TownGuide Core

Easy to choose, easy to use

LED

PHILIPS

Contents

The TownGuide Core family

Easy to choose

Functional LED solution for many residential post-top applications: residential streets, cycle paths and footpaths, squares, parks, playgrounds and parking areas.

The TownGuide Core family consists of two recognizable yet modern shapes: Flat Cone and Bowl. Both are available with either a clear or a frosted bowl. Offering an extensive range of lumen packages and a choice of color temperature, as well as a long lifetime and comparatively low power consumption, TownGuide Core is the obvious choice.

Easy to use

TownGuide Core enables quick and easy installation. Thanks to the bayonet whistle connector located in the spigot, there is no need for the luminaire to be opened, thus saving valuable labor time. In the development of TownGuide Core, Philips has made every effort to ensure the investment required is as low as possible. Given that TownGuide is a dedicated LED luminaire, the savings on energy compared with conventional lighting are significant, making it a natural choice to replace HPL lamps, which are banned from 2015 onwards.

- State-of-the-art mid-power LEDs increase visual comfort for drivers and pedestrians
- Considerable reduction in energy consumption and carbon footprint. Especially compared with HPL Mercury, but also compared with SON-T or compact fluorescent lamps
- Dedicated LED luminaire requiring low capital expenditure
- Suitable for direct retrofit replacement of existing installations

Family Range

Flat Cone clear
Upward light ratio,
ULR < 3%

Flat Cone frosted
Upward light ratio,
ULR < 3%

Bowl clear
Upward light ratio,
ULR < 3%

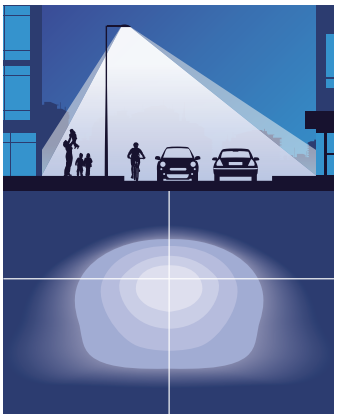
Bowl frosted
Upward light ratio,
ULR < 15%

Lighting performance

Optics

TownGuide Core offers two lens configurations to match the most common application geometries in the residential environment. In many cases G1 glare control can be achieved. In a number of cases G2 is even possible.

