

**louis  
poulsen**

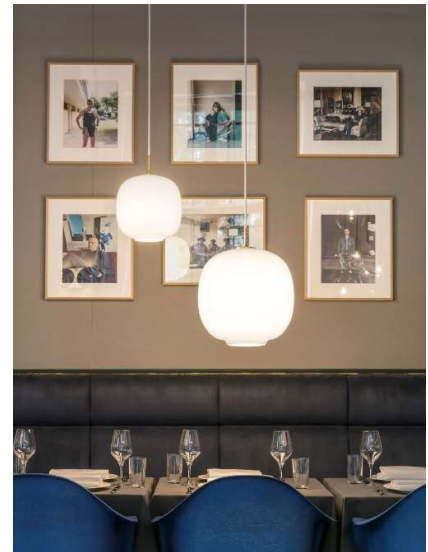


# Environmental Product Specifications

— VL45 Radiohus Pendant

## Product description

- The fixture provides uniform, general and diffused illumination.
- The opening at the bottom of the glass produces downwards directed light.
- The quality of the glass ensures that the fixture is evenly lit.
- In three dimensions.



## Product info

### Mounting

Suspension:

Cable Ø 175, Ø 250: 3x0,75 mm<sup>2</sup>.

Cable Ø 370; 3x1 mm<sup>2</sup>.

Cable and wire Ø 370 (LED): 2x0,75 mm<sup>2</sup>

### Sizes and weights

Width x Height x Length (mm)

175 x 246 x 175 Max 1.3 kg

250 x 328 x 250 Max 2.0 kg

370 x 448 x 370 Max 5.2 kg

### Finish

Glossy white opal glass. Brushed brass, untreated.

### Light source

E27 for Ø170, Ø250, and Ø370.

LED for Ø370.

### Class

Ingress protection IP20.

Electric shock protection I w/o ground.

## Product variants

Dimension	Light source	Lumen	Lighting control
Ø 175	1x100W E27	-	-
Ø 250	1x20W E14	2763	Dali
Ø 370	LED 3000-1800K D2W 41W	3353	Phase dimming (mains dimm)
	LED 3000K 41W		Wireless bluetooth

## 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 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.

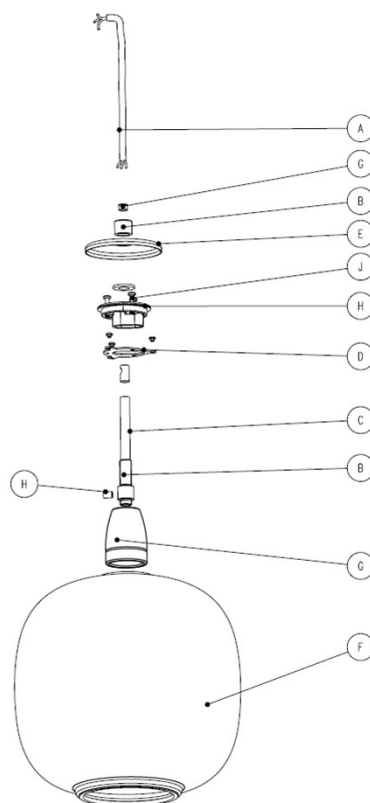
Louis Poulsen is part of ELRETUR which ensures that electronic waste (WEEE) across of Europa is reused.

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	Cord	Silicone and copper	IT – Italy	16,19%
B	Brass parts	Brass	CN – China	2,08%
C	Wire tube	Brass	DK – Denmark	0,49%
D	Shade support	Aluzinc	DK – Denmark	0,98%
E	Top part	Brass	DK – Denmark	0,68%
F	Shade	Mouth blown glass	SI – Slovenia	42,3%
G	Socket	Porcelain	DE – Germany	3,91%
H	Plastic parts	Plastic - PA	SE – Sweden	0,33%
I	Bolts, nuts and washer	Stainless steel	CN – China	0,36%
J1	Canopy	Plastic - PC	DK – Denmark	0,14%
J2	Suspension	Plastic - PBTP	DK – Denmark	0,23%
J3	Strain relief	Plastic – PP	NO – Norway	0,03%
K	Fabric bags	Plastic - Polypropylene Homopolymer	CN – China	0,65%
L	Plastic bag	Plastic - LDPE	LT – Lithuania	0,10%
M	Instruction and labels	Paper	DK – Denmark	0,13%
N	Cotton gloves	Cotton	CN – China	0,75%
O	Packaging	Corrugated cardboard	SI – Slovenia	29,3%
				<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

1,000 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:**

VL45 Radiohus Pendant, Ø250, E27, 7 Watt.

