

The background of the advertisement is a photograph of a large industrial facility, likely a factory or warehouse. The ceiling is high and features a complex network of pipes, ducts, and industrial lighting fixtures. In the foreground, a woman wearing a white hairnet and a bright yellow safety vest is looking down at a tablet device. She is standing next to a series of large blue and white industrial drums. The drums are arranged in rows and have yellow labels with the letters 'A' and 'B' and a green diamond-shaped hazard symbol. The overall scene conveys a sense of industrial scale and professional safety.

PHILIPS

Pacific LED gen5

Made for harsh conditions in industrial and parking applications

Pacific LED gen5



Pacific LED gen5

Content

› Introduction	3
› Benefits	5
› Manufacturing	6
› Warehouses	8
› Private and public parking	10
› Interact	12
› Circular economy	14
› Installation and optics	16
› Chemical resistance	17
› Specifications	18
› Dimensional drawings	19



Optimal performance for demanding environments

For industry and parking areas, a top-class lighting system that ticks all the right boxes is essential. With potential stresses like humidity, extreme temperatures, sparks and chemical fumes, a robust solution is vital. It should also provide the right lighting at the right moment, to support the carrying out of your operations safely. Then there are the financial considerations. It should be easy to install and maintain, harness energy efficiencies, and offer an attractive TCO. All while meeting the greenest of environmental targets.

Meet the 5th generation of Pacific LED. A solution that's designed for optimal performance in the most demanding environments. With optional integration into Interact connected lighting system, enabling light management solutions, Pacific LED can provide even greater energy savings, enhance safety and productivity. Making it future proof in every way.



Lifetime of
up to 100,000
hours (L80)

Highly energy
efficient: up
to 160 lm/W

Water, dust
and chemical
resistant
(IP66, IK08)

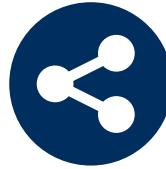
High
uniformity,
glare control
and
smooth light
distribution

6 reasons why
Pacific LED gen5
is the right choice



It can be used in even the most demanding areas of your building

Pacific LED gen5 is suitable for a wide range of (heavy) industrial applications. The luminaires have a robust and compact product architecture, with high water and dust protection (IP66), combined with a high degree of mechanical protection (IK08). Making it a choice you can trust - even in challenging conditions.



It connects to the cloud to optimize maintenance and energy savings

Pacific LED gen5 is connectable and allows for system integration with Interact Industry. This opens up additional opportunities for optimized efficiency, energy savings, improved light management, productivity, and safety.



It creates a safe and healthy working environment

Pacific LED gen5 luminaires offer high uniformity, glare control and smooth light distributions. The portfolio offers an extensive lumen output (up to 15,000 lumen) and optics choice, combined with high quality chemical-resistant materials. Ensuring you have the right light, exactly where you want it.



It saves on energy and maintenance costs

The portfolio is proven to be highly energy efficient and offers luminaires with a long lifetime: up to 160 lm/W and lifetime up to 100,000 hours L80. This, combined with hassle-free installation and maintenance, ensures you enjoy an attractive TCO.



Easy to install and maintain

Installation is quick, easy and offers flexibility in terms of the number of installation and connector choices. What's more, the modular approach and access to Signify Service tag app, makes it easy to service and replace parts, which reduces maintenance costs.



Designed for the circular economy

Pacific LED gen5 is the best environmental choice. Not only does it offer a long and reliable lifetime with high efficacy, it is also designed for complete serviceability and future upgradability, taking into account connected system integration.

Manufacturing

Food and pharma

In industrial production halls, operating conditions demand the most robust luminaires. Not only must they meet the industry norms for visual conditions in specific sectors, they must also comply with the maximum standards for hygiene.

Chemicals and heavy industry

Tough conditions demand tough solutions. Pacific LED gen5 meets every lighting challenge from high failure safety to maximum clarity and comfort. It's also designed to withstand the worst that heavy industry can throw at it, from sparks and dust to oily vapors.

Parts production and assembly halls

Optimal lighting is essential for a satisfied and productive workforce. Minimize mistakes and increase production quality by applying quality lighting at the right levels and uniformity.



