seal for outdoor use. Ideal for wet or dust locations.

**Lamp holder:** Only G24-d compact type fluorescent lamps are suitable.

**Control Gear:** 230 V/50 Hz magnetic switch start ballast or

electronic control gear and capacitors are used with 2 terminal blocks suitable for 4 mm

**Lamps:** The bulkhead can be supplied with 18W or 26W compact fluorescent lamps as well as with 15W or 24W LED modules.

**Screws:** Captive stainless-steel screws operate through the diffuser flange for easy location.

**Conduit entry:** 20mm entry is provided at the back of the bulkhead.

**Emergency Mode:** Emergency backup available on request.

**Ingress Protection:** IP65

**Photometric Data:** Photometric files available on request.

**Warranty:** 1 Year



### NBV Bulkhead

The **NBV Bulkhead** is manufactured from die-cast aluminium and is a stylish, economical and energy efficient compact fluorescent or LED luminaire. Robust design suitable for industrial and/or public buildings. Ceiling or wall mounted and suitable for indoor and outdoor applications. Can also be used as an Emergency EXIT sign. The NBV Bulkhead continues the proud heritage of NORDLAND LIGHTING's quality standards.

**Applications:** Subway Lighting, Stairways Lighting, Corridor Lighting, Landings, Ramps, Public Buildings.

**Body Housing:** Manufactured from LM6 die cast aluminium. Finished in white epoxy powder coated.

**Diffuser:** One piece injection-moulded from clear impact and thermal resistance UV stabilized polycarbonate with internal prisms and smooth exterior.

**Gasket:** Captive silicone gasket provides seal for outdoor use. Ideal for wet or dust locations.

**Lamp holder:** Only 2G11 type linear compact fluorescent lamps are suitable.

**Control Gear:** 230V electronic control gear and capacitors are used with terminal block suitable for 4mm<sup>2</sup>.

**Lamps:** The bulkhead can be supplied with one 11W or one

18W linear compact fluorescent lamp as well as with an 8W LED strip.

**Screws:** Two captive stainless steel screws operate through the diffuser flange for easy location.

**Conduit entry:** Single compression gland.

**Emergency Mode:** The bulkhead is suited for use as a self-contained LED emergency lighting luminaire. Internal inverter charger and battery pack, are mounted on the control gear tray. Maintained and non-maintained modes.

**Emergency Duration:** 3 Hours or 6 Hours

**Ingress Protection:** IP55 after installation.

**Photometric Data:** Photometric files available on request.

**Warranty:** 1 Year



### NGB - LED

The **NGB - LED** luminaire range is a high-performance industrial luminaire designed to replace the conventional HID lamps which makes it energy efficient with high performance, low maintenance and longer life span. It's suitable for wall, ceiling, bracket and pole mounting. The NGB - LED continues the proud heritage of NORDLAND LIGHTING's quality standards.

**Applications:** All non-hazardous areas, Industrial sites, Security, Conveyor, Public Buildings and Various Mining areas.

**Housing:** Manufactured from high pressure die cast aluminium, with a heavy duty toughened smooth clear glass refractor, fitted into a die cast aluminium frame.

**Frame:** The frame is fitted with 6 spring stainless steel fingertip latches which hold the frame in position.

**Gasket:** Round silicone sponge gasket retainer within a recess in the cast aluminium base provides a seal for outdoor use.

**Control Gear:** Constant Current LED driver 220V/240V, 50/60Hz

**Screws:** All external screws are made of stainless steel.

**Cable Entry:** Single compression gland for cable diameter 8-11mm.

**Mountings:** The body incorporates many choices of mounting options including: flood, wall, ceiling brackets, angled wall brackets, anti-vibration brackets, pole mounting brackets and angled post top brackets.

**LED:** The bulkhead is designed to operate with various LED wattages.

**Emergency Mode:** Emergency options available on request.

**Rated Lifetime:** 60 000 Hr. (L70/B10)

**Warranty:** 5 Years

**Photometric Data:** Photometric files available on request.



## BULKHEAD CONT.



### NGB - LED Bulkhead

The **NGB LED Bulkhead** luminaire range is a high-performance industrial die-cast aluminium luminaire that has been designed to satisfy a wide range of industrial and architectural applications. It is available in various LED wattages. It is suitable for wall, ceiling, bracket and pole mounting. The NGB LED Bulkhead continues the proud heritage of NORDLAND LIGHTING's quality standards.

**Applications:** All non-hazardous areas, Industrial sites, Security, Conveyor, Public Buildings and Various Mining areas.

**Body:** High pressure die-cast LM 6 aluminium.

**Lens:** Heavy duty toughened smooth clear glass, fitted into a die-cast aluminium frame.

**Frame:** The frame is fitted with 6 spring stainless steel fingertip latches which hold the frame in position. The hinged frame is reversible for easy installation.

**Gasket:** Round silicone sponge gasket retained within a recess in the cast aluminium base to ensure total sealing.

**Control Gear:** Aluminium gear tray houses the constant current LED driver and LED strips.

**Screws:** All external screws are made of stainless steel.

**LED:** The bulkhead is designed to operate with various LED wattages. Optics are available on request to achieve various light distributions.

**Cable Entry:** The bulkhead is supplied with a single compression gland for cable diameter 8-11mm.

**Mounting:** The body incorporates lugs which provides a variety of mounting options such as, Wall / Ceiling Brackets, Anti-vibration mountings, pole mounting brackets and an angled post-top bracket.

**Ambient Temperature Rating:** -10°C - +35°C

**Ingress Protection Grade:** IP65

**Emergency Mode:** Emergency options available on request.

**Features:** The luminaires have a venting element to avoid high humidity and condensation inside the enclosure. The venting element is made from flame retardant polyamide PA6 with high quality breathable and watertight PES membrane to enable high protection grade of >IP65.

**Photometric Data:** Photometric files available on request.

**Warranty:** 5 Year

## CANOPY



### NCL-LED Canopy

The **NCL-LED Canopy** luminaire is aimed to provide superb lighting distribution for various applications. The luminaire can be recessed, surfaced or suspended and can be used indoors as well as outdoors. It has been designed to replace the conventional HID light sources. The luminaire has a modern design, simple and exquisite smooth lines and is energy efficient with high performance, low maintenance and long life span. The NCL-LED Canopy continues the proud heritage of NORDLAND LIGHTING's quality standards.

**Applications:** Canopy Lighting, Vehicle Showrooms, Warehouses Lighting & Conference Hall Lighting.

**Housing:** Manufactured from aluminium alloy, with a heavy-duty toughened smooth clear glass refractor, fitted into the aluminium alloy housing.

**Gasket:** The silicone sponge gasket between the glass and housing provides an IP66 seal for outdoor use.

**Control Gear:** Constant Current LED driver 100V/240V, 50/60Hz

**Mounting:** Recessed, Surface or Suspension mounting.

**Smart Controls:** Motion sensor and Dali Dimmable available on request.

**Rated Lifetime:** 50 000 Hr. (Ta=30°C@L70)

**Warranty:** 5 Years

## FLOOD



### NFL-Eco LED Floodlight

The **NFL-Eco LED Floodlight** luminaire is aimed to provide superb lighting distribution with special designed optic lenses. This luminaire is not only used as a floodlight for sports or area lighting, but also as a perfect luminaire for building façade lighting. The Floodlight is designed to replace the conventional HID light sources and suitable for bracket and pole mounting. Modern design, simple and exquisite smooth lines, energy efficient with high performance, low maintenance and long life span.

**Applications:** High Masts / Parking / Toll Plaza / Recreational Spots / Building Façade

**Housing:** Manufactured from aluminium alloy, with a heavy duty toughened smooth clear glass refractor, fitted into the aluminium alloy housing. The housing is fitted with 6 spring steel latches which hold the glass in position.

**Gasket:** The silicone sponge gasket between the glass and housing provides a IP66 seal for outdoor use.

**Control Gear:** Constant Current LED driver 100V/240V, 50/60Hz

**Mounting:** The body incorporates an aluminium alloy stirrup which allows for various mounting options.

**Beam Angels:** The optic lenses allows for various light distributions such as narrow, medium, wide, as well as asymmetrical and symmetrical.

**Wire Guard:** The wire guard is an additional option that provides extended protection for the glass against vandalism and the outdoor elements.

