

The logo features the word "TYRI" in a bold, italicized, white sans-serif font. It is enclosed within a white circular graphic that is open at the top and bottom, resembling a stylized 'C' or a partial circle. The background of the entire page is a photograph of a cornfield with rows of mature, golden-brown corn plants. In the foreground, the green, curved tops of a combine harvester are visible, indicating the machine is in the process of harvesting the corn.

# *TYRI*



INTELLIGENT LIGHTING SOLUTIONS

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# TYRI EXCELLENCY

As an industry leader in highway and off highway lighting, TYRI develops intelligent lighting solutions in LED, HID (Xenon) and Halogen technologies. These solutions solve the specific and demanding application requirements of the Heavy Vehicle, Mining, Forestry, Construction, Agricultural and Material Handling Industries. With multiple locations around the world, TYRI is able to offer global supply with local source programs for multinational customers. These programs are complemented by dedicated service and local support to maintain complete customer satisfaction.

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## HISTORY

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TYRI Lights is an initiative undertaken by three partner companies with extensive experience in work lighting. These global companies came together to develop and produce an unbeatable range of work lights for off highway applications. It was essential that this lighting solution provided useable light, focused where it was needed most and was tough enough to stand up to the harsh environments endured in the Construction, Mining and Forestry industries. As a result, TYRI Lights was born.

Drawing on the three partner company's vast knowledge of industry and lighting, spanning over 30 years, TYRI continues to develop innovative solutions using the latest technologies. These solutions are engineered to deliver performance and quality to meet the specific and demanding application requirements of off highway industries.

Employing over 200 experienced workers, TYRI strives to instil quality throughout every task from development

to manufacturing, ensuring that our customers get the very best product from the very best team.

With the knowledge and strength of the TYRI member companies, TYRI is able to adapt to meet the demands of the off highway industries and our customer requirements.

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## RESEARCH & DEVELOPMENT

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The TYRI research and development department, based in Sweden, is on the cutting edge of lighting technology. We lead the way in designing new and innovative lighting solutions which perform to your exact requirements.

Using advanced lab facilities and state of the art equipment, TYRI ensures all our solutions meet exceptionally high standards, from development through manufacture and testing.

The latest optical, thermal, mechanical and FMEA design and simulation software's are



utilised to maximise the amount of useable light distributed from all TYRI solutions. Our high-tech laboratories operate with advanced equipment for optical, EMC and mechanical evaluation. We work according to LEAN product development processes, ensuring our customers get the best possible service and product.

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## TESTING & APPROVALS

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TYRI Lights are proven to perform, even in the harshest of environments. They undergo rigorous testing to ensure they can hold up to the punishing regimes of all off highway machines.

Some of our quality assessments are below. However, TYRI Lights also undergo numerous other examinations to ensure our final product is built to the high standards you would expect:

**LED Protection** - TYRI lights have built in temperature sensing circuits which reduce the output to regulate the temperature of the light. This prevents damage to the LED's that can result in premature failure. TYRI LED lights are also reverse polarity protected in the event of incorrect installation. Should the wires become crossed during connection, TYRI lights will not turn on until the wires have been connected in the correct configuration, protecting the LEDs and associated circuitry.

**Vibration and Shock** - TYRI Lights undergo extensive vibration and shock testing, for up to 8 hours on all axes, with up to 50G force of pressure. This simulates the forces applied to the lights once mounted on off highway machines.

**Combined Environmental Tests** - TYRI Lights are subjected to heat and cool temperatures, as well as humidity, for a minimum of 50 days to ensure they will not be affected by

changes in environments. They are tested in conditions up to -40°C to + 85°C and up to 90% humidity.

**Electromagnetic Compatibility (EMC)** - It is of vital importance, especially on emergency or military vehicles, that lighting does not effect control systems, cameras, onboard computers and other radio sensitive equipment. This is why TYRI Lights are scrutinised to ensure they do not interfere with EMC functionality. In line with this philosophy, TYRI Lights have been awarded CISPR 25 Class 5 ratings in most cases.

**Salt Spray** - TYRI Lights undergo rigorous salt spray testing to ensure they are approved to ASTM B117 standards. This ensures that even in corrosive environments, TYRI Lights will continue to perform.

**IP69K** - Off highway machines will often need to be cleaned with high pressure water hoses, and in some cases even steam, to sanitise the equipment. This is why TYRI ensures our complete lighting is awarded with IP69K approvals.

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## ECO FRIENDLY & RECYCLABLE

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TYRI are committed to environmentally friendly design, through our research, development and manufacturing process at each global locations. TYRI uses quality materials, ensures the design of our lighting products allow for easy disassembly and reusable parts are labelled as recyclable so valuable resources can be reused in other industries. All of our waste electronics are ground down and the recyclable metals are extracted to be repurposed. The elements that cannot be recycled are burnt and the energy recovered is used in the heating of houses. Through our global efforts we have been awarded ISO 14001 and are RoHS compliant.

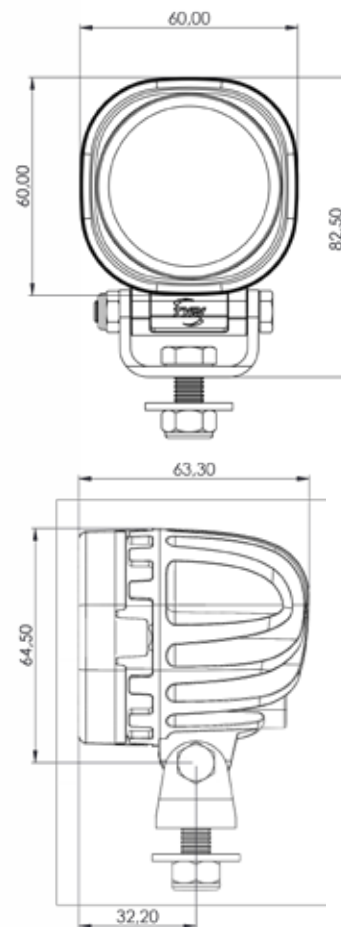






# LED LIGHTING TECHNOLOGY

LED (Light Emitting Diode) Technology offers enormous benefits in a variety of areas. The long life, durability, and efficient lumen to watt ratio of LED lights provide significant savings in service cost and power consumption. LED work lights, designed by TYRI, emit a light with 5500°K which is near the colour spectrum of the mid-day sun, and so allows the human eye to function and view objects better. Since the design capabilities are more flexible; LED lighting can be placed in compact and restrictive areas for better illumination. For unique applications, TYRI is also able to offer an alternative, warmer 4000°K or 3000°K for mining applications or concrete spraying where a white light may cause glare.



# 0606

The TYRI 0606 LED work light may be only 6cm in width and height, but with its 720 effective lumen output, it really shines bright. When you are looking for a small compact work light for applications such as engine compartments, ATV's, speedboats or small compact machinery, the TYRI 0606 is the smart choice. Equipped with a polycarbonate lens, this light is bright and strong.



Light Beam Patterns  
Page 64

**EMC** EMC TESTED

**IP** IP 69K

**VIB** VIBRATION TESTED

**SALT** SALT SPRAY TESTED

**UL** UL RATED OPTIONAL

LUMEN OUTPUT		Number of LED'S	VOLTAGE			AMP DRAW		Power (Watts)	Colour Temp	CRI
Theoretical	Effective		Machine	Operating Range		12 Volts	24 Volts			
1000	720	1	12-48	9	60	1.2	0.6	13	5700	70
1000	750	6	12	9	16	1.1		13.2	5700	70
1000	750	6	24	18	32		0.55	13.2	5700	70

Operating Temp: -40° to 75°C

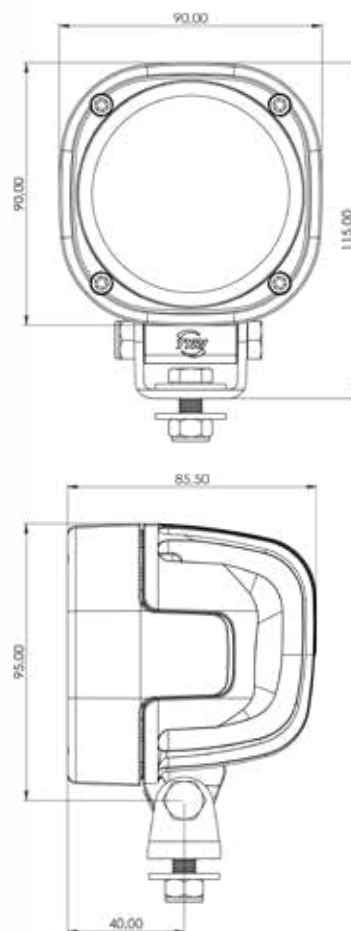
Light Pattern: Symmetric

Lens Material: Plastic

Housing: Cast Aluminum

Mounting Options:  
Hanging, Standing, Side

(DT04-2P) Built in



LED

# 0909

The 0909 is a compact and flexible lighting solution. Available with multi-volt (9V to 108V) or single volt options, it has a contemporary design which compliments any machine. A practical and small light, the 0909 is also available as an E-Approved rated model and can be mounted in a variety of locations on your machine.



Light Beam Patterns  
Page 64-65

**EMC** EMC TESTED

**IP** IP 69K

**VIB** VIBRATION TESTED

**SALT** SALT SPRAY TESTED

**EN** E RATED OPTIONAL

LUMEN OUTPUT		Number of LED'S	VOLTAGE			AMP DRAW		Power (Watts)	Colour Temp	CRI
Theoretical	Effective		Machine	Operating Range		12 Volts	24 Volts			
1800	1400	6	12	9	16	1.8		22	5700	70
1800	1400	6	24	18	32		0.9	22	5700	70
2250	1850	6	12	9	16	2.3		29	5700	70
2250	1850	6	24	18	32		1.2	29	5700	70
1800	1400	6	12-80	9	108	2.0	1.0	24	5700	70

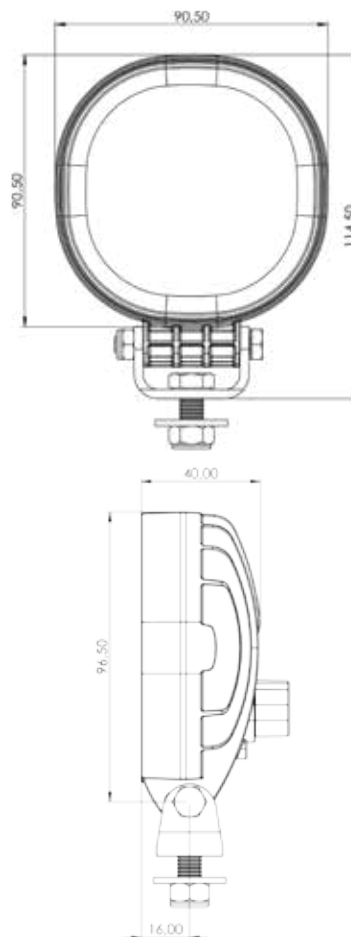
Operating Temp: -40° to 75°C

Light Pattern: Symmetric or Asymmetric

Lens Material: Plastic

Housing: Cast Aluminum

Mounting Options:  
Hanging, Standing, Side  
(DT04-2P) Built in



# 0909 Compact

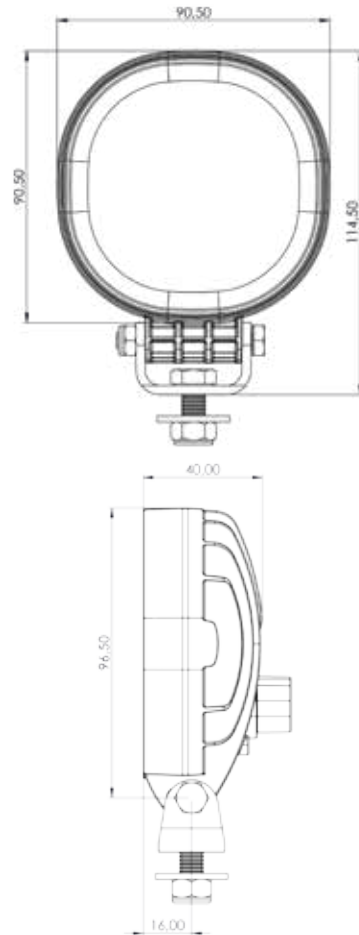
The 0909 Compact is a cost effective LED light with slim housing. It is the ideal replacement for halogen solutions as a first step in upgrading your machinery lighting. The 0909 Compact is UL certified and carries an IP rating of 69K.

-  EMC TESTED
-  IP 69K
-  VIBRATION TESTED
-  SALT SPRAY TESTED
-  UL RATED OPTIONAL

LUMEN OUTPUT		Number of LED'S	VOLTAGE			AMP DRAW		Power (Watts)	Colour Temp	CRI
Theoretical	Effective		Machine	Operating Range		12 Volts	24 Volts			
900	750	4	12-80	9	108	1.2	0.6	14	5700	70

Light Pattern: Symmetric, Asymmetric, High, Spot, Fog  
 Lens Material: Plastic  
 Housing: Cast Aluminum  
 Mounting Options: Hanging, Standing, Side (DT04-2P) Built in








LED

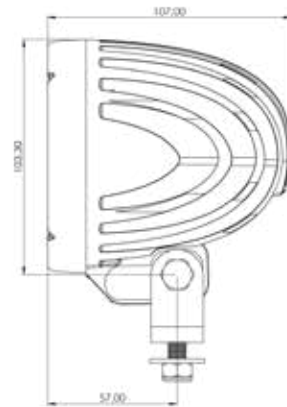
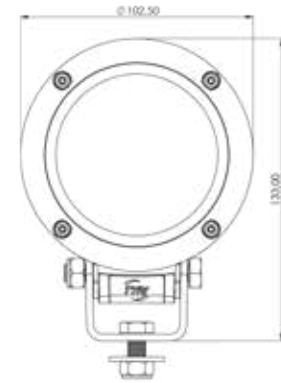
# 0909 Compact P

The 0909 Compact P is an innovative LED work light using advanced thermo plastic housing. This adaptable lighting solution is lightweight and slim line for a discreet mounting option. It is available with UL and IP69K rating.

-  EMC TESTED
-  IP 69K
-  VIBRATION TESTED
-  SALT SPRAY TESTED
-  UL RATED OPTIONAL

LUMEN OUTPUT		Number of LED'S	VOLTAGE			AMP DRAW		Power (Watts)	Colour Temp	CRI
Theoretical	Effective		Machine	Operating Range		12 Volts	24 Volts			
900	750	4	12-80	9	108	1.2	0.6	14	5700	70

Light Pattern: Symmetric, Asymmetric, High, Spot, Fog  
 Lens Material: Plastic  
 Housing: Thermally Conductive Plastic  
 Mounting Options: Hanging, Standing, Side (DT04-2P) Built in



# D10

The D10 LED work light has a unique dome shape which perfectly integrates into your machine. With a 2500 effective lumen output, this work light really helps illuminate your work area in clear, bright, white light.



Light Beam Patterns  
Page 65

**EMC** EMC TESTED

**IP** IP 69K

**VIBRATION** VIBRATION TESTED

**SALT SPRAY** SALT SPRAY TESTED

LUMEN OUTPUT		Number of LED'S	VOLTAGE		AMP DRAW		Power (Watts)	Colour Temp	CRI
Theoretical	Effective		Machine	Operating Range	12 Volts	24 Volts			
3000	2500	10	12-48	9 60	3.2	1.6	42	5000	70

Operating Temp: -40° to 75°C

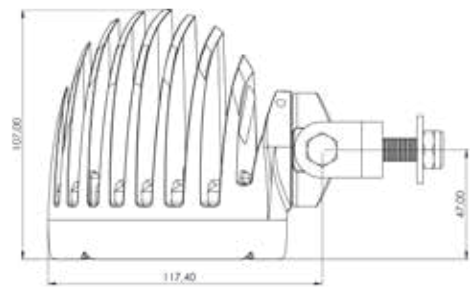
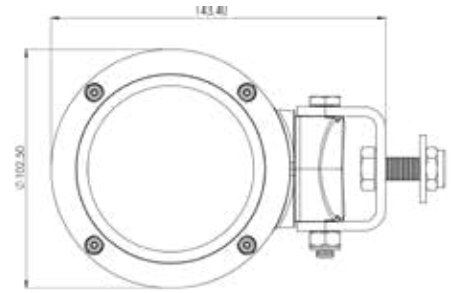
Light Pattern: Asymmetric

Lens Material: Plastic

Housing: Cast Aluminum

Mounting Options:  
Hanging, Standing

(DT04-2P) Built in







LED

# D10 Swivel

The D10 Swivel has streamline shape and a swivel side mounting bracket. This bracket enables the D10 Swivel to be easily adjusted into various positions to illuminate your work area. Delivering an effective lumen output of 2500 lumens, it is not only adaptable but also bright.

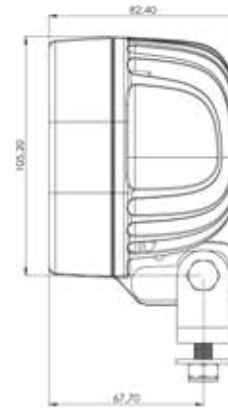
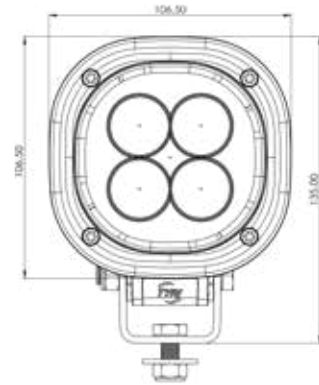


Light Beam Patterns  
Page 65

-  EMC TESTED
-  IP 69K
-  VIBRATION TESTED
-  SALT SPRAY TESTED

LUMEN OUTPUT		Number of LED'S	VOLTAGE			AMP DRAW		Power (Watts)	Colour Temp	CRI
Theoretical	Effective		Machine	Operating Range		12 Volts	24 Volts			
3000	2500	10	12-48	9	60	3.2	1.6	42	5000	70

Operating Temp: -40° to 75°C  
 Light Pattern: Asymmetric  
 Lens Material: Plastic  
 Housing: Cast Aluminum  
 Mounting Options: Side, Swivel  
 (DT04-2P) Built in



# 1010 WhiteBeam

The 1010 WhiteBeam LED is a unique spot light capable of delivering a high lux output in a concentrated area. It is specifically designed to perform as a long distance beam light with a 5° concentrated pattern.



Light Beam Patterns  
Page 65

**EMC** EMC TESTED

**IP** IP 69K

**VIBRATION** VIBRATION TESTED

**SALT SPRAY** SALT SPRAY TESTED

LUMEN OUTPUT		Number of LED'S	VOLTAGE		AMP DRAW		Power (Watts)	Colour Temp	CRI
Theoretical	Effective		Machine	Operating Range	12 Volts	24 Volts			
900	700	4	12-48	9 60	1.4	0.6	17	5700	70
1100	900	4	12-48	9 60	1.4	0.6	17	5700	70

Operating Temp: -40° to 75°C

Light Pattern: Spot

Lens Material: Plastic

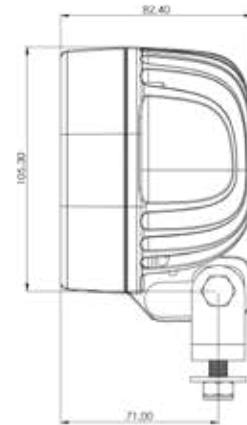
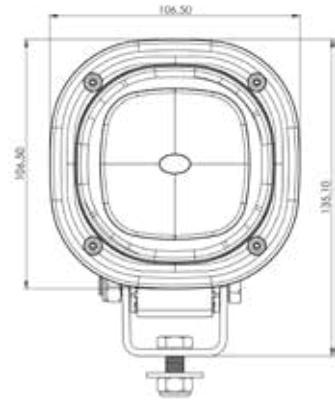
Housing: Cast Aluminum

Dampened

Mounting Options:  
Hanging, Standing, Side,  
Flush

(DT04-2P) Built in









LED

# 1010 WhitePoint

The WhitePoint is a tighter spot light, in comparison to the WhiteBeam, and capable of projecting light over a long distance. This work light is suitable for applications requiring illumination at far distances.



