### L legrand

Building 4, Nexus Industry Park 43-47 Lyn Parade, Prestons NSW 2170, Australia Phone: 1300 369 777

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# **Product Environmental Profile**

**E2 LED EMERGENCY EXIT** 





### LEGRAND'S ENVIRONMENTAL COMMITMENTS

Incorporate environmental management into our industrial sites

Of all Legrand sites worldwide, over 85% are ISO 14001-certified (sites belonging to the Group for more than five years).

#### Offer our customers environmentally friendly solutions

Develop innovative solutions to help our customers design more energy efficient, better managed and more environmentally friendly installations.

• Involve the environment in product design and provide informations in compliance with ISO 14025 Reduce the environmental impact of products over their whole life cycle. Provide our customers with all relevant information (composition, consumption, end of life, etc.).



#### REFERENCE PRODUCT



The company reserves the right to change specifications and designs without notice. All illustrations, descriptions, dimensions and weights in the document are for guidance and cannot be held binding on the company.



### PRODUCTS CONCERNED

The environmental data is representative of the following products:

#### **Catalogue Numbers**

659003LI,659004LI, 659005LI, 659006LI, 684740/LI,684741/LI,684743/LI,684730/LI,684731/LI, 684733/LI

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2.611 kg (all packaging included)





### CONSTITUENT MATERIALS

This Reference Product contains no substances prohibited by the regulations applicable at the time of its introduction to the market. It respects the restrictions on use of hazardous substances as defined in the RoHS directive 2011/65/EU amended by delegated directive (EU) 2015/863, and its amendment 2017/2102/EU.

#### Total weight of **Reference Product**

HIPS

PVC

Various plastics

L							
Product alone weight 1.99 kg							
Plastics as % of weight		Metals as % of weight		Other as % of weight			
PC	33.8%	Steel	14.6 %	Other batteries	1.7 %		
PMMA	16.3%	Copper and copper alloys	0.9%	Various components	1.1 %		
PP	4.1%			PWB < 10cm2 (poor)	0.3 %		
PA	1.3%			Other miscellaneous	0.1 %		
PET	0.9%						

Packaging (alone) : 0.63 kg						
		Cardboard (packaging)	13.3 %			
		Wood (packaging)	9.8 %			
		Paper (packaging)	0.9 %			

Total plastics : 1.49 kg	57.3 %	Total metals : 0.40kg	15.5 %	Total others : 0.71 kg	27.2 %				
At the date of edition of this decument, the content of recycled meteric(c) is :									

At the date of edition of this document, the content of recycled material(s) is :

0.5%

0.4% <0,1%

Product alone (excluding packaging): 0%

Packaging only: 0%



#### MANUFACTURE

This Reference Product comes from sites that have received ISO14001 certification. The final assembly site is located at Prestons, Australia.



### **DISTRIBUTION**

Products are distributed from logistics centres located with a view to optimize transport efficiency. The Reference Product is therefore transported over an average distance of 190km by rail, 572km by sea and 610 km by road from our warehouse to the local point of distribution into the market in Australia and New-Zealand.

Packaging is compliant with with Australian Consumer. Law and other applicable regulation. At the packaging's end of life, it's recyclability rate is 42% (by % weight of packaging)



### INSTALLATION

For the installation of the product, only standard tools are needed. No installation accessories provided.



### USE

Under normal conditions of use, this product requires no servicing, no maintenance or additional products.

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### END OF LIFE

The product end of life factors are taken into account during the design phase. Dismantling and sorting of components or materials is made as easy as possible with a view to recycling or failing that, another form of reuse.

#### Recyclability rate:

Calculated using the method described in technical report IEC/TR 62635, the recyclability rate of the product is estimated at 81%. This value is based on data collected from a technological channel operating on an industrial basis. It does not pre-validate the effective use of this channel for the end of life of this product.

Separated into:

<ul> <li>plastic materials</li> </ul>	(excluding packaging) :	15%
- metal materials	(excluding packaging) :	54%

- 1% - other materials (excluding packaging) : 1%
- packaging (all types of materials) : 10%



### ENVIRONMENTAL IMPACTS

The evaluation of environmental impacts examines the stages of the Reference Product life cycle: manufacturing, distribution, installation, use and end of life. It is representative of products marketed and used in Australia and New Zealand in an electrical installation in compliance with NF C 15100 and associated product standards.

