



LG Electronics
Lighting Business Division
www.lg.com

For continual product development, LG reserves the right to change specifications or designs without notice.
Copyright © 2015 LG Electronics. All rights reserved.



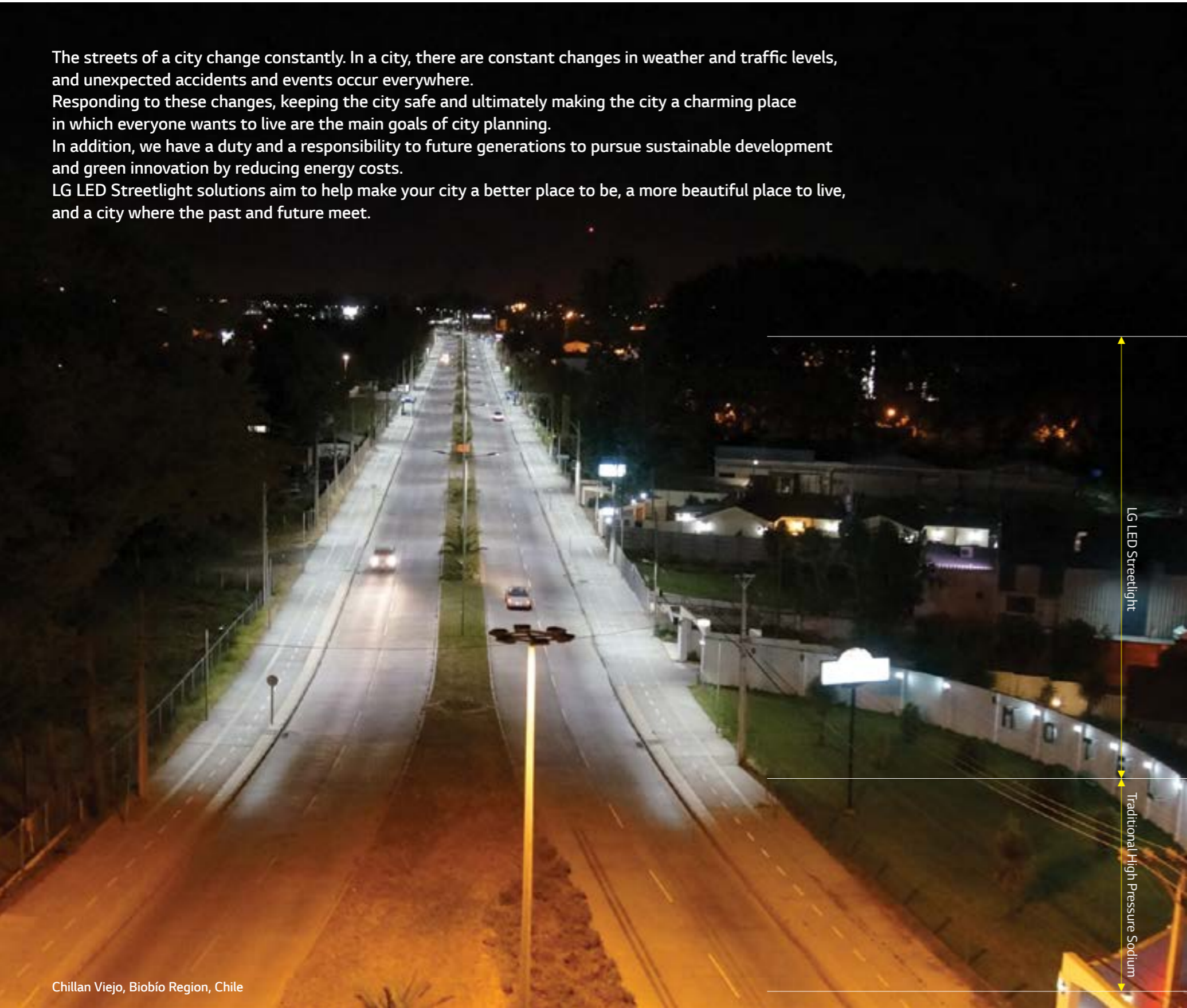
LG LED Streetlight
Lighting's Good,
Life's Good



Elevating city life with LG Lighting



The streets of a city change constantly. In a city, there are constant changes in weather and traffic levels, and unexpected accidents and events occur everywhere. Responding to these changes, keeping the city safe and ultimately making the city a charming place in which everyone wants to live are the main goals of city planning. In addition, we have a duty and a responsibility to future generations to pursue sustainable development and green innovation by reducing energy costs. LG LED Streetlight solutions aim to help make your city a better place to be, a more beautiful place to live, and a city where the past and future meet.



