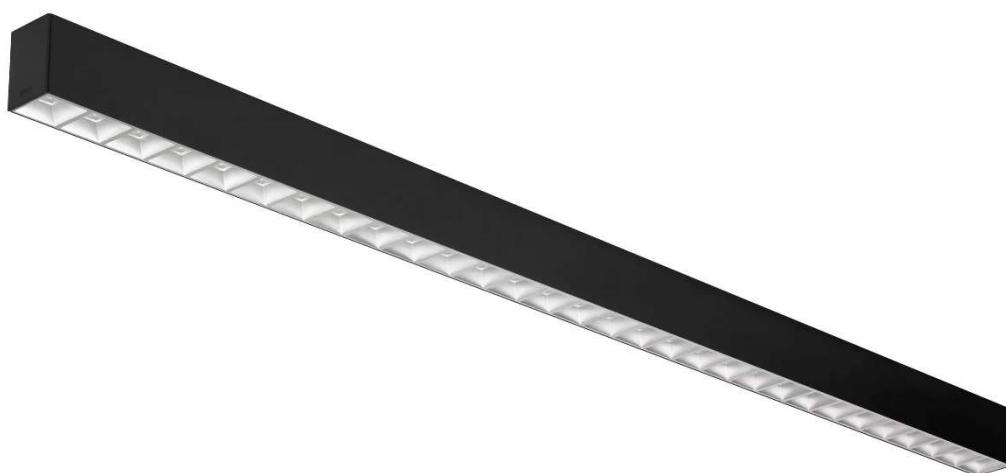



Product Environmental Profile

Simon 860 luminaire



Registration number	SIMO-00007-V01.01-EN	Drafting rules	PCR-ed4-EN-2021 09 06
		Supplemented by	PSR-0014-ed1-2018 07 18
Verifier accreditation number	VH45	Information and reference documents	www.pep-ecopassport.org
Date of issue	February 2025	Validity period	5 years
Independent verification of the declaration and data, in compliance with ISO 14025:2006			
Internal		External	X
The PCR review was conducted by a panel of experts chaired by Julie ORGELET (DDemain)			
PEP are compliant with XP CO08-100-1:2016 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"			

Company information

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Product description and homogeneous environmental family

Simon 860 luminaires are modular-concept lighting system apparatus that distribute the light transmitted by their internal integrated LED module. 860 luminaires have been designed to be the best work companion for health centres, working offices, educational centres spaces and/or libraries, reducing eye strain and maximising energy efficiency through the reduction of direct glare.

Furthermore, Simon 860 luminaires are controllable via DALI-2 protocol, which facilitates the management and regulation of the luminaire intensity according to the availability of the natural light combined with the presence of sensors and taken into consideration the required luminosity by the working applications.

This family of 860 luminaires are composed of a wide range of products, with different versions of fixings, diffusers and lengths. Almost any composition can be created by joining light modules with union connectors or corners to compose the luminous set.. This variation of designs makes



Simon 860 luminaires capable of adapting to the functionality of the space and the need of the people to offer the best lighting results. All the possibilities included in this PEP are in conformity with standards EN IEC 60598-1:2021 + A11:2022; EN IEC 60598-2-1:2021; EN 60598-2-2:2012 and EN IEC 62031:2020+A11:2021.

This Product Environmental Profile (PEP) includes all the elements of the homogeneous environmental family of Simon 860 luminaires. The reference product of the family is a **combination of the best-selling design of the 860 series of luminaires, which is composed of 86041030-109 profile, 86001300-584 LED module and 86045930-039 cover.**

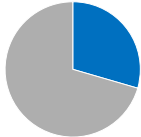



The main technical features of the reference product are described below:

Parameter	860 reference luminaire
Light source	Integrated LED module
Protection index against water and dust	IP20
Nominal operating voltage	220-240 V
Assigned lifetime	30,000 hours
Outgoing luminous flux	1,979 lumens
Electrical power	11.5 W

The present PEP declaration is valid for all the products in the described homogeneous environmental family. The extrapolation-coefficient table provided in section Extrapolation rules shall be used to extrapolate the impact of the reference product to other products from the Simon 860 family.

Constituent materials

Simon 860 reference luminaire is mainly composed of metal, plastic, glass and electronic components. Each part of the luminaire is individually packaged in a plastic bag and in a cardboard box, while the internal assembly components are also packed separately.

