TM65.2 Lightin	g Calculation										
ZTA.50 Mains 1 Zoom	rack										
CIBSE TM65.2	Embodied Ca	arbon Mid-le	evel Calculati	on							
Date: Assessor/Orgar	vication:		19/12/2 Stoane Li								
Contact:		sale	es@mikestoan		m						
Embodied Carb	on Results with	h 'Mid-Level	TM65 Calcula	ition' Metho	d Total						
						28.91 kg C0	)2e				
Through Life (2	5 year) Emboo	died Carbon	n (kgCO <sub>2</sub> e)								
	First Bu			]	Γ	Repair					
4 0 0	18.95					9.96		0 40 00	04 00		25
1 2 3	4 5	6 7	89	10 11	12 13 1	4 15 1	6 17 1	8 19 20	21 22	23 24	25
25 year produc	life										
Product Inform	nation										
Type of Produc Product Weight	t								_	Luminaires	
Material Breakd	eakdown for at least 95% of the product weight. Breakdown 100.00%										
	3: Materials replaced as part of repair 9.956 kgCO2e   nergy consumption of the factory per unit of product 9.80 kWh									9	
Location of Mar	ufacture									rgh, Edinburg United Kingd	
Product Comple	xity									Category 2	
100%				N	aterials by %	of Product	Weight				
90%											
80%											
70%											
60%											
50%											
40%									36.91%		
30%				23.10%							
20%			15.23%							15.82%	
10%											7.08%
	0.57%	0.27%	Eleater -:-	Dianti	0.04%	0.09%	0.62%	0.28% Steel (general	Alumin	Alumini	PMMA
	Brass	Copper	Electronic component	Plastics (general)	Printed circuit board mixed mounted	Rubber	Stainless steel	or galvanised)	Ingot from old scrap	primary ingot	(acrylic, plexiglass)

## **STOANE** LIGHTING

## EQUIPMENT DESIGN + MANUFACTURE

TM65.2 Lighting Calculation: Luminaire

## ZTA.50 Mains Track Zoom

## CIBSE TM65 Embodied Carbon Mid-level Calculation

Embodied Carbon Results Breakdown (kg CO <sub>2</sub> e)	
A1: Material Extraction	6.482
A2: Transport	0.223
A3: Manufacturing	5.226
A4: Transport to Site	0.022
B3: Repair	7.659
C2: Transport	0.007
C3: Waste Processing	2.613
C4: Disposal	0.003
Embodied Carbon Results (kg CO <sub>2</sub> e)	
A1-C4	22.24
A1-C4 with Buffer Factor	28.91
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.



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

www.stoanelighting.com