# STOANE LIGHTING

EQUIPMENT DESIGN + MANUFACTURE

### TM65.2 Lighting Calculation

ZTA.50 Mains Track Macı

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

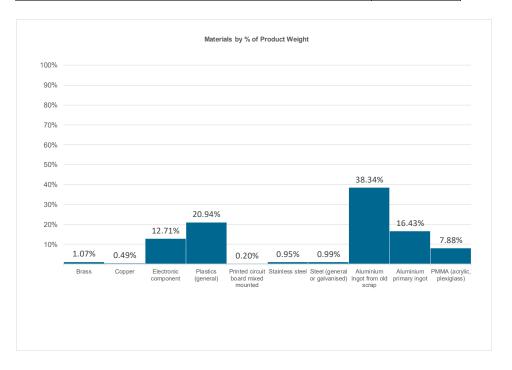
24.21 kg CO2e

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

First Build 16.49										Repa 7.72	2													
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	0.507 kg
Material Breakdown for at least 95% of the product weight. Breakdown	100.00%
B3: Materials replaced as part of repair	7.720 kgCO2e
Energy consumption of the factory per unit of product	8.81 kWh
Location of Manufacture	Edinburgh, Edinburgh, City
Eccation of Manufacture	of, United Kingdom
Product Complexity	Category 2



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#### TM65.2 Lighting Calculation: Luminaire

#### ZTA.50 Mains Track Macron

CIBSE TM65 Embodied Carbon Mid-level Calculation

Embodied Carbon Results Breakdown (kg CO <sub>2</sub> e)	
A1: Material Extraction	5.401
A2: Transport	0.201
A3: Manufacturing	4.700
A4: Transport to Site	0.020
B3: Repair	5.938
C2: Transport	0.007
C3: Waste Processing	2.350
C4: Disposal	0.002

Embodied Carbon Results (kg CO₂e)	
A1-C4	18.62
A1-C4 with Buffer Factor	24.21

Assumptions	
A1: Material carbon coefficient source	TM65, Table 2.1; TM65.2
A1. Waterial Carbon Coefficient Source	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.

This are generated to a standard we storn on the fulling and may be included in the calculation.

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 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