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China.



MAKE THE WORLD BRIGHTER  
**ETHER PHOTOELECTRIC LIMITED**

Construction Machinery & Farm Machinery

2022 Catalogue



# catalogue

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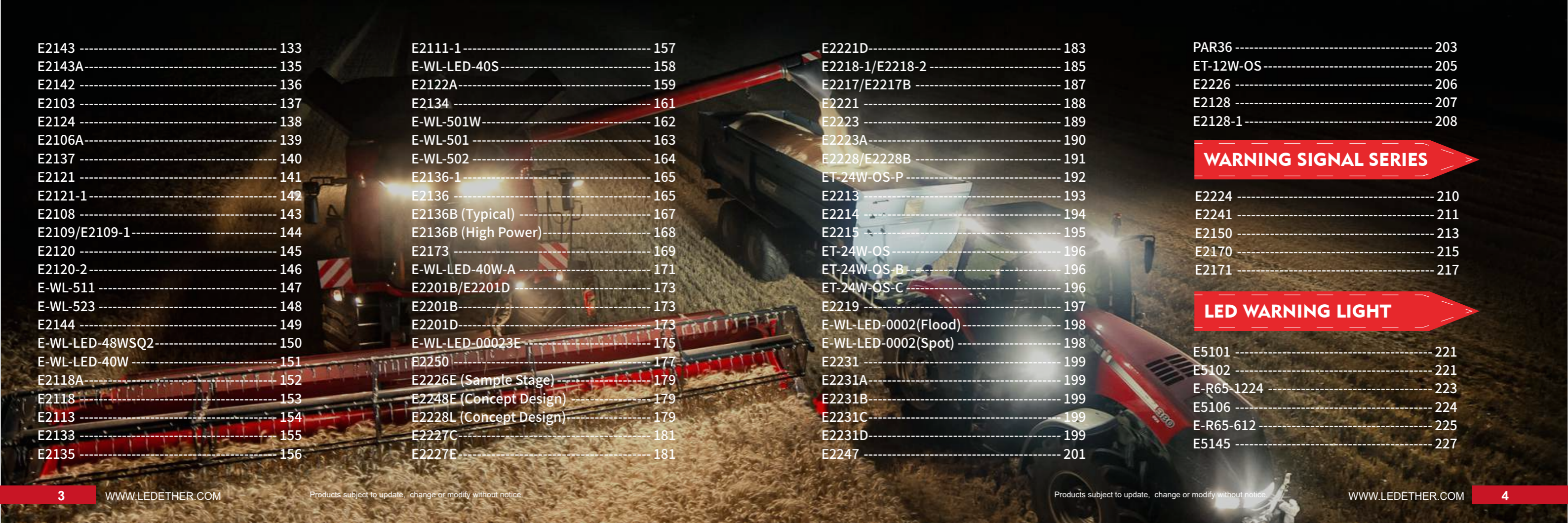
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Your **R&D** Department in China  
Tailored Special for YOU

Your Production **Plant** in China  
Exceptional services and support



ETHER Lab

## ETHER PROFILE

### About ETHER

ETHER was postulated substance that carries light in the universe. Ether Photoelectric Ltd has been committed to R&D, manufacturing and exporting state-of-the-art LED Automotive / Vehicle Lights & lighting solutions since 2005. Ether's product line covers automotive headlights, work lights, signal lights, warning lights, and light bars, etc, according to IATF16949:2016 system.

### ETHER R&D - APQP

Numerous successful ODM/OEM projects (including R&D, design and production) were achieved by ETHER for world famous brands from EU, US, Japan, and Australia on long term strategic partnership. APQP (Advanced Product Quality Planning) has been imported during R&D of each product. Thanks to Powerful R&D team of engineers respectively specialized in Electronics, Optics, Mechanics, production process, etc.

### ETHER Approvals & Standards

All of ETHER's products have been designed and manufactured according to the highest standards of automotive lighting industry, such as DOT, SAE, ECE, CCC, R10, CISPR 25 etc, based on the ISO 9001:2008. ETHER's 7" Headlight was the first to be DOT approved from Chinese mainland. DFMEA (Design Failure Mode and Effects Analysis) and PFMEA (Process Failure Mode and Effects Analysis) have been carried out during the R&D and production stages. So that both tailored design and mass production are satisfied for ETHER's strategic partners, distributors, agents, as well as OE vehicle manufacturers worldwide.

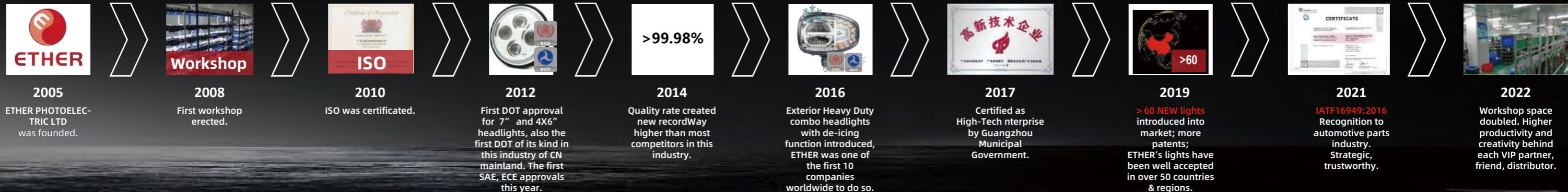
### ETHER Service & Support

Premium services and life-long support are provided in addition to contracted warranty, in terms of upgrading, new tooling, ODM support, etc. Ether products & services have been well accepted by customers from over 50 countries and regions, such as UK, Japan, FRANCE, GERMANY, AUSTRALIA, USA, etc.

### Market Strategy

The core of ETHER's market strategy is about Contract Spirit and Sharing, from which ETHER's high quality products, technologies and innovation are derived. For many ODM & OEM cases, many specific product models only sold via specific channels of specific partners, distributors, agents. This is simply what we mean by Contract Spirit. By sharing, ETHER's market achievements have been regularly shared with our partners, customers and employees. ETHER tends to provide butler-like services to our customers. ETHER is the ODM factory that you can trust from Chinese mainland.

# BRIEFING



# CERTIFICATIONS

ISO9001:2015



ISO

FMVSS 108 / SAE J588 / SAE J222 / SAE J583 / SAE F317 / SAE J914



DOT/SAE

E4 E13 E24



E-MARK



CE



UKCA



ETHER



IATF 16949:2016

Recognized in automotive parts supply chain  
**ETHER** - your trustworthy, strategic **OEM/ODM** partner

# High-Precision Optics State-Of-The-Art

## SMT Line



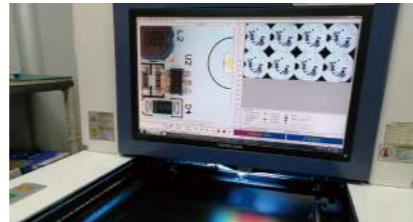
**FULLY AUTOMATIC PRINTER:**  
Fully automated solder paste printing, accurate to 0.02mm, scraping tin evenly.



**SMT (Pick and Place):**  
High speed SMT equipment, fully automated surface mounting and Welding.



**LEAD-FREE HOT AIR REFLOW:**  
8 temperature range of the upper and lower environmental protection reflow soldering, perfect temperature curve, better solder paste curing, high gloss



**AOI (AUTOMATIC OPTIC INSPECTION)**  
AOI automatic optic inspection machine could find out the bad solder joints quickly and ensure good quality of every piece PCB.

## Product Test



WATERPROOF TEST



INTEGRATING SPHERE TEST



SALT SPRAY TEST



DUST PROOF TEST



VIBRATION TEST



HIGH AND LOW TEMPERATURE  
ALTERNATING TEST



TRAFFIC AND AUTOMOTIVE  
PHOTOMETER SYSTEM



EMC TEST



## Why ETHER's LED headlights?

- Automotive grade LED packaged with PiG(Phosphor in Glass);
- Improved thermal stability is guaranteed for LEDs, electronic components, electroplated reflectors, etc;
- More durable performance against UV or high temperature;
- High level of EMC, CISPR 25 Class 4/ 5.



## Combination Heavy Duty / Snowplow LED headlights

ETHER's own Proprietary De-Icing solutions

## LED COMBINATION HEADLIGHT 6-IN-1



### PROJECT PHASE:

Concept Design
Development
Sample Stage
<b>Mass Production</b>



<b>Model:</b>	E7111
<b>Functions, Homologation</b>	
<b>Functions:</b>	High Beam / Low Beam / Turn Light / Side DI / Parking
<b>Homologation:</b>	R149 / R148 / R10; DOT FMVSS 108
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	High Beam: 4pcs*15W LED Low Beam: 45W Turn Light + Side DI: 30pcs*1W LEDs Parking: 12pcs*0.5W LEDs
<b>Color Temp.:</b>	5500-6500K 1700K (for turn light& side DI)
<b>Raw Power:</b>	High Beam: 60W (low beam on at high beam); Low Beam: 45W Turn Light + Side DI: 30W (30pcs*1w) Parking: 6W (12ps*0.5w)
<b>Effective Power:</b>	High Beam: 55W (4pcs*15)(low beam on at high beam) Low Beam: 45W Turn Light + Side DI: 25W Parking: 5W

Find your OE code, or part number, and replace OE halogen or update LED lighting with LED E7111 series.

ATLAS COPCO 3708110535	HAMM 1266985	HELLA 993975051	KOMATSU 42U0613100	OE MODUL120	VOLVO 11170059
ATLAS COPCO 3928789	HAMM 1266993	HELLA 993975057	KOMATSU 42U0613110	SPERRY NEW HOLLAND 368055A1	VOLVO 11170060
ATLAS COPCO 3928790	HELLA 1EA993975011	HELLA 993975091	KOMATSU 42W0633160	SPERRY NEW HOLLAND 368056A1	VOLVO 11881088
ATLAS COPCO 5350246825	HELLA 1EA993975021	HELLA 993975097	KRAMER 000328601	TEREX 3708110535	VOLVO 11882263
ATLAS COPCO 5350246826	HELLA 1EA993975027	HELLA 993975137	KRAMER 0003328701	TEREX 3928789	VOLVO 11882265
ATLAS COPCO 5350246882	HELLA 1EA993975028	HELLA 993975147	KRAMER 1000051956	TEREX 3928790	VOLVO 20002808249
ATLAS COPCO 5350246883	HELLA 1EA993975051	IVECO 00070524	KRAMER 1000051957	TEREX 5350246825	VOLVO 20002808251
ATLAS COPCO 5350246884	HELLA 1EA993975057	IVECO 00070525	LIEBHERR 607149208	TEREX 5350246826	VOLVO 2808249
ATLAS COPCO 5350246885	HELLA 1EA993975091	IVECO R00070524	LIEBHERR 607149308	TEREX 5350246882	VOLVO 2808250
ATLAS COPCO 535024690	HELLA 1EA993975097	IVECO R00070525	LIEBHERR 6905829	TEREX 5350246883	VOLVO 2808251
ATLAS COPCO 535024691	HELLA 1EA993975101	JOHN DEERE AZ54037	LIEBHERR 6905830	TEREX 5350246884	VOLVO 2808252
ATLAS COPCO 535024692	HELLA 993975011	JOHN DEERE AZ54038	LIEBHERR 7026612	TEREX 5350246885	VOLVO E11882263
ATLAS COPCO 535024693	HELLA 993975017	JOHN DEERE AZ55077	LIEBHERR 7026613	TEREX 535024690	VOLVO VOE11882263
CLAAS 05836800	HELLA 993975021	JOHN DEERE AZ56237	OE E46495	TEREX 535024691	VOLVO ZM2808249
CLAAS 05836810	HELLA 993975027	KOMATSU 42T0623150	OE E46505	TEREX 535024692	
CLAAS 05836820	HELLA 993975028	KOMATSU 42T0623160	OE E49471	TEREX 535024693	

<b>ETHER'S Patented De-icing Technology</b>	
<b>De-Icing Tech:</b>	Patented De-icing Modular
<b>De-icing Power:</b>	30W
<b>Control Mode:</b>	Automatic Temp. Sensor Switch
<b>Heating Temp.:</b>	Constant 60°C Lens
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 3
<b>Operating Voltage:</b>	10~30VDC
<b>Connector:</b>	6 pin DT
<b>Mechanical Features</b>	
<b>Size:</b>	209X183X119 mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>Lens Processing:</b>	Surface Hardened
<b>PC Brand:</b>	COVESTRO 2407
<b>Bracket Material:</b>	Stainless Steel
<b>IP Rate:</b>	IP66, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H

## Most **cost effective** combo headlight for OEM and After-market



- Rapid de-icing with constant **60°C lens**
- **Dark exterior design**
- **Deeper & wider** low beam illumination
- **Better light penetration with 3000K**
- even under heavy snow
- 100% compatible with OE halogen lights
- no hyper flashing, nor flickering issue
- LED failure detection on dashboard
- Your **most cost effective** heavy duty combo light from ETHER



VS

## LED COMBINATION HEADLIGHT 7-IN-1



### PROJECT PHASE:

- Concept Design
- Development
- Sample Stage
- Mass Production**

<b>Model</b>	<b>E7107 (Professional Version)</b>
<b>Functions, Homologation</b>	
<b>Functions:</b>	Low Beam, Corner Low Beam, High Beam, Turn Light, Side DI, Parking, De-icing ECE R112, R6, R7, R10
<b>Homologation</b>	DOT FMVSS108/SAE J914/SAE J588/ SAE J222
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	OSRAM OEM Vehicle Level LEDs
<b>Emitting color:</b>	White and Amber (Turn)
<b>Color Temp:</b>	5700K (White)
<b>Energy Consumption</b>	Low Beam 35W; High Beam 21W
<b>(tested):</b>	Corner Low Beam: 11W; Turn Light & Side DI: 2.7W; Parking: 0.5W
<b>Current Draw @ 12V:</b>	Low Beam 2.91A; High Beam 1.75A;
<b>(tested)</b>	Corner Low Beam: 0.92A Turn Light & Side DI: 0.225A Parking Light: 0.04A
<b>Effective Lumen:</b>	Low Beam: 1040LM (OSRAM LED) High Beam: 1160LM (5530 LED) Corner Low Beam: 560LM Turn Light & Side DI: 210LM; (Amber) Parking 24LM

### De-icing features

<b>De-icing Tech:</b>	ETHER's patented Replaceable Modular
<b>De-icing Power:</b>	60W
<b>Control Mode:</b>	Automatic temp. sensor switch

### Electromagnetic Features

<b>EMC Grade:</b>	CISPR 25 Class 5
<b>Operating Voltage:</b>	10~30VDC
<b>Connector:</b>	6 pin DT connector

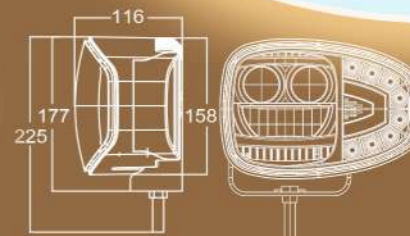
### Mechanical Features

<b>Size:</b>	230X158X116mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>Lens Process:</b>	Surface Hardened
<b>PC Brand:</b>	COVESTRO 2407
<b>Bracket Material:</b>	Tough 304 Stainless Steel
<b>Anti-Corrosion:</b>	ISO 9227 240H
<b>Vibration Level:</b>	15.3Grms
<b>IP Rate:</b>	IP66, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000h

**Fashionable dark Style & Glowing Position Light**  
**Zero interference, Zero noise;**  
Customize your EMC level:  
**CISPR 25 Class 5.**

Corner low beam  
no more dark corner  
Zero glare  
De-icing optional

**7 in 1 E7107**  
Professional performance  
De-icing optional



Turn on the dark CORNER  
if needed.

More daylight illumination;  
More productivity;  
Increased safety;  
0 glare.

No dark corner

Corner Low Beam **ON**

Dark corner

Corner Low Beam **OFF**



## LED COMBINATION HEADLIGHT 6-IN-1



### PROJECT PHASE:

- Concept Design
- Development
- Sample Stage
- Mass Production**

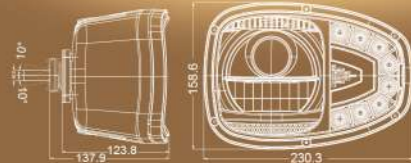
<b>Model:</b>	<b>E7106/E7106 (De-icing)</b>
<b>Functions, Homologation</b>	
<b>Functions:</b>	Low Beam, High Beam, Turn, Side DI, Parking De-icing ECE R112, R6, R7, R10
<b>Homologations:</b>	DOT FMVSS 108/SAE J914/ SAE J588/ SAE J222
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	OSRAM OEM VEHICLE LEDs
<b>Emitting Color:</b>	White Amber (Turn)
<b>Color Temp:</b>	White: 5700K-6500k Amber: 1600-1800K (Turn)
<b>Energy Consumption:</b>	Low Beam: 15W High Beam: 15W Turn Light + Side DI: 2W Parking: 0.4W
<b>Current Draw @ 12V:</b>	Low Beam: 1.25A; High Beam: 1.25A Turn Light + Side DI: 0.17A Parking: 0.03A

<b>ETHER'S Patented De-icing Technology</b>	
<b>De-icing Tech:</b>	Patented Replaceable Modular
<b>De-icing Power:</b>	50W
<b>Control Mode:</b>	Automatic temp. sensor switch
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 5
<b>Operating Voltage:</b>	10~30VDC
<b>Connector:</b>	6 pin DT /AMP /Cable (optional)
<b>Mechanical Features</b>	
<b>Size:</b>	232X164X115mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>Lens Processing:</b>	Surface Hardened
<b>PC Brand:</b>	COVESTRO 2407
<b>Bracket Material:</b>	Stainless Steel
<b>IP Rate:</b>	IP66, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H

**fashionable dark style & glowing position light**  
**Zero interference, Zero noise;**  
 Customize your EMC level:  
**CISPR 25 Class 5.**

Professional  
OEM design  
De-icing optional

**6 in 1 E7106**  
Professional performance



## LED COMBINATION HEADLIGHT 8-IN-1



### PROJECT PHASE:

Concept Design

Development

Sample Stage

Mass Production



<b>Model:</b>	E1320
<b>Functions, Homologation</b>	
<b>Functions:</b>	Low Beam; High Beam; Corner Low Beam; De-icing; Auxiliary Low Beam; Parking; Turn Light; Side DI; ECE R112, R6, R7, R10
<b>Homologations:</b>	DOT J1383/ J914/ J588 SAE J582/ J222

### Optical & Electric Features

<b>LED Type:</b>	OSRAM OEM Vehicle Level LEDs
<b>Emitting color:</b>	White and Amber (Turn)
<b>Color Temp:</b>	5700K (White)
<b>Energy Consumption</b>	High Beam: 24.5W Corner Low Beam: 10.5W Auxiliary Low Beam: 4.5W Parking: 0.5W Turn Light: 5W Side DI: 2.5W

<b>Current Draw @ 12V:</b>	Low Beam: 2.95A High Beam: 2.04A Corner Low Beam: 0.87A Auxiliary Low Beam: 0.375A Parking: 0.04A Turn Light: 0.417A Side DI: 0.208A
----------------------------	--

<b>Raw Lumen:</b>	High Beam: 5750LM Corner Low Beam: 1200LM Auxiliary Low Beam: 1550LM Parking: 187LM Turn Light: 540LM Side DI: 270LM
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<b>effective Lumen:</b>	Low Beam: 1008.6LM High Beam: 1196LM Corner Low Beam: 520.7LM Auxiliary Low Beam: 570LM Parking: 18.3LM Turn Light: 210LM Side DI: 104LM
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### ETHER'S Patented De-icing Technology

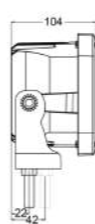
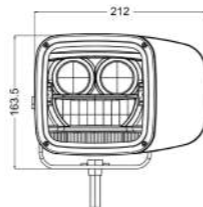
<b>De-icing Tech:</b>	Heating Glass
<b>De-icing Power:</b>	20W
<b>Control Mode:</b>	Temp. Sensor @ constant temp.
<b>Heating Temp.:</b>	Constant 45°C lens

### Electromagnetic Features

<b>EMC Grade:</b>	CISPR 25 Class 3
<b>Operating Voltage:</b>	10~30VDC
<b>Connector:</b>	6 pin DT connector

### Mechanical Features

<b>Size:</b>	212X163.5X104mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Tempered Glass
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H



# 8 Functions

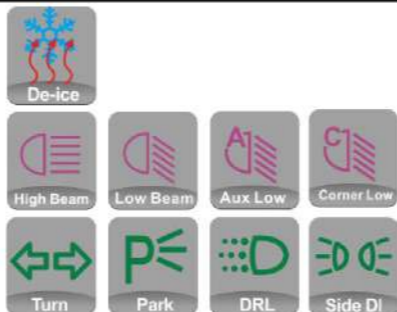
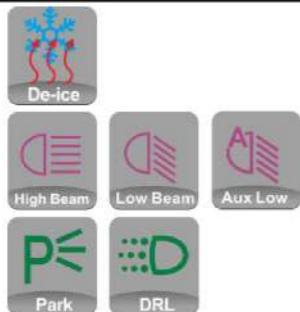
1. High Beam
2. Low Beam
3. Corner Low Beam
4. Auxiliary Low Beam
5. Parking Light (Position)
6. Turn Light (DI)
7. Side DI
8. De-Icing

Photo



Model options	E1320A	E1320B	E1320
De-Icing: Control Mode:	NONE	ETHER's Hot Glass Design Automatic temp. sensor switch	ETHER's Hot Glass Design Automatic temp. sensor switch

Functions  
**Your  
Choice  
?**



Road  
illumination



ATLAS COPCO 3708110535  
ATLAS COPCO 3928789  
ATLAS COPCO 3928790  
ATLAS COPCO 5350246825  
ATLAS COPCO 5350246826  
ATLAS COPCO 5350246882  
ATLAS COPCO 5350246883  
ATLAS COPCO 5350246884  
ATLAS COPCO 5350246885  
ATLAS COPCO 535024690  
ATLAS COPCO 535024691  
ATLAS COPCO 535024692  
ATLAS COPCO 535024693  
CLAAS 05836800  
CLAAS 05836810  
CLAAS 05836820  
HAMM 1266985  
HAMM 1266993  
HELLA 1EA993975011  
HELLA 1EA993975021  
HELLA 1EA993975027  
HELLA 1EA993975028  
HELLA 1EA993975051  
HELLA 1EA993975057  
HELLA 1EA993975091  
HELLA 1EA993975097  
HELLA 1EA993975101  
HELLA 993975011  
HELLA 993975017  
HELLA 993975021  
HELLA 993975027  
HELLA 993975028

HELLA 993975051  
HELLA 993975057  
HELLA 993975091  
HELLA 993975097  
HELLA 993975137  
HELLA 993975147  
IVECO 00070524  
IVECO 00070525  
IVECO R00070524  
IVECO R00070525  
JOHN DEERE AZ54037  
JOHN DEERE AZ54038  
JOHN DEERE AZ55077  
JOHN DEERE AZ56237  
KOMATSU 42T0623150  
KOMATSU 42T0623160  
KOMATSU 42U0613100  
KOMATSU 42U0613110  
KOMATSU 42W0633160  
KRAMER 0003328601  
KRAMER 0003328701  
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LIEBHERR 607149208  
LIEBHERR 607149308  
LIEBHERR 6905829  
LIEBHERR 6905830  
LIEBHERR 7026612  
LIEBHERR 7026613  
OE E46495  
OE E46505  
OE E49471

OE MODUL120  
SPERRY NEW HOLLAND 368055A1  
SPERRY NEW HOLLAND 368056A1  
TEREX 3708110535  
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VOLVO 11170059  
VOLVO 11170060  
VOLVO 11881088  
VOLVO 11882263  
VOLVO 11882265  
VOLVO 20002808249  
VOLVO 20002808251  
VOLVO 2808249  
VOLVO 2808250  
VOLVO 2808251  
VOLVO 2808252  
VOLVO E11882263  
VOLVO VOE11882263  
VOLVO ZM2808249

# Compatible with Originals



OE Halogen

Now LED E1320

Find your OE code, or part number,  
and replace with LED **E1320**.  
*Simply replace it.*

# 90MM LED HEADLIGHT



- PROJECT PHASE:**
- Concept Design
  - Development
  - Sample Stage
  - Mass Production**

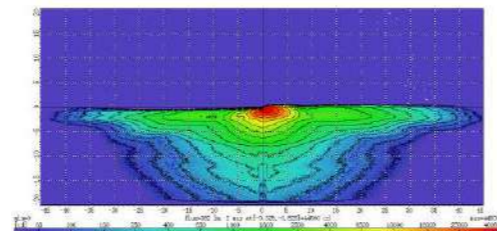


Sharp cut-off line.

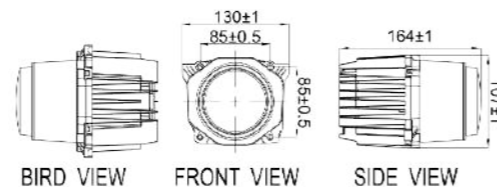
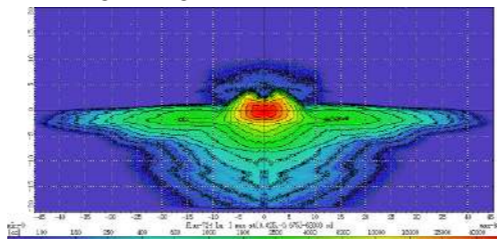


<b>Model:</b>	<b>E-DHL-90</b>
<b>Functions, Homologation</b>	
<b>Functions:</b>	Low Beam, High Beam
<b>Homologations:</b>	ECE R112, R10 DOT FMVSS 108,
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	OSRAM OEM Vehicle LEDs
<b>Color Temp:</b>	5700K
<b>Power:</b>	Low Beam: 14W High Beam: 20W
<b>Current Draw @ 12V:</b>	Low Beam: 1.16A; High Beam: 1.66A
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 4
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	HB4/9006 /AMP 2 Pin/ H4
<b>Mechanical Features</b>	
<b>Size:</b>	130X107X164mm
<b>Housing Material:</b>	Aluminum
<b>Lens Material:</b>	Anti-UV PC
<b>Lens Processing:</b>	Surface Hardened
<b>PC Brand:</b>	COVESTRO 2407
<b>IP Rate:</b>	IP66, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H

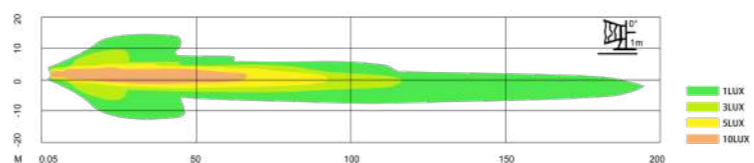
## Low beam light distribution



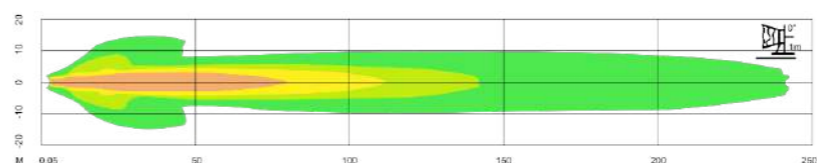
## Glare free high beam light distribution



## isolux E-DHL-90, Low beam, H.:1.0m, tilt: 0°, 1lux@140+m



## isolux E-DHL-90, High beam, H.:1.0m, tilt: 0°, 1lux@240+m



## Why Glare free high beam?

- 1.No glare to front vehicle.
- 2.Higher level of safety.
- 3.Better focus for driver
- 4.Better visibility of road side.

- 1.Sharp cut-off line.
- 2.legal in compliant with ECE R112, DOT FMVSS108
- 3.Daylight road illumination







<b>PROJECT PHASE:</b>
Concept Design
Development
Sample Stage
<b>Mass Production</b>

<b>Model:</b>	E1339
<b>Functions, Homologation</b>	
<b>Functions</b>	LED Headlight, Low Beam, DRL
<b>Homologation:</b>	ECE R112, R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	1 pcs 15W OEM Vehicle LED
<b>Emitting Color:</b>	White
<b>Color Temp:</b>	Low Beam: 6000K
<b>Raw Power:</b>	Low Beam: 15W
<b>Effective Power:</b>	Low Beam: 14W
<b>Current Draw@12V</b>	Low Beam: 1.17A
<b>Illumination:</b>	1 Lux@130+M
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 5
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	Open cable
<b>Mechanical Features</b>	
<b>Size:</b>	118X118X112.8mm
<b>Housing Material:</b>	Aluminum
<b>Lens Material</b>	Anti-UV PC
<b>Lens Processing:</b>	Surface Hardened
<b>PC Brand:</b>	COVESTRO 2407
<b>Mount:</b>	4 tabs
<b>IP Rate:</b>	IP66, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H

### 90MM LED HEADLIGHT



<b>Model:</b>	E1339-2
<b>Functions, Homologation</b>	
<b>Functions</b>	Low Beam only
<b>Homologation:</b>	ECE R112, R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	1 pcs 15W OEM Vehicle LED
<b>Emitting Color:</b>	White
<b>Color Temp:</b>	Low Beam: 6000K
<b>Raw Power:</b>	Low Beam: 15W
<b>Effective Power:</b>	Low Beam: 14W
<b>Current Draw@12V</b>	Low Beam: 1.17A
<b>Illumination:</b>	1 Lux@130+M
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 5
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	Open cable
<b>Mechanical Features</b>	
<b>Size:</b>	118X118X112.8mm
<b>Housing Material:</b>	Aluminum
<b>Lens Material</b>	Anti-UV PC
<b>Lens Processing:</b>	Surface Hardened
<b>PC Brand:</b>	COVESTRO 2407
<b>Mount:</b>	4 tabs
<b>IP Rate:</b>	IP66, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H



<b>Model:</b>	E1341
<b>Functions, Homologation</b>	
<b>Functions</b>	High Beam
<b>Homologation:</b>	ECE R112, R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	High Beam: 9 pcs 3W LEDs
<b>Emitting Color</b>	White
<b>Color Temp:</b>	5000K
<b>Effective Power:</b>	30W Effective
<b>Current Draw @12V</b>	2.5A Effective
<b>Illumination:</b>	1Lux@281m
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 4
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	Open cable
<b>Mechanical Features</b>	
<b>Size:</b>	118X118X112.8mm
<b>Housing Material:</b>	Aluminum
<b>Lens Material</b>	Anti-UV PC
<b>Lens Processing:</b>	Surface Hardened
<b>PC Brand:</b>	COVESTRO 2407
<b>Mount:</b>	4 tabs
<b>IP Rate:</b>	IP66, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H



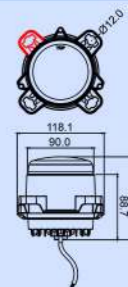
E1339



E1339-2



E1341



#### Reference OE Code:

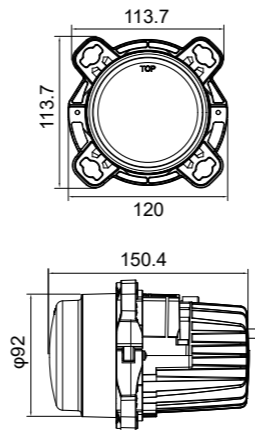
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### 90MM LED HEADLIGHT WITH LOAD RESISTORS



PROJECT PHASE:	
Concept Design	
Development	
Sample Stage	
Mass Production	

<b>Model:</b>	E1339L-A
<b>Functions, Homologation</b>	
<b>Functions</b>	Low Beam
<b>Homologation:</b>	R149,R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	1 pcs 45W OEM Vehicle LED
<b>Emitting Color:</b>	White
<b>Color Temp:</b>	5700-7000k
<b>Raw Power:</b>	40W
<b>Effective Power:</b>	45W
<b>Current Draw@12V</b>	Low Beam: 3.75A
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 3
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	H7+Cable
<b>Mechanical Features</b>	
<b>Size:</b>	113.7X113.7X150.4mm
<b>Housing Material:</b>	Aluminum
<b>Lens Material</b>	Anti-UV PC
<b>Lens Processing:</b>	Surface Hardened
<b>PC Brand:</b>	COVESTRO 2407
<b>Mount:</b>	4 tabs
<b>IP Rate:</b>	IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H

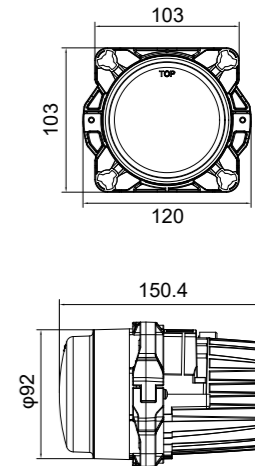


### 90MM LED HEADLIGHT WITH LOAD RESISTORS



PROJECT PHASE:	
Concept Design	
Development	
Sample Stage	
Mass Production	

<b>Model:</b>	E1339L-B
<b>Functions, Homologation</b>	
<b>Functions</b>	Low Beam
<b>Homologation:</b>	R149,R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	1 pcs 45W OEM Vehicle LED
<b>Emitting Color:</b>	White
<b>Color Temp:</b>	5700-7000k
<b>Raw Power:</b>	40W
<b>Effective Power:</b>	45W
<b>Current Draw@12V</b>	Low Beam: 3.75A
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 3
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	H7+Cable
<b>Mechanical Features</b>	
<b>Size:</b>	103X103X150.4mm
<b>Housing Material:</b>	Aluminum
<b>Lens Material</b>	Anti-UV PC
<b>Lens Processing:</b>	Surface Hardened
<b>PC Brand:</b>	COVESTRO 2407
<b>Mount:</b>	4 tabs
<b>IP Rate:</b>	IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H



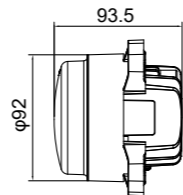
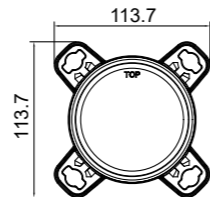
### 90MM LED HEADLIGHT WITH LOAD RESISTORS



**PROJECT PHASE:**

- Concept Design
- Development
- Sample Stage
- Mass Production

<b>Model:</b>	E1341LT-A
<b>Functions, Homologation</b>	
<b>Functions</b>	High Beam
<b>Homologation:</b>	R149,R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	9 pcs 6W OEM Vehicle LED
<b>Emitting Color:</b>	White
<b>Color Temp:</b>	5700-7000k
<b>Raw Power:</b>	54W
<b>Effective Power:</b>	45W
<b>Current Draw@12V</b>	Low Beam: 3.75A
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 3
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	9005+Cable
<b>Mechanical Features</b>	
<b>Size:</b>	113.7X113.7X93.5mm
<b>Housing Material:</b>	Aluminum
<b>Lens Material</b>	Anti-UV PC
<b>Lens Processing:</b>	Surface Hardened
<b>PC Brand:</b>	COVESTRO 2407
<b>Mount:</b>	4 tabs
<b>IP Rate:</b>	IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H



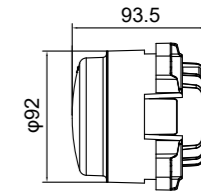
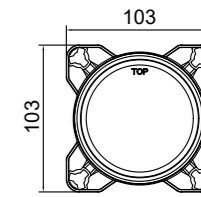
### 90MM LED HEADLIGHT WITH LOAD RESISTORS



**PROJECT PHASE:**

- Concept Design
- Development
- Sample Stage
- Mass Production

<b>Model:</b>	E1341LT-B
<b>Functions, Homologation</b>	
<b>Functions</b>	High Beam
<b>Homologation:</b>	R149,R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	9 pcs 6W OEM Vehicle LED
<b>Emitting Color:</b>	White
<b>Color Temp:</b>	5700-7000k
<b>Raw Power:</b>	54W
<b>Effective Power:</b>	45W
<b>Current Draw@12V</b>	Low Beam: 3.75A
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 3
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	9005+Cable
<b>Mechanical Features</b>	
<b>Size:</b>	103X103X93mm
<b>Housing Material:</b>	Aluminum
<b>Lens Material</b>	Anti-UV PC
<b>Lens Processing:</b>	Surface Hardened
<b>PC Brand:</b>	COVESTRO 2407
<b>Mount:</b>	4 tabs
<b>IP Rate:</b>	IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H



## 90MM LED HEADLIGHT WITH LOAD RESISTORS



**new**

### PROJECT PHASE:

- Concept Design
- Development
- Sample Stage
- Mass Production



<b>Model:</b>	E1339HBL
<b>Functions, Homologation</b>	
<b>Functions</b>	High Beam Low Beam
<b>Homologation:</b>	R149,R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	10 pcs LEDs
<b>Emitting Color:</b>	White
<b>Color Temp:</b>	5700-7000k
<b>Raw Power:</b>	High Beam:54W Low Beam:40W
<b>Effective Power:</b>	High Beam:45W Low Beam:45W
<b>Raw Lumens:</b>	High Beam:3375LM Low Beam:3795LM
<b>Effective Lumens:</b>	High Beam:2700LM Low Beam:1900LM
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 3
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	High Beam:9005+ Cable Low Beam:H7+ Cable
<b>Mechanical Features</b>	
<b>Size:</b>	115X108X150.4mm
<b>Housing Material:</b>	Aluminum
<b>Lens Material</b>	Anti-UV PC
<b>Lens Processing:</b>	Surface Hardened
<b>PC Brand:</b>	COVESTRO 2407
<b>Mount:</b>	4 tabs
<b>IP Rate:</b>	IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H

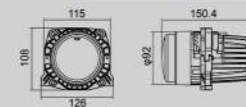
Products subject to update, change or modify without notice.

**ETHER** · IATF16949:2016 Certified  
Your strategic OEM/ODM auto lighting partner

## Gen. II. 90mm LED headlights, Load resistor built-in for all functions

Load resistors for HB/LB and **no hyper flash** issue, **OEM mounting** design of 90mm headlight **100% compatible** with original LED or halogen version.

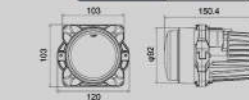
- LED failure detection guarantees **true dashboard signals**
- R112,R10** compliant and high level EMC
- High brightness LED technology, 1 pcs LED equal to 3X halogen headlights
- Zero radio interference; zero noise; zero camera signal interference



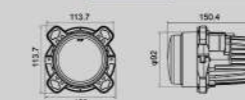
E1339HBL



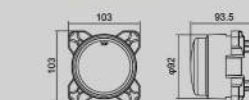
load resistor built-in no hyper flash



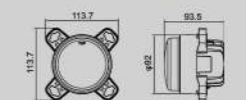
E1339L-B



E1339L-A



E1341LT-B



E1341LT-A

All-ceramic components passing 48K-50K hrs tests.

