ENVIRONMENTAL PRODUCT DECLARATION

IN ACCORDANCE WITH EN 15804+A2 & ISO 14025 / ISO 21930

Philips DigiStreet

BGP762
Signify N.V.

EPD HUB
Publishing date 2024-02-14

GENERAL INFORMATION

MANUFACTURER

Manufacturer	Signify N.V.
Address	High Tech Campus 48, 5656 AE Eindhoven, The Netherlands
Contact details	sustainability@signify.com
Website	https://www.signify.com/global

EPD STANDARDS, SCOPE AND VERIFICATION

Program operator	EPD Hub, hub@epdhub.com
Reference standard	EN 15804+A2:2019 and ISO 14025
PCR	EPD Hub Core PCR version 1.0, 1 Feb 2022
Sector	Electrical product
Category of EPD	Pre-verified EPD
Scope of the EPD	Cradle to gate with options, A4-B7, and modules C1-C4, D
EPD author	Sustainability Signify
EPD verification	Independent verification of this EPD and data, according to ISO 14025: ☑ Internal certification ☐External verification

The manufacturer has the sole ownership, liability, and responsibility for the EPD. EPDs within the same product category but from different programs may not be comparable. EPDs of lighting products may not be comparable if they do not comply with EN 15804 and if they are not compared in a lighting context.

PRODUCT

Product name	Philips DigiStreet Medium
Additional labels	BGP762 LED180-/740 I DM10 DGR 62
Product reference	910770208845
Place of production	Poland
Period for data	2022
Averaging in EPD	No averaging
Variation in GWP-fossil for A1-A3	%

ENVIRONMENTAL DATA SUMMARY

Declared unit	1 unit of 16020 lumens over 100000 hours
Declared unit mass	8.96 kg
GWP-fossil, A1-A3 (kgCO2e)	1.25E+02
GWP-total, A1-A3 (kgCO2e)	1.22E+02
Secondary material, inputs (%)	6.6
Secondary material, outputs (%)	24.6
Total energy use, A1-A3 (kWh)	455.0
Total water use, A1-A3 (m3e)	1.09E+00

PRODUCT AND MANUFACTURER

ABOUT THE MANUFACTURER

Signify is the world leader in lighting for professionals, consumers and lighting for the Internet of Things. Our energy efficient lighting products, systems and services enable our customers to enjoy a superior quality of light, and make people's lives safer and more comfortable, businesses more productive and cities more liveable.

For more information, please visit: https://www.signify.com/global

PRODUCT DESCRIPTION

Developed with the aim to become your long term partner ,. the system ready architecture of DigiStreet enables you to enjoy the benefits of connected lighting systems today and also gets the city ready for the innovations to come!. Its two sockets enable you to connect directly to the Philips CityTouch system and is also prepared to connect you to the future innovations of IoT. Next to this, each individual luminaire is uniquely identifiable, thanks to the Philips Service tag application. With a simple scan of a QR code, placed on the inside of the mast door, you gain instant access to the luminaire configuration, making maintenance and programming operations faster and easier, no matter what stage of the luminaire's lifetime. Digistreet is also equipped with dedicated light recipes that: 1) maintain an optimal ecosystems for bats or 2) preserve a dark night sky.

For more information, please visit
https://www.lighting.philips.com/link/BGP760/fam/aa/en

PRODUCT RAW MATERIAL MAIN COMPOSITION

Raw material category	Amount, mass- %	Material origin
Metals	26.55	APAC , EU
Minerals	13.99	APAC , EU
Fossil materials	59.46	APAC , EU
Bio-based materials	0	Not applicable

BIOGENIC CARBON CONTENT

Product's biogenic carbon content at the factory gate

Biogenic carbon content in product, kg C	0
Biogenic carbon content in packaging, kg C	0.878

FUNCTIONAL UNIT AND SERVICE LIFE

Declared unit	1 Product
Mass per declared unit	8.96 kg
Functional unit	16020 lumens over 100000 hours
Reference service life	100000 hours

SUBSTANCES, REACH - VERY HIGH CONCERN

The product does not contain any REACH SVHC substances in amounts greater than 0,1 % (1000 ppm).

PRODUCT LIFE-CYCLE

SYSTEM BOUNDARY

This EPD covers the life-cycle modules listed in the following table.

Product stage			Assembly stage		Use stage							End of life stage				Beyond the system boundaries		
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D		
x	x	x	x	x	MNR	MNR	MNR	MNR	MNR	x	MNR	MNR	x	x	x	x		
Raw materials	Transport	Manufacturing	Transport	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	Deconstr./demol.	Transport	Waste processing	Disposal	Reuse	Recovery	Recycling

Modules not relevant = MNR.

MANUFACTURING AND PACKAGING (A1-A3)

The environmental impacts considered for the product stage cover the manufacturing of raw materials used in the production as well as packaging materials and other ancillary materials. Also, electricity, and waste formed in the production processes at Signify's manufacturing facilities are included in this stage. The product is made of metals, plastics, and electronic components. All components are transported to Signify's production facility, where the main manufacturing processes primarily are associated with assembly. The finished product is packaged with polyethylene, cardboard, and/or paper as packaging material before being sent to customers. Manufacturing loss, ancillaries and wastes are calculated according to the data that each manufacturing site is sharing with Signify. The total annual amount of waste in kg is allocated to the total annual production in kg at the specific manufacturing site responsible for the production of the studied luminaire. Thus, it is possible to allocate it according to the weight of the product analysed in this study. Some of the wastes are due to ancillary materials used during manufacturing while the rest is due to material losses.

TRANSPORT AND INSTALLATION (A4-A5)

Transport distances were calculated on the base of the supplier location and manufacturing location and then made a cumulative group choosing the conservative scenario. Environmental impacts from installation include waste packaging materials (A5). The impacts of energy consumption and the used ancillary materials during installation are considered negligible.

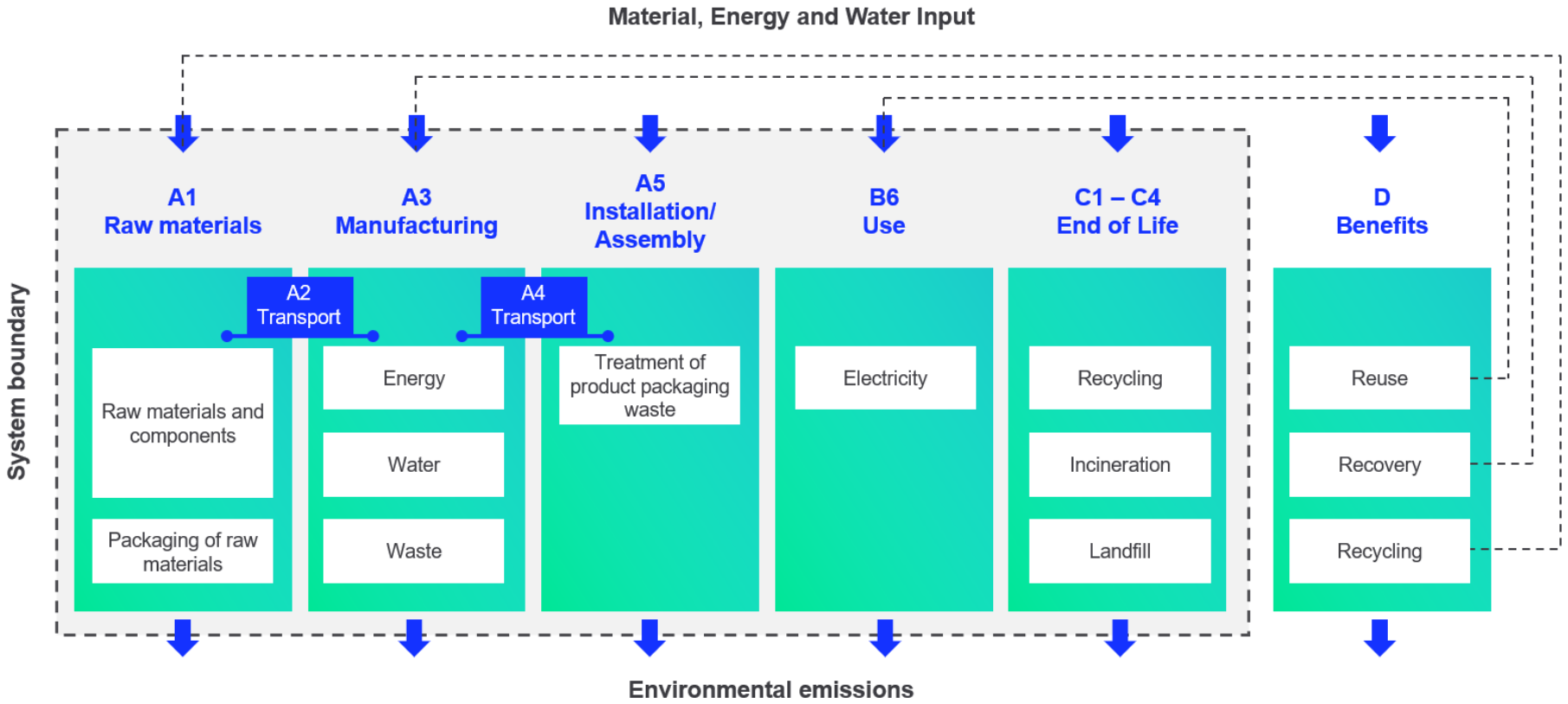
PRODUCT USE AND MAINTENANCE (B1-B7)

During the use phase, the product consumes electricity from Europe's electricity grid mix (B6). The total power consumption of the reference product is calculated as follows: Wattage x Reference lifetime = kWh consumed throughout the entire use phase B6.