- New, more robust design and materials tested against chemical resistance. [▶ See more](#)
- High protection against water, dust (IP66)
- High protection against mechanical impact (IK08)
- Compact architecture, no loose parts to interrupt production processes



- Smooth and color consistent light distributions
- New lumen packages (>8,000 lumen) and new length (1.8m) open up a broader application opportunities
- UGR19 options for workplaces where quality control, inspection or precise work is required
- Low flicker and stroboscopic effect value for good working comfort



- Highly energy efficient (<160 lm/W)
- Very long, reliable lifetime up to 100,000 hours maintaining minimum 80% of the light output
- Optimized optics for reduction of total installed power and further cost optimization



- Flexibility of connection choices
- Fully serviceable parts, simple access to data via our online service database Signify Service tag via QR code on the luminaire. Replacement of parts instead of a complete luminaire
- Installation, maintenance and replacing parts is a straightforward task



Miniaturized, simpler, and fully serviceable design. High energy efficiency and long lifetime, makes it an ideal environmental choice.

Read more on our
[▶ Circular economy approach](#)



Additional control system and intelligent lighting solutions enable further optimization of costs, operation and productivity.

Read more about
[▶ Interact](#)

Lighting application guidance

Industry lighting
.....
Pacific LED gen5
.....
Manufacturing
.....

Open Spaces

Logistics, production and food processing

The new Wide Beam (WB) optic can fulfill all lighting requirements set out in the new *EN12464-1: 2021**. New high output versions (>8,000 lumen) enable a significant (up to 44%) reduction of luminaires and an improved energy efficacy up to 10% due to a higher lm/W value**.

It features R_{UGL} 19 versions, which can provide a higher comfort to the eye and can be installed in workplaces where quality control, inspection or precise work is required.

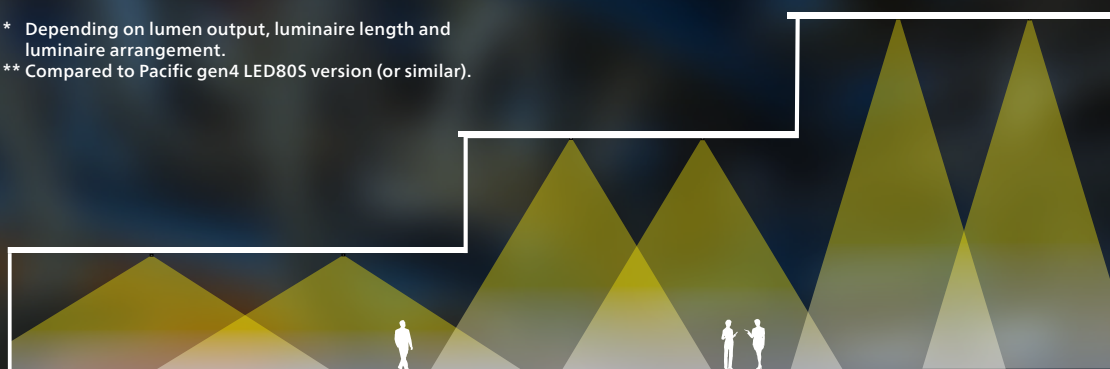
Shorter length 1200mm, replacing old length 1300 and 1600mm, provides comparable light effect, while delivering more energy savings.

* Depending on lumen output, luminaire length and luminaire arrangement.

** Compared to Pacific gen4 LED80S version (or similar).

Recommended optics in open spaces*		Installation height luminaires (m)		
		<4	4 - 9	>9
Illuminance (lux)	750	WB	WB/NB-HRO	NB-HRO
	500	VWB	WB/NB-HRO	NB-HRO
	300	VWB	WB	NB-HRO
	200	VWB	WB	NB-HRO

* Depending on space dimensions



Very Wide Beam (VWB)

Installation height <4m

Wide Beam (WB)

Installation height 4m - 9m

Narrow Beam (NB-HRO)