Lens surface hardening options: Not hardened, Hardened (2H)

Color rendering(CRI) options: CRI>70, CRI>80

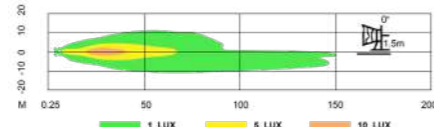
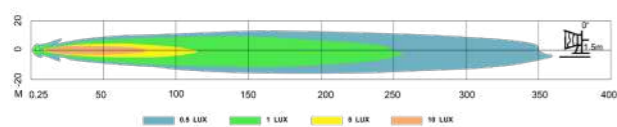


## MOST POWERFUL 90MM LED HEADLIGHT, 5 IN 1.



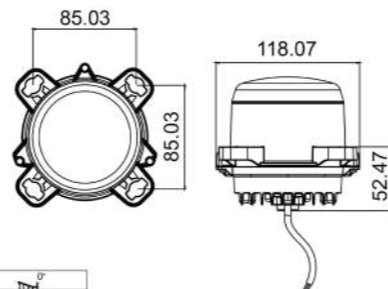
### PROJECT PHASE:

- Concept Design
- Development
- Sample Stage
- Mass Production



<b>Model:</b>	E1349
<b>Functions, Homologation</b>	
<b>Beam Pattern</b>	Low Beam, High Beam, DRL, Position, Turn (DI)
<b>Homologation:</b>	ECE R112, R87, R7, R6, R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	Low Beam: 1pcs 15W LED High Beam: 9pcs 3W LEDs P / DRL: 12pcs 2W LEDs Turn: 6pcs 3W LEDs
<b>Emitting Color:</b>	White Amber (Turn)
<b>Color Temp:</b>	White: 5700K-6500k Amber: 1600-1800K (Turn)
<b>Energy Consumption:</b>	Low Beam: 14.5W; High Beam: 31W; P: 1.1w /DRL: 7.7W Turn: 15.2W
<b>Current Draw @ 12V:</b>	Low Beam: 1.21A; High Beam: 2.58A; P: 0.092A /DRL: 0.64A Turn: 1.27A
<b>Illumination:</b>	Low Beam: lux@150m High Beam: lux@258m

<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 4
<b>Operating Voltage:</b>	10~30VDC
<b>Connector:</b>	6 pin Cable
<b>Mechanical Features</b>	
<b>Size:</b>	118X117X109mm
<b>Housing Material:</b>	Aluminum
<b>Lens Material:</b>	Anti-UV PC
<b>PC Material:</b>	COVESTRO 2407
<b>Lens Processing:</b>	Surface hardened
<b>Mount:</b>	4 tabs
<b>IP Rate:</b>	IP66, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H

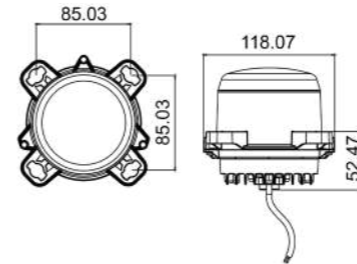


## 90MM LED HEADLIGHT



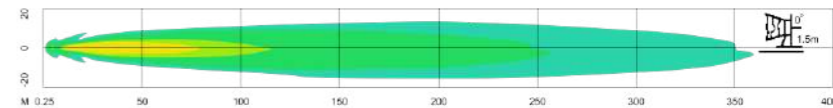
### PROJECT PHASE:

- Concept Design
- Development
- Sample Stage
- Mass Production

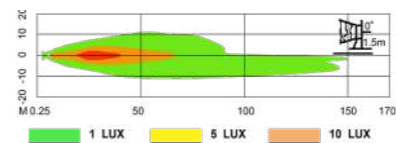


<b>Model:</b>	E1339HB
<b>Functions, Homologation</b>	
<b>Functions</b>	LED Headlight
<b>Beam Pattern:</b>	Low Beam, High Beam
<b>Homologation:</b>	ECE R112, R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	Low Beam: OSRAM 3chip LED High Beam: 9 pcs 4W LEDs
<b>Emitting Color:</b>	White
<b>Color Temp:</b>	Low Beam: 6000K High Beam: 5700K
<b>Raw Lumen:</b>	Low Beam: 1400LM High Beam: 5000LM
<b>Effective Lumen:</b>	Low Beam: 580LM High Beam: 2000LM
<b>Raw Power:</b>	Low Beam: 15W High Beam: 42W
<b>Effective Power:</b>	Low Beam: 15W High Beam: 30W Effective
<b>Current Draw@12V</b>	Low Beam: 1.25A High Beam: 2.5A Effective

<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 5
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	H4/ 9006/ AMP optional
<b>Mechanical Features</b>	
<b>Size:</b>	118X118X109mm
<b>Housing Material:</b>	Aluminum
<b>Lens Material</b>	Anti-UV PC
<b>Lens Processing:</b>	Surface Hardened
<b>PC Brand:</b>	COVESTRO 2407
<b>Mount:</b>	4 tabs
<b>IP Rate:</b>	IP66, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H



isolux E1339HB, Low beam, H.:1.5m, tilt: 0°, 1lux@140+m



E1339HB Low Beam



E1339HB High Beam

## 90MM LED HEADLIGHT



5 in 1 or 2 in 1 optional  
Load resistor built in for High / Low / Turn

PROJECT PHASE:	
Concept Design	
Development	
Sample Stage	
Mass Production	



<b>Model:</b>	E1339HB-D
<b>Functions, Homologation</b>	
<b>Functions</b>	High Beam, Low Beam, DRL, Position, Turn.
<b>Beam Pattern:</b>	Turn.
<b>Homologation:</b>	ECE R10,R148,R149
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	High beam: 9pcs*4w LEDs Low beam: 1pcs*40w LED Position/DRL 12pcs*2w LEDs Turn: 6pcs*3w LEDs
<b>Emitting Color:</b>	White / Amber for turn
<b>Color Temp:</b>	High /Low beam/Position/DRL: 5700-6500K Turn:1600-1800K
<b>Raw Lumen:</b>	High beam: 8275 LM Low beam: 4675 LM Position: 1800 LM DRL: 1800LM
<b>Effective Lumen:</b>	High beam: 1980 LM Low beam:1500 LM Position: 70.7LM Turn: 393.33LM
<b>Raw Power:</b>	High beam:9pcs*4W Low beam:1pcs*40W Position/DRL 12pcs*2W Turn:6pcs*3W
<b>Effective Power:</b>	High beam:45w (Low beam on@high beam) Low beam: 47w Position: 1.1w DRL: 7.7w Turn: 21w
<b>Current Draw@12V</b>	Low Beam: 1.25A High Beam: 2.5A

<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 4
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	cable
<b>Mechanical Features</b>	
<b>Size:</b>	108X126X141.5mm
<b>Housing Material:</b>	Aluminum
<b>Lens Material</b>	Anti-UV PC
<b>Lens Processing:</b>	Surface Hardened
<b>PC Brand:</b>	COVESTRO 2407
<b>Mount:</b>	4 tabs OEM mount
<b>IP Rate:</b>	IP66,IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H

1. **OEM mounting** design of 90mm headlight
2. **100% compatible** with original LED or halogen version.
3. Load resistors for HB/LB/DI and **no hyper flash** issue
4. LED failure detection guarantees **true dashboard signals**
5. **R148, R149, R10** compliant and high level EMC
6. High brightness LED technology, 1 pcs LED equal to 3X halogen headlights
7. High beam **1980LM**, low beam **1500LM**



## 90MM LED HEADLIGHT



### PROJECT PHASE:

Concept Design
<b>Development</b>
Sample Stage
Mass Production

<b>Model:</b>	E1339HB-E
<b>Functions, Homologation</b>	
<b>Functions</b>	High Beam, Low Beam
<b>Homologation:</b>	ECE R10,R149
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	High beam:9pcs*4w LEDs Low beam:1pcs*25w LED
<b>Emitting Color:</b>	White
<b>Color Temp:</b>	5700-6500K
<b>Raw Lumen:</b>	High beam: 3600 LM Low beam: 2400 LM
<b>Effective Lumen:</b>	High beam: 2300 LM Low beam: 750 LM
<b>Raw Power:</b>	High beam: 9pcs*4W Low beam: 1pcs*25W
<b>Effective Power:</b>	High beam: 30w Low beam: 20w
<b>Current Draw@12V</b>	Low Beam: 1.67A High Beam: 2.5A
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 5
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	cabl
<b>Mechanical Features</b>	
<b>Size:</b>	117.4X125X112.3mm
<b>Housing Material:</b>	Aluminum
<b>Lens Material</b>	Anti-UV PC
<b>Lens Processing:</b>	Surface Hardened
<b>PC Brand:</b>	COVESTRO 2407
<b>Mount:</b>	4 tabs OEM mount
<b>IP Rate:</b>	IP67,IP69K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H

Products subject to update, change or modify without notice.

Manufacturer	OE number	Manufacturer	OE number
FIAT	50525990	AGCO	63595600
CLAAS	21659480	AGCO	G334 900 160 020
DEUTZ-FAHR	2.8039.313.0	AGCO	V63595600
FENDT	G 260 900 020 020	HYMER	1640519
FENDT	G334.900.160.020	HYMER	1893941
FENDT	G334900160021	HYMER	1893941 H
HAKO	05104150000	HYMER	8015920
CATERPILLAR	539-0528	HYMER	X1603.15.164
KOMATSU	20G-06-51530	KRONE	200842950
LANDINI	6603320A1	AMAZONE	NA298
VALMET	63595600	LINDNER	3005785

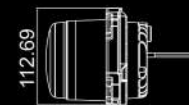
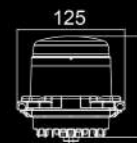
## Classic 90mm LED headlight

- Compatible with OEM halogen and LED
- Zero radio interference
- Zero noise
- Zero camera signal interference
- ECE R149, R10 compliant



E1339HB-E

Salt spray test **240H/480H** Lens surface hardened **(2H)** **CRI>80** **CRI<70**



## 90MM LED HEADLIGHT

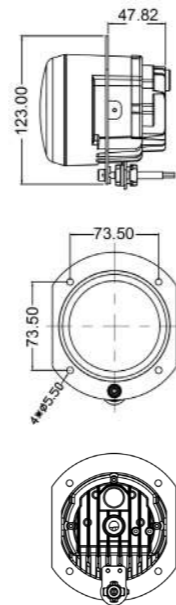
new



### PROJECT PHASE:

Concept Design
Development
Sample Stage
Mass Production

<b>Model:</b>	E1352
<b>Functions, Homologation</b>	
<b>Functions:</b>	Low Beam, High Beam
<b>Homologations:</b>	ECE R112, R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	15W OEM Vehicle LEDs LB 9 pcs 3W LED(s) HB
<b>Color Temp:</b>	6000K Low Beam 5700K High Beam
<b>Power:</b>	Low Beam: 15W High Beam: 30W
<b>Current Draw @ 12V:</b>	Low Beam: 1.25A High Beam: 2.5A
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 3
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	HB4/9006 /AMP 2 Pin
<b>Mechanical Features</b>	
<b>Size:</b>	103X123X108.26 mm
<b>Housing Material:</b>	Aluminum
<b>Lens Material:</b>	Anti-UV PC
<b>Lens Processing:</b>	Surface Hardened
<b>PC Brand:</b>	COVESTRO 2407
<b>IP Rate:</b>	IP66, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H



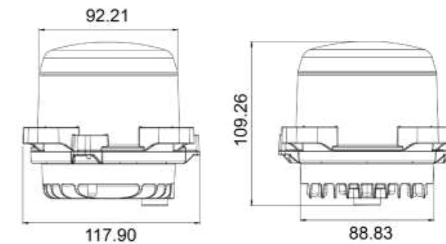
## 90MM LED FOG LIGHT



### PROJECT PHASE:

Concept Design
Development
Sample Stage
Mass Production

<b>Model:</b>	E3104
<b>Functions, Homologation</b>	
<b>Functions:</b>	Fog Beam, DRL
<b>Homologation:</b>	ECE R19, R87
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	OE Vehicle LEDs
<b>Color Temp:</b>	5700K
<b>Power:</b>	Fog Beam: 7W DRL: 5W
<b>Current Draw:</b>	Fog Beam: 0.58A @12V DRL: 0.42 @ 12A
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 3
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	Open cable
<b>Mechanical Features</b>	
<b>Size:</b>	117.9X117.9X109.26mm
<b>Housing Material:</b>	Aluminum
<b>Lens Material:</b>	Anti-UV PC
<b>Lens Processing:</b>	Surface Hardened
<b>PC Brand:</b>	COVESTRO 2407
<b>Mount:</b>	4 tabs
<b>IP Rate:</b>	IP66, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H

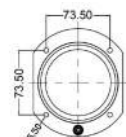
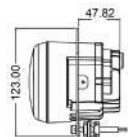
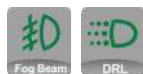




## 90MM LED FOG LIGHT



<b>Model:</b>	E-355FDRL-3
<b>Functions, Homologation</b>	
<b>Functions:</b>	Fog Beam, DRL ECE R19, R87, R10
<b>Homologation:</b>	DOT/SAEJ583-2005
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	OE Vehicle LEDs
<b>Color Temp:</b>	5700K
<b>Power:</b>	Fog Beam: 7W DRL: 5W
<b>Current Draw:</b>	Fog Beam: 0.58A @12V DRL: 0.42 @ 12A
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 3
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	Open cable
<b>Mechanical Features</b>	
<b>Size:</b>	103X 123X 108.26 mm
<b>Housing Material:</b>	Aluminum
<b>Lens Material:</b>	Anti-UV PC
<b>Lens Processing:</b>	Surface Hardened
<b>PC Brand:</b>	COVESTRO 2407
<b>IP Rate:</b>	IP66, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H



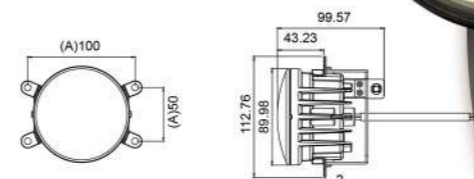
White Color



Yellow Color

## Classic 90MM LED FOG LIGHT SERIES

1. ECE R19, R87, and DOT / SAE J583-2005 compliant
2. 100% compatible with original 55W halogen fog lights
3. Multiple bracket options for various vehicles
4. Zero noise, high level EMC, CISPR 25 Class 3
5. Yellow light of DRL and fog beam against tough weather
6. Effective lumen of fog beam up to 1182LM, DRL 260LM



E-355FDRL-3 general bracket



OEM bracket



4x4 bracket



Toyota bracket



J Wrangler bracket



Ford bracket



exterior bracket

## 6" LED HEADLIGHT



### PROJECT PHASE:

Concept Design
Development
Sample Stage
Mass Production



<b>Model:</b>	E1360
<b>Functions, Homologation</b>	
<b>Functions:</b>	Low Beam, High Beam, Position
<b>Homologation:</b>	ECE R148,R149 R10
<b>Optical &amp; Electric Features</b>	
<b>Emitting Color:</b>	White
<b>Color Temp:</b>	White: 5700K-6500k
<b>Energy Consumption:</b>	Low Beam: 45W High Beam: 55W Position: 2W
<b>Current Draw @ 12V:</b>	Low Beam: 3.75A High Beam: 4.58A Position: 0.167A
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 3
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	open cable
<b>Mechanical Features</b>	
<b>Size:</b>	172.3X155X98.7mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>Lens Processing:</b>	Surface Hardened
<b>PC Brand:</b>	COVESTRO 2407
<b>Mount:</b>	Bottom bracket
<b>Bracket Material:</b>	Stainless steel
<b>IP Rate:</b>	IP66, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H

**6" combo headlight with 3 functions integrated**

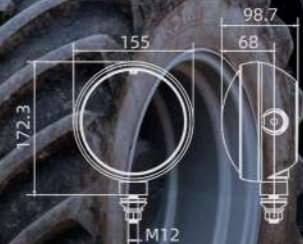
- Stylish housing and front design
- **Deeper & wider low beam** with reflector technology.
- **100% compatible** with OE halogen lights
- load resistor built-in, **no hyper flashing**, nor flickering issue
- LED failure detection on dashboard
- **ECE R112** or **DOT FMVSS108** compliant for high and low beam
- **ECE R7** or **SAE J222** for position light

High Beam	Raw	Effective
	6950 LM	2000 LM
Low Beam	Raw	Effective
	4800 LM	1200 LM



no hyper flash

<p>Salt spray test 240H (standard) or 480H (premium)</p>	<p>Lens surface hardening options: Not hardened, Hardened (2H)</p>	<p>Color rendering (CRI) options: CRI-70, CRI-80</p>
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E1360

## 5.75" LED HEADLIGHT



E1311A

E1329A

### PROJECT PHASE:

- Concept Design
- Development
- Sample Stage
- Mass Production



<b>Model:</b>	<b>E1329A/E1311A</b>
<b>Functions, Homologation</b>	
<b>Functions:</b>	Low Beam, High Beam, Parking
<b>Homologation:</b>	ECE R112, R7, R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	Low Beam: 1pcs OSRAM LED High Beam: 1pcs 15W 3chip LED +1pcs OSRAM LED Parking: 24pcs 0.5W LEDs
<b>Emitting Color:</b>	White
<b>Color Temp:</b>	White: 5700K-6500k
<b>Energy Consumption:</b>	Low Beam: 16W; High Beam: 21W; Parking: 1.0W
<b>Current Draw @ 12V:</b>	Low Beam: 1.33A; High Beam: 1.75A; Parking: 0.083A
<b>Illumination:</b>	High Beam: 1 lux @235m Low Beam: 1 lux @110m
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 3
<b>Operating Voltage:</b>	10~30VDC
<b>Connector:</b>	H4
<b>Mechanical Features</b>	
<b>Size:</b>	Ø144.4X88mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>Lens Processing:</b>	Surface Hardened
<b>PC Brand:</b>	COVESTRO 2407
<b>Bracket Material:</b>	Stainless Steel
<b>IP Rate:</b>	IP66, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	>30,000H

Products subject to update, change or modify without notice.

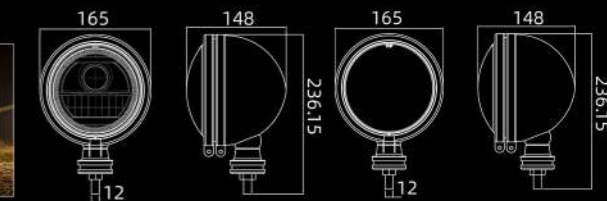
## 5.75" stainless steel Dietz type LED headlights

- Lossless replacement with original halogen lights
- High beam, Low beam, +position light integrated.
- DOT FMVSS108** or **ECE R148, R149, R10** compliant

Zero radio interference    zero noise    CISPR 25 Class 3 or higher



Salt spray test **240H/480H**    Lens surface hardened (>1H)    **CRI<70**    **CRI>80**



## 6" LED HEADLIGHT



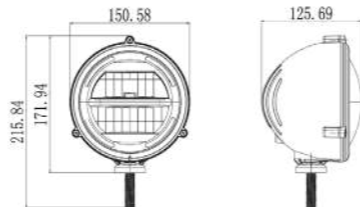
### PROJECT PHASE:

Concept Design
Development
Sample Stage
<b>Mass Production</b>

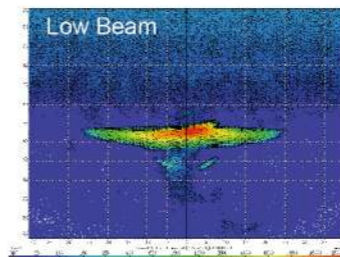
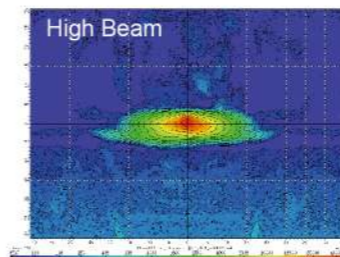


<b>Model:</b>	E1310
<b>Functions, Homologation</b>	
<b>Functions:</b>	Low Beam, High Beam, Position
<b>Homologation:</b>	ECE R112, R7, R10 SAE J1383
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	Low Beam: 1pcs OSRAM LED High Beam: 1pcs 15W 3chip LED +1pcs OSRAM LED Parking: 24pcs 0.5W LEDs
<b>Emitting Color:</b>	White
<b>Color Temp:</b>	White: 5700K-6500k
<b>Energy Consumption:</b>	Low Beam: 16W; High Beam: 21W;
<b>Current Draw @ 12V:</b>	Parking: 1.0W Low Beam: 1.33A; High Beam: 1.75A;
<b>Illumination:</b>	Parking: 0.083A High Beam: 1 lux @235m Low Beam: 1 lux @110m

<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 3
<b>Operating Voltage:</b>	10~30VDC
<b>Connector:</b>	H4 or open cable optional
<b>Mechanical Features</b>	
<b>Size:</b>	Approx.172X150 X126mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>Lens Processing:</b>	Surface Hardened
<b>PC Brand:</b>	COVESTRO 2407
<b>Bracket Material:</b>	Stainless Steel
<b>IP Rate:</b>	IP66, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H



Finish color optional  
(MOQ: 500 pcs per color)



ECE R112 / SAE J581 Compliance  
Protected Against EMI Interference  
3-Years Warranty



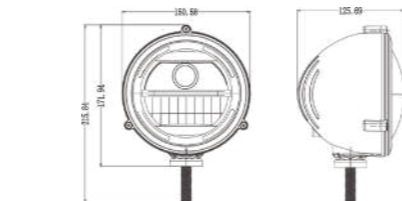
## 6" LED HEADLIGHT



<b>Model:</b>	E1329
<b>Functions, Homologation</b>	
<b>Functions:</b>	Low Beam, High Beam, Position
<b>Homologation:</b>	ECE R112, R7, R10 SAE J1383
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	Low Beam: 1pcs OSRAM LED High Beam: 1pcs 15W 3chip LED +1pcs OSRAM LED Parking: 24pcs 0.5W LEDs
<b>Emitting Color:</b>	White
<b>Color Temp:</b>	White: 5700K-6500k
<b>Energy Consumption:</b>	Low Beam: 16W; High Beam: 21W;
<b>Current Draw @ 12V:</b>	Parking: 1.0W Low Beam: 1.33A; High Beam: 1.75A;
<b>Illumination:</b>	Parking: 0.083A High Beam: 1 lux @235m Low Beam: 1 lux @110m



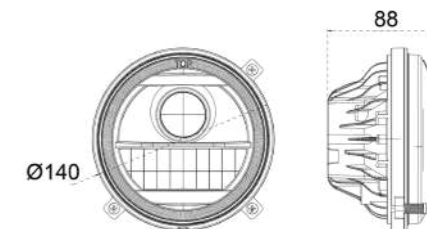
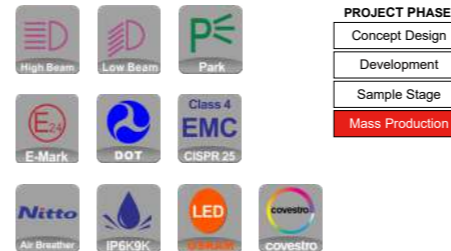
Finish color optional  
(MOQ: 500 pcs per color)



## 5.5" LED HEADLIGHT



<b>Model:</b>	E1328B
<b>Functions, Homologation</b>	
<b>Functions:</b>	Low Beam, High Beam, Park
<b>Homologation:</b>	ECE R112, R7, R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	Low Beam: 1pcs OSRAM LED High Beam: 1pcs 15W 3chip LED +1pcs OSRAM LED Parking: 24pcs 0.5W LEDs
<b>Emitting Color:</b>	White
<b>Color Temp:</b>	White: 5700K-6500k
<b>Energy Consumption:</b>	Low Beam: 16W; High Beam: 21W; Parking: 1.0W
<b>Current Draw @ 12V:</b>	Low Beam: 1.33A; High Beam: 1.75A; Parking: 0.083A
<b>Illumination:</b>	High Beam: 1 lux @235m Low Beam: 1 lux @110m



<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 4
<b>Operating Voltage:</b>	10~30VDC
<b>Connector:</b>	H4
<b>Mechanical Features</b>	
<b>Size:</b>	Ø144.4X88mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>Lens Processing:</b>	Surface Hardened
<b>PC Brand:</b>	COVESTRO 2407
<b>Bracket Material:</b>	Stainless Steel
<b>IP Rate:</b>	IP66, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H

## 5.75" LED HEADLIGHT

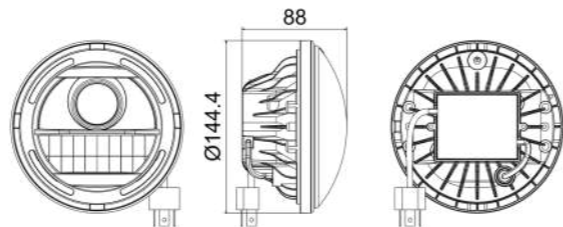


### PROJECT PHASE:

- Concept Design
- Development
- Sample Stage
- Mass Production

<b>Model:</b>	E1328
<b>Functions, Homologation</b>	
<b>Functions:</b>	Low Beam, High Beam, Parking
<b>Homologation:</b>	ECE R112, R7, R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	Low Beam: 1pcs OSRAM LED High Beam: 1pcs 15W 3chip LED +1pcs OSRAM LED Parking: 24pcs 0.5W LEDs
<b>Emitting Color:</b>	White
<b>Color Temp:</b>	White: 5700K-6500k
<b>Energy Consumption:</b>	Low Beam: 16W; High Beam: 21W; Parking: 1.0W
<b>Current Draw @ 12V:</b>	Low Beam: 1.33A; High Beam: 1.75A; Parking: 0.083A
<b>Illumination:</b>	High Beam: 1 lux @235m Low Beam: 1 lux @110m

<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 3
<b>Operating Voltage:</b>	10~30VDC
<b>Connector:</b>	H4
<b>Mechanical Features</b>	
<b>Size:</b>	Ø144.4X88mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>Lens Processing:</b>	Surface Hardened
<b>PC Brand:</b>	COVESTRO 2407
<b>Bracket Material:</b>	Stainless Steel
<b>IP Rate:</b>	IP66, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H



## PAR 46 LED HEADLIGHT APPLICATION

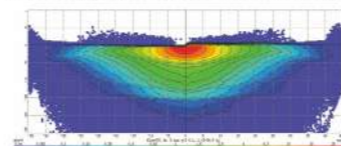
E1328 Low Beam



E1328 High Beam



Plan energy distribution of Low beam and High beam



Part number	Without Halo	With Halo	LHT (UK)	RHT (USA)
E1328	●		●	●
E1328-1		●	●	●



## 5.75" LED HEADLIGHT

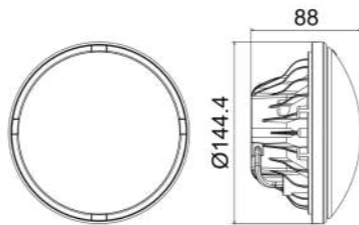


<b>Model:</b>	E1309
<b>Functions, Homologation</b>	
<b>Functions:</b>	Low Beam, High Beam, Parking
<b>Homologation:</b>	ECE R112, R7, R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	Low Beam: 1pcs OSRAM LED High Beam: 1pcs 15W 3chip LED + 1pcs OSRAM LED Parking: 24pcs 0.5W LEDs
<b>Emitting Color:</b>	White
<b>Color Temp:</b>	White: 5700K-6500k
<b>Energy Consumption:</b>	Low Beam: 16W; High Beam: 21W; Parking: 1.0W
<b>Current Draw @ 12V:</b>	Low Beam: 1.33A; High Beam: 1.75A; Parking: 0.083A
<b>Illumination:</b>	High Beam: 1 lux @235m Low Beam: 1 lux @110m

<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 3
<b>Operating Voltage:</b>	10~30VDC
<b>Connector:</b>	H4
<b>Mechanical Features</b>	
<b>Size:</b>	Ø144.4X88mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>Lens Processing:</b>	Surface Hardened
<b>PC Brand:</b>	COVESTRO 2407
<b>Bracket Material:</b>	Stainless Steel
<b>IP Rate:</b>	IP66, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H



<b>PROJECT PHASE:</b>	
Concept Design	
Development	
Sample Stage	
Mass Production	



## 5.75" LED HEADLIGHT

1. OSRAM OEM vehicle LEDs
2. ECE R112 and DOT approved
3. Surface hardened lens
4. World class breather
5. OEM mounting options



E1309 series



## 5.75" LED HEADLIGHT



Bottom Bracket



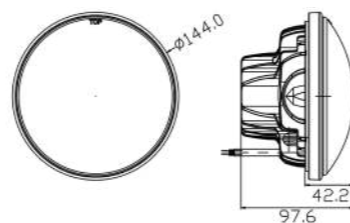
PROJECT PHASE:  
**Concept Design**  
 Development  
 Sample Stage  
 Mass Production



Model:	E1359
Functions, Homologation	
Functions:	Low Beam, High Beam, Parking
Homologation:	ECE R10, R148, R149 DOT
Optical & Electric Features	
Color temp.:	5700-6500K
Effective lumen:	Low Beam: 1500 LM High Beam: 3319 LM; Parking: 172 LM
Illumination:	High Beam: 1 lux @235m Low Beam: 1 lux @110m
Electromagnetic Features	
EMC Grade:	CISPR 25 Class 3
Operating Voltage:	10~30VDC
Connector:	cablc
Mechanical Features	
Size:	Approx. Ø144X97.6mm
Housing Material:	Aluminium Alloy
Lens Material:	Anti-UV PC
Lens Processing:	Surface Hardened
Bracket Material:	Stainless Steel
IP Rate:	IP66, IP6K9K
Work Temp:	-40~+50°C
So this is Life	
Life Time:	>30,000H



Flush Mount



## 5.75" combo LED headlight



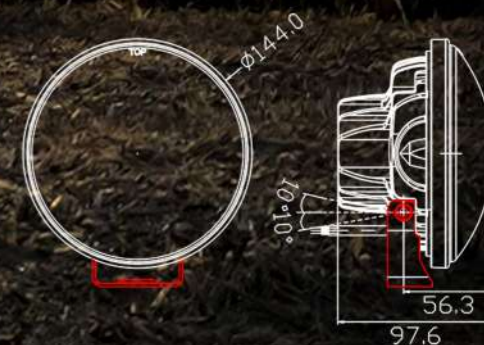
Smart load resistor built-in



E1359  
 Concept & mounting  
 options



- OEM designed combo LED headlight
- High beam **3319LM** @ effective  
Low beam **1500LM** @ effective
- 100% compatible with original halogen and ECU
- Smart** load resistor built-in and benefits are:
  - **no flickering issue**
  - LED failure detection
  - **true dashboard signal**





## OVAL LED HEADLIGHT



E1353



E1353A

PROJECT PHASE:

Concept Design
Development
Sample Stage
Mass Production



<b>Model:</b>	<b>E1353/E1353A</b>
<b>Functions, Homologation</b>	
<b>Functions:</b>	High Beam, Low Beam, Position, DRL, Turning Light
<b>Homologation:</b>	R10, R148, R149
<b>Optical &amp; Electric Features</b>	
<b>Color temp.:</b>	High Beam/Low Beam/ Position/ DRL:5700-6500K
<b>Effective lumen:</b>	Turning:1700K-1900k Low Beam:1500 LM High Beam: 3319 LM; Parking: 172 LM DRL: 518LM
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 3
<b>Operating Voltage:</b>	10~30VDC
<b>Connector:</b>	cable
<b>Mechanical Features</b>	
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>Lens Processing:</b>	Surface Hardened
<b>Bracket Material:</b>	Stainless Steel
<b>IP Rate:</b>	IP66, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H

<b>Model</b>	<b>Size:</b>
<b>E1353</b>	145.7X206.5X91.9mm
<b>E1353A</b>	136.4X179.5X94mm



## 5x7" oval LED headlight

- Oval LED headlight with original mounting design
- High beam **3319LM** @ effective  
Low beam **1500LM** @ effective
- 100% compatible with original halogen and ECU
- Smart** load resistor built-in and benefits are:
  - **no flickering issue**
  - LED failure detection
  - **true dashboard signal**

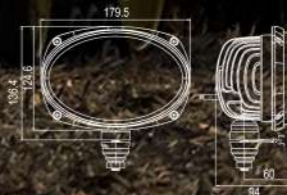
OE code for flush mount:  
1AB 996 157-091  
1AB 996 157-081



E1353



R149 ECE R148 ECE R10 ECE



OE code for bottom mount:  
1AB 996 157-131  
1AB 996 157-151  
996 157-151  
996 157151  
CLAAS 05994280

E1353A

Salt spray test **240H/480H** Lens surface hardened **(2H)** **CRI>80** **CRI<70**



**E1353A** Low beam, 30° illumination beneath horizon



# OVAL LED HEADLIGHT



**new**



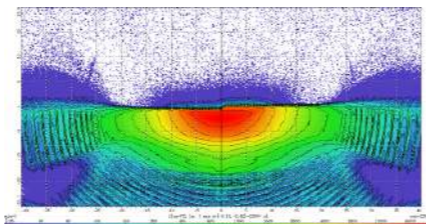
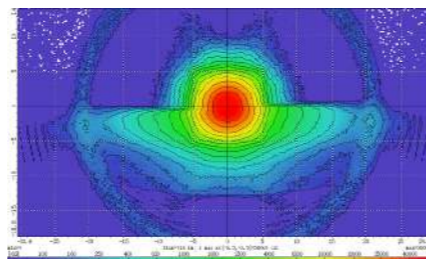
**PROJECT PHASE:**

- Concept Design
- Development
- Sample Stage
- Mass Production**

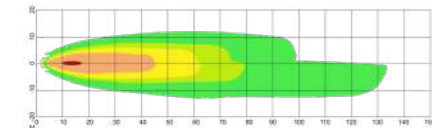
<b>Model:</b>	E1355
<b>Functions, Homologation</b>	
<b>Functions:</b>	Low Beam, High Beam
<b>Homologation:</b>	ECE R112, R10
<b>Optical &amp; Electric Features</b>	
<b>Emitting Color:</b>	White
<b>Color Temp:</b>	White:5700K-6500k
<b>Energy Consumption:</b>	Low Beam: 20W; High Beam: 24W
<b>Current Draw @ 12V:</b>	Low Beam: 1.67A; High Beam: 2.00A
<b>Illumination:</b>	Low Beam: 1lux@133m High Beam: 1lux@242m
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 3
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	3-pin open cable

**Mechanical Features**

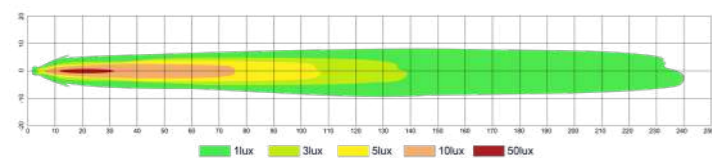
<b>Size:</b>	106.2X166X97.5mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>Lens Processing:</b>	Surface Hardened
<b>PC Brand:</b>	COVESTRO 2407
<b>Mount:</b>	Bottom bracket or Side bracket
<b>Bracket Material:</b>	Stainless steel
<b>IP Rate:</b>	IP66, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H



isolux of low beam, E1355



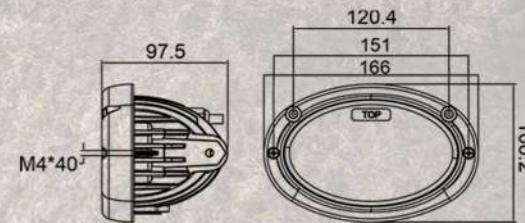
Isolux of high beam, E1355



1. Classic OVAL LED headlight with **ECE R149 and R10** compliant
2. 100% compatible with halogen
3. Flexible mounting options, **side mount**, or **flush**.
4. **Zero noise, zero interference** @ **CISPR 25 Class 3**



E1355  
Flush mount



## OVAL LED HEADLIGHT



### PROJECT PHASE:

- Concept Design
- Development
- Sample Stage
- Mass Production**

**Model:** E1351

### Functions, Homologation

**Functions:** Low Beam, High Beam  
**Homologation:** ECE R112, R10

### Optical & Electric Features

**Emitting Color:** White  
**Color Temp:** White:5700K-6500k  
**Energy Consumption:** Low Beam: 20W;  
 High Beam: 24W  
**Current Draw @ 12V:** Low Beam: 1.67A;  
 High Beam: 2.00A

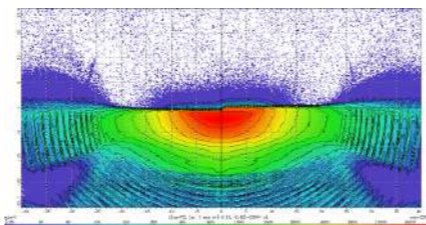
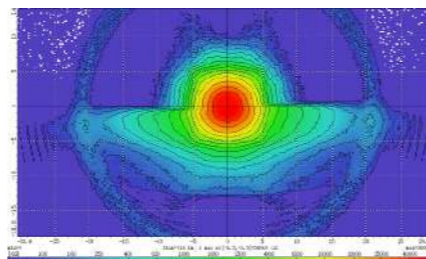
**Illumination:** Low Beam: 1lux@133m  
 High Beam: 1lux@242m

### Electromagnetic Features

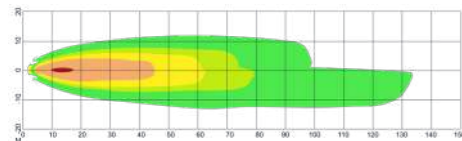
**EMC Grade:** CISPR 25 Class 3  
**Operating Voltage:** 10V~30V  
**Connector:** 3-pin open cable

### Mechanical Features

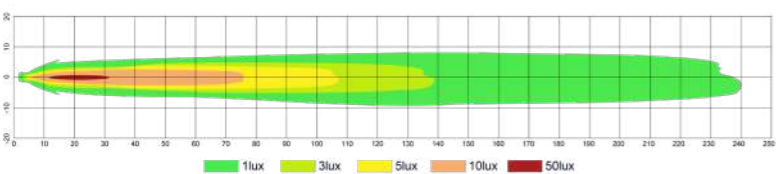
**Size:** 92X166X98mm  
**Housing Material:** Aluminium Alloy  
**Lens Material:** Anti-UV PC  
**Lens Processing:** Surface Hardened  
**PC Brand:** COVESTRO 2407  
**Mount:** Bottom bracket or Side bracket  
**Bracket Material:** Stainless steel  
**IP Rate:** IP66, IP6K9K  
**Work Temp:** -40~+50°C  
**So this is Life**  
**Life Time:** >30,000H



isolux of low beam, E1351



Isolux of high beam, E1351



1. Classic OVAL LED headlight with **ECE R149 and R10** compliant
2. 100% compatible with halogen
3. Flexible mounting options, **bottom** mount or **side** mount.
4. **Zero** noise, zero interference  
 @ **CISPR 25 Class 3**



## 4X6" LED HEADLIGHT (BOTTOM MOUNT)



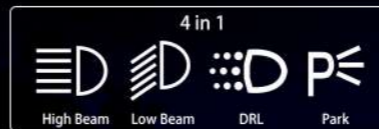
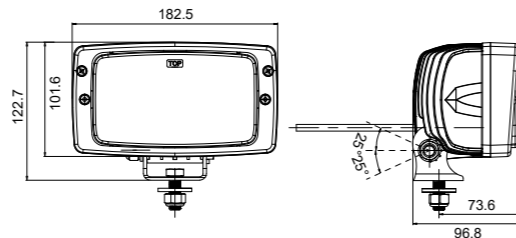
### PROJECT PHASE:

Concept Design
Development
<b>Sample Stage</b>
Mass Production



<b>Model:</b>	E1344G
<b>Functions, Homologation</b>	
<b>Functions:</b>	Low Beam, High Beam, Parking, DRL, Turn
<b>Homologations</b>	R10, R148, R149
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	OEM Vehicle LEDs
<b>Color Temp:</b>	5700K~6500K (W) 1700K-1900K for turn signal
<b>Consumption:</b>	High Beam: 45W Low Beam: 45W
<b>Effective lumen:</b>	High Beam: 3319 LM Low beam: 1500 LM Parking: 172 LM DRL: 518 LM
<b>Dashboard signaling</b>	True dashboard signaling with LED failure detection

<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 3
<b>Operating Voltage:</b>	10V~30V
<b>Load resistor:</b>	built-in
<b>Connector:</b>	cable
<b>Mechanical Features</b>	
<b>Size:</b>	182.5X122.7X96.8mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>Lens Processing:</b>	Surface Hardened
<b>PC Brand:</b>	COVESTRO 2407
<b>Mount:</b>	Bottom bracket
<b>IP Rate:</b>	IP66, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>Project Phase</b>	
<b>Project phase:</b>	Sample Stage



4X6" **4-in-1**  
combo headlight

**load resistors** built-in  
and **LED failure** detection

no false signalling  
on dashboard

- **R148, R149, R10** compliant
- robust housing with tough bottom mount
- **zero** radio interference

## 4X6" LED HEADLIGHT (BOTTOM MOUNT)

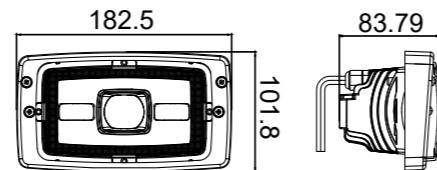


### PROJECT PHASE:

Concept Design
Development
<b>Sample Stage</b>
Mass Production

<b>Model:</b>	E1344J
<b>Functions, Homologation</b>	
<b>Functions:</b>	Low Beam, High Beam, Parking, DRL, Turn
<b>Homologations</b>	R10,R148,R149
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	OEM Vehicle LEDs
<b>Color Temp:</b>	5700K-6500K (W) 1700K-1900kfor turn signal)
<b>Consumption:</b>	High Beam: 45W Low Beam: 45W
<b>Effective lumen:</b>	High Beam: 3319 LM Low beam: 1500 LM Parking: 172 LM DRL: 518 LM
<b>Dashboard signaling</b>	True dashboard signaling with LED failure detection

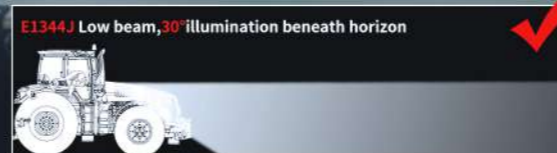
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 3
<b>Operating Voltage:</b>	10V~30V
<b>Load resistor:</b>	built-in
<b>Connector:</b>	cablr
<b>Mechanical Features</b>	
<b>Size:</b>	182.5X83.79X101.8mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>Lens Processing:</b>	Surface Hardened
<b>PC Brand:</b>	COVESTRO 2407
<b>Mount:</b>	Flushbonading
<b>IP Rate:</b>	IP66, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>Project Phase</b>	
<b>Project phase:</b>	Sample Stage



4X6" **4-in-1** combo headlight

- R148, R149, R10 compliant
- robust housing with tough bottom mount
- zero radio interference

no false signalling on dashboard



Factory	OE Number	Factory	OE Number
HELLA	1A8006213011	CASE IH	84814469
HELLA	1A8006213017	CASE IH	017093385
HELLA	1A8006213016	VALMET	34203600
HERTH+BUSS ELPARTS	31658078	HOLDER	791322
ATLAS COPCO	3665383	LIEBHERR	6001421X
HAKO	90340150	LIEBHERR	60014210
K7GEL	322759	ATLAS COPCO	5350660910
LIEBHERR	6001421	HELLA	1A8006213018
O & K	2929066	MERCEDES-BENZ	A0015443801



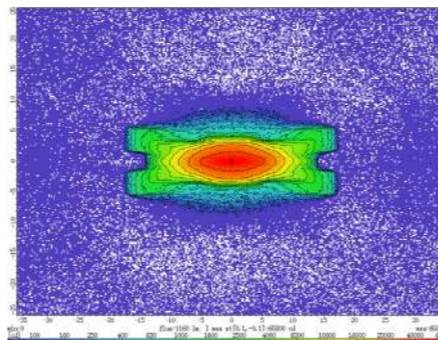
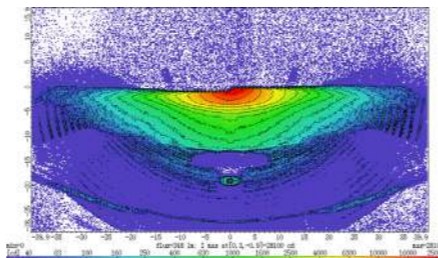
Factory	OE Number	Factory	OE Number
HERTH+BUSS ELPARTS	80655026	HERTH+BUSS ELPARTS	80655026
HELLA	0E14371518	KISSBOHRER	7512030000
VOLVO	14371518	LIEBHERR	60014210
HELLA	1A8006213008	ATLAS WEYHAUSEN	3665383
HELLA	1A8006213007	KIGEL	316573
HELLA	1A8006213001	DEUTZ-FAHR	3665383
HELLA	006213017	HERTH+BUSS ELPARTS	E134CI9068
HELLA	006213016	HERTH+BUSS ELPARTS	E13A9068
HELLA	006213011		

The use of original equipment manufacturer (OEM) part numbers or trademarks, e.g. Fenest, are for reference purposes only and for indicating product use and compatibility. Our company and the listed replacement parts contained herein are not sponsored, approved or manufactured by the OEM.

