

ENVIRONMENTAL PRODUCT DECLARATION
No. 01-06/2024



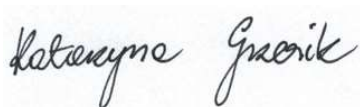
P-Line lighting fixture



Owner of the declaration:	RAFAŁ STANUCH P.P.H.U. AWEX Sp. z o.o.
Program owner:	Łukasiewicz – Institute of Ceramics and Building Materials Center for Environmental Engineering
Program name	Environmental Product Declarations – B2B
Release Date:	03.06.2024
Declaration valid until:	03.06.2029

1. GENERAL INFORMATION

<p>Owner of the declaration: RAFAŁ STANUCH P.P.H.U. AWEX Sp. z o.o.</p>	<p>Products covered by the declaration: P-Line lighting fixture</p>
<p>Program owner: Łukasiewicz – Institute of Ceramics and Building Materials of the Centre for Environmental Engineering in Opole. http://www.icimb.pl/opole/</p>	<p>Owner of the declaration: RAFAŁ STANUCH P.P.H.U. AWEX Sp. z o.o. BUTTERFLY UL. Długa 39 32-091 MICHAŁOWICE Phone: +48 12 681 55 00 www.awex.eu</p>
<p>Date of issue: 03.06.2024</p>	<p>Declared unit: 1 m (1 meter) of the P-Line lighting fixture.</p>
<p>Declaration valid until: 03.06.2029</p>	<p>Scope: The declaration includes: P-Line lighting fixture manufactured at the RAFAŁ STANUCH P.P.H.U. AWEX Sp. z o.o. plant in Masłomiaça.</p> <p>The environmental declaration is based on average data provided by the manufacturer for one production plant for products covered by the declaration manufactured by RAFAŁ STANUCH P.P.H.U. AWEX Sp. z o.o.</p> <p>The average values of the input and output streams were calculated based on data provided by the manufacturer from one production site. It contains information on the environmental impact of the declared products.</p> <p>All data on the production cycle were collected by RAFAŁ STANUCH P.P.H.U. AWEX Sp. z o.o. for the period from 01.11.2022 to 31.10.2023 (12 months) and correspond to the production technology of the time.</p> <p>The life cycle assessment has been developed in accordance with the requirements of PN-EN ISO 15804+A2:2020, PN-EN ISO 14025 and PN-EN ISO 14040. The rules for product categorization have been adopted in accordance with the PN-EN 15804 standard.</p> <p>The declaration owner is responsible for the information and the base evidence. The Łukasiewicz - Institute of Ceramics and Building Materials Center for Environmental Engineering is not responsible for the manufacturer's information and data and evidence regarding the life cycle assessment. Declarations resulting from different programs or performed not in accordance with the standard may not be comparable.</p>

Rules for product categorization (PCR)	According to the standards: PN-EN 15804+A2:2020-03 Sustainability of construction works. Environmental Product Declarations. Basic principles of categorization of construction products. ICIMB-PCR A.
Representativeness:	Polish product, year 2022-2023
Claimed durability:	10 years
Reasons for performing LCA:	B2B
Life Cycle Analysis (LCA):	The LCA analysis includes modules A1-A3, A4, A5, C1-C4 and D according to EN 15804+A2 (cradle-to-gate with options)
The Łukasiewicz Institute of Ceramics and Building Materials, Environmental Engineering Branch, provides access to the Type III environmental declaration for the P-Line lighting fixture by RAFAŁ STANUCH P.P.H.U. AWEX Sp. z o.o. to interested parties.	
<p>Authors' team: Katarzyna Kiprian, MSc. Eng. Ewa Głodek-Bucyk, PhD Patrik Okoń, MSc Eng.</p> <p>Approved:</p> <p> Joanna Poluszyńska, PhD Director of the Center for Environmental Engineering</p> <p> Ewa Głodek-Bucyk, PhD Leader of the Process Engineering Research Group</p>	<p>Review:</p> <p>CEN standard PN-EN 15804+A2 serves as the main PCR document. Independent verification of declarations and data in accordance with EN ISO 14025:2010</p> <p><input type="checkbox"/> Internal <input checked="" type="checkbox"/> External</p> <p> Katarzyna Grzesik, PhD, DSc, Eng.</p>

2. MANUFACTURER AND PRODUCT INFORMATION



The company RAFAŁ STANUCH P.P.H.U. AWEX Sp. z o.o. It has been operating since 2002, invariably implementing a clearly defined mission: modern products of the highest quality and customer satisfaction. The company RAFAŁ STANUCH P.P.H.U. AWEX Sp. z o.o. It offers a full range of emergency lighting devices that meet the standards of European standards. During such a long presence on the market, thanks to the involvement of knowledge, resources, cooperation with the best specialists, including research centers, and investments in innovative projects, the company has achieved the position of a leader in the industry. RAFAŁ STANUCH P.P.H.U. AWEX Sp. z o.o. means state-of-the-art technologies, an experienced team of designers and engineers, the highest quality, reliability of equipment, diversity of the offer, unique design, unlimited production capacity and impeccable reputation confirmed by references.