	Material	Weight (kg)	Percentage
Metals 29.50 %		Aluminum	1.55E+00 22.71%
		Steel	4.44E-01 6.50%
		Copper	2.00E-02 0.29%
Others 28.92 %		Electronic components	1.95E+00 28.58%
		Glass	2.00E-02 0.29%
		Paper	3.38E-03 0.05%
Plastics 15.59 %		Polycarbonate	9.90E-01 14.50%
		Polypropylene	6.94E-02 1.02%
		Polyethylene terephthalate	3.00E-03 0.04%
		Polyamide	2.00E-03 0.03%
Packaging 25.99 %		Cardboard	1.65E+00 24.15%
		Polyethylene	1.12E-01 1.64%
		Paper	1.31E-02 0.19%
Reference product		5.05E+00	74.01%
Packaging		1.77E+00	25.99%
TOTAL		6.83E+00	100 %

Functional unit

“Provide lighting unit that delivers an outgoing artificial luminous flux of 1,000 lumens during a reference lifetime of 35,000 hours”.

The reference flow is calculated as:

$(1,000/\text{outgoing luminous flux of the analysed product in lumens}) \times (35,000/\text{declared product lifetime of the analysed product in hours})$

The outgoing luminous flux is calculated taking into account the variation of the lumens due to the light management system during the reference lifetime of the luminaires. The reference flow factor for the reference product is:

$$(1,000/1,979) \times (35,000/30,000) = 0.5895$$

Manufacturing stage

This stage includes the production, industrial transformation, manufacturing processes and transportation of raw materials and components making up the reference product. The components of the product received from suppliers are transformed, assembled, packaged and tested by Simon in their manufacturing plant located in Haiian, China. The generated wastes attributed to the manufacturing of the reference product have also been considered. In addition to these aspects, this stage also includes the transport from the manufacturing plant in China to Simon’s last logistics platform in Spain, from where the products are distributed to the customers.

Distribution stage

The products are directly distributed from Simon’s logistics platform to the final customers. The distribution scenario comprises the following destinations:

Destination	Percentage (%)	Type of transport
Barcelona (Spain)	41.57%	Intracontinental transport by lorry
Valencia (Spain)	19.10%	Intracontinental transport by lorry
Tarragona (Spain)	8.99%	Intracontinental transport by lorry
Padrón (Spain)	8.99%	Intracontinental transport by lorry
Pamplona (Spain)	6.74%	Intracontinental transport by lorry
Lisboa (Portugal)	5.62%	Intracontinental transport by lorry
Valladolid (Spain)	5.62%	Intracontinental transport by lorry
Zaragoza (Spain)	3.37%	Intracontinental transport by lorry

Installation stage

Simon 860 luminaire are provided to the customers with all the required elements for the installation. The installation phase is done manually, and no electricity consumption is needed. The products of this homogeneous family are installed in concordance to the installation standards, manufacturer's instruction and professional rules, duly maintained and used for the applications as intended, in conformity with the European Union harmonisation legislation: Directive 2014/35/UE LVD, Directive 2014/30/UE EMC, Directive 2011/65/EU RoHs, Directive 2009/125/CE ErP and regulation REACH (CE) 1907/2006.

The product is packaged without any additional component apart from the product itself (disposed in the end-of-life stage) and the packaging (disposed in the installation stage). For this reason, no installation waste must be considered in the installation of the product apart from the packaging waste. The scenario for the end-of-life of the packaging components has been determined by the PSR for the distribution scope.

Use stage

The light source of the Simon 860 luminaires consists of a high-efficiency integrated LED module, designed to comply with the legal framework. Its high performance is designed for the energy sustainability and to take care of the well-being of the people to whom it illuminates. The light module follows UNE 12464-4 regulation and allows a higher score in LEED, WELL V2 and BREEAM certifications.

The use stage includes the electricity consumption of the reference product during its lifetime. The assigned lifetime for the reference product is 30,000 hours. Simon 860 luminaires are potentially dimmable due to the inclusion of DALI-2 protocol, meaning that their brightness and light intensity can be regulated by an external system at the customer's convenience. In this study, the variation of luminous flux is not applicable since it depends on the customer's use.

This use stage also includes the replacement of the light source and control gear. Considered the lifetime of the luminaire, no replacement of these elements is required since their lifetimes are equal or even higher than the lifetime of the luminaire itself.

