



# TownGuide Performer

Designed around your needs



**PHILIPS**

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# The TownGuide Performer family

## Designed around your needs

The TownGuide Performer family is a functional outdoor LED lighting range for the lower post-top applications. TownGuide is most suitable for residential areas, parks, squares and pathways.

We offer five recognisable yet modern shapes: Flat Cone, Bowl, Classic Cone, Classic T and T. All are available with either a clear or frosted bowl. With an extensive range of lumen packages and a choice of colour temperatures and operating lifetimes, it is easy to select the version that best suits your project's specific requirements.

In addition, TownGuide Performer offers a variety of control system options that can make it an integral part of your smart energy reduction programmes – from standalone LumiStep, DynaDimmer and SDU switch-dim control through to seamless remote connectivity with the CityTouch lighting management platform.

Installation is easy. Thanks to the bayonet whistle connector with integrated gland, located in the spigot, there is no need for the luminaire to be opened for installation. Philips has made every effort to make the Total Cost of Ownership (TCO) of the luminaire as attractive as possible. And as TownGuide Performer is a dedicated LED luminaire that is compatible with a variety of control systems, the energy and maintenance cost savings compared with conventional lighting are significant.



- ✓ State-of-the-art mid-power LEDs increase visual comfort for drivers and pedestrians. Thanks to the wide choice of optics, the optimal configuration for your application can always be found, enabling a considerable reduction in energy consumption and carbon footprint. Especially compared with HPL Mercury, but also compared with SON-T and compact fluorescent lamps. Further energy savings can be achieved using constant light output (CLO) or dimming options.
- ✓ Low maintenance thanks to long life of LED light source
- ✓ Suitable for new installations or direct retrofit replacement of existing installations

# Family Range

The wide choice of shapes and bowl finishes enables you to mix and match so you can meet any specific requirements in the residential environment. You will always find a design that suits the time age of the area, be it the roaring twenties, the provocative sixties or the contemporary style of today.



Flat Cone clear  
Upward light ratio,  
ULR < 3%



Bowl clear  
Upward light ratio,  
ULR < 3%



Classic Cone clear  
Upward light ratio,  
ULR < 3%



Classic T clear  
Upward light ratio,  
ULR < 3%



T clear  
Upward light ratio,  
ULR < 3%



Flat Cone frosted  
Upward light ratio,  
ULR < 3%



Bowl frosted  
Upward light ratio,  
ULR < 15%



Classic Cone frosted  
Upward light ratio,  
ULR < 10%



Classic T frosted  
Upward light ratio,  
ULR < 4%



T frosted  
Upward light ratio,  
ULR < 3%



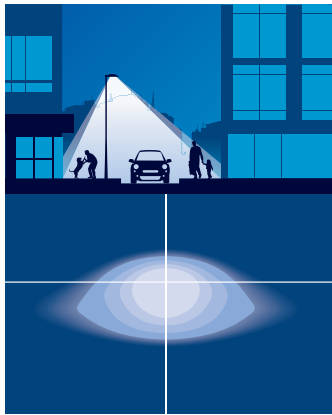
Typical examples of suburban and residential street application

# Lighting performance

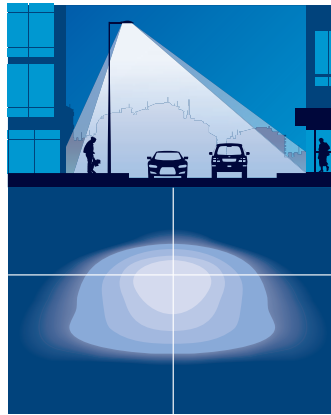
## Light distribution

TownGuide Performer offers four lens configurations and a wide range of GreenLine or EconomyLine lumen packages. The combination makes it possible to match virtually any street geometry in the residential environment, minimising wastage of light and energy, maximising TCO opportunities, yet complying with the applicable lighting classes. In many cases G1 glare control can be achieved, and G2/G3 is even possible in some cases.