## 4X6" LED HEADLIGHT



<b>Model:</b>	E1344 (DRL)/E1344 (Turn)
<b>Functions, Homologation</b>	
<b>Functions:</b>	Low Beam, High Beam, Parking, DRL/Turn
<b>Homologations</b>	ECE R112, R7, R87, R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	OSRAM OEM Vehicle LEDs
<b>Color Temp:</b>	5700K (W) 1700-1900K (for Turn)
<b>Current Draw @ 12V:</b>	Low Beam 1.31A; High Beam 1.8A Parking: 0.13A DRL: 0.42A
<b>Illumination:</b>	Low Beam: 1ux@160m High Beam: 1ux@250m
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 3
<b>Operating Voltage:</b>	10V~30V
<b>Decoder:</b>	PWM
<b>Connector:</b>	H4
<b>Mechanical Features</b>	
<b>Size:</b>	182.5X101.8X83.5mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>Lens Processing:</b>	Surface Hardened
<b>PC Brand:</b>	COVESTRO 2407
<b>Mount:</b>	Flushbonading
<b>IP Rate:</b>	IP66, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H



Leading combo LED headlight assembly  
originally developed by **ETHER**  
for **general purposes engineering** applications

- Directly **replace with original halogen** lights
- Original vehicles **don't have to be retrofitted** to install this light
- Installation positions **completely match with original** vehicle design
- Great labor and time of installation could be saved .
- **30 - 50 % brighter** than original halogen light
- Compact body design
- **Rich functions** : Low Beam , High Beam , Position Light and DRL
- **Higher visibility and EMC performance**
- Much higher level of safety and simplicity
- **Lowered risk of electric failures**
- Circuit protections : reversal polarity protection , surge protection , etc
- **Exceptional lighting and driving experience** on vehicles



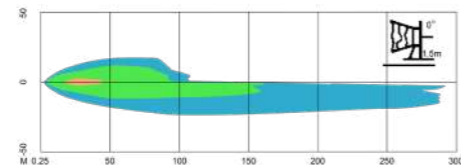
## 4X6" LED HEADLIGHT



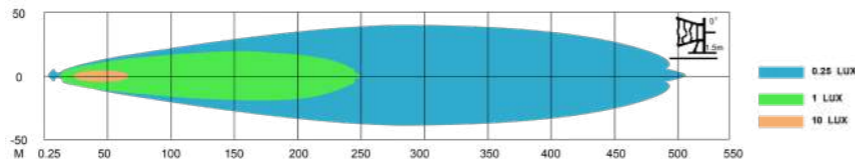
<b>Model:</b>	E1344C
<b>Functions, Homologation</b>	
<b>Functions:</b>	Low Beam, High Beam, Parking, DRL(W) or Turn (Amber)
<b>Homologations</b>	ECE R112, R7, R87 or R6, R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	OSRAM OEM Vehicle LEDs
<b>Color Temp:</b>	5700K (W) 1700-1900K (Amber for Turn)
<b>Current Draw @ 12V:</b>	Low Beam 1.31A; High Beam 1.8A Parking: 0.13A DRL: 0.42A or Turn: 0.75A
<b>Illumination:</b>	Low Beam: 1ux@160m High Beam: 1ux@250m

<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 3
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	Open cable
<b>Mechanical Features</b>	
<b>Size:</b>	155X117X83mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>Lens Processing:</b>	Surface Hardened
<b>PC Brand:</b>	COVESTRO 2407
<b>Mount:</b>	Three tabs
<b>IP Rate:</b>	IP66, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H

Isolux of low beam, 1lux@ 150+m, H:1.5m, tilt:0°.



Isolux of high beam, 1lux@ 280+m, H:1.5m, tilt:0°.



Products subject to update, change or modify without notice.

**Leading combo LED headlight assembly**  
originally developed by **ETHER**  
for **general purposes engineering applications**

E1344C

- Directly **replace with original halogen** lights
- Original vehicles **don't have to be retrofitted** to install this light
- Installation positions **completely match with original** vehicle design
- Great labor and time of installation could be saved .
- **30 - 50 % brighter** than original halogen light
- Compact body design
- **Rich functions** : Low Beam , High Beam , Position Light and DRL
- **Higher visibility and EMC performance**
- Much higher level of safety and simplicity
- **Lowered risk of electric failures**
- Circuit protections : reversal polarity protection , surge protection , etc
- **Exceptional lighting and driving experience** on vehicles



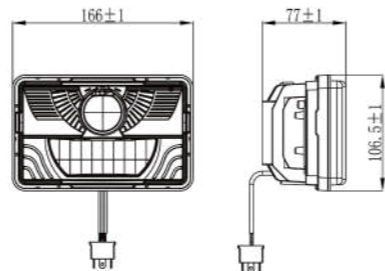
## 4X6" LED HEADLIGHT



### PROJECT PHASE:

- Concept Design
- Development
- Sample Stage
- Mass Production

<b>Model:</b>	E1336
<b>Functions, Homologation</b>	
<b>Functions:</b>	Low Beam, High Beam, Turn/Parking
<b>Homologation:</b>	ECE R112, R6, R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	OSRAM OEM Vehicle LED(s)
<b>Color Temp:</b>	5700K
<b>Energy Consumption:</b>	Low Beam: 12.5 W; High Beam: 12.5W; Turn: 12W;
<b>Current Draw @ 12V:</b>	Low Beam: 1.04 A; High Beam: 1.04 A; Turn: 1.0 A;
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 3
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	H4
<b>Mechanical Features</b>	
<b>Size:</b>	166X107X78mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>Lens Processing:</b>	Surface Hardened
<b>PC Brand:</b>	COVESTRO 2407
<b>IP Rate:</b>	IP66, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H



## 4X6" LED HEADLIGHT



### PROJECT PHASE:

- Concept Design
- Development
- Sample Stage
- Mass Production

<b>Model:</b>	E1336B
<b>Functions, Homologation</b>	
<b>Functions:</b>	Low, High Beam, Turn/Parking
<b>Homologation:</b>	ECE R112, R7, R10 DOT FMVSS 571.108
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	OSRAM OEM Vehicle LED(s)
<b>Color Temp:</b>	5700K
<b>Energy Consumption:</b>	Low Beam: 12.5W; High Beam: 12.5W; Position: 2.5W;
<b>Current Draw @ 12V:</b>	Low Beam: 1.04 A; High Beam: 1.04A; Position: 0.2 A;
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 3
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	H4
<b>Mechanical Features</b>	
<b>Size:</b>	166X107X78mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>Lens Processing:</b>	Surface Hardened
<b>PC Brand:</b>	COVESTRO 2407
<b>IP Rate:</b>	IP66, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H



# 4X6" LED HEADLIGHT



**new**

<b>Model:</b>	<b>E1336M</b>
<b>Functions, Homologation</b>	
<b>Functions:</b>	High Beam, Low Beam, Position De-icing
<b>Homologation:</b>	ECE R112, R7, R10. DOT J1383 / J222

<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	OSRAM OEM Vehicle LEDs
<b>Color Temp:</b>	6000K
<b>Raw Lumen:</b>	Low Beam:1400LM; High Beam:1400LM; Position:1200LM;

<b>Effective Lumen:</b>	Low Beam:489 LM; High Beam:534 LM; Position:29 LM;
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<b>Energy Consumption:</b>	Low Beam:12.5 W; High Beam:12.5W; Position:2.5W;
----------------------------	--

<b>Current Draw @ 12V:</b>	Low Beam:1.04 A; High Beam:1.04 A; Position:0.2 A;
----------------------------	--

<b>De-icing Technology</b>	
<b>De-Icing Tech:</b>	Heating Glass
<b>De-icing Power:</b>	22W
<b>Control Mode:</b>	Auto temp. Sensor@ constant temp.
<b>Heating Temp.:</b>	Constant 45°C lens

<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 3
<b>Operating Voltage:</b>	10~30VDC
<b>Connector:</b>	H4+Cable

<b>Mechanical Features</b>	
<b>Size:</b>	166X107X83.3mm
<b>Housing Material:</b>	Aluminum
<b>Lens Material:</b>	Tempered Glass
<b>Lens Processing:</b>	Surface Heated.
<b>Anti-Corrosion:</b>	ISO 9227 240H
<b>Vibration Level:</b>	15.3Grms
<b>IP Rate:</b>	IP66, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H

**PROJECT PHASE:**

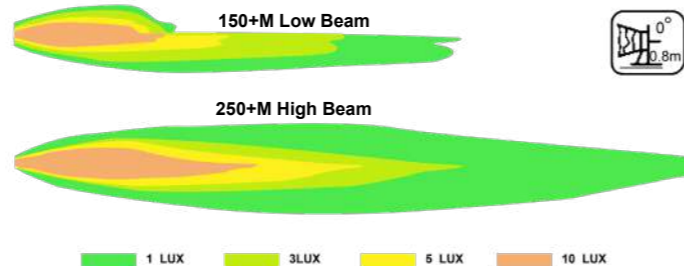
- Concept Design
- Development
- Sample Stage
- Mass Production**



**Black Version**



**H4 Connector**



# Mini snowplow 4x6"

Flexible mounting options.  
Back bracket or  
Bottom bracket is optional  
Designed for convenience.  
**E1336X**



LED HEADLIGHTS  
MINI SNOWPLOW - 4x6"  
LED Headlight

## 45°C LENS

Constant temp. of lens surface.  
Rapid de-icing  
Smart Temp. sensor control.

## 4×6” LED HEADLIGHT



### PROJECT PHASE:

Concept Design
Development
Sample Stage
Mass Production



**Model:** E1305C

### Functions, Homologation

**Functions:** Low Beam, High Beam  
**Homologation:** DOT FMVSS 108  
 ECE R112, R10

### Optical & Electric Features

**LED Type:** Low Beam: 1pcs OSRAM LED  
 High Beam: 1pcs 15W 3chip LED  
 +1pcs OSRAM LED

**Emitting Color:** White  
**Color Temp:** White: 5700K-6500k

**Energy Consumption:** Low Beam: 16W;  
 High Beam: 21W;

**Current Draw @ 12V:** Low Beam: 1.33A;  
 High Beam: 1.75A;

**Illumination:** High Beam: 1 lux @235m  
 Low Beam: 1 lux @110m

### De-icing Technology

**De-icing Tech:** Heating Glass  
**De-icing Power:** 22W  
**Control Mode:** Auto temp. Sensor@ constant temp.  
**Heating Temp.:** Constant 45°C lens

### Electromagnetic Features

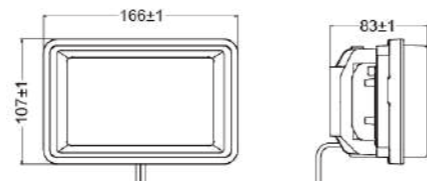
**EMC Grade:** ECE R10  
**Operating Voltage:** 10V~30V  
**Connector:** H4

### Mechanical Features

**Size:** 166X107X83mm  
**Housing Material:** Aluminium Alloy  
**Lens Material:** Anti-UV PC  
**Lens Processing:** Surface Hardened  
**PC Brand:** COVESTRO 2407  
**IP Rate:** IP66, IP6K9K  
**Work Temp:** -40~+50°C

### So this is Life

**Life Time:** >30,000H



## 4×6” LED HEADLIGHT



### PROJECT PHASE:

Concept Design
Development
Sample Stage
Mass Production



**Model:** E1305

### Functions, Homologation

**Functions:** Low Beam, High Beam  
**Homologation:** DOT FMVSS 108  
 ECE R112

### Optical & Electric Features

**LED Type:** Low Beam: 1pcs OSRAM LED  
 High Beam: 1pcs 15W 3chip LED  
 +1pcs OSRAM LED

**Emitting Color:** White  
**Color Temp:** White: 5700K-6500k

**Energy Consumption:** Low Beam: 16W;  
 High Beam: 21W;

**Current Draw @ 12V:** Low Beam: 1.33A;  
 High Beam: 1.75A;

**Illumination:** High Beam: 1 lux @235m  
 Low Beam: 1 lux @110m

### Electromagnetic Features

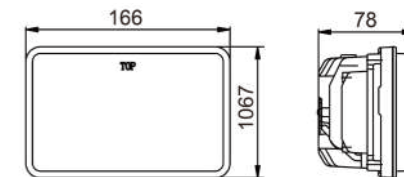
**EMC Grade:** ECE R10  
**Operating Voltage:** 10V~30V  
**Connector:** H4

### Mechanical Features

**Size:** 166X107X83mm  
**Housing Material:** Aluminium Alloy  
**Lens Material:** Anti-UV PC  
**Lens Processing:** Surface Hardened  
**PC Brand:** COVESTRO 2407  
**IP Rate:** IP66, IP6K9K  
**Work Temp:** -40~+50°C

### So this is Life

**Life Time:** >30,000H



## 4×6” LED HEADLIGHT



PROJECT PHASE:	
Concept Design	
Development	
Sample Stage	
Mass Production	

<b>Model:</b>	E1305A
<b>Functions, Homologation</b>	
<b>Functions:</b>	Low Beam, High Beam
<b>Homologation:</b>	DOT FMVSS 108 ECE R112
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	Low Beam: 1pcs OSRAM LED High Beam: 1pcs 15W 3chip LED +1pcs OSRAM LED
<b>Emitting Color:</b>	White
<b>Color Temp:</b>	White: 5700K-6500k
<b>Energy Consumption:</b>	Low Beam: 16W; High Beam: 21W;
<b>Current Draw @ 12V:</b>	Low Beam: 1.33A; High Beam: 1.75A;
<b>Illumination:</b>	High Beam: 1 lux @235m Low Beam: 1 lux @110m
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	ECE R10
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	H4
<b>Mechanical Features</b>	
<b>Size:</b>	166X107X78mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>Lens Processing:</b>	Surface Hardened
<b>PC Brand:</b>	COVESTRO 2407
<b>IP Rate:</b>	IP66, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H

## 4×6” LED HEADLIGHT



PROJECT PHASE:	
Concept Design	
Development	
Sample Stage	
Mass Production	

<b>Model:</b>	E1305B
<b>Functions, Homologation</b>	
<b>Functions:</b>	Low Beam, High Beam
<b>Homologation:</b>	DOT FMVSS 108 ECE R112
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	Low Beam: 1pcs OSRAM LED High Beam: 1pcs 15W 3chip LED +1pcs OSRAM LED
<b>Emitting Color:</b>	White
<b>Color Temp:</b>	White: 5700K-6500k
<b>Energy Consumption:</b>	Low Beam: 16W; High Beam: 21W;
<b>Current Draw @ 12V:</b>	Low Beam: 1.33A; High Beam: 1.75A;
<b>Illumination:</b>	High Beam: 1 lux @235m Low Beam: 1 lux @110m
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	ECE R10
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	H4
<b>Mechanical Features</b>	
<b>Size:</b>	166X107X78mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>Lens Processing:</b>	Surface Hardened
<b>PC Brand:</b>	COVESTRO 2407
<b>IP Rate:</b>	IP66, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H

## 4x6" LED TRACTOR LIGHT



### PROJECT PHASE:

- Concept Design
- Development
- Sample Stage
- Mass Production

<b>Model:</b>	E2175
<b>Functions, Homologation</b>	
<b>Functions:</b>	Flood Beam or Spot Beam
<b>Homologations</b>	ECE R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	12pcs 2W LEDs
<b>Color Temp:</b>	6000K-6300K
<b>Raw Power:</b>	36W
<b>Energy Consumption:</b>	32W
<b>Raw lumens:</b>	3000 LM
<b>Effective lumens:</b>	2858 LM
<b>Current Draw:</b>	2.67A@12V, 1.33A@24V
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	ECE R10
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	cabie
<b>Mechanical Features</b>	
<b>Size:</b>	208X144.5X72.1mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>Lens Processing:</b>	Surface Hardened
<b>PC Brand:</b>	COVESTRO 2407
<b>Mount:</b>	Bottom bracket
<b>IP Rate:</b>	IP66, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H

## OEM design 4X6" tractor light

### OE Codes:

RE269110, AL152331, AL152328, AL152329

### Compatible Equipment Type for after-market:

John Deere 7130	John Deere 6140D	John Deere 6155J	John Deere 5065E	John Deere 5625
John Deere 5085M	John Deere 6140J	John Deere 5055E	John Deere 5325	John Deere 5075M
John Deere 5095M	John Deere 5093E	John Deere 5225	John Deere 6100D	John Deere 5065M
John Deere 5083E	John Deere 5725	John Deere 6125D	John Deere 5105M	John Deere 6115D
John Deere 5425N	John Deere 5075E	John Deere 6130D	John Deere 6110D	John Deere 5525N

### Compatible Model for new lights and vehicle models:

John Deere 7520	John Deere 6220	John Deere 6215	John Deere 6420L	John Deere 6230
John Deere 6420	John Deere 7220	John Deere 6615	John Deere 5525	John Deere 7230
John Deere 6320	John Deere 7320	John Deere 6715	John Deere 6520L	John Deere 7330
John Deere 6120	John Deere 8415	John Deere 5425	John Deere 6430	John Deere 6120L
John Deere 7420	John Deere 5310	John Deere 6320L	John Deere 6330	John Deere 6220L

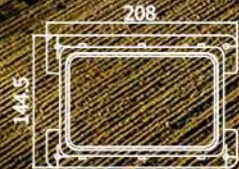
Case/IH Combine 21442144	Case/IH Combine 2377	Case/IH Cotton Picker 420	Case/IH Cotton Picker CPX610
Case/IH Combine 21662166	Case/IH Combine 2388	Case/IH Cotton Picker 625	Case/IH Cotton Picker CPX620
Case/IH Combine 21882188	Case/IH Combine 2577	Case/IH Cotton Picker 2155	Case/IH Cotton Picker CPX420
Case/IH Combine 23442344	Case/IH Combine 2588	Case/IH Cotton Picker 2555	
Case/IH Combine 23662366		Case/IH Cotton Picker 320	



E2175



R10  
ECE



Salt spray test 240H (standard) or 480H (premium)	Lens surface hardening options: Not hardened, Hardened (2H)	Color rendering(CRI) options: CRI-70, CRI>80



## 4x6" LED TRACTOR LIGHT



### PROJECT PHASE:

Concept Design

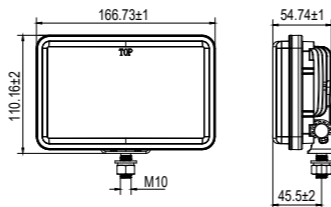
Development

Sample Stage

Mass Production



<b>Model:</b>	E2176
<b>Functions, Homologation</b>	
<b>Functions:</b>	Flood Beam
<b>Homologations</b>	ECE R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	10pcs 4W LEDs
<b>Color Temp:</b>	5700K
<b>Raw Power:</b>	40W
<b>Energy Consumption:</b>	36W
<b>Raw lumens:</b>	6100LM
<b>Effective lumens:</b>	3800LM
<b>Current Draw:</b>	3A@12V, 1.5A@24V
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 3
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	cablc
<b>Mechanical Features</b>	
<b>Size:</b>	166.73X110.16X54.74mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>Lens Processing:</b>	Surface Hardened
<b>PC Brand:</b>	COVESTRO 2407
<b>Mount:</b>	Bottom bracket
<b>IP Rate:</b>	IP66, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H



• Standard: **ANSI/ASABE S608**  
For agriculture headlamps

- **OEM design 4X6"** tractor light
- **Direct replacement** with original halogen ones



### OE Codes:

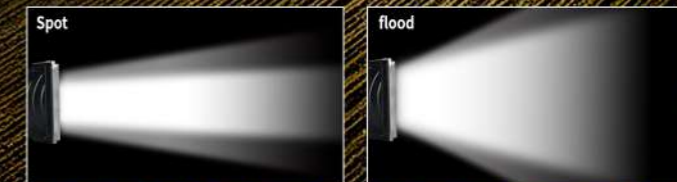
RE269110 , AL152331 , AL152328 , AL152329

### Compatible Equipment Type for/er after-market:

John Deere 7130	John Deere 6140D	John Deere 6155J	John Deere 5065E	John Deere 5075
John Deere 5085M	John Deere 6140J	John Deere 5055E	John Deere 5325	John Deere 5075M
John Deere 5095M	John Deere 5093E	John Deere 5225	John Deere 6100M	John Deere 5065M
John Deere 5083E	John Deere 5725	John Deere 6125D	John Deere 5105M	John Deere 6115D
John Deere 5425N	John Deere 5075E	John Deere 6138D	John Deere 6110M	John Deere 5525N

### Compatible Model for new lights and vehicle models:

John Deere 7520	John Deere 6220	John Deere 6215	John Deere 6420L	John Deere 6230
John Deere 8420	John Deere 7220	John Deere 6815	John Deere 5525	John Deere 7230
John Deere 6320	John Deere 7320	John Deere 6715	John Deere 6520L	John Deere 7330
John Deere 6120	John Deere 6415	John Deere 5425	John Deere 6430	John Deere 6120L
John Deere 7420	John Deere 5310	John Deere 6320L	John Deere 6330	John Deere 6230L
Case/IH Combine 21442144	Case/IH Combine 2277	Case/IH Cotton Picker 420	Case/IH Cotton Picker CPX610	
Case/IH Combine 21642166	Case/IH Combine 2388	Case/IH Cotton Picker 625	Case/IH Cotton Picker CPX620	
Case/IH Combine 21842188	Case/IH Combine 2577	Case/IH Cotton Picker 2155	Case/IH Cotton Picker CPX420	
Case/IH Combine 23442344	Case/IH Combine 2588	Case/IH Cotton Picker 2555		
Case/IH Combine 22662366		Case/IH Cotton Picker 320		





# LED Work Lights

**Choose ETHER work lights for technologies:**

- High efficacy, up to 126Lm/W.
- Vibration level up to 15.3Grms, and impact to 60G.
- Tough housing against salt spray test of up to 480H
- Lens surface hardened.
- Complete ingress protection IP6K9K.
- etc...tested by ETHER's own lab.

Contact ETHER's representatives for more detailed reports.

# HIGH LUMINOUS EFFICACY



**PROJECT PHASE:**

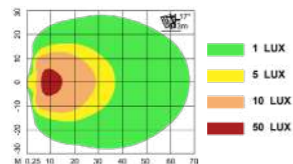
Concept Design
Development
Sample Stage
<b>Mass Production</b>



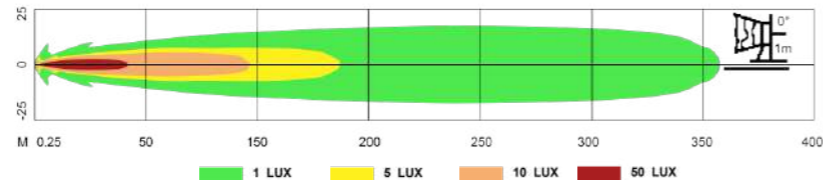
<b>Model:</b>	E2155/E2155A
<b>Functions, Homologation</b>	
<b>Beam Pattern</b>	Flood Beam or Spot Beam
<b>Homologation:</b>	ECE R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	16pcs 5W OSRAM P8 LED
<b>Emitting Color</b>	White
<b>Color Temp:</b>	5000-6500K
<b>Raw Lumen:</b>	8800LM
<b>Effective Lumen:</b>	4725LM
<b>Illumination Distance:</b>	1 lux @ 100m (Tilt: 0°)
<b>Luminous Efficacy:</b>	78.75LM/W
<b>Raw Power:</b>	80W
<b>Effective Power:</b>	60W
<b>Current Flow:</b>	4.92A@12V, 2.42A@24V
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR25 Class 5
<b>EMC Standards:</b>	ISO 13766 ISO 14982 ISO 7637-2
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	2 pin DT

<b>Mechanical Features</b>	
<b>DSize:</b>	110X146X90mm
<b>Housing Material:</b>	Aluminum
<b>Lens Material:</b>	Anti-UV PC
<b>PC Brand:</b>	COVESTRO 2407
<b>Mount:</b>	Bottom Bracket
<b>Bracket Material:</b>	Die-cast Aluminum
<b>Bolt Material:</b>	SUS316 Stainless Steel
<b>IP Rate:</b>	IP68, IP6K9K (SAE J1455)
<b>Anti-Corrosion:</b>	ISO 9227 240H
<b>Vibration Level:</b>	15.3Grms 24~2000Hz
<b>Impact Force:</b>	60G
<b>Work Temp:</b>	-40~+80°C
<b>Over Temp:</b>	GB/T 10485
<b>Protection:</b>	GB 4599—2007
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H

Isolux (Flood) of E2155,  
1lux@100m, Max. 110Lux / H:3.0m, Tilt: 17°



Isolux (Spot) of E2155, 1lux@350+m, H:1.0m, Tilt: 0°



# 8800LM effective from 4.3" body

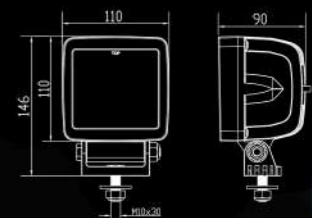
- Color temp. changing from 6000K to 3000K
- Active Thermal Management built-in
- Lens surface hardened and anti-scratch
- Passing salt spray test of 480H

Raw lumen  
**8800 LM**



Tough die-cast aluminum bracket

Class 5  
CISPR 25



E2155 Spot

E2155B Asymmetric

E2155C Flood

## ASYMMETRIC LENS PATTERN

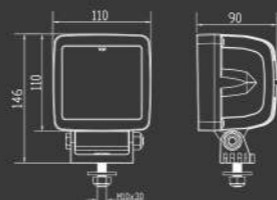


PROJECT PHASE:	
Concept Design	
Development	
Sample Stage	
Mass Production	

<b>Model:</b>	<b>E2155B</b>
<b>Functions, Homologation</b>	
<b>Beam Pattern</b>	Asymmetric Beam
<b>Homologation:</b>	ECE R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	32 pcs LEDs
<b>Emitting Color</b>	White
<b>Color Temp:</b>	3000-6000K (adjustable)
<b>Raw Lumen:</b>	10320LM
<b>Effective Lumen:</b>	2950LM,45w (Cold white) 3316LM,42w (Natural white) 3060LM,45w (Warm white)
<b>Raw Power:</b>	115.2W
<b>Effective Power:</b>	40~45W(to color)
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR25 Class 5
<b>EMC Standards:</b>	ISO 13766 ISO 14982 ISO 7637-2
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	2 pin DT

<b>Mechanical Features</b>	
<b>Size:</b>	110X146X90mm
<b>Housing Material:</b>	Aluminum
<b>Lens Material:</b>	Anti-UV PC
<b>PC Brand:</b>	COVESTRO 2407
<b>Mount:</b>	Bottom Bracket
<b>Bracket Material:</b>	Die-cast Aluminum
<b>Bolt Material:</b>	SUS316 Stainless Steel
<b>IP Rate:</b>	IP68, IP6K9K (SAE J1455)
<b>Anti-Corrosion:</b>	ISO 9227 240H
<b>Vibration Level:</b>	15.3Grms 24~2000Hz
<b>Impact Force:</b>	60G
<b>Work Temp:</b>	-40~+80°C
<b>Over Temp.</b>	GB/T 10485
<b>Protection:</b>	GB 4599—2007
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H

## E2155 series

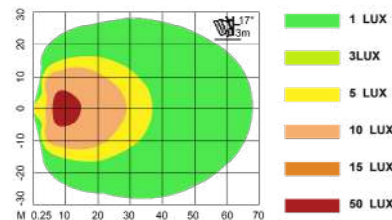


Class 5  
EMC  
CISPR 25

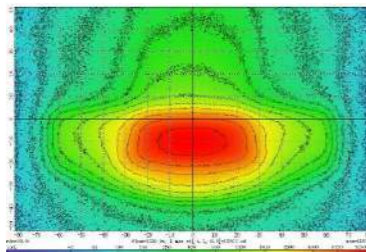
- Any CCT from 3000K~6000K
- No worry about rainy, foggy, dusty days
- Heavy duties unstopped
- Up to 5000LM, almost daylight illumination



Isolux (Asymmetric) of E2155B,  
1lux@31m, Max. 343Lux / H:3.0m, Tilt: 17°



Plane energy distribution





## FRESNEL STYLE LENS SERIES



Model:	E2118D	E2165B	E2155C	E2165D	E2165E
<b>Functions, Homologation</b>					
<b>Beam pattern:</b>	Flood Beam (>180°)	Flood	Flood Beam	Flood	Flood
<b>Homologations:</b>	ECE R10, R23	ECE R10	ECE R10	ECE R10	ECE R10
<b>Optical &amp; Electric Features</b>					
<b>LED Type:</b>	4pcs 10W LEDs	9 pcs 10W LEDs	16 pcs LEDs	9 pcs p8 LEDs	9pcs 10W OSRAM P8 LEDs
<b>Raw Lumen:</b>	6400LM	14400LM	17600LM	9900LM	9900LM
<b>Effective Lumen:</b>	3790LM	6000LM	6800LM	4738.5LM	4738.5LM
<b>Raw Power:</b>	40W	90W	160W	90W	90W
<b>Effective Power:</b>	30W	60W (ATM controlled)	90W	60W (ATM controlled)	60W (ATM controlled)
<b>Electromagnetic Features</b>					
<b>EMC Grade:</b>	CISPR 25 Class 5	CISPR 25 Class 5	CISPR25 Class 3	CISPR 25 Class 5	CISPR 25 Class 5
<b>Operating Voltage:</b>	10V~30V	10V~30V	10V~30V	10V~30V	10V~30V
<b>Connector:</b>	DT / AMP/ Cable (Optional)	DT	DT	DT	DT
<b>Mechanical Features</b>					
<b>Size:</b>	75.54X112.25X47.23mm	106.5X144.3X78.5mm	110X140X90mm	112.5X148.8X84.7mm	112.5X148.8X84.7mm
<b>Housing Material:</b>	Aluminium Alloy	Aluminium Alloy	Aluminum	Aluminium Alloy	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC	Anti-UV PC	Anti-UV PC	Anti-UV PC	Anti-UV PC
<b>Mount:</b>	Bottom bracket	360°bottom bracket	Bottom bracket	Bottom bracket	Bottom bracket
<b>Bracket material:</b>	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
<b>IP Rate:</b>	IP67, IP6K9K	IP67, IP6K9K	IP68, IP6K9K (SAE J1455)	IP6K9K	IP6K9K
<b>Work Temp:</b>	-40~+50°C	-40~+50°C	-40~+80°C	-40~+50°C	-40~+50°C
<b>So this is Life</b>					
<b>Life Time:</b>	>30,000H	>30,000H	>30,000H	>30,000H	>30,000H

## Why Fresnel style lens design?

- Even light distribution
- Higher visibility and safety
- No annoyance of yellow spots
- Avoid drowsy driving



3000K 6000K

### SIMILAR LENS STYLE



## CLASSIC LED WORK LIGHTS



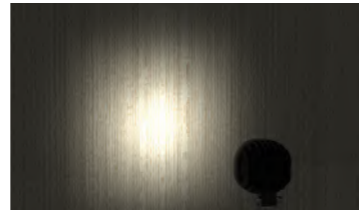
### PROJECT PHASE:

- Concept Design
- Development
- Sample Stage
- Mass Production

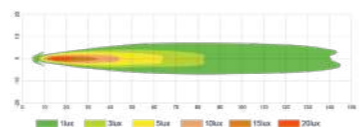


Model:	E2165C	E2165C (Blue)
<b>Functions, Homologation</b>		
Beam pattern:	Spot	Blue pencil beam
Homologations:	ECE R10	ECE R10, EN62471
<b>Optical &amp; Electric Features</b>		
LED Type:	9 pcs 10W OSRAM LEDs	9 pcs 3W LEDs
Emitting Color:	White	Blue
Raw Lumen:	9450LM	405LM
Effective Lumen:	6500LM	335LM
Raw Power:	90W	20W
Current flow:	5.00A@12V; 2.50A@24V	1.66A@12V; 0.83A@24V
<b>Electromagnetic Features</b>		
EMC Grade:	CISPR 25 Class 5	ECE R10 (10-80V) or CISPR 25 Class 5 (10-30V)
<b>Operating Voltage:</b>	10V~30V	10V~80V
Connector:	DT	DT
<b>Mechanical Features</b>		
Size:	106.5X144.3X78.5mm	106.5X144.3X78.5mm
Housing Material:	Aluminium Alloy	Aluminium Alloy
Lens Material:	Anti-UV PC	Anti-UV PC
Mount:	360°bottom bracket	360°bottom bracket
Bracket Material:	Stainless steel	Stainless steel
IP Rate:	IP67, IP6K9K	IP67, IP6K9K
Work Temp:	-40~+50°C	-40~+50°C
So this is Life		
Life Time:	>30,000H	>30,000H

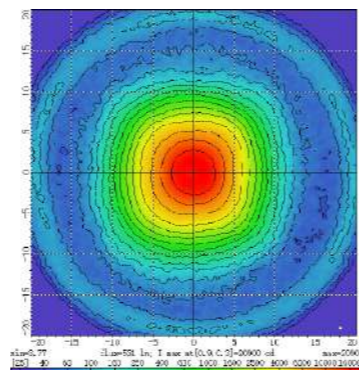
### Lit Effect (Rendering)



E2165C(Blue), Isolux, 1lux@140m, H:1.5m, tilt:0°



### Plane Energy Distribution

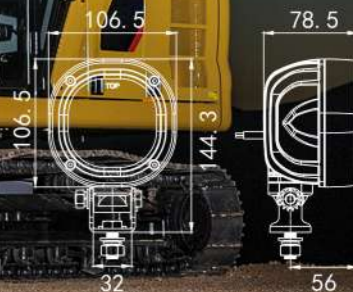


- OEM high power **OSRAM** LEDs
- Up to **6500LM** output (White)
- Flood, spot and **blue pencil beam** optional
- **ATM**(Active Thermo Management)
- Protection against over heating
- **360°** rotating bracket optional
- High level EMC **CISPR 25 Class 5**

E2165B Flood      E2165C Spot      E2165C(Blue) Blue Pencil Beam



E2165 series



# HIGH LUMINOUS EFFICACY

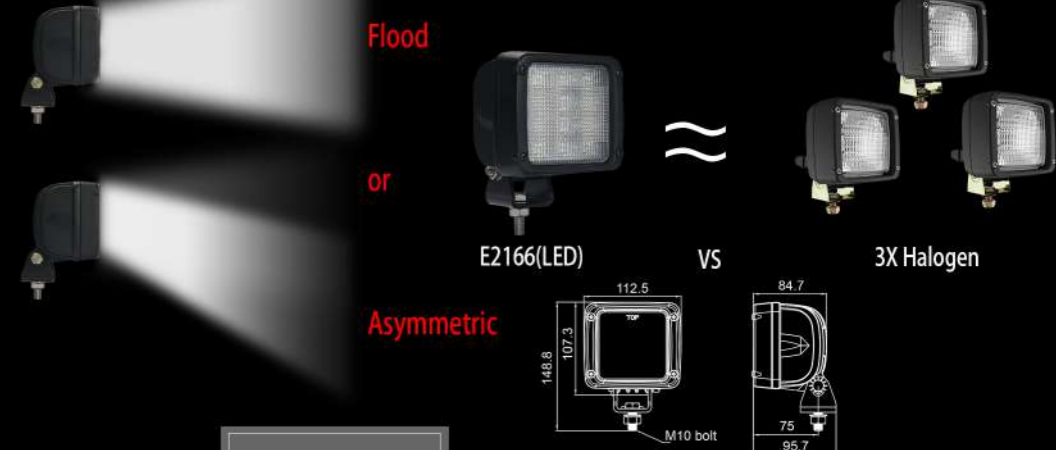
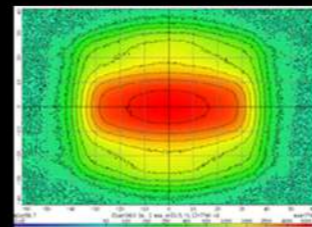
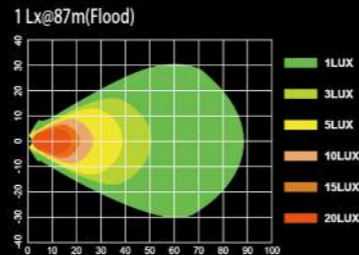


PROJECT PHASE:

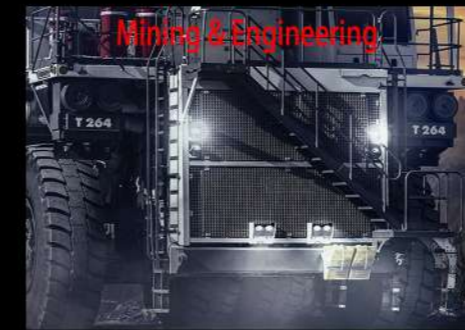
Concept Design
Development
Sample Stage
Mass Production



<b>Model:</b>	<b>E2166/E2166D</b>
<b>Beam patterns, Homologation</b>	
<b>Beam Pattern</b>	Flood or Asymmetric
<b>Homologation:</b>	ECE R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	12 pcs 5W OSRAM LEDs
<b>Emitting Color:</b>	White
<b>Color Temp:</b>	5000-5500K
<b>Raw Lumen:</b>	6600LM
<b>Effective Lumen:</b>	3800LM
<b>Luminous Efficacy:</b>	100.00LM/W
<b>Raw Power:</b>	60W
<b>Effective Power:</b>	38W
<b>Current Flow:</b>	3.16A@12V; 0.16A@24V
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 5
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	DT
<b>Mechanical Features</b>	
<b>Size:</b>	112.5X148.8X84.7mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>Lens Process:</b>	Surface hardened
<b>PC Brand:</b>	COVESTRO 2407
<b>Mount(optional):</b>	Bottom bracket or flush
<b>IP Rate:</b>	IP67, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H



Wide Applications



# HIGH LUMINOUS EFFICACY



360° Rotating Bracket

**PROJECT PHASE:**

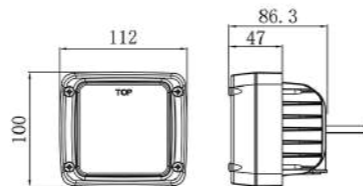
- Concept Design
- Development
- Sample Stage
- Mass Production



<b>Model:</b>	E2166C/E2166G
<b>Beam patterns, Homologation</b>	
<b>Beam Pattern</b>	Flood or Asymmetric
<b>Homologation:</b>	ECE R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	12 pcs 5W OSRAM LEDs
<b>Emitting Color:</b>	White
<b>Color Temp:</b>	5000-5500K
<b>Raw Lumen:</b>	6600LM
<b>Effective Lumen:</b>	3800LM
<b>Luminous Efficacy:</b>	100.00LM/W
<b>Raw Power:</b>	60W
<b>Effective Power:</b>	38W
<b>Current flow:</b>	3.16A@12V; 0.16A@24V
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 5
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	DT
<b>Mechanical Features</b>	
<b>Size:</b>	112.5X148.8X84.7mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>Lens Process:</b>	Surface hardened
<b>PC Brand:</b>	COVESTRO 2407
<b>Mount(optional):</b>	Bottom bracket or flush
<b>IP Rate:</b>	IP67, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H



E2166B Flood Flush Mount  
E2166F Asymmetric



E2166

For both **OEM** and aftermarket  
**Rotating** bracket available now  
Installation more flexible  
3 mounting options

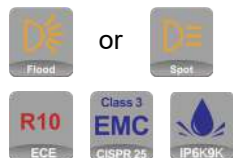


## 4" SQUARE SIDE SHOOTER SERIES



### PROJECT PHASE:

- Concept Design**
- Development
- Sample Stage
- Mass Production



<b>Model:</b>	<b>E-WL-522-A</b>
<b>Functions, Homologation</b>	
<b>Functions:</b>	Flood or Spot Beam
<b>Homologation:</b>	ECE R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	9pcs 10W LEDs
<b>Color Temp:</b>	2700~6500K (Variable)
<b>Raw Lumen:</b>	14850LM
<b>Effective Lumen:</b>	4950LM
<b>Luminous Efficacy:</b>	123.75LM/W
<b>Raw Power:</b>	90W
<b>Effective Power:</b>	40W
<b>Current Draw:</b>	3.33A@12V, 1.66A@24V
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 3
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	DT / AMP/ Cable (Optional)
<b>Thermal Management:</b>	Active (ATM)
<b>Mechanical Features</b>	
<b>Size:</b>	100X118X48.63mm
<b>Housing Material:</b>	Aluminum
<b>Lens Material:</b>	Anti-UV PC
<b>Bracket:</b>	Stainless Steel
<b>IP Rate:</b>	IP67, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H

1. Side shooter design with **Fresnel style** optics
2. Compact body but high power output
3. **4950LM** out of 4" body
4. **Instant** switch from **6000K** to **3000K** when it's foggy or dusty
5. Better penetration against harsh weather
6. Higher level of safety.



