ENVIRONMENTAL PRODUCT DECLARATION

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

Philips DigiStreet

BGP761
Signify N.V.

EPD HUB
Publishing 2024-04-26

GENERAL INFORMATION

MANUFACTURER

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

EPD STANDARDS, SCOPE AND VERIFICATION

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

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

PRODUCT

Product name	Philips DigiStreet Mini
Additional labels	BGP761 LED45-/740 I DM10 DGR 32-48
Product reference	910925866230
Place of production	Poland
Period for data	2022
Averaging in EPD	No averaging
Variation in GWP-fossil for A1-A3	Not applicable

ENVIRONMENTAL DATA SUMMARY

Declared unit	1 unit of 4050 lumens over 100000 hours
Declared unit mass	8.151 kg
GWP-fossil, A1-A3 (kgCO2e)	1,62E+02
GWP-total, A1-A3 (kgCO2e)	1,62E+02
Secondary material, inputs (%)	7.03
Secondary material, outputs (%)	51.4
Total energy use, A1-A3 (kWh)	482
Total water use, A1-A3 (m3e)	0.77

PRODUCT AND MANUFACTURER

ABOUT THE MANUFACTURER

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

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

PRODUCT DESCRIPTION

Developed with the aim to become your long term partner ,. the system ready architecture of DigiStreet enables you to enjoy the benefits of connected lighting systems today and also gets the city ready for the innovations to come!. Its two sockets enable you to connect directly to the Philips CityTouch system and is also prepared to connect you to the future innovations of IoT. Next to this, each individual luminaire is uniquely identifiable, thanks to the Philips Service tag application. With a simple scan of a QR code, placed on the inside of the mast door, you gain instant access to the luminaire configuration, making maintenance and programming operations faster and easier, no matter what stage of the luminaire's lifetime. Digistreet is also equipped with dedicated light recipes that: 1) maintain an optimal ecosystems for bats or 2) preserve a dark night sky.
For more information, please visit
https://www.lighting.philips.com/link/BGP760/fam/aa/en

PRODUCT RAW MATERIAL MAIN COMPOSITION

Raw material category	Amount, mass- %	Material origin
Metals	69.21	EUR, ASIA
Minerals	10.48	EU
Fossil materials	20.31	EUR, ASIA
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	0.017

FUNCTIONAL UNIT AND SERVICE LIFE

Declared unit	1 Product
Mass per declared unit	8.151 kg
Functional unit	1 unit of 4050 lumens over 100000 hours
Reference service life	100000 hours

SUBSTANCES, REACH - VERY HIGH CONCERN

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

PRODUCT LIFE-CYCLE

SYSTEM BOUNDARY

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

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

Modules not relevant = MNR.

MANUFACTURING AND PACKAGING (A1-A3)

The environmental impacts considered for the product stage cover the manufacturing of raw materials used in the production as well as packaging materials and other ancillary materials. Also, electricity, and waste formed in the production processes at Signify's manufacturing facilities are included in this stage.

The product is made of metals, plastics, and electronic components. All components are transported to Signify's production facility, where the main manufacturing processes primarily are associated with assembly. The finished product is packaged with polyethylene, cardboard, and/or paper as packaging material before being sent to customers. Manufacturing loss, ancillaries and wastes are calculated according to the data that each manufacturing site is sharing with Signify. The total annual amount of waste in kg is allocated to the total annual production in kg at the specific manufacturing site responsible for the production of the studied luminaire.

Thus, it is possible to allocate it according to the weight of the product analysed in this study. Some of the wastes are due to ancillary materials used during manufacturing while the rest is due to material losses.

TRANSPORT AND INSTALLATION (A4-A5)

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

PRODUCT USE AND MAINTENANCE (B1-B7)

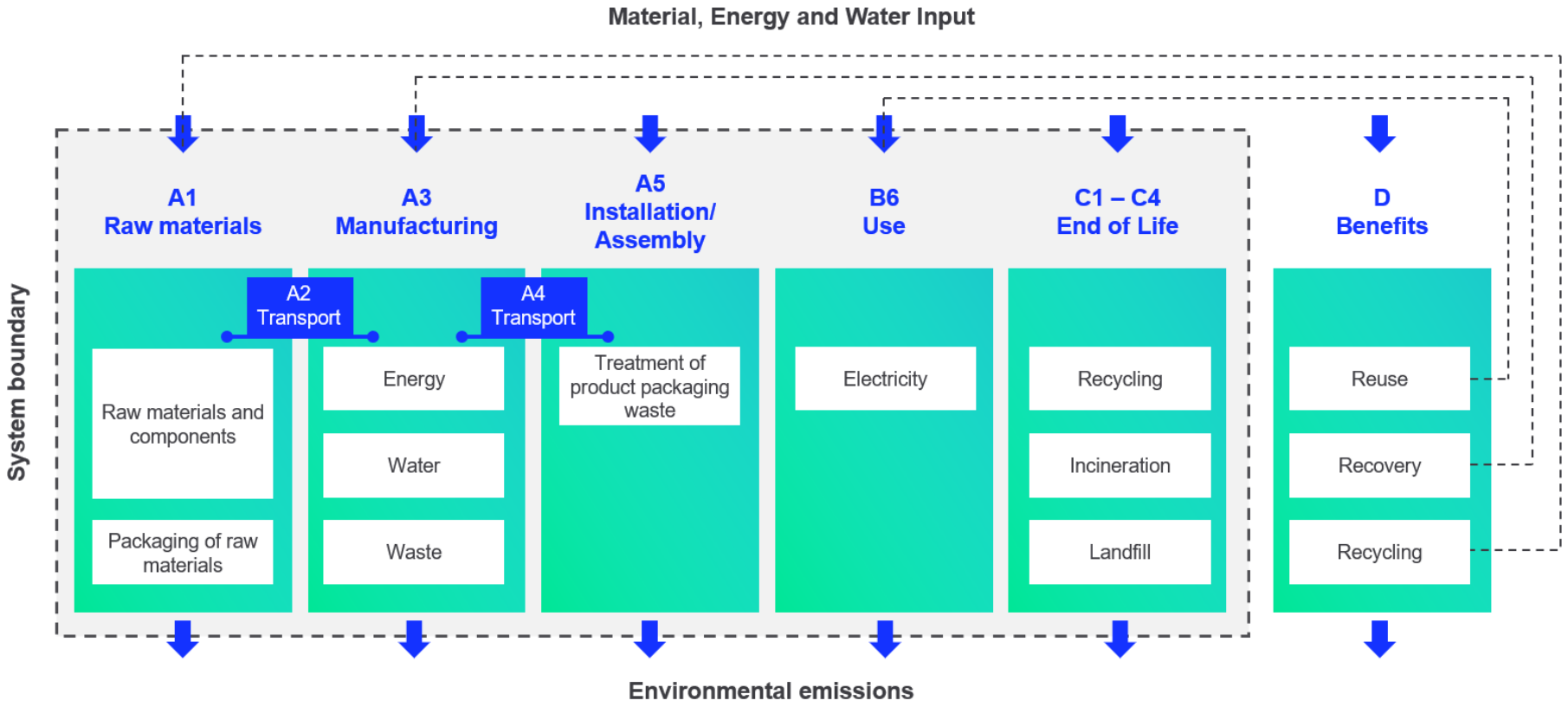
During the use phase, the product consumes electricity from Europe's electricity grid mix (B6). The total power consumption of the reference product is calculated as follows: Wattage x Reference lifetime = kWh consumed throughout the entire use phase B6.

