


Product Environmental Profile of luminaires for indoor lighting - Mains voltage track luminaires PALCO and SIPARIO

Reference product: 436B+P289+MWW8+ MWW8+MX3+MXW9



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		Supplemented by	PSR-0014-ed2.0-EN2023 07 13
Verifier accreditation number	VH04	Information and reference documents	www.pep-ecopassport.org
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Independent verification of the declaration and data, in compliance with ISO 14025: 2006			
Internal		External	x
The PCR review was conducted by a panel of experts chaired by Julie ORGELET (DDemain)			
PEP are compliant with NF C08-100-1:2016 or EN 50693:2019			
The elements of the present PEP cannot be compared with elements from another program.			
Document in compliance with ISO 14025 : 2006 « Environmental labels and declarations. Type III environmental declarations»			



General information

Company information:

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Reference product:

“Palco 436B+P289+MWW8+ MWW8+MX3+MXW9”

The assessed product range covers indoor lighting luminaires from the “Mains voltage track luminaires PALCO and SIPARIO”. The luminaires are used for professional lighting of indoor environments, mainly used for museums as well as a decorative finish for Hospitality & Retail applications.

The main technical features of the reference product Palco 436B+P289+MWW8+ MWW8+MX3+MXW9 are described in the table below.

Characteristics	Unit	Value
Product code	-	436B+P289+MWW8+ MWW8+MX3+MXW9
Light source	-	Integrated LED module
Power supply	-	TCI, MILANOinTRACK 300-1050
Color temperature	K	3.000
Protection index for water and dust (IP)	-	IP20
Impact resistance index (IK)	-	IK02
Nominal operating voltage	V	220-240
Assigned lifetime	Hours	50.000
Declaration lifetime of the LED module	Hours	50.000
Useful output flux	Lumen	575,70
Electrical power	W	14
Luminous efficiency	Lumen/W	41,12
Dimension	mm	ø86x153x171

Declared unit:

The LCA study was conducted considering the lighting fixture as the declared unit. The results of the analysis were then converted to the functional unit according to the indications provided in paragraph “Functional Unit”.

So, the declared unit is defined as “A luminaire providing an outgoing luminous flux of 575,70 lumens during a reference lifetime of 5,8 years” (50.000 hours).

Functional unit:

“Provide lighting that delivers an outgoing artificial luminous flux of 1.000 lumens during a reference lifetime of 35.000 hours”.

The reference flow is calculated as:

(1.000/outgoing luminous flux of the analyzed product in lumens) x (35.000/declared product lifetime of the analyzed product in hours):

$$(1.000/575,70) \times (35.000/50.000) = 1,216$$

Homogeneous environmental family:

The reference product represents the mains voltage track luminaires families Palco and Sipario, which differ in terms of size, power, and useful output flux (lumen).

The range of variations for the products in families is the following:

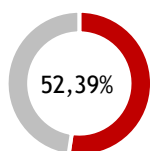
Laser Blade	Unit	Value for the reference product	Minimum value in product range	Maximum value in product range
Electrical power	W	14	8,5	56,4
Useful output flux	Lumen	575,70	291,6	6429,5
Weight	kg	2,148	1,847	4,502

The present PEP declaration is valid for all the products in the described homogenous environmental families. The spreadsheet provided as an annex shall be used by the PEP user to extrapolate the environmental impact of the other products from the mains voltage track luminaires families Palco and Sipario, based on the technical parameters of the considered product, as requested by the PSR.



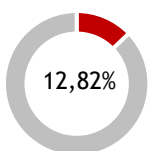
Constituent materials

METALS



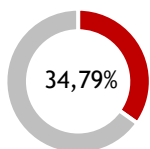
	kg	%
Aluminum	1,259	41,39
Copper	0,199	6,54
Steel	0,121	3,97
Other metal	0,015	0,49

PLASTICS



Polyvinyl Chloride (PVC)	0,167	5,49
Polycarbonate (PC)	0,133	4,37
Polymethyl methacrylate (PMMA)	0,087	2,87
Other plastics	0,003	0,09

OTHER MATERIALS



	kg	%
Electronical components	0,164	5,39
Cardboard - Packaging	0,515	16,92
Plastic - Packaging	0,045	1,48
Wood - Packaging	0,335	11,00

Total reference product	2,148	70,60
Total packaging	0,895	29,40
TOTAL	3,043	100%

The list above includes also materials with a certain amount of recycled content, in order to reduce the impacts linked to the production of virgin materials. In particular:

- The housing is made of diecast aluminum with a recycled content equal to 100%;
- The cardboard box of packaging is made of 100% of recycled content;
- The pallet used for shipment is reused.



