TownGuide Performer

Designed around your needs

LED

PHILIPS

Contents

The TownGuide Performer family

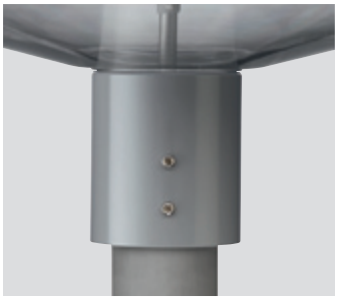
Designed around your needs

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 recognizable yet modern shapes which constitute in a range of six luminaries, Flat Cone, Bowl, Classic Cone, Classic T, T and TzeroTzero. All are available with either a clear or frosted bowl. With an extensive range of lumen packages and a choice of color 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 programs – from stand-alone LumiStep, DynaDimmer and SDU switch-dim control through to seamless remote connectivity with 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 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 enable 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%

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 clear
Upward light ratio,
ULR < 3%

T frosted
Upward light ratio,
ULR < 3%

Tzero frosted
Upward light ratio,
ULR < 0%

Tzero clear
Upward light ratio,
ULR < 0%

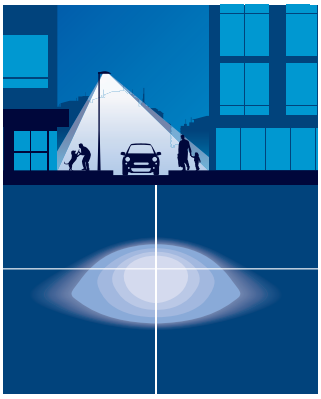
Typical examples of suburban and residential street application

Lighting performance

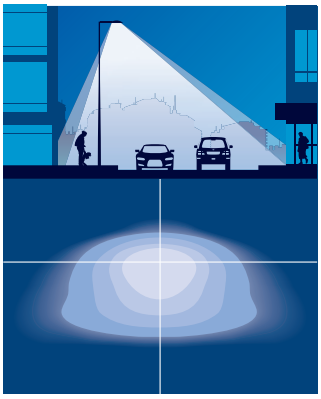
Light distribution

TownGuide Performer offers five 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, minimizing wastage of light and energy, maximizing 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. To obtain best facial recognition properties, the DRW optic is designed specifically with increased vertical illuminance levels.

