



## Product Environmental Profile

# SMART [4] Range GEWISS S.p.A.



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Internal : External :		
The PCR review was conducted by a panel of experts	chaired by Julie ORGELET (DDemain)	PEP
PEPs are compliant with XP C08-100-1:2016 or EN 50	0693:2019	PASS
The content of this PEP cannot be compared with con-	tent based on another program.	
Document in compliance with UNI EN ISO 14025: 201 Type III environmental declarations »	0 « Environmental labels and declarations.	



## **GEWISS Sustainability commitment**

GEWISS mission is to create value for our customer and our staff providing innovative and scalable solutions for building, industries and infrastructures, connecting people and things, while improving the safety and the quality of life, driven by **integrity**, culture of **excellence** and **sustainability**.

GEWISS is strongly convinced that being sustainable is essential, and therefore has decided to develop a responsible business model, which promotes respectful conduct towards people and the environment in developing products, solutions and services.

#### **Disclaimer**

The information contained in this declaration is provided under the responsibility of GEWISS in accordance with standard UNI EN ISO 14025, PCR-ed4-EN-2021 09 06 and PSR-0014-ed2-EN-2023 07 13.

The information contained in this document is updated as of the date of its issuance. Such information is the property of GEWISS. Any inappropriate use that alters its meaning and/or damages GEWISS's reputation is strictly prohibited.

## **Reading instructions**

The following display rules are used:

- Values are expressed in simplified scientific notation: 0.0038 = 3.80 x 10<sup>-3</sup> = 3.80E-3;
- When the result of the inventory calculation is zero, the value zero is displayed;
- Non-zero values are expressed with three significant figures.

#### **General background**

This declaration is an individual declaration covering the life cycle from cradle to grave.

The declaration is available at the following address: www.pep-ecopassport.org/

## Person responsible for this declaration

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## **General information**

#### **Product category**

The assessed products range covers luminaires from the "SMART [4]" family. SMART [4] Range is the new family of LED industrial lighting luminaires developed with new optical solutions that guarantee excellent lighting performance and a significant increase in efficiency and resistance.

#### **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 analysed product in lumens) x (35,000/declared product lifetime of the analysed product in hours)

The outgoing luminous flux is calculated taking in account the variation of the power (and therefore of the lumens, due to the light management system) during the use of the luminaries. Consequentially, the reference flow factor for the reference product corresponds to:

 $(1,000/39.600) \times (35,000/150,000) = 0,0059$ 

#### **Reference product**

The reference product for the study is:

"SMART [4] GWS4423BP840"

#### Products belonging to the same environmental family

SMART [4] is a wide and flexible range that has numerous versions, all LED, in three sizes (1 module, 2 modules and 4 modules), with different colour temperature options (3000K, 4000K, 5700K) and with DALI power supply. The reference product represents the "SMART [4]" family, which differs in terms of power, dimensions and useful output flux (lumen) of the integrated LED installed in the luminaries.

#### **Reference product characteristics**

Product family	SMART [4] Range
Sub-family	HE (High Efficiency), HLO (High Lumen Output)
Main function	Industrial lighting
Relevant standard	-
Manufacturing site	Via Domenico Bosatelli 1 - 24069 CENATE SOTTO BG, Italy
Range	See chapter "Extrapolation rules" for the full list of product codes
Reference product	SMART [4] GWS4423BP840
Dimension	700x504x114
Main constituents	Metals, plastics, packaging, other
Declared operating voltage (Volt)	220-240V
protection index for water and dust (IP)	IP66
impact resistance index (IK)	IK08 (measured according to standard NF EN 62262: 2004)
luminous efficiency (lm / W)*	157 lm/W
Electrical power (W)	0.253
Outgoing artificial luminous flux (lumen)*	39600
*referred to GWS4423BP840	



## Mass of the reference product

Item	Quantity
Total mass (product + packaging) [kg]	16.881
Product mass [kg]	13.996
Packaging mass [kg]	2.885

#### **Constituent materials**

Constituent materials of the reference product and packaging are:

Materials	Weight (g)	%
Metals	7,386	43.8
Other	3,411	20.2
Plastics	3,199	18.9
Packaging	2,885	17.1

#### **Biogenic carbon content**

Biogenic carbon content of the product	0.00 kg C
Biogenic carbon content of the associated packaging	1.70E-03 kg C

## Life Cycle Assessment Methodology

The Life Cycle Assessment (LCA) on which this Product Environmental Profile (PEP) is based, complies with the criteria set out in PCR-ed4-EN-2021 09 06 of the PEP Ecopassport® program. The life cycle analysis was carried out using SIMAPRO software version 9.2.0.2 and Ecoinvent 3.9.1. The reference service life has been modelled according to the provisions of PSR-0014-ed2.0-EN-2023 07 13. The end-of-life modelling follows the default scenarios proposed in PSR-0014-ed2.0-EN-2023 07 13.

## Life Cycle stages

#### Manufacturing stage

SMART [4] Range result from the assembly of several components, partly purchased from suppliers and partly produced by Gewiss at the Cenate Sotto site. The individual components are then assembled by a third-party company to obtain the finished product, which is sent to the Calcinate logistic hub and then placed on the market.

GEWISS S.p.A. has developed an integrated management system for quality (ISO 9001:2015), safety (ISO 45001:2018), environment (ISO 14001:2015) and energy (ISO 50001:2018) for the sites in Cenate Sotto and Calcinate, where the SMART [4] Range are manufactured (https://www.gewiss.com/ww/en/about-gewiss/sustainability).



#### **Distribution stage**

SMART [4] Range products are stored in the logistic hub in Calcinate. From there the products are shipped to the final destinations around the world, as described below:

Location	%	Transport Mode
Italy	25%	Road
Germany	24%	Road
UK	7%	Road
Spain	3%	Road
France	24%	Road
Middle East	16%	Road + sea
Turkey	1%	Road

#### Installation stage

The luminaire is provided to the client with the power supply, the fixing elements and the assembly elements needed for the installation. The product is easily installed using manual tools. According to the PSR, only the contribution of the end of life (EoL) of the packaging of the final product is considered in this phase.

#### Use stage

SMART [4] Range is the new family of LED industrial lighting luminaires developed with new optical solutions that guarantee excellent lighting performance and a significant increase in efficiency and resistance. SMART [4] Range is particularly suitable for indoor lighting in industrial halls, logistics hubs and sport facilities.

#### End-of-life stage

The company is affiliated to a WEEE (Waste Electrical and Electronic Equipment) Italian consortium (EcoLight https://ecolight.it/). The product at its end of life is managed as prescribed by the current legislation about EEE waste (Directive 2012/19/EU) and the waste treatment scenarios of the Countries in which the product is distributed. Waste treatment scenarios considered in the LCA and based on Ecolight consortium statistics are the following:

Country	Recycling	Incineration (without energy recovery)	Landfill	Source
Europe (Italy, Germany, UK, Spain, France)	92.89%	1.6%	5.51%	Ecolight Social Report 2022
RoW (Turkey, Middle East)	/	1	100%	No data available

For all geographical areas, by convention is considered a waste transportation stage of 100 km by truck.

## **Environmental impacts**

This environmental declaration has been developed by considering an outgoing artificial luminous flux of 1,000 lumens over a reference lifetime of 35,000 hours.

The results presented below were obtained using the methods defined in PCR-ed4-EN-2021 09 06 and in PSR-0014-ed2.0-EN-2023 07 13 and are referred to the Functional Unit.

