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Product Environmental Profile
EPD according to ISO 14025
Streetlight SL 31

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EPD prepared by	Sphera Solutions GmbH		
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 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»			

1. General information

1.1 Product information

The Streetlight SL 31 Midi toolless (5XH7D41T08NA) is a pole luminaire with primary light control with lens of Polymethylmethacrylate (PMMA). The primary optical cover is made of transparent glass, whereas the housing is made of a powder coated diecast aluminium.

The light distribution type is ST1.0a with direct asymmetric light distribution. The light source of the luminaire are high power LED modules with a rated luminous flux of 23,570 lm and a luminous efficiency of 157.7 lm/W. The luminaire can be controlled remotely via Zhaga nodes, preprogramed in the workshop and is powered by cable with a nominal operating voltage between 220 and 240 V.

The toolless version of the luminaire family may be opened for maintenance without the use of tools.

The product bears the CE-marking, is ENEC, VDE certified, and can be used for outdoor applications at ambient temperature between -40 and +50 °C.

Table 1 summarizes the key technological data of the analyzed product.

Table 1: Key technological data

Information	Unit	
Product code	-	5XH7D41T08NA
Light source	-	LED
Power supply	-	50/60 Hz
Colour temperature	K	4,000
Protection index for water and dust (IP)	-	66
Impact resistance index (IK)	-	09
Nominal operating voltage	V	220 – 240
Declared lifetime of the luminaire (L96B10)	Hours	100,000
Declaration lifetime of the light source	Hours	100,000
Useful output flux	Lumen	23,570
Electrical input power (Nominal power)	W	149,50
Electrical input power (Typical power)	W	66.7
Luminous efficiency	Lumen/W	157.7
Length	mm	578
Width/Diameter	mm	361
Height	mm	96
Reference use scenario	-	Outdoor application

Based on the declared lifetime of the luminaire and the average annual operating hours by the selected building type according to EN 13201-5:2016, the luminaire has the following annual service time:

Table 2: Use scenario

Type of building	Annual operating hours by default	Operational lifetime (years)
Outdoor application (urban / tunnel / zone, open space)	4,000	25

Following the requirements of the PSR, the operational lifetime is 25 years.

1.2 Overview

The general information used for the EPD are listed below:

Table 3: Basic EPD information

Information	
Functional unit	Provide lighting that delivers an outgoing artificial luminous flux of 1,000 lumens during a reference lifetime of 35,000 hours
Reference flow / declared unit*	0.015 pieces
Life cycle stages covered	Cradle-to-grave and Module D
Product category according to PSR	Luminaires
Product family name	Streetlight SL 31
All products of the product family (Each entry stands for a cluster of variants;"..." is a placeholder for different product codes) (Values on power consumption refer to 50% of the nominal power)	5XH7D41T08NA (reference product) 5XH1... micro: [4,5..6,1W] [995..1346lm] 5XH1... micro: [4,5..6,1W] [1347..1822lm] 5XH1... micro: [4,5..6,1W] [1823..2466lm] 5XH1... micro: [6,2..8,4W] [1000..1352lm] 5XH1... micro: [6,2..8,4W] [1353..1830lm] 5XH1... micro: [6,2..8,4W] [1831..2477lm] 5XH1... micro: [6,2..8,4W] [2478..3352lm] 5XH1... micro: [8,5..10,8W] [1600..2036lm] 5XH1... micro: [8,5..10,8W] [2037..2592lm] 5XH1... micro: [8,5..10,8W] [2593..3300lm] 5XH1... micro: [8,5..10,8W] [3301..4201lm] 5XH1... micro: [10,9..13,8W] [1800..2272lm] 5XH1... micro: [10,9..13,8W] [2273..2892lm] 5XH1... micro: [10,9..13,8W] [2893..3682lm] 5XH1... micro: [10,9..13,8W] [3683..4687lm] 5XH1... micro: [10,9..13,8W] [4688..5966lm] 5XH1... micro: [13,9..18,7W] [2293..3102lm] 5XH1... micro: [13,9..18,7W] [3103..4198lm] 5XH1... micro: [13,9..18,7W] [4199..5681lm] 5XH1... micro: [13,9..18,7W] [5682..7687lm] 5XH2... mini: [16,4..20W] [3677..4484lm] 5XH2... mini: [16,4..20W] [4485..5469lm] 5XH2... mini: [16,4..20W] [5470..6670lm] 5XH2... mini: [20,1..24,8W] [5300..6530lm] 5XH2... mini: [20,1..24,8W] [6531..8047lm] 5XH2... mini: [20,1..24,8W] [8048..9916lm] 5XH2... mini: [24,9..32,1W] [6500..8008lm] 5XH2... mini: [24,9..32,1W] [8009..9868lm] 5XH2... mini: [24,9..32,1W] [9869..12160lm] 5XH2... mini: [32,2..41,4W] [6786..8724lm] 5XH2... mini: [32,2..41,4W] [8725..11217lm] 5XH2... mini: [32,2..41,4W] [11218..14422lm] 5XH3... midi: [35,5..43,9W] [9548..11812lm] 5XH3... midi: [35,5..43,9W] [11813..14614lm] 5XH3... midi: [35,5..43,9W] [14615..18080lm] 5XH3... midi: [44..54,4W] [9500..11752lm]

5XH3... midi: [44..54,4W] [11753..14540lm]
5XH3... midi: [44..54,4W] [14541..17989lm]
5XH3... midi: [44..54,4W] [17990..22256lm]
5XH3... midi: [54,5..65,9W] [17482..22000lm]
5XH3... midi: [54,5..65,9W] [22001..26603lm]
5XH3... midi: [66..79,6W] [18219..22000lm]
5XH3... midi: [66..79,6W] [22001..26727lm]
5XH3... midi: [66..79,6W] [26728..32275lm]

5XH4... maxi: [81,5..94,9W] [19289..22461lm]
5XH4... maxi: [81,5..94,9W] [22462..26157lm]
5XH4... maxi: [81,5..94,9W] [26158..30462lm]
5XH4... maxi: [81,5..94,9W] [30463..35474lm]
5XH4... maxi: [81,5..94,9W] [35475..41310lm]
5XH4... maxi: [95..110,6W] [22928..26699lm]
5XH4... maxi: [95..110,6W] [26700..31092lm]
5XH4... maxi: [95..110,6W] [31093..36207lm]
5XH4... maxi: [95..110,6W] [36208..42164lm]
5XH4... maxi: [95..110,6W] [42165..49101lm]

5XH5... micro toolless: [4,5..6,1W] [715..832lm]
5XH5... micro toolless: [4,5..6,1W] [833..1127lm]
5XH5... micro toolless: [4,5..6,1W] [1128..1526lm]
5XH5... micro toolless: [4,5..6,1W] [1527..2065lm]
5XH5... micro toolless: [6,2..8W] [950..1231lm]
5XH5... micro toolless: [6,2..8W] [1232..1597lm]
5XH5... micro toolless: [6,2..8W] [1598..2071lm]
5XH5... micro toolless: [6,2..8W] [2072..2686lm]
5XH5... micro toolless: [6,2..8W] [2687..3483lm]
5XH5... micro toolless: [8,1..10,5W] [1250..1620lm]
5XH5... micro toolless: [8,1..10,5W] [1621..2101lm]
5XH5... micro toolless: [8,1..10,5W] [2102..2725lm]
5XH5... micro toolless: [8,1..10,5W] [2726..3534lm]
5XH5... micro toolless: [8,1..10,5W] [3535..4583lm]
5XH5... micro toolless: [10,6..13,8W] [1650..2139lm]
5XH5... micro toolless: [10,6..13,8W] [2140..2774lm]
5XH5... micro toolless: [10,6..13,8W] [2775..3597lm]
5XH5... micro toolless: [10,6..13,8W] [3598..4664lm]
5XH5... micro toolless: [10,6..13,8W] [4665..6048lm]
5XH5... micro toolless: [13,9..18,9W] [1768..2391lm]
5XH5... micro toolless: [13,9..18,9W] [2392..3235lm]
5XH5... micro toolless: [13,9..18,9W] [3236..4377lm]
5XH5... micro toolless: [13,9..18,9W] [4378..5923lm]
5XH5... micro toolless: [13,9..18,9W] [5924..8014lm]

5XH6... mini toolless: [14,8..20W] [2425..3280lm]
5XH6... mini toolless: [14,8..20W] [3281..4439lm]
5XH6... mini toolless: [14,8..20W] [4440..6007lm]
5XH6... mini toolless: [14,8..20W] [6008..8128lm]
5XH6... mini toolless: [20,1..25W] [3200..3977lm]
5XH6... mini toolless: [20,1..25W] [3978..4945lm]
5XH6... mini toolless: [20,1..25W] [4946..6148lm]
5XH6... mini toolless: [20,1..25W] [6149..7643lm]
5XH6... mini toolless: [20,1..25W] [7644..9502lm]
5XH6... mini toolless: [25,1..31,2W] [4000..4972lm]
5XH6... mini toolless: [25,1..31,2W] [4973..6181lm]
5XH6... mini toolless: [25,1..31,2W] [6182..7684lm]

	5XH6... mini toolless: [25,1..31,2W] [7685..9553lm] 5XH6... mini toolless: [25,1..31,2W] [9554..11876lm] 5XH6... mini toolless: [31,3..42,3W] [4400..5952lm] 5XH6... mini toolless: [31,3..42,3W] [5953..8053lm] 5XH6... mini toolless: [31,3..42,3W] [8054..10896lm] 5XH6... mini toolless: [31,3..42,3W] [10897..14743lm] 5XH7... midi toolless: [33,6..45,4W] [5591..7564lm] 5XH7... midi toolless: [33,6..45,4W] [7565..10235lm] 5XH7... midi toolless: [33,6..45,4W] [10236..13848lm] 5XH7... midi toolless: [33,6..45,4W] [13849..18736lm] 5XH7... midi toolless: [45,5..61,6W] [7000..9470lm] 5XH7... midi toolless: [45,5..61,6W] [9471..12813lm] 5XH7... midi toolless: [45,5..61,6W] [12814..17336lm] 5XH7... midi toolless: [45,5..61,6W] [17337..23455lm] 5XH7... midi toolless: [61,7..83,5W] [9500..12852lm] 5XH7... midi toolless: [61,7..83,5W] [12853..17389lm] 5XH7... midi toolless: [61,7..83,5W] [17390..22000lm] 5XH7... midi toolless: [61,7..83,5W] [22001..29766lm] 5XH8... maxi toolless: [81,1..94,9W] [14838..17368lm] 5XH8... maxi toolless: [81,1..94,9W] [17369..20331lm] 5XH8... maxi toolless: [81,1..94,9W] [20332..23799lm] 5XH8... maxi toolless: [81,1..94,9W] [23800..27858lm] 5XH8... maxi toolless: [81,1..94,9W] [27859..32609lm] 5XH8... maxi toolless: [81,1..94,9W] [32610..38170lm] 5XH8... maxi toolless: [95..111,2W] [17356..20315lm] 5XH8... maxi toolless: [95..111,2W] [20316..23780lm] 5XH8... maxi toolless: [95..111,2W] [23781..27836lm] 5XH8... maxi toolless: [95..111,2W] [27837..32583lm] 5XH8... maxi toolless: [95..111,2W] [32584..38140lm] 5XH8... maxi toolless: [95..111,2W] [38141..44645lm]
Extrapolation rules	The tables in the last section provide information about the used extrapolation rules and the resulting extrapolation factors according to the applied PSR.

The reference flow is calculated as: (1,000/outgoing luminous flux of the analyzed product in lumens) x (35,000/declared product lifetime of the analyzed product in hours)

Consequently, the reference flow of the following product correspond to:

(1,000/23,570) x (35,000/100,000) = 0,015 pieces per functional unit

2 Constituent materials

2.1 Overview

Table 4: Packed product composition

Information	Weight [in kg]	Share
Total Weight	9.56	100.0%
Product	8.2	85.8%
Packaging	1.36	14.2%
Accessories	0	0.0%

2.2 Product

Table 5: Material composition - product

Information	Weight [in kg]	Share
Total Weight	8.20	100.0%
Metal	5.22	63.7%
-Aluminium	5.09	62.1%
-Steel	0.13	1.6%
Glass	1.87	22.8%
Electronics	0.61	7.4%
Plastic	0.39	4.8%
-Polyester	0.09	1.1%
-PMMA	0.14	1.7%
-PC/ABS	0.07	0.9%
-EPDM	0.05	0.6%
-PA	0.03	0.4%
-Other	0.01	0.1%
Electromechanicals	0.12	1.5%

2.3 Packaging

Table 6: Material composition - packaging

Information	Weight [in kg]	Share
Total Weight	1.36	100.0%
Cardboard	1.34	98.5%
Paper	0.02	1.5%

2.4 Product extensions

The product is sold with and without power cables type H07RN. These power cables can have either 2 (106g/m; cross section 1.5 mm^2), 3 (126 g/m; cross section 1.5 mm^2) or 5 cores (212 g/m; cross section 1.5 mm^2) and are delivered with a customized length.

Due to these variations, this study considers the environmental impacts for 1 meter of power cable (per luminaire FU and per unit of product). The results may be multiplied by the length of the customized power cable and added to the basic results of the product environmental profile (see Section 4.4).

