



## WORKLIGHTS



- The entire product range including accessories
- 45 examples of applications
- Experience lighting technology in real time and in 3D

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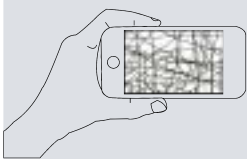
## Get first-hand experience of HELLA worklights!

Let yourself be carried away to a world between reality and fiction. This brochure includes a three-dimensional tractor, for example, that you can equip with different lighting technology.

Let our enthusiastic customers explain why they buy HELLA worklights.

### How it works:

1. Download the free app from HELLA to your smartphone (Apple iOS or Android) or iPad using the QR code on the left, from [www.hella.com/apps](http://www.hella.com/apps) or directly from iTunes and Google Play.
2. Open the app and scan the pages where you see the icon displayed on the left. When scanning, position the camera of your smartphone or iPad face-on over the brochure page at an angle of approx. 45 degrees. You will be amazed!



# PRODUCT INFORMATION



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Compare the illumination of many different HELLA worklights: [www.hella.com/eliver](http://www.hella.com/eliver)



# OUTPUT, COSTS AND MORE: A COMPARISON OF FOUR TECHNOLOGIES.

**Why are HELLA worklights available using four different technologies?**

So that each user can get the best value for money for their specific application requirements. The four comparison photos demonstrate which types of illumination and which light colours are available using the different technologies. Other decision criteria include the working area to be illuminated and the position on the vehicle.

**HELLA makes very specific recommendations for these applications from page 12 onwards.**

**The fold-out page at the end of this catalogue has a lot to offer:  
experience the lighting technologies from HELLA live on your smartphone!**







XENON



LED





# LIGHTING TECHNOLOGIES - WHAT YOU SHOULD KNOW!

## LED technology

The latest LED developments for worklights are already so advanced that they beat Xenon light performance. LEDs also deliver high colour temperatures of approx. 6,000° Kelvin, providing illumination comparable to daylight. Working under these light conditions protects your eyes and keeps you alert for longer.

### Advantages of LED worklights

- High light output
- Low power consumption
- Maintenance-free
- Extremely long service life
- Multi-volt compatible
- 100% water- and dust-proof
- High resistance to vibration
- Low temperature on the lens

### All the advantages of modern LED lighting technology are optimally employed in HELLA worklights.

The choice of LEDs, the power supply and thermal management of the headlight are key factors in achieving optimum light output (lumen). The quality of the components used by HELLA ensures, for example, that the light remains at the same level of brightness at high ambient temperatures.

Good thermal management is necessary to ensure the long service life and the cost-effectiveness of an LED worklight. The reason for this is that as soon as an LED is illuminated, heat is produced. The more current that is supplied to the system, the more heat is produced by the LED. The higher the LED temperature, the lower the light output and the shorter the service life. The heat must therefore be dissipated into the environment.

HELLA uses the latest simulation programs during product development to ensure optimal heat dissipation through the housing.

LED worklights from HELLA are also equipped with thermal sensors to provide reliable protection against the LEDs overheating. This guarantees extremely long service life of up to 60,000 hours, as well as consistent light output.

### Do you know the actual light output of your worklight?

In their product catalogues, LED manufacturers typically specify a light output without factoring in the impact of temperature. This information about the light source, however, does not correspond to the actual light output of a manufactured headlight. When these light values are cited for an overall device, the light output rating is unrealistically high. Such ratings are referred to as "calculated lumen" (clm) or "cold lumen".

The lumen ratings of all HELLA worklights are always based on values determined using light measuring technology. The values therefore correspond to the light that is actually emitted from the headlight.

HELLA LED worklights emit their full output in ambient temperatures of up to 50°C.

### At HELLA, electronic devices cannot cause interference.

Electromagnetic compatibility (EMC) is playing an increasingly important role due to the increased use of electronics in vehicles. Electronic devices must be designed so that they can be used with other electrical devices, equipment or systems without causing interference (radiation) and without experiencing interference from such devices and systems (irradiation). For example, products can only be sold in Europe if they comply with the EMC Directive 2004/108/EC. Manufacturers of worklights must declare conformity with the Directive via a CE marking on the product itself. HELLA even goes one step further and demonstrates compliance with additional EMC criteria via "E" type approval according to ECE Regulation 10. This approval certifies that the device will not interfere with the on-board electronics. HELLA worklights are therefore perfectly suitable for all vehicle groups.







### Advantages of Xenon worklights compared to Halogen worklights

- Brighter and greater illumination of the working area compared to Halogen bulbs
- Light colour similar to daylight (4150° Kelvin)
- No sudden light failure - impact resistant light arc instead of a fragile filament
- Up to five times longer service life compared to a Halogen bulb
- Consistent brightness even when on-board voltage decreases
- Reduced load on the on-board power thanks to low power consumption

#### Information on the new series: X-Powerpack

The new Xenon worklights in the X-Powerpack series are perfectly shielded against internal interference radiation from electronics. The highest EMC requirements are met in full. The headlight therefore cannot interfere with radios and other electronic devices.

The units are dust- and waterproof (IP 6K9K) and extremely resistant to vibration.

#### Information on installing Xenon worklights

To ensure that the electronic ballast of the Xenon bulb ignites, the line resistance between the vehicle battery and the Xenon electronic ballast must not be more than 150mΩ at 12V and not more than 300mΩ at 24V.

To ensure the optimum service life of the Xenon bulb, the inclination of the headlight must not be greater than  $\pm 35^\circ$ .

### Halogen technology

- HELLA worklights use H3 bulbs with a light colour of 2500° Kelvin.
- There are other Halogen versions using HB3 and H9 bulbs.
- Worklights with H9/HB3 bulbs are only available as a 12V version

#### Advantages of H9/HB3 compared to H3

- 1.5-times greater light output thanks to increased luminous flux
- Direct access thanks to an externally accessible bulb
- Easy bulb replacement – without opening the headlight housing
- 3200° Kelvin light colour

## PROVEN QUALITY FROM HELLA

Heat, long hours of operation, impacts and shocks. The operating conditions place the highest demands on worklights. All HELLA worklights are therefore tested during development and manufacturing to meet the highest demands in terms of quality so that they can achieve maximum performance.

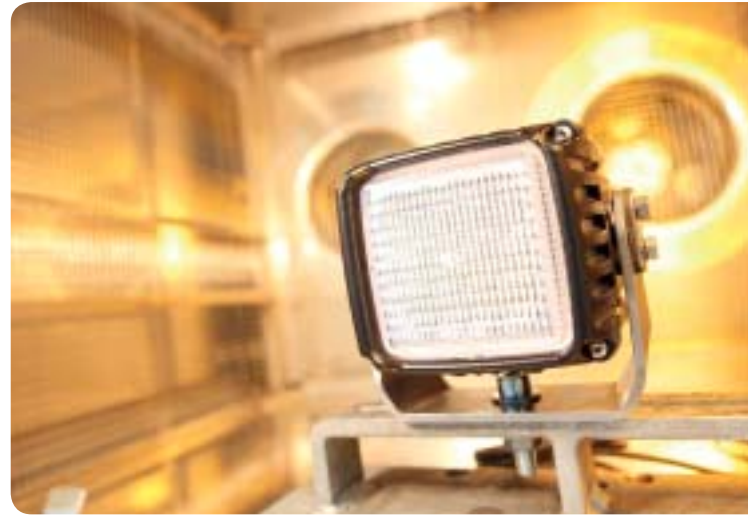




## HEAT, COLD AND VIBRATION TESTS

In temperature cycle tests, HELLA worklights are exposed to temperature fluctuations from  $-40^{\circ}\text{C}$  up to  $+90^{\circ}\text{C}$  in climatic exposure test cabinets. In vibration tests, the temperature varies between  $-30^{\circ}\text{C}$  and  $80^{\circ}\text{C}$  while the headlights are shaken for several hours and exposed to forces of 9.6 G.

These tests put intense stress on every material. Only the units that pass all tests undamaged go into production. Test reports are archived at HELLA for a period of 15 years.



## SPRAY WATER TEST

HELLA worklights are tested under real environmental conditions in universal spray booths. The booths are equipped with devices for rain, flood water, water jets and spray mist.

The products are tested for leaks at a pressure of up to 5 bar in the dripping and spray water test and at a pressure of up to 10 bar in the water jet test.

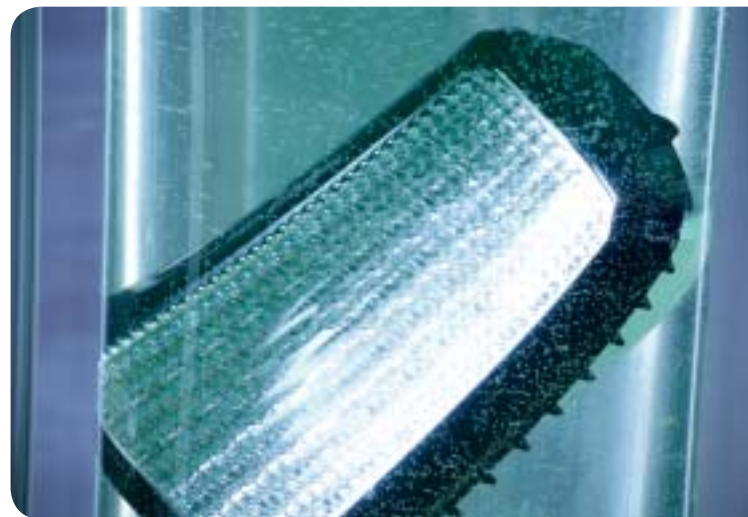


## PRESSURE WASHER TEST

In a test facility, the worklights are tested at a water pressure of up to 100 bar and a water temperature of 80°C. This test reproduces the conditions in a carwash or when a pressure washer is used to clean the vehicle.

## IMMERSION AND PRESSURE LEAK TEST

In this test, the worklights are submerged in water for 30 minutes in an immersion pipe at a depth of 1 metre. There must be no ingress of water. This test is performed on all LED worklights.



## DUST AND SALT SPRAY TEST

The dust protection test measures the degree to which a headlight is protected against the ingress of solid foreign particles, including dust. The device is exposed to an air/dust mixture for this purpose.

The tough environmental conditions of the road are simulated in the salt spray test. A salt spray mist swirls around the worklight for up to 700 hours to test resistance to corrosion.





## Dangerous goods regulation

GGVSEB (previously GGVS) (German abbreviation) stands for the German regulation on carriage of dangerous goods by road, rail and inland waterway. This regulation transposes Directive 2008/68/EC of the European Parliament and Council of 24 September 2008 on the inland transport of dangerous goods. Worklights marked as such are approved for mounting on transportation equipment which meets the regulations of GGVSEB/ADR.

## IP protection classes - Buy with confidence

How well protected is a product against environmental influences? Worklights, for example, are exposed to dust and water. The IP protection class states how resistant the product is. The classes are defined in DIN 40 050 Part 9. HELLA worklights are designed for different degrees of protection:

### Protection class IP 5K4K

The amount of dust that enters the system should not affect function and safety. Water that is sprayed against the housing at an increased pressure from any direction must not have a damaging effect; water pressure approx. 4 bar.

### Protection class IP 5K9K

The amount of dust that enters the system should not affect function and safety. Water that is directed against the housing during high pressure / steam jet cleaning must not have a damaging effect; water pressure approx. 100 bar.

### Protection class IP 6K4K

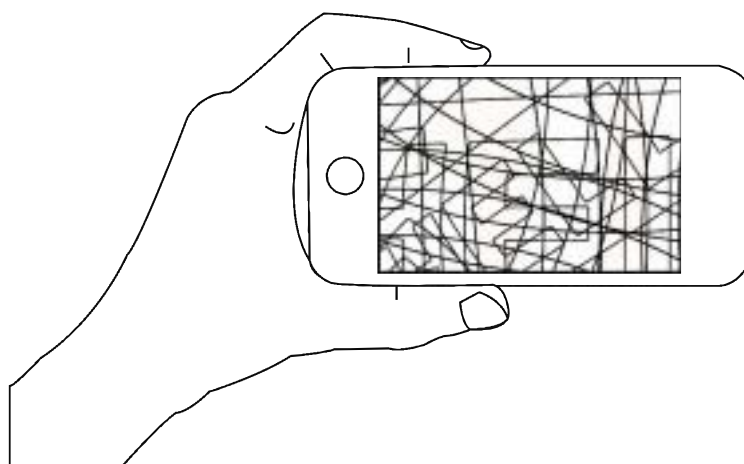
There must be no ingress of dust. Water that is sprayed against the housing at an increased pressure from any direction must not have a damaging effect; water pressure approx. 4 bar.

### Protection class IP 67

There must be no ingress of dust. Even during temporary immersion there must be no ingress of water.

### Protection class IP 6K9K

There must be no ingress of dust. Water that is directed against the housing during high pressure / steam jet cleaning must not have a damaging effect; water pressure approx. 100 bar.



For more information about HELLA's quality criteria, visit:  
[www.hella.com/quality](http://www.hella.com/quality)

# STRAIGHTFORWARD ANSWERS TO TECHNICAL QUESTIONS

## Are there legal regulations which apply to worklights?

There are no specific regulations for type approval, as worklights can only be used while driving off public roads.

## Who is allowed to install worklights on their vehicles?

Worklights can be installed on any vehicle.

## Can I use worklights in road traffic as well?

Yes, if the vehicle is stationary (e.g. loading and unloading).  
Exception: Vehicles used either for the construction, maintenance or cleaning of roads or for refuse collection, if the journey is part of the work process. Worklights can only be switched on if they do not blind other road users.

## Can other headlights be used as worklights?

Depending on the application, special types of headlight have been developed for vehicle lighting, including high and low beam headlights, fog lights and worklights. For illumination of the working area, only a worklight provides adequate illumination. A good worklight is characterised by uniform illumination of the largest possible area and a smooth transition at the edge. (see Figure 1)

## Can I switch on worklights in public traffic when it is foggy?

No. Worklights must not be used while driving on public roads.

## Can I activate worklights at the same time as other headlights (e.g. spotlights and worklights)?

No. It must be possible to switch on worklights independently from all other headlights and lights.

## When can I use a worklight as a reversing spotlight?

If it is a tested reversing spotlight it can only be used if it is marked with the type approval mark 00AR. HELLA offers a reversing spotlight variant in many series: Ultra Beam, Power Beam 1000 (LED), ECO21.

## What do GGVSEB and ADR stand for?

GGVSEB (previously GGVS) (German abbreviation) stands for the German regulation on carriage of dangerous goods by road, rail and inland waterway. This regulation transposes Directive 2008/68/EC of the European Parliament and Council of 24 September 2008 on the inland transport of dangerous goods. Worklights marked as such are approved for mounting on transportation equipment which meets the regulations of GGVSEB/ADR.



Low beam



High beam

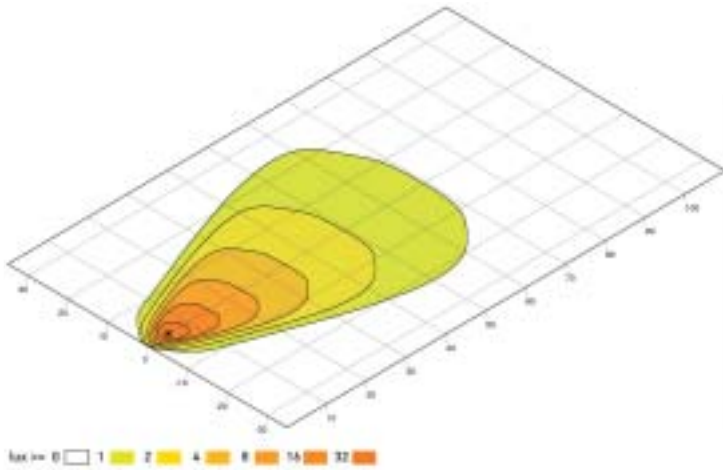


Fog light



Worklight

Fig. 1



Inclination angle: 8° Installation height: 2.5 m

### How can you compare the illumination of different headlights?

Headlights are compared using an informative Isolux diagram. These diagrams show the achieved light intensity on the ground in the form of Isolux lines (lines of equal light intensity). To compare Isolux diagrams, various criteria such as installation height, inclination angle, lux and the number of lines must be taken into account. An objective comparison is difficult if the criteria differ from one another. Different colour scales must also be taken into account and they can be easily misinterpreted. The most significant differences between worklights are visible by directly comparing the light of the worklights at night.

### Why are different inclination angles specified?

The reflector is designed to provide optimum light output that is as uniform as possible at the specified inclination angle.

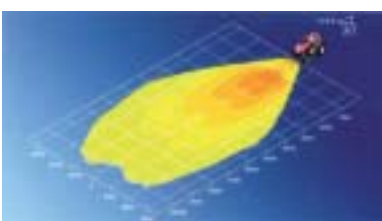


### Why is the inclination angle of the worklight so decisive?

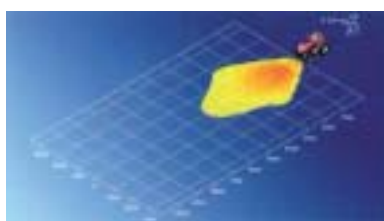
The inclination angle is measured at the headlight attachment point below the horizontal. The greater the inclination angle, the more intense the light in the core area.

A small inclination angle generates a light beam in the distance.

Several worklights (even different worklights) can be combined to achieve custom illumination of the surroundings.



4° inclination angle



10° inclination angle



15° inclination angle







### Why is the installation height of a worklight important?

The light image changes depending on the installation height. A uniform installation height of 2.5m was used for the light diagrams in the catalogue.



Low installation position



High installation position

### What is the difference between the three different types of illumination?

Long-range illumination: rather narrow diffusion (approx. 12-15° to the left and right), range between > 40m - 150m (depending on installation height and inclination angle).

Close-range illumination: designed for the area near the vehicle, range approx. 20m to 40m, wide diffusion.

Terrain illumination: combination of close-range and long-range illumination, may also be referred to as illumination of the surrounding area or off-road illumination.

### When are upright and suspended versions of a worklight available?

If the light distribution is not symmetric, there are specific versions for suspended mounting. The HELLA product text or installation instructions will indicate if a headlight is suitable for suspended mounting.

### Can I use worklights designed to be mounted upright with suspended mounting?

This is only possible if indicated in the product description or installation instructions. You will only achieve optimum illumination and guarantee air-tightness if you follow the instructions.

### Does the light output of headlights double with 2 bulbs?

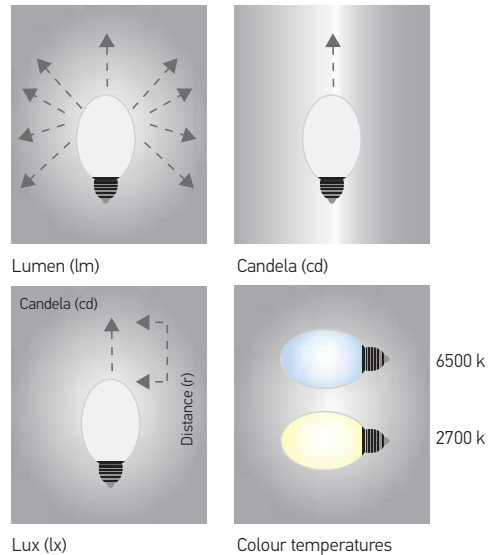
The light output is dependent on the light source and the reflector lens system. Two bulbs, therefore, mean the light output is greater.



**What do watt, Kelvin, lux, lumen and candela mean?**

- Watt (W): Unit of measurement of electrical power
- Kelvin (K): Unit of colour temperature
- Lumen (lm): Unit of luminous flux
- Candela (cd): Unit of the luminous flux emitted in a given direction
- Lux (lx): Unit of illuminance

Lux is an important specification of the worklight because it indicates how much light reaches the work area.



**How long is the service life of a HELLA LED worklight?**

The service life of the entire worklight system is dependent on environmental influences such as vibration, exposure to salt, temperature, etc. The service life of the LED itself is usually very long, but decreases under the influence of temperature.

The light unit of HELLA high-performance LED worklights is designed so that, after 60,000 hours, 70% of the original light output is still available. ("Low Power LED worklights", such as the Flat Beam LED, reach this value after 10,000 hours).

**Do I need an additional relay to install a Xenon worklight?**

Yes, because the current required to ignite the burner briefly reaches 20A (at 12V) or 10A (at 24V), so a fuse is required (15A for 12V systems, 7.5A for 24V systems).

**What cable diameter is required for a Xenon worklight?**

It is important to ensure that cables are used with sufficient cross-section. The recommendation is that a 2.5mm<sup>2</sup> cable with a max. length of 5 metres is used.

**Do I need an additional relay to install an LED worklight?**

A fuse is required, especially for LED units with higher output. Further information on each HELLA LED worklight is provided in the installation instructions.

**What types of connectors are there?**

Different connector systems are supplied by HELLA for electrical contact. Either the connector is integrated in the housing and attached to a cable (AMP/Deutsch) or it is dependent on the bulb (e.g. H9/HB3). Deutsch connectors are mainly used in automotive applications while mating connectors for the H9/HB3 bulbs are not as common in the aftermarket. Consequently, HELLA offers adapter cables to simplify installing the electrical contact.





### Can I clean the HELLA worklight with a pressure washer?

This is indicated by the IP protection class in the product information. All headlights with a protection class of IP5K9K or IP6K9K cannot be damaged by water from a high-pressure/ steam jet cleaner directed against the housing at a water pressure of approx. 80 to 100 bar.

### What IP protection classes are there? And what do they stand for?

IP stands for International Protection. The standard specifies the exact protection of electrical devices against the ingress of solid or liquid foreign bodies such as dust or water on a standardised scale. The exact degree of protection is determined by a series of standardised tests.

Find out more about the HELLA quality tests on pages 8-11.

#### IP 6K 9K

First number: Protection against the ingress of foreign bodies (see Table 1).

Second number: Protection against the ingress of water (see Table 2).

K: Denotes tests for equipment of road vehicles.

Protection against the ingress of foreign bodies (incl. dust)	
<b>X</b>	not tested
<b>0</b>	no special protection
<b>1</b>	solid foreign bodies, diameter $\geq$ 50 mm
<b>2</b>	solid foreign bodies, diameter $\geq$ 12.5 mm
<b>3</b>	solid foreign bodies, diameter $\geq$ 2.5 mm
<b>4</b>	solid foreign bodies, diameter $\geq$ 1.0 mm
<b>5K same as 5</b>	dust-proof
<b>6K same as 6</b>	dust-tight

Table 1

Protection against the ingress of water	
<b>X</b>	not tested
<b>0</b>	no special protection
<b>1</b>	drops of water falling vertically
<b>2</b>	drops of water falling at 15° angle
<b>3</b>	drops of water falling at 60° angle
<b>4</b>	drops of water from all directions
<b>4K</b>	same as 4 but at increased pressure
<b>5</b>	water jet from a nozzle
<b>6</b>	same as 5 but at increased pressure
<b>7</b>	temporary immersion in water
<b>8</b>	sustained immersion in water
<b>9K</b>	cleaning under extremely high pressure

Table 2





### How are HELLA LED worklights shake-proof?

LEDs are semiconductor components and therefore do not have any fragile filaments. They are fully resistant to dust and vibration, which ensures optimal lighting even under extreme conditions.



### What does 'heavy-duty' mean?

Heavy-duty indicates that the product can withstand extreme stress. Heavy-duty worklights go beyond the already very high standard and are equipped with additionally reinforced brackets or vibration dampers that withstand even tougher conditions.

### Why are all HELLA LED and Xenon worklights supplied with stainless steel brackets?

Only high quality materials are used in HELLA worklights. Top-segment LED and Xenon worklights in particular go above and beyond the already very high standard requirements.

A4 stainless steel brackets prevent corrosion and contribute to the long service life of these products.

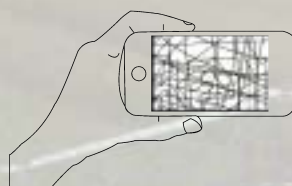
# Agriculture and forestry

“

Worklights must be sturdy and light up my field very clearly. Then I am ready for the harvest season and able to manage my workload. And in my experience, HELLA worklights are the best.

”

Oliver Lösman, Farmer









HELLA recommendation:



Tractor:  
cabin roof, front

   H3  
    H9  
    Xenon  
    LED



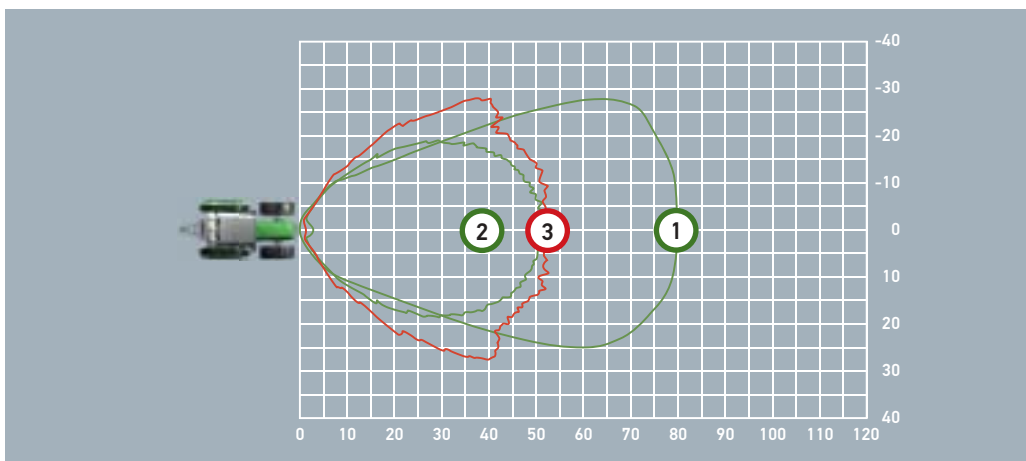
1 **Power Beam 3000**  
 Optimal NW: 12°  
 → Page 83



2 **Oval 100 LED**  
 Optimal NW: 12°  
 → Page 87



3 **Oval 100 X-Powerpack**  
 Optimal NW: 12°  
 → Page 75



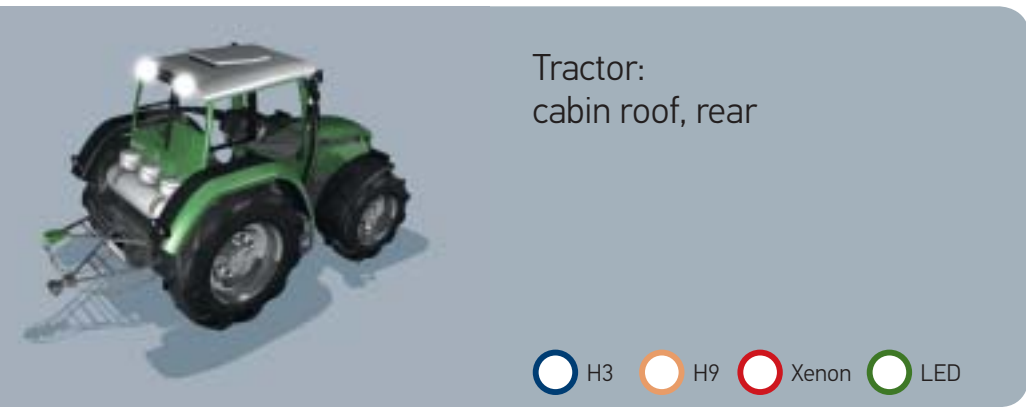
4 **Power Beam 1500**  
 Optimal NW: 10°  
 → Page 81



5 **Oval 90 LED**  
 Optimal NW: 12°  
 → Page 86

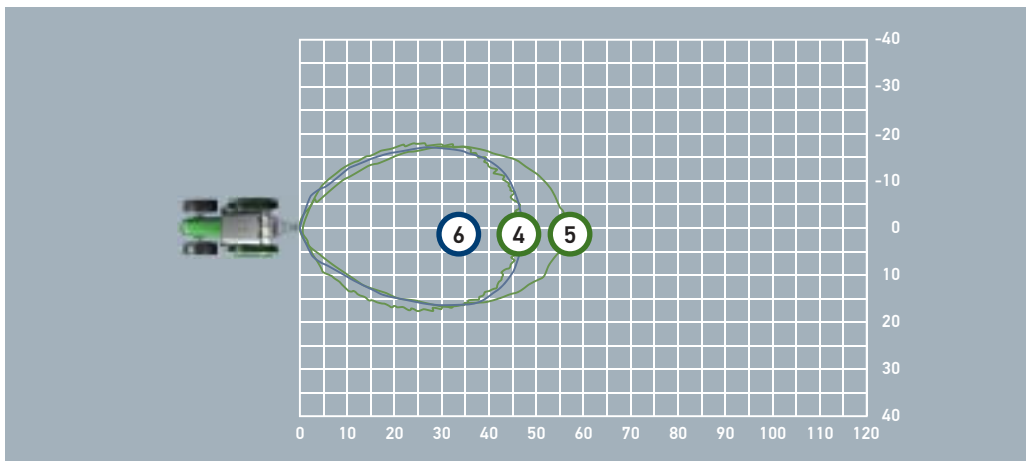


6 **Oval 100 H3**  
 Optimal NW: 12°  
 → Page 58



Tractor:  
cabin roof, rear

   H3  
    H9  
    Xenon  
    LED



NW = tilt angle

All pictograms show the best light distribution at an installation height of 2.5 m per individual headlight.