Light Beam Patterns  
Page 65

-  EMC TESTED
-  IP 69K
-  VIBRATION TESTED
-  SALT SPRAY TESTED

LUMEN OUTPUT		Number of LED'S	VOLTAGE			AMP DRAW		Power (Watts)	Colour Temp	CRI
Theoretical	Effective		Machine	Operating Range		12 Volts	24 Volts			
900	700	4	12-48	9	60	1.4	0.6	17	5700	70
1100	900	4	12-48	9	60	1.4	0.6	17	5700	70

Operating Temp: -40° to 75°C

Light Pattern: Spot

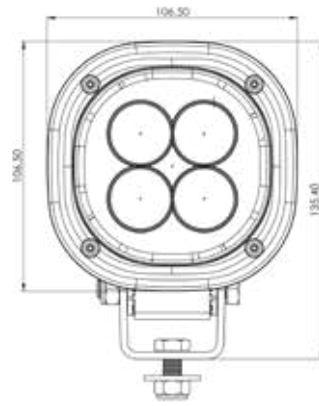
Lens Material: Plastic

Housing: Cast Aluminum

Dampened

Mounting Options:  
Hanging, Standing, Side,  
Flush

Connector: (DT04-2P) Built in



# 1010 BlueBeam & RedBeam

TYRI developed the BlueBeam and RedBeam LED as a powerful spot light, with a wider beam pattern than the BluePoint and RedPoint. Along with the bright blue colour, the BlueBeam serves a practical purpose, ensuring operators of crop sprayers have full visibility of the nozzle spray being spread across the fields with its powerful short range illumination.



Light Beam Patterns  
Page 65

-  EMC TESTED
-  IP 69K
-  VIBRATION TESTED
-  SALT SPRAY TESTED
-  UL RATED OPTIONAL

LUMEN OUTPUT		Number of LED'S	VOLTAGE		AMP DRAW		Power (Watts)	Dominant Wavelength Typical
Theoretical	Effective		Machine	Operating Range	12 Volts	24 Volts		
300	248	4	12-48	9 60	1.2	0.6	15	470nm
300	248	4	12-80	9 60	TBD	TBD	TBD	470nm

Operating Temp: -40° to 75°C

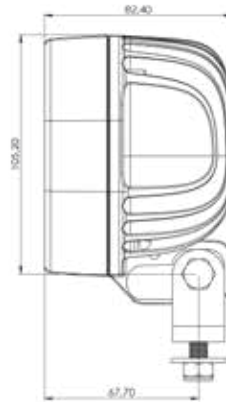
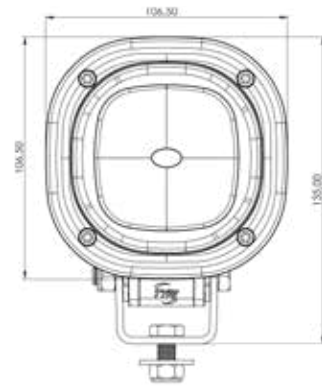
Light Pattern: Spot

Lens Material: Plastic

Housing: Cast Aluminum

Mounting Options:  
Hanging, Standing, Side,  
Flush

Connector: (DT04-2P) Built in



LED

# 1010 BluePoint & RedPoint

TYRI Lights developed the BluePoint and RedPoint LED to increase safety and minimise the risk of accidents around machinery. The LED light projects a coloured, concentrated light beam as a large and visible square on the floor in front or behind the machine. This early warning signal alerts workers that there is a machine approaching. As an industry leading concept, it allows safety to be visual instead of relying solely on sirens and alarms, especially in noisy environments where hearing is difficult. The light is available in blue, red and amber (yellow) colour options.



Light Beam Patterns  
Page 65

-  EMC TESTED
-  IP 69K
-  VIBRATION TESTED
-  SALT SPRAY TESTED
-  UL RATED OPTIONAL

LUMEN OUTPUT		Number of LED'S	VOLTAGE			AMP DRAW		Power (Watts)	Dominant Wavelength Typical
Theoretical	Effective		Machine	Operating Range		12 Volts	24 Volts		
300	248	4	12-48	9	60	1.2	0.6	15	470nm
300	248	4	12-80	9	108	TBD	TBD	TBD	470nm

Operating Temp: -40° to 75°C

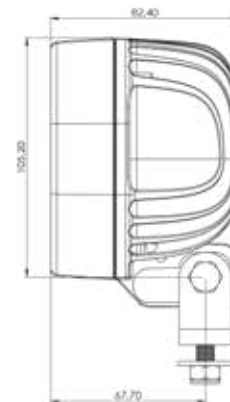
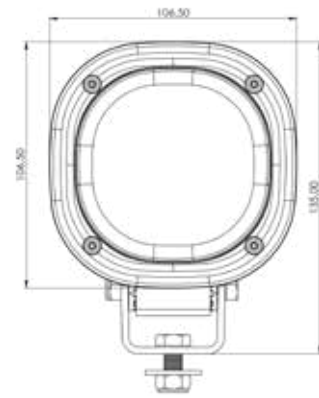
Light Pattern: Spot

Lens Material: Plastic

Housing: Cast Aluminum

Mounting Options:  
Hanging, Standing, Side,  
Flush

(DT04-2P) Built in



# 1010 Diffused

Designed for flexibility and durability, the 1010 Diffused LED work light is ideal for a wide variety of applications, including when you are working in a confined area. The milky, white lens diffuses and disperses the light in a uniform pattern over almost 180° and 2m in distance, making it a light which is easy to work with and free from glare.



Light Beam Patterns  
Page 65

**EMC** EMC TESTED

**IP** IP 69K

**VIBRATION** VIBRATION TESTED

**SALT SPRAY** SALT SPRAY TESTED

LUMEN OUTPUT		Number of LED'S	VOLTAGE		AMP DRAW		Power (Watts)	Colour Temp	CRI
Theoretical	Effective		Machine	Operating Range	12 Volts	24 Volts			
900	700	4	12-48	9   60	1.4	0.6	17	5700	70
1800	1450	8	12-48	9   60	2.5	1.3	30	5700	70

Operating Temp: -40° to 75°C

Light Pattern: Symmetric

Lens Material: Plastic

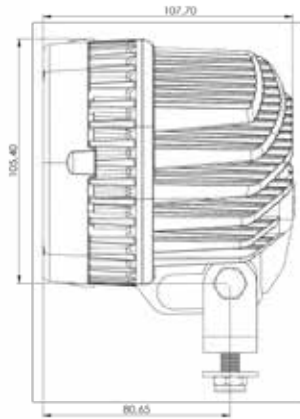
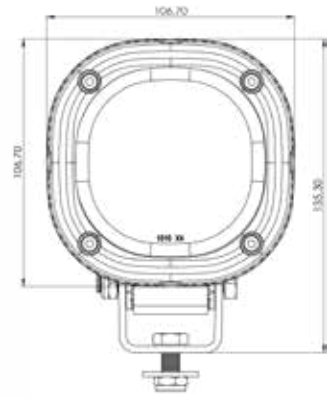
Housing: Cast Aluminum

Dampened

Mounting Options:  
Hanging, Standing, Side

(DT04-2P) Built in









LED

# 1010 X4

The 1010 X4 generates a powerful 2700 effective lumen output with a high beam light pattern which shines over a 125m area, to easily navigate over rough terrain. The tough and unique design of the reflector sets this light apart from the competition.



Light Beam Patterns  
Page 65

-  EMC TESTED
-  IP 69K
-  VIBRATION TESTED
-  SALT SPRAY TESTED

LUMEN OUTPUT		Number of LED'S	VOLTAGE		AMP DRAW		Power (Watts)	Colour Temp	CRI
Theoretical	Effective		Machine	Operating Range	12 Volts	24 Volts			
3600	2700	4	12-24	9 32	4.4	2.2	53	6000	70

Operating Temp: -40° to 75°C

Light Pattern: Spot

Lens Material: Glass

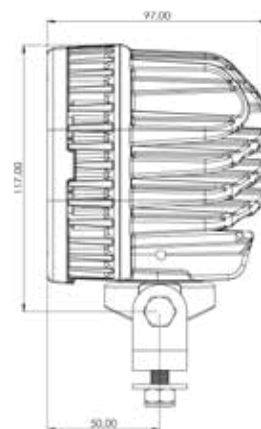
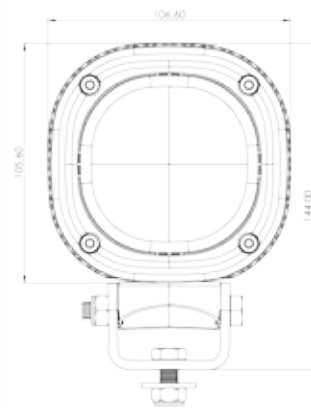
Housing: Cast Aluminum

Dampened

Mounting Options:  
Hanging, Standing, Side





(DT04-2P) Built in

LED



# 1010 Swivel

The TYRI 1010 Swivel LED has a unique swivel side mounting allowing for adjustments to be made to the positioning of the work light. This provides you with the optimum amount of usable light and flexibility in a reliable and trusted work light.

-  EMC TESTED
-  IP 69K
-  VIBRATION TESTED
-  SALT SPRAY TESTED

LUMEN OUTPUT		Number of LED'S	VOLTAGE			AMP DRAW		Power (Watts)	Colour Temp	CRI
Theoretical	Effective		Machine	Operating Range		12 Volts	24 Volts			
3000	2500	10	12-48	9	60	3.2	1.6	38	5700	70

Operating Temp: -40° to 75°C

Light Pattern: Symmetric, Asymmetric, High, Spot, Fog

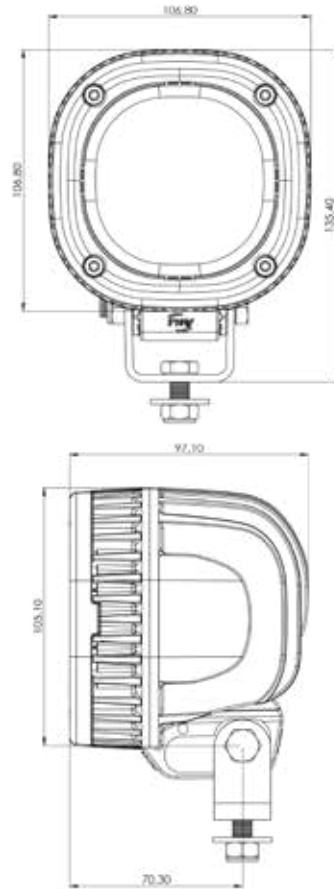
Lens Material: Plastic, Glass

Housing: Cast Aluminum

Dampened

Mounting Options:  
Hanging, Standing, Side, Swivel

(DT04-2P) Built in



LED

# 1010

Available with red, amber, and white LED's or all white LED's, the thru bolt design allows this light to be mounted in a variety of locations on machines with 12 volt and 12-80 volt systems. The white LED option also works great in a dome light application. This LED light is UL approved.



Light Beam Patterns  
Page 66

- EMC TESTED
- IP 69K
- VIBRATION TESTED
- SALT SPRAY TESTED
- UL RATED OPTIONAL

LUMEN OUTPUT		Number of LED'S	VOLTAGE			AMP DRAW		Power (Watts)	Colour Temp	CRI
Theoretical	Effective		Machine	Operating Range		12 Volts	24 Volts			
3000	2000	10	12-48	9	60	3.2	1.6	38	4200	90
3000	2500	10	12-48	9	60	3.2	1.6	38	5700	70
3600	3200	4	12-48	9	60	3	1.5	36	5000	70
3600	3200	4	12-48	9	60	3	1.5	36	5700	70
3600	3200	4	12	9	16	2.9		34	5700	70
3600	3200	4	24	18	32		1.5	34	5700	70
4500	4000	4	12-48	9	60	3.8	1.9	45	5000	70
4500	4000	4	12-48	9	60	3.8	1.9	45	5700	70
4500	4000	4	12	9	16	3.7		44	5700	70
4500	4000	4	24	18	32		1.9	44	5700	70
3800	3200	6	12	9	16	3.3		40	5700	70
3800	3200	6	24	18	32		1.7	40	5700	70

Operating Temp: -40° to 75°C,  
-40 to 85° C

Light Pattern: Symmetric,  
Asymmetric, High, Spot, Fog

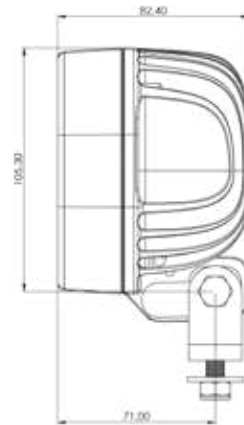
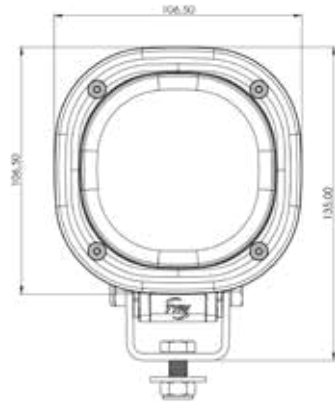
Lens Material: Plastic, Glass

Housing: Cast Aluminum

Dampened

Mounting Options:  
Hanging, Standing, Side

(DT04-2P) Built in



# 1010 Curve

The 1010 Curve design boasts improved, sleek and slightly curved cooling flanges to improve the overall heat transfer and efficiency. This work light is available with voltage range option for multi-voltage systems with a draw of 9V to 108V or as a single voltage model for machines operating with 12V or 24V.



Light Beam Patterns  
Page 67

- EMC TESTED
- IP 69K
- VIBRATION TESTED
- SALT SPRAY TESTED
- UL RATED OPTIONAL
- E RATED OPTIONAL

Operating Temp: -40° to 75°C,  
-40 to 85° C

Light Pattern: Symmetric,  
Asymmetric, High, Spot, Fog

Lens Material: Plastic, Glass

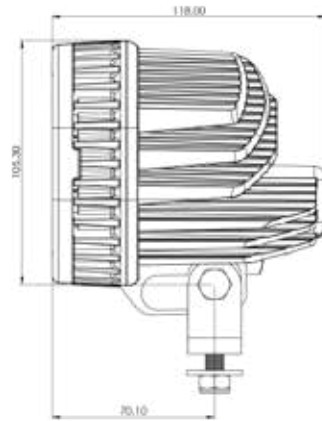
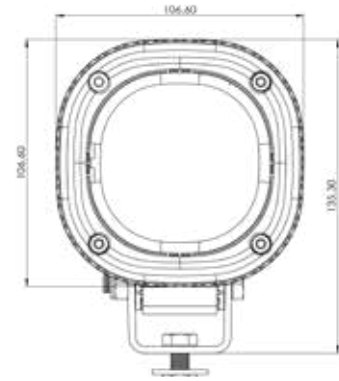
Housing: Cast Aluminum

Dampened

Mounting Options:  
Hanging, Standing, Side

(DT04-2P) Built in

LUMEN OUTPUT		Number of LED'S	VOLTAGE			AMP DRAW		Power (Watts)	Colour Temp	CRI
Theoretical	Effective		Machine	Operating Range		12 Volts	24 Volts			
900	700	4	12-48	9	60	1.4	0.7	17	5700	70
1800	1450	8	12-48	9	60	2.5	1.3	30	5700	70
1800	1400	6	12	9	16	1.8		22	5700	70
1800	1400	6	24	18	32		0.9	22	5700	70
2250	1850	6	12	9	16	2.3		29	5700	70
2250	1850	6	24	18	32		1.2	29	5700	70
3000	2500	4	12-48	9	60	2.8	1.4	34	5700	70



LED

# 1010 AC

The 1010 AC is a durable and hard working light with less power consumption at a voltage of 110V – 277V. This work light is an ideal match for mining, aggregate stations, conveyors and stationary lighting applications.

-  IP 69K
-  VIBRATION TESTED
-  SALT SPRAY TESTED

LUMEN OUTPUT		Number of LED'S	VOLTAGE			AMP DRAW		Power (Watts)	Colour Temp	CRI
Theoretical	Effective		Machine	Operating Range		120V/60Hz	240V/60Hz			
2900	2200	16	110-277 Nominal/47-63Hz	85	264	0.52	0.26	39	5100	70

Operating Temp: -40° to 50°C

Light Pattern: Symmetric, Asymmetric, High, Spot, Fog

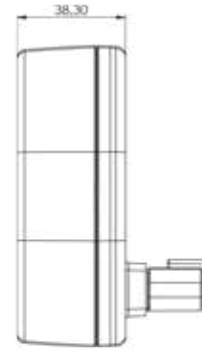
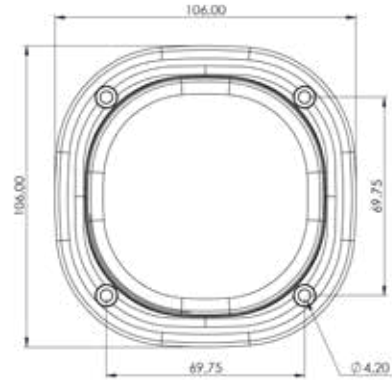
Lens Material: Plastic, Glass

Housing: Cast Aluminum

Dampened

Mounting Options: Hanging, Standing, Side

Connector: Fly Leads



# 1010 Flush

Where the requirement is to have the light flush to the vehicle, and where there is limited space for air flow, the TYRI 1010 Flush mounted light offers a unique solution. Without the need for a recess hole, this light fastens to the surface of the vehicle providing a sleek and clean solution. It uses the metal of the machine to create a cooling effect to help keep the light at an effective temperature.



Light Beam Patterns  
Page 67

-  EMC TESTED
-  IP 69K
-  VIBRATION TESTED
-  SALT SPRAY TESTED
-  UL RATED OPTIONAL

LUMEN OUTPUT		Number of LED'S	VOLTAGE			AMP DRAW		Power (Watts)	Colour Temp	CRI
Theoretical	Effective		Machine	Operating Range		12 Volts	24 Volts			
900	700	4	12-48	9	60	1.4	0.7	17	5700	70
1800	1450	8	12-48	9	60	2.5	1.3	30	5700	70
1800	1400	6	12	9	16	1.8		22	5700	70
1800	1400	6	24	18	32		0.9	22	5700	70
2250	1850	6	12	9	16	2.3		29	5700	70
2250	1850	6	24	18	32		1.2	29	5700	70
3000	2500	4	12-48	9	60	2.8	1.4	34	5700	70

Operating Temp: -40° to 75°C,  
-40 to 85° C

Light Pattern: Symmetric,  
Asymmetric, High, Spot, Fog

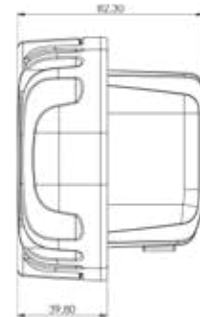
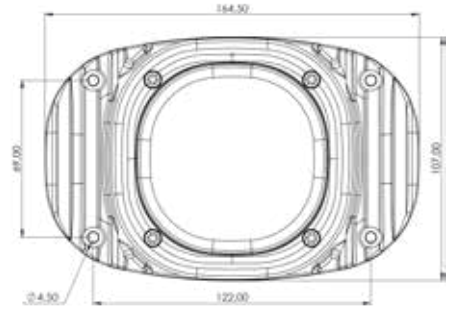
Lens Material: Plastic, Glass

Housing: Cast Aluminum

Mounting Options:  
Flush

(DT04-2P) Built in





LED

# 1010 Recess

Part of the original and most popular 1010 series, this light has the performance of the standard 1010, however it has a unique mounting option which makes it possible for this light to be fitted recessed into the vehicle. This design allows the light to become integral to your machine's design, being flexible enough to mount in a wide variety of positions. The design of the cooling flanges, to the side of the light, makes it ideal for mounting in situations where space and air flow is restricted.

