



Introduction

LED-based lighting solutions are transforming the lighting market. LEDification is particularly interesting to town and city authorities wishing to reduce their energy consumption, as public street lighting accounts for as much as 40% of their electricity bill.

The reduction in energy consumption of an LED lighting installation compared to conventional lighting is highly significant: 50%, or even as high as 70% when coupled with smart controls. At the same time, LED lighting with smart controls can reduce CO₂ emissions by up to 70%.

And that's not all! LED technology also facilitates an improvement in terms of light quality, which among others can lead to an improved sense of safety and more satisfied residents.

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Challenges for public lighting

More and more regulations are requiring outdated public lighting installations to be phased out. In addition, cities today recognize the need to switch to more efficient light sources that enable them to reduce energy costs and contribute to their sustainability objectives.

However, local authorities have only a limited budget available and need to be conscious of their spending. Therefore, maintenance requirements and Total Cost of Ownership are becoming important criteria when selecting new lighting, and when upgrading conventional lighting to LED, where direct 1:1 replacements are often preferred.



Versatile and cost-efficient public lighting

The new second-generation ClearWay builds on the strengths of its predecessor and is designed to further minimize your Total Cost of Ownership. Ideal for new streets and for renovating existing installations, this affordable range of lighting solutions combines clean, high-quality light with significant energy savings and reduced maintenance.

1:1 replacement

ClearWay gen2 is perfect for replacing conventional technology such as SOX, PL-L, SON or HPL. It also enables add-on lighting control while retaining the same electrical installation and poles.

Low initial investment

ClearWay gen2 meets the needs of municipalities under financial constraints. It enables them to keep their initial investment in lighting low, while still providing them with good-quality, energy-efficient lighting.

Attractive TCO

When it comes to Total Cost of Ownership, ClearWay gen2 stands out. It is extremely efficient, offering a performance up to 140 lm/W, with a lifetime of up to 100,000 hours. Both installation and maintenance are simplified thanks to the Philips Service tag QR code, which provides all the installation information you need.

Installation is also easier thanks to the low weight of the ClearWay gen2 luminaire and the reduced number of screws.

Wide application coverage

To suit different areas in and outside the city, you can choose between different sizes, a wide choice of lumen packages (ranging from 1,000 up to 12,000 lumens) and a broad range of standard and premium optics. These optics are designed for 1:1 replacement of conventional luminaires.

Ready to be connected to lighting controls and systems

ClearWay gen2 can be paired with LumiStep or Dynadimmer controls to create specified dimming schedules to optimize energy consumption.

Moreover, it is also ready to be connected to the Philips CityTouch remote light management system, which can provide benefits in terms of maximing operational management and enabling proactive maintenance.





1:1 replacement



Low initial investment



Attractive TCO



Wide application coverage



Connectable to controls





Application areas

Parking area

Roads

- · Main road
- Provincial road
- Minor road

Residential

- Walking/cycling path
- Minor road



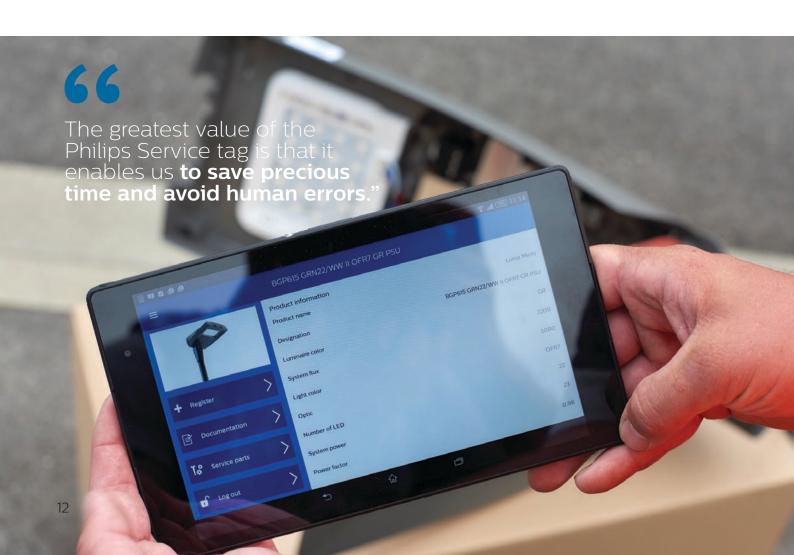


Serviceability

LEDification in outdoor lighting is a growing trend due to the high level of light quality and the outstanding energy efficiency of LED technology. However, maintenance of LED luminaires is more complex than for conventional luminaires, as it requires different competences and processes. At the same time, there is growing pressure to speed up fault finding and repair processes and fulfill increasing safety and efficiency demands.

To meet these often conflicting requirements, Philips has developed the Philips Service tag. This unique QR-based identification system is placed on all next generation Philips luminaires, poles and boxes they are delivered in, to offer the following benefits:

- Easier installation and servicing thanks to 360° service proposition
- Digital maintenance possibilities
- 24/7 access to luminaire and spare part information
- · Quicker access to spare parts
- Rapid on-the-spot re-programming of drivers



Why Philips Service tag?