Indicator	Unit	Manufacturing	Distribution	Installation	Total Use	End of Life	Total Life cycle
Abiotic depletion	kg Sb ea	1.52E-03	3.89E-08	7.88E-09	9.84E-04	1.16E-05	2.51E-03
Abiotic depletion (fossil fuels)	MJ	4.58E+01	1.86E-01	1.82E-02	1.26E+03	1.72E+01	1.32E+03
Climate change	kg CO2 eq	4.46E+00	1.37E-02	3.18E-02	1.07E+02	1.65E+00	1.13E+02
Climate change - Fossil	kg CO2 eq	4.41E+00	1.37E-02	1.82E-03	1.01E+02	1.51E+00	1.07E+02
Climate change - Biogenic	kg CO2 eq	3.97E-02	2.89E-05	3.00E-02	6.32E+00	1.37E-01	6.53E+00
Climate change - Land use and LU change	kg CO2 eq	9.38E-03	6.95E-06	8.70E-07	6.87E-02	2.04E-03	8.01E-02
Ozone depletion	kg CFC11 eq	2.11E-07	2.84E-10	5.40E-11	1.97E-06	1.95E-08	2.20E-06
Acidification	mol H+ eq	3.13E-02	9.43E-05	1.03E-05	4.81E-01	6.88E-03	5.20E-01
Eutrophication, freshwater	kg P eq	5.48E-03	9.15E-07	2.48E-07	4.30E-02	5.32E-04	4.90E-02
Eutrophication, marine	kg N eq	6.08E-03	3.18E-05	1.09E-05	8.26E-02	1.56E-03	9.03E-02
Eutrophication, terrestrial	mol N eq	6.53E-02	3.44E-04	4.13E-05	8.29E-01	1.42E-02	9.09E-01
Photochemical ozone formation	kg NMVOC eq	1.55E-02	8.46E-05	1.19E-05	2.13E-01	3.69E-03	2.32E-01
Water use	m3 depriv.	7.83E-01	8.07E-04	5.20E-04	2.21E+01	3.29E-01	2.32E+01
Renewable primary energy (without raw material)	MJ	5.69E+00	2.88E-03	9.13E-04	3.11E+02	2.30E+00	3.19E+02
Renewable primary energy (raw material)	MJ	2.61E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.61E-01
Total use of renewable primary energy	MJ	5.95E+00	2.88E-03	9.13E-04	3.11E+02	2.30E+00	3.19E+02
Non renewable primary energy (without raw material)	MJ	5.26E+01	1.90E-01	1.95E-02	2.07E+03	1.94E+01	2.15E+03
Non renewable primary energy (raw material)	MJ	5.42E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.42E-01
Total use of non-renewable primary energy	MJ	5.31E+01	1.90E-01	1.95E-02	2.07E+03	1.94E+01	2.15E+03
Use of secondary materials	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Use of renewable secondary fuels	MJ	-	-	-	-	-	-
Use of non-renewable secondary fuels	MJ	-	-	-	-	-	-
Net use of fresh water	m3	3.20E-02	2.75E-05	2.03E-05	8.44E-01	1.05E-02	8.87E-01
Hazardous waste disposed	kg	6.15E-04	1.18E-06	1.12E-07	6.02E-03	8.66E-03	1.53E-02
Non-hazardous waste disposed	kg	3.79E-01	1.11E-02	4.87E-03	6.32E+00	6.64E-01	7.37E+00
Radioactive waste disposed	kg	1.09E-04	6.04E-08	1.94E-08	1.19E-02	3.35E-05	1.21E-02
Components for reuse	kg	-	-	-	-	-	-
Materials for recycling	kg	*	*	*	*	*	*
Materials for energy recovery	kg	*	*	*	*	*	*
Exported energy	MJ	-	-	-	-	-	-

The use of the symbol \* indicates that the value depends on the country where the WEEE is disposed



#### **Extrapolation rules**

According to this environmental analysis, proportionality rules can be used to evaluate the impacts of other products belonging to the same environmental family.

The technical characteristics of these references are shown in the table below:

Te	echnical characteristics of the homogeneous environmental family
Product	SMART [4] Range
Function	Industrial lighting
Туре	-
Manufacturing site	Via Domenico Bosatelli 1 - 24069 CENATE SOTTO BG, Italy
Constituent materials	Metals, plastics, packaging, other

The extrapolation parameters have been calculated following the method provided by PCR-ed4-EN-2021 09 06 and PSR-0014-ed2-EN-2023 07 13 and are shown in the table below. Users can multiply the indicators at any stage by these coefficients, to use the environmental data provided in this PEP for luminaires belonging to the same environmental family as the reference product.