Installation height >9m



Warehouses

Top-quality lighting can make the difference between quickly finding a stored item, or wasting time trying to find objects in dark corners. Sufficient lighting at floor level (≥ 150 lux), combined with properly illuminated rack faces (≥ 75 lux), can significantly improve logistics operations. The importance of productivity is increasing, while optimal operation remains the key attention point. Pacific LED gen5 provides solution for those requirements:



- High protection against water, dust (IP66)
- High protection against mechanical impact (IK08)



- Highly energy efficient (< 160 lm/W)
- Very long, reliable lifetime up to 100,000 hours maintaining minimum 80% of the light output
- Optimized optics for reduction of total installed power and further cost optimization



Miniaturized, simpler, and fully serviceable design. High energy efficiency and long lifetime, makes it an ideal environmental choice.

Read more on our

► **Circular economy approach**



- New lumen packages ($> 8,000$ lumen) open up a broader application opportunities, especially where higher degree of protection is required
- The optimized optics meet new EU-lighting norms for both floor and aisles (NB-HRO) and supports productivity and safety of workers



- Flexibility of connection choices
- Fully serviceable parts, simple access to data via our online service database Signify Service tag via QR code on the luminaire. Replacement of parts instead of a complete luminaire
- Installation, maintenance and replacing parts is a straightforward task



Additional control system and intelligent lighting solutions, enable further optimization of safety for workers, productivity, cost, and operation.

Read more about

► **Interact**

Lighting application guidance

Industry lighting
Pacific LED gen5
Warehouses

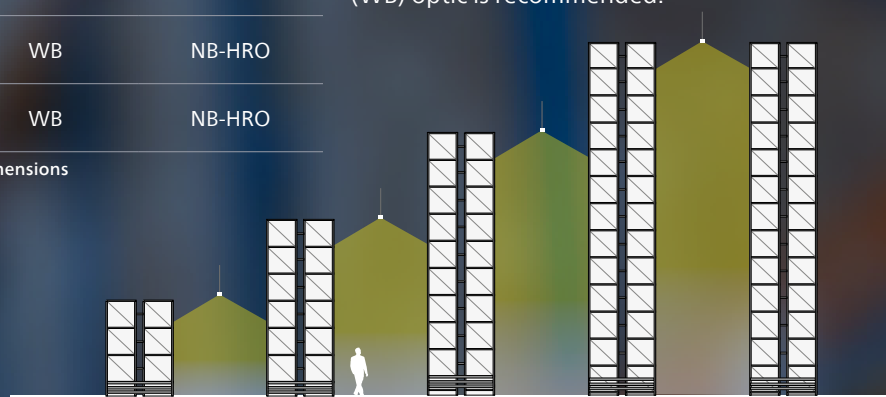
Warehouse aisles

Rack storage

Recommended optics in warehouses*		Installation height luminaires (m)	
		<6	>6
Illuminance (lux)	300	WB	NB-HRO
	200	WB	NB-HRO
	150	WB	NB-HRO

* Depending on space dimensions

The new Narrow Beam High Rack Optic (NB-HRO), especially designed for warehouse aisles, fulfils all lighting requirements set out in new *European norm EN12464-1: 2021*. For aisles with an installation height <6m a Wide Beam (WB) optic is recommended.



Wide Beam (WB)
Installation height <6m

Narrow Beam (NB-HRO)
Installation heights >6m

Open spaces

Logistics, production and food processing

The new Wide Beam (WB) optic is designed for open spaces, especially where IP65 protection is needed. Recommended installation height is between 4 and 9 meters. It can fulfil all lighting requirements set out in the new *European norm EN12464-1: 2021*.

The new high output versions (>8,000 lumen) enable up to 44% reduction in the number of installed luminaires, at an improved energy efficacy up to 10% due to a higher lm/W value**.

Recommended optics in open spaces*		Installation height luminaires (m)		
		<4	4 - 9	>9
Illuminance (lux)	750	WB	WB/NB-HRO	NB-HRO
	500	VWB	WB/NB-HRO	NB-HRO
	300	VWB	WB	NB-HRO
	200	VWB	WB	NB-HRO

* Depending on space dimensions

A shorter 1200mm length replaces the old 1300mm and 1600mm lengths, providing a comparable light effect while saving more energy.

