

ENVIRONMENTAL PRODUCT DECLARATION

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

Philips Luma gen2

BGP704

Signify N.V.



EPD HUB

Publishing date 2024-02-14

The Signify logo, consisting of a green circle with a white 'S' inside, followed by the word 'signify' in a lowercase, green, sans-serif font.

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: <input checked="" type="checkbox"/> Internal certification <input type="checkbox"/> 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 Luma Gen2 Medium
Additional labels	BGP704 LED140-4S/740 I DM11 GR PSU 62
Product reference	910925867231
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 12740 lumens over 100000 hours
Declared unit mass	10.96 kg
GWP-fossil, A1-A3 (kgCO ₂ e)	2.41E+02
GWP-total, A1-A3 (kgCO ₂ e)	2.39E+02
Secondary material, inputs (%)	8.24
Secondary material, outputs (%)	51.5
Total energy use, A1-A3 (kWh)	745.0
Total water use, A1-A3 (m ³ e)	1.38E+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

Luma gen2 is the next generation of the Luma LED luminaire family, fully optimized to become your long-term lighting and innovation partner. While keeping the distinctive design characteristics of the first generation, Luma gen2 gives you the benefits of the latest technologies thanks to its future-proof System Ready architecture, use of optimized Ledgine LED and optical platform ensuring best in class lighting performance in a broad range of applications. It also offers improved serviceability. Installation has also become easier and faster, and thanks to the Service tag, you have access to all relevant documentations onsite. Also, the cable feed-through has been redesigned and access to the gear components is easy thanks to top down tool-less access. Luma gen2 also offers all connectivity and dimming options available today and thanks to being System Ready, it can also to be paired with lighting management systems such as Interact City or existing and upcoming sensor innovations. The Luma gen2 has been developed to optimize and simplify spare part repair and maintenance work using a new plug & play GearFlex module containing all electrical components in an easy to handle and accessible box inside the housing. As a company conscious about the impact of light on the environment and biodiversity, we also equipped the Luma gen2 with dedicated light recipes that help with maintaining the optimal ecosystems for bats or preserve a dark night sky.

Footer_input

For more information, please visit

<https://www.lighting.philips.com/link/BGP701/fam/aa/en>

PRODUCT RAW MATERIAL MAIN COMPOSITION

Raw material category	Amount, mass- %	Material origin
Metals	62.89	EU , APAC
Minerals	13.13	EU , APAC
Fossil materials	23.98	EU , APAC
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	0.376

FUNCTIONAL UNIT AND SERVICE LIFE

Declared unit	1 Product
Mass per declared unit	10.96 kg

Functional unit	1 unit of 12740 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.

Footer_input

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)

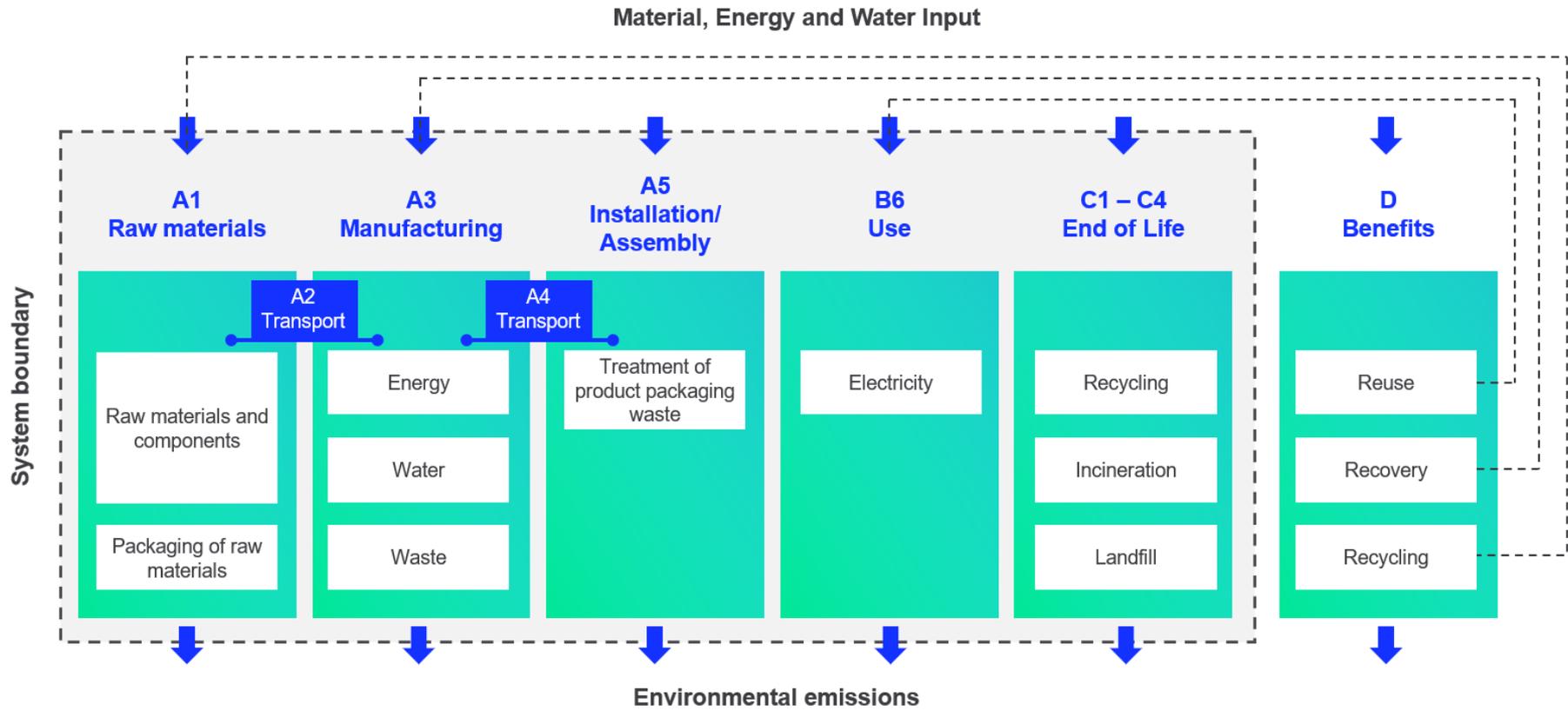
During the use phase, the product consumes electricity from Europe's electricity grid mix (B6). The total power consumption of the reference product is calculated as follows: Wattage x Reference lifetime = kWh consumed throughout the entire use phase B6.