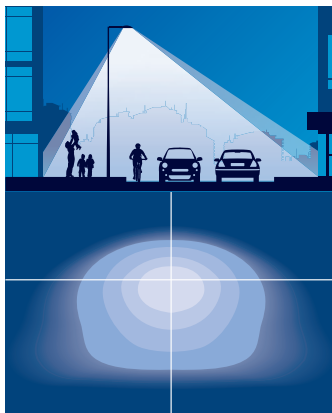
**DN Distribution Narrow**



**DM Distribution Medium**



**DW Distribution Wide**



**DS Distribution Symmetric**

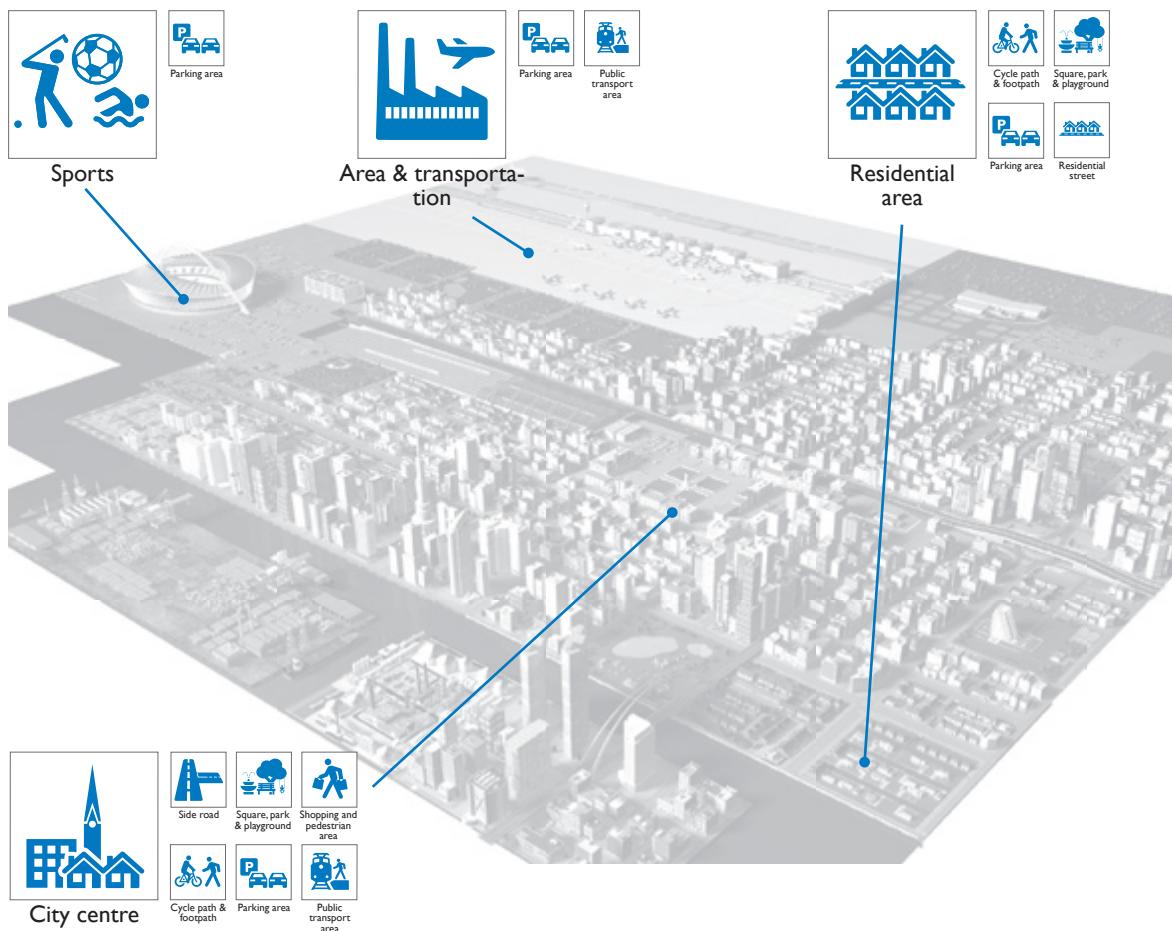


LED module and possible lens combinations

# Applications

As a dedicated post top luminaire, TownGuide Performer is primarily suited to applications in residential streets as well as in suburban squares, parks, pathways and playgrounds. The versatile TownGuide Performer is, however, also ideal for applications in suburban parking areas, sports facilities, public transport areas such as bus and tram stops as well as in large area applications, such as industrial sites, airports, harbours or railways. By adding the many dimming options available, the application can be tailored to suit your requirements throughout the night. When dimming options are included, the annual running costs are further reduced.

TownGuide Performer is also an attractive option for private applications, such as next to an office building, in factory grounds, at a pleasure or theme park, etc. Wherever you want to provide good, functional outdoor lighting, TownGuide Performer will provide guidance and orientation and enhance safety.



TownGuide Performer is part of our functional lighting solutions for urban streets and areas incorporating primarily living or being elements, and less dominant traffic functions. These functions are necessary criteria in sustainable, energy-efficient lighting that contributes significantly to improving the safety, environment and comfort of city centres, urban streets and residential areas.

