

FIRE/RESCUE LED LIGHTING

Fire/Rescue Safety Lighting

NFPA Guide and Application
Solutions from Grote



WHEN "JUST" ISN'T ENOUGH HELPING YOU EXCEED NFPA 1901

GROUND LIGHTING

- 13.10.1.1 - behind the vehicle
- 13.10.1.2 - edge of the vehicle
- 13.10.1.3 - under the crew area

HOSE BED LIGHTING

- 13.10.2.1 - hose beds

SURFACE LIGHTING

- 13.10.3 - work surfaces, steps and walkways

INTERIOR LIGHTING

- 13.10.4 - seat surfaces

COMPARTMENT LIGHTING

- 13.10.5.1 - engine and pump compartment
- 13.10.5.3 - enclosed tool and equipment compartment

PANEL LIGHTING

- 16.9.2 / 4.10.1.1 - pump control and gauges

SCENE LIGHTING

- 22.13.1 - scene lighting

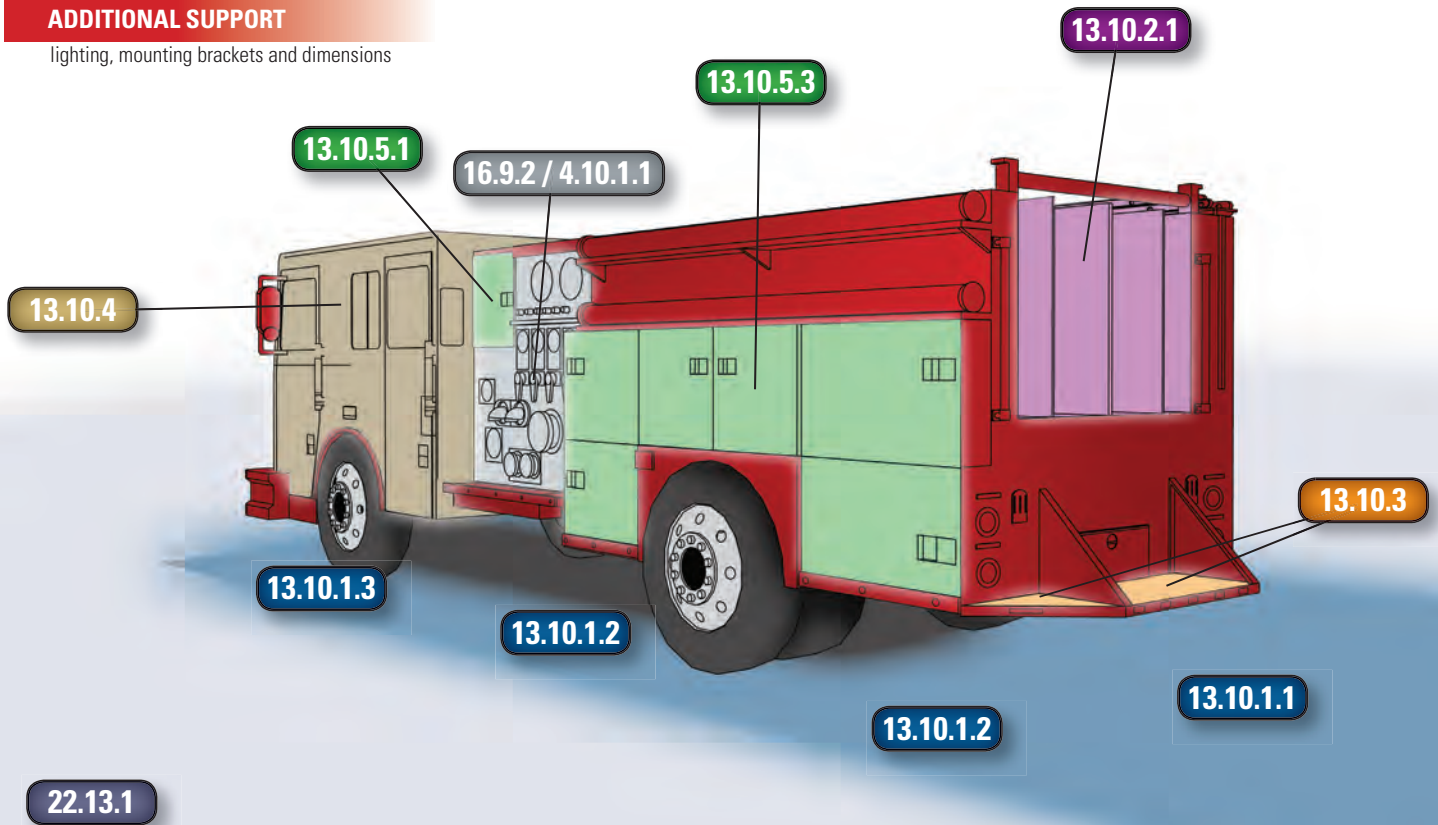
ADDITIONAL SUPPORT

- lighting, mounting brackets and dimensions

HOW TO USE THIS GUIDE

Identify the NFPA code that you are meeting and refer to the number at the top of each page. That page contains lamps that will assist with meeting or exceeding the requirements of the National Fire Protection Association (NFPA).

Please call your Grote representative for a complete list of LED lamps and accessories that will help create a safer, more ergonomically lit environment that will last.



Why Grote - We are the first name in vehicle safety systems.

Award Winning State-of-the-Art Facilities

- **Advanced Manufacturing Systems**
- **Advanced Quality Assurance Systems**
- **Advanced Customer Service Systems**

Grote Industries is a leading manufacturer and marketer of vehicle lighting and safety systems. Our company was founded in the heartland more than 100 years ago and has remained family owned from the day William Grote opened the doors for business.

With manufacturing locations in Canada, Mexico, and the United States, we are the only heavy duty lighting supplier that can boast to be a true NAFTA company. We are an industry leading manufacturer, the first to receive our TS16949 certification in the heavy duty lighting industry.

Our company is steeped in tradition with a continued focus on innovation as well as a strong commitment to providing quality products and services. We still hold firm to the family values and work ethics set forth by our founder all those years ago.



Grote Industries World Wide Headquarters – Madison IN, USA



Grote Industries Canada – Toronto, Ontario, Canada



Grote Electronics – Waterloo, Ontario, Canada



Grote de Mexico – Monterrey, Mexico



Grote Europe – Niederwinkling, Germany

See the Difference...Simply Stated...Simply Evident.

Better Light, Better Performance™

Grote has spent countless hours studying the difference between “brightly lit” and “optimally lit” environments. We understand the relationship between lighting and human and vehicle performance. Our optical engineers have designed the entire array of Grote LED WhiteLight™ Work Lamps to provide maximum visual comfort while reducing fatigue, stress and operator error – all while being some of the most durable and reliable lamps on the planet.

The Grote Performance Advantage™

It’s not just a matter of building a “bright light” – it’s a dedication to delivering the “right light” that continues to set Grote apart. We engineer light to meet the specifications of unique environments – optimizing the lighting conditions for the operations to be performed within them.

