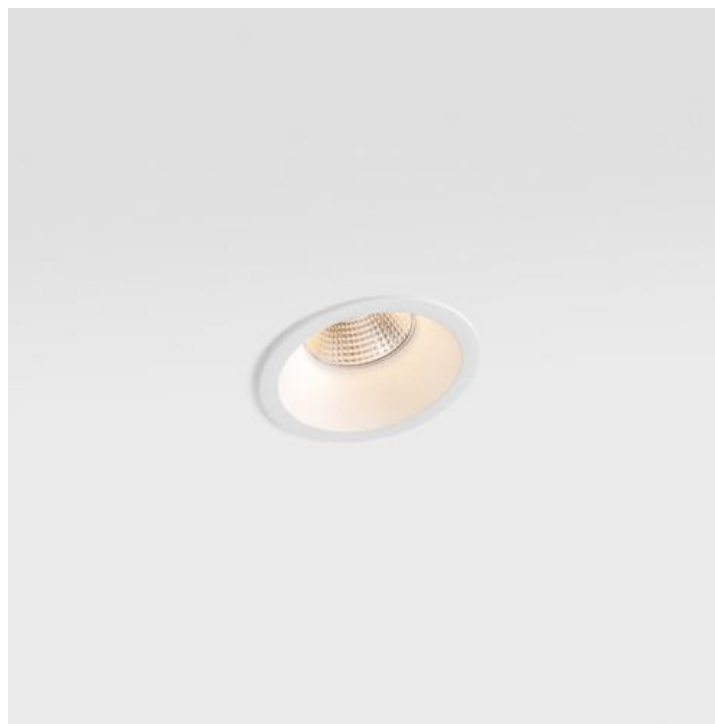# ENVIRONMENTAL PRODUCT DECLARATION

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

Smart Recessed Adjustable 82

Modular Lighting Instruments

EPD HUB
Publishing date 2024-10-03

MODULAR
LIGHTING —
INSTRUMENTS

GENERAL INFORMATION

MANUFACTURER

Manufacturer	Modular Lighting Instruments
Address	Armoedestraat 71 - 8800 Roeselare - BELGIUM
Contact details	sustainability@supermodular.com
Website	www.supermodular.com

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	Smart Recessed Adjustable 82
Additional labels	Not applicable
Product reference	915005518901 (13311109)
Place of production	BELGIUM
Period for data	2024
Averaging in EPD	No averaging
Variation in GWP-fossil for A1-A3	Not applicable

ENVIRONMENTAL DATA SUMMARY

Declared unit	1 Unit
Declared unit mass	0.196 kg
GWP-fossil, A1-A3 (kgCO2e)	5.10E+00
GWP-total, A1-A3 (kgCO2e)	4.96E+00
Secondary material, inputs (%)	11.2
Secondary material, outputs (%)	66.5
Total energy use, A1-A3 (kWh)	19.5
Net fresh water use, A1-A3 (m3e)	0.04

PRODUCT AND MANUFACTURER

ABOUT THE MANUFACTURER

Belgian architectural lighting since 1980.Creating beautifully crafted products that break the boundaries of technical limitations. Our ambition since the start. Over the years, we have built the reputation of being innovators and pioneers in the architectural lighting world. Today, staying true to our core values, we continue offering a full portfolio to challenge your thinking.

For more information, please visit: www.supermodular.com.

PRODUCT DESCRIPTION

Like the flower that opens up and welcomes you in, Smart Recessed brings charm to your space with a simple and elegant design. Smart Recessed is a popular spot for a minimalistic expression.

PRODUCT RAW MATERIAL MAIN COMPOSITION

Raw material category	Amount, mass- %	Material origin
Metals	86.49	APAC , NAM , EU
Minerals	0	Not applicable
Fossil materials	13.51	APAC , NAM , 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	0.03

FUNCTIONAL UNIT AND SERVICE LIFE

Declared unit	1 Unit
Mass per declared unit	0.196 kg
Functional unit	552 Lumens over 50000 hours
Reference service life	50000 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 Modular's manufacturing facilities are included in this stage. The product is made of metals, plastics, and electronic components. All components are transported to Modular'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 Modular. 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 waste 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.
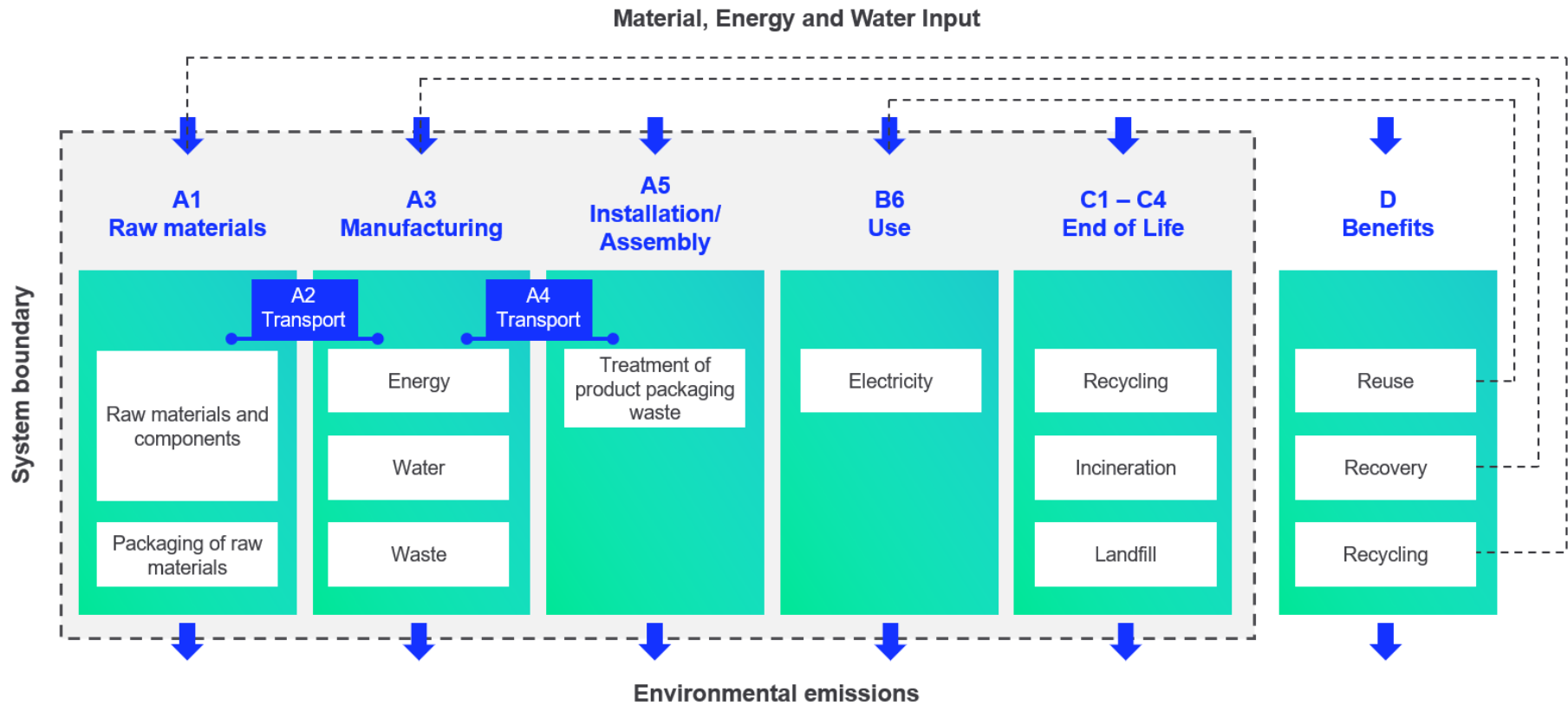
PRODUCT USE AND MAINTENANCE (B1-B7)

During the use phase, the product consumes electricity from EU'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.

Smart Recessed Adjustable 82 915005518901 (13311109)

SYSTEM BOUNDARY

Material, Energy and Water Input

A1 Raw materials	A3 Manufacturing	A5 Installation/ Assembly	B6 Use	C1 – C4 End of Life	D Benefits
Raw materials and components	A2 Transport / Energy	A4 Transport / Treatment of product packaging waste	Electricity	Recycling	Reuse
	Water			Incineration	Recovery
Packaging of raw materials	Waste			Landfill	Recycling

System boundary

Environmental emissions

Smart Recessed Adjustable 82 915005518901 (13311109)

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.

Smart Recessed Adjustable 82 915005518901 (13311109)

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	4.45E+00	5.15E-02	4.64E-01	4.96E+00	5.11E-02	1.13E-01	MNR	MNR	MNR	MNR	MNR	9.90E+01	MNR	MNR	2.75E-03	3.24E-02	5.58E-02	-2.11E+00
GWP – fossil	kg CO_2e	4.48E+00	5.14E-02	5.70E-01	5.10E+00	5.11E-02	5.64E-03	MNR	MNR	MNR	MNR	MNR	9.88E+01	MNR	MNR	2.75E-03	3.23E-02	2.07E-02	-2.11E+00
GWP – biogenic	kg CO_2e	-3.51E-02	0.00E+00	-1.08E-01	-1.43E-01	1.97E-05	1.08E-01	MNR	MNR	MNR	MNR	MNR	0.00E+00	MNR	MNR	0.00E+00	0.00E+00	3.51E-02	-3.43E-04
GWP – LULUC	kg CO_2e	5.08E-03	3.46E-05	1.43E-03	6.54E-03	1.88E-05	1.08E-06	MNR	MNR	MNR	MNR	MNR	2.31E-01	MNR	MNR	1.02E-06	4.26E-06	2.32E-06	-2.20E-04
Ozone depletion pot.	kg $CFC_{-11}e$	1.72E-07	1.05E-08	6.50E-08	2.48E-07	1.17E-08	2.87E-10	MNR	MNR	MNR	MNR	MNR	5.02E-06	MNR	MNR	6.33E-10	3.92E-10	2.42E-10	-5.78E-08
Acidification potential	mol H^+e	3.74E-02	1.44E-03	1.86E-03	4.07E-02	2.16E-04	2.41E-05	MNR	MNR	MNR	MNR	MNR	5.64E-01	MNR	MNR	1.17E-05	4.18E-05	1.26E-05	-2.49E-02
EP-freshwater[2]	kg Pe	2.31E-04	2.21E-07	1.23E-05	2.44E-04	4.18E-07	3.09E-08	MNR	MNR	MNR	MNR	MNR	1.05E-02	MNR	MNR	2.25E-08	1.41E-07	4.09E-08	-1.41E-04
EP-marine	kg Ne	4.88E-03	3.56E-04	5.12E-04	5.75E-03	6.42E-05	1.05E-05	MNR	MNR	MNR	MNR	MNR	7.48E-02	MNR	MNR	3.46E-06	1.06E-05	4.87E-06	-2.44E-03
EP-terrestrial	mol Ne	5.37E-02	3.95E-03	4.38E-03	6.20E-02	7.09E-04	1.09E-04	MNR	MNR	MNR	MNR	MNR	8.52E-01	MNR	MNR	3.82E-05	1.18E-04	4.43E-05	-2.86E-03
POCP ("smog")[3]	kg NMVOCe	1.59E-02	1.03E-03	2.14E-03	1.91E-02	2.27E-04	2.70E-05	MNR	MNR	MNR	MNR	MNR	2.33E-01	MNR	MNR	1.22E-05	3.14E-05	1.25E-05	-8.29E-03
ADP-minerals & metals[4]	kg Sbe	1.84E-04	7.89E-08	3.60E-06	1.88E-04	1.20E-07	9.24E-09	MNR	MNR	MNR	MNR	MNR	9.22E-04	MNR	MNR	6.45E-09	3.51E-07	5.16E-09	-1.27E-04
ADP-fossil resources	MJ	4.58E+01	6.65E-01	9.37E+00	5.59E+01	7.67E-01	2.36E-02	MNR	MNR	MNR	MNR	MNR	2.10E+03	MNR	MNR	4.13E-02	4.22E-02	2.42E-02	-2.07E+01
Water use[5]	m^3e depr.	1.36E+00	2.16E-03	1.77E-01	1.54E+00	3.43E-03	5.28E-03	MNR	MNR	MNR	MNR	MNR	5.75E+01	MNR	MNR	1.85E-04	1.79E-03	1.81E-03	-1.57E-01

