

Product Environmental Profile

CHARTRES - Glass diffusor -ON/OFF - Lamp to equip cap E27



SARLAM'S ENVIRONMENTAL COMMITMENTS

• Incorporate environmental management into our industrial sites

Of all Legrand sites worldwide, over 85 % are ISO 14001-certified (sites belonging to the Group for more than five years).

• Offer our customers environmentally friendly solutions

Develop innovative solutions to help our customers design more energy efficient, better managed and more environmentally friendly installations.


• Involve the environment in product design and provide informations in compliance with ISO 14025

Reduce the environmental impact of products over their whole life cycle.

Provide our customers with all relevant information (composition, consumption, end of life, etc.).



REFERENCE PRODUCT

Function	Envelope allowing to receive a lamp with E27 base (Halogen 53W Maxi or Fluo-compact 20 W Maxi) in order to ensure a general lighting under 230 V during 10 years, inside as outside, of the zones of circulation, the rooms with tertiary use and dwelling. Impact resistance IK 04, waterproof IP 54 and fire resistance 960 °C/5s.
Reference Product	
	Cat.No SL514270
	CHARTRES - Glass diffusor -ON/OFF - Size 1- E27 Lamp to equip - White.

The company reserves the right to change specifications and designs without notice. All illustrations, descriptions, dimensions and weights in the document are for guidance and cannot be held binding on the company.



PRODUCTS CONCERNED

The environmental data is representative of the following products:

Cat. Numbers	Designation	IP	IK
SL-514270	CHARTRES - Glass diffusor -ON/OFF - Size 1- E27 Lamp to equip - White	IP 54	IK 04
SL-514276	CHARTRES - Glass diffusor -ON/OFF - Size 1 - E27 Lamp to equip - Black		
SL-514283	CHARTRES - Glass diffusor -ON/OFF - Size 1 - E27 Lamp to equip - Grey		
SL-514273	CHARTRES - Glass diffusor -ON/OFF - Size 1 - E27 Lamp to equip - White /5		
SL-514275	CHARTRES - Glass diffusor -ON/OFF - Size 1 - E27 Lamp to equip - Black /5		
SL-524270	CHARTRES - Glass diffusor -ON/OFF - Size 2 - E27 Lamp to equip - White		
SL-524276	CHARTRES - Glass diffusor -ON/OFF - Size 2 - E27 Lamp to equip - Black		
SL-524273	CHARTRES - Glass diffusor -ON/OFF - Size 2 - E27 Lamp to equip - Grey		

Product Environmental Profile

CHARTRES - Glass diffusor -ON/OFF - Lamp to equip cap E27



■ CONSTITUENT MATERIALS

This Reference Product contains no substances prohibited by the regulations applicable at the time of its introduction to the market. It respects the restrictions on use of hazardous substances as defined in the RoHS directive 2011/65/EU.

Total weight of Reference Product	1716 g (all packaging included)				
Plastics as % of weight		Metals as % of weight		Other as % of weight	
PC	22.4 %	Al	1.6 %	Glass	48.4 %
ABS	1.5 %	Steel	0.7 %	Ceramic	3.0 %
PA	0.3 %	Copper alloys	0.2 %		
Other plastics	0.3 %				
PS	0.2 %				
PE	0.2 %				
PVC	0.1 %				
Packaging as % of weight					
PE	0.2 %			Paper	13.5 %
Other packaging plastics	< 0.1 %			Wood	7.4 %
Total plastics	25.2 %	Total metals	2.5 %	Total others	72.3 %

Estimated recycled material content: 12 % by mass.

Total weight of Product SL-514276	1716 g (all packaging included)				
Plastics as % of weight		Metals as % of weight		Other as % of weight	
PC	22.4 %	Al	1.6 %	Glass	48.4 %
ABS	1.5 %	Steel	0.7 %	Ceramic	3.0 %
PA	0.3 %	Copper alloys	0.2 %		
Other plastics	0.3 %				
PS	0.2 %				
PE	0.2 %				
PVC	0.1 %				
Packaging as % of weight					
PE	0.2 %			Paper	13.5 %
Other packaging plastics	< 0.1 %			Wood	7.4 %
Total plastics	25.2 %	Total metals	2.5 %	Total others	72.3 %

Estimated recycled material content: 12 % by mass.