PRODUCT END OF LIFE (C1-C4, D)

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

production (D). The benefits and loads of incineration and recycling are included in Module D.

SYSTEM BOUNDARY



LIFE-CYCLE ASSESSMENT

CUT-OFF CRITERIA

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

ALLOCATION, ESTIMATES AND ASSUMPTIONS

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

Data type	Allocation
Raw materials	No allocation
No allocation	No allocation
No allocation	Allocated by mass or volume
Allocated by mass or volume	Allocated by mass or volume

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

AVERAGES AND VARIABILITY

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

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

LCA SOFTWARE AND BIBLIOGRAPHY

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

ENVIRONMENTAL IMPACT DATA

CORE ENVIRONMENTAL IMPACT INDICATORS – EN 15804+A2, PEF

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP – total[1)]	kg CO_2e	1,60E+02	1,54E+00	3,77E-01	1,62E+02	1,54E+00	8,38E-02	MNR	MNR	MNR	MNR	MNR	1,03E+03	MNR	MNR	9,77E-02	1,52E+00	1,06E+00	-7,12E+01
GWP – fossil	kg CO_2e	1,60E+02	1,54E+00	4,37E-01	1,62E+02	1,54E+00	2,30E-02	MNR	MNR	MNR	MNR	MNR	1,03E+03	MNR	MNR	9,76E-02	1,52E+00	1,06E+00	-7,12E+01
GWP – biogenic	kg CO_2e	-5,80E-01	0,00E+00	-6,07E-02	-6,41E-01	5,95E-04	6,08E-02	MNR	MNR	MNR	MNR	MNR	0,00E+00	MNR	MNR	0,00E+00	0,00E+00	0,00E+00	-1,04E-02
GWP – LULUC	kg CO_2e	2,16E-01	6,29E-04	7,27E-04	2,18E-01	5,68E-04	6,73E-07	MNR	MNR	MNR	MNR	MNR	2,40E+00	MNR	MNR	3,60E-05	1,52E-04	1,07E-04	-6,31E-03
Ozone depletion pot.	kg CFC_{-11}e	1,50E-05	3,49E-07	7,11E-08	1,54E-05	3,54E-07	1,83E-10	MNR	MNR	MNR	MNR	MNR	5,22E-05	MNR	MNR	2,25E-08	1,40E-08	1,24E-08	-1,93E-06
Acidification potential	mol H^+e	1,14E+00	1,13E-02	1,21E-03	1,15E+00	6,52E-03	1,73E-05	MNR	MNR	MNR	MNR	MNR	5,87E+00	MNR	MNR	4,13E-04	1,48E-03	6,51E-04	-7,34E-01
EP-freshwater[2)]	kg Pe	6,64E-03	1,18E-05	7,63E-06	6,66E-03	1,26E-05	2,03E-08	MNR	MNR	MNR	MNR	MNR	1,09E-01	MNR	MNR	7,99E-07	4,89E-06	5,70E-06	-4,53E-03
EP-marine	kg Ne	1,66E-01	3,08E-03	3,35E-04	1,69E-01	1,94E-03	7,86E-06	MNR	MNR	MNR	MNR	MNR	7,78E-01	MNR	MNR	1,23E-04	3,97E-04	1,22E-03	-7,99E-02
EP-terrestrial	mol Ne	1,84E+00	3,41E-02	2,93E-03	1,88E+00	2,14E-02	8,06E-05	MNR	MNR	MNR	MNR	MNR	8,86E+00	MNR	MNR	1,36E-03	4,39E-03	2,26E-03	-9,24E-01
POCP ("smog")[3)]	kg NMVOCe	5,44E-01	9,99E-03	1,25E-03	5,55E-01	6,84E-03	1,99E-05	MNR	MNR	MNR	MNR	MNR	2,42E+00	MNR	MNR	4,34E-04	1,15E-03	7,97E-04	-2,67E-01
ADP-minerals & metals[4)]	kg Sbe	3,77E-03	3,45E-06	2,09E-06	3,77E-03	3,61E-06	6,05E-09	MNR	MNR	MNR	MNR	MNR	9,59E-03	MNR	MNR	2,29E-07	1,14E-05	2,66E-07	-9,41E-04
ADP-fossil resources	MJ	1,63E+03	2,27E+01	6,60E+00	1,66E+03	2,31E+01	1,58E-02	MNR	MNR	MNR	MNR	MNR	2,19E+04	MNR	MNR	1,47E+00	1,51E+00	1,20E+00	-6,97E+02
Water use[5)]	m^3e depr.	3,26E+01	9,84E-02	1,11E-01	3,29E+01	1,03E-01	3,63E-03	MNR	MNR	MNR	MNR	MNR	5,98E+02	MNR	MNR	6,56E-03	7,73E-02	7,76E-02	-4,87E+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	1,19E-05	1,63E-07	1,99E-08	1,21E-05	1,77E-07	1,44E-10	MNR	MNR	MNR	MNR	MNR	1,93E-05	MNR	MNR	1,13E-08	1,72E-08	9,55E-09	-3,91E-06
Ionizing radiation[6)]	kBq U235e	5,68E+00	1,08E-01	1,16E-02	5,80E+00	1,10E-01	4,98E-05	MNR	MNR	MNR	MNR	MNR	5,92E+02	MNR	MNR	6,98E-03	8,65E-03	6,26E-03	-4,18E+00