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	3.18E-07	2.29E-09	2.46E-08	3.45E-07	5.88E-09	2.18E-10	MNR	MNR	MNR	MNR	MNR	1.85E-06	MNR	MNR	3.17E-10	5.10E-10	2.02E-10	-1.19E-07
Ionizing radiation[6]	kBq U235e	2.20E-01	3.08E-03	1.85E-02	2.42E-01	3.65E-03	8.06E-05	MNR	MNR	MNR	MNR	MNR	5.69E+01	MNR	MNR	1.97E-04	2.39E-04	1.21E-04	-1.24E-01
Ecotoxicity (freshwater)	CTUe	1.62E+02	4.54E-01	1.06E+01	1.73E+02	6.90E-01	1.38E-01	MNR	MNR	MNR	MNR	MNR	1.43E+03	MNR	MNR	3.72E-02	2.34E-01	1.41E+01	-6.53E+01
Human toxicity, cancer	CTUh	7.14E-09	2.86E-11	4.34E-10	7.60E-09	1.69E-11	8.14E-12	MNR	MNR	MNR	MNR	MNR	4.68E-08	MNR	MNR	9.14E-13	7.73E-12	5.85E-11	-6.75E-10
Human tox. non-cancer	CTUh	1.68E-07	3.30E-10	5.90E-09	1.74E-07	6.83E-10	3.32E-10	MNR	MNR	MNR	MNR	MNR	1.54E-06	MNR	MNR	3.68E-11	3.21E-10	3.57E-09	-1.11E-07
SQP[7]	-	1.69E+01	2.16E-01	8.35E+00	2.54E+01	8.83E-01	1.37E-02	MNR	MNR	MNR	MNR	MNR	3.80E+02	MNR	MNR	4.76E-02	7.46E-02	3.28E-02	-5.13E+00

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.

Smart Recessed Adjustable 82 915005518901 (13311109)

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	3.89E+00	5.11E-03	1.22E+01	1.61E+01	8.64E-03	6.92E-04	MNR	MNR	MNR	MNR	MNR	4.28E+02	MNR	MNR	4.66E-04	5.87E-03	1.09E-03	-3.60E-01
Renew. PER as material	MJ	3.30E-01	0.00E+00	9.84E-01	1.31E+00	0.00E+00	-9.84E-01	MNR	MNR	MNR	MNR	MNR	0.00E+00	MNR	MNR	0.00E+00	-1.41E-03	-3.29E-01	0.00E+00
Total use of renew. PER	MJ	4.22E+00	5.11E-03	1.32E+01	1.74E+01	8.64E-03	-9.83E-01	MNR	MNR	MNR	MNR	MNR	4.28E+02	MNR	MNR	4.66E-04	4.46E-03	-3.28E-01	-3.60E-01
Non-re. PER as energy	MJ	4.51E+01	6.66E-01	8.45E+00	5.42E+01	7.67E-01	2.36E-02	MNR	MNR	MNR	MNR	MNR	2.10E+03	MNR	MNR	4.14E-02	4.22E-02	2.42E-02	-2.07E+01
Non-re. PER as material	MJ	7.60E-01	0.00E+00	6.75E-02	8.28E-01	0.00E+00	-6.75E-02	MNR	MNR	MNR	MNR	MNR	0.00E+00	MNR	MNR	0.00E+00	-3.77E-01	-3.83E-01	0.00E+00
Total use of non-re. PER	MJ	4.59E+01	6.66E-01	8.51E+00	5.51E+01	7.67E-01	-4.39E-02	MNR	MNR	MNR	MNR	MNR	2.10E+03	MNR	MNR	4.14E-02	-3.35E-01	-3.59E-01	-2.07E+01
Secondary materials	kg	2.20E-02	2.82E-04	5.40E-02	7.64E-02	2.13E-04	2.72E-05	MNR	MNR	MNR	MNR	MNR	2.16E-01	MNR	MNR	1.15E-05	4.40E-05	7.73E-05	8.92E-02
Renew. secondary fuels	MJ	2.13E-03	1.01E-06	3.57E-03	5.71E-03	2.15E-06	3.69E-07	MNR	MNR	MNR	MNR	MNR	1.76E-03	MNR	MNR	1.16E-07	2.18E-06	5.06E-07	-4.88E-05
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	m³	3.16E-02	5.05E-05	1.05E-02	4.22E-02	9.93E-05	6.62E-05	MNR	MNR	MNR	MNR	MNR	1.81E+00	MNR	MNR	5.36E-06	6.11E-05	2.86E-05	-7.59E-03

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	8.21E-01	9.04E-04	2.54E-02	8.47E-01	1.02E-03	9.95E-04	MNR	MNR	MNR	MNR	MNR	7.55E+00	MNR	MNR	5.48E-05	2.82E-04	2.19E-03	-3.41E-01
Non-hazardous waste	kg	9.80E+00	8.71E-03	3.71E-01	1.02E+01	1.67E-02	5.15E-02	MNR	MNR	MNR	MNR	MNR	4.78E+02	MNR	MNR	9.01E-04	1.95E-02	6.30E-02	-7.28E+00
Radioactive waste	kg	9.69E-05	4.66E-06	1.38E-05	1.15E-04	5.13E-06	5.29E-08	MNR	MNR	MNR	MNR	MNR	1.53E-02	MNR	MNR	2.77E-07	1.62E-07	0.00E+00	-4.58E-05

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	1.18E-01	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	1.23E-02	0.00E+00	0.00E+00
Exported energy	MJ	0.00E+00	0.00E+00	3.41E-02	3.41E-02	0.00E+00	0.00E+00	MNR	MNR	MNR	MNR	MNR	0.00E+00	MNR	MNR	0.00E+00	2.71E-01	0.00E+00	0.00E+00

Smart Recessed Adjustable 82 915005518901 (13311109)

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	4.36E+00	5.10E-02	5.68E-01	4.98E+00	5.05E-02	5.49E-03	MNR	MNR	MNR	MNR	MNR	9.78E+01	MNR	MNR	2.73E-03	3.22E-02	2.05E-02	-2.07E+00
Ozone depletion Pot.	kg $CFC_{-11}e$	1.47E-07	8.29E-09	5.52E-08	2.11E-07	9.30E-09	2.48E-10	MNR	MNR	MNR	MNR	MNR	4.35E-06	MNR	MNR	5.02E-10	3.22E-10	1.97E-10	-4.91E-08
Acidification	kg SO_2e	3.19E-02	1.15E-03	1.50E-03	3.46E-02	1.68E-04	1.75E-05	MNR	MNR	MNR	MNR	MNR	4.79E-01	MNR	MNR	9.06E-06	3.31E-05	9.65E-06	-2.16E-02
Eutrophication	kg PO_4^3e	9.26E-03	1.31E-04	5.93E-04	9.98E-03	3.82E-05	1.34E-05	MNR	MNR	MNR	MNR	MNR	3.68E-01	MNR	MNR	2.06E-06	1.23E-05	4.47E-05	-5.74E-03
POCP ("smog")	kg C_2H_4e	1.74E-03	2.99E-05	1.38E-04	1.91E-03	6.56E-06	5.13E-07	MNR	MNR	MNR	MNR	MNR	1.96E-02	MNR	MNR	3.54E-07	1.18E-06	6.50E-07	-1.03E-03
ADP-elements	kg Sbe	1.84E-04	7.73E-08	3.50E-06	1.88E-04	1.16E-07	7.31E-09	MNR	MNR	MNR	MNR	MNR	9.20E-04	MNR	MNR	6.25E-09	3.51E-07	4.64E-09	-1.27E-04
ADP-fossil	MJ	4.58E+01	6.65E-01	9.36E+00	5.59E+01	7.67E-01	2.36E-02	MNR	MNR	MNR	MNR	MNR	2.10E+03	MNR	MNR	4.13E-02	4.22E-02	2.42E-02	-2.07E+01

Smart Recessed Adjustable 82 915005518901 (13311109)

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 luminaries 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

Smart Recessed Adjustable 82 915005518901 (13311109)

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
915005518701 - 13310109 Smart Lotis Recessed Adjustable 82 1x LED 2700K Medium DE White Structure	525.0	5.0	105.0	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292840 - 13310114 Smart Lotis Recessed Adjustable 82 1x LED 2700K Medium DE Bronze Brushed	435.0	5.0	87.0	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292841 - 13310115 Smart Lotis Recessed Adjustable 82 1x LED 2700K Medium DE Champagne Brushed	443.0	5.0	88.6	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292842 - 13310116 Smart Lotis Recessed Adjustable 82 1x LED 2700K Medium DE Silver Bronze Brushed	427.0	5.0	85.4	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915005518801 - 13310132 Smart Lotis Recessed Adjustable 82 1x LED 2700K Medium DE Black Structure	512.0	5.0	102.4	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292843 - 13310143 Smart Lotis Recessed Adjustable 82 1x LED 2700K Medium DE Black Brushed	437.0	5.0	87.4	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915005519901 - 13310146 Smart Lotis Recessed Adjustable 82 1x LED 2700K Medium DE Gold Matt	522.0	5.0	104.4	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915005520001 - 13310209 Smart Lotis Recessed Adjustable 82 1x LED 2700K Flood DE White Structure	502.0	5.0	100.4	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292844 - 13310214 Smart Lotis Recessed Adjustable 82 1x LED 2700K Flood DE Bronze Brushed	445.0	5.0	89.0	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292845 - 13310215 Smart Lotis Recessed Adjustable 82 1x LED 2700K Flood DE Champagne Brushed	451.0	5.0	90.2	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5

Smart Recessed Adjustable 82 915005518901 (13311109)

Product												
915006292846 - 13310216 Smart Lotis Recessed Adjustable 82 1x LED 2700K Flood DE Silver Bronze Brushed	451.0	5.0	90.2	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915005520101 - 13310232 Smart Lotis Recessed Adjustable 82 1x LED 2700K Flood DE Black Structure	500.0	5.0	100.0	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292847 - 13310243 Smart Lotis Recessed Adjustable 82 1x LED 2700K Flood DE Black Brushed	443.0	5.0	88.6	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915005520201 - 13310246 Smart Lotis Recessed Adjustable 82 1x LED 2700K Flood DE Gold Matt	523.0	5.0	104.6	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915005518901 - 13311109 Smart Lotis Recessed Adjustable 82 1x LED 3000K Medium DE White Structure	552.0	5.0	110.4	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292848 - 13311114 Smart Lotis Recessed Adjustable 82 1x LED 3000K Medium DE Bronze Brushed	457.0	5.0	91.4	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292849 - 13311115 Smart Lotis Recessed Adjustable 82 1x LED 3000K Medium DE Champagne Brushed	466.0	5.0	93.2	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292850 - 13311116 Smart Lotis Recessed Adjustable 82 1x LED 3000K Medium DE Silver Bronze Brushed	449.0	5.0	89.8	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915005519001 - 13311132 Smart Lotis Recessed Adjustable 82 1x LED 3000K Medium DE Black Structure	539.0	5.0	107.8	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292851 - 13311143 Smart Lotis Recessed Adjustable 82 1x LED 3000K Medium DE Black Brushed	459.0	5.0	91.8	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915005520301 - 13311146 Smart Lotis Recessed Adjustable 82 1x LED 3000K Medium DE Gold Matt	549.0	5.0	109.8	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915005520401 - 13311209 Smart Lotis Recessed Adjustable 82 1x LED 3000K Flood DE White Structure	528.0	5.0	105.6	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292852 - 13311214 Smart Lotis Recessed Adjustable 82 1x LED 3000K Flood DE Bronze Brushed	467.0	5.0	93.4	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292853 - 13311215 Smart Lotis Recessed Adjustable 82 1x LED 3000K Flood DE Champagne Brushed	474.0	5.0	94.8	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292854 - 13311216 Smart Lotis Recessed Adjustable 82 1x LED 3000K Flood DE Silver Bronze Brushed	474.0	5.0	94.8	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5