Tractor:  
wing, rear

   H3  
    H9  
    Xenon  
    LED

HELLA recommendation:



1 **Power Beam 2000**  
 Optimal NW: 12°  
 → Page 82



2 **PowerXen D15**  
 Optimal NW: 15°  
 → Page 73



3 **Ultra Beam H3, handle and switch**  
 Optimal NW: 15°  
 → Page 55



4 **Module 70 LED Gen3**  
 Optimal NW: 10°  
 → Page 85

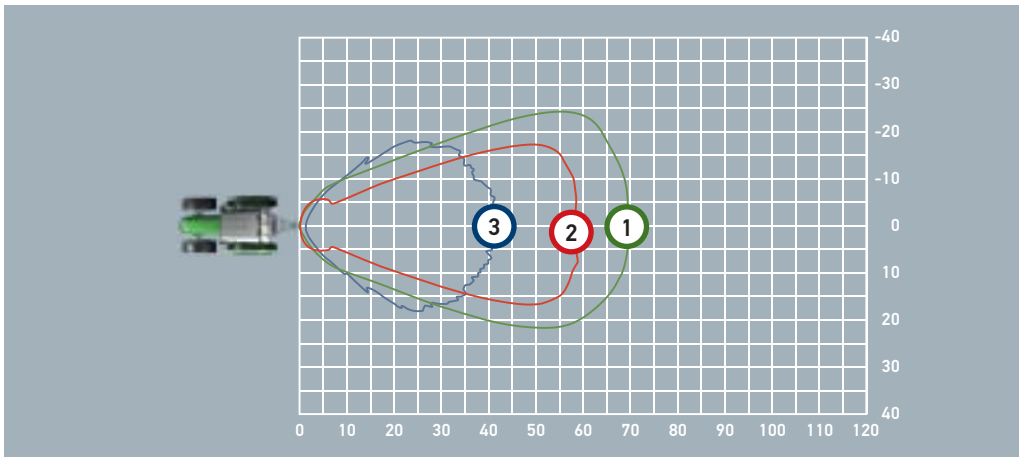


5 **Module 70 H9**  
 Optimal NW: 10°  
 → Page 70



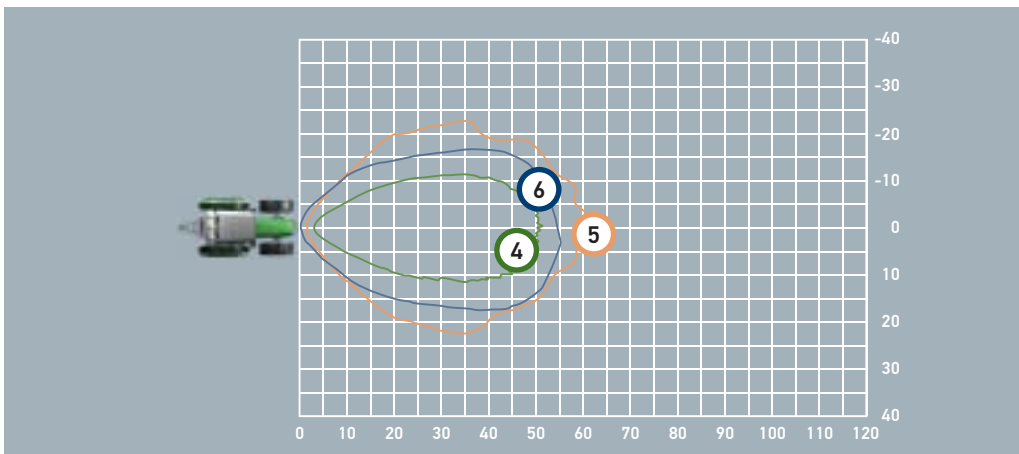
6 **Mega Beam H3**  
 Optimal NW: 13°  
 → Page 56/57

NW = tilt angle

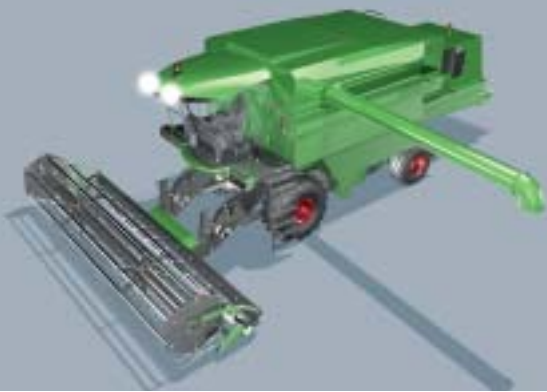


Tractor:  
mirror support

   H3  
    H9  
    Xenon  
    LED

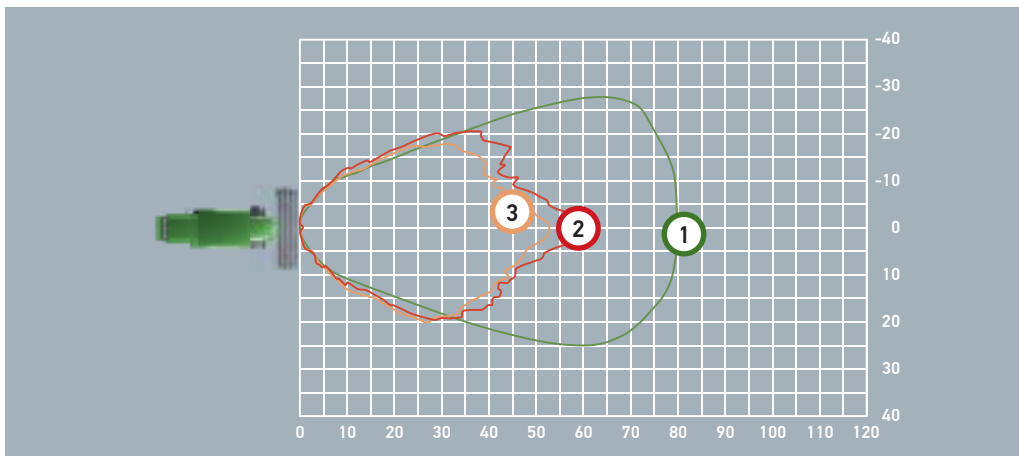


All pictograms show the best light distribution at an installation height of 2.5 m per individual headlight.



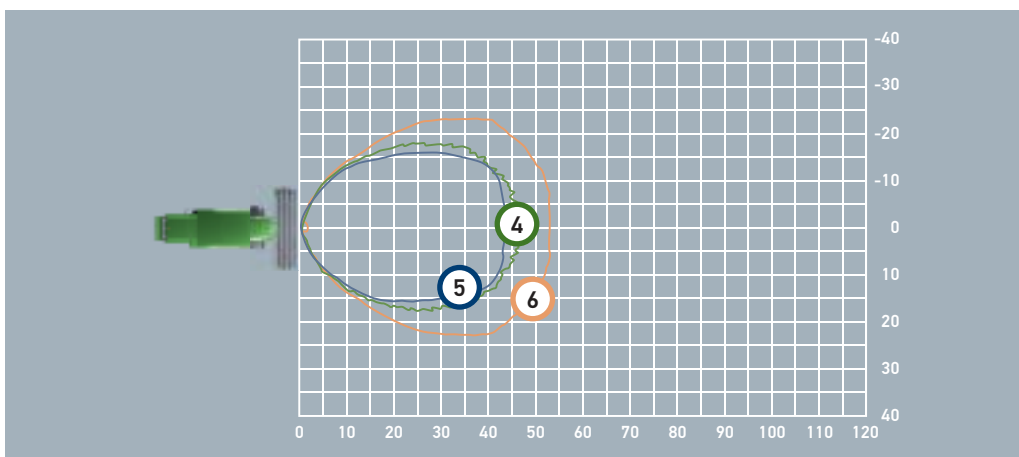
Combine harvester:  
cabin roof, front

H3
H9
Xenon
LED



Combine harvester:  
cabin, bottom/side

H3
H9
Xenon
LED



HELLA recommendation:



1

**Power Beam 3000**

Optimal NW: 12°

→ Page 83



2

**Oval 90 X-Powerpack**

Optimal NW: 12°

→ Page 74



3

**Oval 90 HB3**

Optimal NW: 15°

→ Page 69



4

**Power Beam 1500**

Optimal NW: 10°

→ Page 81



5

**Ultra Beam H3**

Optimal NW: 15°

→ Page 54



6

**Ultra Beam H9**

Optimal NW: 5°

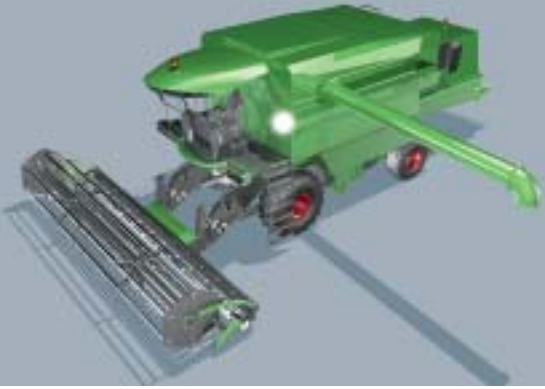
→ Page 67

NW = tilt angle

All pictograms show the best light distribution  
at an installation height of 2.5 m per individual headlight.







Combine harvester:  
mirror support

H3
H9
Xenon
LED

HELLA recommendation:



1

**Power Beam 3000**

Optimal NW: 12°

→ Page 83



2

**Oval 100 X-Powerpack**

Optimal NW: 12°

→ Page 75

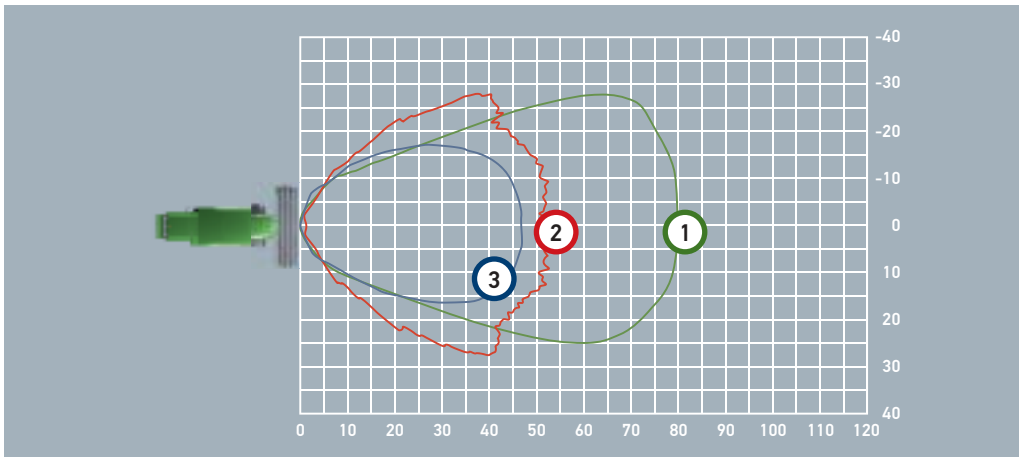


3

**Oval 100 H3**

Optimal NW: 12°

→ Page 58



Combine harvester:  
cabin, front/bottom

H3
H9
Xenon
LED



4

**Power Beam 2000**

Optimal NW: 12°

→ Page 82

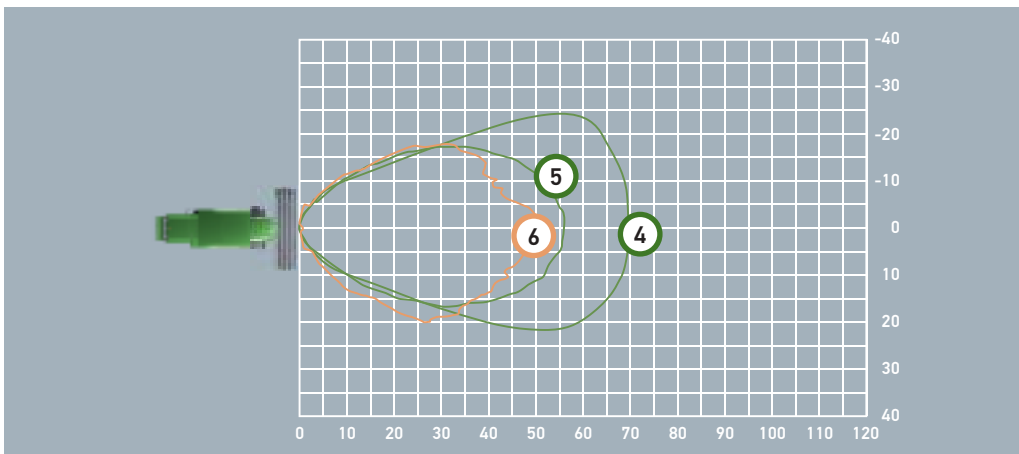


5

**Oval 90 LED**

Optimal NW: 12°

→ Page 86



6

**Oval 90 HB3**

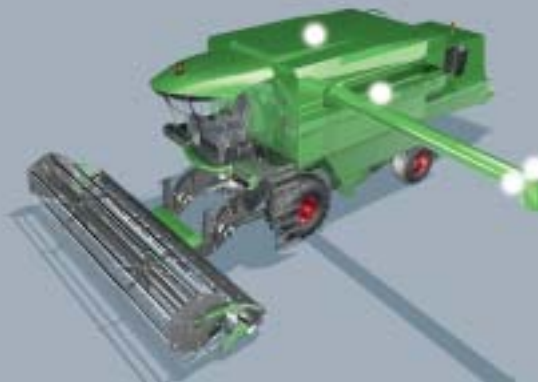
Optimal NW: 15°

→ Page 69

NW = tilt angle



All pictograms show the best light distribution  
at an installation height of 2.5 m per individual headlight.



Combine harvester:  
side panel and grain tank

1 H3 
 2 H9 
 3 Xenon 
 4 LED

HELLA recommendation:



1 **Module 70 LED Gen3**  
 Optimal NW: 10°  
 → Page 85



2 **Module 70 H9**  
 Optimal NW: 10°  
 → Page 70



3 **Oval 100 H3**  
 Optimal NW: 12°  
 → Page 58



4 **Power Beam 2000**  
 Optimal NW: 12°  
 → Page 82

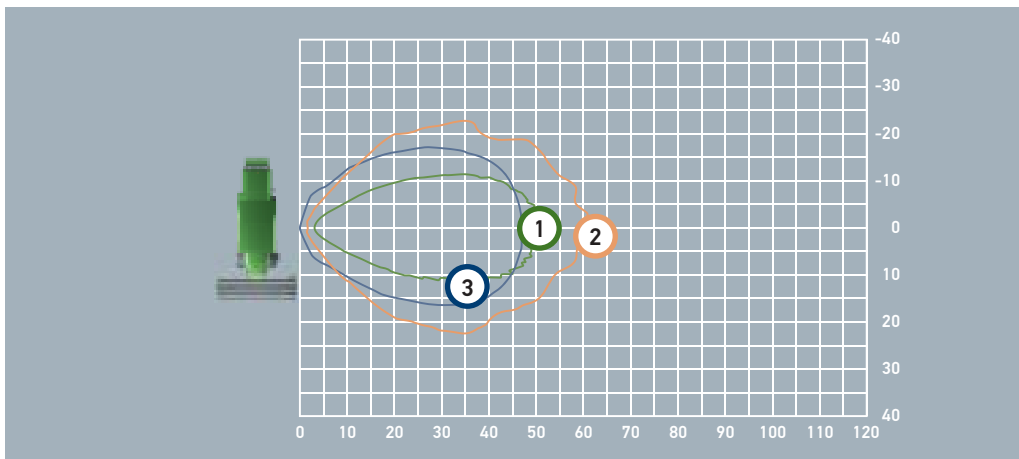


5 **Power Beam 1500**  
 Optimal NW: 10°  
 → Page 81



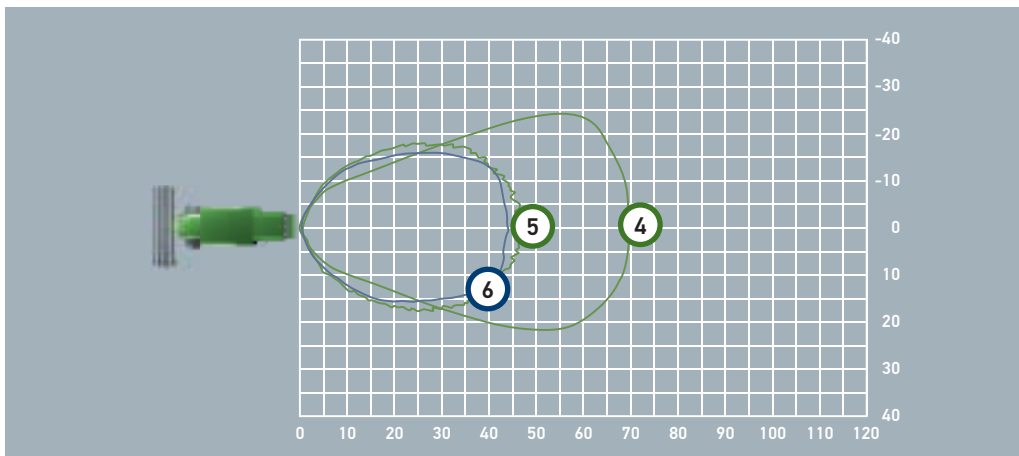
6 **Ultra Beam H3**  
 Optimal NW: 15°  
 → Page 54

NW = tilt angle



Combine harvester:  
rear panel

4 H3 
 5 H9 
 6 Xenon 
 7 LED



All pictograms show the best light distribution  
at an installation height of 2.5 m per individual headlight.



HELLA recommendation:



Combine harvester:  
in the granary and  
service lights

H3
H9
Xenon
LED



1

**Module 70 LED Gen3**

**Optimal NW: 10°**

→ Page 85



2

**Flat Beam 500**

**Optimal NW: 0°**

→ Page 89

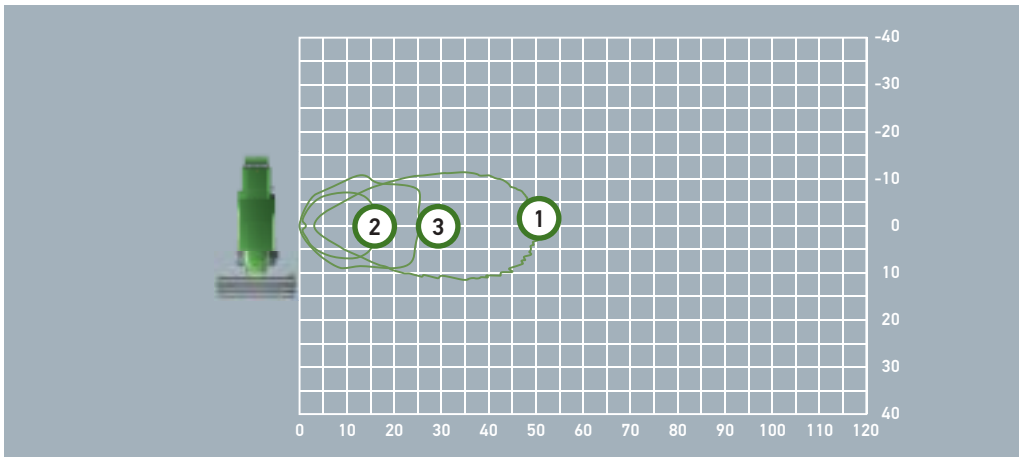


3

**Flat Beam 1000**

**Optimal NW: 0°**

→ Page 87



NW = tilt angle



All pictograms show the best light distribution  
at an installation height of 2.5 m per individual headlight.



Sprayer:  
wing, rear

H3
H9
Xenon
LED

HELLA recommendation:



1

**Power Beam 3000**

Optimal NW: 12°

→ Page 83



2

**Ultra Beam X-Powerpack**

Optimal NW: 12°

→ Page 72



3

**Ultra Beam H3**

Optimal NW: 15°

→ Page 54



4

**Power Beam 1500 long-range**

Optimal NW: 0°

→ Page 81



5

**Module 70 H9 blue**

Optimal NW: 0°

→ Page 61



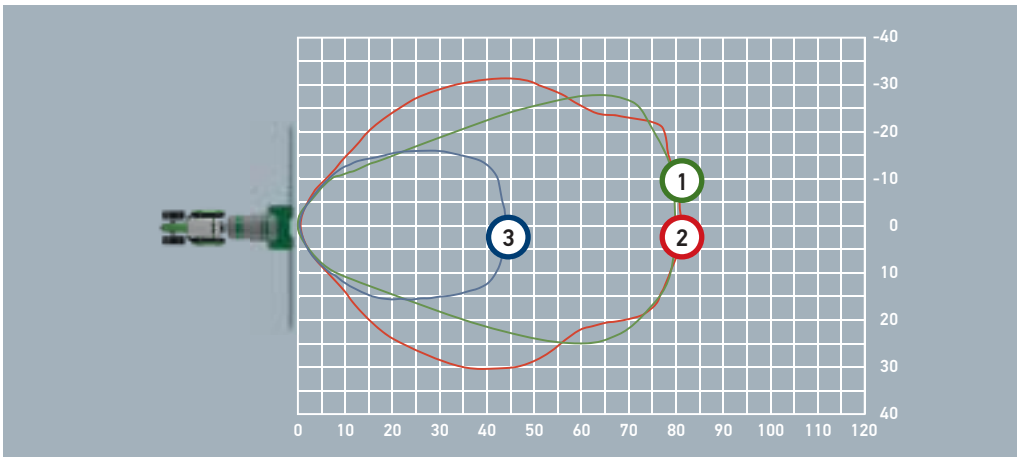
6

**FF50 blue**

Optimal NW: 0°

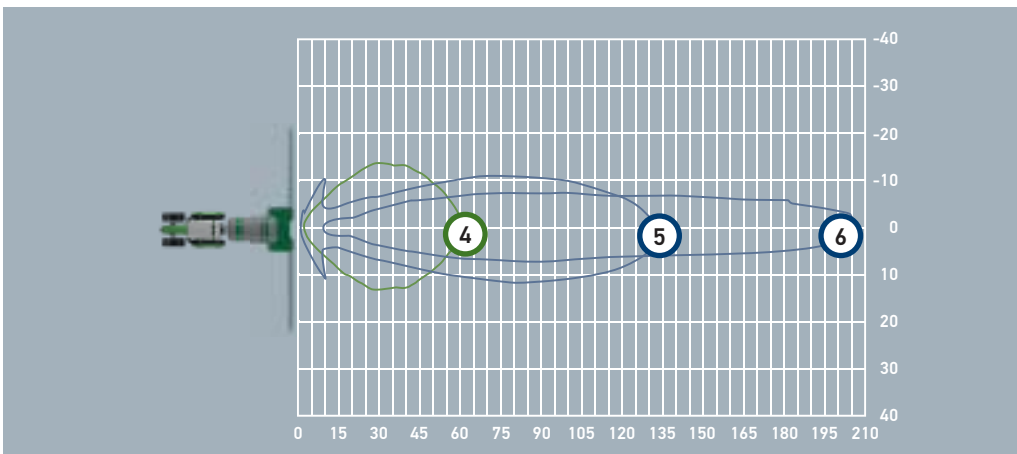
→ Page 71

NW = tilt angle



Sprayer:  
linkage

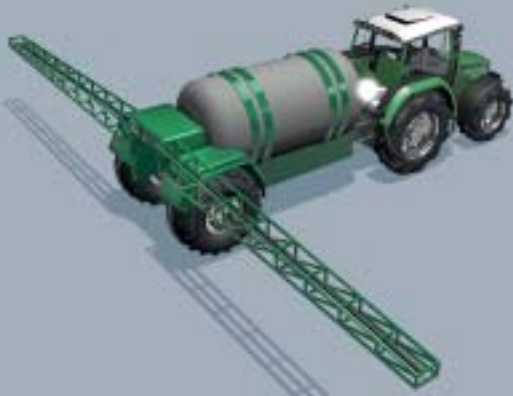
H3
H9
Xenon
LED



All pictograms show the best light distribution  
at an installation height of 2.5 m per individual headlight.







Sprayer:  
tank opening lighting /  
Control panel

○ H3  
 ○ H9  
 ○ Xenon  
 ○ LED

HELLA recommendation:



1 **Mega Beam LED Gen3**  
 Optimal NW: 10°  
 → Page 90



2 **Flat Beam 1000**  
 Optimal NW: 0°  
 → Page 87



3 **Flat Beam 500**  
 Optimal NW: 0°  
 → Page 89



4 **Power Beam 5000**  
 Optimal NW: 10°  
 → Page 84

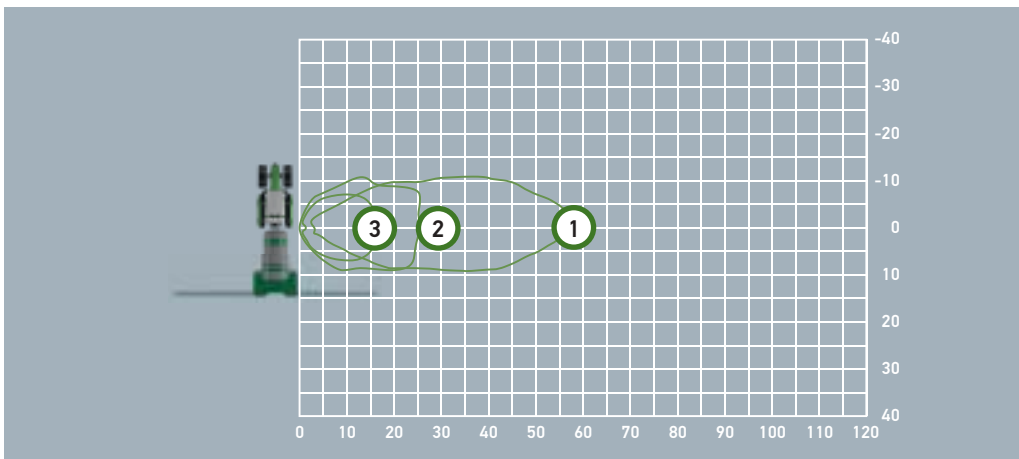


5 **Power Beam 3000**  
 Optimal NW: 12°  
 → Page 83



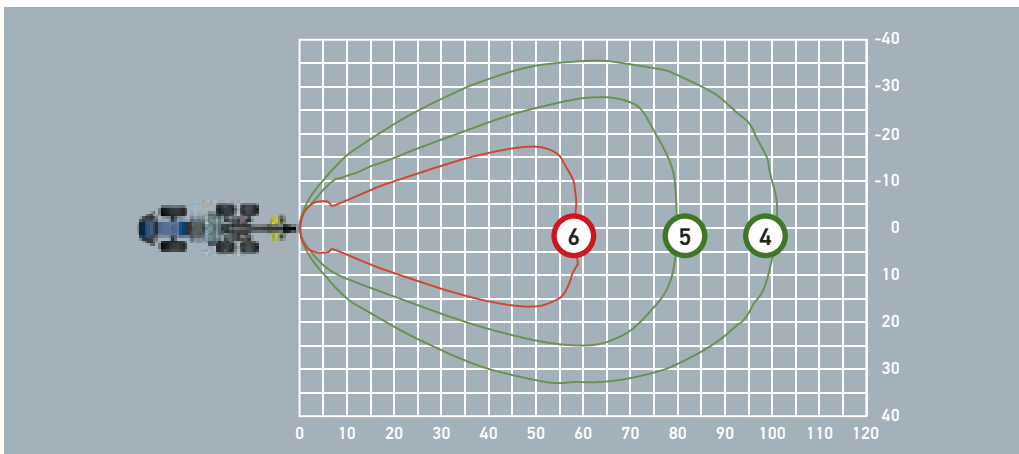
6 **PowerXen D15**  
 Optimal NW: 15°  
 → Page 73

NW = tilt angle



Harvester:  
cabin, front

○ H3  
 ○ H9  
 ○ Xenon  
 ○ LED



All pictograms show the best light distribution  
at an installation height of 2.5 m per individual headlight.



Harvester:  
cabin, rear/side

   H3  
    H9  
    Xenon  
    LED

HELLA recommendation:



1 **Power Beam 2000**  
 Optimal NW: 12°  
 → Page 82



2 **Power Beam 1500**  
 Optimal NW: 10°  
 → Page 81



3 **Ultra Beam H3**  
 Optimal NW: 15°  
 → Page 54



4 **Power Beam 3000**  
 Optimal NW: 12°  
 → Page 83

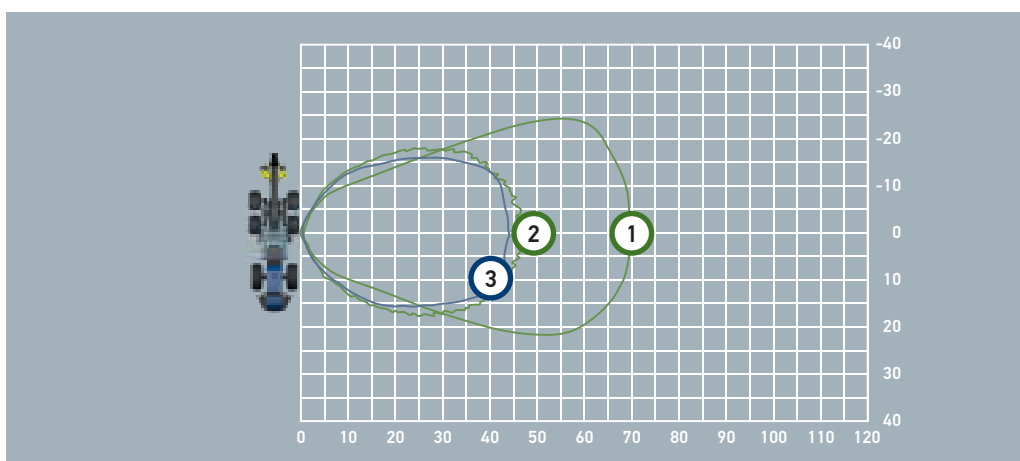


5 **Oval 100 X-Powerpack**  
 Optimal NW: 12°  
 → Page 75



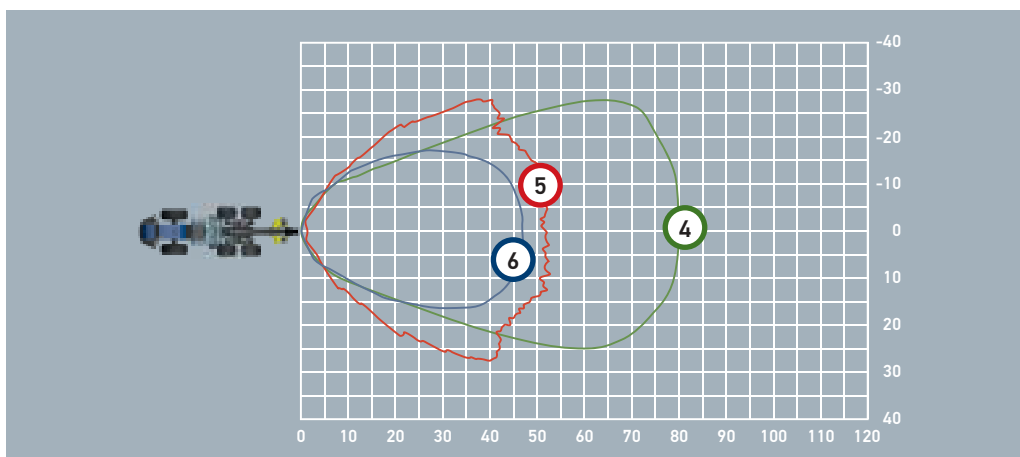
6 **Oval 100 H3**  
 Optimal NW: 12°  
 → Page 58

NW = tilt angle



Harvester:  
front

   H3  
    H9  
    Xenon  
    LED



All pictograms show the best light distribution  
at an installation height of 2.5 m per individual headlight.





