

# STOANE LIGHTING

EQUIPMENT DESIGN + MANUFACTURE

## TM65.2 Lighting Calculation

Toad type X

## CIBSE TM65.2 Embodied Carbon Mid-level Calculation

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

46.18 kg CO<sub>2</sub>e

Through Life (25 year) Embodied Carbon (kgCO<sub>2</sub>e)

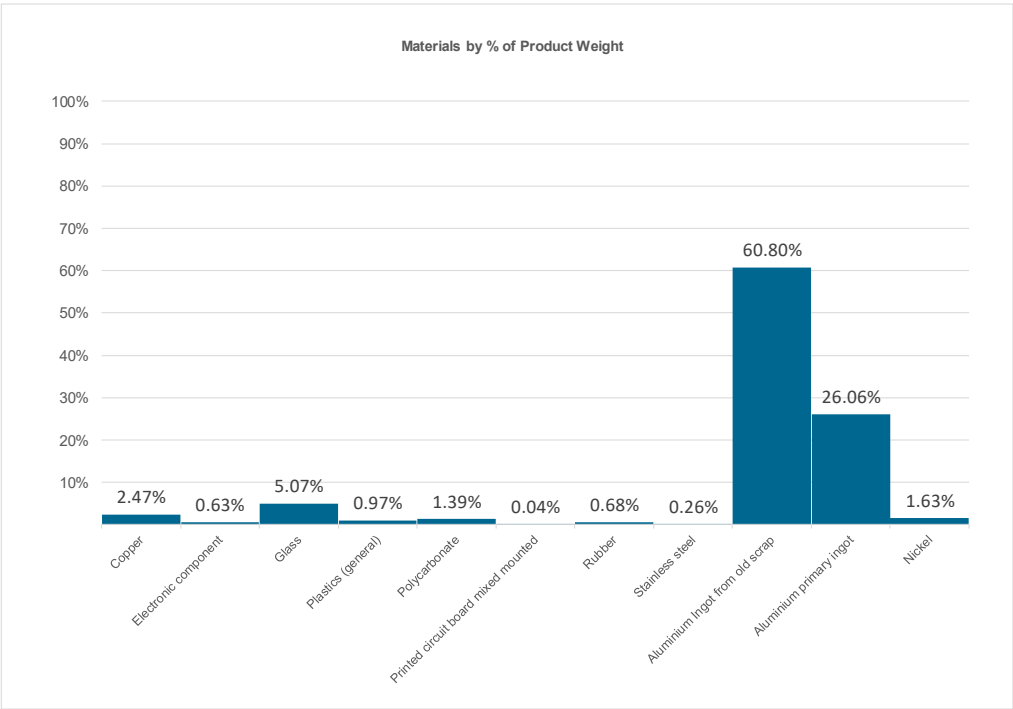
First Build  
45.97

Repair  
0.21

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
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25 year product life

Product Information	
Type of Product	Luminaires
Product Weight	2.367 kg
Material Breakdown for at least 95% of the product weight. Breakdown	100.00%
B3: Materials replaced as part of repair	0.211 kgCO <sub>2</sub> e
Energy consumption of the factory per unit of product	24.50 kWh
Location of Manufacture	Edinburgh, Edinburgh, City of, United Kingdom
Product Complexity	Category 2



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## TM65.2 Lighting Calculation: Luminaire

Toad type X

CIBSE TM65 Embodied Carbon Mid-level Calculation

Embodied Carbon Results Breakdown (kg CO <sub>2</sub> e)	
A1: Material Extraction	13.340
A2: Transport	0.937
A3: Manufacturing	13.966
A4: Transport to Site	0.094
B3: Repair	0.162
C2: Transport	0.031
C3: Waste Processing	6.983
C4: Disposal	0.012

Embodied Carbon Results (kg CO <sub>2</sub> e)	
A1-C4	35.52
A1-C4 with Buffer Factor	46.18

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](http://www.stoanelighting.com)