

# **louis poulsen**



## **Environmental Product Specifications**

— LP Grand

## Product description

- The circular fixture is a wide family of variants.
- Three different mounting options: wall, ceiling and suspended.
- Three dimensions.
- Three standard colour options on outer ring.



## Product info

### Mounting

Depends on the variant

### Finish

Reflector: Matt-white satin finish. Outer shade (outside): Matt (black and champagne) or gloss (white). Wet painted surface. Diffuser: Glossy.

### Light source

LED 3000K 199W, Lumen: 21442

### Sizes and weights

Width x Height x Length (mm)

580 x 160 x 580 Max 5.7 kg

880 x 200 x 880 Max 15.5 kg

1480 x 313 x 1480 Max 45.6 kg

320 x 90 x 320 Max 0.0 kg

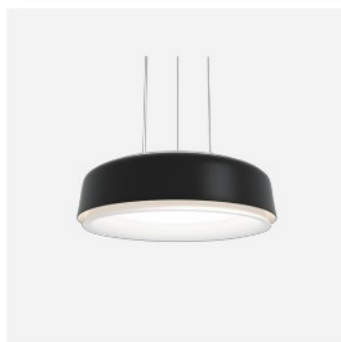
### Class

Ingress protection IP20. Electric shock protection I w/ground.

## Product family



LP Grand Wall



LP Grand Suspended

## Product variants

Dimension	Colour	Mounting	Light source	Lumen	Lighting control
Ø 1480	● Black	Surface mounted	LED 2700K 12W	1052	Dali
Ø 320	● Champagne	Wall & surface mounted	LED 3000K 106W	11010	Phase dimming (mains dimm)
Ø 580	○ White		LED 3000K 12W	1151	
Ø 880			LED 3000K 199W	1166	
			LED 3000K 59W	21442	
			LED 4000K 12W	5159	

## Material information

### RoHS

This product is compliant with the requirements contained in the European Directives, RoHS Directive 2011/65 and 2015/863.

### REACH candidate List

To the best of our knowledge and based on the information provided by our suppliers, the product does not contain more than 0.1 percent (in weight terms) of any deliberately added SVHCs.

### Packaging

The product is packaged in a plastic bag with a cardboard. The packaging material can be easily sorted and treated in waste recycling channels. The packaged product is delivered on a returnable wooden pallet.

### Recycled raw material

Cardboard is made from min. 65% recycled fiber mass. Additional cardboard material comes from an FSC approved sources.

### Recycling

We encourage everyone to take care of the product - even at the end of the product's lifetime. We also offer spare parts, so that we can extend the product lifetime even further.

The luminaires contain valuable materials. They therefore have to be decommissioned and dismantled for reuse of materials in other products.

This product is designed so that 100% of the product can be disassembled and reused.

Louis Poulsen is part of ELRETUR which ensures that electronic waste (WEEE) across of Europa is reused.

This product must be treated as electronic waste:



## Material list

Positions number	Part description	Included substances and materials	Country of origin	Weight% (of the entire product)
<b>A</b>	Bottom reflector	LDPE	IT – Italy	9,7%
<b>B</b>	Diffusor circle	PMMA	SE – Sweden	8,3%
<b>C</b>	Side diffusor	PMMA	KR – Korea	0,3%
<b>D</b>	Clips	PMMA	DK – Denmark	0,2%
<b>E</b>	LED Board	Variety of components	CN – China	6,4%
<b>F</b>	Cord	Variety of components	CN - China	0,3%
<b>G</b>	LED Flexboard	Variety of components	DE – Germany	0,6%
<b>H</b>	Screws and suspension	Stainless steel	TW – Taiwan	1,6%
<b>I</b>	Screws and washers	Stainless steel	CN – China	2,0%
<b>J</b>	Driver bracket	Aluminium	DK – Denmark	2,9%
<b>K</b>	Terminal	Variety of components	DE – Germany	0,2%
<b>L</b>	Drivers	Variety of components	AT – Austria	4,6%
<b>M</b>	Resistor	Variety of components	TH – Thailand	0,0%
<b>N</b>	Wires and cords	Variety of components	IT – Italy	1,5%
<b>O</b>	Ceiling bracket	Steel	SE – Sweden	7,7%
<b>P</b>	Outer suspension	Aluminium	TW – Taiwan	0,7%
<b>P</b>	Painting	Powder coating	DE – Germany	0,3%
<b>Q</b>	Leaf spring	Stainless steel	TW – Taiwan	0,4%
<b>R</b>	Plastic parts	EPDM	DK – Denmark	0,0%
<b>S</b>	Plastic parts	PA	DE – Germany	0,4%
<b>T</b>	Plastic parts	ABS	DK – Denmark	25,2%
<b>U</b>	Labels and instructions	Paper	DK – Denmark	0,2%
<b>V</b>	Packaging	Corrugated cardboard	DK – Denmark	12,2%
<b>W</b>	Inserts	Corrugated cardboard	DK – Denmark	13,8%
<b>X</b>	Plastic bag	LDPE	LT – Lithuania	0,6%
				<b>100%</b>

