ClearWay

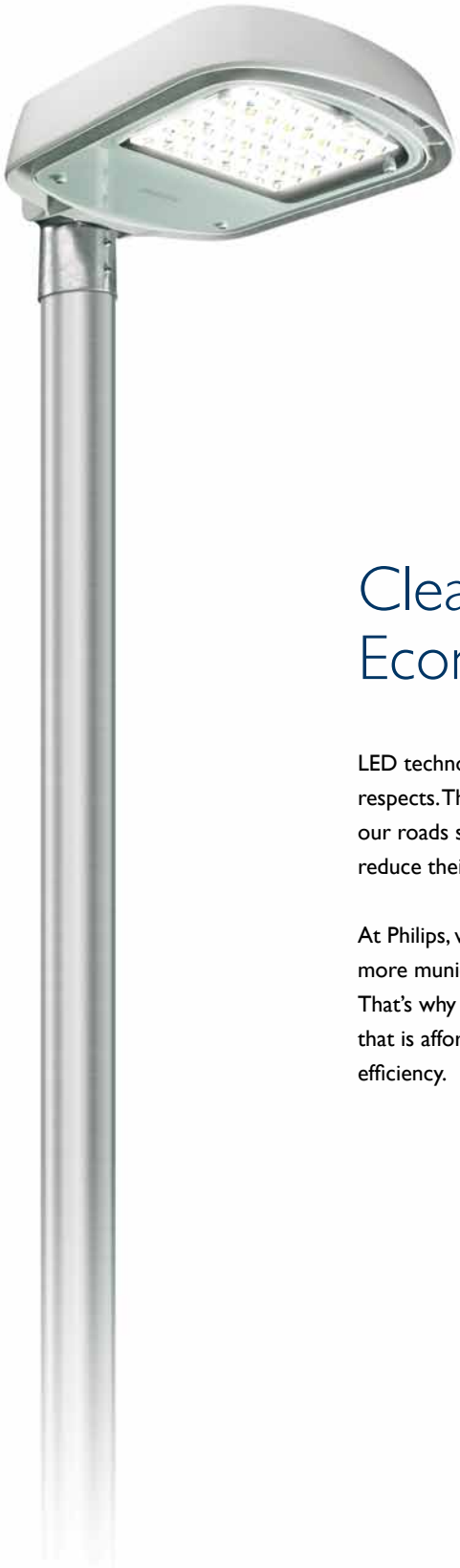
Economical LED performance

LEDGINE
BASED TECHNOLOGY

PHILIPS
sense and simplicity

Contents

ClearWay - Economical LED performance	3
Performance, reliability and simplicity packaged in an economical LED luminaire	4
New project	5
Renovation	6
Dimensions and main specifications	7



ClearWay - Economical LED performance

LED technology represents a breakthrough in lighting in many different respects. The light quality provided by LEDs, for example, has made our roads safer, while the tremendous efficacy of LEDs is helping cities reduce their energy bills.

At Philips, we believe we can make even more roads safer, and help more municipalities achieve their goal of reducing energy consumption. That's why we have developed ClearWay – a LED road luminaire that is affordable yet does not compromise on light quality or energy efficiency.

Performance, reliability and simplicity packaged in an economical LED luminaire

ClearWay uses LEDGINE-based technology with proven components and a high degree of uniformity thanks to its dedicated multi-layer concept. Featuring neutral white LEDs (4000 K), ClearWay offers the best combination of light quality and performance.

The product is meant for major and minor roads, residential and urban streets, covering ME3, ME4, ME5 and S4 to S6 lighting classes according to the EN 13201 norm.

