

# OSRAM LEDriving® working lights PROFESSIONAL SERIES PX

**Product Presentation** 

PK | AM EM MC PSM | OSRAM GmbH 12/2022

# Agenda

- 1. Product Introduction
- 2. Product Details
- 3. Application Examples
- 4. PX Matrix System
- 5. Supporting Material
- 6. Product Quality
- 7. Product Portfolio
- 8. Follow us on Social Media
- 9. Thank you



## **Product Introduction**



### OSRAM LEDriving® working lights PROFESSIONAL SERIES PX



### Light is professional

With the OSRAM LEDriving® Professional Series PX working lights portfolio, it is now possible to find exactly the right lighting for a wide range of special professional tasks and applications. The 16 working lights in total score points with maximum optical efficiency, effectiveness and homogeneous light distribution. The modular series focuses on the most important aspects of worklight use: Illumination, performance, quality, shape, durability, functionality, and thus can also result in increased safety at work for you and others. The optimal factors can be selected and prioritized for each corresponding application; thus, with these high-performance lights, a complete vehicle-specific lighting set-up can be put together, that this is perfectly applicable to the respective individual requirements and needs.

### Light is individual

The working lights are suitable for 12V and 24V vehicles and a total of four beam patterns - Flood, Spot, Wide and Ultra-Wide - and four power levels - 1500lm, 2500lm, 3500lm and 4500lm - are available for each light. In addition, they can be mounted in three different ways: Direct mounting, flexible standard mounting and heavy-duty mounting. Additionally, OSRAM has developed specially designed mounting kits and a cable with DT-connector. Simply assemble, adapt, combine and, if required, easily interchange. For different requirement profiles and multivariant use. At work, whether on- or off-road, this completely new concept of the so-called matrix portfolio impresses with its powerful performance and an exceptionally long service life.

### Light is exceptional

Versatile in use, it defies numerous environmental influences, and, thanks to high-quality materials, it is robust and resistant and specially developed for tough everyday working conditions. All PX-Series working lights have been tested in an environmental simulation laboratory certified according to DIN EN ISO/IEC 17025 for extreme external influences such as water, dust, shocks, hot and cold temperatures, permanent vibrations and shocks and validated according to the highest IP & IK protection classes IP6K8 & IP6K9K. The Professional Series is designed to meet the highest OE standards and requirements of the automotive industry.

Furthermore, the complete PX-Series is "Made in Europe", and OSRAM provides a 5-year guarantee on these products<sup>1)2)</sup>



Additional working lights without ECE approval for use as work lights are approved for use on any vehicle according to German Road Traffic Licensing Regulations (StVZO) §52 (7). However, they must not be used switched on while driving. In addition, individual special regulations, and laws of countries outside Germany must be observed.

<sup>2)</sup> For precise conditions refer to: www.osram.com/am-guarantee

# **Product Introduction**

### OSRAM LEDriving® working lights PROFESSIONAL SERIES PX | Areas of Application

















CONSTRUCTION

**AGRICULTURE** 

**FORESTRY** 

MATERIAL HANDLING

am osram



### OSRAM LEDriving® working lights PROFESSIONAL SERIES PX ULTRA WIDE BEAM











**3500 Lumen** 

**2500 Lumen 1500 Lumen** 

### **Features**

- ULTRA WIDE BEAM = Beam pattern for particularly large-area and especially wide light distribution
- Four power levels can be selected for each beam pattern: 1500lm, 2500lm, 3500lm & 4500lm
- In combination coverage of near, medium and far field illumination
- Brilliantly white light with 6000K
- Highest protection classes: IP6K8 & IP6K9K
- Overheat & polarity protection
- CISPR25 Class 3/5, Certification: ECE R10
- Aluminum die-cast housing with special black coating (cataphoretic painting)
- Three mounting possibilities: standard/flexible, heavy duty and direct mounting
- For 12V & 24V vehicles
- Efficient reflector lens design with powerful OSRAM LEDs
- Compact and robust shatterproof polycarbonate lens
- 5-year OSRAM guarantee<sup>1)</sup>, Made in Europe