Ecotoxicity (freshwater)	CTUe	5,45E+03	1,99E+01	8,17E+00	5,48E+03	2,08E+01	8,64E-02	MNR	MNR	MNR	MNR	MNR	1,49E+04	MNR	MNR	1,32E+00	8,63E+00	4,88E+02	-1,53E+03
Human toxicity, cancer	CTUh	2,07E-07	5,57E-10	2,92E-10	2,08E-07	5,11E-10	5,31E-12	MNR	MNR	MNR	MNR	MNR	4,87E-07	MNR	MNR	3,24E-11	2,94E-10	1,04E-09	-9,11E-10
Human tox. non-cancer	CTUh	4,58E-06	1,92E-08	3,45E-09	4,60E-06	2,06E-08	2,39E-10	MNR	MNR	MNR	MNR	MNR	1,60E-05	MNR	MNR	1,31E-09	1,20E-08	4,78E-08	-1,64E-06
SQP[7)]	-	4,65E+02	2,40E+01	4,35E+00	4,94E+02	2,66E+01	8,22E-03	MNR	MNR	MNR	MNR	MNR	3,95E+03	MNR	MNR	1,69E+00	2,48E+00	1,74E+00	-1,38E+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	1,15E+02	2,47E-01	6,02E+00	1,22E+02	2,61E-01	4,48E-04	MNR	MNR	MNR	MNR	MNR	4,45E+03	MNR	MNR	1,65E-02	1,99E-01	5,22E-02	-1,08E+01
Renew. PER as material	MJ	5,91E+00	0,00E+00	5,51E-01	6,46E+00	0,00E+00	-5,51E-01	MNR	MNR	MNR	MNR	MNR	0,00E+00	MNR	MNR	0,00E+00	-2,28E-01	-4,24E-01	0,00E+00
Total use of renew. PER	MJ	1,21E+02	2,47E-01	6,57E+00	1,28E+02	2,61E-01	-5,51E-01	MNR	MNR	MNR	MNR	MNR	4,45E+03	MNR	MNR	1,65E-02	-2,91E-02	-3,71E-01	-1,08E+01
Non-re. PER as energy	MJ	1,59E+03	2,27E+01	5,84E+00	1,61E+03	2,31E+01	1,58E-02	MNR	MNR	MNR	MNR	MNR	2,18E+04	MNR	MNR	1,47E+00	1,51E+00	1,20E+00	-6,97E+02
Non-re. PER as material	MJ	3,93E+01	0,00E+00	4,45E-01	3,98E+01	0,00E+00	-4,45E-01	MNR	MNR	MNR	MNR	MNR	0,00E+00	MNR	MNR	0,00E+00	-1,51E+01	-1,55E+01	0,00E+00
Total use of non-re. PER	MJ	1,63E+03	2,27E+01	6,28E+00	1,65E+03	2,31E+01	-4,29E-01	MNR	MNR	MNR	MNR	MNR	2,18E+04	MNR	MNR	1,47E+00	-1,36E+01	-1,43E+01	-6,97E+02
Secondary materials	kg	5,73E-01	6,69E-03	3,39E-02	6,13E-01	6,42E-03	1,91E-05	MNR	MNR	MNR	MNR	MNR	2,25E+00	MNR	MNR	4,07E-04	1,51E-03	2,77E-03	2,91E+00
Renew. secondary fuels	MJ	9,84E-02	6,03E-05	2,55E-03	1,01E-01	6,48E-05	2,32E-07	MNR	MNR	MNR	MNR	MNR	1,83E-02	MNR	MNR	4,11E-06	7,46E-05	2,28E-05	-1,59E-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	7,66E-01	2,80E-03	2,67E-03	7,71E-01	3,00E-03	4,11E-05	MNR	MNR	MNR	MNR	MNR	1,88E+01	MNR	MNR	1,90E-04	2,71E-03	1,57E-03	-2,24E-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	2,84E+01	3,02E-02	2,13E-02	2,84E+01	3,07E-02	4,36E-04	MNR	MNR	MNR	MNR	MNR	7,85E+01	MNR	MNR	1,94E-03	9,44E-03	2,68E-02	-1,12E+01
Non-hazardous waste	kg	2,61E+02	4,72E-01	2,32E-01	2,62E+02	5,04E-01	4,18E-02	MNR	MNR	MNR	MNR	MNR	4,97E+03	MNR	MNR	3,19E-02	8,83E-01	3,34E+00	-2,08E+02
Radioactive waste	kg	2,77E-03	1,53E-04	7,69E-06	2,93E-03	1,55E-04	2,76E-08	MNR	MNR	MNR	MNR	MNR	1,59E-01	MNR	MNR	9,81E-06	5,49E-06	0,00E+00	-1,54E-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
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	4,19E+00	0,00E+00	0,00E+00
Materials for energy rec	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MNR	MNR	MNR	MNR	MNR	0,00E+00	MNR	MNR	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported energy	MJ	0,00E+00	0,00E+00	2,79E-01	2,79E-01	0,00E+00	0,00E+00	MNR	MNR	MNR	MNR	MNR	0,00E+00	MNR	MNR	0,00E+00	1,31E+01	0,00E+00	0,00E+00