PRODUCT END OF LIFE (C1-C4, D)

Consumption of energy and natural resources in demolition process is assumed to be negligible. It is assumed that the waste is collected separately and transported to the waste treatment centre. Transportation distance to treatment is assumed as 150 km and the transportation method is assumed to be lorry (C2). According to EN 50693:2019, the sequence of treatment operations occurring to the product shall include de-pollution, fractions separation and preparation (dismantling, crushing, shredding, sorting), recycling, other material recovery, energy recovery and disposal. In this study, the default values from table G.4 of EN 50693 is used for treating materials in different waste treatment methods. Due to the material and energy recovery potential of parts in the lighting system, the end-of-life product is converted into recycled raw materials, while the energy recovered from incineration displaces electricity and heat production (D). The benefits and loads of incineration and recycling are included in Module D.

SYSTEM BOUNDARY



LIFE-CYCLE ASSESSMENT

CUT-OFF CRITERIA

The study does not exclude any modules or processes which are stated mandatory in the reference standard and the applied PCR. The study does not exclude any hazardous materials or substances. The study includes all major raw material and energy consumption. All inputs and outputs of the unit processes, for which data is available for, are included in the calculation. There is no neglected unit process more than 1% of total mass or energy flows. The module specific total neglected input and output flows also do not exceed 5% of energy usage or mass.

ALLOCATION, ESTIMATES AND ASSUMPTIONS

Allocation is required if some material, energy, and waste data cannot be measured separately for the product under investigation. All allocations are done as per the reference standards and the applied PCR. In this study, ancillary materials, energy & water consumption, material loss and waste generation at the manufacturing site are attributed to the bill of materials of the products, therefore, they are allocated by partitioning the quantities on the base of the total production in kg throughout the year. Thus, allocation has been done in the following ways:

Data type	Allocation
Raw materials	No allocation
Packaging materials	No allocation
Ancillary materials	Allocated by mass or volume
Manufacturing energy and waste	Allocated by mass or volume

This EPD is created with a most conservative scenario in A1-A3 in terms of material composition.

AVERAGES AND VARIABILITY

Type of average	No averaging
Averaging method	Not applicable
Variation in GWP-fossil for A1-A3	Not applicable

This EPD is product and factory specific and does not contain average calculations. It is created with a most conservative scenario in A1-A3 in terms of material composition.

LCA SOFTWARE AND BIBLIOGRAPHY

This EPD has been created using One Click LCA EPD Generator. The LCA and EPD have been prepared according to the reference standards and ISO 14040/14044. EcoInvent 3.8 database was used as the source of environmental data.

ENVIRONMENTAL IMPACT DATA

CORE ENVIRONMENTAL IMPACT INDICATORS – EN 15804+A2, PEF

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP – total[1)]	kg CO_2e	1.20E+02	2.17E+00	-6.76E-01	1.22E+02	2.17E+00	3.27E+00	MNR	MNR	MNR	MNR	MNR	3.96E+03	MNR	MNR	1.34E-01	1.03E+00	9.41E-01	-2.79E+01
GWP – fossil	kg CO_2e	1.21E+02	2.17E+00	2.48E+00	1.25E+02	2.16E+00	1.04E-01	MNR	MNR	MNR	MNR	MNR	3.95E+03	MNR	MNR	1.34E-01	1.03E+00	9.41E-01	-2.79E+01
GWP – biogenic	kg CO_2e	-6.65E-01	0.00E+00	-3.17E+00	-3.83E+00	8.37E-04	3.17E+00	MNR	MNR	MNR	MNR	MNR	0.00E+00	MNR	MNR	0.00E+00	0.00E+00	-1.09E-22	-4.05E-03
GWP – LULUC	kg CO_2e	1.52E-01	9.14E-04	1.40E-02	1.67E-01	7.98E-04	2.84E-05	MNR	MNR	MNR	MNR	MNR	9.24E+00	MNR	MNR	4.93E-05	8.37E-05	1.73E-04	-2.41E-03
Ozone depletion pot.	kg CFC_{-11}e	9.70E-06	4.88E-07	2.61E-07	1.05E-05	4.98E-07	8.35E-09	MNR	MNR	MNR	MNR	MNR	2.01E-04	MNR	MNR	3.07E-08	7.22E-09	2.38E-08	-7.53E-07
Acidification potential	mol H^+e	8.27E-01	1.82E-02	1.17E-02	8.57E-01	9.16E-03	6.54E-04	MNR	MNR	MNR	MNR	MNR	2.26E+01	MNR	MNR	5.66E-04	7.49E-04	1.21E-03	-2.83E-01
EP-freshwater[2)]	kg Pe	6.00E-03	1.63E-05	1.30E-04	6.14E-03	1.77E-05	8.72E-07	MNR	MNR	MNR	MNR	MNR	4.19E-01	MNR	MNR	1.09E-06	2.50E-06	2.84E-05	-1.75E-03
EP-marine	kg Ne	1.20E-01	4.87E-03	5.72E-03	1.30E-01	2.72E-03	2.77E-04	MNR	MNR	MNR	MNR	MNR	2.99E+00	MNR	MNR	1.68E-04	2.16E-04	6.80E-03	-3.11E-02
EP-terrestrial	mol Ne	1.32E+00	5.39E-02	3.46E-02	1.41E+00	3.00E-02	2.87E-03	MNR	MNR	MNR	MNR	MNR	3.41E+01	MNR	MNR	1.85E-03	2.36E-03	3.64E-03	-3.58E-01
POCP ("smog")[3)]	kg NMVOCe	4.35E-01	1.55E-02	8.09E-03	4.59E-01	9.61E-03	7.17E-04	MNR	MNR	MNR	MNR	MNR	9.32E+00	MNR	MNR	5.93E-04	6.12E-04	2.13E-03	-1.04E-01
ADP-minerals & metals[4)]	kg Sbe	4.59E-03	4.77E-06	1.37E-05	4.61E-03	5.07E-06	2.75E-07	MNR	MNR	MNR	MNR	MNR	3.69E-02	MNR	MNR	3.13E-07	4.81E-06	4.93E-07	-2.94E-04
ADP-fossil resources	MJ	1.61E+03	3.17E+01	3.26E+01	1.67E+03	3.25E+01	6.48E-01	MNR	MNR	MNR	MNR	MNR	8.41E+04	MNR	MNR	2.01E+00	8.10E-01	2.26E+00	-2.73E+02
Water use[5)]	m^3e depr.	4.24E+01	1.36E-01	1.10E+00	4.37E+01	1.45E-01	1.53E-01	MNR	MNR	MNR	MNR	MNR	2.30E+03	MNR	MNR	8.98E-03	4.94E-02	6.20E-02	-1.85E+00

1) GWP = Global Warming Potential; 2) EP = Eutrophication potential. Required characterisation method and data are in kg P-eq. Multiply by 3,07 to get PO4e; 3) POCP = Photochemical ozone formation; 4) ADP = Abiotic depletion potential; 5) EN 15804+A2 disclaimer for Abiotic depletion and Water use and optional indicators except Particulate matter and Ionizing radiation, human health. The results of these environmental impact indicators shall be used with care as the uncertainties on these results are high or as there is limited experience with the indicator.