Smart Recessed Adjustable 82 915005518901 (13311109)

Product												
915005520501 - 13311232 Smart Lotis Recessed Adjustable 82 1x LED 3000K Flood DE Black Structure	525.0	5.0	105.0	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292855 - 13311243 Smart Lotis Recessed Adjustable 82 1x LED 3000K Flood DE Black Brushed	466.0	5.0	93.2	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915005520601 - 13311246 Smart Lotis Recessed Adjustable 82 1x LED 3000K Flood DE Gold Matt	550.0	5.0	110.0	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915005520701 - 13312109 Smart Lotis Recessed Adjustable 82 1x LED 4000K Medium DE White Structure	589.0	5.0	117.8	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292856 - 13312114 Smart Lotis Recessed Adjustable 82 1x LED 4000K Medium DE Bronze Brushed	487.0	5.0	97.4	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292857 - 13312115 Smart Lotis Recessed Adjustable 82 1x LED 4000K Medium DE Champagne Brushed	497.0	5.0	99.4	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292858 - 13312116 Smart Lotis Recessed Adjustable 82 1x LED 4000K Medium DE Silver Bronze Brushed	479.0	5.0	95.8	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915005520801 - 13312132 Smart Lotis Recessed Adjustable 82 1x LED 4000K Medium DE Black Structure	574.0	5.0	114.8	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292859 - 13312143 Smart Lotis Recessed Adjustable 82 1x LED 4000K Medium DE Black Brushed	490.0	5.0	98.0	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915005520901 - 13312146 Smart Lotis Recessed Adjustable 82 1x LED 4000K Medium DE Gold Matt	586.0	5.0	117.2	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915005521001 - 13312209 Smart Lotis Recessed Adjustable 82 1x LED 4000K Flood DE White Structure	563.0	5.0	112.6	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292860 - 13312214 Smart Lotis Recessed Adjustable 82 1x LED 4000K Flood DE Bronze Brushed	499.0	5.0	99.8	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292861 - 13312215 Smart Lotis Recessed Adjustable 82 1x LED 4000K Flood DE Champagne Brushed	505.0	5.0	101.0	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292862 - 13312216 Smart Lotis Recessed Adjustable 82 1x LED 4000K Flood DE Silver Bronze Brushed	506.0	5.0	101.2	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915005521101 - 13312232 Smart Lotis Recessed Adjustable 82 1x LED 4000K Flood DE Black Structure	560.0	5.0	112.0	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5

Smart Recessed Adjustable 82 915005518901 (13311109)

Product												
915006292863 - 13312243 Smart Lotis Recessed Adjustable 82 1x LED 4000K Flood DE Black Brushed	497.0	5.0	99.4	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915005521201 - 13312246 Smart Lotis Recessed Adjustable 82 1x LED 4000K Flood DE Gold Matt	587.0	5.0	117.4	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915005524701 - 13313109 Smart Lotis Recessed Adjustable 82 1x LED 1800-3000K WD Medium DE White Structure	498.0	6.0	83.0	1.2	1.2	0.9	0.9	0.66	118.8	89.1	89.1	65.3
915006292864 - 13313114 Smart Lotis Recessed Adjustable 82 1x LED 1800-3000K WD Medium DE Bronze Brushed	469.0	6.0	78.2	1.2	1.2	0.9	0.9	0.66	118.8	89.1	89.1	65.3
915006292865 - 13313115 Smart Lotis Recessed Adjustable 82 1x LED 1800-3000K WD Medium DE Champagne Brushed	475.0	6.0	79.2	1.2	1.2	0.9	0.9	0.66	118.8	89.1	89.1	65.3
915006292866 - 13313116 Smart Lotis Recessed Adjustable 82 1x LED 1800-3000K WD Medium DE Silver Bronze Brushed	475.0	6.0	79.2	1.2	1.2	0.9	0.9	0.66	118.8	89.1	89.1	65.3
915005524801 - 13313132 Smart Lotis Recessed Adjustable 82 1x LED 1800-3000K WD Medium DE Black Structure	480.0	6.0	80.0	1.2	1.2	0.9	0.9	0.66	118.8	89.1	89.1	65.3
915006292867 - 13313143 Smart Lotis Recessed Adjustable 82 1x LED 1800-3000K WD Medium DE Black Brushed	467.0	6.0	77.8	1.2	1.2	0.9	0.9	0.66	118.8	89.1	89.1	65.3
915005524901 - 13313146 Smart Lotis Recessed Adjustable 82 1x LED 1800-3000K WD Medium DE Gold Matt	491.0	6.0	81.8	1.2	1.2	0.9	0.9	0.66	118.8	89.1	89.1	65.3
915005525001 - 13313209 Smart Lotis Recessed Adjustable 82 1x LED 1800-3000K WD Flood DE White Structure	489.0	6.0	81.5	1.2	1.2	0.9	0.9	0.66	118.8	89.1	89.1	65.3
915006292868 - 13313214 Smart Lotis Recessed Adjustable 82 1x LED 1800-3000K WD Flood DE Bronze Brushed	475.0	6.0	79.2	1.2	1.2	0.9	0.9	0.66	118.8	89.1	89.1	65.3
915006292869 - 13313215 Smart Lotis Recessed Adjustable 82 1x LED 1800-3000K WD Flood DE Champagne Brushed	480.0	6.0	80.0	1.2	1.2	0.9	0.9	0.66	118.8	89.1	89.1	65.3
915006292870 - 13313216 Smart Lotis Recessed Adjustable 82 1x LED 1800-3000K WD Flood DE Silver Bronze Brushed	483.0	6.0	80.5	1.2	1.2	0.9	0.9	0.66	118.8	89.1	89.1	65.3
915005525101 - 13313232 Smart Lotis Recessed Adjustable 82 1x LED 1800-3000K WD Flood DE Black Structure	459.0	6.0	76.5	1.2	1.2	0.9	0.9	0.66	118.8	89.1	89.1	65.3
915006292871 - 13313243 Smart Lotis Recessed Adjustable 82 1x LED 1800-3000K WD Flood DE Black Brushed	475.0	6.0	79.2	1.2	1.2	0.9	0.9	0.66	118.8	89.1	89.1	65.3

Smart Recessed Adjustable 82 915005518901 (13311109)

Product												
915005525201 - 13313246 Smart Lotis Recessed Adjustable 82 1x LED 1800-3000K WD Flood DE Gold Matt	474.0	6.0	79.0	1.2	1.2	0.9	0.9	0.66	118.8	89.1	89.1	65.3
915005519101 - 13320109 Smart Cake Recessed Adjustable 82 1x LED 2700K Medium DE White Structure	420.0	5.0	84.0	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292872 - 13320114 Smart Cake Recessed Adjustable 82 1x LED 2700K Medium DE Bronze Brushed	328.0	5.0	65.6	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292873 - 13320115 Smart Cake Recessed Adjustable 82 1x LED 2700K Medium DE Champagne Brushed	354.0	5.0	70.8	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292874 - 13320116 Smart Cake Recessed Adjustable 82 1x LED 2700K Medium DE Silver Bronze Brushed	363.0	5.0	72.6	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915005519201 - 13320132 Smart Cake Recessed Adjustable 82 1x LED 2700K Medium DE Black Structure	354.0	5.0	70.8	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292875 - 13320143 Smart Cake Recessed Adjustable 82 1x LED 2700K Medium DE Black Brushed	328.0	5.0	65.6	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915005521301 - 13320146 Smart Cake Recessed Adjustable 82 1x LED 2700K Medium DE Gold Matt	396.0	5.0	79.2	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915005521401 - 13320209 Smart Cake Recessed Adjustable 82 1x LED 2700K Flood DE White Structure	440.0	5.0	88.0	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292876 - 13320214 Smart Cake Recessed Adjustable 82 1x LED 2700K Flood DE Bronze Brushed	315.0	5.0	63.0	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292877 - 13320215 Smart Cake Recessed Adjustable 82 1x LED 2700K Flood DE Champagne Brushed	346.0	5.0	69.2	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292878 - 13320216 Smart Cake Recessed Adjustable 82 1x LED 2700K Flood DE Silver Bronze Brushed	355.0	5.0	71.0	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915005521501 - 13320232 Smart Cake Recessed Adjustable 82 1x LED 2700K Flood DE Black Structure	361.0	5.0	72.2	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292879 - 13320243 Smart Cake Recessed Adjustable 82 1x LED 2700K Flood DE Black Brushed	315.0	5.0	63.0	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915005521601 - 13320246 Smart Cake Recessed Adjustable 82 1x LED 2700K Flood DE Gold Matt	408.0	5.0	81.6	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5

Smart Recessed Adjustable 82 915005518901 (13311109)

Product												
915005519301 - 13321109 Smart Cake Recessed Adjustable 82 1x LED 3000K Medium DE White Structure	442.0	5.0	88.4	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292880 - 13321114 Smart Cake Recessed Adjustable 82 1x LED 3000K Medium DE Bronze Brushed	345.0	5.0	69.0	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292881 - 13321115 Smart Cake Recessed Adjustable 82 1x LED 3000K Medium DE Champagne Brushed	372.0	5.0	74.4	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292882 - 13321116 Smart Cake Recessed Adjustable 82 1x LED 3000K Medium DE Silver Bronze Brushed	381.0	5.0	76.2	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915005519401 - 13321132 Smart Cake Recessed Adjustable 82 1x LED 3000K Medium DE Black Structure	372.0	5.0	74.4	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292883 - 13321143 Smart Cake Recessed Adjustable 82 1x LED 3000K Medium DE Black Brushed	344.0	5.0	68.8	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915005521701 - 13321146 Smart Cake Recessed Adjustable 82 1x LED 3000K Medium DE Gold Matt	416.0	5.0	83.2	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915005521801 - 13321209 Smart Cake Recessed Adjustable 82 1x LED 3000K Flood DE White Structure	463.0	5.0	92.6	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292884 - 13321214 Smart Cake Recessed Adjustable 82 1x LED 3000K Flood DE Bronze Brushed	331.0	5.0	66.2	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292885 - 13321215 Smart Cake Recessed Adjustable 82 1x LED 3000K Flood DE Champagne Brushed	363.0	5.0	72.6	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292886 - 13321216 Smart Cake Recessed Adjustable 82 1x LED 3000K Flood DE Silver Bronze Brushed	373.0	5.0	74.6	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915005521901 - 13321232 Smart Cake Recessed Adjustable 82 1x LED 3000K Flood DE Black Structure	380.0	5.0	76.0	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292887 - 13321243 Smart Cake Recessed Adjustable 82 1x LED 3000K Flood DE Black Brushed	331.0	5.0	66.2	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915005522001 - 13321246 Smart Cake Recessed Adjustable 82 1x LED 3000K Flood DE Gold Matt	429.0	5.0	85.8	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915005522101 - 13322109 Smart Cake Recessed Adjustable 82 1x LED 4000K Medium DE White Structure	471.0	5.0	94.2	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5

Smart Recessed Adjustable 82 915005518901 (13311109)

