	g Calculatio	n								
ZTA.70 Mains T XOB	rack									
CIBSE TM65.2 I	Embodied C	arbon Mid-leve	Calculation							
Date:			09/11/2023							
Assessor/Organ Contact:	isation:		Stoane Lightin mikestoaneligh							
Embodied Carbo	on Results wi	ith 'Mid-Level TM	65 Calculation	Method Total						
						1 kg CO2e				
Through Life (25	ōvear) Embo	odied Carbon (kg	ICO2e)		21.1	- ng 0020				
3 (*	First B				F	lepair				
	20.5	52				6.59				
1 2 3	4 5	6 7 8	9 10	11 12	13 14 1	5 16 1	7 18 19	20 21	22 23 24	25
25 year product	life									
Product Inform Type of Product	t								Luminaire	s
Product Weight Material Breakdo		ast 95% of the pr	oduct weight.	Breakdown					0.890 kg 100.00%	
B3: Materials rep	placed as pa								6.594 kgCC	)2e
Location of Man		actory per unit o	rproduct					Ed	9.21 kWI inburgh, Edinbu	urgh, City
Product Comple									of, United Kin Category	
100%										
90%										
90% 80%										
90% 80% 70%										
90% 80% 70% 60%									50.85%	
90% 80% 70% 60% 50%									50.85%	
90% 80% 70% 60% 50% 40%									50.85%	
90% 80% 70% 60% 40% 30%									50.85%	21.79%
90% 80% 70% 60% 50% 40% 30%		7 23%	10.85%		6 85%				50.85%	21.79%
90% 80% 70% 60% 40% 30%	0.39%	7.23%	10.85%	0.11%	6.85%	1.12%	0.45%	0.34%	50.85%	21.79%
90% 80% 70% 60% 50% 40% 30%	0.39% Brass	7.23%		Printed circuit board mixed	6.85%	1.12% Silicon		el Steel (genera	al Aluminium ) Ingot from old	Aluminium
90% 80% 70% 60% 50% 40% 30%	,	Electronic	Plastics	Printed circuit				el Steel (genera	al Aluminium	Aluminium
90% 80% 70% 60% 50% 40% 30%	,	Electronic	Plastics	Printed circuit board mixed				el Steel (genera	al Aluminium ) Ingot from old	Aluminium
90% 80% 70% 60% 50% 40% 30%	,	Electronic	Plastics	Printed circuit board mixed				el Steel (genera	al Aluminium ) Ingot from old	Aluminium
90% 80% 70% 60% 50% 40% 30%	,	Electronic	Plastics	Printed circuit board mixed				el Steel (genera	al Aluminium ) Ingot from old	Aluminium
90% 80% 70% 60% 50% 40% 30%	,	Electronic	Plastics	Printed circuit board mixed				el Steel (genera	al Aluminium ) Ingot from old	Aluminium
90% 80% 70% 60% 50% 40% 30%	,	Electronic	Plastics	Printed circuit board mixed				el Steel (genera	al Aluminium ) Ingot from old	Aluminium

## **STOANE** LIGHTING

## EQUIPMENT DESIGN + MANUFACTURE

TM65.2 Lighting Calculation: Luminaire

## ZTA.70 Mains Track XOB

## CIBSE TM65 Embodied Carbon Mid-level Calculation

Embodied Carbon Results Breakdown (kg CO <sub>2</sub> e)	
A1: Material Extraction	7.500
A2: Transport	0.353
A3: Manufacturing	5.252
A4: Transport to Site	0.035
B3: Repair	5.072
C2: Transport	0.012
C3: Waste Processing	2.626
C4: Disposal	0.004
Embodied Carbon Results (kg CO <sub>2</sub> e)	
A1-C4	20.85
A1-C4 with Buffer Factor	27.11
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