P-Line lighting fixture

Modern industrial light line for quick installation. The design of the system components allows easy connection into long sections of up to several hundred meters. The system is based on busbars equipped with through-wiring, which replace traditional cable trays or busbars. Lighting fixtures cooperating with rails have a wide range of distributions, which allows them to be used in many applications. The system is complemented by accessories, i.e. reflectors, sensors, emergency luminaires, starters and suspensions.

The production process begins with the order of individual components of the **P-Line lighting fixture** from domestic and foreign partners. Then, at the plant of RAFAŁ STANUCH P.P.H.U. AWEX Sp. z o.o., luminaires are made of rail sheet metal and polycarbonate. After completing all the components of the luminaire, the whole is assembled and verified by quality control. The finished **P-Line lighting fixture** are packed, transported to the warehouse, where it awaits shipment to the customer.

The technological process of production in **P-Line** lighting fixture is shown in Figure 1.

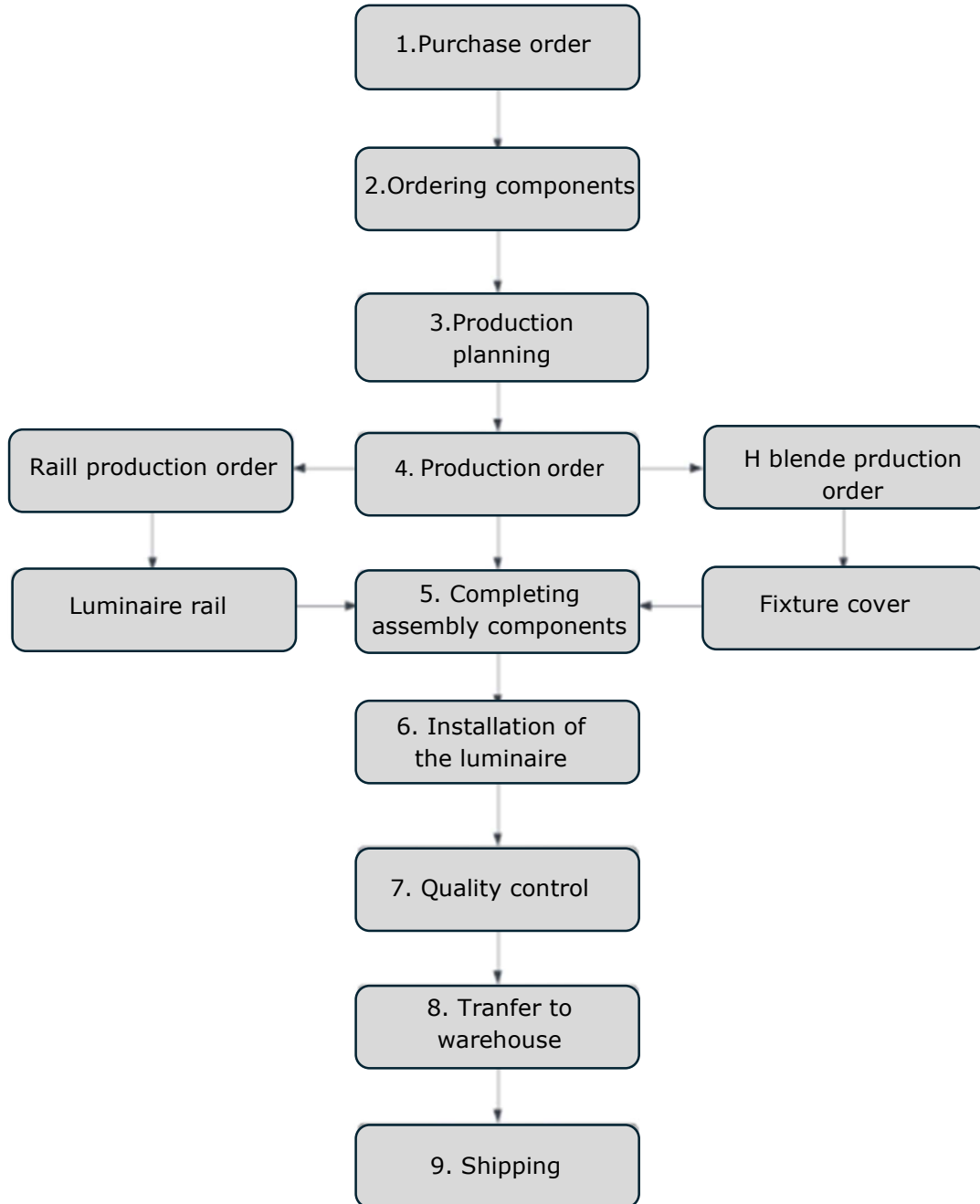
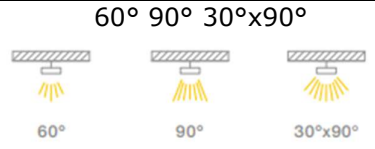
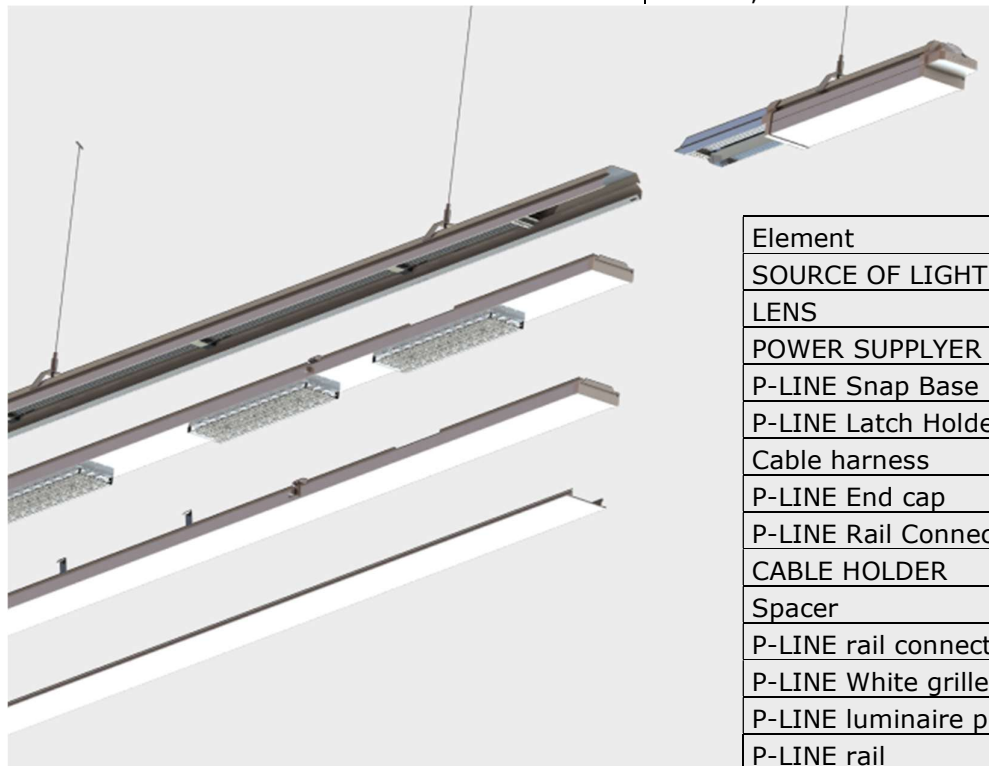


Figure 1: Diagram of the production process of **P-Line lighting fixture**.

Table 1 shows the technical data of the P-Line lighting fixture and Figure 2 presents the illustrative appearance of P-Line lighting fixture along with the approximate composition of the components.