* Depending on lumen output, luminaire length and luminaire arrangement.

** Compared to Pacific gen4 LED805 version (or similar).



Very Wide Beam (VWB)
Installation height <4m

Wide Beam (WB)
Installation height 4m - 9m

Narrow Beam (NB-HRO)
Installation height >9m

Private and public parking

Excellent visibility is key in parking applications. Good light aids safe driving and enhances the feeling of safety for pedestrians. It enables drivers to find vacant spaces easily, park smoothly, and find the exit. But it should provide a bright space without creating disturbing effects, or compromising on operation, maintenance or energy consumption. Pacific LED gen5 meets all the above, and more:



- High protection against mechanical impact (IK08)
- High protection against water, dust (IP66)



- Highly energy efficient (<160 lm/W)
- Very long, reliable lifetime up to 100,000 hours maintaining minimum 80% of the light output
- Optimized optics for reduction of total installed power and further cost optimization



Miniaturized, simpler, and fully serviceable design. High energy efficiency and long lifetime, makes it an ideal environmental choice.

Read more on our
► **Circular economy approach**



- New optimized Very Wide Beam (VWB) optics, create a bright space with high illuminances on walls and ceilings, with good uniformity
- Meets norms for private and public parking



- A choice of connectors and through-wiring or looping options
- Fully serviceable parts, simple access to data via Signify Service tag. Replacement of parts instead of a complete luminaire
- Installation, maintenance and replacing parts is a straightforward task



Additional control system and intelligent lighting solutions enable further optimization of costs and operation.

Read more about
► **Interact**

Lighting application guidance

Car parks

Private and public



Very Wide Beam (VWB)
Installation height 2.5m - 4m

Parking areas – not open to public:

Average illuminance (\bar{E}_m , floor) ≥ 75 lux
Uniformity at floor (U_o) ≥ 0.25



Very Wide Beam (VWB)
Installation height 2.5m - 4m

Parking areas – open to public:

Average illuminance (\bar{E}_m , floor) ≥ 150 lux
Uniformity at floor (U_o) ≥ 0.4

The improved Very Wide Beam (VWB) optic, designed especially for low spaces and car parks, fulfils the new requirements for both private and public car parks set out in the new *European norm EN12464-1: 2021 (Table 42: places of public assembly - car parks indoor)*.



interact

Pacific LED gen5 is easy to integrate into an Interact connected lighting installation

Interact connected lighting systems make it easier than ever to enjoy the benefits of smart lighting. It's a cost-efficient and wireless solution for every step of your smart lighting journey: starting with just lights and an app, while gaining more benefits by simply adding a gateway. The system is scalable, so it's possible to upgrade later when business requirements change, without the need to replace light points. So you can upgrade your lighting from smart to super smart in an instant.



Sensor units

To maximize the benefits of system connectivity and to enable occupancy detection or daylight harvesting, Pacific LED Interact (SIA+ IA9) requires external ZGP battery powered sensors.

OCC SENSOR IA CM IP65 WH
OCC-DL SENSOR IA CM IP65 WH

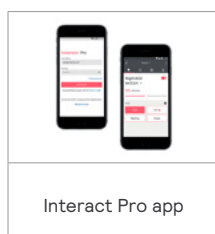


One system, three tiers – each providing the best solution for every customer’s need

	Foundation	Advanced	Enterprise
Sensor/switch control	✓	✓	✓
Scenes	✓	✓	✓
App control by one user	✓	✓	✓
App control by multiple users		✓	✓
Scheduling		✓	✓
Energy reporting		✓	✓
Off-site control		✓	✓
Diagnostics (off-site)		✓	✓
Feature updates		✓	✓
Multi-site dashboards on energy and occupancy data			✓
Space management web application			✓
Productivity mobile application			✓
Integration with building management system			✓
Emergency feedback and monitoring			✓

System building blocks

Foundation tier



Advanced tier



For more information:
www.interact-lighting.com

Enterprise tier



Bringing you benefits with our circular economy approach



What if...