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

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Global Warming Pot.	kg CO_2e	1,55E+02	1,53E+00	4,35E-01	1,57E+02	1,52E+00	2,29E-02	MNR	MNR	MNR	MNR	MNR	1,02E+03	MNR	MNR	9,66E-02	1,51E+00	1,49E+00	-6,98E+01
Ozone depletion Pot.	kg CFC_{-11}e	1,12E-05	2,76E-07	6,15E-08	1,16E-05	2,81E-07	1,59E-10	MNR	MNR	MNR	MNR	MNR	4,52E-05	MNR	MNR	1,78E-08	1,16E-08	1,01E-08	-1,64E-06
Acidification	kg SO_2e	9,64E-01	8,92E-03	9,73E-04	9,74E-01	5,07E-03	1,25E-05	MNR	MNR	MNR	MNR	MNR	4,98E+00	MNR	MNR	3,21E-04	1,16E-03	4,99E-04	-6,33E-01
Eutrophication	kg PO_4^3e	2,81E-01	1,52E-03	5,45E-04	2,83E-01	1,15E-03	9,72E-06	MNR	MNR	MNR	MNR	MNR	3,83E+00	MNR	MNR	7,32E-05	4,61E-04	4,48E-03	-1,79E-01
POCP (“smog”)	kg C_2H_4e	5,62E-02	2,89E-04	9,19E-05	5,66E-02	1,98E-04	3,37E-07	MNR	MNR	MNR	MNR	MNR	2,04E-01	MNR	MNR	1,25E-05	4,06E-05	1,31E-04	-3,11E-02
ADP-elements	kg Sbe	3,74E-03	3,34E-06	2,03E-06	3,75E-03	3,50E-06	4,85E-09	MNR	MNR	MNR	MNR	MNR	9,57E-03	MNR	MNR	2,22E-07	1,14E-05	2,42E-07	-9,34E-04
ADP-fossil	MJ	1,63E+03	2,27E+01	6,59E+00	1,66E+03	2,31E+01	1,58E-02	MNR	MNR	MNR	MNR	MNR	2,18E+04	MNR	MNR	1,47E+00	1,51E+00	1,20E+00	-6,96E+02

APPENDIX (EPD HUB ALIGNED)

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

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

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

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

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

$$TSF = PSF * CSF$$

Table A1: Light management function (PEP EcoPassport aligned)

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

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

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

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

Configuration	Flux [lm]	Power [W]	Efficacy [lm/W]	PSF	Total Scaling Factor (TSF)				Scaled Impacts (GWP100 B6 - kg CO2eq.)			
					NC	DD	PS	DD+PS	NC	DD	PS	DD+PS
BGP761 LED45-4S/722	4050	34,5	117,4	1,327	1,327	0,995	0,995	0,730	1366,7	1025,0	1025,0	751,7
BGP761 LED50-4S/722	4450	38,5	115,6	1,481	1,481	1,111	1,111	0,814	1525,2	1143,9	1143,9	838,9
BGP761 LED55-4S/722	4984	42,5	117,3	1,635	1,635	1,226	1,226	0,899	1683,7	1262,7	1262,7	926,0
BGP761 LED59-4S/722	5340	46	116,1	1,769	1,769	1,327	1,327	0,973	1822,3	1366,7	1366,7	1002,3
BGP761 LED64-4S/722	5696	50	113,9	1,923	1,923	1,442	1,442	1,058	1980,8	1485,6	1485,6	1089,4
BGP761 LED69-4S/722	6230	52	119,8	2,000	2,000	1,500	1,500	1,100	2060,0	1545,0	1545,0	1133,0
BGP761 LED74-4S/722	6586	56	117,6	2,154	2,154	1,615	1,615	1,185	2218,5	1663,8	1663,8	1220,2
BGP761 LED79-4S/722	7120	61	116,7	2,346	2,346	1,760	1,760	1,290	2416,5	1812,4	1812,4	1329,1
BGP761 LED84-4S/722	7476	65	115,0	2,500	2,500	1,875	1,875	1,375	2575,0	1931,3	1931,3	1416,3
BGP761 LED90-4S/722	8010	70	114,4	2,692	2,692	2,019	2,019	1,481	2773,1	2079,8	2079,8	1525,2
BGP761 LED94-4S/722	8366	74	113,1	2,846	2,846	2,135	2,135	1,565	2931,5	2198,7	2198,7	1612,3
BGP761 LED109-4S/727	9790	77	127,1	2,962	2,962	2,221	2,221	1,629	3050,4	2287,8	2287,8	1677,7
BGP761 LED45-4S/727	4050	30,5	132,8	1,173	1,173	0,880	0,880	0,645	1208,3	906,2	906,2	664,5
BGP761 LED50-4S/727	4500	34	132,4	1,308	1,308	0,981	0,981	0,719	1346,9	1010,2	1010,2	740,8
BGP761 LED55-4S/727	5040	38	132,6	1,462	1,462	1,096	1,096	0,804	1505,4	1129,0	1129,0	828,0
BGP761 LED59-4S/727	5340	41	130,2	1,577	1,577	1,183	1,183	0,867	1624,2	1218,2	1218,2	893,3
BGP761 LED64-4S/727	5696	44,5	128,0	1,712	1,712	1,284	1,284	0,941	1762,9	1322,2	1322,2	969,6

BGP761 LED69-4S/727	6230	48,5	128,5	1,865	1,865	1,399	1,399	1,026	1921,3	1441,0	1441,0	1056,7
BGP761 LED74-4S/727	6586	53	124,3	2,038	2,038	1,529	1,529	1,121	2099,6	1574,7	1574,7	1154,8
BGP761 LED79-4S/727	7120	57	124,9	2,192	2,192	1,644	1,644	1,206	2258,1	1693,6	1693,6	1241,9
BGP761 LED84-4S/727	7476	57	131,2	2,192	2,192	1,644	1,644	1,206	2258,1	1693,6	1693,6	1241,9
BGP761 LED90-4S/727	8010	62	129,2	2,385	2,385	1,788	1,788	1,312	2456,2	1842,1	1842,1	1350,9
BGP761 LED94-4S/727	8366	65	128,7	2,500	2,500	1,875	1,875	1,375	2575,0	1931,3	1931,3	1416,3
BGP761 LED109-4S/730	9790	68	144,0	2,615	2,615	1,962	1,962	1,438	2693,8	2020,4	2020,4	1481,6
BGP761 LED119-4S/730	10680	75	142,4	2,885	2,885	2,163	2,163	1,587	2971,2	2228,4	2228,4	1634,1
BGP761 LED45-4S/730	4050	27,5	147,3	1,058	1,058	0,793	0,793	0,582	1089,4	817,1	817,1	599,2
BGP761 LED50-4S/730	4500	30,5	147,5	1,173	1,173	0,880	0,880	0,645	1208,3	906,2	906,2	664,5
BGP761 LED55-4S/730	5040	33,5	150,4	1,288	1,288	0,966	0,966	0,709	1327,1	995,3	995,3	729,9
BGP761 LED59-4S/730	5400	36	150,0	1,385	1,385	1,038	1,038	0,762	1426,2	1069,6	1069,6	784,4
BGP761 LED64-4S/730	5696	39,5	144,2	1,519	1,519	1,139	1,139	0,836	1564,8	1173,6	1173,6	860,6
BGP761 LED69-4S/730	6230	43	144,9	1,654	1,654	1,240	1,240	0,910	1703,5	1277,6	1277,6	936,9
BGP761 LED74-4S/730	6586	46	143,2	1,769	1,769	1,327	1,327	0,973	1822,3	1366,7	1366,7	1002,3
BGP761 LED79-4S/730	7120	49,5	143,8	1,904	1,904	1,428	1,428	1,047	1961,0	1470,7	1470,7	1078,5
BGP761 LED84-4S/730	7476	53	141,1	2,038	2,038	1,529	1,529	1,121	2099,6	1574,7	1574,7	1154,8
BGP761 LED90-4S/730	8010	55	145,6	2,115	2,115	1,587	1,587	1,163	2178,8	1634,1	1634,1	1198,4
BGP761 LED94-4S/730	8366	57	146,8	2,192	2,192	1,644	1,644	1,206	2258,1	1693,6	1693,6	1241,9
BGP761 LED109-4S/740	9790	63	155,4	2,423	2,423	1,817	1,817	1,333	2495,8	1871,8	1871,8	1372,7
BGP761 LED119-4S/740	10680	70	152,6	2,692	2,692	2,019	2,019	1,481	2773,1	2079,8	2079,8	1525,2
BGP761 LED45-4S/740	4050	26	155,8	1,000	1,000	0,750	0,750	0,550	1030,0	772,5	772,5	566,5
BGP761 LED50-4S/740	4500	28,5	157,9	1,096	1,096	0,822	0,822	0,603	1129,0	846,8	846,8	621,0
BGP761 LED55-4S/740	5040	31,5	160,0	1,212	1,212	0,909	0,909	0,666	1247,9	935,9	935,9	686,3
BGP761 LED59-4S/740	5400	34	158,8	1,308	1,308	0,981	0,981	0,719	1346,9	1010,2	1010,2	740,8