3 Information on life cycle stages

3.1 Manufacturing (A1-A3)

Electronic components are largely sourced from Asia, while mechanical components mainly from Europe. The Electronic control gear is manufactured in Asia. Other production steps at the Siteco factory in Traunreut (Germany) are the manufacturing of LED modules, plastic injection moulding of the lenses, painting of housing and final assembly, as well as parameterization of the product. The Siteco factory in Traunreut in Germany is ISO 9001 / 14001 / 45001 / 50001 certified.

Module A2 considers the transportation of the raw materials to Siteco's facility. Based on the location of the tier I suppliers, the scenarios given by the PCR have been used:

- International: 19.000 km Ship + 1.000 km Truck (diesel driven, EURO 0-6, >27t payload, 85% utilization)
- Intracontinental: 3.500 km Truck (diesel driven, EURO 0-6, >27t payload, 85% utilization)
- Local/domestic: 1.000 km Truck (diesel driven, EURO 0-6, >27t payload, 85% utilization)

3.2 Distribution (A4)

The main market of the product is Europe with a special focus on the DACH region (Germany, Austria, Switzerland). For this reason, the transport distance has been calculated as weighted average based on sales statistics. As a result, intracontinental transport with 730 km by truck is considered.

The background assumptions for the transportation are listed below.

Table 7: Background information distribution

Information	Unit	Truck
Fuel type	-	Diesel
Fuel consumption	l/(kg*km)	1.99E-05
Total distance	km	730
Capacity utilisation (including empty runs)	%	85
Bulk density of transported products	kg/m3	n.a.
Volume capacity utilisation factor	-	n.a.

3.3 Installation (A5)

The product is designed for simplified installation (i.e. only fixation with screws). No energy or material input is required. During installation, the product is unpacked and the packaging becomes waste. Siteco uses partnerships to get approximately 80% of these materials into recycling processes. The rest is sent to incineration processes with energy recovery. The LCA model used to calculate the environmental impacts follows these assumptions.

3.4 Use stage (B1-B6)

The product has no direct emissions (B1) and is designed so that no maintenance is required (B2) or parts need to be replaced (B4). Furthermore, no standard repairs (B3) or refurbishments (B5) are foreseen. The use of the product does consume electricity (B6), but no water (B7).

The operational electricity consumption over the entire lifetime of the product is 3335 kWh. It has been calculated according to PSR edition 2. Since the main market of the product is the DACH region, the calculations consider a mix of the average German national grid mix (70% as proxy for the DACH region) and an average European grid mix (30%).

3.5 End of life (C1-C4)

The product falls under the Waste from Electrical and Electronic Equipment (WEEE) directive 2012/19/EU subcategory 4. Primary data on the treatment of the product has been used. The EoL scenario displays an European average and is the following:

- Incineration without energy recovery: 5%
- Incineration with energy recovery: 5%
- Landfilling: 5%
- Recycling[1]: 85%

No environmental burdens for the deinstallation of the product (C1) are considered, since it can be deconstructed manually.

The End-of-life (EoL) stage uses a default distance for the shipment of collected waste to approved treatment centers of 100 km by truck (diesel driven, EURO 0-6, >27t payload, 85% utilization) according to the PSR (C2).

3.6 Benefits and loads beyond the system boundaries stage (D)

Incineration with energy recovery and recycling of the product and packaging generates environmental benefits by avoiding the production of primary materials or energy. The amount and types of waste streams from the product and packaging are listed in Table 8.

Table 8: Material flows for benefits and loads beyond the system boundaries

Information	Unit	Value
Total weight going into re-use	kg/functional unit	0
Total weight going into recycling	kg/functional unit	8.81E-02
- Share from product	%	77
- Share from packaging	%	23
Total weight going into incineration with energy recovery	kg/functional unit	2.35E-02

[1] The recycling scenario for the product excl. packaging considers recycling processes for all metals and incineration with energy recovery for all other material groups.

-	Share from product	%	78
-	Share from packaging	%	22

4 Environmental impacts

4.1 Introduction

The following table summarizes the key information for the calculation of the environmental impacts:

Table 9: Basic information LCA model

Information	Value
Used LCA software	LCA for Experts 10
Used LCI database	Sphera Managed LCA Content Professional 2023.2 + Extension 2023.2
PCR version	PEP-PCR–ED4-EN-2021 09 06
Functional unit	Provide lighting that delivers an outgoing artificial luminous flux of 1,000 lumens during a reference lifetime of 35,000 hours

4.2 Results per functional unit

The following results of the environmental declaration have been developed by considering an outgoing artificial luminous flux of 1,000 lumens over a reference lifetime of 35,000 hours. The results refer to the core environmental impact indicators and indicators describing resource use, waste categories, and output flows according to EN 15804:2012+A2:2019.

Table 10: Core environmental impact result indicators per functional unit (0.15 kg product incl. packaging)

	TOTAL (excl. D)	Raw materials & parts		Manufac-turing	Distribu-tion	Installation	Use	End of life			Benefits and loads be-yond the system boundaries
		A1	A2	A3	A4	A5	B6	C2	C3	C4	D
GWP - total [kg CO_2 eq.]	2.09E+01	4.85E-01	3.63E-02	-1.04E-02	6.48E-03	2.07E-02	2.03E+01	7.35E-04	2.24E-02	2.03E-03	-1.58E-01
GWP - fossil [kg CO_2 eq.]	2.06E+01	4.90E-01	3.60E-02	2.81E-02	6.41E-03	1.11E-02	2.00E+01	7.26E-04	2.24E-02	2.03E-03	-1.56E-01
GWP - biogenic [kg CO_2 eq.]	2.21E-01	-5.07E-03	6.68E-05	-3.86E-02	1.47E-05	9.56E-03	2.55E-01	1.66E-06	1.67E-05	3.55E-06	-1.61E-03
GWP - luluc [kg CO_2 eq.]	3.77E-03	3.87E-04	2.29E-04	1.01E-04	6.02E-05	3.47E-05	2.95E-03	6.82E-06	8.01E-07	1.52E-06	-1.56E-04
ODP [kg CFC-11 eq.]	5.10E-10	2.03E-12	4.01E-15	1.15E-12	8.45E-16	2.23E-14	5.07E-10	9.58E-17	3.50E-14	6.60E-15	-5.37E-13
AP [Mole of H+ eq.]	3.78E-02	3.59E-03	3.07E-04	1.30E-04	7.57E-06	2.12E-05	3.37E-02	8.58E-07	1.09E-05	4.83E-06	-1.44E-03
EP - freshwater [kg P eq.]	1.13E-04	1.91E-06	9.30E-08	9.16E-07	2.37E-08	3.21E-07	1.09E-04	2.69E-09	9.73E-09	3.35E-09	-4.81E-07
EP - marine [kg N eq.]	1.07E-02	4.25E-04	1.11E-04	5.62E-05	2.54E-06	9.51E-06	1.01E-02	2.87E-07	3.86E-06	1.49E-06	-1.12E-04
EP - terrestrial [Mole of N eq.]	1.11E-01	4.62E-03	1.22E-03	5.59E-04	2.99E-05	9.05E-05	1.05E-01	3.39E-06	4.89E-05	1.66E-05	-1.19E-03
POCP [kg NMVOC eq.]	2.67E-02	1.33E-03	2.99E-04	1.45E-04	6.60E-06	1.94E-05	2.49E-02	7.48E-07	1.01E-05	4.22E-06	-4.28E-04
ADPE [kg Sb eq.]	8.01E-05	7.66E-05	1.74E-09	1.21E-08	4.31E-10	4.94E-09	3.53E-06	4.88E-11	2.72E-10	6.46E-11	-2.75E-05
ADPF [MJ]	3.25E+02	6.53E+00	4.78E-01	4.15E-01	8.85E-02	1.55E-01	3.17E+02	1.00E-02	5.50E-02	1.47E-02	-2.08E+00
WDP [m^3 world equiv.]	1.64E+00	1.16E-01	3.18E-04	5.00E-03	7.85E-05	1.19E-03	1.52E+00	8.89E-06	3.72E-03	8.50E-04	-3.93E-02

Table 11: Result indicators describing resource use, waste categories, and output flows per functional unit (0.15 kg product incl. packaging)

	TOTAL (excl. D)	Raw materials & parts		Manufacturing	Distribution	Installation	Use	End of life			Benefits and loads beyond the system boundaries
		A1	A2	A3	A4	A5	B6	C2	C3	C4	D
PERE [MJ]	2.67E+02	2.11E+00	2.51E-02	1.01E+00	6.44E-03	1.27E-01	2.63E+02	7.30E-04	2.12E-02	4.20E-03	-1.59E+00
PERM [MJ]	3.83E-01	7.80E-02	0.00E+00	3.90E-01	0.00E+00	-8.53E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PERT [MJ]	2.67E+02	2.19E+00	2.51E-02	1.40E+00	6.44E-03	4.22E-02	2.63E+02	7.30E-04	2.12E-02	4.20E-03	-1.59E+00
PENRE [MJ]	3.25E+02	6.24E+00	4.80E-01	4.18E-01	8.88E-02	1.56E-01	3.17E+02	1.01E-02	3.18E-01	1.47E-02	-2.08E+00
PENRM [MJ]	3.27E-02	2.98E-01	0.00E+00	-2.16E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-2.63E-01	0.00E+00	0.00E+00
PENRT [MJ]	3.25E+02	6.54E+00	4.80E-01	4.16E-01	8.88E-02	1.56E-01	3.17E+02	1.01E-02	5.50E-02	1.47E-02	-2.08E+00
SM [kg]	7.96E-02	6.96E-02	0.00E+00	9.99E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-8.36E-02
RSF [MJ]	5.29E-03	0.00E+00	0.00E+00	0.00E+00	4.75E-03	0.00E+00	0.00E+00	5.38E-04	0.00E+00	0.00E+00	0.00E+00
NRSF [MJ]	8.30E-02	0.00E+00	0.00E+00	0.00E+00	7.46E-02	0.00E+00	0.00E+00	8.45E-03	0.00E+00	0.00E+00	0.00E+00
FW [m3]	1.25E-01	3.77E-03	2.77E-05	2.82E-04	7.05E-06	1.88E-04	1.20E-01	7.99E-07	9.47E-05	2.13E-05	-1.68E-03
HWD [kg]	1.53E-08	5.35E-08	1.49E-12	6.31E-09	2.75E-13	5.61E-09	-5.00E-08	3.12E-14	7.39E-13	2.17E-13	-1.53E-08
NHWD [kg]	2.46E-02	5.10E-02	6.45E-05	1.55E-03	1.35E-05	6.52E-04	2.72E-01	1.53E-06	3.78E-03	3.06E-02	-2.46E-02
RWD [kg]	3.35E-01	2.03E-04	7.99E-07	1.35E-05	1.66E-07	3.64E-06	3.72E-02	1.88E-08	4.57E-06	7.22E-07	-8.17E-05
CRU [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	0.00E+00	0.00E+00
MFR [kg]	8.81E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.06E-02	0.00E+00	0.00E+00	6.75E-02	0.00E+00	0.00E+00
MER [kg]	2.35E-02	0.00E+00	0.00E+00	4.32E-03	0.00E+00	5.15E-03	0.00E+00	0.00E+00	1.40E-02	0.00E+00	0.00E+00
EEE [MJ]	4.98E-02	3.30E-04	0.00E+00	8.25E-03	0.00E+00	9.29E-03	0.00E+00	0.00E+00	3.20E-02	0.00E+00	0.00E+00
EET [MJ]	1.16E-01	7.66E-04	0.00E+00	1.94E-02	0.00E+00	2.17E-02	0.00E+00	0.00E+00	7.41E-02	0.00E+00	0.00E+00
Biog. C in product [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	0.00E+00	0.00E+00
Biog. C in packaging [kg]	-8.85E-03	-1.91E-03	0.00E+00	-9.15E-03	0.00E+00	2.21E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Note: Full forms of the acronyms can be found in the annex.

4.3 Results per unit of product

The following results of the environmental declaration have been developed by considering the entire life cycle of one product with the technical properties described in section 1. The results refer to the core environmental impact indicators and indicators describing resource use, waste categories, and output flows according to EN 15804:2012+A2:2019.