The datasets collected in this PEP are representative of the year 2024.

For each phase, the following modelling elements were taken in account:

	Manufacture A1-A3	Materials and components of the product, all transport for the manufacturing, the packaging and the waste gene- rated by the manufacturing.
ij	Distribution A4	Transport between the last Group distribution centre and an average delivery point in the sales area.
em Lim	Installation A5	The end of life of the packaging.
Syste	Use B1-B7	<ul> <li>Product category: PSR-0007-ed2.1-2023 12 08 Escape route emergency Lighting : SCELLR for Residential building.</li> <li>Use scenario: for a 10 years working life in continuous operation at 100% of rated load (1W at 230 V) during 100% of the time. This modeling time does not constitute a requirement for minimal durability.</li> <li>Energy model: Electricity Mix_Low voltage_2018_Australia_AU - 2018.</li> </ul>
	End of life C1-C4	Choice of end of life by default model for PCR-ed4-EN-2021 09 06
D Mo	dule	Module D is calculated according to PCR-ed4-EN-2021 09 06 based on the materials recycled and the modelled end-of-life scenario. It expresses the net benefits and loads beyond the boundaries of the system, and are not to be included in the life cycle totals.
Softw base	vare and data- used	EIME V6 & its database 2024-01-24

Unless otherwise indicated the modelling energetic mix are those integrated in the data modules used from the aformentioned database.

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### ENVIRONMENTAL IMPACTS

#### Use<sup>(1)</sup> End of Life Manufacturing Distribution Installation **Total Life Cycle** A1-A3 Δ5 Total B1-B7 **B**2 **B6** C1-C4 Module D Δ4 2.20E+01 100% 2.43E+02 Climate change - total 2.59E-01 100% 0.00E+00 1.67E+00 2.67E+02 kg CO, eq. 1.16E-01 100% 100% 2.43E+02 100% -1.73E+00 Climate change - fossil fuels 2.66E+02 kg CO, eq. 2.16E+01 100% 1.16E-01 100% 2.59E-01 100% 2.43F+02 100% 0.00E+00 1.66E+00 100% 2.43F+02 -1.72E+00 0.00E+00 5.03E-01 100% 100% 0,00E+00 5.04E-03 100% **Climate change - biogenics** kg CO, eq. 100% 100% 3.79E-01 3.89F-04 1.18E-01 1.18E-01 -6.62E-03 Climate change - land use and land use 0.00E+00 1.81E-07 1.32E-03 kg CO, eq. 100% 100% 100% 0.00F+00 100% 0.00E+00 100% 0.00E+00 1.32F-03 0.00F+00 0.00E+00 transformation 1.70E-10 5.53E-08 **Ozone depletion** 4.85E-06 kg CFC-11 eg. 100% 100% 7.85F-09 100% 1.18E-06 100% 0,00E+00 1.18E-06 100% -3.89E-07 3.61F-06 9.11E-03 1.44E-01 100% 1.50E-03 100% 1.53E-03 100% 1.59E+00 100% 0,00E+00 100% -1.25E-02 Acidification (AP) 1.75E+00 mole of H+ eq. 1.59E+00 1.22E-04 Freshwater eutrophication 1.21 E-03 kg P eq. 100% 4.23E-08 100% 100% 100% 0,00E+00 1.72E-06 100% -5.67E-06 1.93E-07 1.72E-06 1.08E-03 4.09E-04 Marine aquatic eutrophication 2.01E-01 kg of N eq. 100% 5.06E-04 100% 100% 1.76E-01 100% 0,00E+00 2.07E-03 100% 2.22E-02 1.76E-01 -1.07E-03 **Terrestrial eutrophication** 2.26E+00 mole of N eq. 100% 100% 5.19E-03 100% 2.00E+00 100% 0.00E+00 2.00E+00 100% 2.22E-01 5.55E-03 2.56E-02 -1.19E-02 5.89E-01 Photochemical ozone formation 6.68E-01 kg NMVOC eq. 100% 100% 100% 100% 0,00E+00 100% -4.51E-03 1.42E-03 1.15E-03 5.89E-01 6.51E-03 7.08F-02 3.75E-06 **Depletion of abiotic resources - elements** 1.50E-03 kg Sb eq. 100% 4.43E-09 100% 100% 0.00E+00 100% -9.51E-04 100% 1.75E-08 3.75E-06 3.93E-06 1.49E-03 3.75E+03 -4.22E+01 1.57E+00 100% 3.75E+03 7.79E+01 100% Depletion of abiotic resources - fossil fuels 4.25E+03 MJ 100% 4.66E+00 100% 100% 0.00E+00 4.14E+02 5.02E-01 m<sup>3</sup> deprivation 9.61E+00 -9.05F-01 4.24E-04 9.63E-03 9.61E+00 3.85E+01 100% 100% 100% 100% 0,00E+00 Water requirement 4.86E+01 100% worldwide ea. incidence of 5.62E-08 8.73E-06 -3.26E-07 9.49E-09 1.08E-08 8.73E-06 100% **Emission of fine particles** 1.01 E-05 1.29E-06 100% 100% 100% 100% 0.00E+00 diseases