BGP761 LED64-4S/740	5760	37	155,7	1,423	1,423	1,067	1,067	0,783	1465,8	1099,3	1099,3	806,2
BGP761 LED69-4S/740	6230	40	155,8	1,538	1,538	1,154	1,154	0,846	1584,6	1188,5	1188,5	871,5
BGP761 LED74-4S/740	6586	43,5	151,4	1,673	1,673	1,255	1,255	0,920	1723,3	1292,5	1292,5	947,8
BGP761 LED79-4S/740	7120	46,5	153,1	1,788	1,788	1,341	1,341	0,984	1842,1	1381,6	1381,6	1013,2
BGP761 LED84-4S/740	7476	49,5	151,0	1,904	1,904	1,428	1,428	1,047	1961,0	1470,7	1470,7	1078,5
BGP761 LED90-4S/740	8010	51	157,1	1,962	1,962	1,471	1,471	1,079	2020,4	1515,3	1515,3	1111,2
BGP761 LED94-4S/740	8366	54	154,9	2,077	2,077	1,558	1,558	1,142	2139,2	1604,4	1604,4	1176,6
BGP761 LED109-4S/757	9790	63	155,4	2,423	2,423	1,817	1,817	1,333	2495,8	1871,8	1871,8	1372,7
BGP761 LED119-4S/757	10680	70	152,6	2,692	2,692	2,019	2,019	1,481	2773,1	2079,8	2079,8	1525,2
BGP761 LED45-4S/757	4050	26	155,8	1,000	1,000	0,750	0,750	0,550	1030,0	772,5	772,5	566,5
BGP761 LED50-4S/757	4500	28,5	157,9	1,096	1,096	0,822	0,822	0,603	1129,0	846,8	846,8	621,0
BGP761 LED55-4S/757	5040	31,5	160,0	1,212	1,212	0,909	0,909	0,666	1247,9	935,9	935,9	686,3
BGP761 LED59-4S/757	5400	34	158,8	1,308	1,308	0,981	0,981	0,719	1346,9	1010,2	1010,2	740,8
BGP761 LED64-4S/757	5760	37	155,7	1,423	1,423	1,067	1,067	0,783	1465,8	1099,3	1099,3	806,2
BGP761 LED69-4S/757	6230	40	155,8	1,538	1,538	1,154	1,154	0,846	1584,6	1188,5	1188,5	871,5
BGP761 LED74-4S/757	6586	43,5	151,4	1,673	1,673	1,255	1,255	0,920	1723,3	1292,5	1292,5	947,8
BGP761 LED79-4S/757	7120	46,5	153,1	1,788	1,788	1,341	1,341	0,984	1842,1	1381,6	1381,6	1013,2
BGP761 LED84-4S/757	7476	50	149,5	1,923	1,923	1,442	1,442	1,058	1980,8	1485,6	1485,6	1089,4
BGP761 LED90-4S/757	8010	51	157,1	1,962	1,962	1,471	1,471	1,079	2020,4	1515,3	1515,3	1111,2
BGP761 LED94-4S/757	8366	54	154,9	2,077	2,077	1,558	1,558	1,142	2139,2	1604,4	1604,4	1176,6
BGP761 LED45-4S/827	4050	33	122,7	1,269	1,269	0,952	0,952	0,698	1307,3	980,5	980,5	719,0
BGP761 LED50-4S/827	4500	37	121,6	1,423	1,423	1,067	1,067	0,783	1465,8	1099,3	1099,3	806,2
BGP761 LED55-4S/827	4984	41	121,6	1,577	1,577	1,183	1,183	0,867	1624,2	1218,2	1218,2	893,3
BGP761 LED59-4S/827	5340	44	121,4	1,692	1,692	1,269	1,269	0,931	1743,1	1307,3	1307,3	958,7
BGP761 LED64-4S/827	5696	48,5	117,4	1,865	1,865	1,399	1,399	1,026	1921,3	1441,0	1441,0	1056,7