ADDITIONAL (OPTIONAL) ENVIRONMENTAL IMPACT INDICATORS – EN 15804+A2, PEF

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Particulate matter	Incidence	7.99E-06	2.23E-07	2.14E-07	8.42E-06	2.49E-07	6.07E-09	MNR	MNR	MNR	MNR	MNR	7.42E-05	MNR	MNR	1.54E-08	8.07E-09	1.57E-08	-1.54E-06
Ionizing radiation[6)]	kBq U235e	6.29E+00	1.50E-01	9.76E-02	6.54E+00	1.55E-01	2.35E-03	MNR	MNR	MNR	MNR	MNR	2.28E+03	MNR	MNR	9.56E-03	4.79E-03	1.35E-02	-1.63E+00

Ecotoxicity (freshwater)	CTUe	4.86E+03	2.75E+01	1.06E+02	5.00E+03	2.92E+01	4.47E+00	MNR	MNR	MNR	MNR	MNR	5.72E+04	MNR	MNR	1.80E+00	4.63E+00	2.24E+02	-5.47E+02
Human toxicity, cancer	CTUh	1.58E-07	8.04E-10	1.77E-09	1.61E-07	7.18E-10	2.01E-10	MNR	MNR	MNR	MNR	MNR	1.87E-06	MNR	MNR	4.43E-11	1.62E-10	4.74E-10	2.81E-10
Human tox. non-cancer	CTUh	3.54E-06	2.63E-08	3.17E-08	3.60E-06	2.89E-08	8.41E-09	MNR	MNR	MNR	MNR	MNR	6.16E-05	MNR	MNR	1.79E-09	6.54E-09	1.80E-08	-5.99E-07
SQP[7)]	-	4.79E+02	3.25E+01	8.56E+01	5.97E+02	3.75E+01	3.52E-01	MNR	MNR	MNR	MNR	MNR	1.52E+04	MNR	MNR	2.31E+00	1.12E+00	3.91E+00	-5.37E+01

6) EN 15804+A2 disclaimer for Ionizing radiation, human health. This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator; 7) SQP = Land use related impacts/soil quality.

USE OF NATURAL RESOURCES

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Renew. PER as energy[8)]	MJ	1.05E+02	3.40E-01	2.33E+01	1.29E+02	3.66E-01	2.14E-02	MNR	MNR	MNR	MNR	MNR	1.71E+04	MNR	MNR	2.26E-02	9.62E-02	9.87E-02	-4.17E+00
Renew. PER as material	MJ	6.03E+00	0.00E+00	2.77E+01	3.38E+01	0.00E+00	-2.77E+01	MNR	MNR	MNR	MNR	MNR	0.00E+00	MNR	MNR	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Total use of renew. PER	MJ	1.11E+02	3.40E-01	5.10E+01	1.63E+02	3.66E-01	-2.77E+01	MNR	MNR	MNR	MNR	MNR	1.71E+04	MNR	MNR	2.26E-02	9.62E-02	9.87E-02	-4.17E+00
Non-re. PER as energy	MJ	1.44E+03	3.17E+01	3.15E+01	1.51E+03	3.25E+01	6.48E-01	MNR	MNR	MNR	MNR	MNR	8.39E+04	MNR	MNR	2.01E+00	8.10E-01	2.26E+00	-2.73E+02
Non-re. PER as material	MJ	8.81E+01	0.00E+00	6.66E-01	8.88E+01	0.00E+00	-6.66E-01	MNR	MNR	MNR	MNR	MNR	0.00E+00	MNR	MNR	0.00E+00	-3.90E+01	-3.90E+01	0.00E+00
Total use of non-re. PER	MJ	1.53E+03	3.17E+01	3.22E+01	1.60E+03	3.25E+01	-1.72E-02	MNR	MNR	MNR	MNR	MNR	8.39E+04	MNR	MNR	2.01E+00	-3.82E+01	-3.67E+01	-2.73E+02
Secondary materials	kg	5.91E-01	9.53E-03	2.16E+00	2.76E+00	9.03E-03	7.73E-04	MNR	MNR	MNR	MNR	MNR	8.66E+00	MNR	MNR	5.57E-04	7.17E-04	1.97E-03	1.13E+00
Renew. secondary fuels	MJ	1.15E-01	8.26E-05	1.53E-01	2.68E-01	9.11E-05	1.28E-05	MNR	MNR	MNR	MNR	MNR	7.02E-02	MNR	MNR	5.62E-06	3.64E-05	3.02E-05	-8.44E-04
Non-ren. secondary fuels	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	MNR	MNR	MNR	MNR	MNR	0.00E+00	MNR	MNR	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Use of net fresh water	m^3	1.06E+00	3.85E-03	2.61E-02	1.09E+00	4.21E-03	2.70E-03	MNR	MNR	MNR	MNR	MNR	7.24E+01	MNR	MNR	2.60E-04	1.77E-03	2.50E-03	-8.51E-02

8) PER = Primary energy resources.

END OF LIFE – WASTE

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D

Hazardous waste	kg	1.77E+01	4.22E-02	1.29E-01	1.79E+01	4.31E-02	6.36E-04	MNR	MNR	MNR	MNR	MNR	3.02E+02	MNR	MNR	2.66E-03	4.56E-03	5.29E-03	-4.36E+00
Non-hazardous waste	kg	2.25E+02	6.49E-01	2.35E+00	2.28E+02	7.08E-01	2.18E+00	MNR	MNR	MNR	MNR	MNR	1.91E+04	MNR	MNR	4.37E-02	6.07E-01	6.73E+00	-8.03E+01
Radioactive waste	kg	3.12E-03	2.14E-04	5.97E-05	3.39E-03	2.17E-04	1.04E-06	MNR	MNR	MNR	MNR	MNR	6.12E-01	MNR	MNR	1.34E-05	2.66E-06	0.00E+00	-6.00E-04

END OF LIFE – OUTPUT FLOWS

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Components for re-use	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	MNR	MNR	MNR	MNR	MNR	0.00E+00	MNR	MNR	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Materials for recycling	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	MNR	MNR	MNR	MNR	MNR	0.00E+00	MNR	MNR	0.00E+00	2.20E+00	0.00E+00	0.00E+00
Materials for energy rec	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	MNR	MNR	MNR	MNR	MNR	0.00E+00	MNR	MNR	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Exported energy	MJ	0.00E+00	0.00E+00	3.21E-01	3.21E-01	0.00E+00	0.00E+00	MNR	MNR	MNR	MNR	MNR	0.00E+00	MNR	MNR	0.00E+00	9.03E+00	0.00E+00	0.00E+00

ENVIRONMENTAL IMPACTS – EN 15804+A1, CML / ISO 21930

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Global Warming Pot.	kg CO_2e	1.17E+02	2.14E+00	2.59E+00	1.21E+02	2.14E+00	1.00E-01	MNR	MNR	MNR	MNR	MNR	3.91E+03	MNR	MNR	1.32E-01	1.03E+00	3.87E+00	-2.74E+01
Ozone depletion Pot.	kg CFC_{-11}e	8.90E-06	3.87E-07	2.19E-07	9.51E-06	3.94E-07	7.30E-09	MNR	MNR	MNR	MNR	MNR	1.74E-04	MNR	MNR	2.43E-08	6.03E-09	1.91E-08	-6.39E-07
Acidification	kg SO_2e	6.98E-01	1.43E-02	8.40E-03	7.21E-01	7.12E-03	4.76E-04	MNR	MNR	MNR	MNR	MNR	1.91E+01	MNR	MNR	4.40E-04	5.83E-04	9.50E-04	-2.44E-01
Eutrophication	kg PO_4^3e	3.05E-01	2.31E-03	6.29E-03	3.14E-01	1.62E-03	3.55E-04	MNR	MNR	MNR	MNR	MNR	1.47E+01	MNR	MNR	1.00E-04	2.53E-04	1.70E-02	-6.81E-02

POCP (“smog”)	kg C_2H_4e	5.18E-02	4.50E-04	5.75E-04	5.28E-02	2.78E-04	1.49E-05	MNR	MNR	MNR	MNR	MNR	7.83E-01	MNR	MNR	1.72E-05	1.97E-05	7.12E-04	-1.20E-02
ADP-elements	kg Sbe	4.50E-03	4.63E-06	1.16E-05	4.52E-03	4.91E-06	2.16E-07	MNR	MNR	MNR	MNR	MNR	3.68E-02	MNR	MNR	3.03E-07	4.78E-06	4.69E-07	-2.91E-04
ADP-fossil	MJ	1.61E+03	3.17E+01	3.23E+01	1.67E+03	3.25E+01	6.48E-01	MNR	MNR	MNR	MNR	MNR	8.39E+04	MNR	MNR	2.01E+00	8.10E-01	2.26E+00	-2.73E+02