...we can enable your luminaires to meet your evolving needs beyond their rated service life from start to finish – including service and repair, upgrades and replacements – while you just enjoy the best lighting performance?

In a truly circular economy, everyone benefits - including our planet itself. Our purpose is to unlock the extraordinary potential of light for brighter lives and a better world. Using a circular approach, we aim to source and use renewable materials in our luminaires and components to maximum effect, while reducing landfill waste. With this in mind, we offer energy-efficient luminaires that are designed for easy maintenance, repair, upgrades and replacement. Maintenance services are designed to be simple, fast and efficient, saving you time and money. And of course, we provide sophisticated technological upgrades, as and where needed, to keep your lighting fit for purpose.

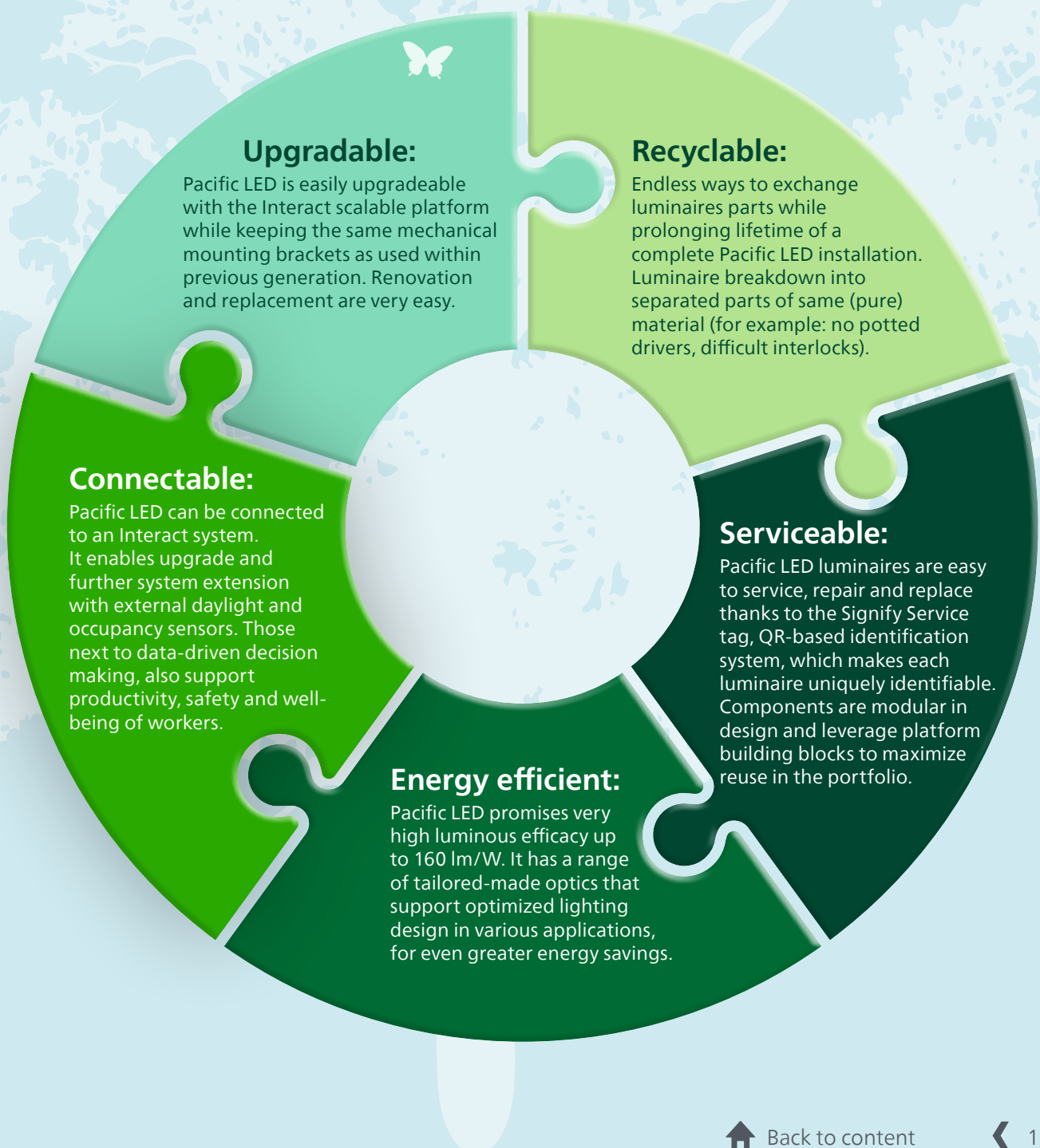
Our circular lighting solutions can include innovative managed service models with end-of-contract options, intelligent asset management systems and circular economy-ready luminaires, supporting optimal performance. We work with partners to ensure the safe and compliant collection and recycling of end-of-life components and luminaires. You benefit from immediate cost savings resulting from long-term functionality. Not to mention the least possible environmental impact.