# Application examples

The examples shown below represent some typical applications in the outdoor environment. The results projected in the graphics provide an overview of the benefits of using TownGuide Performer compared to an average HPL-N or SON-TPP luminaire.

Optional dimming or use of CLO is not considered in this study; further energy savings are achievable.

**In the study, two indicators are compared:**

1. Number of luminaires required per 100 metres
  2. The energy consumption of that number of luminaires per 100 metres
- The road geometry used in the examples is integrated in the pictograms.

## Results per bowl type may vary slightly

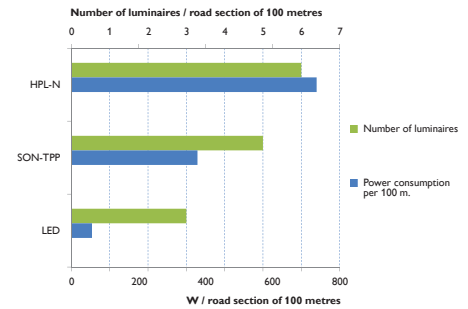
### Cycle path



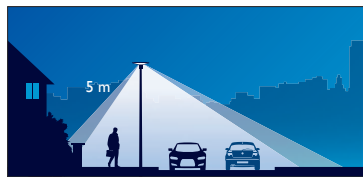
P4 class

0.5 m 3 m

TownGuide Classic Cone - clear bowl  
 Light distribution: DN  
 Source: GRN25/840  
 Spacing: 34 m  
 System power: 21 W  
 Energy saving 90%



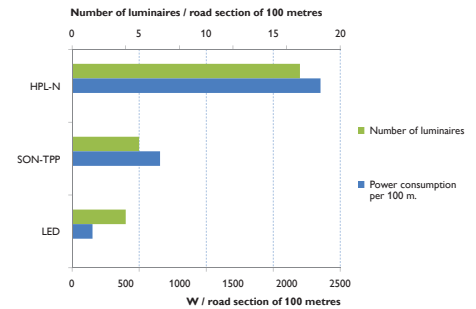
### Residential medium street



CE4 class

1 m 6 m

TownGuide Classic Cone - clear bowl  
 Light distribution: DM  
 Source: ECO70/840  
 Spacing: 31 m  
 System power: 61 W  
 Energy saving 90%



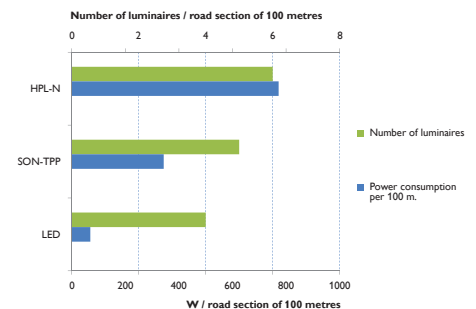
### Residential wide street



P5 class

1 m 9 m

TownGuide Classic Cone - clear bowl  
 Light distribution: DW  
 Source: GRN25/840  
 Spacing: 30 m  
 System power: 21 W  
 Energy saving 90%