Harvester:  
crane boom

   H3  
    H9  
    Xenon  
    LED

HELLA recommendation:



1

**Power Beam 3000**

Optimal NW: 12°

→ Page 83



2

**Power Beam 2000**

Optimal NW: 12°

→ Page 82

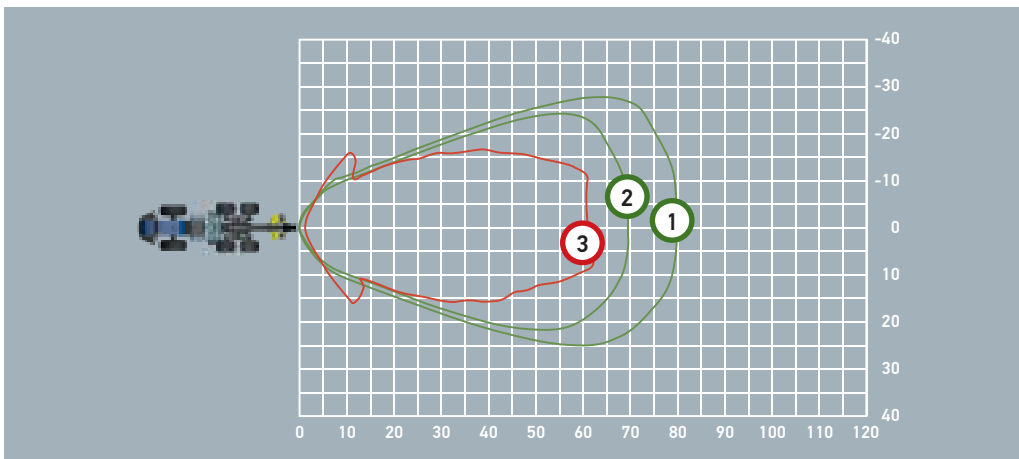


3

**Module 70 X-Powerpack**

Optimal NW: 10°

→ Page 79



Harvester:  
service lights

   H3  
    H9  
    Xenon  
    LED



4

**Flat Beam 1000**

Optimal NW: 0°

→ Page 87

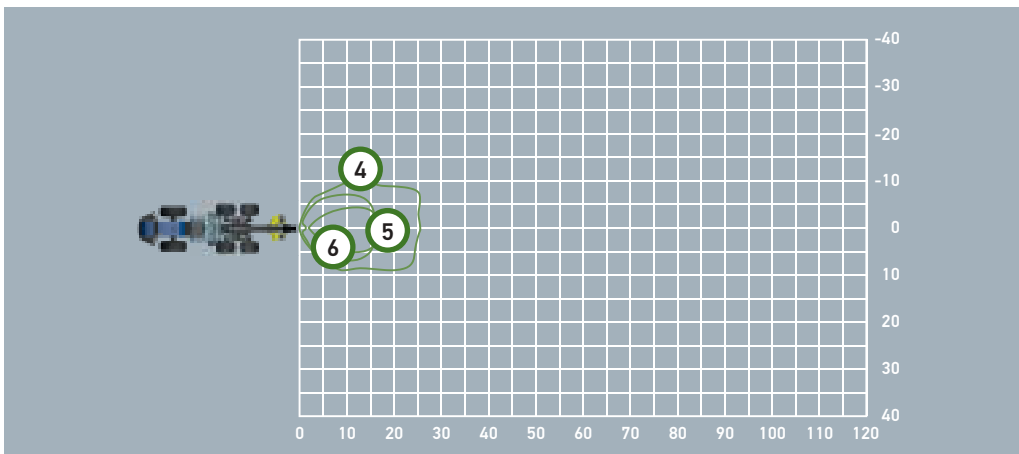


5

**Flat Beam 500**

Optimal NW: 0°

→ Page 89



6

**ETL 250**

Optimal NW: 15°

→ Page 90

NW = tilt angle

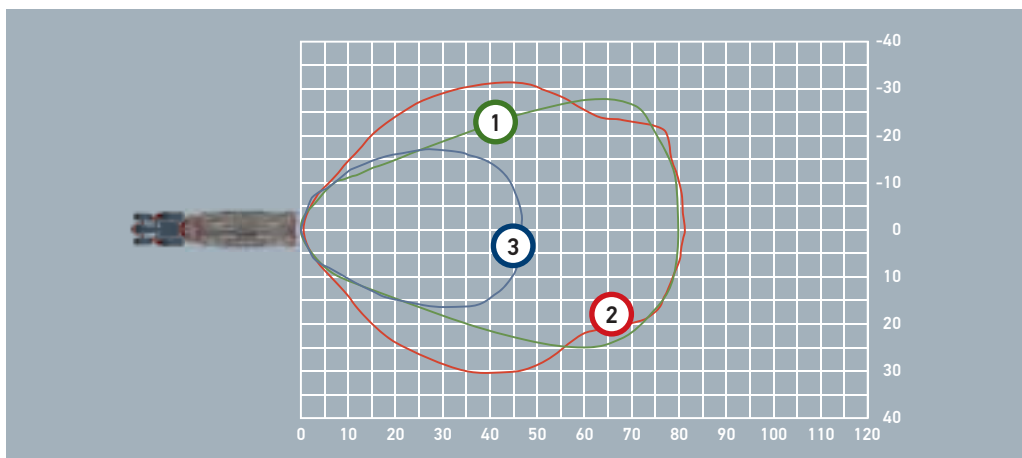


All pictograms show the best light distribution at an installation height of 2.5 m per individual headlight.



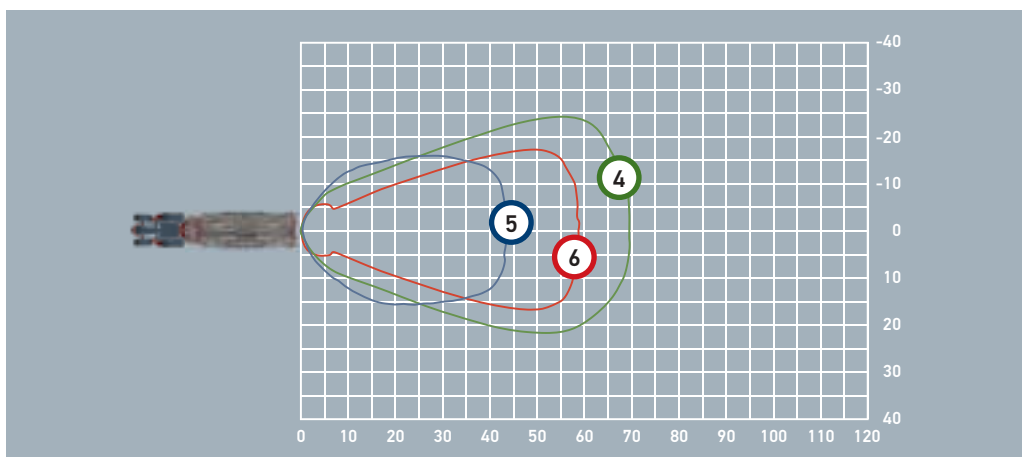
Forwarder:  
crane

H3
H9
Xenon
LED



Forwarder:  
cabin rear panel

H3
H9
Xenon
LED



HELLA recommendation:



- 1
**Power Beam 3000**  
 Optimal NW: 12°  
 → Page 83



- 2
**Ultra Beam X-Powerpack**  
 Optimal NW: 12°  
 → Page 72



- 3
**Oval 100 H3**  
 Optimal NW: 12°  
 → Page 58



- 4
**Power Beam 2000**  
 Optimal NW: 12°  
 → Page 82



- 5
**Ultra Beam H3**  
 Optimal NW: 15°  
 → Page 54



- 6
**PowerXen D15**  
 Optimal NW: 15°  
 → Page 73

NW = tilt angle

All pictograms show the best light distribution at an installation height of 2.5 m per individual headlight.





HELLA recommendation:



Pick-up:  
roof, front

H3
H9
Xenon
LED

1



**Power Beam 3000**  
Optimal NW: 12°  
→ Page 83

2



**Oval 90 X-Powerpack**  
Optimal NW: 12°  
→ Page 74

3



**Oval 90 HB3**  
Optimal NW: 15°  
→ Page 69

4



**Mega Beam LED Gen3**  
Optimal NW: 10°  
→ Page 90

5



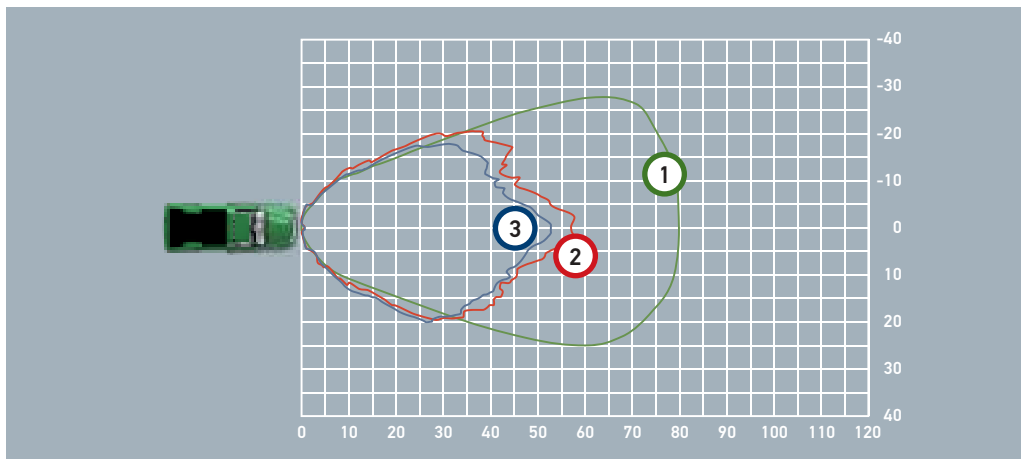
**Flat Beam 1000**  
Optimal NW: 0°  
→ Page 87

6



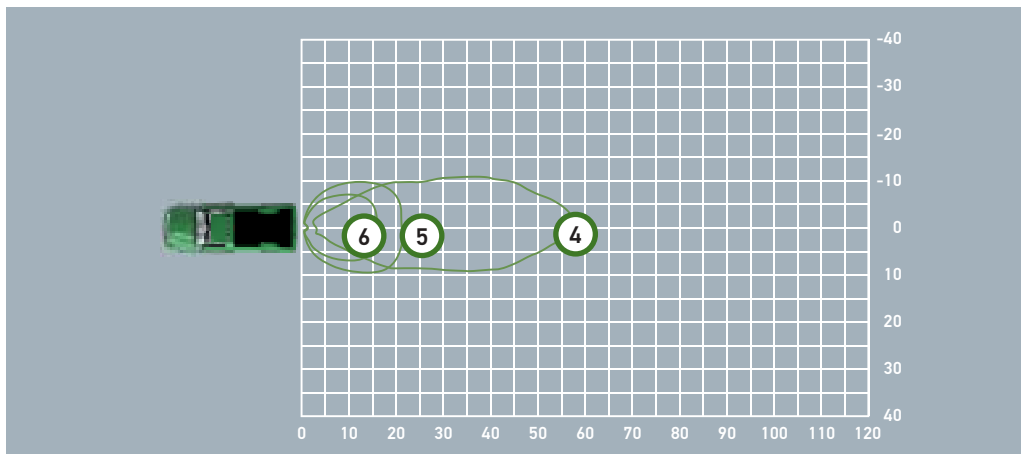
**Flat Beam 500**  
Optimal NW: 0°  
→ Page 89

NW = tilt angle



Pick-up:  
load area lighting

H3
H9
Xenon
LED



All pictograms show the best light distribution at an installation height of 2.5 m per individual headlight.

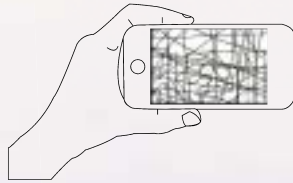
# Construction industry

“

In our line of work, worklights have to withstand extreme stress. They are often used for hours and have to put up with severe shocks and heat. HELLA worklights face up to the challenge brilliantly!

”

Carsten Stuch, Construction Manager











Construction machinery /  
excavator: roof, front/rear

   H3  
    H9  
    Xenon  
    LED

HELLA recommendation:



1

**Power Beam 5000**

Optimal NW: 10°

→ Page 84



2

**AS400**

Optimal NW: 10°

→ Page 78

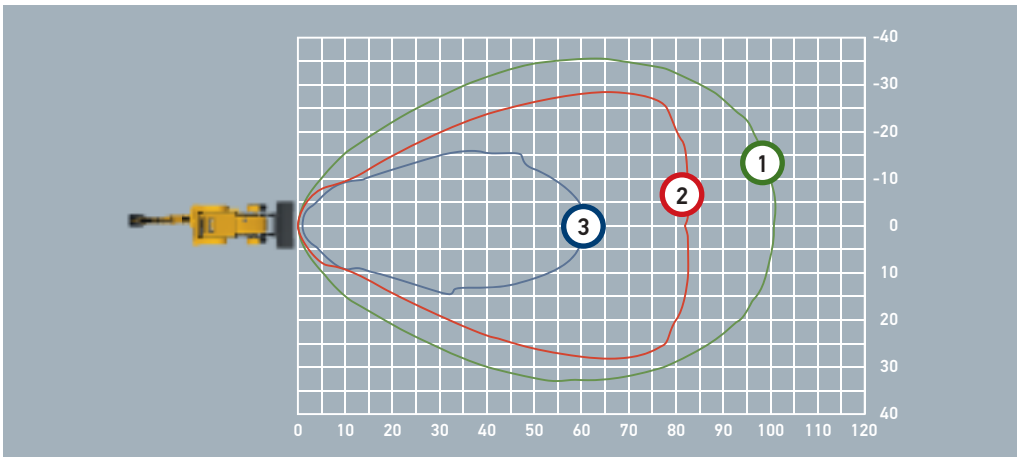


3

**Double Beam**

Optimal NW: 12°

→ Page 65



Construction machinery /  
excavator:  
excavator arm, front/rear

   H3  
    H9  
    Xenon  
    LED



4

**Power Beam 3000**

Optimal NW: 12°

→ Page 83

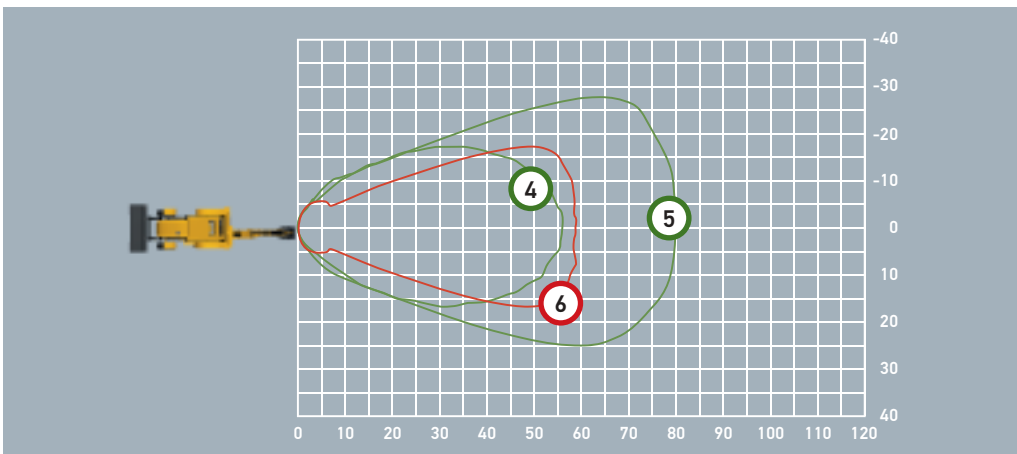


5

**Oval 90 LED**

Optimal NW: 12°

→ Page 86



6

**PowerXen D15**

Optimal NW: 15°

→ Page 73

NW = tilt angle

All pictograms show the best light distribution  
at an installation height of 2.5 m per individual headlight.



Asphalt paver:  
roof, front/rear



H3
H9
Xenon
LED

HELLA recommendation:



1

**Power Beam 5000**

Optimal NW: 10°

→ Page 84



2

**Power Beam 3000**

Optimal NW: 12°

→ Page 83



3

**PowerXen D15**

Optimal NW: 15°

→ Page 73



4

**Power Beam 1500**

Optimal NW: 10°

→ Page 81



5

**Power Beam 2000**

Optimal NW: 12°

→ Page 82



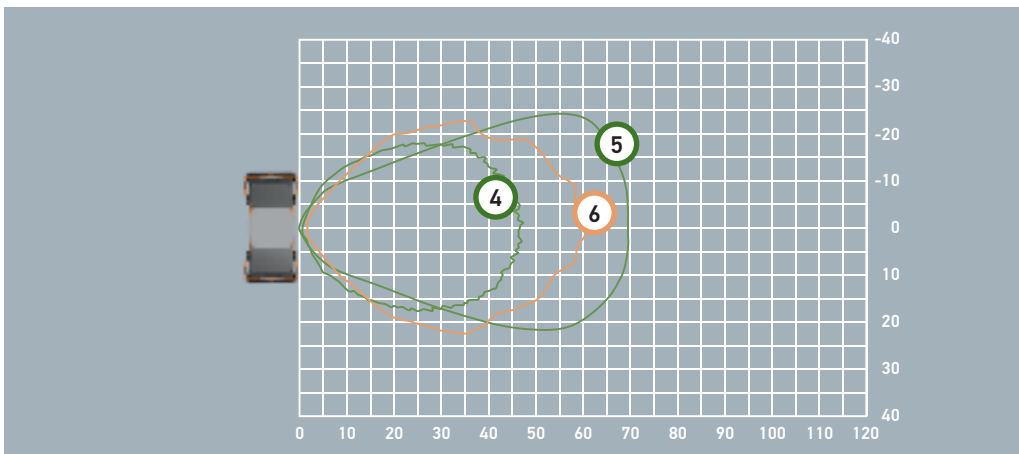
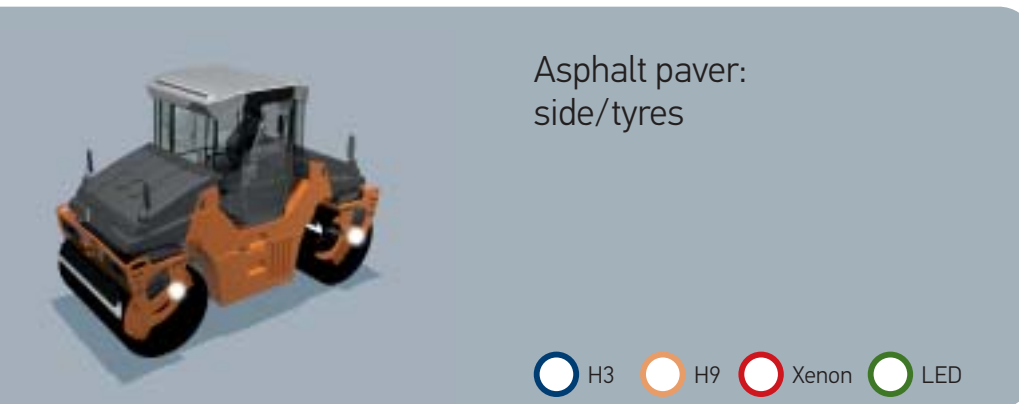
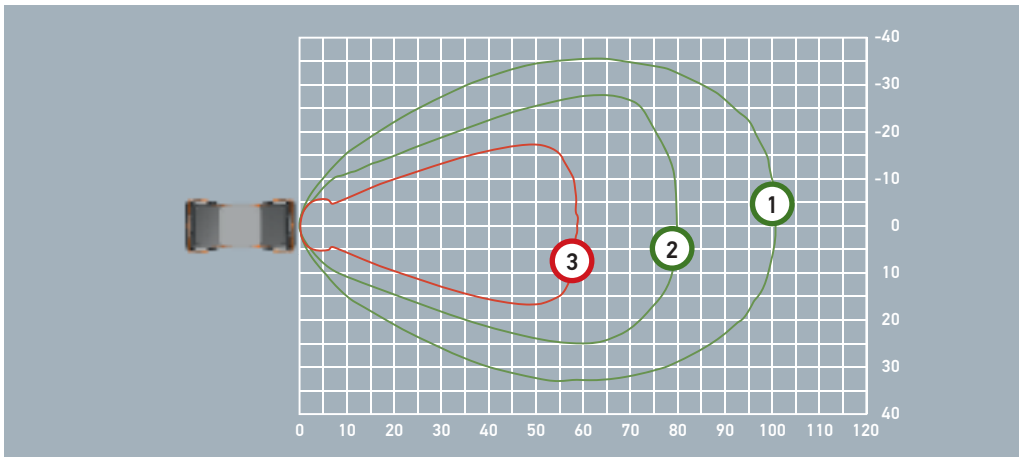
6

**Module 70 H9**

Optimal NW: 10°

→ Page 70

NW = tilt angle



All pictograms show the best light distribution at an installation height of 2.5 m per individual headlight.





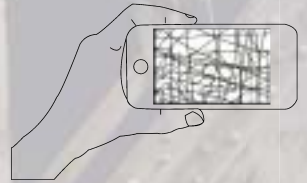
# Commercial

“

Light on my vehicle should point where I need it. Whether during parallel parking to avoid an accident, or while attaching a trailer coupling if I have to work in the dark. I trust HELLA completely to do the job!

”

Walter Konsch, Driver







Commercial vehicle:  
cabin rear panel, top

1 H3 
 2 H9 
 3 Xenon 
 4 LED

HELLA recommendation:



1

**Flat Beam 1000**

Optimal NW: 0°

→ Page 87



2

**Mega Beam LED Gen3**

Optimal NW: 10°

→ Page 90

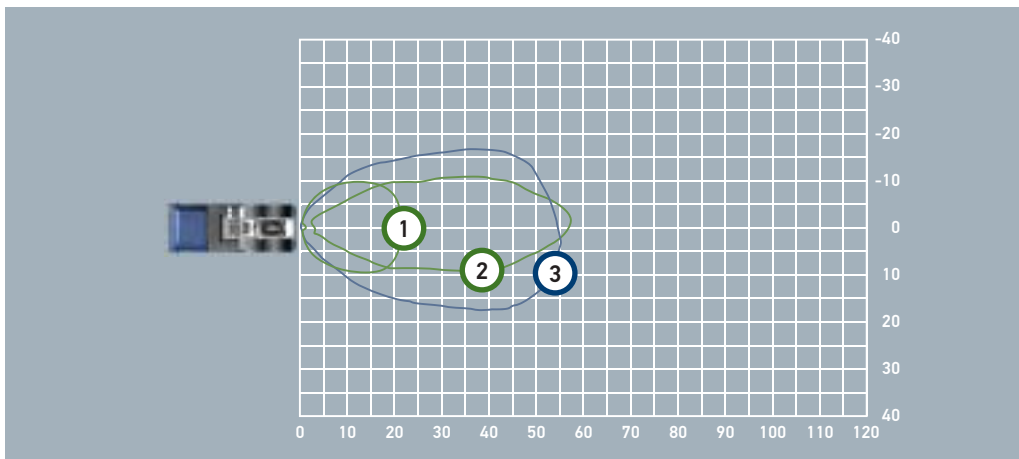


3

**Mega Beam H3**

Optimal NW: 13°

→ Page 56/57



Commercial vehicle:  
cabin rear panel, bottom

4 H3 
 5 H9 
 6 Xenon 
 7 LED



4

**Power Beam 1500**

Optimal NW: 10°

→ Page 81



5

**Module 70 LED Gen3**

Optimal NW: 10°

→ Page 85

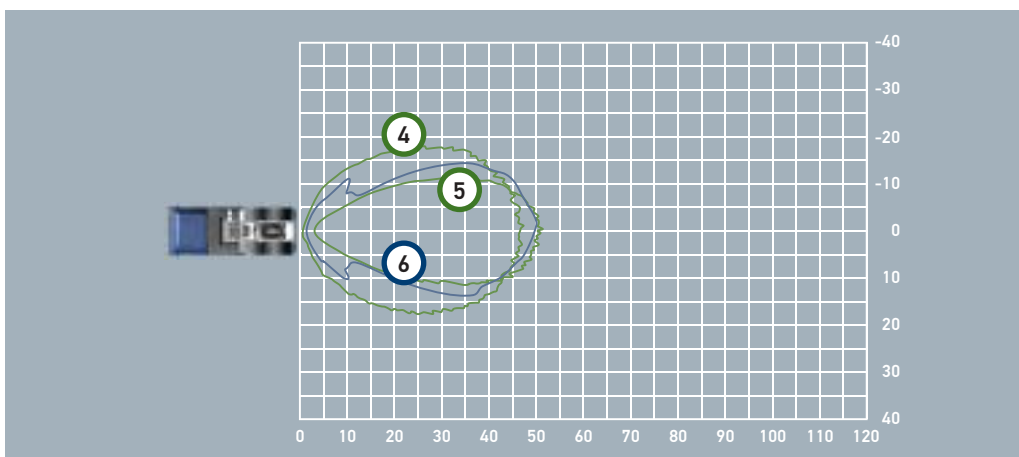


6

**Module 70 H3**

Optimal NW: 10°

→ Page 61



NW = tilt angle

All pictograms show the best light distribution  
at an installation height of 2.5 m per individual headlight.





Commercial vehicle:  
vehicle, rear/side

H3
H9
Xenon
LED

HELLA recommendation:



1

**Power Beam 1000 reversing spotlight**

Optimal NW: 12°

→ Page 95



2

**Ultra Beam H3 reversing spotlight**

Optimal NW: 15°

→ Page 93

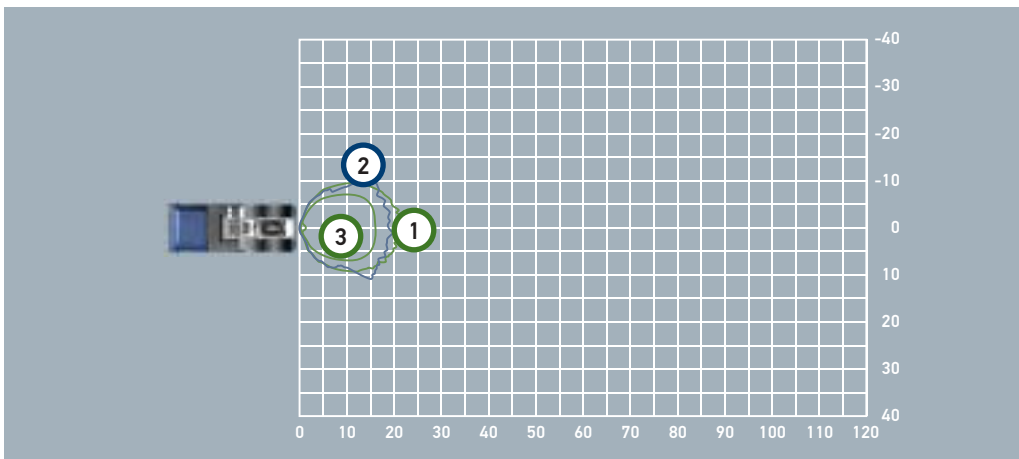


3

**Flat Beam 500**

Optimal NW: 0°

→ Page 89



Commercial vehicle:  
cabin, front

H3
H9
Xenon
LED



4

**Power Beam 1500**

Optimal NW: 10°

→ Page 81



5

**Power Beam 1000**

Optimal NW: 12°

→ Page 79

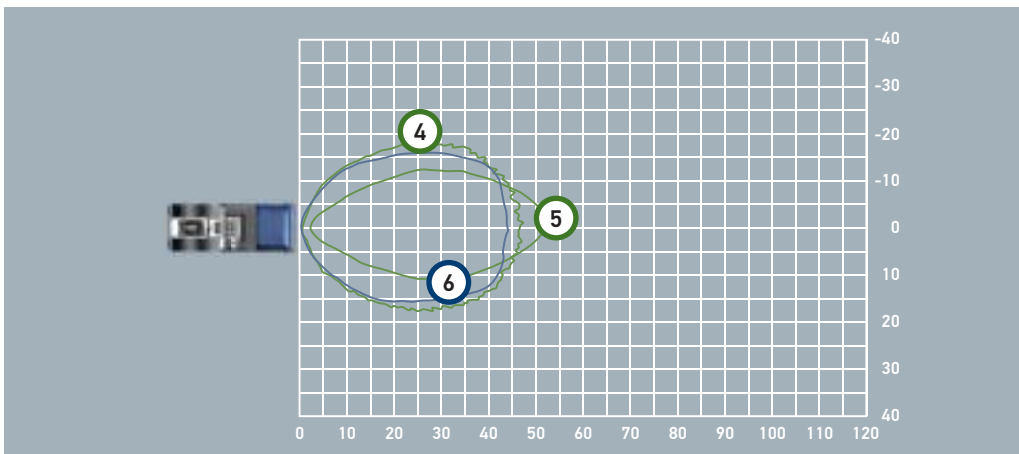


6

**Ultra Beam H3**

Optimal NW: 15°

→ Page 54



NW = tilt angle



All pictograms show the best light distribution at an installation height of 2.5 m per individual headlight.



Tow truck:  
cabin, top

H3
H9
Xenon
LED

HELLA recommendation:



1

**PowerXen D1S**

Optimal NW: 15°

→ Page 73



2

**Ultra Beam H9**

Optimal NW: 5°

→ Page 67

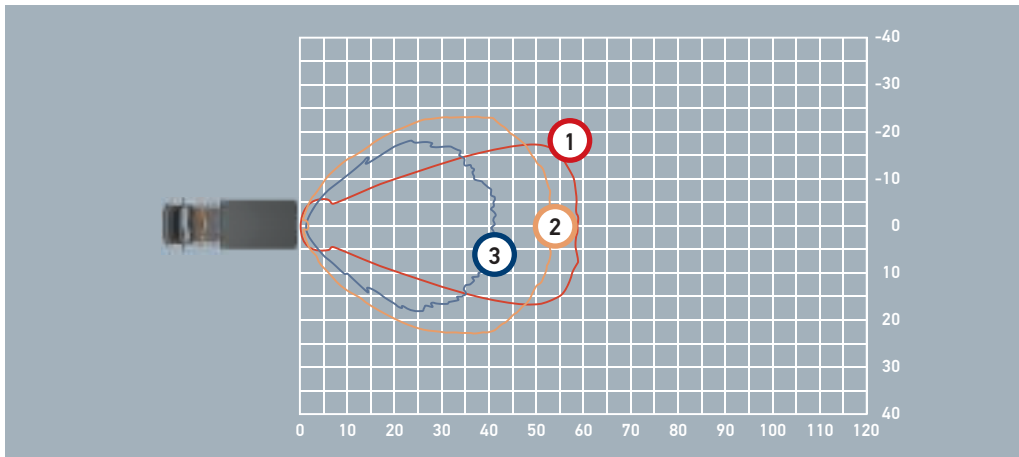


3

**Ultra Beam H3, handle and switch**

Optimal NW: 15°

→ Page 55



Tow truck:  
cabin, middle

H3
H9
Xenon
LED



4

**Power Beam 1500**

Optimal NW: 10°

→ Page 81

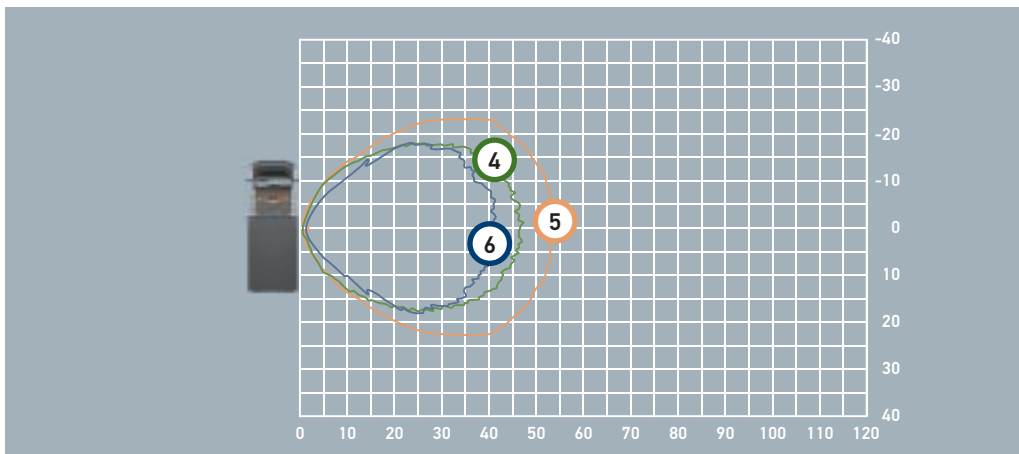


5

**Ultra Beam H9, with handle**

Optimal NW: 5°

→ Page 67



6

**Ultra Beam H3, handle and switch**

Optimal NW: 15°

→ Page 55

NW = tilt angle

All pictograms show the best light distribution at an installation height of 2.5 m per individual headlight.