Product												
915006292888 - 13322114 Smart Cake Recessed Adjustable 82 1x LED 4000K Medium DE Bronze Brushed	368.0	5.0	73.6	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292889 - 13322115 Smart Cake Recessed Adjustable 82 1x LED 4000K Medium DE Champagne Brushed	396.0	5.0	79.2	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292890 - 13322116 Smart Cake Recessed Adjustable 82 1x LED 4000K Medium DE Silver Bronze Brushed	407.0	5.0	81.4	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915005522201 - 13322132 Smart Cake Recessed Adjustable 82 1x LED 4000K Medium DE Black Structure	397.0	5.0	79.4	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292891 - 13322143 Smart Cake Recessed Adjustable 82 1x LED 4000K Medium DE Black Brushed	367.0	5.0	73.4	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915005522301 - 13322146 Smart Cake Recessed Adjustable 82 1x LED 4000K Medium DE Gold Matt	444.0	5.0	88.8	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915005522401 - 13322209 Smart Cake Recessed Adjustable 82 1x LED 4000K Flood DE White Structure	493.0	5.0	98.6	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292892 - 13322214 Smart Cake Recessed Adjustable 82 1x LED 4000K Flood DE Bronze Brushed	353.0	5.0	70.6	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292893 - 13322215 Smart Cake Recessed Adjustable 82 1x LED 4000K Flood DE Champagne Brushed	388.0	5.0	77.6	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292894 - 13322216 Smart Cake Recessed Adjustable 82 1x LED 4000K Flood DE Silver Bronze Brushed	398.0	5.0	79.6	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915005522501 - 13322232 Smart Cake Recessed Adjustable 82 1x LED 4000K Flood DE Black Structure	405.0	5.0	81.0	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292895 - 13322243 Smart Cake Recessed Adjustable 82 1x LED 4000K Flood DE Black Brushed	353.0	5.0	70.6	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915005522601 - 13322246 Smart Cake Recessed Adjustable 82 1x LED 4000K Flood DE Gold Matt	458.0	5.0	91.6	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915005525301 - 13323109 Smart Cake Recessed Adjustable 82 1x LED 1800-3000K WD Medium DE White Structure	414.0	6.0	69.0	1.2	1.2	0.9	0.9	0.66	118.8	89.1	89.1	65.3
915006292896 - 13323114 Smart Cake Recessed Adjustable 82 1x LED 1800-3000K WD Medium DE Bronze Brushed	358.0	6.0	59.7	1.2	1.2	0.9	0.9	0.66	118.8	89.1	89.1	65.3

Smart Recessed Adjustable 82 915005518901 (13311109)

Product												
915006292897 - 13323115 Smart Cake Recessed Adjustable 82 1x LED 1800-3000K WD Medium DE Champagne Brushed	396.0	6.0	66.0	1.2	1.2	0.9	0.9	0.66	118.8	89.1	89.1	65.3
915006292898 - 13323116 Smart Cake Recessed Adjustable 82 1x LED 1800-3000K WD Medium DE Silver Bronze Brushed	405.0	6.0	67.5	1.2	1.2	0.9	0.9	0.66	118.8	89.1	89.1	65.3
915005525401 - 13323132 Smart Cake Recessed Adjustable 82 1x LED 1800-3000K WD Medium DE Black Structure	350.0	6.0	58.3	1.2	1.2	0.9	0.9	0.66	118.8	89.1	89.1	65.3
915006292899 - 13323143 Smart Cake Recessed Adjustable 82 1x LED 1800-3000K WD Medium DE Black Brushed	357.0	6.0	59.5	1.2	1.2	0.9	0.9	0.66	118.8	89.1	89.1	65.3
915005525501 - 13323146 Smart Cake Recessed Adjustable 82 1x LED 1800-3000K WD Medium DE Gold Matt	388.0	6.0	64.7	1.2	1.2	0.9	0.9	0.66	118.8	89.1	89.1	65.3
915005525601 - 13323209 Smart Cake Recessed Adjustable 82 1x LED 1800-3000K WD Flood DE White Structure	407.0	6.0	67.8	1.2	1.2	0.9	0.9	0.66	118.8	89.1	89.1	65.3
915006292901 - 13323214 Smart Cake Recessed Adjustable 82 1x LED 1800-3000K WD Flood DE Bronze Brushed	368.0	6.0	61.3	1.2	1.2	0.9	0.9	0.66	118.8	89.1	89.1	65.3
915006292902 - 13323215 Smart Cake Recessed Adjustable 82 1x LED 1800-3000K WD Flood DE Champagne Brushed	397.0	6.0	66.2	1.2	1.2	0.9	0.9	0.66	118.8	89.1	89.1	65.3
915006292903 - 13323216 Smart Cake Recessed Adjustable 82 1x LED 1800-3000K WD Flood DE Silver Bronze Brushed	406.0	6.0	67.7	1.2	1.2	0.9	0.9	0.66	118.8	89.1	89.1	65.3
915005525701 - 13323232 Smart Cake Recessed Adjustable 82 1x LED 1800-3000K WD Flood DE Black Structure	345.0	6.0	57.5	1.2	1.2	0.9	0.9	0.66	118.8	89.1	89.1	65.3
915006292904 - 13323243 Smart Cake Recessed Adjustable 82 1x LED 1800-3000K WD Flood DE Black Brushed	367.0	6.0	61.2	1.2	1.2	0.9	0.9	0.66	118.8	89.1	89.1	65.3
915005525801 - 13323246 Smart Cake Recessed Adjustable 82 1x LED 1800-3000K WD Flood DE Gold Matt	384.0	6.0	64.0	1.2	1.2	0.9	0.9	0.66	118.8	89.1	89.1	65.3
915005519501 - 13330109 Smart Kup Recessed Adjustable 82 1x LED 2700K Medium DE White Structure	525.0	5.0	105.0	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292905 - 13330114 Smart Kup Recessed Adjustable 82 1x LED 2700K Medium DE Bronze Brushed	444.0	5.0	88.8	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292906 - 13330115 Smart Kup Recessed Adjustable 82 1x LED 2700K Medium DE Champagne Brushed	448.0	5.0	89.6	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5

Smart Recessed Adjustable 82 915005518901 (13311109)

Product											
915006292907 - 13330116 Smart Kup Recessed Adjustable 82 1x LED 2700K Medium DE Silver Bronze Brushed	448.0	5.0	89.6	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915005519601 - 13330132 Smart Kup Recessed Adjustable 82 1x LED 2700K Medium DE Black Structure	512.0	5.0	102.4	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292908 - 13330143 Smart Kup Recessed Adjustable 82 1x LED 2700K Medium DE Black Brushed	450.0	5.0	90.0	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915005522701 - 13330146 Smart Kup Recessed Adjustable 82 1x LED 2700K Medium DE Gold Matt	522.0	5.0	104.4	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915005522801 - 13330209 Smart Kup Recessed Adjustable 82 1x LED 2700K Flood DE White Structure	502.0	5.0	100.4	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292909 - 13330214 Smart Kup Recessed Adjustable 82 1x LED 2700K Flood DE Bronze Brushed	453.0	5.0	90.6	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292910 - 13330215 Smart Kup Recessed Adjustable 82 1x LED 2700K Flood DE Champagne Brushed	458.0	5.0	91.6	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292911 - 13330216 Smart Kup Recessed Adjustable 82 1x LED 2700K Flood DE Silver Bronze Brushed	460.0	5.0	92.0	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915005522901 - 13330232 Smart Kup Recessed Adjustable 82 1x LED 2700K Flood DE Black Structure	500.0	5.0	100.0	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292912 - 13330243 Smart Kup Recessed Adjustable 82 1x LED 2700K Flood DE Black Brushed	455.0	5.0	91.0	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915005523001 - 13330246 Smart Kup Recessed Adjustable 82 1x LED 2700K Flood DE Gold Matt	523.0	5.0	104.6	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915005519701 - 13331109 Smart Kup Recessed Adjustable 82 1x LED 3000K Medium DE White Structure	552.0	5.0	110.4	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292913 - 13331114 Smart Kup Recessed Adjustable 82 1x LED 3000K Medium DE Bronze Brushed	467.0	5.0	93.4	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292914 - 13331115 Smart Kup Recessed Adjustable 82 1x LED 3000K Medium DE Champagne Brushed	470.0	5.0	94.0	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292915 - 13331116 Smart Kup Recessed Adjustable 82 1x LED 3000K Medium DE Silver Bronze Brushed	471.0	5.0	94.2	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5

Smart Recessed Adjustable 82 915005518901 (13311109)

Product											
915005519801 - 13331132 Smart Kup Recessed Adjustable 82 1x LED 3000K Medium DE Black Structure	539.0	5.0	107.8	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292916 - 13331143 Smart Kup Recessed Adjustable 82 1x LED 3000K Medium DE Black Brushed	473.0	5.0	94.6	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915005523101 - 13331146 Smart Kup Recessed Adjustable 82 1x LED 3000K Medium DE Gold Matt	549.0	5.0	109.8	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915005523201 - 13331209 Smart Kup Recessed Adjustable 82 1x LED 3000K Flood DE White Structure	528.0	5.0	105.6	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292917 - 13331214 Smart Kup Recessed Adjustable 82 1x LED 3000K Flood DE Bronze Brushed	477.0	5.0	95.4	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292918 - 13331215 Smart Kup Recessed Adjustable 82 1x LED 3000K Flood DE Champagne Brushed	481.0	5.0	96.2	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292919 - 13331216 Smart Kup Recessed Adjustable 82 1x LED 3000K Flood DE Silver Bronze Brushed	483.0	5.0	96.6	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915005523301 - 13331232 Smart Kup Recessed Adjustable 82 1x LED 3000K Flood DE Black Structure	525.0	5.0	105.0	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292920 - 13331243 Smart Kup Recessed Adjustable 82 1x LED 3000K Flood DE Black Brushed	478.0	5.0	95.6	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915005523401 - 13331246 Smart Kup Recessed Adjustable 82 1x LED 3000K Flood DE Gold Matt	550.0	5.0	110.0	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915005523501 - 13332109 Smart Kup Recessed Adjustable 82 1x LED 4000K Medium DE White Structure	589.0	5.0	117.8	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292921 - 13332114 Smart Kup Recessed Adjustable 82 1x LED 4000K Medium DE Bronze Brushed	498.0	5.0	99.6	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292922 - 13332115 Smart Kup Recessed Adjustable 82 1x LED 4000K Medium DE Champagne Brushed	502.0	5.0	100.4	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292923 - 13332116 Smart Kup Recessed Adjustable 82 1x LED 4000K Medium DE Silver Bronze Brushed	503.0	5.0	100.6	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915005523601 - 13332132 Smart Kup Recessed Adjustable 82 1x LED 4000K Medium DE Black Structure	574.0	5.0	114.8	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5

Smart Recessed Adjustable 82 915005518901 (13311109)

Product												
915006292924 - 13332143 Smart Kup Recessed Adjustable 82 1x LED 4000K Medium DE Black Brushed	504.0	5.0	100.8	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915005523701 - 13332146 Smart Kup Recessed Adjustable 82 1x LED 4000K Medium DE Gold Matt	586.0	5.0	117.2	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915005523801 - 13332209 Smart Kup Recessed Adjustable 82 1x LED 4000K Flood DE White Structure	563.0	5.0	112.6	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292925 - 13332214 Smart Kup Recessed Adjustable 82 1x LED 4000K Flood DE Bronze Brushed	508.0	5.0	101.6	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292926 - 13332215 Smart Kup Recessed Adjustable 82 1x LED 4000K Flood DE Champagne Brushed	514.0	5.0	102.8	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292927 - 13332216 Smart Kup Recessed Adjustable 82 1x LED 4000K Flood DE Silver Bronze Brushed	515.0	5.0	103.0	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915005523901 - 13332232 Smart Kup Recessed Adjustable 82 1x LED 4000K Flood DE Black Structure	560.0	5.0	112.0	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915006292928 - 13332243 Smart Kup Recessed Adjustable 82 1x LED 4000K Flood DE Black Brushed	510.0	5.0	102.0	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915005524001 - 13332246 Smart Kup Recessed Adjustable 82 1x LED 4000K Flood DE Gold Matt	587.0	5.0	117.4	1.0	1.0	0.75	0.75	0.55	99.0	74.2	74.2	54.5
915005524101 - 13333109 Smart Kup Recessed Adjustable 82 1x LED 1800-3000K WD Medium DE White Structure	498.0	6.0	83.0	1.2	1.2	0.9	0.9	0.66	118.8	89.1	89.1	65.3
915006292929 - 13333114 Smart Kup Recessed Adjustable 82 1x LED 1800-3000K WD Medium DE Bronze Brushed	478.0	6.0	79.7	1.2	1.2	0.9	0.9	0.66	118.8	89.1	89.1	65.3
915006292930 - 13333115 Smart Kup Recessed Adjustable 82 1x LED 1800-3000K WD Medium DE Champagne Brushed	486.0	6.0	81.0	1.2	1.2	0.9	0.9	0.66	118.8	89.1	89.1	65.3
915006292931 - 13333116 Smart Kup Recessed Adjustable 82 1x LED 1800-3000K WD Medium DE Silver Bronze Brushed	486.0	6.0	81.0	1.2	1.2	0.9	0.9	0.66	118.8	89.1	89.1	65.3
915005524201 - 13333132 Smart Kup Recessed Adjustable 82 1x LED 1800-3000K WD Medium DE Black Structure	480.0	6.0	80.0	1.2	1.2	0.9	0.9	0.66	118.8	89.1	89.1	65.3
915006292932 - 13333143 Smart Kup Recessed Adjustable 82 1x LED 1800-3000K WD Medium DE Black Brushed	482.0	6.0	80.3	1.2	1.2	0.9	0.9	0.66	118.8	89.1	89.1	65.3