Lifecycle assessments have been conducted for all circular economy-ready luminaires

We've designed luminaires for outdoor and indoor use with the circular economy in mind

Get ready to meet five vital benefits for our customers and our planet

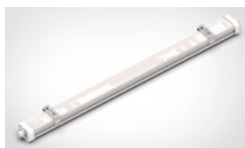


Installation and optics

Flexible installation



WT490C
WT475C
Standalone version



WT490C TW1/TW3
WT475C TW1
Through-wiring version



WT490C TCW5
Looping wires version



WT490C W5
Standalone Wieland version



WT490C TW1/3 W5
Through-wiring Wieland version

Choose your preferred connection type

Push-in connector (PI5/7)

Easy, tool-free wiring.

WAGO connector (WA7)

Flexible and tool-free wiring, thanks to 2-part connector.

Wieland (W5)

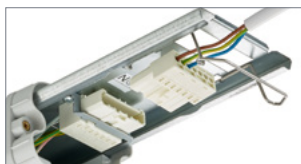
Simple wiring without opening the luminaire.



5-pole



7-pole



7-pole



5-pole

Cable entry adjusted to the luminaire configuration



M20 for cables with max.
14 mm diameter (Ø)

Factory default for all configuration
with up to 5 wires.*



TCW5, only with M20 for cables
max. 14 mm diameter (Ø)



M25 for cables with max.
17 mm diameter (Ø)

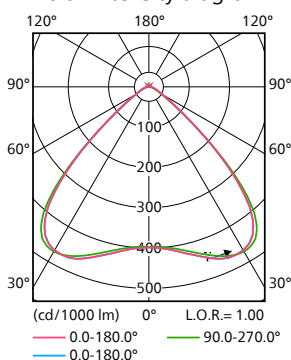
Factory default for all configuration
with 7 wires.*

Factory default configuration can be changed, based on a request.

Optics choices for Pacific LED gen5 Light distributions - Polar diagrams

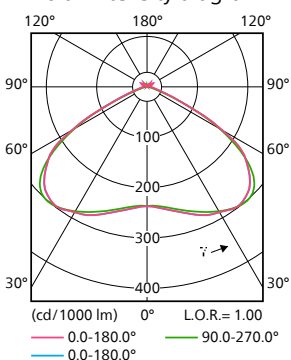
Wide beam (WB)

Polar intensity diagram



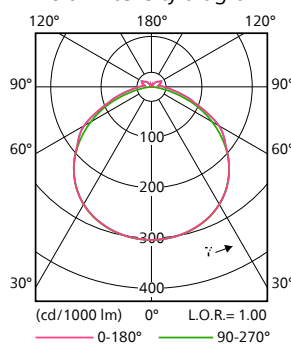
Very wide beam (VWB)

Polar intensity diagram



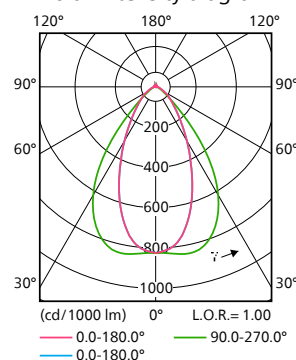
Opal (O)

Polar intensity diagram



Narrow beam (NB-HRO)

