

louis poulsen



Environmental Product Specifications

— PH 4½-3 Outdoor Wall Lamp

Product description

- The fixture is designed based on the principle of a reflective three-shade system according to PH's logarithmic spiral.
- The size of the three shades is adjusted for optimum performance and comfort.
- A straight wall arm mounted in a round wall box holds the fixture.
- The surface will change/patinate over time according to the environmental conditions of the air.



Product info

Mounting

Depends on the variant.

Finish

Copper, brushed.

Light source

1x100W E27.

Sizes and weights

Width x Height x Length (mm)
450 x 290 x 505 Max 6.8 kg

Class

Ingress protection IP23. Electric shock protection I
w. ground.

Product variants

Light source	Body
1x100W E27	BOX W/O SIDE CABLE HOLES
	BOX W/SIDE CABLE HOLES

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)
A	Copper parts	Machined copper	DK - Denmark	75,2%
A	Painting	Wet painting	GB - United Kingdom	0,0%
A	Primer	Primer	SE - Sweden	0,0%
A	Painting	Wet painting	GB - United Kingdom	0,0%
B	Screws	Stainless steel	CN - China	0,5%
C	Brass parts	Machined brass	TW - Taiwan	0,8%
D	Rivet pop	Machined aluminium	CN - China	0,1%
E	Duboring 5 mm WHT	PA	GB - United Kingdom	0,0%
F	Socket	Variety of components	DE - Germany	0,4%
G	Gasket	EPDM	DK - Denmark	0,3%
H	Terminal helag	Variety of components	SE - Sweden	0,1%
I	Membrane nipple	PE	DK - Denmark	0,1%
J	Electrical wiring	Variety of components	IT - Italy	0,5%
K	Stud tab	Brass	FR - France	0,0%
L	Washers	Machined stainless steel	CN - China	0,1%
M	Labels and instructions	Paper	DK - Denmark	0,4%
N	Packaging	Corrugated cardboard	DK - Denmark	8,0%
O	Foam inserts	EPS	DK - Denmark	13,3%
P	Cotton gloves	Cotton	PK - Pakistan	0,3%
				100%

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 WALL, 1X7W E27.

Production of the product

Average climate emission:

130 KG CO2-e

Lower boundary: 75 CO2-e

Upper boundary: 270 CO2-e

Production of the product and use stage

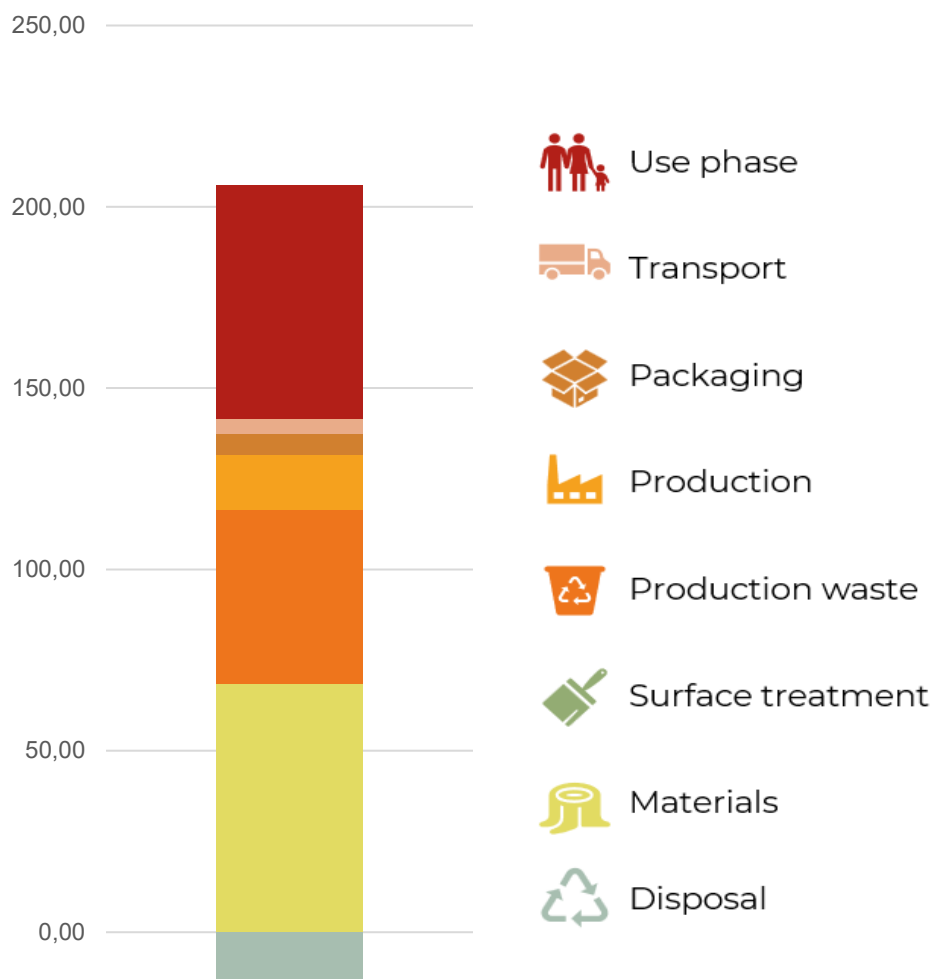
Average climate emission:

190 KG CO2-e

Lower boundary: 130 CO2-e

Upper boundary: 330 CO2-e

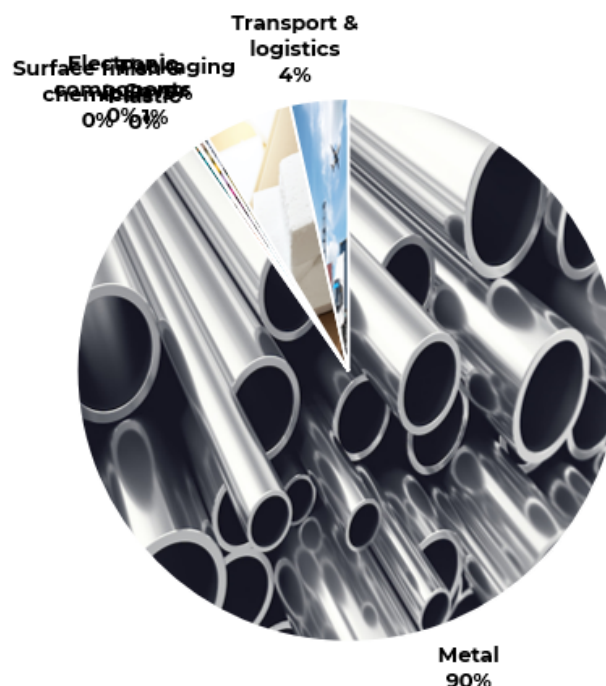
Carbon stages



The carbon footprint has been calculated using Målbar 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)*

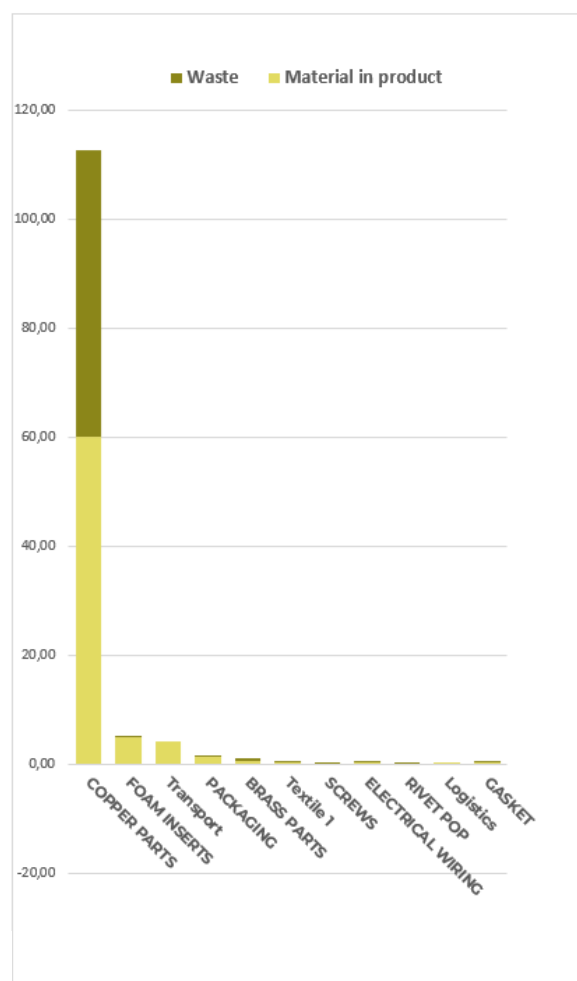
Group	Total impact		
Solid Wood	0,00	kg CO2-e	0,0%
Wood based board	0,00	kg CO2-e	0,0%
Metal	114,31	kg CO2-e	90,3%
Plastic	0,38	kg CO2-e	0,3%
Glass/Stone/Ceramics	0,00	kg CO2-e	0,0%
Surface finish & chemicals	0,08	kg CO2-e	0,1%
Upholstery	0,00	kg CO2-e	0,0%
Cover	0,45	kg CO2-e	0,4%
Electronic components	0,39	kg CO2-e	0,3%
Packaging	6,62	kg CO2-e	5,2%
Transport & logistics	4,34	kg CO2-e	3,4%



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
COPPER PARTS	Copper sheet	112,75 kg CO2-e
FOAM INSERTS	Polystyrene foam (EPS)	4,99 kg CO2-e
Transport	Total emission from transport - all steps	4,15 kg CO2-e
PACKAGING	Corrugated cardboard box printed sustainable fiber	1,51 kg CO2-e
BRASS PARTS	Brass machined	0,97 kg CO2-e
Textile 1	Cotton	0,45 kg CO2-e
SCREWS	Stainless steel screws/bolts	0,35 kg CO2-e
ELECTRICAL WIRING	Electric cable (PVC)	0,30 kg CO2-e
RIVET POP	Alu. machined	0,19 kg CO2-e
Logistics	Total emission from warehouse + own retail	0,18 kg CO2-e
GASKET	EPDM rubber BMC	0,18 kg CO2-e



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