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 ₂ e	2.36E+02	2.33E+00	1.39E-01	2.39E+02	2.33E+00	1.41E+00	MNR	MNR	MNR	MNR	MNR	3.29E+03	MNR	MNR	1.63E-01	2.68E+00	1.79E+00	-9.20E+01
GWP – fossil	kg CO ₂ e	2.37E+02	2.33E+00	1.49E+00	2.41E+02	2.33E+00	5.73E-02	MNR	MNR	MNR	MNR	MNR	3.28E+03	MNR	MNR	1.63E-01	2.68E+00	1.79E+00	-9.19E+01
GWP – biogenic	kg CO ₂ e	-7.96E-01	0.00E+00	-1.36E+00	-2.15E+00	9.00E-04	1.36E+00	MNR	MNR	MNR	MNR	MNR	0.00E+00	MNR	MNR	0.00E+00	0.00E+00	0.00E+00	-1.55E-02
GWP – LULUC	kg CO ₂ e	3.74E-01	9.86E-04	7.50E-03	3.83E-01	8.58E-04	1.24E-05	MNR	MNR	MNR	MNR	MNR	7.67E+00	MNR	MNR	6.00E-05	2.09E-04	1.47E-04	-8.93E-03
Ozone depletion pot.	kg CFC ₁₁ e	2.69E-05	5.24E-07	1.79E-07	2.76E-05	5.35E-07	3.60E-09	MNR	MNR	MNR	MNR	MNR	1.67E-04	MNR	MNR	3.74E-08	1.99E-08	1.76E-08	-2.50E-06
Acidification potential	mol H ⁺ e	1.69E+00	1.98E-02	6.36E-03	1.72E+00	9.85E-03	2.85E-04	MNR	MNR	MNR	MNR	MNR	1.87E+01	MNR	MNR	6.89E-04	2.09E-03	9.38E-04	-9.74E-01
EP-freshwater ²⁾	kg Pe	1.42E-02	1.74E-05	6.53E-05	1.43E-02	1.91E-05	3.77E-07	MNR	MNR	MNR	MNR	MNR	3.48E-01	MNR	MNR	1.33E-06	6.64E-06	6.76E-06	-5.93E-03
EP-marine	kg Ne	2.45E-01	5.30E-03	2.77E-03	2.53E-01	2.93E-03	1.21E-04	MNR	MNR	MNR	MNR	MNR	2.48E+00	MNR	MNR	2.05E-04	5.93E-04	1.46E-03	-1.04E-01
EP-terrestrial	mol Ne	2.74E+00	5.87E-02	1.79E-02	2.82E+00	3.23E-02	1.26E-03	MNR	MNR	MNR	MNR	MNR	2.83E+01	MNR	MNR	2.26E-03	6.49E-03	3.40E-03	-1.21E+00
POCP (“smog”) ³⁾	kg NMVOCe	8.07E-01	1.69E-02	5.20E-03	8.29E-01	1.03E-02	3.14E-04	MNR	MNR	MNR	MNR	MNR	7.74E+00	MNR	MNR	7.23E-04	1.69E-03	1.12E-03	-3.48E-01
ADP-minerals & metals ⁴⁾	kg Sbe	1.14E-02	5.12E-06	8.03E-06	1.14E-02	5.46E-06	1.18E-07	MNR	MNR	MNR	MNR	MNR	3.06E-02	MNR	MNR	3.81E-07	1.47E-05	3.84E-07	-2.02E-03
ADP-fossil resources	MJ	2.48E+03	3.41E+01	2.02E+01	2.54E+03	3.50E+01	2.82E-01	MNR	MNR	MNR	MNR	MNR	6.98E+04	MNR	MNR	2.44E+00	2.13E+00	1.67E+00	-9.00E+02
Water use ⁵⁾	m ³ e depr.	5.63E+01	1.46E-01	6.49E-01	5.71E+01	1.56E-01	6.61E-02	MNR	MNR	MNR	MNR	MNR	1.91E+03	MNR	MNR	1.09E-02	1.29E-01	1.19E-01	-6.55E+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	1.75E-05	2.39E-07	1.17E-07	1.79E-05	2.68E-07	2.63E-09	MNR	MNR	MNR	MNR	MNR	6.15E-05	MNR	MNR	1.88E-08	2.32E-08	1.33E-08	-5.12E-06
Ionizing radiation ⁶⁾	kBq U235e	9.59E+00	1.62E-01	5.59E-02	9.81E+00	1.66E-01	1.01E-03	MNR	MNR	MNR	MNR	MNR	1.89E+03	MNR	MNR	1.16E-02	1.21E-02	8.44E-03	-5.41E+00

Ecotoxicity (freshwater)	CTUe	9.84E+03	2.95E+01	5.34E+01	9.92E+03	3.14E+01	1.90E+00	MNR	MNR	MNR	MNR	MNR	4.75E+04	MNR	MNR	2.20E+00	1.27E+01	6.29E+02	-2.22E+03
Human toxicity, cancer	CTUh	3.00E-07	8.67E-10	1.06E-09	3.02E-07	7.72E-10	8.87E-11	MNR	MNR	MNR	MNR	MNR	1.56E-06	MNR	MNR	5.40E-11	4.44E-10	1.91E-09	-5.97E-09
Human tox. non-cancer	CTUh	8.83E-06	2.82E-08	1.78E-08	8.88E-06	3.11E-08	3.70E-09	MNR	MNR	MNR	MNR	MNR	5.11E-05	MNR	MNR	2.18E-09	1.80E-08	9.50E-08	-2.56E-06
SQP ⁷⁾	-	7.66E+02	3.48E+01	4.44E+01	8.45E+02	4.03E+01	1.55E-01	MNR	MNR	MNR	MNR	MNR	1.26E+04	MNR	MNR	2.82E+00	3.26E+00	2.40E+00	-1.89E+02

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	1.99E+02	3.65E-01	1.61E+01	2.16E+02	3.94E-01	9.14E-03	MNR	MNR	MNR	MNR	MNR	1.42E+04	MNR	MNR	2.75E-02	2.66E-01	6.96E-02	-1.54E+01
Renew. PER as material	MJ	7.39E+00	0.00E+00	1.19E+01	1.93E+01	0.00E+00	-1.19E+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	2.07E+02	3.65E-01	2.81E+01	2.35E+02	3.94E-01	-1.19E+01	MNR	MNR	MNR	MNR	MNR	1.42E+04	MNR	MNR	2.75E-02	2.66E-01	6.96E-02	-1.54E+01
Non-re. PER as energy	MJ	2.41E+03	3.41E+01	1.92E+01	2.47E+03	3.50E+01	2.82E-01	MNR	MNR	MNR	MNR	MNR	6.97E+04	MNR	MNR	2.44E+00	2.13E+00	1.67E+00	-9.00E+02
Non-re. PER as material	MJ	6.43E+01	0.00E+00	5.50E-01	6.48E+01	0.00E+00	-5.50E-01	MNR	MNR	MNR	MNR	MNR	0.00E+00	MNR	MNR	0.00E+00	-2.67E+01	-2.67E+01	0.00E+00
Total use of non-re. PER	MJ	2.48E+03	3.41E+01	1.98E+01	2.53E+03	3.50E+01	-2.68E-01	MNR	MNR	MNR	MNR	MNR	6.97E+04	MNR	MNR	2.44E+00	-2.46E+01	-2.50E+01	-9.00E+02
Secondary materials	kg	9.03E-01	1.03E-02	8.85E-01	1.80E+00	9.70E-03	3.34E-04	MNR	MNR	MNR	MNR	MNR	7.19E+00	MNR	MNR	6.79E-04	2.07E-03	3.75E-03	3.76E+00
Renew. secondary fuels	MJ	1.43E-01	8.85E-05	6.29E-02	2.06E-01	9.79E-05	5.38E-06	MNR	MNR	MNR	MNR	MNR	5.83E-02	MNR	MNR	6.85E-06	1.01E-04	3.28E-05	-2.42E-03
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	1.36E+00	4.13E-03	1.54E-02	1.38E+00	4.53E-03	1.11E-03	MNR	MNR	MNR	MNR	MNR	6.01E+01	MNR	MNR	3.17E-04	4.59E-03	2.58E-03	-3.00E-01

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	4.10E+01	4.54E-02	7.86E-02	4.11E+01	4.63E-02	1.93E-03	MNR	MNR	MNR	MNR	MNR	2.51E+02	MNR	MNR	3.24E-03	1.24E-02	5.50E-02	-1.45E+01
Non-hazardous waste	kg	3.95E+02	6.96E-01	1.35E+00	3.97E+02	7.61E-01	8.98E-01	MNR	MNR	MNR	MNR	MNR	1.59E+04	MNR	MNR	5.32E-02	1.48E+00	4.69E+00	-2.76E+02
Radioactive waste	kg	4.36E-03	2.30E-04	3.40E-05	4.62E-03	2.34E-04	4.77E-07	MNR	MNR	MNR	MNR	MNR	5.08E-01	MNR	MNR	1.63E-05	7.26E-06	0.00E+00	-1.99E-03

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	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	5.64E+00	0.00E+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	0.00E+00
Exported energy	MJ	0.00E+00	0.00E+00	3.93E-01	3.93E-01	0.00E+00	0.00E+00	MNR	MNR	MNR	MNR	MNR	0.00E+00	MNR	MNR	0.00E+00	2.35E+01	0.00E+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 ₂ e	2.29E+02	2.31E+00	1.53E+00	2.33E+02	2.30E+00	5.57E-02	MNR	MNR	MNR	MNR	MNR	3.25E+03	MNR	MNR	1.61E-01	2.67E+00	2.27E+00	-9.01E+01
Ozone depletion Pot.	kg CFC ₁₁ e	2.03E-05	4.15E-07	1.52E-07	2.09E-05	4.24E-07	3.14E-09	MNR	MNR	MNR	MNR	MNR	1.44E-04	MNR	MNR	2.96E-08	1.66E-08	1.44E-08	-2.12E-06
Acidification	kg SO ₂ e	1.43E+00	1.56E-02	4.70E-03	1.45E+00	7.66E-03	2.07E-04	MNR	MNR	MNR	MNR	MNR	1.59E+01	MNR	MNR	5.35E-04	1.63E-03	7.14E-04	-8.40E-01
Eutrophication	kg PO ₄ ³ e	4.63E-01	2.50E-03	3.26E-03	4.69E-01	1.74E-03	1.55E-04	MNR	MNR	MNR	MNR	MNR	1.22E+01	MNR	MNR	1.22E-04	6.85E-04	6.41E-03	-2.36E-01