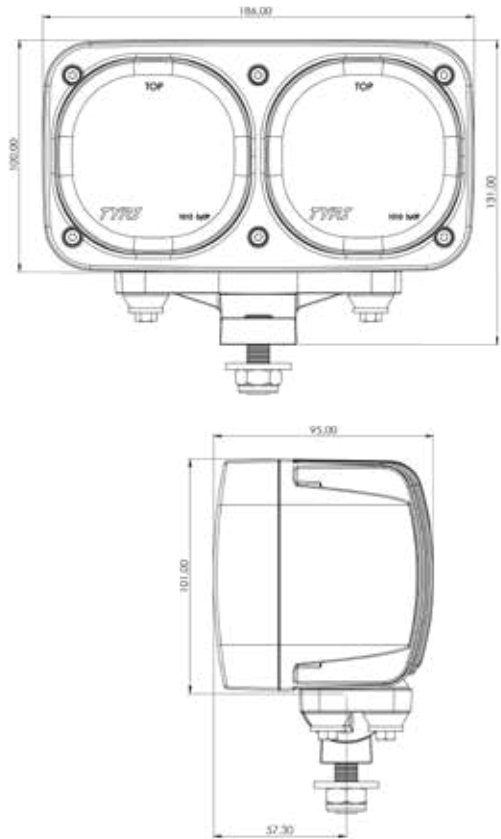


Light Beam Patterns  
Page 67

- EMC TESTED
- IP 69K
- VIBRATION TESTED
- SALT SPRAY TESTED
- UL RATED OPTIONAL





LUMEN OUTPUT		Number of LED'S	VOLTAGE		AMP DRAW		Power (Watts)	Colour Temp	CRI
Theoretical	Effective		Machine	Operating Range	12 Volts	24 Volts			
900	700	4	12-48	9 60	1.4	0.7	17	5700	70
1800	1450	8	12-48	9 60	2.5	1.3	30	5700	70

Operating Temp: -40° to 75°C  
 Light Pattern: Symmetric, Asymmetric, High, Spot, Fog  
 Lens Material: Plastic, Glass  
 Housing: Cast Aluminum  
 Mounting Options: Hanging, Standing, Side (DT04-2P) Built in



# 1010 Twin

The TYRI 1010 Twin LED provides twice the light of the standard 1010. Its rectangular design is powered with two sets of 1010 series electronics generating an extremely high lighting output. With its unique design, this work light is able to house two separate lighting patterns and coloured lenses, ensuring this light is both adaptable and multipurpose for a variety of applications. The TYRI 1010 Twin LED housing is mounted to a heavy duty four post dampened bracket configuration, making it tough and durable.

-  EMC TESTED
-  IP 69K
-  VIBRATION TESTED
-  SALT SPRAY TESTED

Operating Temp: -40° to 75°C

Light Pattern: Symmetric, Asymmetric, High, Spot, Fog

Lens Material: Plastic

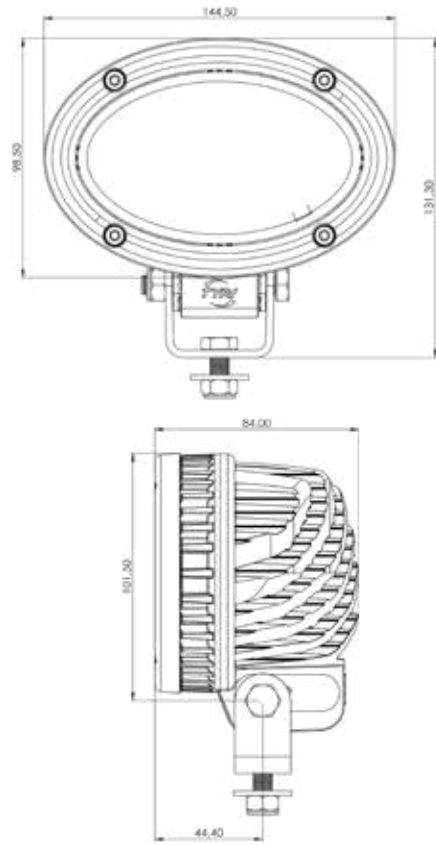
Housing: Cast Aluminum

Dampened

Mounting Options:  
Hanging, Standing

(DT04-2P) Built in

LUMEN OUTPUT		Number of LED'S	VOLTAGE			AMP DRAW		Power (Watts)	Colour Temp	CRI
Theoretical	Effective		Machine	Operating Range		12 Volts	24 Volts			
3600	2100	16	12-48	9	60	5	2.5	60	5700	70



LED

# 1015

Designed in an oval shape and available with wide symmetrical and asymmetrical lens pattern options, the TYRI 1015 LED is the perfect solution for lighting broad work areas. This work light is ideal to replace many of the oval Halogen and HID work lights used on tractors, smaller construction equipment and material handling equipment.



Light Beam Patterns  
Page 68

**EMC** EMC TESTED

**IP** IP 69K

**VIB** VIBRATION TESTED

**SALT** SALT SPRAY TESTED

LUMEN OUTPUT		Number of LED'S	VOLTAGE		AMP DRAW		Power (Watts)	Colour Temp	CRI
Theoretical	Effective		Machine	Operating Range	12 Volts	24 Volts			
1550	1100	8	12-48	9 60	2.4	1.1	29	5700	70
3500	2250	10	12-48	9 60	3.5	1.8	42	6000	72
1800	1450	8	12-48	9 60	1.8	0.9	22	5700	70
3000	2500	4	12-48	9 60	2.2	1.1	26	5700	70

Operating Temp: -40° to 75°C,  
-40 to 85° C

Light Pattern: Symmetric,  
Asymmetric, High

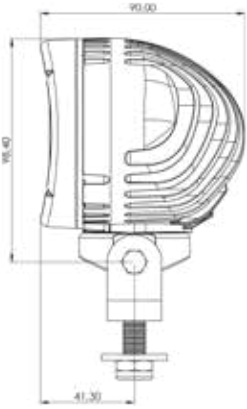
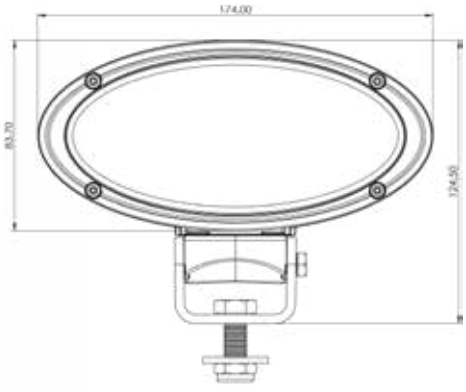
Lens Material: Plastic

Housing: Cast Aluminum

Dampened

Mounting Options:  
Hanging, Standing

(DT04-2P) Built in



# 1017

The slim, yet high output oval bezel design and swivel bracket of the TYRI 1017 LED makes this work light a must have throughout many industries. The 1017 LED provides an impressive 2400 effective lumen, with a mere 1.0 amp consumption at 48 volts, saving energy throughout the life of the machine. The most popular application for this light is in the Agricultural sector, but it is highly adaptable to other off highway situations.

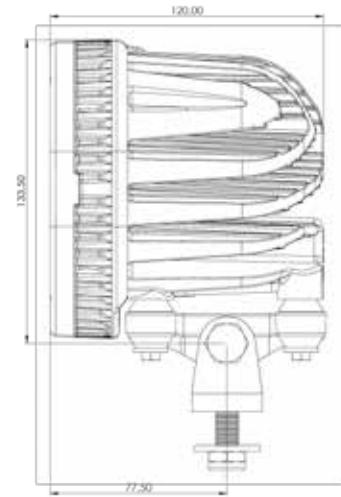
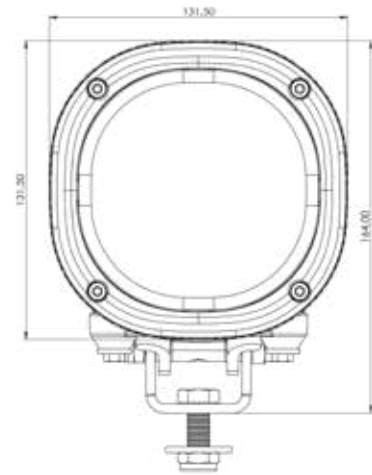


Light Beam Patterns  
Page 68

- EMC TESTED
- IP 69K
- VIBRATION TESTED
- SALT SPRAY TESTED

LUMEN OUTPUT		Number of LED'S	VOLTAGE		AMP DRAW		Power (Watts)	Colour Temp	CRI
Theoretical	Effective		Machine	Operating Range	12 Volts	24 Volts			
3500	2400	10	12-48	9 60	3.5	1.8	42	5700	72



Operating Temp: -40° to 75°C  
 Light Pattern: Symmetric, Asymmetric, High  
 Lens Material: Plastic  
 Housing: Cast Aluminum  
 Mounting Options: Hanging, Standing, Swivel (DT04-2P) Built in



LED

# 1313 AC

The TYRI 1313 AC is a low energy (61W), bright and durable work light. It is suitable for larger conveyors or AC powered machinery giving an output of 3700 effective lumens.

-  IP 69K
-  VIBRATION TESTED
-  SALT SPRAY TESTED

LUMEN OUTPUT		Number of LED'S	VOLTAGE		AMP DRAW		Power (Watts)	Colour Temp	CRI
Theoretical	Effective		Machine	Operating Range	120V/60hz	240V/60Hz			
5900	3700	24	110-277 Nominal/ 47-63Hz	85 264	0.52	0.26	61	5300-6000	70

Operating Temp: -40° to 50°C

Light Pattern: Symmetric, Asymmetric, High

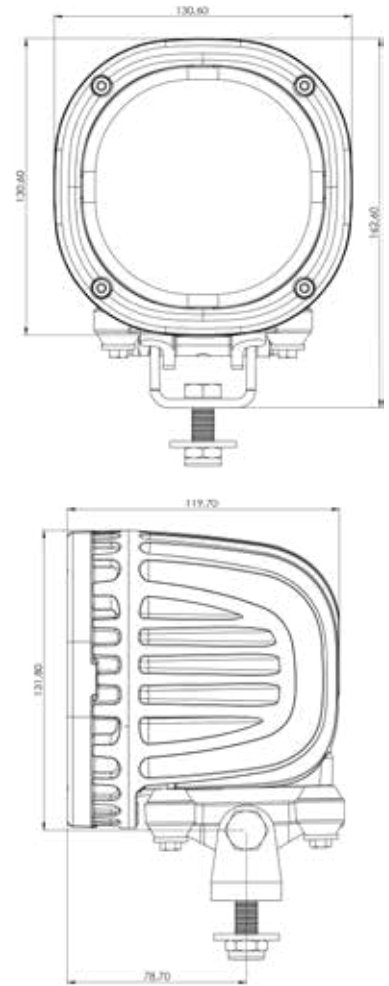
Lens Material: Plastic, Glass

Housing: Cast Aluminum

Dampened

Mounting Options: Hanging, Standing, Side

Connector: Fly Leads



# 1313

Powerful and adaptable with up to 7000 effective lumen, the 1313 is typically used on large construction and mining vehicles. This work light offers greater lumen to watt efficiency ratio and heavy duty housing, ensuring the 1313 delivers in both performance and durability.



Light Beam Patterns  
Page 69

**EMC** EMC TESTED

**IP** IP 69K

**VIBRATION** VIBRATION TESTED

**SALT SPRAY** SALT SPRAY TESTED

LUMEN OUTPUT		Number of LED'S	VOLTAGE			AMP DRAW		Power (Watts)	Colour Temp	CRI
Theoretical	Effective		Machine	Operating Range		12 Volts	24 Volts			
4500	3600	4	12-48	9	60	4	2	48	5700	70
6300	5000	7	12-48	9	60	5.2	2.6	62	5700	70
8900	7000	7	12-48	9	60	6.8	3.4	82	5700	70

Operating Temp: -40° to 85°C

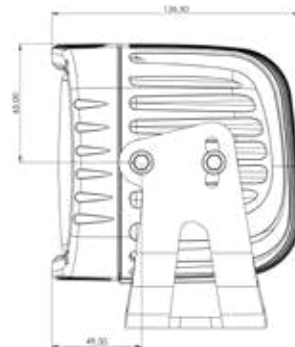
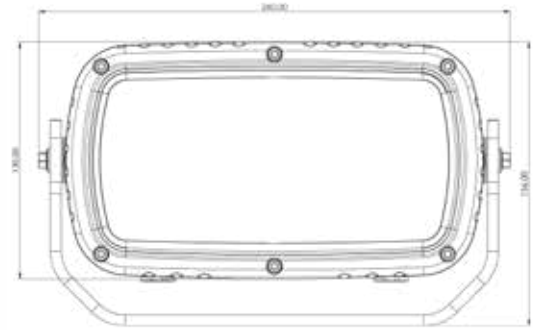
Light Pattern: Symmetric, Asymmetric, High

Lens Material: Plastic

Housing: Cast Aluminum  
Dampened

Mounting Options:  
Hanging, Standing, Side  
(DT04-2P) Built in





LED

# 1323

The 1323 LED is an extremely powerful and bright lighting option, delivering a massive 13,500 effective lumen output with a mere 6.2 amp draw. The curved design and mounting options of 30 degree trunnion mount ensure this work light is suitable for multiple applications and installation choices. The 1323 LED will also available in an AC version.



Light Beam Patterns  
Page 69

**EMC** EMC TESTED

**IP** IP 69K

**VIB** VIBRATION TESTED

**SALT** SALT SPRAY TESTED

LUMEN OUTPUT		Number of LED'S	VOLTAGE		AMP DRAW		Power (Watts)	Colour Temp	CRI
Theoretical	Effective		Machine	Operating Range	12 Volts	24 Volts			
16500	13500	12	24	18 32		6.2	150	4000	70

Operating Temp: -40° to 85°C

Light Pattern: Symmetric, Asymmetric, Spot

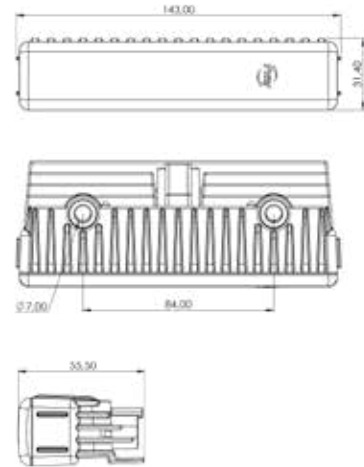
Lens Material: Plastic

Housing: Cast Aluminum

Dampened - 30° Trunnion/6 post

Mounting Options:  
Hanging, Standing, Side

(DT04-2P) Built in



# VL3

The smallest of the VL series, the VL3 LED is designed for the forklift industry to provide a low profile mast light for more effective forward lighting. However, this light is highly adaptable and can be used on a number of different material handling applications as well as trucks and cranes. The thru bolt design allows for placement of the light in a variety of locations on 12 volt machines and the lens colour options of white, red or green provide additional application choices.

-  EMC TESTED
-  IP 69K
-  VIBRATION TESTED
-  SALT SPRAY TESTED
-  UL RATED OPTIONAL

LUMEN OUTPUT		Number of LED'S	VOLTAGE		AMP DRAW		Power (Watts)	Colour Temp	CRI
Theoretical	Effective		Machine	Operating Range	12 Volts	24 Volts			
700	350	3	12	9 - 16	0.9		11	5700	70

Operating Temp: -40° to 75°C

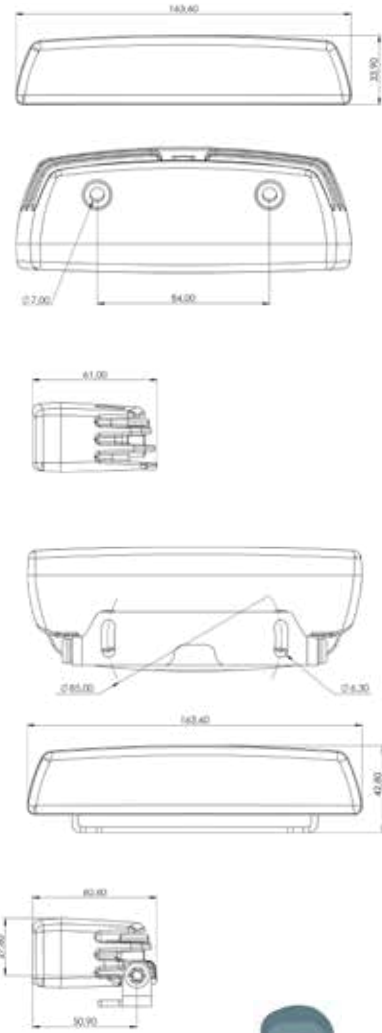
Light Pattern: Symmetric, Asymmetric

Lens Material: Plastic

Housing: Cast Aluminum

Mounting Options:  
Thru Bolt

DT04-2P) Built in



# VL4

The mid-range offering of the VL series, the VL4 has a streamline design for machines with 12-48 volt systems offering up to 825 effective lumen lights with 4 LED's. This work light, widely used on forklifts, is highly adaptable with a variety alternative uses on ATV's, UTV and snow mobiles as well as buses and coaches and even recovery trucks. The VL4 is available with a thru bolt mount or a bracket mount to easily tilt the light to shine light where it is needed and has alternative coloured LED options in white, green or red.

Light Beam Patterns  
Page 70

- EMC TESTED
- IP 69K
- VIBRATION TESTED
- SALT SPRAY TESTED
- UL RATED OPTIONAL

LUMEN OUTPUT		Number of LED'S	VOLTAGE			AMP DRAW		Power (Watts)	Colour Temp	CRI
Theoretical	Effective		Machine	Operating Range		12 Volts	24 Volts			
900	600	4	12-48	9	60	1.2	0.6	15	5700	70
1100	825	4	12-48	9	60	1.2	0.6	15	5700	75
2600	2000	4	12-48	9	60	1.8	0.9	22	5700	70
2600	2000	4	12	9	16	1.8		22	5700	70
2600	2000	4	24	18	32		0.9	22	5700	70

Operating Temp: -40° to 75°C,  
-40 to 85° C

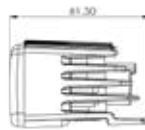
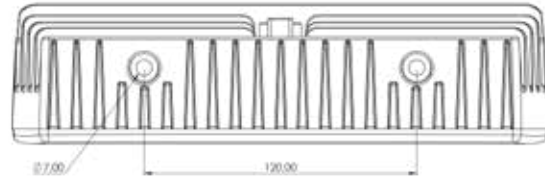
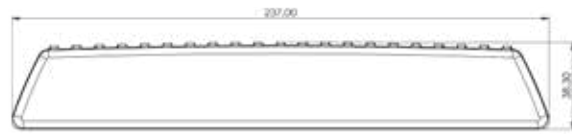
Light Pattern: Symmetric,  
Asymmetric

Lens Material: Plastic

Housing: Cast Aluminum

Mounting Options:  
Thru Bolt

(DT04-2P) Built in







# VL6

The VL6 LED is the largest and most powerful of the TYRI VL series, with a 6 LED design producing a light output of 1000 effective lumen. The thru bolt and low profile design is great for mounting in locations which can be subjected to harsh treatment. The VL6 is available with multiple lighting patterns and for various applications from ATV's and snowmobiles to commercial coaches and trucks.