E-WL-522-A

## CLASSIC LED WORK LIGHTS



**PROJECT PHASE:**

Concept Design
Development
Sample Stage
Mass Production

Model:	E-WL-522-B	E-WL-522-B-2
<b>Functions, Homologation</b>		
Functions:	Flood	Flood
Homologation:	ECE R10	ECE R10
<b>Optical &amp; Electric Features</b>		
LED Type:	9pcs 2W LEDs	9pcs 5W LEDs
Color Temp:	6500K	6500K (Variable)
Raw Lumen:	2500LM	5850LM
Effective Lumen:	2000LM	5000LM
Luminous Efficacy:	100LM/W	111.1LM/W
Raw Power:	18W	45W
Effective Power:	20W	45W
Current Draw:	1.67A@12V, 0.83A@24V	3.75A@12V, 1.875A@24V
<b>Electromagnetic Features</b>		
EMC Grade:	CISPR 25 Class 5	CISPR 25 Class 5
Operating Voltage:	10V~30V	10V~30V
Connector:	DT / AMP/ Cable (Optional)	DT / AMP/ Cable (Optional)
<b>Mechanical Features</b>		
Size:	98X118.5X40mm	98X118.5X51mm
Housing Material:	Aluminum	Aluminum
Lens Material:	Anti-UV PC	Anti-UV PC
Bracket:	Stainless Steel	Stainless Steel
IP Rate:	IP67, IP6K9K	IP67, IP6K9K
Work Temp:	-40~+50°C	-40~+50°C
<b>So this is Life</b>		
Life Time:	>30,000H	>30,000H

Raw	Effective	Raw	Effective
5850 LM	5000 LM	2500 LM	2000 LM

- 4" body of **5000LM** effective output, **>100LM/W**.
- High end LEDs from **LUMILEDS** or **CREE** ⇒ optional
- **Zero noise** nor radio interference, EMC level: **CISPR 25 Class 5**.
- Crisp and **natural** lighting with high **CRI>80**.
- Almost **180° side shooter** illumination
- No more dark corner, increased visibility



Salt spray test **240H/480H** Lens surface hardened **(2H)** **CRI>80** **CRI<70**



# CLASSIC LED WORK LIGHTS



Model:	E-WL-522-C	E-WL-522-C-2
<b>Functions, Homologation</b>		
Functions:	Flood	Flood
Homologation:	ECE R10	ECE R10
<b>Optical &amp; Electric Features</b>		
LED Type:	9pcs 2W LEDs	9pcs 5W LEDs
Color Temp:	6500K	6500K (Variable)
Raw Lumen:	2500LM	5850LM
Effective Lumen:	2000LM	5000LM
Luminous Efficacy:	100LM/W	111.1LM/W
Raw Power:	18W	45W
Effective Power:	20W	45W
Current Draw:	1.67A@12V, 0.83A@24V	3.75A@12V, 1.875A@24V
<b>Electromagnetic Features</b>		
EMC Grade:	CISPR 25 Class 5	CISPR 25 Class 5
Operating Voltage:	10V~30V	10V~30V
Connector:	DT / AMP/ Cable (Optional)	DT / AMP/ Cable (Optional)
<b>Mechanical Features</b>		
Size:	98X118.5X40mm	98X118X51mm
Housing Material:	Aluminum	Aluminum
Lens Material:	Anti-UV PC	Anti-UV PC
Bracket:	Stainless Steel	Stainless Steel
IP Rate:	IP67, IP6K9K	IP67, IP6K9K
Work Temp:	-40~+50°C	-40~+50°C
<b>So this is Life</b>		
Life Time:	>30,000H	>30,000H

- 4" body of **5000LM** effective output, **>100LM/W**.
- High end LEDs from **LUMILEDS** or **CREE** ÷ optional
- **Zero noise** nor radio interference, EMC level: **CISPR 25 Class 5**.
- Crisp and **natural** lighting with high **CRI>80**
- Almost **180° side shooter** illumination
- No more dark corner, increased visibility

Raw	Effective	Raw	Effective
5850 LM	5000 LM	2500 LM	2000 LM



Salt spray test **240H/480H** Lens surface hardened **(2H)** **CRI>80** **CRI<70**



## CLASSIC LED WORK LIGHTS

**new**



E-WL-LED-00036F-1

E-WL-LED-00036F

**PROJECT PHASE:**

- Concept Design
- Development
- Sample Stage
- Mass Production



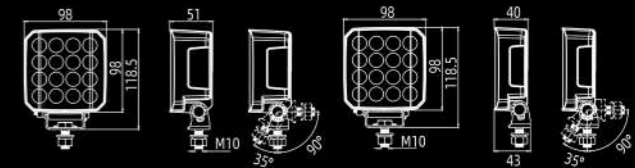
Model:	E-WL-LED-00036F	E-WL-LED-00036F-1
<b>Functions, Homologation</b>		
Functions:	Flood	Flood
Homologation:	ECE R10	ECE R10
<b>Optical &amp; Electric Features</b>		
LED Type:	16pcs 2W LEDs	16pcs 3W LEDs
Color Temp:	6500K (Variable)	6500K
Raw Lumen:	4500LM	10400LM
Effective Lumen:	3000LM	6500LM
Luminous Efficacy:	93.75LM/W	102.2LM/W
Raw Power:	32W	48W
Effective Power:	32W	45W
Current Draw:	2.67A@12V, 1.33A@24V	3.75A@12V, 1.875A@24V
<b>Electromagnetic Features</b>		
EMC Grade:	CISPR 25 Class 5	CISPR 25 Class 5
Operating Voltage:	10V~30V	10V~30V
Connector:	DT / AMP/ Cable (Optional)	DT / AMP/ Cable (Optional)
<b>Mechanical Features</b>		
Size:	98X118.5X40mm	98X118.5X51mm
Housing Material:	Aluminum	Aluminum
Lens Material:	Anti-UV PC	Anti-UV PC
Bracket:	Stainless Steel	Stainless Steel
IP Rate:	IP67, IP6K9K	IP67, IP6K9K
Work Temp:	-40~+50°C	-40~+50°C
So this is Life		
Life Time:	>30,000H	>30,000H

- 4" body of **6500LM** effective output, **>100LM/W**.
- High end LEDs from **LUMILEDS** or **CREE** optional
- **Zero noise** nor radio interference, EMC level: **CISPR 25 Class 5**.
- Crisp and **natural** lighting with high **CRI>80**.
- Almost **180° side shooter** illumination
- No more dark corner, increased visibility

Raw	Effective	Raw	Effective
<b>10400</b>	<b>6500</b>	<b>4500</b>	<b>3000</b>
<b>LM</b>	<b>LM</b>	<b>LM</b>	<b>LM</b>



Salt spray test **240H/480H** Lens surface hardened **(2H)** **CRI>80** **CRI<70**





# CLASSIC LED WORK LIGHTS



E-WL-LED-00036G-1  
E-WL-LED-00036G-2



**PROJECT PHASE:**

- Concept Design
- Development
- Sample Stage
- Mass Production

Model:	E-WL-LED-00036G	E-WL-LED-00036G-1/2
<b>Functions, Homologation</b>		
Functions:	Flood	Flood
Homologation:	ECE R10	ECE R10
<b>Optical &amp; Electric Features</b>		
LED Type:	16pcs 2W LEDs	16pcs 3W LEDs
Color Temp:	6500K (Variable)	6500K
Raw Lumen:	4500LM	10400LM
Effective Lumen:	3000LM	6500LM
Luminous Efficacy:	93.75LM/W	102.2LM/W
Raw Power:	32W	48W
Effective Power:	32W	45W
Current Draw:	2.67A@12V, 1.33A@24V	3.75A@12V, 1.875A@24V
<b>Electromagnetic Features</b>		
EMC Grade:	CISPR 25 Class 5	CISPR 25 Class 5
Operating Voltage:	10V~30V	10V~30V
Connector:	DT / AMP/ Cable (Optional)	DT / AMP/ Cable (Optional)
<b>Mechanical Features</b>		
Size:	98X118.5X40mm	98X118.5X51mm
Housing Material:	Aluminum	Aluminum
Lens Material:	Anti-UV PC	Anti-UV PC
Bracket:	Stainless Steel	Stainless Steel
IP Rate:	IP67, IP6K9K	IP67, IP6K9K
Work Temp:	-40~+50°C	-40~+50°C
<b>So this is Life</b>		
Life Time:	>30,000H	>30,000H

Products subject to update, change or modify without notice.

- 4" body of **6500LM** effective output, **>100LM/W**.
- High end LEDs from **LUMILEDS** or **CREE** optional
- **Zero noise** nor radio interference, EMC level: **CISPR 25 Class 5**
- Crisp and **natural** lighting with high **CRI>80**
- Almost **180° side shooter** illumination
- No more dark corner, increased visibility

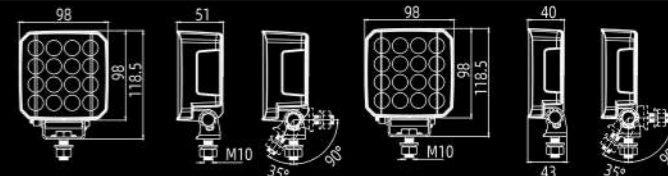
Raw	Effective	Raw	Effective
<b>10400 LM</b>	<b>6500 LM</b>	<b>4500 LM</b>	<b>3000 LM</b>

E-WL-LED-00036G-2  
E-WL-LED-00036G-1

E-WL-LED-00036G



Salt spray test **240H/480H** Lens surface hardened **(2H)** **CRI>80** **CRI<70**



## ASYMMETRIC LENS PATTERN



### PROJECT PHASE:

- Concept Design
- Development
- Sample Stage
- Mass Production



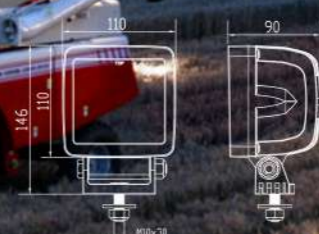
<b>Model:</b>	E2172
<b>Functions, Homologation</b>	
<b>Beam Pattern</b>	Asymmetric Beam
<b>Homologation:</b>	ECE R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	30pcs 3W LEDs
<b>Emitting Color</b>	White
<b>Color Temp:</b>	5700-6500K
<b>Raw Lumen:</b>	10440LM
<b>Effective Lumen:</b>	7000-7800LM
<b>Luminous Efficacy:</b>	93.3LM/W
<b>Raw Power:</b>	90W
<b>Effective Power:</b>	75-85W
<b>Current Flow:</b>	6.25A@12V, 3.54A@24V
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR25 Class 3
<b>EMC Standards:</b>	ISO 13766
	ISO 14982
	ISO 7637-2
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	2 pin DT

<b>Mechanical Features</b>	
<b>DSize:</b>	110X146X90mm
<b>Housing Material:</b>	Aluminum
<b>Lens Material:</b>	Anti-UV PC
<b>PC Brand:</b>	COVESTRO 2407
<b>Mount:</b>	Bottom Bracket
<b>Bracket Material:</b>	Die-cast Aluminum
<b>Bolt Material:</b>	SUS316 Stainless Steel
<b>IP Rate:</b>	IP68, IP6K9K (SAE J1455)
<b>Anti-Corrosion:</b>	ISO 9227 240H
<b>Vibration Level:</b>	15.3Gms 24~2000Hz
<b>Impact Force:</b>	60G
<b>Work Temp:</b>	-40~+80°C
<b>Over Temp.</b>	GB/T 10485
<b>Protection:</b>	GB 4599—2007
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H

Raw lumen 10440LM  
**7800Lm** effective from **4.5"** body  
**Asymmetric** beam pattern  
 More light to work field  
 Tough OEM design



E2172



## CLASSIC LED WORK LIGHT



### PROJECT PHASE:

- Concept Design
- Development
- Sample Stage
- Mass Production



<b>Model:</b>	<b>E2161A</b>
<b>Functions, Homologation</b>	
<b>Functions:</b>	Flood
<b>Homologations</b>	ECE R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	30 pcs 1W LED(s)
<b>Color Temp:</b>	White
<b>Raw Lumen:</b>	5040LM
<b>Effective Lumen:</b>	2309.58LM
<b>Luminous Efficacy:</b>	85.5LM/W
<b>Raw Power:</b>	30W
<b>Effective Power:</b>	27W
<b>Current Draw:</b>	2.25A@12V, 1.125A@24V
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	ECE R10
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	Open cable
<b>Mechanical Features</b>	
<b>Size:</b>	152X99X104mm
<b>Housing Material:</b>	Aluminum
<b>Lens Material:</b>	Anti-UV PC
<b>PC Brand:</b>	COVESTRO 2407
<b>Bracket:</b>	201 or 304 Bolt
<b>IP Rate:</b>	IP67,IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000h

- **OEM design** with Generic mounting options.
- Super conducting **graphene housing**
- Light weight but robust
- High efficacy, up to **85.5LM/W**
- EMC level, **CISPR 25 Class 5**



E2161A

Raw	Effective
<b>5040 LM</b>	<b>2309 LM</b>



Flexible mounting options



**HIGH LUMINOUS EFFICACY  
4X6" LED WORK LIGHT**



**new**

**PROJECT PHASE:**

- Concept Design
- Development
- Sample Stage
- Mass Production



<b>Model:</b>	E2178
<b>Functions, Homologation</b>	
<b>Functions:</b>	Flood
<b>Homologations</b>	ECE R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	8 pcs 10W LED(s)
<b>Color Temp:</b>	White
<b>Raw Lumen:</b>	13200LM / 8800LM / 4000LM(optional)
<b>Effective Lumen:</b>	5200LM / 4350LM / 2950LM(optional)
<b>Luminous Efficacy:</b>	123.8LM/W, 103.5LM/W, 92.1LM/W(optional)
<b>Raw Power:</b>	80W
<b>Effective Power:</b>	42W / 32W(optional)
<b>Current Draw:</b>	42W: 3.5A@12V, 1.75A@24V 32W: 2.67A@12V, 1.33A@24V
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	ECE R10
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	Cable or DT
<b>Mechanical Features</b>	
<b>Size:</b>	142.5X55.24X82mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>PC Brand:</b>	COVESTRO 2407
<b>Bracket:</b>	Flush / Bottom / Side Mount(optional)
<b>IP Rate:</b>	IP67, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H

E2178  
Concept Design

- Fresnel style optics, OEM mounting, **CISPR 25 Class 3**
- Diversified optical and mounting options
- High lumen options are **5200LM, 4350LM, and 2950LM**
- **Flexible** mounting options to your heart content:  
Bottom mounted, Side mounted, and OEM flush mount.
- **Active thermal** management to guarantee optimized lighting experience



OEM Flush Mount

Bottom Mounted

Side Mounted

## CLASSIC LED WORK LIGHT



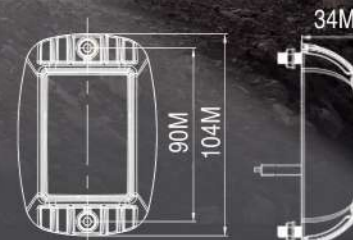
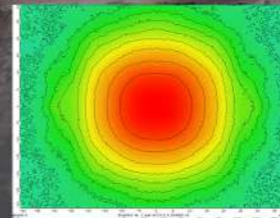
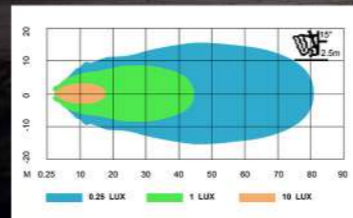
<b>Model:</b>	<b>E2151</b>
<b>Functions, Homologation</b>	
<b>Functions</b>	Auxiliary Work Light
<b>Beam Pattern</b>	Flood or Spot
<b>Approvals/Standards:</b>	ECE R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	10 pcs 3W LED(s)
<b>Emitting Color</b>	White
<b>Color Temp:</b>	6500K
<b>Raw Lumen:</b>	2600LM
<b>Effective Lumen:</b>	860LM
<b>Luminous Efficacy:</b>	86LM/W
<b>illumination</b>	1 lux @43m
<b>Raw Power:</b>	30W
<b>Effective Power:</b>	10W
<b>Current flow:</b>	0.83A@12V, 0.42A@24V
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	ECE R10
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	Open cable
<b>Mechanical Features</b>	
<b>Size:</b>	104X72X34mm
<b>Housing Material:</b>	Aluminum
<b>Lens Material:</b>	Anti-UV PC
<b>PC Brand:</b>	COVESTRO 2407
<b>Mount:</b>	201 or 304 Bolt
<b>IP Rate:</b>	IP67,IP6K9K
<b>Work Tem:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000h

### PROJECT PHASE:

Concept Design
Development
Sample Stage
<b>Mass Production</b>

## Wide applications on almost all commercial vehicles

- Raw Lumen: 2600LM
- Effective Lumen: **860LM**
- Luminous Efficacy: 86LM/W
- Effective Power: **10W**
- over **200 m<sup>2</sup>** illumination



## 9" MINI AUXILIARY DRIVING LIGHT BAR



Fresnel style lens



### PROJECT PHASE:

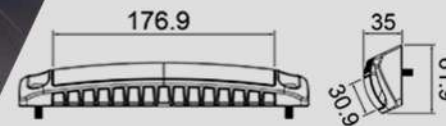
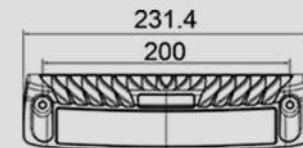
- Concept Design
- Development
- Sample Stage
- Mass Production**



Slope bracket for E2174-1

Model:	E2174	E2174-1(R23)
Functions, Homologation		
Function(optional):	Flood beam	Reversing (with R23 slope bracket)
	Asymmetric beam	
Homologation(opitonal):	ECE R23, R10	
Optical & Electric Features		
LED Type:	6 pcs OSRAM 5W LEDs	6 pcs 6W LEDs
Emitting Color:	White	White
Color Temp:	5700K-6500K	5700K-6500K
Raw lumen:	3300LM	4320LM
Effective lumen:	2780LM	2411LM
Raw power:	30W	36W
Effective power:	30W	29W
Current draw@12V:	2.5A	2.42A
Electromagnetic Features		
EMC Grade:	CISPR 25 Class 3	CISPR 25 Class 5
Operating Voltage:	10V~30V	10V~30V
Connector:	Cable	Cable
Mechanical Features		
Size:	231.4X61.9X35mm	231.4X61.9X35mm
Housing Material:	Aluminum	Aluminum
Lens Material:	Anti-UV PC	Anti-UV PC
Mount:	Back mount	Slope bracket
IP Rate:	IP67, IP6K9K	IP67, IP6K9K
Work Temp:	-40~+50°C	-40~+50°C
So this is Life		
Life Time:	>30,000H	>30,000H

- Diamond-like optic lens design
- Even and **super bright** flooding
- 4 optical versions optional:
  - ① Flood beam
  - ② or High brightness **reversing beam** with R23
  - ③ or **ideal asymmetric** beam for side maker
  - ④ or warning light
- High level EMC, **CISPR 25 Class 5**
- **Zero noise**, zero radio interference.
- Remote control



Raw	Effective
<b>3300 LM</b>	<b>2780 LM</b>

**30W**

E2174(Development)



9"

# HIGH LUMINOUS EFFICACY



Narrow Bracket

**PROJECT PHASE:**

- Concept Design
- Development
- Sample Stage
- Mass Production**



Wide Bracket

**Model:** E2138

**Functions, Homologation**

**Beam Pattern:** 180° Super Flood

**Homologation:** ECE R10

**Optical & Electric Features**

**LED Type:** 15pcs 10W OSRAM P9 LEDs

**Emitting Color:** White

**Color Temp:** 6500K

**Raw Lumen:** 15750LM

**Effective Lumen:** 11000LM

**Illumination Distance:** 1 lux @ 100m

**Luminous Efficacy:** 89.56LM/W

**Raw Power:** 150W

**Effective Power:** 80W

**Current flow:** 7.08A@12V, 3.24A@24V

**Electromagnetic Features**

**EMC Grade:** CISPR 25 Class 5

**Operating Voltage:** 10V~30V

**Connector:** DT / AMP/ Cable (Optional)

**Mechanical Features**

**Housing Material:** Aluminum

**Lens Material:** Anti-UV PC + Hardening

**PC Brand:** COVESTRO 2407

**Mount:** Bottom Bracket

**Bracket:** Stainless Steel

**Bracket thickness:** 4mm

**Bracket tilt angle:** 80°

**IP Rate:** IP67, IP6K9K

**Work Temp:** -40~+50°C

**Vibration Level:** 15.3Grms

**So this is Life**

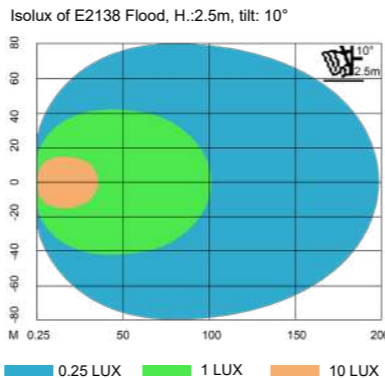
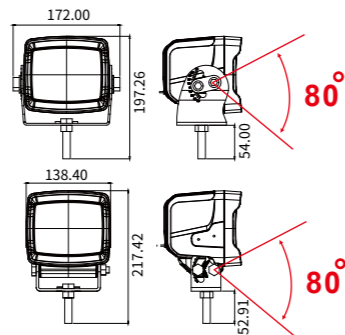
**Life Time:** >30,000H

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**Bracket Optional**

E2138-1 Wide 172X127X197mm

E2138-2 Narrow 138X127X217mm

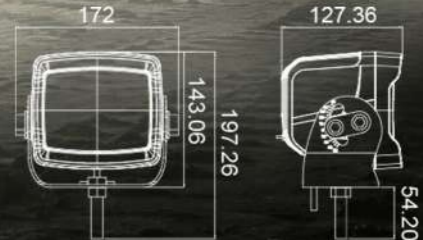
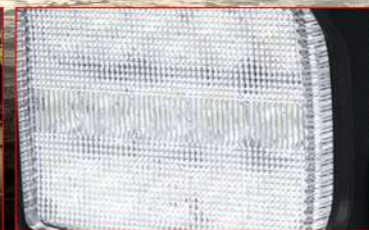


## Designed for heavy duty

- Lens surface hardened and anti-scratch
- 180° even flood, No Dark Corner, Increased visibility
- High level EMC **CISPR 25 Class 5**
- Passing salt spray test of **480H**



Raw	Effective
15750 LM	11000 LM



## CLASSIC LED WORK LIGHT



### PROJECT PHASE:

Concept Design
Development
Sample Stage
Mass Production



<b>Model:</b>	<b>E2152A</b>
<b>Functions, Homologation</b>	
<b>Beam Pattern:</b>	Flood
<b>Standards:</b>	ECE R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	12 pcs 3W OSRAM LED(s)
<b>Color Temp:</b>	5000~6500K
<b>Raw Lumen:</b>	4800LM
<b>Effective Lumen:</b>	2250LM
<b>Luminous Efficacy:</b>	90LM/W
<b>Raw Power:</b>	36W
<b>Effective Power:</b>	25W
<b>Current Draw:</b>	2.09A@12V; 1.5A@24V
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 3
<b>Operating Voltage:</b>	10V~30V
<b>Decoder:</b>	PWM
<b>Connector:</b>	DT / AMP/ Cable (Optional)
<b>Mechanical Features</b>	
<b>Size:</b>	148X92X80mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>PC Brand:</b>	COVESTRO 2407
<b>Bracket:</b>	201 or 304 Stainless Steel
<b>IP Rate:</b>	IP67, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000h

Designed for Wide applications  
Classic Halogen surface High efficacy **OSRAM LED**  
Effective lumen **2250 Lm**  
Effective power **25W**  
**CISPR 25 Class 3** high level of EMC  
**PWM** decoder  
**Zero** flickering  
Even flood beam  
Ideal for general work purposes



E2152A





## ASYMMETRIC LENS PATTERN

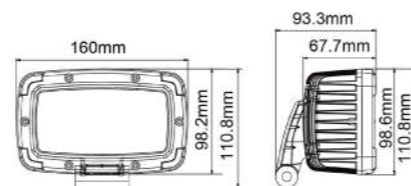
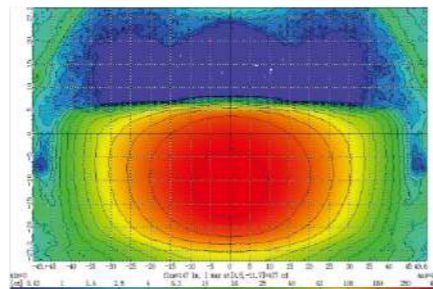


### PROJECT PHASE:

- Concept Design
- Development
- Sample Stage
- Mass Production



<b>Model:</b>	E2101
<b>Functions, Homologation</b>	
<b>Beam Pattern</b>	Asymmetric lens pattern
<b>Homologation:</b>	ECE R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	36pcs 3W SMD LEDs
<b>Color Temp:</b>	5000~6500K
<b>Raw Lumen:</b>	11160LM
<b>Effective Lumen:</b>	6300LM
<b>Luminous Efficacy:</b>	109LM/W
<b>Raw Power:</b>	108W
<b>Effective Power:</b>	48W
<b>Current Draw:</b>	4.00A@12V; 2.00A@24V
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	ECE R10
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	DT / AMP/ Cable (Optional)
<b>Mechanical Features</b>	
<b>Size:</b>	160X93.3X110.8mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>PC Brand:</b>	COVESTRO 2407
<b>Bracket:</b>	Stainless Steel
<b>IP Rate:</b>	IP67, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H



## ASYMMETRIC LENS PATTERN

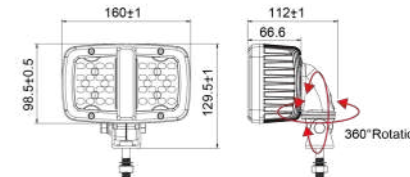
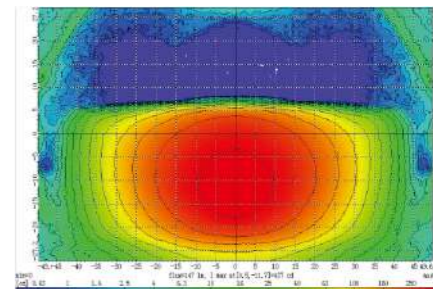


### PROJECT PHASE:

- Concept Design
- Development
- Sample Stage
- Mass Production



<b>Model:</b>	E2101-2
<b>Functions, Homologation</b>	
<b>Beam Pattern</b>	Asymmetric lens pattern
<b>Homologation:</b>	ECE R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	36pcs 3W SMD LED(s)
<b>Color Temp:</b>	5000~6500K
<b>Raw Lumen:</b>	7920LM
<b>Effective Lumen:</b>	5222.7LM
<b>Luminous Efficacy:</b>	109LM/W
<b>Raw Power:</b>	108W
<b>Effective Power:</b>	48W
<b>Current Draw:</b>	4.00A@12V; 2.00A@24V
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 3
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	DT / AMP/ Cable (Optional)
<b>Mechanical Features</b>	
<b>Size:</b>	160X112X129.5mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>PC Brand:</b>	COVESTRO 2407
<b>Bracket:</b>	Stainless Steel
<b>IP Rate:</b>	IP67, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H



## HIGH LUMINOUS EFFICACY 4X6" LED WORK LIGHT



### PROJECT PHASE:

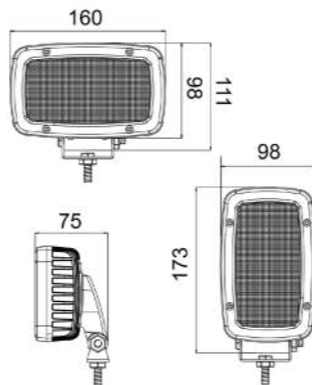
- Concept Design
- Development
- Sample Stage
- Mass Production



<b>Model:</b>	E2102
<b>Functions, Homologation</b>	
<b>Beam Pattern</b>	80° Flood Beam
<b>Homologation:</b>	ECE R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	21pcs LEDs
<b>Color Temp:</b>	5000~6500K
<b>Raw Lumen:</b>	4830LM
<b>Effective Lumen:</b>	4318.5LM
<b>Luminous Efficacy:</b>	118.7LM/W
<b>Raw Power:</b>	63W
<b>Effective Power:</b>	36.36W
<b>Current Draw:</b>	3.03A@12V; 1.515A@24V

<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 3
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	DT / AMP/ Cable (Optional)

<b>Mechanical Features</b>	
<b>Size:</b>	160X111X75mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>PC Brand:</b>	COVESTRO 2407
<b>Bracket:</b>	Stainless Steel
<b>IP Rate:</b>	IP67, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000h

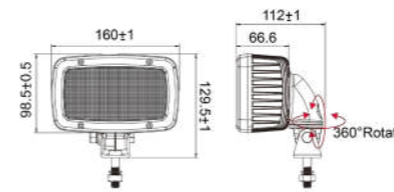
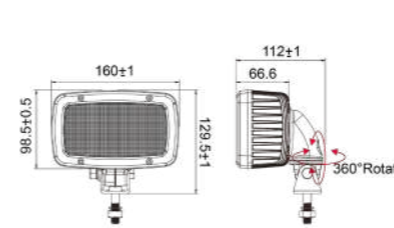


## HIGH LUMINOUS EFFICACY 4X6" LED WORK LIGHT



### PROJECT PHASE:

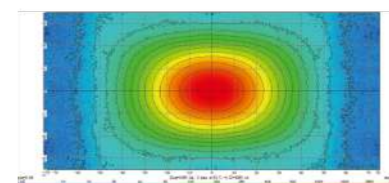
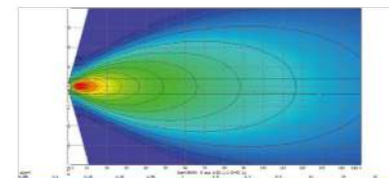
- Concept Design
- Development
- Sample Stage
- Mass Production



<b>Model:</b>	E2102-2
<b>Functions, Homologation</b>	
<b>Beam Pattern</b>	80° Flood Beam
<b>Homologation:</b>	ECE R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	21pcs LEDs
<b>Color Temp:</b>	5000~6500K
<b>Raw Lumen:</b>	4830LM
<b>Effective Lumen:</b>	4318.5LM
<b>Luminous Efficacy:</b>	118.7LM/W
<b>Raw Power:</b>	63W
<b>Effective Power:</b>	36.36W
<b>Current Draw:</b>	3.03A@12V; 1.515A@24V

<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 3
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	DT / AMP/ Cable (Optional)

<b>Mechanical Features</b>	
<b>Size:</b>	160X129.5X112mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>PC Brand:</b>	COVESTRO 2407
<b>Bracket:</b>	Stainless Steel
<b>IP Rate:</b>	IP67, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000h



E2102-2



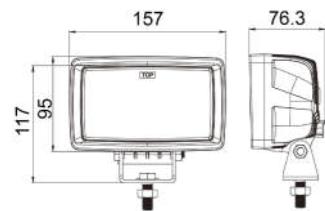
55W Halogen Work Light

## HIGH LUMINOUS EFFICACY 4X6" LED WORK LIGHT



### PROJECT PHASE:

- Concept Design
- Development
- Sample Stage
- Mass Production



**Model:** E2129

### Functions, Homologation

**Beam Pattern:** Trapezoidal Beam

**Homologation:** ECE R10

### Optical & Electric Features

**LED Type:** 12pcs Osram P8 5W LEDs

**Color Temp:** 5000~6500K

**Raw Lumen:** 6600LM

**Effective Lumen:** 3100LM

**Luminous Efficacy:** 77.5LM/W

**Raw Power:** 60W

**Effective Power:** 40W

**Current Draw:** 3.3A@12V; 1.67A@24V

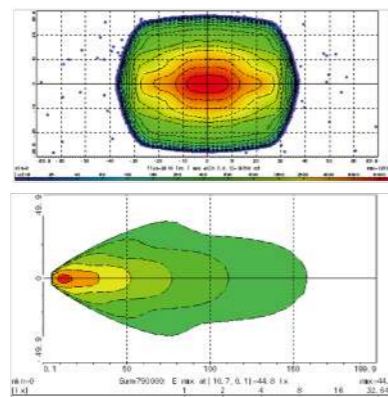
### Electromagnetic Features

**EMC Grade:** CISPR 25 Class 3

**Operating Voltage:** 10V~30V

**Decoder:** PWM

**Connector:** DT / AMP/ Cable (Optional)



### Mechanical Features

**Size:** 157X117X76.3mm

**Housing Material:** Aluminium Alloy

**Lens Material:** Anti-UV PC

**PC Brand:** COVESTRO 2407

**Bracket:** Stainless Steel

**IP Rate:** IP67, IP6K9K

**Work Temp:** -40~+50°C

### So this is Life

**Life Time:** >30,000h

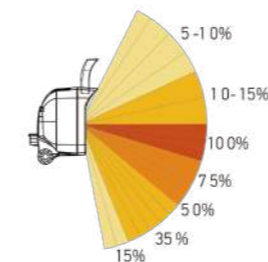


## ASYMMETRIC LENS PATTERN

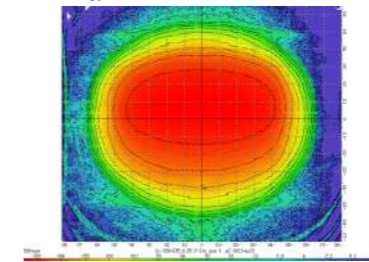


### PROJECT PHASE:

- Concept Design
- Development
- Sample Stage
- Mass Production



### Plan energy distribution



**Model:** E2110

### Functions, Homologation

**Beam Pattern:** Asymmetric lens pattern

**Homologation:** ECE R10

### Optical & Electric Features

**LED Type:** 50pcs SMD LEDs

**Color Temp:** 5000~6500K

**Raw Lumen:** 7000LM

**Effective Lumen:** 2467.7LM

**Luminous Efficacy:** 132.6LM/W

**Raw Power:** 50W

**Effective Power:** 18.6W

**Current Draw:** 1.5A@12V; 0.75A@24V

### Electromagnetic Features

**EMC Grade:** ECE R10

**Operating Voltage:** 10V~30V

**Connector:** DT or Open Cable

### Mechanical Features

**Size:** 156X106X89mm

**Housing Material:** Aluminium Alloy, PC

**Lens Material:** Anti-UV PC

**PC Brand:** COVESTRO 2407

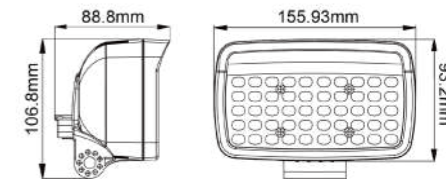
**Bracket:** Stainless Steel

**IP Rate:** IP66, IP6K9K

**Work Temp:** -40~+50°C

### So this is Life

**Life Time:** >30,000H



**HIGH LUMINOUS EFFICACY  
4X6" LED WORK LIGHT**



<b>Model:</b>	<b>E2143</b>
<b>Functions, Homologation</b>	
<b>Beam Pattern</b>	Flood Beam
<b>Homologation:</b>	ECE R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	30pcs 3W SMD LED(s)
<b>Color Temp:</b>	5000~6500K
<b>Raw Lumen:</b>	5800LM
<b>Effective Lumen:</b>	3471LM
<b>Luminous Efficacy:</b>	131.25LM/W
<b>Raw Power:</b>	90W
<b>Effective Power:</b>	45W
<b>Current Draw:</b>	3.75A@12V; 1.88A@24V
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 5
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	DT / AMP/ Cable (Optional)
<b>Mechanical Features</b>	
<b>Size:</b>	105X188X76.3mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>PC Brand:</b>	COVESTRO 2407
<b>Bracket:</b>	Stainless Steel
<b>IP Rate:</b>	IP67, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000h

**PROJECT PHASE:**

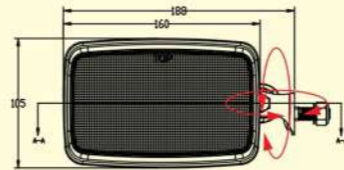
Concept Design
Development
Sample Stage
<b>Mass Production</b>



- Bright Focus and wide illumination
- **1 lux@79m**
- 45W Effective Power
- **3471Lm** Effective Lumen
- High level of EMC, **CISPR 25 Class 5**
- **Zero interfering** with AM/FM radio signals
- **360°** rotating bracket



E2143



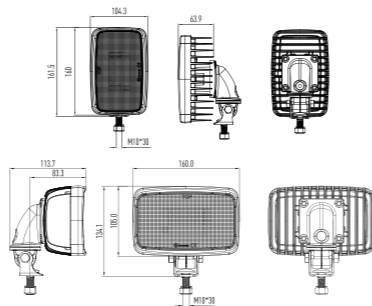
## HIGH LUMINOUS EFFICACY 4X6" LED WORK LIGHT



### PROJECT PHASE:

Concept Design
Development
Sample Stage
Mass Production

<b>Model:</b>	E2143A
<b>Functions, Homologation</b>	
<b>Beam Pattern</b>	Flood Beam
<b>Homologation:</b>	ECE R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	30pcs 3W SMD LED(s)
<b>Color Temp:</b>	5000~6500K
<b>Raw Lumen:</b>	5800LM
<b>Effective Lumen:</b>	3471LM
<b>Luminous Efficacy:</b>	131.25LM/W
<b>Raw Power:</b>	90W
<b>Effective Power:</b>	45W
<b>Current Draw:</b>	3.75A@12V; 1.88A@24V
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 5
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	DT / AMP/ Cable (Optional)
<b>Mechanical Features</b>	
<b>Size:</b>	160X134.1X113.7mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>PC Brand:</b>	COVESTRO 2407
<b>Bracket:</b>	Stainless Steel
<b>IP Rate:</b>	IP67, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000h

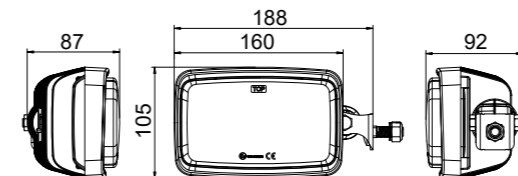


## HIGH LUMINOUS EFFICACY 4X6" LED WORK LIGHT



### PROJECT PHASE:

Concept Design
Development
Sample Stage
Mass Production



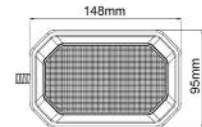
<b>Model:</b>	E2142
<b>Functions, Homologation</b>	
<b>Beam Pattern</b>	Trapezoidal Beam
<b>Homologation:</b>	ECE R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	12 pcs 4 W SMD LED(s)
<b>Color Temp:</b>	5000~6500K
<b>Raw Lumen:</b>	5800LM
<b>Effective Lumen:</b>	3600M
<b>Luminous Efficacy:</b>	131.25LM/W
<b>Raw Power:</b>	48W
<b>Effective Power:</b>	40W
<b>Current Draw:</b>	3.75A@12V; 1.88A@24V
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 3
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	DT / AMP/ Cable (Optional)
<b>Mechanical Features</b>	
<b>Size:</b>	188X92X105
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>PC Brand:</b>	COVESTRO 2407
<b>Bracket:</b>	Stainless Steel
<b>IP Rate:</b>	IP67, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000h

## HIGH LUMINOUS EFFICACY 4X6" LED WORK LIGHT



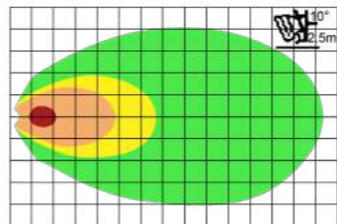
### PROJECT PHASE:

- Concept Design
- Development
- Sample Stage
- Mass Production

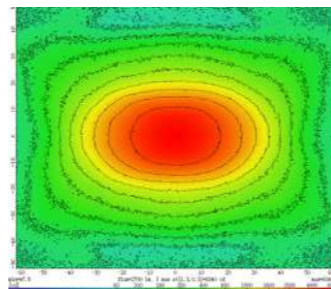


<b>Model:</b>	E2103
<b>Functions, Homologation</b>	
<b>Beam Pattern</b>	Flood Beam
<b>Homologation:</b>	ECE R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	14pcs 3W LEDs
<b>Color Temp:</b>	5000~6500K
<b>Raw Lumen:</b>	3360LM
<b>Effective Lumen:</b>	1813.77LM
<b>Illumination:</b>	1 lux @72m
<b>Luminous Efficacy:</b>	64.78LM/W
<b>Raw Power:</b>	42W
<b>Effective Power:</b>	28W
<b>Current Draw:</b>	2.33A@12V, 1.17@24V
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 3
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	DT / AMP/ Cable (Optional)

<b>Mechanical Features</b>	
<b>Size:</b>	148X95X79mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>PC Brand:</b>	COVESTRO 2407
<b>Bracket:</b>	Stainless Steel
<b>IP Rate:</b>	IP67, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H



1 LUX 5 LUX 10 LUX 80 LUX



## HIGH LUMINOUS EFFICACY 2X5" LED WORK LIGHT



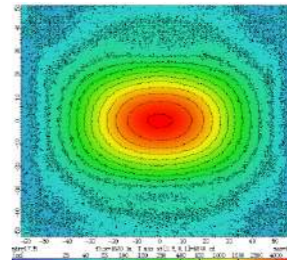
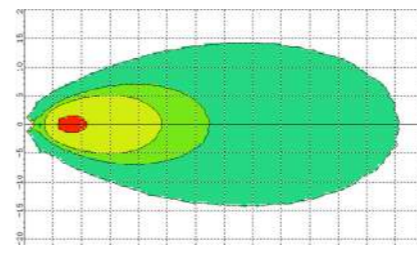
### PROJECT PHASE:

- Concept Design
- Development
- Sample Stage
- Mass Production



<b>Model:</b>	E2124
<b>Functions, Homologation</b>	
<b>Functions</b>	Work Light
<b>Beam Pattern</b>	80° Flood Beam
<b>Homologations</b>	ECE R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	10pcs 3W LEDs
<b>Color Temp:</b>	5000~6500K
<b>Raw Lumen:</b>	1800LM
<b>Effective Lumen:</b>	1440LM
<b>Luminous Efficacy:</b>	120LM/W
<b>Raw Power:</b>	30W
<b>Effective Power:</b>	12W
<b>Current Draw:</b>	1A@12V; 0.5A@24V
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	ECE R10
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	DT / AMP/ Cable (Optional)