Trilliant® High-Performance LED Work Lamps

Grote’s Trilliant® Family of LED WhiteLight™ Work Lamps are the industry’s most advanced and have set a new standard for value, durability and performance.



All of the products mentioned in this catalog are water and/or spray resistant.

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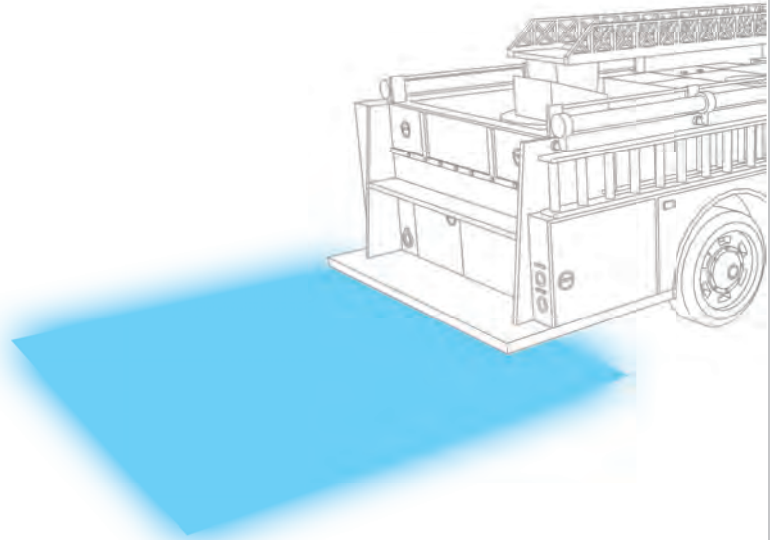
13.10.1.1 - The work area immediately behind the vehicle shall be illuminated to a level of at least 3 fc (30 lx) within a 10 ft x 10 ft (3 m x 3 m) square to the rear of the vehicle.

W O R K A R E A L I G H T I N G

NFPA requires a well lit work area directly behind the fire truck. This is to ensure the emergency responders have clear vision behind the truck and to the hose bed and various connections and controls located in that area.

Many manufacturers use incandescent or halogen lamps in this location. These tend to fail quickly due to short bulb life and high heat. This is not an acceptable situation when lives are at stake.

Grote LED lamps are designed to operate for more than 100 times longer, with low heat and low power consumption. Grote Trilliant® LED lamps also offer a high quality light color. The LED WhiteLight™ lamp is much easier on the eyes and provides high contrast at the scene.



TRILLIANT® LED WHITELIGHT™

This 6" x 9" surface mount, hard-working, rugged, high-output lamp uses Grote's proven premier LED WhiteLight™ technology. The light output of the Trilliant® rivals HIDs, eclipses halogen competitors and provides beam pattern evenness and color temperature that produce a contrast most like that of natural sunlight. Three replaceable lens patterns are available, and can be easily changed out as needed. Add Grote's unique mounting bracket for enhanced directional control.

- 63761 - 10-30V, Wide Flood, Black
- 63931 - Bi-Voltage, Wide Flood, White
- 43652 - Mounting Bracket, Black (not shown)
- 43651 - Mounting Bracket, White (not shown)
- 63771 - 24V, Wide Flood, Black



6" OVAL LED UTILITY LAMP

400 lumens of powerful LED WhiteLight™ that uses 70% less power. Male Pin connection.

Requires four to meet spec: mounted underneath.

- 61G31 - 12V, Male Pin
- See page 14 for mounting options.



TRILLIANT® MINI LED WHITELIGHT™

An excellent 4" x 6" work lamp for any instance where a high-output illumination source is needed. Like its big brother, this low-power, long-life lamp delivers beam pattern evenness and color temperature that produce a contrast most like that of natural sunlight. Mount it anywhere and enjoy thousands of hours of brilliant LED WhiteLight™. The versatile Trilliant® Mini also comes in a flush-mount version and any Trilliant® mini can be installed with an optional flush-mount bracket. **Requires four to meet spec: two top mount and two mounted underneath.**

- 63611 - 12V, Flood
- 63610 - 12V, Flush Mount Lamp, Flood
- 63741 - 24V (0.7 A), Flood



4" LED WHITELIGHT™ LAMP

Uses 70% less power than incandescent options. Integrated flange for easy installation. Male Pin for multiple pigtail and connection options. **Requires four to meet spec: mounted underneath.**

- 61E41 - 12V, Grommet Mount
- 61E01 - 12V, Integrated Flange
- 61E51 - 24V, Grommet Mount
- 61E11 - 24V, Integrated Flange

See page 14 for mounting options.



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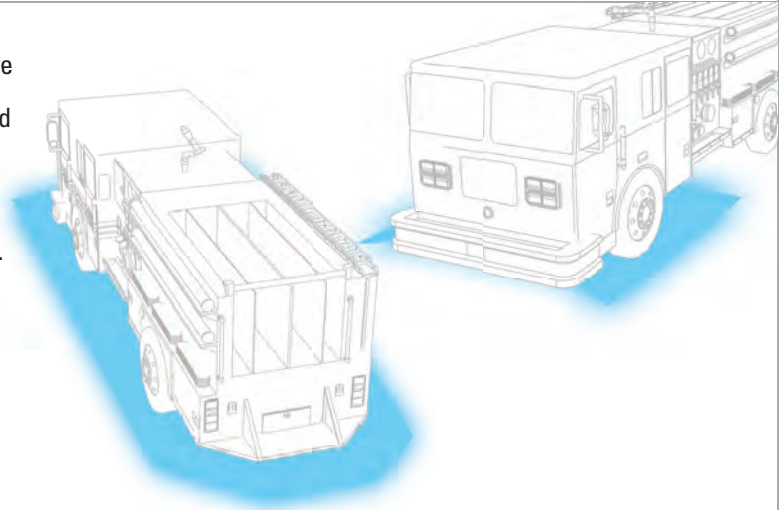
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13.10.1.2 - The fire apparatus shall be equipped with lighting that is capable of providing illumination at a minimum level of 2 fc (20 lx) on ground areas within 30 in. (800 mm) of the edge of the apparatus in areas designed for personnel to climb onto the apparatus or descend from the apparatus to the ground level. areas designed where personnel to climb onto or descend from the apparatus to the ground level.

13.10.1.3 - Lighting designed to provide illumination on areas under the driver and crew riding area exits shall be switchable but activated automatically when the exit doors are opened.

NFPA requires a well lit work area around the edge of the fire truck. This is to ensure the emergency responders have clear vision on the ground around the vehicle.

Grote LED lights in this location are designed specifically to provide great lighting in the perimeter of the truck, while using minimal power. All these lights shown would be mounted below the vehicle shining down, or in a 40° inclination using our mount shown on page 14 designed specifically for this application.



LED 1.4 Amps
at 12VDC

TRILLIANT® MINI LED WHITELIGHT™

An excellent 4" x 6" work lamp for any instance where a high-output illumination source is needed. Like its big brother, this low-power, long-life lamp delivers beam pattern evenness and color temperature that produce a contrast most like that of natural sunlight. Mount it anywhere and enjoy thousands of hours of brilliant LED WhiteLight™. The versatile Trilliant® Mini also comes in a flush-mount version and any Trilliant® mini can be installed with an optional flush-mount bracket.