Polar intensity diagram



Chemical resistance

Resistance to substances

	Resistant	Partial resistance	Not resistant
Acetone		●	
Ammonia 25%	●		
Hydrogen peroxide 30%		●	
Citronella oil		●	
Diesel fuel		●	
Glycerin	●		
Hand cream	●		
Grease		●	
Ink	●		
Insecticide	●		
Nail polish remover			●
Lemon juice		●	
Margarine	●		
Mayonnaise	●		
Milk	●		
Mineral oil	●		
Motor oil	●		
Vegetable oil	●		
Olive oil	●		
Paraffin oil	●		
Petrol normal			●
Petrol super	●		
Pine oil		●	
Sea water	●		
Shampoo	●		
Silicone oil	●		
Soap solution	●		
Soya oil		●	
Turpentine		●	
Wax	●		
Ethanol		●	
Caustic soda 2%	●		
Phosphoric acid 2%		●	

Resistance to cleaning agents and detergents*

	Resistant	Partial resistance
LERAPUR RHE 132 alkaline (diluted 3%)	●	
LERADES CSR 102 alkaline (diluted 3%)		●
LERACID 169 acidic (diluted 3%)	●	
LERACID RSC 215 acidic (diluted 3%)	●	
LERASEPT L 420 acidic (diluted 3%)	●	
Universal detergent	●	
Glass detergent	●	
Dishwashing liquid	●	

* Please refer to Service Manual (available through Signify Service tag app) for more details on chemical composition of cleaning agents and detergents.

- resistant means no changes and/or damage
- not resistant means changes in the appearance and damage
- partial resistance means changes in the appearance with no damage

Industry applications examples

Chemical	✓
Automotive	✓
Petrochemical	✓
Heavy industry	✓
Food processing and pharma	✓
Disinfection	✓

DISCLAIMER: our recommendations concerning the chemical resistance of the materials are based upon chemical resistance testing performed on Pacific LED components. Substances selected for tests are based on our experience in different industry applications. It shall be noted however that, the resistance of various components (metals, plastics, etc.) can be affected by the temperature, concentration, presence of various (mixed) chemicals, among other factors. The summary provided herein is not and should not be considered as any warranty or guarantee, express or implied, of any kind or of any form that the product herein displayed is fit for any purpose and/or any applications as may be described herein and/or resistant against exposure to any chemicals and/or other substances as may be described herein. It is the customer's sole and exclusive responsibility to determine the suitability of the luminaires in various solutions and applications.

Specifications

Comparing Pacific LED gen5 with Pacific LED gen5 Value

	Pacific LED gen5	Pacific LED gen5 Value
Specification		
Efficiency	160 lm/W	140 lm/W
Lifetime	100,000 hours @L80	50,000 hours @L80
Lumen output (lm)	2300/4200/6400/8000/10000/12000/150000	4200/6200/7200/10700
Optics	NB-HRO, WB, VWB, O(tube)	NB-HRO, WB, VWB, O(tube)
Ta range	-25°C to 45°C	-25°C to 45°C
Flicker value (Pst LM)	≤1	≤1
Stroboscope effect value SVM	≤0.4	≤0.4
Installation		
Drivers	Non-dimmable, DALI-2, Interact	Non-dimmable, DALI-2
Connectivity (optional)	Interact ready	No
Service and mounting		
Mounting bracket	Single piece mounting, same as gen4	Single piece mounting, same as gen4
Signify ServiceTag ¹⁾	Yes	Yes
Serviceability and Easy de-installation ²⁾	Fully Serviceable (Driver, LEDs, metal parts, tube)	Fully Serviceable (Driver, LEDs, metal parts, tube)

1) QR-based identification system, enabling unique identification of each luminaire

2) For details please refer to Service manual, available via Signify Service Tag app