**Rated Lifetime:** 50 000 Hr. (Ta=30°C@L70))

**Warranty:** 5 Years

## FLOOD CONT.



### NFL-HP LED Floodlight

The **NFL-HP LED Floodlight** luminaire is aimed to provide superb lighting distribution with special designed optic lenses. This luminaire is used as a floodlight for sport stadiums, area lighting etc. The Floodlight is designed to replace the conventional HID light sources and suitable for bracket mounting. Modern design, simple and exquisite smooth lines, energy efficient with high performance, low maintenance and long life span. The NFL-HP LED Floodlight continues the proud heritage of NORDLAND LIGHTING's quality standards.

**Applications:** Sports Stadiums / High Mast Area Lighting / Parking / Toll Plaza / Recreational Sports.

**Housing:** Manufactured from aluminium alloy powder coated black, with a heavy duty toughened IK08 smooth clear glass refractor, and polycarbonate optical lens fitted into the aluminium alloy housing.

**Gasket:** The silicone sponge gasket between the glass and housing provides a IP66 seal for outdoor use.

**Mounting:** The body incorporates an aluminium alloy stirrup, powder coated black.

**Floodlight Rotation / Tilt Angles:** The modules are connected by a rotation axis. Each module have a 70° rotating range, while two or more modules can be rotated by 40°. This remarkable solution engineered for different requirement in outdoor lighting applications.

**Beam Angles:** The optic lenses allows for various light distributions such as narrow, medium and wide.

**Dimmable:** Dali dimmable and Non-dimmable available on request.

**Warranty:** 5 Years



### NFL-HP Modular LED Floodlight

The **NFL-HP Modular LED Floodlight** luminaire is aimed to provide superb lighting distribution with special designed optic lenses. This luminaire is not only used as a floodlight for sports or area lighting, but also as a perfect luminaire for building façade lighting. The Floodlight is designed to replace the conventional HID light sources and suitable for bracket mounting. Modern design, simple and exquisite smooth lines, energy efficient with high performance, low maintenance and long life span. The NFL-HP Modular LED Floodlight continues the proud heritage of NORDLAND LIGHTING's quality standards.

**Applications:** High Masts / Parking / Toll Plaza / Recreational Sports / Building Facade

**Housing:** Manufactured from aluminium alloy powder coated silver, with a heavy duty toughened smooth clear glass refractor, and polycarbonate optical lens fitted into the aluminium alloy housing.

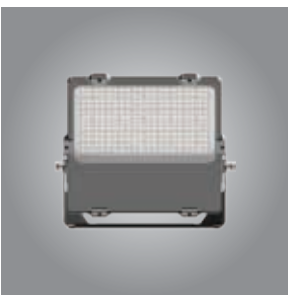
**Gasket:** The silicone sponge gasket between the glass and housing provides a IP65 seal for outdoor use.

**Mounting:** The body incorporates a 180° rotatable aluminium alloy stirrup,

**Beam Angles:** The optic lenses allows for various light distributions such as narrow, medium and wide.

**Dimmable:** Dali dimmable and Non-dimmable available on request.

**Warranty:** 5 Years



### NFL-Mini LED Floodlight

The **NFL-Mini LED Floodlight** luminaire is aimed to provide superb lighting distribution with special designed optic lenses. This luminaire is not only used as a floodlight for recreational sports or area lighting, but also as a perfect luminaire for building façade lighting. The Floodlight is designed to replace the conventional HID light sources and suitable for bracket and pole mounting. Modern design, simple and exquisite smooth lines, energy efficient with high performance, low maintenance and long life span. The NFL-Mini LED continues the proud heritage of NORDLAND LIGHTING's quality standards.

**Applications:** Parking / Toll Plaza / Recreational Sports / Building Facade / Industrial Facilities & Shopping Centers.

**Housing:** Manufactured from aluminium alloy, with either a heavy duty toughened smooth clear glass refractor, or polycarbonate optical lens fitted into the aluminium alloy housing. Powder coated black.

**Gasket:** The silicone sponge gasket between the glass and housing provides a IP66 seal for outdoor use.

**Control Gear:** Constant Current LED driver 100V/240V,

50/60Hz

**Mounting:** The body incorporates an aluminium alloy stirrup which allows for various mounting options.

**Beam Angles:** The optic lenses allows for various light distributions such as narrow, medium, wide, as well as asymmetrical and symmetrical.

**Rated Lifetime:** 50 000 Hr. (Ta=30°C@L70)

**Warranty:** 5 Years



## HIGHBAY



### NHL100 - LED Highbay

The **NHL100 LED Highbay** consist of a die-cast aluminium alloy body and is polyester epoxy powder coated, which makes it ideal for indoor and outdoor applications. This luminaire provides high energy efficiency, excellent illumination, low maintenance and long lifespan. Various mounting options include Hook, Ceiling and Wall mount. The addition of Motion and Daylight sensors allows for even further energy savings especially in areas which are less occupied. Dali dimmable gears are also available on request. The NHL100 LED high bay continues the proud heritage of NORDLAND LIGHTING's quality standards.

**Applications:** Warehouses / Industrial Facilities / Exhibition Centers / Shopping Malls / Indoor Sports / Aircraft Hangers

**Housing:** Manufactured from aluminium alloy, with a heavy duty toughened smooth clear glass refractor as standard fitted into the aluminium alloy housing.

**Optics & Reflectors:** Multiple polycarbonate optic lenses and aluminium reflectors which provides different beam angles available for various applications.

**Gasket:** The silicone sponge gasket between the glass and housing provides a IP65 seal.

**Control Gear:** Constant Current LED driver 100V/240V, 50/60Hz

**Dimming & Sensors:** The addition of Motion and Daylight sensors allows for even further energy savings especially in areas which are less occupied. Dali dimmable gear are also available on request.

**Mounting:** Various mounting options include Hook, Ceiling and Wall mount.

**Rated Lifetime:** 50 000 Hr. (Ta=30°C@L70)

**Warranty:** 5 Years



### NHL200 - LED Highbay

The **NHL200 LED** high bay consists of a die-cast aluminium alloy body and is polyester epoxy powder coated, which makes it ideal for indoor and outdoor applications. This luminaire was specially designed for Food Processing Facilities providing high energy efficiency, excellent illumination, low maintenance and long life span. Dali dimmable gears are also available on request. The NHL200 LED high bay continues the proud heritage of NORDLAND LIGHTING's quality standards.

**Applications:** Food Processing Facilities / Warehouses / Industrial Facilities / Exhibition Centers / Shopping Malls / Indoor Sports / Aircraft Hangers / Supermarkets.

**Housing:** Manufactured from aluminium alloy powder coated grey.

**Lens:** Multiple polycarbonate optic lenses which provides different beam angles available for various applications.

**Gasket:** The silicone sponge gasket between the polycarbonate

lens and housing provides a IP66 seal.

**Control Gear:** Constant Current LED driver 100V/240V, 50/60Hz

**Dimming:** Dali dimmable gears are also available on request.

**Mounting:** Hook mounting.

**Rated Lifetime:** 50 000 Hr. (Ta=30°C@L70)

**Warranty:** 5 Years

## LINEAR



### NSC Open Channel

The **NSC Open Channel** is a high quality stainless steel 304 open channel luminaire suitable for use with T8 fluorescent as well as T8 LED Tubes. Slender and versatile, the stainless steel channel offers resistance to more corrosive elements and offers a Hi-Tech look to the retailing industry. Available in 600mm, 1200mm, 1500mm double lamp versions only. Stainless steel wing available as an optional extra. The NSC Open Channel continues the proud heritage of NORDLAND LIGHTING's quality standards.

**Applications:** All non-hazardous areas, Distribution Centres, Warehouse lighting, Factory lighting, Storage lighting, Parking Garages and Walkways, Retail / Shopping lighting, Coastal areas, subject to higher than normal humidity.

**Body:** The body and control gear cover is formed from Stainless Steel. The control gear cover acts as a reflector.

**Reflector:** Optional Extra: The reflector is formed from stainless steel, and is secured by means of two stainless steel butterfly nuts.

**Control Gear:** Switch start and electronic ballasts available for the 18W, 36W and 58w double lamps.

**Lamp holders:** Twist lock, one end spring-loaded the other fixed.

**Lamp holder End cap:** The lamp holders are clipped into an injection moulded end cap to hold the lamps securely in position. The lamp cap is notched to allow for easy access.

**Cable Entry:** Provision is made for a knockout at either end. The body is punched with a centre rose to match a standard outlet box.