HELLA recommendation:



Tow truck:  
vehicle, rear/side

H3
H9
Xenon
LED

1



**Power Beam 1000 reversing spotlight**

Optimal NW: 12°

→ Page 95

2



**Ultra Beam H3**

Optimal NW: 15°

→ Page 54

3



**Flat Beam 500**

Optimal NW: 0°

→ Page 89

4



**Flat Beam 1000**

Optimal NW: 0°

→ Page 87

5



**Power Beam 1500**

Optimal NW: 10°

→ Page 81

6

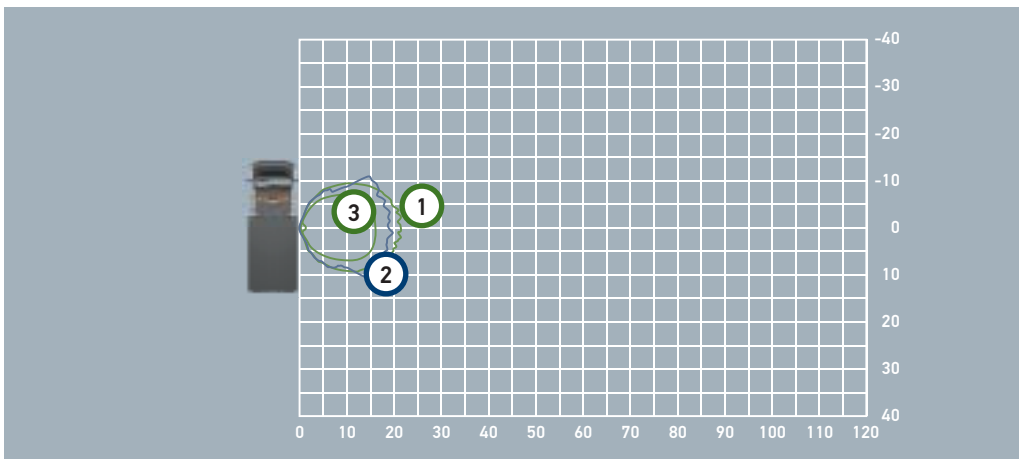


**Module 70 H3**

Optimal NW: 10°

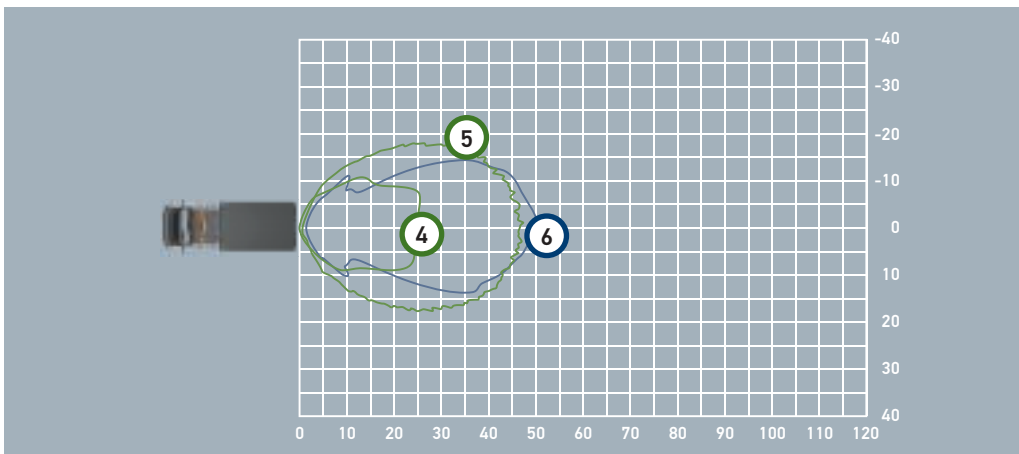
→ Page 61

NW = tilt angle



Tow truck:  
loading platform, bottom

H3
H9
Xenon
LED



All pictograms show the best light distribution at an installation height of 2.5 m per individual headlight.



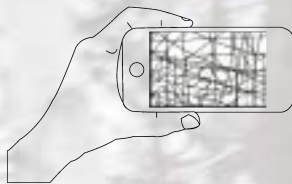
# Municipal

“

We often work for 13 hours continuously in scorching heat or freezing cold and snow. So it is important that we can rely on our equipment. That is why we really like HELLA worklights – they are very resistant to corrosion.

”

Bernd Dutmeier, City Cleaner









Cleaning vehicle:  
top-mounted, rear/front

H3
H9
Xenon
LED

HELLA recommendation:



1
**Power Beam 2000**  
 Optimal NW: 12°  
 → Page 82



2
**Oval 100 LED**  
 Optimal NW: 12°  
 → Page 87



3
**Oval 100 H3**  
 Optimal NW: 12°  
 → Page 58



4
**Power Beam 1500**  
 Optimal NW: 10°  
 → Page 81

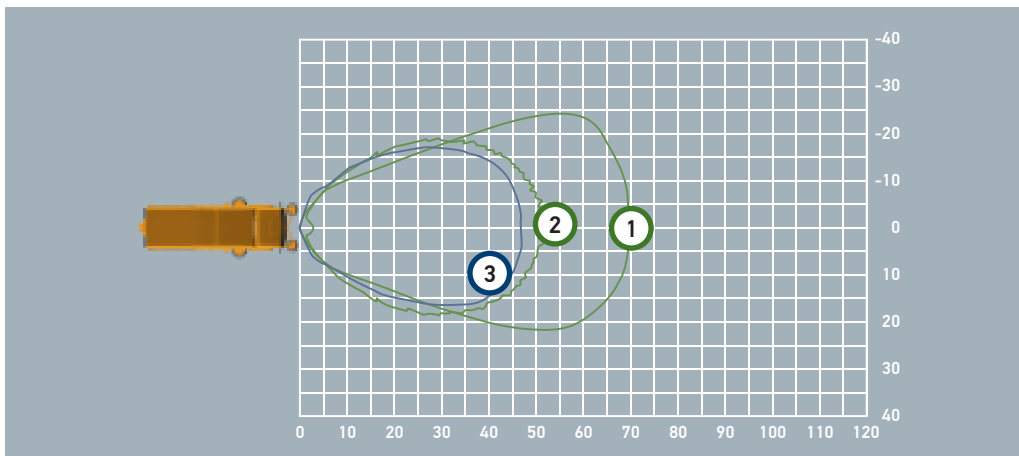


5
**Mega Beam LED Gen3**  
 Optimal NW: 10°  
 → Page 90



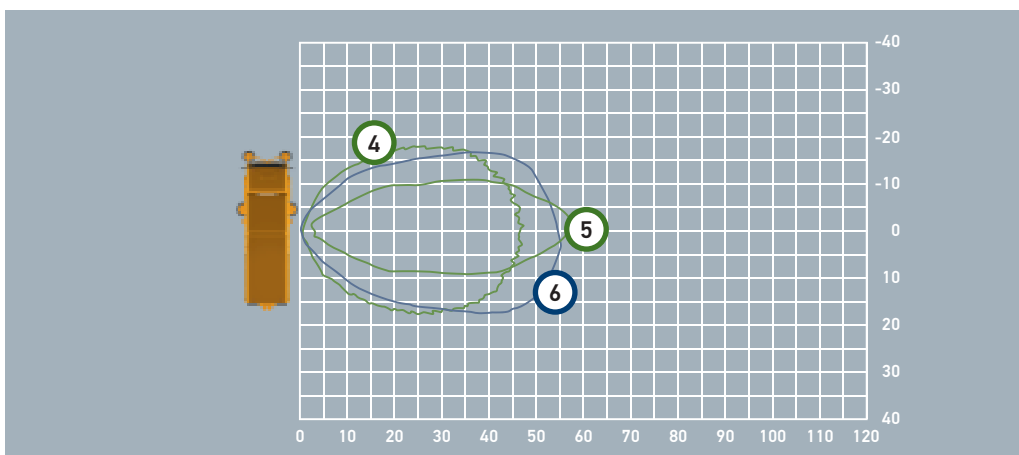
6
**Mega Beam H3**  
 Optimal NW: 13°  
 → Page 56/57

NW = tilt angle



Cleaning vehicle:  
side of the vehicle, bottom

H3
H9
Xenon
LED



All pictograms show the best light distribution  
at an installation height of 2.5 m per individual headlight.





Cleaning vehicle:  
side of the vehicle, rear/side

H3
H9
Xenon
LED

HELLA recommendation:



1

**Power Beam 1000 reversing spotlight**

Optimal NW: 12°

→ Page 95



2

**Ultra Beam H3**

Optimal NW: 15°

→ Page 54



3

**Flat Beam 500**

Optimal NW: 0°

→ Page 89



4

**Power Beam 2000**

Optimal NW: 12°

→ Page 82



5

**Ultra Beam H9**

Optimal NW: 5°

→ Page 67



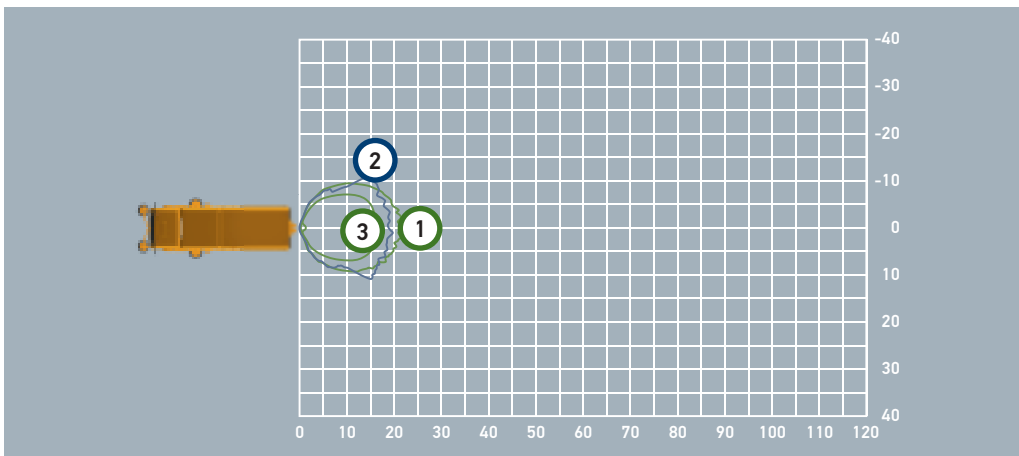
6

**Ultra Beam H3**

Optimal NW: 15°

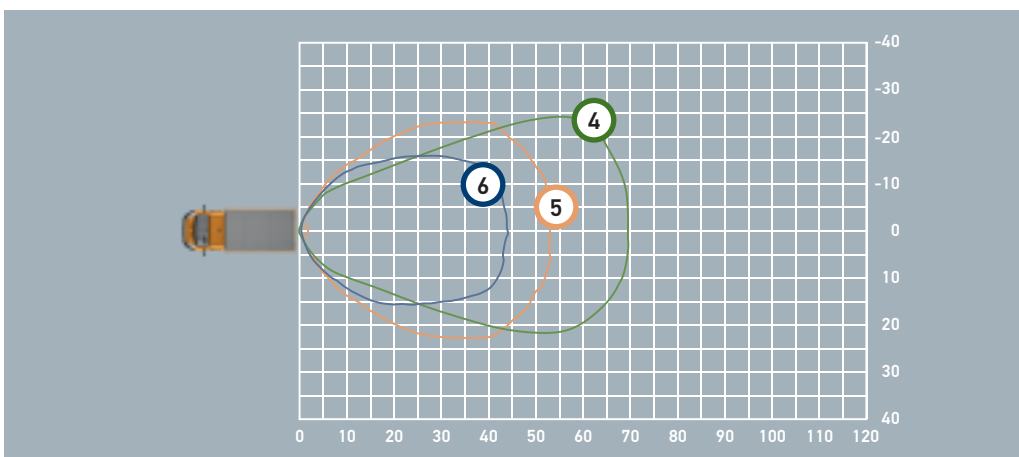
→ Page 54

NW = tilt angle



Cleaning vehicle:  
roof, top

H3
H9
Xenon
LED



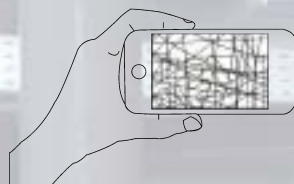
All pictograms show the best light distribution  
at an installation height of 2.5 m per individual headlight.



# Forklift

“ HELLA worklights are very energy efficient. That means we do not need to charge our electric forklift trucks as often, which means less downtime and more gets done. ”

Karl-Heinz Welni, Warehouse Worker









Forklift:  
roof, front/rear

1 H3 
 2 H9 
 3 Xenon 
 4 LED

HELLA recommendation:



1

**Oval 100 FL**

Optimal NW: 0°

→ Page 60



2

**Flat Beam 500**

Optimal NW: 10°

→ Page 89



3

**Module 70 LED Gen3**

Optimal NW: 10°

→ Page 85



4

**Power Beam 1500**

Optimal NW: 10°

→ Page 81



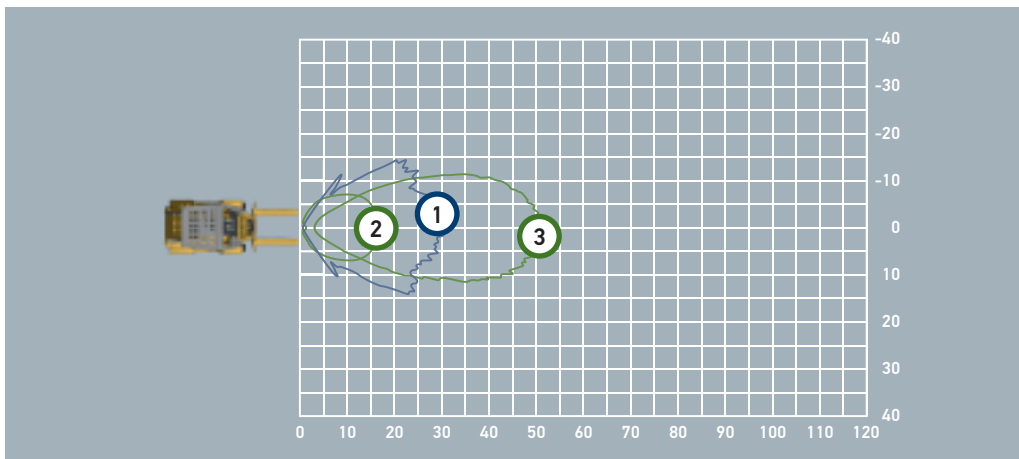
5

**Ultra Beam H3**

Optimal NW: 15°

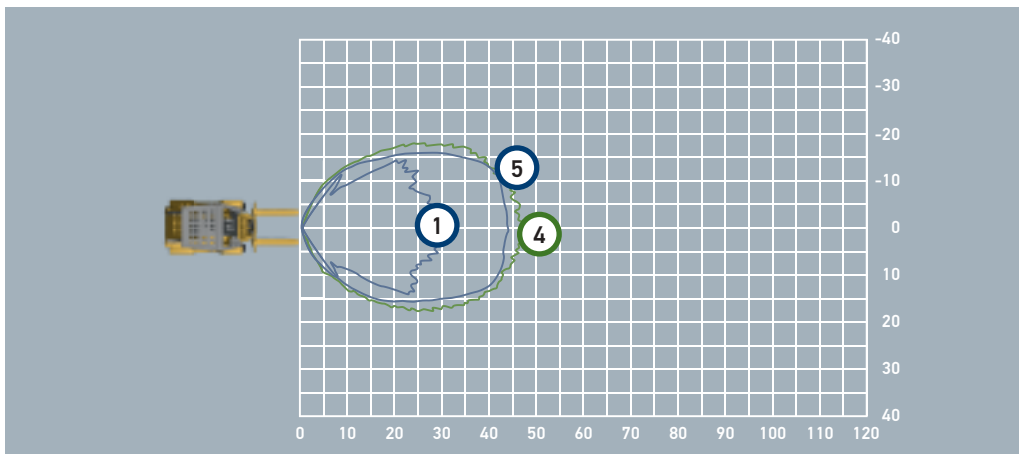
→ Page 54

NW = tilt angle



Forklift:  
forklift cabin, front

1 H3 
 2 H9 
 3 Xenon 
 4 LED



All pictograms show the best light distribution  
at an installation height of 2.5 m per individual headlight.











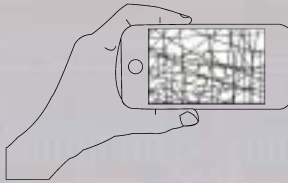
# Emergency vehicles

“

Our job is often a matter of life and death. The lighting simply cannot suddenly fail. So it is quite simple – we rely on HELLA worklights to do the job and provide optimum light for the safety of everyone.

”

Thomas Nurmman, Senior Fire Chief







Emergency vehicle:  
cabin, front

○ H3  
 ○ H9  
 ○ Xenon  
 ○ LED

HELLA recommendation:



1

**PowerXen D1S**

Optimal NW: 15°

→ Page 73



2

**Power Beam 3000**

Optimal NW: 12°

→ Page 83



3

**Power Beam 1500 long-range**

Optimal NW: 0°

→ Page 81



4

**Power Beam 3000**

Optimal NW: 12°

→ Page 83



5

**AS 400 Xenon**

Optimal NW: 10°

→ Page 78



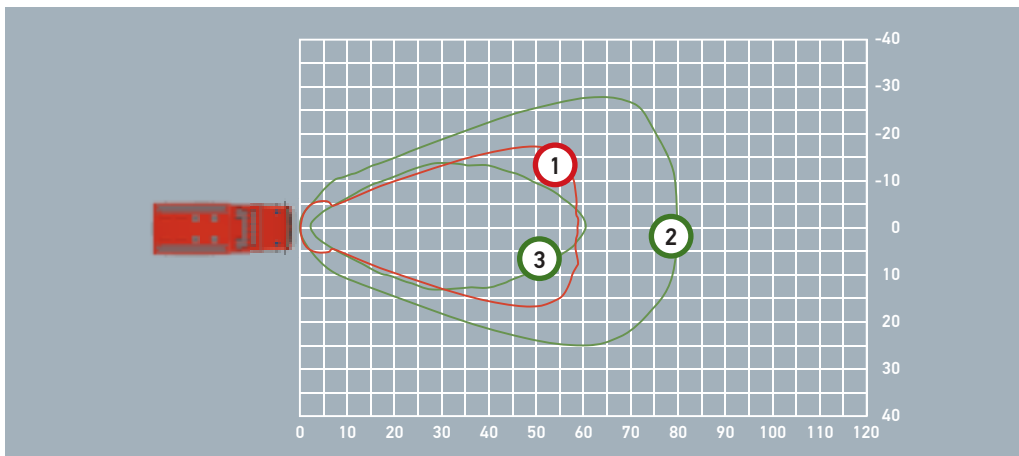
6

**Ultra Beam H3**

Optimal NW: 15°

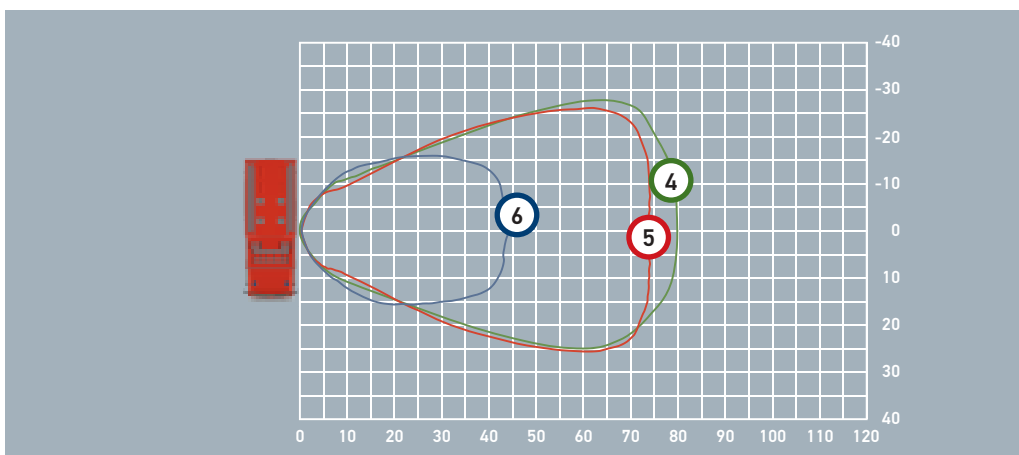
→ Page 54

NW = tilt angle



Emergency vehicle:  
side-mounting, top /  
vehicle rear

○ H3  
 ○ H9  
 ○ Xenon  
 ○ LED



All pictograms show the best light distribution  
at an installation height of 2.5 m per individual headlight.





Emergency vehicle:  
vehicle, rear/side

H3
H9
Xenon
LED

HELLA recommendation:



1

**Power Beam 1000 reversing spotlight**

Optimal NW: 12°

→ Page 95



2

**Ultra Beam H3 reversing spotlight**

Optimal NW: 15°

→ Page 93



3

**Flat Beam 500**

Optimal NW: 0°

→ Page 89



4

**Power Beam 5000**

Optimal NW: 10°

→ Page 84



5

**Power Beam 3000**

Optimal NW: 12°

→ Page 83



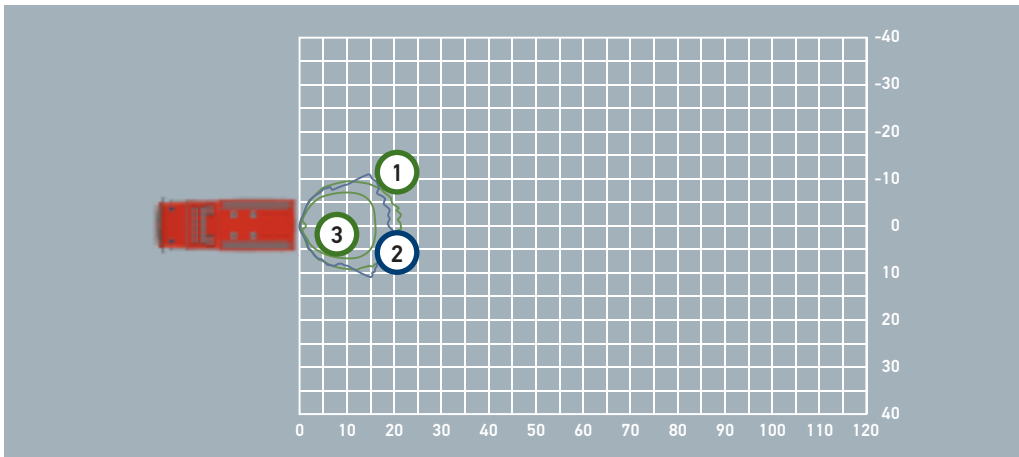
6

**AS 200 Xenon**

Optimal NW: 10°

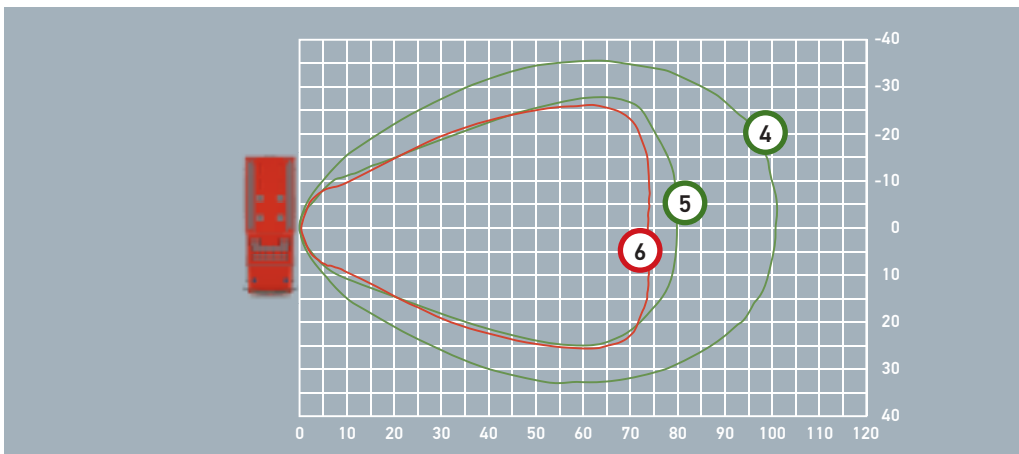
→ Page 76/77

NW = tilt angle



Emergency vehicle:  
vehicle roof or tower

H3
H9
Xenon
LED



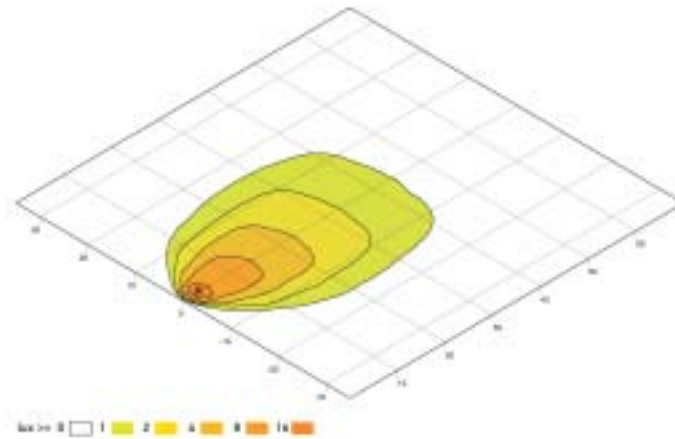
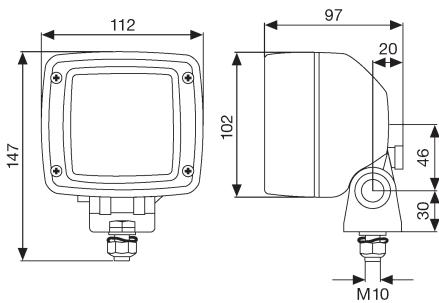
All pictograms show the best light distribution  
at an installation height of 2.5 m per individual headlight.





### Ultra Beam H3

The classic worklight. IP6K9K (withstands high pressure cleaning / submersible), impact-resistant glass-fibre reinforced plastic housing, mounting foot according to DIN EN ISO4165, GGVSEB / ADR, light colour: 2500° Kelvin.



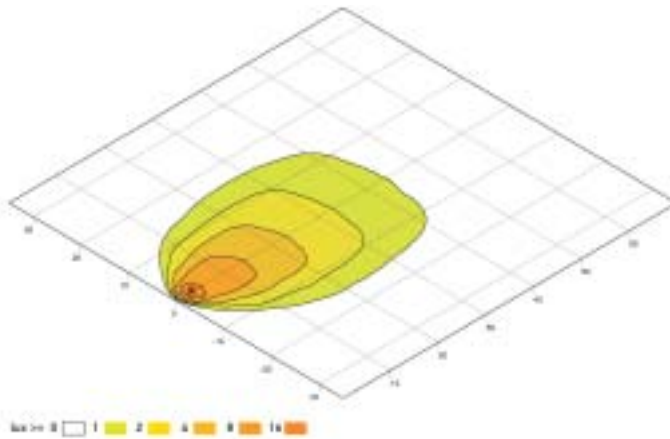
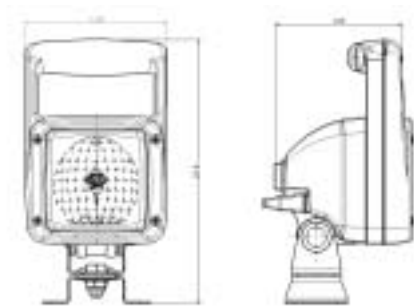
Recommended inclination angle: Close-range: 15° Long-range: 5°

1GA 007 506-...	-001	-011	-601	1GA 997 506-021
Volt	12/24	12/24	12	12/24
Close-range illumination	■	■	■	
Long-range illumination				■
Terrain illumination				
Energy consumption	55/70W	55/70W	55W	55/70W
Lumen (warm)				
Housing material	Plastic	Plastic	Plastic	Plastic
Clear lens			■	■
Lens with structure	■	■		
Plastic lens				
Tempered glass lens	■	■	■	■
Connection	AMP connector	AMP connector	DT connector	AMP connector
Mounting				
Upright mounting	■	■	■	■
Suspended mounting	■	■	■	■
Mounting on the side				
Heavy-duty		■		
Additional characteristics				



### Ultra Beam H3 with handle

The classic worklight with an ergonomically shaped handle and an optional on/off switch. IP5K9K (withstands high pressure cleaning), impact-resistant glass-fibre reinforced plastic housing, light colour: 2500° Kelvin.



Recommended inclination angle: 15°

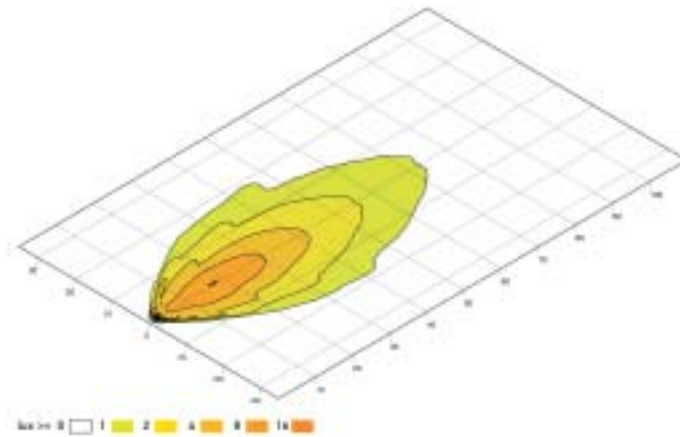
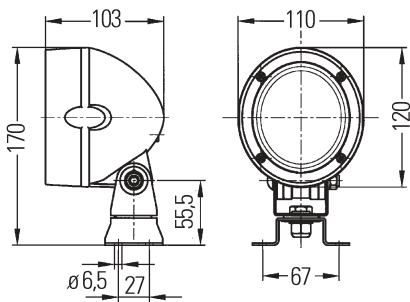
1GA 997 506-...	-631	1GA 007 506-021	1GA 007 506-681
Volt	12/24	12/24	24
Close-range illumination	■	■	■
Long-range illumination			
Terrain illumination			
Energy consumption	55/70 W	55/70 W	70 W
Lumen (warm)			1400
Housing material	Plastic	Plastic	Plastic
Clear lens	■		
Lens with structure		■	■
Plastic lens			
Tempered glass lens	■	■	■
Connection	AMP connector	AMP connector	Mounting foot according to DIN EN ISO 4165
Mounting			
Upright mounting	■	■	■
Suspended mounting		■	■
Mounting on the side			
Heavy-duty	■	■	
Additional characteristics	with handle and on/off switch	Handle	Pipe-socket mounting and handle





### Mega Beam H3

High light output, compact size, IP5K9K (withstands high pressure cleaning) (except -091), impact-resistant glass-fibre reinforced plastic housing, GGVSEB / ADR, light colour: 2500° Kelvin.