Table 1. Technical data of the **P-Line lighting fixture:**

Execution	<ul style="list-style-type: none"> The casing is made of steel sheet protected against corrosion with a double-sided layer of galvanizing, additionally covered with a paint coating, Rail and luminaire endings made of polycarbonate, Blinds made of sheet metal or polycarbonate, Stainless steel suspensions.
Colour	White
Assembly	Surface-mounted, suspended
Supply voltage	220-240 VAC 50/60Hz
Light source	4000K LED
LED Durability	1000000 h
Features/Options	CLO (constant lumen output), light sensor, motion sensor, multisensor, emergency luminaire
Diffuser/lens distribution	<p>60° 90° 30°x90°</p> 
Use	Production halls, warehouses, logistics centers, stores



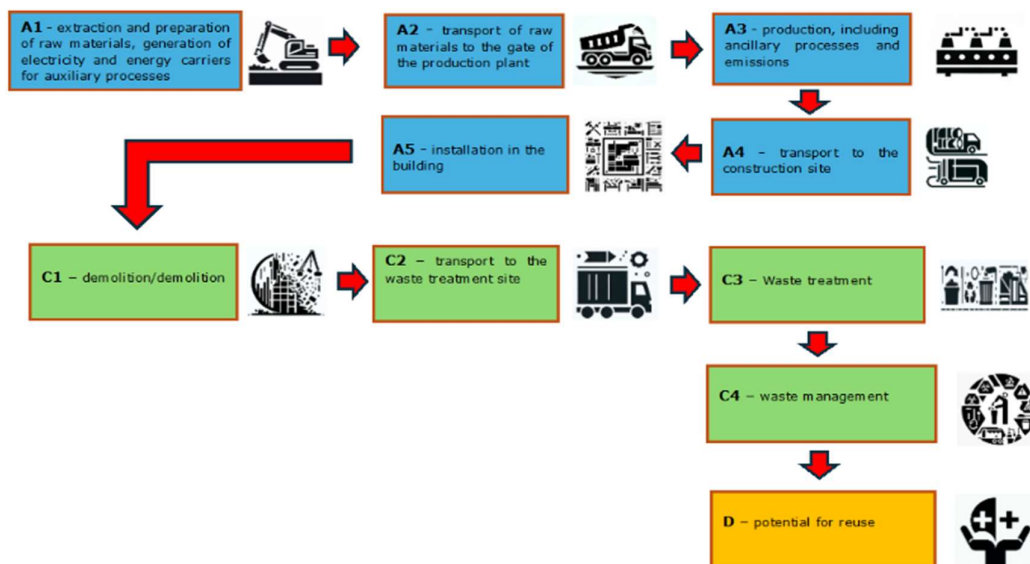
Element	Amount
SOURCE OF LIGHT	1
LENS	3
POWER SUPPLYER	1
P-LINE Snap Base	2
P-LINE Latch Holder	2
Cable harness	1
P-LINE End cap	1
P-LINE Rail Connection Cover	1
CABLE HOLDER	3
Spacer	2
P-LINE rail connection cover	2
P-LINE White grille	1
P-LINE luminaire profile	1
P-LINE rail	1

Figure 2. Overview diagram with the approximate composition of the P-Line lighting fixture elements.

3. LCA: CALCULATION RULES

System limitations

The life cycle analysis of the tested products includes modules A1-A3, A4, A5, C1-C4 and D (Cradle to Gate whit options) in accordance with EN 15804.



Declared Unit (DU)

1 m of P-Line lighting fixture.

Assumptions

A1 – extraction and consumption of raw materials refers to specific mass shares in the production process, per unit declared of the product,

A2 – distances from the place of obtaining raw materials to the production plant individual for each raw material, means of transport differentiated due to the method of delivery of raw materials,

A3 – CO₂, NO_x, SO₂ and dust emissions from the production process obtained as a result of measurements carried out on the premises of the plant, other values estimated on the basis of fuel consumption.

A4 - transport - data used for calculations are included in the developed scenario.

A5 - refers to energy consumption and covers all processes related to the placement-installation of a light fixture. The calculations are performed on the basis of the developed scenario.

C1 - describes the handling of the light fixture during disassembly/demolition. The calculations are performed on the basis of the developed scenario.

C2 – refers to the transport of construction and demolition waste to a recovery or disposal plant. The calculations are performed on the basis of the developed scenario.

C3 – takes into account the environmental impact during the processing of construction and demolition waste containing elements of a light fixture in a waste recovery plant. The calculations are performed on the basis of the developed scenario.

C4 – takes into account the environmental impact of storing and recycling the luminaire. The calculations are performed on the basis of the developed scenario.

D – refers to the impact and effects of the use of secondary material. The calculations are performed based on the developed scenario.

Cut-off criteria

99% of all mass streams involved in the production process were taken into account. All energy used in the process has been taken into account .