Characteristics

Color temperature : cool white 4000 K
Color rendering index : 70
Optical system : Distribution Medium – DM

Product designation

BGP303	LED73	740	PSU	II	DM	42/60

Designation	Product features	Variations
BGP303	**Type**	BGP303
LED73	**Source flux**	LED73 = 7300 lm
740	**Light color**	7 = CRI 70 • 40 = 4000 K
PSU	**Transformer**	Power supply unit
II	**Electricity**	Safety Class II
DM	**Optic**	Distribution Medium
42/60		

Product designation

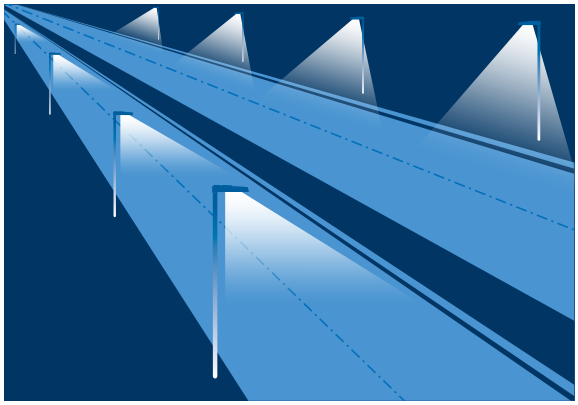
ClearWay	System power (W)	Lumen package system (lm)	LOR	System efficacy (lm/W)
BGP303 LED49/740	57	4,363	0.87	76.7
BGP303 LED73/740	83	6,428	0.85	77.9
BGP303 LED98/740	106	8,413	0.84	79.3
BGP303 LED122/740	131	10,319	0.82	78.8

Installation parameters

Installation : single or dual
Maintenance factor : 0.71 at 50,000 hours
Tilt : 0° to 10°
Overhang : from -3 to 0 meters
Mounting height : from 6 to 12 meters

New project

Urban road



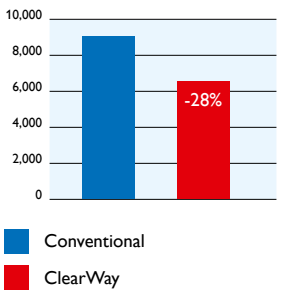
Installation parameters

Carriageway	: Dual
Road width	**: 14 m**
Mounting height	**: 9 m**
Luminaire tilt	: 10°
Lighting class	**: ME3a**
Maintenance factor	: 0.71 at 50,000 hours

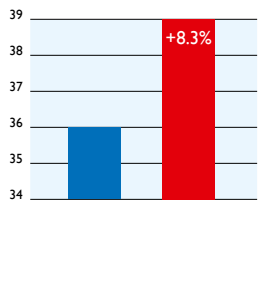
Luminaire	Conventional	ClearWay
Light source	SONTPP150	LED122 DM
Optimized spacing (m)	36	39
System consumption (W)	169	131
Energy saving (W/km)	9389	6718

Solution comparison urban road

Energy saving (W/km)



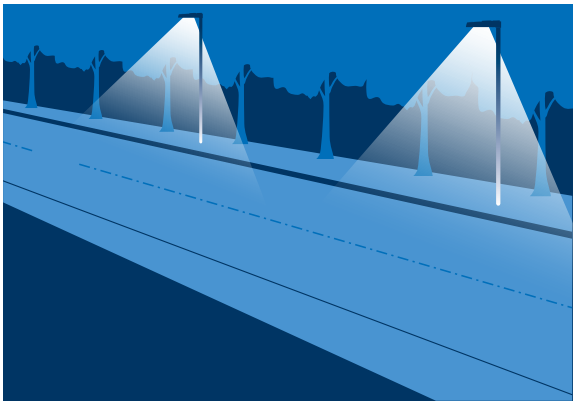
Optimized spacing (m)



Conventional

ClearWay

Residential street



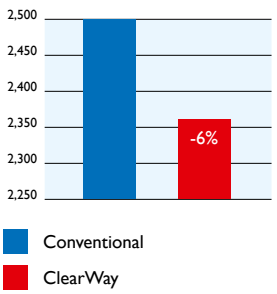
Installation parameters

Carriageway	: Single
Road width	**: 6.5 m**
Mounting height	**: 8 m**
Luminaire tilt	: 0°
Lighting class	**: ME5**
Maintenance factor	: 0.71 at 50,000 hours

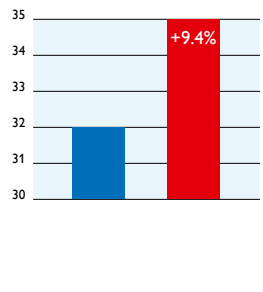
Luminaire	Conventional	ClearWay
Light source	SONTPP70	LED73 DM
Optimized spacing (m)	32	35
System consumption (W)	80	82
Energy saving (W/km)	2500	2357