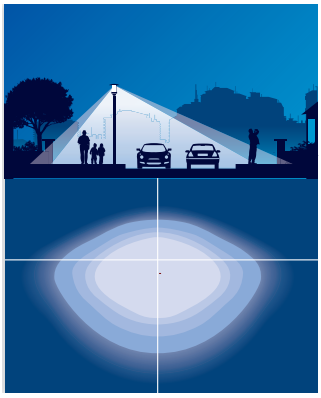
DN
Distribution Narrow



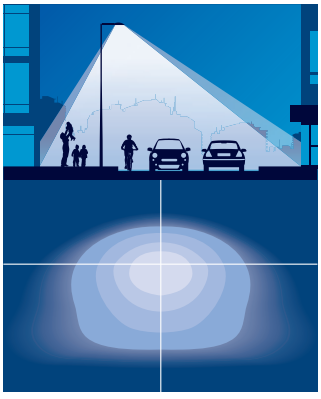
DM
Distribution Medium



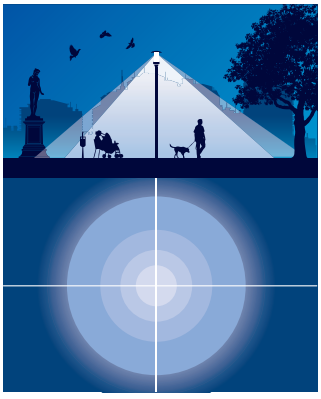
DRW
Distribution Residential Wide

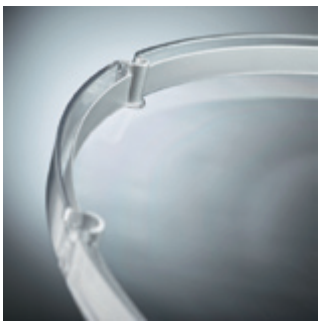


DW Distribution Wide



DS Distribution Symmetric



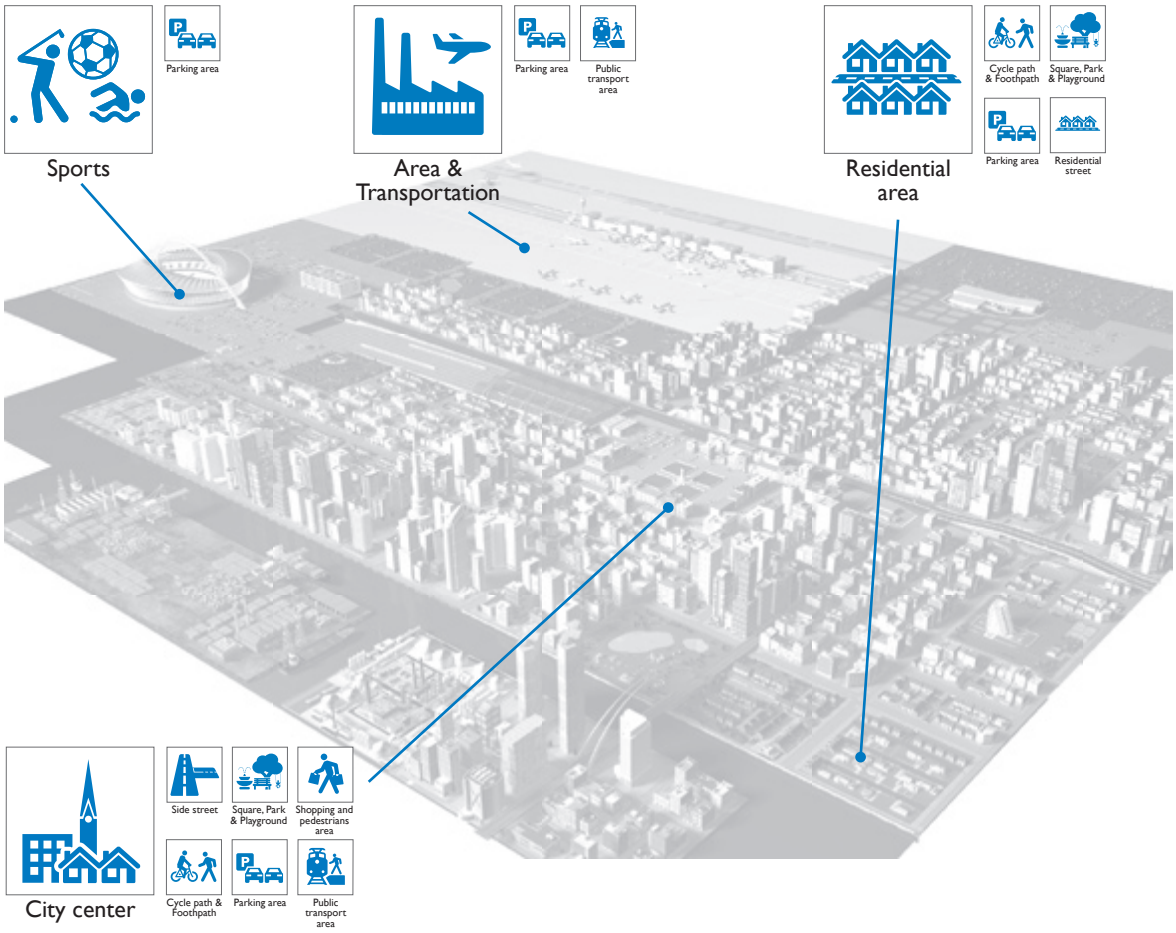


In the Tzero bowl versions, an internal louver is integrated, making the luminaire virtually a flat glass version to prevent light being emitted over the horizon.

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 application in suburban parking areas, sports facilities, public transport areas such as bus and tramway stops as well as in large-area applications, such as industrial sites, airports, harbors 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.



Urban functional lighting

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 contribute significantly to improve the safety, the environment and the comfort of city centers, 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.

