

# STOANE LIGHTING

EQUIPMENT DESIGN + MANUFACTURE

## TM65 Calculation : Luminaire

### ZTA.50 surf

### CIBSE TM65 Embodied Carbon Mid-level Calculation

Date:	10/03/2022
Assessor/ Organisation:	Stoane lighting
Contact:	<a href="mailto:sales@mikestoanelighting.com">sales@mikestoanelighting.com</a>

### Embodied Carbon Results with 'Mid-Level TM65 Calculation' Method Total

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

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

First Build  
13.08

Repair  
2.13

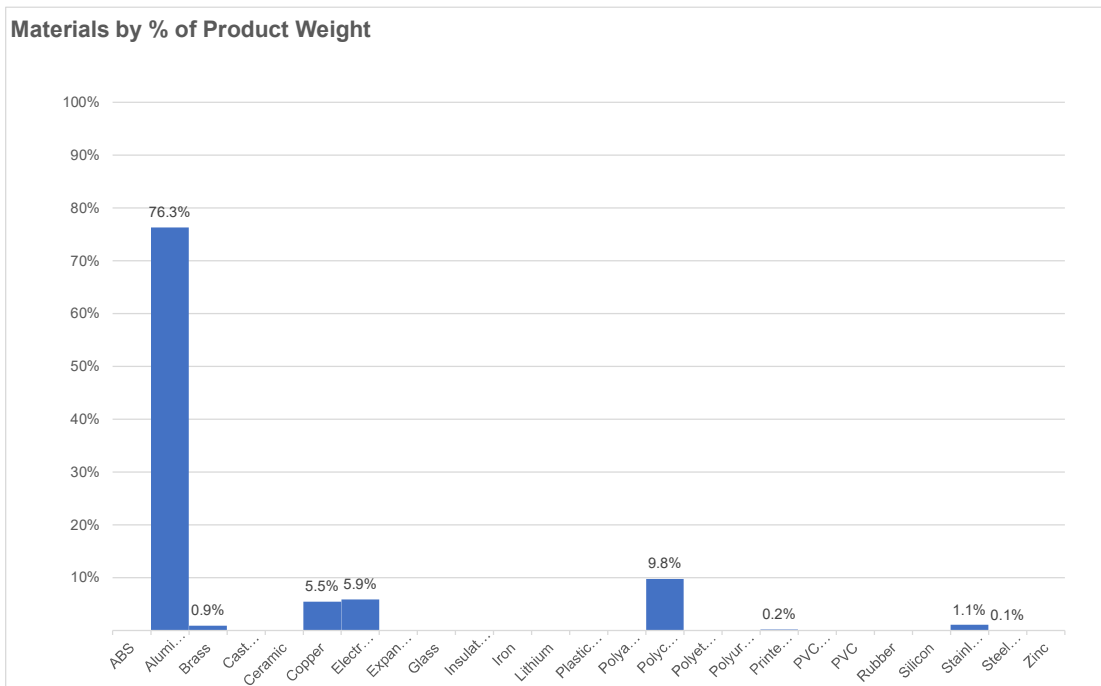
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
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25 year product life

### Product Information

Type of Product	Luminaires
Capacity of Equipment	0.0079 kW
Product Weight	0.44
Material Breakdown for at least 95% of the product weight (Y/N)	Y
B3: Materials replaced as part of repair	1.64 kgCO <sub>2</sub> e
Energy consumption of the factory per unit of product	4.27 kWh
Location of Manufacture	Edinburgh, Edinburgh, City of, United Kingdom
Product Complexity	Category 2

### Materials by % of Product Weight



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#### Embodied Carbon Results Breakdown (kg CO<sub>2</sub>e)

A1: Material Extraction	6.2705
A2: Transport	0.1742
A3: Manufacturing	2.3458
A4: Transport to Site	0.0871
B3: Repair	1.6383
C2: Transport	0.0058
C3: Waste Processing	1.1729
C4: Disposal	0.0022

#### Embodied Carbon Results (kg CO<sub>2</sub>e)

A1-C4	11.70
A1-C4 with Buffer Factor	15.21

#### Assumptions

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

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This report was generated using the CIBSE TM65 Manufacturers form 'beta' version. Released in June 2021.

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 Tool  
Embodied Carbon of MEP Products - June 2021

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

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