POCP ("smog")	kg C ₂ H ₄ e	8.18E-02	4.89E-04	3.80E-04	8.27E-02	2.99E-04	6.41E-06	MNR	MNR	MNR	MNR	MNR	6.50E-01	MNR	MNR	2.09E-05	5.53E-05	1.55E-04	-4.10E-02
ADP-elements	kg Sbe	1.13E-02	4.96E-06	7.14E-06	1.13E-02	5.28E-06	9.27E-08	MNR	MNR	MNR	MNR	MNR	3.06E-02	MNR	MNR	3.69E-07	1.46E-05	3.44E-07	-2.01E-03
ADP-fossil	MJ	2.48E+03	3.41E+01	2.01E+01	2.53E+03	3.50E+01	2.82E-01	MNR	MNR	MNR	MNR	MNR	6.97E+04	MNR	MNR	2.44E+00	2.13E+00	1.67E+00	-9.00E+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 reference variant of a product family, based on various light management scenarios and power inputs of the luminaires within the same product family

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.

$$\text{Scaled Impact} = \text{GWP}_{\text{case}} * \text{TSF}$$

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
BGP704 LED22-4S/830	2002.0	15.6	128.3	0.195	0.195	0.146	0.146	0.107	641.6	480.3	480.3	352.0
BGP704 LED22-4S/722	2002.0	17.4	115.1	0.217	0.217	0.163	0.163	0.119	713.9	536.3	536.3	391.5
BGP704 LED22-4S/727	2002.0	15.6	128.3	0.195	0.195	0.146	0.146	0.107	641.6	480.3	480.3	352.0
BGP704 LED22-4S/730	2002.0	14.0	143.0	0.175	0.175	0.131	0.131	0.096	575.8	431.0	431.0	315.8
BGP704 LED24-4S/740	2184.0	14.4	151.7	0.18	0.18	0.135	0.135	0.099	592.2	444.2	444.2	325.7
BGP704 LED24-4S/830	2184.0	17.0	128.5	0.212	0.212	0.159	0.159	0.117	697.5	523.1	523.1	384.9
BGP704 LED24-4S/722	2184.0	19.0	114.9	0.237	0.237	0.178	0.178	0.13	779.7	585.6	585.6	427.7
BGP704 LED24-4S/727	2184.0	17.0	128.5	0.212	0.212	0.159	0.159	0.117	697.5	523.1	523.1	384.9
BGP704 LED24-4S/730	2184.0	15.2	143.7	0.19	0.19	0.143	0.143	0.105	625.1	470.5	470.5	345.4
BGP704 LED27-4S/740	2457.0	16.2	151.7	0.202	0.202	0.152	0.152	0.111	664.6	500.1	500.1	365.2
BGP704 LED27-4S/830	2457.0	19.2	128.0	0.24	0.24	0.18	0.18	0.132	789.6	592.2	592.2	434.3
BGP704 LED27-4S/722	2457.0	21.5	114.3	0.269	0.269	0.202	0.202	0.148	885.0	664.6	664.6	486.9



BGP704 LED27-4S/727	2457.0	19.2	128.0	0.24	0.24	0.18	0.18	0.132	789.6	592.2	592.2	434.3
BGP704 LED27-4S/730	2457.0	17.2	142.8	0.215	0.215	0.161	0.161	0.118	707.4	529.7	529.7	388.2
BGP704 LED30-4S/740	2730.0	18.0	151.7	0.225	0.225	0.169	0.169	0.124	740.2	556.0	556.0	408.0
BGP704 LED30-4S/830	2730.0	21.0	130.0	0.263	0.263	0.197	0.197	0.145	865.3	648.1	648.1	477.0
BGP704 LED30-4S/722	2730.0	23.5	116.2	0.294	0.294	0.22	0.22	0.162	967.3	723.8	723.8	533.0
BGP704 LED30-4S/727	2730.0	21.0	130.0	0.263	0.263	0.197	0.197	0.145	865.3	648.1	648.1	477.0
BGP704 LED30-4S/730	2730.0	19.0	143.7	0.237	0.237	0.178	0.178	0.13	779.7	585.6	585.6	427.7
BGP704 LED35-4S/740	3185.0	21.0	151.7	0.263	0.263	0.197	0.197	0.145	865.3	648.1	648.1	477.0
BGP704 LED35-4S/830	3185.0	25.0	127.4	0.312	0.312	0.234	0.234	0.172	1026.5	769.9	769.9	565.9
BGP704 LED35-4S/722	3185.0	28.0	113.8	0.35	0.35	0.262	0.262	0.193	1151.5	862.0	862.0	635.0
BGP704 LED35-4S/727	3185.0	25.0	127.4	0.312	0.312	0.234	0.234	0.172	1026.5	769.9	769.9	565.9
BGP704 LED35-4S/730	3185.0	22.0	144.8	0.275	0.275	0.206	0.206	0.151	904.8	677.7	677.7	496.8
BGP704 LED40-4S/740	3640.0	24.0	151.7	0.3	0.3	0.225	0.225	0.165	987.0	740.2	740.2	542.9
BGP704 LED40-4S/830	3640.0	28.5	127.7	0.356	0.356	0.267	0.267	0.196	1171.2	878.4	878.4	644.8
BGP704 LED40-4S/722	3640.0	32.5	112.0	0.406	0.406	0.304	0.304	0.223	1335.7	1000.2	1000.2	733.7
BGP704 LED40-4S/727	3640.0	28.5	127.7	0.356	0.356	0.267	0.267	0.196	1171.2	878.4	878.4	644.8
BGP704 LED40-4S/730	3640.0	25.5	142.7	0.319	0.319	0.239	0.239	0.175	1049.5	786.3	786.3	575.8
BGP704 LED45-4S/740	4095.0	27.0	151.7	0.338	0.338	0.254	0.254	0.186	1112.0	835.7	835.7	611.9
BGP704 LED45-4S/830	4095.0	32.5	126.0	0.406	0.406	0.304	0.304	0.223	1335.7	1000.2	1000.2	733.7
BGP704 LED45-4S/722	4095.0	37.0	110.7	0.463	0.463	0.347	0.347	0.255	1523.3	1141.6	1141.6	839.0
BGP704 LED45-4S/727	4095.0	32.5	126.0	0.406	0.406	0.304	0.304	0.223	1335.7	1000.2	1000.2	733.7
BGP704 LED45-4S/730	4095.0	27.0	151.7	0.338	0.338	0.254	0.254	0.186	1112.0	835.7	835.7	611.9
BGP704 LED50-4S/740	4550.0	30.5	149.2	0.381	0.381	0.286	0.286	0.21	1253.5	940.9	940.9	690.9
BGP704 LED50-4S/830	4550.0	36.5	124.7	0.456	0.456	0.342	0.342	0.251	1500.2	1125.2	1125.2	825.8



BGP704 LED50-4S/722	4550.0	37.5	121.3	0.469	0.469	0.352	0.352	0.258	1543.0	1158.1	1158.1	848.8
BGP704 LED50-4S/727	4550.0	36.5	124.7	0.456	0.456	0.342	0.342	0.251	1500.2	1125.2	1125.2	825.8
BGP704 LED50-4S/730	4550.0	30.0	151.7	0.375	0.375	0.281	0.281	0.206	1233.8	924.5	924.5	677.7
BGP704 LED55-4S/740	5096.0	33.5	152.1	0.419	0.419	0.314	0.314	0.23	1378.5	1033.1	1033.1	756.7
BGP704 LED55-4S/830	4914.0	37.0	132.8	0.463	0.463	0.347	0.347	0.255	1523.3	1141.6	1141.6	839.0
BGP704 LED55-4S/722	4914.0	41.0	119.9	0.512	0.512	0.384	0.384	0.282	1684.5	1263.4	1263.4	927.8
BGP704 LED55-4S/727	5096.0	41.0	124.3	0.512	0.512	0.384	0.384	0.282	1684.5	1263.4	1263.4	927.8
BGP704 LED55-4S/730	4914.0	33.0	148.9	0.412	0.412	0.309	0.309	0.227	1355.5	1016.6	1016.6	746.8
BGP704 LED60-4S/740	5460.0	37.0	147.6	0.463	0.463	0.347	0.347	0.255	1523.3	1141.6	1141.6	839.0
BGP704 LED60-4S/830	5460.0	40.5	134.8	0.506	0.506	0.38	0.38	0.278	1664.7	1250.2	1250.2	914.6
BGP704 LED60-4S/722	5460.0	45.5	120.0	0.569	0.569	0.427	0.427	0.313	1872.0	1404.8	1404.8	1029.8
BGP704 LED60-4S/727	5460.0	40.5	134.8	0.506	0.506	0.38	0.38	0.278	1664.7	1250.2	1250.2	914.6
BGP704 LED60-4S/730	5460.0	36.0	151.7	0.45	0.45	0.338	0.338	0.248	1480.5	1112.0	1112.0	815.9
BGP704 LED65-4S/740	6006.0	36.5	164.5	0.456	0.456	0.342	0.342	0.251	1500.2	1125.2	1125.2	825.8
BGP704 LED65-4S/830	6006.0	44.0	136.5	0.55	0.55	0.413	0.413	0.303	1809.5	1358.8	1358.8	996.9
BGP704 LED65-4S/722	6006.0	49.5	121.3	0.619	0.619	0.464	0.464	0.34	2036.5	1526.6	1526.6	1118.6
BGP704 LED65-4S/727	6006.0	44.0	136.5	0.55	0.55	0.413	0.413	0.303	1809.5	1358.8	1358.8	996.9
BGP704 LED65-4S/730	6006.0	39.0	154.0	0.487	0.487	0.365	0.365	0.268	1602.2	1200.8	1200.8	881.7
BGP704 LED70-4S/740	6370.0	39.5	161.3	0.494	0.494	0.37	0.37	0.272	1625.3	1217.3	1217.3	894.9
BGP704 LED70-4S/830	6370.0	47.5	134.1	0.594	0.594	0.446	0.446	0.327	1954.3	1467.3	1467.3	1075.8
BGP704 LED70-4S/722	6370.0	54.0	118.0	0.675	0.675	0.506	0.506	0.371	2220.8	1664.7	1664.7	1220.6
BGP704 LED70-4S/727	6370.0	47.5	134.1	0.594	0.594	0.446	0.446	0.327	1954.3	1467.3	1467.3	1075.8
BGP704 LED70-4S/730	6370.0	42.0	151.7	0.525	0.525	0.394	0.394	0.289	1727.2	1296.3	1296.3	950.8
BGP704 LED75-4S/740	6734.0	42.5	158.4	0.531	0.531	0.398	0.398	0.292	1747.0	1309.4	1309.4	960.7