Table 12: Core environmental impact result indicators per unit of product

	TOTAL (excl. D)	Raw materials & parts		Manufac-turing	Distribu-tion	Installation	Use	End of life			Benefits and loads beyond the system boundaries
		A1	A2	A3	A4	A5	B6	C2	C3	C4	D
GWP - total [kg CO_2 eq.]	1.39E+03	3.23E+01	2.42E+00	-6.90E-01	4.32E-01	1.38E+00	1.35E+03	4.90E-02	1.49E+00	1.36E-01	-1.05E+01
GWP - fossil [kg CO_2 eq.]	1.38E+03	3.27E+01	2.40E+00	1.88E+00	4.27E-01	7.38E-01	1.34E+03	4.84E-02	1.49E+00	1.35E-01	-1.04E+01
GWP - biogenic [kg CO_2 eq.]	1.47E+01	-3.38E-01	4.45E-03	-2.57E+00	9.79E-04	6.38E-01	1.70E+01	1.11E-04	1.11E-03	2.37E-04	-1.07E-01
GWP - luluc [kg CO_2 eq.]	2.52E-01	2.58E-02	1.53E-02	6.75E-03	4.01E-03	2.31E-03	1.97E-01	4.54E-04	5.34E-05	1.01E-04	-1.04E-02
ODP [kg CFC-11 eq.]	3.40E-08	1.35E-10	2.67E-13	7.66E-11	5.63E-14	1.49E-12	3.38E-08	6.38E-15	2.33E-12	4.40E-13	-3.58E-11

AP [Mole of H+ eq.]	2.52E+00	2.39E-01	2.04E-02	8.66E-03	5.05E-04	1.42E-03	2.25E+00	5.72E-05	7.23E-04	3.22E-04	-9.59E-02
EP - freshwater [kg P eq.]	7.51E-03	1.27E-04	6.20E-06	6.11E-05	1.58E-06	2.14E-05	7.30E-03	1.79E-07	6.48E-07	2.24E-07	-3.21E-05
EP - marine [kg N eq.]	7.15E-01	2.83E-02	7.39E-03	3.75E-03	1.69E-04	6.34E-04	6.75E-01	1.92E-05	2.57E-04	9.91E-05	-7.46E-03
EP - terrestrial [Mole of N eq.]	7.43E+00	3.08E-01	8.15E-02	3.73E-02	1.99E-03	6.03E-03	6.99E+00	2.26E-04	3.26E-03	1.10E-03	-7.94E-02
POCP [kg NMVOC eq.]	1.78E+00	8.89E-02	1.99E-02	9.65E-03	4.40E-04	1.29E-03	1.66E+00	4.98E-05	6.76E-04	2.81E-04	-2.85E-02
ADPE [kg Sb eq.]	5.34E-03	5.11E-03	1.16E-07	8.08E-07	2.87E-08	3.29E-07	2.35E-04	3.25E-09	1.81E-08	4.31E-09	-1.83E-03
ADPF [MJ]	2.17E+04	4.35E+02	3.19E+01	2.77E+01	5.90E+00	1.04E+01	2.11E+04	6.68E-01	3.67E+00	9.80E-01	-1.39E+02
WDP [m³ world equiv.]	1.10E+02	7.71E+00	2.12E-02	3.33E-01	5.23E-03	7.94E-02	1.01E+02	5.93E-04	2.48E-01	5.67E-02	-2.62E+00

Table 13: Result indicators describing resource use, waste categories, and output flows per unit of product

	TOTAL (excl. D)	Raw materials & parts		Manufacturing	Distribution	Installation	Use	End of life			Benefits and loads beyond the system boundaries
		A1	A2	A3	A4	A5	B6	C2	C3	C4	D
PERE [MJ]	1.78E+04	1.41E+02	1.68E+00	6.73E+01	4.29E-01	8.50E+00	1.76E+04	4.86E-02	1.42E+00	2.80E-01	-1.06E+02
PERM [MJ]	2.55E+01	5.20E+00	0.00E+00	2.60E+01	0.00E+00	-5.68E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PERT [MJ]	1.78E+04	1.46E+02	1.68E+00	9.33E+01	4.29E-01	2.81E+00	1.76E+04	4.86E-02	1.42E+00	2.80E-01	-1.06E+02
PENRE [MJ]	2.17E+04	4.16E+02	3.20E+01	2.78E+01	5.92E+00	1.04E+01	2.11E+04	6.71E-01	2.12E+01	9.80E-01	-1.39E+02
PENRM [MJ]	2.18E+00	1.99E+01	0.00E+00	-1.44E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-1.75E+01	0.00E+00	0.00E+00
PENRT [MJ]	2.17E+04	4.36E+02	3.20E+01	2.77E+01	5.92E+00	1.04E+01	2.11E+04	6.71E-01	3.67E+00	9.80E-01	-1.39E+02
SM [kg]	5.31E+00	4.64E+00	0.00E+00	6.66E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-5.57E+00
RSF [MJ]	3.53E-01	0.00E+00	0.00E+00	0.00E+00	3.17E-01	0.00E+00	0.00E+00	3.59E-02	0.00E+00	0.00E+00	0.00E+00
NRSF [MJ]	5.53E+00	0.00E+00	0.00E+00	0.00E+00	4.97E+00	0.00E+00	0.00E+00	5.63E-01	0.00E+00	0.00E+00	0.00E+00
FW [m3]	8.30E+00	2.51E-01	1.84E-03	1.88E-02	4.70E-04	1.25E-02	8.01E+00	5.33E-05	6.31E-03	1.42E-03	-1.12E-01
HWD [kg]	1.02E-06	3.57E-06	9.96E-11	4.21E-07	1.83E-11	3.74E-07	-3.34E-06	2.08E-12	4.93E-11	1.45E-11	-1.02E-06
NHWD [kg]	1.64E+00	3.40E+00	4.30E-03	1.03E-01	9.03E-04	4.35E-02	1.81E+01	1.02E-04	2.52E-01	2.04E+00	-1.64E+00
RWD [kg]	2.23E+01	1.35E-02	5.33E-05	9.00E-04	1.11E-05	2.43E-04	2.48E+00	1.26E-06	3.05E-04	4.81E-05	-5.45E-03
CRU [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	0.00E+00	0.00E+00
MFR [kg]	5.87E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.37E+00	0.00E+00	0.00E+00	4.50E+00	0.00E+00	0.00E+00
MER [kg]	1.57E+00	0.00E+00	0.00E+00	2.88E-01	0.00E+00	3.43E-01	0.00E+00	0.00E+00	9.35E-01	0.00E+00	0.00E+00
EEE [MJ]	3.32E+00	2.20E-02	0.00E+00	5.50E-01	0.00E+00	6.20E-01	0.00E+00	0.00E+00	2.13E+00	0.00E+00	0.00E+00
EET [MJ]	7.73E+00	5.10E-02	0.00E+00	1.29E+00	0.00E+00	1.44E+00	0.00E+00	0.00E+00	4.94E+00	0.00E+00	0.00E+00
Biog. C in product [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	0.00E+00	0.00E+00
Biog. C in packaging [kg]	-5.90E-01	-1.28E-01	0.00E+00	-6.10E-01	0.00E+00	1.48E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Note: Full names of the acronyms can be found in the annex.

4.4 Results for product extensions

Since the product can be delivered with one of three different power cables with a customized length, the following tables show the environmental impacts for 1 meter of power cable (per luminaire FU and per unit of product). Users of the presented product environmental profile may multiply the results by the length of their customized power cable and add it to the basic results presented in the previous sections.

4.4.1 Option 1: 3-core cable (126 g/m; cross section 1.5 mm2)

Table 14: Environmental result indicators for 1 meter 3-core power cable per functional unit

	TOTAL (excl. D)	Raw materials & parts		Manufac-turing	Distribu-tion	Installa-tion	Use	End of life			Bene-fits and loads be-yond the sys-tem boun darie s
		A1	A2	A3	A4	A5	B6	C2	C3	C4	D
GWP - total [kg CO_2 eq.]	8.27E-03	6.63E-03	4.91E-04	0.00E+00	8.24E-05	0.00E+00	0.00E+00	1.13E-05	1.05E-03	0.00E+00	-3.05E-03
GWP - fossil [kg CO_2 eq.]	8.31E-03	6.68E-03	4.89E-04	0.00E+00	8.14E-05	0.00E+00	0.00E+00	1.12E-05	1.05E-03	0.00E+00	-3.05E-03
GWP - biogenic [kg CO_2 eq.]	-5.33E-05	-5.61E-05	6.31E-07	0.00E+00	1.87E-07	0.00E+00	0.00E+00	2.56E-08	1.94E-06	0.00E+00	1.45E-05
GWP - luluc [kg CO_2 eq.]	1.38E-05	1.17E-05	1.21E-06	0.00E+00	7.64E-07	0.00E+00	0.00E+00	1.05E-07	5.10E-08	0.00E+00	-9.69E-06
ODP [kg CFC-11 eq.]	3.42E-14	2.96E-14	4.16E-17	0.00E+00	1.07E-17	0.00E+00	0.00E+00	1.47E-18	4.49E-15	0.00E+00	-1.34E-14
AP [Mole of H+ eq.]	6.75E-05	5.79E-05	8.52E-06	0.00E+00	9.62E-08	0.00E+00	0.00E+00	1.32E-08	1.06E-06	0.00E+00	-4.92E-05
EP - freshwater [kg P eq.]	2.30E-08	2.11E-08	5.57E-10	0.00E+00	3.02E-10	0.00E+00	0.00E+00	4.13E-11	1.00E-09	0.00E+00	-5.58E-09
EP - marine [kg N eq.]	9.13E-06	5.65E-06	3.05E-06	0.00E+00	3.22E-08	0.00E+00	0.00E+00	4.41E-09	3.86E-07	0.00E+00	-2.77E-06
EP - terrestrial [Mole of N eq.]	9.93E-05	6.10E-05	3.35E-05	0.00E+00	3.80E-07	0.00E+00	0.00E+00	5.20E-08	4.42E-06	0.00E+00	-2.88E-05
POCP [kg NMVOC eq.]	2.96E-05	2.01E-05	8.39E-06	0.00E+00	8.38E-08	0.00E+00	0.00E+00	1.15E-08	1.01E-06	0.00E+00	-9.68E-06
ADPE [kg Sb eq.]	2.09E-06	2.09E-06	1.19E-11	0.00E+00	5.47E-12	0.00E+00	0.00E+00	7.49E-13	3.45E-11	0.00E+00	-2.19E-06
ADPF [MJ]	1.15E-01	1.02E-01	6.18E-03	0.00E+00	1.12E-03	0.00E+00	0.00E+00	1.54E-04	5.19E-03	0.00E+00	-3.34E-02
WDP [m^3 world equiv.]	2.72E-03	2.49E-03	2.17E-06	0.00E+00	9.97E-07	0.00E+00	0.00E+00	1.37E-07	2.33E-04	0.00E+00	-1.86E-03
PERE [MJ]	2.33E-02	2.01E-02	1.48E-04	0.00E+00	8.18E-05	0.00E+00	0.00E+00	1.12E-05	2.93E-03	0.00E+00	-1.02E-02
PERM [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	0.00E+00	0.00E+00
PERT [MJ]	2.33E-02	2.01E-02	1.48E-04	0.00E+00	8.18E-05	0.00E+00	0.00E+00	1.12E-05	2.93E-03	0.00E+00	-1.02E-02
PENRE [MJ]	1.07E-01	8.11E-02	6.19E-03	0.00E+00	1.13E-03	0.00E+00	0.00E+00	1.55E-04	1.79E-02	0.00E+00	-3.34E-02
PENRM [MJ]	8.07E-03	2.08E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-1.27E-02	0.00E+00	0.00E+00
PENRT [MJ]	1.15E-01	1.02E-01	6.19E-03	0.00E+00	1.13E-03	0.00E+00	0.00E+00	1.55E-04	5.19E-03	0.00E+00	-3.34E-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	0.00E+00	-6.96E-04
RSF [MJ]	6.86E-05	0.00E+00	0.00E+00	0.00E+00	6.03E-05	0.00E+00	0.00E+00	8.27E-06	0.00E+00	0.00E+00	0.00E+00
NRSF [MJ]	1.08E-03	0.00E+00	0.00E+00	0.00E+00	9.47E-04	0.00E+00	0.00E+00	1.30E-04	0.00E+00	0.00E+00	0.00E+00
FW [m3]	6.17E-05	5.49E-05	1.66E-07	0.00E+00	8.96E-08	0.00E+00	0.00E+00	1.23E-08	6.52E-06	0.00E+00	-3.29E-05
HWD [kg]	6.15E-10	6.16E-10	1.94E-14	0.00E+00	3.49E-15	0.00E+00	0.00E+00	4.78E-16	-3.52E-13	0.00E+00	-9.85E-13
NHWD [kg]	1.43E-03	1.15E-03	6.75E-07	0.00E+00	1.72E-07	0.00E+00	0.00E+00	2.36E-08	2.84E-04	0.00E+00	-1.15E-03
RWD [kg]	2.01E-06	1.28E-06	8.51E-09	0.00E+00	2.11E-09	0.00E+00	0.00E+00	2.89E-10	7.28E-07	0.00E+00	-4.88E-07
CRU [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	0.00E+00	0.00E+00
MFR [kg]	7.34E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.34E-04	0.00E+00	0.00E+00
MER [kg]	1.16E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.16E-03	0.00E+00	0.00E+00
EEE [MJ]	1.44E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.44E-03	0.00E+00	0.00E+00
EET [MJ]	3.35E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.35E-03	0.00E+00	0.00E+00
Biog. C in product [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	0.00E+00	0.00E+00
Biog. C in packaging [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	0.00E+00	0.00E+00

Table 15: Environmental result indicators for 1 meter 3-core power cable per unit of product