Smart Recessed Adjustable 82 915005518901 (13311109)

Product											
915005524301 - 13333146 Smart Kup Recessed Adjustable 82 1x LED 1800-3000K WD Medium DE Gold Matt	491.0	6.0	81.8	1.2	1.2	0.9	0.9	0.66	118.8	89.1	89.1	65.3
915005524401 - 13333209 Smart Kup Recessed Adjustable 82 1x LED 1800-3000K WD Flood DE White Structure	489.0	6.0	81.5	1.2	1.2	0.9	0.9	0.66	118.8	89.1	89.1	65.3
915006292933 - 13333214 Smart Kup Recessed Adjustable 82 1x LED 1800-3000K WD Flood DE Bronze Brushed	485.0	6.0	80.8	1.2	1.2	0.9	0.9	0.66	118.8	89.1	89.1	65.3
915006292934 - 13333215 Smart Kup Recessed Adjustable 82 1x LED 1800-3000K WD Flood DE Champagne Brushed	489.0	6.0	81.5	1.2	1.2	0.9	0.9	0.66	118.8	89.1	89.1	65.3
915006292935 - 13333216 Smart Kup Recessed Adjustable 82 1x LED 1800-3000K WD Flood DE Silver Bronze Brushed	491.0	6.0	81.8	1.2	1.2	0.9	0.9	0.66	118.8	89.1	89.1	65.3
915005524501 - 13333232 Smart Kup Recessed Adjustable 82 1x LED 1800-3000K WD Flood DE Black Structure	459.0	6.0	76.5	1.2	1.2	0.9	0.9	0.66	118.8	89.1	89.1	65.3
915006292936 - 13333243 Smart Kup Recessed Adjustable 82 1x LED 1800-3000K WD Flood DE Black Brushed	483.0	6.0	80.5	1.2	1.2	0.9	0.9	0.66	118.8	89.1	89.1	65.3
915005524601 - 13333246 Smart Kup Recessed Adjustable 82 1x LED 1800-3000K WD Flood DE Gold Matt	474.0	6.0	79.0	1.2	1.2	0.9	0.9	0.66	118.8	89.1	89.1	65.3

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.

Smart Recessed Adjustable 82 915005518901 (13311109)

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.

$$TSF = PGSF * CSF$$

Smart Recessed Adjustable 82 915005518901 (13311109)

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
915005518701 - 13310109 Smart Lotis Recessed Adjustable 82 1x LED 2700K Medium DE White Structure	525.0	5.0	105.0	1.0	1.333	1.0	1.0	0.733	132.0	99.0	99.0	72.6
915006292840 - 13310114 Smart Lotis Recessed Adjustable 82 1x LED 2700K Medium DE Bronze Brushed	435.0	5.0	87.0	1.0	1.609	1.207	1.207	0.885	159.3	119.5	119.5	87.6
915006292841 - 13310115 Smart Lotis Recessed Adjustable 82 1x LED 2700K Medium DE Champagne Brushed	443.0	5.0	88.6	1.0	1.58	1.185	1.185	0.869	156.4	117.3	117.3	86.0
915006292842 - 13310116 Smart Lotis Recessed Adjustable 82 1x LED 2700K Medium DE Silver Bronze Brushed	427.0	5.0	85.4	1.0	1.639	1.229	1.229	0.901	162.3	121.7	121.7	89.2

Smart Recessed Adjustable 82 915005518901 (13311109)

Product												
915005518801 - 13310132 Smart Lotis Recessed Adjustable 82 1x LED 2700K Medium DE Black Structure	512.0	5.0	102.4	1.0	1.367	1.025	1.025	0.752	135.3	101.5	101.5	74.4
915006292843 - 13310143 Smart Lotis Recessed Adjustable 82 1x LED 2700K Medium DE Black Brushed	437.0	5.0	87.4	1.0	1.602	1.202	1.202	0.881	158.6	119.0	119.0	87.2
915005519901 - 13310146 Smart Lotis Recessed Adjustable 82 1x LED 2700K Medium DE Gold Matt	522.0	5.0	104.4	1.0	1.341	1.006	1.006	0.738	132.8	99.6	99.6	73.1
915005520001 - 13310209 Smart Lotis Recessed Adjustable 82 1x LED 2700K Flood DE White Structure	502.0	5.0	100.4	1.0	1.394	1.045	1.045	0.767	138.0	103.5	103.5	75.9
915006292844 - 13310214 Smart Lotis Recessed Adjustable 82 1x LED 2700K Flood DE Bronze Brushed	445.0	5.0	89.0	1.0	1.573	1.18	1.18	0.865	155.7	116.8	116.8	85.6
915006292845 - 13310215 Smart Lotis Recessed Adjustable 82 1x LED 2700K Flood DE Champagne Brushed	451.0	5.0	90.2	1.0	1.552	1.164	1.164	0.854	153.6	115.2	115.2	84.5
915006292846 - 13310216 Smart Lotis Recessed Adjustable 82 1x LED 2700K Flood DE Silver Bronze Brushed	451.0	5.0	90.2	1.0	1.552	1.164	1.164	0.854	153.6	115.2	115.2	84.5
915005520101 - 13310232 Smart Lotis Recessed Adjustable 82 1x LED 2700K Flood DE Black Structure	500.0	5.0	100.0	1.0	1.4	1.05	1.05	0.77	138.6	104.0	104.0	76.2
915006292847 - 13310243 Smart Lotis Recessed Adjustable 82 1x LED 2700K Flood DE Black Brushed	443.0	5.0	88.6	1.0	1.58	1.185	1.185	0.869	156.4	117.3	117.3	86.0
915005520201 - 13310246 Smart Lotis Recessed Adjustable 82 1x LED 2700K Flood DE Gold Matt	523.0	5.0	104.6	1.0	1.338	1.004	1.004	0.736	132.5	99.4	99.4	72.9
915005518901 - 13311109 Smart Lotis Recessed Adjustable 82 1x LED 3000K Medium DE White Structure	552.0	5.0	110.4	1.0	1.268	0.951	0.951	0.697	125.5	94.1	94.1	69.0
915006292848 - 13311114 Smart Lotis Recessed Adjustable 82 1x LED 3000K Medium DE Bronze Brushed	457.0	5.0	91.4	1.0	1.532	1.149	1.149	0.843	151.7	113.8	113.8	83.5
915006292849 - 13311115 Smart Lotis Recessed Adjustable 82 1x LED 3000K Medium DE Champagne Brushed	466.0	5.0	93.2	1.0	1.502	1.127	1.127	0.826	148.7	111.6	111.6	81.8
915006292850 - 13311116 Smart Lotis Recessed Adjustable 82 1x LED 3000K Medium DE Silver Bronze Brushed	449.0	5.0	89.8	1.0	1.559	1.169	1.169	0.857	154.3	115.7	115.7	84.8
915005519001 - 13311132 Smart Lotis Recessed Adjustable 82 1x LED 3000K Medium DE Black Structure	539.0	5.0	107.8	1.0	1.299	0.974	0.974	0.714	128.6	96.4	96.4	70.7

Smart Recessed Adjustable 82 915005518901 (13311109)

Product												
915006292851 - 13311143 Smart Lotis Recessed Adjustable 82 1x LED 3000K Medium DE Black Brushed	459.0	5.0	91.8	1.0	1.525	1.144	1.144	0.839	151.0	113.3	113.3	83.1
915005520301 - 13311146 Smart Lotis Recessed Adjustable 82 1x LED 3000K Medium DE Gold Matt	549.0	5.0	109.8	1.0	1.275	0.956	0.956	0.701	126.2	94.6	94.6	69.4
915005520401 - 13311209 Smart Lotis Recessed Adjustable 82 1x LED 3000K Flood DE White Structure	528.0	5.0	105.6	1.0	1.326	0.995	0.995	0.729	131.3	98.5	98.5	72.2
915006292852 - 13311214 Smart Lotis Recessed Adjustable 82 1x LED 3000K Flood DE Bronze Brushed	467.0	5.0	93.4	1.0	1.499	1.124	1.124	0.824	148.4	111.3	111.3	81.6
915006292853 - 13311215 Smart Lotis Recessed Adjustable 82 1x LED 3000K Flood DE Champagne Brushed	474.0	5.0	94.8	1.0	1.477	1.108	1.108	0.812	146.2	109.7	109.7	80.4
915006292854 - 13311216 Smart Lotis Recessed Adjustable 82 1x LED 3000K Flood DE Silver Bronze Brushed	474.0	5.0	94.8	1.0	1.477	1.108	1.108	0.812	146.2	109.7	109.7	80.4
915005520501 - 13311232 Smart Lotis Recessed Adjustable 82 1x LED 3000K Flood DE Black Structure	525.0	5.0	105.0	1.0	1.333	1.0	1.0	0.733	132.0	99.0	99.0	72.6
915006292855 - 13311243 Smart Lotis Recessed Adjustable 82 1x LED 3000K Flood DE Black Brushed	466.0	5.0	93.2	1.0	1.502	1.127	1.127	0.826	148.7	111.6	111.6	81.8
915005520601 - 13311246 Smart Lotis Recessed Adjustable 82 1x LED 3000K Flood DE Gold Matt	550.0	5.0	110.0	1.0	1.273	0.955	0.955	0.7	126.0	94.5	94.5	69.3
915005520701 - 13312109 Smart Lotis Recessed Adjustable 82 1x LED 4000K Medium DE White Structure	589.0	5.0	117.8	1.0	1.188	0.891	0.891	0.653	117.6	88.2	88.2	64.6
915006292856 - 13312114 Smart Lotis Recessed Adjustable 82 1x LED 4000K Medium DE Bronze Brushed	487.0	5.0	97.4	1.0	1.437	1.078	1.078	0.79	142.3	106.7	106.7	78.2
915006292857 - 13312115 Smart Lotis Recessed Adjustable 82 1x LED 4000K Medium DE Champagne Brushed	497.0	5.0	99.4	1.0	1.408	1.056	1.056	0.774	139.4	104.5	104.5	76.6
915006292858 - 13312116 Smart Lotis Recessed Adjustable 82 1x LED 4000K Medium DE Silver Bronze Brushed	479.0	5.0	95.8	1.0	1.461	1.096	1.096	0.804	144.6	108.5	108.5	79.6
915005520801 - 13312132 Smart Lotis Recessed Adjustable 82 1x LED 4000K Medium DE Black Structure	574.0	5.0	114.8	1.0	1.22	0.915	0.915	0.671	120.8	90.6	90.6	66.4
915006292859 - 13312143 Smart Lotis Recessed Adjustable 82 1x LED 4000K Medium DE Black Brushed	490.0	5.0	98.0	1.0	1.429	1.072	1.072	0.786	141.5	106.1	106.1	77.8

