

STOANE LIGHTING

EQUIPMENT DESIGN + MANUFACTURE

TM65.2 Lighting Calculation

Frog type X zoom

CIBSE TM65.2 Embodied Carbon Mid-level Calculation

| | |
|------------------------|--|
| Date: | 18/12/2024 |
| Assessor/Organisation: | Stoane Lighting |
| Contact: | sales@mikestoanelighting.com |

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

14.92 kg CO2e

Through Life (25 year) Embodied Carbon (kgCO₂e)

First Build
14.88

Repair
0.04

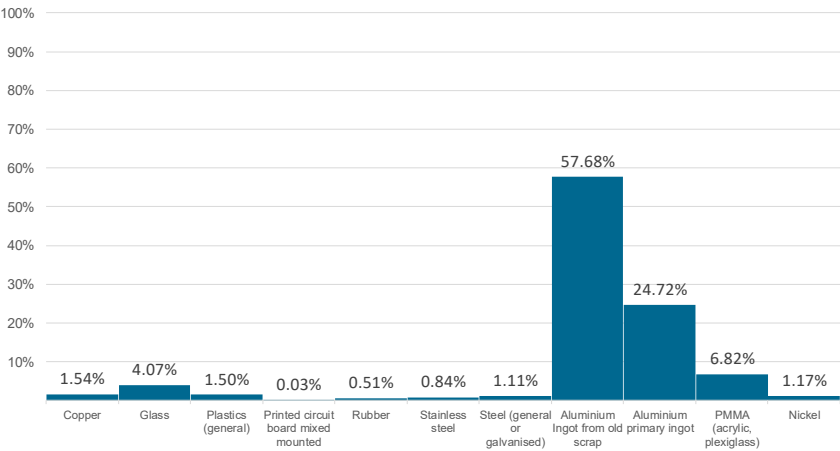
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|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|---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

25 year product life

Product Information

| | |
|--|---|
| Type of Product | Luminaires |
| Product Weight | 0.585 kg |
| Material Breakdown for at least 95% of the product weight. Breakdown | 100.00% |
| B3: Materials replaced as part of repair | 0.044 kgCO ₂ e |
| Energy consumption of the factory per unit of product | 10.17 kWh |
| Location of Manufacture | Edinburgh, Edinburgh, City of, United Kingdom |
| Product Complexity | Category 2 |

Materials by % of Product Weight



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TM65.2 Lighting Calculation: Luminaire

Frog type X zoom

CIBSE TM65 Embodied Carbon Mid-level Calculation

| Embodied Carbon Results Breakdown (kg CO ₂ e) | |
|--|-------|
| A1: Material Extraction | 3.043 |
| A2: Transport | 0.232 |
| A3: Manufacturing | 5.426 |
| A4: Transport to Site | 0.023 |
| B3: Repair | 0.033 |
| C2: Transport | 0.008 |
| C3: Waste Processing | 2.713 |
| C4: Disposal | 0.003 |

| Embodied Carbon Results (kg CO ₂ e) | |
|--|-------|
| A1-C4 | 11.48 |
| A1-C4 with Buffer Factor | 14.92 |

| 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

Regional variations of the TM65 methodology are being developed; please contact us if there is a requirement for a specific regional assessment where such a local addendum exists.

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