BGP704 LED75-4S/830	6916.0	51.0	135.6	0.637	0.637	0.478	0.478	0.35	2095.7	1572.6	1572.6	1151.5
BGP704 LED75-4S/722	6916.0	58.0	119.2	0.725	0.725	0.544	0.544	0.399	2385.2	1789.8	1789.8	1312.7
BGP704 LED75-4S/727	6916.0	51.0	135.6	0.637	0.637	0.478	0.478	0.35	2095.7	1572.6	1572.6	1151.5
BGP704 LED75-4S/730	6916.0	45.5	152.0	0.569	0.569	0.427	0.427	0.313	1872.0	1404.8	1404.8	1029.8
BGP704 LED80-4S/740	7280.0	45.5	160.0	0.569	0.569	0.427	0.427	0.313	1872.0	1404.8	1404.8	1029.8
BGP704 LED80-4S/830	7280.0	55.0	132.4	0.688	0.688	0.516	0.516	0.378	2263.5	1697.6	1697.6	1243.6
BGP704 LED80-4S/722	7280.0	62.0	117.4	0.775	0.775	0.581	0.581	0.426	2549.8	1911.5	1911.5	1401.5
BGP704 LED80-4S/727	7280.0	55.0	132.4	0.688	0.688	0.516	0.516	0.378	2263.5	1697.6	1697.6	1243.6
BGP704 LED80-4S/730	7280.0	48.5	150.1	0.606	0.606	0.455	0.455	0.333	1993.7	1497.0	1497.0	1095.6
BGP704 LED85-4S/740	7826.0	47.0	166.5	0.588	0.588	0.441	0.441	0.323	1934.5	1450.9	1450.9	1062.7
BGP704 LED85-4S/830	7826.0	56.0	139.8	0.7	0.7	0.525	0.525	0.385	2303.0	1727.2	1727.2	1266.7
BGP704 LED85-4S/722	7644.0	63.0	121.3	0.787	0.787	0.59	0.59	0.433	2589.2	1941.1	1941.1	1424.6
BGP704 LED85-4S/727	7826.0	56.0	139.8	0.7	0.7	0.525	0.525	0.385	2303.0	1727.2	1727.2	1266.7
BGP704 LED85-4S/730	7826.0	50.0	156.5	0.625	0.625	0.469	0.469	0.344	2056.2	1543.0	1543.0	1131.8
BGP704 LED90-4S/740	8190.0	50.0	163.8	0.625	0.625	0.469	0.469	0.344	2056.2	1543.0	1543.0	1131.8
BGP704 LED90-4S/830	8190.0	60.0	136.5	0.75	0.75	0.562	0.562	0.413	2467.5	1849.0	1849.0	1358.8
BGP704 LED90-4S/722	8190.0	67.0	122.2	0.838	0.838	0.628	0.628	0.461	2757.0	2066.1	2066.1	1516.7
BGP704 LED90-4S/727	8190.0	60.0	136.5	0.75	0.75	0.562	0.562	0.413	2467.5	1849.0	1849.0	1358.8
BGP704 LED90-4S/730	8190.0	53.0	154.5	0.662	0.662	0.497	0.497	0.364	2178.0	1635.1	1635.1	1197.6
BGP704 LED95-4S/740	8736.0	53.0	164.8	0.662	0.662	0.497	0.497	0.364	2178.0	1635.1	1635.1	1197.6
BGP704 LED95-4S/830	8736.0	63.0	138.7	0.787	0.787	0.59	0.59	0.433	2589.2	1941.1	1941.1	1424.6
BGP704 LED95-4S/722	8736.0	71.0	123.0	0.887	0.887	0.665	0.665	0.488	2918.2	2187.8	2187.8	1605.5
BGP704 LED95-4S/727	8736.0	63.0	138.7	0.787	0.787	0.59	0.59	0.433	2589.2	1941.1	1941.1	1424.6
BGP704 LED95-4S/730	8736.0	56.0	156.0	0.7	0.7	0.525	0.525	0.385	2303.0	1727.2	1727.2	1266.7



BGP704 LED100-4S/740	9100.0	56.0	162.5	0.7	0.7	0.525	0.525	0.385	2303.0	1727.2	1727.2	1266.7
BGP704 LED100-4S/830	9100.0	67.0	135.8	0.838	0.838	0.628	0.628	0.461	2757.0	2066.1	2066.1	1516.7
BGP704 LED100-4S/722	9100.0	75.0	121.3	0.938	0.938	0.704	0.704	0.516	3086.0	2316.2	2316.2	1697.6
BGP704 LED100-4S/727	9100.0	67.0	135.8	0.838	0.838	0.628	0.628	0.461	2757.0	2066.1	2066.1	1516.7
BGP704 LED100-4S/730	9100.0	59.0	154.2	0.738	0.738	0.553	0.553	0.406	2428.0	1819.4	1819.4	1335.7
BGP704 LED110-4S/740	10010.0	61.0	164.1	0.762	0.762	0.572	0.572	0.419	2507.0	1881.9	1881.9	1378.5
BGP704 LED110-4S/830	10010.0	74.0	135.3	0.925	0.925	0.694	0.694	0.509	3043.2	2283.3	2283.3	1674.6
BGP704 LED110-4S/722	10010.0	84.0	119.2	1.05	1.05	0.788	0.788	0.578	3454.5	2592.5	2592.5	1901.6
BGP704 LED110-4S/727	10010.0	74.0	135.3	0.925	0.925	0.694	0.694	0.509	3043.2	2283.3	2283.3	1674.6
BGP704 LED110-4S/730	10010.0	66.0	151.7	0.825	0.825	0.619	0.619	0.454	2714.2	2036.5	2036.5	1493.7
BGP704 LED120-4S/740	10920.0	68.0	160.6	0.85	0.85	0.637	0.637	0.468	2796.5	2095.7	2095.7	1539.7
BGP704 LED120-4S/830	10920.0	82.0	133.2	1.025	1.025	0.769	0.769	0.564	3372.2	2530.0	2530.0	1855.6
BGP704 LED120-4S/722	10800.0	92.0	117.4	1.15	1.15	0.862	0.862	0.632	3783.5	2836.0	2836.0	2079.3
BGP704 LED120-4S/727	10920.0	82.0	133.2	1.025	1.025	0.769	0.769	0.564	3372.2	2530.0	2530.0	1855.6
BGP704 LED120-4S/730	10920.0	72.0	151.7	0.9	0.9	0.675	0.675	0.495	2961.0	2220.8	2220.8	1628.5
BGP704 LED130-4S/740	11830.0	74.0	159.9	0.925	0.925	0.694	0.694	0.509	3043.2	2283.3	2283.3	1674.6
BGP704 LED130-4S/830	11830.0	89.0	132.9	1.113	1.113	0.835	0.835	0.612	3661.8	2747.2	2747.2	2013.5
BGP704 LED130-4S/722	11700.0	102.0	114.7	1.275	1.275	0.956	0.956	0.701	4194.8	3145.2	3145.2	2306.3
BGP704 LED130-4S/727	11830.0	89.0	132.9	1.113	1.113	0.835	0.835	0.612	3661.8	2747.2	2747.2	2013.5
BGP704 LED130-4S/730	11830.0	79.0	149.7	0.988	0.988	0.741	0.741	0.543	3250.5	2437.9	2437.9	1786.5
BGP704 LED140-4S/740 I DM11 GR PSU 62	12740.0	80.0	159.2	1.0	1.0	0.75	0.75	0.55	3290.0	2467.5	2467.5	1809.5
BGP704 LED140-4S/830	12600.0	97.0	129.9	1.212	1.212	0.909	0.909	0.667	3987.5	2990.6	2990.6	2194.4
BGP704 LED140-4S/722	12600.0	110.0	114.5	1.375	1.375	1.031	1.031	0.756	4523.8	3392.0	3392.0	2487.2
BGP704 LED140-4S/727	12600.0	97.0	129.9	1.212	1.212	0.909	0.909	0.667	3987.5	2990.6	2990.6	2194.4