63611 - 12V, Flood 63741 - 24V (0.7 A), Flood
63610 - 12V, Flush Mount Lamp, Flood



LED .6 Amps
at 12VDC

6" OVAL LED UTILITY LAMP

400 lumens of powerful LED WhiteLight™ that uses 70% less power. Male Pin connection.

Requires four to meet spec: mounted underneath.

61G31 - 12V, Male Pin

See page 14 for mounting options.



LED 0.6 Amps
at 12VDC

4" LED WHITELIGHT™ LAMP

Uses 70% less power than incandescent options. Integrated flange for easy installation. Male Pin for multiple pigtail and connection options.

61E41 - 12V, Grommet Mount 61E51 - 24V, Grommet Mount
61E01 - 12V, Integrated Flange 61E11 - 24V, Integrated Flange

See page 14 for mounting options.

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13.10.2.1 - If a hose bed is provided, lighting on the hose bed shall be at a level of 3 fc (30 lx) or higher.

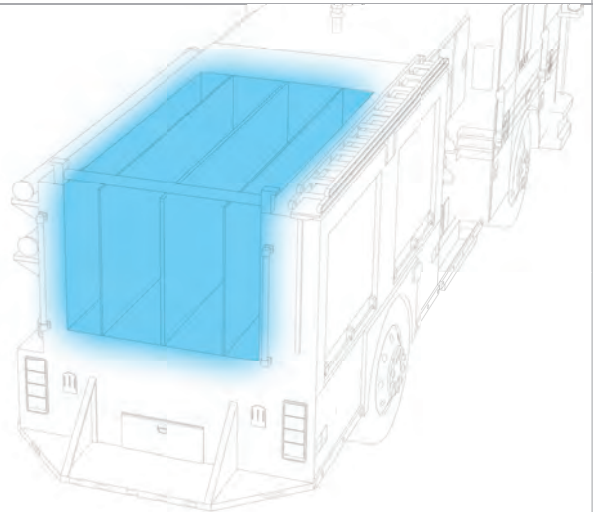
WORK AREA LIGHTING

NFPA requires a well lit work area on the hose bed of the fire truck. This is to ensure the emergency responders have clear vision to the hose bed during deployment and storage of the hose.

Grote recommends three possible mounting configurations to keep this area well lit.

If the bed is open (no compartment dividers), the Trilliant® 36 LED bulb, Trilliant® Mini, or Rectangular LED lamp could be recess mounted on the sides. The bracketed Trilliant 36 or Trilliant® LED WhiteLight could be mounted above the front bulkhead shining back or could be mounted on the rear top wall facing front.

If the bed has compartments, Grote recommends using the Rectangular LED lamp mounted in the floor, and augmented with 4" LED or the 6" Oval LED mounted in the front bulkhead.



LED 4.2 Amps
at 12VDC

TRILLIANT® LED WHITELIGHT™

This 6" x 9" surface mount, rugged, high-output lamp uses Grote's proven premier LED WhiteLight™ technology. The light output of the Trilliant® rivals LEDs, eclipses halogen competitors and provides beam pattern evenness and color temperature that produce a contrast most like that of natural sunlight.

- 63761 - 10-30V, Wide Flood, Black
- 63771 - 24V, Wide Flood, Black
- 63931 - Bi-Voltage, Wide Flood, White
- 63581 - 10-30V, Flood, Black
- 63681 - 24V, Flood, Black

- 43652 - Mounting Bracket, Black
- 43651 - Mounting Bracket, White



LED 0.6 Amps
at 12VDC

4" LED WHITELIGHT™ LAMP

Uses 70% less power than incandescent options. Integrated flange for easy installation. Male Pin for multiple pigtail and connection options.

- 61E41 - 12V, Grommet Mount
- 61E51 - 24V, Grommet Mount
- 61E01 - 12V, Integrated Flange
- 61E11 - 24V, Integrated Flange

See page 14 for mounting options.



LED 1.4 Amps
at 12VDC

TRILLIANT® 36 LED WHITELIGHT™

The Trilliant® 36 LED WhiteLight™ with Mounting Bracket was created to give the user the ability to install an LED WhiteLight™ Work Lamp that offers total flexibility. The lamp is designed to allow 180-degrees of vertical rotation, it takes up little space and can be mounted virtually anywhere. The lamp assembly comes with a Packard-style connector and pigtail. Replaceable UV, hard-coated, polycarbonate lenses are also a standard feature.

- 63871-5 10V-30V, Bracketed, Wide Flood
- 63971 10V-30V, LED Bulb, Packard Connector, Wide Flood



LED 1.4 Amps
at 12VDC

TRILLIANT® MINI LED WHITELIGHT™

An excellent 4" x 6" work lamp for any instance where a high-output illumination source is needed. Like its big brother, this low-power, long-life lamp delivers beam pattern evenness and color temperature that produce a contrast most like that of natural sunlight.

- 63610 - 12V, Flush Mount Lamp, Flood



LED 0.48 Amps
at 12VDC

RECTANGULAR LED LAMP

LED lamp is rated to 50,000 hours. Fits existing, similar incandescent lamp mountings. Low heat will not melt lens. Encapsulant potting for total circuit board protection against moisture and corrosion. Dimensions 4.75x2.75.

- 61991 - 12V, White, 6 Diodes, Recess-Mount



LED 0.6 Amps
at 12VDC

6" OVAL LED UTILITY LAMP

400 lumens of powerful LED WhiteLight™ that uses 70% less power. Male Pin connection.

- 61G31 - 12V, Male Pin

See page 14 for mounting options.



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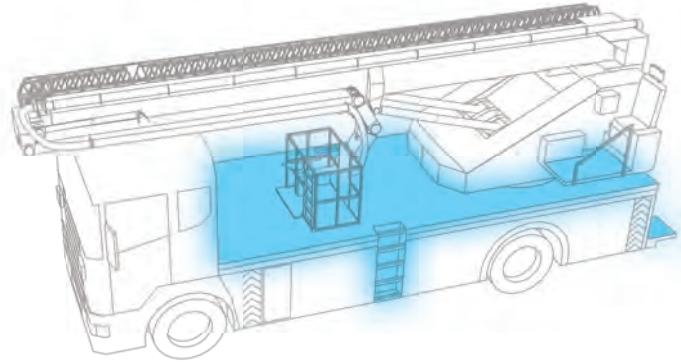
13.10.3 - Surface Lighting. The apparatus shall have sufficient lighting to provide a minimum level of 2 fc (20 lx) on all work surfaces, steps, and walkways.

NFPA 1901

NFPA requires a well lit work area in the interior of the fire truck. This is to ensure the emergency responders have clear vision of documents, controls and handles.

The working bed of the Fire Truck needs to be well lit and easy to see. Grote recommends recess mounting lights on the sides of the bed facing inward as the best bet. Placing multiple, smaller lights, where you need them is a better solution than one big light trying to do the job.

