louis poulsen

Environmental Product Specifications

— Bysted Garden Bollard

Product description

- The fixture has a round symmetrical design with four rings reflecting the light in a soft downward direction.
- The rings have a soft glow while their white underside achieve optimal light reflection and produce a characteristic symmetric light pattern on the ground.

Product info

Mounting

Depends on the variant

Finish

Aluminium coloured or corten coloured. Textured surface, powder coated.

Light source

LED 2700K.

Sizes and weights

Width x Height x Length (mm)
132 x 534 x 132 Max 4.6 kg
132 x 254 x 132 Max 4.0 kg

Class

Ingress protection w/spike: IP 65 Ingress protection w/anchor: IP 65 (Head), IP44 (Anchor) Ingress protection w/base plate: IP 65 (Head), IP44 (Baseplate) Electric shock protection III IK06.

Product family

Bysted

Product variants

Dimension	Colour	Mounting	Light source	Lumen	Class
LONG	Aluminium colour texture	Anchor and w/adaptor	LED 2700K	-	-
SHORT	Corten colour	Anchor and wo/adaptor	LED 2700K 14W	247	III
		Base and w/adaptor	LED 3000K	259	
		Base and wo/adaptor	LED 3000K 14W	275	
		Spike and w/adaptor	LED 4000K	288	
		Spike w/o adap w/connector	LED 4000K 14W	324	

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 fibre 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	Aluminium parts	Die casted aluminium	CN - China	**38,5%**
A1	Painting	Powder coating	CN - China	**1,6%**
B	Lamp-post, steel screws, bolts and nuts	Machined stainless steel	CN - China	**6,8%**
C	Diffuser	PC	CN - China	**2,7%**
D	Plastic parts	PC	SK - South Korea	**1,8%**
E	COB	Variety of components	CN - China	**0,5%**
F	Driver	Variety of components	CN - China	**0,5%**
G	Electrical wiring	Variety of components	CN - China	**4,6%**
H	Labels and instructions	Paper	CN - China	**0,9%**
I	Packaging	Corrugated cardboard	CN - China	**38,7%**
J	Plastic bag	LDPE	CN - China	**3,4%**
				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.

European Commission

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.

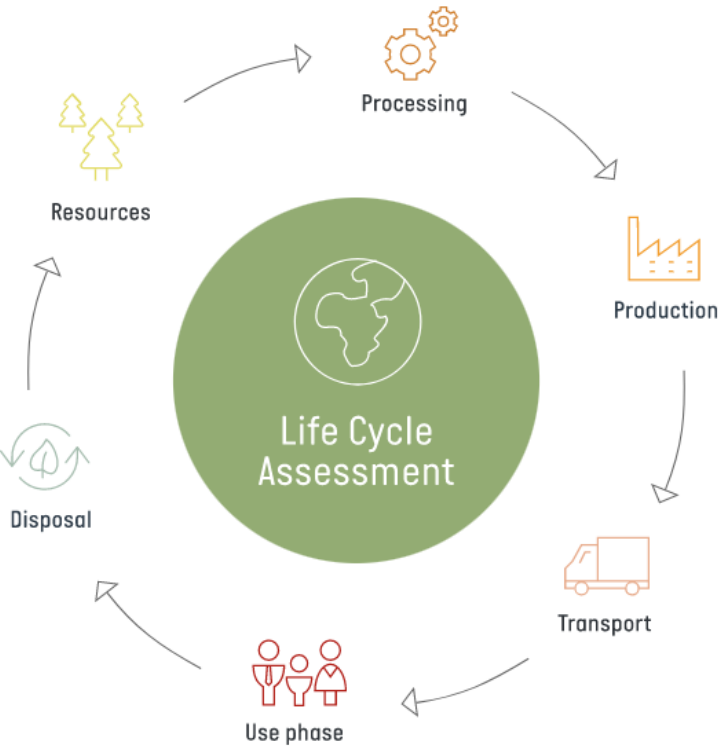
The electricity is based on the European energy mix, with data from: the European Environment Agency Greenhouse gas emission intensity of electricity generation.

Transport

1,000 km of 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:

BYSTED GARDEN BOLLARD, SHORT, BASE AND WO/ADAPTOR, LED 2700K, 14W.