Total weight of Product SL-514283	1922 g (all packaging included)				
Plastics as % of weight		Metals as % of weight		Other as % of weight	
PC	20.0 %	Al	1.4 %	Glass	43.2 %
ABS	1.4 %	Steel	0.7 %	Ceramic	2.7 %
PA	0.3 %	Copper alloys	0.2 %		
Other plastics	0.2 %				
PS	0.1 %				
PE	0.1 %				
PVC	0.1 %				
Packaging as % of weight					
PE	0.2 %			Wood	17.3 %
Other packaging plastics	< 0.1 %			Paper	12.1 %
Total plastics	22.4 %	Total metals	2.3 %	Total others	75.3 %

Estimated recycled material content: 11 % by mass.

Product Environmental Profile

CHARTRES - Glass diffusor -ON/OFF - Lamp to equip cap E27



■ CONSTITUENT MATERIALS (CONTINUED)

Total weight of Product SL-514273	1588 g (all packaging included)
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Plastics as % of weight		Metals as % of weight		Other as % of weight	
PC	24.2 %	Al	1.7 %	Glass	52.0 %
ABS	1.7 %	Steel	0.8 %	Ceramic	3.3 %
PA	0.4 %	Copper alloys	0.2 %		
Other plastics	0.3 %				
PS	0.2 %				
PE	0.2 %				
PVC	0.2 %				
Packaging as % of weight					
PE	0.2 %			Paper	9.4 %
Other packaging plastics	<0.1 %			Wood	5.2 %
Total plastics	27.4 %	Total metals	2.7 %	Total others	69.9 %

Estimated recycled material content: 9 % by mass.

Total weight of Product SL-514275	1838 g (all packaging included)
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Plastics as % of weight		Metals as % of weight		Other as % of weight	
PC	21.0 %	Al	1.5 %	Glass	45.3 %
ABS	1.4 %	Steel	0.7 %	Ceramic	2.8 %
PA	0.3 %	Copper alloys	0.2 %		
Other plastics	0.2 %				
PS	0.1 %				
PE	0.1 %				
PVC	0.1 %				
Packaging as % of weight					
PE	0.1 %			Wood	18.1 %
Other packaging plastics	<0.1 %			Paper	8.1 %
Total plastics	23.3 %	Total metals	2.4 %	Total others	74.3 %

Estimated recycled material content: 8 % by mass.

Total weight of Product SL-514275	1838 g (all packaging included)
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Plastics as % of weight		Metals as % of weight		Other as % of weight	
PC	20.7 %	Al	1.1 %	Glass	52.1 %
ABS	1.0 %	Steel	0.5 %	Ceramic	2.2 %
PA	0.3 %	Copper alloys	0.2 %		
Other plastics	0.2 %				
PS	0.2 %				
PE	0.1 %				
PVC	0.1 %				
Packaging as % of weight					
PE	0.2 %			Paper	12.2 %
Other packaging plastics	<0.1 %			Wood	8.9 %
Total plastics	22.8 %	Total metals	1.8 %	Total others	75.4 %

Estimated recycled material content: 11 % by mass.

Total weight of Product SL-524276	2631 g (all packaging included)
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Plastics as % of weight		Metals as % of weight		Other as % of weight	
PC	18.4 %	Al	1.0 %	Glass	46.4 %
ABS	0.9 %	Steel	0.5 %	Ceramic	2.0 %
PA	0.2 %	Copper alloys	0.1 %		
Other plastics	0.2 %				
PS	0.1 %				
PE	0.1 %				
PVC	<0.1 %				
Packaging as % of weight					
PE	0.2 %			Wood	19.1 %
Other packaging plastics	<0.1 %			Paper	10.8 %
Total plastics	20.1 %	Total metals	1.6 %	Total others	78.3 %

Estimated recycled material content: 10 % by mass.