For the steps, Grote suggests two alternatives shown below. The Small Round Stepwell light works best with one on each side of the steps. The LED Courtesy Stepwell light is also best mounted on the side of the steps. An added feature of the LED Courtesy Stepwell light is it is ADA compliant.



WORK AREA LIGHTING



LED 0.6Amps
at 14VDC

6" OVAL LED UTILITY LAMP

400 lumens of powerful LED WhiteLight™ that uses 70% less power. Male Pin connection.

61G31 - 12V, Male Pin

See page 14 for mounting options.



LED 0.24 Amps
at 12VDC

RECTANGULAR LED LAMP

LED lamp is rated to 50,000 hours. Fits existing, similar incandescent lamp mountings. Low heat will not melt lens. Encapsulant potting for total circuit board protection against moisture and corrosion. Dimensions 4.75x2.75.

61961 - 12V, White, 3 Diodes, Recess-Mount



LED 0.6 Amps
at 12VDC

4" SUPERNOVA®

Sealed flange-to-housing. Housing to truck gasket included to keep moisture and elements out. Male Pin connection for worry-free service.

60631 - 12V, Clear



LED .05 Amps
at 12VDC

SMALL ROUND STEPWELL LAMP

Great for the hard to reach places, corners, steps, ect. 40 lumens of LED WhiteLight™.05 AMPS @ 14V.

49341 - 12V, White
49351 - 24V, White



LED 0.3 Amps
at 14VDC

LED COURTESY STEPWELL LAMP

Electronics completely encapsulated with durable epoxy for maximum environmental protection. Same mounting as popular incandescent versions. Connections can be easily adjusted for typical installations. Designed for seamless integration into existing platforms. ADA compliant. .3 AMPS @ 14V

60571 - 12V, Chrome

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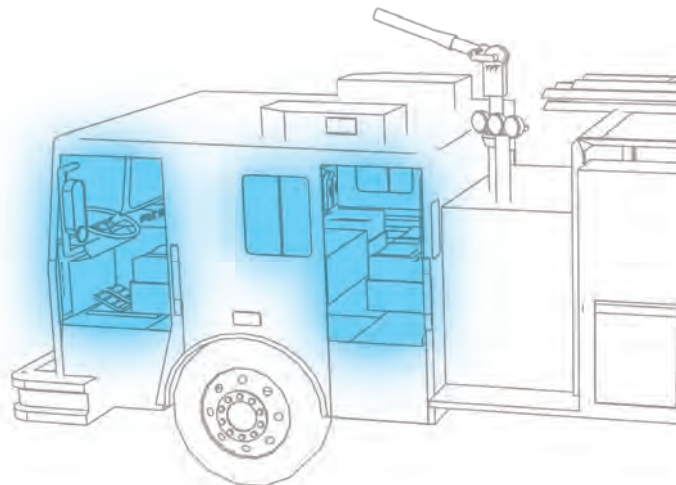
13.10.4 - Interior Lighting. The apparatus shall have sufficient lighting to provide an average level of 2 fc (20 lx) at each seating surface in the driving and crew compartments.

WORK AREA LIGHTING

NFPA requires a well lit work area in the interior of the fire truck. This is to ensure the emergency responders have clear vision of documents, controls and handles.

The crew areas are key to maintain proper lighting, all of which provide excellent light output, while maintaining low eye strain. Our interior lights utilize a wavelength which is easy on the eyes, while providing great visibility.

The lights shown below can be tailored to the application needs. One option to consider is a dual color LED dome lamp. These lights are available in Red / White or Blue / White. Using red while driving can help night vision for the responder when he or she exits the vehicle. Having these dual color can allow white while entering, or viewing documents, and red when night vision is most important.



LED 0.6 Amps
at 12VDC

6.5" S100 LED WHITELIGHT™ SURFACE MOUNT DOME LAMP

Low profile sleek design, less than 15.0mm depth. Moisture resistant construction allows for a wide variety of uses. Surface mount allows for quick and easy installation. 300 Lumens of output utilizing the latest LED WhiteLight™ technology. Operates at -40C to +50C. 12V / .6A; 24V / .38A.

- 61391 - 12V
- 61401 - 24V
- 61411 - 12V, w/Motion Sensor
- 61421 - 24V, w/Motion Sensor



LED 0.48 Amps
at 12VDC

LED 0.25 Amps
at 14VDC

COURTESY AND DOME RECTANGULAR LED LAMP

LED lamp is rated to 50,000 hours. Fits existing, similar incandescent lamp mountings. Low heat will not melt lens. Encapsulant potting for total circuit board protection against moisture and corrosion. Dimensions 4.75x2.75.

- 61F30 - 10-32 V, White/Red, Black, Surface Mount
- 61F40 - 10-32 V, White/Blue, Black, Surface Mount
- 61991 - 12V, White, 6 Diodes, Recess-Mount



LED 0.6 Amps
at 12VDC

*Custom Lengths Available

LED 1.2 Amps
at 12VDC

LED SLIMWHITE

High-output 500 lumen LED dome lamp emits low heat. Tough polycarbonate lens, sturdy aluminum base and conformal coated circuits. Profile is less than 3/4" high. Rated at 50,000 service hours. Velcro® and other mounting clip options available. Call your Grote representative for more information on custom lengths.

- 61E81 - 12V, 18" - White - 500 Lumens
- 61E91 - 24V, 18" - White - 500 Lumens
- 61281 - 12V, 48" - White - up to 1500 Lumens!



LED 2.16 Amps
at 14VDC

18" LED WHITELIGHT™ RECESSED-MOUNT DOME LAMP

Encapsulant potting for total circuit board protection. Robust, one-piece, aluminum housing and removable acrylic lens. Built-in, automatic thermal protection device. Operating temperatures -40C to +50C.

- 61611 - 12V, White, High Output, 18 Diode, 2.16A
- 61881 - 12V, White, 10 Diode, 1.2A



LED 1.92 Amps
at 12VDC

LED WHITELIGHT™ 7" ROUND, DOME LAMP

High output white LED lamp. Encapsulant potting for total circuit board protection against moisture and corrosion. Designed to operate in extreme cold temperatures of up to -40C. Shallow recess requires only 1 1/4" depth for mounting pan. Self-resetting cutoff device in case lamp experiences excess heat.

- 61811 - 12V, Clear
- 61061 - 24V, Clear



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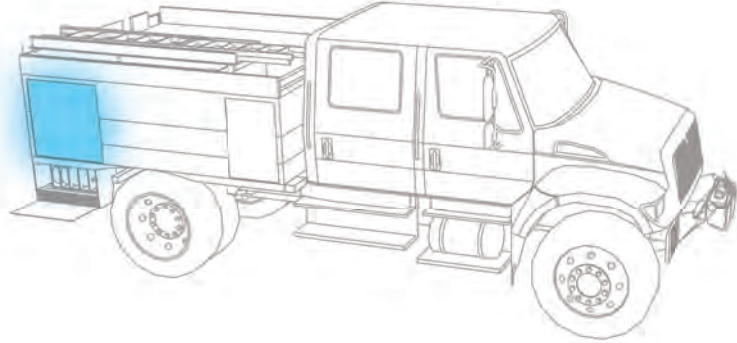
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13.10.5.1 - Each engine compartment and pump compartment shall have a light of at least 20 candlepower (250 lumens).