Recommended inclination angle: Close-range: 13° Long-range: 5°

1GM 996 134-...	-051	-061	-071	-081
Volt	12/24	12/24	12/24	12/24
Close-range illumination				
Long-range illumination	■		■	
Terrain illumination		■		■
Energy consumption	55/70 W	55/70 W	55/70 W	55/70 W
Lumen (warm)				
Housing material	Plastic	Plastic	Plastic	Plastic
Clear lens	■	■	■	■
Lens with structure				
Plastic lens				
Tempered glass lens	■	■	■	■
Connection	Cable inlet with grommet	Cable inlet with grommet	AMP connector	AMP connector
Mounting				
Upright mounting	■	■	■	■
Suspended mounting	■	■	■	■
Mounting on the side				
Heavy-duty	■	■	■	■
Additional characteristics				





Recommended inclination angle: Close-range: 13° Long-range: 5°

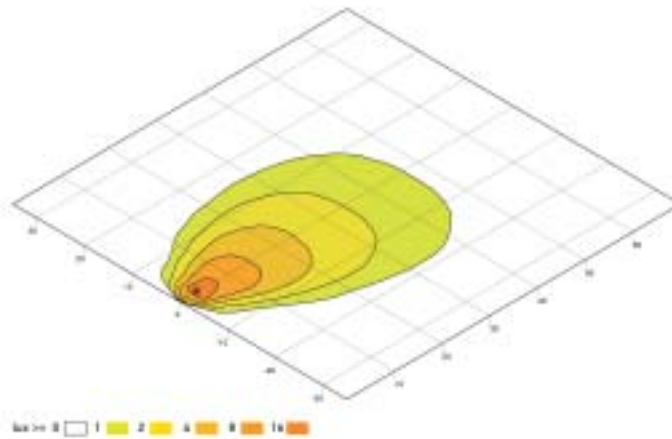
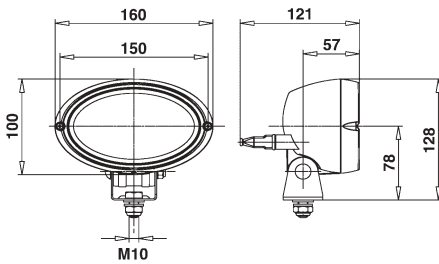
-171	-321	-241	-271	-371	-091
12/24	12/24	12/24	12/24	12/24	12/24
■	■	■	■	■	
					■
55/70 W	55/70 W	55/70 W	55/70 W	55/70 W	55/70 W
Plastic	Plastic	Plastic	Plastic	Plastic	Plastic
■	■	■	■	■	■
■	■	■	■	■	■
AMP connector	Cable inlet with grommet	Cable inlet with grommet	Cable inlet with grommet	Cable inlet with grommet	Cable inlet with grommet
■	■	■			■
■	■	■			
■		■	■	■	
		Handle	Mounting, right	Mounting, left	





**Oval 100 H3**

Extremely wide and homogeneous illumination, IP5K9K (withstands high pressure cleaning), impact-resistant glass-fibre reinforced plastic housing, light colour: 2500° Kelvin.



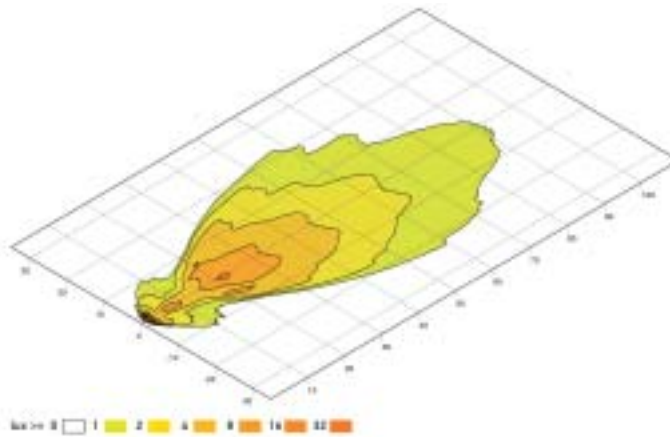
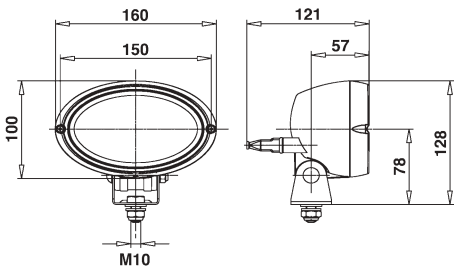
Recommended inclination angle: Close-range: 12° Long-range: 5°

1GA 996 161-...	-121	-281	1GA 996 361-171	1GA 996 361-421	1GA 996 361-501
Volt	12	12	24	12	12/24
Close-range illumination	■		■	■	■
Long-range illumination		■			
Terrain illumination					
Energy consumption	55 W	55 W	70 W	55 W	55/70 W
Lumen (warm)	1150	1150	1400		
Housing material	Plastic	Plastic	Plastic	Plastic	Plastic
Clear lens		■			■
Lens with structure	■		■	■	
Plastic lens					
Tempered glass lens	■	■	■	■	■
Connection	AMP connector	AMP connector	AMP connector	Cable inlet with grommet	Cable inlet with grommet
Mounting					
Upright mounting	■	■	■	■	■
Suspended mounting	■	■	■	■	■
Mounting on the side					
Heavy-duty			■	■	
Additional characteristics					



### Oval 100 Double Beam H3

Extremely intense light output thanks to double chamber reflector. IP5K9K (withstands high pressure cleaning), impact-resistant glass-fibre reinforced plastic housing, light colour: 2500° Kelvin.



Recommended inclination angle: Close-range: 12° Long-range: 5°

1GA 996 361-...	-011	-131	-291
Volt	24	12	12
Close-range illumination			■
Long-range illumination	■	■	
Terrain illumination			
Energy consumption	140 W	110 W	110 W
Lumen (warm)	2800	2300	2300
Housing material	Plastic	Plastic	Plastic
Clear lens	■	■	
Lens with structure			■
Plastic lens			
Tempered glass lens	■	■	■
Connection	AMP connector	AMP connector	AMP connector
Mounting			
Upright mounting	■	■	■
Suspended mounting	■	■	■
Mounting on the side			
Heavy-duty			
Additional characteristics	Double Beam	Double Beam	Double Beam

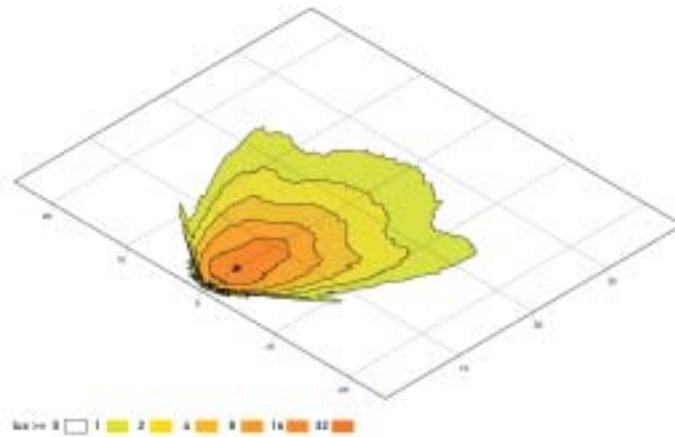
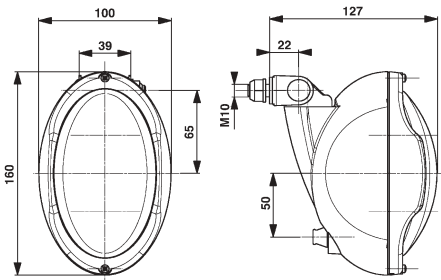






### Oval 100 FL H3

Free-form double reflector system to illuminate the entire stacking area from the ground to the high rack. Specially developed for forklifts, IP5K9K (withstands high pressure cleaning), impact-resistant glass-fibre reinforced plastic housing. Tip: to save power, the bulbs on the side of the vehicle can be separately switched on/off as needed, light colour: 2500° Kelvin.



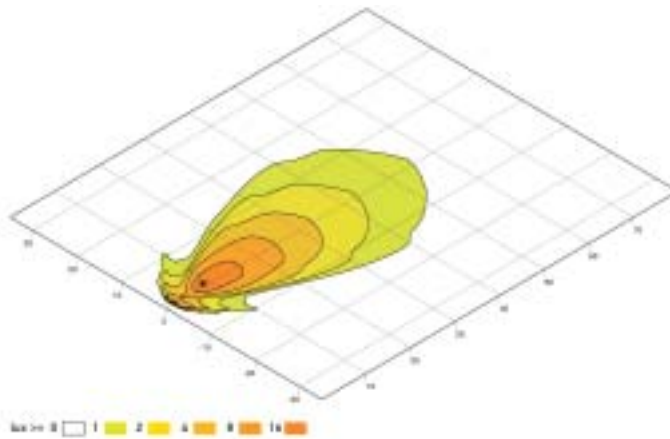
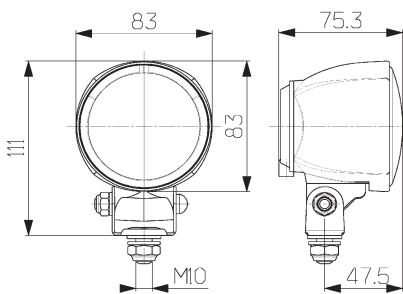
Recommended inclination angle: 0°

1GN 996 361-...	-461	-651
Volt	12	24
Close-range illumination	■	■
Long-range illumination		
Terrain illumination		
Energy consumption	55 W/ 55 W	70 W/ 70 W
Lumen (warm)	1150/ 1150	1400/1400
Housing material	Plastic	Plastic
Clear lens	■	■
Lens with structure		
Plastic lens		
Tempered glass lens	■	■
Connection	420 mm cable	420 mm cable
Mounting		
Upright mounting		
Suspended mounting	■	■
Mounting on the side		
Heavy-duty		
Additional characteristics		



**Module 70 H3**

Compact - smaller installation space. IP5K9K (withstands high pressure cleaning), impact-resistant glass-fibre reinforced plastic housing, light colour: 2500° Kelvin.



Recommended inclination angle: Close-range: 10° Long-range: 5°

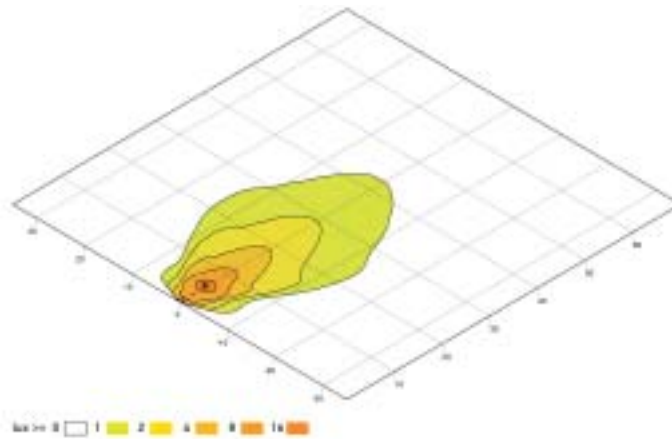
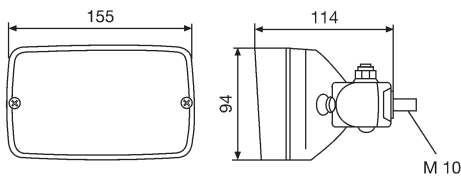
160 996 176-...	-001	-011	-021	-031	-111
Volt	12/24	12/24	12/24	12/24	12/24
Close-range illumination	■		■		■
Long-range illumination		■		■	
Terrain illumination					
Energy consumption	55/70 W	55/70 W	55/70 W	55/70 W	55/70 W
Lumen (warm)					
Housing material	Plastic	Plastic	Plastic	Plastic	Plastic
Clear lens	■	■	■	■	■
Lens with structure					
Plastic lens					
Tempered glass lens	■	■	■	■	■
Connection	Cable inlet with grommet	Cable inlet with grommet	Cable inlet with grommet	Cable inlet with grommet	Cable inlet with grommet
Mounting			■	■	
Upright mounting	■	■			
Suspended mounting					■
Mounting on the side					
Heavy-duty					
Additional characteristics					





### Picador H3

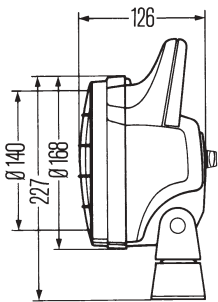
Intensive illumination of the close-range working area, impact-resistant glass-fibre reinforced plastic housing, IP5K4K (splash-proof), light colour: 2500° Kelvin.



Recommended inclination angle: Close-range: 10°

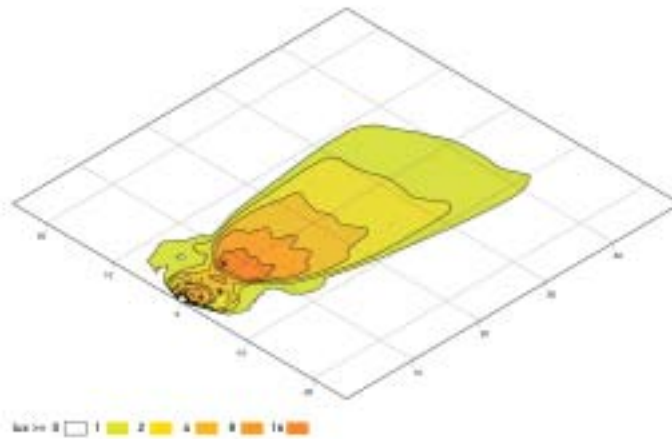
	1GA 006 875-001	1GA 006 876-001	1GA 998 522-011
Volt	12/24	12/24	12/24
Close-range illumination	■	■	■
Long-range illumination			
Terrain illumination			
Energy consumption	55/70 W	55/70 W	55/70 W
Lumen (warm)			
Housing material	Plastic	Plastic	Plastic
Clear lens			
Lens with structure	■	■	■
Plastic lens			
Tempered glass lens	■	■	■
Connection	Cable inlet with grommet	Cable inlet with grommet	Cable inlet with grommet
Mounting			
Upright mounting		■	■
Suspended mounting		■	■
Mounting on the side	■		
Heavy-duty			
Additional characteristics		Swivel joint	





### Matador H3

Optimum close-range illumination, with handle, IP5K4K (splash-proof), impact-resistant glass-fibre reinforced plastic housing, light colour: 2500° Kelvin.



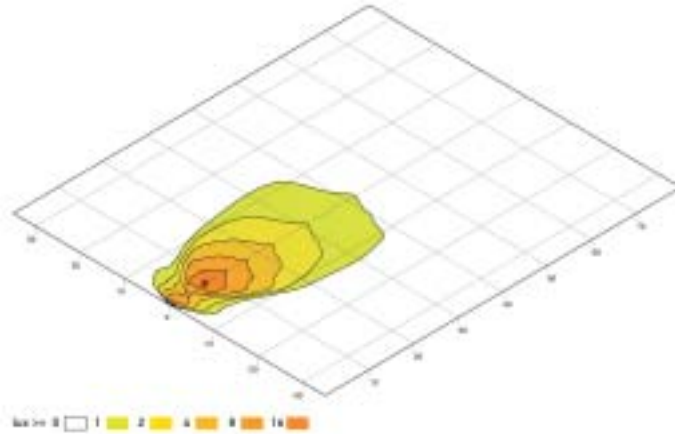
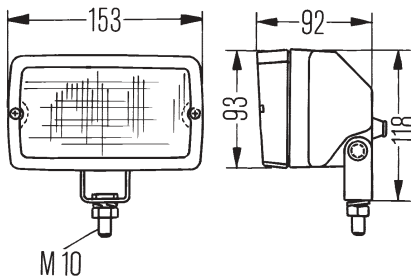
Recommended inclination angle: Close-range: 10°

164 003 470-...	-001	-031	-051	-141
Volt	12/24	12/24	12/24	24
Close-range illumination	■	■	■	■
Long-range illumination				
Terrain illumination				
Energy consumption	55/70 W	55/70 W	55/70 W	70 W
Lumen (warm)				1400
Housing material	Plastic	Plastic	Plastic	Plastic
Clear lens				
Lens with structure	■	■	■	■
Plastic lens				
Tempered glass lens	■	■	■	■
Connection	Cable inlet with grommet	Cable inlet with grommet	Cable inlet with grommet	DIN EN ISO 4165
Mounting				
Upright mounting	■	■	■	■
Suspended mounting				
Mounting on the side				
Heavy-duty				
Additional characteristics	On/off switch	On/off switch Protective grid	Protective grid	Pipe-socket mounting, protective grid



**Master H3**

Homogeneous workplace lighting, IP5K4K (splash-proof), impact-resistant glass-fibre reinforced plastic housing, light colour: 2500° Kelvin.



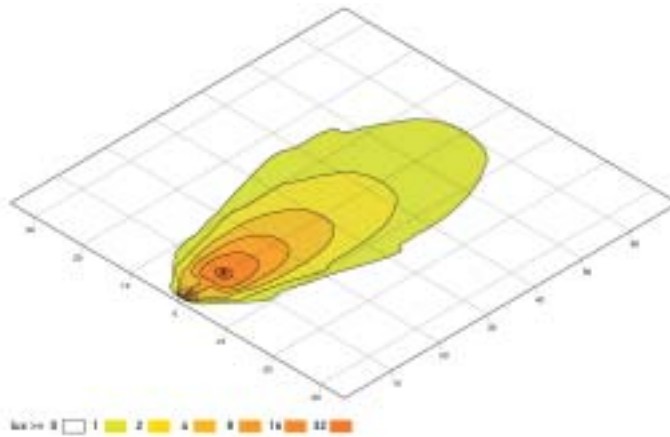
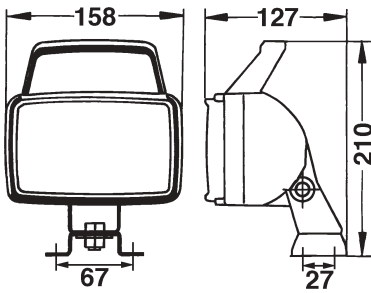
Recommended inclination angle: Close-range: 10° Long-range: 5°

1GA 005 060-...	-001	-041
Volt	12/24	12/24
Close-range illumination		■
Long-range illumination	■	
Terrain illumination		
Energy consumption	55/70 W	55/70 W
Lumen (warm)		
Housing material	Plastic	Plastic
Clear lens		
Lens with structure	■	■
Plastic lens		
Tempered glass lens	■	■
Connection	Cable inlet with grommet	Cable inlet with grommet
Mounting		
Upright mounting	■	■
Suspended mounting	■	■
Mounting on the side		
Heavy-duty		
Additional characteristics		



### Double Beam H3

IP5K4K (splash-proof), impact-resistant glass-fibre reinforced plastic housing, GGVSEB / ADR, intensive lighting thanks to double reflector, suitable for hazardous goods transport vehicles, light colour: 2500° Kelvin.



Recommended inclination angle: Close-range: 12° Long-range: 5° Terrain: 5°

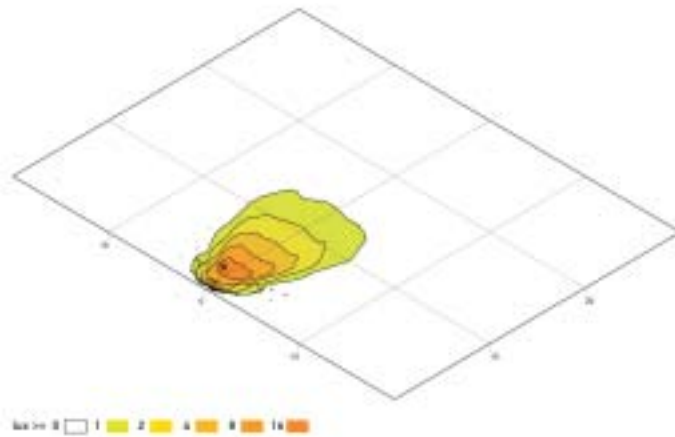
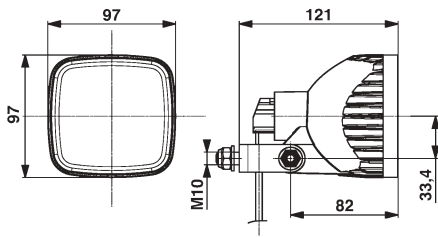
1GA 006 991-...	-031	-041	-051	-091
Volt	12/24	12/24	12/24	12/24
Close-range illumination				■
Long-range illumination			■	
Terrain illumination	■	■		
Energy consumption	110/140 W	110/140 W	110/140 W	110/140 W
Lumen (warm)				
Housing material	Plastic	Plastic	Plastic	Plastic
Clear lens			■	
Lens with structure	■	■		■
Plastic lens				
Tempered glass lens	■	■	■	■
Connection	250 mm cable	250 mm cable	250 mm cable	250 mm cable
Mounting				
Upright mounting	■	■	■	■
Suspended mounting	■	■	■	■
Mounting on the side				
Heavy-duty				
Additional characteristics	Handle			





**Eco 21**

Low power consumption, IP5K9K (withstands high pressure cleaning), impact-resistant plastic housing, tool-free bulb replacement (bayonet socket), light colour: 2500° Kelvin.



Recommended inclination angle: 10°

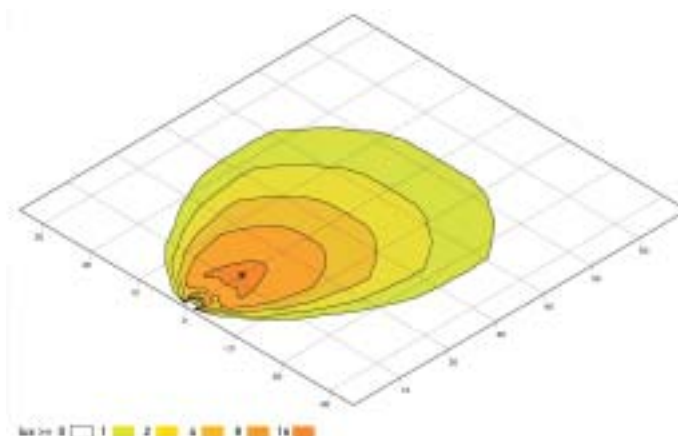
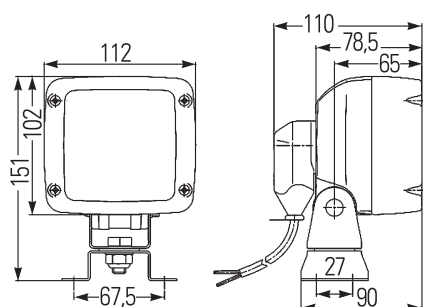
1GA 996 179-...	-001	-021
Volt	24	12
Close-range illumination	■	■
Long-range illumination		
Terrain illumination		
Energy consumption	21 W	21 W
Lumen (warm)	400	400
Housing material	Plastic	Plastic
Clear lens	■	■
Lens with structure		
Plastic lens	■	■
Tempered glass lens		
Connection	500 mm cable	500 mm cable
Mounting		
Upright mounting		
Suspended mounting	■	■
Mounting on the side		
Heavy-duty		
Additional characteristics		





### Ultra Beam H9

Very high and efficient light output, IP5K9K (withstands high pressure cleaning), impact-resistant glass-fibre reinforced plastic housing, light colour: 3200° Kelvin.



Recommended inclination angle: Terrain: 5°

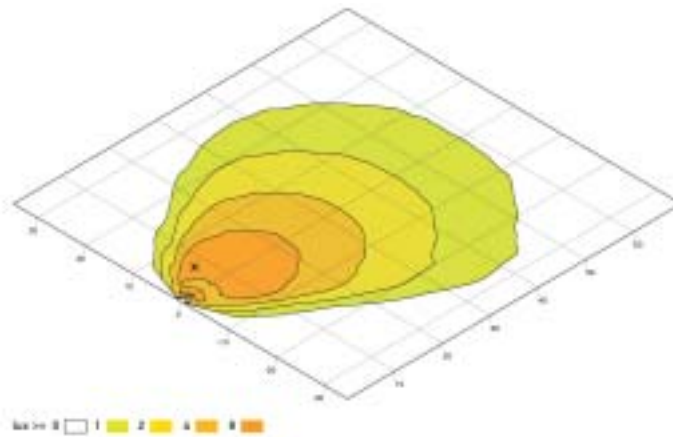
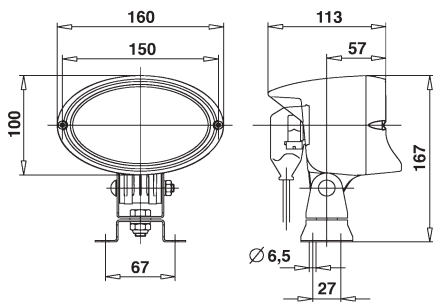
1GA 996 150-...	-021	-081
Volt	12	12
Close-range illumination		
Long-range illumination		
Terrain illumination	■	■
Energy consumption	65 W	65 W
Lumen (warm)	1700	1700
Housing material	Plastic	Plastic
Clear lens		
Lens with structure	■	■
Plastic lens		
Tempered glass lens	■	■
Connection	2000 mm cable	AMP connector
Mounting		
Upright mounting	■	■
Suspended mounting	■	
Mounting on the side		
Heavy-duty		
Additional characteristics		





### Oval 100 H9

Extremely wide and homogeneous illumination, impact-resistant glass-fibre reinforced plastic housing, IP5K9K/IP67 (withstands high pressure cleaning), light colour: 3200° Kelvin.



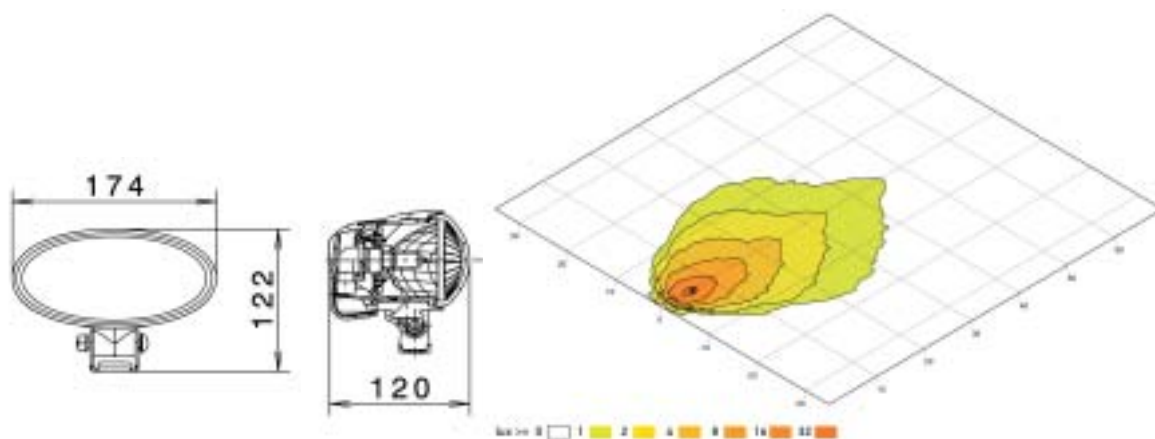
Recommended inclination angle: 5°

<b>1GA 996 161-...</b>	<b>-391</b>
Volt	12
Close-range illumination	
Long-range illumination	
Terrain illumination	■
Energy consumption	65 W
Lumen (warm)	1700
Housing material	Plastic
Clear lens	
Lens with structure	■
Plastic lens	
Tempered glass lens	
Connection	2000 mm cable
Mounting	
Upright mounting	■
Suspended mounting	
Mounting on the side	
Heavy-duty	■
Additional characteristics	



### Oval 90 HB3

Latest design and intense light. HB3 "long life" bulb, IP6K9K (withstands high pressure cleaning), impact-resistant glass-fibre reinforced plastic housing, light colour: 3200° Kelvin.



Recommended inclination angle: 15°, 15°

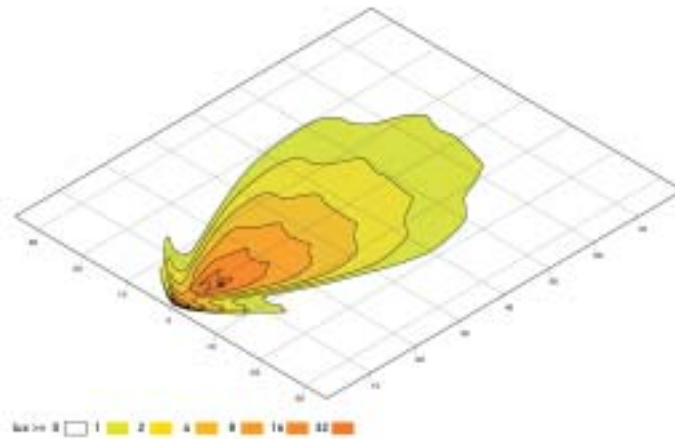
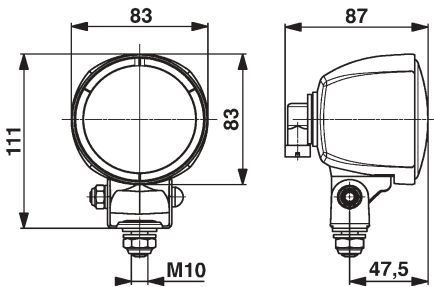
1GB 996 186-...	-051	-061
Volt	12	12
Close-range illumination	■	■
Long-range illumination		
Terrain illumination		
Energy consumption	60 W	60 W
Lumen (warm)	1400	1400
Housing material	Plastic	Plastic
Clear lens	■	■
Lens with structure		
Plastic lens		
Tempered glass lens	■	■
Connection	HB3 connector	HB3 connector
Mounting		■
Upright mounting	■	
Suspended mounting		
Mounting on the side		
Heavy-duty		
Additional characteristics		





**Module 70 H9**

Compact with small installation space, IP5K9K (withstands high pressure cleaning), impact-resistant glass-fibre reinforced plastic housing, light colour: 3200° Kelvin.