<b>Mechanical Features</b>	
<b>Size:</b>	110X76.6X51mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>PC Brand:</b>	COVESTRO 2407
<b>Bracket:</b>	Stainless Steel
<b>IP Rate:</b>	IP67, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H
<b>Part number:</b>	
E2124	40cm cable only
E2124-1	AMP 2P male connector
E2124-2	DEUTSCH 2P male connector

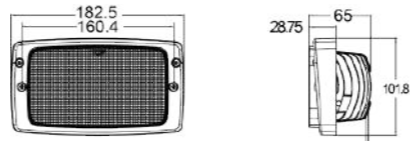


## FLUSHBONADING LED WORK LIGHTS 4" SQUARE WORK LIGHT



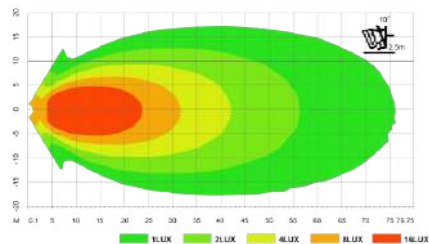
<b>Model:</b>	E2106A
<b>Functions, Homologation</b>	
<b>Functions:</b>	Flood Beam
<b>Homologations</b>	ECE R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	30pcs 3W LED(s)
<b>Color Temp:</b>	5000~6500K
<b>Raw Lumen:</b>	9900LM
<b>Effective Lumen:</b>	3550LM
<b>Max illumination:</b>	1Lux@106m
<b>Work illumination:</b>	1Lux@76m
<b>Luminous Efficacy:</b>	98.6LM/W
<b>Raw Power:</b>	90W
<b>Effective Power:</b>	36W
<b>Current Draw:</b>	3A@12V; 1.5A@24V
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 5
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	DT / AMP/ Cable (Optional)

<b>Mechanical Features</b>	
<b>Size:</b>	182.5X101.8X65mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>PC Brand:</b>	COVESTRO 2407
<b>Bracket:</b>	Flushbonading
<b>IP Rate:</b>	IP67, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H



### PROJECT PHASE:

- Concept Design
- Development
- Sample Stage
- Mass Production**



## FLUSHBONADING LED WORK LIGHTS 4" SQUARE WORK LIGHT

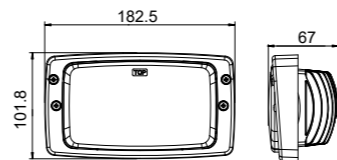


<b>Model:</b>	E2137
<b>Functions, Homologation</b>	
<b>Functions:</b>	Trapezoidal Beam
<b>Homologations</b>	ECE R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	12pcs Osram P8 5W LED(s)
<b>Color Temp:</b>	5000~6500K
<b>Raw Lumen:</b>	6600LM
<b>Effective Lumen:</b>	3071.04LM
<b>Luminous Efficacy:</b>	127.96LM/W
<b>Raw Power:</b>	60W
<b>Effective Power:</b>	24W
<b>Current Draw:</b>	2.0A@12V; 1.0A@24V
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 3
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	DT / AMP/ Cable (Optional)

<b>Mechanical Features</b>	
<b>Size:</b>	182.5X101.8X67mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>PC Brand:</b>	COVESTRO 2407
<b>Bracket:</b>	Flushbonading
<b>IP Rate:</b>	IP67, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H

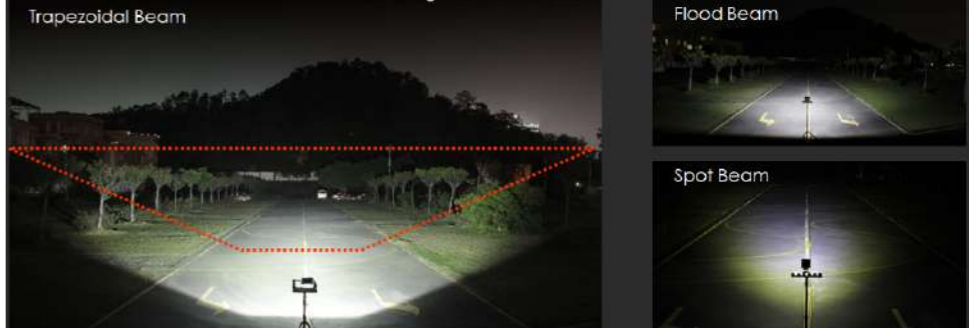
### PROJECT PHASE:

- Concept Design
- Development
- Sample Stage
- Mass Production**



### Why Trapezoidal Beam?

- Narrower than Flood Beam
- Wider than Spot Beam
- Brighter than Flood Beam
- More even light than Combo Beam



**HIGH LUMINOUS EFFICACY**  
**4X6" LED WORK LIGHT HORIZONTAL-HIGH POWER**



**PROJECT PHASE:**

Concept Design
Development
Sample Stage
<b>Mass Production</b>

**Model:** E2121

**Functions, Homologation**

**Beam Pattern:** 80° Flood Beam

**Homologation:** ECE R10

**Optical & Electric Features**

**LED Type:** 14pcs 3W LEDs

**Color Temp:** 5000~6500K

**Raw Lumen:** 2800LM

**Effective Lumen:** 2359.4LM

**Luminous Efficacy:** 75.9LM/W

**Raw Power:** 42W

**Effective Power:** 31 W

**Current Draw:** 2.59A@12V; 1.295A@24V

**Electromagnetic Features**

**EMC Grade:** ECE R10

**Operating Voltage:** 10V~30V

**Connector:** DT / AMP/ Cable (Optional)

**Mechanical Features**

**Size:** 179.29X95X58.61mm

**Housing Material:** Aluminium Alloy

**Lens Material:** Anti-UV PC

**PC Brand:** COVESTRO 2407

**Bracket:** Stainless Steel

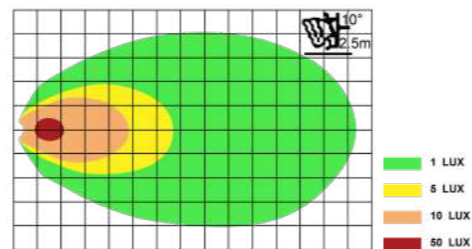
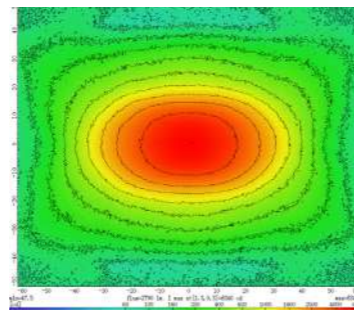
**IP Rate:** IP67, IP6K9K

**Work Temp:** -40~+50°C

**So this is Life**

**Life Time:** >30,000H

Plane energy distribution.



**HIGH LUMINOUS EFFICACY**  
**4X6" LED WORK LIGHT HORIZONTAL-HIGH POWER**



**PROJECT PHASE:**

Concept Design
Development
Sample Stage
<b>Mass Production</b>

**Model:** E2121-1

**Functions, Homologation**

**Beam Pattern:** 80° Flood Beam

**Homologation:** ECE R10

**Optical & Electric Features**

**LED Type:** 14pcs 5W LEDs

**Color Temp:** 5000~6500K

**Raw Lumen:** 7000LM

**Effective Lumen:** 3600LM

**Luminous Efficacy:** 100LM/W

**Raw Power:** 70W

**Effective Power:** 36 W

**Current Draw:** 3A@12V; 1.5A@24V

**Electromagnetic Features**

**EMC Grade:** CISPR 25 Class 5

**Operating Voltage:** 10V~30V

**Connector:** DT / AMP/ Cable (Optional)

**Mechanical Features**

**Size:** 179.29X95X58.61mm

**Housing Material:** Aluminium Alloy

**Lens Material:** Anti-UV PC

**PC Brand:** COVESTRO 2407

**Bracket:** Stainless Steel

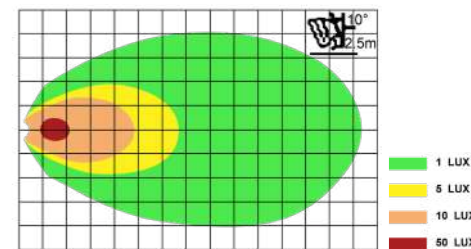
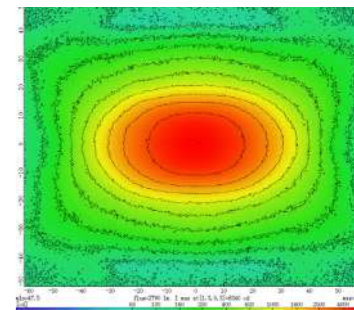
**IP Rate:** IP67, IP6K9K

**Work Temp:** -40~+50°C

**So this is Life**

**Life Time:** >30,000H

Plane energy distribution.



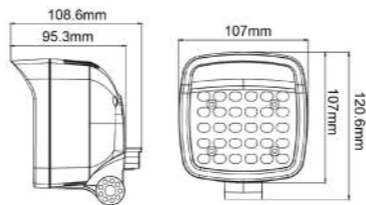


## ASYMMETRIC LENS PATTERN



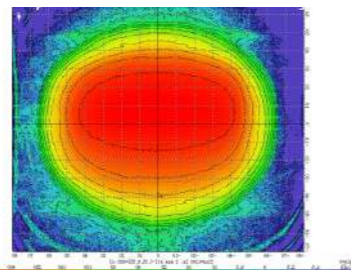
<b>Model:</b>	E2108
<b>Functions, Homologation</b>	
<b>Beam Pattern</b>	Asymmetric lens pattern
<b>Homologation:</b>	ECE R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	30pcs SMD LEDs
<b>Color Temp:</b>	5000~6500K
<b>Raw Lumen:</b>	4200LM
<b>Effective Lumen:</b>	1923.5LM
<b>Luminous Efficacy:</b>	128.2LM/W
<b>Raw Power:</b>	30W
<b>Effective Power:</b>	15W
<b>Current Draw:</b>	1.29A@12V; 0.645A@24V
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	ECE R10
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	DT or Open Cable

<b>Mechanical Features</b>	
<b>Size:</b>	107X120.6X108.6mm
<b>Housing Material:</b>	Aluminium Alloy, PC
<b>Lens Material:</b>	Anti-UV PC
<b>PC Brand:</b>	COVESTRO 2407
<b>Bracket:</b>	Stainless Steel
<b>IP Rate:</b>	IP66, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H



<b>PROJECT PHASE:</b>	
Concept Design	
Development	
Sample Stage	
Mass Production	

Plan energy distribution

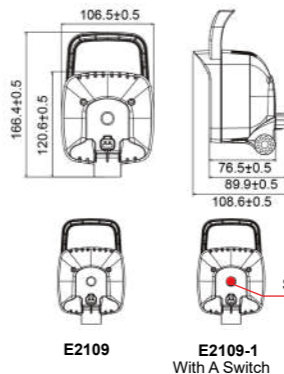
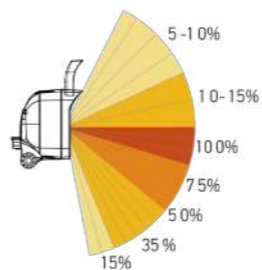


## ASYMMETRIC LENS PATTERN



<b>Model:</b>	E2109/E2109-1
<b>Functions, Homologation</b>	
<b>Beam Pattern</b>	Asymmetric lens pattern
<b>Homologation:</b>	ECE R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	30pcs SMD LEDs
<b>Color Temp:</b>	5000~6500K
<b>Raw Lumen:</b>	4200LM
<b>Effective Lumen:</b>	1923.5LM
<b>Luminous Efficacy:</b>	128.2LM/W
<b>Raw Power:</b>	30W
<b>Effective Power:</b>	15W
<b>Current Draw:</b>	1.29A@12V; 0.645A@24V
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	ECE R10
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	DT or Open Cable

<b>PROJECT PHASE:</b>	
Concept Design	
Development	
Sample Stage	
Mass Production	

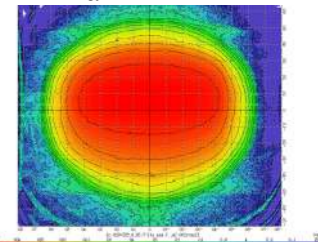


E2109

E2109-1  
With A Switch

<b>Mechanical Features</b>	
<b>Size:</b>	107X120.6X108.6mm
<b>Housing Material:</b>	Aluminium Alloy, PC
<b>Lens Material:</b>	Anti-UV PC
<b>PC Brand:</b>	COVESTRO 2407
<b>Bracket:</b>	Stainless Steel
<b>IP Rate:</b>	IP54
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H

Plan energy distribution



## HIGH LUMINOUS EFFICACY



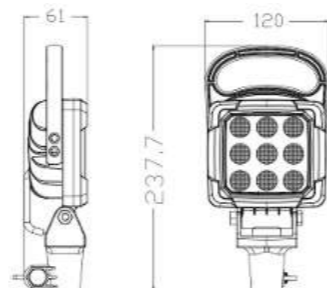
**PROJECT PHASE:**

- Concept Design
- Development
- Sample Stage
- Mass Production



<b>Model:</b>	E2120
<b>Functions, Homologation</b>	
<b>Functions:</b>	80° Flood Beam
<b>Homologations</b>	ECE R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	9pcs 5W LEDs
<b>Color Temp:</b>	5000~6500K
<b>Raw Lumen:</b>	4950LM
<b>Effective Lumen:</b>	3087LM
<b>Luminous Efficacy:</b>	114LM/W
<b>Raw Power:</b>	45W
<b>Effective Power:</b>	28.5W
<b>Current Draw:</b>	2.37A@12V; 1.18A@24V
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 3
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	DT / AMP/ Cable (Optional)

<b>Mechanical Features</b>	
<b>Size:</b>	120X237.7X61mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>PC Brand:</b>	COVESTRO 2407
<b>Mount:</b>	Cigar Lighter Pedestal
<b>Bracket:</b>	Stainless Steel
<b>IP Rate:</b>	IP67, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H
<b>3W LED power optional</b>	
<b>Part number:</b>	D-GZ-FXD-0279
	9 pcs 3W LEDs



## HIGH LUMINOUS EFFICACY 4" SQUARE WORK LIGHT



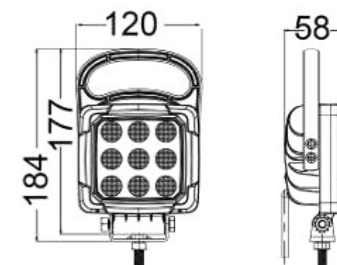
**PROJECT PHASE:**

- Concept Design
- Development
- Sample Stage
- Mass Production



<b>Model:</b>	E2120-2
<b>Functions, Homologation</b>	
<b>Functions:</b>	80° Flood Beam
<b>Homologations</b>	ECE R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	9pcs 3W LEDs
<b>Color Temp:</b>	5000~6500K
<b>Raw Lumen:</b>	2250LM
<b>Effective Lumen:</b>	1500LM
<b>Luminous Efficacy:</b>	114LM/W
<b>Raw Power:</b>	27W
<b>Effective Power:</b>	24W
<b>Current Draw:</b>	2A@12V; 1A@24V
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 3
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	DT / AMP/ Cable (Optional)

<b>Mechanical Features</b>	
<b>Size:</b>	120X184X58mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>PC Brand:</b>	COVESTRO 2407
<b>Bracket Material:</b>	PC + Stainless Steel
<b>IP Rate:</b>	IP67, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H
<b>5W LED power optional</b>	
<b>Part number:</b>	D-GZ-FXD-0317
	9 pcs 5W LEDs



## CLASSIC LED WORK LIGHTS



### PROJECT PHASE:

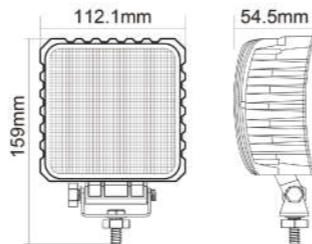
- Concept Design
- Development
- Sample Stage
- Mass Production



OR



<b>Model:</b>	E-WL-511
<b>Functions, Homologation</b>	
<b>Beam pattern:</b>	Flood or Spot or Combo Beam
<b>Homologations:</b>	ECE R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	16pcs 3W SMD LEDs
<b>Color Temp:</b>	5000~6500K
<b>Raw Lumen:</b>	3840LM
<b>Effective Lumen:</b>	3688LM
<b>Luminous Efficacy:</b>	131.71LM/W
<b>Raw Power:</b>	48W
<b>Effective Power:</b>	28W
<b>Current Draw:</b>	2.33A@12V; 1.16@24V
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 5
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	DT / AMP/ Cable (Optional)
<b>Mechanical Features</b>	
<b>Size:</b>	112.1X159X54.5mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>PC Brand:</b>	COVESTRO 2407
<b>Bracket:</b>	Stainless Steel
<b>IP Rate:</b>	IP67,IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	>30,000H
<b>Life Time:</b>	>30,000H



## 4" SQUARE GRAPHENE- WORK LIGHT



### PROJECT PHASE:

- Concept Design
- Development
- Sample Stage
- Mass Production



OR



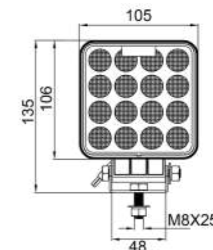
<b>Model:</b>	E-WL-523
<b>Functions, Homologation</b>	
<b>Beam pattern:</b>	Flood or Spot or combo beam
<b>Homologations:</b>	ECE R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	16pcs 3W LEDs
<b>Color Temp:</b>	5000~6500K
<b>Raw Lumen:</b>	2016LM
<b>Effective Lumen:</b>	1370LM
<b>Luminous Efficacy:</b>	117LM/W
<b>Raw Power:</b>	48W
<b>Effective Power:</b>	11.64W
<b>Current Draw:</b>	0.97A@12V, 0.485A@24V
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 3
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	DT / AMP/ Cable (Optional)
<b>Mechanical Features</b>	
<b>Size:</b>	105X135X30mm
<b>Housing Material:</b>	Graphene
<b>Lens Material:</b>	Anti-UV PC
<b>PC Brand:</b>	COVESTRO 2407
<b>Bracket:</b>	Stainless Steel
<b>IP Rate:</b>	IP67, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	>30,000H
<b>Life Time:</b>	>30,000H



Spot Beam



Combo Beam

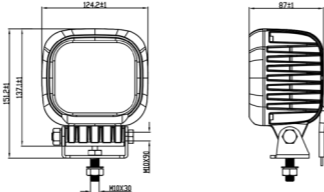


**CLASSIC LED WORK LIGHTS**  
**5" SQUARE LED WORK LIGHT**



<b>Model:</b>	<b>E2144</b>
<b>Functions, Homologation</b>	
<b>Functions:</b>	Flood or Spot Beam
<b>Homologations</b>	ECE R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	9pcs 10W LED(s)
<b>Color Temp:</b>	5000~6500K
<b>Raw Lumen:</b>	14000LM
<b>Effective Lumens:</b>	5184.95LM
<b>Luminous Efficacy:</b>	103.70LM/W
<b>Raw Power:</b>	90W
<b>Effective Power:</b>	50W
<b>Current Draw:</b>	4.1A@12V; 2.08A@24V
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 4
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	DT / AMP/ Cable (Optional)

<b>Mechanical Features</b>	
<b>Size:</b>	124.2X151.2X87mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>PC Brand:</b>	COVESTRO 2407
<b>Bracket:</b>	Power Coated Steel
<b>Bolt</b>	Stainless steel
<b>IP Rate:</b>	IP67, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H



**PROJECT PHASE:**

- Concept Design
- Development
- Sample Stage
- Mass Production**



Field illumination  
E2144

**CLASSIC LED WORK LIGHTS**  
**5" SQUARE LED WORK LIGHT**

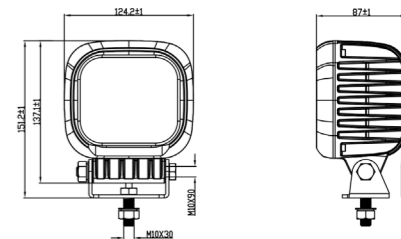


<b>Model:</b>	<b>E-WL-LED-48WSQ2</b>
<b>Functions, Homologation</b>	
<b>Functions:</b>	Flood or Spot Beam
<b>Homologations</b>	ECE R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	16pcs 3W OSRAM P7 LEDs
<b>Color Temp:</b>	5000~6500K
<b>Raw Lumen:</b>	4320LM
<b>Effective Lumen:</b>	3218LM
<b>Luminous Efficacy:</b>	90.00LM/W
<b>Raw Power:</b>	48W
<b>Effective Power:</b>	35.52W
<b>Current Draw:</b>	2.96A@12V, 1.48A@24V
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	ECE R10
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	DT / AMP/ Cable (Optional)
<b>Mechanical Features</b>	
<b>Size:</b>	124.2X151.2X87mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>PC Brand:</b>	COVESTRO 2407
<b>Bracket:</b>	Stainless Steel
<b>IP Rate:</b>	IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H



**PROJECT PHASE:**

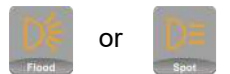
- Concept Design
- Development
- Sample Stage
- Mass Production**



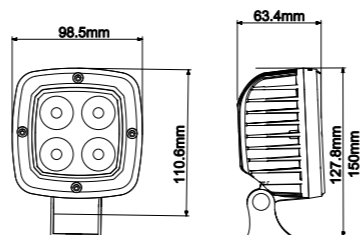
## HIGH LUMINOUS EFFICACY 4" SQUARE WORK LIGHT



PROJECT PHASE:  
 Concept Design  
 Development  
 Sample Stage  
 Mass Production



<b>Model:</b>	E-WL-LED-40W
<b>Functions, Homologation</b>	
<b>Beam Pattern:</b>	80° Flood beam or 40° Spot beam
<b>Homologations:</b>	ECE R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	4 pcs 10W LED(s)
<b>Color Temp:</b>	5000~6500K
<b>Raw Lumen:</b>	4000LM
<b>Effective Lumen:</b>	2928.25LM
<b>Luminous Efficacy:</b>	100.9LM/W
<b>Raw Power:</b>	40W
<b>Effective Power:</b>	29W
<b>Current Draw:</b>	2.44A@12V; 1.22A@24V
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 3
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	DT / AMP/ Cable (Optional)
<b>Mechanical Features</b>	
<b>Size:</b>	98.5X110.6X63.4 mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>PC Brand:</b>	COVESTRO 2407
<b>Bracket:</b>	Stainless Steel
<b>IP Rate:</b>	IP67, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H



## HIGH LUMINOUS EFFICACY 4" SQUARE WORK LIGHT - FRESNEL LENS

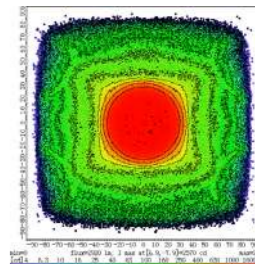
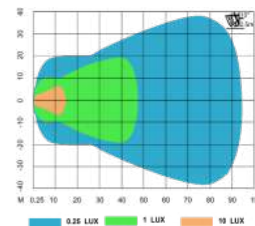


PROJECT PHASE:  
 Concept Design  
 Development  
 Sample Stage  
 Mass Production



<b>Model:</b>	E2118A
<b>Functions, Homologation</b>	
<b>Functions:</b>	Flood
<b>Homologations</b>	ECE R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	4pcs 10w SMD
<b>Emitting Color</b>	White
<b>Color Temp:</b>	6500K
<b>Raw Lumen:</b>	6400LM
<b>Effective Lumen:</b>	2968.35LM
<b>Illumination distance:</b>	1 lux @48m
<b>Luminous Efficacy:</b>	89.95LM/W
<b>Raw Power:</b>	40W
<b>Effective Power:</b>	33W
<b>Current flow:</b>	2.75A@12V, 1.38@24V
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 4
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	DT / AMP/ Cable (Optional)

<b>Mechanical Features</b>	
<b>Size:</b>	98.5X110.6X63.4mm
<b>Housing Material:</b>	Aluminium
<b>Lens Material:</b>	Anti-UV PC
<b>Lens Design:</b>	Fresnel Lens
<b>PC Brand:</b>	COVESTRO 2407
<b>Bracket:</b>	Stainless Steel
<b>IP Rate:</b>	IP67, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H



## HIGH LUMINOUS EFFICACY 4" SQUARE WORK LIGHT

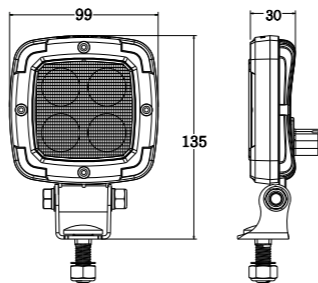


<b>PROJECT PHASE:</b>
Concept Design
Development
Sample Stage
<b>Mass Production</b>

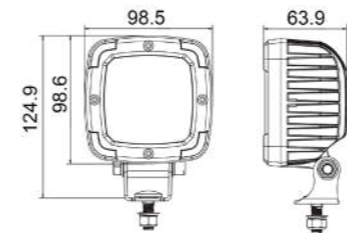


<b>Model:</b>	E2118
<b>Functions, Homologation</b>	
<b>Functions:</b>	Flood Beam
<b>Homologations</b>	ECE R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	4pcs 5W Osram LED(s)
<b>Color Temp:</b>	5000~6500K
<b>Raw Lumen:</b>	2200LM
<b>Effective Lumen:</b>	1623LM
<b>Luminous Efficacy:</b>	81LM/W
<b>Raw Power:</b>	20W
<b>Effective Power:</b>	20W
<b>Current Draw:</b>	1.67A@12V; 0.835A@24V
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 5
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	DT / AMP/ Cable (Optional)

<b>Mechanical Features</b>	
<b>Size:</b>	99X135X30mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>PC Brand:</b>	COVESTRO 2407
<b>Bracket:</b>	Flushbonading
<b>IP Rate:</b>	IP67, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H
<b>Part number:</b>	
E2118	40cm cable only
E2118-1	AMP 2P male connector
E2118-2	DEUTSCH 2P male connector
E2118-3	Back Switch



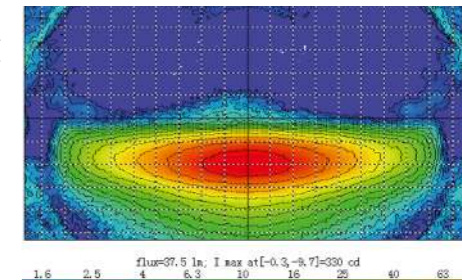
## ASYMMETRIC LENS PATTERN



<b>PROJECT PHASE:</b>
Concept Design
Development
Sample Stage
<b>Mass Production</b>

<b>Model:</b>	E2113
<b>Functions, Homologation</b>	
<b>Beam Pattern</b>	Asymmetric lens pattern
<b>Homologation:</b>	ECE R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	12pcs 3W LEDs
<b>Color Temp:</b>	5000~6500K
<b>Raw Lumen:</b>	3600LM
<b>Effective Lumen:</b>	2192.6LM
<b>Luminous Efficacy:</b>	91.35LM/W
<b>Raw Power:</b>	36W
<b>Effective Power:</b>	24W
<b>Current Draw:</b>	2A@12V; 1A@24V
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 3
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	DT or Open Cable

<b>Mechanical Features</b>	
<b>Size:</b>	98.5X124.9X63.9mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>PC Brand:</b>	COVESTRO 2407
<b>Bracket:</b>	Stainless Steel
<b>IP Rate:</b>	IP67, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H



E2213



55W halogen work light

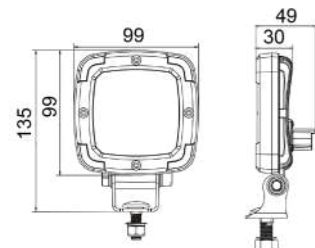
## ASYMMETRIC LENS PATTERN



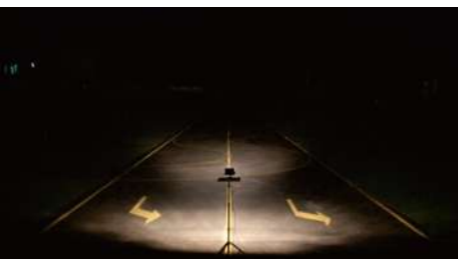
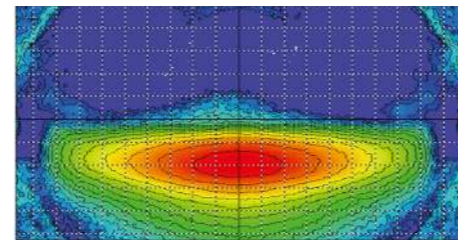
<b>Model:</b>	E2133
<b>Functions, Homologation</b>	
<b>Beam Pattern</b>	Asymmetric lens pattern
<b>Homologation:</b>	ECE R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	12pcs 3W LEDs
<b>Color Temp:</b>	5000~6500K
<b>Raw Lumen:</b>	3600lm
<b>Effective Lumen:</b>	1400LM
<b>Luminous Efficacy:</b>	93.3LM/W
<b>Raw Power:</b>	36W
<b>Effective Power:</b>	15W
<b>Current Draw:</b>	1.25A@12V; 0.625A@24V

<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 3
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	DT or Open Cable

<b>PROJECT PHASE:</b>	
Concept Design	
Development	
Sample Stage	
Mass Production	



E2213



55W halogen work light

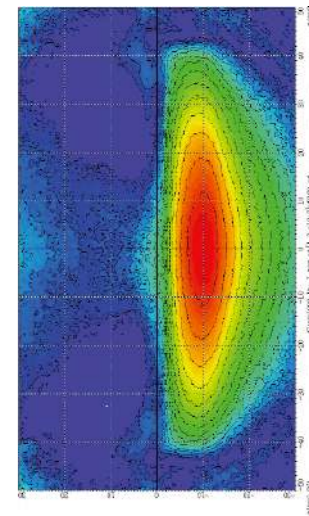
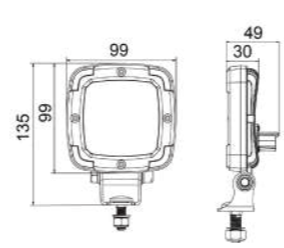
## ASYMMETRIC LENS PATTERN



<b>Model:</b>	E2135
<b>Functions, Homologation</b>	
<b>Beam Pattern</b>	Asymmetric lens pattern
<b>Homologation:</b>	ECE R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	12pcs 3W LEDs
<b>Color Temp:</b>	5000~6500K
<b>Raw Lumen:</b>	3600lm
<b>Effective Lumen:</b>	1400LM
<b>Luminous Efficacy:</b>	93.3LM/W
<b>Raw Power:</b>	36W
<b>Effective Power:</b>	15W
<b>Current Draw:</b>	1.25A@12V; 0.625A@24V

<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 3
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	DT or Open Cable

<b>PROJECT PHASE:</b>	
Concept Design	
Development	
Sample Stage	
Mass Production	



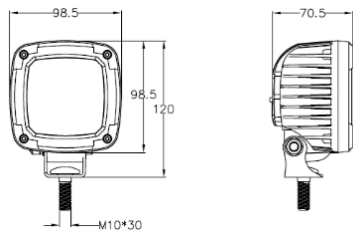
<b>Mechanical Features</b>	
<b>Size:</b>	99X135X30mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>PC Brand:</b>	COVESTRO 2407
<b>Bracket:</b>	Stainless Steel
<b>IP Rate:</b>	IP67, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H

## BLUE SAFETY LINE



### PROJECT PHASE:

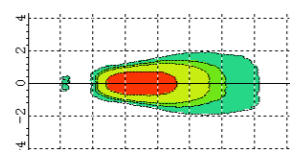
- Concept Design
- Development
- Sample Stage
- Mass Production



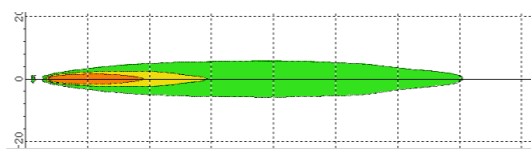
<b>Model:</b>	E2111-1
<b>Functions, Homologation</b>	
<b>Functions</b>	Work Light
<b>Beam Pattern</b>	Blue Pencil Beam
<b>Homologations</b>	ECE R10, EN62471
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	9pcs SMD LED(s)
<b>Emitting Color:</b>	Blue
<b>Wavelength:</b>	460-470nm
<b>Raw Lumen:</b>	405 LM
<b>Effective Lumen:</b>	218.23 LM
<b>Illumination:</b>	1 Lux@140m
<b>Luminous Efficacy:</b>	10.39LM/W
<b>Raw Power:</b>	27W
<b>Effective Power:</b>	21W
<b>Current Flow:</b>	1.75A@12V, 0.875A@24V

<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	ECE R10
<b>Operating Voltage:</b>	10V~80V
<b>Connector:</b>	DT / AMP/ Cable (Optional)
<b>Mechanical Features</b>	
<b>Size:</b>	98.5X120X70.5mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Optical Design:</b>	Anti-UV Lens +Tempered Glass
<b>PC Brand:</b>	COVESTRO 2407
<b>Bracket:</b>	Stainless Steel
<b>Anti-Corrosion:</b>	ISO 9227 240H
<b>IP Rate:</b>	IP67, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	>30,000H

Max. 385Lux / H:2.5m, Tilt: 20°



1lux@140m, Max. 23.3Lux / H:1.2m, Tilt: 0°



1 lux 5 lux 10 lux 50 lux



## CLASSIC LED WORK LIGHTS 5" SQUARE LED WORK LIGHT



### PROJECT PHASE:

- Concept Design
- Development
- Sample Stage
- Mass Production



<b>Model:</b>	E-WL-LED-40S
<b>Functions, Homologation</b>	
<b>Functions:</b>	Spot Beam
<b>Homologations</b>	ECE R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	4pcs 10W OSRAM P9 LEDs
<b>Color Temp:</b>	5000~6500K
<b>Raw Lumen:</b>	4320LM
<b>Luminous Efficacy:</b>	90LM/W
<b>Raw Power:</b>	40W
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	ECE R10
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	DT / AMP/ Cable (Optional)
<b>Mechanical Features</b>	
<b>Size:</b>	124.2X151.2X87mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>PC Brand:</b>	COVESTRO 2407
<b>Bracket:</b>	Stainless Steel
<b>IP Rate:</b>	IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	>30,000H



# HIGH LUMINOUS EFFICACY 3X6" LED WORK LIGHT

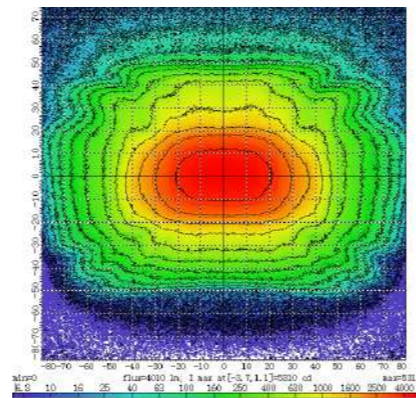


### PROJECT PHASE:

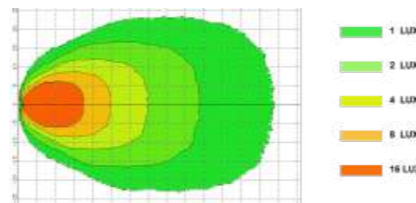
- Concept Design
- Development
- Sample Stage
- Mass Production

<b>Model:</b>	E2122A
<b>Functions, Homologation</b>	
<b>Beam Pattern</b>	Flood Beam
<b>Homologation:</b>	ECE R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	18pcs 3W LED(s)
<b>Color Temp:</b>	5000~6500K
<b>Raw Lumen:</b>	5400LM
<b>Effective Lumen:</b>	3500LM
<b>Luminous Efficacy:</b>	116.66LM/W
<b>Raw Power:</b>	54W
<b>Effective Power:</b>	30W
<b>Current Draw:</b>	2.5A@12V; 1.25A@24V
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 3
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	DT / AMP/ Cable (Optional)
<b>Mechanical Features</b>	
<b>Size:</b>	151.8X102.4X68.29mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>PC Brand:</b>	COVESTRO 2407
<b>Bracket:</b>	Flushbonading
<b>IP Rate:</b>	IP67, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H

Plane energy distribution



isolux



Field illumination  
E2122A Flood

**OEM mount design**  
**Replacing halogen lights**  
**Almost daylight illumination**  
**Raw 5400LM and effective 3500LM**  
**Asymmetric beam**  
**Zero radio interference,**  
**Zero noise,**  
**Zero camera interference**

**FORD NEW HOLLAND TRACTORS:**  
 T6020, T6040, T6060, T7030, T7040, T7050,  
 T7060, TG210, TG215, TG230, TG245,  
 TG255, TG275, TG285, TG305, TS100A,  
 TS110A, TS115A, TS125A, TS130A, TS135A



Class  
**3**  
CISPR 25

Asymmetric

E2122A 6"x3"

## HIGH LUMINOUS EFFICACY 2X5" LED WORK LIGHT



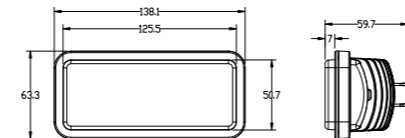
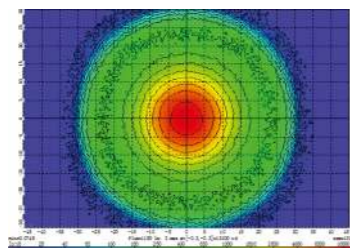
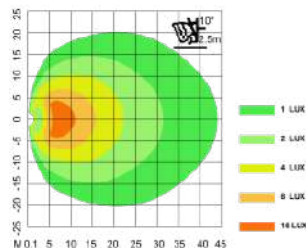
<b>Model:</b>	E2134
<b>Functions, Homologation</b>	
<b>Functions:</b>	Flood Beam
<b>Homologations</b>	ECE R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	30pcs 2W LED(s)
<b>Color Temp:</b>	5000~6500K
<b>Raw Lumen:</b>	3500LM
<b>Effective Lumen:</b>	1900LM
<b>Luminous Efficacy:</b>	114LM/W
<b>Raw Power:</b>	60W
<b>Effective Power:</b>	20W
<b>Current Draw:</b>	1.67A@12V; 0.83A@24V
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 3
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	original mount

**PROJECT PHASE:**

- Concept Design
- Development
- Sample Stage
- Mass Production**



Isolux E2134



## CLASSIC LED WORK LIGHTS



**PROJECT PHASE:**

- Concept Design
- Development
- Sample Stage
- Mass Production**



OR



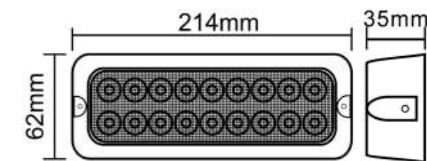
<b>Model:</b>	E-WL-501W
<b>Functions, Homologation</b>	
<b>Functions:</b>	80° Flood Beam or 40° Spot Beam
<b>Homologations</b>	ECE R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	18pcs SMD LED(s)
<b>Color Temp:</b>	5000~6500K
<b>Raw Lumen:</b>	3960LM
<b>Effective Lumen:</b>	2195.3LM
<b>Luminous Efficacy:</b>	85LM/W
<b>Raw Power:</b>	54W
<b>Effective Power:</b>	25W
<b>Current Draw:</b>	2.13A@12V; 1.065A@24V
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	ECE R10
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	DT / AMP/ Cable (Optional)
<b>Mechanical Features</b>	
<b>Size:</b>	214X35X62mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>PC Brand:</b>	COVESTRO 2407
<b>Bracket:</b>	Stainless Steel
<b>IP Rate:</b>	IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H



Flood beam



Spot beam



## CLASSIC LED WORK LIGHTS



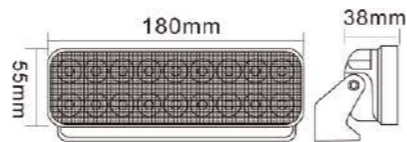
**PROJECT PHASE:**

- Concept Design
- Development
- Sample Stage
- Mass Production



<b>Model:</b>	E-WL-501
<b>Functions, Homologation</b>	
<b>Functions:</b>	80° Flood Beam or 40° Spot Beam
<b>Homologations</b>	ECE R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	18pcs SMD LED(s)
<b>Color Temp:</b>	5000~6500K
<b>Raw Lumen:</b>	3960LM
<b>Effective Lumen:</b>	2195.3LM
<b>Luminous Efficacy:</b>	85LM/W
<b>Raw Power:</b>	54W
<b>Effective Power:</b>	25.56W
<b>Current Draw:</b>	2.13A@12V; 1.065A@24V
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	ECE R10
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	DT / AMP/ Cable (Optional)

<b>Mechanical Features</b>	
<b>Size:</b>	180X38X55mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>PC Brand:</b>	COVESTRO 2407
<b>Bracket:</b>	201 or 304 Stainless Steel
<b>IP Rate:</b>	IP67, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H



Flood beam



Spot beam

## CLASSIC LED WORK LIGHTS



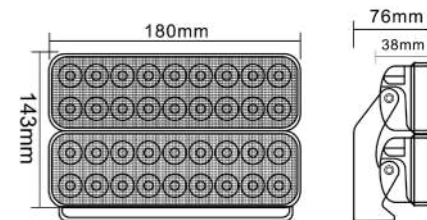
**PROJECT PHASE:**

- Concept Design
- Development
- Sample Stage
- Mass Production



<b>Model:</b>	E-WL-502
<b>Functions, Homologation</b>	
<b>Functions:</b>	80° Flood Beam or 40° Spot Beam
<b>Homologations</b>	ECE R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	36pcs SMD LED(s)
<b>Color Temp:</b>	5000~6500K
<b>Raw Lumen:</b>	7920LM
<b>Effective Lumen:</b>	4496.3LM
<b>Luminous Efficacy:</b>	85 LM/W
<b>Raw Power:</b>	108W
<b>Effective Power:</b>	51.84W
<b>Current Draw:</b>	4.32A@12V; 2.16A@24V
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	ECE R10
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	DT / AMP/ Cable (Optional)

<b>Mechanical Features</b>	
<b>Size:</b>	180X76X143mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>PC Brand:</b>	COVESTRO 2407
<b>Bracket:</b>	201 or 304 Stainless Steel
<b>IP Rate:</b>	IP67, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H



Flood beam



Spot beam

## 4" REVERSING LIGHT HIGH LUMEN



E2136-1

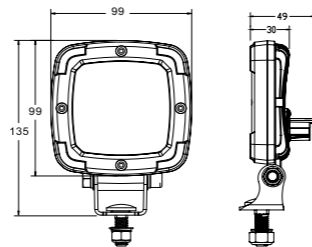


Model:	E2136
<b>Functions, Homologation</b>	
Beam Pattern:	Asymmetric Lens pattern
Homologation:	ECE R23, R10
<b>Optical &amp; Electric Features</b>	
LED Type:	18pcs 1W LED(s)
Color Temp:	5000~6500K
Raw Lumen:	2340LM
Effective Lumen:	1318LM
Luminous Efficacy:	87.8LM/W
Raw Power:	18W
Effective Power:	15W
Current Draw:	1.25A@12V; 0.625A@24V
<b>Electromagnetic Features</b>	
EMC Grade:	CISPR 25 Class 5
Operating Voltage:	10V~30V
Connector:	DT / AMP/ Cable (Optional)

### PROJECT PHASE:

Concept Design
Development
Sample Stage
Mass Production

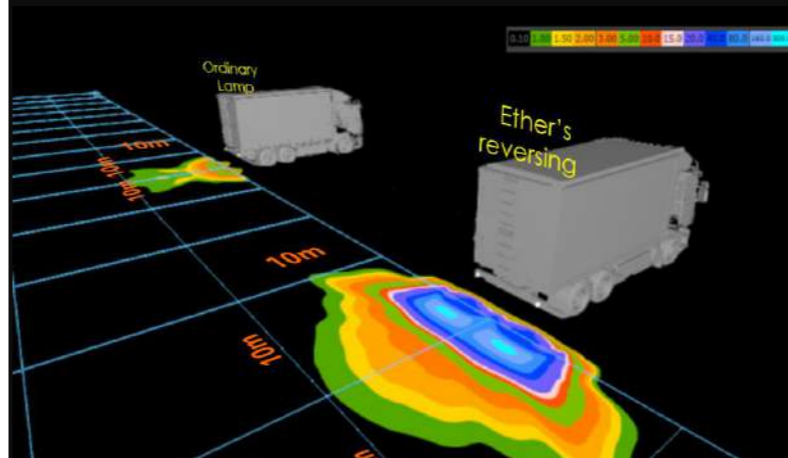
<b>Mechanical Features</b>	
Size:	98.5X135X30mm
Housing Material:	Aluminium Alloy
Lens Material:	Anti-UV PC
PC Brand:	COVESTRO 2407
Bracket:	Stainless Steel
IP Rate:	IP67, IP6K9K
Work Temp:	-40~+50°C
<b>So this is Life</b>	
Life Time:	>30,000H



Not only reversing signal

But also rear illumination

Brightest under R23 regulations  
**150+ M<sup>2</sup> field illumination**  
 Zero glare



**80%**  
**Labor Cost Saved.**

Unlike ordinary LED reversing lamp setting tilt angle to comply with R23, ETHER's LED reversing lights are **simply installed vertical, without measuring tilt angle.**

**0 noise**

**Highest EMC level**  
 (CISPR 25 Class 5) adopted to eliminate noise or radio interference; **quiet, safe driving** is guaranteed. Better focus on driving



# Legally Brightest

So far, **the brightest LED reversing lamp** under R23 regulations. **8-10X brighter** than original halogen reversing lights. **Increased visibility** like never before

# Any mount

**Flexible bracket** enables ETHER's LED reversing light to be either **top** mounted, or **back** mounted, or **bottom** mounted.