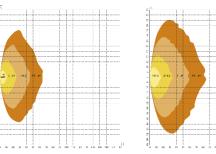
### **Benefits**

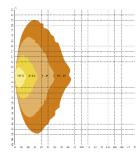
- Low portfolio complexity (one design approach) and high application diversity through matrix approach
- Perfectly tailored to the respective individual requirements and needs for multi-variant use
- Superior illumination, performance, quality, shape, durability, functionality
- Maximum of optical efficiency, effectiveness and homogeneous light distribution
- Class 3/5 is the most stringent requirement of automotive EMI testing
- Robust and resistant and specially developed for tough everyday working conditions
- Powerful performance and exceptionally long service life
- Increased safety through improved illumination at work for you and others
- Designed to meet the highest OE standards and requirements of the automotive industry

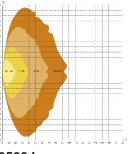
### **Areas of Application**

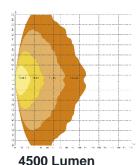
- Truck
- Transporter
- Agricultural vehicles
- Commercial vehicles
- Construction vehicles
- Off-road vehicles
- Etc.

### **Performance Levels**









**2500 Lumen** 

**3500 Lumen** 





### OSRAM LEDriving® working lights PROFESSIONAL SERIES PX WIDE BEAM











3500 Lumen

2500 Lumen 1500 Lumen

### **Features**

- WIDE BEAM = Beam pattern for a large-area and wide light distribution
- Four power levels can be selected for each beam pattern: 1500lm, 2500lm, 3500lm & 4500lm
- In combination coverage of near, medium and far field illumination
- Brilliantly white light with 6000K
- Highest protection classes: IP6K8 & IP6K9K
- Overheat & polarity protection
- CISPR25 Class 3/5, Certification: ECE R10
- Aluminum die-cast housing with special black coating (cataphoretic painting)
- Three mounting possibilities: standard/flexible, heavy duty and direct mounting
- For 12V & 24V vehicles
- Efficient reflector lens design with powerful OSRAM LEDs
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- 5-year OSRAM guarantee<sup>1)</sup> Made in Europe

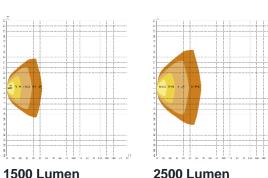
### **Benefits**

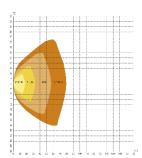
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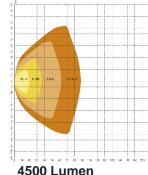
### **Areas of Application**

- Truck
- Transporter
- Agricultural vehicles
- Commercial vehicles
- Construction vehicles
- Off-road vehicles
- Etc.

### **Performance Levels**











### OSRAM LEDriving® working lights PROFESSIONAL SERIES PX FLOOD BEAM











3500 Lumen 2500 Lumen

1500 Lumen

### **Features**

- FLOOD BEAM = Beam pattern for a wide and broad distribution of high beam light
- Four power levels can be selected for each beam pattern: 1500lm, 2500lm, 3500lm & 4500lm
- In combination coverage of near, medium and far field illumination
- Brilliantly white light with 6000K
- Highest protection classes: IP6K8 & IP6K9K
- Overheat & polarity protection
- CISPR25 Class 3/5, Certification: ECE R10
- Aluminum die-cast housing with special black coating (cataphoretic painting)
- Three mounting possibilities: standard/flexible, heavy duty and direct mounting
- For 12V & 24V vehicles
- Efficient reflector lens design with powerful OSRAM LEDs
- Compact and robust shatterproof polycarbonate lens
- 5-year OSRAM guarantee<sup>1)</sup> Made in Europe

### **Benefits**

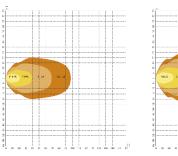
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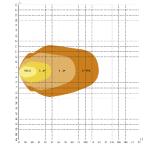


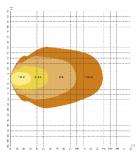
### **Areas of Application**

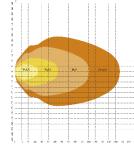
- Truck
- Transporter
- Agricultural vehicles
- Commercial vehicles
- Construction vehicles
- Off-road vehicles
- Etc.

