louis poulsen

Environmental Product Specifications

— Patera

Product description

- The pendant is a glowing sphere built up of small diamond-shaped cells.
- Each cell is carefully designed to capture light and to shield the light source from the viewing angles above 45 degrees.
- Below 45 degrees, the fields are open to direct light downwards.
- A small amount of light is also sent upwards to illuminate the ceiling.

Product info

Mounting

Suspension:
E27 Ø450/Ø600: Cable 2x1 mm².

E27 Ø900: Cable 3x1 mm².

LED (Ø450/Ø600/900): Cable 2x0,75mm² and wire

Finish

White, matt coated.

Light source

1x60W E27
LED

Sizes and weights

Width x Height x Length (mm)

600 x 608 x 600 Max 5.8 kg

450 x 433 x 450 Max 4.9 kg

900 x 865 x 900 Max 11.8 kg

Class

Ingress protection IP20.
Electric shock protection:
I w. ground. Ø480 and Ø600 E27: II w/o ground.

Product variants

Dimension	Light source	Lumen	Class	Lighting control
Ø 450	1x100W E27	-	I	-
Ø 600	1x60W E27	2428	II	Dali
Ø 900	LED 2700K 42W	2525		Wireless bluetooth
	LED 2700K 65W	4206		
	LED 2700K 96W	4272		
	LED 3000K 42W	5472		
	LED 3000K 65W	5689		
	LED 3000K 96W			

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 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. 75% 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.

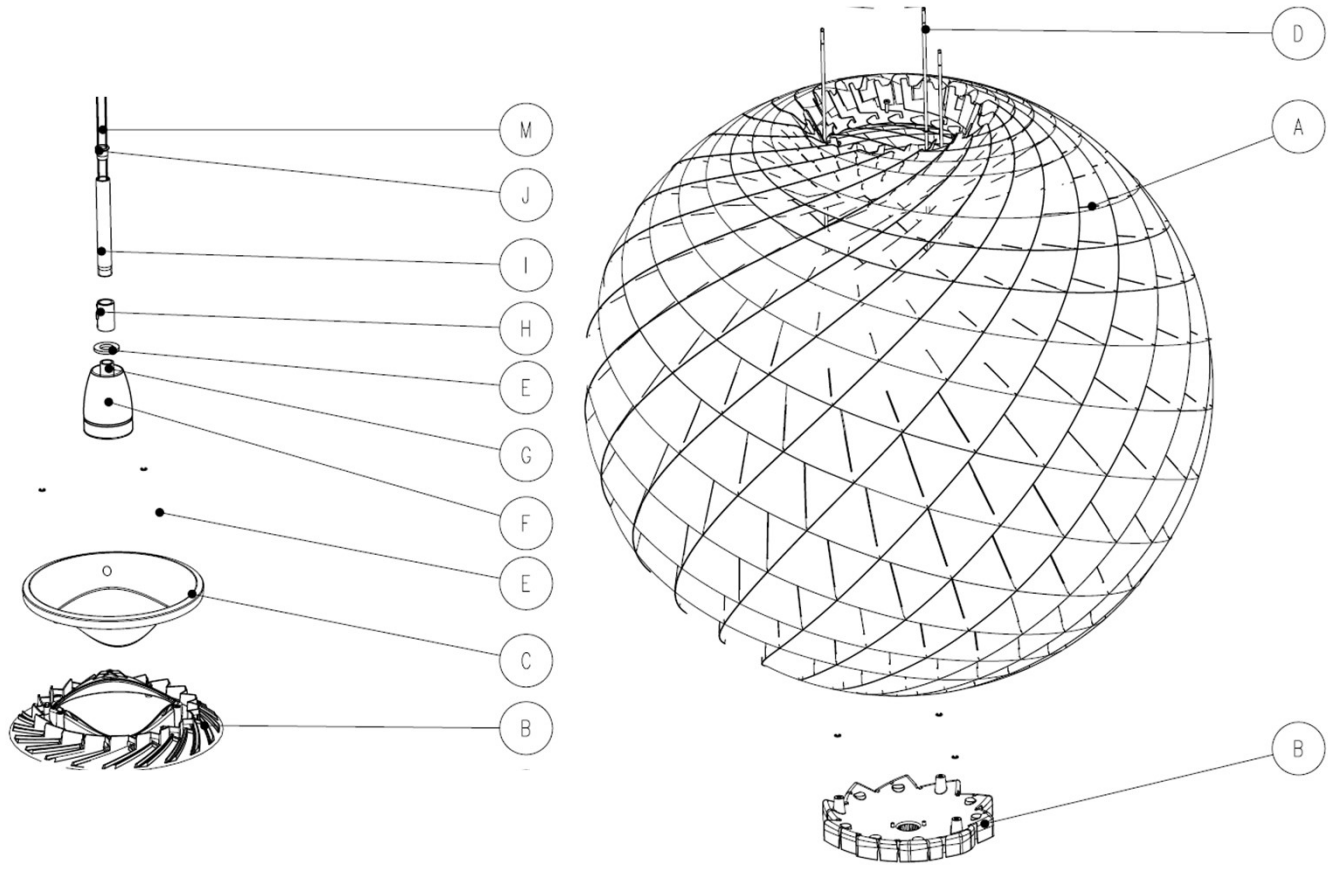
This product is designed so that 100% of the product can be disassembled and reused.