BGP761 LED69-4S/827	6230	50	124,6	1,923	1,923	1,442	1,442	1,058	1980,8	1485,6	1485,6	1089,4
BGP761 LED74-4S/827	6586	54	122,0	2,077	2,077	1,558	1,558	1,142	2139,2	1604,4	1604,4	1176,6
BGP761 LED79-4S/827	7120	58	122,8	2,231	2,231	1,673	1,673	1,227	2297,7	1723,3	1723,3	1263,7
BGP761 LED84-4S/827	7476	62	120,6	2,385	2,385	1,788	1,788	1,312	2456,2	1842,1	1842,1	1350,9
BGP761 LED90-4S/827	8010	67	119,6	2,577	2,577	1,933	1,933	1,417	2654,2	1990,7	1990,7	1459,8
BGP761 LED94-4S/827	8366	71	117,8	2,731	2,731	2,048	2,048	1,502	2812,7	2109,5	2109,5	1547,0
BGP761 LED109-4S/830	9790	77	127,1	2,962	2,962	2,221	2,221	1,629	3050,4	2287,8	2287,8	1677,7
BGP761 LED45-4S/830	4050	30,5	132,8	1,173	1,173	0,880	0,880	0,645	1208,3	906,2	906,2	664,5
BGP761 LED50-4S/830	4500	34	132,4	1,308	1,308	0,981	0,981	0,719	1346,9	1010,2	1010,2	740,8
BGP761 LED55-4S/830	5040	38	132,6	1,462	1,462	1,096	1,096	0,804	1505,4	1129,0	1129,0	828,0
BGP761 LED59-4S/830	5340	41	130,2	1,577	1,577	1,183	1,183	0,867	1624,2	1218,2	1218,2	893,3
BGP761 LED64-4S/830	5696	44,5	128,0	1,712	1,712	1,284	1,284	0,941	1762,9	1322,2	1322,2	969,6
BGP761 LED69-4S/830	6230	46,5	134,0	1,788	1,788	1,341	1,341	0,984	1842,1	1381,6	1381,6	1013,2
BGP761 LED74-4S/830	6586	50	131,7	1,923	1,923	1,442	1,442	1,058	1980,8	1485,6	1485,6	1089,4
BGP761 LED79-4S/830	7120	54	131,9	2,077	2,077	1,558	1,558	1,142	2139,2	1604,4	1604,4	1176,6
BGP761 LED84-4S/830	7476	57	131,2	2,192	2,192	1,644	1,644	1,206	2258,1	1693,6	1693,6	1241,9
BGP761 LED90-4S/830	8010	62	129,2	2,385	2,385	1,788	1,788	1,312	2456,2	1842,1	1842,1	1350,9
BGP761 LED94-4S/830	8366	65	128,7	2,500	2,500	1,875	1,875	1,375	2575,0	1931,3	1931,3	1416,3
BGP761 LED109-4S/840	9790	74	132,3	2,846	2,846	2,135	2,135	1,565	2931,5	2198,7	2198,7	1612,3
BGP761 LED45-4S/840	4050	29,5	137,3	1,135	1,135	0,851	0,851	0,624	1168,7	876,5	876,5	642,8
BGP761 LED50-4S/840	4500	33	136,4	1,269	1,269	0,952	0,952	0,698	1307,3	980,5	980,5	719,0
BGP761 LED55-4S/840	5040	36,5	138,1	1,404	1,404	1,053	1,053	0,772	1446,0	1084,5	1084,5	795,3
BGP761 LED59-4S/840	5340	39,5	135,2	1,519	1,519	1,139	1,139	0,836	1564,8	1173,6	1173,6	860,6
BGP761 LED64-4S/840	5696	43	132,5	1,654	1,654	1,240	1,240	0,910	1703,5	1277,6	1277,6	936,9
BGP761 LED69-4S/840	6230	44,5	140,0	1,712	1,712	1,284	1,284	0,941	1762,9	1322,2	1322,2	969,6

BGP761 LED74-4S/840	6586	48	137,2	1,846	1,846	1,385	1,385	1,015	1901,5	1426,2	1426,2	1045,8
BGP761 LED79-4S/840	7120	52	136,9	2,000	2,000	1,500	1,500	1,100	2060,0	1545,0	1545,0	1133,0
BGP761 LED84-4S/840	7476	55	135,9	2,115	2,115	1,587	1,587	1,163	2178,8	1634,1	1634,1	1198,4
BGP761 LED90-4S/840	8010	60	133,5	2,308	2,308	1,731	1,731	1,269	2376,9	1782,7	1782,7	1307,3
BGP761 LED94-4S/840	8366	63	132,8	2,423	2,423	1,817	1,817	1,333	2495,8	1871,8	1871,8	1372,7

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

APPENDIX (PEP ECOPASSPORT ALIGNED)

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

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

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

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

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

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

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

$$PGSF = PSF * GSF$$

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

$$TSF = PGSF * CSF$$

Table A3: Light management functions (PEP EcoPassport aligned)

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

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

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

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

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

Configuration	Flux [lm]	Power [W]	Efficacy [lm/W]	PSF	Total Scaling Factor (TSF)				Scaled Impacts (GWP100 B6 - kg CO2eq.)			
					NC	DD	PS	DD+PS	NC	DD	PS	DD+PS
BGP761 LED45-4S/722	4050	34,5	117,4	1,327	0,115	0,086	0,086	0,063	118,1	88,6	88,6	65,0
BGP761 LED50-4S/722	4450	38,5	115,6	1,481	0,116	0,087	0,087	0,064	120,0	90,0	90,0	66,0
BGP761 LED55-4S/722	4984	42,5	117,3	1,635	0,115	0,086	0,086	0,063	118,2	88,7	88,7	65,0
BGP761 LED59-4S/722	5340	46	116,1	1,769	0,116	0,087	0,087	0,064	119,4	89,6	89,6	65,7
BGP761 LED64-4S/722	5696	50	113,9	1,923	0,118	0,089	0,089	0,065	121,7	91,3	91,3	66,9
BGP761 LED69-4S/722	6230	52	119,8	2,000	0,112	0,084	0,084	0,062	115,7	86,8	86,8	63,7
BGP761 LED74-4S/722	6586	56	117,6	2,154	0,114	0,086	0,086	0,063	117,9	88,4	88,4	64,8
BGP761 LED79-4S/722	7120	61	116,7	2,346	0,115	0,086	0,086	0,063	118,8	89,1	89,1	65,3
BGP761 LED84-4S/722	7476	65	115,0	2,500	0,117	0,088	0,088	0,064	120,6	90,4	90,4	66,3
BGP761 LED90-4S/722	8010	70	114,4	2,692	0,118	0,088	0,088	0,065	121,2	90,9	90,9	66,6