Chillan Viejo, Biobío Region, Chile



A livable city for everyone

When beautiful lights provide the right lighting and blend in with the urban landscape of your city, nights become safer and more fun. Simply being able to safely walk the streets at night is enough to bring happiness to the people living in a city. Good lighting can have a positive effect on a city's crime rate and also make driving on the roads safer. Choosing the right lighting makes your city a safe and beautiful place in which everyone wants to live.



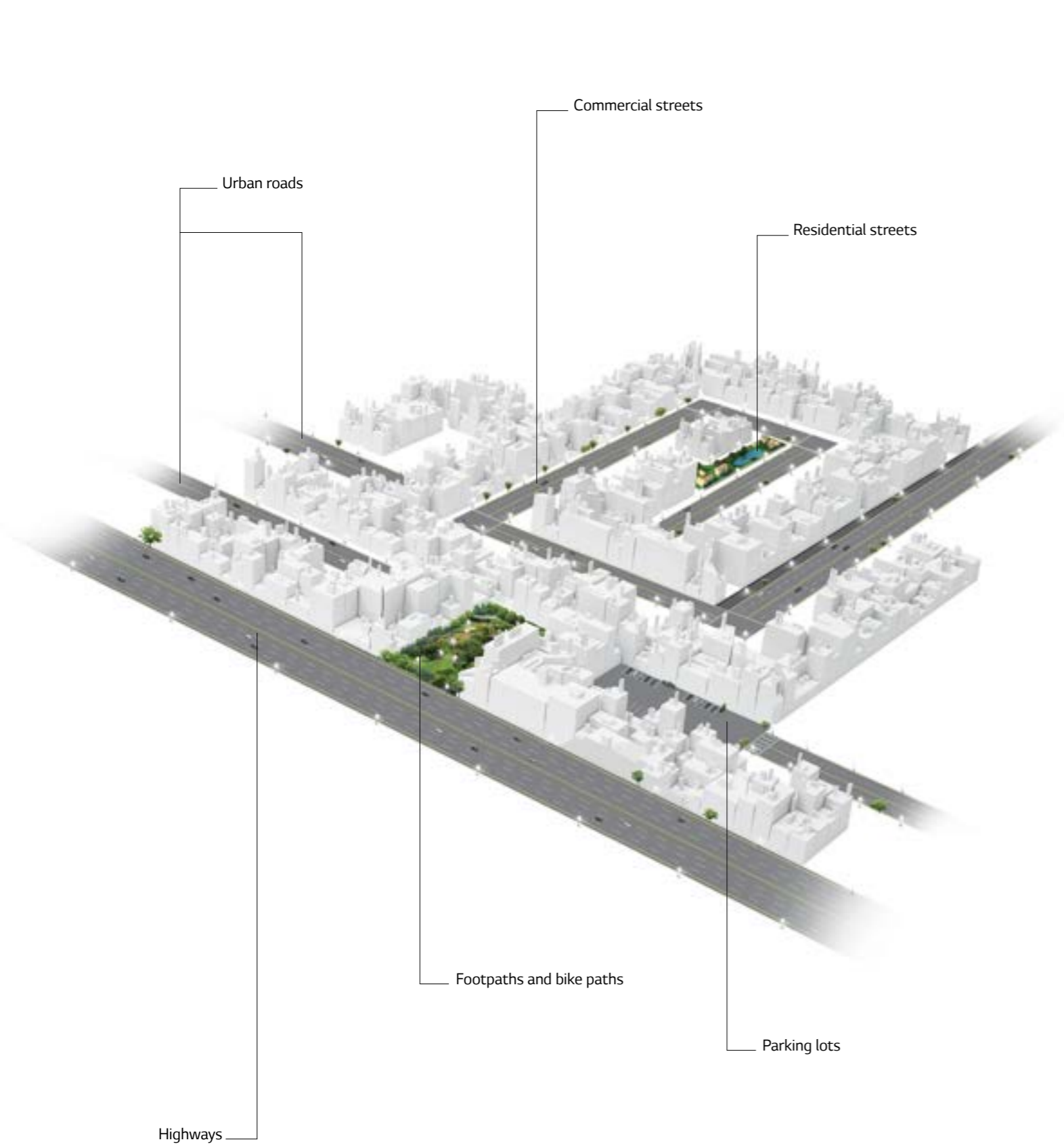
Reducing maintenance costs

Managing a city's limited budget requires responsibility. That's why we must strive for a quick return on any expenditure. LG LED Lighting provides a solution that can reduce maintenance costs through energy efficiency, installation costs through consideration of the installation process from as early as the production design stages, and even repair costs through the adoption of the modular design.

The Vision of LG Lighting

LG Electronics is the only brand that provides comprehensive solutions to vitalize you and your city at a lower cost to the natural environment. Create optimal environments for people to live, work and relax. Provide effective solutions for customers as trusted partners. LG Lighting brightens your city with innovative technology.

LG LED Streetlight solutions for your city



Roads	
Highways	
Urban roads	
Streets	
Commercial streets	
Residential streets	
Pedestrian areas	
Footpaths bike paths	
Area lighting	
Parking lots	

Flexible choices for the right light

Use the right amount of light in the right place. This is the simplest and most effective way to save energy costs and ensure security at night.

With a modular design, LG LED Road & Street Lighting can be adapted based on various environmental conditions, such as the type of road lane, the road width, the level of curve, vehicle speed, etc. In addition, it is suitable for a wide range of applications from suburban streets and urban traffic routes to highways.

LG Electronics solutions can provide the product that is best suited to your local environment in order to best enhance the value of the space.



Key features

- Achieves energy savings of up to 60%