## 4" REVERSING LIGHT HIGH LUMEN

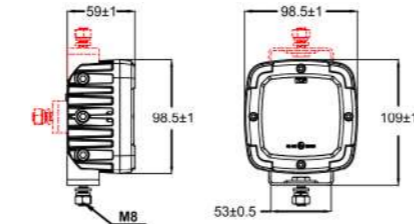


### PROJECT PHASE:

Concept Design
Development
Sample Stage
Mass Production



<b>Model:</b>	E2136B (Typical)
<b>Functions, Homologation</b>	
<b>Beam Pattern:</b>	Asymmetric Lens pattern
<b>Homologation:</b>	ECE R23, R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	18pcs 1W LED(s)
<b>Color Temp:</b>	5000~6500K
<b>Raw Lumen:</b>	2340LM
<b>Effective Lumen:</b>	1318LM
<b>Luminous Efficacy:</b>	87.8LM/W
<b>Raw Power:</b>	18W
<b>Effective Power:</b>	15W
<b>Current Draw:</b>	1.25A@12V; 0.625A@24V
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 5
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	DT / AMP/ Cable (Optional)



## 4" REVERSING LIGHT HIGH LUMEN

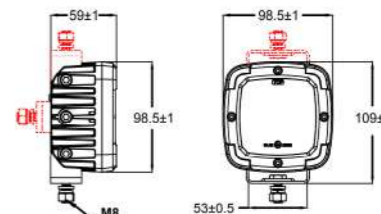


### PROJECT PHASE:

Concept Design
Development
Sample Stage
Mass Production



<b>Model:</b>	E2136B (High Power)
<b>Functions, Homologation</b>	
<b>Beam Pattern:</b>	Asymmetric Lens pattern
<b>Homologation:</b>	ECE R23, R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	18pcs 3W LED(s)
<b>Color Temp:</b>	5000~6500K
<b>Raw Lumen:</b>	3160LM
<b>Effective Lumen:</b>	1700LM
<b>Luminous Efficacy:</b>	70.83LM/W
<b>Raw Power:</b>	54W
<b>Effective Power:</b>	25W
<b>Current Draw:</b>	2.08A@12V; 1.04A@24V
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 4
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	DT / AMP/ Cable (Optional)



<b>Mechanical Features</b>	
<b>Size:</b>	98.5X98.5X59mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>PC Brand:</b>	COVESTRO 2407
<b>Bracket:</b>	Stainless Steel
<b>IP Rate:</b>	IP67, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H

## R23 COMPLIANT WORK LIGHT



### PROJECT PHASE:

Concept Design
Development
Sample Stage
Mass Production

<b>Model:</b>	E2173
<b>Functions, Homologation</b>	
<b>Function:</b>	Reversing
<b>Beam Pattern</b>	Asymmetric beam
<b>Homologations:</b>	ECE R10, R23, CE
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	18 pcs 1W LED
<b>Emitting Color:</b>	White
<b>Color Temp:</b>	5700K
<b>Raw Lumen:</b>	2340LM
<b>Effective Lumen:</b>	1100LM
<b>Luminous Efficacy:</b>	91.66LM/W
<b>Raw Power:</b>	18W
<b>Effective Power:</b>	12W
<b>Current flow:</b>	1.00A@12V, 0.5A@24V
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 5
<b>Operating Voltage:</b>	10V~30V
<b>Connector (optional):</b>	Open cable
<b>Mechanical Features</b>	
<b>Size:</b>	110X115.5X52mm
<b>Housing Material:</b>	Anti-UV PC
<b>Lens Material:</b>	Anti-UV PC
<b>PC Brand:</b>	COVESTRO 2407
<b>Mount:</b>	Flexible mount
<b>Bracket</b>	Stainless steel
<b>IP Rate:</b>	IP67, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H

### Flexible mount

Bracket could be top mounted, bottom mounted, or back mounted.



One bracket and any mount to your needs.

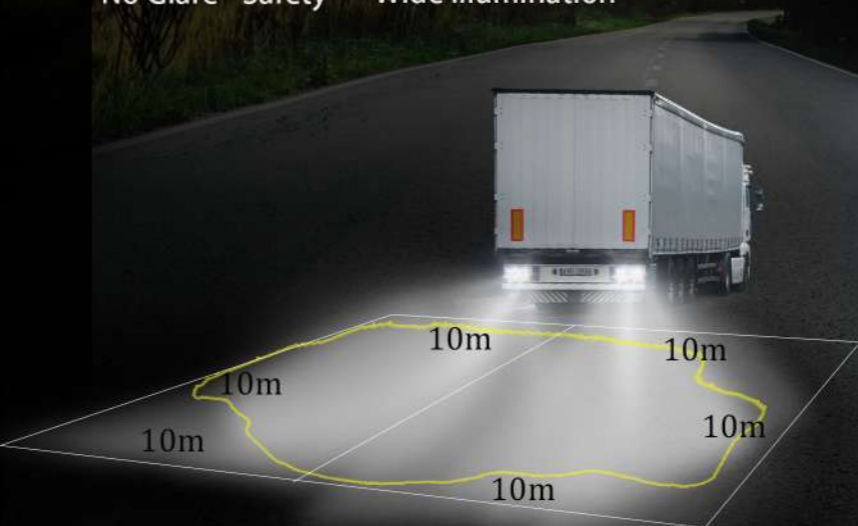


## R23 compliant

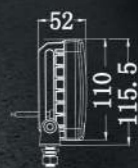
8-10X BRIGHTNESS OF ORIGINAL HALOGEN REVERSING

# REVERSING LAMPS

No Glare - Safety Wide illumination



E2173  
PROJECT PHASE : PRE PRODUCTION



## DE-ICING WORK LIGHT



**Model:** E-WL-LED-40W-A

### Functions, Homologation

**Beam Pattern:** 80° Flood beam or  
40° Spot beam

**Homologations:** ECE R10

### Optical & Electric Features

**LED Type:** 4pcs 10W LEDs  
**Emitting Color:** White  
**Color Temp:** 5000~6500K  
**Raw Lumen:** 6400LM  
**Effective Lumen:** 2768 LM (Flood)  
**Luminous Efficacy:** 26.47LM/W (Flood)  
**Raw Power:** 40W(LED)  
**Effective Power:** 34W(LED), 20W(De-icing)  
**Current flow:** 4.5A@12V

### De-icing technology

**De-icing Tech:** Heating Glass  
**De-icing Power:** 20W @ 12VDC  
**Control Mode:** Auto temp. Sensor  
**Heating Temp.:** Constant 45°C lens

### PROJECT PHASE:

- Concept Design
- Development
- Sample Stage
- Mass Production**



### Electromagnetic Features

**EMC Grade:** ECE R10  
**Operating Voltage:** 12VDC / 24VDC  
**Connector:** DT / AMP/ Cable (Optional)

### Mechanical Features

**Size:** 98.5X120X70.5mm  
**Housing Material:** Aluminium Alloy  
**Lens Material:** Anti-UV PC  
**PC Brand:** COVESTRO 2407  
**Bracket:** Stainless Steel  
**IP Rate:** IP67, IP6K9K  
**Work Temp:** -40~+50°C  
**So this is Life**  
**Life Time:** >30,000H

**ETHER** IATF16949:2015 Certified  
Your average OEM/ODM auto lighting partner

V.: E-WL-LED-40W-A-0903-22 III

# Better cost better design

## 4" de-icing work lamp

- Smart heating film technology
- Instant de-icing with max heating power: **14.7W**
- **4°C** of lens surface when ambient temp. **-25°C**
- Max **80°C** of lens when ambient temp. **+30°C**



E-WL-LED-40W-A

Salt spray test **240H (standard)**  
or **480H (premium)**



Color rendering(CRI) options  
CRI-70 **CRI>80**



**Raw**  
**6400 LM**

**Effective**  
**2768 LM**



# CLASSIC LED WORK LIGHTS



**PROJECT PHASE:**

Concept Design
Development
Sample Stage
Mass Production



<b>Model:</b>	<b>E2201B/E2201D</b>
<b>Functions, Homologation</b>	
<b>Functions:</b>	Flood Beam
<b>Homologations</b>	ECE R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	10pcs 6W LED(s)
<b>Color Temp:</b>	5700~6500K
<b>Raw Lumen:</b>	10000LM
<b>Effective Lumen:</b>	6500LM
<b>Luminous Efficacy:</b>	128LM/W
<b>Raw Power:</b>	60W
<b>Effective Power:</b>	50W
<b>Current Draw:</b>	4.17A@12V; 2.1A@24V
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 3
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	AMP
<b>Mechanical Features</b>	
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>Lens Processing:</b>	Surface Hardened
<b>PC Brand:</b>	COVESTRO 2407
<b>Bracket:</b>	Stainless Steel
<b>IP Rate:</b>	IP67/IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H

Model	Size:
E2201B	173x129x56mm
E2201D	191x108x56mm

## Redefining OEM oval 90 LED work lamp

- High lumen. High efficacy >100LM/W
- EMC level: **CISPR 25 Class 5**
- Lens surface **hardened (2H)**
- High level color rendering, **CRI>80**
- **Lossless replacing** original halogen lights

**Reference OE number:**  
21.51052,DC218651,RE269640,  
RE269638, RE573609.  
**Lossless replacement with JD:**  
RE269640,RE269638,RE573609

Raw	Effective
11000 LM	6500 LM





## CLASSIC LED WORK LIGHTS



### PROJECT PHASE:

- Concept Design
- Development
- Sample Stage
- Mass Production



<b>Model:</b>	<b>E-WL-LED-00023E</b>
<b>Functions, Homologation</b>	
<b>Functions:</b>	Flood
<b>Homologation:</b>	ECE R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	9pcs 6W LEDs
<b>Color Temp:</b>	5700K~6500K
<b>Raw Lumen:</b>	9000LM
<b>Effective Lumen:</b>	5200LM
<b>Luminous Efficacy:</b>	115.56LM/W
<b>Raw Power:</b>	54W
<b>Effective Power:</b>	45W
<b>Current Draw:</b>	3.75A@12V, 1.875A@24V
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 3
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	AMP
<b>Mechanical Features</b>	
<b>Size:</b>	112X154X54mm
<b>Housing Material:</b>	Aluminum
<b>Lens Material:</b>	Anti-UV PC
<b>Bracket:</b>	Stainless Steel
<b>IP Rate:</b>	IP67, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H

<b>Raw</b>	<b>Effective</b>
<b>9900 LM</b>	<b>5200 LM</b>



- **4.8"X4.4"** oval body of **5200LM** effective output, **>100LM/W**.
- High end LEDs from **LUMILEDS** or **CREE** optional
- **Zero noise** nor radio interference, EMC level: **CISPR 25 Class 3**.
- Crisp and **natural** lighting with high **CRI>80**.
- Almost **180° side shooter** illumination
- No more dark corner, increased visibility

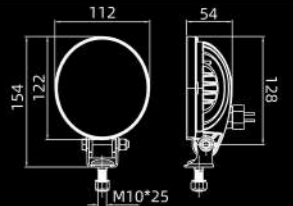
E-WL-LED-00023E

Salt spray test **240H/480H**

Lens surface hardened **(2H)**

**CRI>80**

**CRI<70**



**SIDE SHOOTER SERIES**  
**4.4" ROUND SIDE SHOOTER**



**PROJECT PHASE:**

- Concept Design
- Development
- Sample Stage
- Mass Production



<b>Model:</b>	E2250
<b>Functions, Homologation</b>	
<b>Functions:</b>	Flood Beam
<b>Homologations</b>	ECE R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	9pcs 10W LEDs
<b>Color Temp:</b>	2700~6500K
<b>Raw Lumen:</b>	14400LM
<b>Effective Lumen:</b>	4950LM
<b>Luminous Efficacy:</b>	123.75LM/W
<b>Raw Power:</b>	90W
<b>Effective Power:</b>	40W
<b>Current Draw:</b>	3.33A@12V, 1.66A@24V
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 3
<b>Operating Voltage:</b>	10V~30V
<b>Connector(optional):</b>	DT/AMP/Open cable
<b>Thermal Management:</b>	ATM
<b>Mechanical Features</b>	
<b>Size:</b>	φ113X48.46mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>Bracket:</b>	Stainless Steel
<b>IP Rate:</b>	IP67, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H

1. Side shooter design with **Fresnel style** optics
2. Compact body but high power output
3. **4950LM** out of **4.4"** body
4. **Instant** switch from **6000K** to **3000K** when it's foggy or dusty
5. Better penetration against harsh weather
6. Higher level of safety.



90°



VS

>180°



Class  
**5**  
CISPR 25

**R23**  
ECE  
optional

1



48.63  
40.5

M10

28.5

## FRESNEL STYLE LENS SERIES



**Model:** E2226E (Sample Stage)

**Functions, Homologation**

**Functions:** Flood

**Homologations:** ECE R10

**Optical & Electric Features**

**LED Type:** 4 pcs LED(s)

**Color Temp:** 3000~6000K

**Effective Lumen:** @6000K:1300LM,

@4500K:1424.6LM

@3000K: 1103LM

**Effective Power:** 6000K: 17.5W

4500k: 15.5W

3000K: 16.44W

**Electromagnetic Features**

**EMC Grade:** CISPR 25 Class 5

**Operating Voltage:** 10V~30V

**Connector:** 40cm

**Mechanical Features**

**Size:** 83.8X126.2X71.8mm

**Housing Material:** Aluminium Alloy

**Lens Material:** Anti-UV PC

**PC Brand:** COVESTRO 2407

**Bracket:** Stainless Steel

**IP Rate:** IP67, IP6K9K

**Work Temp:** -40~+50°C

**So this is Life**

**Life Time:** >30,000H

**Model:** E2248E (Concept Design)

**Functions, Homologation**

**Beam Pattern:** Flood Beam

**Homologation:** ECE R10

**Optical & Electric Features**

**LED Type:** 18pcs p8 LEDs

**Color Temp:** 5700~6500K

**Raw Lumen:** 9900LM

**Effective Lumen:** 5000LM

**Luminous Efficacy:** 83.3LM/W

**Raw Power:** 90W

**Effective Power:** 60W

**Current flow:** 5A@12V, 2.5A@24V

**Electromagnetic Features**

**EMC Grade:** CISPR 25 Class 3

**Operating Voltage:** 10V~30V

**Connector:** Open cable

**Mechanical Features**

**Size:** 110X100X146mm

**Housing Material:** Aluminium Alloy

**Lens Material:** Anti-UV PC

**PC Brand:** COVESTRO 2407

**Bracket:** Stainless Steel

**IP Rate:** IP67, IP6K9K

**Work Temp:** -40~+50°C

**So this is Life**

**Life Time:** >30,000H

**Model:** E2228L (Concept Design)

**Functions, Homologation**

**Beam Pattern:** Flood

**Homologation:** ECE R10

**Optical & Electric Features**

**LED Type:** 21 pcs P8 LEDs

**Color Temp:** 5700~6500K

**Raw Lumen:** 11550LM

**Effective Lumen:** 5100LM

**Luminous Efficacy:** 85LM/W

**Raw Power:** 105W

**Effective Power:** 60W

**Current flow:** 5A@12V, 2.5A@24V

**Electromagnetic Features**

**EMC Grade:** CISPR 25 Class 3

**Operating Voltage:** 10V~30V

**Connector:** DT

**Mechanical Features**

**Size:** 161.2X76.8X126.7mm

**Housing Material:** Aluminum

**Lens Material:** Anti-UV PC

**PC Brand:** COVESTRO 2407

**Bracket Kit:** 3mm or 1.6mm optional

**IP Rate:** IP67, IP6K9K

**Work Temp:** -40~+50°C

**So this is Life**

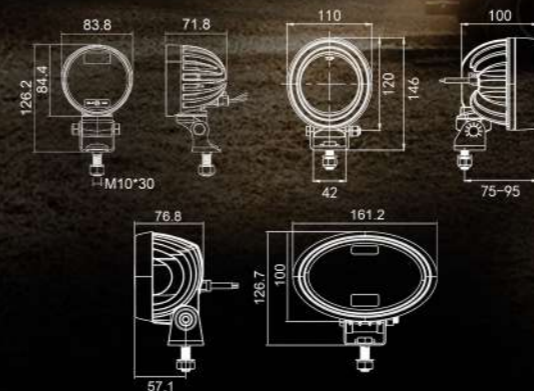
**Life Time:** >30,000H

## Why Fresnel style lens design?

- Even light distribution
- Higher visibility and safety
- No annoyance of yellow spots
- Avoid drowsy driving



3000K 6000K



### Similar Lens Style



3.3"  
E2226E



4.7x4.3"  
E2248



4x6.3"  
E2228L

**SIDE SHOOTER SERIES**  
**4"X2.4" OVAL SIDE SHOOTER**



PROJECT PHASE:  
 Concept Design  
 Development  
 Sample Stage  
 Mass Production



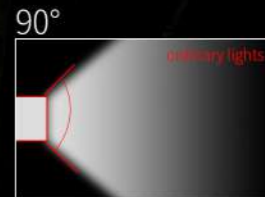
Model:	E2227C	E2227E
<b>Functions, Homologation</b>		
<b>Beam Pattern</b>	Flood	Flood
<b>Homologation:</b>	ECE R10	ECE R10
<b>Optical &amp; Electric Features</b>		
<b>LED Type:</b>	4 pcs 10W LEDs	4 pcs 10W LEDs
<b>Color Temp:</b>	5000~6500K	5000~6500K
<b>Raw Lumen:</b>	6400LM	6400LM
<b>Effective Lumen:</b>	3800LM	3800LM
<b>Luminous Efficacy:</b>	126LM/W	126LM/W
<b>Raw Power:</b>	40W	40W
<b>Effective Power:</b>	30W	30W
<b>Current flow:</b>	2.5A@12V, 1.25A@24V	2.5A@12V, 1.25A@24V
<b>Electromagnetic Features</b>		
<b>EMC Grade:</b>	CISPR 25 Class 3	CISPR 25 Class 3
<b>Operating Voltage:</b>	10V~30V	10V~30V
<b>Connector:</b>	DT / AMP / Cable (Optional)	DT / AMP / Cable (Optional)
<b>Thermal Management:</b>	Active (ATM)	Active (ATM)
<b>Mechanical Features</b>		
<b>Size:</b>	82 X 115.75X 47.23mm	100X103.55X57.78mm (3mm) 100X93.05X57.78mm(1.6mm)
<b>Housing Material:</b>	Aluminum	Aluminum
<b>Lens Material:</b>	Anti-UV PC	Anti-UV PC
<b>PC Brand:</b>	COVESTRO 2407	COVESTRO 2407
<b>Bracket Kit:</b>	Stainless Steel	3mm or 1.6mm optional
<b>IP Rate:</b>	IP67, IP6K9K	IP67, IP6K9K
<b>Work Temp:</b>	-40~+50°C	-40~+50°C
<b>So this is Life</b>		
<b>Life Time:</b>	>30,000H	>30,000H

Products subject to update, change or modify without notice.

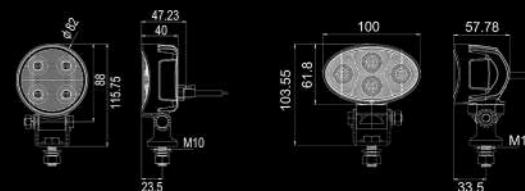
## Side shooter design.

- **3" body, compact & tough**
- **Fresnel style** lens optics.
- High power@ robust housing
- Better penetration against harsh weather
- **Higher visibility** and safety

up to  
**3800 LM**  
effective from  
**3"**



Salt spray test **240H/480H** Lens surface hardened (>1H) **CRI>80** **CRI<70**



## CLASSIC LED WORK LIGHTS

<b>Model:</b>	E2221D
<b>Functions, Homologation</b>	
<b>Functions:</b>	Flood Beam or Spot Beam
<b>Homologation:</b>	ECE R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	15pcs 3W LED(s)
<b>Color Temp:</b>	5700~6500K
<b>Effective Lumen:</b>	2722.3LM
<b>Luminous Efficacy:</b>	90.74LM/W
<b>Raw Power:</b>	45W
<b>Effective Power:</b>	30W
<b>Current Draw:</b>	3.3A@12V; 1.67A@24V
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 3
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	open cable
<b>Mechanical Features</b>	
<b>Size:</b>	166X92X98mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>Lens Processing:</b>	Surface Hardened
<b>PC Brand:</b>	COVESTRO 2407
<b>Mount:</b>	Bottom bracket or Side bracket
<b>Bracket Material:</b>	Stainless steel
<b>IP Rate:</b>	IP66, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H

### PROJECT PHASE:

Concept Design
Development
Sample Stage
<b>Mass Production</b>



or



Class 3



left-hand mounted

right-hand mounted

Bottom bracket



1. Classic LED oval work lamp with **360° rotatable** bracket
2. OEM design and 100% compatible with halogen
3. Zero noise, zero interference @ **CISPR 25 Class 5**



**CLASSIC LED WORK LIGHTS**  
**OVAL LED WORK LIGHT**



E2218-1

E2218-2

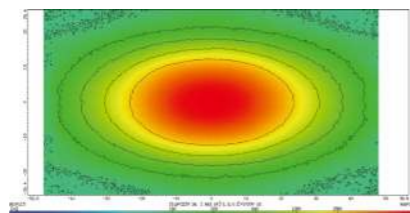
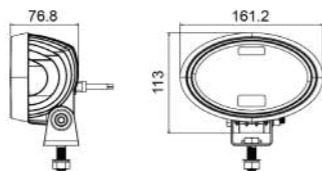
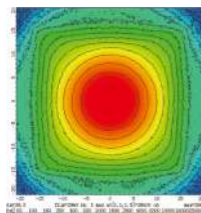


or



**PROJECT PHASE:**

- Concept Design
- Development
- Sample Stage
- Mass Production**



Flood beam

**Model:** E2218-1/E2218-2

**Functions, Homologation**

**Functions:** Flood Beam or Spot Beam

**Homologations** ECE R10

**Optical & Electric Features**

**LED Type:** 15pcs 3W LED(s)

**Color Temp:** 5000~6500K

**Effective Lumen:** 2411LM

**Luminous Efficacy:** 60LM/W

**Raw Power:** 45W

**Effective Power:** 40W

**Current Draw:** 3.3A@12V; 1.67A@24V

**Electromagnetic Features**

**EMC Grade:** CISPR 25 Class 5

**Operating Voltage:** 10V~30V

**Connector:** DT / AMP/ Cable (Optional)

**Mechanical Features**

**Size:** 161.2X113X76.8mm

**Housing Material:** Aluminium Alloy

**Lens Material:** Anti-UV PC

**Lens Processing:** Surface Hardened

**PC Brand:** COVESTRO 2407

**Bracket:** Stainless Steel

**IP Rate:** IP67, IP6K9K

**Work Temp:** -40~+50°C

**So this is Life**

**Life Time:** >30,000H



Spot beam



Flood beam

- Spot Beam or Flood Beam options
- Effective Lumen 2500Lm
- CISPR 25 Class 5, no interference with radio
- Covestro 2407 as Anti UV PC material for lens
- Hardened PC processing to anti scratch (Optional).
- Anti Vibration Level 15.3Grm



Spot Beam  
E2218-1



Flood Beam  
E2218-2

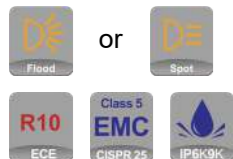


**CLASSIC LED WORK LIGHTS  
OVAL LED WORK LIGHT**

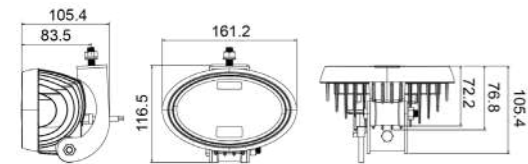


E2217(Flood)  
CISPR 25 Class 5

E2217B(Spot)  
CISPR 25 Class 3



**PROJECT PHASE:**  
 Concept Design  
 Development  
 Sample Stage  
 Mass Production

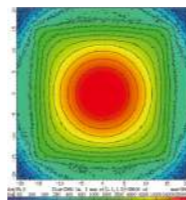


<b>Model:</b>	E2217/E2217B
<b>Functions, Homologation</b>	
<b>Functions:</b>	Flood Beam or Spot Beam
<b>Homologations</b>	ECE R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	15pcs 3W LED(s)
<b>Color Temp:</b>	5000~6500K
<b>Effective Lumen:</b>	2411LM
<b>Luminous Efficacy:</b>	60LM/W
<b>Raw Power:</b>	45W
<b>Effective Power:</b>	40W
<b>Current Draw:</b>	3.3A@12V; 1.67A@24V
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 3/5
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	DT / AMP/ Cable (Optional)

<b>Mechanical Features</b>	
<b>Size:</b>	161.2X105.4X116.5mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>Lens Processing:</b>	Surface Hardened
<b>PC Brand:</b>	COVESTRO 2407
<b>Bracket:</b>	Stainless Steel
<b>IP Rate:</b>	IP67, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H



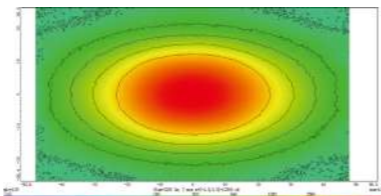
Spot beam



Spot beam



Flood beam



Flood beam

**FLUSH BONADING LED WORK LIGHTS  
OVAL LED WORK LIGHT**



E2221-2  
Spot Beam

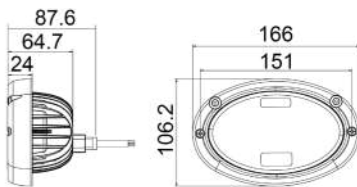
E2221-1  
Flood Beam

**PROJECT PHASE:**  
 Concept Design  
 Development  
 Sample Stage  
 Mass Production



<b>Model:</b>	E2221
<b>Functions, Homologation</b>	
<b>Functions:</b>	Flood Beam or Spot Beam
<b>Homologations</b>	ECE R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	15pcs 3W LED(s)
<b>Color Temp:</b>	5000~6500K
<b>Raw Lumen:</b>	4100LM
<b>Effective Lumen:</b>	3500LM
<b>Luminous Efficacy:</b>	117LM/W
<b>Raw Power:</b>	45W
<b>Effective Power:</b>	40W
<b>Current Draw:</b>	3.33A@12V; 1.66A@24V
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 5
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	DT / AMP/ Cable (Optional)

<b>Mechanical Features</b>	
<b>Size:</b>	166X106.2X87.6mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>PC Brand:</b>	COVESTRO 2407
<b>IP Rate:</b>	IP67, IP6K9K
<b>Bracket:</b>	Flushbonading
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H

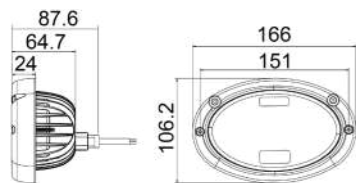


## FLUSHBONADING LED WORK LIGHTS OVAL LED WORK LIGHT



### PROJECT PHASE:

Concept Design
Development
Sample Stage
Mass Production



<b>Model:</b>	E2223
<b>Functions, Homologation</b>	
<b>Functions:</b>	Trapezoidal Beam
<b>Homologations</b>	ECE R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	10 pcs 5W OSRAM P8 LEDs
<b>Color Temp:</b>	5000~6500K
<b>Raw Lumen:</b>	4850LM
<b>Effective Lumen:</b>	2900LM
<b>Luminous Efficacy:</b>	96.67LM/W
<b>Raw Power:</b>	50W
<b>Effective Power:</b>	30W
<b>Current Draw:</b>	2.50A@12V; 1.25A@24V
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 3
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	DT / AMP/ Cable (Optional)

<b>Mechanical Features</b>	
<b>Size:</b>	166X106.2X87.6mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>PC Brand:</b>	COVESTRO 2407
<b>IP Rate:</b>	Flushbonading
<b>Bracket:</b>	IP67, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H

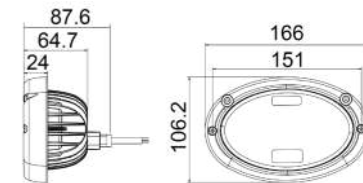


## FLUSHBONADING LED WORK LIGHTS OVAL LED WORK LIGHT



### PROJECT PHASE:

Concept Design
Development
Sample Stage
Mass Production



<b>Model:</b>	E2223A
<b>Functions, Homologation</b>	
<b>Functions:</b>	Flood Beam
<b>Homologations</b>	ECE R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	10 pcs 5050SMD LED(s)
<b>Color Temp:</b>	5000~6500K
<b>Raw Lumen:</b>	4850LM
<b>Effective Lumen:</b>	3100LM
<b>Luminous Efficacy:</b>	103.33LM/W
<b>Raw Power:</b>	50W
<b>Effective Power:</b>	30W
<b>Current Draw:</b>	2.50A@12V; 1.25A@24V
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 4
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	DT / AMP/ Cable (Optional)

<b>Mechanical Features</b>	
<b>Size:</b>	166X106.2X87.6mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>PC Brand:</b>	COVESTRO 2407
<b>IP Rate:</b>	Flushbonading
<b>Bracket:</b>	IP67, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H



**CLASSIC LED WORK LIGHTS  
OVAL LED WORK LIGHT**

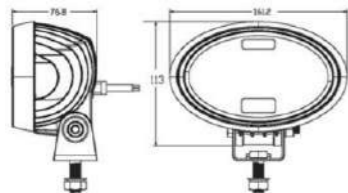


**E2228**  
Trapezoidal Beam

**E2228B**  
Flood  
Beam

**PROJECT PHASE:**

Concept Design
Development
Sample Stage
Mass Production



**Model:** E2228/E2228B

Functions, Homologation	
<b>Functions:</b>	Trapezoidal or Flood Beam
<b>Homologations</b>	ECE R10
Optical & Electric Features	
<b>LED Type:</b>	10pcs 5W LEDs
<b>Color Temp:</b>	5000~6500K
<b>Raw Lumen:</b>	4600LM
<b>Effective Lumen:</b>	3400LM
<b>Luminous Efficacy:</b>	82.93LM/W
<b>Raw Power:</b>	50W
<b>Effective Power:</b>	41W
<b>Current Draw:</b>	3.41A@12V; 1.71A@24V
Electromagnetic Features	
<b>EMC Grade:</b>	CISPR 25 Class 5
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	DT / AMP/ Cable (Optional)

Mechanical Features	
<b>Size:</b>	161.2X113X76.8mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>Lens Processing:</b>	Surface Hardened
<b>PC Brand:</b>	COVESTRO 2407
<b>Bracket:</b>	Stainless Steel
<b>IP Rate:</b>	IP67, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H



**FLUSHBONADING LED WORK LIGHTS  
4" SQUARE WORK LIGHT**



**PROJECT PHASE:**

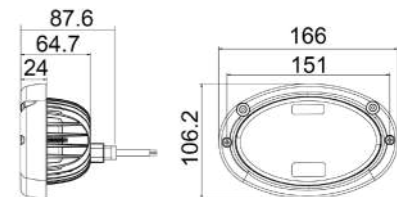
Concept Design
Development
Sample Stage
Mass Production



**Model:** ET-24W-OS-P

Functions, Homologation	
<b>Functions:</b>	Flood Beam
<b>Homologations</b>	ECE R10
Optical & Electric Features	
<b>LED Type:</b>	8pcs 3W LEDs
<b>Color Temp:</b>	5000~6500K
<b>Raw Lumen:</b>	2688LM
<b>Effective Lumen:</b>	1223LM
<b>Luminous Efficacy:</b>	76.43LM/W
<b>Raw Power:</b>	24W
<b>Effective Power:</b>	16W
<b>Current Draw:</b>	1.33A@12V; 0.66A@24V
Electromagnetic Features	
<b>EMC Grade:</b>	ECE R10
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	DT / AMP/ Cable (Optional)

Mechanical Features	
<b>Size:</b>	166X106.2X87.6mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>PC Brand:</b>	COVESTRO 2407
<b>IP Rate:</b>	Flushbonading
<b>Bracket:</b>	IP67, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H



**CLASSIC LED WORK LIGHTS**  
**OVAL LED WORK LIGHT**



PROJECT PHASE:	
Concept Design	
Development	
Sample Stage	
Mass Production	

**Model:** E2213

**Functions, Homologation**

**Functions:** Flood Beam  
**Homologations:** ECE R10

**Optical & Electric Features**

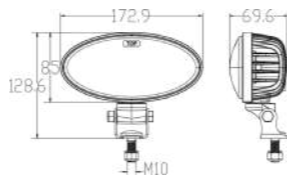
**LED Type:** 18pcs 3W LED(s)  
**Color Temp:** 5000~6500K  
**Raw Lumen:** 4100LM  
**Effective Lumen:** 3500LM  
**Luminous Efficacy:** 117LM/W  
**Raw Power:** 54W  
**Effective Power:** 30W  
**Current Draw:** 2.5A@12V; 1.25A@24V

**Electromagnetic Features**

**EMC Grade:** CISPR 25 Class 5  
**Operating Voltage:** 10V~30V  
**Connector:** DT / AMP/ Cable (Optional)

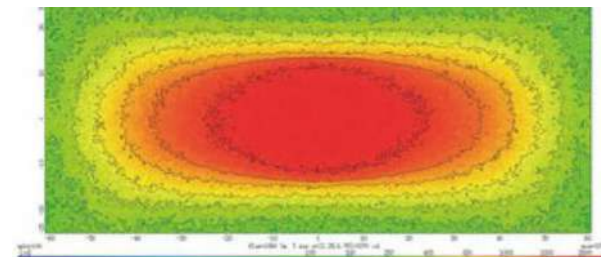
**Mechanical Features**

**Size:** 173X128.63X70mm  
**Housing Material:** Aluminium Alloy  
**Lens Material:** Anti-UV PC  
**Lens Processing:** Surface Hardened  
**PC Brand:** COVESTRO 2407  
**Bracket:** Stainless Steel  
**IP Rate:** IP67, IP6K9K  
**Work Temp:** -40~+50°C  
**So this is Life**  
**Life Time:** >30,000H

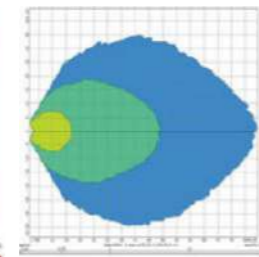


E2213 Flood, Road illumination

Plane energy distribution



Isolux of E2215, flood.



**FLUSHBONADING LED WORK LIGHTS**  
**OVAL LED WORK LIGHT**



PROJECT PHASE:	
Concept Design	
Development	
Sample Stage	
Mass Production	

**Model:** E2214

**Functions, Homologation**

**Functions:** Flood Beam  
**Homologations:** ECE R10

**Optical & Electric Features**

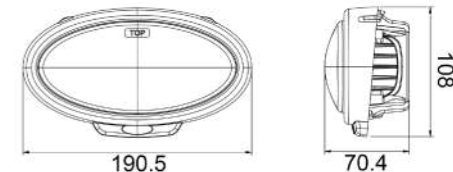
**LED Type:** 18pcs 3W LED(s)  
**Color Temp:** 5000~6500K  
**Raw Lumen:** 4100LM  
**Effective Lumen:** 3500LM  
**Luminous Efficacy:** 117LM/W  
**Raw Power:** 54W  
**Effective Power:** 30W  
**Current Draw:** 2.5A@12V; 1.25A@24V

**Electromagnetic Features**

**EMC Grade:** CISPR 25 Class 5  
**Operating Voltage:** 10V~30V  
**Connector:** DT / AMP/ Cable (Optional)

**Mechanical Features**

**Size:** 190X108X70mm  
**Housing Material:** Aluminium Alloy  
**Lens Material:** Anti-UV PC  
**PC Brand:** COVESTRO 2407  
**Bracket:** Flushbonading  
**IP Rate:** IP67, IP6K9K  
**Work Temp:** -40~+50°C  
**So this is Life**  
**Life Time:** >30,000H

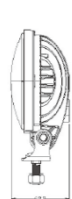
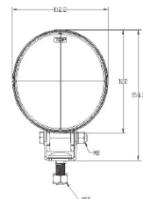


## CLASSIC LED WORK LIGHTS OVAL LED WORK LIGHT

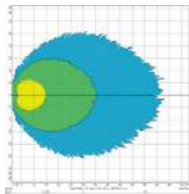


### PROJECT PHASE:

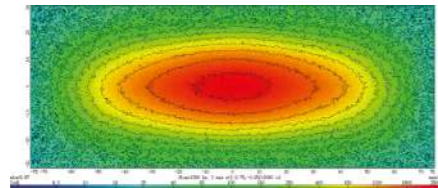
- Concept Design
- Development
- Sample Stage
- Mass Production



Isolux of E2215, flood.