Manufacture

The product components are manufactured or assembled by iGuzzini S.p.A. at its facilities in Recanati (Italy) and Shanghai (China). iGuzzini implements an environmental management system certified in accordance with ISO 14001:2015 and an energy management system certified under ISO 50001:2018 (the certificates are available at: www.iguzzini.com/certifications) at its Italian manufacturing site. Since 2022, the iGuzzini plant in Recanati has been purchasing 100% green energy, verified and certified by GO (Guarantee of Origin) certificates.

The company also publishes its sustainability performance in the Fagerhult Group's annual Sustainability Report. As of 2023, iGuzzini has been awarded the Gold Medal on the EcoVadis platform.

All lighting products manufactured by iGuzzini comply with the European directive "2011/65/EU ROHS 2 - Restriction of dangerous substances in electrical and electronic equipment".



Distribution

There is no hub for distribution. Products leaving the production site in Recanati, Italy, are delivered directly to the final clients. Based on the sales breakdown by state, the distribution of final destinations is as follows:

Destination	Share (%)	Type transport considered
Italy	25 %	Truck
France	25 %	Truck
Germany	25 %	Truck
Great Britain	25 %	Truck



Installation

The luminaires are provided to the client with the power supply, the fixing elements and the assembly elements, fittings and other electrical connectors needed for installation. Therefore, the installation of the luminaire does not require additional components and the product is easily installed using manual tools. In this phase the end of life (EoL) of the packaging of the final product is considered as well.



Use

Energy efficient light sources (LED lighting) are integrated. The use phase consists of electricity use during the whole lifetime of the product. The assigned lifetime of the luminaire is 50,000 hours, as decided by the manufacturer.

ILB05-TR-IC-030-FL-UNV	Type of buildings	Annual operating hours (h)	Operational Lifetime (years)
Operational lifetime of 50.000 hours	Offices	2.500	20
	Education	2.000	20
	Hospitals	5.000	10
	Hotels	5.000	10
	Restaurants	2.500	20
	Retail	5.000	10



End of life

The company is affiliated with a WEEE (Waste Electrical and Electronic Equipment) consortium (Ecolight, <https://ecolight.it/>).

The end-of-life product is managed in accordance with the current regulations of the countries where the product is distributed. A transportation distance of 100 km from the installation site to the treatment center has been assumed, and based on the Ecolight Report 2024, Global E-Waste Monitor report (2024) and PSR, the following disposal scenarios have been considered:

Scenario	Recycling	Energy recovery	Incineration	Landfill
Italy	95%	2%	-	3%
France	41%	15%	-	44%
Germany	54%	-	-	46%
Great Britain	30%	-	-	70%



Environmental impacts

The evaluation of environmental impacts examines the manufacturing, distribution, installation, use, end-of-life stages and Module D of the Reference Product life cycle.

The environmental impacts assessment of the reference product has been performed using SimaPro 10.2 software. Background datasets have been retrieved from Ecoinvent 3.11 libraries. The impact indicators and impact models used are the ones indicated by the PCR-ed4-EN-2021 09 06. This environmental declaration has been developed considering an outgoing artificial luminous flux of 1,000 lumens over a reference lifetime of 35,000 hours (Functional Unit).

Results of mandatory indicators per F.U. (for 1.000 lumens during 35.000 hours) of 436B+P289+MWW8+ MWW8+MXV3+MXW9 luminaire, reported for life cycle stages:

Impact category	Unit	Total	Manufacturing	Distribution	Installation	Use	EoL	Module D
Climate change	kg CO ₂ eq	2,76E+02	2,67E+01	9,03E-01	1,16E-01	2,48E+02	1,67E-01	1,02E+01
Ozone depletion	kg CFC-11 eq	2,65E-04	2,58E-04	1,97E-08	3,40E-10	6,60E-06	1,77E-09	3,89E-08
Photochemical ozone formation	kg NMVOC eq	7,11E-01	1,20E-01	4,39E-03	1,23E-04	5,86E-01	4,87E-04	3,64E-02
Acidification	mol H ⁺ eq	1,31E+00	3,75E-01	2,90E-03	7,75E-05	9,30E-01	3,20E-04	7,18E-02
Eutrophication, freshwater	kg P eq	2,01E-01	2,14E-02	6,16E-05	1,99E-06	1,79E-01	6,18E-06	2,76E-03
Eutrophication, marine	kg N eq	2,30E-01	3,48E-02	9,75E-04	1,40E-04	1,94E-01	9,32E-04	1,20E-02
Eutrophication, terrestrial	mol N eq	2,20E+00	4,11E-01	1,06E-02	3,08E-04	1,77E+00	1,30E-03	1,25E-01
Water requirement	m ³ depriv.	6,71E+01	9,77E+00	4,96E-02	2,85E-03	5,72E+01	-1,20E-04	9,57E-01
Abiotic resource depletion, fossils	MJ	6,96E+03	3,31E+02	1,28E+01	2,24E-01	6,61E+03	1,24E+00	8,99E+01
Abiotic resource depletion, m. and m.	kg Sb eq	5,02E-02	4,63E-02	3,04E-06	5,09E-08	3,83E-03	2,33E-07	2,29E-06
Climate change - Fossil	kg CO ₂ eq	2,75E+02	2,63E+01	9,02E-01	6,74E-02	2,47E+02	1,67E-01	1,02E+01
Climate change - Biogenic	kg CO ₂ eq	1,19E+00	3,56E-01	1,72E-04	4,87E-02	7,83E-01	2,32E-05	1,45E-02
Climate change - Land use and LU change	kg CO ₂ eq	3,26E-01	4,86E-02	2,99E-04	5,47E-06	2,77E-01	2,38E-05	1,54E-02

Results of mandatory indicators per unit of product (declared unit, 575,70 lumens during 50.000 hours) of 436B+P289+MWW8+ MWW8+MXV3+MXW9 luminaire, reported for life cycle stages:

Impact category	Unit	Total	Manufacturing	Distribution	Installation	Use	EoL	Module D
Climate change	kg CO ₂ eq	2,27E+02	2,19E+01	7,42E-01	9,55E-02	2,04E+02	1,38E-01	8,40E+00
Ozone depletion	kg CFC-11 eq	2,18E-04	2,12E-04	1,62E-08	2,80E-10	5,43E-06	1,45E-09	3,20E-08
Photochemical ozone formation	kg NMVOC eq	5,85E-01	9,89E-02	3,61E-03	1,01E-04	4,82E-01	4,01E-04	2,99E-02
Acidification	mol H ⁺ eq	1,08E+00	3,08E-01	2,38E-03	6,37E-05	7,64E-01	2,63E-04	5,90E-02
Eutrophication, freshwater	kg P eq	1,65E-01	1,76E-02	5,07E-05	1,64E-06	1,47E-01	5,09E-06	2,27E-03
Eutrophication, marine	kg N eq	1,90E-01	2,86E-02	8,02E-04	1,15E-04	1,59E-01	7,67E-04	9,85E-03
Eutrophication, terrestrial	mol N eq	1,81E+00	3,38E-01	8,72E-03	2,54E-04	1,46E+00	1,07E-03	1,03E-01
Water requirement	m ³ depriv.	5,52E+01	8,04E+00	4,08E-02	2,35E-03	4,71E+01	-9,84E-05	7,87E-01
Abiotic resource depletion, fossils	MJ	5,72E+03	2,72E+02	1,05E+01	1,84E-01	5,44E+03	1,02E+00	7,40E+01
Abiotic resource depletion, m. and m.	kg Sb eq	4,13E-02	3,81E-02	2,50E-06	4,19E-08	3,15E-03	1,92E-07	1,88E-06
Climate change - Fossil	kg CO ₂ eq	2,26E+02	2,16E+01	7,42E-01	5,54E-02	2,03E+02	1,38E-01	8,37E+00
Climate change - Biogenic	kg CO ₂ eq	9,77E-01	2,93E-01	1,42E-04	4,00E-02	6,44E-01	1,91E-05	1,19E-02
Climate change - Land use and LU change	kg CO ₂ eq	2,68E-01	3,99E-02	2,46E-04	4,50E-06	2,28E-01	1,96E-05	1,27E-02