- Slim edge design for a distinctive urban landscape
- Tool-less latch opening for easy installation, maintenance and upgrade
- Product reliability with IP66, IK08 and 10 kV surge protection
- Convenient $\pm 5^\circ$ tilt
- Long life expectancy, with maintained high-lumen output
- NEMA receptacle, PLC/wireless control optional
- 3G vibration rating

Specifications

Power consumption	13.6 ~ 56 W	Operating temperature	-40 ~ 50 °C
Optical distribution	Type I / II / III	Average ambient temperature	25 °C
Luminous flux	1,540 ~ 5,830 lm	Input voltage	120 ~ 277 Vac
Efficacy	99 ~ 113 lm/W	Input frequency	50/60 Hz
Color temperature	4000 ~ 5000 K	Input current	400mA / 700 mA
CRI	>70	Dimensions	612x211x101 mm
IP	IP 66	Weight	4 kg
IK	IK 08	Dimmable	1-10 V
Maintenance of lumen output	100,000 h (L80B10)	Certification	CE

Key features

- Achieves energy savings of up to 55%
- Tool-less installation, maintenance and upgrade
- Product reliability with IP66, IK08 and 10 kV surge protection
- Can be used for various road types by changing lenses
- Adopts a proprietary radiation shielding system that applies hydrodynamic techniques
- Convenient $\pm 5^\circ$ tilt
- NEMA receptacle, PLC/wireless control optional
- 3G vibration rating

Specifications

Power consumption	38 ~ 180 W	Operating temperature	-40 ~ 50 °C
Optical distribution	Type I / II / III / V	Average ambient temperature	25 °C
Luminous flux	3,680 ~ 19,500 lm	Input voltage	120-277
Efficacy	97 ~ 110 lm/W	Input frequency	50/60 Hz
Color temperature	4000 ~ 5700 K	Input current	700 mA
CRI	>70	Dimensions	580/682/784x340x110 mm
IP	IP 66	Weight	8.5 ~ 13 kg
IK	IK 08	Dimmable	1-10 V
Maintenance of lumen output	100,000 h (L80B10)	Certification	CE



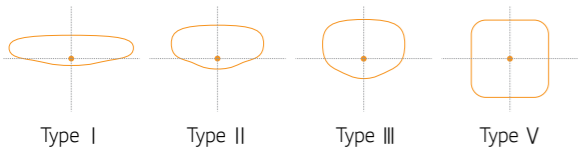
Comfortable visibility for a safer city

Streetlights provide light for residential areas and roads, enhancing the safety of drivers and pedestrians. Installing road lighting can increase vehicle accident prevention rates by up to 57%¹⁾ and reduce crime rates.²⁾

Various light distributions

You need various levels of lighting distribution to achieve uniform lighting throughout the space. LG LED Road & Street Lighting provides optimized light according to the road conditions through different combinations of lenses.