# Life Cycle Screening

## Background

Our carbon footprint is the total quantity of greenhouse gas (GHG) emissions associated with the full lifecycle of the product. This includes the impacts associated with raw materials and emissions from manufacturing (materials and resources), transport, in use (cleaning) impacts and impacts at end of life (reuse, recycling, incineration, landfill etc.).

## Basis of calculation

This is calculated according to the EU Product Environmental Footprint and presented according to ISO 14067 (Carbon footprint of products).

## EU Product Environmental Footprint (PEF)

The PEF methodology is a new standard, introduced by the European Commission. The mission: to strengthen the (European) market for green alternatives and ensure that environmental impact is transparently assessed.



## Use stage

The product use stage is calculated for a lifetime of 15 years with 1,000 hours of use each year in Europa, as required by the reference in PEF.

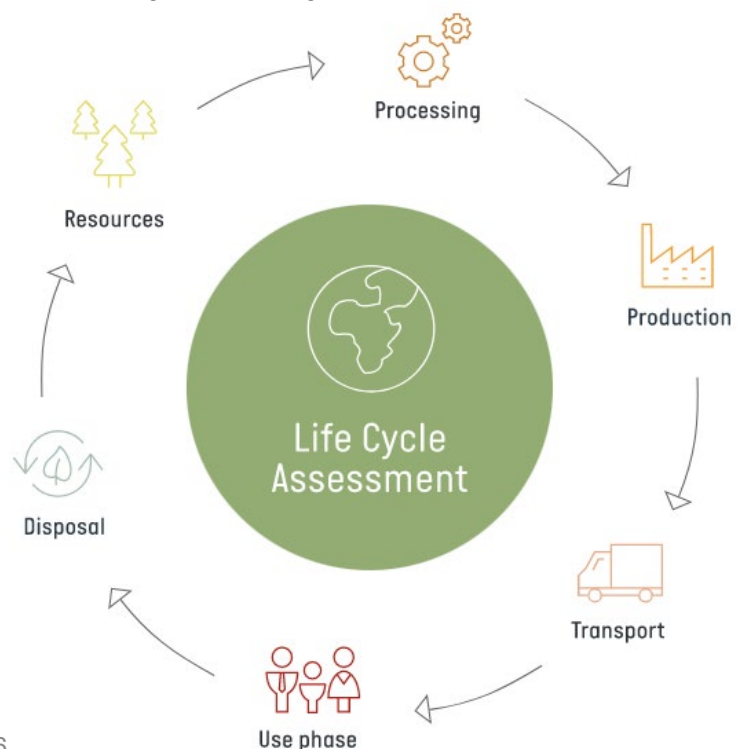
The electricity is based on the European energy mix, with data from: the European Environment Agency Greenhouse gas emission intensity of electricity generation.

## Transport

1.200 km national or 3.500 km for export transport is calculated for the product from factory to end customer as required by the reference in PEF.

## Uncertainties associated with these calculations

Calculation of emission levels is associated with uncertainty. This means that results may vary from actual levels. By using the PEF method, uncertainties are embedded in the Life Cycle Screening result using statistical methods.