NFPA requires a well lit work area in the engine and pump compartments of a fire truck. This is to ensure the emergency responders have clear vision of controls and components.

The engine and pump compartments need to be well lit for the operator. The Grote lamps shown below are compact, and will provide for good visibility, while utilizing low current.

These are intended to be bulkhead or ceiling mounted.



LED 0.6 Amps
at 12VDC

4" LED WHITELIGHT™ LAMP

Uses 70% less power than incandescent options. Integrated flange for easy installation. Male Pin for multiple pigtail and connection options.

- 61E41 - 12V, Grommet Mount 61E51 - 24V, Grommet Mount
- 61E01 - 12V, Integrated Flange 61E11 - 24V, Integrated Flange

See page 14 for mounting options.



LED 0.6 Amps
at 12VDC

6.5" S100 LED WHITELIGHT™ SURFACE MOUNT DOME LAMP

Low profile sleek design, less than 15.0mm depth. Moisture resistant construction allows for a wide variety of uses. Surface mount allows for quick and easy installation. 300 Lumens of output utilizing the latest LED WhiteLight™ technology. Operates at -40C to +50C. 12V / .6A; 24V / .38A.

- 61391 - 12V
- 61401 - 24V



LED 0.48 Amps
at 12VDC

RECTANGULAR LED LAMP

LED lamp is rated to 50,000 hours. Fits existing, similar incandescent lamp mountings. Low heat will not melt lens. Encapsulant potting for total circuit board protection against moisture and corrosion. Dimensions 4.75x2.75.

- 61991 - 12V, White, 6 Diodes, Recess-Mount

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13.10.5.3 - Each enclosed tool and equipment compartment greater than 4 ft³ (0.1 m³) in volume and having an opening greater than 144 in.² (92,900 mm²) shall have sufficient compartment lighting to provide a minimum of 2 fc (20 lx) at any location on the floor of the compartment without any shelves, dividers, or equipment in the compartment.

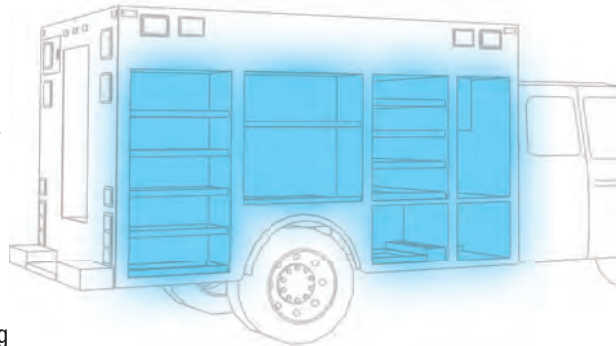
W O R K A R E A L I G H T I N G

NFPA requires a well lit work area in the compartments of a fire truck. This is to ensure the emergency responders have clear vision of tools and equipment.

Compartment lighting provides unique challenges. The specification calls for a LOT of light at every spot in the compartment. However, it is evaluated with tools and shelving removed. This can mean a lighting system which passes the test, but in use, is less than satisfactory.

Grote has designed lights specifically to solve these issues. The Pump Panel or SlimWhite both provide strong light output, and both can be tailored to length. Shown are 18" and 48" lengths, however, any length between these can be manufactured. Placing a strip in the corner standing up, can light compartments which will have shelves. Placing any of these lights on the ceiling will provide a good solution for compartments which will not have shelves.

Our engineering department will be glad to help with your specific problem!



LED 0.6 Amps
at 12VDC

4" LED WHITELIGHT™ LAMP

Uses 70% less power than incandescent options. Integrated flange for easy installation. Male Pin for multiple pigtail and connection options.

- 61E41 - 12V, Grommet Mount
- 61E51 - 24V, Grommet Mount
- 61E01 - 12V, Integrated Flange
- 61E11 - 24V, Integrated Flange

See page 14 for mounting options.



LED 1.4 Amps
at 12VDC

TRILLIANT® 36 LED WHITELIGHT™ CONVERSION BULB

The Trilliant® 36 LED WhiteLight™ Conversion Bulb is a brilliant LED WhiteLight™ Work Lamp that lasts longer, shines brighter and delivers better value. The bulbs come in a wide flood beam pattern and Grote's new Combo beam pattern. Each bulb is manufactured with a replaceable UV, hard-coated, polycarbonate lens and can be surface mounted. The lenses are easily interchanged and conversion from a wide flood to combo lens can be accomplished within moments.

- 63821-5 10V-30V, LED Bulb, Combo Pattern
- 63831-5 10V-30V, LED Bulb, Wide Flood



*Custom Lengths Available

LED .65 Amps
at 12VDC

LED PUMP PANEL LAMP

High-output LED dome lamp emits low heat. Tough polycarbonate lens. Sturdy aluminum base. Profile is less than 3/4" high. Rated at 50,000 service hours. Velcro® and other mounting clip options available. Call your Grote representative for more information on custom lengths.

- 61G81 - 12V, 18", Clear Lens, 700 Lumen, .65A
- 61G01 - 12V, 48", Clear Lens, 3 function 2100 Lumen max, 1.3A, .65A, 1.95A



LED 0.6 Amps
at 12VDC

6.5" S100 LED WHITELIGHT™ SURFACE MOUNT DOME LAMP

Low profile sleek design, less than 15.0mm depth. Moisture resistant construction allows for a wide variety of uses. Surface mount allows for quick and easy installation. 300 Lumens of output utilizing the latest LED WhiteLight™ technology. Operates at -40C to +50C. 12V / .6A; 24V / .38A

61391 - 12V

61401 - 24V



LED 0.6 Amps
at 14VDC

6" OVAL LED UTILITY LAMP

400 lumens of powerful LED WhiteLight™ that uses 70% less power. Male Pin connection.

61G31 - 12V, Male Pin

See page 14 for mounting options.



LED 0.6 Amps
at 12VDC

*Custom Lengths Available

LED 1.2 Amps
at 12VDC

LED SLIMWHITE

LED dome lamp emits low heat. Tough polycarbonate lens, sturdy aluminum base and conformal coated circuits. Profile is less than 3/4" high. Rated at 50,000 service hours. Velcro® and other mounting clip options available. Call your Grote representative for more information on custom lengths.

- 61E81 - 12V, 18" - White - 500 Lumens
- 61E91 - 24V, 18" - White - 500 Lumens
- 61281 - 12V, 48" - White - Up to 1500 Lumens!