	TOTAL (excl. D)	Raw materials & parts		Manufac-turing	Distribu-tion	Installa-tion	Use	End of life			Benefits and loads beyond the sys-tem bounda-ries
		A1	A2	A3	A4	A5	B6	C2	C3	C4	D
GWP - total [kg CO_2 eq.]	5.51E-01	4.42E-01	3.27E-02	0.00E+00	5.49E-03	0.00E+00	0.00E+00	7.52E-04	6.98E-02	0.00E+00	-2.03E-01
GWP - fossil [kg CO_2 eq.]	5.54E-01	4.45E-01	3.26E-02	0.00E+00	5.43E-03	0.00E+00	0.00E+00	7.43E-04	6.97E-02	0.00E+00	-2.03E-01
GWP - biogenic [kg CO_2 eq.]	-3.56E-03	-3.74E-03	4.21E-05	0.00E+00	1.24E-05	0.00E+00	0.00E+00	1.70E-06	1.29E-04	0.00E+00	9.68E-04
GWP - luluc [kg CO_2 eq.]	9.23E-04	7.81E-04	8.06E-05	0.00E+00	5.09E-05	0.00E+00	0.00E+00	6.98E-06	3.40E-06	0.00E+00	-6.46E-04
ODP [kg CFC-11 eq.]	2.28E-12	1.98E-12	2.77E-15	0.00E+00	7.16E-16	0.00E+00	0.00E+00	9.80E-17	2.99E-13	0.00E+00	-8.91E-13
AP [Mole of H+ eq.]	4.50E-03	3.86E-03	5.68E-04	0.00E+00	6.41E-06	0.00E+00	0.00E+00	8.79E-07	7.04E-05	0.00E+00	-3.28E-03
EP - freshwater [kg P eq.]	1.53E-06	1.40E-06	3.71E-08	0.00E+00	2.01E-08	0.00E+00	0.00E+00	2.75E-09	6.69E-08	0.00E+00	-3.72E-07
EP - marine [kg N eq.]	6.09E-04	3.77E-04	2.04E-04	0.00E+00	2.15E-06	0.00E+00	0.00E+00	2.94E-07	2.58E-05	0.00E+00	-1.85E-04
EP - terrestrial [Mole of N eq.]	6.62E-03	4.06E-03	2.23E-03	0.00E+00	2.53E-05	0.00E+00	0.00E+00	3.47E-06	2.95E-04	0.00E+00	-1.92E-03
POCP [kg NMVOC eq.]	1.97E-03	1.34E-03	5.59E-04	0.00E+00	5.59E-06	0.00E+00	0.00E+00	7.65E-07	6.70E-05	0.00E+00	-6.45E-04
ADPE [kg Sb eq.]	1.39E-04	1.39E-04	7.94E-10	0.00E+00	3.65E-10	0.00E+00	0.00E+00	5.00E-11	2.30E-09	0.00E+00	-1.46E-04
ADPF [MJ]	7.63E+00	6.79E+00	4.12E-01	0.00E+00	7.49E-02	0.00E+00	0.00E+00	1.03E-02	3.46E-01	0.00E+00	-2.23E+00
WDP [m^3 world equiv.]	1.81E-01	1.66E-01	1.45E-04	0.00E+00	6.65E-05	0.00E+00	0.00E+00	9.10E-06	1.55E-02	0.00E+00	-1.24E-01
PERE [MJ]	1.55E+00	1.34E+00	9.87E-03	0.00E+00	5.45E-03	0.00E+00	0.00E+00	7.47E-04	1.95E-01	0.00E+00	-6.82E-01
PERM [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	0.00E+00	0.00E+00
PERT [MJ]	1.55E+00	1.34E+00	9.87E-03	0.00E+00	5.45E-03	0.00E+00	0.00E+00	7.47E-04	1.95E-01	0.00E+00	-6.82E-01
PENRE [MJ]	7.10E+00	5.41E+00	4.13E-01	0.00E+00	7.52E-02	0.00E+00	0.00E+00	1.03E-02	1.19E+00	0.00E+00	-2.23E+00
PENRM [MJ]	5.38E-01	1.39E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-8.48E-01	0.00E+00	0.00E+00
PENRT [MJ]	7.64E+00	6.79E+00	4.13E-01	0.00E+00	7.52E-02	0.00E+00	0.00E+00	1.03E-02	3.46E-01	0.00E+00	-2.23E+00
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	0.00E+00	-4.64E-02
RSF [MJ]	4.57E-03	0.00E+00	0.00E+00	0.00E+00	4.02E-03	0.00E+00	0.00E+00	5.51E-04	0.00E+00	0.00E+00	0.00E+00
NRSF [MJ]	7.18E-02	0.00E+00	0.00E+00	0.00E+00	6.31E-02	0.00E+00	0.00E+00	8.65E-03	0.00E+00	0.00E+00	0.00E+00
FW [m3]	4.12E-03	3.66E-03	1.11E-05	0.00E+00	5.97E-06	0.00E+00	0.00E+00	8.18E-07	4.35E-04	0.00E+00	-2.19E-03
HWD [kg]	4.10E-08	4.10E-08	1.29E-12	0.00E+00	2.33E-13	0.00E+00	0.00E+00	3.19E-14	-2.35E-11	0.00E+00	-6.57E-11
NHWD [kg]	9.56E-02	7.65E-02	4.50E-05	0.00E+00	1.15E-05	0.00E+00	0.00E+00	1.57E-06	1.90E-02	0.00E+00	-7.68E-02
RWD [kg]	1.34E-04	8.51E-05	5.68E-07	0.00E+00	1.41E-07	0.00E+00	0.00E+00	1.93E-08	4.85E-05	0.00E+00	-3.25E-05
CRU [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	0.00E+00	0.00E+00
MFR [kg]	4.89E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.89E-02	0.00E+00	0.00E+00
MER [kg]	7.71E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.71E-02	0.00E+00	0.00E+00
EEE [MJ]	9.58E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.58E-02	0.00E+00	0.00E+00
EET [MJ]	2.23E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.23E-01	0.00E+00	0.00E+00
Biog. C in product [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	0.00E+00	0.00E+00
Biog. C in packaging [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	0.00E+00	0.00E+00

4.4.2 Option 2: 5-core cable (212 g/m; cross section 1.5 mm2)

Table 16: Environmental result indicators for 1 meter 5-core power cable per functional unit

	TOTAL (excl. D)	Raw materials & parts		Manufacturing	Distribution	Installation	Use	End of life			Benefits and loads beyond the system boundaries
		A1	A2	A3	A4	A5	B6	C2	C3	C4	D
GWP - total [kg CO_2 eq.]	1.39E-02	1.12E-02	8.26E-04	0.00E+00	1.39E-04	0.00E+00	0.00E+00	1.90E-05	1.76E-03	0.00E+00	-5.12E-03
GWP - fossil [kg CO_2 eq.]	1.40E-02	1.12E-02	8.23E-04	0.00E+00	1.37E-04	0.00E+00	0.00E+00	1.88E-05	1.76E-03	0.00E+00	-5.13E-03
GWP - biogenic [kg CO_2 eq.]	-8.97E-05	-9.44E-05	1.06E-06	0.00E+00	3.14E-07	0.00E+00	0.00E+00	4.30E-08	3.26E-06	0.00E+00	2.44E-05
GWP - luluc [kg CO_2 eq.]	2.33E-05	1.97E-05	2.03E-06	0.00E+00	1.29E-06	0.00E+00	0.00E+00	1.76E-07	8.58E-08	0.00E+00	-1.63E-05
ODP [kg CFC-11 eq.]	5.75E-14	4.99E-14	6.99E-17	0.00E+00	1.81E-17	0.00E+00	0.00E+00	2.47E-18	7.55E-15	0.00E+00	-2.25E-14
AP [Mole of H+ eq.]	1.14E-04	9.73E-05	1.43E-05	0.00E+00	1.62E-07	0.00E+00	0.00E+00	2.22E-08	1.78E-06	0.00E+00	-8.28E-05
EP - freshwater [kg P eq.]	3.86E-08	3.54E-08	9.37E-10	0.00E+00	5.08E-10	0.00E+00	0.00E+00	6.95E-11	1.69E-09	0.00E+00	-9.38E-09
EP - marine [kg N eq.]	1.54E-05	9.51E-06	5.14E-06	0.00E+00	5.42E-08	0.00E+00	0.00E+00	7.43E-09	6.50E-07	0.00E+00	-4.66E-06
EP - terrestrial [Mole of N eq.]	1.67E-04	1.03E-04	5.63E-05	0.00E+00	6.39E-07	0.00E+00	0.00E+00	8.75E-08	7.44E-06	0.00E+00	-4.85E-05
POCP [kg NMVOC eq.]	4.98E-05	3.38E-05	1.41E-05	0.00E+00	1.41E-07	0.00E+00	0.00E+00	1.93E-08	1.69E-06	0.00E+00	-1.63E-05
ADPE [kg Sb eq.]	3.51E-06	3.51E-06	2.00E-11	0.00E+00	9.20E-12	0.00E+00	0.00E+00	1.26E-12	5.81E-11	0.00E+00	-3.69E-06
ADPF [MJ]	1.93E-01	1.71E-01	1.04E-02	0.00E+00	1.89E-03	0.00E+00	0.00E+00	2.59E-04	8.73E-03	0.00E+00	-5.62E-02
WDP [m^3 world equiv.]	4.58E-03	4.18E-03	3.65E-06	0.00E+00	1.68E-06	0.00E+00	0.00E+00	2.30E-07	3.92E-04	0.00E+00	-3.12E-03
PERE [MJ]	3.92E-02	3.38E-02	2.49E-04	0.00E+00	1.38E-04	0.00E+00	0.00E+00	1.89E-05	4.92E-03	0.00E+00	-1.72E-02
PERM [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	0.00E+00	0.00E+00
PERT [MJ]	3.92E-02	3.38E-02	2.49E-04	0.00E+00	1.38E-04	0.00E+00	0.00E+00	1.89E-05	4.92E-03	0.00E+00	-1.72E-02
PENRE [MJ]	1.79E-01	1.36E-01	1.04E-02	0.00E+00	1.90E-03	0.00E+00	0.00E+00	2.60E-04	3.01E-02	0.00E+00	-5.63E-02
PENRM [MJ]	1.36E-02	3.50E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-2.14E-02	0.00E+00	0.00E+00
PENRT [MJ]	1.93E-01	1.71E-01	1.04E-02	0.00E+00	1.90E-03	0.00E+00	0.00E+00	2.60E-04	8.73E-03	0.00E+00	-5.63E-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	0.00E+00	-1.17E-03
RSF [MJ]	1.15E-04	0.00E+00	0.00E+00	0.00E+00	1.02E-04	0.00E+00	0.00E+00	1.39E-05	0.00E+00	0.00E+00	0.00E+00
NRSF [MJ]	1.81E-03	0.00E+00	0.00E+00	0.00E+00	1.59E-03	0.00E+00	0.00E+00	2.18E-04	0.00E+00	0.00E+00	0.00E+00
FW [m3]	1.04E-04	9.24E-05	2.80E-07	0.00E+00	1.51E-07	0.00E+00	0.00E+00	2.06E-08	1.10E-05	0.00E+00	-5.53E-05
HWD [kg]	1.04E-09	1.04E-09	3.27E-14	0.00E+00	5.88E-15	0.00E+00	0.00E+00	8.05E-16	-5.93E-13	0.00E+00	-1.66E-12
NHWD [kg]	2.41E-03	1.93E-03	1.13E-06	0.00E+00	2.89E-07	0.00E+00	0.00E+00	3.96E-08	4.78E-04	0.00E+00	-1.94E-03
RWD [kg]	3.39E-06	2.15E-06	1.43E-08	0.00E+00	3.55E-09	0.00E+00	0.00E+00	4.87E-10	1.22E-06	0.00E+00	-8.21E-07
CRU [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	0.00E+00	0.00E+00
MFR [kg]	1.23E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.23E-03	0.00E+00	0.00E+00
MER [kg]	1.95E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.95E-03	0.00E+00	0.00E+00
EEE [MJ]	2.42E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.42E-03	0.00E+00	0.00E+00
EET [MJ]	5.63E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.63E-03	0.00E+00	0.00E+00
Biog. C in product [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	0.00E+00	0.00E+00
Biog. C in packaging [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	0.00E+00	0.00E+00

Table 17: Environmental result indicators for 1 meter 5-core power cable per unit of product