The extrapolation coefficients are given for the environmental impact of the FU, which is the emission of an outgoing artificial luminous flux of 1,000 lumens over 35,000 hours. For each life cycle stage, the environmental impacts of the product are calculated by multiplying the reference product impacts of the declaration with the extrapolation coefficient. The "Total" column shall be calculated by adding the environmental impacts of each life cycle stage.

Products	Manufacturing	Distribution	Installation	Use (B6)	End of Life
GWS4120AF830, GWS4122AF830	0.31	0.23	0.49	0.19	0.17
GWS4120AF840, GWS4120AF857, GWS4122AF840, GWS4122AF857	0.31	0.23	0.49	0.19	0.17
GWS4121AF830, GWS4123AF830	0.32	0.26	0.49	0.19	0.21
GWS4121AF840, GWS4121AF857, GWS4123AF840, GWS4123AF857	0.32	0.26	0.49	0.19	0.21
GWS4120AA830, GWS4120AH830, GWS4120AP830, GWS4122AA830, GWS4122AH830, GWS4122AP830	0.31	0.23	0.49	0.19	0.17
GWS4120AA840, GWS4120AA857, GWS4120AH840, GWS4120AH857, GWS4120AP840, GWS4120AP857, GWS4122AA840, GWS4122AA857, GWS4122AH840, GWS4122AH857, GWS4122AP840, GWS4122AP857	0.31	0.23	0.49	0.19	0.17
GWS4121AA830, GWS4121AH830, GWS4121AP830, GWS4123AA830, GWS4123AH830, GWS4123AP830	0.32	0.26	0.49	0.19	0.21
GWS4121AA840, GWS4121AA857, GWS4121AH840, GWS4121AH857, GWS4121AP840, GWS4121AP857, GWS4123AA840, GWS4123AA857, GWS4123AH840, GWS4123AH857, GWS4123AP840, GWS4123AP857	0.32	0.26	0.49	0.19	0.21
GWS4120AC830, GWS4122AC830	0.31	0.23	0.49	0.19	0.17
GWS4120AC840, GWS4120AC857, GWS4122AC840, GWS4122AC857	0.31	0.23	0.49	0.19	0.17
GWS4121AC830, GWS4123AC830	0.32	0.26	0.49	0.19	0.21
GWS4121AC840, GWS4121AC857, GWS4123AC840, GWS4123AC857	0.32	0.26	0.49	0.19	0.21
GWS4120AQ830, GWS4122AQ830	0.31	0.23	0.49	0.19	0.17
GWS4120AQ840, GWS4120AQ857, GWS4122AQ840, GWS4122AQ857	0.31	0.23	0.49	0.19	0.17