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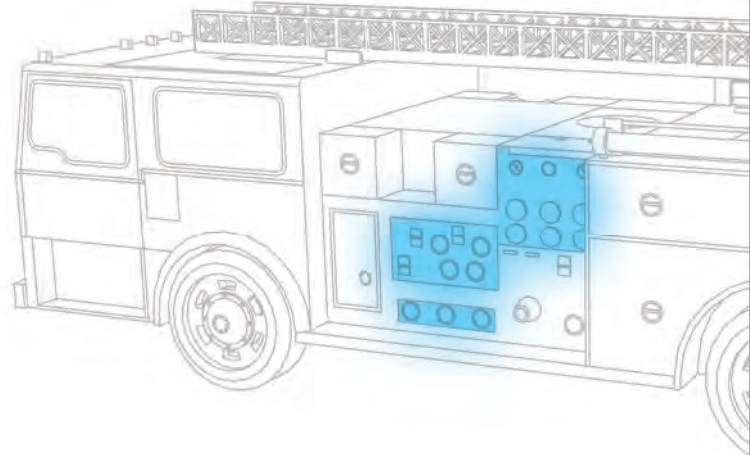
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16.9.2 / 4.10.1.1 - If external illumination is provided, it shall be a minimum of 5 fc (50 lx) on the face of the device.

NFPA requires a well lit work area at the pump control and gages of the fire truck. This is to ensure the emergency responders have clear vision to the pump control, gages and various connections and controls located in that area.

The gauge and control areas of the truck also have needs for a strong lighting solution. Here, we recommend mounting above the panel and facing down. The length of the lights can be tailored to your panel needs.



*Custom Lengths Available

LED .65 Amps
at 12.0VDC

LED PUMP PANEL LAMP

High-output LED dome lamp emits low heat. Tough polycarbonate lens. Sturdy aluminum base. Profile is less than 3/4" high. Rated at 50,000 service hours. Velcro® and other mounting clip options available. Call your Grote representative for more information on custom lengths.

- 61G81 - 12V, 18", Clear Lens, 700 Lumen, .65A
- 61G01 - 12V, 48", Clear Lens, 3 function 2100 Lumen max, 1.3A, .65A, 1.95A



*Custom Lengths Available

LED 0.6 Amps
at 12VDC

LED 0.12Amps
at 12VDC

LED SLIMWHITE

High-output 500 lumen LED dome lamp emits low heat. Tough polycarbonate lens. Sturdy aluminum base. Profile is less than 3/4" high. Rated at 50,000 service hours. Call your Grote representative for more information on custom lengths.

- 61E81 - 12V, 18" - White - 500 Lumens
- 61E91 - 24V, 18" - White - 500 Lumens
- 61281 - 12V, 48" - White - Up to 1500 Lumens!



LED 0.6 Amps
at 12VDC

6" OVAL LED UTILITY LAMP

400 lumens of powerful LED WhiteLight™ that uses 70% less power. Male Pin connection.

61G31 - 12V, Male Pin

See page 14 for mounting options.

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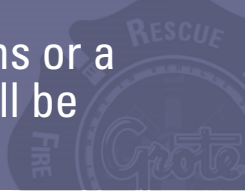
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22.13.1 - All scene lights shall be provided with a lens or a means for preventing damage from water spray and shall be listed for wet location usage.



WORK AREA LIGHTING

NFPA requires that scene lamps are equipped with lenses capable of preventing damage to the lamp due to water spray. This is to ensure the emergency responders have clear vision of the scene and lamps do not fail due to water spray.

Lighting the scene is paramount! Here Grote really excels. Our Trilliant® LED WhiteLight™ are used for long range lighting and high powered scene illumination. These lights are on deployment in the Middle East by our troops. Then they want to “light up the world”, they flip on the Trilliant’s, and turn night into day.

We have provided a number of patterns for your usage. On the rear of the vehicle (Page 4) the work area lights use only flood / wide flood. To light up a distance, we recommend the Trapezoid or Combo patterns. A pencil beam for long distance viewing would best use the spot.

We have used these in the field, and received comments about how they help in forensics as they do not throw heat, and the wavelength is great for visibility.



Ultra High Power

LED 4.2 Amps at 12VDC

Shown with optional mounting bracket

TRILLIANT® LED WHITELIGHT™

This hard-working, rugged, high-output lamp uses Grote’s proven premier LED WhiteLight™ technology. The light output of the Trilliant® rivals HIDs, eclipses halogen competitors and provides beam pattern evenness and color temperature that produce a contrast most like that of natural sunlight. Three replaceable lens patterns are available, and can be easily changed out as needed. Add Grote’s unique mounting bracket for enhanced directional control.

- 63581 - Bi-Voltage, Flood, Black
- 63911 - Bi-Voltage, Flood, White
- 63571 - Bi-Voltage, Spot, Black
- 63901 - Bi-Voltage, Spot, White
- 63591 - Bi-Voltage, Trapezoid, Black

- 94580 - Spot Lens
- 94600 - Flood Lens
- 94590 - Trapezoid Lens

- 63681 - 24V, Flood, Black
- 63671 - 24V, Spot, Black
- 63691 - 24V, Trapezoid, Black

- 43652 - Mounting Bracket, Black
- 43651 - Mounting Bracket, White
- 98100 - Bezel, Chrome

PAR 36 LED WHITELIGHT™ CONVERSION BULB



LED 1.4 Amps at 12VDC



LED WHITELIGHT™ WORK LAMP WITH MOUNTING BRACKET

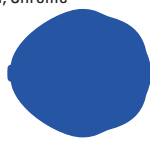
TRILLIANT® 36 LED WHITELIGHT™

The Trilliant® 36 LED WhiteLight™ with Mounting Bracket was created to give the user the ability to install an LED WhiteLight™ Work Lamp that offers total flexibility. The lamp is designed to allow 180-degrees of vertical rotation, it takes up little space and can be mounted virtually anywhere. The lamp assembly comes with a Packard-style connector and pigtail. Replaceable UV, hard-coated, polycarbonate lenses are also a standard feature.

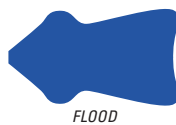
- 63861-5 10V-30V, Bracketed, Combo Pattern
- 63821-5 10V-30V, LED Bulb, Combo Pattern



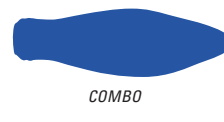
TRAPEZOID



WIDE FLOOD



FLOOD



COMBO



SPOT



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Support Products - Signal Lamps



LED 0.24 Amps
at 12VDC

SUPERNOVA® 4" NEXGEN™ LED STOP / TAIL / TURN

Less current draw than standard incandescent lamps for increased fuel efficiency and more power available to other vehicle systems. 20% less current draw than major competitor LED products. Fully encapsulated circuitry provides protection from the elements. Similar look to incandescent light, which helps prevent theft.

54332 - Red, Male Pin
54333 - Yellow, Male Pin

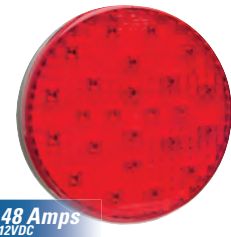


LED 0.24 Amps
at 12VDC

SUPERNOVA® 4" 10-DIODE PATTERN STOP / TAIL / TURN LED LAMP

Lens design spreads light for maximum dispersion. Encapsulant potting for total circuit board protection. Hermetic lens-to-housing seal. Advanced Pin Connection System uses tin-plated, solid brass pin terminals. Uses same UBS pigtail as Male Pin incandescent.