DW Distribution Wide



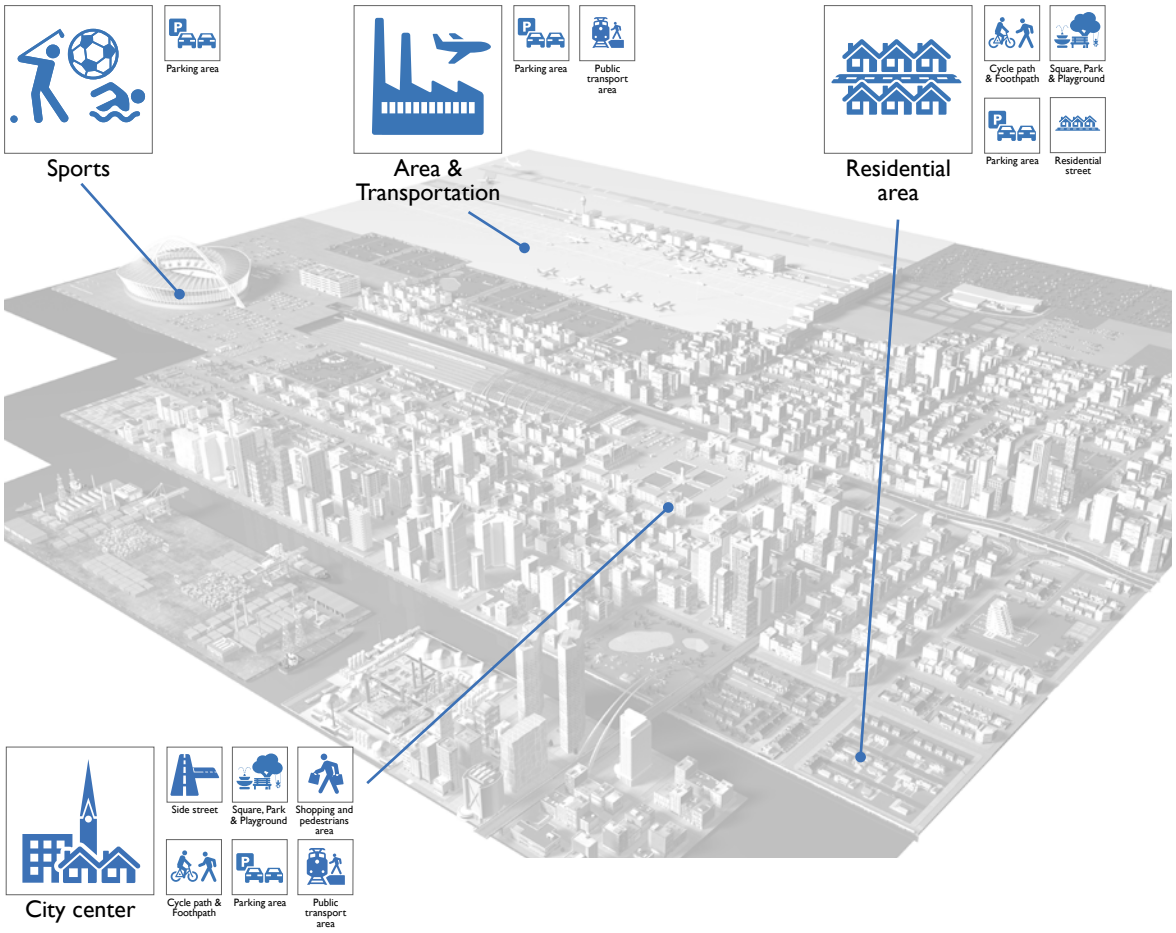
DS Distribution Symmetric

LED module and possible lens combinations

Applications

As a dedicated post-top luminaire, TownGuide Core is primarily suited to applications in residential streets as well as in suburban squares, parks, pathways and playgrounds. The versatile TownGuide Core 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.

TownGuide Core 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. In other words, wherever you want to provide good, functional outdoor lighting for guidance or orientation.




Urban functional lighting

TownGuide Core 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.

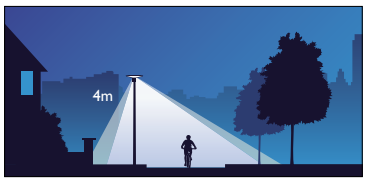
Application examples

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 Core compared to an average HPL-N or SON-TPP luminaire.

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.

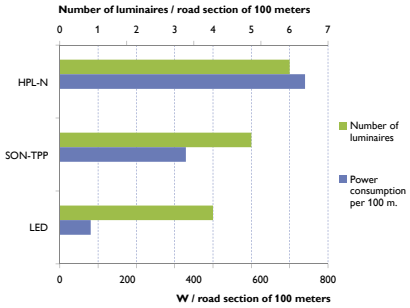
Results per bowl type may vary slightly

Cycle path

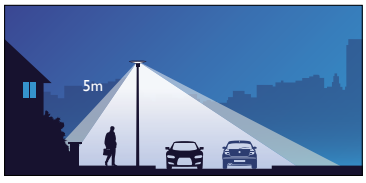


S4 class

TownGuide Core Bowl - clear bowl
Light distribution: DW
Source: ECO25/840
Spacing: 26 m
System power: 24 W
Energy saving 88%

