

# Environmental Product Declaration

EPD of multiple products based on a representative product in accordance with ISO 14025:2006 and EN 15804:2012+A2:2019/AC:2021 for:



from XAL GmbH

#### Included products

- SPOT LINE 305 for MOVE IT 25
- SPOT LINE 605 for MOVE IT 25

Programme The International EPD® System www.environdec.com

Programme operator EPD International AB	
EPD registration number	EPD-IES-0015924:001
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This EPD follows additional requirements for construction products considered as Electronic or Electric Equipment. An EPD should provide current information and may be updated if conditions change. The stated validity is therefore subject to the continued registration and publication at www.environdec.com





#### **Programme information**

Programme System	The International EPD®	CEN standard EN 15804 serves as the Core Product Category Rules (PCR)
Address	EPD International AB Box 210 60 SE-100 31 Stockholm	Product Category Rules (PCR) PCR 2019:14 Construction products version 1.3.4 (Expired - Transfer PCR), 2024-04-30 UN CPC code(s): 4653 (Ver. 2.1) Lighting Equipment
	Sweden	PCR review was conducted by
Website	www.environdec.com	The Technical Committee of the International EPD® System
- "		Life Cycle Assessment (LCA) accountability
E-mail	info@environdec.com	XAL GmbH, Auer-Welsbach-Gasse 36, 8055 Graz, Austria
		Independent third-party verification of the declaration and data, according to ISO 14025:2006, via

 $\boxtimes$  EPD verification by individual verifier

#### Third party verifier:

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#### Approved by

The International EPD® System

The EPD owner has the sole ownership, liability, and responsibility for the EPD.

EPDs within the same product category but registered in different EPD programs, or not compliant with EN 15804:2012+A2:2019/AC:2021, may not be comparable. For two EPDs to be comparable, they must be based on the same PCR (including the same version number) or be based on fully-aligned PCRs or versions of PCRs; cover products with identical functions, technical performances and use (e.g. identical declared/declared units); have equivalent system boundaries and descriptions of data; apply equivalent data quality requirements, methods of data collection, and allocation methods; apply identical cut-off rules and impact assessment methods (including the same version of characterization factors); have equivalent content declarations; and be valid at the time of comparison. For further information about comparability, see EN 15804:2012+A2:2019/AC:2021 and ISO 14025:2006.

# Company information

#### **Owner of the EPD**

XAL GmbH Auer-Welsbach-Gasse 36 8055 Graz AUSTRIA

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# Description of the organisation

XAL is an internationally operating manufacturer of high-end luminaires and lighting solutions for shop, office, hotel and residential lighting. For 30 years, XAL has been working with lighting designers, architects and planners to develop custom luminaires of the highest technical standard, with a focus on style and aesthetics. While XAL mainly targets B2B costumers, we also provide our standard portfolio to B2C costumers.

With its headquarters in Graz, Austria, the XAL Group currently employs 1300 people worldwide and has 30 international subsidiaries. We are continuously working on further improving our products – whether in terms of durability, efficiency, the carbon footprint, or also with regard to the replaceability and reusability of components and materials.

# Product-related or management system-related certifications

XAL is certified according to several management and CSR standards.

- ISO 9001 Quality management systems
- · ISO 14001 Environmental management systems
- ISO 45001 Occupational health and safety management systems
- **Ecovadis** regular evaluation of our corporate social responsibility based on objective criteria with a focus on the environment, labour and human rights, ethics and responsible procurement.
- UN Global Compact initiative our interactions with each other and our stakeholders, our supply chain management and our resource strategies are guided by the principles of the UN Global compact.

#### Name and location of production site(s)

The production sites are located in Murska Sobota (XAL Svetila d.o.o., Slovenia) and in Graz (XAL GmbH, Austria). The production facilities operate in a complementary manner, with each produc tpassing through both facilities.

More information xal.com

# **Product information**







Product name

### SPOT LINE for MOVE IT 25

#### **Product identification**

Linear light inset made of aluminium. Available in three different sizes.