Optical distributions



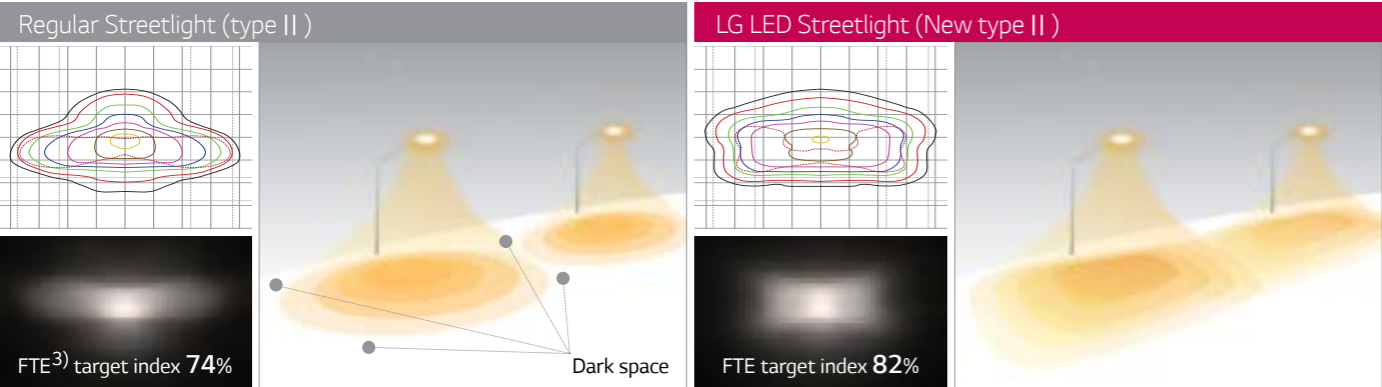
Optical lenses



An example of various distributions of type I light



Improvement of light distribution for safety



LG Electronics maintains a specialized design team at its headquarters to effectively light every corner of your city in order to make your streets safer.
* Detailed light distributions will be available on the DIALux website: <http://www.dial.de/DIAL/>

Visible differences

Experience for yourself light that is closest to natural light, made possible by a design that guarantees high performance and is perfectly suitable for your road environment.



1) Excerpt from "Effects of road lighting: An analysis based on Dutch accident statistics 1987-2006" from American journal Accident Analysis & Prevention
2) Excerpt from "Good lighting for safety on roads, paths and squares" from the German magazine Fordergemeinschaft Gutes Licht
3) FTE (Fitted Target Efficacy): Quantifies how effectively a rectangular-shaped target is lit, calculated as a percentage

Securing urban sustainability



LG Electronics is a responsible global corporation and strives to make products with the least impact on the environment for future generations.

Environment-friendly lighting

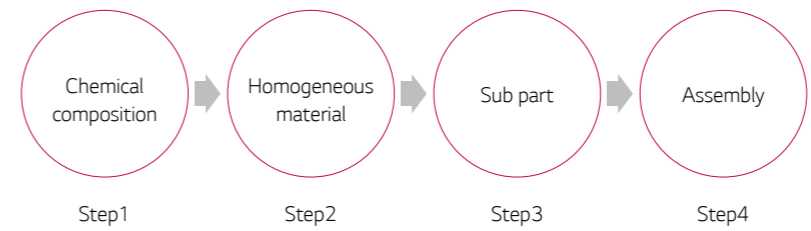
Substituting a conventional streetlight with an LG streetlight has an effect equivalent to planting 35 pine trees per year.

When substituting a 250 W metal-halide streetlight with a 126 W LG streetlight
(12 hours operation per day, conversion factor 0.47 kg CO₂/h, 7.3 kg CO₂/pine tree)



Supervision starts from as early as material selection

LG Electronics collects accurate substance data, even with homogeneous structure material, via the LG hazardous substances management system (LG HSMS).