Light Beam Patterns  
Page 70

-  EMC TESTED
-  IP 69K
-  VIBRATION TESTED
-  SALT SPRAY TESTED

LUMEN OUTPUT		Number of LED'S	VOLTAGE		AMP DRAW		Power (Watts)	Colour Temp	CRI
Theoretical	Effective		Machine	Operating Range	12 Volts	24 Volts			
1800	1000	6	12-48	9 60	1.2	1.0	24	6200	70

Operating Temp: -40° to 75°C

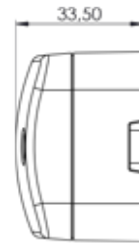
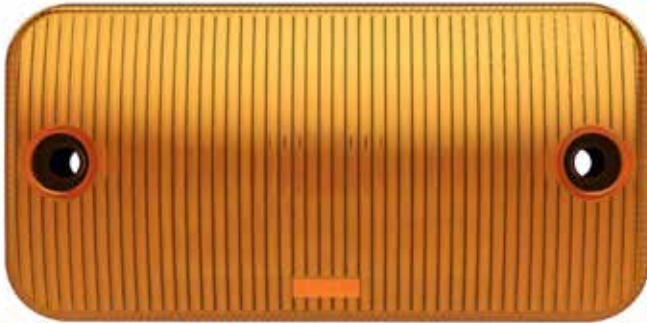
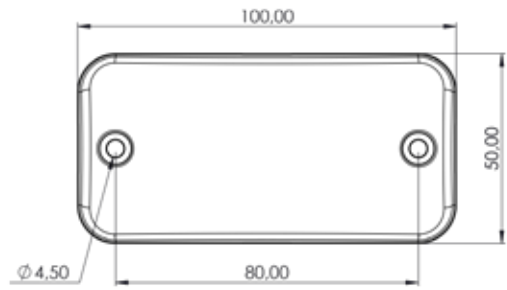
Light Pattern: Symmetric, Asymmetric

Lens Material: Plastic

Housing: Cast Aluminum

Mounting Options:  
Thru Bolt

(DT04-2P) Built in



LED

# 1005A Marker LED

The 1005A Marker LED is the smallest of the TYRI markers. It is available with flying leads and UL approval, ensuring it is a smart choice for your market needs.

**EMC** EMC TESTED

**IP** IP 69K

**UL** UL RATED OPTIONAL \*

\* Pending

Number of LED's: 2

Power: 1W

Voltage machine: 12, 24-48V

Amp Draw 12/24V: 0.08/0.04

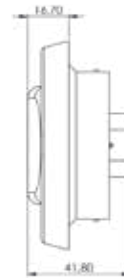
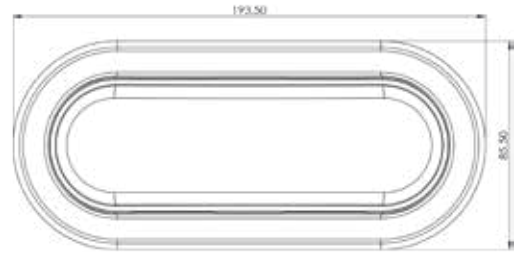
Operating Temp: -40° to 50°C

Lens Material: Plastic

Housing: Plastic

Mounting Options: Flush

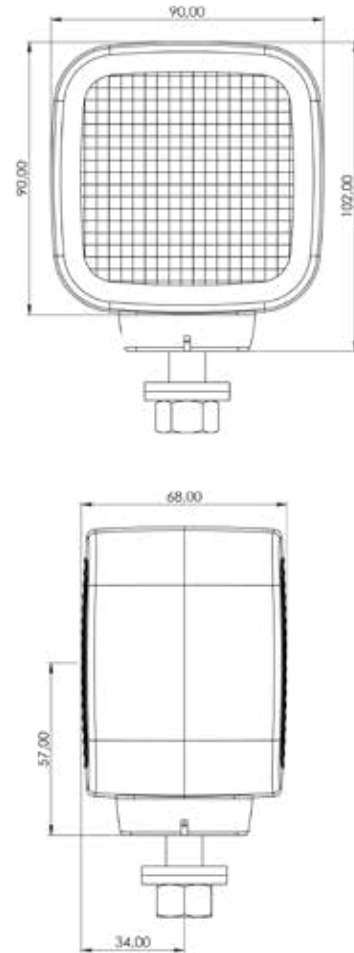
(DT04-2P) Built in: Leads



# 1706A Marker LED

Ensure clear signals, whether you are reversing, indicating or stopping your machine, with the 1706A Marker LED. The oval shape and size of this light is common on many vehicles and it is available with red, white or amber LED colours. The rubber grommet allow for an easy flush installation on 12 or 24 volt vehicle systems.

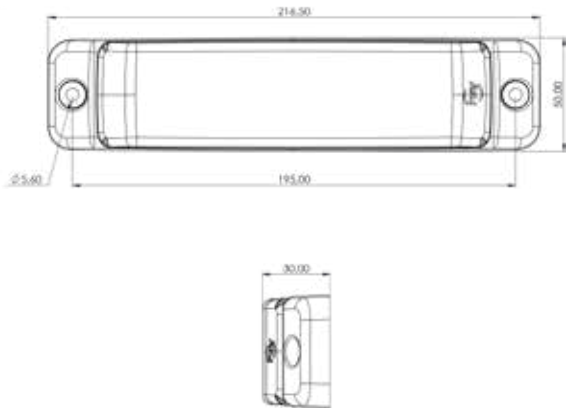




LED

# 0910A Marker LED

This square, dual sided, turn marker is commonly placed on fenders and cabs of vehicles. It has a 24 volt system and is used to clearly indicate the direction the machine is turning. The TYRI 0910A Marker is mounted via pedestal or hanging mount.

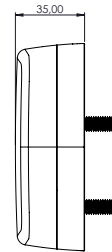
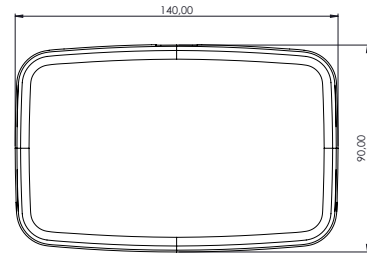


# 0522A Marker LED

Available with red, amber, and white LED's or all white LED's, the thru bolt design allows this light to be mounted in a variety of locations on machines with 12 volt and 12-80 volt systems. The white LED option also works great in a dome light application. This LED light is UL approved.

- EMC** EMC TESTED
- UL** UL RATED OPTIONAL

Voltage machine: 24V  
Operating Temp: -40° to 75°C  
Lens Material: Plastic  
Housing: Plastic  
Mounting Options: Flush  
(DT04-2P) Built in



LED

# 1409A Marker LED

The TYRI 1409A LED is the ideal work light for dump trucks and other heavy equipment. It is tough and durable as well as being flush mounted. This versatile LED is a very popular choice as it can truly integrate into your machines design.

**EMC** EMC TESTED

**IP** IP 69K

Voltage machine: 24V  
Amp Draw 24V: 0,24  
Operating Temp: -40° to 75°C  
Lens Material: Plastic  
Mounting Options: Flush  
Built-in harness with Deutsch  
(DT04-2P)

# LED CHART

LED

LAMP MODEL		0606			0909			0909 Compact P		D10	D10 Swivel
		1000	750	1000	1800	1800	1800	900	900	3000	3000
LUMEN OUTPUT	Theoretical	720	750	1000	1400	1400	1400	750	750	2500	2500
	Effective	1	6	6	6	6	6	4	4	10	10
VOLTAGE	Machine	12-48	12	24	12	24	12-80	12-80	12-80	12-48	12-48
	Operating Range	9	9	18	18	18	9	9	9	9	9
Amp Draw	12 V	60	16	32	16	32	108	108	108	60	60
	24 V	1.2	1.1	0.55	1.8	0.9	2.0	1.2	1.2	3.2	3.2
POWER (W)	12 V	0.6	13.2	13.2	22	22	24	14	14	1.6	1.6
	24 V	13	13.2	5700	5700	5700	5700	5700	5700	42	42
COLOUR TEMP (K)		5700	5700	5700	5700	5700	5700	5700	5700	5000	5000
CRI		70	70	70	70	70	70	70	70	70	70
OPERATING TEMP (C°)	High	75	75	75	75	75	75	75	75	75	75
	Low	-40	-40	-40	-40	-40	-40	-40	-40	-40	-40
LIGHT PATTERN	Sym	•	•	•	•	•	•	•	•	•	•
	Asym	•	•	•	•	•	•	•	•	•	•
	High	•	•	•	•	•	•	•	•	•	•
	Spot	•	•	•	•	•	•	•	•	•	•
	Low	•	•	•	•	•	•	•	•	•	•
LENS MATERIAL	Fog	•	•	•	•	•	•	•	•	•	•
	Plastic	•	•	•	•	•	•	•	•	•	•
HOUSING MATERIAL	Glass	•	•	•	•	•	•	•	•	•	•
	Cast Aluminum	•	•	•	•	•	•	•	•	•	•
DAMPENED		•	•	•	•	•	•	•	•	•	•
MOUNTING OPTIONS	Hanging	•	•	•	•	•	•	•	•	•	•
	Standing	•	•	•	•	•	•	•	•	•	•
	Side	•	•	•	•	•	•	•	•	•	•
	Flush	•	•	•	•	•	•	•	•	•	•
	Thru Bolt	•	•	•	•	•	•	•	•	•	•
BUILT-IN (DT04-2P)	Swivel	•	•	•	•	•	•	•	•	•	•
	EMC EN55025 Class	•	•	•	•	•	•	•	•	•	•
COMPLIANCE/RATING	IP 69K	4	5	5	5	5	TBD	4	4	5	5
	Vibration 5-2000Hz 3 Axis	8 Grms	8 Grms	8 Grms	8 Grms	8 Grms	8 Grms	8 Grms	8 Grms	10 Grms*	10 Grms
	Salt Spray ASTM B117	•	•	•	•	•	•	•	•	•	•
	UL Optional	•	•	•	•	•	•	•	•	•	•
E Approved Optional		•	•	•	•	•	•	•	•	•	•

\* Pending

# LED CHART

LAMP MODEL		1010 WhiteBeam		1010 WhitePoint		1010 BlueBeam		1010 BluePoint		1010 Diffused		1010 X4	
		900	1100	900	1100	300	300	300	300	900	1800	3600	3600
LUMEN OUTPUT	Theoretical	700	900	700	900	248	248	248	248	700	1450	2700	2700
	Effective	4	4	4	4	4	4	4	4	4	8	4	4
NUMBER OF LED'S	Machine	12-48	12-48	12-48	12-48	12-48	12-80	12-80	12-80	12-48	12-48	12-24	12-24
	Operating Range	9	9	9	9	9	9	9	9	9	9	9	9
VOLTAGE	12 V	60	60	60	60	60	60	60	60	60	60	32	32
	24 V	1.4	1.4	1.4	1.4	1.2	TBD	1.2	TBD	1.4	2.5	4.4	4.4
Amp Draw	0.6	0.6	0.6	0.6	0.6	0.6	TBD	0.6	TBD	0.6	1.3	2.2	2.2
	17	17	17	17	17	15	TBD	15	TBD	17	30	53	53
POWER (W)	5700	5700	5700	5700	5700	Dominant Wavelength typical: 470nm	Dominant Wavelength typical: 470nm	Dominant Wavelength typical: 470nm	Dominant Wavelength typical: 470nm	5700	5700	6000	6000
	70	70	70	70	70	75	75	75	75	70	70	70	70
OPERATING TEMP (C°)	High	75	75	75	75	-40	-40	-40	-40	-40	-40	-40	-40
	Low	-40	-40	-40	-40	-40	-40	-40	-40	-40	-40	-40	-40
LIGHT PATTERN	Sym												
	Asym												
SPOT	High												
	Spot												
LOW	Low												
	Fog												
LENS MATERIAL	Plastic												
	Glass												
HOUSING MATERIAL	Cast Aluminum												
	DAMPENED												
MOUNTING OPTIONS	Hanging												
	Standing												
SIDE	Side												
	Flush												
THRU BOLT	Thru Bolt												
	BUILT-IN (DT04-2P)												
COMPLIANCE/RATING	EMC EN55025 Class	5	5	5	5	5	5	5	5	5	5	5	5
	Vibration 5-2000hz 3 Axis	10 Grms	10 Grms	10 Grms	10 Grms	10 Grms	10 Grms	10 Grms	10 Grms	10 Grms	10 Grms	10 Grms	10 Grms
UL Optional	Salt Spray ASTM B117												
	E Approved Optional												

\* Pending



# LED CHART

LED

LAMP MODEL		1010																	
		1010 Swivel		3000		2000		10		3600		3200		4500		4000		3800	
LUMEN OUTPUT	Theoretical	3000	3000	3000	3000	3600	3600	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500	3800	3800
	Effective	2500	2500	2500	2500	3200	3200	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	3200	3200
NUMBER OF LED'S	Machine	12-48	12-48	12-48	12-48	12-48	12-48	12-48	12-48	12-48	12-48	12-48	12-48	12-48	12-48	12-48	12-48	6	6
	Operating Range	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	18	18
VOLTAGE	12 V	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	16	16
	24 V	3.2	3.2	3.2	3.2	3	3	3	3	3	3	3	3	3	3	3	3.3	3.3	3.3
Amp Draw	1.6 V	1.6	1.6	1.6	1.6	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.9	1.7	1.7
	24 V	38	38	38	38	36	36	36	36	34	34	34	34	34	34	34	44	40	40
POWER (W)	5700	4200	5700	5700	5700	5700	5700	5000	5000	5700	5700	5700	5700	5700	5700	5700	5700	5700	5700
	CRI	70	90	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
OPERATING TEMP (C°)	High	75	75	75	75	85	85	85	85	85	85	85	85	85	85	85	85	85	85
	Low	-40	-40	-40	-40	-40	-40	-40	-40	-40	-40	-40	-40	-40	-40	-40	-40	-40	-40
LIGHT PATTERN	Sym	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Asym	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	High	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Spot	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Low	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
LENS MATERIAL	Fog	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Plastic	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
HOUSING MATERIAL	Glass	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Cast Aluminum	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
MOUNTING OPTIONS	DAMPENED	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Hanging	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Standing	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Side	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Flush	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Thru Bolt	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
BUILT-IN (DT04-2P)	Swivel	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	EMC EN55025 Class	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
COMPLIANCE/RATING	IP 69K	5	5	5	5	5	5	3	3	3	3	3	3	3	3	3	5	5	5
	Vibration 5-2000hz 3 Axis	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	Salt Spray ASTM B117	10 Grms	10 Grms	10 Grms	10 Grms	10 Grms	10 Grms	10 Grms	10 Grms	10 Grms	10 Grms	10 Grms	10 Grms	10 Grms	10 Grms	10 Grms	10 Grms	10 Grms	10 Grms
	UL Optional	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
E-Approved Optional	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	

\* Pending



# LED CHART

LAMP MODEL		1010 Curve						1010 AC			1010 Recess		1010 Twin
		1800	1400	1800	2250	3000	2900	900	1800	3600			
LUMEN OUTPUT	Theoretical	1800	1400	1800	2250	3000	2900	900	1800	3600			
	Effective	1450	1000	1400	1850	2500	2200	700	1450	2100			
NUMBER OF LED'S		8	6	6	6	4	16	4	8	16			
VOLTAGE	Machine	12-48	12	24	12	12-48	110-277 Nominal/47-63Hz	12-48	12-48	12-48			
	Operating Range	60	16	32	16	60	264	60	60	60			
Amp Draw	12 V	1.4	2.5	1.8	2.3	2.8	0.35 (120V/60Hz)	1.4	2.5	5			
	24 V	0.7	1.3	0.9	1.2	1.4	0.26 (240V/60Hz)	0.7	1.3	2.5			
POWER (W)		17	30	22	29	34	39	17	30	60			
	COLOUR TEMP (K)	5700	5700	5700	5700	5700	5100	5700	5700	5700			
OPERATING TEMP (C°)	High	70	70	70	70	70	70	70	70	70			
	Low	-40	-40	-40	-40	-40	-40	-40	-40	-40			
LIGHT PATTERN	Sym	•	•	•	•	•	•	•	•	•			
	Asym	•	•	•	•	•	•	•	•	•			
	High	•	•	•	•	•	•	•	•	•			
	Spot	•	•	•	•	•	•	•	•	•			
LENS MATERIAL	Low	•	•	•	•	•	•	•	•	•			
	Fog	•	•	•	•	•	•	•	•	•			
HOUSING MATERIAL	Plastic	•	•	•	•	•	•	•	•	•			
	Glass	•	•	•	•	•	•	•	•	•			
MOUNTING OPTIONS	Cast Aluminum	•	•	•	•	•	•	•	•	•			
	DAMPENED	•	•	•	•	•	•	•	•	•			
	Hanging	•	•	•	•	•	•	•	•	•			
	Standing	•	•	•	•	•	•	•	•	•			
BUILT-IN (DT04-2P)	Side	•	•	•	•	•	•	•	•	•			
	Flush	•	•	•	•	•	•	•	•	•			
COMPLIANCE/RATING	Thru Bolt	•	•	•	•	•	•	•	•	•			
	EMC EN55025 Class	•	•	•	•	•	•	•	•	•			
	IP 69K	5	5	5	5	4	Fly Leads	5	5	4			
	Vibration 5-2000Hz 3 Axis	•	•	•	•	•	•	•	•	•			
COMPLIANCE/RATING	Salt Spray ASTM B117	10 Grms	10 Grms	10 Grms	10 Grms	10 Grms	10 Grms	10 Grms	10 Grms	10 Grms			
	UL Optional	•*	•	•	•	•	•	•	•	•			
COMPLIANCE/RATING	E Approved	•	•	•	•	•	•	•	•	•			
	Optional	•	•	•	•	•	•	•	•	•			