**Mounting:** Two bosses are stamped into the back of the luminaire with a 5mm central hole.

**Emergency Mode:** these luminaires can be fitted with inverter charger and battery backup, to operate in the maintained mode.

**Ingress Protection:** IP20

**Photometric Data:** Photometric files available on request.

**Warranty:** 1 Year

## LINEAR CONT.



### JBF-LS LED

The **JBF-LS LED** linear luminaire range is a high-performance industrial vapour proof DMC, flame retardant glass fibre reinforced polyester luminaire that has been designed to operate with LED strips. It's suitable for wall, ceiling, bracket and pole mounting. The JBF-LS LED continues the proud heritage of NORDLAND LIGHTING's quality standards.

**Applications:** All non-hazardous areas, Industrial sites, Warehouses, Public Buildings, Underground Parking areas and Various Mining areas.

**Body:** Manufactured from DMC, compression moulded flame retardant glass fibre reinforced polyester.

**Clips:** Double acting stainless steel clips.

**Lens:** Injection moulded frosted polycarbonate lens with linear internal prisms.

**Gasket:** Silicone sponge gasket.

**Control Gear:** Aluminium gear tray carries the LED driver and LED strips, and also acts as a reflector. Two cords allow the

gear tray to be suspended from the body during installation and service.

**Cable Entry:** Standard single entry with No.0 Compression gland for cable diameter 6 - 11mm.

**Mounting:** Brass body inserts allows for hook, wall/ceiling brackets or pole clamps to be used.

**Ambient Temperature Rating:** -10°C - +35°C

**Ingress Protection Grade:** IP66

**Emergency Mode:** Emergency options available on request.

**Photometric Data:** Photometric files available on request.

**Warranty:** 5 Year



### JBF-LT LED

The **JBF-LT LED** linear luminaire range is a high-performance industrial vapour proof DMC, flame retardant glass fibre reinforced polyester luminaire that has been designed to operate conventional T8 LED tubes. It's suitable for wall, ceiling, bracket and pole mounting. The JBF-LT LED continues the proud heritage of NORDLAND LIGHTING's quality standards.

**Applications:** All non-hazardous areas, Industrial sites, Warehouses, Public Buildings, Underground Parking areas and Various Mining areas.

**Body:** Manufactured from DMC, compression moulded flame retardant glass fibre reinforced polyester.

**Clips:** Double acting stainless steel clips.

**Lens:** Injection moulded clear polycarbonate lens with linear internal prisms.

**Gasket:** Silicone sponge gasket.

**Control Gear:** White epoxy coated gear tray carries the lamp holders. The gear tray is designed to operate T8 LED tubes. Two

cords allow the gear tray to be suspended from the body during installation and service.

**Cable Entry:** Standard single entry with No.0 Compression gland for cable diameter 6 - 11mm.

**Mounting:** Brass body inserts allows for hook, wall/ceiling brackets or pole clamps to be used.

**Ambient Temperature Rating:** -10°C - +45°C

**Ingress Protection Grade:** IP66

**Emergency Mode:** Emergency options available on request.

**Photometric Data:** Photometric files available on request.

**Warranty:** 1 Year



### JBLS LED

The **JBLS LED** linear luminaire range is a high-performance industrial vapour proof DMC, glass fibre reinforced polyester luminaire that has been designed to operate with LED strips. It's suitable for wall, ceiling, bracket and pole mounting. The JBLS LED continues the proud heritage of NORDLAND LIGHTING's quality standards.

**Applications:** All non-hazardous areas, Industrial sites, Warehouses, Public Buildings, Underground Parking areas and Various Mining areas.

**Body:** Manufactured from DMC, compression moulded glass fibre reinforced polyester.

**Clips:** Polyamide clips supplied as standard. Stainless steel or vandal resistant stainless steel clips available on request.

**Lens:** Injection moulded frosted polycarbonate lens with linear internal prisms.

**Gasket:** Silicone sponge gasket.

**Control Gear:** Gear tray carries the LED driver and LED strips, and also acts as a reflector. Two cords allow the gear tray to be suspended from the body during installation and service.

**Cable Entry:** Two 20mm diameter cable entries are provided for through wiring. Plugs are supplied for blanking off cable entries. Glands are not provided.

**Mounting:**

- IP65: Optional stainless steel hanging brackets available on request.

- IP66: Brass body inserts allows for hook, wall/ceiling brackets or pole clamps to be used.

**Ambient Temperature Rating:** -15°C - +35°C

**Ingress Protection Grade:** IP65 standard/IP66 on request.

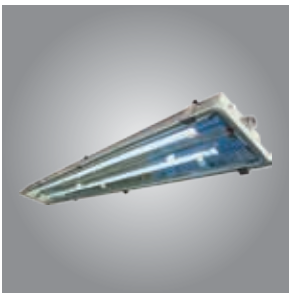
**Emergency Mode:** Emergency options available on request.

**Photometric Data:** Photometric files available on request.

**Warranty:** 5 Year



## LINEAR CONT.



### JBLS-LB LED

The **JBLS-LB LED** linear luminaire range is a high-performance industrial vapour proof DMC, glass fibre reinforced polyester luminaire that has been designed to operate with LED strips. The luminaire has a unique reflector design which optimizes the light distribution. It's suitable for wall, ceiling, bracket and pole mounting. The JBLS-LB LED continues the proud heritage of NORDLAND LIGHTING's quality standards.

**Applications:** All non-hazardous areas, Industrial sites, Warehouses, Public Buildings, Underground Parking areas and Various Mining areas.

**Body:** Manufactured from DMC, compression moulded glass fibre reinforced polyester.

**Clips:** Double acting Stainless steel clips.

**Lens:** 4mm Thick clear tempered plate glass.

**Gasket:** Silicone sponge gasket.

**Control Gear:** High brightness aluminium reflector designed for optimized light distribution carries the LED driver and LED strips. Two cords allow the reflector to be suspended from the body during installation and service.

**Cable Entry:** Two 20mm diameter cable entries are provided for through wiring. Plugs are supplied for blanking off cable entries. Glands are not provided.

**Mounting:** Brass body inserts allows for hook, wall/ceiling brackets or pole clamps to be used.

**Ambient Temperature Rating:** -10°C - +35°C

**Ingress Protection Grade:** IP65

**Emergency Mode:** Emergency options available on request with the use of an external emergency box. To be ordered separately.

**Photometric Data:** Photometric files available on request.

**Warranty:** 2 Years



### JBLT LED

The **JBLT LED** linear luminaire range is a high-performance industrial vapour proof DMC, glass fibre reinforced polyester luminaire that has been designed to operate with LED tubes. It's suitable for wall, ceiling, bracket and pole mounting. The JBLT LED continues the proud heritage of NORDLAND LIGHTING's quality standards.

**Applications:** All non-hazardous areas, Industrial sites, Warehouses, Public Buildings, Underground Parking areas and Various Mining areas.

**Body:** Manufactured from DMC, compression moulded glass fibre reinforced polyester.

**Clips:** Polyamide clips supplied as standard. Stainless steel or vandal resistant stainless steel clips available on request.

**Lens:** Injection moulded clear polycarbonate lens with linear internal prisms.

**Gasket:** Silicone sponge gasket.

**Control Gear:** White epoxy coated gear tray carries the lamp holders. The gear tray is designed to operate T8 LED tubes. Two cords allow the gear tray to be suspended from the body during installation and service.

**Cable Entry:** Two 20mm diameter cable entries are provided for through wiring. Plugs are supplied for blanking off cable entries. Glands are not provided.

**Mounting:**

- IP65: Optional stainless steel hanging brackets available on request.

- IP66: Brass body inserts allows for hook, wall/ceiling brackets or pole clamps to be used.

**Ambient Temperature Rating:** -10°C - +45°C

**Ingress Protection Grade:** IP65 standard/IP66 on request.

**Emergency Mode:** Emergency options available on request.

**Photometric Data:** Photometric files available on request.

**Warranty:** 1 Year



### N20-LED 600/1200

The **N20-LED** linear luminaire range is a high-performance LED industrial stainless steel luminaire. The luminaire is designed to replace the conventional fluorescent lamps which make it energy efficient with high performance, low maintenance and longer life span. It's suitable for wall, ceiling, bracket and pole mounting. The N20-LED continues the proud heritage of NORDLAND LIGHTING's quality standards whilst utilizing the latest LED technology.