General data

The data for the calculations come from Ecoinvent v. 3.9.2, and KOBiZE. Emission factors for electricity were determined using the actual KOBiZE data. The Polish electricity emission factor used (Ecoinvent supplemented with current national data from KOBiZE) is 0.685 kg CO₂/kWh. A detailed analysis of data quality was part of an external audit.

Allocation

All data on components manufactured in the plant of RAFAŁ STANUCH P.P.H.U. AWEX Sp. z o.o. in Masłomiąca have been provided by the manufacturer and have been referred to the declared unit of the product **1 m** of P-Line lighting fixture. The allocation rules used in this EPD are based on the general ICIMB-PCR A principles.

4. LCA: SCENARIOS AND ADDITIONAL TECHNICAL INFORMATION

For the life cycle analysis of products covered by the cradle to gate with options environmental declaration, scenarios have been developed for modules A4, A5 and C1-C4 and D:

Module A4 – *Transport to the construction site* – Transport is carried out by trucks with a load capacity of 3.5-7.5 tonnes that meet the EURO 6 emission standards. The average distance from the plant to the customer is 100 km.

Module A5 – *Installation in the building* – Covers all processes related to the installation of a lighting fixture. The information provided by the producer was used to develop the script. The lighting fixture is assembled manually by assembling the luminaire from the appropriate components. The fixture is attached to the ceiling with a hammer drill with a power of 850 W. Hammer drill work of 10 minutes is assumed.

Module C1 - *Demolition/demolition* – demolition is carried out manually by separating individual components of the luminaire from the ceiling.

Module C2 – *Transport* – Waste is directed to the waste treatment plant. From there, after separating the recyclable fraction, the fraction for thermal processing and the fraction for storage in a landfill, their appropriate amounts are directed to further processes.

- Transport is carried out by trucks with a load capacity of 3.5-7.5 tons, meeting the EURO 6 emission standards.
- The material is transported to the waste management plant.
- Transport to the waste treatment plant takes place at a distance of 100 km from the demolition site.

Module C3 - *Waste treatment*, e.g. collection of waste fractions from demolition and treatment of material streams for reuse, recycling and energy recovery. All assembly waste (A5) goes to the waste treatment plant. The plant is divided into fractions, and then the separated fractions are recycled, incinerated and stored.

type of waste	steel	plastic	Electronic Parts	
recycling [%]		90	0	80
Fuel consumption [%]		0	80	0
Storage [%]		10	20	20

Electricity consumption per 1 kg of waste is 0.03 kWh/kg, and energy consumption for internal transport vehicles is 0.3 MJ/kg.

The following processes were assumed for the calculations: unloading (loader), crushing (crusher).

Module C4 - Storage, recycling and thermal utilization of part of the waste separated in the processing process (module C2) has been assumed. As a result of thermal utilization, energy is released, which is partially recovered as heat and electrical energy. It was assumed that the average calorific value of plastics (mainly PVC) is 14.1 MJ/kg. The efficiency of heat recovery from waste incineration is 32.0%, while the efficiency of electricity production is 11.2%. The benefits of thermal waste treatment are included in module D as exported energy.

Module D – *Material reuse potential*, the benefits of thermal waste treatment and recovery of some raw materials have been taken into account.

5. LCA: RESULTS

The table below shows the LCA modules taken into account in the calculation of the environmental impact categories for the products covered by the declaration.

DESCRIPTION OF SYSTEM BOUNDARIES (X – INCLUDED IN LCA, MND – UNDECLARED MODULE)																	
Production stage			Constructi on Stage		Usage stage							End of life stage				Benefits and flows beyond the system boundaries	
Mining and supply in raw materials	Transport	Production	Transport	Construction Process	Usufruct	Maintenance	Repair	Exchange	Renovation	Energy consumption	Water consumption	Demolition	Transport	Waste treatment	Waste management	Reuse potential	
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D	
X	X	X	X	X	MND	MND	MND	MND	MND	MND	MND	X	X	X	X	X	

The following tables present the results of the LCA analysis for the **P-Line** lighting fixture. Explanations of the abbreviations used to describe the impact category are provided below:

GWP-total	Global warming potential
GWP-fossil	Global warming potential fossil fuel
GWP-biogenic	Global warming potential biogenic
GWP-luluc	Global warming potential land use and land change
ODP	Depletion potential of the stratospheric ozone layer
AP	Acidification potential of land and water
EP-freshwater	Eutrophication potential, fraction of nutrients reaching freshwater end compartment
EP-marine	Eutrophication potential, fraction of nutrients reaching marine end compartment
EP-terrestrial	Eutrophication potential, Accumulated Exceedance
POCP	Formation potential of tropospheric ozone photochemical oxidants
ADP-minerals&metals	Abiotic depletion potential for nonfossil resources
ADP-fossil	Abiotic depletion potential for fossil resources
WDP	Water (user) deprivation potential
PM	Potential incidence of disease due to PM emissions
IRP	Potential Human exposure efficiency relative to U235
ETP-fw	Potential comparative Toxic Unit for ecosystems
HTP-c	Potential comparative Toxic Unit for humans (cancerogenic)
HTP-nc	Potential comparative Toxic Unit for humans (non cancerogenic)
SQP	Potential soil quality index
PERE	Use of renewable primary energy excluding renewable primary energy resources used as raw materials

PERM	Use of renewable primary energy resources used as raw materials
PERT	Total use of renewable primary energy resources
PEN-RE	Use of non-renewable primary energy resources excluding non-renewable primary energy resources used as raw materials
RE	Use of non-renewable primary energy resources used as raw materials
PENRT	Total use of non-renewable primary energy resources
SM	Use of secondary material
RSF	Use of renewable fuels
NRSF	Use of non-renewable secondary fuels
FW	Use of net fresh water

MAIN IMPACT INDICATORS: 1 m P-Line lighting fixture											
Life cycle stage											
Indicator	Unit	A1	A2	A3	A4	A5	C1	C2	C3	C4	D
GWP-total	kg CO2 eq.	1.29E+01	1.85E-01	-2.46E-01	1.09E-01	4.95E-02	0.00E+00	1.09E-01	1.08E-01	7.44E-04	-1.48E+00
GWP-fossil	kg CO2 eq.	1.28E+01	1.85E-01	4.08E-01	1.09E-01	4.72E-02	0.00E+00	1.09E-01	1.06E-01	7.42E-04	-1.47E+00
GWP-biogenic	kg CO2 eq.	6.58E-02	7.67E-05	-6.55E-01	9.95E-05	2.21E-03	0.00E+00	9.95E-05	2.12E-03	2.07E-06	-9.56E-03
GWP-luluc	kg CO2 eq.	1.54E-02	1.20E-04	1.05E-03	6.26E-05	4.50E-05	0.00E+00	6.26E-05	4.95E-05	9.81E-08	-1.38E-03
A	kg CFC11 eq.	3.62E-07	3.38E-09	4.56E-09	2.31E-09	6.88E-11	0.00E+00	2.31E-09	1.01E-09	1.16E-11	-1.63E-08
AP	mol H+ eq.	1.80E-01	2.71E-03	2.04E-03	2.26E-04	2.13E-04	0.00E+00	2.26E-04	7.56E-04	6.59E-06	-5.95E-03
EP-freshwater	kg PO4 eq.	1.41E-02	1.07E-05	4.63E-04	8.99E-06	6.02E-05	0.00E+00	8.99E-06	5.90E-05	2.25E-08	-8.25E-04
EP-marine	kg N eq.	1.75E-02	6.74E-04	5.20E-04	5.25E-05	3.79E-05	0.00E+00	5.25E-05	2.92E-04	3.04E-06	-1.10E-03
EP-terrestrial	mol N eq.	1.97E-01	7.41E-03	4.61E-03	5.31E-04	2.92E-04	0.00E+00	5.31E-04	3.06E-03	3.31E-05	-1.05E-02
POCP	kg NMVOC eq.	6,50E-02	2.18E-03	1.62E-03	3.33E-04	8.17E-05	0.00E+00	3.33E-04	9.03E-04	9.84E-06	-4.21E-03
ADP-minerals & metals	kg Sb eq.	1.67E-03	4.75E-07	9.28E-07	4.63E-07	4.43E-08	0.00E+00	4.63E-07	6.29E-08	2.90E-10	-3.09E-06
ADP-fossil	MJ	1.67E+02	2.40E+00	5.10E+00	1.49E+00	4.90E-01	0.00E+00	1.49E+00	1.25E+00	9.49E-03	-1.51E+01
WDP	WDP (m3) world. ekw	4.12E+00	8.11E-03	9.31E-02	6.26E-03	2.26E-03	0.00E+00	6.26E-03	3.87E-03	2.09E-05	-2.09E-01
ADDITIONAL IMPACT INDICATORS: 1 m of P-Line lighting fixture											
Life cycle stage											
Indicator	Unit	A1	A2	A3	A4	A5	C1	C2	C3	C4	D
PM	Disease incidence	9.23E-07	8.19E-09	1.57E-08	5.64E-09	4.01E-10	0.00E+00	5.64E-09	1.58E-08	1.87E-10	-4.09E-08
IRP	kBq U235 eq.	1.05E+00	2.98E-03	2.33E-02	2.98E-03	4.12E-04	0.00E+00	2.98E-03	7.62E-04	5.63E-06	-3.05E-02
ETP-fw	CTUe	1.41E-02	1.07E-05	4.63E-04	8.99E-06	6.02E-05	0.00E+00	8.99E-06	5.90E-05	2.25E-08	-8.25E-04
HTP-c	CTUh	1.60E-08	3.75E-11	7.29E-10	2.68E-11	1.67E-12	0.00E+00	2.68E-11	1.16E-11	1.22E-13	-1.73E-09
HTP-nc	CTUh	4.64E-07	5.99E-10	2.04E-09	3.84E-10	4.35E-11	0.00E+00	3.84E-10	3.38E-10	3.72E-12	-1.37E-08
SQP	-	6.64E+01	7.15E-01	6.32E+01	6.19E-01	8.48E-02	0.00E+00	6.19E-01	1.33E-01	1.17E-02	-2.53E+00
INDICATORS DESCRIBING RESOURCE CONSUMPTION: 1 m of P-Line lighting fixture											
Life cycle stage											
Indicator	Unit	A1	A2	A3	A4	A5	C1	C2	C3	C4	D
PERE	MJ	1.79E+01	3.49E-02	1.18E+01	3.25E-02	4.51E-02	0.00E+00	3.25E-02	4.73E-02	2.79E-04	-7.42E-01
PERMIAN	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00