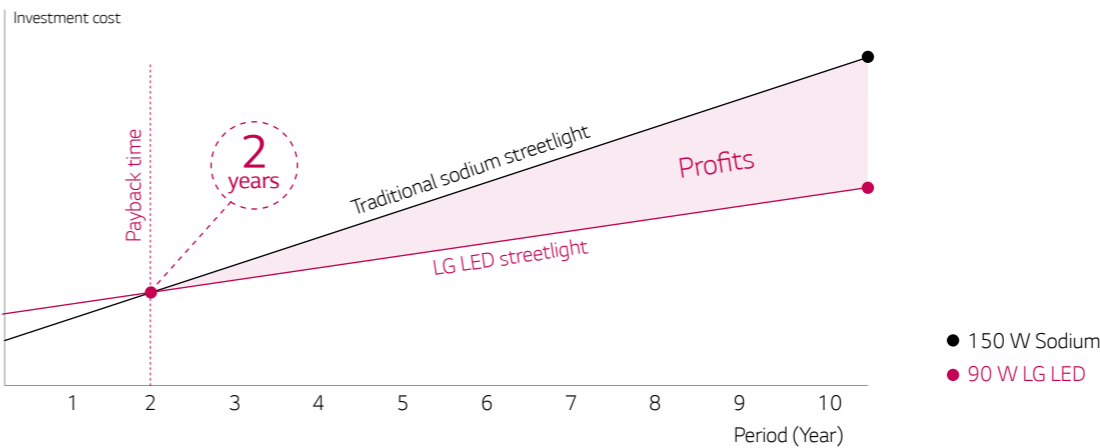
An obvious choice for reliable savings



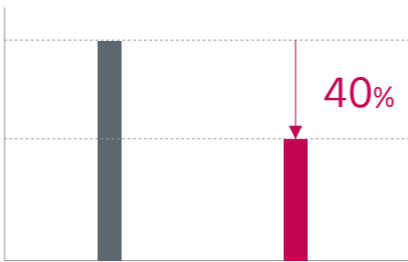
While other communities are still paying for costly replacements of their conventional streetlights, LG LED Road & Street Lighting will have returned your investment through lower operating expenses. A lower total cost of ownership will allow you to be flexible with your operating or capital expenses.

Short payback time

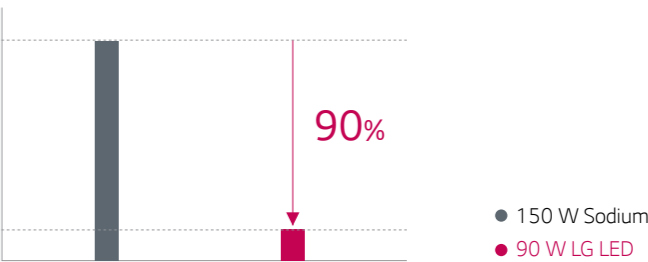
Considering energy efficiency and maintenance costs, you can expect to recoup the initial costs after two years.



Saving energy and reducing electricity costs



Maintenance and labor costs for 10 years



- * Calculated based on a 5-year guarantee.
- * Electricity costs in Chile: \$0.22/kWh, annual operating hours: 4,167 hours
- * Applied PV (present value) calculation, interest rate 2.7%
- * Failure rate: Based on LG Electronics FRR calculation standard (= defect quantity/total installation quantity)

Energy saving

It's the best alternative to traditional streetlights. It saves energy by at least 50% and replaces traditional metal halide lamps.

Metal halide	Energy savings	LG LED
100 W Metal halide	62%	38 W LED
150 W Metal halide	52%	72 W LED
250 W Metal halide	50%	126 W LED
400 W Metal halide	55%	180 W LED

Installation & maintenance focused design

LG Electronics is represented in the production site and listens to the voice of the customer. A lot of research goes into developing a design that is durable as well as easy to install and maintain when developing a product.