Results of mandatory indicators per F.U. (for 1.000 lumens during 35.000 hours) of 436B+P289+MWW8+ MWW8+MXV3+MXW9 luminaire, reported for life cycle modules:

			Manufacturing			Distribution	Installation	Use	EoL		Module D
Impact category	Unit	Total	A1	A2	A3	A4	A5	B6	C2	C4	D
Climate change	kg CO2 eq	2,76E+02	2,20E+01	4,26E-02	4,60E+00	9,03E-01	1,16E-01	2,48E+02	4,97E-02	1,18E-01	1,02E+01
Ozone depletion	kg CFC-11 eq	2,65E-04	1,01E-05	2,48E-04	5,29E-08	1,97E-08	3,40E-10	6,60E-06	1,08E-09	6,84E-10	3,89E-08
Photochemical ozone formation	kg NMVOC eq	7,11E-01	1,06E-01	2,47E-04	1,36E-02	4,39E-03	1,23E-04	5,86E-01	2,42E-04	2,45E-04	3,64E-02
Acidification	mol H+ eq	1,31E+00	3,54E-01	1,71E-04	2,06E-02	2,90E-03	7,75E-05	9,30E-01	1,60E-04	1,60E-04	7,18E-02
Eutrophication, freshwater	kg P eq	2,01E-01	2,06E-02	6,88E-05	7,12E-04	6,16E-05	1,99E-06	1,79E-01	3,39E-06	2,79E-06	2,76E-03
Eutrophication, marine	kg N eq	2,30E-01	2,94E-02	8,08E-04	4,62E-03	9,75E-04	1,40E-04	1,94E-01	5,37E-05	8,79E-04	1,20E-02
Eutrophication, terrestrial	mol N eq	2,20E+00	3,29E-01	3,45E-02	4,74E-02	1,06E-02	3,08E-04	1,77E+00	5,84E-04	7,11E-04	1,25E-01
Water requirement	m3 depriv.	6,71E+01	7,31E+00	5,72E-01	1,90E+00	4,96E-02	2,85E-03	5,72E+01	2,73E-03	-2,85E-03	9,57E-01
Abiotic resource depletion, fossils	MJ	6,96E+03	2,79E+02	5,71E-01	5,13E+01	1,28E+01	2,24E-01	6,61E+03	7,05E-01	5,31E-01	8,99E+01
Abiotic resource depletion, minerals and metals	kg Sb eq	5,02E-02	3,74E-03	4,26E-02	8,52E-06	3,04E-06	5,09E-08	3,83E-03	1,68E-07	6,56E-08	2,29E-06
Climate change - Fossil	kg CO2 eq	2,75E+02	2,18E+01	4,26E-02	4,41E+00	9,02E-01	6,74E-02	2,47E+02	4,97E-02	1,18E-01	1,02E+01
Climate change - Biogenic	kg CO2 eq	1,19E+00	1,67E-01	8,91E-06	1,88E-01	1,72E-04	4,87E-02	7,83E-01	9,48E-06	1,37E-05	1,45E-02
Climate change - Land use and LU change	kg CO2 eq	3,26E-01	4,69E-02	5,06E-06	1,64E-03	2,99E-04	5,47E-06	2,77E-01	1,65E-05	7,39E-06	1,54E-02

Results of mandatory indicators per unit of product (declared unit, 575,70 lumens during 50.000 hours) of 436B+P289+MWW8+MWW8+MXV3+MXW9 luminaire, reported for life cycle modules:

			Manufacturing			Distribution	Installation	Use	EoL		Module D
Impact category	Unit	Total	A1	A2	A3	A4	A5	B6	C2	C4	D
Climate change	kg CO ₂ eq	2,27E+02	1,81E+01	3,50E-02	3,78E+00	7,42E-01	9,55E-02	2,04E+02	4,09E-02	9,68E-02	8,40E+00
Ozone depletion	kg CFC-11 eq	2,18E-04	8,31E-06	2,04E-04	4,35E-08	1,62E-08	2,80E-10	5,43E-06	8,92E-10	5,63E-10	3,20E-08
Photochemical ozone formation	kg NMVOC eq	5,85E-01	8,75E-02	2,03E-04	1,12E-02	3,61E-03	1,01E-04	4,82E-01	1,99E-04	2,02E-04	2,99E-02
Acidification	mol H ⁺ eq	1,08E+00	2,91E-01	1,41E-04	1,70E-02	2,38E-03	6,37E-05	7,64E-01	1,31E-04	1,32E-04	5,90E-02
Eutrophication, freshwater	kg P eq	1,65E-01	1,69E-02	5,66E-05	5,86E-04	5,07E-05	1,64E-06	1,47E-01	2,79E-06	2,30E-06	2,27E-03
Eutrophication, marine	kg N eq	1,90E-01	2,42E-02	6,64E-04	3,80E-03	8,02E-04	1,15E-04	1,59E-01	4,42E-05	7,23E-04	9,85E-03
Eutrophication, terrestrial	mol N eq	1,81E+00	2,71E-01	2,84E-02	3,89E-02	8,72E-03	2,54E-04	1,46E+00	4,80E-04	5,85E-04	1,03E-01
Water requirement	m ³ depriv.	5,52E+01	6,01E+00	4,71E-01	1,56E+00	4,08E-02	2,35E-03	4,71E+01	2,25E-03	-2,35E-03	7,87E-01
Abiotic resource depletion, fossils	MJ	5,72E+03	2,30E+02	4,70E-01	4,22E+01	1,05E+01	1,84E-01	5,44E+03	5,79E-01	4,36E-01	7,40E+01
Abiotic resource depletion, minerals and metals	kg Sb eq	4,13E-02	3,08E-03	3,50E-02	7,00E-06	2,50E-06	4,19E-08	3,15E-03	1,38E-07	5,40E-08	1,88E-06
Climate change - Fossil	kg CO ₂ eq	2,26E+02	1,79E+01	3,50E-02	3,63E+00	7,42E-01	5,54E-02	2,03E+02	4,09E-02	9,68E-02	8,37E+00
Climate change - Biogenic	kg CO ₂ eq	9,77E-01	1,38E-01	7,32E-06	1,55E-01	1,42E-04	4,00E-02	6,44E-01	7,80E-06	1,13E-05	1,19E-02
Climate change - Land use and LU change	kg CO ₂ eq	2,68E-01	3,86E-02	4,16E-06	1,35E-03	2,46E-04	4,50E-06	2,28E-01	1,35E-05	6,08E-06	1,27E-02

Results of mandatory indicators per unit of product - Detail of the use phase with the decomposition of module B (B1-B7) according to EN 15978 and EN 15804:

Impact category	Unit	Total	B1	B2	B3	B4	B5	B6	B7
Climate change	kg CO ₂ eq	2,04E+02	-	-	-	-	-	2,04E+02	-
Ozone depletion	kg CFC-11 eq	5,43E-06	-	-	-	-	-	5,43E-06	-
Photochemical ozone formation	kg NMVOC eq	4,82E-01	-	-	-	-	-	4,82E-01	-
Acidification	mol H ⁺ eq	7,64E-01	-	-	-	-	-	7,64E-01	-
Eutrophication, freshwater	kg P eq	1,47E-01	-	-	-	-	-	1,47E-01	-
Eutrophication, marine	kg N eq	1,59E-01	-	-	-	-	-	1,59E-01	-
Eutrophication, terrestrial	mol N eq	1,46E+00	-	-	-	-	-	1,46E+00	-
Water requirement	m ³ depriv.	4,71E+01	-	-	-	-	-	4,71E+01	-
Abiotic resource depletion, fossils	MJ	5,44E+03	-	-	-	-	-	5,44E+03	-
Abiotic resource depletion, minerals and metals	kg Sb eq	3,15E-03	-	-	-	-	-	3,15E-03	-
Climate change - Fossil	kg CO ₂ eq	2,03E+02	-	-	-	-	-	2,03E+02	-
Climate change - Biogenic	kg CO ₂ eq	6,44E-01	-	-	-	-	-	6,44E-01	-
Climate change - Land use and LU change	kg CO ₂ eq	2,28E-01	-	-	-	-	-	2,28E-01	-

Within the determination of the impacts of the manufacturing, installation, use and end of life the choice of the dataset relating to electricity consumption fell on low voltage energy (230 V) for all the geographical areas considered in the study. Furthermore, energy mixes were used for each country.