	TOTAL (excl. D)	Raw materials & parts		Manufacturing	Distribution	Installa-tion	Use	End of life			Benefits and loads beyond the sys-tem bounda-ries
		A1	A2	A3	A4	A5	B6	C2	C3	C4	D
GWP - total [kg CO_2 eq.]	9.27E-01	7.44E-01	5.50E-02	0.00E+00	9.24E-03	0.00E+00	0.00E+00	1.27E-03	1.17E-01	0.00E+00	-3.42E-01
GWP - fossil [kg CO_2 eq.]	9.32E-01	7.49E-01	5.48E-02	0.00E+00	9.13E-03	0.00E+00	0.00E+00	1.25E-03	1.17E-01	0.00E+00	-3.42E-01
GWP - biogenic [kg CO_2 eq.]	-5.98E-03	-6.29E-03	7.08E-05	0.00E+00	2.09E-05	0.00E+00	0.00E+00	2.87E-06	2.17E-04	0.00E+00	1.63E-03
GWP - luluc [kg CO_2 eq.]	1.55E-03	1.31E-03	1.36E-04	0.00E+00	8.57E-05	0.00E+00	0.00E+00	1.17E-05	5.72E-06	0.00E+00	-1.09E-03
ODP [kg CFC-11 eq.]	3.83E-12	3.33E-12	4.66E-15	0.00E+00	1.20E-15	0.00E+00	0.00E+00	1.65E-16	5.03E-13	0.00E+00	-1.50E-12
AP [Mole of H+ eq.]	7.58E-03	6.49E-03	9.56E-04	0.00E+00	1.08E-05	0.00E+00	0.00E+00	1.48E-06	1.19E-04	0.00E+00	-5.52E-03
EP - freshwater [kg P eq.]	2.58E-06	2.36E-06	6.25E-08	0.00E+00	3.38E-08	0.00E+00	0.00E+00	4.63E-09	1.12E-07	0.00E+00	-6.25E-07
EP - marine [kg N eq.]	1.02E-03	6.34E-04	3.42E-04	0.00E+00	3.61E-06	0.00E+00	0.00E+00	4.95E-07	4.33E-05	0.00E+00	-3.10E-04
EP - terrestrial [Mole of N eq.]	1.11E-02	6.84E-03	3.76E-03	0.00E+00	4.26E-05	0.00E+00	0.00E+00	5.84E-06	4.96E-04	0.00E+00	-3.23E-03
POCP [kg NMVOC eq.]	3.32E-03	2.25E-03	9.41E-04	0.00E+00	9.40E-06	0.00E+00	0.00E+00	1.29E-06	1.13E-04	0.00E+00	-1.09E-03
ADPE [kg Sb eq.]	2.34E-04	2.34E-04	1.34E-09	0.00E+00	6.14E-10	0.00E+00	0.00E+00	8.40E-11	3.87E-09	0.00E+00	-2.46E-04
ADPF [MJ]	1.28E+01	1.14E+01	6.93E-01	0.00E+00	1.26E-01	0.00E+00	0.00E+00	1.73E-02	5.82E-01	0.00E+00	-3.75E+00
WDP [m^3 world equiv.]	3.05E-01	2.79E-01	2.43E-04	0.00E+00	1.12E-04	0.00E+00	0.00E+00	1.53E-05	2.61E-02	0.00E+00	-2.08E-01
PERE [MJ]	2.61E+00	2.25E+00	1.66E-02	0.00E+00	9.17E-03	0.00E+00	0.00E+00	1.26E-03	3.28E-01	0.00E+00	-1.15E+00
PERM [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	0.00E+00	0.00E+00
PERT [MJ]	2.61E+00	2.25E+00	1.66E-02	0.00E+00	9.17E-03	0.00E+00	0.00E+00	1.26E-03	3.28E-01	0.00E+00	-1.15E+00
PENRE [MJ]	1.19E+01	9.10E+00	6.95E-01	0.00E+00	1.27E-01	0.00E+00	0.00E+00	1.73E-02	2.01E+00	0.00E+00	-3.75E+00
PENRM [MJ]	9.05E-01	2.33E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-1.43E+00	0.00E+00	0.00E+00
PENRT [MJ]	1.29E+01	1.14E+01	6.95E-01	0.00E+00	1.27E-01	0.00E+00	0.00E+00	1.73E-02	5.82E-01	0.00E+00	-3.75E+00
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	0.00E+00	-7.81E-02
RSF [MJ]	7.70E-03	0.00E+00	0.00E+00	0.00E+00	6.77E-03	0.00E+00	0.00E+00	9.27E-04	0.00E+00	0.00E+00	0.00E+00
NRSF [MJ]	1.21E-01	0.00E+00	0.00E+00	0.00E+00	1.06E-01	0.00E+00	0.00E+00	1.46E-02	0.00E+00	0.00E+00	0.00E+00
FW [m3]	6.93E-03	6.16E-03	1.87E-05	0.00E+00	1.00E-05	0.00E+00	0.00E+00	1.38E-06	7.32E-04	0.00E+00	-3.69E-03
HWD [kg]	6.90E-08	6.91E-08	2.18E-12	0.00E+00	3.92E-13	0.00E+00	0.00E+00	5.37E-14	-3.95E-11	0.00E+00	-1.10E-10
NHWD [kg]	1.61E-01	1.29E-01	7.57E-05	0.00E+00	1.93E-05	0.00E+00	0.00E+00	2.64E-06	3.19E-02	0.00E+00	-1.29E-01
RWD [kg]	2.26E-04	1.43E-04	9.55E-07	0.00E+00	2.37E-07	0.00E+00	0.00E+00	3.24E-08	8.16E-05	0.00E+00	-5.48E-05
CRU [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	0.00E+00	0.00E+00
MFR [kg]	8.23E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.23E-02	0.00E+00	0.00E+00
MER [kg]	1.30E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.30E-01	0.00E+00	0.00E+00
EEE [MJ]	1.61E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.61E-01	0.00E+00	0.00E+00
EET [MJ]	3.75E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.75E-01	0.00E+00	0.00E+00
Biog. C in product [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	0.00E+00	0.00E+00
Biog. C in packaging [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	0.00E+00	0.00E+00

4.4.3 Option 3: 2-core cable (106 g/m; cross section 1.5 mm2)

Table 18: Environmental result indicators for 1 meter 2-core power cable per functional unit

	TOTAL (excl. D)	Raw materials & parts		Manufacturing	Distribution	Installation	Use	End of life			Benefits and loads beyond the system boundaries
		A1	A2	A3	A4	A5	B6	C2	C3	C4	D
GWP - total [kg CO_2 eq.]	6.95E-03	5.58E-03	4.13E-04	0.00E+00	6.93E-05	0.00E+00	0.00E+00	9.49E-06	8.81E-04	0.00E+00	-2.56E-03
GWP - fossil [kg CO_2 eq.]	6.99E-03	5.62E-03	4.11E-04	0.00E+00	6.85E-05	0.00E+00	0.00E+00	9.38E-06	8.79E-04	0.00E+00	-2.57E-03
GWP - biogenic [kg CO_2 eq.]	-4.49E-05	-4.72E-05	5.31E-07	0.00E+00	1.57E-07	0.00E+00	0.00E+00	2.15E-08	1.63E-06	0.00E+00	1.22E-05
GWP - luluc [kg CO_2 eq.]	1.16E-05	9.85E-06	1.02E-06	0.00E+00	6.43E-07	0.00E+00	0.00E+00	8.81E-08	4.29E-08	0.00E+00	-8.15E-06
ODP [kg CFC-11 eq.]	2.88E-14	2.49E-14	3.50E-17	0.00E+00	9.03E-18	0.00E+00	0.00E+00	1.24E-18	3.77E-15	0.00E+00	-1.12E-14
AP [Mole of H+ eq.]	5.68E-05	4.87E-05	7.17E-06	0.00E+00	8.09E-08	0.00E+00	0.00E+00	1.11E-08	8.89E-07	0.00E+00	-4.14E-05
EP - freshwater [kg P eq.]	1.93E-08	1.77E-08	4.68E-10	0.00E+00	2.54E-10	0.00E+00	0.00E+00	3.48E-11	8.44E-10	0.00E+00	-4.69E-09
EP - marine [kg N eq.]	7.68E-06	4.76E-06	2.57E-06	0.00E+00	2.71E-08	0.00E+00	0.00E+00	3.71E-09	3.25E-07	0.00E+00	-2.33E-06
EP - terrestrial [Mole of N eq.]	8.35E-05	5.13E-05	2.82E-05	0.00E+00	3.19E-07	0.00E+00	0.00E+00	4.38E-08	3.72E-06	0.00E+00	-2.43E-05
POCP [kg NMVOC eq.]	2.49E-05	1.69E-05	7.05E-06	0.00E+00	7.05E-08	0.00E+00	0.00E+00	9.66E-09	8.46E-07	0.00E+00	-8.14E-06
ADPE [kg Sb eq.]	1.76E-06	1.76E-06	1.00E-11	0.00E+00	4.60E-12	0.00E+00	0.00E+00	6.30E-13	2.91E-11	0.00E+00	-1.84E-06
ADPF [MJ]	9.63E-02	8.57E-02	5.19E-03	0.00E+00	9.45E-04	0.00E+00	0.00E+00	1.30E-04	4.36E-03	0.00E+00	-2.81E-02
WDP [m^3 world equiv.]	2.29E-03	2.09E-03	1.83E-06	0.00E+00	8.39E-07	0.00E+00	0.00E+00	1.15E-07	1.96E-04	0.00E+00	-1.56E-03
PERE [MJ]	1.96E-02	1.69E-02	1.25E-04	0.00E+00	6.88E-05	0.00E+00	0.00E+00	9.43E-06	2.46E-03	0.00E+00	-8.61E-03
PERM [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	0.00E+00	0.00E+00
PERT [MJ]	1.96E-02	1.69E-02	1.25E-04	0.00E+00	6.88E-05	0.00E+00	0.00E+00	9.43E-06	2.46E-03	0.00E+00	-8.61E-03
PENRE [MJ]	8.96E-02	6.82E-02	5.21E-03	0.00E+00	9.49E-04	0.00E+00	0.00E+00	1.30E-04	1.51E-02	0.00E+00	-2.81E-02
PENRM [MJ]	6.79E-03	1.75E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-1.07E-02	0.00E+00	0.00E+00
PENRT [MJ]	9.64E-02	8.57E-02	5.21E-03	0.00E+00	9.49E-04	0.00E+00	0.00E+00	1.30E-04	4.36E-03	0.00E+00	-2.81E-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	0.00E+00	-5.86E-04
RSF [MJ]	5.77E-05	0.00E+00	0.00E+00	0.00E+00	5.08E-05	0.00E+00	0.00E+00	6.95E-06	0.00E+00	0.00E+00	0.00E+00
NRSF [MJ]	9.06E-04	0.00E+00	0.00E+00	0.00E+00	7.97E-04	0.00E+00	0.00E+00	1.09E-04	0.00E+00	0.00E+00	0.00E+00
FW [m3]	5.19E-05	4.62E-05	1.40E-07	0.00E+00	7.54E-08	0.00E+00	0.00E+00	1.03E-08	5.49E-06	0.00E+00	-2.77E-05
HWD [kg]	5.18E-10	5.18E-10	1.63E-14	0.00E+00	2.94E-15	0.00E+00	0.00E+00	4.03E-16	-2.96E-13	0.00E+00	-8.29E-13
NHWD [kg]	1.21E-03	9.66E-04	5.67E-07	0.00E+00	1.45E-07	0.00E+00	0.00E+00	1.98E-08	2.39E-04	0.00E+00	-9.69E-04
RWD [kg]	1.70E-06	1.07E-06	7.16E-09	0.00E+00	1.78E-09	0.00E+00	0.00E+00	2.43E-10	6.12E-07	0.00E+00	-4.11E-07
CRU [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	0.00E+00	0.00E+00
MFR [kg]	6.17E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.17E-04	0.00E+00	0.00E+00
MER [kg]	9.73E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.73E-04	0.00E+00	0.00E+00
EEE [MJ]	1.21E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.21E-03	0.00E+00	0.00E+00
EET [MJ]	2.82E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.82E-03	0.00E+00	0.00E+00
Biog. C in product [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	0.00E+00	0.00E+00
Biog. C in packaging [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	0.00E+00	0.00E+00

Table 19: Environmental result indicators for 1 meter 2-core power cable per unit of product