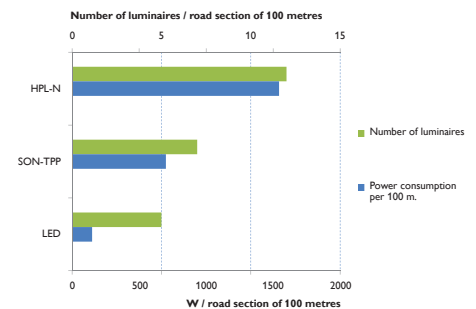
### Square



CE5 class

4 m 16 m 4 m

TownGuide Classic Cone - clear bowl  
 Light distribution: DS  
 Source: GRN40/840  
 Spacing: 22 m  
 System power: 33 W  
 Energy saving 91%



# TCO calculation

Starting with the ban of HPL-N lamps in 2015, it is important to keep the upcoming challenges posed by the implementation of ERP/EUP legislations in mind. In the event of point for point replacement of luminaires in an existing installation, the Philips TCO calculation is a valuable tool for getting a first impression of potential savings.

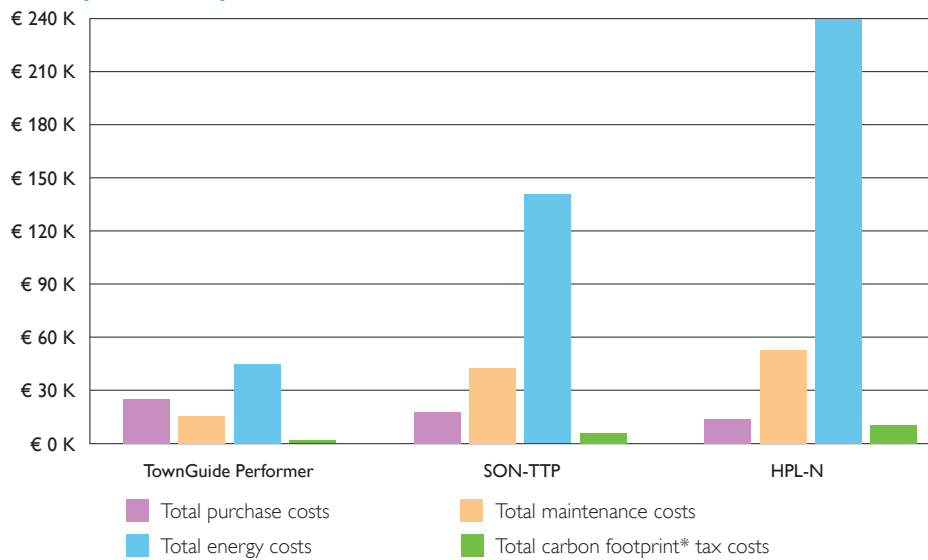
You can access the TCO tool via the Philips website or consult your Philips representative to see what updating to TownGuide solutions can mean for you.