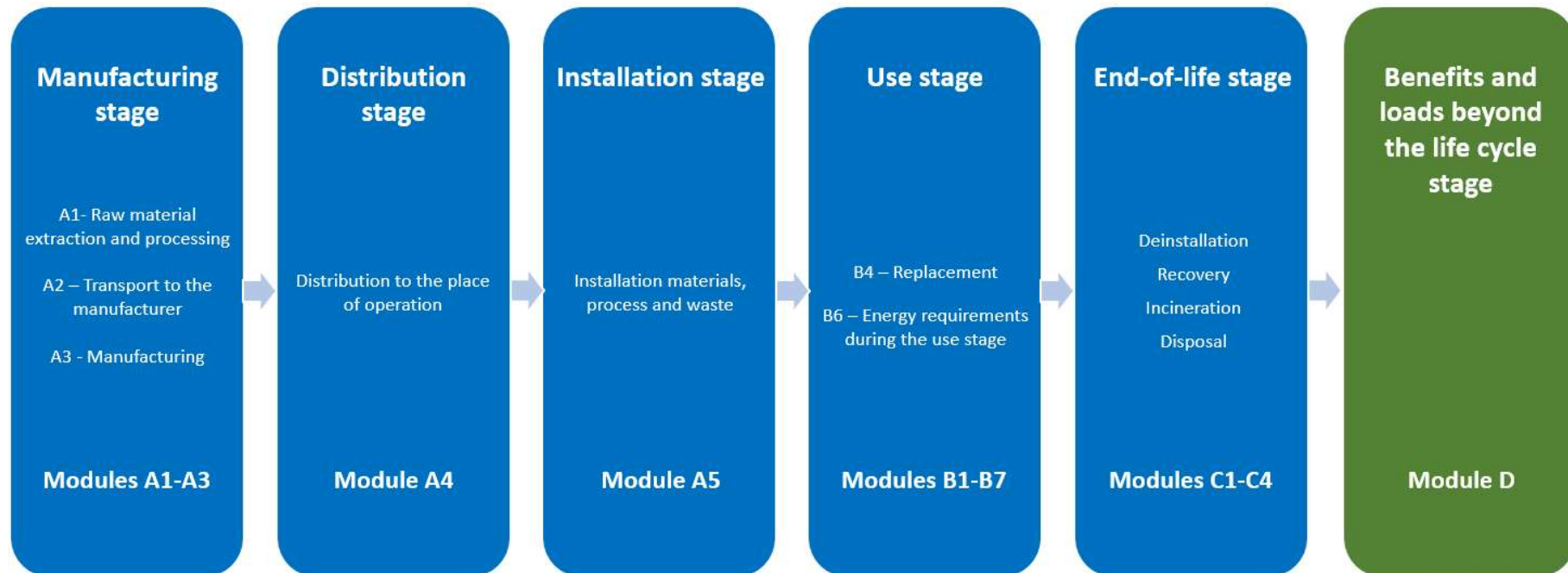
End of life stage

Simon 860 luminaires are subject to specific end-of-life treatment obligations regulated by Directive 2012/19/EU. Simon SAU is affiliated to Ecolum, which is a Spanish organisation authorised for the treatment of WEEE (Waste Electrical and Electronic Equipment).

In the case of this PEP and following the rules of the applicable PSR, an end-of-life scenario have been considered following the percentages of table G-4 of standard EN 50693 due to the lack of specific data. This table provides the material recovery rate and disposal rate per type of material. Additionally, a disassembly process of the luminaire in its specific materials and a transportation to the waste manager is included.

Environmental impacts

The environmental impacts of the reference product have been evaluated for the five stages described above: manufacturing, distribution, installation, use and end-of-life stages. Additionally, each one of these stages have been divided when required into several modules.



The environmental impact assessment has been carried out with Simapro 9.6.0.1 tool and the background databases have been retrieved from Ecoinvent 3.10 libraries.

Results of common based indicators per Functional unit (1,000 lumens during 35,000 hours) of Simon 860 reference luminaire:

Impact category	Unit	Total	Manufacturing stage (modules A1-A3)		Distribution stage (module A4)		Installation stage (module A5)		Module B4	Module B6	Use stage (modules B1-B7)		End-of-life stage (modules C1-C4)		Benefits (module D)
Climate change - Total	kg CO ₂ eq	1.29E+02	7.76E+01	60.29%	3.48E+00	2.71%	1.93E+00	1.50%	0.00E+00	4.31E+01	4.31E+01	33.48%	2.61E+00	2.03%	-1.57E+01
Climate change – Fossil	kg CO ₂ eq	1.27E+02	7.89E+01	61.89%	3.48E+00	2.73%	1.24E-01	0.10%	0.00E+00	4.24E+01	4.24E+01	33.24%	2.60E+00	2.04%	-1.55E+01
Climate change – Biogenic	kg CO ₂ eq	5.26E-01	-1.40E+00	-42.09%	6.23E-04	0.02%	1.80E+00	54.24%	0.00E+00	1.16E-01	1.16E-01	3.49%	5.24E-03	0.16%	-1.05E-01
Climate change - Luluc	kg CO ₂ eq	6.44E-01	6.55E-02	10.17%	1.14E-03	0.18%	1.94E-05	0.00%	0.00E+00	5.77E-01	5.77E-01	89.47%	1.20E-03	0.19%	-8.08E-03
Ozone depletion	kg CFC-11 eq	2.17E-06	1.21E-06	55.64%	6.92E-08	3.19%	1.20E-09	0.06%	0.00E+00	8.74E-07	8.74E-07	40.24%	1.88E-08	0.87%	-8.81E-08
Acidification of soil and water	mol H ⁺ eq	1.07E+00	8.23E-01	76.70%	1.09E-02	1.02%	3.11E-04	0.03%	0.00E+00	2.34E-01	2.34E-01	21.83%	4.66E-03	0.43%	-1.49E-01
Freshwater eutrophication	kg P eq	6.88E-03	5.87E-03	85.22%	2.68E-05	0.39%	6.43E-07	0.01%	0.00E+00	9.40E-04	9.40E-04	13.66%	4.98E-05	0.72%	-9.19E-04
Marine aquatic eutrophication	kg N eq	1.42E-01	9.96E-02	70.04%	3.63E-03	2.55%	1.18E-04	0.08%	0.00E+00	3.80E-02	3.80E-02	26.69%	9.01E-04	0.63%	-1.90E-02
Terrestrial eutrophication	mol N eq	1.63E+00	1.15E+00	70.30%	3.99E-02	2.45%	1.30E-03	0.08%	0.00E+00	4.33E-01	4.33E-01	26.57%	9.90E-03	0.61%	-2.02E-01
Photochemical ozone creation	kg NMVOC eq	5.25E-01	3.47E-01	66.21%	1.71E-02	3.25%	5.01E-04	0.10%	0.00E+00	1.56E-01	1.56E-01	29.75%	3.59E-03	0.68%	-6.19E-02
Depletion of abiotic resources – elements	kg Sb eq	8.01E-03	7.08E-03	88.45%	1.11E-05	0.14%	3.19E-07	0.00%	0.00E+00	8.97E-04	8.97E-04	11.20%	1.70E-05	0.21%	-9.28E-05
Depletion of abiotic resources – Fossil fuels	MJ	2.31E+03	9.00E+02	39.01%	4.89E+01	2.12%	8.66E-01	0.04%	0.00E+00	1.35E+03	1.35E+03	58.29%	1.26E+01	0.54%	-1.60E+02
Water use	m ³ eq. depriv.	6.11E+01	1.87E+01	30.56%	2.00E-01	0.33%	5.67E-03	0.01%	0.00E+00	4.21E+01	4.21E+01	68.84%	1.60E-01	0.26%	-1.45E+00

Results of common based indicators per Declared unit (1,979 lumens during 30,000 hours) of Simon 860 reference luminaire:

Impact category	Unit	Total	Manufacturing stage (modules A1-A3)	Distribution stage (module A4)	Installation stage (module A5)	Module B4	Module B6	Use stage (modules B1-B7)	End-of-life stage (modules C1-C4)	Benefits (module D)
Climate change - Total	kg CO ₂ eq	2.18E+02	1.32E+02	5.91E+00	3.27E+00	0.00E+00	7.31E+01	7.31E+01	4.42E+00	-2.66E+01
Climate change – Fossil	kg CO ₂ eq	2.16E+02	1.34E+02	5.91E+00	2.11E-01	0.00E+00	7.19E+01	7.19E+01	4.41E+00	-2.64E+01
Climate change – Biogenic	kg CO ₂ eq	8.93E-01	-2.38E+00	1.06E-03	3.06E+00	0.00E+00	1.97E-01	1.97E-01	8.88E-03	-1.78E-01
Climate change - Luluc	kg CO ₂ eq	1.09E+00	1.11E-01	1.93E-03	3.29E-05	0.00E+00	9.78E-01	9.78E-01	2.04E-03	-1.37E-02
Ozone depletion	kg CFC-11 eq	3.68E-06	2.05E-06	1.17E-07	2.04E-09	0.00E+00	1.48E-06	1.48E-06	3.19E-08	-1.49E-07
Acidification of soil and water	mol H ⁺ eq	1.82E+00	1.40E+00	1.85E-02	5.28E-04	0.00E+00	3.97E-01	3.97E-01	7.90E-03	-2.52E-01
Freshwater eutrophication	kg P eq	1.17E-02	9.95E-03	4.54E-05	1.09E-06	0.00E+00	1.59E-03	1.59E-03	8.45E-05	-1.56E-03
Marine aquatic eutrophication	kg N eq	2.41E-01	1.69E-01	6.15E-03	2.00E-04	0.00E+00	6.44E-02	6.44E-02	1.53E-03	-3.22E-02
Terrestrial eutrophication	mol N eq	2.77E+00	1.94E+00	6.77E-02	2.21E-03	0.00E+00	7.35E-01	7.35E-01	1.68E-02	-3.43E-01
Photochemical ozone creation	kg NMVOC eq	8.90E-01	5.89E-01	2.89E-02	8.49E-04	0.00E+00	2.65E-01	2.65E-01	6.08E-03	-1.05E-01
Depletion of abiotic resources – elements	kg Sb eq	1.36E-02	1.20E-02	1.89E-05	5.41E-07	0.00E+00	1.52E-03	1.52E-03	2.88E-05	-1.57E-04
Depletion of abiotic resources – Fossil fuels	MJ	3.91E+03	1.53E+03	8.29E+01	1.47E+00	0.00E+00	2.28E+03	2.28E+03	2.13E+01	-2.72E+02
Water use	m ³ eq. depriv.	1.04E+02	3.17E+01	3.40E-01	9.62E-03	0.00E+00	7.14E+01	7.14E+01	2.71E-01	-2.47E+00