Recommended inclination angle: Terrain: 10° Long-range: 2°

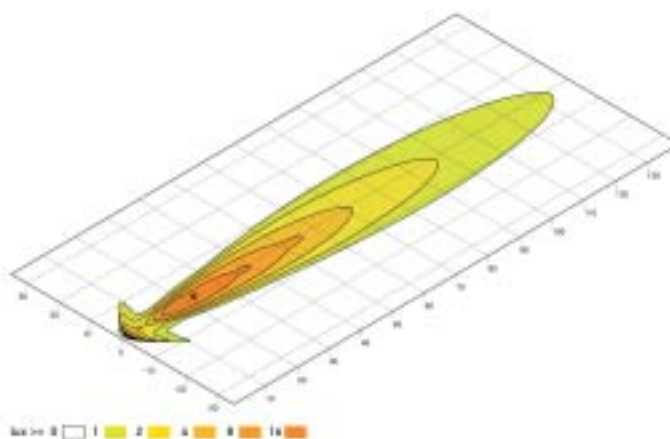
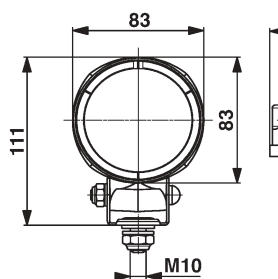
1G0 996 176-...	-051	-061	-171	-181
Volt	12	12	12	12
Close-range illumination		■	■	■
Long-range illumination	■			
Terrain illumination				
Energy consumption	65 W	65 W	65 W	65 W
Lumen (warm)	1700	1700	1700	1700
Housing material	Plastic	Plastic	Plastic	Plastic
Clear lens	■	■	■	■
Lens with structure				
Plastic lens				
Tempered glass lens	■	■	■	■
Connection	H9 connector	H9 connector	2000 mm cable	2000 mm cable
Mounting		■		
Upright mounting	■		■	
Suspended mounting				■
Mounting on the side				
Heavy-duty				
Additional characteristics				





**Module 70 H9 / FF50 H7 "blue"**

Blue lens for high-contrast light. Penetrates dust, water and mist. Potential applications: spreader and sprayer vehicles.



Recommended inclination angle: 0°

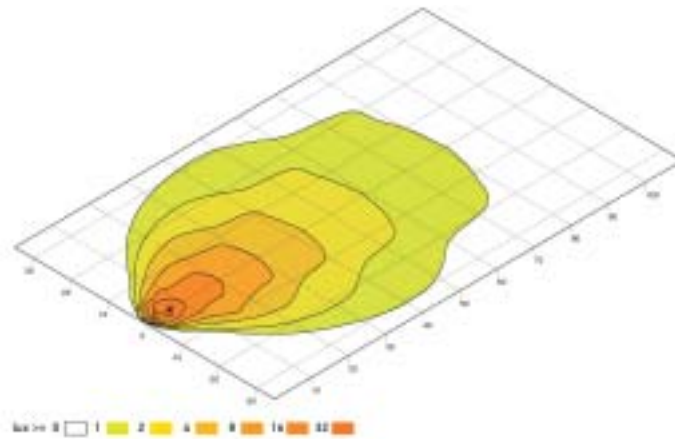
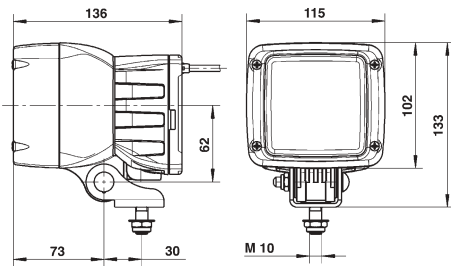
	1GO 996 176-671	1FA 008 283-031
Volt	12	12
Close-range illumination		
Long-range illumination	■	■
Terrain illumination		
Energy consumption	65 W	55 W
Lumen (warm)	1700	1200
Housing material	Plastic	Plastic
Clear lens	■	■
Lens with structure		
Plastic lens		
Tempered glass lens	■	■
Connection	H9 connector	
Mounting		
Upright mounting	■	■
Suspended mounting		
Mounting on the side		
Heavy-duty		
Additional characteristics		
Bulb	H9	H7





### Ultra Beam X-Powerpack D1S

Compact Xenon worklights with integrated ballast, IP6K9K (withstands high pressure cleaning), impact-resistant glass-fibre reinforced plastic housing, attachment made of stainless steel, electronics in aluminium housing, light colour: 4150° Kelvin.



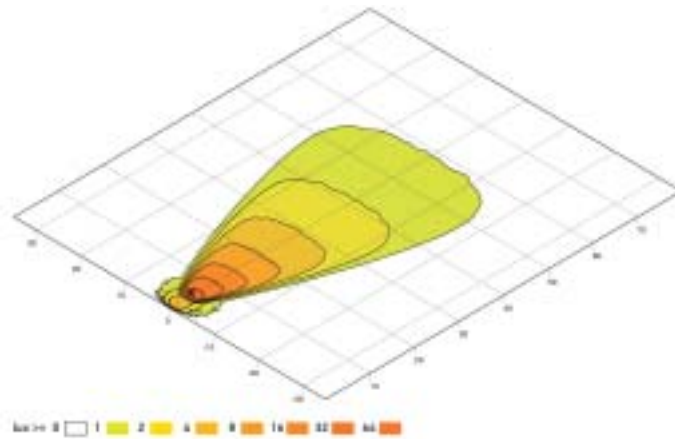
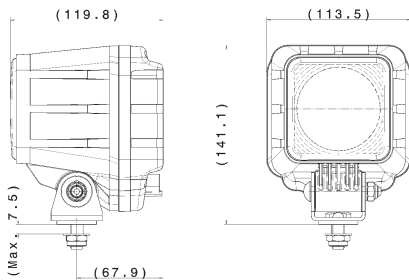
Recommended inclination angle: Close-range: 12°

1GA 998 534-...	-431	-441	-451	-461
Volt	12	12	24	24
Close-range illumination	■	■	■	■
Long-range illumination				
Terrain illumination				
Energy consumption	42 W	42 W	42 W	42 W
Lumen (warm)	2800	2800	2800	2800
Housing material	Plastic	Plastic	Plastic	Plastic
Clear lens				
Lens with structure	■	■	■	■
Plastic lens				
Tempered glass lens	■	■	■	■
Connection	AMP connector	AMP connector	AMP connector	AMP connector
Mounting				
Upright mounting	■		■	
Suspended mounting		■		■
Mounting on the side				
Heavy-duty				
Additional characteristics				
Light source	D1S	D1S	D1S	D1S



### PowerXen D1S

Light-weight Xenon all-around worklight, integrated ballast, IP6K9K/IP67 (withstands high pressure cleaning), impact-resistant plastic housing, attachment made of stainless steel, light colour: 4150° Kelvin.



Recommended inclination angle: Close-range: 15° Long-range: 5°

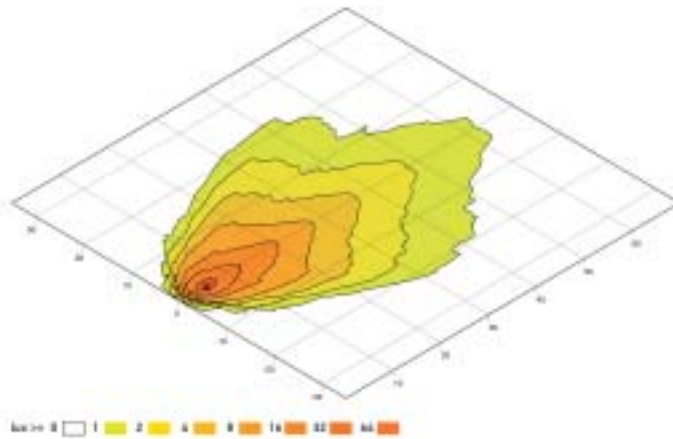
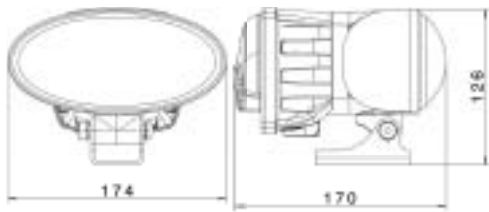
1GA 996 196-...	-001	-011	-021	-031	-041	-051
Volt	12	24	12	24	24	24
Close-range illumination	■	■	■	■		
Long-range illumination					■	■
Terrain illumination						
Energy consumption	42 W	42 W	42 W	42 W	42 W	42 W
Lumen (warm)	2400	2400	2400	2400	2400	2400
Housing material	Plastic	Plastic	Plastic	Plastic	Plastic	Plastic
Clear lens					■	■
Lens with structure	■	■	■	■		
Plastic lens						
Tempered glass lens	■	■	■	■	■	■
Connection	DT connector	DT connector	500 mm cable	500 mm cable	DT connector	500 mm cable
Mounting						
Upright mounting	■	■	■	■	■	■
Suspended mounting	■	■	■	■	■	■
Mounting on the side						
Heavy-duty						
Additional characteristics						
Light source	D1S	D1S	D1S	D1S	D1S	D1S





### Oval 90 X-Powerpack D1S

Top-performance light output with the latest reflector technology, IP6K9K (withstands high pressure cleaning), impact-resistant plastic housing, electronics in aluminium housing, attachment made of stainless steel, light colour: 4150° Kelvin.



Recommended inclination angle: Close-range: 12°

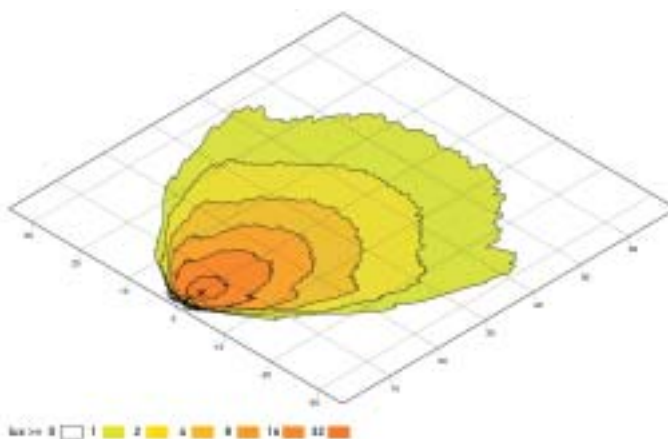
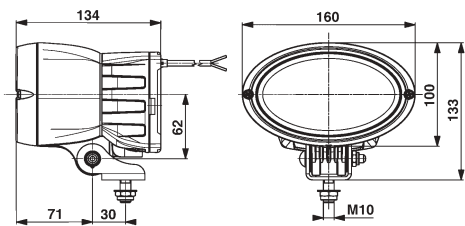
1GB 996 186-...	-071	-081
Volt	12	12
Close-range illumination	■	■
Long-range illumination		
Terrain illumination		
Energy consumption	42 W	50 W
Lumen (warm)	2800	3500
Housing material	Plastic	Plastic
Clear lens	■	■
Lens with structure		
Plastic lens		
Tempered glass lens	■	■
Connection	AMP connector	AMP connector
Mounting		
Upright mounting	■	■
Suspended mounting		
Mounting on the side		
Heavy-duty		
Additional characteristics		
Light source	D1S	D1S





### Oval 100 X-Powerpack D1S

Top-performance light output with the latest reflector technology, IP6K9K (withstands high pressure cleaning), impact-resistant plastic housing, electronics in aluminium housing, attachment made of stainless steel, suitable for modular design, light colour: 4150° Kelvin.



Recommended inclination angle: Close-range: 12°

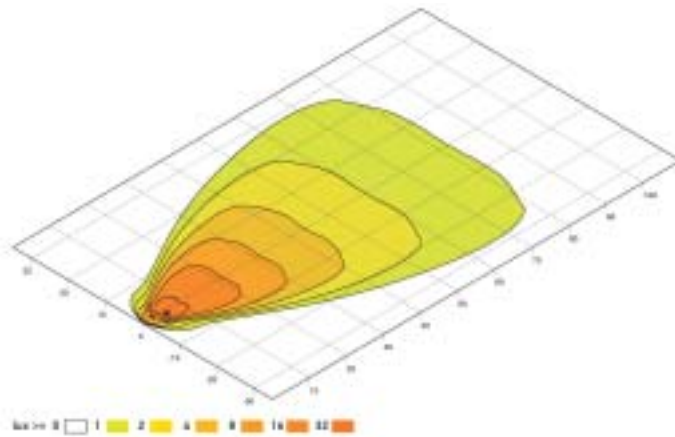
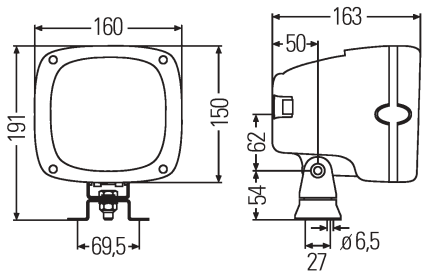
1GA 996 461-...	-311	-321	-331	-341
Volt	12	12	24	24
Close-range illumination	■	■	■	■
Long-range illumination				
Terrain illumination				
Energy consumption	42 W	42 W	42 W	42 W
Lumen (warm)	2800	2800	2800	2800
Housing material	Plastic	Plastic	Plastic	Plastic
Clear lens	■	■	■	■
Lens with structure				
Plastic lens				
Tempered glass lens	■	■	■	■
Connection	AMP connector	AMP connector	AMP connector	AMP connector
Mounting				
Upright mounting	■		■	
Suspended mounting		■		■
Mounting on the side				
Heavy-duty				
Additional characteristics				
Light source	D1S	D1S	D1S	D1S





**AS200 D1S**

Extensive, highly homogeneous light distribution, IP5K9K (withstands high pressure cleaning), impact-resistant glass-fibre reinforced plastic housing, light colour: 4150° Kelvin.



Recommended inclination angle: Close-range: 10° Long-range: 5°

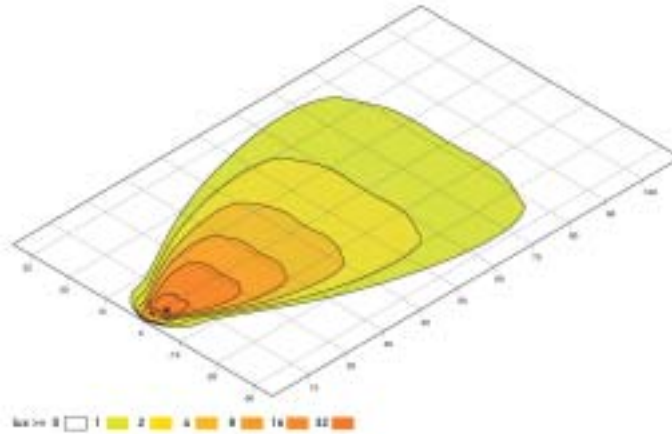
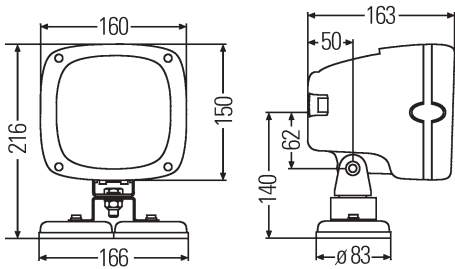
1GA 996 142-...	-001	-011	-041	-061
Volt	12	24	12	12
Close-range illumination	■	■	■	
Long-range illumination				■
Terrain illumination				
Energy consumption	42 W	42 W	42 W	42 W
Lumen (warm)	2800	2800	2800	2800
Housing material	Plastic	Plastic	Plastic	Plastic
Clear lens				
Lens with structure	■	■	■	■
Plastic lens				
Tempered glass lens	■	■	■	■
Connection	AMP connector	AMP connector	2500 mm cable	AMP connector
Mounting				
Upright mounting	■	■	■	■
Suspended mounting				
Mounting on the side				
Heavy-duty				
Additional characteristics			On/off switch, magnetic base, cigarette lighter	
Light source	D1S	D1S	D1S	D1S



### AS200 D1S

Extensive, highly homogeneous light distribution, IP5K9K (withstands high pressure cleaning), impact-resistant glass-fibre reinforced plastic housing, light colour: 4150° Kelvin.

1GA 996 142-241, -251 at 230 volts



Recommended inclination angle: Close-range: 10° Long-range: 5°

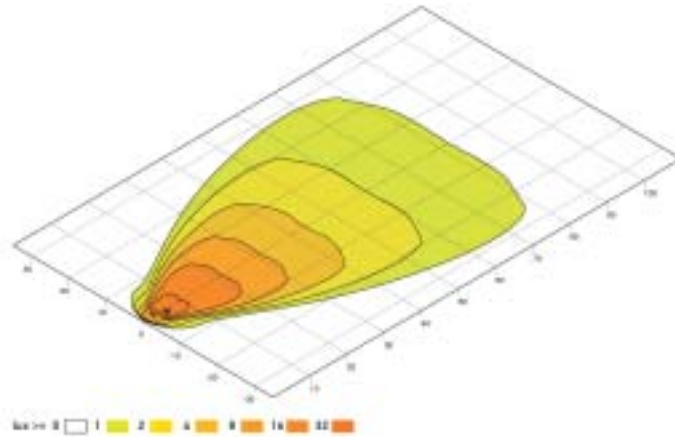
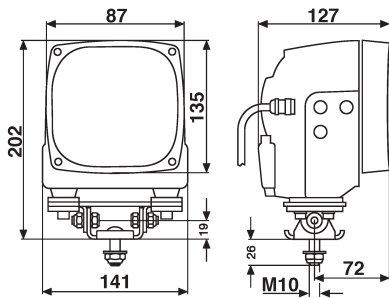
-071	-081	-091	-221	-241	-251
24	12	24	24	230	230
■	■	■	■	■	■
42 W	42 W	42 W	42 W	42 W	42 W
2800	2800	2800	2800	2800	2800
Plastic	Plastic	Plastic	Plastic	Plastic	Plastic
■	■	■	■	■	■
■	■	■	■	■	■
AMP connector	AMP connector	AMP connector	Mounting foot according to DIN EN ISO 4165	1000 mm cable	1000 mm cable
■	■	■	■	■	■
	On/off Switch	On/off Switch	Pipe-socket mounting, on/off switch		
D1S	D1S	D1S	D1S	D1S	D1S





**AS300 D1S / AS400 D1S**

For heavy-duty use, integrated ballast, impact-resistant glass-fibre reinforced plastic housing for AS300 and high quality aluminium housing for AS400, IP6K9K/IP67 (withstands high pressure cleaning). Heavy-duty support bracket: 8HG 990 380-001 Heavy-duty surrounding bracket: 8HG 990 381-001 Light colour: 4150° Kelvin.



Recommended inclination angle: 10°

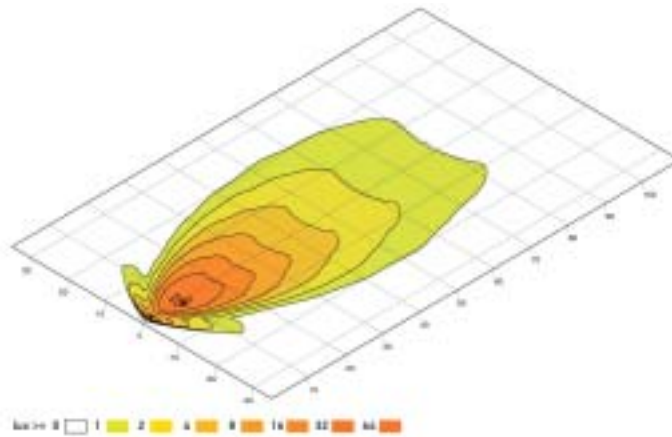
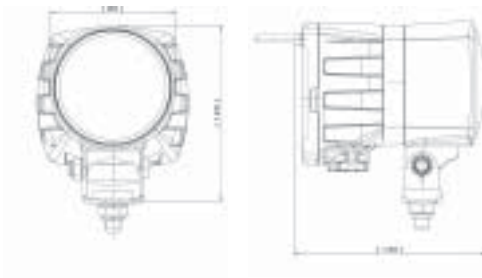
1GA 996 242-...	-111	-521	-541
Volt	24	24	24
Close-range illumination	■	■	■
Long-range illumination			
Terrain illumination			
Energy consumption	42 W	42 W	42 W
Lumen (warm)	2800	2800	2800
Housing material	Aluminium	Plastic	Plastic
Clear lens			
Lens with structure	■	■	■
Plastic lens			
Tempered glass lens	■	■	■
Connection	DT connector	DT connector	DT connector
Mounting			
Upright mounting	■	■	■
Suspended mounting			
Mounting on the side			
Heavy-duty	■	■	■
Additional characteristics			
Light source	D1S	D1S	D1S





### Module 70 X-Powerpack

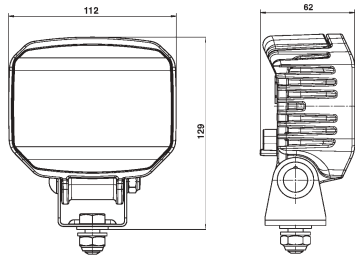
Compact Xenon worklights with integrated ballast. Suitable for modular series, IP6K9K/ IP67 (withstands high pressure cleaning), impact-resistant glass-fibre reinforced plastic housing, electronics in aluminium housing, attachment made of stainless steel. Light colour: 4150° Kelvin.



Recommended inclination angle: Close-range: 12°

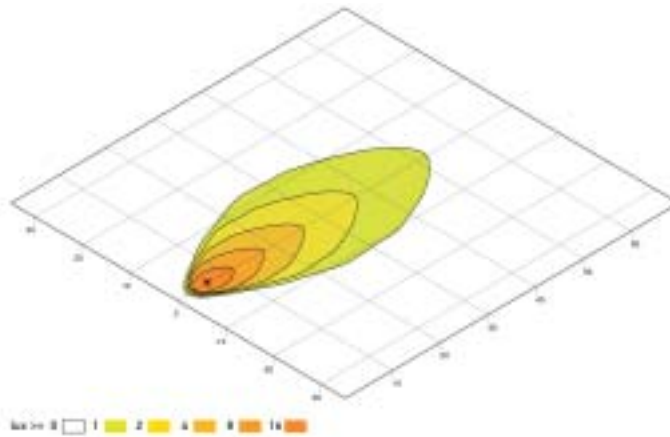
1G0 996 176-...	-681	-691
Volt	12	24
Close-range illumination	■	■
Long-range illumination		
Terrain illumination		
Energy consumption	42 W	42 W
Lumen (warm)	2800	2800
Housing material	Plastic/aluminium	Plastic/aluminium
Clear lens	■	■
Lens with structure		
Plastic lens		
Tempered glass lens	■	■
Connection	AMP connector	AMP connector
Mounting		
Upright mounting	■	■
Suspended mounting		
Mounting on the side		
Heavy-duty		
Additional characteristics	Integrated ballast	Integrated ballast
Light source	D1S	D1S





### Power Beam 1000

Intense light output with an elegant design, IP6K9K/IP67 (withstands high pressure cleaning / submersible), reverse-polarity protection, surge protection, overheating protection, high quality aluminium housing, GGVSEB / ADR, E1 type approval, light colour: 5700° Kelvin.



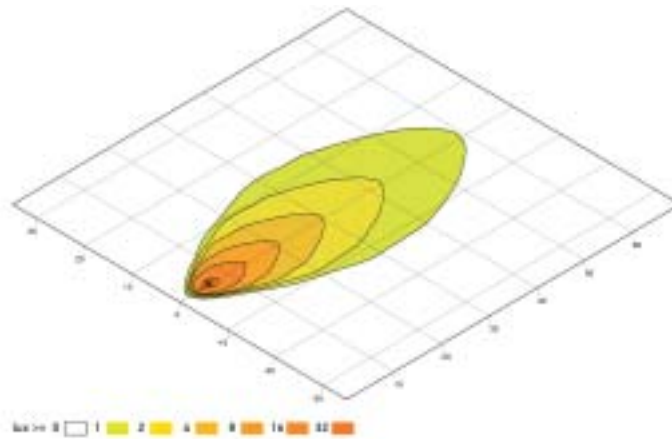
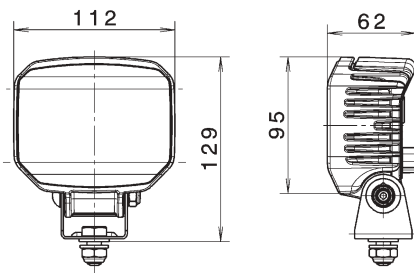
Recommended inclination angle: Close-range: 12°

1GA 996 188-...	-001	-011	-021
Volt	9-33	9-33	9-33
Close-range illumination	■	■	■
Long-range illumination			
Terrain illumination			
Energy consumption	18 W	18 W	18 W
Lumen (warm)	850	850	850
Housing material	Aluminium	Aluminium	Aluminium
Clear lens	■	■	■
Lens with structure			
Plastic lens			■
Tempered glass lens	■	■	
Connection	DT connector	DT connector	DT connector
Mounting			
Upright mounting	■	■	■
Suspended mounting	■	■	■
Mounting on the side			
Heavy-duty		■	
Additional characteristics		Surrounding bracket	



### Power Beam 1500

IP6K9K/IP67 (withstands high pressure cleaning / submersible), reverse-polarity protection, surge protection, overheating protection, high quality aluminium housing, E1 type approval, for heavy-duty use, light colour: 5700° Kelvin.



Recommended inclination angle: Close-range: 10° Long-range: 5°

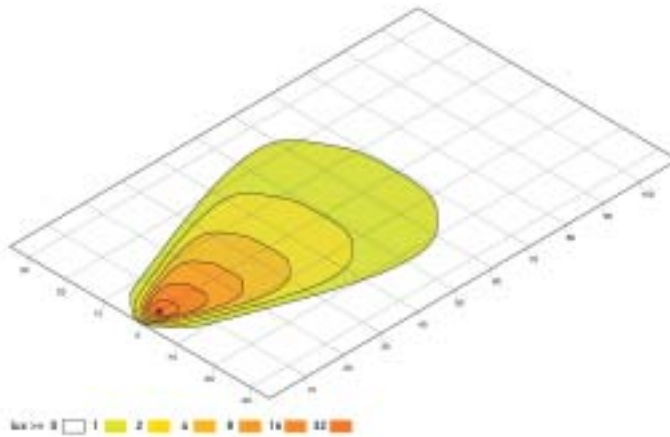
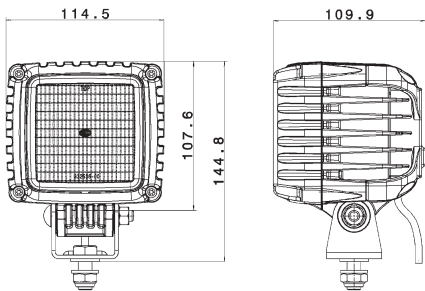
1GA 996 288-...	-001	-011	-021	-031	-041
Volt	9-33	9-33	9-33	9-33	9-33
Close-range illumination		■		■	
Long-range illumination	■		■		■
Terrain illumination					
Energy consumption	22 W	22 W	22 W	22 W	22 W
Lumen (warm)	1300	1300	1300	1300	1300
Housing material	Aluminium	Aluminium	Aluminium	Aluminium	Aluminium
Clear lens	■		■		■
Lens with structure		■		■	
Plastic lens	■	■	■	■	■
Tempered glass lens					
Connection	DT connector	DT connector	DT connector	DT connector	DT connector
Mounting					
Upright mounting	■	■	■	■	■
Suspended mounting	■	■	■	■	■
Mounting on the side					
Heavy-duty			■	■	
Additional characteristics			Surrounding bracket	Surrounding bracket	Orange lens





**Power Beam 2000**

Intense light output compared to Xenon, IP6K9K/IP67 (withstands high pressure cleaning / submersible), reverse-polarity protection, surge protection, overheating protection, high quality aluminium housing, E1 type approval, light colour: 5700° Kelvin.



Recommended inclination angle: Close-range: 12° Long-range: 3°

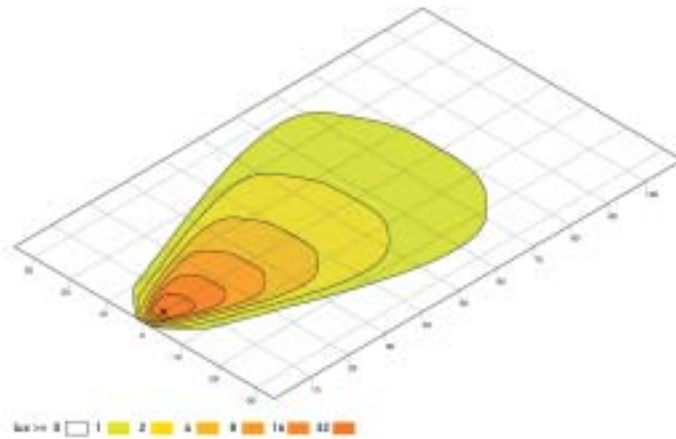
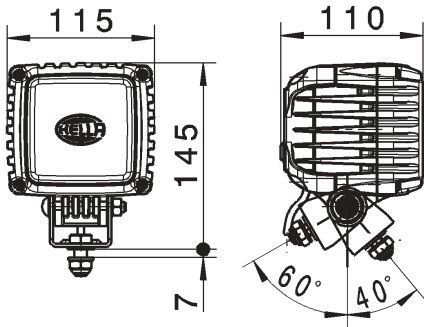
1GA 996 189-...	-001	-011	-031	-051	-061
Volt	9-33	9-33	9-33	9-33	9-33
Close-range illumination	■	■	■		■
Long-range illumination				■	
Terrain illumination					
Energy consumption	43 W	43 W	43 W	43 W	43 W
Lumen (warm)	2200	2200	2200	2200	2200
Housing material	Aluminium	Aluminium	Aluminium	Aluminium	Aluminium
Clear lens				■	
Lens with structure	■	■	■		■
Plastic lens	■	■	■	■	■
Tempered glass lens					
Connection	2000 mm cable	DT connector	2000 mm cable	2000 mm cable	Mounting foot according to DIN EN ISO 4165
Mounting					
Upright mounting	■	■		■	■
Suspended mounting			■	■	
Mounting on the side					
Heavy-duty					
Additional characteristics					with handle, pipe-socket mounting





### Power Beam 3000

Extremely intense light output above Xenon levels, IP6K9K/IP67 (withstands high pressure cleaning / submersible), reverse-polarity protection, surge protection, overheating protection, high quality aluminium housing, E1 type approval, light colour: 5700° Kelvin.