53252 - Red, Male Pin 53253 - Yellow, Male Pin
53552 - Red, Hard Shell 53553 - Yellow, Hard Shell



LED 0.48 Amps
at 12VDC

SUPERNOVA® 4" FULL-PATTERN STOP / TAIL / TURN LED LAMP

Encapsulant potting for total circuit-board protection. Hermetic lens-to-housing seal. Advanced pin connection system uses tin-plated, solid brass pin terminations. Uses same UBS pigtail as Male Pin incandescent.

53312 - Red, Male Pin
53313 - Yellow, Male Pin



LED 0.02 Amps
at 13.5VDC

SUPERNOVA® LED 9-DIODE OVAL STOP/TAIL/TURN LAMP

High visibility optics combined with high output LED's result in a high performing stop, tail and turn lamp. Available in Grote OEM male pin, hard shell, and hard wired termination options for easy retrofit or replacement. Electronics completely encapsulated with durable epoxy for maximum protection from the environment. Fits current mounting flanges and grommets.

54132 - Red, Male Pin 54133 - Yellow, Male Pin
54142 - Red, Hard Shell 54143 - Yellow, Hard Shell



LED 0.48 Amps
at 12VDC

SUPERNOVA® LED OVAL STOP/TAIL/TURN LAMP

Advanced Pin Connection System uses tin-plated, solid-brass terminals. Encapsulant potting covers LED circuit board. Male pin termination for premium sealability. Meets specifications for vertical & horizontal mounting.

53962 - Red, Male Pin
53963 - Yellow, Male Pin



LED 0.25 Amps
at 13.5VDC

SUPERNOVA® 4" DUAL SYSTEM LED BACK-UP LAMP

Requires two lamps to meet back-up function. Environmental encapsulant potting for total circuit board protection. Advanced pin connection system uses tin-plated, solid brass terminations. Uses same UBS pigtail as male incandescent. Hard coated lens for long-term UV protection.

62391 - Clear



LED 0.55 Amps
at 13.5VDC

SUPERNOVA® 4" DUAL SYSTEM LED BACK-UP LAMP

Fits standard round or oval grommets and brackets. Hermetically sealed lamp prevents water intrusion. Requires two lamps to meet back-up function. Encapsulant potting for total circuit board protection

62091 - Round, Clear, Male Pin
62101 - Round, Clear, Hard Shell
62051 - Oval, Male Pin
62761 - Oval, Hard Wire



LED 0.03 Amps
at 12VDC

SMALL RECTANGULAR LED LICENSE LAMP

Hermetically sealed lamp prevents water intrusion. Hardwired with .180 slim-line UBS plug connections for maximum performance. Indexed, snap-fit mounting to brackets.

60601 - Clear
5790 - 90° Kit (60601 + 43960), Gray
60601 - Kit (60601 + 42162), Black



LED 0.03 Amps
at 12VDC

MICRONOVA® DOT CLEARANCE / MARKER LED LAMPS

Small size provides more flexibility. Outperforms all legal requirements. Available in PC and P2 versions. Sleek aerodynamic styling extrudes less than 3/8" from mounted surface. No fasteners required. Available in 12V and 24V versions

49322 - Red P2 w/ Grommet
49332 - Red PC w/ Grommet
49333 - Yellow P2/ PC w/ Grommet

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Support Products - Pigtails Brackets and Grommets



GROMMET FOR 6" OVAL OR 4" ROUND LAMPS

Fits 6" oval or 4" round lamps. Oval fits 2.5" x 6.76" size hole and round fits 4.5" hole. Both fit panel thickness up to 1/4".

92420 - Oval, Open Back 92720 - Oval, Closed Back
91740 - Round, Open Back 91950 - Round Closed Back



THEFT-RESISTANT MOUNTING FLANGE FOR OVAL OR ROUND 4" LAMPS

Snap-in feature, locks lamp in place to reduce chance of theft. Attractive add-on option improves the look of any rig or trailer.

43723 - Oval, Stainless Steel
43223 - Oval, Chrome Plated, ABS
43222 - Oval, Black, Polycarbonate
92510 - 4" Round, White, Polycarbonate
92512 - 4" Round, Black, Polycarbonate
92511 - 4" Round, Gray, Polycarbonate
92513 - 4" Round, Chrome Plated, ABS
43253 - 4" Round, Stainless Steel



SNAP-IN THEFT-RESISTANT FLANGE FOR 4" ROUND LED LAMPS

Flange is held in place by snap tabs as opposed to standard screw holes, for a quicker, easier installation. Snap tabs on the flange lock the flange into place, keeping it from backing out of the hole. Flange is theft-resistant once snap tabs are in place. Foam gasket cushions flange from vibration and road shock. Panel thickness .120" to .250" thick mounting hole size 4.50" diameter.

93553 - Chrome
93552 - Black
93550 - Gray
43702 - Red, Reflex



MOUNTING BRACKET FOR OVAL OR 4" ROUND LAMPS

90° angle bracket. For use with oval or round lamps. Grommet required for mounting.

43362 - 90°, Oval, Black 43572 - 90°, 4" Round, Black
42042 - 45°, Oval, Black 42052 - 45°, 4" Round, Black



"Z" MOUNTING BRACKET FOR OVAL LAMPS

Heavy gauge steel, baked black enamel finish. Grommet or flange required for mounting.

43952 - Black



SURFACE MOUNT SNAP-IN FLANGE FOR OVAL LAMPS

Allows for quick and easy surface mount application.

42153 - Chrome
42152 - Black
94540 - Gray, 4" Round



STOP / TAIL / TURN THREE-WIRE PLUG-IN PIGTAILS FOR MALE-PIN LAMPS

Dual function for S / T / T lamps. O-ring seal resists moisture and corrosion. Quality ULTRA-BLUE-SEAL® construction. Grease grooves for additional sealing protection.

66815 - 6" Long, Ground Return System, Slim-line .180 Male
66816 - 6" Long, Ground Return System, 90° Plug, Slim-line .180 Male



TWO-WIRE PLUG-IN PIGTAILS FOR MALE-PIN LAMPS

Straight-in pigtail. Single function. O-ring seal resists moisture and corrosion. Quality ULTRA-BLUE-SEAL® construction. Grease grooves for additional sealing protection.