Solution comparison residential street

Energy saving (W/km)



Optimized spacing (m)

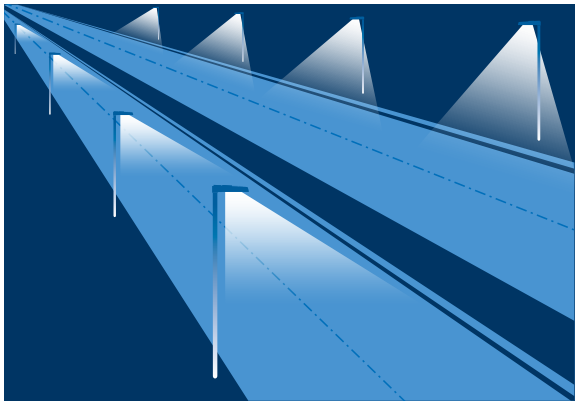


Conventional

ClearWay

Renovation

Urban road



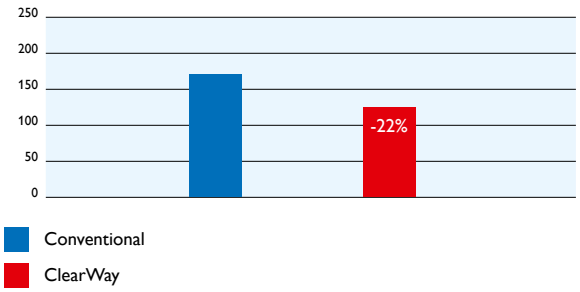
Installation parameters

Carriageway	: Dual
Road width	**: 14 m**
Mounting height	**: 12 m**
Luminaire tilt	: 10°
Lighting class	**: ME3a**
Maintenance factor	: 0.71 at 50,000 hours

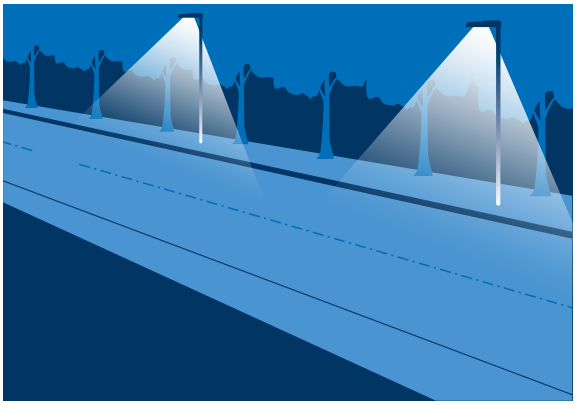
Luminaire	Conventional	ClearWay
Light source	SONTPP150	LED122 DM
Optimized spacing (m)	36	39
System consumption (W)	169	131
Energy saving (W/km)	9389	7278

Solution comparison urban road

System consumption (W)



Residential street



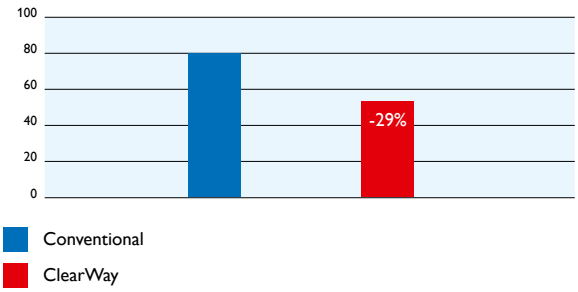
Installation parameters

Carriageway	: Single
Road width	**: 8 m**
Mounting height	**: 6 m**
Luminaire tilt	: 5°
Lighting class	**: S4**
Maintenance factor	: 0.71 at 50,000 hours