**Applications:** All non-hazardous Industrial, Mining and Highly corrosive areas.

**Body:** Manufactured from Stainless steel grade 304. Marine grade 316 available on special order. The single piece deep drawn body may not be drilled on site.

**Clips:** Double acting stainless steel clips.

**Lens:** 4mm thick clear tempered plate glass.

**Gasket:** Extruded silicone one piece gasket.

**Lens Frame:** Pressed from a single piece stainless steel sheet without joining welds and with extra wide ends for increased rigidity.

**Frame Suspension:** The lens frame is suspended on two points along one side of the body to allow the glass frame to swing open during servicing.

**Control Gear:** Aluminium gear tray carries the LED driver and LED strips, or LED tubes and is also designed to act as a

reflector. Two cords allow the gear tray to be suspended from the body during installation and service.

**Cable Entry:** Threaded 20 mm entry provided for a gland via a special welded insert boss is positioned about 60mm from the mounting surface to facilitate installation. Corrosion resistant glands are recommended for use with stainless steel light fittings. Single gland entry standard.

**Mounting:** 8mm threaded nut welded into the rear mounting brackets allows the luminaire to be mounted using either brackets, or pole clamps.

**Wire Guard:** A stainless steel wire guard is available as an optional extra on the 4ft version only.

**Emergency Mode:** Emergency Options available on request.

**Photometric Data:** Photometric files available on request.

**Warranty:** 5 Years LED strip / 1 Year LED tube.

## SENSOR



### NMS 1100

The **NMS 1100** Microwave Sensor is an active pre-set motion detector. The Sensor emits high frequency electro-magnetic wave (5.8GHz) and receives the echo from movements in the detection zone. An internal micro-processor then triggers and connects the load to the "switch light ON" command. Detection is possible through doors, glass panes or thin walls. The Microwave Sensor is suitable for use in indoor areas. The NMS 1100 continues the proud heritage of NORDLAND LIGHTING's standards whilst utilizing the latest technology.

**Applications:** Industrial, commercial, office and warehouse application.

**Setting Sensitivity (range):** The range is the distance of the circular detection zone produced on the ground in an open area adjacent to where the NMS 1100 Sensor is mounted.

**Minimum range – (approx. 2m)**

**Maximum range – (approx. 10m)**

**Note:** The above detection distances are based on a person who is between 1.6m/1.7m tall moving

at speed of 0.6 – 1.5m/sec. Detection range will differ depending on the height and stature of the person moving within the detection zone.

**Time 'ON' Setting:** The luminaire can be set to stay 'ON' for any period of time between approximately 8 seconds to a maximum of 12 minutes. Any movement detected will re-start the timer therefore holding the lighting on.

**Daylight Control Setting:** The light response threshold can be adjusted from. Approximately 2 Lux to 2000 Lux.

## STREET



### NST LED Streetlight

The **NST LED Streetlight** luminaire is aimed to provide superb lighting distribution with special designed optic lenses. This luminaire is perfect for the lighting of Freeways, Main Roads, Branch Roads, Toll Plazas & Residential Road Lighting etc. The Streetlight is designed to replace the conventional HID light sources and suitable for pole mounting. Modern design, simple and exquisite smooth lines, energy efficient with high performance, low maintenance and long life span. The NST LED streetlight continues the proud heritage of NORDLAND LIGHTING's quality standards.

**Applications:** Suitable for Freeway, Main Roads, Branch Roads, Toll Plazas, Commercial Areas, Security, Parks & Residential Road Lighting

**Housing:** Manufactured from aluminium alloy and finished in a silver grey powder coating.

**Lens:** Tempered IK08 glass lens with high output polycarbonate optical lens provide outstanding uniformity and efficiency.

**Gasket:** The silicone sponge gasket between the glass lens and housing provides a IP66 seal for outdoor use.

**Control Gear:** Constant Current LED driver 100V/240V, 50/60Hz. Built-in 10kV surge protection.

**Mounting:** The body uses aluminium bottom or side entry

spigots for pole mounting. The spigots can be adjusted between +15° ~ -15°.

**Spigot diameter:** 34mm, 42mm, 60mm, 76mm

**Beam Angles:** The polycarbonate optic lenses allows for various streetlight distributions.

**Dimming:** Dimmable options available on request.

**Installation:** Tool Free opening allows for individual installation. The luminaire also includes a water level for level accuracy. Power would automatically turn off once the luminaire is opened for maintenance.

**Rated Lifetime:** >50 000 Hr. (Ta= 30°C@L70)

**Warranty:** 5 Years



### NST-Eco LED Streetlight

The **NST-Eco LED Streetlight** luminaire is aimed to provide superb lighting distribution with special designed optic lenses. This luminaire is perfect for lighting residential, commercial, recreational areas etc. The Streetlight is designed to replace the conventional HID light sources and suitable for wall bracket and pole mounting. Modern design, simple and exquisite smooth lines, energy efficient with high performance, low maintenance and long life span. The NST-Eco LED streetlight continues the proud heritage of NORDLAND LIGHTING's quality standards.

**Applications:** Suitable for street lighting, branch roads, commercial areas, gardens, parks & residential area lighting

**Housing:** Manufactured from aluminium alloy and finished in a silver grey powder coating.

**Lens:** High output polycarbonate optical lens provide outstanding uniformity and efficiency.

**Gasket:** The silicone sponge gasket between the poly-carbonate lens and housing provides a IP66 seal for outdoor use.

**Control Gear:** Constant Current LED driver 100V/240V, 50/60Hz

**Mounting:** The body incorporates an aluminium side entry spigot for wall bracket and pole mounting, sizes from 42mm to 60mm.

**Beam Angles:** The polycarbonate optic lenses allows for various streetlight distributions.

**Dimming:** Dimmable options available for the 70W, 90W, 120W & 150W streetlights only.

**Rated Lifetime:** >50 000 Hr. (Ta= 30°C@L70)

**Warranty:** 5 Years



## STREET



### NST-Solar LED

The **NST-Solar LED** is an All-In-One LED solar-powered luminaire designed to provide sufficient illumination in most applications. The robust water and dust proof design makes the luminaire suitable for even the most remote locations across Africa. It has an integrated motion sensor that allows the NST-Solar LED to provide 100% light output when motion is detected and 50% light output when it detects no activity, ensuring preservation of the batteries capacity.

**Applications:** Walkway, Perimeter, Urban Roads, Rural, Security, Parking, Off-Grid Areas & Area Lighting.

**Housing:** Body manufactured from die-cast aluminium and powder coated.

**Solar Module:** Polycrystalline panel.

**LED:** Efficient High Power LED's used with polycarbonate optic lenses.

**Battery:** Lithium battery technology which provides sufficient capacity for up to 2 days when fully charged.

**Motion Sensor:** The luminaire will provide 50% of its light output, and as soon as motion is detected, the light output increases to 100%.

**Mounting:** Powder coated die-cast aluminium bracket.

**Warranty:** 5 years

## TAMPER PROOF



### NCP-LS LED Tamper Proof

The **NCP-LS LED Tamper Proof** is a range of enclosed vandal/tamper proof luminaires designed to operate LED strips and are available in 600mm, 1200mm and 1500mm lengths. The luminaire has a unique reflector design which optimizes the light distribution. The heavy-duty luminaire is designed to be used in areas subject to physical abuse with a view to vandalize and destroy. Tamper proof screws require a special tool for opening the luminaire. The NCP-LS LED Tamper Proof continues the proud heritage of NORDLAND LIGHTING's quality standards.

**Applications:** Suitable for use in Prison Cells, Subways Railway Stations, Magistrates Court Holding Cells, Police Station Holding Cells, Small factories with low mounting heights, or Covered Walkways and Mine Hostels.

**Body & Frame:** Manufactured from cold rolled sheet metal of minimum thickness 0.8 mm gauge. White epoxy powder coated.

**Gear Tray:** Manufactured from 0.8 mm gauge cold rolled sheet metal, formed to give the best light distribution.

**Diffuser:** 1.2 mm thick clear polycarbonate lens, with internal linear prism to limit glare. Sealed into the fabricated frame. The combination is designed for impact strength, and appearance.

**Lamp Types:** The gear tray is designed to house the LED strips.

**Screws:** Tamper Proof round headed screws are used to secure the frame to the body. A special tool is required to open this luminaire.

