| | g Calculation unt base | | | | | | | | | |
|-----------------------------------|---------------------------|-----------------------|--------------------------------------|-------------|------------------|-----------------------------------|----------------------------|------------------------------|--------|--|
| CIBSE TM65.2 | | oon Mid-level (| Calculation | | | | | | | |
| Date: | | | 19/12/2024 | | 7 | | | | | |
| Assessor/Organ Contact: | isation: | S | toane Lighting ikestoanelighting. | com | _ | | | | | |
| | | | | | | | | | | |
| Embodied Carbo | on Results with 'I | Mid-Level TM65 | 5 Calculation' Met | nod Total | | | | | | |
| | | | | | 24.87 kg CO | 2e | | | | |
| Through Life (25 | | | :O ₂ e) | | | _ | | | | |
| | First Build 24.08 | d | | | Repair 0.79 | | | | | |
| 1 2 3 | 4 5 | 6 7 8 | 9 10 11 | 12 13 | 14 15 16 | 17 18 1 | 9 20 21 | 22 23 24 | 4 25 | |
| | | | | | | | | | | |
| 25 year product | life | | | | | | | | | |
| Product Inform | | | | | | | | • | | |
| Type of Product Product Weight | | | | | | | | Luminaire 0.919 kg | 1 | |
| B3: Materials re | placed as part o | f repair | duct weight. Brea | kdown | | | | 100.00% 0.789 kgC0 | D2e | |
| Energy consum | | ory per unit of p | product | | | | E | 15.99 kW Edinburgh, Edinb | | |
| Location of Man Product Comple | | | | | | | | of, United Kin Category | gdom | |
| | | | | | | | | | | |
| 100% | | | | Materials D | y % of Product V | veignt | | | | |
| 90% | | | | | | | | | | |
| 80% | | | | | | | | | | |
| 70% | | | | | | | | | | |
| 60% | | | | | | F2 210/ | | | | |
| 50% | | | | | | 53.31% | | | | |
| 40% | | | | | | | | | | |
| 30% | | | | | | | | | | |
| 20% | | | | | | | 22.85% | 10.010/ | | |
| | / | | | | | | | 13.31% | | |
| 10% | 3.94% | 2.45% | 0.39% | 0.97% | 1.31% | | | | 1.49% | |
| 10% | Copper | Plastics (general) | Printed circuit board mixed | Rubber | Stainless steel | Aluminium Ingot from old scrap | Aluminium primary ingot | PMMA (acrylic, plexiglass) | Nickel | |
| 10% | | | mounted | | | | | | | |
| 10% | | | | | | | | | | |
| 10% | | | | | | | | | | |
| 10% | | | | | | | | | | |
| 10% | | | | | | | | | | |
| 10% | | | | | | | | | | |

STOANE LIGHTING

EQUIPMENT DESIGN + MANUFACTURE

TM65.2 Lighting Calculation: Luminaire

Mushroom mount base

CIBSE TM65 Embodied Carbon Mid-level Calculation

| Embodied Carbon Results Breakdown (kg CO ₂ e) | |
|--|-------------------------|
| A1: Material Extraction | 5.313 |
| A2: Transport | 0.364 |
| A3: Manufacturing | 8.529 |
| A4: Transport to Site | 0.036 |
| B3: Repair | 0.607 |
| C2: Transport | 0.012 |
| C3: Waste Processing | 4.264 |
| C4: Disposal | 0.004 |
| | |
| Embodied Carbon Results (kg CO ₂ e) | |
| A1-C4 | 19.13 |
| A1-C4 with Buffer Factor | 24.87 |
| | |
| 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

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