## Example calculation

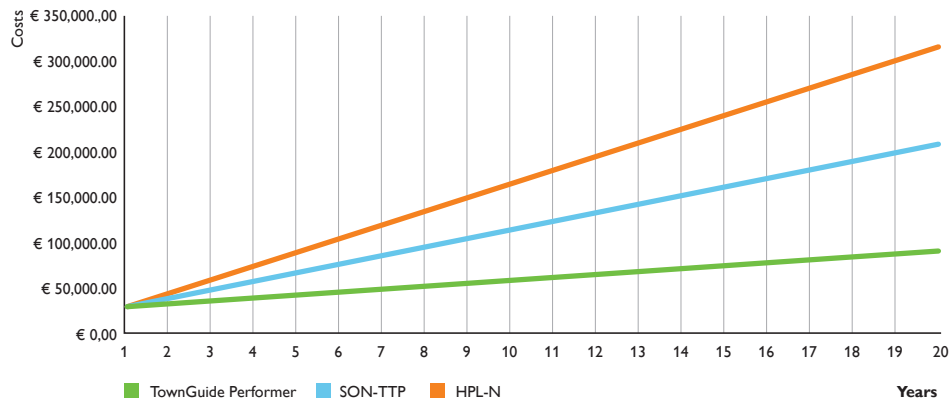
Total Cost of Ownership	TownGuide Performer	SON-TTP	HPL-N
Total purchase costs	€25,200.00	€17,750.00	€13,750.00
Total maintenance costs	€15,500.00	€42,700.00	€52,800.00
Total energy consumption/transport (kWh) costs	€44,703.09	€140,549.71	€239,701.40
Total carbon footprint* tax costs	€1,587.68	€5,972.72	€10,508.96
Total Cost of Ownership during service lifetime	€85,403.09	€200,999.71	€306,251.40

\* Not applicable in all EU countries

## TCO specification per 100 luminaires



## Costs over the years per 100 luminaires





# Components

**1 Canopy** made of die cast aluminium and powder coat painted with RAL 9006 (SI), RAL 9007 (ALU), RAL 9005 (BK) or RAL 7035 (GR). Other colours on request. Marine salt protection coating on request.

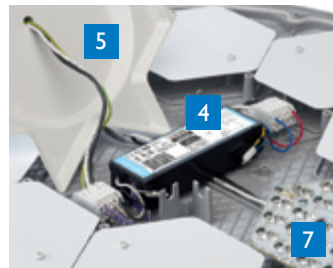
**2 Bowl** made in UV stabilised polycarbonate in a clear or frosted finish. Impact resistance: IK10.

**3 Spigot** in die cast aluminium. Painted in the same colour as the canopy. Spigot sizes of Ø 76, Ø 60 and Ø 48 mm are available. Fixation to the pole by means of two stainless steel bolts (M10). Spigot is fixed from the inside of the bowl by four stainless steel bolts.

**4 The driver** is secured directly to the canopy. Dimming equipment, e.g. SDU, will use the forks. Other dimming options include LumiStep, DynaDimmer and StarSense Wireless RF.

**5 Driver** cover is made of reflective white plastic and designed in such a way as to form an integral part of the unit so that it harmonises with the other visible components.

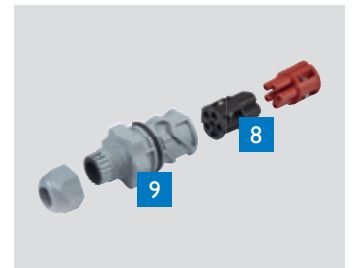
**6 Aluminium** tube holds the internal wiring between the gear cover and spigot. The tube is held firmly in a vertical position by the self guiding grey disc.



Driver installation



Pole fixation by two bolts



Whistle connector

**7 LED modules** GRN: 2, 4, 6 or 8 modules ECO: 3, 4, 6 or 8 modules Including lens plates, these are fixed onto an aluminium supporting and cooling body. The lens plates are made of clear PMMA with either DS, DN, DM or DW light distributions. Positions not in use are covered by reflective white plastic plates.

**8 Connection** is by means of the bayonet whistle connector with integrated gland. The gland features strain relief and is suitable for a Ø 6-12 mm cable.