**Conduit entry:** The body has provision for a central 20mm rear entry.

**Emergency Mode:** Emergency Options available on request.

**Night Light:** Available on request.

**Ingress Protection:** IP54 after installation.

**Photometric Data:** Photometric files available on request.

**Warranty:** 5 Year



### NCP-LT LED Tamper Proof

The **NCP-LT LED Tamper Proof** is a range of enclosed vandal/tamper proof luminaires designed to operate LED tubes and are available in 600mm, 1200mm and 1500mm lengths. The luminaire has a unique reflector design which optimizes the light distribution. The heavy-duty luminaire is designed to be used in areas subject to physical abuse with a view to vandalize and destroy. Tamper proof screws require a special tool for opening the luminaire. The NCP-LT LED Tamper Proof continues the proud heritage of NORDLAND LIGHTING's quality standards.

**Applications:** Suitable for use in Prison Cells, Subways Railway Stations, Magistrates Court Holding Cells, Police Station Holding Cells, Small factories with low mounting heights, or Covered Walkways and Mine Hostels.

**Body & Frame:** Manufactured from cold rolled sheet metal of minimum thickness 0.8 mm gauge. White epoxy powder coated.

**Gear Tray:** Manufactured from 0.8 mm gauge cold rolled sheet metal, formed to give the best light distribution.

**Diffuser:** 1.2 mm thick clear polycarbonate lens, with internal linear prism to limit glare. Sealed into the fabricated frame. The combination is designed for impact strength, and appearance.

**Lamp Types:** The gear tray is designed to operate T8 LED

tubes.

**Screws:** Tamper Proof round headed screws are used to secure the frame to the body. A special tool is required to open this luminaire.

**Conduit entry:** The body has provision for a central 20mm rear entry.

**Emergency Mode:** Emergency Options available on request.

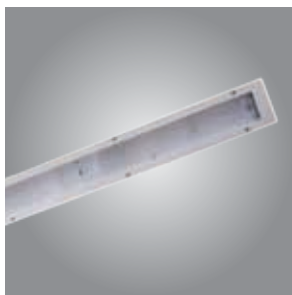
**Night Light:** Available on request.

**Ingress Protection:** IP54 after installation.

**Photometric Data:** Photometric files available on request.

**Warranty:** 1 Year

## TAMPER PROOF



### WV-B-LT LED Tamper Proof

The **WV-B-LT LED Tamper Proof** is a range of enclosed vandal/tamper proof luminaires designed to operate with T8 LED tubes and are available in 600mm, 1200mm and 1500mm lengths. The luminaire has a unique reflector design which optimizes the light distribution. The heavy-duty luminaire is designed to be used in areas subject to physical abuse with a view to vandalize and destroy. Tamper proof screws require a special tool for opening the luminaire. The WV-B-LT LED Tamper Proof continues the proud heritage of NORDLAND LIGHTING's quality standards.

**Applications:** Suitable for use in Prison Cells, Subways Railway Stations, Magistrates Court Holding Cells, Police Station Holding Cells, Small factories with low mounting heights, or Covered Walkways and Mine Hostels.

**Body & Frame:** Manufactured from cold rolled sheet metal of minimum thickness 0.8 mm gauge. White epoxy powder coated.

**Gear Tray:** Manufactured from 0.8 mm gauge cold rolled sheet metal, formed to give the best light distribution.

**Diffuser:** 1.2 mm thick clear polycarbonate lens, with internal linear prism to limit glare. Sealed into the fabricated frame. The combination is designed for impact strength, and appearance.

**Lamp Types:** The gear tray is designed to operate T8 LED

tubes.

**Screws:** Tamper Proof round headed screws are used to secure the frame to the body. A special tool is required to open this luminaire.

**Conduit entry:** The body has provision for a central 20mm rear entry.

**Emergency Mode:** Emergency Options available on request.

**Night Light:** Available on request.

**Ingress Protection:** IP54 after installation.

**Photometric Data:** Photometric files available on request.

**Warranty:** 1 Year

## TUBES



### T8 LED TUBES

**Applications:** All non-hazardous Industrial, Storage, Cold rooms, Parking areas and Offices

The T8 LED Tube has been characterized by its long life, high lumen efficacy and high safety performance.

The LED tube is manufactured from clear or frosted glass and they replace the traditional T8 fluorescent lamps. The LED tube has a built-in constant current driver, with

over current and over voltage protection.

High light transmittance and soft light colour, available in 1200mm and 1500mm lengths.

600mm LED tubes are available on request.

**Applications:** All non-hazardous Industrial, Storage, Cold rooms, Parking areas and Offices

## INGRESS PROTECTION RATING

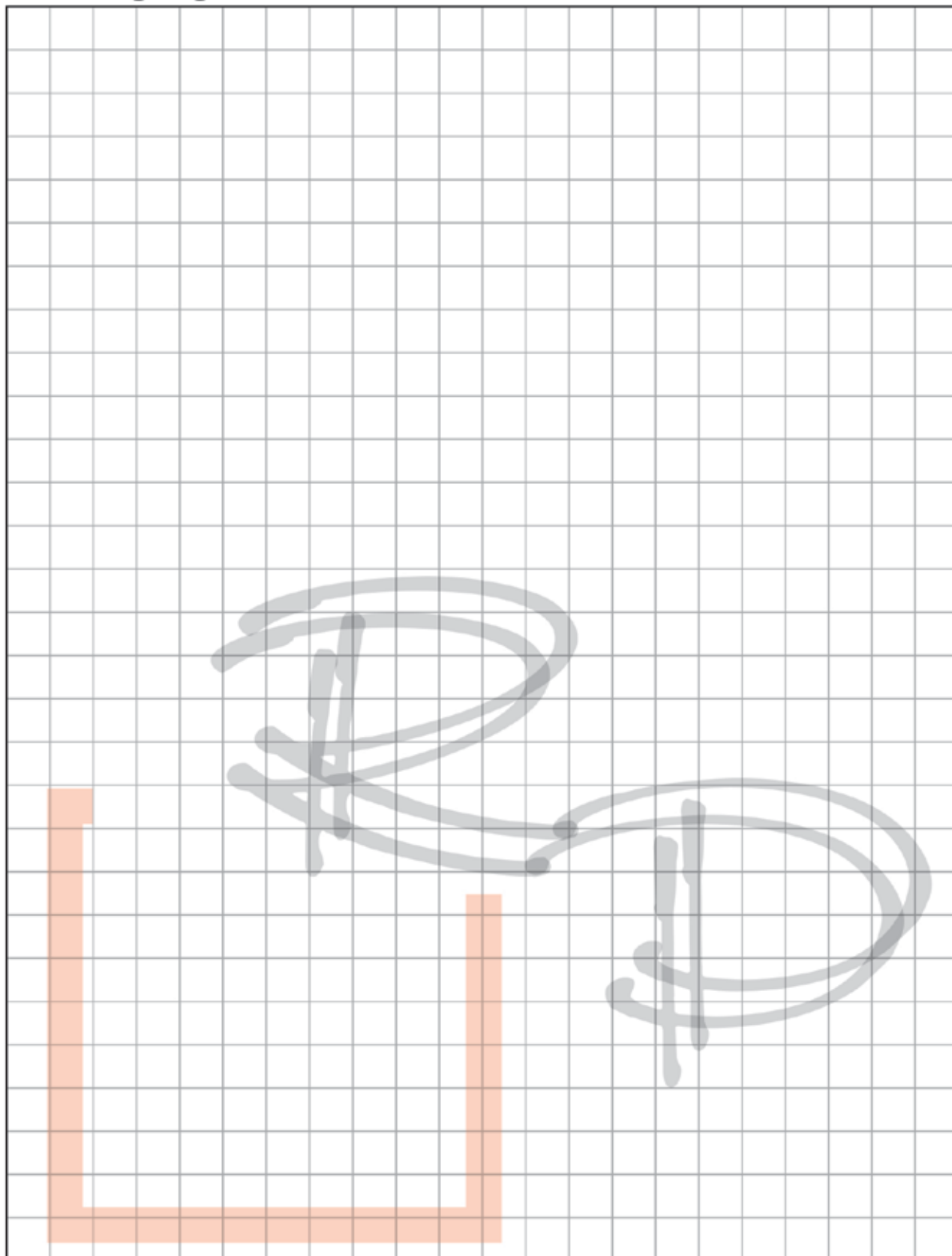
### IP ratings

The international protection system for enclosures (IP) is particularly relevant for hazardous areas. A non-sparking electrical apparatus, for example, will have an IP64 rating. The first digit indicates the degree of protection against touching live parts and the ingress of dust. The second digit indicates the degree of protection against the ingress of liquid. Table below lists all the IP ratings.