APPENDIX (EPD HUB ALIGNED)

This section represents the scaling method for the **B6 module**, following the PEP EcoPassport PSR for luminaries (PSR-0014-ed2.0-EN-2023 07 13). The GWP results were scaled from a refernce variant of a product family, based on various light management scenarios and power inputs of the luminaires within the same product familiy

To calculate the Scaled Impact (*SI*), we have followed the below methods:

1. Calculate the power scaling factor (PSF), which is the ratio of the power input of the variant in questions P_{in} and the power input of the base variant P_{base}.

$$PSF = \frac{P_{in}}{P_{base}}$$

2. Calculate the Total Scaling factor by multiplying the PSF by the control scaling factor (CSF), where the CSF is determined according the relevant control factor scenario (e.g. if the luminaire has a presence detection system). The presented controls factors values in Table A1 are based on BS EN 15193-1:2017. Please refer to this publication or contact Signify directly for more information.

$$TSF = PSF * CSF$$

Table A1: Light management function (PEP EcoPassport aligned)

Scenario	Abbrev.	CSF
No control	NC	1
Daylight dependency factor	DD	0.75
Presence sensing	PS	0.75
Daylight dependency and presence sensing	DD+PS	0.55

3. Lastly, the GWP of the base variant is then scaled by the TSF.

$$Scaled\ Impact = GWP_{case} * TSF$$

Table A2 Scaled GWP per scaling factor (EPD Hub aligned)

Configuration	Flux [lm]	Power [W]	Efficacy [lm/W]	PSF	Total Scaling Factor (TSF)				Scaled Impacts (GWP100 B6 - kg CO2eq.)			
					NC	DD	PS	DD+PS	NC	DD	PS	DD+PS
BGP762 LED100-4S/722	8900.0	75.0	118.7	0.75	0.75	0.562	0.562	0.413	2970.0	2225.5	2225.5	1635.5
BGP762 LED110-4S/722	9790.0	83.0	118.0	0.83	0.83	0.622	0.622	0.457	3286.8	2463.1	2463.1	1809.7
BGP762 LED120-4S/722	10680.0	91.0	117.4	0.91	0.91	0.682	0.682	0.501	3603.6	2700.7	2700.7	1984.0
BGP762 LED129-4S/722	11570.0	99.0	116.9	0.99	0.99	0.742	0.742	0.544	3920.4	2938.3	2938.3	2154.2
BGP762 LED139-4S/722	12460.0	104.0	119.8	1.04	1.04	0.78	0.78	0.572	4118.4	3088.8	3088.8	2265.1
BGP762 LED149-4S/722	13350.0	112.0	119.2	1.12	1.12	0.84	0.84	0.616	4435.2	3326.4	3326.4	2439.4
BGP762 LED159-4S/722	14240.0	120.0	118.7	1.2	1.2	0.9	0.9	0.66	4752.0	3564.0	3564.0	2613.6
BGP762 LED169-4S/722	15130.0	128.0	118.2	1.28	1.28	0.96	0.96	0.704	5068.8	3801.6	3801.6	2787.8
BGP762 LED170-4S/722	15130.0	130.0	116.4	1.3	1.3	0.975	0.975	0.715	5148.0	3861.0	3861.0	2831.4
BGP762 LED180-4S/722	16020.0	138.0	116.1	1.38	1.38	1.035	1.035	0.759	5464.8	4098.6	4098.6	3005.6
BGP762 LED190-4S/722	16910.0	148.0	114.3	1.48	1.48	1.11	1.11	0.814	5860.8	4395.6	4395.6	3223.4
BGP762 LED95-4S/722	8640.0	70.0	123.4	0.7	0.7	0.525	0.525	0.385	2772.0	2079.0	2079.0	1524.6

BGP762 LED100-4S/727	9000.0	66.0	136.4	0.66	0.66	0.495	0.495	0.363	2613.6	1960.2	1960.2	1437.5
BGP762 LED110-4S/727	9900.0	73.0	135.6	0.73	0.73	0.547	0.547	0.402	2890.8	2166.1	2166.1	1591.9
BGP762 LED120-4S/727	10680.0	81.0	131.9	0.81	0.81	0.608	0.608	0.446	3207.6	2407.7	2407.7	1766.2
BGP762 LED129-4S/727	11570.0	88.0	131.5	0.88	0.88	0.66	0.66	0.484	3484.8	2613.6	2613.6	1916.6
BGP762 LED139-4S/727	12460.0	95.0	131.2	0.95	0.95	0.712	0.712	0.522	3762.0	2819.5	2819.5	2067.1
BGP762 LED149-4S/727	13350.0	104.0	128.4	1.04	1.04	0.78	0.78	0.572	4118.4	3088.8	3088.8	2265.1
BGP762 LED159-4S/727	14240.0	112.0	127.1	1.12	1.12	0.84	0.84	0.616	4435.2	3326.4	3326.4	2439.4
BGP762 LED169-4S/727	15130.0	114.0	132.7	1.14	1.14	0.855	0.855	0.627	4514.4	3385.8	3385.8	2482.9
BGP762 LED170-4S/727	15130.0	114.0	132.7	1.14	1.14	0.855	0.855	0.627	4514.4	3385.8	3385.8	2482.9
BGP762 LED180-4S/727	16020.0	122.0	131.3	1.22	1.22	0.915	0.915	0.671	4831.2	3623.4	3623.4	2657.2
BGP762 LED190-4S/727	16910.0	130.0	130.1	1.3	1.3	0.975	0.975	0.715	5148.0	3861.0	3861.0	2831.4
BGP762 LED200-4S/727	17800.0	138.0	129.0	1.38	1.38	1.035	1.035	0.759	5464.8	4098.6	4098.6	3005.6
BGP762 LED210-4S/727	18690.0	146.0	128.0	1.46	1.46	1.095	1.095	0.803	5781.6	4336.2	4336.2	3179.9
BGP762 LED220-4S/727	19580.0	154.0	127.1	1.54	1.54	1.155	1.155	0.847	6098.4	4573.8	4573.8	3354.1
BGP762 LED95-4S/727	8640.0	62.0	139.4	0.62	0.62	0.465	0.465	0.341	2455.2	1841.4	1841.4	1350.4
BGP762 LED100-4S/730	9000.0	59.0	152.5	0.59	0.59	0.443	0.443	0.325	2336.4	1754.3	1754.3	1287.0
BGP762 LED110-4S/730	9900.0	65.0	152.3	0.65	0.65	0.488	0.488	0.358	2574.0	1932.5	1932.5	1417.7
BGP762 LED120-4S/730	10800.0	71.0	152.1	0.71	0.71	0.532	0.532	0.391	2811.6	2106.7	2106.7	1548.4
BGP762 LED129-4S/730	11570.0	77.0	150.3	0.77	0.77	0.578	0.578	0.424	3049.2	2288.9	2288.9	1679.0
BGP762 LED139-4S/730	12460.0	84.0	148.3	0.84	0.84	0.63	0.63	0.462	3326.4	2494.8	2494.8	1829.5
BGP762 LED149-4S/730	13350.0	91.0	146.7	0.91	0.91	0.682	0.682	0.501	3603.6	2700.7	2700.7	1984.0
BGP762 LED159-4S/730	14240.0	98.0	145.3	0.98	0.98	0.735	0.735	0.539	3880.8	2910.6	2910.6	2134.4
BGP762 LED169-4S/730	15130.0	104.0	145.5	1.04	1.04	0.78	0.78	0.572	4118.4	3088.8	3088.8	2265.1
BGP762 LED170-4S/730	15130.0	100.0	151.3	1.0	1.0	0.75	0.75	0.55	3960.0	2970.0	2970.0	2178.0