### **Performance Levels**









**2500 Lumen** 

3500 Lumen

4500 Lumen





### OSRAM LEDriving® working lights PROFESSIONAL SERIES PX SPOT BEAM











**3500 Lumen 2500 Lumen** 

**1500 Lumen** 

### **Features**

- **SPOT BEAM** = Beam pattern for particularly focused high beam distribution
- Four power levels can be selected for each beam pattern: **1500lm**, 2500lm, 3500lm & 4500lm
- In combination coverage of near, medium and far field illumination
- Brilliantly white light with 6000K
- Highest protection classes: IP6K8 & IP6K9K
- Overheat & polarity protection
- CISPR25 Class 3/5, Certification: ECE R10
- Aluminum die-cast housing with special black coating (cataphoretic painting)
- Three mounting possibilities: standard/flexible, heavy duty and direct mounting
- For 12V & 24V vehicles
- Efficient reflector lens design with powerful OSRAM LEDs
- Compact and robust shatterproof polycarbonate lens
- 5-year OSRAM guarantee<sup>1)</sup> Made in Europe

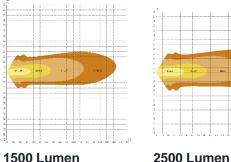
### **Benefits**

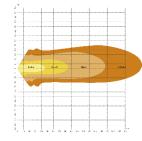
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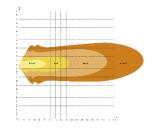
### **Areas of Application**

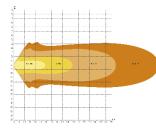
- Truck
- Transporter
- Agricultural vehicles
- Commercial vehicles
- Construction vehicles
- Off-road vehicles
- Etc.

### **Performance Levels**









**4500 Lumen** 



# **Produkt Overview**

### OSRAM LEDriving® working lights PROFESSIONAL SERIES PX

- Cube PX1500 Ultra Wide
- Cube PX2500 Ultra Wide
- Cube PX3500 Ultra Wide
- Cube PX4500 Ultra Wide



- Cube PX1500 Wide
- Cube PX2500 Wide
- Cube PX3500 Wide
- Cube PX4500 Wide

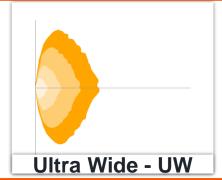


- Cube PX1500 Flood
- Cube PX2500 Flood
- Cube PX3500 Flood
- Cube PX4500 Flood

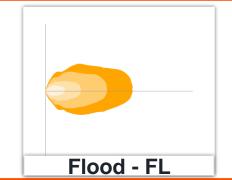


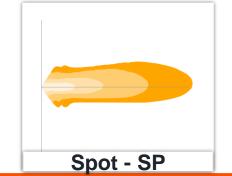
- Cube PX1500 Spot
- Cube PX2500 Spot
- Cube PX3500 Spot
- Cube PX4500 Spot