Easy access to relevant information

Improving installation process by providing easy access to product configuration information



More effective maintenance

Enabling more effective maintenance operations by identifying spare parts



Digital maintenance

Enabling you to pre-program spare parts to factory settings

Instant access to procedures, spare part list and programming

This tag features a QR-based identification system that gives you instant access to critical information during unpacking, installation, diagnostics, fault reporting and programming. Simply scan the tag with a smartphone or tablet running the Philips Service tag app, and the contents of the box plus installation information are displayed. The tag also activates the five-year warranty. To assist in diagnosing breakdowns, scanning the tag provides the troubleshooting guide applicable to that luminaire. Sourcing spare parts and 'one touch' programming of parts to original settings can also be done using the app. It's that simple.



Success story

Enköping, Sweden







What was the customer looking for?

Enköping wanted to renew its lighting system with an economical solution that would deliver a significant decrease in energy consumption and its environmental footprint.

The Philips Lighting solution

Philips upgraded 3,000 mercury streetlights to LED-based ClearWay gen2 luminaires. Integral to the solution was the Dynadimmer controller, to enable lights to be dimmed during the day when there is sufficient daylight, thus saving energy.

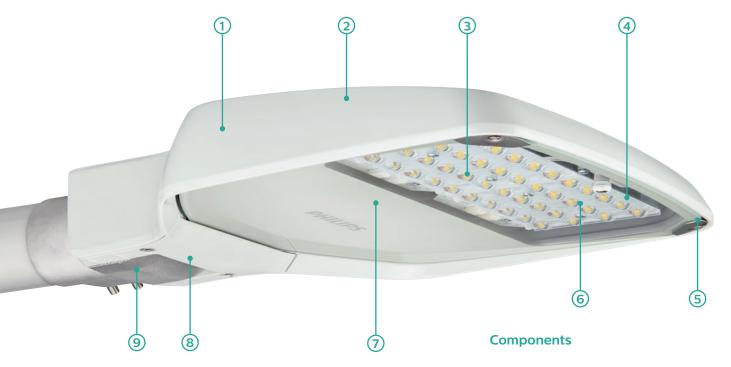
Impressive results

The streets of Enköping now have a warm and welcoming ambience, while the authorities are delighted with a reduction in energy consumption of 32%. This was possible thanks to both the new energy-efficient ClearWay gen2 LED lighting solution and Dynadimmer, which enabled scheduled dimming and consequently additional energy savings. The number of operating hours of the town's public lighting has been reduced by 348,000 hours per year, contributing greatly to the city's environmental and cost-saving objectives.

Components

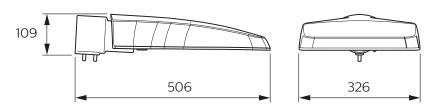


Components

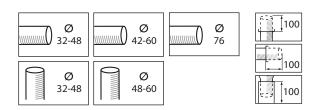


- 1 Aluminum housing (diecast)
- **2** Top surface without fins
- 3 High efficiency LEDs
- 4 Flat glass
- **5** Glass opening with 2 screws
- 6 Two light engine
- **7** Philips drivers
- **8** Adjustable spigot +15° to -90°
- 9 Spigot regulated without cover opening

Dimensions (mm)



Spigot (mm)







specifications



Product **specifications**

Specifications

Type	BGP307 ClearWay gen2
Light source	Integral LED-module
Power	12.6W to 80 W (depending on the version)
Luminous flux	Nominal (source): CORE: 2.5k – 10.9k lm PERFORMER to 12k lm Tunable by L-Tune
Luminaire (system) efficacy	Core: 113 - 129lm/W (depending on the version) Performer: 121 - 141lm/W (depending on the version)
Correlated color temperature	4000 K (3000K upon request – PERFORMER version only)
Color rendering index	> 70 (4000 K) > 80 (3000 K) PERFORMER ONLY
Useful life	100,000 hours min L80B10 (Core), min L90B10 (Performer) at 25°C ambient temperature
Operating temperature range	-40 to +35 ℃
Driver	Built-in (self-ballasted LED-module)
Mains voltage	220-240 V / 50-60 Hz
Dimming	LightWave LumiStep Dynadimmer Dali
Options	Constant light output (CLO) External cable 4, 6, 8, 10, 12, 15, 22m Surge protection device (up to 10 kV) Backlight louver (BL1 and BL2) for Performer
Optic	Core version: Distribution Medium (DM) or Distribution Wide (DW); Performer version: Distribution Narrow DN10; Distribution Medium DM10, DM11, DM12, DM 50; Distribution Wide DW10 Other Performer optics upon request.
Optical cover	Flat cover, glass (5mm)
Materials	Housing: die-cast aluminium, high pressure Cover: glass, thermally hardened, 5 mm
Color	Housing: light gray (RAL7035), other colors upon request
Connection	Push-in connection block or as option an external IP connector