BGP762 LED180-4S/730	16020.0	108.0	148.3	1.08	1.08	0.81	0.81	0.594	4276.8	3207.6	3207.6	2352.2
BGP762 LED190-4S/730	16910.0	114.0	148.3	1.14	1.14	0.855	0.855	0.627	4514.4	3385.8	3385.8	2482.9
BGP762 LED200-4S/730	17800.0	120.0	148.3	1.2	1.2	0.9	0.9	0.66	4752.0	3564.0	3564.0	2613.6
BGP762 LED210-4S/730	18690.0	128.0	146.0	1.28	1.28	0.96	0.96	0.704	5068.8	3801.6	3801.6	2787.8
BGP762 LED220-4S/730	19580.0	134.0	146.1	1.34	1.34	1.005	1.005	0.737	5306.4	3979.8	3979.8	2918.5
BGP762 LED239-4S/730	21360.0	148.0	144.3	1.48	1.48	1.11	1.11	0.814	5860.8	4395.6	4395.6	3223.4
BGP762 LED95-4S/730	8640.0	56.0	154.3	0.56	0.56	0.42	0.42	0.308	2217.6	1663.2	1663.2	1219.7
BGP762 LED100-4S/740	9000.0	55.0	163.6	0.55	0.55	0.413	0.413	0.303	2178.0	1635.5	1635.5	1199.9
BGP762 LED110-4S/740	9900.0	61.0	162.3	0.61	0.61	0.458	0.458	0.336	2415.6	1813.7	1813.7	1330.6
BGP762 LED120-4S/740	10800.0	67.0	161.2	0.67	0.67	0.503	0.503	0.369	2653.2	1991.9	1991.9	1461.2
BGP762 LED129-4S/740	11700.0	72.0	162.5	0.72	0.72	0.54	0.54	0.396	2851.2	2138.4	2138.4	1568.2
BGP762 LED139-4S/740	12460.0	78.0	159.7	0.78	0.78	0.585	0.585	0.429	3088.8	2316.6	2316.6	1698.8
BGP762 LED149-4S/740	13350.0	85.0	157.1	0.85	0.85	0.637	0.637	0.468	3366.0	2522.5	2522.5	1853.3
BGP762 LED159-4S/740	14240.0	91.0	156.5	0.91	0.91	0.682	0.682	0.501	3603.6	2700.7	2700.7	1984.0
BGP762 LED169-4S/740	15130.0	98.0	154.4	0.98	0.98	0.735	0.735	0.539	3880.8	2910.6	2910.6	2134.4
BGP762 LED170-4S/740	15300.0	94.0	162.8	0.94	0.94	0.705	0.705	0.517	3722.4	2791.8	2791.8	2047.3
BGP762 LED180-/740 I DM10 DGR 62	16020.0	100.0	160.2	1.0	1.0	0.75	0.75	0.55	3960.0	2970.0	2970.0	2178.0
BGP762 LED190-4S/740	16910.0	106.0	159.5	1.06	1.06	0.795	0.795	0.583	4197.6	3148.2	3148.2	2308.7
BGP762 LED200-4S/740	17800.0	114.0	156.1	1.14	1.14	0.855	0.855	0.627	4514.4	3385.8	3385.8	2482.9
BGP762 LED210-4S/740	18690.0	120.0	155.8	1.2	1.2	0.9	0.9	0.66	4752.0	3564.0	3564.0	2613.6
BGP762 LED220-4S/740	19580.0	126.0	155.4	1.26	1.26	0.945	0.945	0.693	4989.6	3742.2	3742.2	2744.3
BGP762 LED239-4S/740	21360.0	138.0	154.8	1.38	1.38	1.035	1.035	0.759	5464.8	4098.6	4098.6	3005.6
BGP762 LED95-4S/740	8640.0	52.0	166.2	0.52	0.52	0.39	0.39	0.286	2059.2	1544.4	1544.4	1132.6
BGP762 LED100-4S/757	9000.0	55.0	163.6	0.55	0.55	0.413	0.413	0.303	2178.0	1635.5	1635.5	1199.9

BGP762 LED110-4S/757	9900.0	61.0	162.3	0.61	0.61	0.458	0.458	0.336	2415.6	1813.7	1813.7	1330.6
BGP762 LED120-4S/757	10800.0	67.0	161.2	0.67	0.67	0.503	0.503	0.369	2653.2	1991.9	1991.9	1461.2
BGP762 LED129-4S/757	11700.0	72.0	162.5	0.72	0.72	0.54	0.54	0.396	2851.2	2138.4	2138.4	1568.2
BGP762 LED139-4S/757	12460.0	78.0	159.7	0.78	0.78	0.585	0.585	0.429	3088.8	2316.6	2316.6	1698.8
BGP762 LED149-4S/757	13350.0	85.0	157.1	0.85	0.85	0.637	0.637	0.468	3366.0	2522.5	2522.5	1853.3
BGP762 LED159-4S/757	14240.0	91.0	156.5	0.91	0.91	0.682	0.682	0.501	3603.6	2700.7	2700.7	1984.0
BGP762 LED169-4S/757	15130.0	98.0	154.4	0.98	0.98	0.735	0.735	0.539	3880.8	2910.6	2910.6	2134.4
BGP762 LED170-4S/757	15300.0	94.0	162.8	0.94	0.94	0.705	0.705	0.517	3722.4	2791.8	2791.8	2047.3
BGP762 LED180-4S/757	16020.0	100.0	160.2	1.0	1.0	0.75	0.75	0.55	3960.0	2970.0	2970.0	2178.0
BGP762 LED190-4S/757	16910.0	106.0	159.5	1.06	1.06	0.795	0.795	0.583	4197.6	3148.2	3148.2	2308.7
BGP762 LED200-4S/757	17800.0	114.0	156.1	1.14	1.14	0.855	0.855	0.627	4514.4	3385.8	3385.8	2482.9
BGP762 LED210-4S/757	18690.0	120.0	155.8	1.2	1.2	0.9	0.9	0.66	4752.0	3564.0	3564.0	2613.6
BGP762 LED220-4S/757	19580.0	126.0	155.4	1.26	1.26	0.945	0.945	0.693	4989.6	3742.2	3742.2	2744.3
BGP762 LED239-4S/757	21360.0	138.0	154.8	1.38	1.38	1.035	1.035	0.759	5464.8	4098.6	4098.6	3005.6
BGP762 LED95-4S/757	8640.0	52.0	166.2	0.52	0.52	0.39	0.39	0.286	2059.2	1544.4	1544.4	1132.6
BGP762 LED100-4S/827	9000.0	72.0	125.0	0.72	0.72	0.54	0.54	0.396	2851.2	2138.4	2138.4	1568.2
BGP762 LED110-4S/827	9790.0	80.0	122.4	0.8	0.8	0.6	0.6	0.44	3168.0	2376.0	2376.0	1742.4
BGP762 LED120-4S/827	10680.0	87.0	122.8	0.87	0.87	0.652	0.652	0.479	3445.2	2581.9	2581.9	1896.8
BGP762 LED129-4S/827	11570.0	95.0	121.8	0.95	0.95	0.712	0.712	0.522	3762.0	2819.5	2819.5	2067.1
BGP762 LED139-4S/827	12460.0	99.0	125.9	0.99	0.99	0.742	0.742	0.544	3920.4	2938.3	2938.3	2154.2
BGP762 LED149-4S/827	13350.0	108.0	123.6	1.08	1.08	0.81	0.81	0.594	4276.8	3207.6	3207.6	2352.2
BGP762 LED159-4S/827	14240.0	114.0	124.9	1.14	1.14	0.855	0.855	0.627	4514.4	3385.8	3385.8	2482.9
BGP762 LED169-4S/827	15130.0	124.0	122.0	1.24	1.24	0.93	0.93	0.682	4910.4	3682.8	3682.8	2700.7
BGP762 LED170-4S/827	15130.0	124.0	122.0	1.24	1.24	0.93	0.93	0.682	4910.4	3682.8	3682.8	2700.7