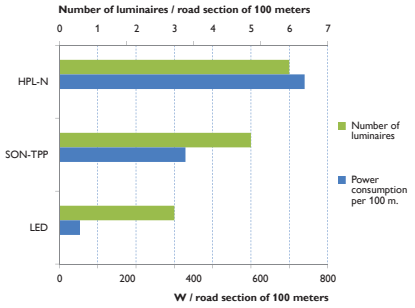
In the study, two indicators are compared:
1 Number of luminaires required per 100 meters
2 The energy consumption of that number of luminaires per 100 meters
The road geometry used in the examples is integrated in the pictograms.

Results per bowl type may vary slightly

Cycle path

S4 class

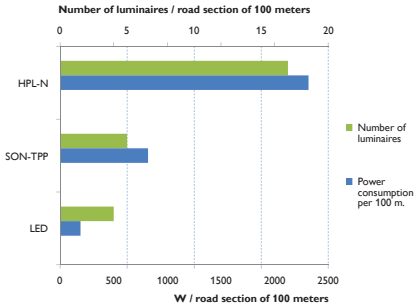
TownGuide Classic Cone - clear bowl
Light distribution: DN
Source: GRN25/840
Spacing: 34 m
System power: 21 W
Energy saving 90%



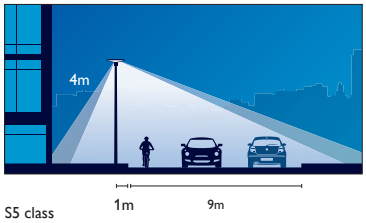
Residential medium street

CE4 class

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

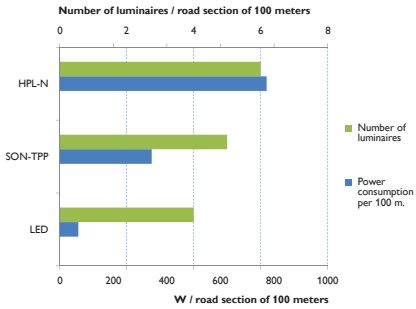


Residential wide street

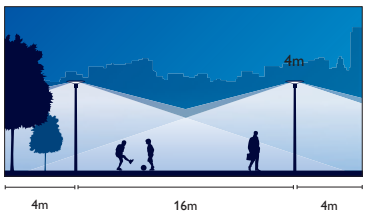


S5 class

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

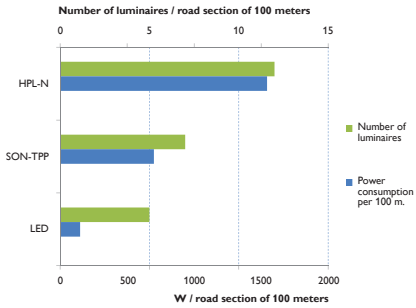


Square



CE5 class

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.

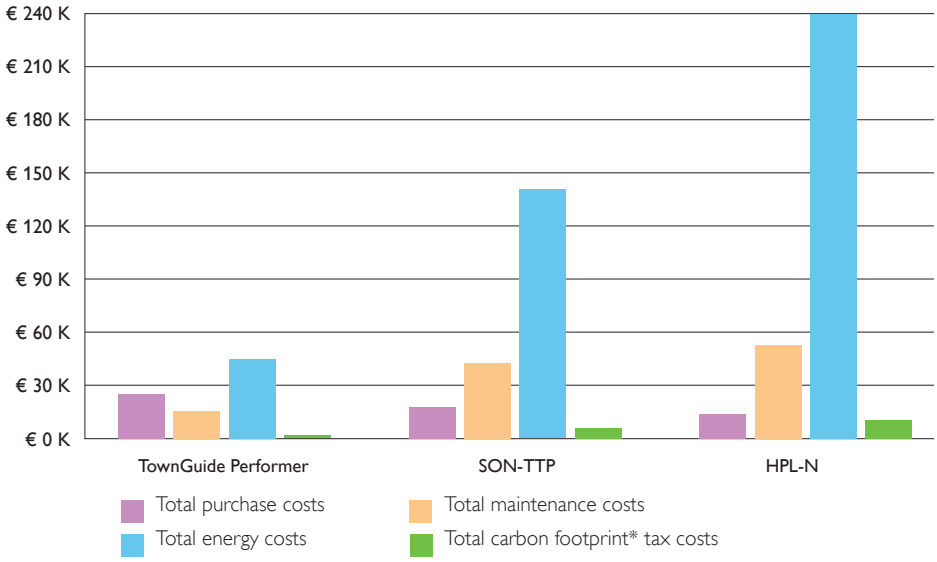
You can access the TCO tool via the Philips website or consult your Philips representative to see what updating to TownGuide solutions can mean for you.