Plane energy distribution



Model: E2215

### Functions, Homologation

Functions: Flood Beam  
Homologations: ECE R10

### Optical & Electric Features

LED Type: 21pcs 3W LED(s)  
Color Temp: 5000~6500K  
Raw Lumen: 4800LM  
Effective Lumen: 3500LM  
Luminous Efficacy: 130LM/W  
Raw Power: 63W  
Effective Power: 27W  
Current Draw: 2.25A@12V; 1.12A@24V

### Electromagnetic Features

EMC Grade: CISPR 25 Class 5  
Operating Voltage: 10V~30V  
Connector: DT / AMP/ Cable (Optional)

### Mechanical Features

Size: 112X154X69mm  
Housing Material: Aluminium Alloy  
Lens Material: Anti-UV PC  
Lens Processing: Surface Hardened  
PC Brand: COVESTRO 2407  
Bracket: Stainless Steel  
IP Rate: IP67, IP6K9K  
Work Temp: -40~+50°C  
So this is Life  
Life Time: >30,000H



E2215 Flood, Road illumination



55W halogen work light

## CLASSIC LED WORK LIGHTS OVAL LED WORK LIGHT



ET-24W-OS

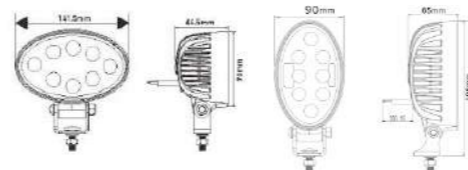
ET-24W-OS-B

ET-24W-OS-C



### PROJECT PHASE:

- Concept Design
- Development
- Sample Stage
- Mass Production



Model: ET-24W-OS ET-24W-OS-B ET-24W-OS-C

### Functions, Homologation

Functions: Flood Beam  
Homologations: ECE R10

### Optical & Electric Features

LED Type:	8pcs 3W OSRAM P7 LEDs	8pcs 3W OSRAM P7 LEDs	8pcs 3W OSRAM P7 LEDs
Color Temp:	5000~6500K	5000~6500K	5000~6500K
Raw Lumen:	2240LM	2240LM	2240LM
Effective Lumen:	1649LM	1649LM	1649LM
Luminous Efficacy:	82.45LM/W	82.45LM/W	82.45LM/W
Raw Power:	24W	24W	24W
Effective Power:	20W	20W	20W
Current Draw:	1.66A@12V; 0.833A@24V	1.66A@12V; 0.833A@24V	1.66A@12V; 0.833A@24V

### Electromagnetic Features

EMC Grade:	ECE R10	ECE R10	ECE R10
Operating Voltage:	10V~30V	10V~30V	10V~30V
Connector:	DT / AMP/ Cable (Optional)	DT / AMP/ Cable (Optional)	DT / AMP/ Cable (Optional)

### Mechanical Features

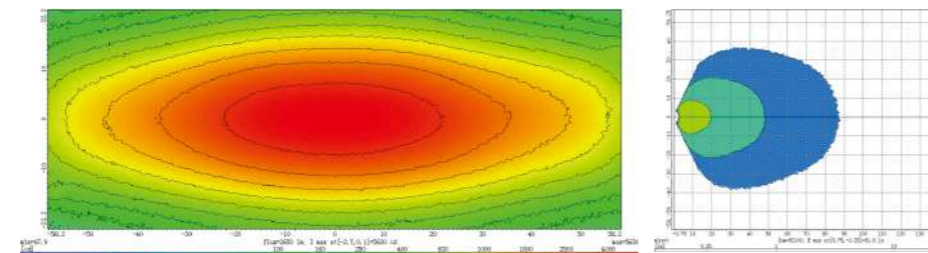
Size:	141.5X90X64.5 mm	90X177X65 mm	90X177X65 mm
Housing Material:	Aluminium Alloy	Aluminium Alloy	Aluminium Alloy
Lens Material:	Anti-UV PC	Anti-UV PC	Anti-UV PC
PC Brand:	COVESTRO 2407	COVESTRO 2407	COVESTRO 2407
Bracket:	Stainless Steel	Stainless Steel	Stainless Steel
IP Rate:	IP6K9K	IP6K9K	IP6K9K
Work Temp:	-40~+50°C	-40~+50°C	-40~+50°C
So this is Life	>30,000H	>30,000H	>30,000H
Life Time:	>30,000H	>30,000H	>30,000H

## FLUSHBONADING LED WORK LIGHTS 90MM LED WORK LIGHT



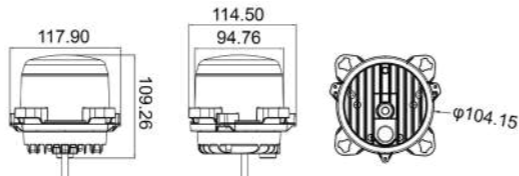
### PROJECT PHASE:

- Concept Design
- Development
- Sample Stage
- Mass Production**



<b>Model:</b>	E2219
<b>Functions, Homologation</b>	
<b>Functions:</b>	Flood Beam or Spot Beam
<b>Homologations</b>	ECE R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	OE Vehicle Level LEDs
<b>Color Temp:</b>	5700K
<b>Effective Power:</b>	31W
<b>Current Draw:</b>	2.58A@12V; 1.29A@24V
<b>Effective Lumen:</b>	2879.5LM
<b>Luminous Efficacy:</b>	92.8LM/W
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 3
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	Cable

<b>Mechanical Features</b>	
<b>Size:</b>	117.9X109X114.5mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC + Hardening Process
<b>PC Brand:</b>	COVESTRO 2407
<b>IP Rate:</b>	IP66, IP6K9K
<b>Bracket:</b>	Flushbonading (4 tabs)
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H



## CLASSIC LED WORK LIGHTS OVAL LED WORK LIGHT



### PROJECT PHASE:

- Concept Design
- Development
- Sample Stage
- Mass Production**

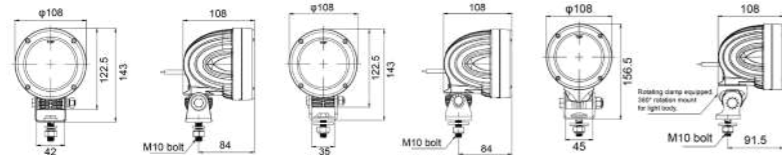


Model:	E-WL-LED-0002(Flood)	E-WL-LED-0002(Spot)
<b>Functions, Homologation</b>		
<b>Functions:</b>	Flood Beam	Spot Beam
<b>Homologations</b>	ECE R10	ECE R10
<b>Optical &amp; Electric Features</b>		
<b>LED Type:</b>	12pcs 3W LED(s)	12pcs 3W LED(s)
<b>Color Temp:</b>	5000~6500K	5000~6500K
<b>Raw Lumen:</b>	2240LM	2240LM
<b>Effective Lumen:</b>	2143.5LM	2143.5LM
<b>Luminous Efficacy:</b>	74LM/W	74LM/W
<b>Raw Power:</b>	36W	36W
<b>Effective Power:</b>	28.8W	28.8W
<b>Current Draw:</b>	2.4A@12V, 1.2A@24V	2.4A@12V, 1.2A@24V
<b>Electromagnetic Features</b>		
<b>EMC Grade:</b>	ECE R10	ECE R10
<b>Operating Voltage:</b>	10V~30V	10V~30V
<b>Connector:</b>	DT / AMP/ Cable (Optional)	DT / AMP/ Cable (Optional)
<b>Mechanical Features</b>		
<b>Size:</b>	144X85X146mm	144X85X146mm
<b>Housing Material:</b>	Aluminium Alloy	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC	Anti-UV PC
<b>PC Brand:</b>	COVESTRO 2407	COVESTRO 2407
<b>Bracket:</b>	Stainless Steel	Stainless Steel
<b>IP Rate:</b>	IP6K9K	IP6K9K
<b>Work Temp:</b>	-40~+50°C	-40~+50°C
<b>So this is Life</b>		
<b>Life Time:</b>	>30,000H	>30,000H

## CLASSIC LED WORK LIGHTS- E2231 SERIES



**E2231** Asymmetric  
**E2231A** Flood  
**E2231B** Classic lens

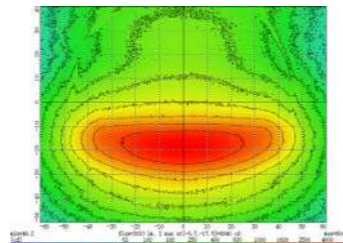


**Bracket option 42mm**  
**Bracket option 35mm**  
**Bracket option 45mm(360°)**

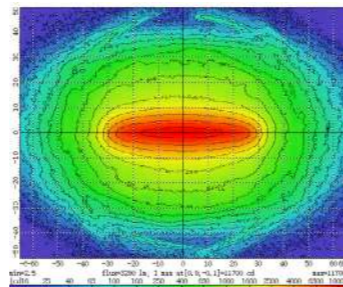
Model	Beam pattern	LED type	Raw power	Effective power	Raw lumen	Effective lumen	Voltage input	EMC level	Plug	Bracket optional
E2231	Asymmetric	OSRAM P8 LEDs	9pcs*5w	40W	4950LM	3855LM	10-30V	CISPR 25 Class 4	DT	35/ 42/ 45
E2231A	Flood	OSRAM P8 LEDs	9pcs*5w	40W	4950LM	3855LM	10-30V	CISPR 25 Class 4	DT	35/ 42/ 45
E2231B	Flood	OSRAM P8 LEDs	9pcs*5w	40W	4950LM	4500LM	10-30V	CISPR 25 Class 4	DT	35/ 42/ 45
E2231C	Spot	OSRAM P8 LEDs	9pcs*5w	40W	4950LM	4017LM	10-30V	CISPR 25 Class 4	DT	35/ 42/ 45
E2231D	Spot	OSRAM P8 LEDs	9pcs*5w	40W	4950LM	2905LM	10-30V	CISPR 25 Class 4	DT	35/ 42/ 45

PROJECT PHASE:

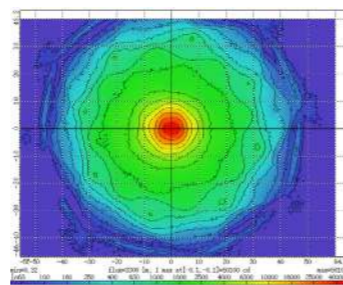
Concept Design
Development
Sample Stage
<b>Mass Production</b>



Asymmetric Beam



Flood Beam



Spot Beam

## Classic LED work lamps- E2231 series



## Diversified beams

Multiple beam patterns offered to the needs of your work. Field friendly, even light distribution.



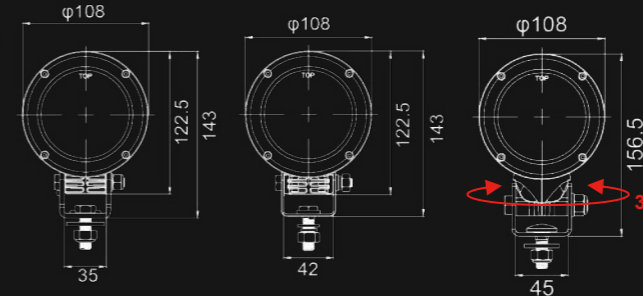
## OEM Design

100% compatible with original OE parts, be it halogen or LED.



## Flexible mount

3 different mounting brackets optional for different positions. 35mm bracket/ 42mm bracket/ 45mm(360°) bracket.



# CLASSIC LED WORK LIGHTS



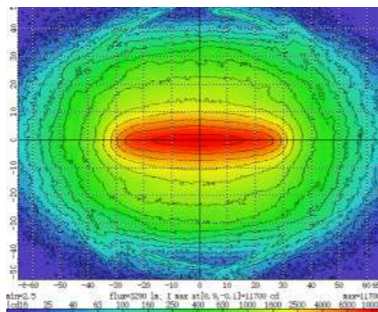
**PROJECT PHASE:**

Concept Design
Development
Sample Stage
<b>Mass Production</b>

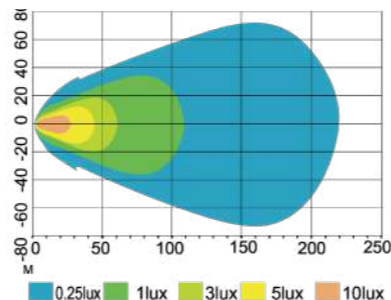


<b>Model:</b>	E2247
<b>Functions, Homologation</b>	
<b>Beam pattern:</b>	Flood
<b>Homologations:</b>	ECE R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	9 pcs 5W OSRAM LEDs
<b>Emitting Color:</b>	White
<b>Color Temp:</b>	6500K
<b>Raw Lumen:</b>	4950LM
<b>Effective Lumen:</b>	4500LM
<b>Luminous Efficacy:</b>	112.50LM/W
<b>Raw Power:</b>	45W
<b>Effective Power:</b>	40W
<b>Current flow:</b>	3.33A@12V; 1.66A@24V
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 4
<b>Operating Voltage:</b>	10V~30V
<b>Connector (optional):</b>	DT 2 pin
<b>Mechanical Features</b>	
<b>Size:</b>	103X146X109mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>PC Brand:</b>	COVESTRO 2407
<b>Mount:</b>	Bottom bracket
<b>Bracket material:</b>	Powder coated iron plate
<b>IP Rate:</b>	IP67, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H

Plane energy distribution.



Isolux of E2247 flood, H:2m, Tilt: 0°, 1lux @105m.



- Compact and generic desgin
- **4" body of 4500LM effective output, >100LM/W**
- Guaranteed quality with OED **OSARM P9 LEDs** optional
- **Zero noise** or radio interference, **CISPR 25 Class4**
- Lossless replacement with original halogen and LED ones



**CLASSIC LED WORK LIGHTS**  
**PAR36 LED WORK LIGHT**



PROJECT PHASE:

Concept Design
Development
Sample Stage
Mass Production

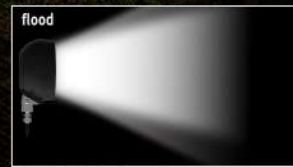


Model:	PAR36
<b>Functions, Homologation</b>	
Functions:	Flood Beam or Spot Beam
Homologations	ECE R10
<b>Optical &amp; Electric Features</b>	
LED Type:	18PCS 3W LEDs
Color Temp:	5000~6500K
Raw Lumen:	2880 LM
Effective Lumen:	1779LM (Flood)
Luminous Efficacy:	1707 LM (Spot)
Raw Power:	54W
Effective Power:	15W
Current Draw:	1.25A@12V; 0.625A@24V
<b>Electromagnetic Features</b>	
EMC Grade:	ECE R10
Operating Voltage:	10~30VDC
Connector:	H4 or open cable optional
<b>Mechanical Features</b>	
Size:	φ127X149X76mm
Housing Material:	Rubber
Lens Material:	Anti-UV PC
PC Brand:	COVESTRO 2407
Bracket:	Stainless Steel
IP Rate:	IP6K9K
Work Temp:	-40~+50°C
<b>So this is Life</b>	
Life Time:	>30,000H

1. Modular design, Par 36 work lamp + rubber housing
2. Effective lumen  $\geq 1700\text{Lm}$  from 5" body
3. One screw hole to fix both bracket and cable  
**50% labor cost saved**



**R10**  
ECE



**CLASSIC LED WORK LIGHTS**  
84MM LED WORK LIGHT

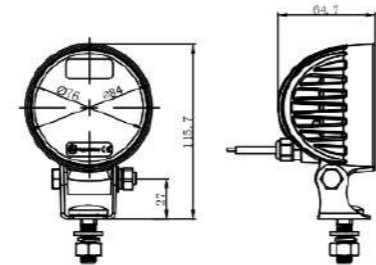


PROJECT PHASE:

Concept Design
Development
Sample Stage
Mass Production

 or   
  

<b>Model:</b>	ET-12W-OS
<b>Functions, Homologation</b>	
<b>Functions:</b>	Flood Beam or Spot Beam
<b>Homologations</b>	ECE R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	4pcs 3W OSRAM P7 LEDs
<b>Color Temp:</b>	5000~6500K
<b>Raw Lumen:</b>	1000LM
<b>Effective Lumen:</b>	717.15LM
<b>Luminous Efficacy:</b>	90.5LM/W
<b>Raw Power:</b>	12W
<b>Effective Power:</b>	7.92W
<b>Current Draw:</b>	0.66A@12V, 0.33A@24V
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 3
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	Open cable



<b>Mechanical Features</b>	
<b>Size:</b>	84X115.7X64.7mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>PC Brand:</b>	COVESTRO 2407
<b>IP Rate:</b>	Stainless Steel
<b>Bracket:</b>	IP67, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H

**CLASSIC LED WORK LIGHTS**  
84MM LED WORK LIGHT



E2226 Flood



DT Connector

 or   
   
   

PROJECT PHASE:

Concept Design
Development
Sample Stage
Mass Production



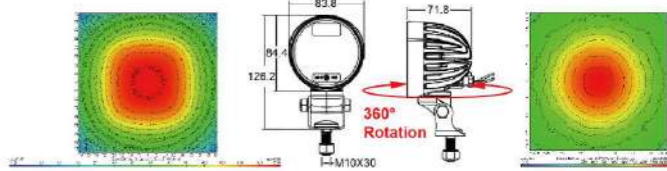
E2226-1 Spot



E2226-2 Spot

<b>Model:</b>	E2226
<b>Functions, Homologation</b>	
<b>Functions:</b>	Flood Beam or Spot Beam
<b>Homologations</b>	ECE R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	4pcs 10W OSRAM P9 LED(s)
<b>Color Temp:</b>	5000~6500K
<b>Raw Lumen:</b>	5600LM
<b>Effective Lumen:</b>	2500LM
<b>Luminous Efficacy:</b>	138.88LM/W
<b>Raw Power:</b>	40W
<b>Effective Power:</b>	18W
<b>Current Draw:</b>	1.5A@12V; 0.75A@24V
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 3
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	DT

<b>Mechanical Features</b>	
<b>Size:</b>	83.8X126.2X71.8mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>PC Brand:</b>	COVESTRO 2407
<b>IP Rate:</b>	Stainless Steel
<b>Bracket:</b>	IP67, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H



Flood Beam



Spot Beam



## FLUSHBONADING LED WORK LIGHTS 84MM LED WORK LIGHT



Spot Beam

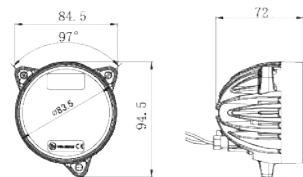
Flood Beam

### PROJECT PHASE:

- Concept Design
- Development
- Sample Stage
- Mass Production**



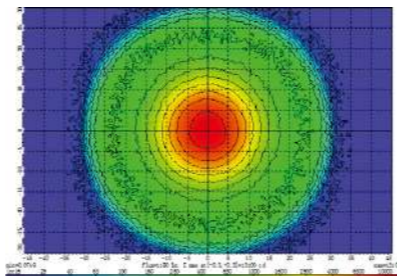
or



<b>Model:</b>	E2128
<b>Functions, Homologation</b>	
<b>Functions:</b>	Flood Beam or Spot Beam
<b>Homologations</b>	ECE R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	4pcs 10W OSRAM P9 LEDs
<b>Color Temp:</b>	5000~6500K
<b>Raw Lumen:</b>	4800LM
<b>Effective Lumen:</b>	2207LM
<b>Luminous Efficacy:</b>	120LM/W
<b>Raw Power:</b>	40W
<b>Effective Power:</b>	18W
<b>Current Draw:</b>	1.5A@12V; 0.75A@24V

<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 3
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	DT / AMP/ Cable (Optional)

<b>Mechanical Features</b>	
<b>Size:</b>	φ83.5X72mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>PC Brand:</b>	COVESTRO 2407
<b>Bracket:</b>	Flushbonading (3 tabs)
<b>IP Rate:</b>	IP67, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H



Flood Beam

Spot Beam

## FLUSHBONADING LED WORK LIGHTS 84MM ROUND LED WORK LIGHT+OEM FINISH



Spot Beam

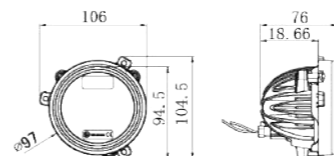
Flood Beam

### PROJECT PHASE:

- Concept Design
- Development
- Sample Stage
- Mass Production**



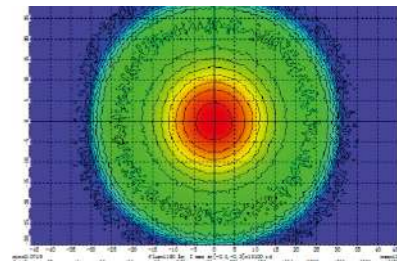
or



<b>Model:</b>	E2128-1
<b>Functions, Homologation</b>	
<b>Functions:</b>	Flood Beam or Spot Beam
<b>Homologations</b>	ECE R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	4pcs 10W OSRAM P9 LEDs
<b>Color Temp:</b>	5000~6500K
<b>Raw Lumen:</b>	4800LM
<b>Effective Lumen:</b>	2207LM
<b>Luminous Efficacy:</b>	120LM/W
<b>Raw Power:</b>	40W
<b>Effective Power:</b>	18W
<b>Current Draw:</b>	1.5A@12V; 0.75A@24V

<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 3
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	Cable

<b>Mechanical Features</b>	
<b>Size:</b>	Φ97X76mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>PC Brand:</b>	COVESTRO 2407
<b>Bracket:</b>	Flushbonading (3 tabs)
<b>IP Rate:</b>	IP67, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H



Flood Beam

Spot Beam

# Warning Signal Series

Safety is always the top priority for heavy duty jobs.  
 Eye-catching signals even visible in the sunshine.  
 ETHER's clear, sharp warning signals guarantee safety for YOU.  
 Higher efficiency and productivity.



## RED OR BLUE SAFETY LINE

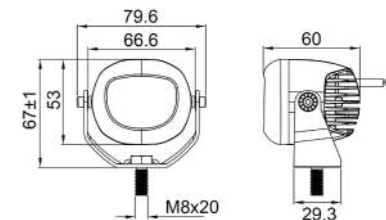


### PROJECT PHASE:

- Concept Design
- Development
- Sample Stage
- Mass Production



<b>Model:</b>	E2224
<b>Functions, Homologation</b>	
<b>Beam Pattern:</b>	Safety line
<b>Optical &amp; Electric Features</b>	
<b>Emitting Color:</b>	Red
<b>Color Temp:</b>	620-630K
<b>Raw Lumen:</b>	300LM
<b>Effective Lumen:</b>	180LM
<b>Luminous Efficacy:</b>	36LM/W
<b>Raw Power:</b>	6W
<b>Effective Power:</b>	5W
<b>Current flow:</b>	0.42A@12V, 0.21A@24V
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	ECE R10
<b>Operating Voltage:</b>	10V~80V
<b>Connector:</b>	Open cable
<b>Mechanical Features</b>	
<b>Size:</b>	80X67X60mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>PC Brand:</b>	COVESTRO 2407
<b>Bracket Material:</b>	Stainless Steel
<b>IP Rate:</b>	IP67, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H



Products subject to update, change or modify without notice.

## RED OR BLUE SAFETY LINE



### PROJECT PHASE:

- Concept Design
- Development
- Sample Stage
- Mass Production

<b>Model:</b>	<b>E2241</b>
<b>Functions, Homologation</b>	
<b>Beam Pattern:</b>	Safety line
<b>Optical &amp; Electric Features</b>	
<b>Emitting Color:</b>	Red
<b>Red wavelength:</b>	620-630nm
<b>Raw Lumen:</b>	600LM
<b>Effective Lumen:</b>	180LM
<b>Luminous Efficacy:</b>	24LM/W
<b>Raw Power:</b>	12W
<b>Effective Power:</b>	7.5W
<b>Current flow:</b>	0.63A@12V, 0.31A@24V
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	ECE R10
<b>Operating Voltage:</b>	10V~80V
<b>Connector:</b>	Open cable
<b>Mechanical Features</b>	
<b>Size:</b>	84X64.7X111.2mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>PC Brand:</b>	COVESTRO 2407
<b>Bracket Material:</b>	Stainless Steel
<b>IP Rate:</b>	IP67, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H

- ECE **R10** compliant
- **Longer** safety line
- Special for **heavy duty** forklifts
- Straight and even line lighting
- **Sharp** warning signal



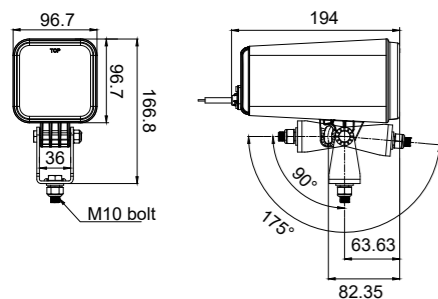
Salt spray test: **240H/480H**    Lens surface hardened: **(>1H)**    Vibration: **15.3Grms**  
Shock: **60G**

**WARNING SIGNALS  
- PROJECTION TECHNOLOGY**



**PROJECT PHASE:**

- Concept Design
- Development
- Sample Stage
- Mass Production**



**Model:** E2150

**Functions, Homologation**

**Beam Pattern:** Projection logo customized

**Homologations:** ECE R10 (10-30V)

**Optical & Electric Features**

**LED Type:** 1pcs 40W LED

**Emitting Color:** Full color

**Raw Lumen:** 1900LM

**Effective Lumen:** To logo design

**Effective Power:** 30W

**Electromagnetic Features**

**EMC Grade:** ECE R10 (10-30V)

**Operating Voltage:** 10V~80V

**Connector (optional):** 2 pin cable

**Mechanical Features**

**Size:** 96.7X166.8X194mm

**Housing Material:** Aluminium Alloy

**Lens Material:** Anti-UV PC

**Mount:** bottom bracket

**Bracket material:** Stainless steel

**IP Rate:** IP67, IP6K9K

**Work Temp:** -40~+50°C

**So this is Life**

**Life Time:** >30,000H

Projection logo could be customized(MOQ:500Pcs)to your needs.



Products subject to update, change or modify without notice.

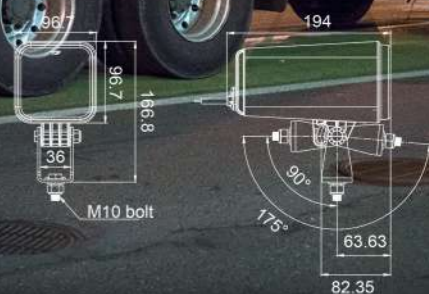
**Customized logo available**

- Projection technology
- Sharp warning signals
- High brightness, higher safety

10~80V  
DC



Logo could be tailored to your needs



## 8" MINI DRIVING LIGHT BAR – RED SAFETY LINE



### PROJECT PHASE:

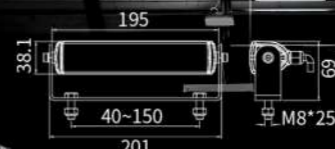
Concept Design
Development
Sample Stage
Mass Production

<b>Model:</b>	E2170
<b>Functions, Homologation</b>	
<b>Beam Pattern:</b>	Safety line
<b>Homologations:</b>	ECE R10
<b>Optical &amp; Electric Features</b>	
<b>Emitting Color:</b>	Red
<b>Wavelength:</b>	620-634nm
<b>Raw Lumen:</b>	2760LM
<b>Effective Lumen:</b>	551.5LM
<b>Illumination Distance:</b>	1 lux @80m
<b>Luminous Efficacy:</b>	31.5LM/W
<b>Raw Power:</b>	36W
<b>Effective Power:</b>	17.5W
<b>Current flow:</b>	1.45A@12V, 0.72A@24V
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	ECE R10
<b>Operating Voltage:</b>	10V~80V
<b>Connector:</b>	Open cable
<b>Mechanical Features</b>	
<b>Size:</b>	195X38.1X65.6mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>PC Brand:</b>	COVESTRO 2407
<b>Bracket Material:</b>	Stainless Steel
<b>IP Rate:</b>	IP67, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H



Blue safety line EN62471

Red safety line



E2170

8"

40~150mm free range of bolts in slot hole

2.5m

### Flexible mounting options



*For higher safety.  
Your focus for work.  
Our focus for your safety.  
Clear signals even in daytime.*

## 14" MINI DRIVING LIGHT BAR – RED SAFETY LINE



Model: E2171

### Functions, Homologation

Beam Pattern: Safety line

Homologations: ECE R10

### Optical & Electric Features

Emitting Color: Red

Wavelength: 620-634nm

Raw Lumen: 5520LM

Effective Lumen: 915.98LM

Illumination Distance: 1 lux @110.7m

Luminous Efficacy: 30LM/W

Raw Power: 72W

Effective Power: 30.5W

Current flow: 2.52A@12V, 1.26A@24V

### Electromagnetic Features

EMC Grade: ECE R10

Operating Voltage: 10V~80V

Connector: Open cable

### Mechanical Features

Size: 350X38X74mm

Housing Material: Aluminium Alloy

Lens Material: Anti-UV PC

Mount: COVESTRO 2407

Bracket material: Stainless Steel

IP Rate: IP67, IP6K9K

Work Temp: -40~+50°C

So this is Life

Life Time: >30,000H

### PROJECT PHASE:

Concept Design

Development

Sample Stage

Mass Production

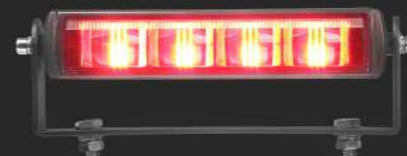


E2171 14"

350

74

38



E2170 8"

195

38.1

40~150

201

68

M8\*25



- **ECE R10** compliant
- **Longer** safety line
- Straight and **even** line lighting
- **Sharp** warning signal
- Vibration level **15.3Grms**
- Shock resistance up to **60G**



Salt spray test **240H/480H**

Lens surface hardened (**>1H**)

Vibration: **15.3Grms**





# LED Warning Lights

ECE R65, R10 Standards,

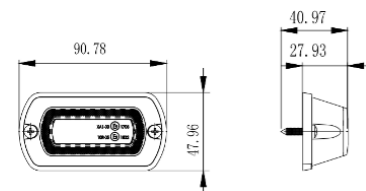
Now EMC upgraded, CISPR 25 Class 3/4/5 Available

Aluminum Base, permanent or magnetic mount (Speed up to 120km/H)

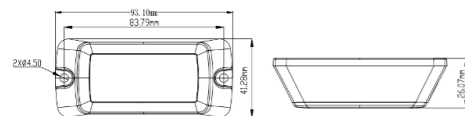
Anti-UV Lens PC from COVESTRO/Teijin

Multiple Flash Patterns

### 3.6" MINI WARNING LIGHT



### 3.6" MINI WARNING LIGHT



**Model:** E5101

**Functions, Homologation**

**Flash Patterns:** Up to 10 patterns

**Homologations:** ECE R65

**Optical & Electric Features**

**LED Type:** 3pcs 3W LED(s)

**Power:** 9W

**Emitting Color:** Amber, Red, White, Blue (Optional)

**Control Mode:** Synchronized or Asynchronous

**Electromagnetic Features**

**EMC Grade:** ECE R10

**Operating Voltage:** 10V~30V

**Connector:** Open cable

**PROJECT PHASE:**

Concept Design
Development
Sample Stage
<b>Mass Production</b>

**Model:** E5102

**Functions, Homologation**

**Flash Patterns:** Up to 10 patterns

**Homologations:** ECE R65

**Optical & Electric Features**

**LED Type:** 8pcs 3W LED(s)

**Power:** 24W

**Emitting Color:** Amber, Red, White, Blue (Optional)

**Control Mode:** Synchronized or Asynchronous

**Electromagnetic Features**

**EMC Grade:** ECE R10

**Operating Voltage:** 10V~30V

**Connector:** Open cable

**Mechanical Features**

**Size:** 91X47X28mm

**Housing Material:** Aluminium Alloy

**Lens Material:** Anti-UV PC

**PC Brand:** COVESTRO 2407

**IP Rate:** IP6K9K

**Bracket:** Permanent Mount

**Work Temp:** -40~+50°C

**So this is Life**

**Life Time:** >30,000H

**Mechanical Features**

**Size:** 93X41X26mm

**Housing Material:** Aluminium Alloy

**Lens Material:** Anti-UV PC

**PC Brand:** COVESTRO 2407

**IP Rate:** IP6K9K

**Bracket:** Permanent Mount

**Work Temp:** -40~+50°C

**So this is Life**

**Life Time:** >30,000H



Amber



Red



White



Blue





### 3" SQUARE WARNING LIGHT

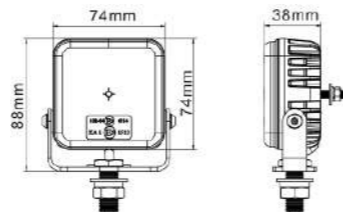


<b>Model:</b>	E-R65-1224
<b>Functions, Homologation</b>	
<b>Flash Patterns:</b>	Up to 10 patterns
<b>Homologations:</b>	ECE R65
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	12pcs LED(s)
<b>Emitting Color:</b>	Amber or White
<b>Control Mode:</b>	Synchronized or Asynchronous
<b>Electromagnetic Features</b>	
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	Car Charger (Optional)

<b>Mechanical Features</b>	
<b>Size:</b>	74X74X38mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>PC Brand:</b>	COVESTRO 2407
<b>IP Rate:</b>	IP6K9K
<b>Mounting Means:</b>	Permanent
<b>Work Temp:</b>	Mount-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H

**PROJECT PHASE:**

Concept Design
Development
Sample Stage
Mass Production



### 7" MINI WARNING LIGHT



**PROJECT PHASE:**

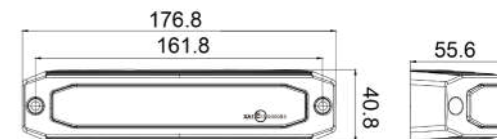
Concept Design
Development
Sample Stage
Mass Production

#### Flash patterns

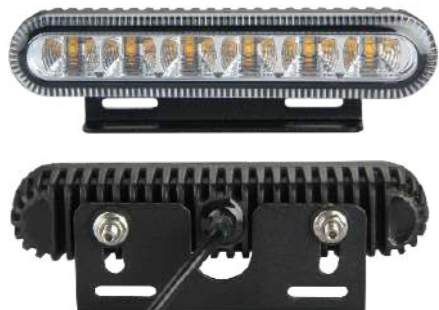
Flash pattern	FPM(Flashes per minute)
1.Single	100
2.Quad (Left-right split)	75
3.Quint (Left-right split)	60
4.Triple (Left-right split)	100
5.Mega	1200
6.Double (Left-right split)	75
7.Triple	100
8.Single (ECE) (1)	93
9.Single (ECE) (2)	144
10.Combine	112

<b>Model:</b>	E5106
<b>Functions, Homologation</b>	
<b>Flash Patterns:</b>	Up to 10 patterns
<b>Homologations:</b>	ECE R65, R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	6pcs 3W LED(s)
<b>Power:</b>	18W
<b>Emitting Color:</b>	Amber
<b>Control Mode:</b>	Synchronized or Asynchronous
<b>Qty of Sync group</b>	4 or 8 pcs synchronized
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	ECE R10
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	Open cable

<b>Mechanical Features</b>	
<b>Size:</b>	176.8X40.8X55.6mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>PC Brand:</b>	COVESTRO 2407
<b>IP Rate:</b>	IP6K9K
<b>Mounting Means:</b>	Bracket Mount
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H



## 5.6" MINI WARNING LIGHT



### PROJECT PHASE:

Concept Design
Development
Sample Stage
Mass Production

### Flash patterns

Flash pattern	FPM(Flashes per minute)
1.Single	100
2.Quad (Left-right split)	75
3.Quint (Left-right split)	60
4.Triple (Left-right split)	100
5.Mega	1200
6.Double (Left-right split)	75
7.Triple	100
8.Single (ECE) (1)	93
9.Single (ECE) (2)	144
10.Combine	112

Model: E-R65-612

### Functions, Homologation

Flash Patterns: Up to 10 patterns

Homologations: ECE R65

### Optical & Electric Features

LED Type: 6pcs 3W LED(s)

Power: 18W

Emitting Color: Amber

Control Mode: Synchronized or Asynchronous

### Electromagnetic Features

EMC Grade: ECE R10

Operating Voltage: 10V~30V

Connector: Open cable

### Mechanical Features

Size: 142X30X35mm

Housing Material: Aluminium Alloy

Lens Material: Anti-UV PC

PC Brand: COVESTRO 2407

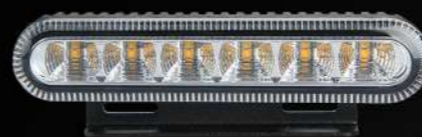
IP Rate: IP6K9K

Bracket: Bracket Mount

Work Temp: -40~+50°C

### So this is Life

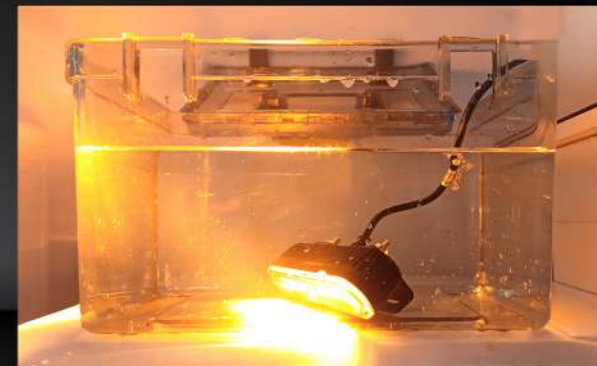
Life Time: >30,000H



E-R65-612



- Classic warning light with **updated tooling**
- Completely sealed housing design
- High level protection: **IP67, IP6K9K**
- ECE **R65** Compliant.
- EMC optional: ECE R10, **CISPR 25 Class 3~5**



## RECHARGEABLE LIGHT

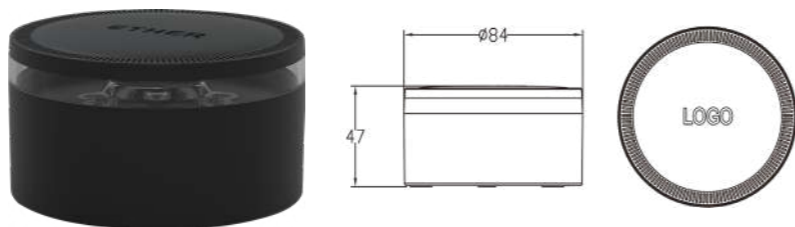


<b>Model:</b>	E5145
<b>Functions, Homologation</b>	
<b>Beam pattern:</b>	Flash warning light
<b>Homologations:</b>	V16
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	3 pcs 1W LEDs
<b>Emitting Color:</b>	Amber
<b>Color Temp:</b>	1700~1900K
<b>Raw Lumen:</b>	300LM
<b>Effective Lumen:</b>	200LM
<b>Raw Power:</b>	3W
<b>Effective Power:</b>	3W
<b>Illumination distance:</b>	1000m
<b>Electromagnetic Features</b>	
<b>Operating Voltage:</b>	3 pcs 1.5V AA battery
<b>Connector:</b>	None

<b>Mechanical Features</b>	
<b>Size:</b>	φ84X47mm
<b>Housing Material:</b>	Aluminium Alloy
<b>Lens Material:</b>	Anti-UV PC
<b>Mount:</b>	Magnetic base
<b>IP Rate:</b>	IP65
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H

### PROJECT PHASE:

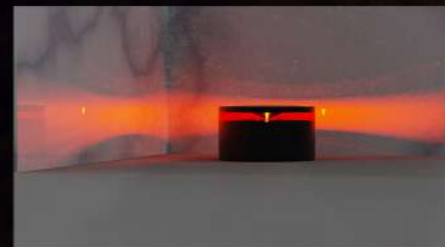
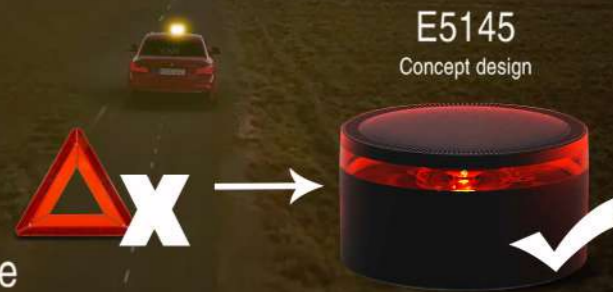
Concept Design
Development
Sample Stage
Mass Production



Products subject to update, change or modify without notice.

visibility up to 1000m

- Moveable beacon of **V16** standard
- 3 pcs AA battery powered
- **30 min** warning time @ 100% brightness
- Warning distance up to **1000m**
- **Increased safety** to replace traditional triangle



## RECHARGEABLE BEACON



**Model:** E5108A

### Functions, Homologation

**Flash Patterns:** Up to 10 patterns

**Homologations:** ECE R65

### Optical & Electric Features

**LED Type:** 30 pcs SMD LED(s)

**Emitting Color:** Amber

### Electromagnetic Features

**EMC Grade:** CISPR 25 Class 3

**Operating Voltage:** 10V~30V

**Connector:** DT/ AMP/ Cable/  
Car Charger (Optional)

### Mechanical Features

**Size:**  $\phi 168 \times 102 \text{mm}$

**Housing Material:** Amber or Clear (Optional)

**Lens Material:** Anti-UV PC

**PC Brand:** COVESTRO 2407 or Teijin

**IP Rate:** IP65

**Mounting Means:** Permanent Mount

**Work Temp:**  $-40 \sim +50^\circ \text{C}$

**So this is Life**

**Life Time:**  $>30,000 \text{H}$

### PROJECT PHASE:

Concept Design

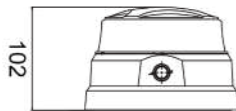
Development

Sample Stage

Mass Production



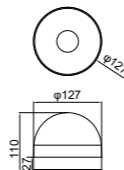
$\phi 168$



102



## LED BEACONS



**Model:** E5128

**Mounting:** Screw mount

**Size:**  $\phi 127 \times 110 \text{mm}$

**Homologation:** ECE R65, SAE J845 Class 1

**EMC Level:** ECE R10 / CISPR 25 Class 5

**Light Source:** LED, Amber

**Color Temp.:** 1700-1800K

**Flash Pattern:** 2.5Hz, 150 FPM @ strobe  
Or rotating (optional)

**Lens Color:** Transparent Amber

**Finish:** Elegant Silver



### PROJECT PHASE:

Concept Design

Development

Sample Stage

Mass Production

**Model:** E5128A

**Mounting:** Socket Pipe(DIN Pole)

**Size:**  $\phi 127 \times 110 \text{mm}$

**Homologation:** ECE R65, SAE J845 Class 1

**EMC Level:** ECE R10 / CISPR 25 Class 5

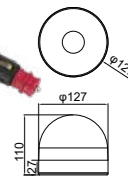
**Light Source:** LED, Amber

**Color Temp.:** 1700-1800K

**Flash Pattern:** 2.5Hz, 150 FPM @ strobe  
Or rotating (optional)

**Lens Color:** Transparent Amber

**Finish:** Elegant Silver



**Model:** E5128B

**Mounting:** Screw mount+car charger

**Size:**  $\phi 127 \times 110 \text{mm}$

**Homologation:** ECE R65, SAE J845 Class 1

**EMC Level:** ECE R10 / CISPR 25 Class 5

**Light Source:** LED, Amber

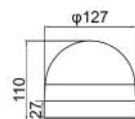
**Color Temp.:** 1700-1800K

**Flash Pattern:** 2.5Hz, 150 FPM @ strobe  
Or rotating (optional)

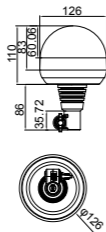
**Lens Color:** Transparent Amber

**Finish:** Elegant Silver

## LED BEACONS

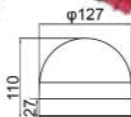


**Model:** E5129  
**Mounting:** Screw mount  
**Size:**  $\phi$ 127X110mm  
**Homologation:** ECE R65, SAE J845 Class 1  
**EMC Level:** ECE R10 / CISPR 25Class 5  
**Light Source:** LED, Amber  
**Color Temp.:** 1700-1800K  
**Flash Pattern:** 2.5Hz, 150 FPM @ strobe  
 Or rotating (optional)  
**Lens Color:** Transparent Amber  
**Finish:** Classic black