BGP704 LED140-4S/730	12740.0	85.0	149.9	1.062	1.062	0.796	0.796	0.584	3494.0	2618.8	2618.8	1921.4
BGP704 LED150-4S/740	13650.0	83.0	164.5	1.038	1.038	0.778	0.778	0.571	3415.0	2559.6	2559.6	1878.6
BGP704 LED150-4S/830	13500.0	100.0	135.0	1.25	1.25	0.938	0.938	0.688	4112.5	3086.0	3086.0	2263.5
BGP704 LED150-4S/722	13500.0	114.0	118.4	1.425	1.425	1.069	1.069	0.784	4688.2	3517.0	3517.0	2579.4
BGP704 LED150-4S/727	13500.0	100.0	135.0	1.25	1.25	0.938	0.938	0.688	4112.5	3086.0	3086.0	2263.5
BGP704 LED150-4S/730	13650.0	89.0	153.4	1.113	1.113	0.835	0.835	0.612	3661.8	2747.2	2747.2	2013.5
BGP704 LED160-4S/740	14560.0	90.0	161.8	1.125	1.125	0.844	0.844	0.619	3701.2	2776.8	2776.8	2036.5
BGP704 LED160-4S/830	14400.0	108.0	133.3	1.35	1.35	1.013	1.013	0.743	4441.5	3332.8	3332.8	2444.5
BGP704 LED160-4S/722	14400.0	122.0	118.0	1.525	1.525	1.144	1.144	0.839	5017.2	3763.8	3763.8	2760.3
BGP704 LED160-4S/727	14400.0	108.0	133.3	1.35	1.35	1.013	1.013	0.743	4441.5	3332.8	3332.8	2444.5
BGP704 LED160-4S/730	14560.0	96.0	151.7	1.2	1.2	0.9	0.9	0.66	3948.0	2961.0	2961.0	2171.4
BGP704 LED170-4S/740	15470.0	96.0	161.1	1.2	1.2	0.9	0.9	0.66	3948.0	2961.0	2961.0	2171.4
BGP704 LED170-4S/830	15300.0	116.0	131.9	1.45	1.45	1.087	1.087	0.797	4770.5	3576.2	3576.2	2622.1
BGP704 LED170-4S/722	15300.0	130.0	117.7	1.625	1.625	1.219	1.219	0.894	5346.2	4010.5	4010.5	2941.3
BGP704 LED170-4S/727	15300.0	116.0	131.9	1.45	1.45	1.087	1.087	0.797	4770.5	3576.2	3576.2	2622.1
BGP704 LED170-4S/730	15300.0	102.0	150.0	1.275	1.275	0.956	0.956	0.701	4194.8	3145.2	3145.2	2306.3
BGP704 LED180-4S/740	16200.0	102.0	158.8	1.275	1.275	0.956	0.956	0.701	4194.8	3145.2	3145.2	2306.3
BGP704 LED180-4S/830	16200.0	124.0	130.6	1.55	1.55	1.163	1.163	0.853	5099.5	3826.3	3826.3	2806.4
BGP704 LED180-4S/722	16200.0	140.0	115.7	1.75	1.75	1.312	1.312	0.963	5757.5	4316.5	4316.5	3168.3
BGP704 LED180-4S/727	16200.0	124.0	130.6	1.55	1.55	1.163	1.163	0.853	5099.5	3826.3	3826.3	2806.4
BGP704 LED180-4S/730	16200.0	108.0	150.0	1.35	1.35	1.013	1.013	0.743	4441.5	3332.8	3332.8	2444.5
BGP704 LED190-4S/740	17100.0	108.0	158.3	1.35	1.35	1.013	1.013	0.743	4441.5	3332.8	3332.8	2444.5
BGP704 LED190-4S/830	17100.0	132.0	129.5	1.65	1.65	1.237	1.237	0.907	5428.5	4069.7	4069.7	2984.0
BGP704 LED190-4S/722	17100.0	148.0	115.5	1.85	1.85	1.388	1.388	1.018	6086.5	4566.5	4566.5	3349.2



BGP704 LED190-4S/727	17100.0	132.0	129.5	1.65	1.65	1.237	1.237	0.907	5428.5	4069.7	4069.7	2984.0
BGP704 LED190-4S/730	17100.0	116.0	147.4	1.45	1.45	1.087	1.087	0.797	4770.5	3576.2	3576.2	2622.1
BGP704 LED200-4S/740	18000.0	114.0	157.9	1.425	1.425	1.069	1.069	0.784	4688.2	3517.0	3517.0	2579.4
BGP704 LED200-4S/830	18000.0	140.0	128.6	1.75	1.75	1.312	1.312	0.963	5757.5	4316.5	4316.5	3168.3
BGP704 LED200-4S/722	17800.0	158.0	112.7	1.975	1.975	1.481	1.481	1.086	6497.8	4872.5	4872.5	3572.9
BGP704 LED200-4S/727	18000.0	140.0	128.6	1.75	1.75	1.312	1.312	0.963	5757.5	4316.5	4316.5	3168.3
BGP704 LED200-4S/730	18000.0	122.0	147.5	1.525	1.525	1.144	1.144	0.839	5017.2	3763.8	3763.8	2760.3
BGP704 LED20-4S/722	1820.0	16.0	113.8	0.2	0.2	0.15	0.15	0.11	658.0	493.5	493.5	361.9
BGP704 LED210-4S/740	18900.0	120.0	157.5	1.5	1.5	1.125	1.125	0.825	4935.0	3701.2	3701.2	2714.2
BGP704 LED210-4S/830	18900.0	148.0	127.7	1.85	1.85	1.388	1.388	1.018	6086.5	4566.5	4566.5	3349.2
BGP704 LED210-4S/727	18900.0	148.0	127.7	1.85	1.85	1.388	1.388	1.018	6086.5	4566.5	4566.5	3349.2
BGP704 LED210-4S/730	18900.0	130.0	145.4	1.625	1.625	1.219	1.219	0.894	5346.2	4010.5	4010.5	2941.3
BGP704 LED220-4S/740	19800.0	128.0	154.7	1.6	1.6	1.2	1.2	0.88	5264.0	3948.0	3948.0	2895.2
BGP704 LED220-4S/830	19800.0	156.0	126.9	1.95	1.95	1.462	1.462	1.073	6415.5	4810.0	4810.0	3530.2
BGP704 LED220-4S/727	19800.0	156.0	126.9	1.95	1.95	1.462	1.462	1.073	6415.5	4810.0	4810.0	3530.2
BGP704 LED220-4S/730	19800.0	136.0	145.6	1.7	1.7	1.275	1.275	0.935	5593.0	4194.8	4194.8	3076.2
BGP704 LED230-4S/740	20700.0	134.0	154.5	1.675	1.675	1.256	1.256	0.921	5510.8	4132.2	4132.2	3030.1
BGP704 LED230-4S/830	20470.0	164.0	124.8	2.05	2.05	1.537	1.537	1.127	6744.5	5056.7	5056.7	3707.8
BGP704 LED230-4S/727	20470.0	164.0	124.8	2.05	2.05	1.537	1.537	1.127	6744.5	5056.7	5056.7	3707.8
BGP704 LED230-4S/730	20700.0	144.0	143.8	1.8	1.8	1.35	1.35	0.99	5922.0	4441.5	4441.5	3257.1
BGP704 LED240-4S/740	21600.0	140.0	154.3	1.75	1.75	1.312	1.312	0.963	5757.5	4316.5	4316.5	3168.3
BGP704 LED240-4S/730	21600.0	150.0	144.0	1.875	1.875	1.406	1.406	1.031	6168.8	4625.7	4625.7	3392.0
BGP704 LED250-4S/740	22500.0	148.0	152.0	1.85	1.85	1.388	1.388	1.018	6086.5	4566.5	4566.5	3349.2
BGP704 LED250-4S/730	22500.0	158.0	142.4	1.975	1.975	1.481	1.481	1.086	6497.8	4872.5	4872.5	3572.9

BGP704 LED260-4S/740	23400.0	154.0	151.9	1.925	1.925	1.444	1.444	1.059	6333.2	4750.8	4750.8	3484.1
BGP704 LED260-4S/730	23140.0	166.0	139.4	2.075	2.075	1.556	1.556	1.141	6826.8	5119.2	5119.2	3753.9

* 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.