Example calculation

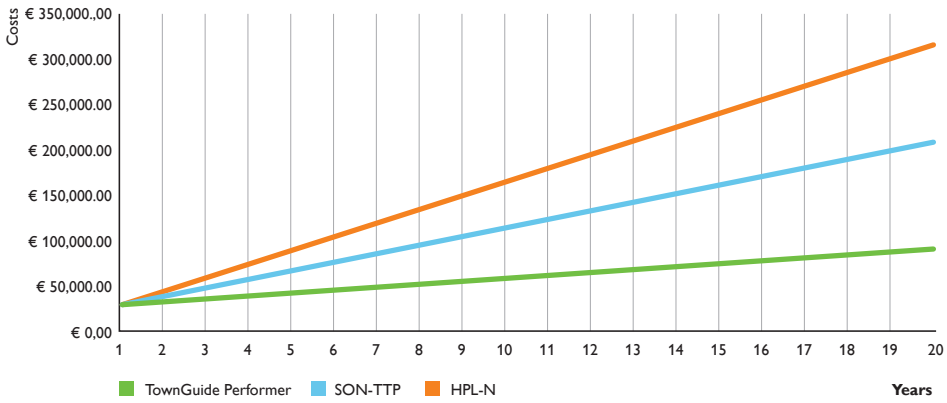
Total Cost of Ownership	TownGuide Performer	SON-TPP	HPL-N
Total purchase costs	€ 25,200.00	€ 17,750.00	€ 13,750.00
Total maintenance costs	€ 15,500.00	€ 42,700.00	€ 52,800.00
Total energy consumption / transport (kWh) costs	€ 44,703.09	€ 140,549.71	€ 239,701.40
Total carbon footprint* tax costs	€ 1,587.68	€ 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 aluminum and powder coat-painted with RAL 9006 (SI), RAL 9007 (ALU), RAL 9005 (BK) or RAL 7035 (GR). Other colors on request. Marine salt protection coating on request.

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

3 Spigot in die-cast aluminum. Painted in the same color as the canopy. Spigot sizes of Ø 76, Ø 62 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 using either LightWave or 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 harmonizes 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.

Louver in Tzero

Pole fixation by two bolts

Driver installation

Whistle connector

7 LED modules
GRN: 2, 4 , 6 or 8 modules
ECO: 3, 4, 6 or 8 modules
Including lens plates are fixed onto an aluminum supporting and cooling body. The lens plates are made of clear PMMA with either DS, DN, DM, DW or DRW 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.

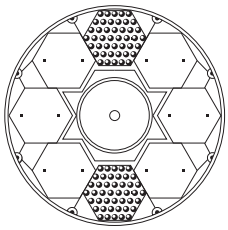
10. Tzero bowl with integrated louver to prevent light emission over the horizon.

Luminaire features

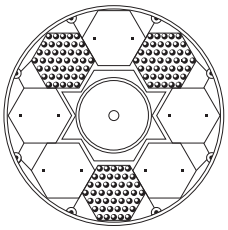
LED configuration patterns

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 LEDs and are covered by lens plates to obtain a highly efficient distribution of the available light. To obtain a highly effective light distribution, 5 lens types are available to optimize the application. The individual LEDs operate on a very low drive current. The intensity per LED is therefore lower than usual and spread over a larger surface area. This results in an improved perception of glare and visual comfort.

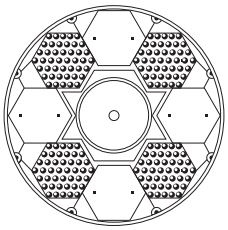
Arrangement of the LED modules in the luminaire, viewed from the road axis.