Recommended inclination angle: Close-range: 12° Long-range: 3°

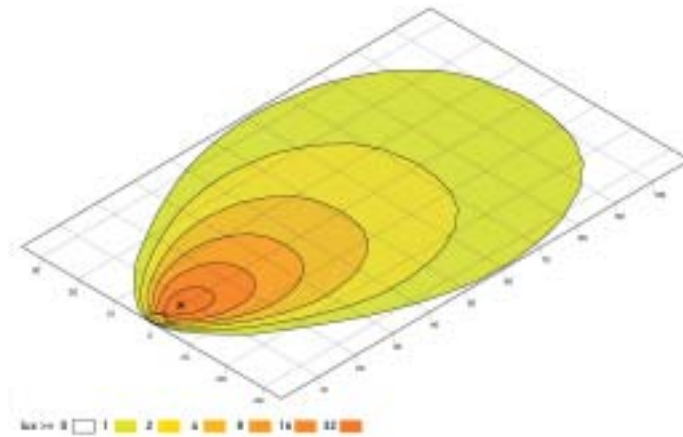
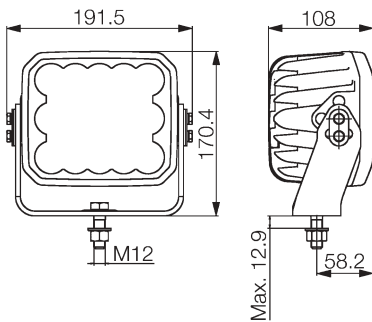
1GA 996 192-...	-001	-011	-021	-051	-061
Volt	9-33	9-33	9-33	9-33	9-33
Close-range illumination	■		■	■	■
Long-range illumination		■			
Terrain illumination					
Energy consumption	43 W	43 W	43 W	43 W	43 W
Lumen (warm)	3000	3000	3000	3000	3000
Housing material	Aluminium	Aluminium	Aluminium	Aluminium	Aluminium
Clear lens		■			
Lens with structure	■		■	■	■
Plastic lens	■	■	■	■	■
Tempered glass lens					
Connection	2000 mm cable	2000 mm cable	2000 mm cable	Mounting foot according to DIN EN ISO 4165	DT connector
Mounting					
Upright mounting	■	■	■	■	■
Suspended mounting					
Mounting on the side					
Heavy-duty			■		
Additional characteristics			Surrounding bracket	with handle, pipe-socket mounting	





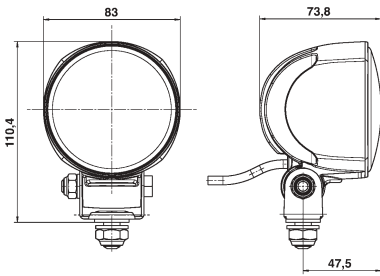
### Power Beam 5000

For extreme conditions, IP6K9K/IP67 (withstands high pressure cleaning / submersible), reverse-polarity protection, surge protection, overheating protection, high quality aluminium housing, E1 type approval, light colour: 5700° Kelvin.



Recommended inclination angle: Close-range: 10°

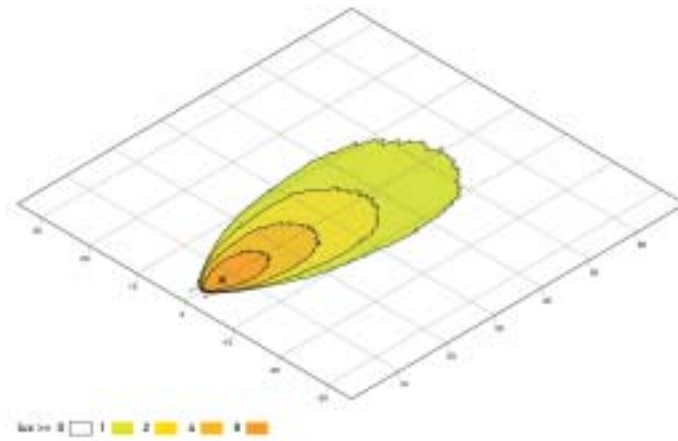
1GB 996 194-...	-001	-011
Volt	9-33	9-33
Close-range illumination	■	■
Long-range illumination		
Terrain illumination		
Energy consumption	70 W	70 W
Lumen (warm)	4500	4500
Housing material	Aluminium	Aluminium
Clear lens		
Lens with structure	■	■
Plastic lens	■	■
Tempered glass lens		
Connection	DT connector	2000 mm cable
Mounting		
Upright mounting	■	■
Suspended mounting	■	■
Mounting on the side		
Heavy-duty	■	■
Additional characteristics	Surrounding bracket	Surrounding bracket



### Module 70 LED Generation III

Good lighting in a compact design, IP6K9K/IP67 (withstands high pressure cleaning / submersible), reverse-polarity protection, surge protection, overheating protection, high quality aluminium housing, E1 type approval, light colour: 5700° Kelvin.

+ 30% more light than Generation II



Recommended inclination angle: Close-range: 10°

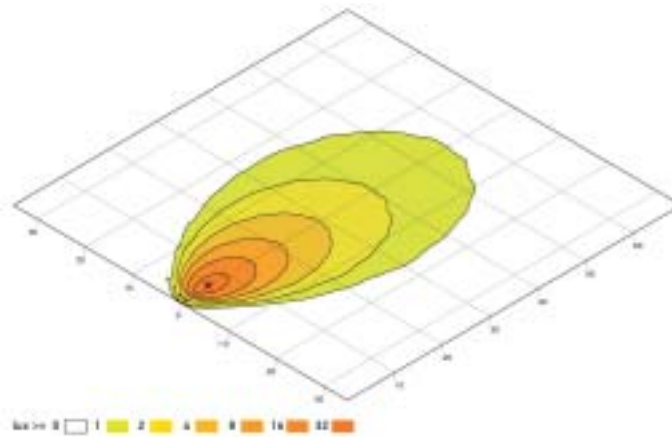
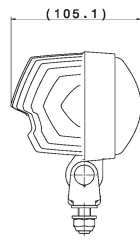
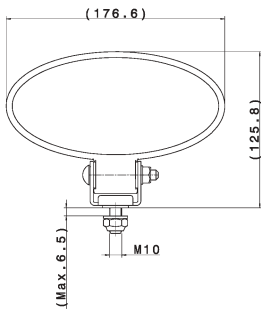
160 996 276-...	-451	-453	-461	-481	-431	-071
Volt	9-33	9-33	9-33	9-33	9-33	10-100
Close-range illumination	■	■	■	■	■	■
Long-range illumination						
Terrain illumination						
Energy consumption	13 W	13 W	13 W	13 W	13 W	13 W
Lumen (warm)	800	800	800	800	800	600
Housing material	Aluminium	Aluminium	Aluminium	Aluminium	Aluminium	Aluminium
Clear lens	■	■	■		■	■
Lens with structure				■		
Plastic lens						
Tempered glass lens	■	■	■	■	■	■
Connection	2000 mm cable	2000 mm cable	2000 mm cable	2000 mm cable	2000 mm cable	2000 mm cable
Mounting					■	
Upright mounting	■	■	■	■		■
Suspended mounting				■		■
Mounting on the side						
Heavy-duty						
Additional characteristics				Extra-wide illumination		





**Oval 90 LED**

Intense light output in an oval design, IP6K9K/IP67 (withstands high pressure cleaning / submersible), reverse-polarity protection, surge protection, overheating protection, high quality aluminium housing, E1 type approval, oval design is suitable for the Oval 100 modular series, possible conversion to maintenance-free worklight, light colour: 5700° Kelvin.



Recommended inclination angle: Close-range: 12° Long-range: 5°

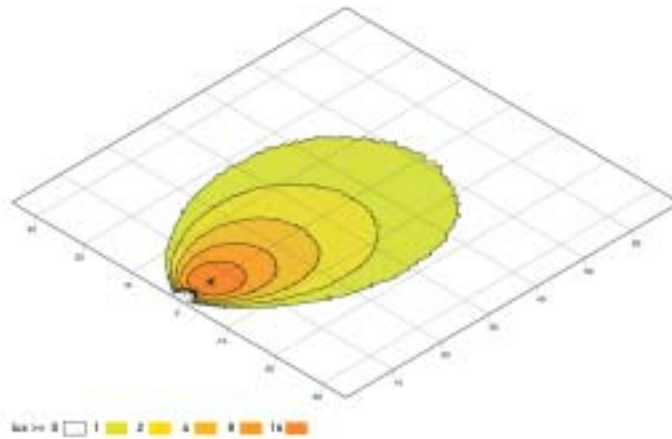
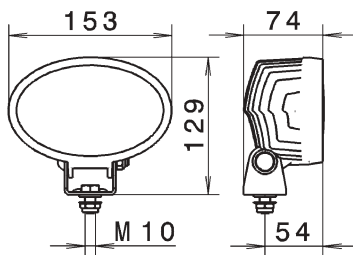
1GB 996 386-...	-001	-021
Volt	9-33	9-33
Close-range illumination	■	
Long-range illumination		■
Terrain illumination		
Energy consumption	28 W	28 W
Lumen (warm)	1700	1700
Housing material	Aluminium	Aluminium
Clear lens		■
Lens with structure	■	
Plastic lens	■	■
Tempered glass lens		
Connection	DT connector	DT connector
Mounting		
Upright mounting	■	■
Suspended mounting	■	■
Mounting on the side		
Heavy-duty		
Additional characteristics		





### Oval 100 LED

IP6K9K/IP67 (withstands high pressure cleaning / submersible), reverse-polarity protection, surge protection, overheating protection, high quality aluminium housing, E1 type approval, oval design is suitable for the Oval 100 modular series, possible conversion to maintenance-free worklight, light colour: 5700° Kelvin.



Recommended inclination angle: Close-range: 12° Long-range: 5°

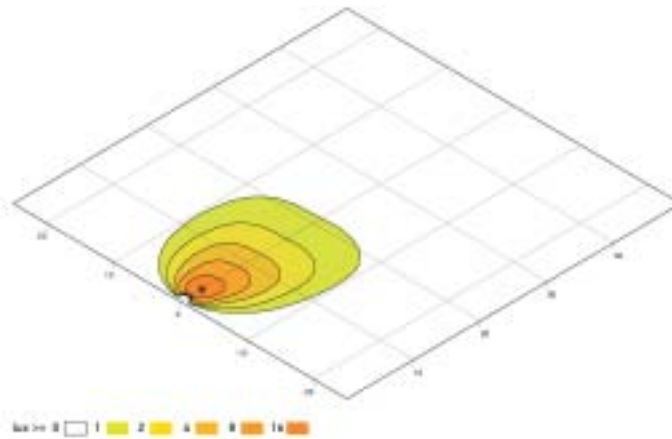
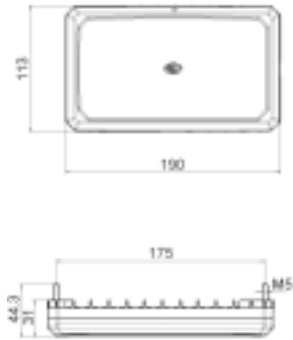
1GA 996 661-...	-001	-011
Volt	9-33	9-33
Close-range illumination	■	
Long-range illumination		■
Terrain illumination		
Energy consumption	25 W	25 W
Lumen (warm)	1500	1500
Housing material	Aluminium	Aluminium
Clear lens		■
Lens with structure	■	
Plastic lens	■	■
Tempered glass lens		
Connection	DT connector	DT connector
Mounting		
Upright mounting	■	■
Suspended mounting	■	■
Mounting on the side		
Heavy-duty		
Additional characteristics		



### Flat Beam 1000

Extremely flat design and highly efficient, IP6K9K/IP67 (withstands high pressure cleaning / submersible), reverse-polarity protection, surge protection, overheating protection, impact-resistant plastic housing, E1 type approval, light colour: 5700° Kelvin. 45° illumination brings the light itself closer to the working area without inclining the worklight.

1GD 996 193-051 = 45° illumination



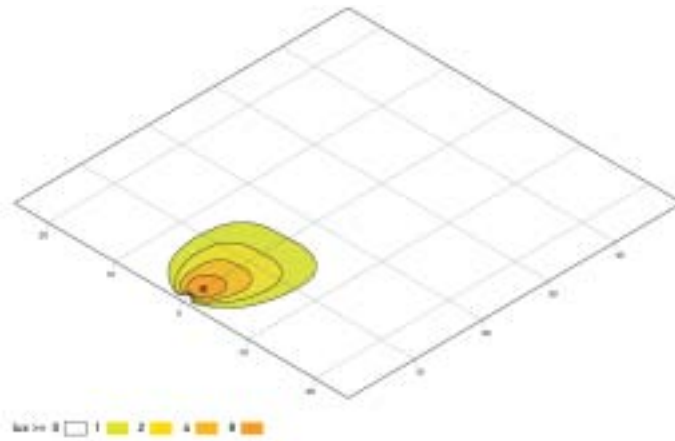
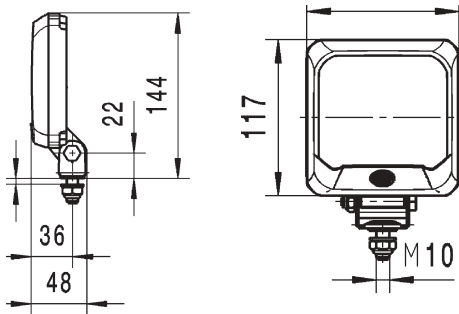
Recommended inclination angle: Standard: 45° Illumination: 0°

1GD 996 193-...	-001	-011	-051
Volt	9-33	9-33	9-33
Close-range illumination	■	■	■
Long-range illumination			
Terrain illumination			
Energy consumption	11 W	11 W	11 W
Lumen (warm)	1100	1100	1100
Housing material	Plastic	Plastic	Plastic
Clear lens			
Lens with structure	■	■	■
Plastic lens	■	■	■
Tempered glass lens			
Connection	2000 mm cable	2000 mm cable	2000 mm cable
Mounting			
Upright mounting	■	■	■
Suspended mounting			
Mounting on the side			
Heavy-duty			
Additional characteristics	Panel mounting	Surrounding bracket	45° illumination



### Flat Beam 500

Only 7 W power requirement - extremely efficient, IP6K9K/IP67 (withstands high pressure cleaning / submersible), reverse-polarity protection, surge protection, overheating protection, impact-resistant plastic housing, E1 type approval, light colour: 5700° Kelvin Standard 45° illumination.



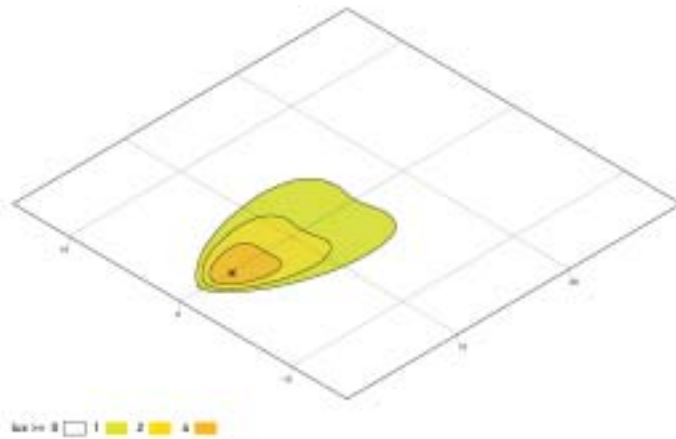
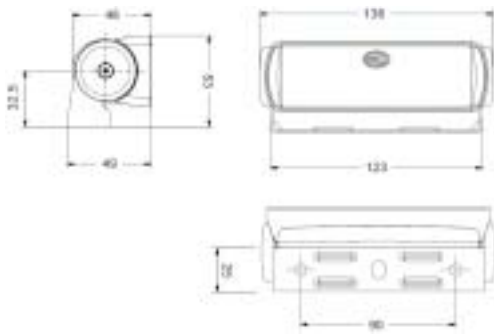
Recommended inclination angle: 0°

1GA 995 193-...	-001	-011	-021	-031	-041
Volt	9-33	9-33	9-33	9-33	9-33
Close-range illumination	■	■	■	■	■
Long-range illumination					
Terrain illumination					
Energy consumption	7 W	7 W	7 W	7 W	7 W
Lumen (warm)	550	550	550	550	550
Housing material	Plastic	Plastic	Plastic	Plastic	Plastic
Clear lens					
Lens with structure	■	■	■	■	■
Plastic lens	■	■	■	■	■
Tempered glass lens					
Connection	2000 mm cable	2000 mm cable	2000 mm cable	2000 mm cable	2000 mm cable
Mounting					
Upright mounting	■		■	■	■
Suspended mounting		■			
Mounting on the side					
Heavy-duty					
Additional characteristics	Standard bracket	Standard bracket	Panel mounting	Lug mounting	Surrounding bracket



**ETL 250**

Highly efficiency compact design, IP6K9K/IP67 (withstands high pressure cleaning / submersible), reverse-polarity protection, surge protection, impact-resistant plastic housing, attachment made of stainless steel. For reduced light requirements such as entry lighting, service lights etc., light colour: 5700° Kelvin.



Recommended inclination angle: 15°

1GA 980 670-...	-231	-331
Volt	9-33	9-33
Close-range illumination	■	■
Long-range illumination		
Terrain illumination		
Energy consumption	3 W	3 W
Lumen (warm)	250	250
Housing material	Plastic	Plastic
Clear lens	■	
Lens with structure		■
Plastic lens	■	■
Tempered glass lens		
Connection	2000 mm cable	2000 mm cable
Mounting		
Upright mounting	■	■
Suspended mounting	■	■
Mounting on the side		
Heavy-duty		
Additional characteristics	Spot illumination	Wide illumination

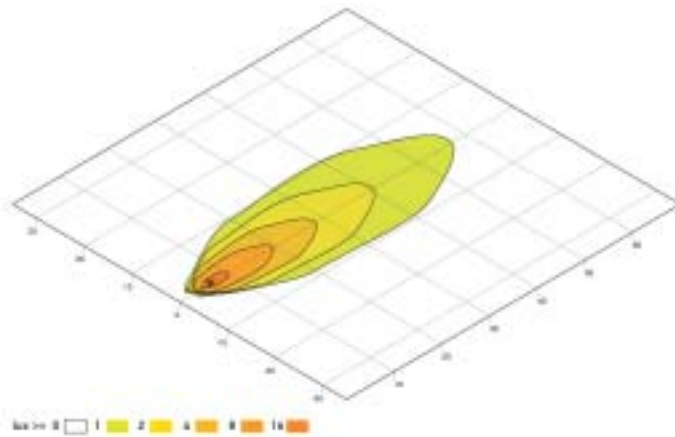
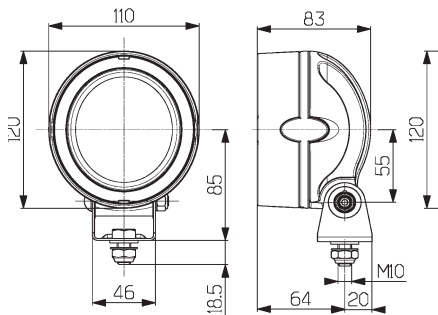




### Mega Beam LED Generation III

Trendy universal headlight, 4 high-performance LEDs, IP6K9K/IP67 (withstands high pressure cleaning / submersible), reverse-polarity protection, surge protection, overheating protection, high quality aluminium housing, E1 type approval, light colour: 5700° Kelvin.

+ 30% more light than Generation II



Recommended inclination angle: Close-range: 12° Long-range: 5°

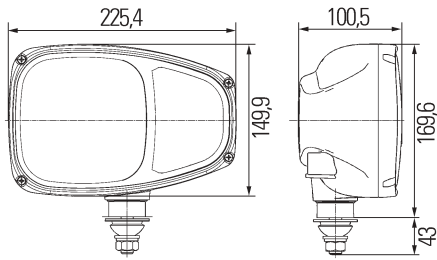
1GM 996 136-...	-311	-361
Volt	9-33	9-33
Close-range illumination	■	■
Long-range illumination		
Terrain illumination		
Energy consumption	13 W	13 W
Lumen (warm)	800	800
Housing material	Aluminium	Aluminium
Clear lens	■	■
Lens with structure		
Plastic lens		
Tempered glass lens	■	■
Connection	2000 mm cable	2000 mm cable
Mounting		
Upright mounting	■	
Suspended mounting		■
Mounting on the side		
Heavy-duty		
Additional characteristics		





**C220 headlight**

Combination headlight with ECE type approval, IP5K9K (withstands high pressure cleaning), impact-resistant glass-fibre reinforced plastic housing.



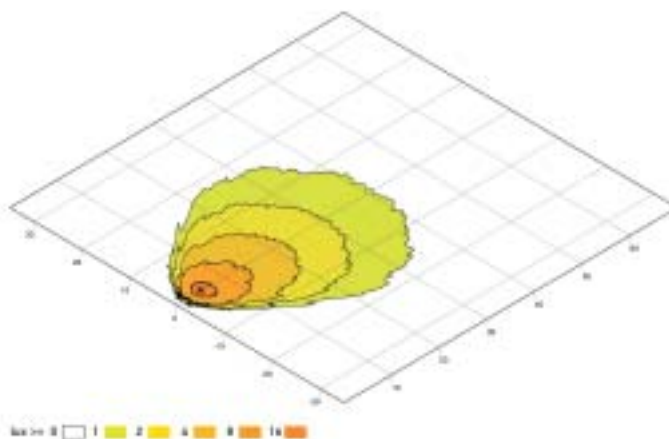
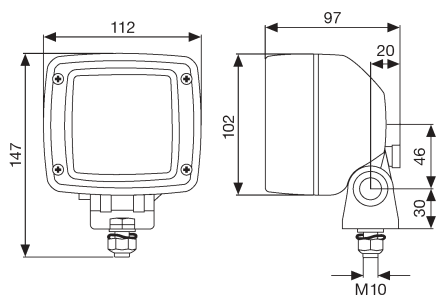
1EE 996 174-...	-051	-061	-191	-201
Volt	12	12	24	24
Close-range illumination				
Long-range illumination				
Terrain illumination				
Energy consumption				
Lumen (warm)				
Housing material	Plastic	Plastic	Plastic	Plastic
Clear lens	■	■	■	■
Lens with structure				
Plastic lens				
Tempered glass lens	■	■	■	■
Connection	DT connector	DT connector	DT connector	DT connector
Mounting				
Mounting, left	■		■	
Mounting, right		■		■
Mounting on the side				
Heavy-duty				
Additional characteristics				
Bulb	H3/H7/P21W/T4W	H3/H7/P21W/T4W	H3/H7/P21W/T4W	H3/H7/P21W/T4W



### Ultra Beam H3 Reversing Spotlight

Reversing spotlight, IP5K9K (withstands high pressure cleaning), impact-resistant glass-fibre reinforced plastic housing, approved special illumination as reversing spotlight, GGVSEB/ADR, light colour: 2300° Kelvin.

Approved special illumination as reversing spotlight 00AR.



Inclination angle: according to the installation instructions

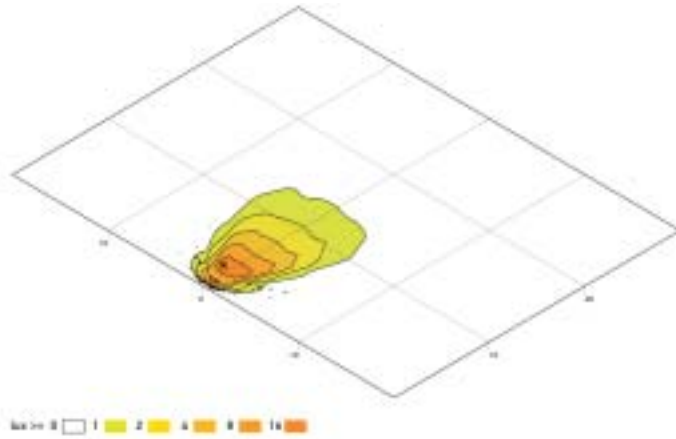
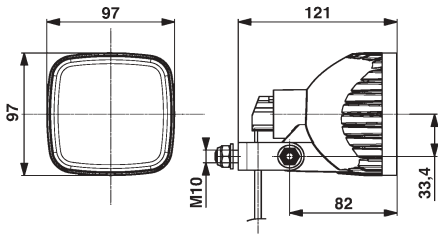
	2ZR 996 506-501	2ZR 997 506-391	2ZR 997 506-621
Volt	24	24	24
Close-range illumination while reversing		■	
Long-range illumination while reversing			■
Terrain illumination while reversing	■		
Energy consumption	70 W	70 W	70 W
Lumen (warm)	1400	1400	1400
Housing material	Plastic	Plastic	Plastic
Clear lens			■
Lens with structure	■	■	
Plastic lens			
Tempered glass lens	■	■	■
Connection	AMP connector	AMP connector	AMP connector
Mounting			
Upright mounting	■	■	■
Suspended mounting			
Mounting on the side			
Heavy-duty	■	■	■
Additional characteristics			





### Eco 21 Reversing Spotlight

Low power consumption and reduced light output, tool-free bulb replacement (bayonet socket), IP5K9K (withstands high pressure cleaning), impact-resistant plastic housing. Approved special illumination as reversing spotlight 00AR.



Recommended inclination angle: according to the installation instructions

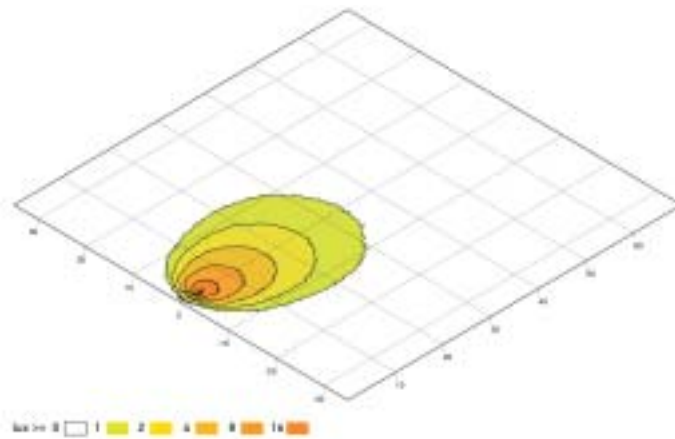
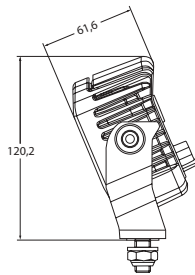
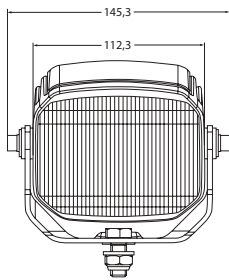
<b>2ZR 996 179-...</b>	<b>-701</b>
Volt	24
Close-range illumination while reversing	■
Long-range illumination while reversing	
Terrain illumination while reversing	
Energy consumption	21 W
Lumen (hot)	400
Housing material	Plastic
Clear lens	■
Lens with structure	
Plastic lens	■
Tempered glass lens	
Connection	500 mm cable
Mounting	
Upright mounting	■
Suspended mounting	
Mounting on the side	
Heavy-duty	
Additional characteristics	





**Power Beam 1000 Reversing Spotlight**

IP6K9K/IP67 (withstands high pressure cleaning / submersible), reverse-polarity protection, surge protection, overheating protection, high quality aluminium housing, E1 type approval, for heavy-duty use, approved special lighting as RFSW 00AR, light colour: 5700° Kelvin.



Recommended inclination angle: according to the installation instructions

2ZR 996 188-...	-061	-091
Volt	9-33	9-33
Close-range illumination while reversing	■	■
Long-range illumination while reversing		
Terrain illumination while reversing		
Energy consumption	18 W	18 W
Lumen (hot)	850	850
Housing material	Aluminium	Aluminium
Clear lens		
Lens with structure	■	■
Plastic lens	■	■
Tempered glass lens		
Connection	DT connector	2000 mm cable
Mounting		
Upright mounting	■	■
Suspended mounting	■	■
Mounting on the side		
Heavy-duty	■	■
Additional characteristics	Surrounding bracket	Surrounding bracket





**KL 7000 LED**

The KL 7000 LED is the result of ongoing development of the widely used KL 700 and KL 7000 series. The beacon is distinguished by its slim and compact design, long service life and a very high degree of efficiency when converting electrical power into light. It allows you to change from Halogen to LED with ease.

<b>2RL 011 484-001</b>	Multi-volt, 10-32V, fixed
<b>2RL 011 484-011</b>	Multi-volt, 10-32V, pipe-socket
<b>2RL 011 484-021</b>	Multi-volt, 10-32V, magnet
<b>Recommended for the following target groups:</b>	municipal, trucks, tow trucks



**Rota LED**

The Rota LED with rotating LED light function delivers high efficiency, a flat and compact design and a rotating light function. Thanks to the shock-absorbing rubber feet, it is very resistant to high vibrations and is therefore suitable for demanding applications.

<b>2RL 010 979-001</b>	Multi-volt, 10–32V, amber, fixed
<b>2RL 010 979-011</b>	Multi-volt, 10–32V, amber, flex
<b>2RL 010 979-021</b>	Multi-volt, 10–32V, amber, magnet
<b>Recommended for the following target groups:</b>	construction, agriculture/forestry



**K-LED FO**

The K-LED FO is the first HELLA LED strobe-type beacon with very low installation height. The use of intelligent and efficient electronics delivers maximum warning effectiveness, optimum safety and an extremely long service life.

<b>2XD 010 311-001</b>	Multi-volt, 10–32V, amber, fixed
<b>2XD 010 311-011</b>	Multi-volt, 10–32V, amber, flex
<b>2XD 010 311-021</b>	Multi-volt, 10–32V, amber, magnet
<b>Recommended for the following target groups:</b>	municipal, trucks, tow trucks



#### KLX Junior Plus

The KLX Junior Plus is a Xenon beacon with a modern design. It comes with a robust, easy-to-clean lens made of polycarbonate and with integrated reverse-polarity protection. The flash tube is replaceable. Thanks to its double-flash warning signal, the warning effect is high.

2XD 009 051-001	12V, amber, fixed
2XD 009 051-011	24V, amber, fixed
2XD 009 052-001	12V, amber, flex
2XD 009 052-011	24V, amber, flex
2XD 009 053-001	12V, amber, magnet

**Recommended for the following target groups:** municipal, agriculture/forestry



#### KL 7000

The KL 7000 delivers an optimum signal thanks to high quality technology and maximum light intensity. The robust dome with special optics guarantees efficient light yield. Maximum smooth operation is delivered by a maintenance-free drive bearing and twin belt technology.

2RL 008 061-101	12V, amber, fixed
2RL 008 061-111	24V, amber, fixed
2RL 008 060-101	12V, amber, pipe-socket
2RL 008 060-111	24V, amber, Pipe-socket
2RL 008 063-101	12V, amber, flex
2RL 008 063-111	24V, amber, flex
2RL 008 062-101	12V, amber, magnet
2RL 008 062-111	24V, amber, magnet

**Recommended for the following target groups:** municipal, trucks, tow trucks



**KL Rotaflex / Rotafix**

The KL Rotaflex / Rotafix is a compact and durable rotating beacon. It delivers excellent light intensity and comes with an impact resistant light dome and extremely high resistance to vibration.