### IP ratings table

DIGIT	DEGREE OF PROTECTION AGAINST SOLIDS	SECOND DIGIT	DEGREE OF PROTECTION AGAINST LIQUIDS
0	Non-protected	0	No special protection
1	Protected against solids > 50 mm	1	Protected against dripping water
2	Protected against solids > 12 mm	2	Protected against dripping water at 15° angle
3	Protected against solids > 2,5 mm	3	Protected against spraying water
4	Protected against solids > 1 mm	4	Protected against splashing water
5	Dust-protected	5	Protected against water-jets
6	Dust-tight	6	Protected against heavy seas
		7	Protected against effect of immersion
		8	Protected against immersion





The background of the entire page is a photograph of a cave interior, heavily tinted with an orange color. The cave walls are covered in numerous stalactites and other rock formations. In the lower right, there is a small, simple structure or altar. The overall atmosphere is mysterious and ancient.

# **HAZARDOUS LIGHTING**



## BULKHEAD



### NGBP Exn – LED

The **NGBP Exn - LED** luminaire range is a high-performance industrial luminaire for use in hazardous Zone 2, 21 & 22 locations. The luminaire is designed to replace the conventional HID lamps which make it energy efficient with high performance, low maintenance and longer life span. It's suitable for wall, ceiling, bracket and pole mounting. The NGBP Exn - LED continues the proud heritage of NORDLAND LIGHTING's quality standards.

**Applications:** Industrial / Hazardous / Corrosive

**Housing:** Manufactured from Lm6 high pressure die cast aluminium, with a heavy duty toughened smooth clear glass refractor, fitted into a die cast aluminium frame.

**Frame:** The frame is fitted with 6 spring stainless steel fingertip latches which hold the frame in position.

**Gasket:** Round silicone sponge gasket retainer within a recess in the cast aluminium base provides a seal for outdoor use.

**Control Gear:** Constant Current LED driver 220V/240V, 50/60Hz

**Screws:** All external screws are made of stainless steel.

**Cable Entry:** Single compression gland for cable diameter 8-11mm.

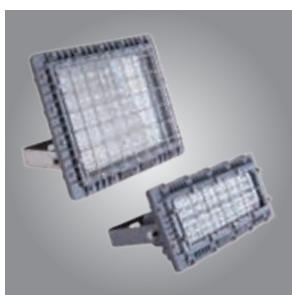
**Mountings:** The body incorporates many choices of options including: flood, wall, ceiling brackets, angled wall brackets, anti-vibration brackets, pole mounting brackets and angled post top brackets.

**LED:** The bulkhead is designed to take up to 9 x LED strips.

**Rated Lifetime:** 50 000 Hr. (L70/B10)

**Warranty:** 5 Years

## FLOOD



### BLD150 LED Floodlight - Zone 1, 2, 21 & 22

The **BLD150** is a high performance LED indoor and outdoor floodlight luminaire designed and certified for Zone 1, 2, 21 and 22 hazardous areas. The luminaire is designed to replace the conventional HID lamp technology which makes it energy efficient with high performance, low maintenance and long life span. It's suitable for wall, ceiling and bracket mounting. The **BLD150** continues the proud heritage of NORDLAND LIGHTING's Ex safety standards whilst utilizing the latest LED technology.

**Applications:** Zone 1, 2, 21 & 22 Hazardous locations. Oil Refineries, Chemical and Petrochemical plants and Fuel Depots.

**Body:** Manufactured from Copper-free content aluminium alloy body with grey epoxy powder coating. Includes a stainless steel wire guard. All external screws are stainless steel.

**Lens:** Shock & Temperature resistant borosilicate glass.

**Gasket:** Acid/Hydrocarbon resistant silicone gasket.

**Control Gear:** Multi-protection constant current LED driver

with short-circuit and over voltage protection. AC/DC 90-305V, 50/60Hz

**Cable Entry:** Comes standard with an M25 x 1.5 thread hole.

**Mounting:** Supplied with a stainless steel stirrup which allows for various mounting options.

**Emergency Mode:** Only available in the 10W, 20W & 40W luminaire. 60min Emergency backup duration.

**Warranty:** 5 Years

## HIGHBAY



### HX1 - LED High Bay

The **HX1** is a high performance LED high bay luminaire, designed and certified for Zone 1, 2, 21 and 22 hazardous areas. The luminaire is designed to replace the conventional HID lamp technology which makes it energy efficient with high performance, low maintenance and long life span. It's suitable for wall, ceiling, pendant, pole and bracket mounting. The HX1 continues the proud heritage of NORDLAND LIGHTING's Ex safety standards whilst utilizing the latest LED technology.

**Applications:** Zone 1, 2, 21 & 22 Hazardous locations. Oil Refineries, Chemical and Petrochemical plants and Fuel Depots.

**Body:** Manufactured from Copper-free content aluminium alloy body with grey epoxy powder coating. All external screws are stainless steel.

**Lens:** Shock & Temperature resistant borosilicate glass.

**Gasket:** Acid/Hydrocarbon resistant silicone gasket.

**Control Gear:** Multi-protection constant current LED driver

with short-circuit and over voltage protection. AC/DC 90-305V, 50/60Hz

**Cable Entry:** Comes standard with an M25 x 1.5 thread hole.

**Mounting:** Ceiling, Pendant, Pole, Bracket and Wall Mount.

**Emergency Mode:** Only available in the 20W, 30W & 40W luminaire. 90min Emergency backup duration.

**Warranty:** 5 Years

## LINEAR



### N60LED-Ex

The **N60LED-Ex** linear luminaire range uses specially designed LED light sources and is paired with Ex certified LED drivers. The luminaire is designed to replace the conventional fluorescent lamps which makes it energy efficient with high performance, low maintenance and long life span. It's suitable for wall, ceiling, bracket and pole mounting. The N60LED-Ex continues the proud heritage of NORDLAND LIGHTING's Ex safety standards whilst utilizing the latest LED technology.

**Applications:** Zone 1, 2, 21 & 22 Hazardous locations, and highly corrosive areas.

**Body:** Manufactured from Stainless steel grade 304. Marine grade 316 available on special order. The single piece deep drawn body may not be drilled on site.

**Clips:** Double acting stainless steel with M4 socket head screws on outer clips.

**Lens:** 4mm thick clear tempered plate glass.

**Gasket:** Extruded silicone one piece gasket.

**Lens Frame:** Pressed from a single piece stainless steel sheet without joining welds and with extra wide ends for increased rigidity.

**Frame Suspension:** The lens frame is suspended on two points along one side of the body to allow the glass frame to swing open during servicing.

**Control Gear:** Aluminium gear tray carries the LED driver and LED strips. Two cords allow the gear tray to be suspended from the body during installation and service.

**Cable Entry:** Threaded 20 mm entry provided for a gland via a special welded insert boss is positioned about 60mm from the mounting surface to facilitate installation. Corrosion resistant glands are recommended for use with stainless steel light fittings. Single gland entry standard, twin gland entry available as option.

**Mounting:** 8mm threaded nut welded into the rear mounting brackets allows the luminaire to be mounted using either brackets, or pole clamps.

**Wire Guard:** A stainless steel wire guard is available as an optional extra on the 4ft version only.

**Warranty:** 5 Years



### N50-Exn LED 600/1200

The **N50-Exn LED** linear luminaire range is a high-performance LED industrial stainless steel luminaire and is certified for use in Zone 2, 21 and 22 hazardous environments. The luminaire is designed to replace the conventional fluorescent lamps which make it energy efficient with high performance, low maintenance and longer life span. It's suitable for wall, ceiling, bracket and pole mounting. The N50-Exn LED continues the proud heritage of NORDLAND LIGHTING's Ex safety standards whilst utilizing the latest LED technology.

**Applications:** Zone 2, 21 & 22 Hazardous locations, and highly corrosive areas.

**Body:** Manufactured from Stainless steel grade 304. Marine grade 316 available on special order. The single piece deep drawn body may not be drilled on site.

**Clips:** Double acting stainless steel clips with M4 socket head screws on outer clips.

**Lens:** 4mm thick clear tempered plate glass.

**Gasket:** Extruded silicone one piece gasket.

**Lens Frame:** Pressed from a single piece stainless steel sheet without joining welds and with extra wide ends for increased rigidity.