BGP761 LED94-4S/722	8366	74	113,1	2,846	0,119	0,089	0,089	0,065	122,6	92,0	92,0	67,5
BGP761 LED109-4S/727	9790	77	127,1	2,962	0,106	0,079	0,079	0,058	109,1	81,8	81,8	60,0
BGP761 LED45-4S/727	4050	30,5	132,8	1,173	0,101	0,076	0,076	0,056	104,4	78,3	78,3	57,4
BGP761 LED50-4S/727	4500	34	132,4	1,308	0,102	0,076	0,076	0,056	104,8	78,6	78,6	57,6
BGP761 LED55-4S/727	5040	38	132,6	1,462	0,101	0,076	0,076	0,056	104,5	78,4	78,4	57,5
BGP761 LED59-4S/727	5340	41	130,2	1,577	0,103	0,078	0,078	0,057	106,5	79,8	79,8	58,6
BGP761 LED64-4S/727	5696	44,5	128,0	1,712	0,105	0,079	0,079	0,058	108,3	81,2	81,2	59,6
BGP761 LED69-4S/727	6230	48,5	128,5	1,865	0,105	0,079	0,079	0,058	107,9	81,0	81,0	59,4
BGP761 LED74-4S/727	6586	53	124,3	2,038	0,108	0,081	0,081	0,060	111,6	83,7	83,7	61,4
BGP761 LED79-4S/727	7120	57	124,9	2,192	0,108	0,081	0,081	0,059	111,0	83,3	83,3	61,1
BGP761 LED84-4S/727	7476	57	131,2	2,192	0,103	0,077	0,077	0,056	105,7	79,3	79,3	58,1
BGP761 LED90-4S/727	8010	62	129,2	2,385	0,104	0,078	0,078	0,057	107,3	80,5	80,5	59,0
BGP761 LED94-4S/727	8366	65	128,7	2,500	0,105	0,078	0,078	0,058	107,7	80,8	80,8	59,3
BGP761 LED109-4S/730	9790	68	144,0	2,615	0,094	0,070	0,070	0,051	96,3	72,2	72,2	53,0
BGP761 LED119-4S/730	10680	75	142,4	2,885	0,095	0,071	0,071	0,052	97,4	73,0	73,0	53,6
BGP761 LED45-4S/730	4050	27,5	147,3	1,058	0,091	0,069	0,069	0,050	94,1	70,6	70,6	51,8
BGP761 LED50-4S/730	4500	30,5	147,5	1,173	0,091	0,068	0,068	0,050	94,0	70,5	70,5	51,7
BGP761 LED55-4S/730	5040	33,5	150,4	1,288	0,089	0,067	0,067	0,049	92,2	69,1	69,1	50,7
BGP761 LED59-4S/730	5400	36	150,0	1,385	0,090	0,067	0,067	0,049	92,4	69,3	69,3	50,8
BGP761 LED64-4S/730	5696	39,5	144,2	1,519	0,093	0,070	0,070	0,051	96,2	72,1	72,1	52,9
BGP761 LED69-4S/730	6230	43	144,9	1,654	0,093	0,070	0,070	0,051	95,7	71,8	71,8	52,6
BGP761 LED74-4S/730	6586	46	143,2	1,769	0,094	0,071	0,071	0,052	96,8	72,6	72,6	53,3
BGP761 LED79-4S/730	7120	49,5	143,8	1,904	0,094	0,070	0,070	0,051	96,4	72,3	72,3	53,0
BGP761 LED84-4S/730	7476	53	141,1	2,038	0,095	0,072	0,072	0,052	98,3	73,7	73,7	54,1
BGP761 LED90-4S/730	8010	55	145,6	2,115	0,092	0,069	0,069	0,051	95,2	71,4	71,4	52,4
BGP761 LED94-4S/730	8366	57	146,8	2,192	0,092	0,069	0,069	0,050	94,5	70,9	70,9	52,0
BGP761 LED109-4S/740	9790	63	155,4	2,423	0,087	0,065	0,065	0,048	89,2	66,9	66,9	49,1
BGP761 LED119-4S/740	10680	70	152,6	2,692	0,088	0,066	0,066	0,049	90,9	68,2	68,2	50,0
BGP761 LED45-4S/740	4050	26	155,8	1,000	0,086	0,065	0,065	0,048	89,0	66,8	66,8	49,0
BGP761 LED50-4S/740	4500	28,5	157,9	1,096	0,085	0,064	0,064	0,047	87,8	65,9	65,9	48,3
BGP761 LED55-4S/740	5040	31,5	160,0	1,212	0,084	0,063	0,063	0,046	86,7	65,0	65,0	47,7
BGP761 LED59-4S/740	5400	34	158,8	1,308	0,085	0,064	0,064	0,047	87,3	65,5	65,5	48,0
BGP761 LED64-4S/740	5760	37	155,7	1,423	0,086	0,065	0,065	0,048	89,1	66,8	66,8	49,0
BGP761 LED69-4S/740	6230	40	155,8	1,538	0,086	0,065	0,065	0,048	89,0	66,8	66,8	49,0
BGP761 LED74-4S/740	6586	43,5	151,4	1,673	0,089	0,067	0,067	0,049	91,6	68,7	68,7	50,4
BGP761 LED79-4S/740	7120	46,5	153,1	1,788	0,088	0,066	0,066	0,048	90,6	67,9	67,9	49,8
BGP761 LED84-4S/740	7476	49,5	151,0	1,904	0,089	0,067	0,067	0,049	91,8	68,9	68,9	50,5
BGP761 LED90-4S/740	8010	51	157,1	1,962	0,086	0,064	0,064	0,047	88,3	66,2	66,2	48,6
BGP761 LED94-4S/740	8366	54	154,9	2,077	0,087	0,065	0,065	0,048	89,5	67,1	67,1	49,2
BGP761 LED109-4S/757	9790	63	155,4	2,423	0,087	0,065	0,065	0,048	89,2	66,9	66,9	49,1
BGP761 LED119-4S/757	10680	70	152,6	2,692	0,088	0,066	0,066	0,049	90,9	68,2	68,2	50,0
BGP761 LED45-4S/757	4050	26	155,8	1,000	0,086	0,065	0,065	0,048	89,0	66,8	66,8	49,0
BGP761 LED50-4S/757	4500	28,5	157,9	1,096	0,085	0,064	0,064	0,047	87,8	65,9	65,9	48,3
BGP761 LED55-4S/757	5040	31,5	160,0	1,212	0,084	0,063	0,063	0,046	86,7	65,0	65,0	47,7
BGP761 LED59-4S/757	5400	34	158,8	1,308	0,085	0,064	0,064	0,047	87,3	65,5	65,5	48,0
BGP761 LED64-4S/757	5760	37	155,7	1,423	0,086	0,065	0,065	0,048	89,1	66,8	66,8	49,0
BGP761 LED69-4S/757	6230	40	155,8	1,538	0,086	0,065	0,065	0,048	89,0	66,8	66,8	49,0
BGP761 LED74-4S/757	6586	43,5	151,4	1,673	0,089	0,067	0,067	0,049	91,6	68,7	68,7	50,4
BGP761 LED79-4S/757	7120	46,5	153,1	1,788	0,088	0,066	0,066	0,048	90,6	67,9	67,9	49,8