\* Pending



# LED CHART

LED

LAMP MODEL		1015			1017			1313 AC			1313		
		1550	3500	1800	3000	3500	3000	4500	5900	6300	8900	4500	6300
LUMEN OUTPUT	Theoretical	1100	2250	1450	2500	2400	3600	5900	5000	7000	3600	5000	7000
	Effective	8	10	8	4	10	4	4	7	7	4	7	7
NUMBER OF LED'S		12-48	12-48	12-48	12-48	12-48	12-48	110-277 Nominal/47-63Hz	12-48	12-48	12-48	12-48	12-48
VOLTAGE	Machine	9	9	9	9	9	9	85	9	9	9	9	9
	Operating Range	60	60	60	60	60	60	264	60	60	60	60	60
Amp Draw	12 V	2.4	3.5	1.8	2.2	3.5	2.2	0.52 (120V/60Hz)	4	5.2	4	5.2	6.8
	24 V	1.1	1.8	0.9	1.1	1.8	1.1	0.26 (240V/60Hz)	2	2.6	2	2.6	3.4
POWER (W)		29	42	22	26	42	26	61	62	62	48	62	82
COLOUR TEMP (K)		5700	6000	5700	5700	5700	5700	5300-6000	5700	5700	5700	5700	5700
CRI		70	72	70	70	72	70	70	70	70	70	70	70
OPERATING TEMP (C°)	High	75	75	75	85	75	85	50	85	85	85	85	85
	Low	-40	-40	-40	-40	-40	-40	-40	-40	-40	-40	-40	-40
LIGHT PATTERN	Sym	•	•	•	•	•	•	•	•	•	•	•	•
	Asym	•	•	•	•	•	•	•	•	•	•	•	•
	High	•	•	•	•	•	•	•	•	•	•	•	•
	Spot	•	•	•	•	•	•	•	•	•	•	•	•
	Low	•	•	•	•	•	•	•	•	•	•	•	•
LENS MATERIAL	Plastic	•	•	•	•	•	•	•	•	•	•	•	•
	Glass	•	•	•	•	•	•	•	•	•	•	•	•
HOUSING MATERIAL	Cast Aluminum	•	•	•	•	•	•	•	•	•	•	•	•
	DAMPENED	•	•	•	•	•	•	•	•	•	•	•	•
MOUNTING OPTIONS	Hanging	•	•	•	•	•	•	•	•	•	•	•	•
	Standing	•	•	•	•	•	•	•	•	•	•	•	•
	Side	•	•	•	•	•	•	•	•	•	•	•	•
	Flush	•	•	•	•	•	•	•	•	•	•	•	•
	Thru Bolt	•	•	•	•	•	•	•	•	•	•	•	•
SWIVEL	Swivel	•	•	•	•	•	•	•	•	•	•	•	•
	BUILT-IN (DT04-2P)	•	•	•	•	•	•	•	•	•	•	•	•
COMPLIANCE/RATING	EMC EN55025 Class	5	5	5	4	5	4	Fly Leads	3	5	3	5	4 (reflector) 5 (reflector)
	IP 69K	•	•	•	•	•	•	•	•	•	•	•	•
	Vibration 5-2000Hz 3 Axis	10 Grms	10 Grms	10 Grms	10 Grms	10 Grms	10 Grms	10 Grms*	10 Grms*	10 Grms*	10 Grms*	10 Grms*	10 Grms*
	Salt Spray ASTM B117	•	•	•	•	•	•	•	•	•	•	•	•
	UL Optional	•	•	•	•	•	•	•	•	•	•	•	•
E Approved Optional	•	•	•	•	•	•	•	•	•	•	•	•	

\* Pending

# LED CHART

LAMP MODEL		1323	VL3	VL4			VL6
LUMEN OUTPUT	Theoretical	16500	700	2600	2600	2600	1800
	Effective	13500	350	2000	2000	2000	1000
NUMBER OF LED'S		12	3	4	4	4	6
VOLTAGE	Machine	24	12	12-48	12-48	12	24
	Operating Range	18	9	9	9	9	18
Amp Draw	12 V	32	16	60	60	16	32
	24 V	6.2	0.9	1.2	1.8	1.8	1.2
POWER (W)		151	11	15	15	22	24
COLOUR TEMP (K)		4000	5700	5700	5700	5700	6200
CRI							
OPERATING TEMP (C°)	High	70	70	75	70	70	70
	Low	85	75	85	75	75	75
LIGHT PATTERN	Spot	-40	-40	-40	-40	-40	-40
	High	•	•	•	•	•	•
	Asym	•	•	•	•	•	•
	Sym	•	•	•	•	•	•
LENS MATERIAL	Plastic	•	•	•	•	•	•
	Glass	•	•	•	•	•	•
	Cast Aluminum	•	•	•	•	•	•
	DAMPENED	30"Trunion/6post					
MOUNTING OPTIONS	Hanging	•					
	Standing	•					
	Side	•					
	Flush	•					
BUILT-IN (DT04-2P)	Thru Bolt		•	•	•	•	•
			•	•	•	•	•
COMPLIANCE/RATING	EMC EN55025 Class	5	5	4	4	5	4
	IP 69K	•	•	•	•	•	•
	Vibration 5-2000Hz 3 Axis	10 Grms*	10 Grms	10 Grms	10 Grms	10 Grms	10 Grms
	Salt Spray ASTM B117	••	•	•	•	•	•
UL Optional		•	•	•	•	•	
E Approved Optional		•	•	•	•	•	

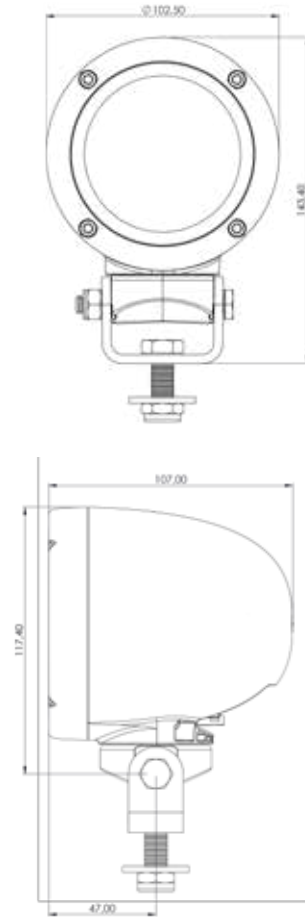
\* Pending





# HALOGEN LIGHTING TECHNOLOGY

TYRI Halogen work lights are designed to meet the requirements of the agricultural, construction, mining, forestry, material handling and related OEM sectors. The housing of the lights is available in rugged nylon and for more severe applications a dampened shock resistant design is available to ensure a long life under tough, rugged conditions. Our Halogen lights carry an IP rating of 69K and have been tested to withstand vibration, dust/dirt and water. This quality constructed light is suited to all off highway applications.



# D10

The D10 Halogen light is an attractive round work light mounted on a swivel mount which allows placement adjustment as needed.

**IP** IP 69K

Light Pattern: Symmetric, Asymmetric

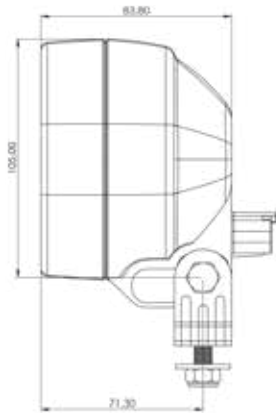
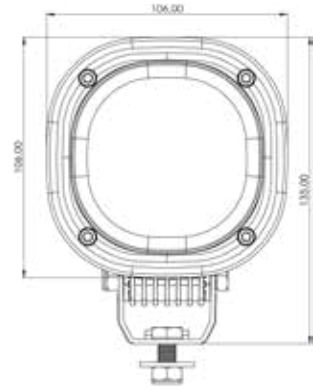
Housing: PA6

Mounting Options: Hanging, Standing, Side

Connectors: (DT04-2P) Built in Compression seal w/pigtail harness

BULB H9								VOLTAGE
25W	35W	50W	55W	55W LL	65W	65W HD	70W	12
					•		•	

LIGHT PATTERN				LENS COLOR			
SYMMETRIC	ASSYMMETRIC	HIGH	LOW	BLUE	AMBER	RED	YELLOW
•	•						



HALO  
GEN

# 1010

As part of the 1010 lighting family, the 1010 Halogen work light reflects TYRI's recognisable square design. The powerful light beam can be directed by a variety of lens patterns including Symmetrical, Asymmetrical and High Beam for maximum reach.

**IP** IP 69K

**UL** UL RATED OPTIONAL

Light Pattern: Symmetric, Asymmetric, High

Lens Material: Glass

Housing: PA6

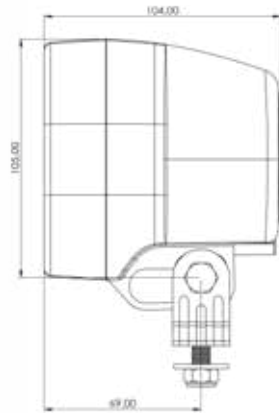
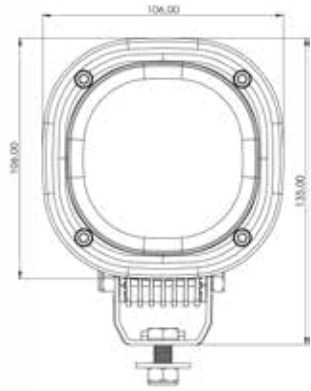
Mounting Options: Hanging, Standing, Side, Flush, Dampened

Connectors: (DT04-2P) Built in Compression seal w/pigtail harness Spade (1/4" - 6.35mm)

BULB H3								VOLTAGE
25W	35W	50W	55W	55W LL	65W	65W HD	70W	12-48
•		•		•		•	•	

LIGHT PATTERN				LENS COLOR			
SYMMETRIC	ASSYMMETRIC	HIGH	LOW	BLUE	AMBER	RED	YELLOW
•	•	•		•	•	•	•





# 1010 H9

The 1010 Halogen H9 uses a significantly brighter H9 bulb than other work lights in the TYRI Halogen range. The powerful light beam can be directed by a variety of lens patterns including Symmetrical, Asymmetrical and High Beam.

**IP** IP 69K

Light Pattern: Symmetric, High

Lens Material: Glass

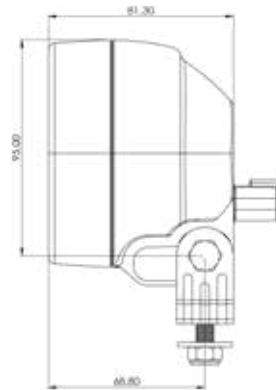
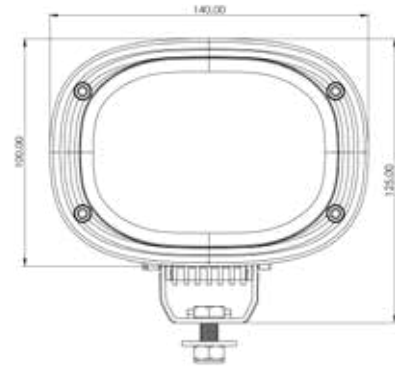
Housing: PA6

Mounting Options:  
Hanging, Standing, Side,  
Dampened

Connectors:  
(DT04-2P) Built in  
Compression seal  
w/pigtail harness  
Spade (1/4" - 6.35mm)

BULB H9								VOLTAGE
25W	35W	50W	55W	55W LL	65W	65W HD	70W	12-48
•					•		•	

LIGHT PATTERN				LENS COLOR			
SYMMETRIC	ASSYMMETRIC	HIGH	LOW	BLUE	AMBER	RED	YELLOW
•		•		•	•	•	•



HALO  
GEN

# 1014

This rectangular shaped work light can be used in a number of applications to provide usable light on surface or underground machines. The vibration dampened housing option can extend the life of the bulb and coupled with the corrosion resistant coating ensures this light withstands the harshest of environments. The 1014 Halogen is available with the additional option of a side mount, allowing this work light to be installed in a multitude of locations.

IP IP 69K

Light Pattern: Symmetric, Asymmetric

Lens Material: Glass

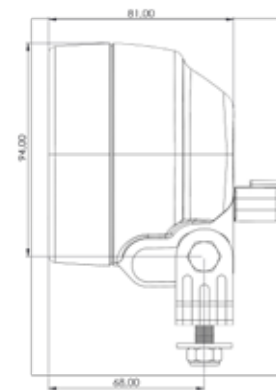
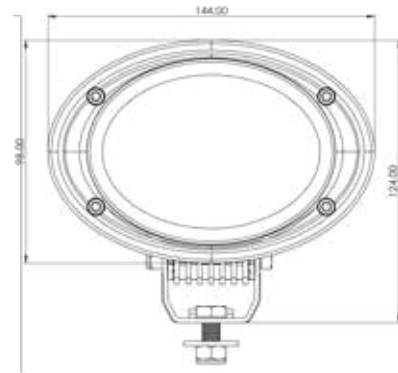
Housing: PA6

Mounting Options:  
Hanging, Standing, Side,  
Flush, Dampened

Connectors:  
(DT04-2P) Built in  
Compression seal  
w/pigtail harness  
Spade (1/4" - 6.35mm)

BULB H3								VOLTAGE
25W	35W	50W	55W	55W LL	65W	65W HD	70W	12-48
•	•	•	•	•		•	•	

LIGHT PATTERN				LENS COLOR			
SYMMETRIC	ASSYMMETRIC	HIGH	LOW	BLUE	AMBER	RED	YELLOW
•	•			•	•	•	



# 1015

Part of the 1015 family of TYRI lights, the 1015 is designed in an oval shape. This work light is the perfect solution for lighting broad work areas. To ensure long life under tough, rugged conditions, the 1015 Halogen is available with vibration dampening and corrosion resistant hardware.

IP IP 69K

Light Pattern: Asymmetric

Lens Material: Glass

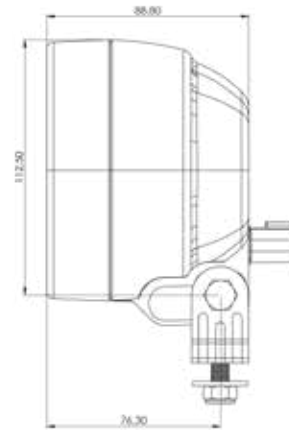
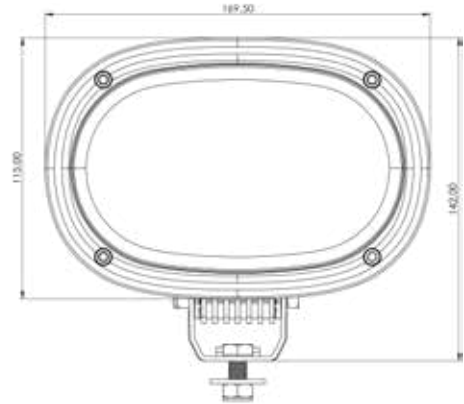
Housing: PA6

Mounting Options:  
Hanging, Standing,  
Dampened

Connectors:  
(DT04-2P) Built in  
Compression seal  
w/pigtail harness

BULB H3								VOLTAGE
25W	35W	50W	55W	55W LL	65W	65W HD	70W	12-48
•	•		•	•		•	•	

LIGHT PATTERN				LENS COLOR			
SYMMETRIC	ASSYMMETRIC	HIGH	LOW	BLUE	AMBER	RED	YELLOW
	•						



HALO  
GEN

# 1117

The TYRI 1117 is available in a Single Reflector (SR) and Dual Reflector (DR) model. This halogen work light is a powerful oval shaped halogen light which is ideal in a wide range of applications. The 1117 halogen is extremely adaptable with a variety of mounting options and lighting patterns.

IP 69K

Light Pattern: Symmetric, Asymmetric, High

Lens Material: Glass

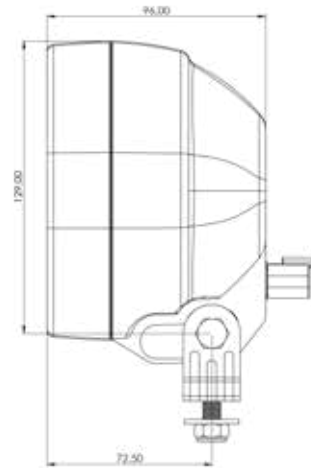
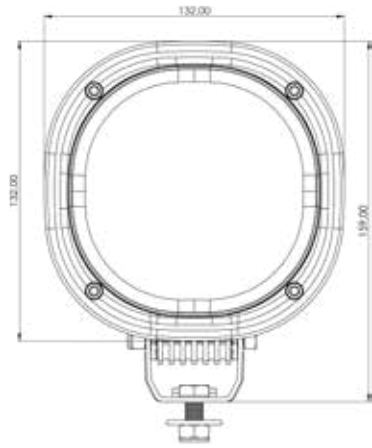
Housing: PA6

Mounting Options: Hanging, Standing, Flush, Dampened

Connectors: (DT04-2P) Built in Compression seal w/pigtail harness Spade (1/4" - 6.35mm)

BULB H3								VOLTAGE
25W	35W	50W	55W	55W LL	65W	65W HD	70W	12-48
•	•	•	•	•		•	•	

LIGHT PATTERN				LENS COLOR			
SYMMETRIC	ASSYMMETRIC	HIGH	LOW	BLUE	AMBER	RED	YELLOW
•	•	•		•	•	•	•



# 1313

The TYRI 1313 is a powerful rounded square shaped halogen work light with a powerful lighting beam. This work light is available with a number of options, including being supplied with a handle to allow the light to be transported to other machines safely and easily. The larger size of this work light helps to prolong the life of the bulb by allowing better dispersal of heat.

**IP** IP 69K

Light Pattern: Symmetric, Asymmetric, High, Low

Lens Material: Glass

Housing: PA6

Mounting Options: Hanging, Standing, Dampened

Connectors: (DT04-2P) Built in Compression seal w/pigtail harness

BULB H3								VOLTAGE
25W	35W	50W	55W	55W LL	65W	65W HD	70W	12-48
•	•	•	•	•		•	•	

LIGHT PATTERN				LENS COLOR			
SYMMETRIC	ASSYMMETRIC	HIGH	LOW	BLUE	AMBER	RED	YELLOW
•	•	•	•	•	•	•	•

# HALOGEN CHART

LAMP MODEL	D10	1010	1010H9	1014	1015	1117SR/DR	1313
<b>BULB</b>	H9	H3	H9	H3	H3	H3	H3
25W		•		•	•	•	•
35W				•	•	•	•
50W		•		•		•	•
55W				•	•	•	•
55W LL		•		•	•	•	•
65W	•		•				
65W HD		•		•	•	•	•
70W	•	•	•	•	•	•	•
<b>VOLTAGE</b>	12	12-48	12-24	12-48	12-48	12-48	12-48
<b>LIGHT PATTERN</b>							
Symmetric	•	•	•	•		•	•
Asymmetric	•	•		•	•	•	•
High		•	•			•	•
Low							•
<b>LENS COLOR</b>							
Blue		•	•	•		•	•
Amber		•	•	•		•	•
Red		•	•	•		•	•
Yellow		•	•			•	•
<b>LENS MATERIAL</b>							
Glass		•	•	•	•	•	•
<b>HOUSING MATERIAL</b>							
PA 6	•	•	•	•	•	•	•
<b>VIBRATION DAMPENED</b>		•	•	•	•	•	•
<b>MOUNTING OPTIONS</b>							
Hanging	•	•	•	•	•	•	•
Standing	•	•	•	•	•	•	•
Side	•	•	•	•			
Flush		•		•		•	
<b>CONNECTORS</b>							
Deutsch (DT04-2P) Built-in	•	•	•	•	•	•	•
Compression seal w/pigtail harness	•	•	•	•	•	•	•
Spade (1/4" - 6.35mm)		•	•	•		•	•
<b>COMPLIANCE/RATING</b>							
UL		•					
IP 69K	•	•	•	•	•	•	•



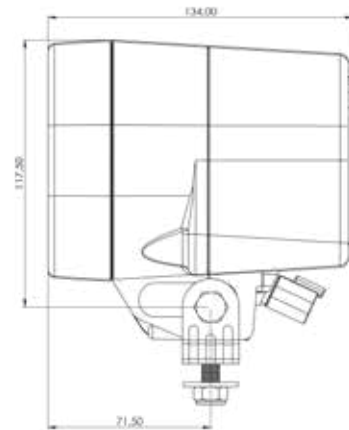
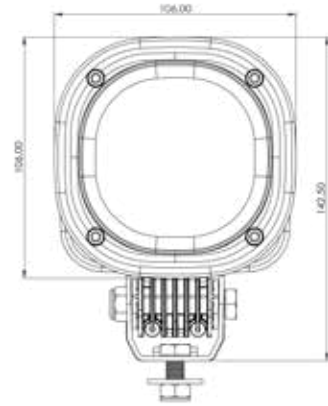






# HID | XENON LIGHTING TECHNOLOGY

TYRI's HID models are designed with an integrated ballast, providing a cleaner and more compact appearance. HID's produce four to five times greater light, consume less power than halogen lights, and creates a colour spectrum closer to daylight than halogen technology.