**Frame Suspension:** The lens frame is suspended on two points along one side of the body to allow the glass frame to swing open during servicing.

**Control Gear:** Aluminium gear tray carries the LED driver and LED strips, and is also designed to act as a reflector. Two cords allow the gear tray to be suspended from the body during installation and service.

**Cable Entry:** Threaded 20 mm entry provided for a gland via a special welded insert boss is positioned about 60mm from the mounting surface to facilitate installation. Corrosion resistant glands are recommended for use with stainless steel light fittings. Single gland entry standard.

**Mounting:** 8mm threaded nut welded into the rear mounting brackets allows the luminaire to be mounted using either brackets, or pole clamps.

**Wire Guard:** A stainless steel wire guard is available as an optional extra on the 4ft version only.

**Warranty:** 5 Years



### NLED-Ex

The **NLED-Ex** linear luminaire range uses specially designed LED light sources and is paired with Ex certified LED drivers. The luminaire is designed to replace the conventional fluorescent lamps which makes it energy efficient with high performance, low maintenance and long life span. It's suitable for wall, ceiling, bracket and pole mounting. The NLED-Ex continues the proud heritage of NORDLAND LIGHTING's Ex safety standards whilst utilizing the latest LED technology.

**Applications:** Zone 1, 2, 21 & 22 Hazardous locations.

**Body:** Manufactured from GRP Glass Fibre reinforced polyester, by means of a compression moulded process.

**Diffuser:** Available with a clear or frosted polycarbonate diffuser.

**Gasket:** Continuous neoprene gasket insures IP66 seal between the body and diffuser.

**Control Gear:** Aluminium gear tray carries the LED driver and LED strips. Two cords allow the gear tray to be suspended from the body during installation and service.

**Cable Entry:** Comes standard with an Ex e compression gland. Cable diameter 6 – 12 mm.

Also available with a No 1/0 gland for armoured cable. Incoming terminal size max 2x4 mm<sup>2</sup>.

**Mounting:** Supplied with two 8mm body inserts in rear of the luminaire. Suitable for wall / ceiling brackets & pole clamps. Supplied with M8 hooks as standard.

**Warranty:** 5 Years



## LINEAR CONT.



### JBP - LED / JBP - LS

The JBP - LED and JBP - LS linear luminaire range is a high-performance industrial luminaire for use in hazardous Zone 2, 21 & 22 locations. The luminaire is designed to replace the conventional fluorescent lamps which makes it energy efficient with high performance, low maintenance and longer life span. It's suitable for wall, ceiling, bracket and pole mounting. The JBP - LED and JBP - LS continues the proud heritage of NORDLAND LIGHTING's quality standards.

**Applications:** Zone 2, 21 & 22 hazardous areas.

**Body:** Manufactured from DMC, compression moulded glass fibre reinforced polyester.

**Clips:** Double acting stainless steel clips.

**Lens:** Injection moulded clear polycarbonate lens with linear internal prisms. JBP-LS supplied with frosted polycarbonate lens.

**Gasket:** Silicone sponge gasket.

**Control Gear:** Aluminium gear tray carries the LED driver and LED strips, and also acts as a reflector. Two cords allow the gear tray to be suspended from the body during installation and

service.

**Cable Entry:** The Body has two 20mm entries. One is plugged and the other is fitted with an Ex n compression gland.

**Mounting:** Brass body inserts allows for hook, wall/ceiling brackets or pole clamps to be used.

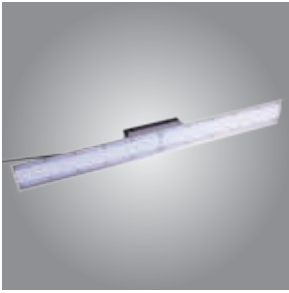
**Ambient Temperature Rating:** -20°C - +40°C

**Ingress Protection Grade:** IP66

**Emergency Mode:** Emergency option available on request for JBP-LED Zone 2 version only.

Photometric files available on request.

**Warranty:** 5 Year



### HL1 - LED linear

The HL1 is a high performance LED linear luminaire, designed and certified for Zone 2, 21 and 22 hazardous areas. The luminaire is designed to replace the conventional fluorescent lamp technology which makes it energy efficient with high performance, low maintenance and long life span. It's suitable for wall, ceiling, pendant and pole mounting. The HL1 continues the proud heritage of NORDLAND LIGHTING's Ex safety standards whilst utilizing the latest LED technology.

**Applications:** Zone 2, 21 & 22 Hazardous locations. Oil Refineries, Chemical and Petrochemical plants and Fuel Depots.

**Body:** Manufactured from Copper-free content aluminium alloy body with grey epoxy powder coating. All external screws are stainless steel.

**Diffuser:** Manufactured from impact and UV resistant polycarbonate.

**Gasket:** Acid/Hydrocarbon resistant silicone gasket.

**Control Gear:** Multi-protection constant current LED driver with short-circuit and over voltage protection. AC 90-305V, 50/60Hz

**Cable Entry:** Comes standard with a M25 x 1.5 thread hole.

**Mounting:** Ceiling, Pendant, Pole and Wall Mount.

**Emergency:** Emergency options available on request.

**Warranty:** 5 Years

## PENDANT



### HA1 - LED Pendant

The HA1 is a high performance LED pendant luminaire, designed and certified for Zone 1, 2, 21 and 22 hazardous areas. The luminaire is designed to replace the conventional HID lamp technology which makes it energy efficient with high performance, low maintenance and long life span. It's suitable for wall, ceiling, pendant and pole mounting. The HA1 continues the proud heritage of NORDLAND LIGHTING's Ex safety standards whilst utilizing the latest LED technology.

**Applications:** Zone 1, 2, 21 & 22 Hazardous locations. Oil Refineries, Chemical and Petrochemical plants and Fuel Depots.

**Body:** Manufactured from Copper-free content aluminium alloy body with grey epoxy powder coating. Wire guard and all external screws are stainless steel.

**Lens:** Shock & Temperature resistant borosilicate glass.

**Gasket:** Acid/Hydrocarbon resistant silicone gasket.

**Control Gear:** Multi-protection constant current LED driver with short-circuit and over voltage protection. AC 100-277V, 50/60Hz

**Cable Entry:** Comes standard with an M25 x 1.5 thread hole.

**Mounting:** Ceiling, Pendant, Pole and Wall Mount.

**Warranty:** 5 Years

Available on request.

## SENSOR



### NMS 1200 - Exn

The **NMS 1200 - Exn** Microwave Sensor is an active pre-set motion detector. The Sensor emits high frequency electro-magnetic wave (5.8GHz) and receives the echo from movements in the detection zone. An internal micro-processor then triggers and connects the load to the "switch light ON" command. Detection is possible through doors, glass panes or thin walls. The Microwave Sensor is suitable for use in Zone 2 indoor and outdoor classified areas. The NMS 1200 - Ex n continues the proud heritage of NORDLAND LIGHTING's Ex safety standards whilst utilizing the latest technology.

**Applications:** Zone 2 Hazardous locations, including industrial, commercial and warehouse application.

**Body:** The housing is a CCG Ex housing which is made of impact, corrosion and UV resistant glass reinforced polyester compound.

**Gasket/Seals:** Gasket consists of Nitrile rubber and EPDM

seals.

**Cable Entry:** The unit is supplied with 2 x M20 Exe cable glands with other entries blanked off by Exe approved plugs.

**Mounting:** 4 x M10 slot holes are provided for mounting.

**Warranty:** 1 Year

### What is a Hazardous (Ex) Zone?

A hazardous zone is an environment where explosive gasses or dusts are present in concentrations that could ignite and cause fires and/or explosions.

### What zones are there?

A hazardous zone is classified under 1 of 6 types of Zones. Zone 0,1 or 2 for explosive gas atmospheres and Zone 20,21 or 22 for explosive dust atmospheres.