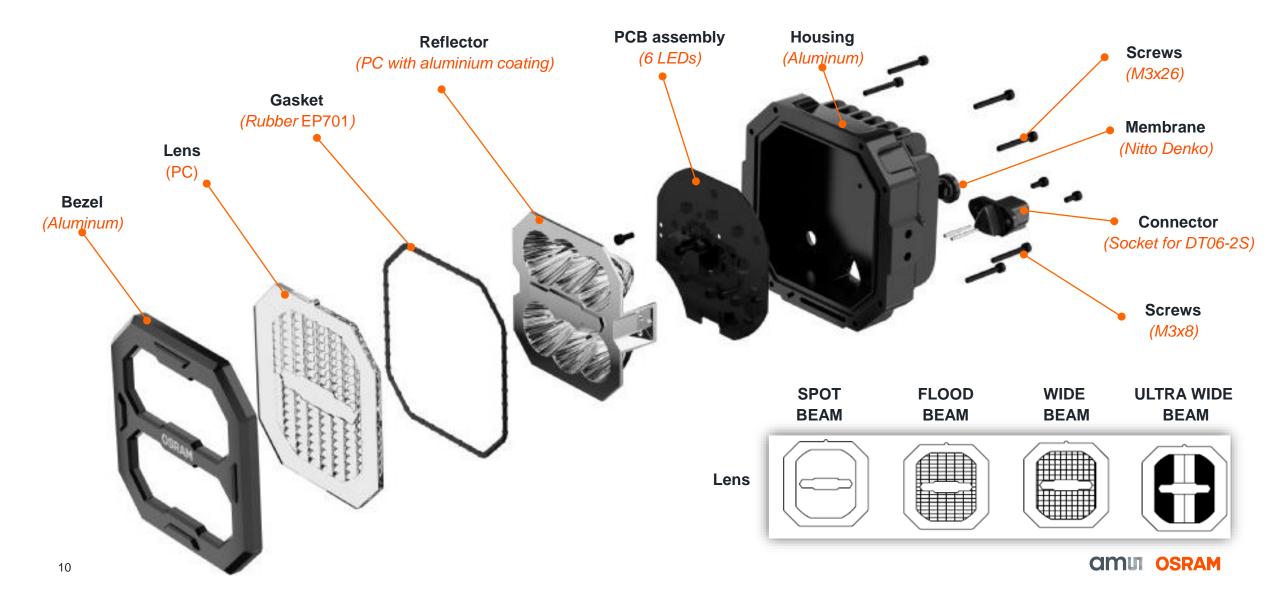






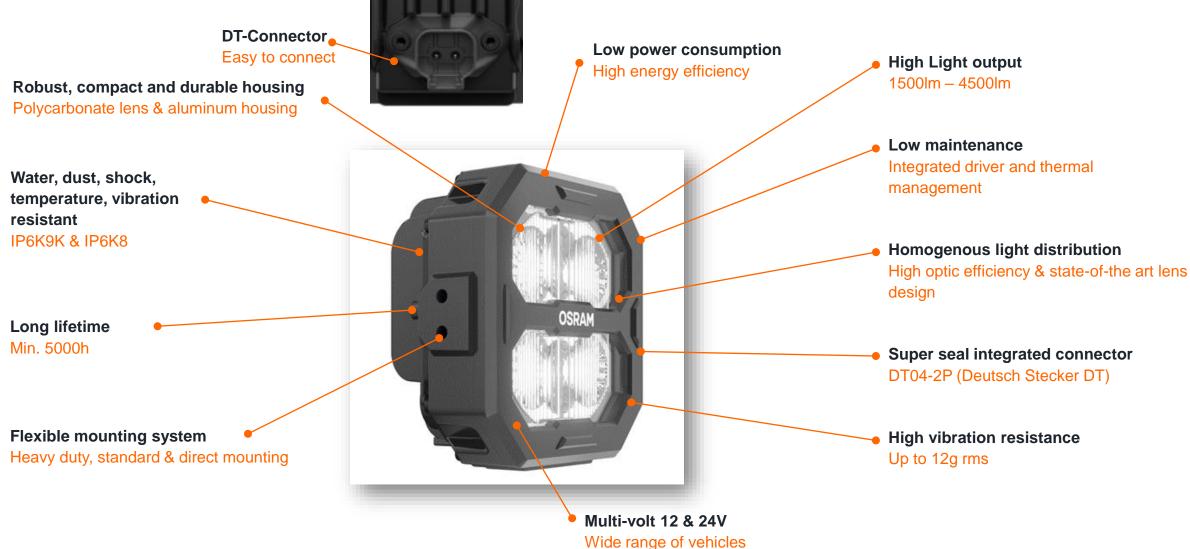


### OSRAM LEDriving® working lights PROFESSIONAL SERIES PX | Technical specifications



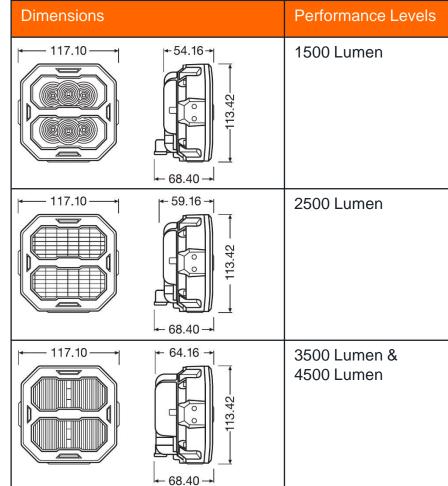


### OSRAM LEDriving® working lights PROFESSIONAL SERIES PX | Technical Specifications



### OSRAM LEDriving® working lights PROFESSIONAL SERIES PX





























### OSRAM LEDriving® working lights PROFESSIONAL SERIES PX/AX Accessories

### **Mounting Kit PX**





- Specially designed for easy, uncomplicated, and flexible assembly
- Mounting on the vehicle with only one central screw possible
- Vibration resistance: Min. 8g rms, robust and resistant
- Adjustable to the desired tilt angle by up to +/- 15 degrees
- 360° Flexible Mounting
- All components are made of stainless steel
- 5-year OSRAM guarantee<sup>1)</sup>