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Products	Manufacturing	Distribution	Installation	Use (B6)	End of Life
GWS4121AQ830, GWS4123AQ830	0.32	0.26	0.49	0.19	0.21
GWS4121AQ840, GWS4121AQ857, GWS4123AQ840, GWS4123AQ857	0.32	0.26	0.49	0.19	0.21
GWS4120BF830, GWS4122BF830	0.30	0.23	0.49	0.25	0.18
GWS4120BF840, GWS4120BF857, GWS4122BF840, GWS4122BF857	0.30	0.23	0.49	0.25	0.18
GWS4121BF830, GWS4123BF830	0.32	0.26	0.49	0.25	0.21
GWS4121BF840, GWS4121BF857, GWS4123BF840, GWS4123BF857	0.32	0.26	0.49	0.25	0.21
GWS4120BA830, GWS4120BH830, GWS4120BP830, GWS4122BA830, GWS4122BH830, GWS4122BP830	0.30	0.23	0.49	0.25	0.18
GWS4120BA840, GWS4120BA857, GWS4120BH840, GWS4120BH857, GWS4120BP840, GWS4120BP857, GWS4122BA840, GWS4122BA857, GWS4122BH840, GWS4122BH857, GWS4122BP840, GWS4122BP857	0.30	0.23	0.49	0.25	0.18
GWS4121BA830, GWS4121BH830, GWS4121BP830, GWS4123BA830, GWS4123BH830, GWS4123BP830	0.32	0.26	0.49	0.25	0.21
GWS4121BA840, GWS4121BA857, GWS4121BH840, GWS4121BH857, GWS4121BP840, GWS4121BP857, GWS4123BA840, GWS4123BA857, GWS4123BH840, GWS4123BH857, GWS4123BP840, GWS4123BP857	0.32	0.26	0.49	0.25	0.21
GWS4120BC830, GWS4122BC830	0.30	0.23	0.49	0.25	0.18
GWS4120BC840, GWS4120BC857, GWS4122BC840, GWS4122BC857	0.30	0.23	0.49	0.25	0.18
GWS4121BC830, GWS4123BC830	0.32	0.26	0.49	0.25	0.21
GWS4121BC840, GWS4121BC857, GWS4123BC840, GWS4123BC857	0.32	0.26	0.49	0.25	0.21
GWS4120BQ830, GWS4122BQ830	0.30	0.23	0.49	0.25	0.18
GWS4120BQ840, GWS4120BQ857, GWS4122BQ840, GWS4122BQ857	0.30	0.23	0.49	0.25	0.18
GWS4121BQ830, GWS4123BQ830	0.32	0.26	0.49	0.25	0.21
GWS4121BQ840, GWS4121BQ857, GWS4123BQ840	0.32	0.26	0.49	0.25	0.21
GWS4123BQ857	0.32	0.24	0.49	0.25	0.18
GWS4220AF830, GWS4222AF830	0.63	0.46	1.00	0.38	0.33
GWS4220AF840, GWS4220AF857, GWS4222AF840, GWS4222AF857	0.63	0.46	1.00	0.38	0.33
GWS4221AF830. GWS4223AF830	0.64	0.52	1.00	0.38	0.40
GWS4221AF840, GWS4221AF857, GWS4223AF840, GWS4223AF857	0.64	0.52	1.00	0.38	0.40
GWS4220AA830, GWS4220AH830, GWS4220AP830, GWS4222AA830, GWS4222AH830, GWS4222AP830	0.63	0.46	1.00	0.38	0.33
GWS4220AA840, GWS4220AA857, GWS4220AH840, GWS4220AH857, GWS4220AP840, GWS4220AP857, GWS4222AA840, GWS4222AA857, GWS4222AH840, GWS4222AH857, GWS4222AP840, GWS4222AP857	0.63	0.46	1.00	0.38	0.33
GWS4221AA830, GWS4221AH830, GWS4221AP830, GWS4223AA830, GWS4223AH830, GWS4223AP830	0.64	0.52	1.00	0.38	0.40
GWS4221AA840, GWS4221AA857, GWS4221AH840, GWS4221AH857, GWS4221AP840, GWS4221AP857, GWS4223AA840, GWS4223AA857, GWS4223AH840, GWS4223AH857, GWS4223AP840, GWS4223AP857	0.64	0.52	1.00	0.38	0.40
GWS4220AC830, GWS4222AC830	0.63	0.46	1.00	0.38	0.33
GWS4220AC840, GWS4220AC857, GWS4222AC840, GWS4222AC857	0.63	0.46	1.00	0.38	0.33
GWS4221AC830, GWS4223AC830	0.64	0.52	1.00	0.38	0.40
GWS4221AC840, GWS4221AC857, GWS4223AC840, GWS4223AC857	0.64	0.52	1.00	0.38	0.40
GWS4220AQ830, GWS4222AQ830	0.63	0.46	1.00	0.38	0.33
GWS4220AQ840, GWS4220AQ857, GWS4222AQ840, GWS4222AQ857	0.63	0.46	1.00	0.38	0.33
GWS4221AQ830, GWS4223AQ830	0.64	0.52	1.00	0.38	0.40
GWS4221AQ840, GWS4221AQ857, GWS4223AQ840, GWS4223AQ857	0.64	0.52	1.00	0.38	0.40
GWS4220BF830, GWS4222BF830	0.63	0.46	1.00	0.49	0.33
GWS4220BF840, GWS4220BF857, GWS4222BF840, GWS4222BF857	0.63	0.46	1.00	0.49	0.33
GWS4221BF830, GWS4223BF830	0.64	0.52	1.00	0.49	0.40
GWS4221BF840, GWS4221BF857, GWS4223BF840, GWS4223BF857	0.64	0.52	1.00	0.49	0.40
GWS4220BA830, GWS4220BH830, GWS4220BP830, GWS4222BA830, GWS4222BH830, GWS4222BP830	0.63	0.46	1.00	0.49	0.33
GWS4220BA840, GWS4220BA857, GWS4220BH840, GWS4220BH857, GWS4220BP840, GWS4220BP857, GWS4222BA840, GWS4222BA857, GWS4222BH840, GWS4222BH857, GWS4222BP840, GWS4222BP857	0.63	0.46	1.00	0.49	0.33