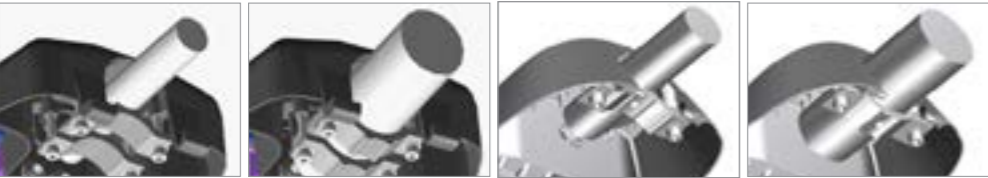
Tool-less entry

It is possible to access the electrical compartment without any additional tools. It makes the installation and maintenance quick and easy, saving time and money.



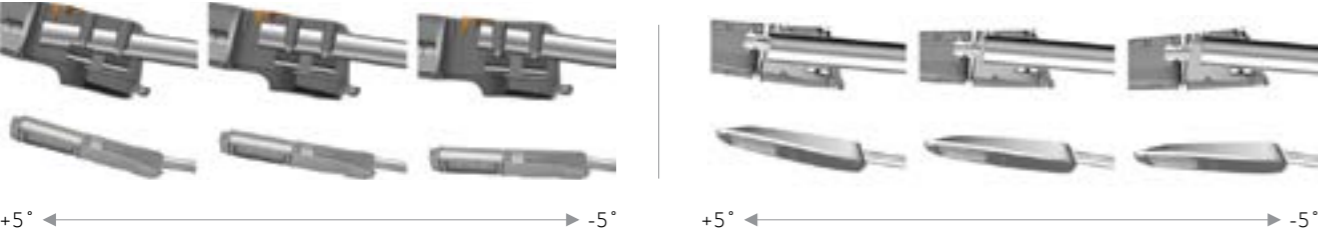
Compatible with various arm sizes

It is designed to be compatible with various pole diameters and arm angles so that it can be easily installed without replacing the existing poles.



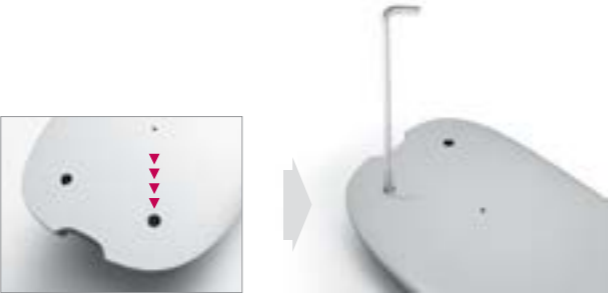
Adjustable tilting angle

LG Electronics boasts unique, patented technology that, through easy angle adjustment, ensures the provision of homogenous lighting in any installation environment.



Convenient outer tightening

There are two holes which facilitate the use of a screwdriver to connect the head and arm, without the need to open the cover.



Modular design

With a modular design, you can easily upgrade your lighting unit while retaining the unit's complete housing. This increases the light's energy efficiency in the future as well as greatly reducing the number of components that need to be replaced.



IP66 / IK08 rating

IP66-rated housing protects the LEDs from degradation caused by environmental factors and pollutants such as rain, ice, snow, dust, sand, etc. Also, the tempered glass is three times stronger (IK08) than normal glass.

10 kV surge protection

The integral surge protector with 10 kV resistance prevents power damage caused by static-electric sparks such as those caused by lightning.

3G vibration rating

3G vibration-rated to ensure strength of construction and longevity in application. (Certified to ANSI C136.31-2001, 3G bridge and overpass vibration standards)

Long-lasting protection with rugged finish

Die-cast aluminum housing and polyester powder-coating finish provide long-lasting protection.

Preventing the collection of foreign substances

Unlike with other LED streetlights, the heat sink channel is not on view and instead is covered by the housing. This prevents dust, leaves and bird droppings from collecting on top of the lighting unit.



Smart saver for sustainable city

LG Lighting is earnestly focused on independent development based on LG Electronics' excellent technology. However, it also provides customized control solutions that suit each site by collaborating with the world's leading companies.

All LG streetlights have an NEMA receptacle for the installation of a photo sensor.

Also, from basic, motion sensor-based individual controls to central control systems for streets and cities, we are endeavoring to provide a wide range of solutions that are tailored to each site in order to meet your needs.