### How is the Zone classified?

Zone 0 is an area which has a constant/permanent explosive gas atmosphere (Think inside a petrol tank)

Zone 1 is an area which under normal operating conditions an explosive gas atmosphere is present (Think someone uses a container to hourly/daily pour diesel from the tank above)

Zone 2 is an area which under abnormal operating conditions an explosive gas atmosphere is present (Think someone transfers and spills diesel from the container mentioned above)

Zone 20 is an area where explosive conductive dusts are present (Electrically conductive dusts, such as powdered aluminium or magnesium)

Zone 21 is an area where explosive non-conductive dusts are present (Non-conductive dusts, such as Sugar or Flour)

Zone 22 is an area where combustible flying's are present (such as textiles, cotton and wood cutting)

### Risk of hazardous areas

Loss of human life

Massive damage to infrastructure due to Fire/ Explosions

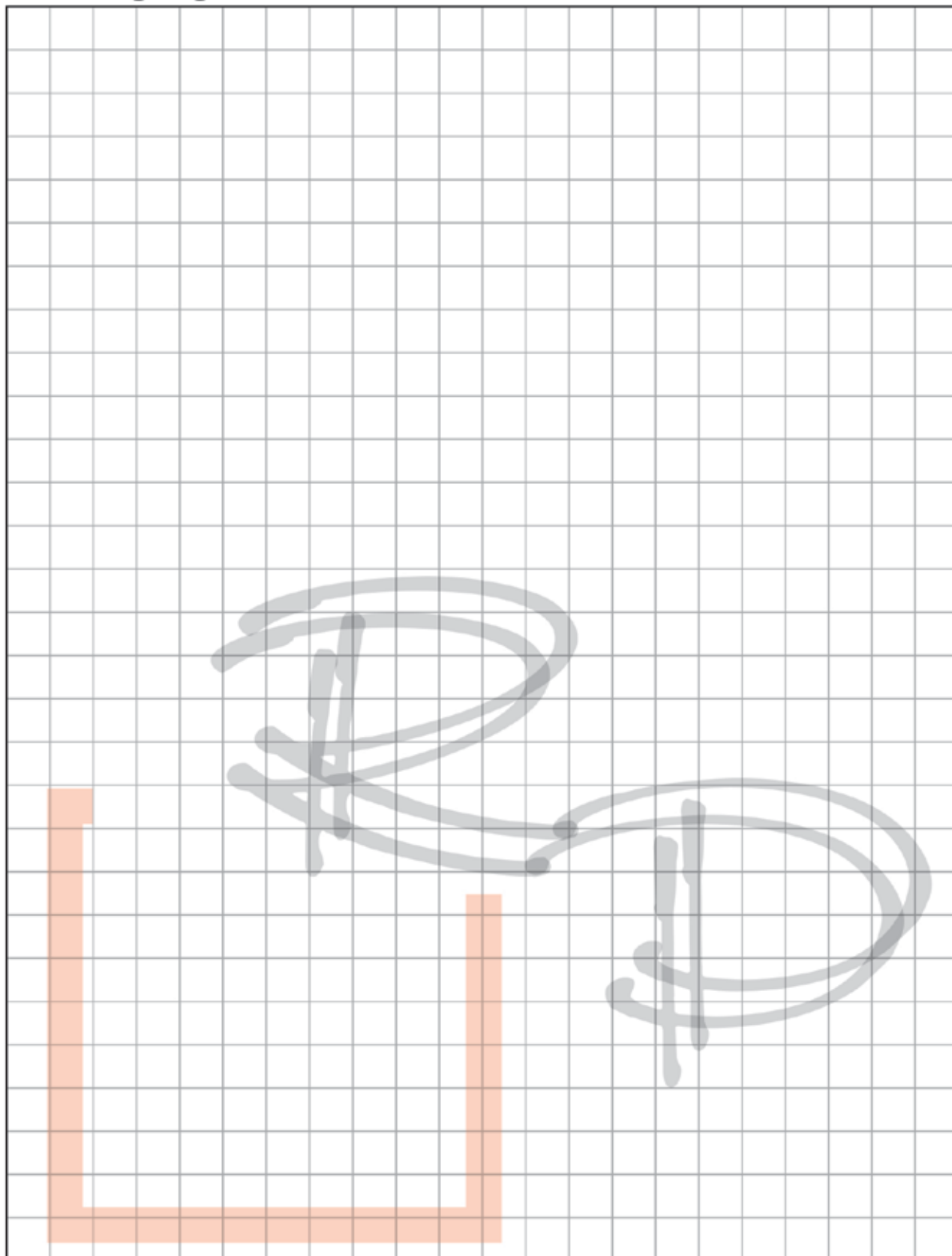
### Examples of Hazardous Areas:

Zone 0	Underground Mines at the rockface, Inside a fuel tanker
Zone 1	Spray booths, Tank vents, Tank Flanges, Sources of Gas release
Zone 2	Outdoor, ventilated areas such as petrochemical plants, some food industries
Zone 20	Inside a steel plant where conductive metals are a by product
Zone 21	Sugar refineries, Flour mills
Zone 22	Wood mills, Cotton production.

### Zoned areas of interest:

Any premises that uses vapors/chemicals indoors	Generator rooms
Battery banks indoors (Hydrogen gas)	Laboratories
Certain wood shops/mills	Manufacture of chemicals
Chemical Stores	Manufacturer of any flammable products (e.g. Paint, benzine, thinners, polish, printing ink)
Clothing factories	Material and carpet manufacturers and carpet manufacturers
Distilleries	Petrochemical plants
Engine compartment on a vessel	Pharmaceutical manufacturers
Food industry (e.g. bakeries, cooking oil, Spray & cook)	Refineries
Fuel stations and depots	Spray booths
Gas storage or refilling outlets	





# RAMIKA PROJECTS

Ramika Projects are Lighting Specialist and offers a wide range of Lighting solutions including Energy Efficient Products.  
A Highly rated Level 2 BBBEE Contributor with 51% black female Ownership.

t: 010 443-9149 | f: 086-465-4636 | e: sales@ramika.co.za | www.ramika.co.za | Unit 11, Monument Arch, 268 Voortrekker Road, Krugersdorp

## LIGHTING SOLUTIONS FOR MINES

1 Ex Luminaires

2 Mining Luminaires

3 Streetlights

4 Floodlights

5 Linear Luminaires

6 Linear Luminaires

7 Linear Luminaires

8 Backhauled

9 High Bay

10 Tunnel Flood

11 Zone 0

Ramika Projects supply a wide range of Lighting Solutions which are locally manufactured to international safety and performance standards for hazardous, mining and industrial applications.



## WARRANTY STATEMENT

**Ramika Projects** warrants ("The Warranty") that the ("The Product") will perform in accordance with the specifications set out in the Product Data Sheet ("The Specifications ") for a period as stated in the respective 'Limited Warranty Statement' from the date of original purchase from **Ramika Projects** ("The Warranty Period "). The Warranty is not valid if a defect is caused by one of the following:

1. The Product being exposed at any time to temperatures beyond its Specifications.
2. Use other than in accordance with the Specifications.
3. Rough handling, mechanical damage, exposure to extreme environmental or other conditions or a rapid change in such conditions. Corrosion, oxidation, unauthorized modifications or connections, unauthorized opening or repair. Authorized repair using unauthorized spare parts. Accidents, forces of nature or other actions beyond the reasonable control of **Ramika Projects** unless the defect was caused directly and entirely by faulty material or workmanship.
4. Installation other than in accordance with the supplied installation manual. If the Products are used for a purpose or under conditions for which they are not designed or not sold. If the Products are adapted, modified, refitted or re-purposed, or are connected in any way to any equipment, system or apparatus which is not approved by **Ramika Projects** for that purpose. Transients, or voltage spikes on the supply line exceeding 2 kV. The Warranty excludes damages due to lightning strikes or any under / over voltage fluctuations on the supply voltage.

The customer shall notify **Ramika Projects** as soon as possible after discovery of any defect in the Product with detailed descriptions and pictures in order to help ensure that it is correctly dealt with in a timely manner.

In order to determine whether a defect is covered by the Warranty, the customer shall (at **Ramika Projects'** cost, if agreed in writing) arrange for the product to be returned to **Ramika Projects** for inspection, repair or replacement, as determined by **Ramika Projects**. **Ramika Projects** will inform the customer within 2 weeks after the receipt of the Product about the findings and whether the claim is covered by the Warranty.

**Ramika Projects** will replace or repair any Products with defects covered by the Warranty free of charge. In no event shall **Ramika Projects** be liable for any loss of profit or any other losses of an indirect or consequential nature. **Ramika Projects'** liability under this Warranty is limited to repair, replacement, or alternatively payment of the amount originally paid to **Ramika Projects** for the Product.

In all respects not specifically dealt with in this Limited Warranty Statement, **Ramika Projects'** Standard Conditions of Sale shall apply.



For more information, contact Ramika Projects,  
T 010 443 9149  
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[www.ramika.co.za](http://www.ramika.co.za)