Results of optional impact indicators per Functional Unit (1,000 lumens during 35,000 hours) of Simon 860 reference luminaire:

	Unit	Total	Manufacturing (A1-A3)	Distribution (A4)	Installation (A5)	B4	B6	Use (B1-B7)	End of Life (C1-C4)	Benefits (D)
PERE	MJ	5.51E+02	7.21E+01	8.01E-01	6.55E-02	0.00E+00	4.77E+02	4.77E+02	1.24E+00	-1.22E+01
PERM	MJ	1.89E+01	1.89E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PERT	MJ	5.70E+02	9.09E+01	8.01E-01	6.55E-02	0.00E+00	4.77E+02	4.77E+02	1.24E+00	-1.22E+01
PENRE	MJ	2.28E+03	8.77E+02	4.89E+01	8.66E-01	0.00E+00	1.35E+03	1.35E+03	1.26E+01	-1.60E+02
PENRM	MJ	2.28E+01	2.28E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PENRT	MJ	2.31E+03	9.00E+02	4.89E+01	8.66E-01	0.00E+00	1.35E+03	1.35E+03	1.26E+01	-1.60E+02
SM	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
RSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NRSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
FW	m ³	1.21E+00	5.42E-01	6.69E-03	4.13E-04	0.00E+00	6.59E-01	6.59E-01	4.22E-03	-4.20E-02

Results of optional impact indicators per Declared unit (1,979 lumens during 30,000 hours) of Simon 860 reference luminaire:

	Unit	Total	Manufacturing (A1-A3)	Distribution (A4)	Installation (A5)	B4	B6	Use (B1-B7)	End of Life (C1-C4)	Benefits (D)
PERE	MJ	9.35E+02	1.22E+02	1.36E+00	1.11E-01	0.00E+00	8.10E+02	8.10E+02	2.10E+00	-2.07E+01
PERM	MJ	3.20E+01	3.20E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PERT	MJ	9.67E+02	1.54E+02	1.36E+00	1.11E-01	0.00E+00	8.10E+02	8.10E+02	2.10E+00	-2.07E+01
PENRE	MJ	3.88E+03	1.49E+03	8.29E+01	1.47E+00	0.00E+00	2.28E+03	2.28E+03	2.13E+01	-2.72E+02
PENRM	MJ	3.87E+01	3.87E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PENRT	MJ	3.91E+03	1.53E+03	8.29E+01	1.47E+00	0.00E+00	2.28E+03	2.28E+03	2.13E+01	-2.72E+02
SM	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
RSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NRSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
FW	m ³	2.06E+00	9.19E-01	1.14E-02	7.01E-04	0.00E+00	1.12E+00	1.12E+00	7.16E-03	-7.12E-02

PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy re-sources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW: Fresh Water Use.

Results of waste impact indicators per Functional Unit (1,000 lumens during 35,000 hours) of Simon 860 reference luminaire:

	Unit	Total	Manufacturing (A1-A3)	Distribution (A4)	Installation (A5)	B4	B6	Use (B1-B7)	End of Life (C1-C4)	Benefits (D)
Hazardous waste disposed	kg	5.94E-01	1.42E-02	3.29E-04	6.38E-06	0.00E+00	3.81E-03	3.81E-03	5.75E-01	-3.80E-04
Non-hazardous waste disposed	kg	1.14E+01	3.69E+00	2.32E+00	1.25E-01	0.00E+00	4.35E+00	4.35E+00	8.66E-01	-4.85E-01
Radioactive waste disposed	kg	1.21E-02	1.05E-03	1.56E-05	6.85E-07	0.00E+00	1.10E-02	1.10E-02	1.84E-05	-1.95E-04
Components for re-use	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Material for recycling	kg	1.81E+00	1.05E-01	0.00E+00	8.30E-01	0.00E+00	0.00E+00	0.00E+00	8.71E-01	0.00E+00
Materials for energy recovery	kg	1.95E+00	7.84E-01	0.00E+00	1.13E-01	0.00E+00	0.00E+00	0.00E+00	1.05E+00	0.00E+00
Exported energy. electricity	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Results of waste impact indicators per Declared unit (1,979 lumens during 30,000 hours) of Simon 860 reference luminaire:

	Unit	Total	Manufacturing (A1-A3)	Distribution (A4)	Installation (A5)	B4	B6	Use (B1-B7)	End of Life (C1-C4)	Benefits (D)
Hazardous waste disposed	kg	1.01E+00	2.40E-02	5.59E-04	1.08E-05	0.00E+00	6.46E-03	6.46E-03	9.76E-01	-6.45E-04
Non-hazardous waste disposed	kg	1.93E+01	6.26E+00	3.94E+00	2.12E-01	0.00E+00	7.37E+00	7.37E+00	1.47E+00	-8.24E-01
Radioactive waste disposed	kg	2.05E-02	1.78E-03	2.64E-05	1.16E-06	0.00E+00	1.87E-02	1.87E-02	3.12E-05	-3.31E-04
Components for re-use	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Material for recycling	kg	3.07E+00	1.79E-01	0.00E+00	1.41E+00	0.00E+00	0.00E+00	0.00E+00	1.48E+00	0.00E+00
Materials for energy recovery	kg	3.31E+00	1.33E+00	0.00E+00	1.91E-01	0.00E+00	0.00E+00	0.00E+00	1.79E+00	0.00E+00
Exported energy. electricity	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Results of biogenic carbon per Functional Unit (1,000 lumens during 35,000 hours) of Simon 860 reference luminaire:

	Unit	Quantity
Biogenic carbon content of the product	Kg of C	7.84E-04
Biogenic carbon content of the packaging	kg of C	4.93E-01

Results of biogenic carbon per Declared unit (1,979 lumens during 30,000 hours) of Simon 860 reference luminaire:

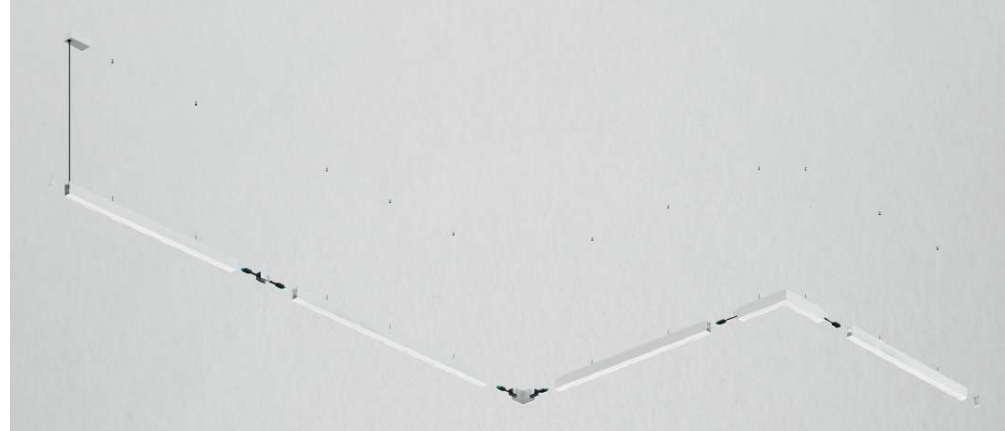
	Unit	Quantity
Biogenic carbon content of the product	Kg of C	1.33E-03
Biogenic carbon content of the packaging	kg of C	8.36E-01

Extrapolation rules

Extrapolations factors have been calculated in order to extrapolate the results of the reference product for the rest of the products of the homogeneous environmental family of Simon 860 luminaires.

Simon 860 luminaires are generally composed of four elements: one or several aluminium profiles, one or several aluminium covers/connectors, one or several integrated LED modules and one or several light diffusers.

The customer can connect any desired element of the family to compose the final luminaire. For this reason, the customer must sum the extrapolation factors of each part of the final luminaire to obtain the extrapolation factor of the desired 860 luminaire.



The following formula summarises the method to obtain the extrapolation factor for each stage of the life cycle of the complete luminaire, which always include an aluminium profile, one cover and an integrated LED module (the presence of additional profiles, covers, connectors, diffusers and light modules depends on the necessities of the customer and the luminaire location):

$$\textit{Extrapolation factor of the complete 860 luminaire for each stage} = \sum_{i=1}^n \textit{Factor } A_i + \sum_{i=1}^n \textit{Factor } B_i + \sum_{i=1}^n \textit{Factor } C_i + \sum_{i=1}^n \textit{Factor } D_i$$

The extrapolation factors for each element of the homogeneous family are based on the main environmental aspects for each life cycle stage, since all the products of the family have the same manufacturing method and materials:

- Manufacturing, distribution and benefits stages: the total weight of each product (sum of the product itself and the packaging).
- Installation stage: weight of the packaging components of each product.
- Use stage: energy consumption due to the electrical losses of each product during the reference lifetime.
- End-of-life stage: weight of each product without the packaging components.