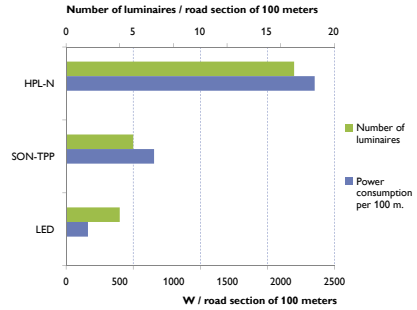


Residential medium street

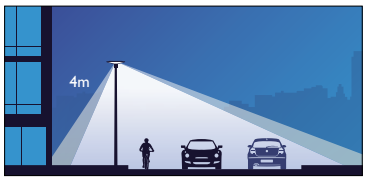


CE4 class

TownGuide Core Bowl - clear bowl
Light distribution: DW
Source: ECO70/840
Spacing: 29 m
System power: 59 W
Energy saving 89%

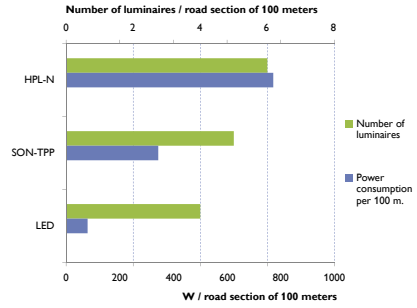


Residential wide street

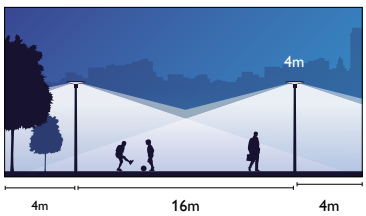


S5 class

TownGuide Bowl - clear bowl
Light distribution: DW
Source: ECO25/840
Spacing: 30 m
System power: 24 W
Energy saving 88%

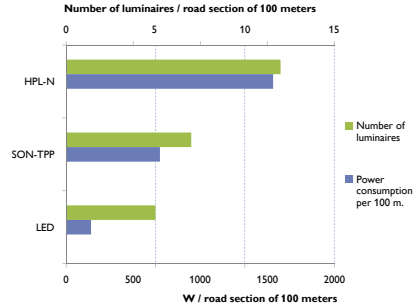


Square



CE5 class

TownGuide Bowl - clear bowl
Light distribution: DS
Source flux: ECO25/840
Spacing: 20 m
System power: 24 W
Energy saving 88%



Components

1 Canopy made of die-cast aluminum and powder-coat painted with RAL 7035 (GR).

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

3 Spigot in die-cast aluminum with a sand-blasted finish. 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.

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.

Pole fixation by two bolts

Driver installation

Whistle connector

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.

7 LED modules (two or four) including lens plates are fixed onto an aluminum supporting and cooling body. The lens plates are made of clear PMMA with either DS or DW light distribution. 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.

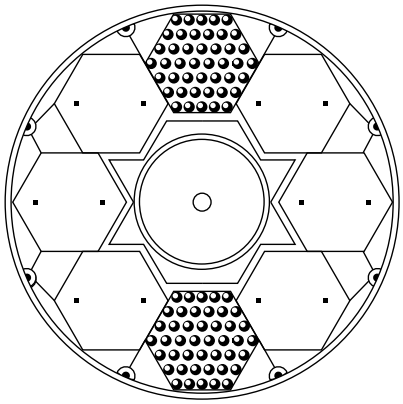
9 Gaskets are positioned between the canopy and the bowl, between the bowl and the spigot and between the bowl and the whistle connector, securing the luminaire in accordance with IP66. An integrated breathing filter prevents condensation from forming.

Luminaire features

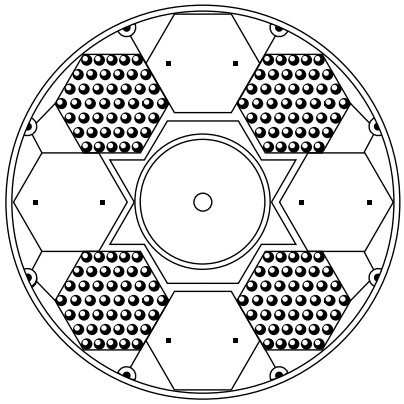
LED configuration patterns

TownGuide Core offers several LED configurations, delivering a wide range of lumen packages. The 6-sided LED boards each contain 30 mid-power LEDs and are covered by lens plates to ensure a highly efficient distribution of the available light. 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.