Results of mandatory inventory flow indicators per F.U. (for 1.000 lumens during 35.000 hours), and declared unit (D.U.):

Indicators	Unit	F.U.	D.U.
Renewable primary energy (without raw material)	MJ	1,60E+03	1,32E+03
Renewable primary energy (raw material)	MJ	1,01E+01	8,29E+00
Total use of renewable primary energy	MJ	1,61E+03	1,32E+03
Non-renewable primary energy (without raw material)	MJ	6,84E+03	5,62E+03
Non-renewable primary energy (raw material)	MJ	1,24E+02	1,02E+02
Total use of non-renewable primary energy	MJ	6,96E+03	5,72E+03
Use of secondary materials	kg	1,41E+00	1,16E+00
Use of renewable secondary fuels	MJ	-	-
Use of non-renewable secondary fuels	MJ	-	-
Net use of fresh water	m ³	4,79E-04	3,94E-04
Hazardous waste disposed	kg	2,93E-02	2,41E-02
Non-hazardous waste disposed	kg	1,90E-01	1,56E-01
Radioactive waste disposed	kg	-	-
Components for reuse	kg	-	-
Materials for recycling	kg	9,07E-01	7,46E-01
Materials for energy recovery	kg	0,00E+00	0,00E+00
Exported energy	MJ	-	-
Biogenic carbon content of the product	kg	0,00E+00	0,00E+00
Biogenic carbon content of the associated packaging	kg	1,35E-01	1,11E-01



Extrapolation rules

Extrapolations rules have been calculated following PCR-ed4-EN-2021 09 06 PSR-0014-ed2.0-EN2023 07 13. The defined rules shall be applied using the Extrapolation rules file provided in the following tables.

Parameter	Value for reference product
Lighting output [lumens]	575,70
Weight of light source [kg]	0,002
Weight of luminaire structure [kg]	1,996
Weight of control gear [kg]	0,150
Weight of light management system [kg]	-
Weight of product including its light source (no packaging) [kg]	2,148
Weight of product including its packaging [kg]	3,043
Power [W]	14

The extrapolation coefficients calculation at the functional unit level shall be taken into account with the following formula:

$$\text{Extrapolation coefficient at the product level} \times \frac{\text{Lighting output of reference product (lumen)}}{\text{Lighting output of concerned product (lumens)}}$$

For each stage of the product's life cycle, the environmental impacts are calculated by multiplying the reference product impacts, as outlined in the declaration, by the corresponding extrapolation coefficient. The "Total" column is determined by summing the environmental impacts across all life cycle stages.

The following tables present an excerpt of the product configurations from the mains voltage track luminaires families Palco and Sipario, listing only the standard configurations. Further details can be found in the product datasheet available at www.iguzzini.com.

The first table contains the extrapolation coefficients provided at the product level (declared unit) and not at functional unit level, while the second table presents detailed information on the products.