### Production of the product

Total climate emission:

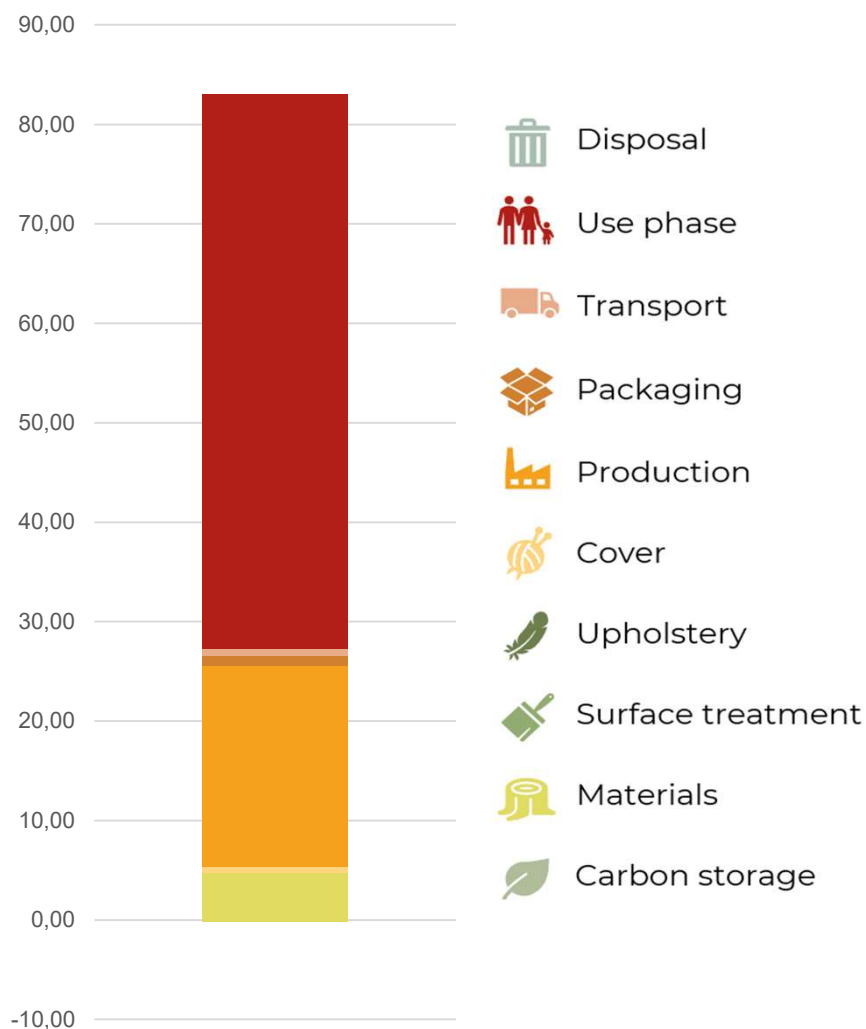
**28 KG CO2-e**

### Production of the product and use stage

Total climate emission:

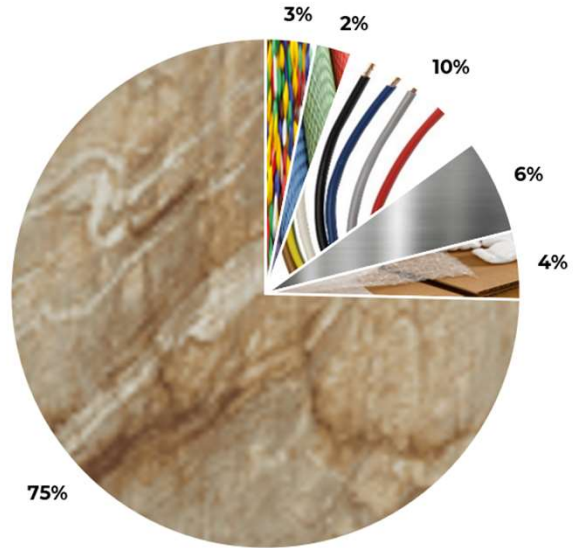
**85 KG CO2-e**

### Carbon stages



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

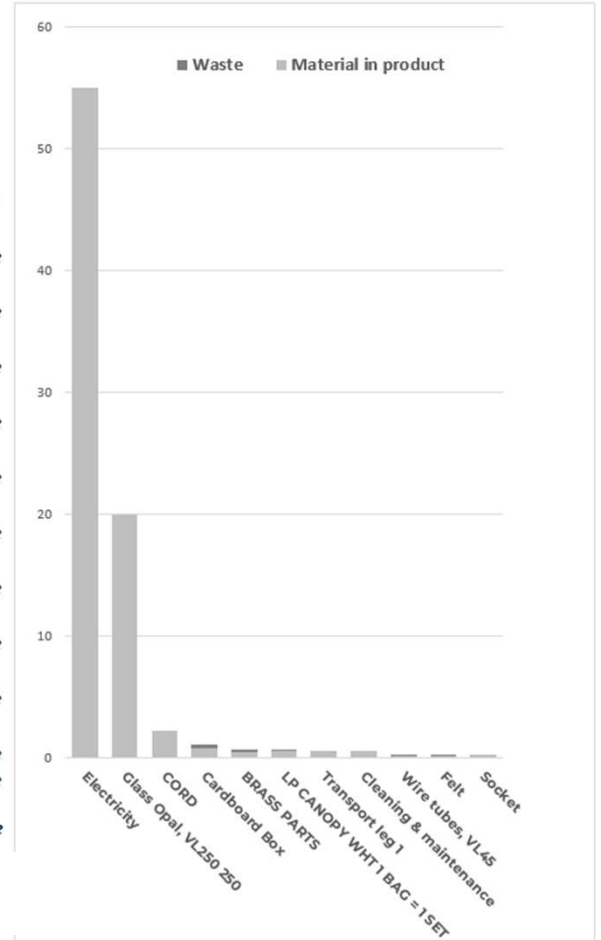
Group	Total impact
Solid Wood	0,00 kg CO2-e
Plastic	0,85 kg CO2-e
Cover	0,62 kg CO2-e
Standard Components	0,00 kg CO2-e
Electronics	2,55 kg CO2-e
Metal	1,62 kg CO2-e
Packaging	1,16 kg CO2-e
Upholstery	0,00 kg CO2-e
Wood Based Board	0,00 kg CO2-e
Surface Finish & Chemicals	0,00 kg CO2-e
Glass / Stone / Ceramics	19,99 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
Glass Opal, VL250 250	Virgin glass hand made kg	19,99 kg CO2-e
CORD	Electric cable kg	2,29 kg CO2-e
Cardboard Box	Corrugated cardboard box, printed	1,15 kg CO2-e
BRASS PARTS	Brass, machined	0,71 kg CO2-e
LP CANOPY WHT 1 BAG = 1 SET	PC, molded Freight/bulk – via transport hubs	0,66 kg CO2-e
Transport leg 1	(Less than Full-load)	0,60 kg CO2-e
Cleaning & maintenance	Cleaning, maintenance & Product Loss	0,56 kg CO2-e
Wire tubes, VL45	Brass, machined	0,33 kg CO2-e
Felt	Wool	0,30 kg CO2-e
Socket	E27 light bulb socket ceramic	0,26 kg CO2-e
<b>Total impact from Waste</b>		<b>1,51 kg CO2-e</b>



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