## Life Cycle Screening results

**Product that has been calculated as a reference for the product family:**

LP GRAND EXTENSION, Ø580, WHITE, LED 3000K 59W, DALI

### Production of the product

Average climate emission:

**80 KG CO<sub>2</sub>-e**

Lower boundary: 75 CO<sub>2</sub>-e

Upper boundary: 130 CO<sub>2</sub>-e

### Production of the product and use stage

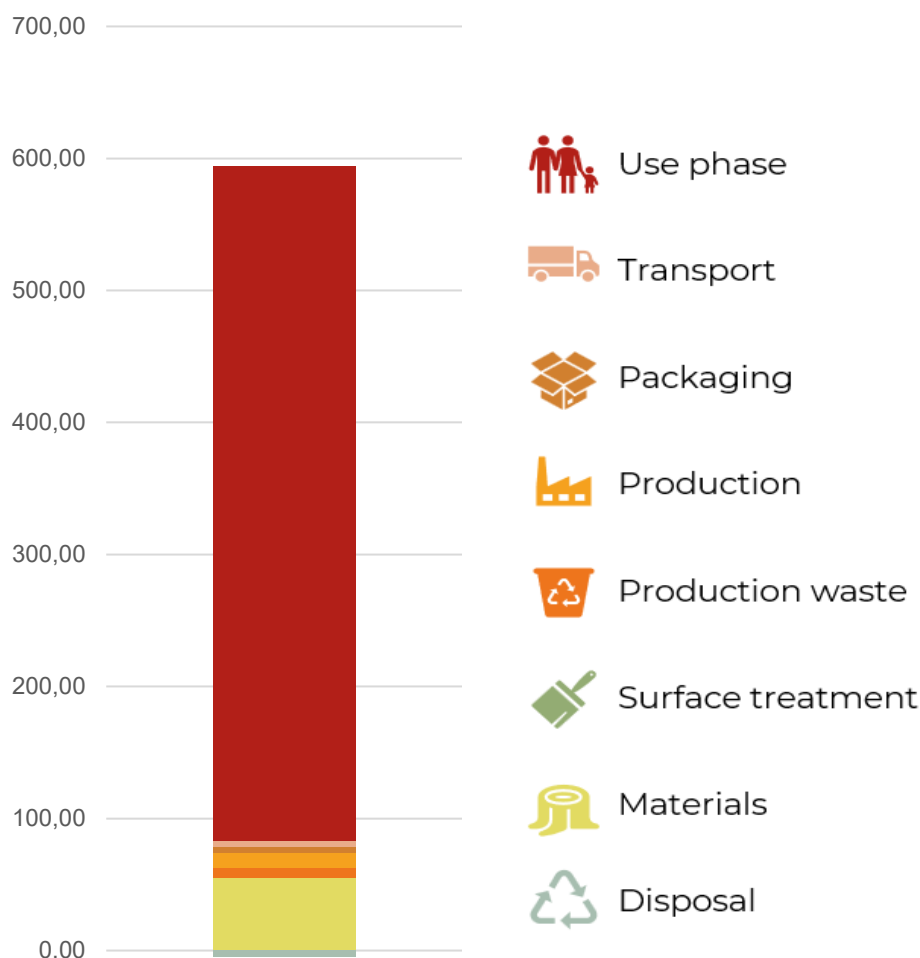
Average climate emission:

**590 KG CO<sub>2</sub>-e**

Lower boundary: 580 CO<sub>2</sub>-e

Upper boundary: 640 CO<sub>2</sub>-e

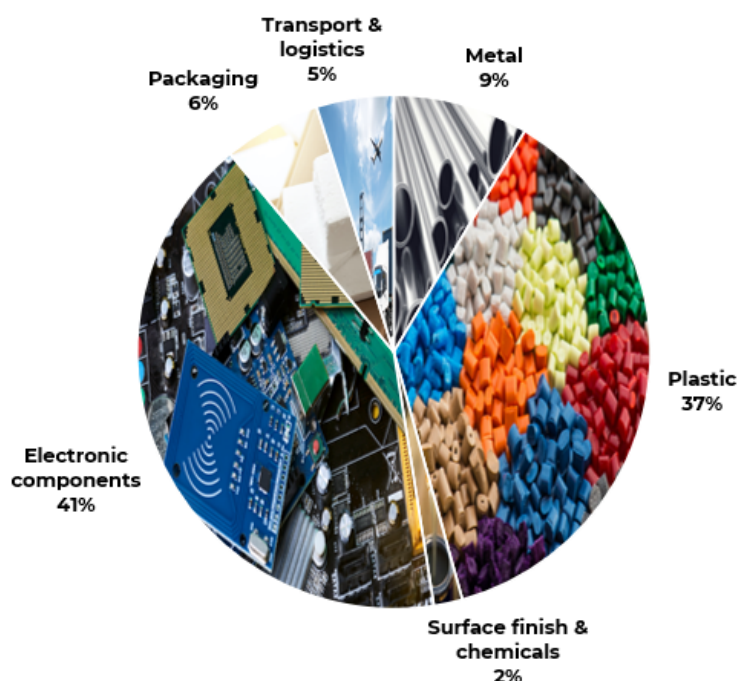
### Carbon stages



The carbon footprint has been calculated using Málbar version 2.9612; in accordance with the Product Environmental Footprint. The carbon footprint has not been third-party verified. Only to be used for B2B, as comparing alternative results. Comparing data across methodologies is likely to result in inaccurate representations.