# 1010

The TYRI 1010 HID work light is a member of the 1010 series family. Its powerful, yet compact, design makes it ideal for numerous applications and is available in a number of different lighting pattern configurations.

**EMC** EMC TESTED

**IP** IP 69K

Light Pattern: Symmetric, Asymmetric, High, Low

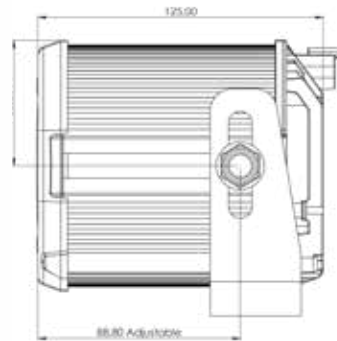
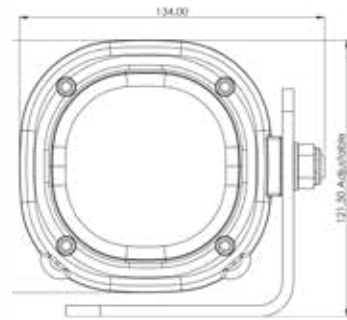
Lens Material: Glass

Housing: PA6

Mounting Options: Hanging, Standing, Side, Dampened

Connectors: (DT04-2P) Built in

LUMEN OUTPUT		AMP DRAW		XENON BULB	BALLAST		VOLTAGE
Theoretical	Effective	12 Volts	24 Volts	DS1	35W	45W	12-24
3200	2400	4.0	2.0	•	•		•



**HID  
XENON**

# 1111

The TYRI 1111 HID work light has an aluminium housing with side mount bracket and sliding bolt connection. It is an adaptable HID with multiple positioning options.

**EMC** EMC TESTED

**IP** IP 69K

Light Pattern: Symmetric, Asymmetric

Lens Material: Glass

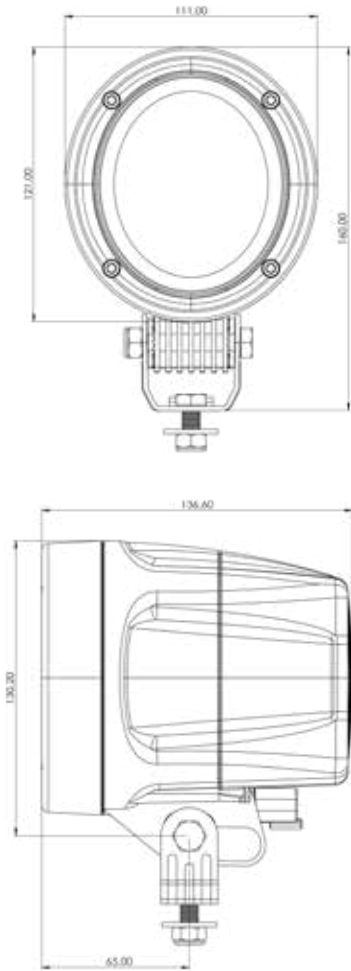
Housing: Aluminum

Mounting Options: Hanging, Standing, Side

Connectors: (DT04-2P) Built in

LUMEN OUTPUT		AMP DRAW		XENON BULB	BALLAST		VOLTAGE
Theoretical	Effective	12 Volts	24 Volts	DS1	35W	45W	12-24
3200	2400	4.0	2.0	•	•		•
4200	3100	4.8	2.4	•		•	•

HID  
XENON



# 1112

The TYRI 1112 HID work light is designed with a tapered design. This sleek and stylish housing ensures the 1112 HID complements your machine design.

**EMC** EMC TESTED

**IP** IP 69K

LUMEN OUTPUT		AMP DRAW		XENON BULB	BALLAST		VOLTAGE
Theoretical	Effective	12 Volts	24 Volts	DS1	35W	45W	12-24
3200	2400	4.0	2.0	•	•		•

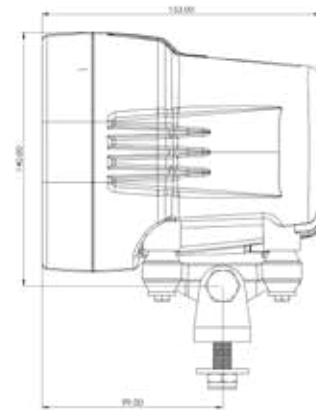
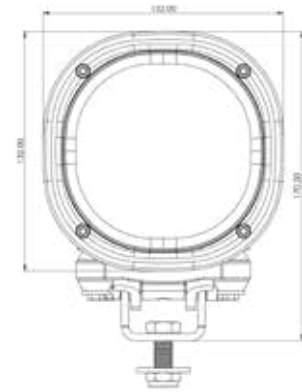
Light Pattern: High, Symmetric

Lens Material: Glass

Housing: PA6

Mounting Options:  
Hanging, Standing, Side,  
Dampened

Connectors:  
(DT04-2P) Built in



**HID  
XENON**

# 1313

The TYRI 1313 HID work light, with its large light shape, is designed to suit big trucks. It provides the same output as the popular TYRI 1010 HID light, but has a more stylish tapered look.

- EMC** EMC TESTED
- IP** IP 69K

Light Pattern: Symmetric, Asymmetric, High, Low

Lens Material: Glass

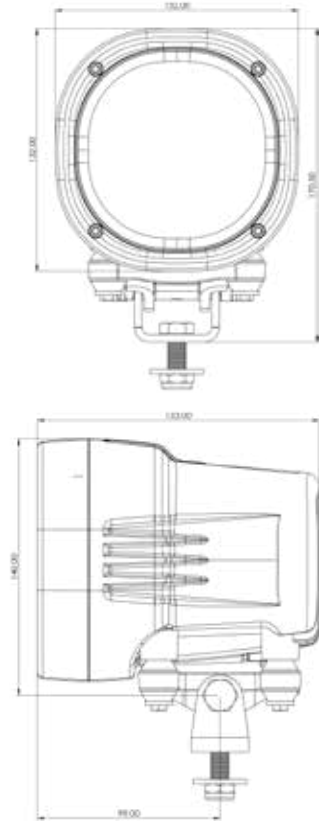
Housing: PA6

Mounting Options: Hanging, Standing, Side, Dampened

Connectors: (DT04-2P) Built in

LUMEN OUTPUT		AMP DRAW		XENON BULB	BALLAST		VOLTAGE
Theoretical	Effective	12 Volts	24 Volts	DS1	35W	45W	12-24
3200	2400	4.0	2.0	•	•		•

HID  
XENON



# 1313 SD

The TYRI 1313 HID Super Duty (SD) work light is a robust and sturdier version of the 1313 HID. It is available in 12V or 24V configuration with ballast options of 35W or 45W.

- EMC** EMC TESTED
- IP** IP 69K

LUMEN OUTPUT		AMP DRAW		XENON BULB	BALLAST		VOLTAGE
Theoretical	Effective	12 Volts	24 Volts	DS1	35W	45W	12-24
3200	2400	4.0	2.0	•	•		•
4200	3100	4.8	2.4	•		•	•

Light Pattern: Symmetric, Asymmetric, High, Low

Lens Material: Glass

Housing: PA6

Mounting Options: Hanging, Standing, Side, Dampened

Connectors: (DT04-2P) Built in

# HID/Xenon chart

LAMP MODEL	1010	1111	1112	1313	1313SD		
<b>LUMEN OUTPUT</b>							
Theoretical	3200	3200	4200	3200	3200	3200	4200
Effective	2400	2400	3100	2400	2400	2400	3100
<b>AMP DRAW</b>							
12 V	4.0	4.0	4.8	4.0	4.0	4.0	4.8
24 V	2.0	2.0	2.4	2.0	2.0	2.0	2.4
<b>XENON BULB D1S:</b>	•	•	•	•	•	•	•
<b>BALLAST</b>							
35W	•	•		•	•	•	
45W			•				•
<b>VOLTAGE</b>	12-24	12-24	12-24	12-24	12-24	12-24	12-24
<b>LIGHT PATTERN</b>							
Symmetric	•	•	•	•	•	•	•
Asymmetric	•	•	•		•	•	•
High	•			•	•	•	•
Low	•				•	•	•
<b>LENS MATERIAL</b>							
Glass	•	•	•	•	•	•	•
<b>HOUSING MATERIAL</b>							
PA 6	•			•	•	•	•
Aluminum		•	•				
<b>VIBRATION DAMPENED</b>	•			•	•	•	•
<b>MOUNTING OPTIONS</b>							
Hanging	•	•	•	•	•	•	•
Standing	•	•	•	•	•	•	•
Side	•	•	•	•	•	•	•
<b>CONNECTORS</b>							
Deutsch (DT04-2P) Built-in	•	•	•	•	•	•	•
<b>COMPLIANCE/RATING</b>							
EMC EN55025 Class	5	5	5	5	5	5	5
IP 69K	•	•	•	•	•	•	•

HID  
XENON





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# LIGHT BEAM PATTERNS

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TYRI lights are available with a number of different lighting patterns. These patterns influence how light is directed away from the vehicle and ensures you receive the maximum useable light available.

## Symmetrical Lighting Patterns

Most lights will have these lighting patterns available. They are the most common patterns and simply mean that the light beam is dispersed evenly on both sides of the light centre line. These lighting patterns are suited for all mounting positions.

## High Beam Patterns

A high beam lighting pattern is a more focused, forward lighting pattern producing a long distance range of light. Rather than dispersing the light outwards in a diagonal pattern, it is thrown forward to brightly light a specific area.

## Asymmetrical Lighting Patterns

These patterns disperses the light beam forward and down from the light centre line so the light is more focused onto the ground rather than into the air. This is useful when you want to concentrate the light on a particular place of work rather than a wide area and reduces the amount of glare effecting workers around the machine.

## Low Beam Pattern

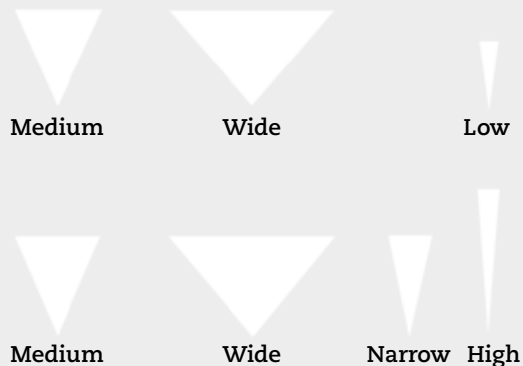
The low beam light is best suited for lighting a small, specified area. This light pattern has a wider beam of light providing illumination in an area close to the placement of the light.



Asymmetrical Light

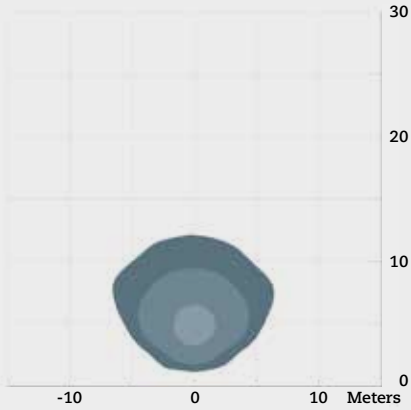


Symmetrical Light



# LED LIGHT BEAM PATTERNS

## 0606 LED

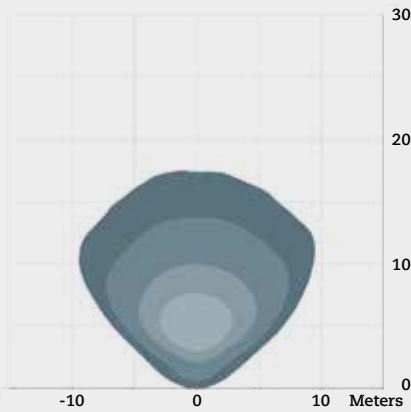


**0606 -720**  
Wide 45°+  
Symmetrical

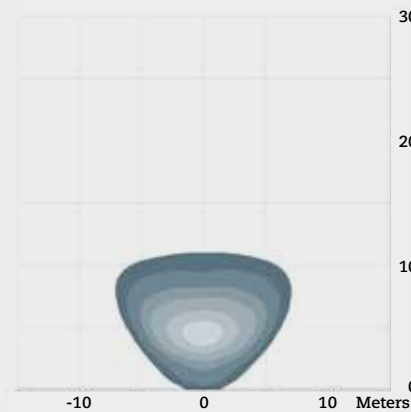


**0606 -750**  
Wide 45°+  
Symmetrical

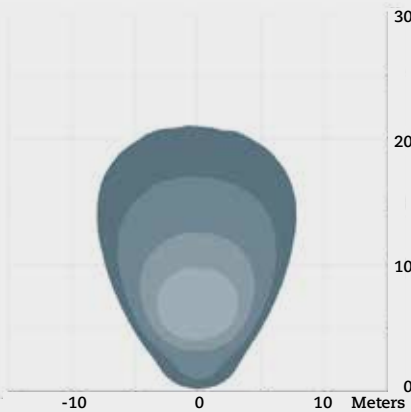
## 0909 LED



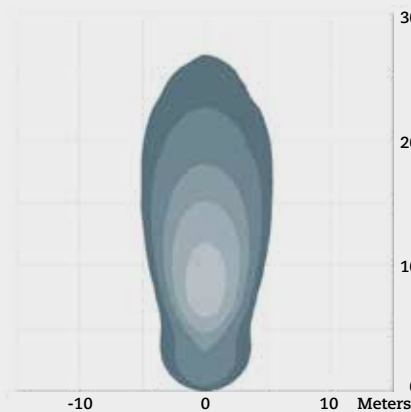
**0909 -1400**  
Wide 45°+  
Symmetrical



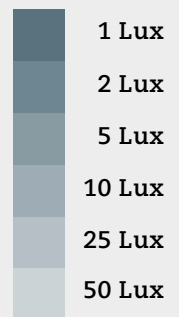
**0909 -1400**  
Wide 45°+  
Asymmetrical



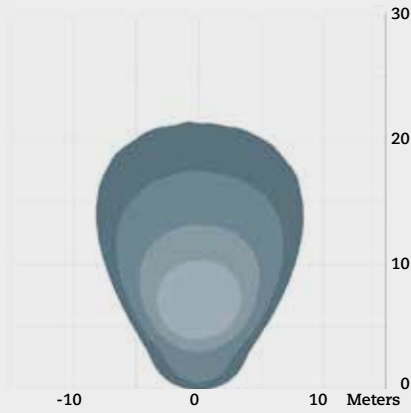
**0909 -1400**  
Medium 31-45°  
Symmetrical



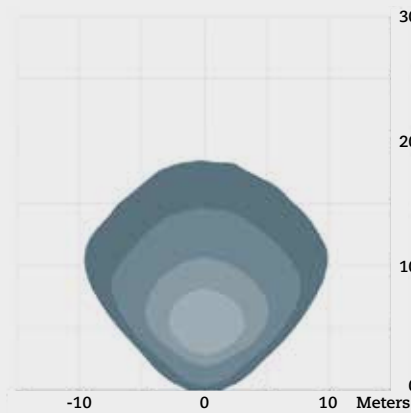
**0909 -1850**  
Narrow 0-30°  
Symmetrical



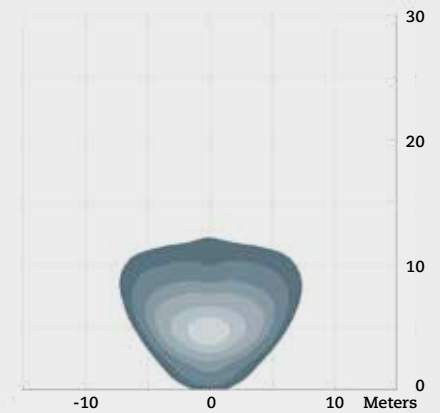
## 0909 LED



**0909 -1850**  
Medium 31-45°  
Symmetrical



**0909 -1850**  
Wide 45°+  
Symmetrical



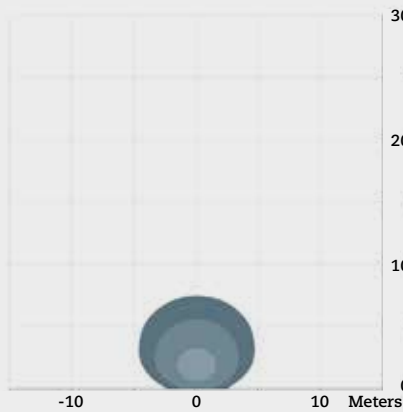
**0909 -1850**  
Wide 45°+  
Asymmetrical

## D10 LED

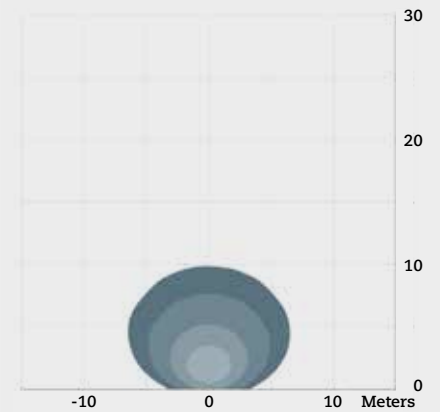


**D10 -2500**  
Wide 45°+  
Asymmetrical

## 1010 LED DIFFUSED

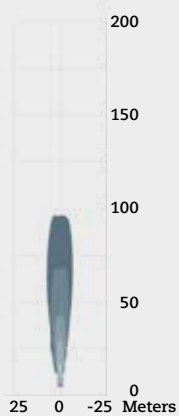


**1010 Diffused -700**  
Wide 45°+  
Symmetrical

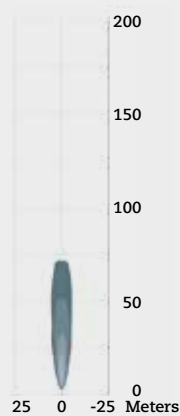


**1010 Diffused -1450**  
Wide 45°+  
Symmetrical

## 1010 LED BLUEPOINT

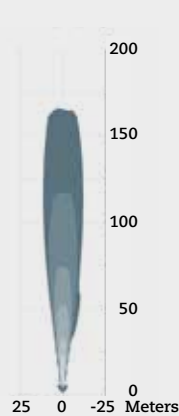


**1010 BluePoint**  
Spot  
Symmetrical



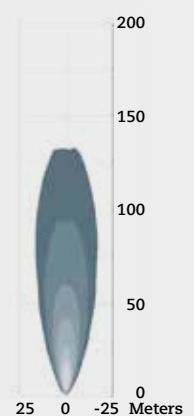
**1010 BluePoint Lg**  
Spot  
Symmetrical

