STOANE LIGHTING

EQUIPMENT DESIGN + MANUFACTURE

TM65.2 Lighting Calculation

Mushroom spike

CIBSE TM65.2 Embodied Carbon Mid-level Calculation

Date:	19/12/2024
Assessor/Organisation:	Stoane Lighting
Contact:	sales@mikestoanelighting.com

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

22.45 kg CO2e

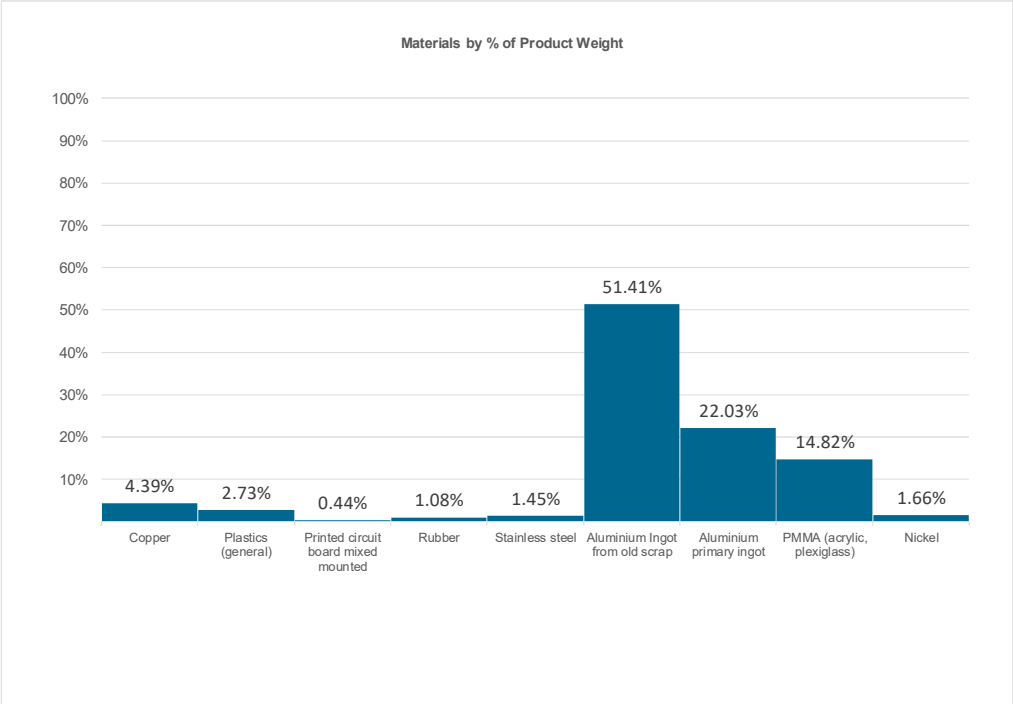
Through Life (25 year) Embodied Carbon ($kgCO_2e$)

First Build	Repair
21.66	0.79

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	0.825 kg
Material Breakdown for at least 95% of the product weight. Breakdown	100.00%
B3: Materials replaced as part of repair	0.788 kgCO2e
Energy consumption of the factory per unit of product	14.36 kWh
Location of Manufacture	Edinburgh, Edinburgh, City of, United Kingdom
Product Complexity	Category 2



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TM65.2 Lighting Calculation: Luminaire

Mushroom spike

CIBSE TM65 Embodied Carbon Mid-level Calculation

Embodied Carbon Results Breakdown (kg CO_2e)	
A1: Material Extraction	4.802
A2: Transport	0.327
A3: Manufacturing	7.657
A4: Transport to Site	0.033
B3: Repair	0.606
C2: Transport	0.011
C3: Waste Processing	3.829
C4: Disposal	0.004

Embodied Carbon Results (kg CO_2e)	
A1-C4	17.27
A1-C4 with Buffer Factor	22.45

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.

CIBSE

This report was produced using the CIBSE documents;
TM65 Embodied Carbon of MEP Products - June 2021
TM65.2 Lighting - August 2023

www.stoanelighting.com