Product code	Manufacturing	Distribution	Installation	Use	EoL	Module D
P605+P289+MWW8+MWW8+MXW9+MXY3	1,25	1,23	1,01	0,61	1,31	1,25
P604+P289+MWW8+MWW8+MXW9+MXY3	1,25	1,23	1,01	0,61	1,31	1,25
QG57+P289+MWW8+MWW8+MXW9+MXY3	1,18	1,14	0,91	2,04	1,24	1,18
QG49+P289+MWW8+MWW8+MXW9+MXY3	1,21	1,19	1,09	2,11	1,24	1,21
P607+P289+MWW8+MWW8+MXW9+MXY3	1,75	1,72	1,70	0,91	1,73	1,75
P606+P289+MWW8+MWW8+MXW9+MXY3	1,76	1,72	1,70	0,91	1,73	1,76
RC00+P289+MWW8+MWW8+MXW9+MXY3	1,69	1,61	1,59	2,80	1,62	1,69
QG73+P289+MWW8+MWW8+MXW9+MXY3	1,62	1,61	1,59	2,98	1,62	1,62
QG65+P289+MWW8+MWW8+MXW9+MXY3	1,63	1,61	1,59	2,87	1,62	1,63
P250+P289+MWW8+MWW8+MXW9+MXY3	2,06	2,05	1,93	4,03	2,10	2,06
430B+P289+MWW8+MWW8+MXW9+MXY3	0,88	0,88	0,83	1,46	0,89	0,88
432B+P289+MWW8+MWW8+MXW9+MXY3	0,86	0,86	0,76	1,45	0,89	0,86
436B+P289+MWW8+MWW8+MXW9+MXY3	1,00	1,00	1,00	1,00	1,00	1,00
441B+P289+MWW8+MWW8+MXW9+MXY3	1,02	1,01	0,89	2,18	1,06	1,02
PX93+P289+MWW8+MWW8+MXW9+MXY3	1,19	1,15	0,87	1,42	1,26	1,19
PS06+P289+MWW8+MWW8+MXW9+MXY3	1,19	1,15	0,87	1,42	1,26	1,19
PR98+P289+MWW8+MWW8+MXW9+MXY3	1,17	1,09	0,68	1,42	1,26	1,17
PY41+P289+MWW8+MWW8+MXW9+MXY3	1,53	1,39	0,81	2,09	1,63	1,53
PS22+P289+MWW8+MWW8+MXW9+MXY3	1,55	1,47	1,08	2,09	1,63	1,55
PS14+P289+MWW8+MWW8+MXW9+MXY3	1,54	1,47	1,08	2,12	1,63	1,54
PW41+P289+MWW8+MWW8+MXW9+MXY3	0,93	0,93	1,04	1,39	0,88	0,93
PW89+P289+MWW8+MWW8+MXW9+MXY3	0,87	0,86	0,83	1,38	0,88	0,87
PX05+P289+MWW8+MWW8+MXW9+MXY3	1,03	1,03	0,93	1,31	1,07	1,03
PX53+P289+MWW8+MWW8+MXW9+MXY3	1,02	1,01	0,88	1,34	1,07	1,02
544A+P289+MWW8+MWW8+MXW9+MXY3	1,39	1,30	0,88	0,91	1,48	1,39
504A+P289+MWW8+MWW8+MXW9+MXY3	1,39	1,30	0,88	0,98	1,48	1,39
652A+P289+MWW8+MWW8+MXW9+MXY3	1,24	1,19	0,88	2,49	1,32	1,24
628A+P289+MWW8+MWW8+MXW9+MXY3	1,23	1,19	0,88	2,49	1,32	1,23
041A+P289+MWW8+MWW8+MXW9+MXY3	0,85	0,85	0,83	1,07	0,86	0,85
001A+P289+MWW8+MWW8+MXW9+MXY3	0,85	0,85	0,83	1,07	0,86	0,85
160A+P289+MWW8+MWW8+MXW9+MXY3	0,88	0,84	0,58	0,92	0,94	0,88
120A+P289+MWW8+MWW8+MXW9+MXY3	0,88	0,84	0,58	0,92	0,94	0,88
264A+P289+MWW8+MWW8+MXW9+MXY3	0,87	0,83	0,58	1,51	0,94	0,87
240A+P289+MWW8+MWW8+MXW9+MXY3	0,87	0,83	0,58	1,47	0,94	0,87
352A+P289+MWW8+MWW8+MXW9+MXY3	0,99	0,97	0,81	0,91	1,04	0,99
312A+P289+MWW8+MWW8+MXW9+MXY3	0,99	0,97	0,81	0,98	1,04	0,99
456A+P289+MWW8+MWW8+MXW9+MXY3	0,96	0,94	0,81	1,56	1,00	0,96
432A+P289+MWW8+MWW8+MXW9+MXY3	0,96	0,94	0,81	1,51	1,00	0,96