2RL 007 337-001	12V, amber, fixed
2RL 007 337-011	24V, amber, fixed
2RL 006 846-001	12V, amber, flex
2RL 006 846-011	24V, amber, flex
2RL 007 337-021	12V, amber, magnet
2RL 007 337-031	24V, amber, magnet

**Recommended for the following target groups:** construction, agriculture/forestry, trucks, trailers



**KL Rota Compact**

The KL Rota Compact delivers high quality technology, extreme robustness and good light intensity. Its elastic, shock-absorbing socket minimises the risk of damage.

2RL 009 506-201	12V, amber, fixed
2RL 009 506-211	24V, amber, fixed
2RL 009 506-001	12V, amber, flex
2RL 009 506-011	24V, amber, flex
2RL 009 506-101	12V, amber, pipe-socket
2RL 009 506-111	24V, amber, Pipe-socket

**Recommended for the following Target groups:** construction, agriculture/forestry, trucks



**OWS-E**

The OWS-E is available with Halogen single reflector system, Halogen multi-reflector system or Xenon double flash system in 4 different varieties for 12V and 24V.

For more information, visit [www.hella.com/municipal](http://www.hella.com/municipal)

**Recommended for the following target groups:** municipal, trucks, tow trucks





### OWS7

The OWS7 combines innovative technology with modern design. It delivers excellent light output, a very long service life, a high degree of efficiency and comprehensive modularity. It is available in widths between 900mm and 2000mm, as well as in 12V and 24V and can be used in a wide range of applications.

For more information, visit [www.hella.com/municipal](http://www.hella.com/municipal)

**Recommended for the following target groups:** municipal, trucks, tow trucks



### RTK7

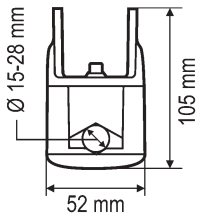
RTK 7 highly modular warning system, 12V or 24V, ranging in width from 900mm to 2000mm, wide range of different LED main beacons and auxiliary light modules, also as an addition to for blue signals, bundled to the front, with 3 more beacons, amber warning light, amber rear traffic control and warning system, infrared signals, and white worklight on all four sides of the unit (front, rear, left, right). Pre-programmed and freely programmable text signals to the front and back in 280mm, 380mm and 560mm wide LED matrix modules.

In combination with different operating concepts, an efficient signalling system can be customised to meet specific requirements for each emergency vehicle in accordance with current technical standards.

More information is available in the "Emergency vehicles product overview" brochure or in the RTK 7 purchasing guideline in the download area of the HELLA microsite: [www.hella.com/emergency](http://www.hella.com/emergency)

**Recommended for the following target groups:** official vehicles





### Universal bracket / mirror bracket fastening

Rotating universal bracket for installation on pipes (diameter: 15 - 25mm). For replacement on worklights with a 36mm angle bracket. With an additional 2 narrow spacers to replace wide spacers with/without vibration dampening on worklights with a 42mm angle bracket.

**8HG 990 263-111**



### Pipe-socket mounting bracket

For combination with 8HG 002 365-001 pipe sockets and all 8HG 006 294- versions. Suitable for mounting a worklight with an AMP plug connector or grommet. Electrical contact within the pipe socket via socket in accordance with DIN 7 2 591.

**8HG 990 320-001**



### Tripod bracket, 24 mm diameter

For screwing onto the rear side of the cabin roof. Length: 100mm. Option to shift by up to 700mm.

**8HG 006 294-041**



1,2



3,4



5

### Socket pipes, 24mm diameter

With a brass socket in accordance with DIN 72 591 and rubber stoppers with retaining mechanism. Earthing contact via the pipe. For mounting to bracket attached to the side of the vehicle or for welding to a flange. 24mm diameter, approx. 100mm long.

1	8HG 002 365-001	Socket pipe, complete
2	8HG 006 294-101	With separate earthing connection
3	8HG 006 294-051	With screw attachment
4	8HG 006 294-091	With separate earthing connection
5	8HG 006 294-011	For screwing onto a flat cabin roof (top)
6	8HG 006 294-021	With 90mm cable attachment bracket
7	8HG 006 294-111	With 50mm cable attachment bracket
8	8HG 006 294-031	For screwing onto a flat cabin roof (to or side), pivotable



6,7



8



### Magnetic bracket

For worklights with U-brackets, consisting of 2 magnets and fixtures.

8HG 004 806-001



1



2



1



3



2

**Attachment bracket for four point fastening**

Work and mounting lights with M10 fastening screws and stainless steel and amber chromatised steel attachment bracket.

1	9XD 990 298-001	Amber chromatised steel
2	9XS 130 261-001	Stainless steel

Connector	
1	8JA 990 295-127 2-pin Deutsch connector, pack of 10 pcs.
2	8JA 990 295-217 HB3 connector, pack of 10 pcs.
3	8JD 158 175-807 HB9 connector, pack of 20 pcs.
	8JD 990 295-031 AMP connector assembly set consisting of AMP connector + mounting grommet

**Harness assemblies**

8KB 990 299-011	2000mm DT connector
8KB 990 299-311	2000mm HB9 connector with rubber cap
8KB 990 299-331	2000mm HB3 connector

**Bulbs**

8GH 002 090-133	H3 12V/55W
8GH 002 090-251	H3 24V/70W
8GH 005 635-181	HB3 LL 12V/60W
8GH 008 357-001	H9 12V/65W
8GS 009 028-001	D1S Xenon burner

**230 Volt adapter**

8EN 332 584-001	For LED worklights (DT connector)
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**OLIVER**

**ELIVER**

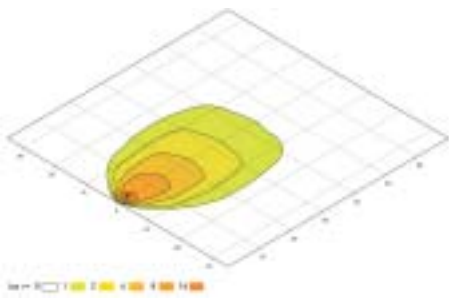
## OLIVER IS USING ELIVER TO SEARCH – ARE YOU?

Oliver is a farmer and he is looking for a new worklight for his tractor. ELIVER – our unique tool for worklights – gives Oliver the best possible overview of the right worklight for him!

With ELIVER, you can easily compare our best worklights online – and get a realistic idea of the light yield. To get the right light for your everyday work.

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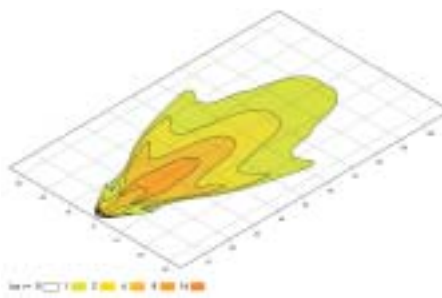




**Ultra Beam H3**

Close-range

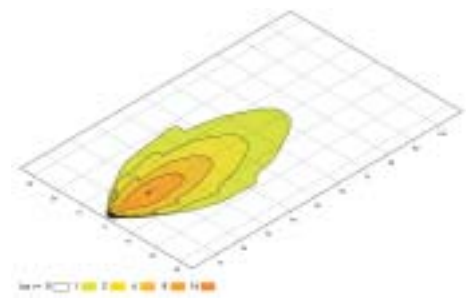
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**Ultra Beam H3 with handle**

Close-range

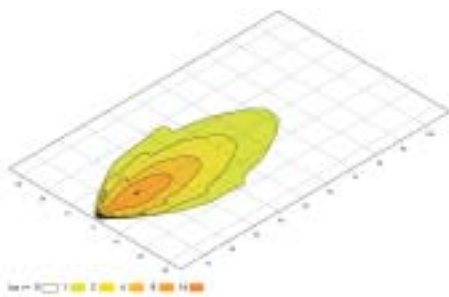
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**Mega Beam H3**

Close-range

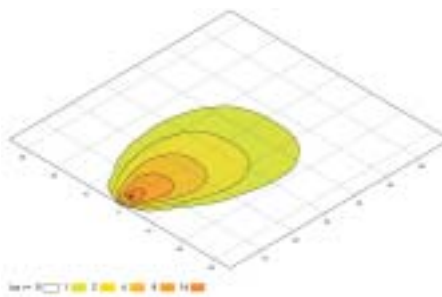
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**Mega Beam H3**

Wide

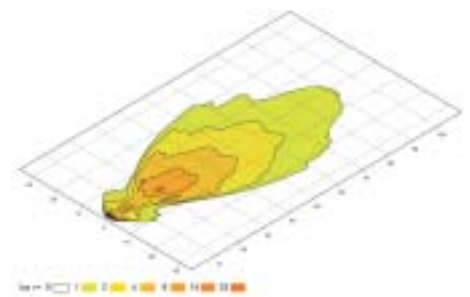
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**Oval 100 H3**

Close-range

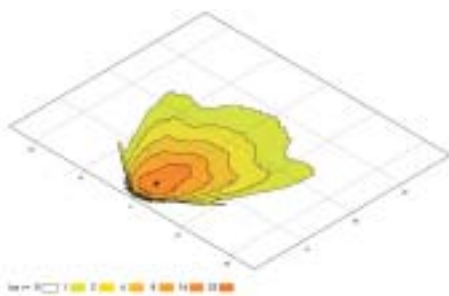
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**Oval 100 Double Beam H3**

Close-range

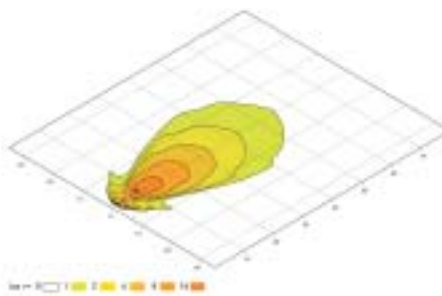
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**Oval 100 FL H3**

Close-range

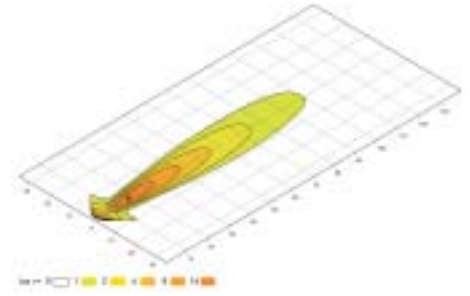
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**Module 70 H3**

Close-range

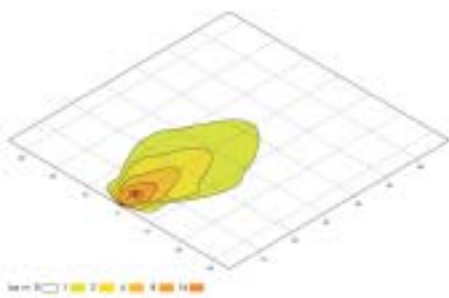
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**Module 70 H3**

Wide

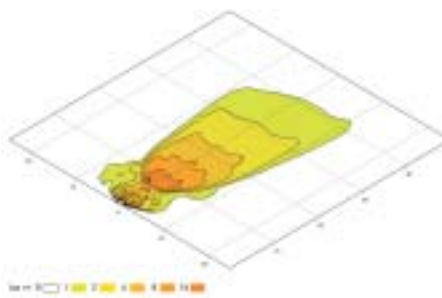
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**Picador H3**

Close-range

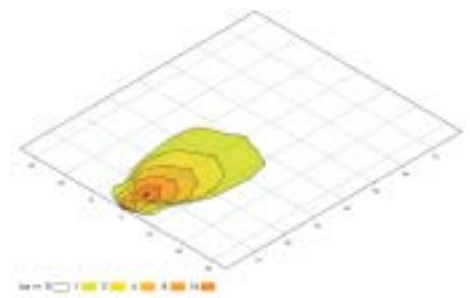
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**Matador H3**

Close-range

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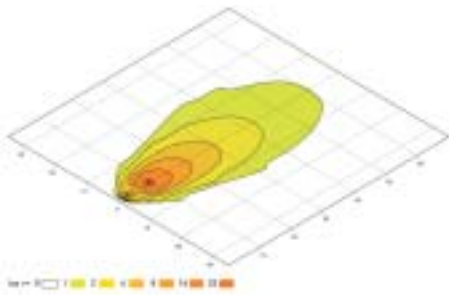


**Master H3**

Close-range

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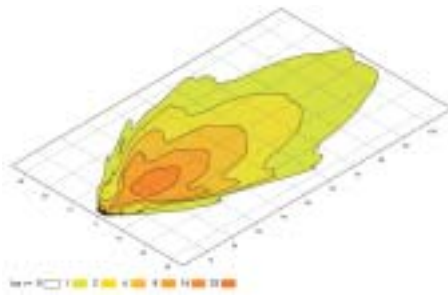




**Double Beam H3**

Close-range

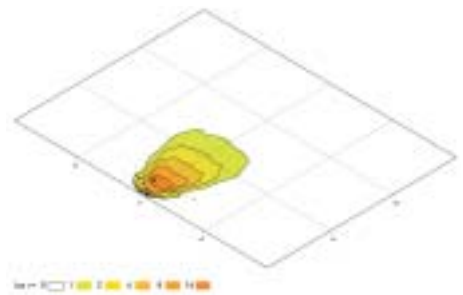
→ Page 65



**Double Beam H3**

Terrain

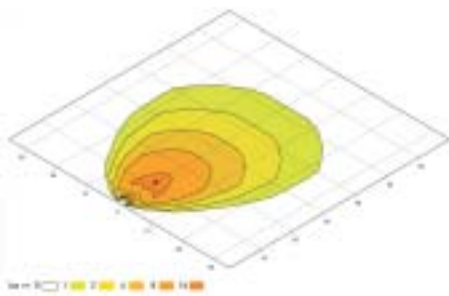
→ Page 65



**Eco 21**

Close-range

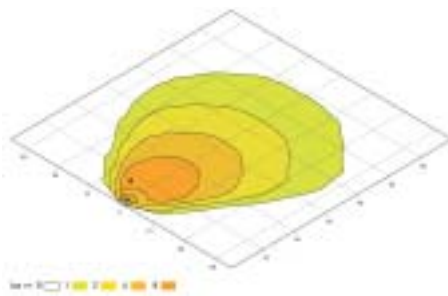
→ Page 66



**Ultra Beam H9**

Terrain

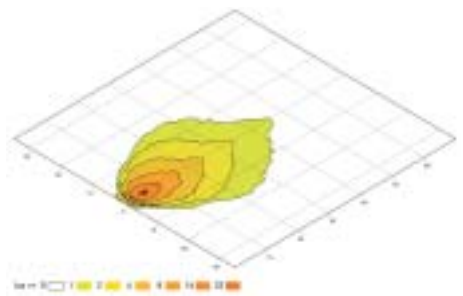
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**Oval 100 H9**

Terrain

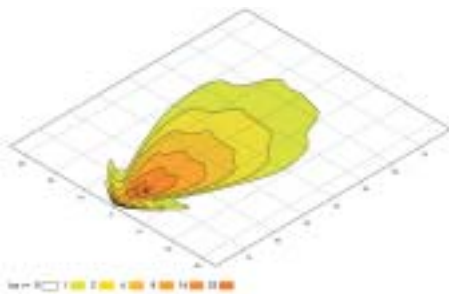
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**Oval 90 HB3**

Close-range

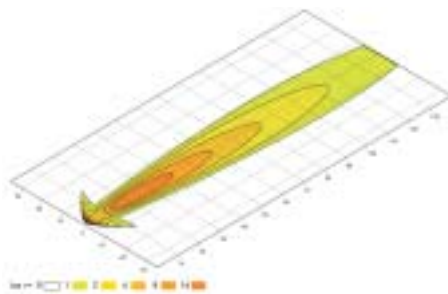
→ Page 69



**Module 70 H9**

Close-range

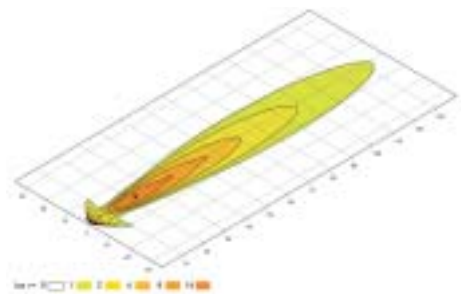
→ Page 70



**Module 70 H9**

Wide

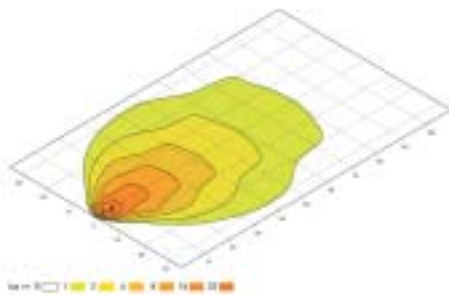
→ Page 70



**Module 70 H9 / FF50 H7 "blue"**

Wide

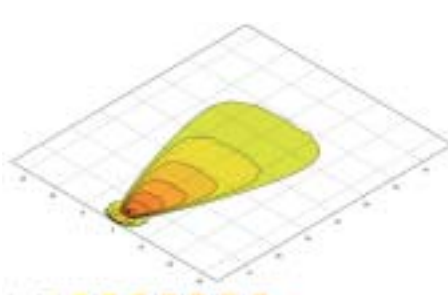
→ Page 71



**Ultra Beam X-Powerpack D1S**

Close-range

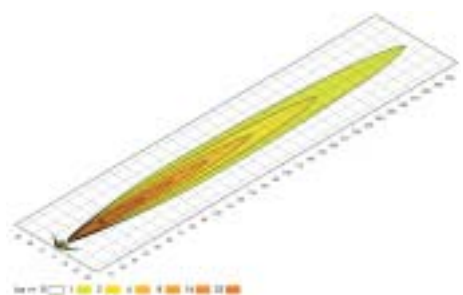
→ Page 72



**PowerXen D1S**

Close-range

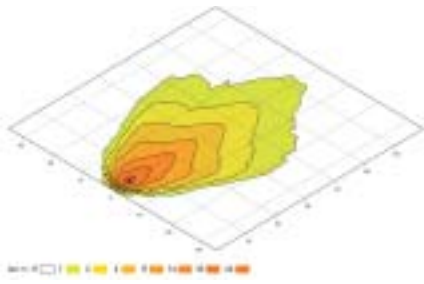
→ Page 73



**PowerXen D1S**

Wide

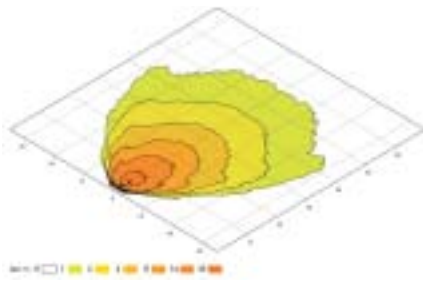
→ Page 73



**Oval 90 X-Powerpack D1S**

Close-range

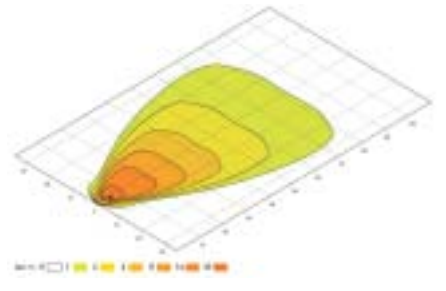
→ Page 74



**Oval 100 X-Powerpack D1S**

Close-range

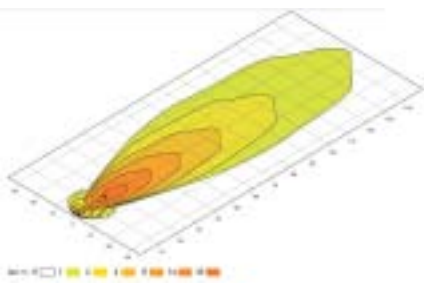
→ Page 75



**AS200 D1S**

Close-range

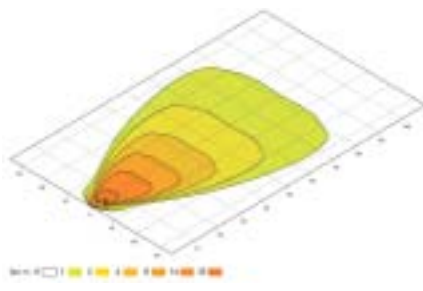
→ Page 76/77



**AS200 D1S**

Wide

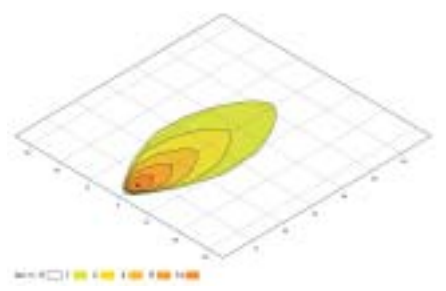
→ Page 76/77



**AS300 D1S / AS400 D1S**

Close-range

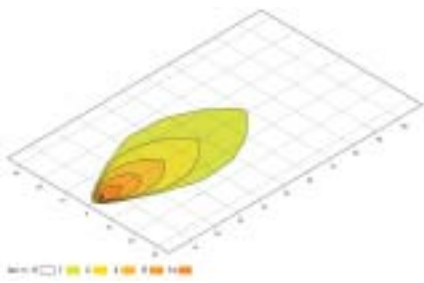
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**Power Beam 1000**

Close-range

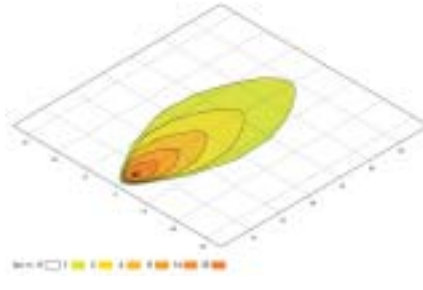
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**Power Beam 1500**

Close-range

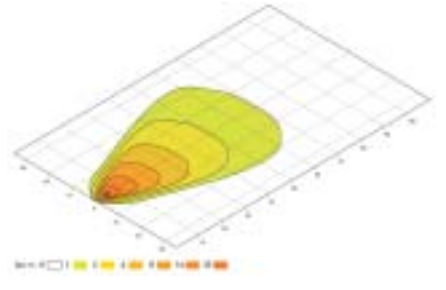
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**Power Beam 1500**

Wide

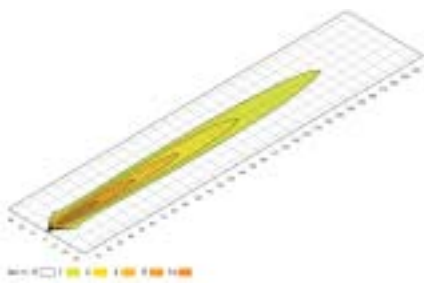
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**Power Beam 2000**

Close-range

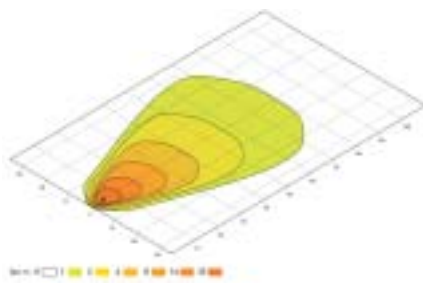
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**Power Beam 2000**

Langtrækkende

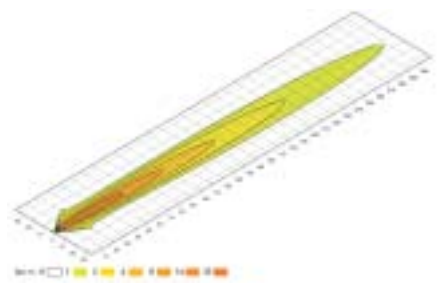
→ Side 82



**Power Beam 3000**

Nærzone

→ Side 83



**Power Beam 3000**

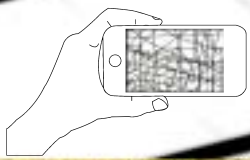
Langtrækkende

→ Side 83

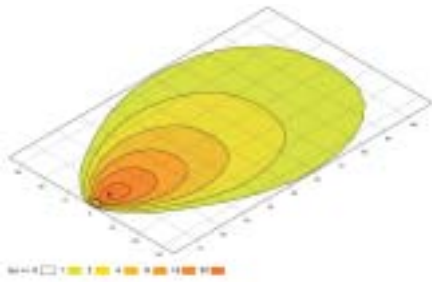








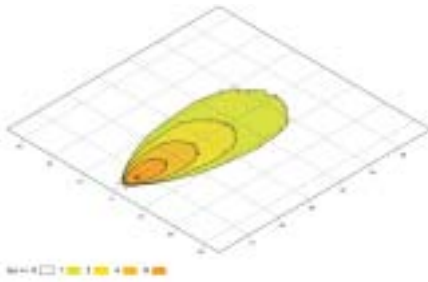




**Power Beam 5000**

Close-range

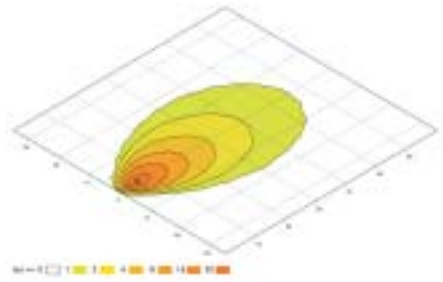
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**Module 70 LED Generation III**

Close-range

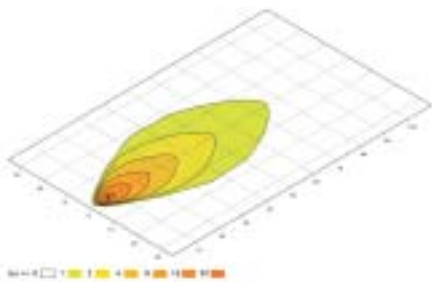
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**Oval 90 LED**

Close-range

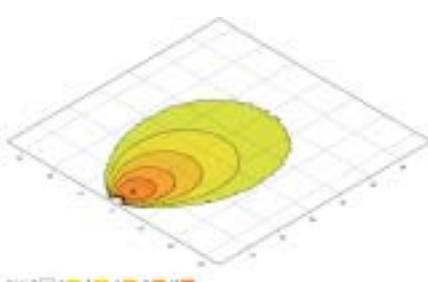
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**Oval 90 LED**

Wide

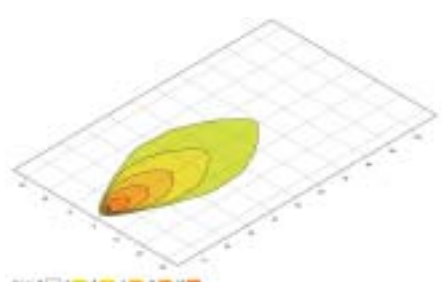
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**Oval 100 LED**

Close-range

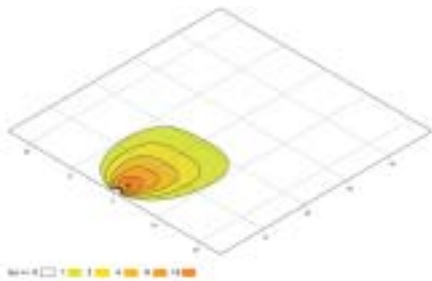
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**Oval 100 LED**

Wide

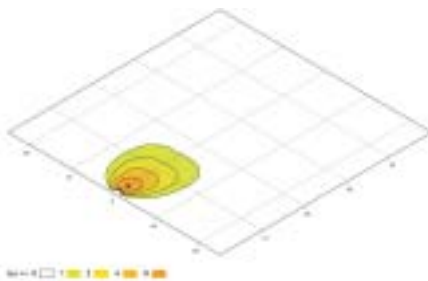
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**Flat Beam 1000**

Close-range

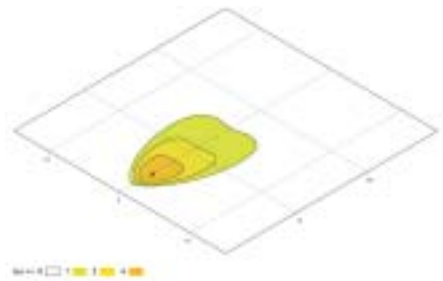
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**Flat Beam 500**

Close-range

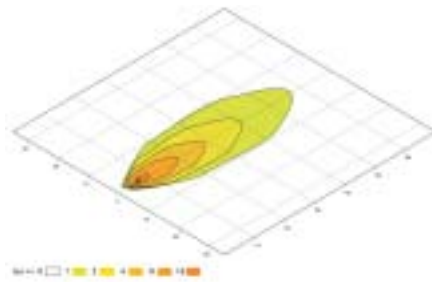
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**ETL 250**

Close-range

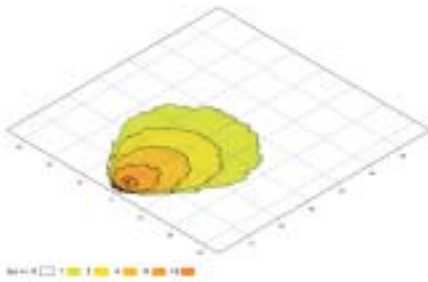
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**Mega Beam LED Generation III**

Close-range

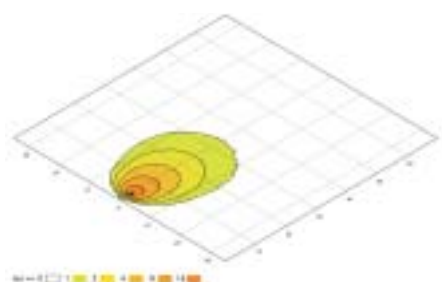
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**Ultra Beam H3 reversing spotlight**

Close-range

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**Power Beam 1000 reversing spotlight**

Close-range

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**HELLA KGaA Hueck & Co.**

Kunden-Service-Center  
Rixbecker Straße 75  
59552 Lippstadt /Germany  
Tel.: 0180-5-250001 (0,14 €/Min. aus dem deutschen Festnetz)  
Fax: 0180-2-250001 (0,06 € je Verbindung)  
[www.hella.com](http://www.hella.com)

**HELLA Fahrzeugteile Austria GmbH**

Target Group Land-, Baumaschinen  
und Spezialfahrzeuge  
Handelskai 94-96  
A-1200 Wien  
Tel. +43 (0) 1 606 89 20  
Fax +43 (0) 1 606 89 20-1291  
E-Mail: [info-ag-ce@hella.at](mailto:info-ag-ce@hella.at)  
[www.hella.com/agro](http://www.hella.com/agro)

**HELLA Limited**

Wildmere Industrial Estate  
Banbury, Oxon OX16 3JU  
Tel.: (01295) 225600  
Fax: 0800 7832571  
E-mail: [hella.sales@hella.com](mailto:hella.sales@hella.com)  
Website: [www.hella.co.uk](http://www.hella.co.uk)

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922 999 133-041 SCH/09.12/2.2  
Printed in Germany