	ng Calculation									
		arbon Mid-level	Calculation							
Date:			11/10/2023	3						
Assessor/Orga Contact:	nisation:		Stoane Lighti mikestoanelig	-						
Embodied Car	bon Results with	n 'Mid-Level TM	65 Calculatior	n' Method Tota						
Through Life //)F veer) Ember	diad Carbon (ka			2.27	kg CO2e				
	First Bu	died Carbon (kg	JCO ₂ e)		Re	pair				
	2.06					.21				
1 2 3	4 5	6 7 8	9 10	11 12	13 14 1	5 16 17	18 19	20 21 2	2 23 24	25
25 year produc	t life									
Product Inform	ot								Luminaires	
	down for at leas	st 95% of the pr	oduct weight.	Breakdown					0.070 kg 100.00%	
	eplaced as part nption of the fa	t of repair ctory per unit of	f product						0.212 kgCO2 0.72 kWh	le
Location of Ma	nufacture								nburgh, Edinburgh, Of, United Kingo	
Product Comp	exity								Category 2	
				Mater	ials by % of Pr	oduct Weight	t			
100%				Mater	ials by % of Pr	oduct Weight	t			
100% 90%				Materi	ials by % of Pr	oduct Weight	t			
				Materi	ials by % of Pr	oduct Weight	t			
90%				Materi	ials by % of Pr	oduct Weight	t			
90% 80%				Materi	ials by % of Pr	oduct Weight	t 			
90% 80% 70% 60% 50%				Materi	ials by % of Pr	oduct Weight	t		42.00%	
90% 80% 70% 60% 50% 40%				Materi	ials by % of Pr	oduct Weight			42.00%	
90% 80% 70% 60% 50% 40% 30%				Materi	ials by % of Pr	oduct Weight	t 		42.00%	18.00%
90% 80% 70% 60% 50% 40% 30%		14.28%	8.57%	Materi	ials by % of Pr	oduct Weight			42.00%	18.00%
90% 80% 70% 60% 50% 40% 30%	4.29%	14.28%	8.57%	4.29%	1.43%	1.43%	1.43%	4.29%	42.00%	18.00%
90% 80% 70% 60% 50% 40% 30% 20%	4.29%	14.28%	8.57% Glass		1.43% Printed circuit board mixed			4.29% Stainless steel	Aluminium Ingot from old	Aluminium
90% 80% 70% 60% 50% 40% 30% 20%		Electronic		4.29% Plastics	1.43% Printed circuit	1.43%	1.43%		Aluminium	Aluminium
90% 80% 70% 60% 50% 40% 30% 20%		Electronic		4.29% Plastics	1.43% Printed circuit board mixed	1.43%	1.43%		Aluminium Ingot from old	Aluminium
90% 80% 70% 60% 50% 40% 30% 20%		Electronic		4.29% Plastics	1.43% Printed circuit board mixed	1.43%	1.43%		Aluminium Ingot from old	Aluminium
90% 80% 70% 60% 50% 40% 30% 20%		Electronic		4.29% Plastics	1.43% Printed circuit board mixed	1.43%	1.43%		Aluminium Ingot from old	Aluminium
90% 80% 70% 60% 50% 40% 30% 20%		Electronic		4.29% Plastics	1.43% Printed circuit board mixed	1.43%	1.43%		Aluminium Ingot from old	Aluminium

STOANE LIGHTING

EQUIPMENT DESIGN + MANUFACTURE

TM65.2 Lighting Calculation: Luminaire

Indehandrail module

CIBSE TM65 Embodied Carbon Mid-level Calculation

Embodied Carbon Results Breakdown (kg CO ₂ e)	
A1: Material Extraction	0.932
A2: Transport	0.028
A3: Manufacturing	0.413
A4: Transport to Site	0.003
B3: Repair	0.163
C2: Transport	0.001
C3: Waste Processing	0.206
C4: Disposal	0.000
Embodied Carbon Results (kg CO ₂ e)	
A1-C4	1.75
A1-C4 with Buffer Factor	2.27
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