# louis poulsen

# Environmental Product Specifications

— PH 5

# Product description

- The fixture provides 100% glare-free light.
- Its design is based on the principle of a reflective three-shade system, which directs majority of the light downwards.
- The fixture emits both downward and lateral light, thus illuminating itself.





# Product info

# **Mounting**

Suspension: Cable 2x1 mm<sup>2</sup>.

# **Finish**

Classic (white) or Modern White: Matt powder coated. Monochrome Black, Monochrome Blue, Monochrome White, Hues of Blue, Hues of Green, Hues of Grey, Hues of Orange, Hues of Red, Hues of Rose: Matt wet painted. Metal versions: Polished brass or copper and white, matt powder coated.

# **Light source**

1x75W E27

# Sizes and weights

Width x Height x Length (mm) 500 x 267 x 500 Max 3.5 kg

#### **Class**

Ingress protection IP20.
Electric shock protection II w/o ground.

# **Product family**



# **Product variants**

Colour	Cable type	Light source
Brass	Blk tex	1x75W E27
Copper	Wht tex	
Hues of blue		
Hues of green		
Hues of grey		
Hues of orange		
Hues of red		
Hues of rose		
Monochrome black		
Monochrome blue		
Monochrome white		
White classic		
White modern		

# 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 fabric bag, with polyethylene foam and 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.

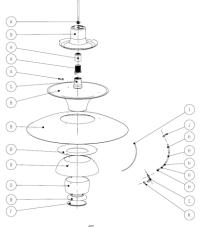
This product must be treated as electronic waste:



100%

# Material list

Positions number	Part description	Included substances and materials	Country of origin	Weight% (of the entire product)
A	Socket parts	Plastic LCP	DK – Denmark	0,7%
В	Shade	Aluminium	DK – Denmark	27,0%
В	Painting	Wet painting and powder coating	AT - Austria	0,3%
С	Cable	Silicone and copper	IT – Italy	0,9%
D	Shade	Steel	DK – Denmark	5,4%
D	Painting	Wet painting and powder coating	AT - Austria	3,0%
E	Glass holder	Aluzink	DK – Denmark	0,4%
F	Glass diffuser	Float glass	GE – Germany	1,6%
G	Socket	Porcelain	GE – Germany	1,6%
Н	Tube	Aluminium	DK – Denmark	0,3%
l	Wireleg	Brass	DK – Denmark	0,5%
J	Nut	Steel	CN – China	0,1%
K	Nut	Brass	TW – Taiwan	0,3%
L	Screw	Steel	CN – China	0,1%
M	Canopy	Plastic - PC	DK – Denmark	1,4%
N	Fabric bag	Polypropylene homopolymer	CN - China	0,8%
0	Inlay	Corrugated cardboard	DK – Denmark	11,1%
Р	Inlay	Corrugated cardboard	DK - Denmark	2,5%
Q	Handle	Plastic - PC	DK – Denmark	0,5%
R	Instruction and labels	Paper	DK – Denmark	0,5%
s	Plastic bag	Plastic - LDPE	LT – Lithuania	0,1%
Т	Packaging	Corrugated cardboard	DK – Denmark	40,8%
TU	Fabric bag	Nonwoven Polypropylene Homopolymer	CN – China	0,1%



# 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.

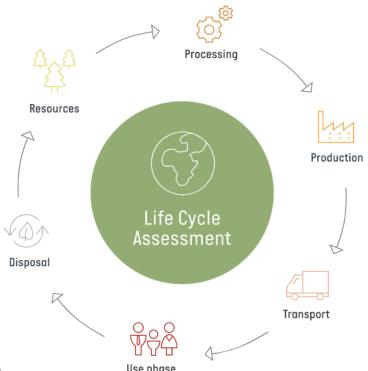
The electricity is based on the European energy mix, with data from: the European Environment Agency Greenhouse gas emission intensity of electricity generation.

# **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:

PH 5, WHITE CLASSIC, WHITE TEXTILE, 1X75W E27

# **Production of the product**

Average climate emission:

29 KG CO2-e

Lower boundary: 19 CO2-e Upper boundary: 85 CO2-e

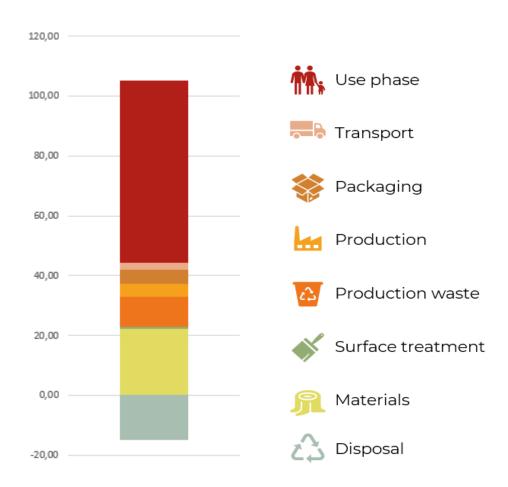
# Production of the product and use stage

Average climate emission:

90 KG CO2-e

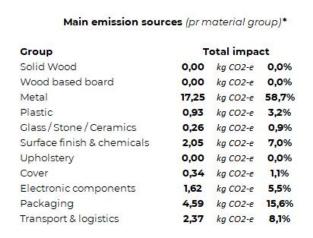
Lower boundary: 80 CO2-e Upper boundary: 140 CO2-e

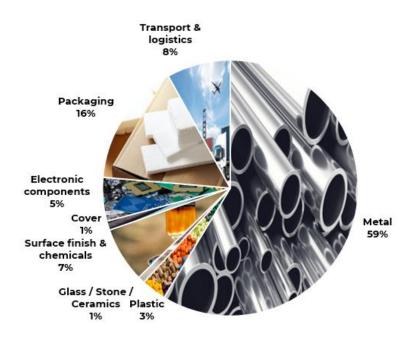
# **Carbon stages**



The carbon footprint has been calculated using Målbar version 2.9608; 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)\*





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
Shade 3	Alu. sheet punched Corrugated cardboard box	<b>6,37</b> kg CO2-e
Outer cardboard	printed sustainable fiber	<b>3,49</b> kg CO2-e
Shade 4	Alu. sheet punched	<b>3,17</b> kg CO2-e
Shade 2	Alu. sheet punched	<b>2,64</b> kg CO2-e
Shade 1	Alu. sheet punched Total emission from transport -	<b>2,49</b> kg CO2-e
Transport	all steps	<b>2,20</b> kg CO2-e
Cable	Electric cable (PVC)	<b>1,45</b> kg CO2-e
Wet painting	Or kg lacquer/paint solvent on metal	<b>1,03</b> kg CO2-e
Powder coating	Or kg powder consumed	<b>1,02</b> kg CO2-e
Shade 5	Alu. sheet punched	1,01 kg CO2-e
Foam insert	Corrugated cardboard inlay	<b>0,78</b> kg CO2-e
	Total impact from Waste	<b>7,89</b> kg CO2-e

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