BGP761 LED84-4S/757	7476	50	149,5	1,923	0,090	0,068	0,068	0,050	92,7	69,5	69,5	51,0
BGP761 LED90-4S/757	8010	51	157,1	1,962	0,086	0,064	0,064	0,047	88,3	66,2	66,2	48,6
BGP761 LED94-4S/757	8366	54	154,9	2,077	0,087	0,065	0,065	0,048	89,5	67,1	67,1	49,2
BGP761 LED45-4S/827	4050	33	122,7	1,269	0,110	0,082	0,082	0,060	113,0	84,7	84,7	62,1
BGP761 LED50-4S/827	4500	37	121,6	1,423	0,111	0,083	0,083	0,061	114,0	85,5	85,5	62,7
BGP761 LED55-4S/827	4984	41	121,6	1,577	0,111	0,083	0,083	0,061	114,1	85,5	85,5	62,7
BGP761 LED59-4S/827	5340	44	121,4	1,692	0,111	0,083	0,083	0,061	114,2	85,7	85,7	62,8
BGP761 LED64-4S/827	5696	48,5	117,4	1,865	0,115	0,086	0,086	0,063	118,1	88,5	88,5	64,9
BGP761 LED69-4S/827	6230	50	124,6	1,923	0,108	0,081	0,081	0,059	111,3	83,5	83,5	61,2
BGP761 LED74-4S/827	6586	54	122,0	2,077	0,110	0,083	0,083	0,061	113,7	85,3	85,3	62,5
BGP761 LED79-4S/827	7120	58	122,8	2,231	0,110	0,082	0,082	0,060	112,9	84,7	84,7	62,1
BGP761 LED84-4S/827	7476	62	120,6	2,385	0,112	0,084	0,084	0,061	115,0	86,2	86,2	63,2
BGP761 LED90-4S/827	8010	67	119,6	2,577	0,113	0,084	0,084	0,062	116,0	87,0	87,0	63,8
BGP761 LED94-4S/827	8366	71	117,8	2,731	0,114	0,086	0,086	0,063	117,7	88,3	88,3	64,7
BGP761 LED109-4S/830	9790	77	127,1	2,962	0,106	0,079	0,079	0,058	109,1	81,8	81,8	60,0
BGP761 LED45-4S/830	4050	30,5	132,8	1,173	0,101	0,076	0,076	0,056	104,4	78,3	78,3	57,4
BGP761 LED50-4S/830	4500	34	132,4	1,308	0,102	0,076	0,076	0,056	104,8	78,6	78,6	57,6
BGP761 LED55-4S/830	5040	38	132,6	1,462	0,101	0,076	0,076	0,056	104,5	78,4	78,4	57,5
BGP761 LED59-4S/830	5340	41	130,2	1,577	0,103	0,078	0,078	0,057	106,5	79,8	79,8	58,6
BGP761 LED64-4S/830	5696	44,5	128,0	1,712	0,105	0,079	0,079	0,058	108,3	81,2	81,2	59,6
BGP761 LED69-4S/830	6230	46,5	134,0	1,788	0,100	0,075	0,075	0,055	103,5	77,6	77,6	56,9
BGP761 LED74-4S/830	6586	50	131,7	1,923	0,102	0,077	0,077	0,056	105,3	78,9	78,9	57,9
BGP761 LED79-4S/830	7120	54	131,9	2,077	0,102	0,077	0,077	0,056	105,2	78,9	78,9	57,8
BGP761 LED84-4S/830	7476	57	131,2	2,192	0,103	0,077	0,077	0,056	105,7	79,3	79,3	58,1
BGP761 LED90-4S/830	8010	62	129,2	2,385	0,104	0,078	0,078	0,057	107,3	80,5	80,5	59,0
BGP761 LED94-4S/830	8366	65	128,7	2,500	0,105	0,078	0,078	0,058	107,7	80,8	80,8	59,3
BGP761 LED109-4S/840	9790	74	132,3	2,846	0,102	0,076	0,076	0,056	104,8	78,6	78,6	57,6
BGP761 LED45-4S/840	4050	29,5	137,3	1,135	0,098	0,074	0,074	0,054	101,0	75,7	75,7	55,5
BGP761 LED50-4S/840	4500	33	136,4	1,269	0,099	0,074	0,074	0,054	101,7	76,3	76,3	55,9
BGP761 LED55-4S/840	5040	36,5	138,1	1,404	0,097	0,073	0,073	0,054	100,4	75,3	75,3	55,2
BGP761 LED59-4S/840	5340	39,5	135,2	1,519	0,100	0,075	0,075	0,055	102,6	76,9	76,9	56,4
BGP761 LED64-4S/840	5696	43	132,5	1,654	0,102	0,076	0,076	0,056	104,7	78,5	78,5	57,6
BGP761 LED69-4S/840	6230	44,5	140,0	1,712	0,096	0,072	0,072	0,053	99,0	74,3	74,3	54,5
BGP761 LED74-4S/840	6586	48	137,2	1,846	0,098	0,074	0,074	0,054	101,1	75,8	75,8	55,6
BGP761 LED79-4S/840	7120	52	136,9	2,000	0,098	0,074	0,074	0,054	101,3	75,9	75,9	55,7
BGP761 LED84-4S/840	7476	55	135,9	2,115	0,099	0,074	0,074	0,054	102,0	76,5	76,5	56,1
BGP761 LED90-4S/840	8010	60	133,5	2,308	0,101	0,076	0,076	0,055	103,9	77,9	77,9	57,1
BGP761 LED94-4S/840	8366	63	132,8	2,423	0,101	0,076	0,076	0,056	104,4	78,3	78,3	57,4

** 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.*