

STOANE LIGHTING

EQUIPMENT DESIGN + MANUFACTURE

TM65.2 Lighting Calculation

Exterior LED channel

CIBSE TM65.2 Embodied Carbon Mid-level Calculation

Date:	11/10/2023
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Embodied Carbon Results with 'Mid-Level TM65 Calculation' Method Total

45.65 kg CO₂e

Through Life (25 year) Embodied Carbon (kgCO₂e)

First Build 29.84	Repair 15.80
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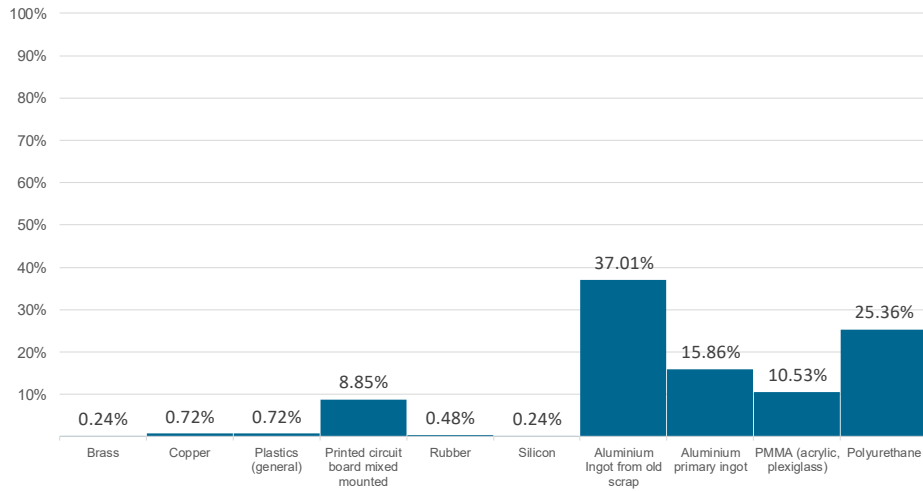
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25 year product life

Product Information

Type of Product	Luminaires
Product Weight	0.841 kg
Material Breakdown for at least 95% of the product weight. Breakdown	100.00%
B3: Materials replaced as part of repair	15.804 kgCO ₂ e
Energy consumption of the factory per unit of product	8.70 kWh
Location of Manufacture	Edinburgh, Edinburgh, City of, United Kingdom
Product Complexity	Category 2

Materials by % of Product Weight



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Exterior LED channel

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Embodied Carbon Results Breakdown (kg CO ₂ e)	
A1: Material Extraction	15.132
A2: Transport	0.333
A3: Manufacturing	4.962
A4: Transport to Site	0.033
B3: Repair	12.157
C2: Transport	0.011
C3: Waste Processing	2.481
C4: Disposal	0.004

Embodied Carbon Results (kg CO ₂ e)	
A1-C4	35.11
A1-C4 with Buffer Factor	45.65

Assumptions	
A1: Material carbon coefficient source	TM65, Table 2.1; TM65.2 Table 9
C4 Percentage of product going to landfill(%)	55% - TM65 Table 4.14

This report was generated using the CIBSE TM65 Manufacturers form 'beta' version V1.3. Released in August 2023

Stoane Lighting are a UK based company.

Files are generated for a 'standard' version of the fitting and may not include calculations for accessories or derivatives.

Only if LED drivers or Power supplies are integral will they be included in the calculation.

Repair embodied carbon is calculated based on light source and control gear replacement once in the 25 year product life

For more information please contact us via our website shown below.



This report was produced using the CIBSE documents;

TM65 Embodied Carbon of MEP Products - June 2021

TM65.2 Lighting - August 2023

www.stoanelighting.com