PERT	MJ	1.79E+01	3.49E-02	1.18E+01	3.25E-02	4.51E-02	0.00E+00	3.25E-02	4.73E-02	2.79E-04	-7.42E-01
PEN-RE	MJ	1.81E+02	2.50E+00	5.94E+00	1.54E+00	6.62E-01	0.00E+00	1.54E+00	1.45E+00	9.93E-03	-1.88E+01
RE	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PENRT	MJ	1.81E+02	2.50E+00	5.94E+00	1.54E+00	6.62E-01	0.00E+00	1.54E+00	1.45E+00	9.93E-03	-1.88E+01
SM	Kg	0.00E+00	0.00E+00	6.83E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
RSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NRSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
FW	m3	7.59E-02	3.72E-04	1.42E-02	4.23E-04	9.67E-04	0.00E+00	4.23E-04	9.45E-04	3.32E-07	-2.68E-03

INDICATORS DESCRIBING OUTPUT STREAMS AND WASTE: 1 m of P-Line lighting fixture

Indicator	Unit (referenced to DU)	Life cycle stage										
		A1	A2	A3	A4	A5	C1	C2	C3	C4	D	
Amount of hazardous waste	Kg	HV	HV	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Amount of non-hazardous waste	Kg	HV	HV	6.83E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Amount of radioactive waste	Kg	HV	HV	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Reusable components	Kg	HV	HV	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Recyclable materials	Kg	HV	HV	6.83E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Energy Recovery Materials	Kg	HV	HV	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.38E+00
Exported Energy	MJ/energy carrier	HV	HV	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.71E+00

BIOGENIC CARBON

Biogenic carbon content in the product (kg C _{org})	0.00E+00
Biogenic carbon content per package (kg C _{org})	2.45E-01

6. INTERPRETATION OF RESULTS

Figure 3 shows a graph of the contributions of individual life cycle modules to the basic categories of impact of a **P-Line** lighting fixture:

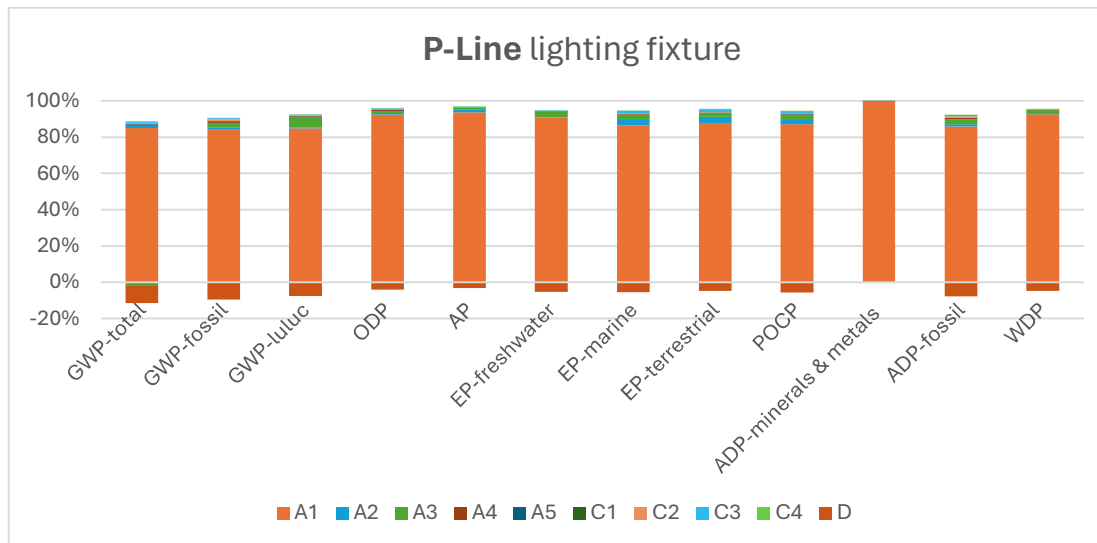


Figure 3 Shares of life cycle modules on the main impact categories – **P-Line** lighting fixture.

LITERATURE

- ✓ PN-EN ISO 14025:2014-04, Environmental labels and declarations - Type III environmental declarations --Rules and procedures.
- ✓ PN-EN 15804+A2:2020, Sustainability of construction works - Environmental product declarations - Basic principles of categorization of construction products.
- ✓ PN-EN ISO 14040:2009 Environmental management. Life Cycle Assessment. Principles and structure.
- ✓ PN-EN ISO 14044:2009, Environmental management. Life Cycle Assessment. Requirements and guidelines.
- ✓ EN 15942:2012, Sustainability of construction works – Environmental product declarations – Communication format business-to-business.
- ✓ The Act of 14 December 2012 on Waste, Journal of Laws. 2013, item 21.
- ✓ Act of 27 April 2001. Environmental Protection Law Journal of Laws 2024.54, consolidated text.
- ✓ ACT of 11 September 2015 on waste electrical and electronic equipment, Journal of Laws of 2024, item 573.t.j.
- ✓ Data from the company's website: **WWW.AWEX.EU**

Explanatory material can be obtained by contacting the representative directly
RAFAŁ STANUCH P.P.H.U.AWEX Sp. z o.o.



Łukasiewicz
Institute
of Ceramics
and Building
Materials

Łukasiewicz Research Network – Institute of Ceramics and Building Materials
31-983 Kraków, Cementowa 8 Str., Poland

CENTER OF ENVIRONMENTAL ENGINEERING

45-641 Opole, Oświęcimska 21 Str., Poland
Phone: +48 77 456 32 01

www.icimb.lukasiewicz.gov.pl
info.opole@icimb.lukasiewicz.gov.pl

PROCESS ENGINEERING RESEARCH GROUP

TYPE III ENVIRONMENTAL DECLARATION CERTIFICATE

no. 01-06/2024

Products:

P-Line lighting fixture

Owner:

Rafał Stanuch P.P.H.U. AWEX Sp. z o.o.

**MASŁOMIĄCA ul. Długa 39,
32-091 MICHAŁOWICE**

The declaration was developed in accordance with the requirements of the standard:

PN-EN 15804+A2: 2020-03

Sustainability of construction works
Environmental product declarations
Core rules for the product category of construction products

The declaration was verified in accordance with the requirements of the standard:

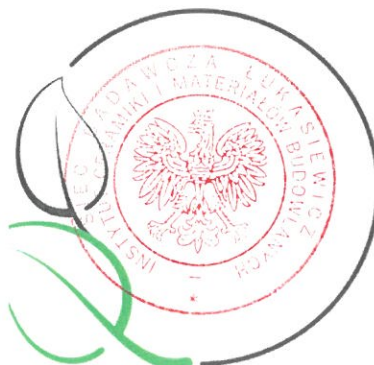
PN-EN ISO 14025:2010

Environmental labels and declarations
Type III environmental declarations. Principles and procedures

The certificate was issued for the first time on **June,03 2024** and is valid for 5 years or until the said EPD is amended.

**Process Engineering
Research Group Leader**

Ewa Głodek-Bucyk, PhD Eng.



**Director of
Center of Environmental
Engineering**

Joanna Poluszyńska, PhD

Opole, June 2024