### **Heavy Duty Mounting Kit PX**



- Compatible with all OSRAM LEDriving<sup>®</sup> working lights
   Professional Series
- Especially developed for heavy duty vehicles
- Mounting on the vehicle with two screws possible
- Vibration resistance: Min. 15g rms,
- Particularly robust and resistant
- Adjustable to the desired tilt angle by up to +/- 30 degrees
- All components are made of stainless steel
- 5-year OSRAM guarantee<sup>1)</sup>









### **Connection Cable 300 DT AX**



- Compatible with all OSRAM LEDriving<sup>®</sup> working lights Professional Series and W&D Lights FX-and SX
- For 12V and 24V Vehicles
- DT Connector: DT06-2S
- Conductor material pure copper
- Length: 3m
- Easy installation
- To install appropriate lighting even on large vehicles
- 5-year OSRAM guarantee<sup>1)</sup>











# 

### OSRAM LEDriving® working lights PROFESSIONAL SERIES PX/AX Accessories

Direct Mounting	Mounting Kit PX Standard/Flexible Mounting	Heavy Duty Mounting Kit PX Heavy Duty Mounting	Connection Cable 300 DT AX
<ul> <li>Direct mounting</li> <li>Usage of existing screw hole's on side and bottom</li> </ul>	<ul> <li>Separately available</li> <li>Mounting with one central screw</li> </ul>	<ul><li>Separately available</li><li>Mounting with two screws</li></ul>	<ul><li>Separately available</li><li>DT-Connector</li></ul>
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### OSRAM LEDriving® working lights PROFESSIONAL SERIES PX/AX Accessories

### **Mounting Kit PX**









**Heavy Duty Mounting Kit PX** 





















Dimensions	Accessories			
+ 45 +   + 5E +   + 5E +	Mounting Kit PX			
123.25	Heavy Duty Mounting Kit PX			
3000	Connection Cable 300 DT AX			



# **Application Examples**



### **Excavator – Positions for Working Lights and required light distribution**



Mix and match Vary and combine



Ø up to 14 positions for working lights on an excavator

Light with multiple beam patterns and different performance levels needed!



# **Application Examples**



### **Tractor – Positions for Working Lights and required light distribution**



Mix and match Vary and combine



Ø up to **10 positions for working lights** on a tractor

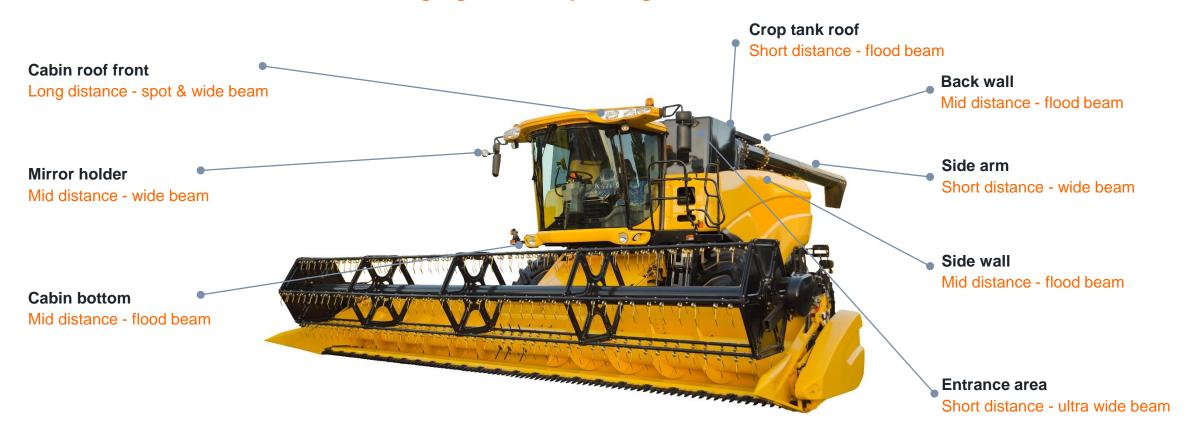
Light with multiple beam patterns and different performance levels needed!