2 modules



4 modules

Lumen packages	Number of LED modules
ECO20	2
ECO25	2
ECO30	2
ECO40	2
ECO50	4
ECO60	4
ECO70	4

Spigot arrangements

There are three sizes of spigot - Ø 48, Ø 62 and Ø 76 mm - to suit virtually every standard mast 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 bolts are 90 degrees perpendicular to the road axis. The Philips logo is than facing the pedestrian side.

ZDP001 90/62 mm adapter, Outer Ø 98 mm to give a smooth transition with spigot.

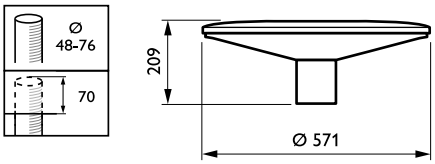
TownGuide in perspective

The TownGuide Core 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.

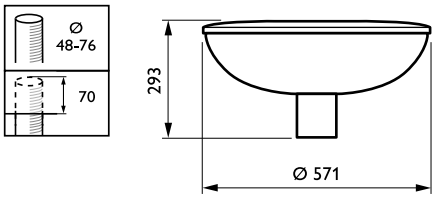
Recommended mounting heights for TownGuide Core versions is between 4 to 6 meters.

Main specifications

Product features	Specifications
Type	BDP001 (Flat Cone version) • BDP002 (Bowl version)
Light source	Integrated LED module
Power	19 to 64 W, depending on LED configuration and color temperature
Luminous flux	ECO: 20, 25, 30, 40, 50, 60 or 70 lm
Luminaire efficacy	80-100 lm/W (for clear bowl; 4000 K version, depending on configuration)
Correlated Color Temperature	3000 K (warm white) • 4000 K (neutral white)
Color Rendering Index	≥ 80
Maintenance of lumen output - L80F10	70,000 hours at 25 °C
Operating temperature range	-20 to +35 °C
Driver	Philips Xitanium constant current driver, 1-10 V, purpose restricted by resistor to fixed output (no additional dimming possible)
Mains voltage	120-277 V / 50-60 Hz
Options	Class II version • Mini photocell or NEMA socket
Optic	Distribution Wide (DW) or Distribution Symmetrical (DS)
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	Canopy: grey, RAL7035 • Spigot: sand-blasted, unpainted
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: BDP001 (Flat Cone): 0.051 m² / BDP002 (Bowl): 0.095 m²
Cable gland	M20, cable Ø 6-12 mm
Accessories	Special adapter for post-top Ø 90 mm (in combination with Ø 62 mm spigot)
Warranty	Bronze 3 years
Inrush current	70 A/120 µs
IP	IP66
IK	IK10
Weight	From 6 to 6.6 kg, depending on version and chosen flux



TownGuide Core BDP001



TownGuide Core BDP002

Specification table

Luminaire version	Product family code	Lumen package	System power (W)	
			Warm White (WW)	Neutral White (NW)
TownGuide Core Flat cone	BDP001	ECO20	19	19
TownGuide Core Flat cone	BDP001	ECO25	24	24
TownGuide Core Flat cone	BDP001	ECO30	29	29
TownGuide Core Flat cone	BDP001	ECO40	39	39
TownGuide Core Flat cone	BDP001	ECO50	43	43
TownGuide Core Flat cone	BDP001	ECO60	52	52
TownGuide Core Flat cone	BDP001	ECO70	64	59
TownGuide Core Bowl	BDP002	ECO20	19	19
TownGuide Core Bowl	BDP002	ECO25	24	24
TownGuide Core Bowl	BDP002	ECO30	29	29
TownGuide Core Bowl	BDP002	ECO40	39	39
TownGuide Core Bowl	BDP002	ECO50	43	43
TownGuide Core Bowl	BDP002	ECO60	52	52
TownGuide Core Bowl	BDP002	ECO70	64	59

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Document order number: 3222 635 69507
07/2014
Data subject to change.