Surf Type S Stick         CIBSE TM65.2 Embodied Carbon Mid-level Calculation         Date: 11/10/2023 Assessor/Organisation: Stoane Lighting Contact: Sales@mikestoanelighting.com         Stoane Lighting Contact: Sales@mikestoanelighting.com         Imbodied Carbon Results with 'Mid-Level TM65 Calculation' Method Total         Imbodied Carbon Results with 'Mid-Level TM65 Calculation' Method Total         Imbodied Carbon Results with 'Mid-Level TM65 Calculation' Method Total         Imbodied Carbon (kgCO2e)         First Build 1.09       Repair 0.04         Imbodied Carbon (kgCO2e)         Through Life (25 year) Embodied Carbon (kgCO2e)         Impodied Carbon (kg CO2e)	
Assessor/Organisation: Stoane Lighting Contact: sales@mikestoanelighting.com Embodied Carbon Results with 'Mid-Level TM65 Calculation' Method Total           I.13 kg CO2e           Through Life (25 year) Embodied Carbon (kgCO2e)           First Build           1.09	
Contact:       sales@mikestoanelighting.com         Embodied Carbon Results with 'Mid-Level TM65 Calculation' Method Total       1.13 kg CO2e         Through Life (25 year) Embodied Carbon (kgCO2e)       Repair         1.09       0.04	
1.13 kg CO2e       Through Life (25 year) Embodied Carbon (kgCO2e)       First Build       1.09	
1.13 kg CO2e       Through Life (25 year) Embodied Carbon (kgCO2e)       First Build       1.09	
Through Life (25 year) Embodied Carbon (kgCO2e) First Build 1.09 0.04	
First Build Repair 1.09 0.04	
1.09 0.04	
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         Luminaires           Type of Product         Luminaires	
Product Weight         0.056 kg           Material Breakdown for at least 95% of the product weight. Breakdown         100.00%	
B3: Materials replaced as part of repair 0.042 kgCO2e	
Energy consumption of the factory per unit of product 0.58 kWh Lessien of Menufacture Edinburgh, Ed	)it/
Location of Manufacture of, United Kingdom Product Complexity Calledon Category 2	ity
Materials by % of Product Weight	
100%	
90%	
80%	
70% 61.60%	
60%	
50%	
40%	
30%	
20%	
10% 4.48% 4.66%	54%
10%       4.48%       4.66%       0.36%       0.72%       1.08%       0.18%       0.5         Copper       Plastics       Printed circuit       Rubber       Stainless steel (general or Aluminium Ingot       Aluminium       PMMA	(acrylic,
10%       4.48%       4.66%       0.36%       0.72%       1.08%       0.18%       0.5         Copper       Plastics       Printed circuit       Rubber       Stainless steel (general or Aluminium Ingot       Aluminium       PMMA	
10%       4.48%       4.66%       0.36%       0.72%       1.08%       0.18%       0.5         Copper       Plastics (general)       Printed circuit board mixed       Rubber       Stainless steel       Steel (general or Aluminium Ingot galvanised)       Aluminium from old scrap       PMMA plexi	(acrylic,
10%       4.48%       4.66%       0.36%       0.72%       1.08%       0.18%       0.5         Copper       Plastics (general)       Printed circuit board mixed       Rubber       Stainless steel       Steel (general or Aluminium Ingot galvanised)       Aluminium from old scrap       PMMA plexi	(acrylic,
10%       4.48%       4.66%       0.36%       0.72%       1.08%       0.18%       0.5         Copper       Plastics (general)       Printed circuit board mixed       Rubber       Stainless steel       Steel (general or Aluminium Ingot galvanised)       Aluminium from old scrap       PMMA plexi	(acrylic,

## **STOANE** LIGHTING

## EQUIPMENT DESIGN + MANUFACTURE

TM65.2 Lighting Calculation: Luminaire

## Surf Type S Stick

## CIBSE TM65 Embodied Carbon Mid-level Calculation

Embodied Carbon Results Breakdown (kg CO <sub>2</sub> e)	
A1: Material Extraction	0.321
A2: Transport	0.022
A3: Manufacturing	0.329
A4: Transport to Site	0.002
B3: Repair	0.033
C2: Transport	0.001
C3: Waste Processing	0.165
C4: Disposal	0.000
Embodied Carbon Results (kg CO <sub>2</sub> e)	
A1-C4	0.87
A1-C4 with Buffer Factor	1.13
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 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