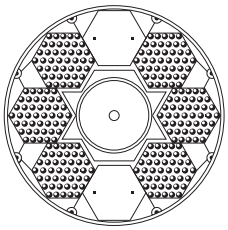
2 modules



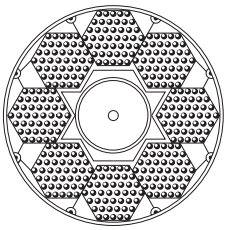
3 modules



4 modules



6 modules



8 modules

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 - Ø 48, Ø 62 and Ø 76 mm - to suit virtually every standard pole type. A special Ø 90/62 mm adapter is also available, for added flexibility. The outer diameter of the adapter and the Ø 62 mm spigot are the same in order to ensure a smooth transition.

Ø 48, Ø 62 and Ø 76 mm spigot size. Outer Ø 98 mm.

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

ZDP100 90/62 mm adapter, outer

Ø 98 mm to give smooth transition with the spigot.

Ø 76 > Ø 60 mm reducing adapter

In a number of cases, over time a mix of both 76 and 60 mm post top masts have been placed in the field. In order to secure flexible application of TownGuide luminaries in your community for both cases, also an adapter for the Ø 76 mm spigot is available to reduce the spigot size from Ø 76 to Ø 60 mm size.

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 maximize your green credentials. Philips offers a complete range of intelligent lighting controls to help you overcome all these problems and make the city more livable 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 center for adjusting and monitoring your public lighting in the city. Simply, interactively and reliably.

CityTouch LightWave

TownGuide Performer can be seamlessly connected with CityTouch LightWave via integration of all the intelligence into the luminaire without any additional hardware needed.
The communication runs directly via the public mobile network. As a positive side effect, no own maintenance effort is required. In addition, the whole connectivity management is part of our service which keeps any hassle away from you as a customer. Once connected to the power supply a light point automatically appears on the CityTouch map at the right location – with all technical parameters imported into the system.

CityTouch LightWave is an intelligent, interactive remote management solution for your street lighting. It brings your city lighting to life and provides you with flexibility, knowledge and accuracy.

Flexibility means that you will be easily able to act or react according to expected and unexpected situations by dimming or brightening all areas within your city to ensure safety and well-being. Knowledge implies that you are always informed about the current status of every single luminaire– for better maintenance and faster repairs.
Accuracy stands for precise energy metering which gives you a perfect overview on real non-estimated energy consumption.

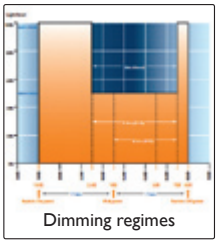
TownGuide in control

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

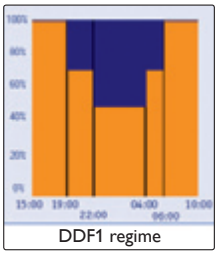
An integrated control system available in the Philips driver, which lowers the flux of the light source and power consumed over a period of 6, 8 or 10 hours (3 pre-programmed versions). The potential energy savings (on power system) is up to 25%, depending on the luminaires and light source used.



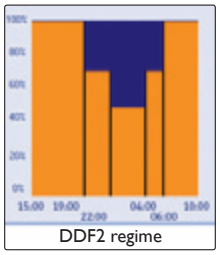
Dimming regimes

DynaDimmer control

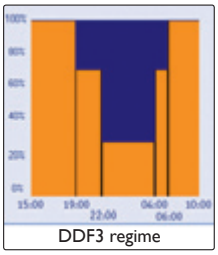
An integrated control system included in each light point - operated on electronic equipment and can be integrated into the Philips driver. It can apply 5 levels of power, (re)definable on the level and duration, per chosen light point. For example, an average energy saving of approximately 50% per year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



DDF1 regime



DDF2 regime



DDF3 regime

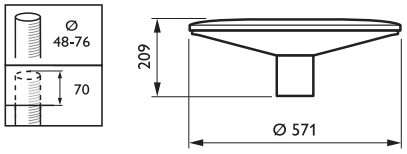
TownGuide in perspective

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.

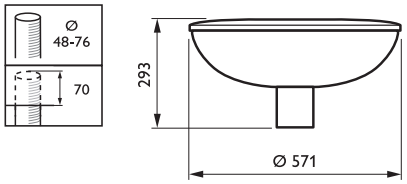
Recommended mounting heights for TownGuide Performer versions is between 4 to 6 meters.