Production of the product

Average climate emission:

25 KG CO2-e

Lower boundary: 16 CO2-e
Upper boundary: 70 CO2-e

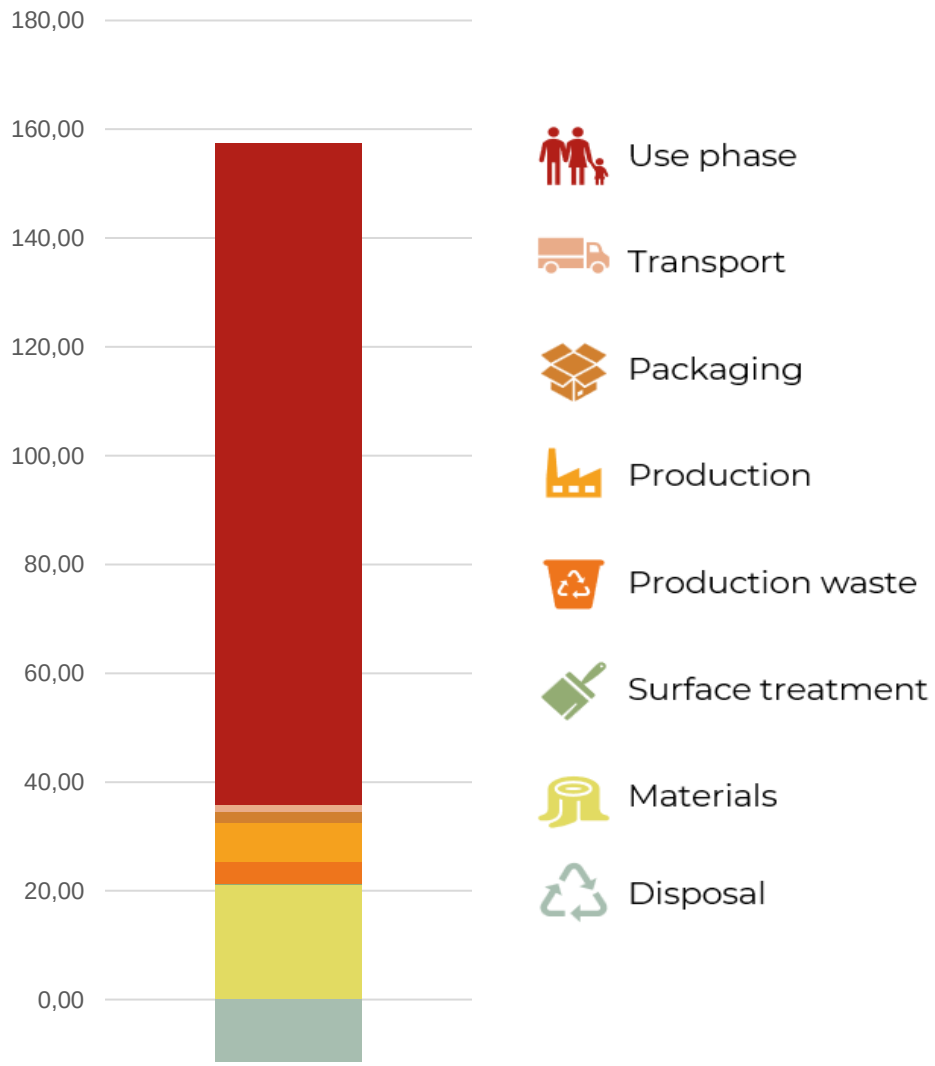
Production of the product and use stage

Average climate emission:

150 KG CO2-e

Lower boundary: 140 CO2-e
Upper boundary: 190 CO2-e

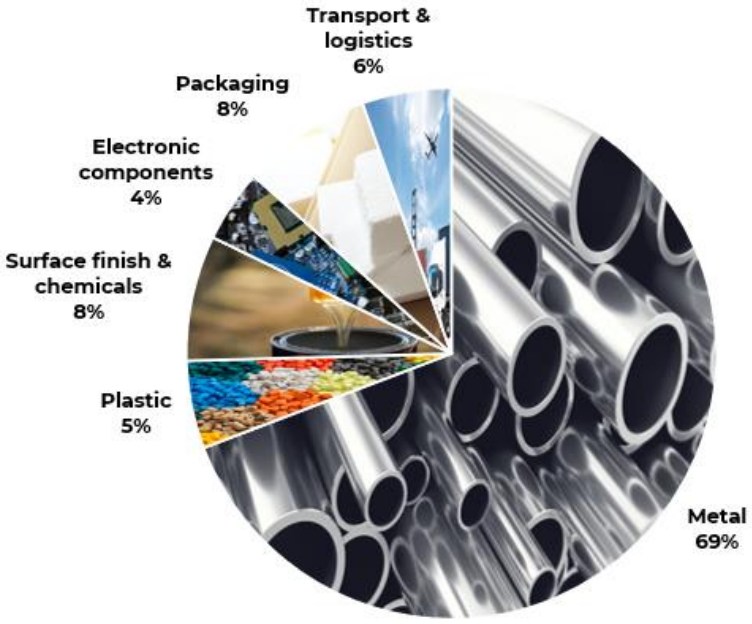
Carbon stages



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)**

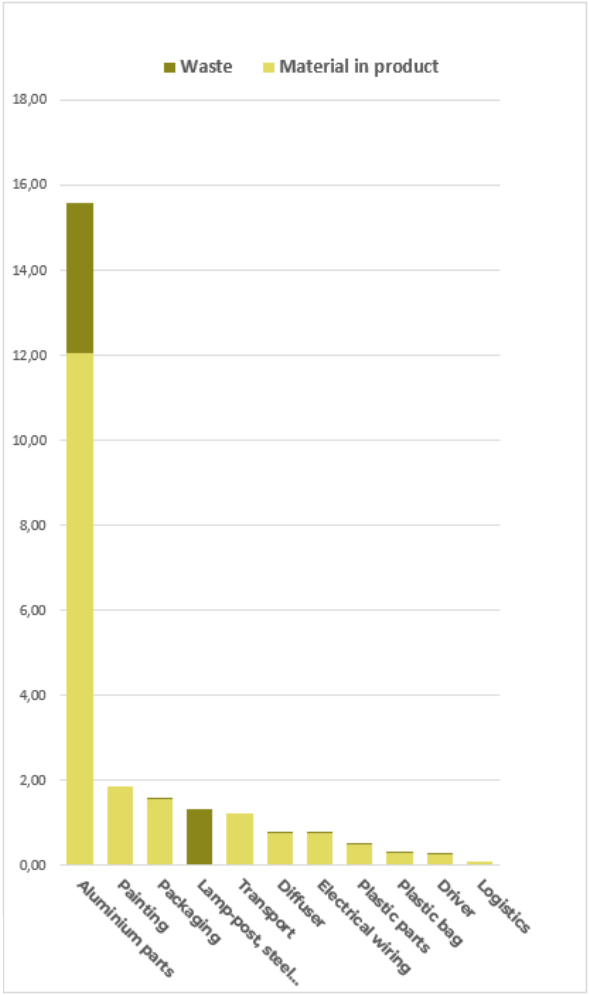
Group	Total impact		
Solid Wood	**0,00**	*kg CO2-e*	**0,0%**
Wood based board	**0,00**	*kg CO2-e*	**0,0%**
Metal	**16,90**	*kg CO2-e*	**69,2%**
Plastic	**1,31**	*kg CO2-e*	**5,3%**
Glass / Stone / Ceramics	**0,00**	*kg CO2-e*	**0,0%**
Surface finish & chemicals	**1,86**	*kg CO2-e*	**7,6%**
Upholstery	**0,00**	*kg CO2-e*	**0,0%**
Cover	**0,00**	*kg CO2-e*	**0,0%**
Electronic components	**1,08**	*kg CO2-e*	**4,4%**
Packaging	**1,93**	*kg CO2-e*	**7,9%**
Transport & logistics	**1,33**	*kg CO2-e*	**5,4%**



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	
Aluminium parts	Alu. cast	**15,58**	*kg CO2-e*
Painting	Or kg powder consumed	**1,86**	*kg CO2-e*
Packaging	Corrugated cardboard box printed sustainable fiber	**1,56**	*kg CO2-e*
Lamp-post, steel screws, bolts and nuts	Stainless steel machined	**1,32**	*kg CO2-e*
Transport	Total emission from transport - all steps	**1,23**	*kg CO2-e*
Diffuser	Polycarbonate PC	**0,78**	*kg CO2-e*
Electrical wiring	Electric cable (PVC)	**0,78**	*kg CO2-e*
Plastic parts	Polycarbonate PC	**0,52**	*kg CO2-e*
Plastic bag	Polyethylene bag (PE-LD)	**0,29**	*kg CO2-e*
Driver	Power supply with cables + connectors	**0,27**	*kg CO2-e*
Logistics	Total emission from warehouse +	**0,10**	*kg CO2-e*



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