Product Environmental Profile

CHARTRES - Glass diffusor -ON/OFF - Lamp to equip cap E27



■ CONSTITUENT MATERIALS (CONTINUED)

Total weight of Product SL-524273		3384 g (all packaging included)			
Plastics as % of weight		Metals as % of weight		Other as % of weight	
PC	14.3 %	Al	0.8 %	Glass	36.0 %
ABS	0.7 %	Steel	0.4 %	Ceramic	1.5 %
PA	0.2 %	Copper alloys	0.1 %		
Other plastics	0.2 %				
PS	0.1 %				
PE	<0.1 %				
PVC	<0.1 %				
Packaging as % of weight					
PE	0.3 %			Wood	37.0 %
Other packaging plastics	<0.1 %			Paper	8.4 %
Total plastics	15.8 %	Total metals	1.3 %	Total others	82.9 %

Estimated recycled material content: 8 % by mass.



■ MANUFACTURE

This Reference Product comes from sites that have received ISO14001 certification.



■ DISTRIBUTION

Products are distributed from logistics centres located with a view to optimize transport efficiency. The Reference Product is therefore transported over an average distance of 780 km by road from our warehouse to the local point of distribution into the market in Europe.

Packaging is compliant with european directive 2004/12/EU concerning packaging and packaging waste. At their end of life, its recyclability rate is 97 % (in % of packaging weight).



■ INSTALLATION

For the installation of the product, only standard tools are needed.



■ USE

Under normal conditions of use, this product requires no servicing, no maintenance or additional products.

Product Environmental Profile

CHARTRES - Glass diffusor -ON/OFF - Lamp to equip cap E27



END OF LIFE

The product end-of-life factors are taken into account during the design phase. Dismantling and sorting of components or materials is made as easy as possible with a view to recycling or failing that, another form of reuse. This product falls within the scope of the WEEE directive (2012/19/EU). Therefore it must be processed through local WEEE recycling/recovery channels.

• Elements to process specifically:

In accordance with the requirements of this Directive, the following components must be removed and sent to specific channels for processing which comply with the WEEE Directive 2012/19/EU:

- plastic parts with brominated flame retardant: 416 g

• Extended producer responsibility:

The sale of this product is subject to a contribution to eco-organisations in each country responsible for managing end-of-life products in the field of application of the European Waste Electronic and Electrical Equipment Directive.

• Recyclability rate:

Calculated using the method described in technical report IEC/TR 62635, the recyclability rate of the product is estimated at 95 %. This value is based on data collected from a technological channel operating on an industrial basis. It does not pre-validate the effective use of this channel for the end of life of this product.

Separated into:

- plastic materials (excluding packaging) : 24 %
- metal materials (excluding packaging) : 2 %
- other materials (excluding packaging) : 48 %
- packaging (all types of materials) : 21 %

For products covered by the PEP other than the Reference Product, the recyclability rates are:	SL-514276	SL-514283	SL-514273	SL-514275	SL-524270	SL-524276	SL-524273
- Estimated recyclability rate of the product:	95 %	95 %	95 %	95 %	95 %	96 %	95 %
- Plastic materials (excluding packaging) :	24 %	21 %	25 %	22 %	24 %	19 %	15 %
- Metal materials (excluding packaging) :	2 %	2 %	3 %	2 %	2 %	2 %	1 %
- Other materials (excluding packaging) :	48 %	43 %	52 %	45 %	48 %	46 %	36 %
- Packaging (all types of materials) :	21 %	28 %	14 %	25 %	21 %	29 %	44 %



ENVIRONMENTAL IMPACTS

The evaluation of environmental impacts examines the stages of the Reference Product life cycle: manufacturing, distribution, installation, use and end-of-life. It is representative of products marketed and used in France in an electrical installation in compliance with NF C 15100 and associated product standards.