66842 - 10" Long, Chassis Ground, Slim-line .180 Male
66846 - 10" Long, Chassis Ground, 90° Plug, Slim-line .180 Male



ADAPTER PLUGS

Female to male pin lamp termination, and male to female pin lamp termination

66836 - 6" Long, Female Pin to 90° Male Pin Lamp Termination
66830 - 6" Long, Female Pin to Male Pin Lamp Termination



ADJUSTABLE BRACKET FOR TRILLIANT™

Adjustable and lockable bracket for the Trilliant™ LED Whitelight™ lamps. Gives more aiming control than the standard bracket and additional reliability. Cantilever locking mechanism stays in place in even the most harsh environment

43652 - Bracket

Grote

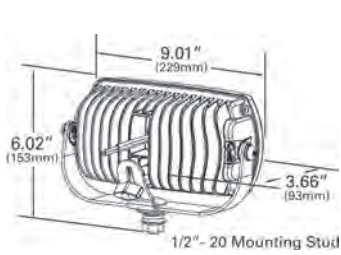
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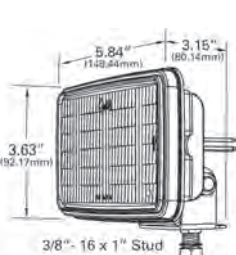
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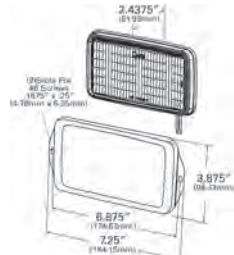
Dimensions - Signal Lamps, Brackets and Grommets



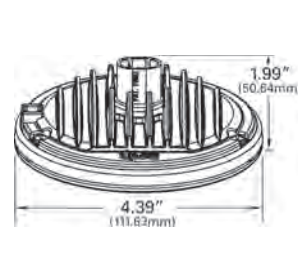
TRILLIANT®



TRILLIANT® MINI



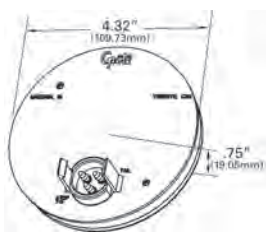
TRILLIANT® MINI FLUSH MOUNT



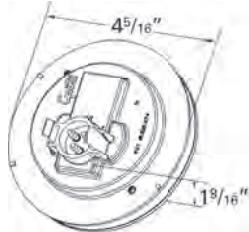
TRILLIANT® 36 LED BULB



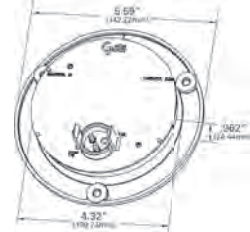
TRILLIANT® 36 BRACKETED



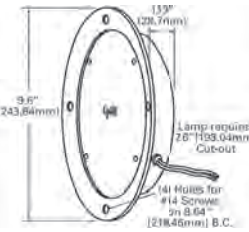
4" LED WHITELIGHT™ LAMP / 4" SUPERNOVA® 10-DIODE / 4" SUPERNOVA® FULL PATTERN



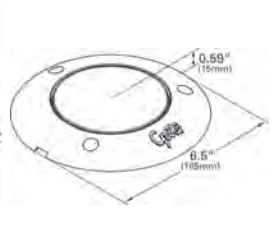
SUPERNOVA® 4" NEXGEN™ LED S/T/T



4" LED WHITELIGHT™ LAMP FLANGE MOUNT



LED WHITELIGHT™ 7" ROUND, DOME LAMP



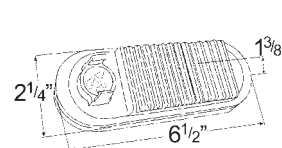
S100



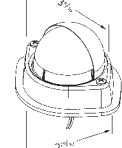
LED WHITELIGHT™ RECESSED-MOUNT DOME LAMP



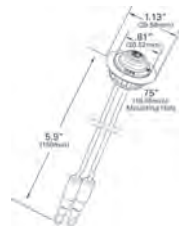
6" OVAL LED UTILITY LAMP / SUPERNOVA® OVAL 9 DIODE



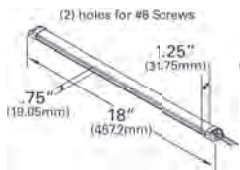
SUPERNOVA® LED OVAL S/T/T LAMP / SUPERNOVA® OVAL LED BACK-UP LAMPS



LED COURTESY STEPWELL LAMP



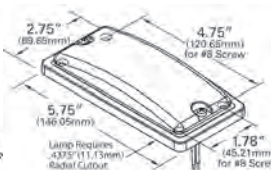
SMALL ROUND STEPWELL LAMP



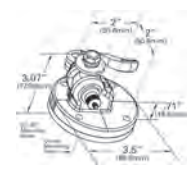
18" LED SLIMWHITE/ PUMP PANEL STRIP



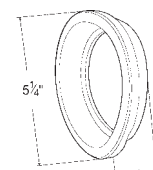
48" LED SLIMWHITE/ PUMP PANEL STRIP



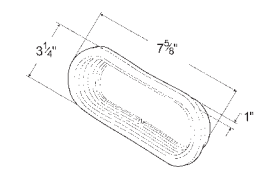
RECTANGULAR LED LAMP



ADJUSTABLE BRACKET FOR TRILLIANT®



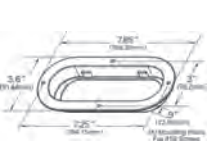
GROMMET FOR 4" ROUND LAMPS



GROMMET FOR OVAL LAMPS



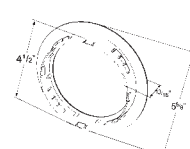
SURFACE MOUNT SNAP-IN FLANGE FOR OVAL LAMPS



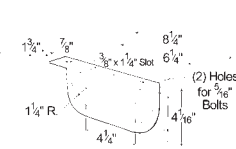
THEFT-RESISTANT MOUNTING FLANGE FOR OVAL LAMPS



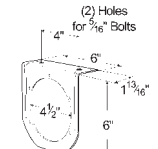
SURFACE MOUNT BRACKET FOR 4" LED LAMPS



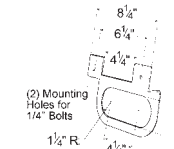
SNAP-IN THEFT-RESISTANT FLANGE FOR 4" ROUND LED LAMPS



MOUNTING BRACKET FOR OVAL LAMPS



MOUNTING BRACKET FOR 4" ROUND LAMPS



"Z" MOUNTING BRACKET FOR OVAL LAMPS

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FIRE/RESCUE LED LIGHTING



**William D. Grote, Founder
Grote Industries 1901**

A family's commitment to the vehicle and transportation lighting industry, spanning more than four generations

Just like many of the distributors, fleets and OEM's Grote Industries serves, we're a family-owned business. Like a number of our customers, we're proud of our family's multi-generational commitment to the transportation industry, reaching back more than a century. If you know the Grote family, you also know that the vehicle lighting business is not just a job to us, it's something that's molded into our family's culture – part of our very DNA. We're fond of saying that "lighting is in our blood" and we're only half kidding.

Unlike many institutionally-owned companies, we're able to draw on our family's time-honored values, built upon our tradition of service to the industry and our fierce entrepreneurial spirit. We're thankful for the visionary legacy of our predecessors and because of it, we can't help but to see the past, present and future of the lighting industry in a different context from those who simply find themselves working in the lighting business.

Founded on the principles of solid customer relationships, continuous innovation and exceptional product performance, Grote is committed to propelling itself and its industry forward, with inventive products and challenging ideas.

As a corporation, our family's culture extends to our entire organization, around the globe and particularly to our customer-facing staff. Grote is not sales oriented, we're not engineering oriented – we're relationship oriented and we're working hard every day to uphold our reputation and continue to earn your trust.

The Grote family has played a prominent role in shaping the vehicle lighting industry. We are deeply and personally engaged today, as we will be in the future, to make the kind of brave choices and bold decisions that will help move the vehicle lighting industry ahead and into an even brighter tomorrow.



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