**PROJECT PHASE:**  
 Concept Design  
 Development  
 Sample Stage  
**Mass Production**

**Model:** E5129A  
**Mounting:** Socket Pipe(DIN Pole)  
**Size:**  $\phi$ 127X110mm  
**Homologation:** ECE R65, SAE J845 Class 1  
**EMC Level:** ECE R10 / CISPR 25Class 5  
**Light Source:** LED, Amber  
**Color Temp.:** 1700-1800K  
**Flash Pattern:** 2.5Hz, 150 FPM @ strobe  
 Or rotating (optional)  
**Lens Color:** Transparent Amber  
**Finish:** Classic black



**Model:** E5129B  
**Mounting:** Screw mout+car charger  
**Size:**  $\phi$ 127X110mm  
**Homologation:** ECE R65, SAE J845 Class 1  
**EMC Level:** ECE R10 / CISPR 25Class 5  
**Light Source:** LED, Amber  
**Color Temp.:** 1700-1800K  
**Flash Pattern:** 2.5Hz, 150 FPM @ strobe  
 Or rotating (optional)  
**Lens Color:** Transparent Amber  
**Finish:** Classic black

# LED BEACON

OEM design

R65/J845 Class 1

Compact

Endurable



E5129

E5129B

Class 5  
**EMC**  
 CISPR 25

0 interference

360°

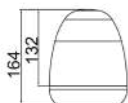
Warning



Zero noise



OEM mount



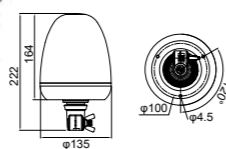
**Model:** E5130  
**Mounting:** Screw mount  
**Size:**  $\phi 135 \times 222 \text{mm}$   
**Homologation:** ECE R65, SAE J845 Class 1  
**EMC Level:** ECE R10 / CISPR 25 Class 5  
**Light Source:** LED, Amber  
**Color Temp.:** 1700-1800K  
**Flash Pattern:** 2.5Hz, 150 FPM @ strobe  
 Or rotating (optional)  
**Lens Color:** Transparent Amber  
**Finish:** Classic black

## LED BEACONS

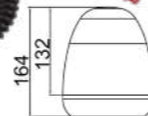


**PROJECT PHASE:**

Concept Design
Development
Sample Stage
<b>Mass Production</b>



**Model:** E5130A  
**Mounting:** Socket Pipe (DIN Pole)  
**Size:**  $\phi 135 \times 222 \text{mm}$   
**Homologation:** ECE R65, SAE J845 Class 1  
**EMC Level:** ECE R10 / CISPR 25 Class 5  
**Light Source:** LED, Amber  
**Color Temp.:** 1700-1800K  
**Flash Pattern:** 2.5Hz, 150 FPM @ strobe  
 Or rotating (optional)  
**Lens Color:** Transparent Amber  
**Finish:** Classic black



**Model:** E5130B  
**Mounting:** Screw mount + car charger  
**Size:**  $\phi 135 \times 222 \text{mm}$   
**Homologation:** ECE R65, SAE J845 Class 1  
**EMC Level:** ECE R10 / CISPR 25 Class 5  
**Light Source:** LED, Amber  
**Color Temp.:** 1700-1800K  
**Flash Pattern:** 2.5Hz, 150 FPM @ strobe  
 Or rotating (optional)  
**Lens Color:** Transparent Amber  
**Finish:** Classic black

# LED BEACON

- Higher EMC level, CISPR 25 Class 5
- Zero noise
- Zero wireless interference
- OEM mount design
- 100% compatible with original beacons
- Safer, more cost effective

E5130A



E5130



E5130B



## LED BEACONS



### PROJECT PHASE:

Concept Design
Development
Sample Stage
Mass Production

Model: E5132

#### Functions, Homologation

Beam pattern: Flash warning light

Homologations: ECE R65

#### Optical & Electric Features

LED Type: 30 pcs 0.5W LEDs

Emitting Color: Amber

Color Temp: 1700~1800K

Raw Lumen: NA

Effective Lumen: NA

Raw Power: 15W

Effective Power: 15W

Illumination distance: 1000m

#### Electromagnetic Features

Operating Voltage: 10-30V

Connector: cable

#### Mechanical Features

Size: 158Xφ142mm

Housing Material: Aluminium Alloy

Lens Material: Anti-UV PC

Mount: Screw mount

IP Rate: IP65

Work Temp: -40~+50°C

#### So this is Life

Life Time: >30,000H

# 5" LED BEACON

- Higher EMC level, **CISPR 25 Class 5**
- Zero noise
- Zero radio interference
- **OEM mount** design
- 100% compatible with original beacons
- Safer, more cost effective



E5132



Side view



Bottom view

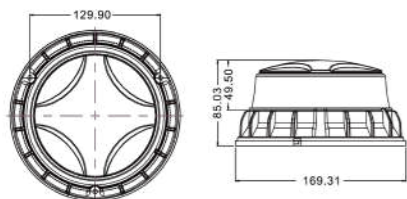


## LED BEACONS



### PROJECT PHASE:

- Concept Design
- Development
- Sample Stage
- Mass Production



<b>Model:</b>	E5108
<b>Functions, Homologation</b>	
<b>Flash Patterns:</b>	Up to 10 patterns
<b>Homologations:</b>	ECE R65
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	30 pcs SMD LED(s)
<b>Emitting Color:</b>	Amber
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	CISPR 25 Class 3
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	DT/ AMP/ Cable/ Car Charger (Optional)

<b>Mechanical Features</b>	
<b>Size:</b>	ø169X85mm
<b>Housing Material:</b>	Amber or Clear (Optional)
<b>Lens Material:</b>	Anti-UV PC
<b>PC Brand:</b>	COVESTRO 2407 or Teijin
<b>IP Rate:</b>	IP6K9K
<b>Mounting Means:</b>	Permanent Mount
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H

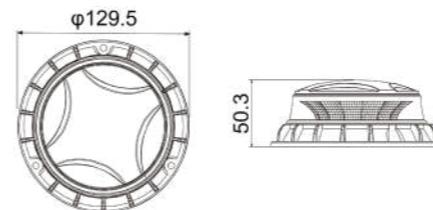


## LED BEACONS



### PROJECT PHASE:

- Concept Design
- Development
- Sample Stage
- Mass Production



<b>Model:</b>	E5109
<b>Functions, Homologation</b>	
<b>Flash Patterns:</b>	Up to 10 patterns
<b>Homologations:</b>	ECE R65, R10
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	30 pcs SMD LED(s)
<b>Emitting Color:</b>	Amber or White
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	ECE R10
<b>Operating Voltage:</b>	10V~30V
<b>Connector:</b>	DT / AMP/ Cable (Optional)

<b>Mechanical Features</b>	
<b>Size:</b>	ø129.5X50.3mm
<b>Housing Material:</b>	Amber or Clear (Optional)
<b>Lens Material:</b>	Anti-UV PC
<b>PC Brand:</b>	COVESTRO 2407 or Teijin
<b>IP Rate:</b>	IP6K9K
<b>Mounting Means:</b>	Permanent Mount
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000H





# Tail Lights

LED Tail Lights for Various Sizes/Designs of vehicles  
 Find your DOT, SAE, or ECE approved Tail lights  
 2.4G Hz wireless control optional



## OVAL LED TAIL LIGHTS



**Model:** E5116

### Functions, Homologation

**Flash Patterns:** 14 flash patterns  
**Homologations:** SAE Class 1, ECE R10

### Optical & Electric Features

**LED Type:** 21pcs 0.5W LED(s)  
**Emitting Color:** Amber  
**Effective Power:** 8.6W  
**Control Mode:** Synchronous;  
 Forward; Backward,  
 Reset to Default

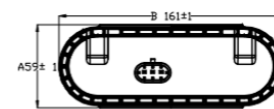
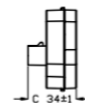
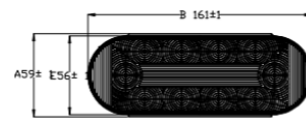
### Electromagnetic Features

**EMC Grade:** ECE R10  
**Operating Voltage:** 12V  
**Connector:** AMP 3-pin connector

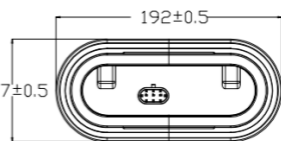
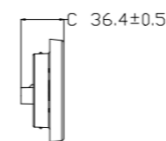
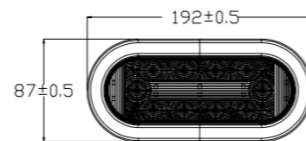
### Mechanical Features

**Size of Light Body:** 161X59X34mm  
**Mounting Means:** Flush Bracket Mount  
**Size with Bracket:** 192x 87x 36.4mm  
**Housing Material:** Anti-UV PC+ABS  
**Lens Material:** Anti-UV PMMA  
**Bracket Material:** Rubber  
**IP Rate:** IP67, IP6K9K  
**Work Temp:** -40~+50°C  
**So this is Life**  
**Life Time:** >30,000H

### Size of Light Body



### Size with Bracket:



Products subject to update, change or modify without notice.

WWW.LEDETHER.COM

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## OVAL LED TAIL LIGHTS



E5116C



E5116D



E5116B

PROJECT PHASE:

- Concept Design
- Development
- Sample Stage
- Mass Production

Model:	E5116B	E5116C	E5116D	E5116Y
<b>Functions, Homologation</b>				
<b>Flash Patterns:</b>	Direction indicator	Direction indicator	Direction indicator	Warning light
<b>Homologations:</b>	DOT	DOT	DOT	DOT
<b>Optical &amp; Electric Features</b>				
<b>LED Type:</b>	10pcs 1W LED(s)	10pcs 0.5W LED(s)	10pcs 0.5W LED(s)	10pcs 1W LED(s)
<b>Emitting Color:</b>	Amber	Amber	Amber	Amber
<b>Raw Power</b>	10W	5W	5W	10W
<b>Effective Power:</b>	2.5W	2.5W	2.5W	2.5W
<b>Electromagnetic Features</b>				
<b>EMC Grade:</b>	CISPR 25 Class 5	CISPR 25 Class 5	CISPR 25 Class 5	CISPR 25 Class 5
<b>Operating Voltage:</b>	12V	12V	12V	12V
<b>Connector:</b>	cable	cable	cable	cable
<b>Mechanical Features</b>				
<b>Size:</b>	192X39.2X87mm	192X39.2X87mm	192X39.2X87mm	192X39.2X87mm
<b>Mounting Means:</b>	Flush Bracket Mount	Flush Bracket Mount	Flush Bracket Mount	Flush Bracket Mount
<b>Housing Material:</b>	Anti-UV PC+ABS	Anti-UV PC+ABS	Anti-UV PC+ABS	Anti-UV PC+ABS
<b>Lens Material:</b>	Anti-UV PMMA	Anti-UV PMMA	Anti-UV PMMA	Anti-UV PMMA
<b>Bracket Material:</b>	Rubber	Rubber	Rubber	Rubber
<b>IP Rate:</b>	IP67, IP6K9K	IP67, IP6K9K	IP67, IP6K9K	IP67, IP6K9K
<b>Work Temp:</b>	-40~+50°C	-40~+50°C	-40~+50°C	-40~+50°C
<b>So this is Life</b>	>30,000H	>30,000H	>30,000H	>30,000H
<b>Life Time:</b>	>30,000H	>30,000H	>30,000H	>30,000H

1. No radio interference, no noise, no camera signal interference
2. High level EMC
3. DOT approved by influential labs in the U.S.A.



AMECA Certified



E5116B-Turn (DI)



E5116Y-Warning



E5116D-Reversing



E5116C-Position/Brake



**WIRELESS TRIANGULAR COMBO TAIL LIGHT**



PROJECT PHASE:

Concept Design
Development
Sample Stage
Mass Production

Model: E7510

**Functions, Homologation**

Flash Patterns: Up to 10 patterns

Homologations: ECE R65

**Optical & Electric Features**

LED Type: 30 pcs SMD LED(s)

Emitting Color: Amber

**Electromagnetic Features**

EMC Grade: CISPR 25 Class 3

Operating Voltage: 10V~30V

Connector: DT/ AMP/ Cable/  
Car Charger (Optional)

**Mechanical Features**

Size: ø168X102mm

Housing Material: Amber or Clear (Optional)

Lens Material: Anti-UV PC

PC Brand: COVESTRO 2407 or Teijin

IP Rate: IP65

Mounting Means: Permanent Mount

Work Temp: -40~+50°C

So this is Life

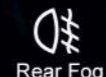
Life Time: >30,000H



V.:E7510-0817-22

# Wireless triangular combo tail light

- Strong **magnet** and elegant design
- **6 functions** in 1
- **Remote control** with 2.4G
- Max control range: **75m**
- Safe **Lithium-ion** battery
- Max **16 hours** for position and plate lighting



E7510



## RECHARGEABLE LIGHT



**PROJECT PHASE:**

Concept Design
Development
Sample Stage
<b>Mass Production</b>



<b>Model:</b>	<b>E7504</b>
<b>Functions, Homologation</b>	
<b>Functions:</b>	Park Direction indicator Brake License plate light
<b>Homologation:</b>	ECE R10, R148
<b>Optical &amp; Electric Features</b>	
<b>Voltage :</b>	10~30V
<b>EMC Level:</b>	R10
<b>Electromagnetic Features</b>	
<b>Waterproof level:</b>	IP65
<b>Size:</b>	100X100X58mm
<b>Materials:</b>	ABS + PMMA
<b>Mounting type:</b>	Powerful Magnetic

<b>Battery</b>	
<b>Battery</b>	1pcs lithium battery
<b>Capacity:</b>	3.7V 2000mAh
<b>Charging time:</b>	2 hours
<b>Running time:</b>	5 hours (Position and plate light)
<b>So this is Life</b>	
<b>Frequency:</b>	2.4G Hz
<b>Control range:</b>	≤75m
<b>Compatibility:</b>	CAN-BUS

### Parts & Accessories

- Parts:
- 2 X lights
  - 1 X Wireless 7pin plug
  - 1 X Charging cable
  - 1 X 12V Car charger
  - 1 X package box

Tail light kit

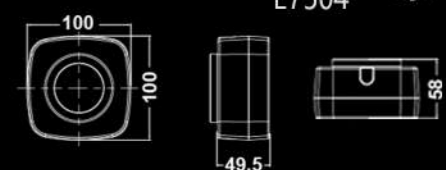


# Gen. II. E7504 Wireless Combo tail lamp



- ☰
- ↔ Direction Indicator
- ⚠ Brake
- ⏸ Park
- ETHER Plate Light

E7504



### Why E7504?

- 📶 **EMC**  
Wireless Zero noise
- 📡 **CAN-BUS**
- Ⓜ **Strong Magnetic base**

### Accessories

- 📡 Transmitter
- 🔌 Car charger
- 🔌 wireharness kit

## LED COMBINATION TAIL LIGHTS 5-IN-1 E7503 SERIES



E7503/E7503-8



E7503-7/E7503-6

**PROJECT PHASE:**

Concept Design

Development

Sample Stage

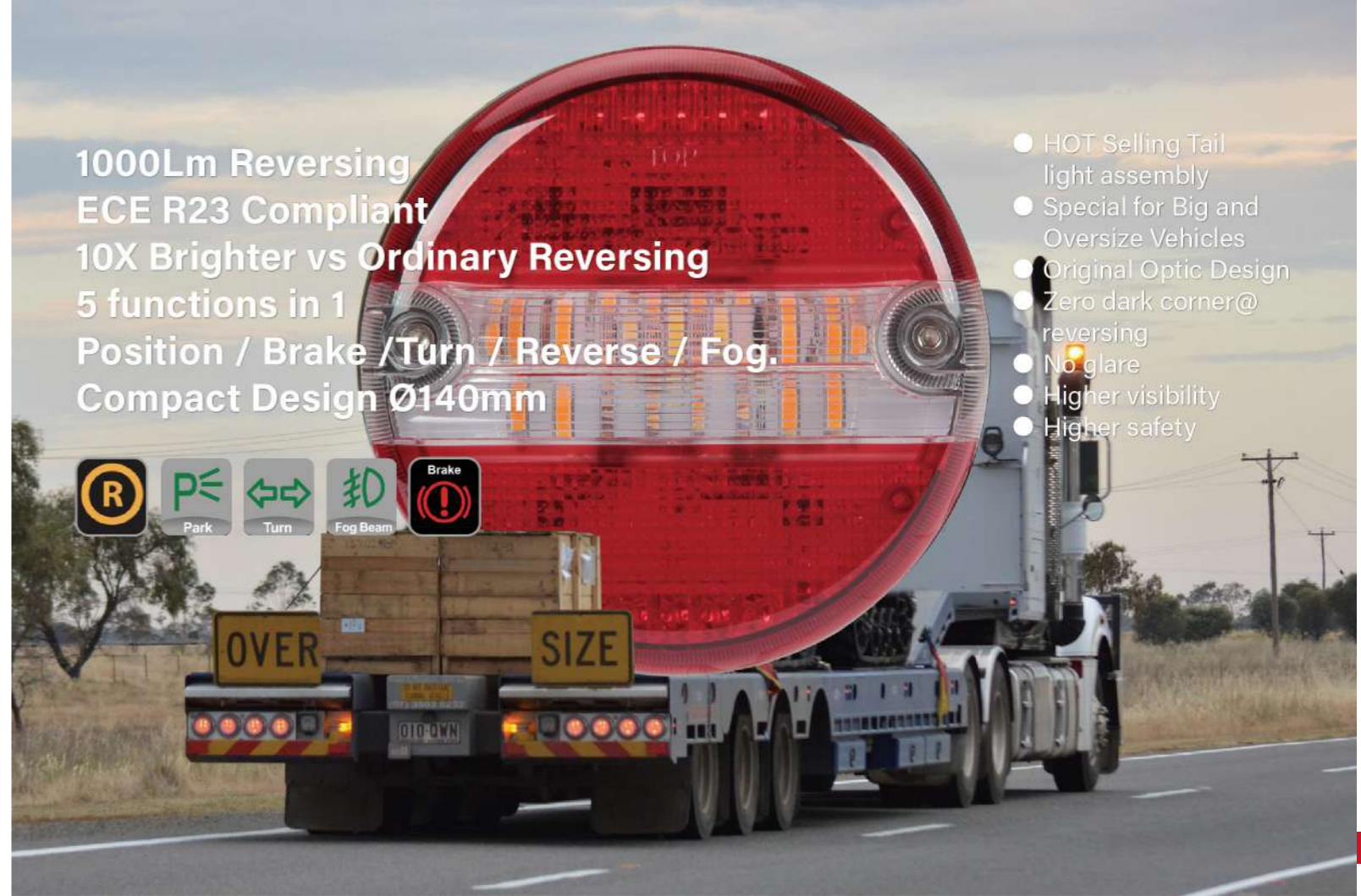
Mass Production

Model	E7503	E7503-8	E7503-7	E7503-6
<b>Total functions</b>	5	5	5	5
<b>Load Resistor:</b>	None	Built-in	Built-in	None
<b>Voltage input:</b>	10V~30V	12V or 24V	12V or 24V	10V~30V
<b>Functions:</b>	Brake (Stop) Rear Position Reverse (Back up) Rear DI(Turn) Rear Fog	Brake (Stop) Rear Position Reverse (Back up) Rear DI(Turn) Rear Fog	Brake (Stop) Rear Position Reverse (Back up) Rear DI(Turn) Rear Fog	Brake (Stop) Rear Position Reverse (Back up) Rear DI(Turn) Rear Fog
<b>Homologations:</b>	ECE R7 S1 ECE R7 R1 ECE R23 ECE R38 ECE R6	ECE R7 S1 ECE R7 R1 ECE R23 ECE R38 ECE R6	ECE R7 S1 ECE R7 R1 ECE R23 ECE R38 ECE R6	ECE R7 S1 ECE R7 R1 ECE R23 ECE R38 ECE R6
<b>EMC Grade:</b>	R10	R10	R10	R10
<b>Dimension</b>				

1000Lm Reversing  
ECE R23 Compliant  
10X Brighter vs Ordinary Reversing  
5 functions in 1  
Position / Brake / Turn / Reverse / Fog.  
Compact Design Ø140mm



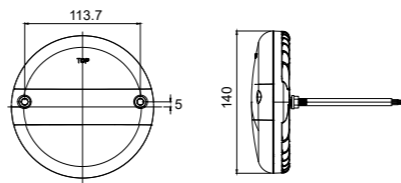
- HOT Selling Tail light assembly
- Special for Big and Oversize Vehicles
- Original Optic Design
- Zero dark corner@ reversing
- No glare
- Higher visibility
- Higher safety










LED COMBINATION TAIL LIGHTS 5-IN-1, E7503F SERIES

Photo	Model	Total functions	Load resistor	Voltage input	Functions	Homologations	EMC Grade
	E7503F	5	None	10V-30V	Rear Position Brake (Stop) Reverse (Back up) Rear DI(Turn) Rear Fog	ECE R7 S1 ECE R7 R1 ECE R23 ECE R38 ECE R6	R10
	E7503F-1	3	None	10V-30V	Rear Position Brake (Stop) Rear DI(Turn)	ECE R7 S1 ECE R7 R1 ECE R6	R10
	E7503F-2	3	None	10V-30V	Rear Position Brake (Stop) Reverse (Back up)	ECE R7 S1 ECE R7 R1 ECE R23	R10
	E7503F-3	5	Built-in	12V	Rear Position Brake (Stop) Reverse (Back up) Rear DI(Turn) Rear Fog	ECE R7 S1 ECE R7 R1 ECE R23 ECE R38 ECE R6	R10
	E7503F-4	3	Built-in	12V	Rear Position Brake (Stop) Rear DI(Turn)	ECE R7 S1 ECE R7 R1 ECE R6	R10
	E7503F-6	5	Built-in	24V	Rear Position Brake (Stop) Reverse (Back up) Rear DI(Turn) Rear Fog	ECE R7 S1 ECE R7 R1 ECE R23 ECE R38 ECE R6	R10
	E7503F-7	3	Built-in	24V	Rear Position Brake (Stop) Rear DI(Turn)	ECE R7 S1 ECE R7 R1 ECE R6	R10

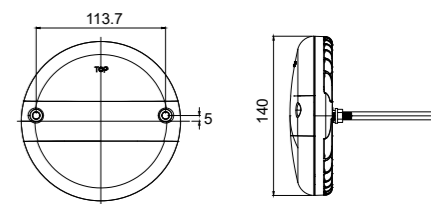
Dimension of E7503F series:



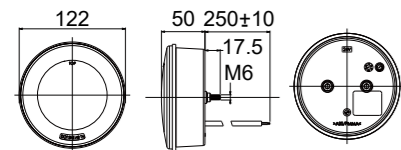
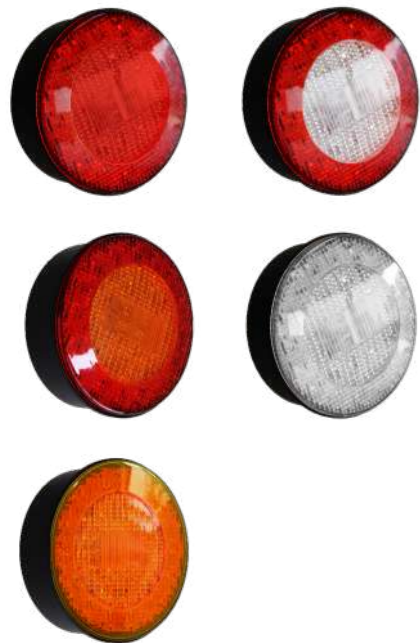
LED COMBINATION TAIL LIGHTS---E7503G SERIES – BACK CUP VERSION

Photo	Model	Total functions	Load resistor	Voltage input	Functions	Homologations	EMC Grade
	E7503G	5	None	10V-30V	Rear Position Brake (Stop) Reverse (Back up) Rear DI(Turn) Rear Fog	ECE R7 S1 ECE R7 R1 ECE R23 ECE R38 ECE R6	R10
	E7503G-1	3	None	10V-30V	Rear Position Brake (Stop) Rear DI(Turn)	ECE R7 S1 ECE R7 R1 ECE R6	R10
	E7503G-2	3	None	10V-30V	Rear Position Brake (Stop) Reverse (Back up)	ECE R7 S1 ECE R7 R1 ECE R23	R10
	E7503G-3	5	Built-in	12V	Rear Position Brake (Stop) Reverse (Back up) Rear DI(Turn) Rear Fog	ECE R7 S1 ECE R7 R1 ECE R23 ECE R38 ECE R6	R10
	E7503G-4	3	Built-in	12V	Rear Position Brake (Stop) Rear DI(Turn)	ECE R7 S1 ECE R7 R1 ECE R6	R10
	E7503G-6	5	Built-in	24V	Rear Position Brake (Stop) Reverse (Back up) Rear DI(Turn) Rear Fog	ECE R7 S1 ECE R7 R1 ECE R23 ECE R38 ECE R6	R10
	E7503G-7	3	Built-in	24V	Rear Position Brake (Stop) Rear DI(Turn)	ECE R7 S1 ECE R7 R1 ECE R6	R10

Dimension of E7503G series:

















### 122MM LED ROUND TAIL LIGHTS



### SPECIFICATION

Size: 122X122X50mm      Voltage: 12V or 24V      IP Rate: IP6K9K  
 Lens Material: PC      Housing Material: ABS

LED Color	 	 	 
<b>Model</b>	E-TL-122-RE/RR	E-R122-STR	E-R122-STDI
<b>LEDs</b>	12pcs White SMD LED	16pcs Red LED 12pcs White LED	16pcs Red LED 12pcs Amber LED
<b>Description</b>	Reversing / Reflector	LED Stop / Tail light, Reversing	LED Stop / Tail light, LED DI

LED Color	 	 	 	 
<b>Model</b>	E-R122-R	E-R122-RF	E-R122-DI	E-R122-ST
<b>Material/Colour</b>	28pcs White LED	28pcs Red LED	28pcs Amber LED	28pcs Red LED
<b>Description</b>	Rear Reversing	Rear Fog light	LED DI	LED Stop / Tail light
<b>Approvals</b>	FMVSS 108 SAE / FMVSS 108 DOT			

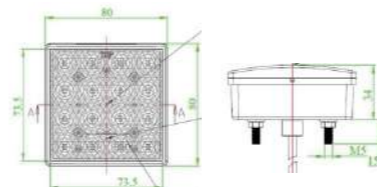
### SQUARE TAIL LIGHT 80MM



Size: 80X80X33mm      Voltage: 12V or 24V      IP Rate: IP6K9K

LED Color			
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Mode	E-TL-80-ST	E-EL-80-DI	E-EL-80-R
<b>Material/Colour</b>	PC/ABS;Red	PC/ABS;Amber	PC/ABS;White
<b>Description</b>	LED Stop/Tail light; 16pcs red LEDs	LED DI 16pcs amber LEDs	LED Reversing light 16pcs white LEDs
<b>Approvals</b>	FMVSS 108 DOT	FMVSS 108 DOT	FMVSS 108 SAE



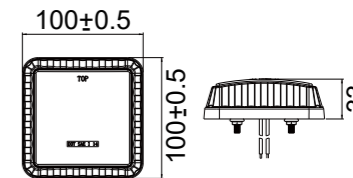
### SQUARE TAIL LIGHT 100MM



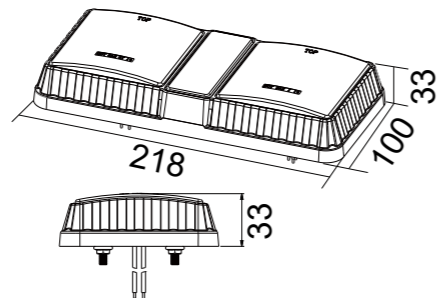
Size: 100X100X33mm      Voltage: 12V or 24V or 12V or 24V      IP Rate: IP6K9K

LED Color			
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Model	E-SQ-100-ST	E-SQ-100-DI	E-SQ-100-R
<b>Material/Colour</b>	PC/ABS;Red	PC/ABS;Amber	PC/ABS;White
<b>Description</b>	LED Stop/Tail light; 16pcs red LEDs	LED DI; 16pcs amber LEDs	LED Reversing light; 16pcs white LEDs
<b>Approvals</b>	FMVSS 108 DOT	FMVSS 108 DOT	FMVSS 108 SAE



TAIL LIGHT ASSEMBLY 100MM



Size:218X100X33mm

Voltage:12V or 24V

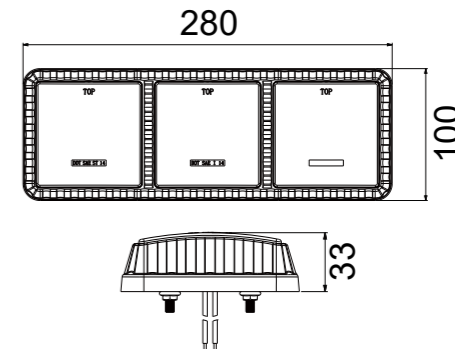
IP Rate:IP6K9K

LED Color



Model	E-SQ100x2-STR	E-SQ100x2-STD	E-SQ100x2-RDI
Material/Colour	PC / ABS; Red, White	PC / ABS; Red, Amber	PC / ABS; White, Amber
Description	LED Stop / Tail light; Reversing	LED Stop / Tail light; LED DI	LED Reversing light; LED DI
Approvals	FMVSS 108 SAE / FMVSS 108 DOT		

TAIL LIGHT ASSEMBLY 100MM



Size:280X100X33mm

Voltage:12V or 24V

IP Rate:IP6K9K

LED Color



Model	E-SQ100x3-RAW	E-SQ100x3-RRA
Material/Colour	PC / ABS; Red, White, Amber	PC / ABS; Red, Red, Amber
Description	LED Stop / Tail light; Reversing, DI	LED Stop / Tail light; Rear Fog light, LED DI
Approvals	FMVSS 108 SAE / FMVSS 108 DOT	





## Combo High Beam

ECE R112 compliant as driving beam pattern.  
High power LEDs built-in.  
5W or 10W LED optional.  
Long range illumination



Spot Beam High Beam

Anti-UV PC lens  
Lens surface hardened  
Ideal for off roads, trucks, etc  
Sports style designed for tough

**Stylish  
Tough**



## Flexible Mount

Various brackets optional for  
side mount,  
bottom mount,  
back mount  
on roof, or grille, or bumper of vehicles



Side mount



Bottom mount

Back mount

## CLASSIC LED LIGHT BAR



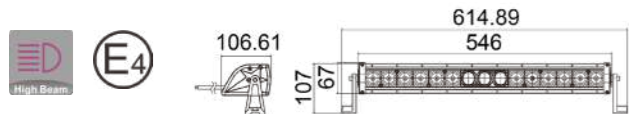
E8301-1 13"



**Length:** 13"  
**LEDs:** 9pcs  
**LED Power:** 45W / 90W  
**Raw Lumen:** 2700LM  
**Color Temp:** 5000-6500K  
**EMC Grade:** CISPR 25 Class 3  
**Housing:** Aluminum  
**IP Rate:** IP67, IP6K9K  
**Life Time:** >30,000H



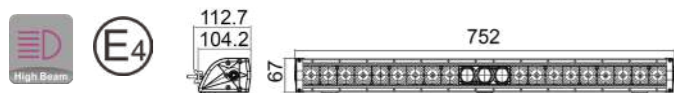
E8301-2 21"



**Length:** 21"  
**LEDs:** 15pcs  
**LED Power:** 75W / 150W  
**Raw Lumen:** 6750LM  
**Color Temp:** 5000-6500K  
**EMC Grade:** CISPR 25 Class 3  
**Housing:** Aluminum  
**IP Rate:** IP67, IP6K9K  
**Life Time:** >30,000H

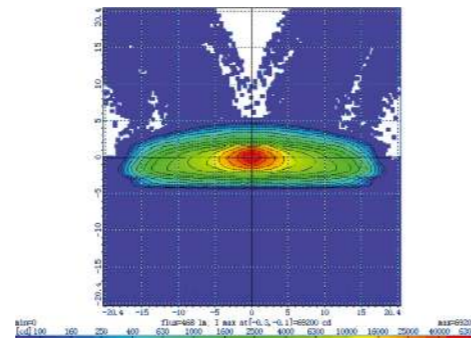


E8301-3 30"

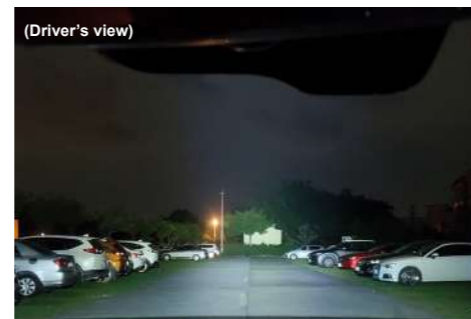


**Length:** 30"  
**LEDs:** 21pcs  
**LED Power:** 105W / 210W  
**Raw Lumen:** 9450LM  
**Color Temp:** 5000-6500K  
**EMC Grade:** CISPR 25 Class 3  
**Housing:** Aluminum  
**IP Rate:** IP67, IP6K9K  
**Life Time:** >30,000H

### Plane energy distribution of E8301 series.



### Road illumination E8301-2



E8301-4 38"



**Length:** 38"  
**LEDs:** 27pcs  
**LED Power:** 135W / 270W  
**Raw Lumen:** 12150LM  
**Color Temp:** 5000-6500K  
**EMC Grade:** CISPR 25 Class 3  
**Housing:** Aluminum  
**IP Rate:** IP67, IP6K9K  
**Life Time:** >30,000H



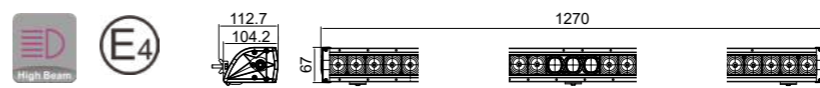
E8301-5 46"



**Length:** 46"  
**LEDs:** 33pcs  
**LED Power:** 165W / 330W  
**Raw Lumen:** 14850LM  
**Color Temp:** 5000-6500K  
**EMC Grade:** CISPR 25 Class 3  
**Housing:** Aluminum  
**IP Rate:** IP67, IP6K9K  
**Life Time:** >30,000H

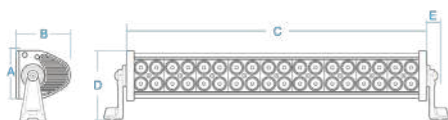


E8301-6 50"



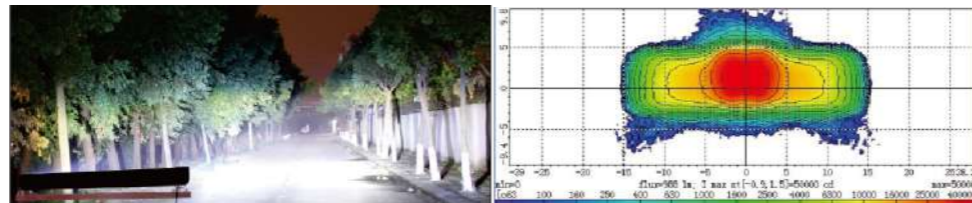
**Length:** 50"  
**LEDs:** 36pcs  
**LED Power:** 180W / 360W  
**Raw Lumen:** 16200LM  
**Color Temp:** 5000-6500K  
**EMC Grade:** CISPR 25 Class 3  
**Housing:** Aluminum  
**IP Rate:** IP67, IP6K9K  
**Life Time:** >30,000H

## CLASSIC LED LIGHT BAR



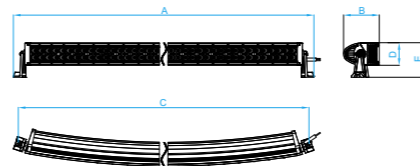
<b>Model:</b>	ET-XXX-2x3W-LM
<b>Functions, Homologation</b>	
<b>Beam Pattern:</b>	High Beam (DOT)
<b>Approvals:</b>	SAE J581
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	3W LED(s)
<b>Lumen:</b>	See the table below
<b>Power:</b>	See the table below
<b>Color Temp:</b>	5000~6500K
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	ECE R10
<b>Operating Voltage:</b>	10V~30V
<b>Decoder:</b>	PWM

<b>Mechanical Features</b>	
<b>Sizes:</b>	See the Table Below
<b>Housing Material:</b>	Aluminium Extrusion
<b>Lens Material:</b>	Anti-UV PC
<b>PC Brand:</b>	COVESTRO 2407
<b>Bracket Material:</b>	201 or 304 Stainless Steel
<b>IP Rate:</b>	IP67, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000h



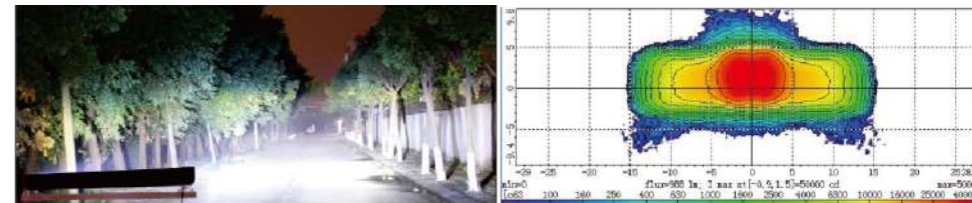
Part Number	LEDs	Power	Lumen	A	B	C	D	E
ET-36W-2x3W-LM	12pcs	36W	2760LM	3"	3.38"	7.5"	4.8"	1"
ET-72W-2x3W-LM	24pcs	72W	5520LM	3"	3.38"	13.5"	4.8"	1"
ET-120W-2x3W-LM	40pcs	120W	9200LM	3"	3.38"	21.5"	4.8"	1"
ET-180W-2x3W-LM	60pcs	180W	13800LM	3"	3.38"	31.5"	4.8"	1"
ET-240W-2x3W-LM	80pcs	240W	18400LM	3"	3.38"	41.5"	4.8"	1"
ET-288W-2x3W-LM	96pcs	288W	22080LM	3"	3.38"	50"	4.8"	1"
ET-300W-2x3W-LM	100pcs	300W	23000LM	3"	3.38"	54"	4.8"	1"

## CLASSIC LED LIGHT BAR



<b>Model:</b>	ET-XXX-2x3W-CL
<b>Functions, Homologation</b>	
<b>Beam Pattern:</b>	High Beam (DOT)
<b>Approvals:</b>	SAE J581
<b>Optical &amp; Electric Features</b>	
<b>LED Type:</b>	3W LED(s)
<b>Lumen:</b>	See the table below
<b>Power:</b>	See the table below
<b>Color Temp:</b>	5000~6500K
<b>Electromagnetic Features</b>	
<b>EMC Grade:</b>	ECE R10
<b>Operating Voltage:</b>	10V~30V
<b>Decoder:</b>	PWM

<b>Mechanical Features</b>	
<b>Sizes:</b>	See the Table Below
<b>Housing Material:</b>	Aluminium Extrusion
<b>Lens Material:</b>	Anti-UV PC
<b>PC Brand:</b>	COVESTRO 2407
<b>Bracket Material:</b>	201 or 304 Stainless Steel
<b>IP Rate:</b>	IP67, IP6K9K
<b>Work Temp:</b>	-40~+50°C
<b>So this is Life</b>	
<b>Life Time:</b>	>30,000h



Part Number	LEDs	Power	Lumen	A	B	C	D	E
ET-36W-2x3W-LM	12pcs	36W	2760LM	7.5"	3.38"	6.5"	3.15"	4.8"
ET-72W-2x3W-LM	24pcs	72W	5520LM	16.7"	3.46"	13.5"	3.15"	4.8"
ET-120W-2x3W-LM	40pcs	120W	9200LM	24.8"	3.85"	21.5"	3.15"	4.8"
ET-180W-2x3W-LM	60pcs	180W	13800LM	34.8"	4.33"	31.5"	3.15"	4.8"
ET-240W-2x3W-LM	80pcs	240W	18400LM	44.8"	5"	41.5"	3.15"	4.8"
ET-288W-2x3W-LM	96pcs	288W	22080LM	52.9"	5.7"	50"	3.15"	4.8"
ET-300W-2x3W-LM	100pcs	300W	23000LM	54.9"	6.2"	54"	3.15"	4.8"