	TOTAL (excl. D)	Raw materials & parts		Manufacturing	Distribution	Installation	Use	End of life			Benefits and loads beyond the system boundaries
		A1	A2	A3	A4	A5	B6	C2	C3	C4	D
GWP - total [kg CO_2 eq.]	4.64E-01	3.72E-01	2.75E-02	0.00E+00	4.62E-03	0.00E+00	0.00E+00	6.33E-04	5.87E-02	0.00E+00	-1.71E-01
GWP - fossil [kg CO_2 eq.]	4.66E-01	3.75E-01	2.74E-02	0.00E+00	4.57E-03	0.00E+00	0.00E+00	6.25E-04	5.86E-02	0.00E+00	-1.71E-01
GWP - biogenic [kg CO_2 eq.]	-2.99E-03	-3.15E-03	3.54E-05	0.00E+00	1.05E-05	0.00E+00	0.00E+00	1.43E-06	1.09E-04	0.00E+00	8.15E-04
GWP - luluc [kg CO_2 eq.]	7.76E-04	6.57E-04	6.78E-05	0.00E+00	4.29E-05	0.00E+00	0.00E+00	5.87E-06	2.86E-06	0.00E+00	-5.43E-04
ODP [kg CFC-11 eq.]	1.92E-12	1.66E-12	2.33E-15	0.00E+00	6.02E-16	0.00E+00	0.00E+00	8.25E-17	2.52E-13	0.00E+00	-7.49E-13
AP [Mole of H+ eq.]	3.79E-03	3.24E-03	4.78E-04	0.00E+00	5.39E-06	0.00E+00	0.00E+00	7.39E-07	5.93E-05	0.00E+00	-2.76E-03
EP - freshwater [kg P eq.]	1.29E-06	1.18E-06	3.12E-08	0.00E+00	1.69E-08	0.00E+00	0.00E+00	2.32E-09	5.62E-08	0.00E+00	-3.13E-07
EP - marine [kg N eq.]	5.12E-04	3.17E-04	1.71E-04	0.00E+00	1.81E-06	0.00E+00	0.00E+00	2.48E-07	2.17E-05	0.00E+00	-1.55E-04
EP - terrestrial [Mole of N eq.]	5.57E-03	3.42E-03	1.88E-03	0.00E+00	2.13E-05	0.00E+00	0.00E+00	2.92E-06	2.48E-04	0.00E+00	-1.62E-03
POCP [kg NMVOC eq.]	1.66E-03	1.13E-03	4.70E-04	0.00E+00	4.70E-06	0.00E+00	0.00E+00	6.44E-07	5.64E-05	0.00E+00	-5.43E-04
ADPE [kg Sb eq.]	1.17E-04	1.17E-04	6.68E-10	0.00E+00	3.07E-10	0.00E+00	0.00E+00	4.20E-11	1.94E-09	0.00E+00	-1.23E-04
ADPF [MJ]	6.42E+00	5.71E+00	3.46E-01	0.00E+00	6.30E-02	0.00E+00	0.00E+00	8.63E-03	2.91E-01	0.00E+00	-1.87E+00
WDP [m^3 world equiv.]	1.53E-01	1.39E-01	1.22E-04	0.00E+00	5.59E-05	0.00E+00	0.00E+00	7.66E-06	1.31E-02	0.00E+00	-1.04E-01
PERE [MJ]	1.31E+00	1.13E+00	8.30E-03	0.00E+00	4.59E-03	0.00E+00	0.00E+00	6.28E-04	1.64E-01	0.00E+00	-5.74E-01
PERM [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	0.00E+00	0.00E+00
PERT [MJ]	1.31E+00	1.13E+00	8.30E-03	0.00E+00	4.59E-03	0.00E+00	0.00E+00	6.28E-04	1.64E-01	0.00E+00	-5.74E-01
PENRE [MJ]	5.97E+00	4.55E+00	3.47E-01	0.00E+00	6.33E-02	0.00E+00	0.00E+00	8.67E-03	1.00E+00	0.00E+00	-1.88E+00
PENRM [MJ]	4.53E-01	1.17E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-7.13E-01	0.00E+00	0.00E+00
PENRT [MJ]	6.43E+00	5.72E+00	3.47E-01	0.00E+00	6.33E-02	0.00E+00	0.00E+00	8.67E-03	2.91E-01	0.00E+00	-1.88E+00
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	0.00E+00	-3.91E-02
RSF [MJ]	3.85E-03	0.00E+00	0.00E+00	0.00E+00	3.38E-03	0.00E+00	0.00E+00	4.64E-04	0.00E+00	0.00E+00	0.00E+00
NRSF [MJ]	6.04E-02	0.00E+00	0.00E+00	0.00E+00	5.31E-02	0.00E+00	0.00E+00	7.28E-03	0.00E+00	0.00E+00	0.00E+00
FW [m3]	3.46E-03	3.08E-03	9.34E-06	0.00E+00	5.02E-06	0.00E+00	0.00E+00	6.88E-07	3.66E-04	0.00E+00	-1.84E-03
HWD [kg]	3.45E-08	3.45E-08	1.09E-12	0.00E+00	1.96E-13	0.00E+00	0.00E+00	2.68E-14	-1.98E-11	0.00E+00	-5.52E-11
NHWD [kg]	8.04E-02	6.44E-02	3.78E-05	0.00E+00	9.64E-06	0.00E+00	0.00E+00	1.32E-06	1.59E-02	0.00E+00	-6.46E-02
RWD [kg]	1.13E-04	7.16E-05	4.78E-07	0.00E+00	1.18E-07	0.00E+00	0.00E+00	1.62E-08	4.08E-05	0.00E+00	-2.74E-05
CRU [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	0.00E+00	0.00E+00
MFR [kg]	4.11E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.11E-02	0.00E+00	0.00E+00
MER [kg]	6.49E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.49E-02	0.00E+00	0.00E+00
EEE [MJ]	8.06E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.06E-02	0.00E+00	0.00E+00
EET [MJ]	1.88E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.88E-01	0.00E+00	0.00E+00
Biog. C in product [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	0.00E+00	0.00E+00
Biog. C in packaging [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	0.00E+00	0.00E+00

5. Extrapolation rules

The extrapolation coefficients included in the PEP Eco-passport have been developed according to the valid PCR & PSR. Table 20 shows the key properties of the reference product, function as extrapolation basis.

Table 20: Reference values for the extrapolation

Parameter	Unit	Reference value (5XH7D41T08NA)
Weight of structural/ mechanical parts	kg	7.48
Weight of power equipment	kg	0.54
Weight of light source	kg	0.19
Weight of light management system	kg	0.00
Weight of product (excl. packaging)	kg	8.20
Weight of packaging	kg	1.72
Typical power consumption	W	66.7
Lumen output	lm	23570
Weight of product (incl. packaging)	kg	9.92

The extrapolation at the level of the functional unit needs to be done according to the following formula:

$$Extrapolation\ coefficient\ at\ the\ product\ level \times \left(\frac{Lighting\ output\ of\ reference\ product\ (lumens)}{Lighting\ output\ of\ product\ concerned\ (lumens)}\right)$$

The required extrapolation coefficients at the product level are listed in the following table.

Table 21: Extrapolation coefficients at the product level

Product code	Fabrication stage	Distribution stage	Installation stage	Use stage	End of life stage
5XH1... micro: [4,5..6,1W] [995..1346lm]	0.617	0.617	0.747	0.079	0.590
5XH1... micro: [4,5..6,1W] [1347..1822lm]	0.617	0.617	0.747	0.079	0.590
5XH1... micro: [4,5..6,1W] [1823..2466lm]	0.617	0.617	0.747	0.079	0.590
5XH1... micro: [6,2..8,4W] [1000..1352lm]	0.617	0.617	0.747	0.109	0.590
5XH1... micro: [6,2..8,4W] [1353..1830lm]	0.617	0.617	0.747	0.109	0.590
5XH1... micro: [6,2..8,4W] [1831..2477lm]	0.617	0.617	0.747	0.109	0.590
5XH1... micro: [6,2..8,4W] [2478..3352lm]	0.617	0.617	0.747	0.109	0.590
5XH1... micro: [8,5..10,8W] [1600..2036lm]	0.600	0.600	0.747	0.144	0.570
5XH1... micro: [8,5..10,8W] [2037..2592lm]	0.600	0.600	0.747	0.144	0.570
5XH1... micro: [8,5..10,8W] [2593..3300lm]	0.600	0.600	0.747	0.144	0.570
5XH1... micro: [8,5..10,8W] [3301..4201lm]	0.600	0.600	0.747	0.144	0.570
5XH1... micro: [10,9..13,8W] [1800..2272lm]	0.600	0.600	0.747	0.184	0.570
5XH1... micro: [10,9..13,8W] [2273..2892lm]	0.600	0.600	0.747	0.184	0.570
5XH1... micro: [10,9..13,8W] [2893..3682lm]	0.600	0.600	0.747	0.184	0.570
5XH1... micro: [10,9..13,8W] [3683..4687lm]	0.600	0.600	0.747	0.184	0.570
5XH1... micro: [10,9..13,8W] [4688..5966lm]	0.600	0.600	0.747	0.184	0.570
5XH1... micro: [13,9..18,7W] [2293..3102lm]	0.620	0.620	0.747	0.244	0.594

5XH1... micro: [13,9..18,7W] [3103..4198lm]	0.620	0.620	0.747	0.244	0.594
5XH1... micro: [13,9..18,7W] [4199..5681lm]	0.620	0.620	0.747	0.244	0.594
5XH1... micro: [13,9..18,7W] [5682..7687lm]	0.620	0.620	0.747	0.244	0.594
	0.000	0.000	0.000	0.000	0.000
5XH2... mini: [16,4..20W] [3677..4484lm]	0.702	0.702	0.780	0.273	0.686
5XH2... mini: [16,4..20W] [4485..5469lm]	0.702	0.702	0.780	0.273	0.686
5XH2... mini: [16,4..20W] [5470..6670lm]	0.702	0.702	0.780	0.273	0.686
5XH2... mini: [20,1..24,8W] [5300..6530lm]	0.706	0.706	0.780	0.337	0.690
5XH2... mini: [20,1..24,8W] [6531..8047lm]	0.706	0.706	0.780	0.337	0.690
5XH2... mini: [20,1..24,8W] [8048..9916lm]	0.706	0.706	0.780	0.337	0.690
5XH2... mini: [24,9..32,1W] [6500..8008lm]	0.706	0.706	0.780	0.427	0.690
5XH2... mini: [24,9..32,1W] [8009..9868lm]	0.706	0.706	0.780	0.427	0.690
5XH2... mini: [24,9..32,1W] [9869..12160lm]	0.706	0.706	0.780	0.427	0.690
5XH2... mini: [32,2..41,4W] [6786..8724lm]	0.706	0.706	0.780	0.552	0.690
5XH2... mini: [32,2..41,4W] [8725..11217lm]	0.706	0.706	0.780	0.552	0.690
5XH2... mini: [32,2..41,4W] [11218..14422lm]	0.706	0.706	0.780	0.552	0.690
	0.000	0.000	0.000	0.000	0.000
5XH3... midi: [35,5..43,9W] [9548..11812lm]	0.967	0.967	0.793	0.595	1.003
5XH3... midi: [35,5..43,9W] [11813..14614lm]	0.967	0.967	0.793	0.595	1.003
5XH3... midi: [35,5..43,9W] [14615..18080lm]	0.967	0.967	0.793	0.595	1.003
5XH3... midi: [44..54,4W] [9500..11752lm]	0.967	0.967	0.793	0.738	1.003
5XH3... midi: [44..54,4W] [11753..14540lm]	0.967	0.967	0.793	0.738	1.003
5XH3... midi: [44..54,4W] [14541..17989lm]	0.967	0.967	0.793	0.738	1.003
5XH3... midi: [44..54,4W] [17990..22256lm]	0.967	0.967	0.793	0.738	1.003
5XH3... midi: [54,5..65,9W] [17482..22000lm]	0.976	0.976	0.793	0.903	1.015
5XH3... midi: [54,5..65,9W] [22001..26603lm]	1.018	1.018	0.793	0.903	1.065
5XH3... midi: [66..79,6W] [18219..22000lm]	1.019	1.019	0.793	1.091	1.066
5XH3... midi: [66..79,6W] [22001..26727lm]	1.019	1.019	0.793	1.091	1.066
5XH3... midi: [66..79,6W] [26728..32275lm]	1.019	1.019	0.793	1.091	1.066
	0.000	0.000	0.000	0.000	0.000
5XH4... maxi: [81,5..94,9W] [19289..22461lm]	1.165	1.165	0.826	1.322	1.235
5XH4... maxi: [81,5..94,9W] [22462..26157lm]	1.165	1.165	0.826	1.322	1.235
5XH4... maxi: [81,5..94,9W] [26158..30462lm]	1.165	1.165	0.826	1.322	1.235
5XH4... maxi: [81,5..94,9W] [30463..35474lm]	1.165	1.165	0.826	1.322	1.235
5XH4... maxi: [81,5..94,9W] [35475..41310lm]	1.165	1.165	0.826	1.322	1.235
5XH4... maxi: [95..110,6W] [22928..26699lm]	1.165	1.165	0.826	1.541	1.235
5XH4... maxi: [95..110,6W] [26700..31092lm]	1.165	1.165	0.826	1.541	1.235
5XH4... maxi: [95..110,6W] [31093..36207lm]	1.165	1.165	0.826	1.541	1.235
5XH4... maxi: [95..110,6W] [36208..42164lm]	1.165	1.165	0.826	1.541	1.235
5XH4... maxi: [95..110,6W] [42165..49101lm]	1.165	1.165	0.826	1.541	1.235
	0.000	0.000	0.000	0.000	0.000
5XH5... micro toolless: [4,5..6,1W] [715..832lm]	0.617	0.617	0.747	0.079	0.590
5XH5... micro toolless: [4,5..6,1W] [833..1127lm]	0.617	0.617	0.747	0.079	0.590
5XH5... micro toolless: [4,5..6,1W] [1128..1526lm]	0.617	0.617	0.747	0.079	0.590
5XH5... micro toolless: [4,5..6,1W] [1527..2065lm]	0.617	0.617	0.747	0.079	0.590
5XH5... micro toolless: [6,2..8W] [950..1231lm]	0.617	0.617	0.747	0.106	0.590
5XH5... micro toolless: [6,2..8W] [1232..1597lm]	0.617	0.617	0.747	0.106	0.590
5XH5... micro toolless: [6,2..8W] [1598..2071lm]	0.617	0.617	0.747	0.106	0.590