Main specifications

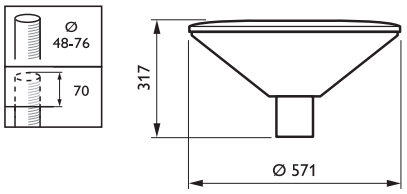
Product features	Specifications
Type	BDP100 (Flat Cone version) • BDP101 (Bowl version) • BDP102 (Classic Cone version) • BDP103 (Classic T version) • BDP104 (T version) • BDP105 (Tzero version)
Light source	Integrated LED module
Power	10-110 W, depending on LED configuration and color temperature
Luminous flux	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
Luminaire efficacy	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)
Correlated Color Temperature	3000 K (warm white) • 4000 K (neutral white) • 5000 K (cool white)
Color Rendering Index	≥ 80
Maintenance of lumen output - L80F10	GRN: 100,000 hours at 25 °C • ECO: 70,000 hours at 25 °C
Operating temperature range	-20 to +35 °C
Driver	Integrated programmable LED driver
Power/Data supply	Philips Xitanium Prog+
Mains voltage	120-277 V / 50-60 Hz
Control system input	1-10 V or DALI
Intelligence control	SDU • DynaDimmer • LumiStep • StarSense Wireless RF • CityTouch Ready • LightWave
Options	Constant Light Output (CLO), also possible in combination with dimming • Mains dimming (AmpDim) • Class II version • Mini photocell or NEMA socket • 10kV surge protection (SGR) • Factory-fitted cable (H07RN-F-1 mm), 4, 5 or 6 meter exterior length
Optic	Distribution Wide (DW) • Distribution Narrow (DN) • Distribution Medium (DM) • Distribution Symmetrical (DS) • Distribution Residential Wide (DRW)
Optical cover	Polycarbonate cover clear (PCC) or frosted (PCF)
Material	Canopy and spigot: high-pressure die-cast aluminum • Cover: impact-resistant UV-stabilized polycarbonate
Color	Silver grey (RAL9006) • grey aluminum (RAL9007) • black (RAL9005) • light grey (RAL7035) • Other RAL or AKZO Futura colors available on request
Connection	Bayonet whistle connector with integrated M20 gland
Maintenance	Maintenance in (local) workshop only
Installation	Post-top mounting: axial entry Ø 48-76 mm (48P, 62P or 76P) • Recommended installation height: 4-6 m
Effective Projective Area	Max SCx: BDP100 (Flat Cone): 0.051 m^2 / BDP10 1 (Bowl): 0.095 m^2 / BDP102 (Classic Cone): 0.088 m^2 / BDP103 (Classic T): 0.093 m^2 / BDP104 (T): 0.053 m^2
Surge protection	4 kV standard. Option to increase to 10kV by adding surge protection device
Cable gland	M20, cable Ø 6-12 mm, with integrated strain relief
Accessories	• Special adapter for post-top Ø 90 mm (in combination with Ø 62 mm spigot) • Spigot size adapter to reduce Ø 76mm spigot to Ø 60 mm
Warranty	Bronze 3 years, extended warranty can be applied for
Inrush current driver	40 W: 65 A/100 µs • 100 W: 80 A/150 µs • 150 W: 118 A/140 µs
IP	IP66
IK	IK10
Weight	From 6.1 to 8.4 kg, depending on version and chosen flux



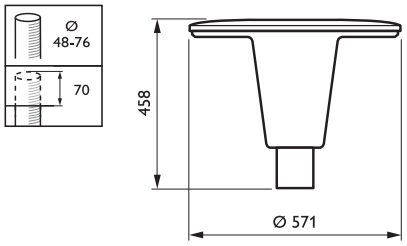
TownGuide Performer BDP100



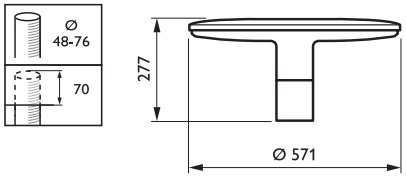
TownGuide Performer BDP101



TownGuide Performer BDP102



TownGuide Performer BDP103



TownGuide Performer BDP104 / BDP105

Specification table

Luminaire version*	Product family code*	Lumen package	Systeem 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
TownGuide Performer Tzero	BDP105	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

02/2015
Data subject to change.