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	Shades	Plastic - PVC	DE - Germany	**30,3%**
B	Top and bottom ring	Plastic - PMMA	DK - Denmark	**2,7%**
C	Top and lock cap	Plastic - PC	DK - Denmark	**0,9%**
D	Steel rod	Steel	TW - Taiwan	**1,6%**
E	Washer, screw and nuts	Stailess steel	CN - China	**1,6%**
F	Socket	Porcelain	DE - Germany	**3,0%**
G	Plastic parts	Plastic - PA	DK - Denmark	**0,2%**
H	STRAIN RELIEF PATERA 600	Brass	CN - China	**0,5%**
I	Suspension tube	Aluminium	TW - Taiwan	**0,4%**
J	Plastic parts	Plastic - ABS	DK - Denmark	**1,5%**
M	Cord	Silicone and copper	IT - Italy	**11,7%**
N	Packaging	Corrugated cardboard	DK - Denmark	**11,1%**
L	Inserts for packaging	Paper pulp	CN - China	**34,2%**
O	Plastic bag	Plastic - LDPE	LT - Lithaunia	**0,1%**
P	Fabric bag	Nonwoven Polypropylene Homopolymer	CN - China	**0,1%**
Q	Instruction and labels	Paper	DK – Denmark	**0,2%**
				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:

Patera Ø450, 7 Watt.

Production of the product

Total climate emission:

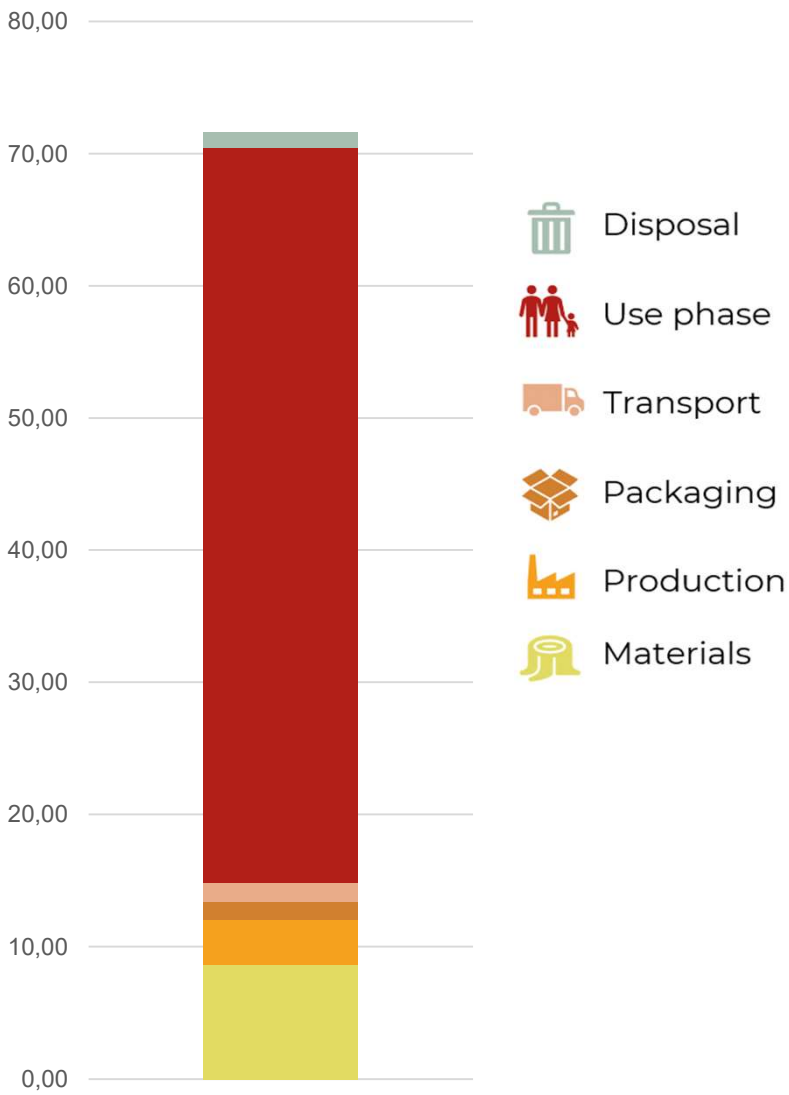
17 KG CO2-e

Production of the product and use stage

Total climate emission:

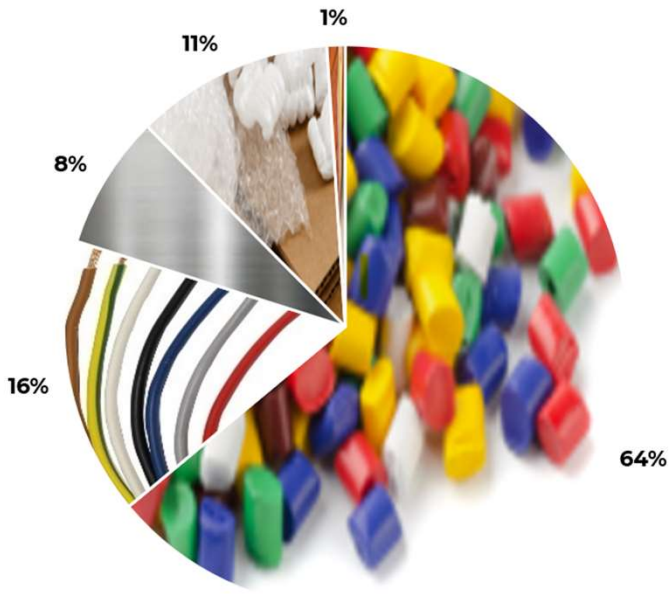
70 KG CO2-e

Carbon stages



Main emission sources *(pr material group)**

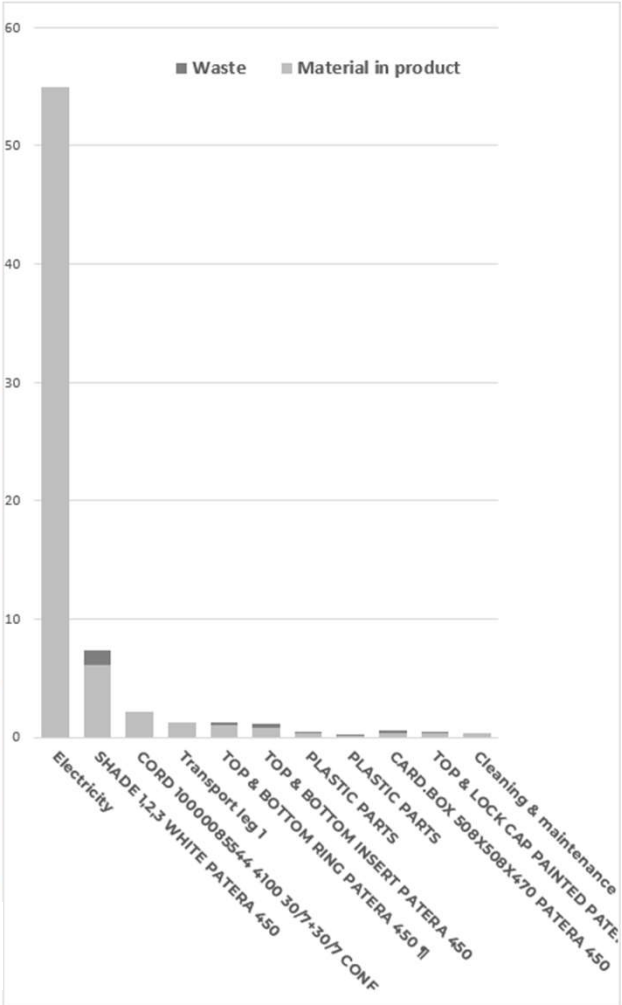
Group	Total impact
Solid Wood	**0,00** *kg CO2-e*
Plastic	**9,59** *kg CO2-e*
Cover	**0,00** *kg CO2-e*
Standard Components	**0,00** *kg CO2-e*
Electronics	**2,39** *kg CO2-e*
Metal	**1,15** *kg CO2-e*
Packaging	**1,71** *kg CO2-e*
Upholstery	**0,00** *kg CO2-e*
Wood Based Board	**0,00** *kg CO2-e*
Surface Finish & Chemicals	**0,16** *kg CO2-e*
Glass / Stone / Ceramics	**0,00** *kg CO2-e*



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
Electricity	0	**54,95** *kg CO2-e*
SHADE 1,2,3 WHITE PATERA 450	PVC (vinyl), molded	**7,34** *kg CO2-e*
CORD 10000085544 4100 30/7+30/7 CONF	Electric cable kg	**2,13** *kg CO2-e*
Transport leg 1	Freight/bulk – via transport hubs (Less than Full-load)	**1,29** *kg CO2-e*
TOP & BOTTOM RING PATERA 450 ¶	Acrylic (PMMA), molded	**1,23** *kg CO2-e*
TOP & BOTTOM INSERT PATERA 450	Corrugated cardboard box, no print	**1,13** *kg CO2-e*
PLASTIC PARTS	ABS/ASA, molded	**0,47** *kg CO2-e*
PLASTIC PARTS	Polyamide (PA6), molded	**0,11** *kg CO2-e*
CARD.BOX 508X508X470 PATERA 450	Corrugated cardboard box, no print	**0,55** *kg CO2-e*
TOP & LOCK CAP PAINTED PATERA 450	PC, molded	**0,44** *kg CO2-e*
Cleaning & maintenance	Cleaning, maintenance & Product	**0,36** *kg CO2-e*
	Total impact from Waste	**2,45** *kg CO2-e*



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