SPOT LINE 155, 305 and 605 use the same materials and production technology and are therefore covered in one EPD. This EPD covers multiple products:

- SPOT LINE 155 for MOVE IT 25
- SPOT LINE 305 for MOVE IT 25
- SPOT LINE 605 for MOVE IT 25

### **Product description**

Linear light inset made of aluminium; light inset can be installed and moved without tools by means of magnetic holders+locking; surface anodised; flush with profile system; fitted with single LED light points; good glare reduction due to recessed light point plane; despite this increased efficiency through special lens technology; inserted lenses with medium radiation characteristic 31°; with CSP (Chip-Scale-Packaging) technology for maximum efficiency; energy-efficient LEDs with very good colour rendering; hot plug protection

#### **Technical specifications**

#### UN CPC code(s):

 4653 (Ver. 2.1) Other electric lamps and lighting fittings (including lamps and lighting fittings of a kind used for lighting public open spaces or thorough-fares)

Specification	SPOT LINE 155	SPOT LINE 305	<b>SPOT LINE 605</b> 17.9 W		
Inset power	4.5 W	8.9 W			
Luminous efficacy	Up to 81 lm/W	Up to 82 lm/W	Up to 81 lm/W		
Colour temperature	2700 K, 3000 K	2700 K, 3000 K	2700 K, 3000 K		
Electrical	DALI-2 single control	DALI-2 single control	DALI-2 single control		
Physical	Lenght: 155 mm Width: 25 mm Height: 45 mm	Lenght: 305 mm Width: 25 mm Height: 45 mm	Lenght: 606 mm Width: 25 mm Height: 45 mm		

### **Declared unit**

The declared unit is one piece of SPOT LINE for MOVE IT 25 including the LED-Converter. This product has been chosen as the reference due to the highest share of sales. The weight of the product per declared unit is 0.2079 kg. Luminous flux: 726lm

For better comparison with other types of luminaires, conversion fac¬tors are also available to convert the results to 1000 lumens during a reference lifetime of 35000 hours. This reference value is proposed by the PEP Category rules (PSR-0014-ed2.0-EN-2023 07 13). The conversion factors are available under "Additional environmental information".

The principles of "Modularity" and "polluter pay" have been followed.

**Reference service life** 13.25 years

Time representativeness 2023

Database(s) and LCA software used LCA for Experts 10.9.0.20

**Description of system boundaries** Cradle to grave and module D.

# System diagram (A1 – A3)



# Product stage (A1 – A3)

Raw materials are found in the components used for the luminaire production. The raw materials and the necessary process steps have been modelled using LCA for Experts. The PCB is assembled in Graz, Austria and the final assembly of the luminaire is done in Murska Sobota, Slovenia. The corresponding electricity mix has been used for all manufacturing steps. Transportation of all the components is incorporated. For the components which are delivered from China, aggregated data has been used, since transportation involved various routes and transport vehicles. Packaging for the components has been accounted for using a worst-case approach. The ESD-packaging is reused one time within the company, therefore only ½ of the weight is taken into account for the production and the recycling. Since connectors typically consist of various material compositions, the EPDs of XAL GmbH assume plastic/ metal connectors with a ratio of 50/50.

#### Transport to building (A4)

The transport is calculated to the capitals of the countries with sales shares >4% (Berlin, London, Zurich, Rome, Vienna, Copenhagen, Stockholm).

The product market includes countries all over the world.

Weighted distance:	979.44 km
Truck used	Class EURO 6, 26-28 t
Fuel type	Diesel (0.00287 kg/100 kkm)

#### Installation into building (A5)

No emissions occur during the installation. This module includes the waste treatment of the packaging. For the transport-packaging the euro pallet is reused 28 times. Therefore only 1/28 of the weight is taken into account for the production and the end of life of the pallet.

Material	Weight (kg)
Cardboard	0.09
Paper	0.01

#### Use, maintenance, repair, replacement and refurbishment (B1, B2, B3, B4, B5)

These stages include the use, maintenance, repair, replacement and refurbishment of the product, which do not contribute to the environmental impacts of the products functional unit.

# **Operational Energy Use (B6)**

Electricity consumption during the use stage is modelled based on the technical parameters of the luminaires and is representative for a weighted average of the following applications – office (60%), hotel (15%), restaurant (15%), and retail (10%) with an average lifetime of 13.25 years. Geography of the electricity mix is modelled by sales shares and is representative for European countries (92% - EU-28) and rest of world countries (8%). For the rest of world countries, an electricity mix for China is used following a worst-case approach

The energy consumption is calculated using the formula from EN 15193:2007: Energy consumption [kWh] = {Pa × FCP × FO × (FD ×  $tD + FN \times tN$ ) + Pp × ty} × 1/1.000 × a

The results are presented in the additional information chapter.