**Product Environmental Profile** 

**E2 LED EMERGENCY EXIT** 

\*represents less than 0.01% of the total life cycle of the reference flow

(1) For the Use phase and according to the current PCR, the information modules B1, B3, B4, B5 and B7, all having indicator values equal to «0» (zero), are not listed in this table

In accordance with current PCR rules, the environmental indicator values in the «Module D» column must not be summed with the values in the «Total Life Cycle» column



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### **Product Environmental Profile**

**E2 LED EMERGENCY EXIT** 



	Total	ife Cycle	Manufactu	uring	Distribut	tion	Installat	tion			Use <sup>(1)</sup>		End of	Life	
	Total		A1-A3	3	A4		A5		Total B1-	-B7	B2	B6	C1-C	4	Module D
Ionizing radiation, human health	8.04E+01	kBq of U235 eq.	7.88E+01	100%	2.71E-04	100%	9.66E-02	100%	1.25E+00	100%	0,00E+00	1.25E+00	2.90E-01	100%	-6.02E+00
Ecotoxicity (fresh water)	4.41E+03	CTUe	5.41E+02	100%	7.61E-02	100%	3.67E+00	100%	3.84E+03	100%	0,00E+00	3.84E+03	2.74E+01	100%	-4.66E+01
Human toxicity, carcinogenic effects	1.25E-06	CTUh	1.22E-06	100%	1.93E-12	100%	4.00E-11	100%	2.97E-08	100%	0,00E+00	2.97E-08	3.76E-09	100%	-4.28E-07
Human toxicity, non-carcinogenic effects	2.11F-06	CTUh	5.62E-07	100%	2.98E-10	100%	2.28E-09	100%	1.50E-06	100%	0,00E+00	1.50E-06	4.14E-08	100%	-1.45E-07
Impacts related to land use/soil quality	9.53E+00	-	7.31E+00	100%	0.00E+00	100%	4.49E-03	100%	1.66E+00	100%	0,00E+00	1.66E+00	5.57E-01	100%	-1.45E-03
Use of renewable primary energy, excluding renewable primary energy resources used as raw materials	2.96E+02	MJ	1.19E+01	100%	2.08E-03	100%	3.24E-01	100%	2.83E+02	100%	0,00E+00	2.83E+02	9.19E-01	100%	-3.11E-01
Use of renewable primary energy resources used as raw materials	1.37E+01	MJ	1.37E+01	100%	0.00E+00	100%	0.00E+00	100%	0.00E+00	100%	0,00E+00	0.00E+00	0.00E+00	100%	0.00E+00
<b>Total use of renewable primary energy</b> <b>resources</b> (primary energy and primary energy resources used as raw materials)	3.10E+02	MJ	2.56E+01	100%	2.08E-03	100%	3.24E-01	100%	2.83E+02	100%	0,00E+00	2.83E+02	9.19E-01	100%	-3.11E-01
Use of non-renewable primary energy, excluding non-renewable primary energy resources used as raw materials	4.19E+03	MJ	3.62E+02	100%	1.57E+00	100%	4.66E+00	100%	3.75E+03	100%	0,00E+00	3.75E+03	7.79E+01	100%	-4.12E+01
Use of non-renewable primary energy resources used as raw materials	5.19E+01	MJ	5.19E+01	100%	0.00E+00	100%	0.00E+00	100%	0.00E+00	100%	0,00E+00	0.00E+00	0.00E+00	100%	-1.01E+00
Total use of non-renewable primary energy resources (primary energy and primary energy resources used as raw materials)	4.25E+03	МЈ	4.14E+02	100%	1.57E+00	100%	4.66E+00	100%	3.75E+03	100%	0,00E+00	3.75E+03	7.79E+01	100%	-4.22E+01