BGP762 LED180-4S/827	16020.0	132.0	121.4	1.32	1.32	0.99	0.99	0.726	5227.2	3920.4	3920.4	2875.0
BGP762 LED190-4S/827	16910.0	142.0	119.1	1.42	1.42	1.065	1.065	0.781	5623.2	4217.4	4217.4	3092.8
BGP762 LED200-4S/827	17800.0	150.0	118.7	1.5	1.5	1.125	1.125	0.825	5940.0	4455.0	4455.0	3267.0
BGP762 LED95-4S/827	8640.0	68.0	127.1	0.68	0.68	0.51	0.51	0.374	2692.8	2019.6	2019.6	1481.0
BGP762 LED100-4S/830	9000.0	66.0	136.4	0.66	0.66	0.495	0.495	0.363	2613.6	1960.2	1960.2	1437.5
BGP762 LED110-4S/830	9900.0	73.0	135.6	0.73	0.73	0.547	0.547	0.402	2890.8	2166.1	2166.1	1591.9
BGP762 LED120-4S/830	10680.0	81.0	131.9	0.81	0.81	0.608	0.608	0.446	3207.6	2407.7	2407.7	1766.2
BGP762 LED129-4S/830	11570.0	88.0	131.5	0.88	0.88	0.66	0.66	0.484	3484.8	2613.6	2613.6	1916.6
BGP762 LED139-4S/830	12600.0	91.0	138.5	0.91	0.91	0.682	0.682	0.501	3603.6	2700.7	2700.7	1984.0
BGP762 LED149-4S/830	13350.0	99.0	134.8	0.99	0.99	0.742	0.742	0.544	3920.4	2938.3	2938.3	2154.2
BGP762 LED159-4S/830	14240.0	106.0	134.3	1.06	1.06	0.795	0.795	0.583	4197.6	3148.2	3148.2	2308.7
BGP762 LED169-4S/830	15130.0	114.0	132.7	1.14	1.14	0.855	0.855	0.627	4514.4	3385.8	3385.8	2482.9
BGP762 LED170-4S/830	15130.0	114.0	132.7	1.14	1.14	0.855	0.855	0.627	4514.4	3385.8	3385.8	2482.9
BGP762 LED180-4S/830	16020.0	122.0	131.3	1.22	1.22	0.915	0.915	0.671	4831.2	3623.4	3623.4	2657.2
BGP762 LED190-4S/830	16910.0	130.0	130.1	1.3	1.3	0.975	0.975	0.715	5148.0	3861.0	3861.0	2831.4
BGP762 LED200-4S/830	17800.0	138.0	129.0	1.38	1.38	1.035	1.035	0.759	5464.8	4098.6	4098.6	3005.6
BGP762 LED210-4S/830	18690.0	146.0	128.0	1.46	1.46	1.095	1.095	0.803	5781.6	4336.2	4336.2	3179.9
BGP762 LED220-4S/830	19580.0	154.0	127.1	1.54	1.54	1.155	1.155	0.847	6098.4	4573.8	4573.8	3354.1
BGP762 LED95-4S/830	8640.0	62.0	139.4	0.62	0.62	0.465	0.465	0.341	2455.2	1841.4	1841.4	1350.4
BGP762 LED100-4S/840	9000.0	64.0	140.6	0.64	0.64	0.48	0.48	0.352	2534.4	1900.8	1900.8	1393.9
BGP762 LED110-4S/840	9900.0	71.0	139.4	0.71	0.71	0.532	0.532	0.391	2811.6	2106.7	2106.7	1548.4
BGP762 LED120-4S/840	10680.0	78.0	136.9	0.78	0.78	0.585	0.585	0.429	3088.8	2316.6	2316.6	1698.8
BGP762 LED129-4S/840	11570.0	84.0	137.7	0.84	0.84	0.63	0.63	0.462	3326.4	2494.8	2494.8	1829.5
BGP762 LED139-4S/840	12600.0	88.0	143.2	0.88	0.88	0.66	0.66	0.484	3484.8	2613.6	2613.6	1916.6

BGP762 LED149-4S/840	13500.0	95.0	142.1	0.95	0.95	0.712	0.712	0.522	3762.0	2819.5	2819.5	2067.1
BGP762 LED159-4S/840	14240.0	102.0	139.6	1.02	1.02	0.765	0.765	0.561	4039.2	3029.4	3029.4	2221.6
BGP762 LED169-4S/840	15130.0	110.0	137.5	1.1	1.1	0.825	0.825	0.605	4356.0	3267.0	3267.0	2395.8
BGP762 LED170-4S/840	15130.0	110.0	137.5	1.1	1.1	0.825	0.825	0.605	4356.0	3267.0	3267.0	2395.8
BGP762 LED180-4S/840	16020.0	118.0	135.8	1.18	1.18	0.885	0.885	0.649	4672.8	3504.6	3504.6	2570.0
BGP762 LED190-4S/840	16910.0	124.0	136.4	1.24	1.24	0.93	0.93	0.682	4910.4	3682.8	3682.8	2700.7
BGP762 LED200-4S/840	17800.0	132.0	134.8	1.32	1.32	0.99	0.99	0.726	5227.2	3920.4	3920.4	2875.0
BGP762 LED210-4S/840	18690.0	140.0	133.5	1.4	1.4	1.05	1.05	0.77	5544.0	4158.0	4158.0	3049.2
BGP762 LED220-4S/840	19580.0	148.0	132.3	1.48	1.48	1.11	1.11	0.814	5860.8	4395.6	4395.6	3223.4
BGP762 LED95-4S/840	8640.0	60.0	144.0	0.6	0.6	0.45	0.45	0.33	2376.0	1782.0	1782.0	1306.8

** Note that if the product is non-dimmable, only the values for "NC (No Control)" are valid; if the driver type is PSU, only the values for "NC (No Control)"and "PS (presence sensing)" for are valid.*

APPENDIX (PEP ECOPASSPORT ALIGNED)

This section represents the scaling method for the **B6 module**, following the PEP EcoPassport PSR for luminaries (PSR-0014-ed2.0-EN-2023 07 13). The GWP results were scaled from a refernce variant of a product family, based on various light management functions, the lumen output (O_{lum}) and reference service life (*RSL*) of each product within the same product familiy.

To calculate the Scaled Impact (SI_{pep}), we have followed the below methods:

1. Calculate the power scaling factor (PSF), which is the ratio of the power input of the variant in questions P_{in} and the power input of the base variant P_{base}.

$$PSF = \frac{P_{in}}{P_{base}}$$

2. Using this scaled GWP, we then can apply the PEP Ecopassport method for calculating the environmental impact of the functional unit for a luminary (1000 lumens over 35000 hours), applied to B6, where the Functional Unit application considers the lumen output (Olum) and reference service lifetime (RSL) of the product to estimate the final environmental impact. The scaled impact (SIpep) is presented in Table A4.

$$GSF = \frac{FU_{pep}}{FU_p} = \frac{1{,}000}{O_{lum}} * \frac{35{,}000}{RSL}$$

3. Calculate the GWP scaling factor (P*GSF*), by multiplying the PSF by the GSF.

$$PGSF = PSF * GSF$$

4. Calculate the Total Scaling factor by multiplying the PSF by the control scaling factor (CSF), where the CSF is determined according the relevant control factor scenario (e.g. if the luminaire has a presence detection system), as presented in Table A1.

$$TSF = PGSF * CSF$$

Table A3: Light management functions (PEP EcoPassport aligned)

Scenario	Abbrev.	CSF
No control	NC	1
Daylight dependency factor	DD	0.75
Presence sensing	PS	0.75
Daylight dependency and presence sensing	DD+PS	0.55

5. Lastly, the GWP of the base variant is then scaled by the TSF.

$$Scaled\ GWP = GWP_{case} * TSF$$

As described in the EPD, calculations are made based on dataset describing electricity available on the low voltage level in Europe for year 2022 (source Ecoinvent 3.8 database). This value should be adjusted depending on specific project requirements. Presented controls factors and functional unit conversion values are based on the PEP EcoPassport PSR for luminaries (PSR-0014-ed2.0-EN-2023 07 13). Please refer to this publication or contact Signify directly for more information.

Table A4 Scale impact per scaling factor (PEP EcoPassport aligned)

Configuration	Flux [lm]	Power [W]	Efficacy [lm/W]	PSF	Total Scaling Factor (TSF)				Scaled Impacts (GWP100 B6 - kg CO2eq.)			
					NC	DD	PS	DD+PS	NC	DD	PS	DD+PS
BGP762 LED100-4S/722	8900.0	75.0	118.7	0.75	0.75	0.56	0.56	0.41	116.8	87.6	87.6	64.2
BGP762 LED110-4S/722	9790.0	83.0	118.0	0.83	0.83	0.62	0.62	0.46	117.5	88.1	88.1	64.6
BGP762 LED120-4S/722	10680.0	91.0	117.4	0.91	0.91	0.68	0.68	0.50	118.1	88.6	88.6	65.0
BGP762 LED129-4S/722	11570.0	99.0	116.9	0.99	0.99	0.74	0.74	0.54	118.6	88.9	88.9	65.2
BGP762 LED139-4S/722	12460.0	104.0	119.8	1.04	1.04	0.78	0.78	0.57	115.7	86.8	86.8	63.6