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 reference 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 family.

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} .

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

- 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 (SI_{pep}) is presented in Table A4.

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

- Calculate the GWP scaling factor (PGSF), by multiplying the PSF by the GSF.

$$PGSF = PSF * GSF$$

- 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.

$$\text{Scaled GWP} = \text{GWP}_{\text{case}} * \text{TSF}$$

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
BGP704 LED22-4S/830	2002.0	15.6	128.3	0.195	0.034	0.026	0.026	0.019	111.9	85.5	85.5	62.5
BGP704 LED22-4S/722	2002.0	17.4	115.1	0.217	0.038	0.028	0.028	0.021	125.0	92.1	92.1	69.1
BGP704 LED22-4S/727	2002.0	15.6	128.3	0.195	0.034	0.026	0.026	0.019	111.9	85.5	85.5	62.5
BGP704 LED22-4S/730	2002.0	14.0	143.0	0.175	0.031	0.023	0.023	0.017	102.0	75.7	75.7	55.9
BGP704 LED24-4S/740	2184.0	14.4	151.7	0.18	0.029	0.022	0.022	0.016	95.4	72.4	72.4	52.6
BGP704 LED24-4S/830	2184.0	17.0	128.5	0.212	0.034	0.026	0.026	0.019	111.9	85.5	85.5	62.5
BGP704 LED24-4S/722	2184.0	19.0	114.9	0.237	0.038	0.028	0.028	0.021	125.0	92.1	92.1	69.1
BGP704 LED24-4S/727	2184.0	17.0	128.5	0.212	0.034	0.026	0.026	0.019	111.9	85.5	85.5	62.5
BGP704 LED24-4S/730	2184.0	15.2	143.7	0.19	0.03	0.022	0.022	0.017	98.7	72.4	72.4	55.9
BGP704 LED27-4S/740	2457.0	16.2	151.7	0.202	0.029	0.022	0.022	0.016	95.4	72.4	72.4	52.6
BGP704 LED27-4S/830	2457.0	19.2	128.0	0.24	0.034	0.026	0.026	0.019	111.9	85.5	85.5	62.5
BGP704 LED27-4S/722	2457.0	21.5	114.3	0.269	0.038	0.028	0.028	0.021	125.0	92.1	92.1	69.1
BGP704 LED27-4S/727	2457.0	19.2	128.0	0.24	0.034	0.026	0.026	0.019	111.9	85.5	85.5	62.5



BGP704 LED27-4S/730	2457.0	17.2	142.8	0.215	0.031	0.023	0.023	0.017	102.0	75.7	75.7	55.9
BGP704 LED30-4S/740	2730.0	18.0	151.7	0.225	0.029	0.022	0.022	0.016	95.4	72.4	72.4	52.6
BGP704 LED30-4S/830	2730.0	21.0	130.0	0.263	0.034	0.026	0.026	0.019	111.9	85.5	85.5	62.5
BGP704 LED30-4S/722	2730.0	23.5	116.2	0.294	0.038	0.028	0.028	0.021	125.0	92.1	92.1	69.1
BGP704 LED30-4S/727	2730.0	21.0	130.0	0.263	0.034	0.026	0.026	0.019	111.9	85.5	85.5	62.5
BGP704 LED30-4S/730	2730.0	19.0	143.7	0.237	0.03	0.022	0.022	0.017	98.7	72.4	72.4	55.9
BGP704 LED35-4S/740	3185.0	21.0	151.7	0.263	0.029	0.022	0.022	0.016	95.4	72.4	72.4	52.6
BGP704 LED35-4S/830	3185.0	25.0	127.4	0.312	0.034	0.026	0.026	0.019	111.9	85.5	85.5	62.5
BGP704 LED35-4S/722	3185.0	28.0	113.8	0.35	0.038	0.028	0.028	0.021	125.0	92.1	92.1	69.1
BGP704 LED35-4S/727	3185.0	25.0	127.4	0.312	0.034	0.026	0.026	0.019	111.9	85.5	85.5	62.5
BGP704 LED35-4S/730	3185.0	22.0	144.8	0.275	0.03	0.022	0.022	0.017	98.7	72.4	72.4	55.9
BGP704 LED40-4S/740	3640.0	24.0	151.7	0.3	0.029	0.022	0.022	0.016	95.4	72.4	72.4	52.6
BGP704 LED40-4S/830	3640.0	28.5	127.7	0.356	0.034	0.026	0.026	0.019	111.9	85.5	85.5	62.5
BGP704 LED40-4S/722	3640.0	32.5	112.0	0.406	0.039	0.029	0.029	0.021	128.3	95.4	95.4	69.1
BGP704 LED40-4S/727	3640.0	28.5	127.7	0.356	0.034	0.026	0.026	0.019	111.9	85.5	85.5	62.5
BGP704 LED40-4S/730	3640.0	25.5	142.7	0.319	0.031	0.023	0.023	0.017	102.0	75.7	75.7	55.9
BGP704 LED45-4S/740	4095.0	27.0	151.7	0.338	0.029	0.022	0.022	0.016	95.4	72.4	72.4	52.6
BGP704 LED45-4S/830	4095.0	32.5	126.0	0.406	0.035	0.026	0.026	0.019	115.2	85.5	85.5	62.5
BGP704 LED45-4S/722	4095.0	37.0	110.7	0.463	0.039	0.029	0.029	0.021	128.3	95.4	95.4	69.1
BGP704 LED45-4S/727	4095.0	32.5	126.0	0.406	0.035	0.026	0.026	0.019	115.2	85.5	85.5	62.5
BGP704 LED45-4S/730	4095.0	27.0	151.7	0.338	0.029	0.022	0.022	0.016	95.4	72.4	72.4	52.6
BGP704 LED50-4S/740	4550.0	30.5	149.2	0.381	0.029	0.022	0.022	0.016	95.4	72.4	72.4	52.6
BGP704 LED50-4S/830	4550.0	36.5	124.7	0.456	0.035	0.026	0.026	0.019	115.2	85.5	85.5	62.5
BGP704 LED50-4S/722	4550.0	37.5	121.3	0.469	0.036	0.027	0.027	0.02	118.4	88.8	88.8	65.8