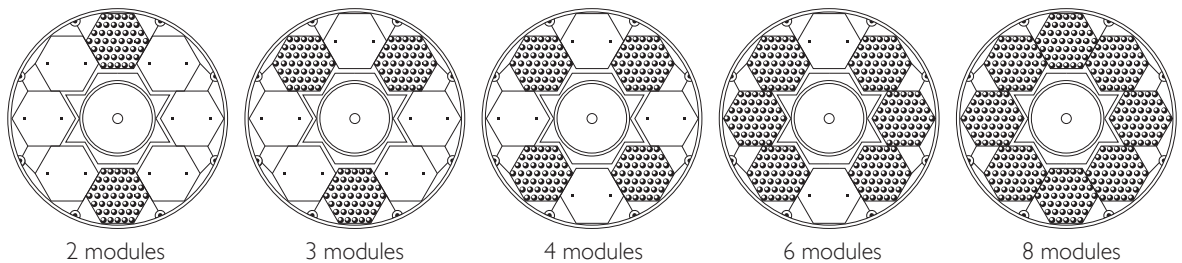
**9 Gaskets** are positioned between the canopy and the bowl, between the bowl and the spigot and between the bowl and the whistle connector, securing the luminaire in accordance with IP66. An integrated breathing filter prevents condensation from forming.

# Luminaire features

## LED configuration patterns

TownGuide Performer offers several LED configurations, delivering a wide range of lumen packages. Lumen packages in GreenLine offer a life expectancy of 100,000 hours, and for EconomyLine the life expectancy is 70,000 hours. The 6-sided LED modules each contain 30 mid-power LEDs and are covered by lens plates to obtain a highly efficient distribution of the available light. To obtain a highly effective light distribution, 4 lens types are available to optimise the application. Mid-power LEDs operate on a low drive current. The intensity per LED is therefore lower and spread over a larger surface area. This results in an improved perception of glare and visual comfort.

Arrangement of the LED modules in the luminaire, viewed from the road axis.



GRN		ECO	
Lumen packages	Number of LED modules	Lumen packages	Number of LED modules
GRN12	2	ECO40	3
GRN15	2	ECO50	3
GRN20	4	ECO60	4
GRN25	4	ECO70	4
GRN30	4	ECO80	6
GRN35	4	ECO90	6
GRN40	4	ECO100	6
GRN50	6	ECO110	8
GRN60	8	ECO120	8
GRN70	8		

## Spigot arrangements

There are three sizes of spigot -  $\varnothing 48$ ,  $\varnothing 60$  and  $\varnothing 76$  mm to suit virtually every standard pole type. A special  $\varnothing 90/60$  mm adapter is also available, for added flexibility. The outer diameter of the adapter and the  $\varnothing 60$  mm spigot are the same in order to ensure a smooth transition.



$\varnothing 48$ ,  $\varnothing 60$  and  $\varnothing 76$  mm spigot size. Outer  $\varnothing 98$  mm.

Correct orientation of the optics is warranted when the pole bolts are 90 degrees perpendicular to the road axis. The Philips logo is then facing the pedestrian side.



ZDP100 90/60 mm adapter; outer  $\varnothing 98$  mm to give smooth transition with the spigot.

# TownGuide in control

Lighting city streets, roads and public spaces presents many challenges. The dynamics of city life are constantly changing due to, among other things, differences in traffic levels. You need the right level of lighting to respond to these changes and make the city feel safe, attractive and inviting. But you are also under pressure to reduce energy costs and maximise your green credentials. Philips offers a complete range of intelligent lighting controls to help you overcome all these problems and make the city more liveable and sustainable.



## CityTouch lighting management platform

TownGuide connected with our CityTouch management platform gives you the power to make the lighting in your city dynamic, intelligent and totally flexible. CityTouch is a web-based lighting management platform that links all the lighting assets in your city with CityTouch software, which you can use to manage and control lighting from your desk at one touch. It is a platform that puts you in charge today with plug-and-play commissioning and open standards.

CityTouch puts into practice the most advanced lighting management available. It consists of two key application programs:

- CityTouch LightPoint – Asset lighting management system. A sophisticated tool for data and maintenance management. It brings transparency over your assets and workflows.
- CityTouch LightWave – Remote lighting management system. Acts as the control centre for adjusting and monitoring your public lighting in the city. Simply, interactively and reliably.

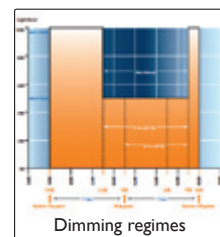


## StarSense Wireless with RF antenna

This system controls and monitors light points remotely, and works independently with practically any light source. There is no limit on the power scenarios available. StarSense enables you to receive feedback from the installation, thus facilitating maintenance. This solution can generate up to 70% savings on energy and 40% on maintenance costs.