5XH5... micro toolless: [6,2..8W] [2072..2686lm]	0.617	0.617	0.747	0.106	0.590
5XH5... micro toolless: [6,2..8W] [2687..3483lm]	0.617	0.617	0.747	0.106	0.590
5XH5... micro toolless: [8,1..10,5W] [1250..1620lm]	0.617	0.617	0.747	0.139	0.590
5XH5... micro toolless: [8,1..10,5W] [1621..2101lm]	0.617	0.617	0.747	0.139	0.590
5XH5... micro toolless: [8,1..10,5W] [2102..2725lm]	0.617	0.617	0.747	0.139	0.590
5XH5... micro toolless: [8,1..10,5W] [2726..3534lm]	0.617	0.617	0.747	0.139	0.590
5XH5... micro toolless: [8,1..10,5W] [3535..4583lm]	0.617	0.617	0.747	0.139	0.590
5XH5... micro toolless: [10,6..13,8W] [1650..2139lm]	0.620	0.620	0.747	0.183	0.594
5XH5... micro toolless: [10,6..13,8W] [2140..2774lm]	0.620	0.620	0.747	0.183	0.594
5XH5... micro toolless: [10,6..13,8W] [2775..3597lm]	0.620	0.620	0.747	0.183	0.594
5XH5... micro toolless: [10,6..13,8W] [3598..4664lm]	0.620	0.620	0.747	0.183	0.594
5XH5... micro toolless: [10,6..13,8W] [4665..6048lm]	0.620	0.620	0.747	0.183	0.594
5XH5... micro toolless: [13,9..18,9W] [1768..2391lm]	0.620	0.620	0.747	0.246	0.594
5XH5... micro toolless: [13,9..18,9W] [2392..3235lm]	0.620	0.620	0.747	0.246	0.594
5XH5... micro toolless: [13,9..18,9W] [3236..4377lm]	0.620	0.620	0.747	0.246	0.594
5XH5... micro toolless: [13,9..18,9W] [4378..5923lm]	0.620	0.620	0.747	0.246	0.594
5XH5... micro toolless: [13,9..18,9W] [5924..8014lm]	0.620	0.620	0.747	0.246	0.594
	0.000	0.000	0.000	0.000	0.000
5XH6... mini toolless: [14,8..20W] [2425..3280lm]	0.683	0.683	0.780	0.261	0.662
5XH6... mini toolless: [14,8..20W] [3281..4439lm]	0.683	0.683	0.780	0.261	0.662
5XH6... mini toolless: [14,8..20W] [4440..6007lm]	0.683	0.683	0.780	0.261	0.662
5XH6... mini toolless: [14,8..20W] [6008..8128lm]	0.683	0.683	0.780	0.261	0.662
5XH6... mini toolless: [20,1..25W] [3200..3977lm]	0.685	0.685	0.780	0.339	0.665
5XH6... mini toolless: [20,1..25W] [3978..4945lm]	0.685	0.685	0.780	0.339	0.665
5XH6... mini toolless: [20,1..25W] [4946..6148lm]	0.685	0.685	0.780	0.339	0.665
5XH6... mini toolless: [20,1..25W] [6149..7643lm]	0.685	0.685	0.780	0.339	0.665
5XH6... mini toolless: [20,1..25W] [7644..9502lm]	0.685	0.685	0.780	0.339	0.665
5XH6... mini toolless: [25,1..31,2W] [4000..4972lm]	0.685	0.685	0.780	0.421	0.665
5XH6... mini toolless: [25,1..31,2W] [4973..6181lm]	0.685	0.685	0.780	0.421	0.665
5XH6... mini toolless: [25,1..31,2W] [6182..7684lm]	0.685	0.685	0.780	0.421	0.665
5XH6... mini toolless: [25,1..31,2W] [7685..9553lm]	0.685	0.685	0.780	0.421	0.665
5XH6... mini toolless: [25,1..31,2W] [9554..11876lm]	0.685	0.685	0.780	0.421	0.665
5XH6... mini toolless: [31,3..42,3W] [4400..5952lm]	0.706	0.706	0.780	0.552	0.690
5XH6... mini toolless: [31,3..42,3W] [5953..8053lm]	0.706	0.706	0.780	0.552	0.690
5XH6... mini toolless: [31,3..42,3W] [8054..10896lm]	0.706	0.706	0.780	0.552	0.690
5XH6... mini toolless: [31,3..42,3W] [10897..14743lm]	0.706	0.706	0.780	0.552	0.690
	0.000	0.000	0.000	0.000	0.000
5XH7... midi toolless: [33,6..45,4W] [5591..7564lm]	0.977	0.977	0.793	0.592	1.016
5XH7... midi toolless: [33,6..45,4W] [7565..10235lm]	0.977	0.977	0.793	0.592	1.016
5XH7... midi toolless: [33,6..45,4W] [10236..13848lm]	0.977	0.977	0.793	0.592	1.016
5XH7... midi toolless: [33,6..45,4W] [13849..18736lm]	0.977	0.977	0.793	0.592	1.016
5XH7... midi toolless: [45,5..61,6W] [7000..9470lm]	0.978	0.978	0.793	0.803	1.016
5XH7... midi toolless: [45,5..61,6W] [9471..12813lm]	0.978	0.978	0.793	0.803	1.016
5XH7... midi toolless: [45,5..61,6W] [12814..17336lm]	0.978	0.978	0.793	0.803	1.016
5XH7... midi toolless: [45,5..61,6W] [17337..23455lm]	0.978	0.978	0.793	0.803	1.016
5XH7... midi toolless: [61,7..83,5W] [9500..12852lm]	1.019	1.019	0.793	1.088	1.066
5XH7... midi toolless: [61,7..83,5W] [12853..17389lm]	1.019	1.019	0.793	1.088	1.066
5XH7... midi toolless: [61,7..83,5W] [17390..22000lm]	1.019	1.019	0.793	1.088	1.066

5XH7... midi toolless: [61,7..83,5W] [22001..29766lm]	1.019	1.019	0.793	1.088	1.066
	0.000	0.000	0.000	0.000	0.000
5XH8... maxi toolless: [81,1..94,9W] [14838..17368lm]	1.163	1.163	0.826	1.319	1.234
5XH8... maxi toolless: [81,1..94,9W] [17369..20331lm]	1.163	1.163	0.826	1.319	1.234
5XH8... maxi toolless: [81,1..94,9W] [20332..23799lm]	1.163	1.163	0.826	1.319	1.234
5XH8... maxi toolless: [81,1..94,9W] [23800..27858lm]	1.163	1.163	0.826	1.319	1.234
5XH8... maxi toolless: [81,1..94,9W] [27859..32609lm]	1.163	1.163	0.826	1.319	1.234
5XH8... maxi toolless: [81,1..94,9W] [32610..38170lm]	1.163	1.163	0.826	1.319	1.234
5XH8... maxi toolless: [95..111,2W] [17356..20315lm]	1.165	1.165	0.826	1.546	1.235
5XH8... maxi toolless: [95..111,2W] [20316..23780lm]	1.165	1.165	0.826	1.546	1.235
5XH8... maxi toolless: [95..111,2W] [23781..27836lm]	1.165	1.165	0.826	1.546	1.235
5XH8... maxi toolless: [95..111,2W] [27837..32583lm]	1.165	1.165	0.826	1.546	1.235
5XH8... maxi toolless: [95..111,2W] [32584..38140lm]	1.165	1.165	0.826	1.546	1.235
5XH8... maxi toolless: [95..111,2W] [38141..44645lm]	1.165	1.165	0.826	1.546	1.235

Lumen output of each product variant and other important properties are listed in the table below.

Table 22: Information about the product family

Product Code	Weight of structural/ mechanical parts	Weight of power equipment	Weight of light source	Weight of light management system	Weight of product (excl. packaging)	Weight of packaging	Typical power consumption	Lumen output	Weight of product (incl. packaging)
5XH7D41T08NA	7.48	0.54	0.19	0	8.2	1.72	66.7	23,570	9.56
5XH1... micro: [4,5..6,1W] [995..1346lm]	4.50	0.29	0.05	0	4.84	1.28	5.3	1,170	6.12
5XH1... micro: [4,5..6,1W] [1347..1822lm]	4.50	0.29	0.05	0	4.84	1.28	5.3	1,585	6.12
5XH1... micro: [4,5..6,1W] [1823..2466lm]	4.50	0.29	0.05	0	4.84	1.28	5.3	2,145	6.12
5XH1... micro: [6,2..8,4W] [1000..1352lm]	4.50	0.29	0.05	0	4.84	1.28	7.3	1,176	6.12
5XH1... micro: [6,2..8,4W] [1353..1830lm]	4.50	0.29	0.05	0	4.84	1.28	7.3	1,592	6.12
5XH1... micro: [6,2..8,4W] [1831..2477lm]	4.50	0.29	0.05	0	4.84	1.28	7.3	2,154	6.12
5XH1... micro: [6,2..8,4W] [2478..3352lm]	4.50	0.29	0.05	0	4.84	1.28	7.3	2,915	6.12
5XH1... micro: [8,5..10,8W] [1600..2036lm]	4.50	0.12	0.05	0	4.67	1.28	9.6	1,818	5.95
5XH1... micro: [8,5..10,8W] [2037..2592lm]	4.50	0.12	0.05	0	4.67	1.28	9.6	2,315	5.95
5XH1... micro: [8,5..10,8W] [2593..3300lm]	4.50	0.12	0.05	0	4.67	1.28	9.6	2,947	5.95
5XH1... micro: [8,5..10,8W] [3301..4201lm]	4.50	0.12	0.05	0	4.67	1.28	9.6	3,751	5.95
5XH1... micro: [10,9..13,8W] [1800..2272lm]	4.50	0.12	0.05	0	4.67	1.28	12.3	2,036	5.95
5XH1... micro: [10,9..13,8W] [2273..2892lm]	4.50	0.12	0.05	0	4.67	1.28	12.3	2,583	5.95
5XH1... micro: [10,9..13,8W] [2893..3682lm]	4.50	0.12	0.05	0	4.67	1.28	12.3	3,288	5.95
5XH1... micro: [10,9..13,8W] [3683..4687lm]	4.50	0.12	0.05	0	4.67	1.28	12.3	4,185	5.95
5XH1... micro: [10,9..13,8W] [4688..5966lm]	4.50	0.12	0.05	0	4.67	1.28	12.3	5,327	5.95
5XH1... micro: [13,9..18,7W] [2293..3102lm]	4.50	0.32	0.05	0	4.87	1.28	16.3	2,698	6.15
5XH1... micro: [13,9..18,7W] [3103..4198lm]	4.50	0.32	0.05	0	4.87	1.28	16.3	3,651	6.15
5XH1... micro: [13,9..18,7W] [4199..5681lm]	4.50	0.32	0.05	0	4.87	1.28	16.3	4,940	6.15
5XH1... micro: [13,9..18,7W] [5682..7687lm]	4.50	0.32	0.05	0	4.87	1.28	16.3	6,685	6.15
5XH2... mini: [16,4..20W] [3677..4484lm]	5.22	0.32	0.09	0	5.63	1.34	18.2	4,081	6.97

5XH2... mini: [16,4..20W] [4485..5469lm]	5.22	0.32	0.09	0	5.63	1.34	18.2	4,977	6.97
5XH2... mini: [16,4..20W] [5470..6670lm]	5.22	0.32	0.09	0	5.63	1.34	18.2	6,070	6.97
5XH2... mini: [20,1..24,8W] [5300..6530lm]	5.22	0.35	0.09	0	5.66	1.34	22.5	5,915	7.00
5XH2... mini: [20,1..24,8W] [6531..8047lm]	5.22	0.35	0.09	0	5.66	1.34	22.5	7,289	7.00
5XH2... mini: [20,1..24,8W] [8048..9916lm]	5.22	0.35	0.09	0	5.66	1.34	22.5	8,982	7.00
5XH2... mini: [24,9..32,1W] [6500..8008lm]	5.22	0.35	0.09	0	5.66	1.34	28.5	7,254	7.00
5XH2... mini: [24,9..32,1W] [8009..9868lm]	5.22	0.35	0.09	0	5.66	1.34	28.5	8,939	7.00
5XH2... mini: [24,9..32,1W] [9869..12160lm]	5.22	0.35	0.09	0	5.66	1.34	28.5	11,015	7.00
5XH2... mini: [32,2..41,4W] [6786..8724lm]	5.22	0.35	0.09	0	5.66	1.34	36.8	7,755	7.00
5XH2... mini: [32,2..41,4W] [8725..11217lm]	5.22	0.35	0.09	0	5.66	1.34	36.8	9,971	7.00
5XH2... mini: [32,2..41,4W] [11218..14422lm]	5.22	0.35	0.09	0	5.66	1.34	36.8	12,820	7.00
5XH3... midi: [35,5..43,9W] [9548..11812lm]	7.60	0.54	0.09	0	8.23	1.36	39.7	10,680	9.59
5XH3... midi: [35,5..43,9W] [11813..14614lm]	7.60	0.54	0.09	0	8.23	1.36	39.7	13,214	9.59
5XH3... midi: [35,5..43,9W] [14615..18080lm]	7.60	0.54	0.09	0	8.23	1.36	39.7	16,348	9.59
5XH3... midi: [44..54,4W] [9500..11752lm]	7.60	0.54	0.09	0	8.23	1.36	49.2	10,626	9.59
5XH3... midi: [44..54,4W] [11753..14540lm]	7.60	0.54	0.09	0	8.23	1.36	49.2	13,147	9.59
5XH3... midi: [44..54,4W] [14541..17989lm]	7.60	0.54	0.09	0	8.23	1.36	49.2	16,265	9.59
5XH3... midi: [44..54,4W] [17990..22256lm]	7.60	0.54	0.09	0	8.23	1.36	49.2	20,123	9.59
5XH3... midi: [54,5..65,9W] [17482..22000lm]	7.60	0.54	0.18	0	8.32	1.36	60.2	19,310	9.68
5XH3... midi: [54,5..65,9W] [22001..26603lm]	7.60	0.95	0.18	0	8.74	1.36	60.2	24,302	10.10
5XH3... midi: [66..79,6W] [18219..22000lm]	7.60	0.95	0.19	0	8.74	1.36	72.8	20,110	10.10
5XH3... midi: [66..79,6W] [22001..26727lm]	7.60	0.95	0.19	0	8.74	1.36	72.8	24,430	10.10
5XH3... midi: [66..79,6W] [26728..32275lm]	7.60	0.95	0.19	0	8.74	1.36	72.8	29,502	10.10
5XH4... maxi: [81,5..94,9W] [19289..22461lm]	8.92	0.95	0.26	0	10.13	1.42	88.2	20,875	11.55
5XH4... maxi: [81,5..94,9W] [22462..26157lm]	8.92	0.95	0.26	0	10.13	1.42	88.2	24,310	11.55
5XH4... maxi: [81,5..94,9W] [26158..30462lm]	8.92	0.95	0.26	0	10.13	1.42	88.2	28,310	11.55
5XH4... maxi: [81,5..94,9W] [30463..35474lm]	8.92	0.95	0.26	0	10.13	1.42	88.2	32,969	11.55
5XH4... maxi: [81,5..94,9W] [35475..41310lm]	8.92	0.95	0.26	0	10.13	1.42	88.2	38,393	11.55
5XH4... maxi: [95..110,6W] [22928..26699lm]	8.92	0.95	0.26	0	10.13	1.42	102.8	24,814	11.55
5XH4... maxi: [95..110,6W] [26700..31092lm]	8.92	0.95	0.26	0	10.13	1.42	102.8	28,896	11.55
5XH4... maxi: [95..110,6W] [31093..36207lm]	8.92	0.95	0.26	0	10.13	1.42	102.8	33,650	11.55
5XH4... maxi: [95..110,6W] [36208..42164lm]	8.92	0.95	0.26	0	10.13	1.42	102.8	39,186	11.55
5XH4... maxi: [95..110,6W] [42165..49101lm]	8.92	0.95	0.26	0	10.13	1.42	102.8	45,633	11.55
5XH5... micro toolless: [4,5..6,1W] [715..832lm]	4.50	0.29	0.05	0	4.84	1.28	5.3	774	6.12
5XH5... micro toolless: [4,5..6,1W] [833..1127lm]	4.50	0.29	0.05	0	4.84	1.28	5.3	980	6.12
5XH5... micro toolless: [4,5..6,1W] [1128..1526lm]	4.50	0.29	0.05	0	4.84	1.28	5.3	1,327	6.12
5XH5... micro toolless: [4,5..6,1W] [1527..2065lm]	4.50	0.29	0.05	0	4.84	1.28	5.3	1,796	6.12
5XH5... micro toolless: [6,2..8W] [950..1231lm]	4.50	0.29	0.05	0	4.84	1.28	7.1	1,091	6.12
5XH5... micro toolless: [6,2..8W] [1232..1597lm]	4.50	0.29	0.05	0	4.84	1.28	7.1	1,415	6.12
5XH5... micro toolless: [6,2..8W] [1598..2071lm]	4.50	0.29	0.05	0	4.84	1.28	7.1	1,835	6.12
5XH5... micro toolless: [6,2..8W] [2072..2686lm]	4.50	0.29	0.05	0	4.84	1.28	7.1	2,379	6.12
5XH5... micro toolless: [6,2..8W] [2687..3483lm]	4.50	0.29	0.05	0	4.84	1.28	7.1	3,085	6.12
5XH5... micro toolless: [8,1..10,5W] [1250..1620lm]	4.50	0.29	0.05	0	4.84	1.28	9.3	1,435	6.12
5XH5... micro toolless: [8,1..10,5W] [1621..2101lm]	4.50	0.29	0.05	0	4.84	1.28	9.3	1,861	6.12
5XH5... micro toolless: [8,1..10,5W] [2102..2725lm]	4.50	0.29	0.05	0	4.84	1.28	9.3	2,414	6.12