BGP704 LED50-4S/727	4550.0	36.5	124.7	0.456	0.035	0.026	0.026	0.019	115.2	85.5	85.5	62.5
BGP704 LED50-4S/730	4550.0	30.0	151.7	0.375	0.029	0.022	0.022	0.016	95.4	72.4	72.4	52.6
BGP704 LED55-4S/740	5096.0	33.5	152.1	0.419	0.029	0.022	0.022	0.016	95.4	72.4	72.4	52.6
BGP704 LED55-4S/830	4914.0	37.0	132.8	0.463	0.033	0.025	0.025	0.018	108.6	82.2	82.2	59.2
BGP704 LED55-4S/722	4914.0	41.0	119.9	0.512	0.036	0.027	0.027	0.02	118.4	88.8	88.8	65.8
BGP704 LED55-4S/727	5096.0	41.0	124.3	0.512	0.035	0.026	0.026	0.019	115.2	85.5	85.5	62.5
BGP704 LED55-4S/730	4914.0	33.0	148.9	0.412	0.029	0.022	0.022	0.016	95.4	72.4	72.4	52.6
BGP704 LED60-4S/740	5460.0	37.0	147.6	0.463	0.03	0.022	0.022	0.017	98.7	72.4	72.4	55.9
BGP704 LED60-4S/830	5460.0	40.5	134.8	0.506	0.032	0.024	0.024	0.018	105.3	79.0	79.0	59.2
BGP704 LED60-4S/722	5460.0	45.5	120.0	0.569	0.036	0.027	0.027	0.02	118.4	88.8	88.8	65.8
BGP704 LED60-4S/727	5460.0	40.5	134.8	0.506	0.032	0.024	0.024	0.018	105.3	79.0	79.0	59.2
BGP704 LED60-4S/730	5460.0	36.0	151.7	0.45	0.029	0.022	0.022	0.016	95.4	72.4	72.4	52.6
BGP704 LED65-4S/740	6006.0	36.5	164.5	0.456	0.026	0.019	0.019	0.014	85.5	62.5	62.5	46.1
BGP704 LED65-4S/830	6006.0	44.0	136.5	0.55	0.032	0.024	0.024	0.018	105.3	79.0	79.0	59.2
BGP704 LED65-4S/722	6006.0	49.5	121.3	0.619	0.036	0.027	0.027	0.02	118.4	88.8	88.8	65.8
BGP704 LED65-4S/727	6006.0	44.0	136.5	0.55	0.032	0.024	0.024	0.018	105.3	79.0	79.0	59.2
BGP704 LED65-4S/730	6006.0	39.0	154.0	0.487	0.028	0.021	0.021	0.015	92.1	69.1	69.1	49.4
BGP704 LED70-4S/740	6370.0	39.5	161.3	0.494	0.027	0.02	0.02	0.015	88.8	65.8	65.8	49.4
BGP704 LED70-4S/830	6370.0	47.5	134.1	0.594	0.033	0.025	0.025	0.018	108.6	82.2	82.2	59.2
BGP704 LED70-4S/722	6370.0	54.0	118.0	0.675	0.037	0.028	0.028	0.02	121.7	92.1	92.1	65.8
BGP704 LED70-4S/727	6370.0	47.5	134.1	0.594	0.033	0.025	0.025	0.018	108.6	82.2	82.2	59.2
BGP704 LED70-4S/730	6370.0	42.0	151.7	0.525	0.029	0.022	0.022	0.016	95.4	72.4	72.4	52.6
BGP704 LED75-4S/740	6734.0	42.5	158.4	0.531	0.028	0.021	0.021	0.015	92.1	69.1	69.1	49.4
BGP704 LED75-4S/830	6916.0	51.0	135.6	0.637	0.032	0.024	0.024	0.018	105.3	79.0	79.0	59.2



BGP704 LED75-4S/722	6916.0	58.0	119.2	0.725	0.037	0.028	0.028	0.02	121.7	92.1	92.1	65.8
BGP704 LED75-4S/727	6916.0	51.0	135.6	0.637	0.032	0.024	0.024	0.018	105.3	79.0	79.0	59.2
BGP704 LED75-4S/730	6916.0	45.5	152.0	0.569	0.029	0.022	0.022	0.016	95.4	72.4	72.4	52.6
BGP704 LED80-4S/740	7280.0	45.5	160.0	0.569	0.027	0.02	0.02	0.015	88.8	65.8	65.8	49.4
BGP704 LED80-4S/830	7280.0	55.0	132.4	0.688	0.033	0.025	0.025	0.018	108.6	82.2	82.2	59.2
BGP704 LED80-4S/722	7280.0	62.0	117.4	0.775	0.037	0.028	0.028	0.02	121.7	92.1	92.1	65.8
BGP704 LED80-4S/727	7280.0	55.0	132.4	0.688	0.033	0.025	0.025	0.018	108.6	82.2	82.2	59.2
BGP704 LED80-4S/730	7280.0	48.5	150.1	0.606	0.029	0.022	0.022	0.016	95.4	72.4	72.4	52.6
BGP704 LED85-4S/740	7826.0	47.0	166.5	0.588	0.026	0.019	0.019	0.014	85.5	62.5	62.5	46.1
BGP704 LED85-4S/830	7826.0	56.0	139.8	0.7	0.032	0.024	0.024	0.018	105.3	79.0	79.0	59.2
BGP704 LED85-4S/722	7644.0	63.0	121.3	0.787	0.036	0.027	0.027	0.02	118.4	88.8	88.8	65.8
BGP704 LED85-4S/727	7826.0	56.0	139.8	0.7	0.032	0.024	0.024	0.018	105.3	79.0	79.0	59.2
BGP704 LED85-4S/730	7826.0	50.0	156.5	0.625	0.028	0.021	0.021	0.015	92.1	69.1	69.1	49.4
BGP704 LED90-4S/740	8190.0	50.0	163.8	0.625	0.027	0.02	0.02	0.015	88.8	65.8	65.8	49.4
BGP704 LED90-4S/830	8190.0	60.0	136.5	0.75	0.032	0.024	0.024	0.018	105.3	79.0	79.0	59.2
BGP704 LED90-4S/722	8190.0	67.0	122.2	0.838	0.036	0.027	0.027	0.02	118.4	88.8	88.8	65.8
BGP704 LED90-4S/727	8190.0	60.0	136.5	0.75	0.032	0.024	0.024	0.018	105.3	79.0	79.0	59.2
BGP704 LED90-4S/730	8190.0	53.0	154.5	0.662	0.028	0.021	0.021	0.015	92.1	69.1	69.1	49.4
BGP704 LED95-4S/740	8736.0	53.0	164.8	0.662	0.026	0.019	0.019	0.014	85.5	62.5	62.5	46.1
BGP704 LED95-4S/830	8736.0	63.0	138.7	0.787	0.031	0.023	0.023	0.017	102.0	75.7	75.7	55.9
BGP704 LED95-4S/722	8736.0	71.0	123.0	0.887	0.035	0.026	0.026	0.019	115.2	85.5	85.5	62.5
BGP704 LED95-4S/727	8736.0	63.0	138.7	0.787	0.031	0.023	0.023	0.017	102.0	75.7	75.7	55.9
BGP704 LED95-4S/730	8736.0	56.0	156.0	0.7	0.028	0.021	0.021	0.015	92.1	69.1	69.1	49.4
BGP704 LED100-4S/740	9100.0	56.0	162.5	0.7	0.027	0.02	0.02	0.015	88.8	65.8	65.8	49.4



BGP704 LED100-4S/830	9100.0	67.0	135.8	0.838	0.032	0.024	0.024	0.018	105.3	79.0	79.0	59.2
BGP704 LED100-4S/722	9100.0	75.0	121.3	0.938	0.036	0.027	0.027	0.02	118.4	88.8	88.8	65.8
BGP704 LED100-4S/727	9100.0	67.0	135.8	0.838	0.032	0.024	0.024	0.018	105.3	79.0	79.0	59.2
BGP704 LED100-4S/730	9100.0	59.0	154.2	0.738	0.028	0.021	0.021	0.015	92.1	69.1	69.1	49.4
BGP704 LED110-4S/740	10010.0	61.0	164.1	0.762	0.027	0.02	0.02	0.015	88.8	65.8	65.8	49.4
BGP704 LED110-4S/830	10010.0	74.0	135.3	0.925	0.032	0.024	0.024	0.018	105.3	79.0	79.0	59.2
BGP704 LED110-4S/722	10010.0	84.0	119.2	1.05	0.037	0.028	0.028	0.02	121.7	92.1	92.1	65.8
BGP704 LED110-4S/727	10010.0	74.0	135.3	0.925	0.032	0.024	0.024	0.018	105.3	79.0	79.0	59.2
BGP704 LED110-4S/730	10010.0	66.0	151.7	0.825	0.029	0.022	0.022	0.016	95.4	72.4	72.4	52.6
BGP704 LED120-4S/740	10920.0	68.0	160.6	0.85	0.027	0.02	0.02	0.015	88.8	65.8	65.8	49.4
BGP704 LED120-4S/830	10920.0	82.0	133.2	1.025	0.033	0.025	0.025	0.018	108.6	82.2	82.2	59.2
BGP704 LED120-4S/722	10800.0	92.0	117.4	1.15	0.037	0.028	0.028	0.02	121.7	92.1	92.1	65.8
BGP704 LED120-4S/727	10920.0	82.0	133.2	1.025	0.033	0.025	0.025	0.018	108.6	82.2	82.2	59.2
BGP704 LED120-4S/730	10920.0	72.0	151.7	0.9	0.029	0.022	0.022	0.016	95.4	72.4	72.4	52.6
BGP704 LED130-4S/740	11830.0	74.0	159.9	0.925	0.028	0.021	0.021	0.015	92.1	69.1	69.1	49.4
BGP704 LED130-4S/830	11830.0	89.0	132.9	1.113	0.033	0.025	0.025	0.018	108.6	82.2	82.2	59.2
BGP704 LED130-4S/722	11700.0	102.0	114.7	1.275	0.038	0.028	0.028	0.021	125.0	92.1	92.1	69.1
BGP704 LED130-4S/727	11830.0	89.0	132.9	1.113	0.033	0.025	0.025	0.018	108.6	82.2	82.2	59.2
BGP704 LED130-4S/730	11830.0	79.0	149.7	0.988	0.03	0.022	0.022	0.017	98.7	72.4	72.4	55.9
BGP704 LED140-4S/740 DM11 GR PSU 62	12740.0	80.0	159.2	1.0	0.027	0.02	0.02	0.015	88.8	65.8	65.8	49.4
BGP704 LED140-4S/830	12600.0	97.0	129.9	1.212	0.034	0.026	0.026	0.019	111.9	85.5	85.5	62.5
BGP704 LED140-4S/722	12600.0	110.0	114.5	1.375	0.038	0.028	0.028	0.021	125.0	92.1	92.1	69.1
BGP704 LED140-4S/727	12600.0	97.0	129.9	1.212	0.034	0.026	0.026	0.019	111.9	85.5	85.5	62.5
BGP704 LED140-4S/730	12740.0	85.0	149.9	1.062	0.029	0.022	0.022	0.016	95.4	72.4	72.4	52.6