## 1010 LED WHITEBEAM



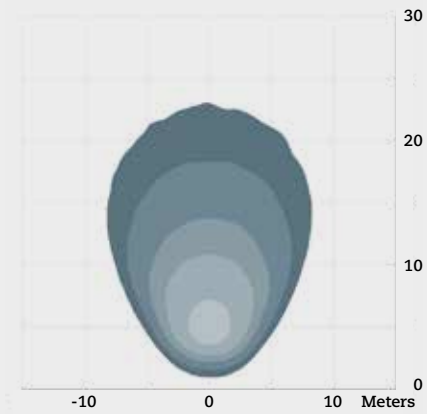
**1010 WhiteBeam**  
Spot  
Symmetrical

## 1010 LED X4

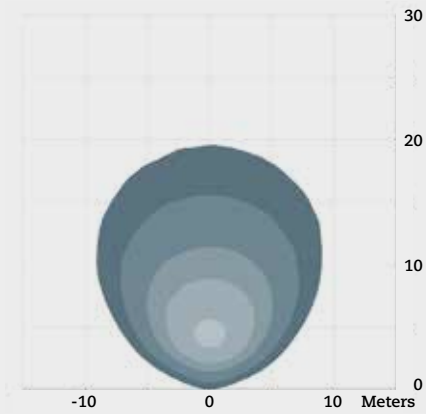


**1010 X4**  
Spot  
Symmetrical

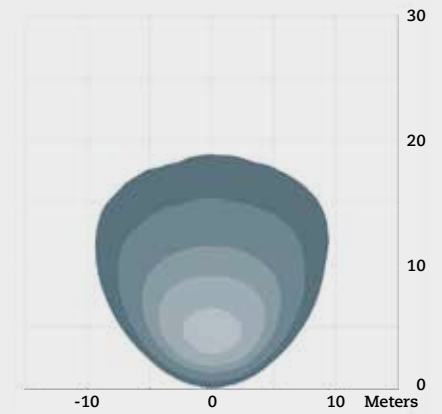
# 1010 LED



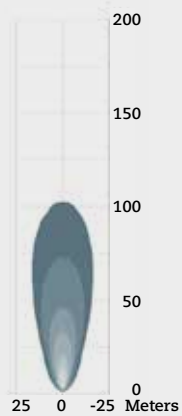
**1010 -2500**  
Narrow 0-30°  
Symmetrical



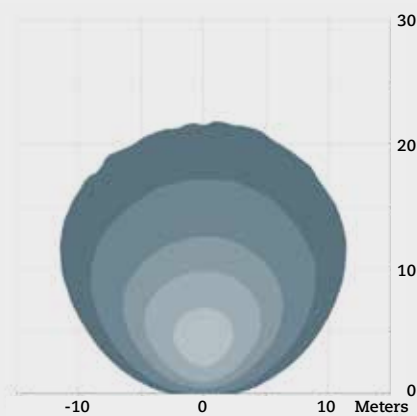
**1010 -2500**  
Medium 31-45°  
Symmetrical



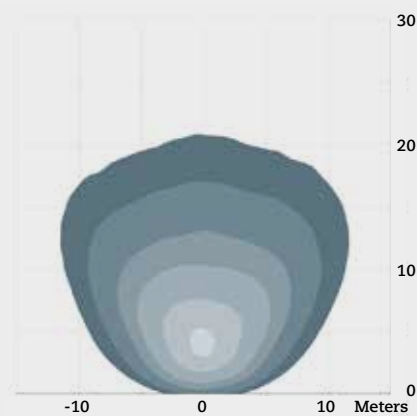
**1010 -2500**  
Medium 31-45°  
Asymmetrical



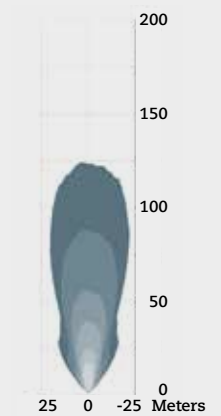
**1010 -2500**  
High  
Symmetrical



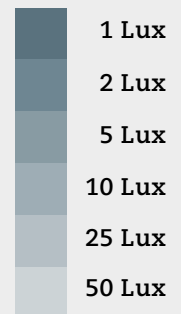
**1010 -4000**  
Wide 45°+  
Symmetrical



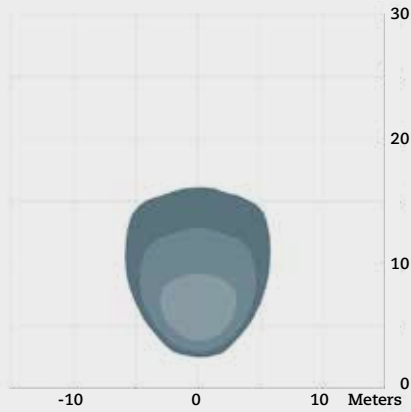
**1010 -4000**  
Wide 45°+  
Asymmetrical



**1010 -4000**  
High  
Symmetrical



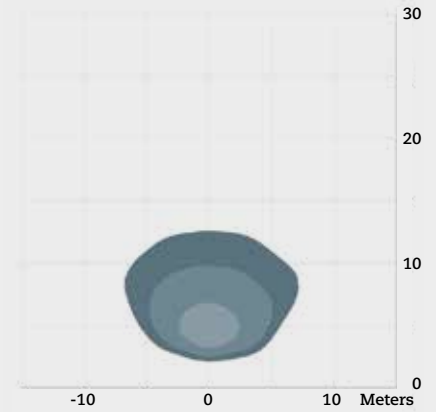
# 1010 LED Curve/Recess/Flush



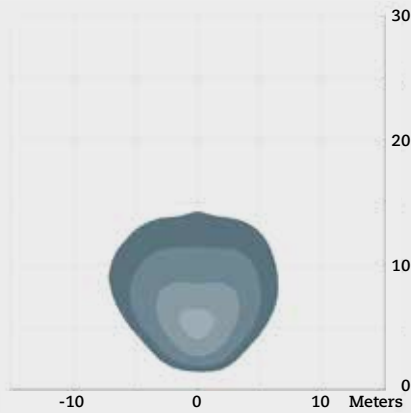
**1010 Curve/Recess/Flush -700**  
Narrow 0-30°  
Symmetrical



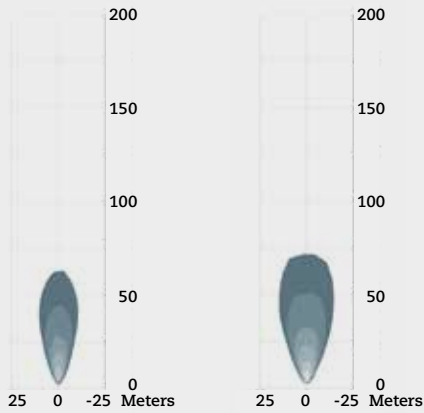
**1010 Curve/Recess/Flush -700**  
Medium 31-45°  
Asymmetrical



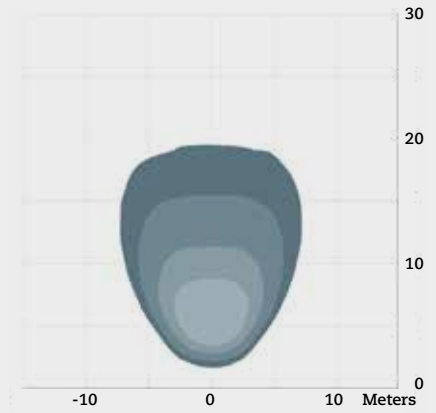
**1010 Curve/Recess/Flush -700**  
Wide 45°+  
Symmetrical



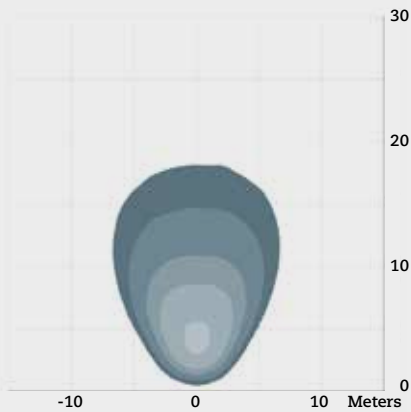
**1010 Curve/Recess/Flush -700**  
Wide 45°+  
Asymmetrical



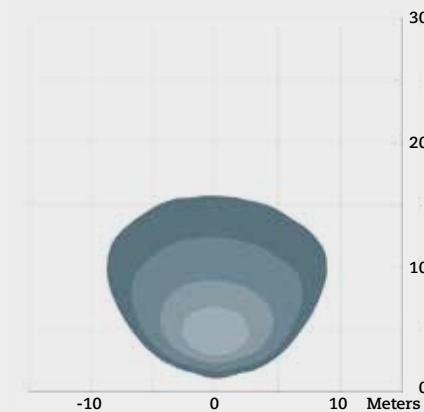
**1010 Curve/Recess/Flush -700/1450**  
High  
Symmetrical



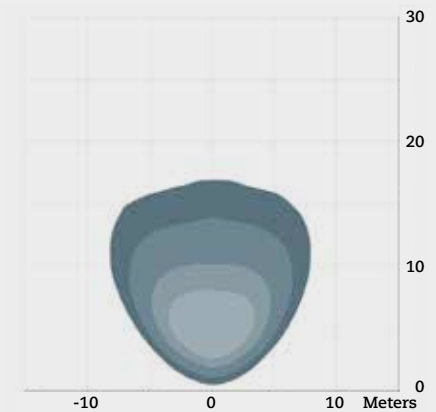
**1010 Curve/Recess/Flush -1450**  
Narrow 0-30°  
Symmetrical



**1010 Curve/Recess/Flush -1450**  
Medium 31-45°  
Asymmetrical



**1010 Curve/Recess/Flush -1450**  
Wide 45°+  
Symmetrical



**1010 Curve/Recess/Flush -1450**  
Wide 45°+  
Asymmetrical

# 1015 LED

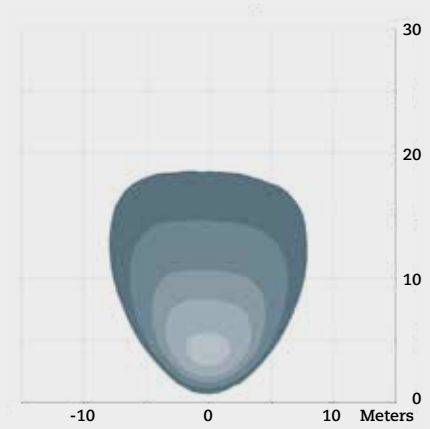
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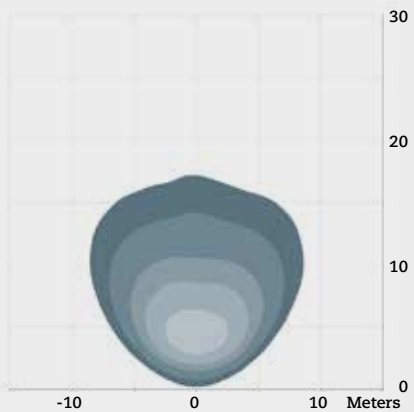
**1015 -1450**  
Wide 45°+  
Symmetrical



**1015 -1450**  
Wide 45°+  
Asymmetrical



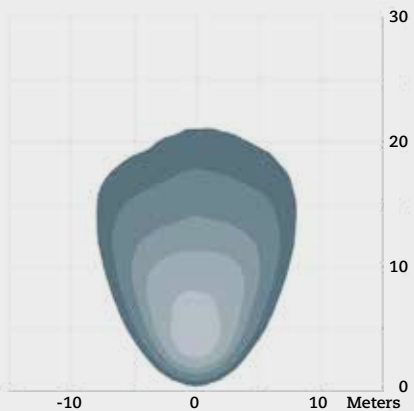
**1015 -2250**  
Wide 45°+  
Symmetrical



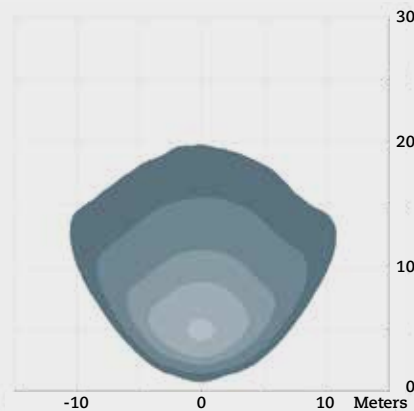
**1015 -2250**  
Wide 45°+  
Asymmetrical

# 1017 LED

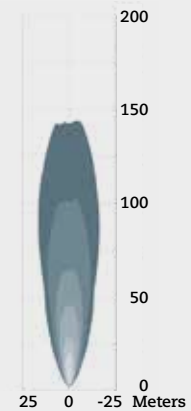
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**1017 -2400**  
Medium 31-45°  
Asymmetrical



**1017 -2400**  
Wide 45°+  
Symmetrical

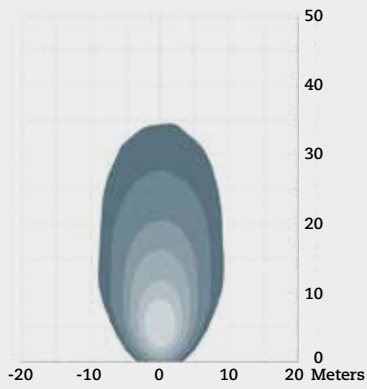


**1017 -2400**  
High  
Symmetrical

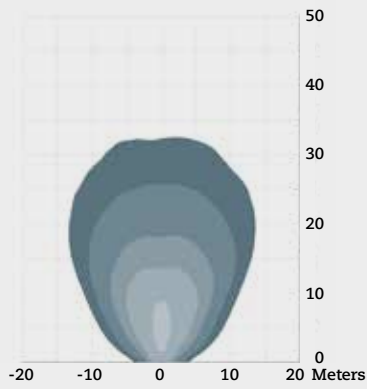


# 1313 LED

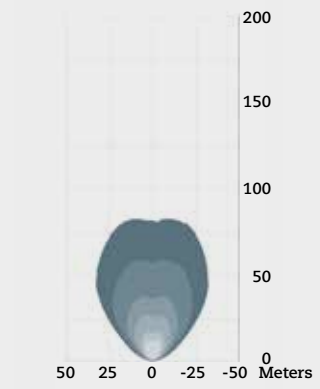
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**1313 -7000**  
Narrow 0-30°  
Symmetrical



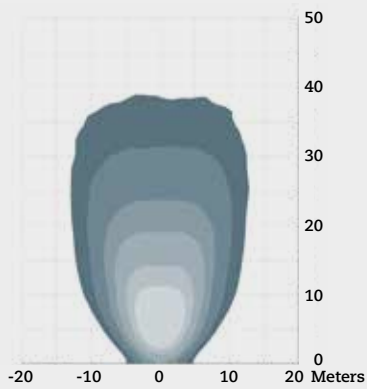
**1313 -7000**  
Wide 45°+  
Asymmetrical



**1313 -7000**  
Low

# 1323 LED

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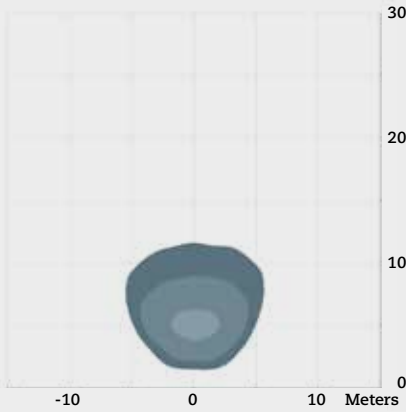


**1323 -13500**  
Medium 31-45°  
Symmetrical

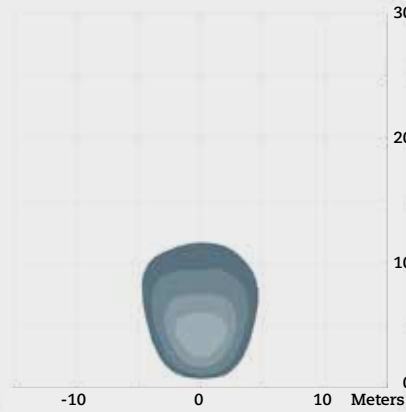


## VL4 LED

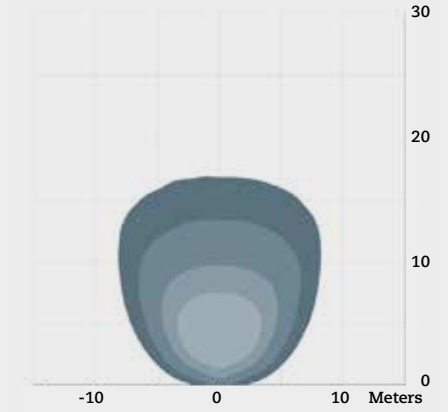
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**VL4 -600**  
Wide 45°+  
Symmetrical



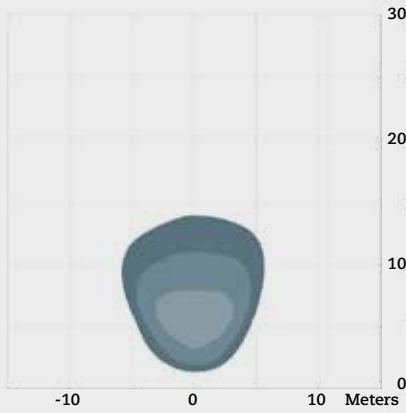
**VL4 -600**  
Wide 45°+  
Asymmetrical



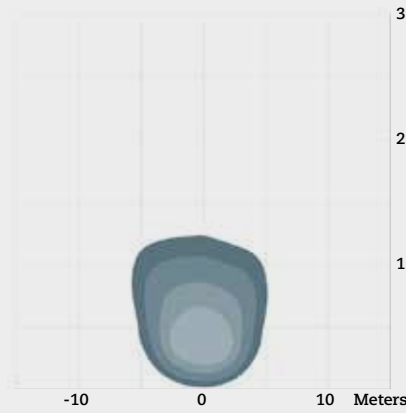
**VL4 -2000**  
Wide 45°+  
Symmetrical

## VL6 LED

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**VL6 -1000**  
Wide 45°+  
Symmetrical



**VL6 -1000**  
Wide 45°+  
Asymmetrical





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# ACCESSORIES

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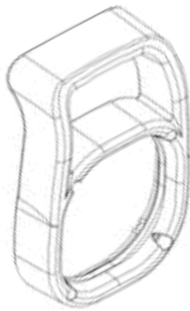
TYRI lights are available with a wide range of options and accessories to help you equip your vehicle with the perfect lighting solution.

## Magnet Mount



The magnet mount is used as an anti-theft device when machines are not in use. Operators can easily remove the work lights by hand at the end of a work shift to be stored in a secure location.

## Handle Bezel



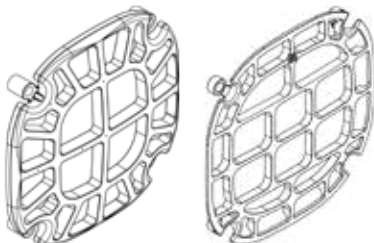
The handle bezel is available on various 1010 models and allows for easy adjustment of the light, whilst it is switched on, to position the light beam where you need it the most.

## Replacement Lens



Damage to lights can be expensive to repair so a replaceable lens can make this task much more cost effective. Similarly, if a different light pattern is needed, a replacement lens is a practical solution.

## Lens Guard

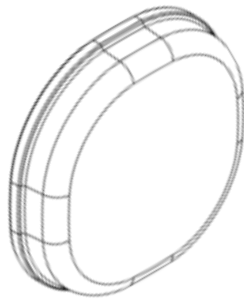


Lens guards provide additional protection, durability and a more rugged appearance. The TYRI Lens guard is available on various 1010 models.