Product code	System power (Watt)	Total weight (kg)	Luminaries weight (kg)	Structure weight (kg)	Control Gear (kg)	Lighting Source weight (kg)	Packaging (and packing) weight (kg)
P605+P289+MWW8+MWW8+MXW9+MXY3	8,5	3,728	2,822	2,692	0,13	0,0001	0,906
P604+P289+MWW8+MWW8+MXW9+MXY3	8,5	3,728	2,8219	2,707	0,115	0,0001	0,906
QG57+P289+MWW8+MWW8+MXW9+MXY3	28,5	3,473	2,6569	2,568	0,088	0,001	0,816
QG49+P289+MWW8+MWW8+MXW9+MXY3	29,6	3,628	2,6569	2,541	0,115	0,001	0,971
P607+P289+MWW8+MWW8+MXW9+MXY3	12,8	5,245	3,7219	3,609	0,113	0,0001	1,524
P606+P289+MWW8+MWW8+MXW9+MXY3	12,8	5,245	3,7219	3,622	0,1	0,0001	1,524
RC00+P289+MWW8+MWW8+MXW9+MXY3	39,2	4,895	3,4719	3,470	0,001	0,001	1,424
QG73+P289+MWW8+MWW8+MXW9+MXY3	41,7	4,895	3,4719	3,296	0,175	0,001	1,424
QG65+P289+MWW8+MWW8+MXW9+MXY3	40,2	4,895	3,4719	3,359	0,112	0,001	1,424
P250+P289+MWW8+MWW8+MXW9+MXY3	56,4	6,225	4,5019	4,299	0,2	0,003	1,724
430B+P289+MWW8+MWW8+MXW9+MXY3	20,5	2,669	1,9219	1,770	0,15	0,002	0,747
432B+P289+MWW8+MWW8+MXW9+MXY3	20,3	2,605	1,9219	1,771	0,15	0,001	0,684
436B+P289+MWW8+MWW8+MXW9+MXY3	14	3,043	2,148	1,996	0,15	0,002	0,895
441B+P289+MWW8+MWW8+MXW9+MXY3	30,5	3,077	2,2819	2,131	0,15	0,001	0,795
PX93+P289+MWW8+MWW8+MXW9+MXY3	19,9	3,488	2,7089	2,617	0,091	0,001	0,779
PS06+P289+MWW8+MWW8+MXW9+MXY3	19,9	3,488	2,7089	2,601	0,107	0,001	0,779
PR98+P289+MWW8+MWW8+MXW9+MXY3	19,9	3,320	2,7089	2,593	0,115	0,001	0,611
PY41+P289+MWW8+MWW8+MXW9+MXY3	29,3	4,235	3,5099	3,412	0,097	0,001	0,726
PS22+P289+MWW8+MWW8+MXW9+MXY3	29,3	4,475	3,5099	3,421	0,088	0,001	0,966
PS14+P289+MWW8+MWW8+MXW9+MXY3	29,7	4,475	3,5099	3,394	0,115	0,001	0,966
PW41+P289+MWW8+MWW8+MXW9+MXY3	19,4	2,815	1,8819	1,730	0,15	0,002	0,934
PW89+P289+MWW8+MWW8+MXW9+MXY3	19,3	2,629	1,8819	1,730	0,15	0,002	0,747
PX05+P289+MWW8+MWW8+MXW9+MXY3	18,4	3,124	2,2919	2,141	0,15	0,001	0,832
PX53+P289+MWW8+MWW8+MXW9+MXY3	18,7	3,082	2,2919	2,141	0,15	0,001	0,790
544A+P289+MWW8+MWW8+MXW9+MXY3	12,7	3,960	3,1769	3,085	0,09	0,002	0,784
504A+P289+MWW8+MWW8+MXW9+MXY3	13,7	3,960	3,1769	3,085	0,09	0,002	0,784
652A+P289+MWW8+MWW8+MXW9+MXY3	34,8	3,610	2,8269	2,728	0,097	0,002	0,784
628A+P289+MWW8+MWW8+MXW9+MXY3	34,9	3,610	2,8269	2,695	0,13	0,002	0,784
041A+P289+MWW8+MWW8+MXW9+MXY3	15,0	2,589	1,8469	1,695	0,15	0,002	0,742
001A+P289+MWW8+MWW8+MXW9+MXY3	15,0	2,589	1,8469	1,695	0,15	0,002	0,742
160A+P289+MWW8+MWW8+MXW9+MXY3	12,9	2,545	2,0269	1,935	0,09	0,002	0,519
120A+P289+MWW8+MWW8+MXW9+MXY3	12,9	2,545	2,0269	1,935	0,09	0,002	0,519
264A+P289+MWW8+MWW8+MXW9+MXY3	21,2	2,538	2,0199	1,928	0,091	0,001	0,519
240A+P289+MWW8+MWW8+MXW9+MXY3	20,6	2,538	2,0199	1,899	0,12	0,001	0,519
352A+P289+MWW8+MWW8+MXW9+MXY3	12,7	2,955	2,2319	2,140	0,09	0,002	0,724
312A+P289+MWW8+MWW8+MXW9+MXY3	13,7	2,955	2,2319	2,140	0,09	0,002	0,724
456A+P289+MWW8+MWW8+MXW9+MXY3	21,8	2,865	2,1419	2,044	0,097	0,001	0,724
432A+P289+MWW8+MWW8+MXW9+MXY3	21,1	2,865	2,1419	2,051	0,09	0,001	0,724



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