Smart Recessed Adjustable 82 915005518901 (13311109)

Product												
915005520901 - 13312146 Smart Lotis Recessed Adjustable 82 1x LED 4000K Medium DE Gold Matt	586.0	5.0	117.2	1.0	1.195	0.896	0.896	0.657	118.3	88.7	88.7	65.0
915005521001 - 13312209 Smart Lotis Recessed Adjustable 82 1x LED 4000K Flood DE White Structure	563.0	5.0	112.6	1.0	1.243	0.932	0.932	0.684	123.1	92.3	92.3	67.7
915006292860 - 13312214 Smart Lotis Recessed Adjustable 82 1x LED 4000K Flood DE Bronze Brushed	499.0	5.0	99.8	1.0	1.403	1.052	1.052	0.772	138.9	104.1	104.1	76.4
915006292861 - 13312215 Smart Lotis Recessed Adjustable 82 1x LED 4000K Flood DE Champagne Brushed	505.0	5.0	101.0	1.0	1.386	1.039	1.039	0.762	137.2	102.9	102.9	75.4
915006292862 - 13312216 Smart Lotis Recessed Adjustable 82 1x LED 4000K Flood DE Silver Bronze Brushed	506.0	5.0	101.2	1.0	1.383	1.037	1.037	0.761	136.9	102.7	102.7	75.3
915005521101 - 13312232 Smart Lotis Recessed Adjustable 82 1x LED 4000K Flood DE Black Structure	560.0	5.0	112.0	1.0	1.25	0.938	0.938	0.688	123.8	92.9	92.9	68.1
915006292863 - 13312243 Smart Lotis Recessed Adjustable 82 1x LED 4000K Flood DE Black Brushed	497.0	5.0	99.4	1.0	1.408	1.056	1.056	0.774	139.4	104.5	104.5	76.6
915005521201 - 13312246 Smart Lotis Recessed Adjustable 82 1x LED 4000K Flood DE Gold Matt	587.0	5.0	117.4	1.0	1.193	0.895	0.895	0.656	118.1	88.6	88.6	64.9
915005524701 - 13313109 Smart Lotis Recessed Adjustable 82 1x LED 1800-3000K WD Medium DE White Structure	498.0	6.0	83.0	1.2	1.687	1.265	1.265	0.928	167.0	125.2	125.2	91.9
915006292864 - 13313114 Smart Lotis Recessed Adjustable 82 1x LED 1800-3000K WD Medium DE Bronze Brushed	469.0	6.0	78.2	1.2	1.792	1.344	1.344	0.986	177.4	133.1	133.1	97.6
915006292865 - 13313115 Smart Lotis Recessed Adjustable 82 1x LED 1800-3000K WD Medium DE Champagne Brushed	475.0	6.0	79.2	1.2	1.769	1.327	1.327	0.973	175.1	131.4	131.4	96.3
915006292866 - 13313116 Smart Lotis Recessed Adjustable 82 1x LED 1800-3000K WD Medium DE Silver Bronze Brushed	475.0	6.0	79.2	1.2	1.769	1.327	1.327	0.973	175.1	131.4	131.4	96.3
915005524801 - 13313132 Smart Lotis Recessed Adjustable 82 1x LED 1800-3000K WD Medium DE Black Structure	480.0	6.0	80.0	1.2	1.75	1.312	1.312	0.963	173.2	129.9	129.9	95.3
915006292867 - 13313143 Smart Lotis Recessed Adjustable 82 1x LED 1800-3000K WD Medium DE Black Brushed	467.0	6.0	77.8	1.2	1.799	1.349	1.349	0.989	178.1	133.6	133.6	97.9
915005524901 - 13313146 Smart Lotis Recessed Adjustable 82 1x LED 1800-3000K WD Medium DE Gold Matt	491.0	6.0	81.8	1.2	1.711	1.283	1.283	0.941	169.4	127.0	127.0	93.2

Smart Recessed Adjustable 82 915005518901 (13311109)

Product												
915005525001 - 13313209 Smart Lotis Recessed Adjustable 82 1x LED 1800-3000K WD Flood DE White Structure	489.0	6.0	81.5	1.2	1.717	1.288	1.288	0.944	170.0	127.5	127.5	93.5
915006292868 - 13313214 Smart Lotis Recessed Adjustable 82 1x LED 1800-3000K WD Flood DE Bronze Brushed	475.0	6.0	79.2	1.2	1.769	1.327	1.327	0.973	175.1	131.4	131.4	96.3
915006292869 - 13313215 Smart Lotis Recessed Adjustable 82 1x LED 1800-3000K WD Flood DE Champagne Brushed	480.0	6.0	80.0	1.2	1.75	1.312	1.312	0.963	173.2	129.9	129.9	95.3
915006292870 - 13313216 Smart Lotis Recessed Adjustable 82 1x LED 1800-3000K WD Flood DE Silver Bronze Brushed	483.0	6.0	80.5	1.2	1.739	1.304	1.304	0.956	172.2	129.1	129.1	94.6
915005525101 - 13313232 Smart Lotis Recessed Adjustable 82 1x LED 1800-3000K WD Flood DE Black Structure	459.0	6.0	76.5	1.2	1.83	1.373	1.373	1.007	181.2	135.9	135.9	99.7
915006292871 - 13313243 Smart Lotis Recessed Adjustable 82 1x LED 1800-3000K WD Flood DE Black Brushed	475.0	6.0	79.2	1.2	1.769	1.327	1.327	0.973	175.1	131.4	131.4	96.3
915005525201 - 13313246 Smart Lotis Recessed Adjustable 82 1x LED 1800-3000K WD Flood DE Gold Matt	474.0	6.0	79.0	1.2	1.772	1.329	1.329	0.975	175.4	131.6	131.6	96.5
915005519101 - 13320109 Smart Cake Recessed Adjustable 82 1x LED 2700K Medium DE White Structure	420.0	5.0	84.0	1.0	1.667	1.25	1.25	0.917	165.0	123.8	123.8	90.8
915006292872 - 13320114 Smart Cake Recessed Adjustable 82 1x LED 2700K Medium DE Bronze Brushed	328.0	5.0	65.6	1.0	2.134	1.6	1.6	1.174	211.3	158.4	158.4	116.2
915006292873 - 13320115 Smart Cake Recessed Adjustable 82 1x LED 2700K Medium DE Champagne Brushed	354.0	5.0	70.8	1.0	1.977	1.483	1.483	1.087	195.7	146.8	146.8	107.6
915006292874 - 13320116 Smart Cake Recessed Adjustable 82 1x LED 2700K Medium DE Silver Bronze Brushed	363.0	5.0	72.6	1.0	1.928	1.446	1.446	1.06	190.9	143.2	143.2	104.9
915005519201 - 13320132 Smart Cake Recessed Adjustable 82 1x LED 2700K Medium DE Black Structure	354.0	5.0	70.8	1.0	1.977	1.483	1.483	1.087	195.7	146.8	146.8	107.6
915006292875 - 13320143 Smart Cake Recessed Adjustable 82 1x LED 2700K Medium DE Black Brushed	328.0	5.0	65.6	1.0	2.134	1.6	1.6	1.174	211.3	158.4	158.4	116.2
915005521301 - 13320146 Smart Cake Recessed Adjustable 82 1x LED 2700K Medium DE Gold Matt	396.0	5.0	79.2	1.0	1.768	1.326	1.326	0.972	175.0	131.3	131.3	96.2
915005521401 - 13320209 Smart Cake Recessed Adjustable 82 1x LED 2700K Flood DE White Structure	440.0	5.0	88.0	1.0	1.591	1.193	1.193	0.875	157.5	118.1	118.1	86.6

Smart Recessed Adjustable 82 915005518901 (13311109)

915006292876 - 13320214 Smart Cake Recessed Adjustable 82 1x LED 2700K Flood DE Bronze Brushed	315.0	5.0	63.0	1.0	2.222	1.667	1.667	1.222	220.0	165.0	165.0	121.0
915006292877 - 13320215 Smart Cake Recessed Adjustable 82 1x LED 2700K Flood DE Champagne Brushed	346.0	5.0	69.2	1.0	2.023	1.517	1.517	1.113	200.3	150.2	150.2	110.2
915006292878 - 13320216 Smart Cake Recessed Adjustable 82 1x LED 2700K Flood DE Silver Bronze Brushed	355.0	5.0	71.0	1.0	1.972	1.479	1.479	1.085	195.2	146.4	146.4	107.4
915005521501 - 13320232 Smart Cake Recessed Adjustable 82 1x LED 2700K Flood DE Black Structure	361.0	5.0	72.2	1.0	1.939	1.454	1.454	1.066	192.0	143.9	143.9	105.5
915006292879 - 13320243 Smart Cake Recessed Adjustable 82 1x LED 2700K Flood DE Black Brushed	315.0	5.0	63.0	1.0	2.222	1.667	1.667	1.222	220.0	165.0	165.0	121.0
915005521601 - 13320246 Smart Cake Recessed Adjustable 82 1x LED 2700K Flood DE Gold Matt	408.0	5.0	81.6	1.0	1.716	1.287	1.287	0.944	169.9	127.4	127.4	93.5
915005519301 - 13321109 Smart Cake Recessed Adjustable 82 1x LED 3000K Medium DE White Structure	442.0	5.0	88.4	1.0	1.584	1.188	1.188	0.871	156.8	117.6	117.6	86.2
915006292880 - 13321114 Smart Cake Recessed Adjustable 82 1x LED 3000K Medium DE Bronze Brushed	345.0	5.0	69.0	1.0	2.029	1.522	1.522	1.116	200.9	150.7	150.7	110.5
915006292881 - 13321115 Smart Cake Recessed Adjustable 82 1x LED 3000K Medium DE Champagne Brushed	372.0	5.0	74.4	1.0	1.882	1.411	1.411	1.035	186.3	139.7	139.7	102.5
915006292882 - 13321116 Smart Cake Recessed Adjustable 82 1x LED 3000K Medium DE Silver Bronze Brushed	381.0	5.0	76.2	1.0	1.837	1.378	1.378	1.01	181.9	136.4	136.4	100.0
915005519401 - 13321132 Smart Cake Recessed Adjustable 82 1x LED 3000K Medium DE Black Structure	372.0	5.0	74.4	1.0	1.882	1.411	1.411	1.035	186.3	139.7	139.7	102.5
915006292883 - 13321143 Smart Cake Recessed Adjustable 82 1x LED 3000K Medium DE Black Brushed	344.0	5.0	68.8	1.0	2.035	1.526	1.526	1.119	201.5	151.1	151.1	110.8
915005521701 - 13321146 Smart Cake Recessed Adjustable 82 1x LED 3000K Medium DE Gold Matt	416.0	5.0	83.2	1.0	1.683	1.262	1.262	0.926	166.6	124.9	124.9	91.7
915005521801 - 13321209 Smart Cake Recessed Adjustable 82 1x LED 3000K Flood DE White Structure	463.0	5.0	92.6	1.0	1.512	1.134	1.134	0.832	149.7	112.3	112.3	82.4
915006292884 - 13321214 Smart Cake Recessed Adjustable 82 1x LED 3000K Flood DE Bronze Brushed	331.0	5.0	66.2	1.0	2.115	1.586	1.586	1.163	209.4	157.0	157.0	115.1

Smart Recessed Adjustable 82 915005518901 (13311109)