Configuration options and product description

Family Description	Length (mm)	Lumen Package	Light Colour options (K)	Optics options	System options	Wiring options	Connector options	River options	Emergency options ⁴⁾
Pacific LED gen5 WT490C	700	2300 LED23S	3000	Narrow Beam (NB)	Interact Ready Antenna with bluetooth functionality (IA9, sensor type SNS441 IA)	Through wiring 1-Phase (TW1)	Push in connector (PI5 and PI7)	Non-dimmable PSU	ELP3 Emergency lighting PRO (3h)
	1200	4200 LED42S	4000	Wide Beam (WB)		Through wiring 3-Phases (TW3)		WAGO connector (WA7)	DALI-2 dimmable PSD
		6400 LED64S	6500 ²⁾		Feed-through connection (5 poles) (TCW5)	Wieland connector on a wire (5-pole) (W5)	Interact Ready SIA		
		8000 LED80S		Very Wide Beam (VWB)				Opal tube (O) ³⁾	
		10000 LED100S	DALI-2 dim or Interact ready, DC-compatible Emergency lighting PSED/SEIA						
	1600 ¹⁾	4200 LED42S		ELW3 Emergency lighting with Wireless Interface (3h)					
		6400 LED64S							
		8000 LED80S							
	1800	8000 LED80S	CLO Constant Light Output						
		10000 LED100S							
		12000 LED120S							
		15000 LED150S							
Pacific LED gen5 Value WT475C	1200	4200 LED42S	4000	Narrow Beam (NB)		Through wiring 1-Phase (TW1)	Push in connector (PI5 and PI7)	Non-dimmable PSU	ELB3 Emergency lighting Basic (3h)
	1600 ¹⁾	7200 LED72S	Wide Beam (WB)	DALI-2 dimmable PSD					
	1800	6200 LED62S							
		10700 LED107S	Very Wide Beam (VWB)						

1) 1600mm available from early 2022

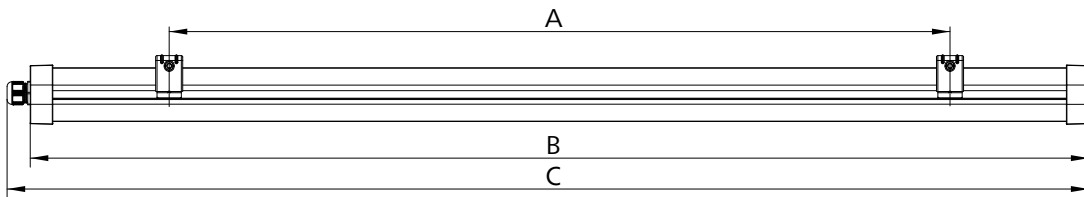
2) 6500K available on request

3) opal tube available from Q2'22

4) DALI and PRO Emergency Lighting enables self-test function, Emergency Lighting features LFP batteries with up to 6yrs lifetime

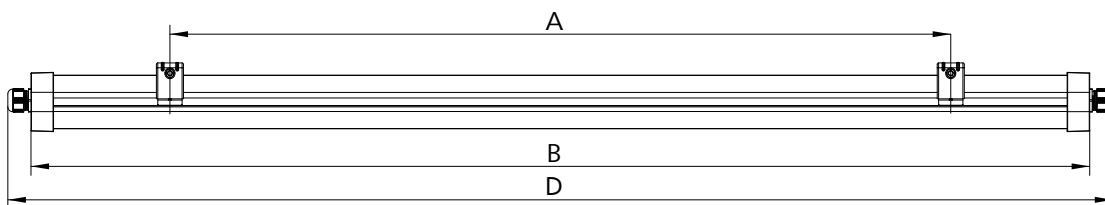
Dimensional drawings

Philips Pacific LED gen5 standalone type



Luminaire type	A (mm)	B (mm)	C (mm)	kg max
WT490C L700 (TCW5)	360 - 260	660	686	1.6
WT490C L1200 (TCW5)	920 - 720	1221	1248	2.4
WT490C L1600 (TCW5)	1300 - 1100	1601	1628	3.0
WT490C L1800 (TCW5)	1480 - 1080	1783	1810	3.2

Philips Pacific LED gen5 through wiring type



Luminaire type	A (mm)	B (mm)	C (mm)	kg max
WT490C L1200 TW	920 - 720	1224	1278	2.8
WT490C L1600 TW	1300 - 1100	1601	1654	3.4
WT490C L1800 TW	1480 - 1080	1785	1838	3.6