For each phase, the following modelling elements were taken in account:

Manufacture	Materials and components of the product, all transport for the manufacturing, the packaging and the waste generated by the manufacturing.
Distribution	Transport between the last Group distribution centre and an average delivery point in the sales area.
Installation	The end of life of the packaging.
Use	<ul style="list-style-type: none"> • Product category: active product. • Use scenario: for a 10 years working life, in non continuous operation at 100 % rated load, 2.92 μW 7 hours/day all the time. This modelling duration does not constitute a minimum durability requirement. • Energy model: Electricity Mix; Europe 27 - 2008.
End of life	The default end of life scenario maximizing the impacts.
Software and database used	EIME & database CODDE-2016-11

Product Environmental Profile

CHARTRES - Glass diffusor -ON/OFF - Lamp to equip cap E27



SELECTION OF ENVIRONMENTAL IMPACTS

	Total for Life cycle		Raw material and manufacture		Distribution		Installation		Use		End of life	
	Value	Unit	Value	%	Value	%	Value	%	Value	%	Value	%
Global warming	5.93E+01	kgCO ₂ eq.	4.33E+00	7 %	6.66E-02	< 1 %	2.13E-02	< 1 %	5.47E+01	92 %	1.61E-01	< 1 %
Ozone depletion	4.21E-06	kgCFC-11 eq.	6.42E-07	15 %	1.35E-10	< 1 %	1.24E-10	< 1 %	3.56E-06	85 %	4.05E-09	< 1 %
Acidification of soils and water	2.40E-01	kgSO ₂ eq.	1.12E-02	5 %	2.99E-04	< 1 %	1.01E-04	< 1 %	2.28E-01	95 %	6.13E-04	< 1 %
Water eutrophication	3.48E-02	kg(PO ₄) ³⁻ eq.	2.02E-02	58 %	6.88E-05	< 1 %	8.50E-05	< 1 %	1.38E-02	40 %	7.05E-04	2 %
Photochemical ozone formation	1.37E-02	kgC ₂ H ₄ eq.	1.08E-03	8 %	2.13E-05	< 1 %	7.18E-06	< 1 %	1.25E-02	92 %	4.78E-05	< 1 %
Depletion of abiotic resources - elements	3.79E-03	kgSb eq.	3.78E-03	100 %	2.67E-09	< 1 %	9.14E-10	< 1 %	4.75E-06	< 1 %	1.03E-08	< 1 %
Total use of primary energy	1.17E+03	MJ	7.94E+01	7 %	9.42E-01	< 1 %	2.94E-01	< 1 %	1.09E+03	93 %	1.76E+00	< 1 %
Net use of fresh water	1.98E+02	m ³	3.37E-02	< 1 %	5.96E-06	< 1 %	5.51E-06	< 1 %	1.98E+02	100 %	1.40E-04	< 1 %
Depletion of abiotic resources - fossil fuels	6.92E+02	MJ	6.75E+01	10 %	9.36E-01	< 1 %	2.97E-01	< 1 %	6.21E+02	90 %	2.29E+00	< 1 %
Water pollution	3.55E+03	m ³	1.26E+03	36 %	1.10E+01	< 1 %	3.34E+00	< 1 %	2.26E+03	64 %	1.82E+01	< 1 %
Air pollution	2.77E+03	m ³	3.92E+02	14 %	2.73E+00	< 1 %	2.14E+00	< 1 %	2.35E+03	85 %	1.89E+01	< 1 %

The values of the 27 impacts defined in the PCR-ed3-EN-2015 04 02 are available in the digital database of pep-ecopassport.org website.

For products covered by the PEP other than the Reference product, the environmental impacts of each phase of the lifecycle are assimilated to the impacts of the Reference Product.

Product Environmental Profile

CHARTRES - Glass diffusor -ON/OFF - Lamp to equip cap E27



SELECTION OF ENVIRONMENTAL IMPACTS (CONTINUED)

For others references use following table:

The use phase, and end of life phase do not represent significant differences with the Reference Product	Rate SL-514270 SL-514276	Rate SL-514283			
		Manufacturing	Distribution	Installation	End of life
Global warming	1	1	1.1	1.5	1
Ozon depletion				1.2	
Acidification of soil and water				1.5	
Water eutrophication				1.1	
Photochemical ozone creation					
Depletion of abiotic resources - elements					
Total use of primary energy during the life cycle					
Net use of fresh water				1.2	
Depletion of abiotic resources - fossil fuels				1.5	
Water pollution					
Air pollution				1.2	
The use phase, and end of life phase do not represent significant differences with the Reference Product				Rate SL-514270 SL-514276	
	Manufacturing	Distribution	Installation		End of life
Global warming	1	1	0.9	0.7	1
Ozon depletion					
Acidification of soil and water					
Water eutrophication					
Photochemical ozone creation					
Depletion of abiotic resources - elements					
Total use of primary energy during the life cycle					
Net use of fresh water					
Depletion of abiotic resources - fossil fuels					
Water pollution					
Air pollution					
The use phase, and end of life phase do not represent significant differences with the Reference Product					
	Manufacturing	Distribution	Installation	End of life	
Global warming	1	1	1.1	1.2	1
Ozon depletion				0.9	
Acidification of soil and water				1.2	
Water eutrophication				0.8	
Photochemical ozone creation					
Depletion of abiotic resources - elements					
Total use of primary energy during the life cycle					
Net use of fresh water				0.9	
Depletion of abiotic resources - fossil fuels				1.2	
Water pollution				1.3	
Air pollution				0.9	
The use phase, and end of life phase do not represent significant differences with the Reference Product				Rate SL-514270 SL-514276	
	Manufacturing	Distribution	Installation		End of life
Global warming	1	1.3	1.4	1.3	1.4
Ozon depletion					
Acidification of soil and water					
Water eutrophication					
Photochemical ozone creation					
Depletion of abiotic resources - elements					
Total use of primary energy during the life cycle					
Net use of fresh water					
Depletion of abiotic resources - fossil fuels					
Water pollution					
Air pollution					

Product Environmental Profile

CHARTRES - Glass diffusor -ON/OFF - Lamp to equip cap E27



SELECTION OF ENVIRONMENTAL IMPACTS (CONTINUED)

The use phase, and end of life phase do not represent significant differences with the Reference Product	Rate SL-514270 SL-514276	Rate SL-524276				
		Manufacturing	Distribution	Installation	End of life	
Global warming	1	1.4	1.5	2	1.4	
Ozon depletion				1.5		
Acidification of soil and water		1.3		2		
Water eutrophication				1.4		
Photochemical ozone creation		1.1		2		
Depletion of abiotic resources - elements						
Total use of primary energy during the life cycle		1.3				
Net use of fresh water		1.1		1.5		
Depletion of abiotic resources - fossil fuels		1.3				2.1
Water pollution						1.6
Air pollution						

The use phase, and end of life phase do not represent significant differences with the Reference Product	Rate SL-514270 SL-514276	Rate SL-514273				
		Manufacturing	Distribution	Installation	End of life	
Global warming	1	1.3	2	3.8	1.4	
Ozon depletion		1.4		2.2		
Acidification of soil and water		1.3		3.7		
Water eutrophication				1.9		
Photochemical ozone creation		1.1		3.7		
Depletion of abiotic resources - elements						
Total use of primary energy during the life cycle		1.6		3.9		
Net use of fresh water		1.1		2.2		
Depletion of abiotic resources - fossil fuels		1.3				3.9
Water pollution						2.3
Air pollution						

Registration N°: LGRP-00786-V01.01-EN	Drafting rules: «PEP-PCR-ed3-EN-2015 04 02» Supplemented by «PSR-0005-ed2-2016 03 29»
Verifier accreditation N°: VH23	Information and reference documents: www.pep-ecopassport.org
Date of issue: 09-2018	Validity period: 5 years
Independent verification of the declaration and data, in compliance with ISO 14025 : 2010 Internal <input checked="" type="checkbox"/> External <input type="checkbox"/>	
The PCR review was conducted by a panel of experts chaired by Philippe Osset (SOLINNEN)	
PEP are compliant with XP C08-100-1 : 2014 The elements of the present PEP cannot be compared with elements from another program	
Document in compliance with ISO 14025 : 2010: «Environmental labels and declarations. Type III environmental declarations»	
Environmental data in alignment with EN 15804: 2012 + A1 : 2013	

