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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.





Water, dust and chemical resistant (IP66, IK08)

High

uniformity,

glare control

and

smooth light

distribution

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.



Highly energy efficient: up to 160 lm/W

Lifetime of

up to 100,000

hours (L80)



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



- 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



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



- Flexibility of connection choices
- Fully serviceable parts, simple access to data via our online service database Signify Service tag via QR code on the luminiare. 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, operation and productivity.

Read more about

) Interact

Lighting application guidance

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_{ugi} 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
- ** Compared to Pacific gen4 LED80S version (or similar).

Reco	ommended	ended Installation height lu		minaires (m)		
	ptics in en spaces*					
(xn		WB	WB/NB-HRO	NB-HRO		
llluminance (lux)	500	VWB	WB/NB-HRO	NB-HRO		
mina	300	VWB	WB	NB-HRO		
<u> </u>	200	VWB	WB	NB-HRO		

* Depending on space dimensions



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 luminiare. 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

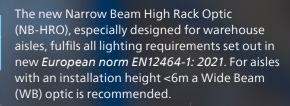
Pacific LED gen5

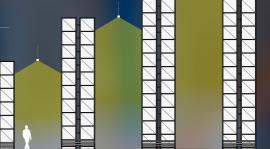
Warehouse aisles

Rack storage

Reco	ommended	Installation heigh	nt luminaires (m)
	ptics in rehouses*		
(Iux)	300	WB	NB-HRO
Illuminance (lux)		WB	NB-HRO
Illum	150	WB	NB-HRO

* Depending on space dimensions





Narrow Beam (NB-HRO)

Open spaces

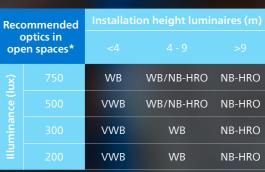
Logistics, production and food processing

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 luminiares, at an improved energy efficacy up to 10% due to a higher lm/W value**.

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

- * Depending on
- * Compared to LED80S version



* Depending on space dimensions



Very Wide Beam (VWB) Installation height

Wide Beam (WB) Installation height

Narrow Beam (NB-HRO) Installation height

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 (Ēm, floor) ≥75 lux Uniformity at floor (Uo) ≥0.25



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

Parking areas – open to public: Average illuminance (Ēm, floor) ≥150 lux Uniformity at floor (Uo) ≥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).*



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.

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			✓

Sensor units

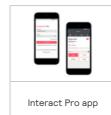
To maximize the benefits of system connectivity and to enable occupancy detection or daylight harvesting, Pacific LED Interact (SIA+ IA9) requires external ZGP battery powered sensors.

OCC-DL SENSOR IA CM IP65 WH



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 energyefficient 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

Upgradable:

Pacific LED is easily upgradeable with the Interact scalable platform while keeping the same mechanical mounting brackets as used within previous generation. Renovation and replacement are very easy.

Recyclable:

Endless ways to exchange luminaires parts while prolonging lifetime of a complete Pacific LED installation. Luminaire breakdown into separated parts of same (pure) material (for example: no potted drivers, difficult interlocks).

Connectable:

Pacific LED can be connected to an Interact system. It enables upgrade and further system extension with external daylight and occupancy sensors. Those next to data-driven decision making, also support productivity, safety and wellbeing of workers.

Serviceable:

Pacific LED luminaires are easy to service, repair and replace thanks to the Signify Service tag, QR-based identification system, which makes each luminaire uniquely identifiable. Components are modular in design and leverage platform building blocks to maximize reuse in the portfolio.

Energy efficient:

Pacific LED promises very high luminous efficacy up to 160 lm/W. It has a range of tailored-made optics that support optimized lighting design in various applications, for even greater energy savings.

Installation and optics

Flexible installation



WT475C Standalone version



Through-wiring version



Looping wires version



Standalone Wieland version



Through-wiring Wieland

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.



5-pole

Simple wiring without

opening the luminaire.

Wieland (W5)

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.*



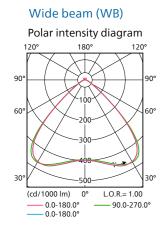
M25 for cables with max. 17 mm diameter (Ø)

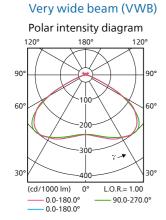
Factory default for all configuration

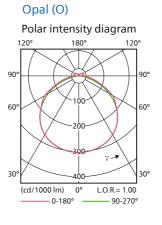
Factory default configuration can be changed, based on a request.