# **Application Examples**



**Combine Harvester – Positions for Working Lights and required light distribution** 



Mix and match Vary and combine



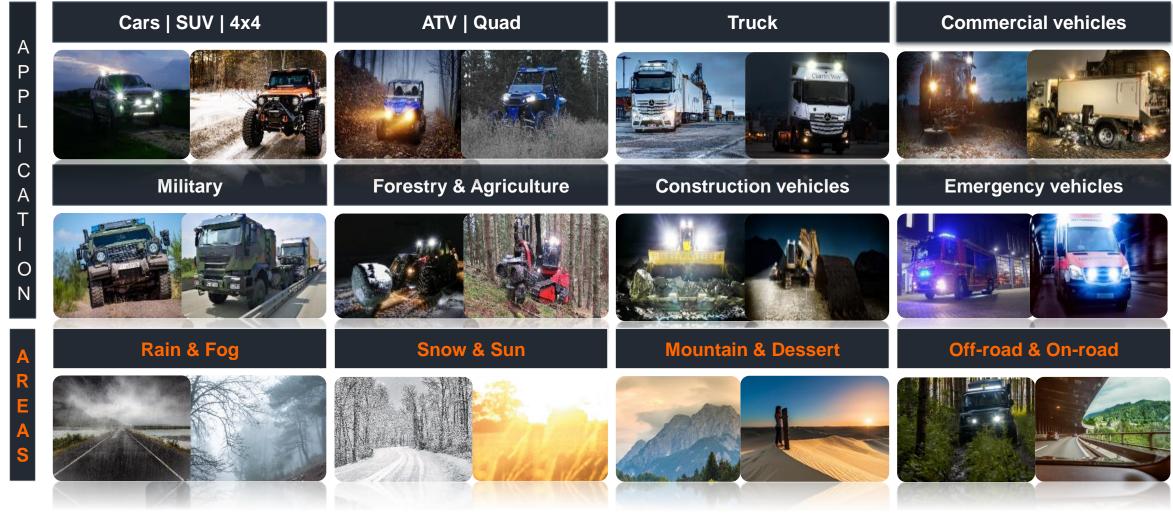
Ø up to 16 positions for working lights on a combine harvester

Light with multiple beam patterns and different performance levels needed!



# Areas of Application

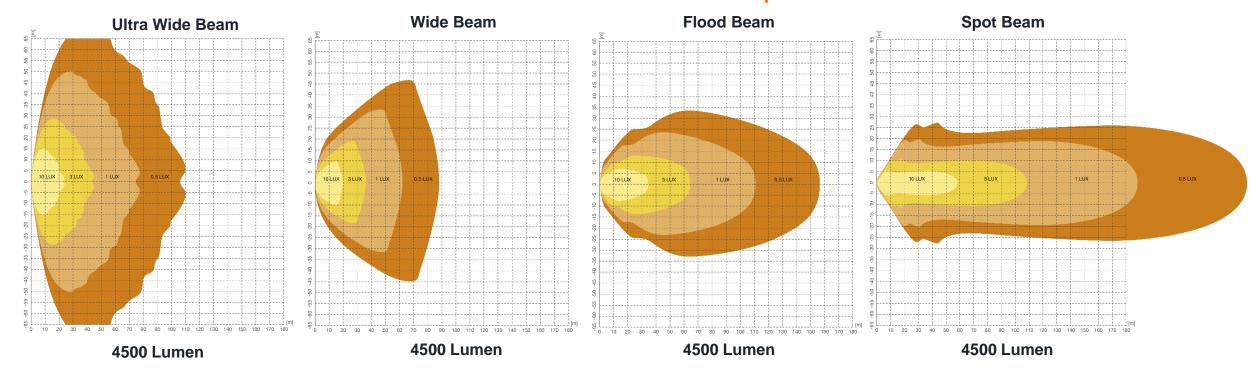
### OSRAM LEDriving® working lights PROFESSIONAL SERIES PX



# PX Matrix-Approach



### 4 Beam Pattern & 4 Performance Levels for illumination of the desired and optimal area





The Matrix portfolio can cover all possible lighting scenarios around the vehicle

In combination OSRAM LEDriving® working lights PROFESSIONAL SERIES can cover **near-**, **mid- and far-field illumination**. Thus, the headlights can be individually combined to suit the respective area of application and needs.