BGP704 LED150-4S/740	13650.0	83.0	164.5	1.038	0.027	0.02	0.02	0.015	88.8	65.8	65.8	49.4
BGP704 LED150-4S/830	13500.0	100.0	135.0	1.25	0.033	0.025	0.025	0.018	108.6	82.2	82.2	59.2
BGP704 LED150-4S/722	13500.0	114.0	118.4	1.425	0.037	0.028	0.028	0.02	121.7	92.1	92.1	65.8
BGP704 LED150-4S/727	13500.0	100.0	135.0	1.25	0.033	0.025	0.025	0.018	108.6	82.2	82.2	59.2
BGP704 LED150-4S/730	13650.0	89.0	153.4	1.113	0.029	0.022	0.022	0.016	95.4	72.4	72.4	52.6
BGP704 LED160-4S/740	14560.0	90.0	161.8	1.125	0.027	0.02	0.02	0.015	88.8	65.8	65.8	49.4
BGP704 LED160-4S/830	14400.0	108.0	133.3	1.35	0.032	0.024	0.024	0.018	105.3	79.0	79.0	59.2
BGP704 LED160-4S/722	14400.0	122.0	118.0	1.525	0.037	0.028	0.028	0.02	121.7	92.1	92.1	65.8
BGP704 LED160-4S/727	14400.0	108.0	133.3	1.35	0.032	0.024	0.024	0.018	105.3	79.0	79.0	59.2
BGP704 LED160-4S/730	14560.0	96.0	151.7	1.2	0.029	0.022	0.022	0.016	95.4	72.4	72.4	52.6
BGP704 LED170-4S/740	15470.0	96.0	161.1	1.2	0.028	0.021	0.021	0.015	92.1	69.1	69.1	49.4
BGP704 LED170-4S/830	15300.0	116.0	131.9	1.45	0.033	0.025	0.025	0.018	108.6	82.2	82.2	59.2
BGP704 LED170-4S/722	15300.0	130.0	117.7	1.625	0.037	0.028	0.028	0.02	121.7	92.1	92.1	65.8
BGP704 LED170-4S/727	15300.0	116.0	131.9	1.45	0.033	0.025	0.025	0.018	108.6	82.2	82.2	59.2
BGP704 LED170-4S/730	15300.0	102.0	150.0	1.275	0.029	0.022	0.022	0.016	95.4	72.4	72.4	52.6
BGP704 LED180-4S/740	16200.0	102.0	158.8	1.275	0.028	0.021	0.021	0.015	92.1	69.1	69.1	49.4
BGP704 LED180-4S/830	16200.0	124.0	130.6	1.55	0.034	0.026	0.026	0.019	111.9	85.5	85.5	62.5
BGP704 LED180-4S/722	16200.0	140.0	115.7	1.75	0.038	0.028	0.028	0.021	125.0	92.1	92.1	69.1
BGP704 LED180-4S/727	16200.0	124.0	130.6	1.55	0.034	0.026	0.026	0.019	111.9	85.5	85.5	62.5
BGP704 LED180-4S/730	16200.0	108.0	150.0	1.35	0.03	0.022	0.022	0.017	98.7	72.4	72.4	55.9
BGP704 LED190-4S/740	17100.0	108.0	158.3	1.35	0.027	0.02	0.02	0.015	88.8	65.8	65.8	49.4
BGP704 LED190-4S/830	17100.0	132.0	129.5	1.65	0.033	0.025	0.025	0.018	108.6	82.2	82.2	59.2
BGP704 LED190-4S/722	17100.0	148.0	115.5	1.85	0.037	0.028	0.028	0.02	121.7	92.1	92.1	65.8
BGP704 LED190-4S/727	17100.0	132.0	129.5	1.65	0.033	0.025	0.025	0.018	108.6	82.2	82.2	59.2



BGP704 LED190-4S/730	17100.0	116.0	147.4	1.45	0.029	0.022	0.022	0.016	95.4	72.4	72.4	52.6
BGP704 LED200-4S/740	18000.0	114.0	157.9	1.425	0.027	0.02	0.02	0.015	88.8	65.8	65.8	49.4
BGP704 LED200-4S/830	18000.0	140.0	128.6	1.75	0.033	0.025	0.025	0.018	108.6	82.2	82.2	59.2
BGP704 LED200-4S/722	17800.0	158.0	112.7	1.975	0.04	0.03	0.03	0.022	131.6	98.7	98.7	72.4
BGP704 LED200-4S/727	18000.0	140.0	128.6	1.75	0.033	0.025	0.025	0.018	108.6	82.2	82.2	59.2
BGP704 LED200-4S/730	18000.0	122.0	147.5	1.525	0.029	0.022	0.022	0.016	95.4	72.4	72.4	52.6
BGP704 LED20-4S/722	1820.0	16.0	113.8	0.2	0.038	0.028	0.028	0.021	125.0	92.1	92.1	69.1
BGP704 LED210-4S/740	18900.0	120.0	157.5	1.5	0.028	0.021	0.021	0.015	92.1	69.1	69.1	49.4
BGP704 LED210-4S/830	18900.0	148.0	127.7	1.85	0.035	0.026	0.026	0.019	115.2	85.5	85.5	62.5
BGP704 LED210-4S/727	18900.0	148.0	127.7	1.85	0.035	0.026	0.026	0.019	115.2	85.5	85.5	62.5
BGP704 LED210-4S/730	18900.0	130.0	145.4	1.625	0.031	0.023	0.023	0.017	102.0	75.7	75.7	55.9
BGP704 LED220-4S/740	19800.0	128.0	154.7	1.6	0.029	0.022	0.022	0.016	95.4	72.4	72.4	52.6
BGP704 LED220-4S/830	19800.0	156.0	126.9	1.95	0.035	0.026	0.026	0.019	115.2	85.5	85.5	62.5
BGP704 LED220-4S/727	19800.0	156.0	126.9	1.95	0.035	0.026	0.026	0.019	115.2	85.5	85.5	62.5
BGP704 LED220-4S/730	19800.0	136.0	145.6	1.7	0.031	0.023	0.023	0.017	102.0	75.7	75.7	55.9
BGP704 LED230-4S/740	20700.0	134.0	154.5	1.675	0.028	0.021	0.021	0.015	92.1	69.1	69.1	49.4
BGP704 LED230-4S/830	20470.0	164.0	124.8	2.05	0.035	0.026	0.026	0.019	115.2	85.5	85.5	62.5
BGP704 LED230-4S/727	20470.0	164.0	124.8	2.05	0.035	0.026	0.026	0.019	115.2	85.5	85.5	62.5
BGP704 LED230-4S/730	20700.0	144.0	143.8	1.8	0.031	0.023	0.023	0.017	102.0	75.7	75.7	55.9
BGP704 LED240-4S/740	21600.0	140.0	154.3	1.75	0.028	0.021	0.021	0.015	92.1	69.1	69.1	49.4
BGP704 LED240-4S/730	21600.0	150.0	144.0	1.875	0.03	0.022	0.022	0.017	98.7	72.4	72.4	55.9
BGP704 LED250-4S/740	22500.0	148.0	152.0	1.85	0.03	0.022	0.022	0.017	98.7	72.4	72.4	55.9
BGP704 LED250-4S/730	22500.0	158.0	142.4	1.975	0.032	0.024	0.024	0.018	105.3	79.0	79.0	59.2
BGP704 LED260-4S/740	23400.0	154.0	151.9	1.925	0.029	0.022	0.022	0.016	95.4	72.4	72.4	52.6



BGP704 LED260-4S/730	23140.0	166.0	139.4	2.075	0.031	0.023	0.023	0.017	102.0	75.7	75.7	55.9
----------------------	---------	-------	-------	-------	-------	-------	-------	-------	-------	------	------	------

** 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.*