Extrapolation coefficients of the profiles – Factor A:

Reference code	Manufacturing stage	Distribution stage	Installation stage	Use stage (Module B4)	Use stage (Module B6)	End-of-life stage	Benefits stage
86004430-209	0.10	0.10	0.04	0.00	0.12	0.10	0.10
86004438-209	0.10	0.10	0.04	0.00	0.12	0.10	0.10
86021030-109	0.23	0.23	0.22	0.00	0.23	0.23	0.23
86021038-109	0.23	0.23	0.22	0.00	0.23	0.23	0.23
86022030-109	0.31	0.31	0.32	0.00	0.31	0.31	0.31
86022038-109	0.31	0.31	0.32	0.00	0.31	0.31	0.31
86023030-109	0.46	0.46	0.45	0.00	0.46	0.46	0.46
86023038-109	0.46	0.46	0.45	0.00	0.46	0.46	0.46
86024330-309	0.18	0.18	0.13	0.00	0.19	0.18	0.18
86024338-309	0.18	0.18	0.13	0.00	0.19	0.18	0.18
86024430-209	0.11	0.11	0.05	0.00	0.12	0.11	0.11
86024438-209	0.11	0.11	0.05	0.00	0.12	0.11	0.11
86024530-209	0.15	0.15	0.13	0.00	0.16	0.15	0.15
86024538-209	0.15	0.15	0.13	0.00	0.16	0.15	0.15
86024630-209	0.15	0.15	0.13	0.00	0.16	0.15	0.15
86024638-209	0.13	0.13	0.00	0.00	0.16	0.13	0.13
86025930-039	0.01	0.01	0.00	0.00	0.01	0.01	0.01
86025938-039	0.01	0.01	0.00	0.00	0.01	0.01	0.01
86041030-109*	0.22	0.22	0.22	0.00	0.22	0.22	0.22
86041038-109	0.22	0.22	0.22	0.00	0.22	0.22	0.22
86042030-109	0.30	0.30	0.31	0.00	0.30	0.30	0.30
86042038-109	0.30	0.30	0.31	0.00	0.30	0.30	0.30
86043030-109	0.45	0.45	0.45	0.00	0.45	0.45	0.45
86043038-109	0.45	0.45	0.45	0.00	0.45	0.45	0.45
86044330-309	0.17	0.17	0.13	0.00	0.18	0.17	0.17

Reference code	Manufacturing stage	Distribution stage	Installation stage	Use stage (Module B4)	Use stage (Module B6)	End-of-life stage	Benefits stage
86044338-309	0.17	0.17	0.13	0.00	0.18	0.17	0.17
86044530-209	0.15	0.15	0.13	0.00	0.16	0.15	0.15
86044538-209	0.15	0.15	0.13	0.00	0.16	0.15	0.15
86044630-209	0.15	0.15	0.13	0.00	0.16	0.15	0.15
86044638-209	0.15	0.15	0.13	0.00	0.16	0.15	0.15

Extrapolation coefficients of the covers and connectors – Factor B:

Reference code	Manufacturing stage	Distribution stage	Installation stage	Use stage (Module B4)	Use stage (Module B6)	End-of-life stage	Benefits stage
86045930-039*	0.03	0.03	0.03	0.00	0.03	0.03	0.03
86045938-039	0.03	0.03	0.03	0.00	0.03	0.03	0.03
86048730-039	0.05	0.05	0.03	0.00	0.05	0.05	0.05
86048738-039	0.05	0.05	0.03	0.00	0.05	0.05	0.05
86048930-039	0.07	0.07	0.06	0.00	0.07	0.07	0.07
86048938-039	0.07	0.07	0.06	0.00	0.07	0.07	0.07
86096930-039	0.17	0.17	0.12	0.00	0.18	0.17	0.17
86096938-039	0.17	0.17	0.12	0.00	0.18	0.17	0.17
86097900-039	0.10	0.10	0.12	0.00	0.10	0.10	0.10
86097905-039	0.35	0.35	0.31	0.00	0.36	0.35	0.35
86098700-039	0.05	0.05	0.03	0.00	0.05	0.05	0.05
86098730-039	0.36	0.36	0.37	0.00	0.36	0.36	0.36
86098738-039	0.36	0.36	0.37	0.00	0.36	0.36	0.36
86098830-039	0.09	0.09	0.31	0.00	0.08	0.09	0.09
86098838-039	0.09	0.09	0.31	0.00	0.08	0.09	0.09
86098900-039	0.08	0.08	0.06	0.00	0.08	0.08	0.08
86099930-039	0.54	0.54	0.61	0.00	0.54	0.54	0.54
86099938-039	0.54	0.54	0.61	0.00	0.54	0.54	0.54

Extrapolation coefficients of the diffuser – Factor C:

Reference code	Manufacturing stage	Distribution stage	Installation stage	Use stage (Module B4)	Use stage (Module B6)	End-of-life stage	Benefits stage
86099900-510	0.03	0.03	0.06	0.00	0.03	0.03	0.03
86099900-520	0.03	0.03	0.06	0.00	0.03	0.03	0.03
86099900-612	0.33	0.33	1.71	0.00	0.21	0.33	0.33
86099900-616	0.43	0.43	2.20	0.00	0.29	0.43	0.43
86099900-624	0.66	0.66	3.42	0.00	0.43	0.66	0.66
86099900-700	0.42	0.42	1.22	0.00	0.36	0.42	0.42
86099900-712	0.46	0.46	1.71	0.00	0.36	0.46	0.46
86099900-716	0.61	0.61	2.14	0.00	0.48	0.61	0.61
86099900-724	0.94	0.94	3.67	0.00	0.71	0.94	0.94