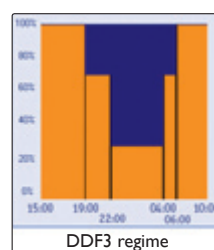
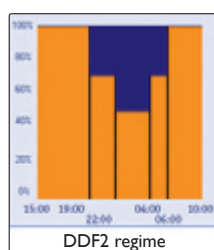
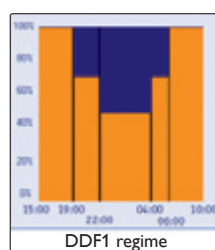
## LumiStep control

An integrated control system available in the Philips driver, which lowers the flux of the light source and power consumed over a period of 6, 8 or 10 hours (3 pre-programmed versions). The potential energy savings (on power system) are up to 25%, depending on the luminaires and light source used.



## DynaDimmer control

An integrated control system included in each light point, which is operated on electronic equipment and can be integrated into the Philips driver. It can apply 5 levels of power, (re) definable in terms of level and duration, per chosen light point. For example, an average energy saving of approximately 50% per year can be realised.



## TownGuide in perspective

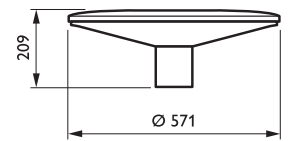
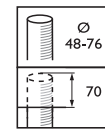
The TownGuide Performer range has been designed to offer perfect solutions, also in terms of the proportion of the luminaire to its mounting height or a specific environment.

Recommended mounting heights for TownGuide Performer versions are between 4 and 6 metres.

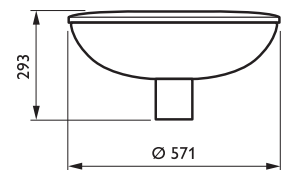
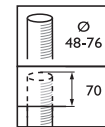