### **Glass Lens Kits**

In extremely high heat applications such as blast furnaces and smelting operations, glass lens kits provides additional resistance against the temperature and abrasiveness. These kits are available on all TYRI 1010 and TYRI 1313 models.



### **Coloured Lenses**

Depending on the application, a coloured lens may be needed. The most common coloured lenses available are blue, amber, red and yellow.

-Blue glass lenses are used with halogen lights to match HID colour temperatures.

-Amber glass can be used as a halogen warning or directional light.

-Red are commonly used for stop signals

-Yellow are used as fog lighting to offer improved detail and contrast in hazy or dusty atmospheres

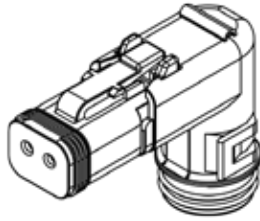
Lens colours available:



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# CONNECTORS

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## Deutsch to ADR Approved Connection

A Deutsch (DT04-2P) connector attaches to a work light and converts the plug to an ADR approved connection. This connector is ADR approved for vehicles transporting or hazardous goods in bulk.



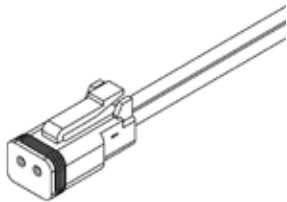
## Deutsch Divider 1:2

This Deutsch Divider converts one Deutsch (DT04-2P) connection into two Deutsch (DT04-2P) connections to easily allow two work lights to be connected.



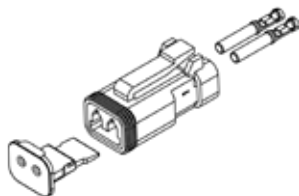
## Coil Cable

The coil cable plugs the Deutsch (DT04-2P) into a work light and the opposite end into the outlet on your vehicle for an instant power source. This connector works seamlessly with the magnet mount accessory for an effective portable lighting solution.



## Deutsch Wire Harness

Available in 50cm and 100cm lengths, this wire harness attaches to a work light equipped with Deutsch (DT04-2P) connector and converts it into two 16 gauge wire leads for easy installation.



## Deutsch (DT04-2P) Connector Kit

This complete kit provides all the parts needed to connect a TYRI work light to your machine.

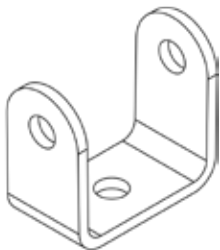
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# BRACKETS

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There are many positions where work lights can be installed on machinery and a limitless number of configurations. To accommodate these fittings, it is essential to think about the bracket type required to ensure that the work light is securely fastened and that the light is directed where you need it.

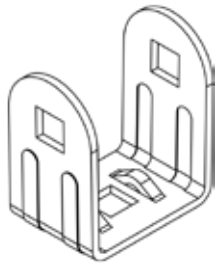
TYRI lights have the option of dampened or un-dampened housing brackets for standard placements such as standing or hanging. Dampened brackets are recommended for demanding and harsh off highway applications as they offer some stability in environments where lights are subjected to excessive vibration. These brackets are available in 25mm, 30mm, or 40mm standard heights and most brackets are available in three standard mounting bolt sizes; M8, M10 or M12.



LED Bracket Shown

## Brackets for Dampened Housing

The dampened bracket is an ideal solution for high vibration applications. The bracket mounts directly through the vibration dampener onto the light and is available in 25mm, 30mm and 40mm heights for M8 or M10 size bolts.



Halogen Bracket Shown

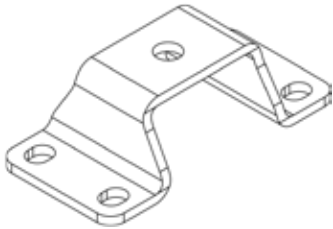
## Brackets for Undampened Housing

The undampened bracket mounts directly to the light and is available in 25mm, 30mm and 40mm heights for M8, M10 or M12 size bolts.



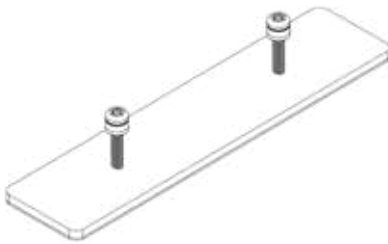
### **Slide Bracket**

The slide bracket gives you more flexibility when mounting a work light. It allows the light to move left to right in pedestal and hanging applications or up and down on side mounted applications. This bracket is suited to a LED work light.



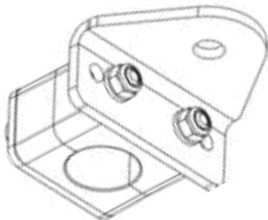
### **Chassis 5 Hole Mounting Bracket**

Where a through bolt hole would not be suitable, this bracket can be fixed to a machine by the use of screws. The work light can then be mounted to the bracket via the centre hole.



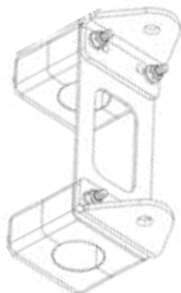
### **VL Easy Mount**

The VL Easy Mount is designed specifically for use on the VL6 LED range. The mounting plate comes equipped with 3M double sided tape to secure the light in the position required.



### **Single Handrail Bracket**

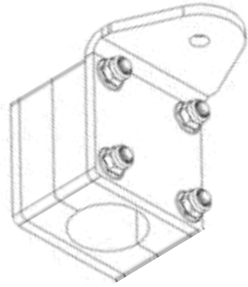
The single handrail bracket allows a work light to be mounted on a handrail of your machine, without the need for drilling or modifications. This mount fits 25mm and 35mm handrails, is dampened, and vibration tested.



### **Dual Handrail Bracket**

The dual mount handrail bracket allows two or more lights to be positioned on the handrail of a machine with the additional stability of a double mount. This bracket mounts to 25mm and 35mm handrails, is dampened, and vibration tested.





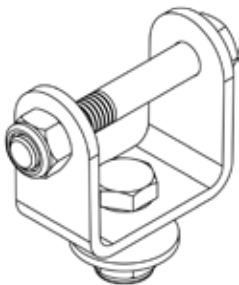
### **Heavy Duty Single Handrail Bracket**

Similar to the single handrail bracket, this heavy duty version is designed for mounting of larger LED lights to a hand rail of a machine. Particularly effective in the harshest conditions where additional support and strength is needed, it mounts to 25mm and 35mm handrails, is dampened, and vibration tested.



### **Angle Mount Kit**

The angle mount kit is ideal for fixing two work lights in the same location without the need for modifications to the machine. We recommend that this double mount kit is paired with the Deutsch Divider for ease of installation.



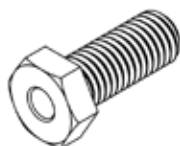
### **Stainless Steel Hardware**

Stainless steel is known for its resistance to corrosion, rusting, and staining over conventional steel, making marine and salt mine applications a popular fit. This bracket is also recommended for high vibration machines, due to its strength.



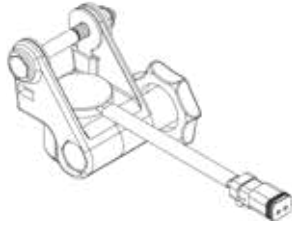
### **Dampened Halogen Bracket Kit**

To lengthen the life of a halogen work light, the dampened halogen bracket kit is designed to withstand higher levels of vibration.



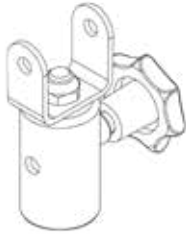
### **Hollow Bolt**

The hollow bolt fits an M12 bolt and is an excellent option when mounting lights in areas such as fenders, where you want to limit the amount of holes required for installation. The wires are able to run thru the hollow bolt to power the light, requiring only one mounting hole.



#### **Pole Brackets with electrical connection**

TYRI's pole brackets allow a work light to be fixed to the top of a 24mm cylindrical pole for quick and easy connection and disconnection. They are supplied with an integrated connector.



#### **Fire Fighter Bracket**

The Fire Fighter bracket fits a 30 mm cylindrical post to allow easy connection and disconnection.

#### **Custom Bracket**

For an unconventional light positioning, you may require a custom bracket to suit the application. TYRI works with our customers to first, find the correct lighting solution, and then create a custom bracket.

*\*Some brackets may not be available on all TYRI work light models, please contact TYRI for further information*



SCOOPTRAM

ST7

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# CUSTOMISATION

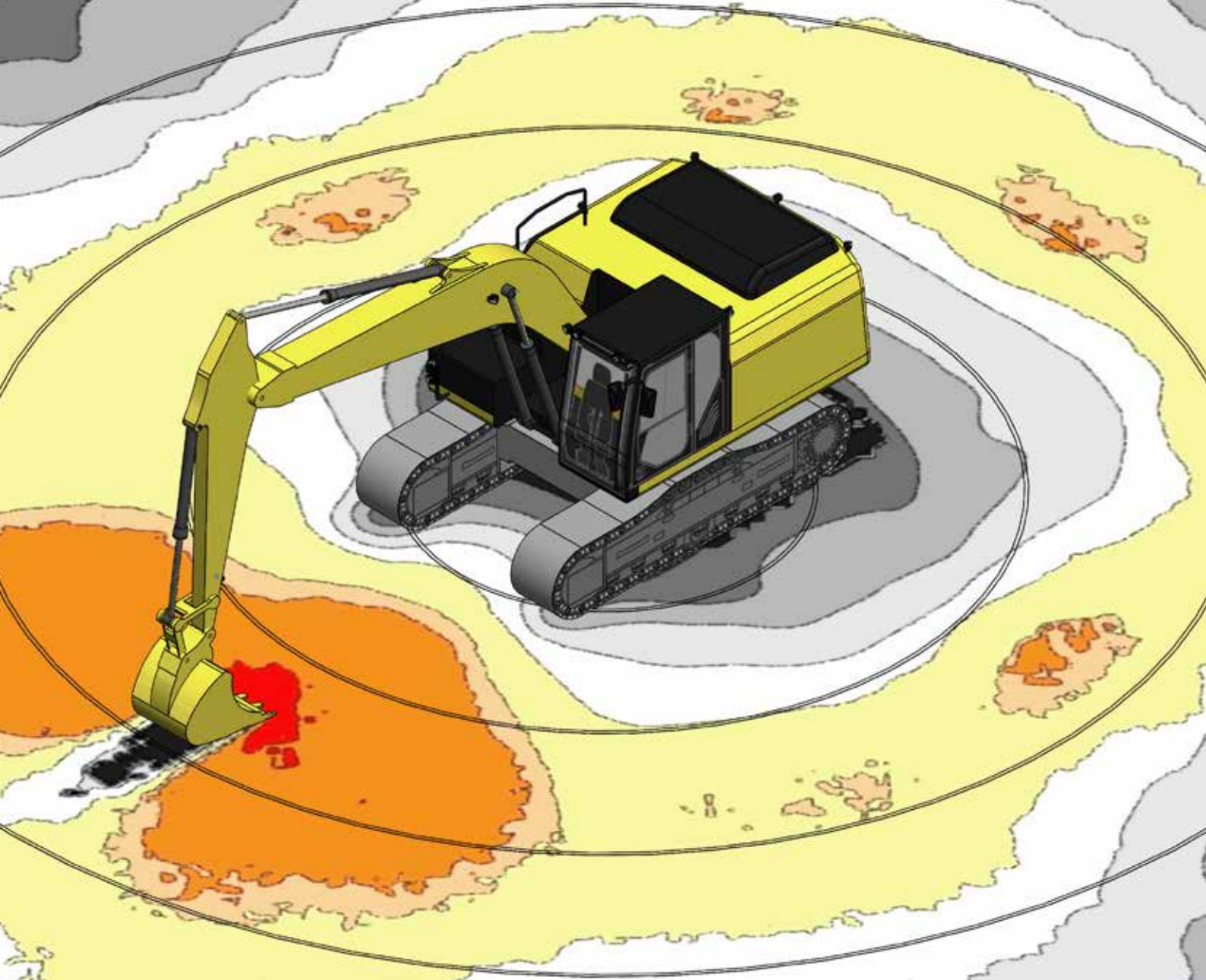
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TYRI understands that as an OEM you have a vision of how your machinery will look and perform. We will work with you to ensure our lights complement both your design and functionality. Creating a practical and robust machine does not mean you have to compromise on style over performance. TYRI's flexibility makes us the ideal design partner and industry leader in off highway lighting.

TYRI is able to make small modifications as well as design a completely new work light and bracket specifically for your machine. Working with your designers, we can drastically improve the look and performance of your lighting.







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## PHOTOMETRIC ANALYSIS

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Using state-of-the-art software, TYRI lighting engineers are able to fully demonstrate how light will be dispersed around your machine. Our lighting simulations take into account your vehicle's design and features to highlight any potential obstruction to the light projection. This allows you to fully visualise how your machine will operate with TYRI solutions and ensure you get the very best performance from your lighting.





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# FAQ

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## **Why LED?**

As the latest and fastest growing technology, LED is the most cost effective and environmentally friendly lighting available. LED has a long burn life, low power consumption and exact optics which makes it the smart choice for long term cost savings. It also emits a bright, white light; closer to that of the daytime sun. This allows machine operators to see clearly with less strain on their eyes compared to other lighting technologies such as Halogen and HID (Xenon) which typically emit a more yellowish light.

## **What is a Lumen Value?**

A lumen is the value placed on the amount of all light a source emits and can be described as Theoretical, Cold or Effective. These values are explained below:

**Theoretical** – This is the maximum light you could obtain if nothing else impacted the light, such as optics, reflectors or heat.

**Cold** - The cold lumen rating is measured when the LED light is first switched on, it will continually decrease until the LED work light has reached its operating temperature.

**Effective** - Once the light has reached its operating temperature, we then measure the lumen output in effective lumens. This is the most reliable and honest rating of lumens.

## **Does the Watts value tell me the light output?**

Often confused with the light output, watts actually measures the amount of energy a work light draws. To gauge how much light you will receive, the effective lumen value is the correct measurement to observe.

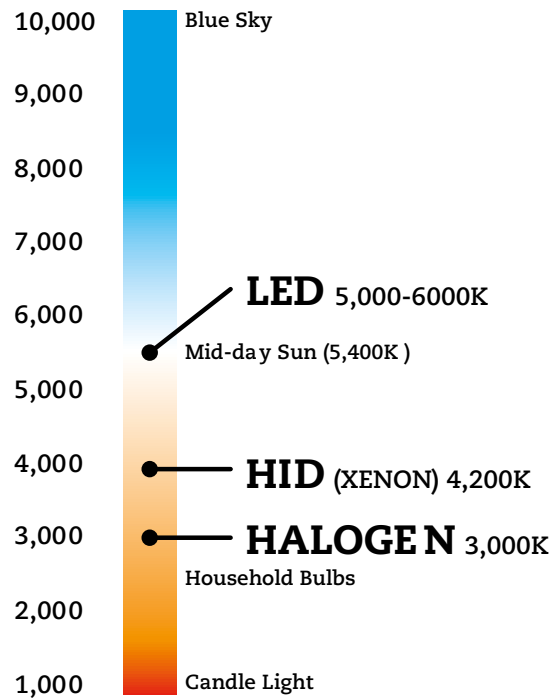
## **Does electronic compatibility matter?**

LED lights contain circuitry, which could influence other electronic devices. This interference can be heard as noise on the radio or cause a monitor to flicker. To ensure work lights do not impair other radio devices, it is essential that they are tested to comply with industry standards (EMC). These standards are to ensure the interference is reduced to an insignificant level that is nearly undetectable and allows other electronics on the equipment to operate correctly as designed.

### What is Colour Temperature?

Colour temperature measures one characteristic of visible light and is rated against a Kelvin scale (°K). Generally, the human eye functions more effectively when objects are illuminated by a light source that is closest to the mid day sun, which is around 5500°K. From a health and safety perspective, this translates to a safer, more productive environment.

### Kelvin Light Color/Temperature





**What are Lux and Footcandles values?**

Illumination (luminance) is light density falling upon a surface. The name footcandle conveys the luminance cast on a surface by a one-candela source, one foot away.

Similarly, a Lux value measures the luminous flux per unit area. Therefore:

1 Lux = 1 lumen per square meter

5 Lux = 5 lumens per square meter

1 Footcandle = 1 lumen per square foot

5 Footcandle = 5 lumens per square foot

**What is a Candela?**

Luminous intensity is light intensity through space. Luminous Intensity is expressed in Candela; the greater the candela, the brighter the light.

**How do I calculate watts, volts and amperage requirements?**

Wattage is the amount of volts and amps needed to power a device and is calculated by multiplying the voltage by the amps. The higher the wattage, the more power is needed.

Volts and Amps can be calculated by dividing the wattage by the Amp value to gain the Voltage, and by the voltage to gain the amp value. As per below:

Watts (W) = V x A                  Voltage (V) = W / A                  Amps (A) = W / V

**What is the effect of voltage on bulb life and light output?**

Halogen bulbs are manufactured to operate at a 'design voltage' or rated voltage such as 12v or 24v. Bulb output and light statements are based on results of testing bulbs at their rated voltage. Operating a bulb at more than its rated voltage affects its life span and the output given.

UNDERRATED BULB VOLTAGES (100%<)			
Volts %	Amps %	MSCP %	Life %
99	99.4	96.5	112.8
95	97.2	83.6	185.1
90	94.4	69.2	354.1
80	88.5	45.8	1445.2

OVERRATED BULB VOLTAGES (100%<)			
Volts %	Amps %	MSCP %	Life %
101	100.5	103.5	88.7
105	102.7	118.6	55.7
110	105.4	139.6	31.9
120	110.5	189.3	11.2

NOTE: Total Bulb Light Output is measured in Mean Spherical Candle Power (MSCP)

**Illumination Examples**

LUX	
Sun Light	50,000-100,000
Football Field	200-1,000
Shopping Center	30-1,000
Gas Station	15-500
Work Area	15-500

## What is the Nominal Amp Draw (Consumption)?

### Halogen Work Lights

	35W	55W	65W	70W
12V	2.9 Amps	4.6 Amps		
24V	1.5 Amps	2.3 Amps	2.7 Amps	2.9 Amps

### HID Work Lights

	35W	45W
12V	<4 Amps	4.8 Amps
24V	2 Amps	2.4 Amps

### LED Work Lights

LED work lights with equivalent light now have less amp draw than halogen & HID lights. Refer to LED section for amp draw data.

### Lumen Output - Halogen & HID (Xenon) Lights

LIGHT	THEORETICAL LUMEN OUTPUT
Halogen 12V 35W	700 Lumens
Halogen 12V 55W	1,350 Lumens
Halogen 24V 65W	1,250 Lumens
Halogen 24V 70W	1,700 Lumens
HID (Xenon) 12V or 24V 35W	3,200 Lumens
HID (Xenon) 12V or 24V 45W	4,200 Lumens

### What Can I Expect for Service Life?

TECHNOLOGY	HOURS
HALOGEN	500 to 1,000 hours
HID (Xenon)	4,000 to 6,000 hours
LED	40,000 hours



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- TYRI have subsidiary offices in Jakobstad, Finland, Italy and in San Paulo, Brazil.

**INTELL  
IGENT  
LIGHT  
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SOLU  
TIONS**