Extrapolation coefficients of the light module – Factor D:

Reference code	Manufacturing stage	Distribution stage	Installation stage	Use stage (Module B4)	Use stage (Module B6)	End-of-life stage	Benefits stage
86001300-383	0.63	0.63	0.84	1.00	0.58	0.63	0.63
86001300-384	0.63	0.63	0.84	1.00	0.58	0.63	0.63
86001300-393	0.63	0.63	0.84	1.00	0.58	0.63	0.63
86001300-394	0.63	0.63	0.84	1.00	0.58	0.63	0.63
86001300-399	0.72	0.72	0.60	1.00	0.75	0.72	0.72
86001300-583	0.75	0.75	0.75	0.75	0.75	0.75	0.75
86001300-584*	0.75	0.75	0.75	0.75	0.75	0.75	0.75
86001300-593	0.75	0.75	0.75	0.75	0.75	0.75	0.75
86001300-594	0.75	0.75	0.75	0.75	0.75	0.75	0.75
86001300-599	0.75	0.75	0.75	0.75	0.75	0.75	0.75
86002300-383	0.78	0.78	1.08	1.33	0.70	0.78	0.78
86002300-384	0.78	0.78	1.08	1.33	0.70	0.78	0.78

Reference code	Manufacturing stage	Distribution stage	Installation stage	Use stage (Module B4)	Use stage (Module B6)	End-of-life stage	Benefits stage
86002300-393	0.78	0.78	1.08	1.33	0.70	0.78	0.78
86002300-394	0.78	0.78	1.08	1.33	0.70	0.78	0.78
86002300-399	0.78	0.78	1.08	1.33	0.70	0.78	0.78
86002300-583	0.96	0.96	0.99	1.08	0.95	0.96	0.96
86002300-584	0.96	0.96	0.99	1.08	0.95	0.96	0.96
86002300-593	0.96	0.96	0.99	1.08	0.95	0.96	0.96
86002300-594	0.96	0.96	0.99	1.08	0.95	0.96	0.96
86002300-599	0.96	0.96	0.99	1.08	0.95	0.96	0.96
86003300-383	1.08	1.08	1.55	1.99	0.96	1.08	1.08
86003300-384	1.08	1.08	1.55	1.99	0.96	1.08	1.08
86003300-393	0.78	0.78	1.08	1.99	0.70	0.78	0.78
86003300-394	0.78	0.78	1.08	1.99	0.70	0.78	0.78
86003300-399	1.37	1.37	1.49	1.99	1.34	1.37	1.37
86003300-583	1.37	1.37	1.49	1.49	1.34	1.37	1.37
86003300-584	1.37	1.37	1.49	1.49	1.34	1.37	1.37
86003300-593	1.37	1.37	1.49	1.49	1.34	1.37	1.37
86003300-594	1.37	1.37	1.49	1.49	1.34	1.37	1.37
86003300-599	1.37	1.37	1.49	1.49	1.34	1.37	1.37
86004300-183	0.45	0.45	0.45	0.58	0.45	0.45	0.45
86004300-184	0.45	0.45	0.45	0.58	0.45	0.45	0.45
86004300-193	0.45	0.45	0.45	0.58	0.45	0.45	0.45
86004300-194	0.45	0.45	0.45	0.58	0.45	0.45	0.45
86051330-793	0.81	0.81	0.90	0.80	0.78	0.81	0.81
86051330-794	0.81	0.81	0.90	0.80	0.78	0.81	0.81
86051338-793	0.81	0.81	0.90	0.80	0.78	0.81	0.81
86051338-794	0.81	0.81	0.90	0.80	0.78	0.81	0.81
86052330-793	1.11	1.11	1.19	1.05	1.08	1.11	1.11
86052330-794	1.11	1.11	1.19	1.05	1.08	1.11	1.11

Reference code	Manufacturing stage	Distribution stage	Installation stage	Use stage (Module B4)	Use stage (Module B6)	End-of-life stage	Benefits stage
86052338-793	1.11	1.11	1.19	1.05	1.08	1.11	1.11
86052338-794	1.11	1.11	1.19	1.05	1.08	1.11	1.11
86053330-793	1.73	1.73	1.19	1.60	1.87	1.73	1.73
86053330-794	1.73	1.73	1.19	1.60	1.87	1.73	1.73
86053338-793	1.73	1.73	1.19	1.60	1.87	1.73	1.73
86053338-794	1.73	1.73	1.19	1.60	1.87	1.73	1.73

* Elements of the reference product.