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Products	Manufacturing	Distribution	Installation	Use (B6)	End of Life
GWS4221BA830, GWS4221BH830, GWS4221BP830, GWS4223BA830, GWS4223BH830, GWS4223BP830	0.64	0.52	1.00	0.49	0.40
GWS4221BA840, GWS4221BA857, GWS4221BH840, GWS4221BH857, GWS4221BP840, GWS4221BP857, GWS4223BA840, GWS4223BA857, GWS4223BH840, GWS4223BH857, GWS4223BP840, GWS4223BP857	0.64	0.52	1.00	0.49	0.40
GWS4220BC830, GWS4222BC830	0.63	0.46	1.00	0.49	0.33
GWS4220BC840, GWS4220BC857, GWS4222BC840, GWS4222BC857	0.63	0.46	1.00	0.49	0.33
GWS4221BC830, GWS4223BC830	0.64	0.52	1.00	0.49	0.40
GWS4221BC840, GWS4221BC857, GWS4223BC840, GWS4223BC857	0.64	0.52	1.00	0.49	0.40
GWS4220BQ830, GWS4222BQ830	0.63	0.46	1.00	0.49	0.33
GWS4220BQ840, GWS4220BQ857, GWS4222BQ840, GWS4222BQ857	0.63	0.46	1.00	0.49	0.33
GWS4221BQ830, GWS4223BQ830	0.64	0.52	1.00	0.49	0.40
GWS4221BQ840, GWS4221BQ857, GWS4223BQ840	0.64	0.52	1.00	0.49	0.40
GWS4223BQ857	0.64	0.47	1.00	0.49	0.35
GWS4420AF830, GWS4422AF830	0.98	0.91	1.00	0.75	0.89
GWS4420AF840, GWS4420AF857, GWS4422AF840, GWS4422AF857	0.98	0.91	1.00	0.75	0.89
GWS4421AF830, GWS4423AF830	1.02	1.01	1.00	0.75	1.02
GWS4421AF840, GWS4421AF857, GWS4423AF840, GWS4423AF857	1.02	1.01	1.00	0.75	1.02
GWS4420AA830, GWS4420AH830, GWS4420AP830, GWS4422AA830, GWS4422AH830, GWS4422AP830	0.98	0.91	1.00	0.75	0.89
GWS4420AA840, GWS4420AA857, GWS4420AH840, GWS4420AH857, GWS4420AP840, GWS4420AP857, GWS4422AA840, GWS4422AA857, GWS4422AH840, GWS4422AH857, GWS4422AP840, GWS4422AP857	0.98	0.91	1.00	0.75	0.89
GWS4421AA830, GWS4421AH830, GWS4421AP830, GWS4423AA830, GWS4423AH830, GWS4423AP830	1.02	1.01	1.00	0.75	1.02
GWS4421AA840, GWS4421AA857, GWS4421AH840, GWS4421AH857, GWS4421AP840, GWS4421AP857, GWS4423AA840, GWS4423AA857, GWS4423AH840, GWS4423AH857, GWS4423AP840, GWS4423AP857	1.02	1.01	1.00	0.75	1.02
GWS4420AC830, GWS4422AC830	0.98	0.91	1.00	0.75	0.89
GWS4420AC840, GWS4420AC857, GWS4422AC840, GWS4422AC857	0.98	0.91	1.00	0.75	0.89
GWS4421AC830, GWS4423AC830	1.02	1.01	1.00	0.75	1.02