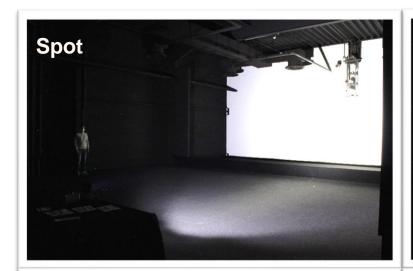
A length of up to **185m @1Lux** is covered (Spot Beam)
A width of up to **100m @1Lux** is covered (Ultra Wide Beam)



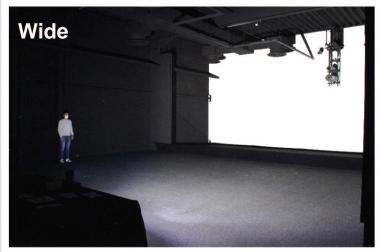
# PX Matrix-System

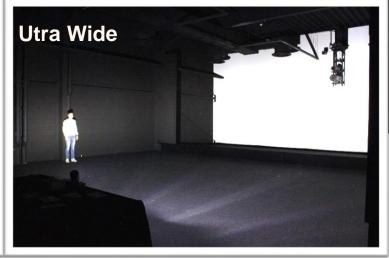
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### 4 Beam pattern - For illumination of the desired and optimal area











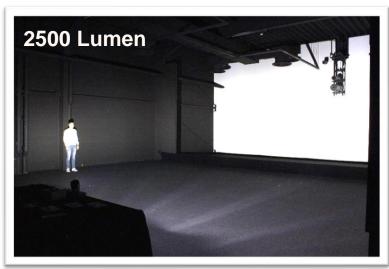
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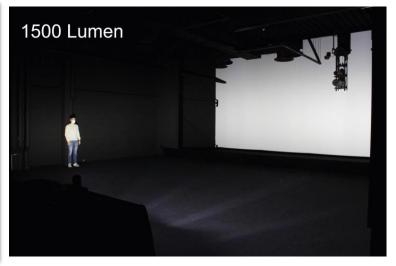
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# 4 Beam pattern - For illumination of the desired and optimal area