Scenario	SPOT LINE 155	SPOT LINE 305	SPOT LINE 605	Unit
Electricity use (13.25 years)	247.85	430.03	802.69	kWh
Active power	4.5	8.9	17.9	W
Passive power	0.53	0.53	0.53	W
Total active time	41 406	41 406	41 406	h
Total pas- sive time	74 664	74 664	74 664	h
Dimmable	non-dim., DALI-2 control	non-dim., DALI-2 control	non-dim., DALI-2 control	-
Presence control	no	no	no	-

# **Operational water use (B7)**

No water is consumed during the use stage. Therefore this stage does not contribute to the environmental impacts of the products functional unit.

# End-of-life stage (C1 - C4)

The product is presumed to be decomposed manually; therefore no emissions should occur. For the corresponding waste destinations, the following distances are used:

- To recycling facility 250 km
- To incineration facility 50 km
- To landfill 100 km for metal and electronic parts, 20 km for plastic parts and packaging waste

Based on official statistics and literature, waste treatment options are taken into account for Europe and rest of the world countries.

#### Scenario (luminaire +

mounting accessory)	SPOT LINE 155	Unit
Collected separately	0.208	kg
Collected with mixed (construction) waste	-	kg
For reuse	-	kg
For recycling	0.102	kg
For energy recovery	0.025	kg
For final disposal	0.081	kg

#### Module D

According to the guidelines of EN 15804+A2 and the PCR from EPD International, calculations are made for Module D. The loads and benefits result from the export of secondary materials and the energy which comes from incineration and landfilling. In Module D also the benefits from the product packaging waste are included.

Scenario (contributing materials, incl. packaging)	SPOT LINE 155	Unit
Materials for recycling	0.15	kg
Materials for export of secondary fuels	-	kg
Materials for incineration	0.04	kg
Materials for landfilling	0.09	kg

#### **Cut-off rules**

Consistent with the PCR, a minimum of 95% of total inflows (mass and energy) are included. In addition, materials and processes with insignificant contributions of less than 1% are also included. For the use and end-of-life stage, scenarios are used, factoring in geographical conditions (such as electricity mix) and applications (waste treatment practices).

#### **Data quality**

Based on site specific information, this LCA study reflects the production for 2023. Components are supplied by external vendors, therefore manufacturing processes are modelled using LCA for Experts, with the best fitting representative geographical conditions and applications.

# **Electricity grid**

For the manufacturing in Graz, Austria, purchased renewable electricity grid mix as stated on the invoice is used: Hydro (87.3 %), Wind (8.4 %), Solar (2 %), Biomass (1.4 %), other RE (0.9 %). Since only renewable electricity is used, the climate impact for  $CO_2$  emissions is assumed to be 0.

For Murska Sobota, Slovenia, the corresponding electricity grid mix is: 100% Hydro. Again, the climate impact for  $CO_2$  emissions is assumed to be 0.

# Modules declared, geographical scope, share of specific data (in GWP-GHG results) and data variation (in GWP-GHG results):

	Product stage Construction process stage					I	Use stage				End of life stage				Resource recovery stage		
	Raw material supply	Transport	Manufacturing	Transport	Construction installation	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Reuse-Recov- ery-Recycling- potential
Module	A1	A2	A3	A4	A5	B1	B2	<b>B</b> 3	B4	B5	B6	B7	C1	C2	C3	C4	D
Modules declared	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	х	x
Geography	GLO	GLO	AUT, SLO	GLO	GLO	GLO	GLO	GLO	GLO	GLO	GLO	GLO	GLO	GLO	GLO	GLO	GLO
Specific data used		18%		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation – products		+76%		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation – sites		0%		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acronyms		GLO = Global, AUT = Austria, SLO = Slovenia															