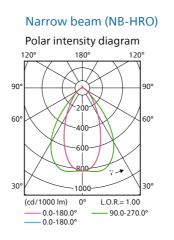
TCW5, only with M20 for cables max. 14 mm diameter (Ø)

Optics choices for Pacific LED gen5 Light distributions - Polar diagrams









Chemical resistance Resistance to substances Acetone Ammonia 25% Hydrogen peroxide 30% Glycerin Hand cream Grease Insecticide Nail polish remover Lemon juice Margarine Mayonnaise Milk Mineral oil **Industry applications examples**

•

Motor oil

Olive oil

Paraffin oil

Petrol normal

Petrol super Pine oil

Sea water Shampoo

Silicone oil

Soya oil

Ethanol

Turpentine

Caustic soda 2%

Phosphoric acid 2%

Soap solution

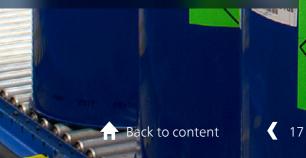
Resistance to cleaning agents and detergents*

	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 app) for more details on chemical composition of cleaning agent
- 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 damag

Chemical	
Automotive	\sim
Petrochemical	\sim
Heavy industry	
Food processing and pharma	V
Disinfection	V

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)	2300/4200/6400/8000/10000/12000/15000	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 luminiare

Configuration options and product description

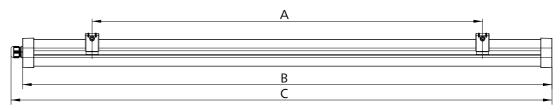
Family Description	Length (mm)	Lumen Package	Light Colour options (K)	Optics options	System options	Wiring options	Connector options	River options	Emergency options 4)
Pacific LED gen5	700	2300 LED23S	3000	Narrow Beam	Interact Ready	Through wiring		Non-dimmable	
WT490C	1200	4200 LED42S	. 4000	(NB)	Antenna with bluetooth	1-Phase (TW1)	(PI5 and PI7)	PSU	Emergency lighting
		6400 LED64S		Wide Beam	functionality	Through wiring		DALI-2	PRO (3h)
		8000 LED80S	6500 ²⁾	(WB)	(IA9, sensor type	3-Phases (TW3)	WAGO connector	dimmable PSD	ELD3
		10000 LED100S		Very Wide	SNS441 IA)	Feed-through	(WA7)		Emergency
	1600 ¹)	4200 LED42S		Beam (VWB)		connection (5 poles)	Wieland	Interact Ready SIA	lighting DALI (3h)
		6400 LED64S		Opal tube		(TCW5)	connector	JIA.	DALI (311)
		8000 LED80S		(O) 3)			on a wire (5-pole) (W5)	DALI-2 dim or Intreact ready,	ELW3 Emergency
	1800	8000 LED80S					(3-pole) (VV3)	DC-compatible	
		10000 LED100S						Emergency lighting	Wireless Interface (3h)
		12000 LED120S						PSED/SEIA	interiace (SII)
		15000 LED150S						CLO Constant Light Output	
Pacific LED gen5	1200	4200 LED42S	4000	Narrow Beam		Through wiring		Non-dimmable	
Value WT475C	1600 ¹)	7200 LED72S	(N	(NB)		1-Phase (TW1)	connector (PI5 and PI7)	PSU	Emergency lighting Basic
	1800	6200 LED62S		Wide Beam			(115 dilu 117)	DALI-2	(3h)
		10700 LED107S		(WB)				dimmable PSD	
				Very Wide Beam (VWB)					

^{1) 1600}mm available from early 2022

Dimensional drawings

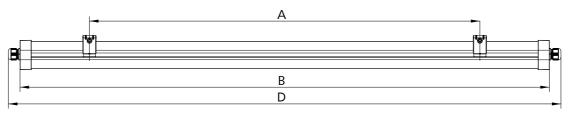
Industry lighting Pacific LED gen5 Dimensional drawings

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





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

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



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