BGP762 LED149-4S/722	13350.0	112.0	119.2	1.12	1.12	0.84	0.84	0.62	116.3	87.2	87.2	64.0
BGP762 LED159-4S/722	14240.0	120.0	118.7	1.2	1.20	0.90	0.90	0.66	116.8	87.6	87.6	64.2
BGP762 LED169-4S/722	15130.0	128.0	118.2	1.28	1.28	0.96	0.96	0.70	117.3	87.9	87.9	64.5
BGP762 LED170-4S/722	15130.0	130.0	116.4	1.3	1.30	0.98	0.98	0.72	119.1	89.3	89.3	65.5
BGP762 LED180-4S/722	16020.0	138.0	116.1	1.38	1.38	1.04	1.04	0.76	119.4	89.5	89.5	65.7
BGP762 LED190-4S/722	16910.0	148.0	114.3	1.48	1.48	1.11	1.11	0.81	121.3	91.0	91.0	66.7
BGP762 LED95-4S/722	8640.0	70.0	123.4	0.7	0.70	0.53	0.53	0.39	112.3	84.2	84.2	61.8
BGP762 LED100-4S/727	9000.0	66.0	136.4	0.66	0.66	0.50	0.50	0.36	101.6	76.2	76.2	55.9
BGP762 LED110-4S/727	9900.0	73.0	135.6	0.73	0.73	0.55	0.55	0.40	102.2	76.7	76.7	56.2
BGP762 LED120-4S/727	10680.0	81.0	131.9	0.81	0.81	0.61	0.61	0.45	105.1	78.8	78.8	57.8
BGP762 LED129-4S/727	11570.0	88.0	131.5	0.88	0.88	0.66	0.66	0.48	105.4	79.1	79.1	58.0
BGP762 LED139-4S/727	12460.0	95.0	131.2	0.95	0.95	0.71	0.71	0.52	105.7	79.3	79.3	58.1
BGP762 LED149-4S/727	13350.0	104.0	128.4	1.04	1.04	0.78	0.78	0.57	108.0	81.0	81.0	59.4
BGP762 LED159-4S/727	14240.0	112.0	127.1	1.12	1.12	0.84	0.84	0.62	109.0	81.8	81.8	60.0
BGP762 LED169-4S/727	15130.0	114.0	132.7	1.14	1.14	0.86	0.86	0.63	104.4	78.3	78.3	57.4
BGP762 LED170-4S/727	15130.0	114.0	132.7	1.14	1.14	0.86	0.86	0.63	104.4	78.3	78.3	57.4
BGP762 LED180-4S/727	16020.0	122.0	131.3	1.22	1.22	0.92	0.92	0.67	105.6	79.2	79.2	58.1
BGP762 LED190-4S/727	16910.0	130.0	130.1	1.3	1.30	0.98	0.98	0.72	106.6	79.9	79.9	58.6
BGP762 LED200-4S/727	17800.0	138.0	129.0	1.38	1.38	1.04	1.04	0.76	107.5	80.6	80.6	59.1
BGP762 LED210-4S/727	18690.0	146.0	128.0	1.46	1.46	1.10	1.10	0.80	108.3	81.2	81.2	59.5
BGP762 LED220-4S/727	19580.0	154.0	127.1	1.54	1.54	1.16	1.16	0.85	109.0	81.8	81.8	60.0
BGP762 LED95-4S/727	8640.0	62.0	139.4	0.62	0.62	0.47	0.47	0.34	99.5	74.6	74.6	54.7
BGP762 LED100-4S/730	9000.0	59.0	152.5	0.59	0.59	0.44	0.44	0.32	90.9	68.1	68.1	50.0
BGP762 LED110-4S/730	9900.0	65.0	152.3	0.65	0.65	0.49	0.49	0.36	91.0	68.3	68.3	50.1

BGP762 LED120-4S/730	10800.0	71.0	152.1	0.71	0.71	0.53	0.53	0.39	91.1	68.3	68.3	50.1
BGP762 LED129-4S/730	11570.0	77.0	150.3	0.77	0.77	0.58	0.58	0.42	92.2	69.2	69.2	50.7
BGP762 LED139-4S/730	12460.0	84.0	148.3	0.84	0.84	0.63	0.63	0.46	93.4	70.1	70.1	51.4
BGP762 LED149-4S/730	13350.0	91.0	146.7	0.91	0.91	0.68	0.68	0.50	94.5	70.9	70.9	52.0
BGP762 LED159-4S/730	14240.0	98.0	145.3	0.98	0.98	0.74	0.74	0.54	95.4	71.5	71.5	52.5
BGP762 LED169-4S/730	15130.0	104.0	145.5	1.04	1.04	0.78	0.78	0.57	95.3	71.5	71.5	52.4
BGP762 LED170-4S/730	15130.0	100.0	151.3	1.0	1.00	0.75	0.75	0.55	91.6	68.7	68.7	50.4
BGP762 LED180-4S/730	16020.0	108.0	148.3	1.08	1.08	0.81	0.81	0.59	93.4	70.1	70.1	51.4
BGP762 LED190-4S/730	16910.0	114.0	148.3	1.14	1.14	0.86	0.86	0.63	93.4	70.1	70.1	51.4
BGP762 LED200-4S/730	17800.0	120.0	148.3	1.2	1.20	0.90	0.90	0.66	93.4	70.1	70.1	51.4
BGP762 LED210-4S/730	18690.0	128.0	146.0	1.28	1.28	0.96	0.96	0.70	94.9	71.2	71.2	52.2
BGP762 LED220-4S/730	19580.0	134.0	146.1	1.34	1.34	1.01	1.01	0.74	94.9	71.1	71.1	52.2
BGP762 LED239-4S/730	21360.0	148.0	144.3	1.48	1.48	1.11	1.11	0.81	96.0	72.0	72.0	52.8
BGP762 LED95-4S/730	8640.0	56.0	154.3	0.56	0.56	0.42	0.42	0.31	89.8	67.4	67.4	49.4
BGP762 LED100-4S/740	9000.0	55.0	163.6	0.55	0.55	0.41	0.41	0.30	84.7	63.5	63.5	46.6
BGP762 LED110-4S/740	9900.0	61.0	162.3	0.61	0.61	0.46	0.46	0.34	85.4	64.1	64.1	47.0
BGP762 LED120-4S/740	10800.0	67.0	161.2	0.67	0.67	0.50	0.50	0.37	86.0	64.5	64.5	47.3
BGP762 LED129-4S/740	11700.0	72.0	162.5	0.72	0.72	0.54	0.54	0.40	85.3	64.0	64.0	46.9
BGP762 LED139-4S/740	12460.0	78.0	159.7	0.78	0.78	0.59	0.59	0.43	86.8	65.1	65.1	47.7
BGP762 LED149-4S/740	13350.0	85.0	157.1	0.85	0.85	0.64	0.64	0.47	88.2	66.2	66.2	48.5
BGP762 LED159-4S/740	14240.0	91.0	156.5	0.91	0.91	0.68	0.68	0.50	88.6	66.4	66.4	48.7
BGP762 LED169-4S/740	15130.0	98.0	154.4	0.98	0.98	0.74	0.74	0.54	89.8	67.3	67.3	49.4
BGP762 LED170-4S/740	15300.0	94.0	162.8	0.94	0.94	0.71	0.71	0.52	85.2	63.9	63.9	46.8
BGP762 LED180-/740 I DM10 DGR 62	16020.0	100.0	160.2	1.0	1.00	0.75	0.75	0.55	86.5	64.9	64.9	47.6