915006292885 - 13321215 Smart Cake Recessed Adjustable 82 1x LED 3000K Flood DE Champagne Brushed	363.0	5.0	72.6	1.0	1.928	1.446	1.446	1.06	190.9	143.2	143.2	104.9
915006292886 - 13321216 Smart Cake Recessed Adjustable 82 1x LED 3000K Flood DE Silver Bronze Brushed	373.0	5.0	74.6	1.0	1.877	1.408	1.408	1.032	185.8	139.4	139.4	102.2
915005521901 - 13321232 Smart Cake Recessed Adjustable 82 1x LED 3000K Flood DE Black Structure	380.0	5.0	76.0	1.0	1.842	1.381	1.381	1.013	182.4	136.7	136.7	100.3
915006292887 - 13321243 Smart Cake Recessed Adjustable 82 1x LED 3000K Flood DE Black Brushed	331.0	5.0	66.2	1.0	2.115	1.586	1.586	1.163	209.4	157.0	157.0	115.1
915005522001 - 13321246 Smart Cake Recessed Adjustable 82 1x LED 3000K Flood DE Gold Matt	429.0	5.0	85.8	1.0	1.632	1.224	1.224	0.898	161.6	121.2	121.2	88.9
915005522101 - 13322109 Smart Cake Recessed Adjustable 82 1x LED 4000K Medium DE White Structure	471.0	5.0	94.2	1.0	1.486	1.115	1.115	0.817	147.1	110.4	110.4	80.9
915006292888 - 13322114 Smart Cake Recessed Adjustable 82 1x LED 4000K Medium DE Bronze Brushed	368.0	5.0	73.6	1.0	1.902	1.426	1.426	1.046	188.3	141.2	141.2	103.6
915006292889 - 13322115 Smart Cake Recessed Adjustable 82 1x LED 4000K Medium DE Champagne Brushed	396.0	5.0	79.2	1.0	1.768	1.326	1.326	0.972	175.0	131.3	131.3	96.2
915006292890 - 13322116 Smart Cake Recessed Adjustable 82 1x LED 4000K Medium DE Silver Bronze Brushed	407.0	5.0	81.4	1.0	1.72	1.29	1.29	0.946	170.3	127.7	127.7	93.7
915005522201 - 13322132 Smart Cake Recessed Adjustable 82 1x LED 4000K Medium DE Black Structure	397.0	5.0	79.4	1.0	1.763	1.322	1.322	0.97	174.5	130.9	130.9	96.0
915006292891 - 13322143 Smart Cake Recessed Adjustable 82 1x LED 4000K Medium DE Black Brushed	367.0	5.0	73.4	1.0	1.907	1.43	1.43	1.049	188.8	141.6	141.6	103.9
915005522301 - 13322146 Smart Cake Recessed Adjustable 82 1x LED 4000K Medium DE Gold Matt	444.0	5.0	88.8	1.0	1.577	1.183	1.183	0.867	156.1	117.1	117.1	85.8
915005522401 - 13322209 Smart Cake Recessed Adjustable 82 1x LED 4000K Flood DE White Structure	493.0	5.0	98.6	1.0	1.42	1.065	1.065	0.781	140.6	105.4	105.4	77.3
915006292892 - 13322214 Smart Cake Recessed Adjustable 82 1x LED 4000K Flood DE Bronze Brushed	353.0	5.0	70.6	1.0	1.983	1.487	1.487	1.091	196.3	147.2	147.2	108.0
915006292893 - 13322215 Smart Cake Recessed Adjustable 82 1x LED 4000K Flood DE Champagne Brushed	388.0	5.0	77.6	1.0	1.804	1.353	1.353	0.992	178.6	133.9	133.9	98.2

Smart Recessed Adjustable 82 915005518901 (13311109)

Product											
915006292894 - 13322216 Smart Cake Recessed Adjustable 82 1x LED 4000K Flood DE Silver Bronze Brushed	398.0	5.0	79.6	1.0	1.759	1.319	1.319	0.967	174.1	130.6	130.6	95.7
915005522501 - 13322232 Smart Cake Recessed Adjustable 82 1x LED 4000K Flood DE Black Structure	405.0	5.0	81.0	1.0	1.728	1.296	1.296	0.95	171.1	128.3	128.3	94.0
915006292895 - 13322243 Smart Cake Recessed Adjustable 82 1x LED 4000K Flood DE Black Brushed	353.0	5.0	70.6	1.0	1.983	1.487	1.487	1.091	196.3	147.2	147.2	108.0
915005522601 - 13322246 Smart Cake Recessed Adjustable 82 1x LED 4000K Flood DE Gold Matt	458.0	5.0	91.6	1.0	1.528	1.146	1.146	0.84	151.3	113.5	113.5	83.2
915005525301 - 13323109 Smart Cake Recessed Adjustable 82 1x LED 1800-3000K WD Medium DE White Structure	414.0	6.0	69.0	1.2	2.029	1.522	1.522	1.116	200.9	150.7	150.7	110.5
915006292896 - 13323114 Smart Cake Recessed Adjustable 82 1x LED 1800-3000K WD Medium DE Bronze Brushed	358.0	6.0	59.7	1.2	2.346	1.76	1.76	1.29	232.3	174.2	174.2	127.7
915006292897 - 13323115 Smart Cake Recessed Adjustable 82 1x LED 1800-3000K WD Medium DE Champagne Brushed	396.0	6.0	66.0	1.2	2.122	1.591	1.591	1.167	210.1	157.5	157.5	115.5
915006292898 - 13323116 Smart Cake Recessed Adjustable 82 1x LED 1800-3000K WD Medium DE Silver Bronze Brushed	405.0	6.0	67.5	1.2	2.074	1.555	1.555	1.141	205.3	153.9	153.9	113.0
915005525401 - 13323132 Smart Cake Recessed Adjustable 82 1x LED 1800-3000K WD Medium DE Black Structure	350.0	6.0	58.3	1.2	2.4	1.8	1.8	1.32	237.6	178.2	178.2	130.7
915006292899 - 13323143 Smart Cake Recessed Adjustable 82 1x LED 1800-3000K WD Medium DE Black Brushed	357.0	6.0	59.5	1.2	2.353	1.765	1.765	1.294	232.9	174.7	174.7	128.1
915005525501 - 13323146 Smart Cake Recessed Adjustable 82 1x LED 1800-3000K WD Medium DE Gold Matt	388.0	6.0	64.7	1.2	2.165	1.624	1.624	1.191	214.3	160.8	160.8	117.9
915005525601 - 13323209 Smart Cake Recessed Adjustable 82 1x LED 1800-3000K WD Flood DE White Structure	407.0	6.0	67.8	1.2	2.064	1.548	1.548	1.135	204.3	153.3	153.3	112.4
915006292901 - 13323214 Smart Cake Recessed Adjustable 82 1x LED 1800-3000K WD Flood DE Bronze Brushed	368.0	6.0	61.3	1.2	2.282	1.712	1.712	1.255	225.9	169.5	169.5	124.2
915006292902 - 13323215 Smart Cake Recessed Adjustable 82 1x LED 1800-3000K WD Flood DE Champagne Brushed	397.0	6.0	66.2	1.2	2.116	1.587	1.587	1.164	209.5	157.1	157.1	115.2
915006292903 - 13323216 Smart Cake Recessed Adjustable 82 1x LED 1800-3000K WD Flood DE Silver Bronze Brushed	406.0	6.0	67.7	1.2	2.069	1.552	1.552	1.138	204.8	153.6	153.6	112.7

Smart Recessed Adjustable 82 915005518901 (13311109)

915005525701 - 13323232 Smart Cake Recessed Adjustable 82 1x LED 1800-3000K WD Flood DE Black Structure	345.0	6.0	57.5	1.2	2.435	1.826	1.826	1.339	241.1	180.8	180.8	132.6
915006292904 - 13323243 Smart Cake Recessed Adjustable 82 1x LED 1800-3000K WD Flood DE Black Brushed	367.0	6.0	61.2	1.2	2.288	1.716	1.716	1.258	226.5	169.9	169.9	124.5
915005525801 - 13323246 Smart Cake Recessed Adjustable 82 1x LED 1800-3000K WD Flood DE Gold Matt	384.0	6.0	64.0	1.2	2.188	1.641	1.641	1.203	216.6	162.5	162.5	119.1
915005519501 - 13330109 Smart Kup Recessed Adjustable 82 1x LED 2700K Medium DE White Structure	525.0	5.0	105.0	1.0	1.333	1.0	1.0	0.733	132.0	99.0	99.0	72.6
915006292905 - 13330114 Smart Kup Recessed Adjustable 82 1x LED 2700K Medium DE Bronze Brushed	444.0	5.0	88.8	1.0	1.577	1.183	1.183	0.867	156.1	117.1	117.1	85.8
915006292906 - 13330115 Smart Kup Recessed Adjustable 82 1x LED 2700K Medium DE Champagne Brushed	448.0	5.0	89.6	1.0	1.562	1.171	1.171	0.859	154.6	115.9	115.9	85.0
915006292907 - 13330116 Smart Kup Recessed Adjustable 82 1x LED 2700K Medium DE Silver Bronze Brushed	448.0	5.0	89.6	1.0	1.562	1.171	1.171	0.859	154.6	115.9	115.9	85.0
915005519601 - 13330132 Smart Kup Recessed Adjustable 82 1x LED 2700K Medium DE Black Structure	512.0	5.0	102.4	1.0	1.367	1.025	1.025	0.752	135.3	101.5	101.5	74.4
915006292908 - 13330143 Smart Kup Recessed Adjustable 82 1x LED 2700K Medium DE Black Brushed	450.0	5.0	90.0	1.0	1.556	1.167	1.167	0.856	154.0	115.5	115.5	84.7
915005522701 - 13330146 Smart Kup Recessed Adjustable 82 1x LED 2700K Medium DE Gold Matt	522.0	5.0	104.4	1.0	1.341	1.006	1.006	0.738	132.8	99.6	99.6	73.1
915005522801 - 13330209 Smart Kup Recessed Adjustable 82 1x LED 2700K Flood DE White Structure	502.0	5.0	100.4	1.0	1.394	1.045	1.045	0.767	138.0	103.5	103.5	75.9
915006292909 - 13330214 Smart Kup Recessed Adjustable 82 1x LED 2700K Flood DE Bronze Brushed	453.0	5.0	90.6	1.0	1.545	1.159	1.159	0.85	153.0	114.7	114.7	84.1
915006292910 - 13330215 Smart Kup Recessed Adjustable 82 1x LED 2700K Flood DE Champagne Brushed	458.0	5.0	91.6	1.0	1.528	1.146	1.146	0.84	151.3	113.5	113.5	83.2
915006292911 - 13330216 Smart Kup Recessed Adjustable 82 1x LED 2700K Flood DE Silver Bronze Brushed	460.0	5.0	92.0	1.0	1.522	1.141	1.141	0.837	150.7	113.0	113.0	82.9
915005522901 - 13330232 Smart Kup Recessed Adjustable 82 1x LED 2700K Flood DE Black Structure	500.0	5.0	100.0	1.0	1.4	1.05	1.05	0.77	138.6	104.0	104.0	76.2

Smart Recessed Adjustable 82 915005518901 (13311109)