### **Content information**

Product components	Weight, kg	Weight-% (versus total weight)	Post- consumer material, weight-%	Biogenic material, weight-% / declared unit	Biogenic material, kg C / declared unit
Aluminum	0.07	34.06%	0.90%	0.00	0.00
Copper	0.02	10.91%	0.00%	0.00	0.00
Steel	0.02	8.40%	0.00%	0.00	0.00
Polycarbonate	0.01	6.94%	0.00%	0.00	0.00
Polyamide 6 (PA6)	0.01	6.87%	0.00%	0.00	0.00
Epoxy resin	0.01	6.21%	0.00%	0.00	0.00
Ferrites	0.01	5.61%	0.00%	0.00	0.00
Glass fibers	0.01	5.49%	0.00%	0.00	0.00
Copper in alloy	0.01	3.86%	0.00%	0.00	0.00
Tin	0.00	2.38%	0.00%	0.00	0.00
Silicon dioxide (SiO2)	0.00	1.27%	0.00%	0.00	0.00
Others (<1%)	0.02	8.00%	0.00%	0.00	0.00
TOTAL	0.21	100.00	0.31%	0.00	0.00

Packaging materials	Weight, kg	Weight-% (versus the product)	Weight biogenic carbon, kg C/declared unit		
Paper	0.012	5.68	0.006		
Cardboard	0.069	33.15	0.035		
TOTAL	0.096	38.83	0.041		

The products do not contain any REACH and RoHS SVHC substances in amounts greater than 0.1 % (1000 ppm).

# Mandatory impact category indicators according to EN 15804

		Results per piece of SPOT LINE 155 for MOVE IT 25											
Indicator	Unit	A1 – A3	A4	A5	B1 – B5	B6	B7	C1	C2	C3	C4	D	
GWP – fossil	kg $\rm CO_2$ eq.	1.18E+01	7.18E-02	2.31E-03	0.00E+00	8.47E+01	0.00E+00	0.00E+00	2.12E-03	7.63E-02	5.78E-04	-1.00E+00	
GWP – biogenic	kg CO <sub>2</sub> eq.	-1.34E+00	0.00E+00	1.34E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.84E-04	0.00E+00	0.00E+00	
GWP – luluc	kg $\rm CO_2$ eq.	8.96E-03	1.23E-03	1.93E-05	0.00E+00	2.62E-02	0.00E+00	0.00E+00	3.62E-05	4.42E-06	1.08E-06	-1.42E-04	
GWP – total	kg CO <sub>2</sub> eq.	1.05E+01	7.30E-02	1.35E+00	0.00E+00	8.47E+01	0.00E+00	0.00E+00	2.16E-03	7.68E-02	5.79E-04	-1.00E+00	
ODP	kg CFC 11 eq.	1.78E-10	7.35E-15	3.72E-15	0.00E+00	1.45E-09	0.00E+00	0.00E+00	2.17E-16	6.25E-14	1.38E-15	-5.58E-12	
AP	mol H+ eq.	6.30E-02	1.04E-04	9.06E-06	0.00E+00	2.64E-01	0.00E+00	0.00E+00	3.08E-06	2.20E-05	4.16E-06	-5.08E-03	
EP – freshwater	kg P eq.	6.60E-05	3.11E-07	8.64E-08	0.00E+00	2.96E-04	0.00E+00	0.00E+00	9.19E-09	1.39E-08	9.94E-10	-1.23E-06	
EP – marine	kg N eq.	1.07E-02	3.86E-05	4.17E-06	0.00E+00	4.66E-02	0.00E+00	0.00E+00	1.14E-06	6.12E-06	1.06E-06	-8.94E-04	
EP – terrestrial	mol N eq.	1.16E-01	4.58E-04	3.80E-05	0.00E+00	4.96E-01	0.00E+00	0.00E+00	1.35E-05	9.40E-05	1.17E-05	-9.64E-03	
POCP	kg NMVOC eq.	3.20E-02	9.87E-05	1.30E-05	0.00E+00	1.31E-01	0.00E+00	0.00E+00	2.92E-06	1.67E-05	3.23E-06	-2.54E-03	
ADP – minerals & metals*	kg Sb eq.	6.39E-04	6.21E-09	1.46E-10	0.00E+00	1.47E-05	0.00E+00	0.00E+00	1.83E-10	8.48E-10	6.02E-11	-9.86E-05	
ADP – fossil*	MJ	1.48E+02	9.52E-01	2.89E-02	0.00E+00	1.59E+03	0.00E+00	0.00E+00	2.81E-02	7.52E-02	7.69E-03	-1.25E+01	
WDP*	m³	9.91E+00	1.09E-03	1.81E-03	0.00E+00	1.84E+01	0.00E+00	0.00E+00	3.21E-05	8.21E-03	6.43E-05	-1.55E-01	