5XH5... micro toolless: [8,1..10,5W] [2726..3534lm]	4.50	0.29	0.05	0	4.84	1.28	9.3	3,130	6.12
5XH5... micro toolless: [8,1..10,5W] [3535..4583lm]	4.50	0.29	0.05	0	4.84	1.28	9.3	4,059	6.12
5XH5... micro toolless: [10,6..13,8W] [1650..2139lm]	4.50	0.32	0.05	0	4.87	1.28	12.2	1,895	6.15
5XH5... micro toolless: [10,6..13,8W] [2140..2774lm]	4.50	0.32	0.05	0	4.87	1.28	12.2	2,457	6.15
5XH5... micro toolless: [10,6..13,8W] [2775..3597lm]	4.50	0.32	0.05	0	4.87	1.28	12.2	3,186	6.15
5XH5... micro toolless: [10,6..13,8W] [3598..4664lm]	4.50	0.32	0.05	0	4.87	1.28	12.2	4,131	6.15
5XH5... micro toolless: [10,6..13,8W] [4665..6048lm]	4.50	0.32	0.05	0	4.87	1.28	12.2	5,357	6.15
5XH5... micro toolless: [13,9..18,9W] [1768..2391lm]	4.50	0.32	0.05	0	4.87	1.28	16.4	2,080	6.15
5XH5... micro toolless: [13,9..18,9W] [2392..3235lm]	4.50	0.32	0.05	0	4.87	1.28	16.4	2,814	6.15
5XH5... micro toolless: [13,9..18,9W] [3236..4377lm]	4.50	0.32	0.05	0	4.87	1.28	16.4	3,807	6.15
5XH5... micro toolless: [13,9..18,9W] [4378..5923lm]	4.50	0.32	0.05	0	4.87	1.28	16.4	5,150	6.15
5XH5... micro toolless: [13,9..18,9W] [5924..8014lm]	4.50	0.32	0.05	0	4.87	1.28	16.4	6,969	6.15
5XH6... mini toolless: [14,8..20W] [2425..3280lm]	5.04	0.30	0.09	0	5.43	1.34	17.4	2,853	6.77
5XH6... mini toolless: [14,8..20W] [3281..4439lm]	5.04	0.30	0.09	0	5.43	1.34	17.4	3,860	6.77
5XH6... mini toolless: [14,8..20W] [4440..6007lm]	5.04	0.30	0.09	0	5.43	1.34	17.4	5,224	6.77
5XH6... mini toolless: [14,8..20W] [6008..8128lm]	5.04	0.30	0.09	0	5.43	1.34	17.4	7,068	6.77
5XH6... mini toolless: [20,1..25W] [3200..3977lm]	5.04	0.32	0.09	0	5.45	1.34	22.6	3,589	6.79
5XH6... mini toolless: [20,1..25W] [3978..4945lm]	5.04	0.32	0.09	0	5.45	1.34	22.6	4,462	6.79
5XH6... mini toolless: [20,1..25W] [4946..6148lm]	5.04	0.32	0.09	0	5.45	1.34	22.6	5,547	6.79
5XH6... mini toolless: [20,1..25W] [6149..7643lm]	5.04	0.32	0.09	0	5.45	1.34	22.6	6,896	6.79
5XH6... mini toolless: [20,1..25W] [7644..9502lm]	5.04	0.32	0.09	0	5.45	1.34	22.6	8,573	6.79
5XH6... mini toolless: [25,1..31,2W] [4000..4972lm]	5.04	0.32	0.09	0	5.45	1.34	28.1	4,486	6.79
5XH6... mini toolless: [25,1..31,2W] [4973..6181lm]	5.04	0.32	0.09	0	5.45	1.34	28.1	5,577	6.79
5XH6... mini toolless: [25,1..31,2W] [6182..7684lm]	5.04	0.32	0.09	0	5.45	1.34	28.1	6,933	6.79
5XH6... mini toolless: [25,1..31,2W] [7685..9553lm]	5.04	0.32	0.09	0	5.45	1.34	28.1	8,619	6.79
5XH6... mini toolless: [25,1..31,2W] [9554..11876lm]	5.04	0.32	0.09	0	5.45	1.34	28.1	10,715	6.79
5XH6... mini toolless: [31,3..42,3W] [4400..5952lm]	5.04	0.53	0.09	0	5.66	1.34	36.8	5,176	7.00
5XH6... mini toolless: [31,3..42,3W] [5953..8053lm]	5.04	0.53	0.09	0	5.66	1.34	36.8	7,003	7.00
5XH6... mini toolless: [31,3..42,3W] [8054..10896lm]	5.04	0.53	0.09	0	5.66	1.34	36.8	9,475	7.00
5XH6... mini toolless: [31,3..42,3W] [10897..14743lm]	5.04	0.53	0.09	0	5.66	1.34	36.8	12,820	7.00
5XH7... midi toolless: [33,6..45,4W] [5591..7564lm]	7.61	0.54	0.18	0	8.33	1.36	39.5	6,578	9.69
5XH7... midi toolless: [33,6..45,4W] [7565..10235lm]	7.61	0.54	0.18	0	8.33	1.36	39.5	8,900	9.69
5XH7... midi toolless: [33,6..45,4W] [10236..13848lm]	7.61	0.54	0.18	0	8.33	1.36	39.5	12,042	9.69
5XH7... midi toolless: [33,6..45,4W] [13849..18736lm]	7.61	0.54	0.18	0	8.33	1.36	39.5	16,293	9.69
5XH7... midi toolless: [45,5..61,6W] [7000..9470lm]	7.61	0.54	0.19	0	8.33	1.36	53.6	8,235	9.69
5XH7... midi toolless: [45,5..61,6W] [9471..12813lm]	7.61	0.54	0.19	0	8.33	1.36	53.6	11,142	9.69
5XH7... midi toolless: [45,5..61,6W] [12814..17336lm]	7.61	0.54	0.19	0	8.33	1.36	53.6	15,075	9.69
5XH7... midi toolless: [45,5..61,6W] [17337..23455lm]	7.61	0.54	0.19	0	8.33	1.36	53.6	20,396	9.69
5XH7... midi toolless: [61,7..83,5W] [9500..12852lm]	7.61	0.94	0.19	0	8.74	1.36	72.6	11,176	10.10
5XH7... midi toolless: [61,7..83,5W] [12853..17389lm]	7.61	0.94	0.19	0	8.74	1.36	72.6	15,121	10.10
5XH7... midi toolless: [61,7..83,5W] [17390..22000lm]	7.61	0.94	0.19	0	8.74	1.36	72.6	19,695	10.10
5XH7... midi toolless: [61,7..83,5W] [22001..29766lm]	7.61	0.94	0.19	0	8.74	1.36	72.6	25,884	10.10
5XH8... maxi toolless: [81,1..94,9W] [14838..17368lm]	8.91	0.95	0.26	0	10.12	1.42	88.0	16,103	11.54
5XH8... maxi toolless: [81,1..94,9W] [17369..20331lm]	8.91	0.95	0.26	0	10.12	1.42	88.0	18,850	11.54
5XH8... maxi toolless: [81,1..94,9W] [20332..23799lm]	8.91	0.95	0.26	0	10.12	1.42	88.0	22,066	11.54

5XH8... maxi toolless: [81,1..94,9W] [23800..27858lm]	8.91	0.95	0.26	0	10.12	1.42	88.0	25,829	11.54
5XH8... maxi toolless: [81,1..94,9W] [27859..32609lm]	8.91	0.95	0.26	0	10.12	1.42	88.0	30,234	11.54
5XH8... maxi toolless: [81,1..94,9W] [32610..38170lm]	8.91	0.95	0.26	0	10.12	1.42	88.0	35,390	11.54
5XH8... maxi toolless: [95..111,2W] [17356..20315lm]	8.91	0.95	0.27	0	10.13	1.42	103.1	18,836	11.55
5XH8... maxi toolless: [95..111,2W] [20316..23780lm]	8.91	0.95	0.27	0	10.13	1.42	103.1	22,048	11.55
5XH8... maxi toolless: [95..111,2W] [23781..27836lm]	8.91	0.95	0.27	0	10.13	1.42	103.1	25,809	11.55
5XH8... maxi toolless: [95..111,2W] [27837..32583lm]	8.91	0.95	0.27	0	10.13	1.42	103.1	30,210	11.55
5XH8... maxi toolless: [95..111,2W] [32584..38140lm]	8.91	0.95	0.27	0	10.13	1.42	103.1	35,362	11.55
5XH8... maxi toolless: [95..111,2W] [38141..44645lm]	8.91	0.95	0.27	0	10.13	1.42	103.1	41,393	11.55

Annex

Indicator	Acronym [Unit]
Renewable primary energy (without raw material)	PERE [MJ]
Renewable primary energy (raw material)	PERM [MJ]
Total use of renewable primary energy	PERT [MJ]
Non-renewable primary energy (without raw material)	PENRE [MJ]
Non-renewable primary energy (raw material)	PENRM [MJ]
Total use of non-renewable primary energy	PENRT [MJ]
Use of secondary materials	SM [kg]
Use of renewable secondary fuels	RSF [MJ]
Use of non-renewable secondary fuels	NRSF [MJ]
Net use of fresh water	FW [m3]
Hazardous waste disposed	HWD [kg]
Non-hazardous waste disposed	NHWD [kg]
Radioactive waste disposed	RWD [kg]
Components for reuse	CRU [kg]
Materials for recycling	MFR [kg]
Materials for energy recovery	MER [kg]
Exported electricity	EEE [MJ]
Exported thermal energy	EET [MJ]
Biogenic carbon content of the product	Biog. C in product [kg]
Biogenic carbon content of the associated packaging	Biog. C in packaging [kg]
Global Warming Potential, total	GWP - total [kg CO2 eq.]
Global Warming Potential, fossil	GWP - fossil [kg CO2 eq.]
Global Warming Potential, biogenic	GWP - biogenic [kg CO2 eq.]
Global Warming Potential, land use and land use change	GWP - luluc [kg CO2 eq.]
Ozone depletion	ODP [kg CFC-11 eq.]
Acidification	AP [Mole of H+ eq.]
Eutrophication, freshwater	EP - freshwater [kg P eq.]
Eutrophication, marine	EP - marine [kg N eq.]
Eutrophication, terrestrial	EP - terrestrial [Mole of N eq.]
Photochemical ozone formation, human health	POCP [kg NMVOC eq.]
Resource use, mineral and metals	ADPE [kg Sb eq.]
Resource use, fossils	ADPF [MJ]
Water use	WDP [m³ world equiv.]