\*represents less than 0.01% of the total life cycle of the reference flow

<sup>(1)</sup> For the Use phase and according to the current PCR, the information modules B1, B3, B4, B5 and B7, all having indicator values equal to «0» (zero), are not listed in this table In accordance with current PCR rules, the environmental indicator values in the «Module D» column must not be summed with the values in the «Total Life Cycle» column Building 4, Nexus Industry Park 43-47 Lyn Parade, Prestons NSW 2170, Australia Phone: 1300 369 777 - Fax: 1300 369 780

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## **Product Environmental Profile**

### **E2 LED EMERGENCY EXIT**



	Total Life Cycle		Total Life Cycle		Total Life Cycle		Total Life Cycle Manufacturing		Distribution		Installation		Use <sup>(1)</sup>				End of Life			
			A1-A3	5	A4		A5		Iotal B1-B	57	B2	86	C1-C2	•	Module D					
Use of secondary materials	1.25E-04	kg	1.25E-04	100%	0.00E+00	100%	0.00E+00	100%	0.00E+00 0	100%	0,00E+00	0.00E+00	0.00E+00	100%	0.00E+00					
Use of renewable secondary fuels	0.00E+00	MJ	0.00E+00	100%	0.00E+00	100%	0.00E+00	100%	0.00E+00	100%	0,00E+00	0.00E+00	0.00E+00	100%	0.00E+00					
Use of non-renewable secondary fuels	0.00E+00	МЈ	0.00E+00	100%	0.00E+00	100%	0.00E+00	100%	0.00E+00	100%	0,00E+00	0.00E+00	0.00E+00	100%	0.00E+00					
Net use of fresh water	1.15E+00	m <sup>3</sup>	9.11E-01	100%	9.87E-06	100%	3.71E-04	100%	2.24E-01	100%	0,00E+00	2.24E-01	1.21E-02	100%	-2.11E-02					
Hazardous waste disposed of	6.70E+01	kg	5.80E+01	100%	0.00E+00	100%	2.34E-01	100%	6.19E+00	100%	0,00E+00	6.19E+00	2.58E+00	100%	-2.63E+01					
Non-hazardous waste disposed of	5.11E+01	kg	1.19E+01	100%	3.92E-03	100%	3.41E-02	100%	3.90E+01	100%	0,00E+00	3.90E+01	1.18E-01	100%	-5.27E-01					
Radioactive waste disposed of	1.29E-02	kg	9.03E-03	100%	2.78E-06	100%	1.44E-05	100%	3.84E-03	100%	0,00E+00	3.84E-03	6.07E-05	100%	-2.81E-04					
Components for re-use	0.00E+00	kg	0.00E+00	100%	0.00E+00	100%	0.00E+00	100%	0.00E+00	100%	0,00E+00	0.00E+00	0.00E+00	100%	0.00E+00					
Materials for recycling	4.52E-01	kg	1.08E-01	100%	0.00E+00	100%	0.00E+00	100%	0.00E+00	100%	0,00E+00	0.00E+00	3.44E-01	100%	0.00E+00					
Materials for energy recovery	0.00E+00	MJ by energy vector	0.00E+00	100%	0.00E+00	100%	0.00E+00	100%	0.00E+00	100%	0,00E+00	0.00E+00	0.00E+00	100%	0.00E+00					
Exported energy	0.00E+00	MJ	0.00E+00	100%	0.00E+00	100%	0.00E+00	100%	0.00E+00	100%	0,00E+00	0.00E+00	0.00E+00	100%	0.00E+00					
Total use of primary energy during the life cycle	4.56E+03	MJ	4.39E+02	100%	1.57E+00	100%	4.98E+00	100%	4.03E+03	100%	0,00E+00	4.03E+03	7.88E+01	100%	-4.25E+01					
Biogenic carbon content of the product	0.00E+00	kg of C	0.00E+00	100%	0.00E+00	100%	0.00E+00	100%	0.00E+00	100%	0,00E+00	0.00E+00	0.00E+00	100%	0.00E+00					
Biogenic carbon content of the associated packaging	2.08E-01	kg of C	2.08E-01	100%	0.00E+00	100%	0.00E+00	100%	0.00E+00	100%	0,00E+00	0.00E+00	0.00E+00	100%	0.00E+00					