BGP762 LED190-4S/740	16910.0	106.0	159.5	1.06	1.06	0.80	0.80	0.58	86.9	65.2	65.2	47.8
BGP762 LED200-4S/740	17800.0	114.0	156.1	1.14	1.14	0.86	0.86	0.63	88.8	66.6	66.6	48.8
BGP762 LED210-4S/740	18690.0	120.0	155.8	1.2	1.20	0.90	0.90	0.66	89.0	66.7	66.7	48.9
BGP762 LED220-4S/740	19580.0	126.0	155.4	1.26	1.26	0.95	0.95	0.69	89.2	66.9	66.9	49.1
BGP762 LED239-4S/740	21360.0	138.0	154.8	1.38	1.38	1.04	1.04	0.76	89.5	67.2	67.2	49.2
BGP762 LED95-4S/740	8640.0	52.0	166.2	0.52	0.52	0.39	0.39	0.29	83.4	62.6	62.6	45.9
BGP762 LED100-4S/757	9000.0	55.0	163.6	0.55	0.55	0.41	0.41	0.30	84.7	63.5	63.5	46.6
BGP762 LED110-4S/757	9900.0	61.0	162.3	0.61	0.61	0.46	0.46	0.34	85.4	64.1	64.1	47.0
BGP762 LED120-4S/757	10800.0	67.0	161.2	0.67	0.67	0.50	0.50	0.37	86.0	64.5	64.5	47.3
BGP762 LED129-4S/757	11700.0	72.0	162.5	0.72	0.72	0.54	0.54	0.40	85.3	64.0	64.0	46.9
BGP762 LED139-4S/757	12460.0	78.0	159.7	0.78	0.78	0.59	0.59	0.43	86.8	65.1	65.1	47.7
BGP762 LED149-4S/757	13350.0	85.0	157.1	0.85	0.85	0.64	0.64	0.47	88.2	66.2	66.2	48.5
BGP762 LED159-4S/757	14240.0	91.0	156.5	0.91	0.91	0.68	0.68	0.50	88.6	66.4	66.4	48.7
BGP762 LED169-4S/757	15130.0	98.0	154.4	0.98	0.98	0.74	0.74	0.54	89.8	67.3	67.3	49.4
BGP762 LED170-4S/757	15300.0	94.0	162.8	0.94	0.94	0.71	0.71	0.52	85.2	63.9	63.9	46.8
BGP762 LED180-4S/757	16020.0	100.0	160.2	1.0	1.00	0.75	0.75	0.55	86.5	64.9	64.9	47.6
BGP762 LED190-4S/757	16910.0	106.0	159.5	1.06	1.06	0.80	0.80	0.58	86.9	65.2	65.2	47.8
BGP762 LED200-4S/757	17800.0	114.0	156.1	1.14	1.14	0.86	0.86	0.63	88.8	66.6	66.6	48.8
BGP762 LED210-4S/757	18690.0	120.0	155.8	1.2	1.20	0.90	0.90	0.66	89.0	66.7	66.7	48.9
BGP762 LED220-4S/757	19580.0	126.0	155.4	1.26	1.26	0.95	0.95	0.69	89.2	66.9	66.9	49.1
BGP762 LED239-4S/757	21360.0	138.0	154.8	1.38	1.38	1.04	1.04	0.76	89.5	67.2	67.2	49.2
BGP762 LED95-4S/757	8640.0	52.0	166.2	0.52	0.52	0.39	0.39	0.29	83.4	62.6	62.6	45.9
BGP762 LED100-4S/827	9000.0	72.0	125.0	0.72	0.72	0.54	0.54	0.40	110.9	83.2	83.2	61.0
BGP762 LED110-4S/827	9790.0	80.0	122.4	0.8	0.80	0.60	0.60	0.44	113.3	84.9	84.9	62.3

BGP762 LED120-4S/827	10680.0	87.0	122.8	0.87	0.87	0.65	0.65	0.48	112.9	84.7	84.7	62.1
BGP762 LED129-4S/827	11570.0	95.0	121.8	0.95	0.95	0.71	0.71	0.52	113.8	85.4	85.4	62.6
BGP762 LED139-4S/827	12460.0	99.0	125.9	0.99	0.99	0.74	0.74	0.54	110.1	82.6	82.6	60.6
BGP762 LED149-4S/827	13350.0	108.0	123.6	1.08	1.08	0.81	0.81	0.59	112.1	84.1	84.1	61.7
BGP762 LED159-4S/827	14240.0	114.0	124.9	1.14	1.14	0.86	0.86	0.63	111.0	83.2	83.2	61.0
BGP762 LED169-4S/827	15130.0	124.0	122.0	1.24	1.24	0.93	0.93	0.68	113.6	85.2	85.2	62.5
BGP762 LED170-4S/827	15130.0	124.0	122.0	1.24	1.24	0.93	0.93	0.68	113.6	85.2	85.2	62.5
BGP762 LED180-4S/827	16020.0	132.0	121.4	1.32	1.32	0.99	0.99	0.73	114.2	85.7	85.7	62.8
BGP762 LED190-4S/827	16910.0	142.0	119.1	1.42	1.42	1.07	1.07	0.78	116.4	87.3	87.3	64.0
BGP762 LED200-4S/827	17800.0	150.0	118.7	1.5	1.50	1.13	1.13	0.83	116.8	87.6	87.6	64.2
BGP762 LED95-4S/827	8640.0	68.0	127.1	0.68	0.68	0.51	0.51	0.37	109.1	81.8	81.8	60.0
BGP762 LED100-4S/830	9000.0	66.0	136.4	0.66	0.66	0.50	0.50	0.36	101.6	76.2	76.2	55.9
BGP762 LED110-4S/830	9900.0	73.0	135.6	0.73	0.73	0.55	0.55	0.40	102.2	76.7	76.7	56.2
BGP762 LED120-4S/830	10680.0	81.0	131.9	0.81	0.81	0.61	0.61	0.45	105.1	78.8	78.8	57.8
BGP762 LED129-4S/830	11570.0	88.0	131.5	0.88	0.88	0.66	0.66	0.48	105.4	79.1	79.1	58.0
BGP762 LED139-4S/830	12600.0	91.0	138.5	0.91	0.91	0.68	0.68	0.50	100.1	75.1	75.1	55.1
BGP762 LED149-4S/830	13350.0	99.0	134.8	0.99	0.99	0.74	0.74	0.54	102.8	77.1	77.1	56.5
BGP762 LED159-4S/830	14240.0	106.0	134.3	1.06	1.06	0.80	0.80	0.58	103.2	77.4	77.4	56.7
BGP762 LED169-4S/830	15130.0	114.0	132.7	1.14	1.14	0.86	0.86	0.63	104.4	78.3	78.3	57.4
BGP762 LED170-4S/830	15130.0	114.0	132.7	1.14	1.14	0.86	0.86	0.63	104.4	78.3	78.3	57.4
BGP762 LED180-4S/830	16020.0	122.0	131.3	1.22	1.22	0.92	0.92	0.67	105.6	79.2	79.2	58.1
BGP762 LED190-4S/830	16910.0	130.0	130.1	1.3	1.30	0.98	0.98	0.72	106.6	79.9	79.9	58.6
BGP762 LED200-4S/830	17800.0	138.0	129.0	1.38	1.38	1.04	1.04	0.76	107.5	80.6	80.6	59.1
BGP762 LED210-4S/830	18690.0	146.0	128.0	1.46	1.46	1.10	1.10	0.80	108.3	81.2	81.2	59.5

BGP762 LED220-4S/830	19580.0	154.0	127.1	1.54	1.54	1.16	1.16	0.85	109.0	81.8	81.8	60.0
BGP762 LED95-4S/830	8640.0	62.0	139.4	0.62	0.62	0.47	0.47	0.34	99.5	74.6	74.6	54.7
BGP762 LED100-4S/840	9000.0	64.0	140.6	0.64	0.64	0.48	0.48	0.35	98.6	73.9	73.9	54.2
BGP762 LED110-4S/840	9900.0	71.0	139.4	0.71	0.71	0.53	0.53	0.39	99.4	74.6	74.6	54.7
BGP762 LED120-4S/840	10680.0	78.0	136.9	0.78	0.78	0.59	0.59	0.43	101.2	75.9	75.9	55.7
BGP762 LED129-4S/840	11570.0	84.0	137.7	0.84	0.84	0.63	0.63	0.46	100.6	75.5	75.5	55.3
BGP762 LED139-4S/840	12600.0	88.0	143.2	0.88	0.88	0.66	0.66	0.48	96.8	72.6	72.6	53.2
BGP762 LED149-4S/840	13500.0	95.0	142.1	0.95	0.95	0.71	0.71	0.52	97.5	73.2	73.2	53.6
BGP762 LED159-4S/840	14240.0	102.0	139.6	1.02	1.02	0.77	0.77	0.56	99.3	74.5	74.5	54.6
BGP762 LED169-4S/840	15130.0	110.0	137.5	1.1	1.10	0.83	0.83	0.61	100.8	75.6	75.6	55.4
BGP762 LED170-4S/840	15130.0	110.0	137.5	1.1	1.10	0.83	0.83	0.61	100.8	75.6	75.6	55.4
BGP762 LED180-4S/840	16020.0	118.0	135.8	1.18	1.18	0.89	0.89	0.65	102.1	76.6	76.6	56.1
BGP762 LED190-4S/840	16910.0	124.0	136.4	1.24	1.24	0.93	0.93	0.68	101.6	76.2	76.2	55.9
BGP762 LED200-4S/840	17800.0	132.0	134.8	1.32	1.32	0.99	0.99	0.73	102.8	77.1	77.1	56.5
BGP762 LED210-4S/840	18690.0	140.0	133.5	1.4	1.40	1.05	1.05	0.77	103.8	77.9	77.9	57.1
BGP762 LED220-4S/840	19580.0	148.0	132.3	1.48	1.48	1.11	1.11	0.81	104.8	78.6	78.6	57.6
BGP762 LED95-4S/840	8640.0	60.0	144.0	0.6	0.60	0.45	0.45	0.33	96.3	72.2	72.2	52.9

** Note that if the product is non-dimmable, only the values for "NC (No Control)" are valid; if the driver type is PSU, only the values for "NC (No Control)"and "PS (presence sensing)" for are valid.*