GWS4421AC840, GWS4421AC857, GWS4423AC840, GWS4423AC857	1.02	1.01	1.00	0.75	1.02
GWS4420AQ830, GWS4422AQ830	0.98	0.91	1.00	0.75	0.89
GWS4420AQ840, GWS4420AQ857, GWS4422AQ840, GWS4422AQ857	0.98	0.91	1.00	0.75	0.89
GWS4421AQ830, GWS4423AQ830	1.02	1.01	1.00	0.75	1.02
GWS4421AQ840, GWS4421AQ857, GWS4423AQ840, GWS4423AQ857	1.02	1.01	1.00	0.75	1.02
GWS4420BF830, GWS4422BF830	0.98	0.91	1.00	1.00	0.89
GWS4420BF840, GWS4420BF857, GWS4422BF840, GWS4422BF857	0.98	0.91	1.00	1.00	0.89
GWS4421BF830	0.99	0.99	1.00	1.00	0.99
GWS4421BF840, GWS4421BF857	0.99	0.99	1.00	1.00	0.99
GWS4420BA830, GWS4420BH830, GWS4420BP830, GWS4422BA830, GWS4422BH830, GWS4422BP830	0.98	0.91	1.00	1.00	0.89
GWS4420BA840, GWS4420BA857, GWS4420BH840, GWS4420BH857, GWS4420BP840, GWS4420BP857, GWS4422BA840, GWS4422BA857, GWS4422BH840, GWS4422BH857, GWS4422BP840, GWS4422BP857	0.98	0.91	1.00	1.00	0.89
GWS4421BA830, GWS4421BH830, GWS4421BP830	0.99	0.99	1.00	1.00	0.99
GWS4421BA840, GWS4421BA857, GWS4421BH840, GWS4421BH857, GWS4421BP840, GWS4421BP857	0.99	0.99	1.00	1.00	0.99
GWS4420BC830, GWS4422BC830	0.98	0.91	1.00	1.00	0.89
GWS4420BC840, GWS4420BC857, GWS4422BC840, GWS4422BC857	0.98	0.91	1.00	1.00	0.89
GWS4421BC830	0.99	0.99	1.00	1 00	0.99
GWS4421BC840_GWS4421BC857	0.99	0.99	1 00	1 00	0.99
GWS4420BQ830_GWS4422BQ830	0.98	0.91	1 00	1 00	0.89
GWS4420B0840 GWS4420B0857 GWS4422B0840 GWS4422B0857	0.00	0.91	1.00	1.00	0.80
GWS4421B0830	0.00	0.01	1.00	1.00	0.03
GWS4421B0840 GWS4421B0857	0.00	0.00	1.00	1 00	0.00
	0.00	0.00	1.00	1.00	0.00

## Product Environmental Profile



Products	Manufacturing	Distribution	Installation	Use (B6)	End of Life
GWS4423BF830	1.00	1.00	1.00	1.00	1.00
GWS4423BF840, GWS4423BF857	1.00	1.00	1.00	1.00	1.00
GWS4423BA830, GWS4423BH830, GWS4423BP830	1.00	1.00	1.00	1.00	1.00
GWS4423BA840, GWS4423BA857, GWS4423BH840, GWS4423BH857, <b>GWS4423BP840</b> , GWS4423BP857	1.00	1.00	1.00	1.00	1.00
GWS4423BC830	1.00	1.00	1.00	1.00	1.00
GWS4423BC840, GWS4423BC857	1.00	1.00	1.00	1.00	1.00
GWS4423BQ830	1.00	1.00	1.00	1.00	1.00
GWS4423BQ840	1.00	1.00	1.00	1.00	1.00
GWS4423BQ857	0.92	0.91	1.00	1.00	0.89