\*represents less than 0.01% of the total life cycle of the reference flow

<sup>(1)</sup> For the Use phase and according to the current PCR, the information modules B1, B3, B4, B5 and B7, all having indicator values equal to «0» (zero), are not listed in this table

In accordance with current PCR rules, the environmental indicator values in the «Module D» column must not be summed with the values in the «Total Life Cycle» column

The values of the indicators defined in the PCR-ed4-EN-2021 09 06 are available in the digital database of pep-ecopassport.org website.

For all products concerned (see § «products concerned»), take these impacts values.

For products covered by the PEP other than the Reference product, the environmental impacts of each phase of the lifecycle are calculated with <extrapolation rules>.

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References	Designation	Coefficient of extrapolation of environnemental indicators								
	Designation	Total life Cycle	Manufacturing	Distribution	Installation	Use	End of life			
659003LI	Galaxy E2 LED Running Man Lithium Battery Recessed Exit Sign	0.0	1.0	1.0	1.0	1.0	1.0			
659004LI	E2 LED Exit Sign - black with lithium battery - Galaxy	0.0	1.0	1.0	1.0	1.0	1.0			
659005LI	E2 LED Exit Sign - white finish with lithium battery - Galaxy	0.0	0.8	0.8	1.0	1.0	0.7			
659006LI	E2 LED Exit Sign - black with lithium battery - Galaxy	0.0	0.8	0.8	1.0	1.0	0.7			
684740/LI	E2 LED Exit Sign - white finish with lithium battery - Axiom	0.0	1.0	1.0	1.0	1.0	1.0			
684741/LI	E2 LED Exit Sign - white finish with lithium battery - Axiom	0.0	0.8	0.8	1.0	1.0	0.7			
684743/LI	E2 LED Exit Sign - black with lithium battery - Axiom	0.0	0.8	0.8	1.0	1.0	0.7			
684730/LI	E2 LED Exit Sign - white finish with lithium battery	0.0	1.0	1.0	1.0	1.0	1.0			
684731/LI	E2 LED Exit Sign - white finish with lithium battery	0.0	0.8	0.8	1.0	1.0	0.7			
684733/LI	E2 LED Exit Sign - black finish with lithium battery	0.0	0.8	0.8	1.0	1.0	0.7			

Registration number: LGRP-01949-V01.01-EN	Drafting rules: PEP-PCR-ed4-2021 09 06 Supplemented by PSR-0007-ed2.1-2023 12 08					
Verifier accreditation N°: VH08	Information and reference documents: www.pep-ecopassport.org					
Date of issue: 07-2024	Validity period : 5 years					
Independent verification of the declaration and data, in complian	ce with ISO 14025 : 2006					
Internal 🛛 External 🗌						
The PCR review was conducted by a panel of experts chaired by Jul	ie ORGELET (DDemain)					
PEP are compliant with XP C08-100-1 :2016 or EN 50693 :2019 The elements of the present PEP cannot be compared with elements from another program						
Document in compliance with ISO 14025 : 2006: «Environmental labels and declarations. Type III environmental declarations»						

Environmental data in alignment with EN 15804: 2012 + A2 : 2019