## Main emission sources (pr material group)\*

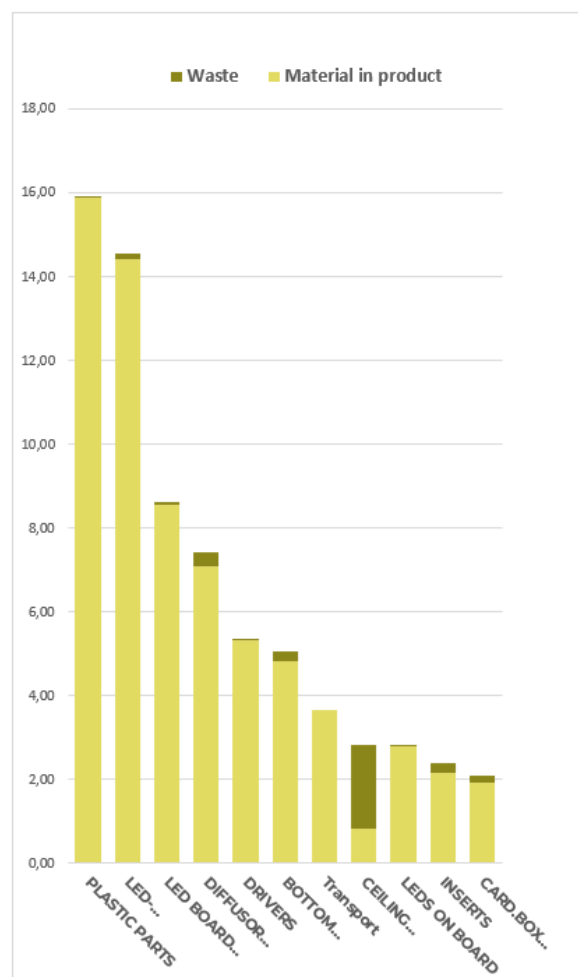
Group	Total impact		
Solid Wood	0,00	kg CO2-e	0,0%
Wood based board	0,00	kg CO2-e	0,0%
Metal	6,65	kg CO2-e	8,5%
Plastic	28,99	kg CO2-e	37,2%
Glass / Stone / Ceramics	0,00	kg CO2-e	0,0%
Surface finish & chemicals	1,41	kg CO2-e	1,8%
Upholstery	0,00	kg CO2-e	0,0%
Cover	0,00	kg CO2-e	0,0%
Electronic components	32,37	kg CO2-e	41,5%
Packaging	4,79	kg CO2-e	6,1%
Transport & logistics	3,79	kg CO2-e	4,9%



The values presented here represent total emissions per material group (incl. material, production, transport, waste, CO2e uptake)

## Main emission sources (pr element)\*

Element	Material	Total impact
PLASTIC PARTS	Polyamide (PA6)	15,91 kg CO2-e
LED-FLEXBOARD (7 sektioner) 3000K	Unspecified PCB surface mounted	14,56 kg CO2-e
LED BOARD CIRCLE Ø450 3K90 V1^	1 layer aluminium (1,6mm thickness) PCB surface mount	8,62 kg CO2-e
DIFFUSOR CIRCLE 450 1^	Acrylic (PMMA)	7,43 kg CO2-e
DRIVERS	Power supply with cables + connectors	5,37 kg CO2-e
BOTTOM REFLECTOR LP GRAND 580 1^	Polyethylene (PE-LD)	5,06 kg CO2-e
Transport	Total emission from transport - all steps	3,65 kg CO2-e
CEILING BRACKET LP GRAND 580	Steel machined	2,82 kg CO2-e
LEDS ON BOARD	LED 3,5x3,5x2,0mm (59mg)	2,80 kg CO2-e
INSERTS	Corrugated cardboard inlay sustainable	2,39 kg CO2-e
CARD.BOX 593X593X229 LP	Corrugated cardboard box	2,11 kg CO2-e



The values presented here represent total emissions per element (incl. material, production, transport, waste, CO2e uptake)