# Main specifications

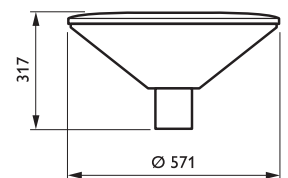
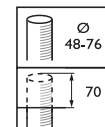
Product features	Specifications
<b>Type</b>	BDP100 (Flat Cone version) • BDP101 (Bowl version) • BDP102 (Classic Cone version) • BDP103 (Classic T version) • BDP104 (T version)
<b>Light source</b>	Integrated LED module
<b>Power</b>	10-110 W, depending on LED configuration and colour temperature
<b>Luminous flux</b>	GRN: 12, 15, 20, 25, 30, 35, 40, 50, 60 or 70 lm ECO: 40, 50, 60, 70, 80, 90, 10, 110 or 120 lm
<b>Luminaire efficacy</b>	GRN: 82-106 Lm/W (for clear bowl; 4000 K version, depending on configuration) ECO: 89-98 Lm/W (for clear bowl; 4000 K version, depending on configuration)
<b>Correlated Colour Temperature</b>	3000 K (warm white) • 4000 K (neutral white) • 5000 K (cool white)
<b>Colour Rendering Index</b>	≥ 80
<b>Maintenance of lumen output - L80F10</b>	GRN: 100,000 hours at 25°C • ECO: 70,000 hours at 25°C
<b>Operating temperature range</b>	-20 to +35°C
<b>Driver</b>	Integrated programmable LED driver
<b>Power/Data supply</b>	Philips Xitanium Prog+
<b>Mains voltage</b>	120-277 V / 50-60 Hz
<b>Control system input</b>	1-10 V or DALI
<b>Intelligence control</b>	SDU • DynaDimmer • LumiStep • StarSense Wireless RF • CityTouch Ready
<b>Options</b>	Constant Light Output (CLO), also possible in combination with dimming • Mains dimming (AmpDim) • Class II version • Mini photocell or NEMA socket • 10 kV surge protection (SGR) for Class I • Factory-fitted cable (H07RN-F-1 mm), 4, 5 or 6 metre exterior length
<b>Optic</b>	Distribution Wide (DW) • Distribution Narrow (DN) • Distribution Medium (DM) • Distribution Symmetrical (DS)
<b>Optical cover</b>	Polycarbonate cover clear (PCC) or frosted (PCF)
<b>Material</b>	Canopy and spigot: high-pressure die-cast aluminium • Cover: impact-resistant UV-stabilised polycarbonate
<b>Colour</b>	Silver grey (RAL9006) • grey aluminium (RAL9007) • black (RAL9005) • light grey (RAL7035) • Other RAL or AKZO Futura colours available on request
<b>Connection</b>	Bayonet whistle connector with integrated M20 gland
<b>Maintenance</b>	Maintenance in (local) workshop only
<b>Installation</b>	Post-top mounting: axial entry Ø 48-76 mm (48P, 60P or 76P) • Recommended installation height: 4-6 m
<b>Effective Projective Area</b>	Max SCx: BDP100 (Flat Cone): 0.051 m <sup>2</sup> / BDP101 (Bowl): 0.095 m <sup>2</sup> / BDP102 (Classic Cone): 0.088 m <sup>2</sup> / BDP103 (Classic T): 0.093 m <sup>2</sup> / BDP104 (T): 0.053 m <sup>2</sup>
<b>Surge protection</b>	4 kV standard, in class 1 option added 10 kV surge protection device
<b>Cable gland</b>	M20, cable Ø 6-12 mm, with integrated strain relief
<b>Accessories</b>	Special adapter for post-top Ø 90 mm (in combination with Ø 62 mm spigot)
<b>Warranty</b>	Bronze 3 years, extended warranty can be applied for
<b>Inrush current driver</b>	40 W: 65 A/100 µs • 100 W: 80 A/150 µs • 150 W: 118 A/140 µs
<b>IP</b>	IP66
<b>IK</b>	IK10
<b>Weight</b>	From 6.1 to 8.4 kg, depending on version and chosen flux



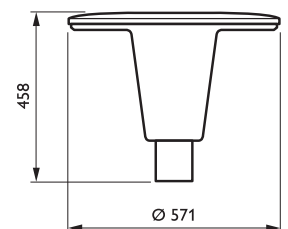
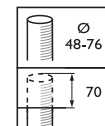
TownGuide Performer BDP100



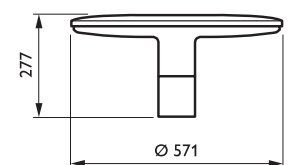
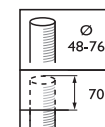
TownGuide Performer BDP101



TownGuide Performer BDP102



TownGuide Performer BDP103



TownGuide Performer BDP104

# Specification table

Luminaire version*	Product family code*	Lumen package	System power (W)		
			Warm White (WW)	Neutral White (NW)	Cool White (CW)
		GRN12	11.5	11.5	11.5
		GRN15	14.5	13.5	13.5
		GRN20	17.5	16.5	16.5
		GRN25	22	21	21
		GRN30	25.5	23.5	23.5
		GRN35	29	27.5	27.5
		GRN40	34.5	33	33
TownGuide Performer Flat cone	BDP100	GRN50	43	40.5	40.5
TownGuide Performer Bowl	BDP101	GRN60	48.5	44	44
TownGuide Performer Classic cone	BDP102	GRN70	56	52	52
TownGuide Performer Classic T	BDP103				
TownGuide Performer T	BDP104				
		ECO40	38.5	34.5	34.5
		ECO50	48.5	45.5	45.5
		ECO60	54.5	50	50
		ECO70	67	61	61
		ECO80	68.5	65.5	65.5
		ECO90	80.5	74.5	74.5
		ECO100	92	86	86
		ECO110	97.5	95	95
		ECO120	109.5	101.5	101.5

\* Per luminaire version/product family code all the lumen packages are available





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Data subject to change.