Product												
915006292912 - 13330243 Smart Kup Recessed Adjustable 82 1x LED 2700K Flood DE Black Brushed	455.0	5.0	91.0	1.0	1.538	1.153	1.153	0.846	152.3	114.1	114.1	83.8
915005523001 - 13330246 Smart Kup Recessed Adjustable 82 1x LED 2700K Flood DE Gold Matt	523.0	5.0	104.6	1.0	1.338	1.004	1.004	0.736	132.5	99.4	99.4	72.9
915005519701 - 13331109 Smart Kup Recessed Adjustable 82 1x LED 3000K Medium DE White Structure	552.0	5.0	110.4	1.0	1.268	0.951	0.951	0.697	125.5	94.1	94.1	69.0
915006292913 - 13331114 Smart Kup Recessed Adjustable 82 1x LED 3000K Medium DE Bronze Brushed	467.0	5.0	93.4	1.0	1.499	1.124	1.124	0.824	148.4	111.3	111.3	81.6
915006292914 - 13331115 Smart Kup Recessed Adjustable 82 1x LED 3000K Medium DE Champagne Brushed	470.0	5.0	94.0	1.0	1.489	1.117	1.117	0.819	147.4	110.6	110.6	81.1
915006292915 - 13331116 Smart Kup Recessed Adjustable 82 1x LED 3000K Medium DE Silver Bronze Brushed	471.0	5.0	94.2	1.0	1.486	1.115	1.115	0.817	147.1	110.4	110.4	80.9
915005519801 - 13331132 Smart Kup Recessed Adjustable 82 1x LED 3000K Medium DE Black Structure	539.0	5.0	107.8	1.0	1.299	0.974	0.974	0.714	128.6	96.4	96.4	70.7
915006292916 - 13331143 Smart Kup Recessed Adjustable 82 1x LED 3000K Medium DE Black Brushed	473.0	5.0	94.6	1.0	1.48	1.11	1.11	0.814	146.5	109.9	109.9	80.6
915005523101 - 13331146 Smart Kup Recessed Adjustable 82 1x LED 3000K Medium DE Gold Matt	549.0	5.0	109.8	1.0	1.275	0.956	0.956	0.701	126.2	94.6	94.6	69.4
915005523201 - 13331209 Smart Kup Recessed Adjustable 82 1x LED 3000K Flood DE White Structure	528.0	5.0	105.6	1.0	1.326	0.995	0.995	0.729	131.3	98.5	98.5	72.2
915006292917 - 13331214 Smart Kup Recessed Adjustable 82 1x LED 3000K Flood DE Bronze Brushed	477.0	5.0	95.4	1.0	1.468	1.101	1.101	0.807	145.3	109.0	109.0	79.9
915006292918 - 13331215 Smart Kup Recessed Adjustable 82 1x LED 3000K Flood DE Champagne Brushed	481.0	5.0	96.2	1.0	1.455	1.091	1.091	0.8	144.0	108.0	108.0	79.2
915006292919 - 13331216 Smart Kup Recessed Adjustable 82 1x LED 3000K Flood DE Silver Bronze Brushed	483.0	5.0	96.6	1.0	1.449	1.087	1.087	0.797	143.5	107.6	107.6	78.9
915005523301 - 13331232 Smart Kup Recessed Adjustable 82 1x LED 3000K Flood DE Black Structure	525.0	5.0	105.0	1.0	1.333	1.0	1.0	0.733	132.0	99.0	99.0	72.6
915006292920 - 13331243 Smart Kup Recessed Adjustable 82 1x LED 3000K Flood DE Black Brushed	478.0	5.0	95.6	1.0	1.464	1.098	1.098	0.805	144.9	108.7	108.7	79.7

Smart Recessed Adjustable 82 915005518901 (13311109)

915005523401 - 13331246 Smart Kup Recessed Adjustable 82 1x LED 3000K Flood DE Gold Matt	550.0	5.0	110.0	1.0	1.273	0.955	0.955	0.7	126.0	94.5	94.5	69.3
915005523501 - 13332109 Smart Kup Recessed Adjustable 82 1x LED 4000K Medium DE White Structure	589.0	5.0	117.8	1.0	1.188	0.891	0.891	0.653	117.6	88.2	88.2	64.6
915006292921 - 13332114 Smart Kup Recessed Adjustable 82 1x LED 4000K Medium DE Bronze Brushed	498.0	5.0	99.6	1.0	1.406	1.054	1.054	0.773	139.2	104.3	104.3	76.5
915006292922 - 13332115 Smart Kup Recessed Adjustable 82 1x LED 4000K Medium DE Champagne Brushed	502.0	5.0	100.4	1.0	1.394	1.045	1.045	0.767	138.0	103.5	103.5	75.9
915006292923 - 13332116 Smart Kup Recessed Adjustable 82 1x LED 4000K Medium DE Silver Bronze Brushed	503.0	5.0	100.6	1.0	1.392	1.044	1.044	0.766	137.8	103.4	103.4	75.8
915005523601 - 13332132 Smart Kup Recessed Adjustable 82 1x LED 4000K Medium DE Black Structure	574.0	5.0	114.8	1.0	1.22	0.915	0.915	0.671	120.8	90.6	90.6	66.4
915006292924 - 13332143 Smart Kup Recessed Adjustable 82 1x LED 4000K Medium DE Black Brushed	504.0	5.0	100.8	1.0	1.389	1.042	1.042	0.764	137.5	103.2	103.2	75.6
915005523701 - 13332146 Smart Kup Recessed Adjustable 82 1x LED 4000K Medium DE Gold Matt	586.0	5.0	117.2	1.0	1.195	0.896	0.896	0.657	118.3	88.7	88.7	65.0
915005523801 - 13332209 Smart Kup Recessed Adjustable 82 1x LED 4000K Flood DE White Structure	563.0	5.0	112.6	1.0	1.243	0.932	0.932	0.684	123.1	92.3	92.3	67.7
915006292925 - 13332214 Smart Kup Recessed Adjustable 82 1x LED 4000K Flood DE Bronze Brushed	508.0	5.0	101.6	1.0	1.378	1.033	1.033	0.758	136.4	102.3	102.3	75.0
915006292926 - 13332215 Smart Kup Recessed Adjustable 82 1x LED 4000K Flood DE Champagne Brushed	514.0	5.0	102.8	1.0	1.362	1.022	1.022	0.749	134.8	101.2	101.2	74.2
915006292927 - 13332216 Smart Kup Recessed Adjustable 82 1x LED 4000K Flood DE Silver Bronze Brushed	515.0	5.0	103.0	1.0	1.359	1.019	1.019	0.747	134.5	100.9	100.9	74.0
915005523901 - 13332232 Smart Kup Recessed Adjustable 82 1x LED 4000K Flood DE Black Structure	560.0	5.0	112.0	1.0	1.25	0.938	0.938	0.688	123.8	92.9	92.9	68.1
915006292928 - 13332243 Smart Kup Recessed Adjustable 82 1x LED 4000K Flood DE Black Brushed	510.0	5.0	102.0	1.0	1.373	1.03	1.03	0.755	135.9	102.0	102.0	74.7
915005524001 - 13332246 Smart Kup Recessed Adjustable 82 1x LED 4000K Flood DE Gold Matt	587.0	5.0	117.4	1.0	1.193	0.895	0.895	0.656	118.1	88.6	88.6	64.9

Smart Recessed Adjustable 82 915005518901 (13311109)

Product											
915005524101 - 13333109 Smart Kup Recessed Adjustable 82 1x LED 1800-3000K WD Medium DE White Structure	498.0	6.0	83.0	1.2	1.687	1.265	1.265	0.928	167.0	125.2	125.2	91.9
915006292929 - 13333114 Smart Kup Recessed Adjustable 82 1x LED 1800-3000K WD Medium DE Bronze Brushed	478.0	6.0	79.7	1.2	1.757	1.318	1.318	0.966	173.9	130.5	130.5	95.6
915006292930 - 13333115 Smart Kup Recessed Adjustable 82 1x LED 1800-3000K WD Medium DE Champagne Brushed	486.0	6.0	81.0	1.2	1.728	1.296	1.296	0.95	171.1	128.3	128.3	94.0
915006292931 - 13333116 Smart Kup Recessed Adjustable 82 1x LED 1800-3000K WD Medium DE Silver Bronze Brushed	486.0	6.0	81.0	1.2	1.728	1.296	1.296	0.95	171.1	128.3	128.3	94.0
915005524201 - 13333132 Smart Kup Recessed Adjustable 82 1x LED 1800-3000K WD Medium DE Black Structure	480.0	6.0	80.0	1.2	1.75	1.312	1.312	0.963	173.2	129.9	129.9	95.3
915006292932 - 13333143 Smart Kup Recessed Adjustable 82 1x LED 1800-3000K WD Medium DE Black Brushed	482.0	6.0	80.3	1.2	1.742	1.306	1.306	0.958	172.5	129.3	129.3	94.8
915005524301 - 13333146 Smart Kup Recessed Adjustable 82 1x LED 1800-3000K WD Medium DE Gold Matt	491.0	6.0	81.8	1.2	1.711	1.283	1.283	0.941	169.4	127.0	127.0	93.2
915005524401 - 13333209 Smart Kup Recessed Adjustable 82 1x LED 1800-3000K WD Flood DE White Structure	489.0	6.0	81.5	1.2	1.717	1.288	1.288	0.944	170.0	127.5	127.5	93.5
915006292933 - 13333214 Smart Kup Recessed Adjustable 82 1x LED 1800-3000K WD Flood DE Bronze Brushed	485.0	6.0	80.8	1.2	1.732	1.299	1.299	0.953	171.5	128.6	128.6	94.3
915006292934 - 13333215 Smart Kup Recessed Adjustable 82 1x LED 1800-3000K WD Flood DE Champagne Brushed	489.0	6.0	81.5	1.2	1.717	1.288	1.288	0.944	170.0	127.5	127.5	93.5
915006292935 - 13333216 Smart Kup Recessed Adjustable 82 1x LED 1800-3000K WD Flood DE Silver Bronze Brushed	491.0	6.0	81.8	1.2	1.711	1.283	1.283	0.941	169.4	127.0	127.0	93.2
915005524501 - 13333232 Smart Kup Recessed Adjustable 82 1x LED 1800-3000K WD Flood DE Black Structure	459.0	6.0	76.5	1.2	1.83	1.373	1.373	1.007	181.2	135.9	135.9	99.7
915006292936 - 13333243 Smart Kup Recessed Adjustable 82 1x LED 1800-3000K WD Flood DE Black Brushed	483.0	6.0	80.5	1.2	1.739	1.304	1.304	0.956	172.2	129.1	129.1	94.6
915005524601 - 13333246 Smart Kup Recessed Adjustable 82 1x LED 1800-3000K WD Flood DE Gold Matt	474.0	6.0	79.0	1.2	1.772	1.329	1.329	0.975	175.4	131.6	131.6	96.5

** 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.

Smart Recessed Adjustable 82 915005518901 (13311109)

ANNEX

USE PHASE (B6) VALUES FOR DIFFERENT COUNTRY MIX

The table in this annex is useful for conversion and comparison of B6 values with other energy country mix. The Global Warming Potential Total (GWP tot) value is illustrated for each country. The value refers to 1 kwh.

Example on how to use the table:

This EPD was done according to a specific customer use location that can be read in the paragraph **PRODUCT USE AND MAINTENANCE (B1-B7).**

If for example the EPD was done according to EU energy mix and you want to see how the GWP total changes according to a Finland country energy mix, you can take the original value in the results table here highlighted in yellow:

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	5,88E+00	2,61E-01	-1,25E-01	6,02E+00	3,02E-01	5,41E-01	MND	MND	MND	MND	MND	4,06E+02	MND	MNR	1,77E-02	2,62E-01	1,88E-01	-1,09E+01

Divide that value according to the EU value from the following table (EU = 3,96E-01) and then multilplying for the Finland value from the same table (FINLAND = 2,70E-01).

Thus, the calculation of this example would be:

New B6 GWP tot for Finland = (4,06E+02 / 3,96E-01) x 2,70E-01 = 2,76 E+02

Smart Recessed Adjustable 82 915005518901 (13311109)

Country	GWP tot (kg CO2 eq. per kwh)
AUSTRALIA	9,59E-01
AUSTRIA	3,37E-01
BELGIUM	2,63E-01
CHINA	1,14E+00
DENMARK	2,91E-01
EU	3,96E-01
FINLAND	2,70E-01
FRANCE	8,77E-02
GERMANY	5,32E-01
HUNGARY	4,67E-01
IRELAND	4,26E-01
ITALY	3,94E-01
LATAM	3,50E-01
NAM	4,83E-01
NETHERLANDS	5,88E-01
NORWAY	2,59E-02
POLAND	1,05E+00

Smart Recessed Adjustable 82 915005518901 (13311109)

PORTUGAL	4,22E-01
ROW	7,32E-01
SPAIN	3,34E-01
SWEDEN	4,95E-02
SWITZERLAND	5,38E-02
UK	3,17E-01

Source Ecoinvent 3.8

Smart Recessed Adjustable 82 915005518901 (13311109)