STOANE LIGHTING

EQUIPMENT DESIGN + MANUFACTURE

TM65.2 Lighting Calculation

Amanita

CIBSE TM65.2 Embodied Carbon Mid-level Calculation

| Date: | 15/11/2023 |
|------------------------|------------------------------|
| Assessor/Organisation: | Stoane Lighting |
| Contact: | sales@mikestoanelighting.com |

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

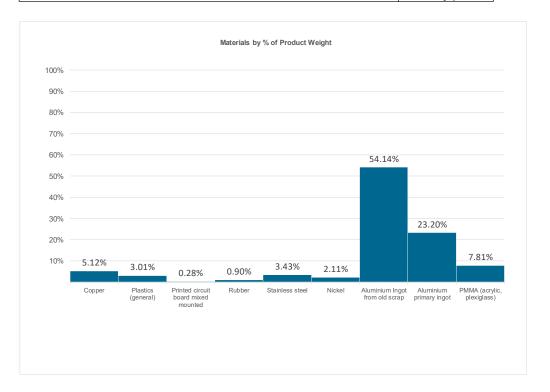
12.39 kg CO2e

Through Life (25 year) Embodied Carbon (kgCO $_2$ e)

| First Build 12.01 | | | | | Repair 0.38 | | | | | | | | | | | | | | | | | | | |
|----------------------|---|---|---|---|----------------|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 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 | 0.648 kg |
| Material Breakdown for at least 95% of the product weight. Breakdown | 100.00% |
| B3: Materials replaced as part of repair | 0.381 kgCO2e |
| Energy consumption of the factory per unit of product | 6.16 kWh |
| Location of Manufacture | Edinburgh, Edinburgh, City |
| Edition of Manufacture | of, United Kingdom |
| Product Complexity | Category 2 |



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TM65.2 Lighting Calculation: Luminaire

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| Embodied Carbon Results Breakdown (kg CO ₂ e) | |
|--|-------|
| A1: Material Extraction | 3.681 |
| A2: Transport | 0.257 |
| A3: Manufacturing | 3.511 |
| A4: Transport to Site | 0.026 |
| B3: Repair | 0.293 |
| C2: Transport | 0.009 |
| C3: Waste Processing | 1.755 |
| C4: Disposal | 0.003 |

| Embodied Carbon Results (kg CO ₂ e) | |
|--|-------|
| A1-C4 | 9.53 |
| A1-C4 with Buffer Factor | 12.39 |

| 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 calcualted based on light source and control gear replacement once in the 25 year product life For more infoormation 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