Acronyms GWP-fossil = Global Warming Potential fossil fuels; GWP-biogenic = Global Warming Potential biogenic; GWP-luluc = Global Warming Potential land use and land use change; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential, Accumulated Exceedance; 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; ADP-minerals&metals = Abiotic depletion potential for non-fossil resources; ADP-fossil = Abiotic depletion for fossil resources potential; WDP = Water (user) deprivation potential, deprivation-weighted water consumption

\* Disclaimer: The results of this environmental impact indicator shall be used with care as the uncertainties of these results are high or as there is limited experience with the indicator.

# Additional mandatory and voluntary impact category indicators

		Results per piece of SPOT LINE 155 for MOVE IT 25											
Indicator	Unit	A1 - A3	A4	A5	B1 – B5	B6	B7	C1	C2	C3	C4	D	
GWP – GHG <sup>1</sup>	kg $\rm CO_2$ eq.	1.19E+01	7.30E-02	2.33E-03	0.00E+00	8.47E+01	0.00E+00	0.00E+00	2.16E-03	7.63E-02	5.79E-04	-1.00E+00	
PM	disease inc.	8.58E-07	1.06E-09	7.14E-11	0.00E+00	2.51E-06	0.00E+00	0.00E+00	3.12E-11	2.44E-10	5.12E-11	-7.21E-08	
IRP – HE**	kg U235-eq	6.39E-01	1.72E-04	6.35E-05	0.00E+00	2.11E+01	0.00E+00	0.00E+00	5.07E-06	9.94E-04	9.51E-06	-6.01E-02	
ETP – fw*	CTUe	7.03E+01	7.00E-01	1.98E-02	0.00E+00	3.89E+02	0.00E+00	0.00E+00	2.07E-02	2.83E-02	4.29E-03	-3.87E+00	
HTP – c*	CTUh	1.39E-04	1.40E-11	4.99E-13	0.00E+00	2.76E-08	0.00E+00	0.00E+00	4.15E-13	2.00E-12	6.57E-13	-6.67E-10	
HTP – nc*	CTUh	1.36E-07	6.26E-10	3.15E-11	0.00E+00	3.99E-07	0.00E+00	0.00E+00	1.85E-11	1.15E-10	6.98E-11	-1.10E-08	
SQP	dimension- less	4.45E+01	4.71E-01	9.35E-03	0.00E+00	6.98E+02	0.00E+00	0.00E+00	1.39E-02	2.63E-02	1.60E-03	1.77E+01	
Acronyms	PM = particula								y (freshwater	). HTP-c = hur	man toxicity p	otential.	

cancer effects. HTP-nc = human toxicity potential. non-cancer effects. SQP = land use related impacts.

<sup>1</sup> The indicator includes all greenhouse gases included in GWP-total but excludes biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product. This indicator is thus almost equal to the GWP indicator originally defined in EN 15804:2012+A1:2013.

### **Resource use indicators**

		Results per piece of SPOT LINE 155 for MOVE IT 25											
Indicator	Unit	A1 – A3	A4	A5	B1 – B5	B6	B7	C1	C2	C3	C4	D	
PERE	MJ	7.98E+01	8.05E-02	3.64E-03	0.00E+00	1.06E+03	0.00E+00	0.00E+00	2.38E-03	3.68E-02	1.15E-03	-3.17E+00	
PERM	MJ	1.77E+00	0.00E+00	-1.70E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-6.57E-02	0.00E+00	0.00E+00	
PERT	MJ	8.16E+01	8.05E-02	-1.70E+00	0.00E+00	1.06E+03	0.00E+00	0.00E+00	2.38E-03	-2.89E-02	1.15E-03	-3.17E+00	
PENRE	MJ	1.48E+02	9.52E-01	2.89E-02	0.00E+00	1.59E+03	0.00E+00	0.00E+00	2.81E-02	7.52E-02	7.69E-03	-1.25E+01	
PENRM	MJ	1.36E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-1.36E+00	0.00E+00	0.00E+00	
PENRT	MJ	1.50E+02	9.52E-01	2.89E-02	0.00E+00	1.59E+03	0.00E+00	0.00E+00	2.81E-02	-1.29E+00	7.69E-03	-1.25E+01	
SM	kg	6.30E-04	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	
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	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	0.00E+00	
FW	m³	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	1.38E-02	

PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources; PENRE = Use of non-renewable primary energy resources; SM = Use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water

### Waste indicators

#### Results per piece of SPOT LINE 155 for MOVE IT 25

Indicator	Unit	A1 - A3	A4	A5	B1 – B5	B6	B7	C1	C2	C3	C4	D
Hazardous waste disposed	kg	3.09E-06	3.08E-11	1.57E-11	0.00E+00	2.24E-06	0.00E+00	0.00E+00	9.10E-13	5.65E-11	3.95E-13	-2.96E-10
Non-hazardous waste disposed	kg	2.10E+00	1.48E-04	7.91E-03	0.00E+00	1.37E+00	0.00E+00	0.00E+00	4.37E-06	8.46E-02	7.42E-02	-3.38E-01
Radioactive waste disposed	kg	5.75E-03	1.23E-06	4.10E-07	0.00E+00	2.28E-01	0.00E+00	0.00E+00	3.63E-08	6.56E-06	8.56E-08	-5.94E-04

# **Output flow indicators**

#### Results per piece of SPOT LINE 155 for MOVE IT 25

Indicator	Unit	A1 – A3	A4	A5	B1 – B5	B6	B7	C1	C2	C3	C4	D
Components for re-use	kg	0.00E+00										
Material for recycling	kg	3.27E-02	0.00E+00	9.69E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.38E-02	0.00E+00	6.48E-02
Materials for energy recovery	kg	0.00E+00	0.00E+00	8.31E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.55E-02	0.00E+00	0.00E+00
Exported energy, electricity	MJ	0.00E+00										
Exported energy, thermal	MJ	0.00E+00										

X/L

### **Conversion to SPOT LINE 305 and SPOT LINE 605**

The SPOT LINE 155, the SPOT LINE 305 and SPOT LINE 605 Insets for MOVE IT 25 belong to an environmental homogenous family and fulfill the requirements established by the PEP-PCR-ed4-EN-2021 09 06. The 305 and 605 variants use the same material and production technology, but there are differences in weight for the aluminum profile and plastic covers, the amount of lenses and magnets. These differences have been incorporated in the model and therefore the difference in the environmental impact can be scaled based on the SPOT LINE 155 reference Product using the given conversion factors:

#### Scaling Factors for SPOT LINE 305 and 605

Variant	w	A1-A3	Α4	A5	B6	C1-C4	D
SPOT LINE 305	8.9	1.25	1.41	1.22	1.98	1.53	1.24
SPOT LINE 605	17.9	1.77	2.22	1.91	3.98	2.40	1.76

Results for 1000 lumens during a reference life of 35000 hours produced by 1 BETO free standing sensor soft luminaire (As per reference of PEP-ECO Passport PSR-0014-ed2.0-EN-2023 07 13).

A conversion factor can be used for converting the results to 1000 lumens during a reference life of 35000 hours.

Variant	A1-A3	A4	A5	B1-B5	B6	B7	C1-C4	D
SPOT LINE 155	2.74	2.74	2.74	2.74	2.32	2.74	2.74	2.74
SPOT LINE 305	1.37	1.37	1.37	1.37	1.16	1.37	1.37	1.37
SPOT LINE 605	0.69	0.69	0.69	0.69	0.58	0.69	0.69	0.69

#### Information related to the sectorial EPD

This EPD is not sectoral.

#### **Differences from previous versions**

This is the first version of the EPD.

# References

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ISO 14025:2006 - Environmental labels and declarations - Type III environmental declarations - Principles and procedures

ISO 14040:2021 Environmental management – Life cycle assessment – Principles and framework

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LCA Background Report, SPOT LINE 155, XAL GmbH, 2024-12-12

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Product category rules (PCR) 2019:14 Construction products version 1.3.4 (Expired Transfer PCR), 2024-04-30. The EPD International, 2024

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