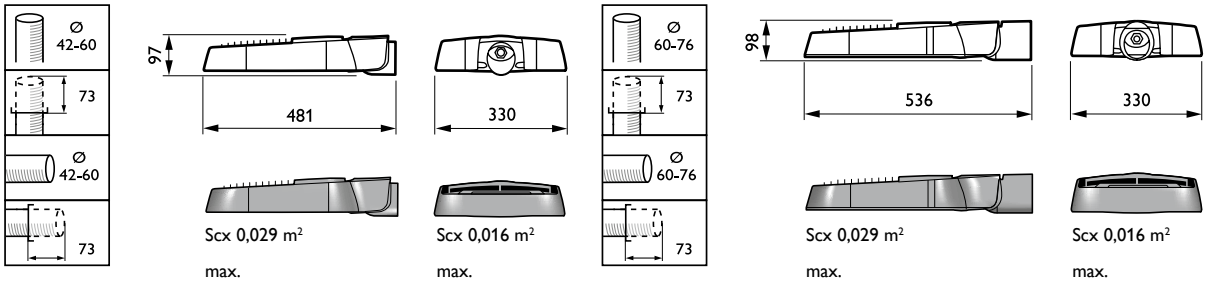
Luminaire	Conventional	ClearWay
Light source	SONTPP70	LED49 DM
Optimized spacing (m)	36	36
System consumption (W)	80	57
Energy saving (W/km)	2222	1583

Solution comparison residential street

System consumption (W)



Dimensions and main specifications



ClearWay

Main specifications	
IP of the luminaire	IP66
Mechanical resistance	IK08
Nominal voltage	230 V – 50/60 Hz
Electrical protection	Class I or II
Glass cover	Flat glass
Housing	Aluminum
Standard color	Gray (RAL 7035)
Weight	7.5 kg
Mounting height	4 to 8 m

Installation	
Post-top position	0°, 5°, 10°, 15°
Post-top diameter	42/60 mm and 76 mm
Side-entry position	-15°, -10°, -5°, 0°, 5°, 10°, 15°
Side-entry diameter	42/60 mm and 76 mm

List of standard codes available for ClearWay

Configuration	12NC
BGP303 LED49/740 PSU I DM 42/60	9109 254 34412
BGP303 LED73/740 PSU I DM 42/60	9109 254 34512
BGP303 LED98/740 PSU I DM 42/60	9109 254 34612
BGP303 LED122/740 PSU I DM 42/60	9109 254 34712
BGP303 LED49/740 PSU I DM 76	9109 254 35212
BGP303 LED73/740 PSU I DM 76	9109 254 35312
BGP303 LED98/740 PSU I DM 76	9109 254 35412
BGP303 LED122/740 PSU I DM 76	9109 254 35512
BGP303 LED49/740 PSU II DM 42/60	9109 254 34812
BGP303 LED73/740 PSU II DM 42/60	9109 254 34912
BGP303 LED98/740 PSU II DM 42/60	9109 254 35012
BGP303 LED122/740 PSU II DM 42/60	9109 254 35112
BGP303 LED49/740 PSU II DM 76	9109 254 35612
BGP303 LED73/740 PSU II DM 76	9109 254 35712
BGP303 LED98/740 PSU II DM 76	9109 254 35812
BGP303 LED122/740 PSU II DM 76	9109 254 35912

Configuration	12NC
BGP303 LED49/740 PSU I DM P3-35 42/60	9109 254 36012
BGP303 LED73/740 PSU I DM P3-35 42/60	9109 254 36112
BGP303 LED98/740 PSU I DM P3-35 42/60	9109 254 36212
BGP303 LED122/740 PSU I DM P3-35 42/60	9109 254 36312
BGP303 LED49/740 PSU I DM P3-35 76	9109 254 36412
BGP303 LED73/740 PSU I DM P3-35 76	9109 254 36512
BGP303 LED98/740 PSU I DM P3-35 76	9109 254 36612
BGP303 LED122/740 PSU I DM P3-35 76	9109 254 36712
BGP303 LED49/740 PSU I DM P1 42/60	9109 254 36812
BGP303 LED73/740 PSU I DM P1 42/60	9109 254 36912
BGP303 LED98/740 PSU I DM P1 42/60	9109 254 37012
BGP303 LED122/740 PSU I DM P1 42/60	9109 254 37112
BGP303 LED49/740 PSU I DM P1 76	9109 254 37212
BGP303 LED73/740 PSU I DM P1 76	9109 254 37312
BGP303 LED98/740 PSU I DM P1 76	9109 254 37412
BGP303 LED122/740 PSU I DM P1 76	9109 254 37512

Document order number: 3222 635 67300
12/2012
Data subject to change.

www.philips.com/catalog