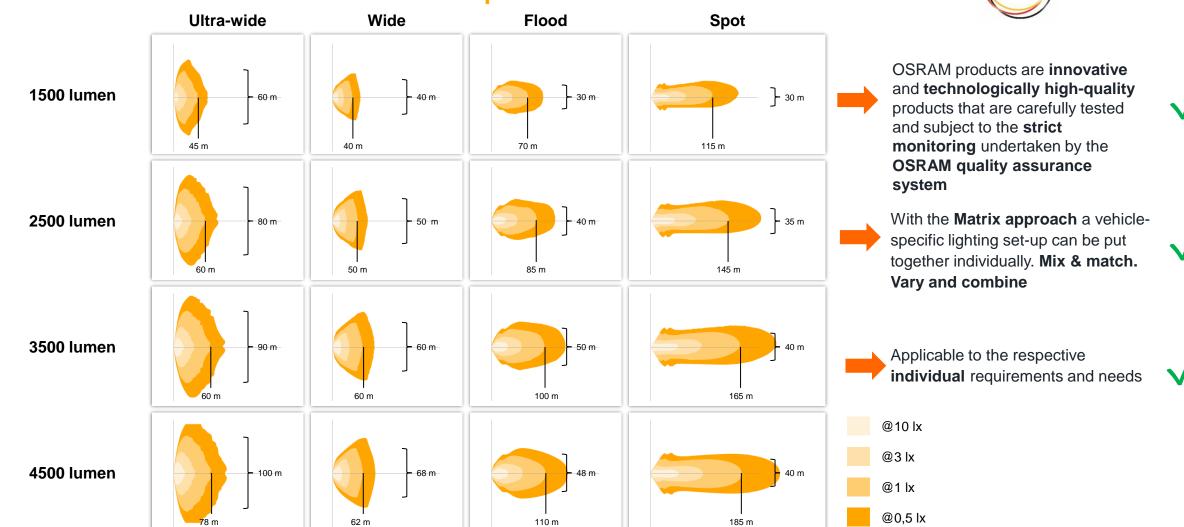


# PX Matrix-System

**OSRAM** QUALITY

### **Overview**

### **Beam pattern**



# PX Matrix-Approach

1x Flood Beam

### **Combination possibilities**

# Example 1: 2x different beam pattern (Spot and wide) Example 2: 2x same beam pattern in different direction

1x Ultra Wide Beam + 1x Flood Beam

1x Wide Beam

4x different beam pattern

in different directions

Example 3:

Matrix approach facilitates the combination of light beams



all beam pattern can be covered

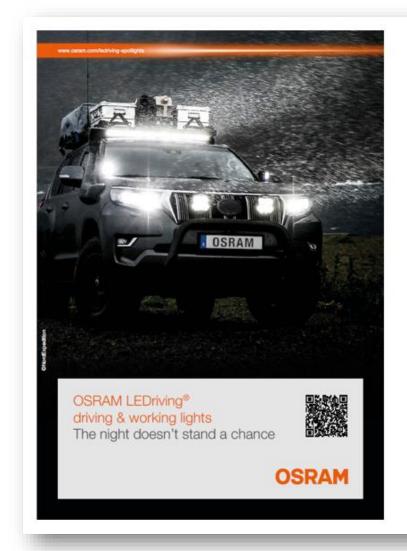
cost savings

**MATRIX Solution** 



# **Supporting Material**

OSRAM LEDriving® working lights: Catalogue & Light News







# **Product Quality**

### **OSRAM LEDriving® working lights**



Water resistance



**Heat resistance** 



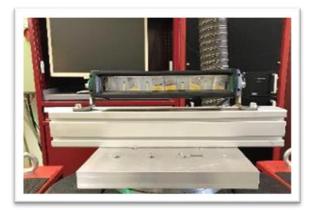
**Cold resistance** 



**Corrosion resistance** 



**Dust resistance** 



Vibration and shock resistance

Video quality test LEDriving® driving and working lights

osram-dam-14882376



# **Product Quality**

### **Quality is our expertise!**

Systematic quality assurance measures underpin the high-quality workmanship and functionality of our products.

Innovative technology and outstanding quality pay off for our customers.

With the accreditation of our laboratory, we can comply with global standards for measurement processes and to guarantee such standards. High-precision test results can only be achieved with the continuous monitoring of processes.



Expertise and competence in the field of environmental simulation according to DIN EN ISO/IEC 17025

Video Quality Laboratory

<u>Link</u>

**Central Laboratory** 

**Website Link** 



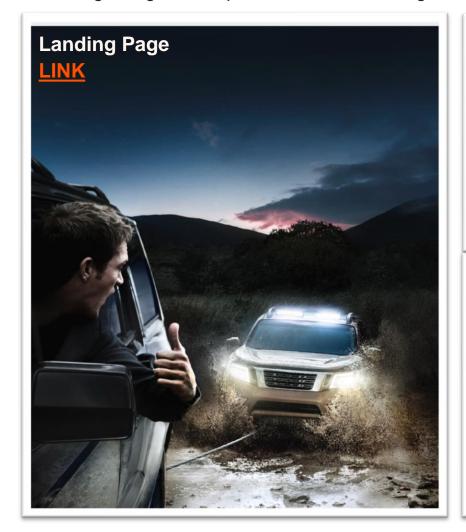


# **Product Portfolio**

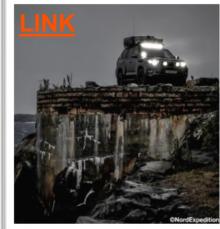


### Bringing light to life – OSRAM LEDriving® driving and working lights

For more information regarding the complete OSRAM LEDriving® driving & working lights portfolio please refer to our website











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# Thank you

Sensing is life

# am osram