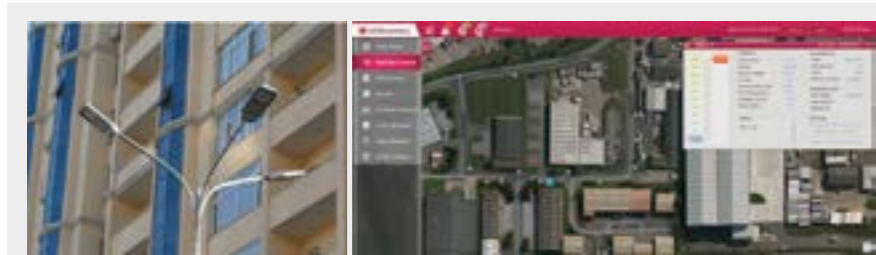
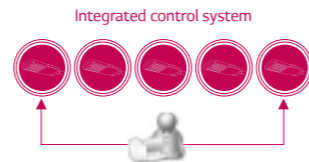
Individual/group control

With this solution, you can maximize energy saving by conveniently installing sensors. Not only can you control each streetlight independently, but also control streetlights based on small groups.



Integrated control system

Suitable for large sites such as major roads or city blocks. You can remotely control large spaces with a small number of personnel. We will suggest wired or wireless control systems as appropriate for your city.



Imanbaeva street, Astana, Akmola Province, Kazakhstan

The Kazakhstan government has installed and is running LED streetlights and an integrated control system on Imanbaeva Street. Replacing the existing 250 W metal-halide streetlights with LG LED 145 W streetlights and establishing an integrated control system maximized energy reduction as well as making the system easier to manage.

“ Much brighter and better than the previous lighting!
I want to replace my cafe's interior lighting with it as well ”

- Owner of a cafe on the street -

Efficient maintenance

- Automatic failure detection
- No need for night patrols
- Group onsite operation
- Drastic reduction in the number of incoming calls
- Decreased use of service trucks and cars
- Able to check failure before sending crews

Maximized energy savings

- Dimming based on a preset timer, weather conditions and traffic levels
- Managed peak demand

Annual energy consumption comparison



* Based on 12 hrs operation per day yearly.
* Calculation result may differ by the operating conditions.

An example of schedule control



[Before midnight] operating at 100% light intensity for 6 hours
[After midnight] operating at 30% light intensity until sunrise

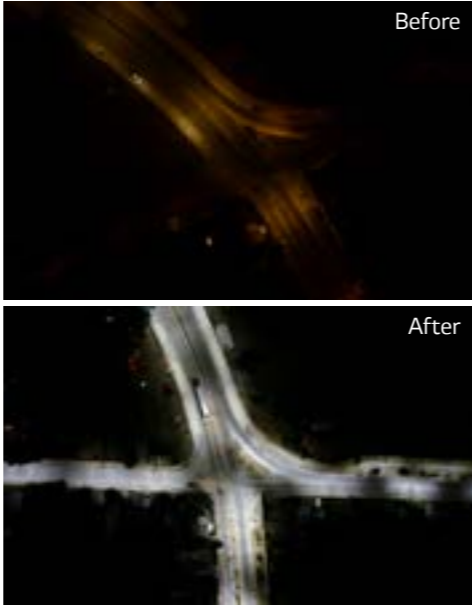
Reference site

CHILLAN VIEJO, CHILE

Installed units : 2,753
Construction : 2013

“
An interview
with a city official ”

The street light replacement project changed the city's image enormously. I can feel the citizens' greatly increased satisfaction, not to mention the reduction of operation and management costs.



CAUQUENES, CHILE

Installed units : 4,514
Construction : 2013

“
An interview
with a community member ”

In the past, with dim and reddish lighting giving me an eerie feeling, it was scary to walk around the city late at night. However, it's not like that anymore. I really like the new lighting because it's bright and clean.



ERCILLA, CHILE

Installed units : 800
Construction : 2012

“
An interview
with a police officer ”

I think brighter lighting than the previous system is more conducive to ensuring the public security of the city. I expect it to be of great help in promoting safe driving and the reduction of the crime rate.



CHAMPION'S PARK, KOREA

Installed units : 34
Construction : 2014

“
An interview
with a facility manager ”


LG lighting is brighter than other lighting systems and can be used for more than 10 years, which in turn results in a great reduction of maintenance costs. By providing bright light at night, it is also helpful to examine surveillance camera footage.



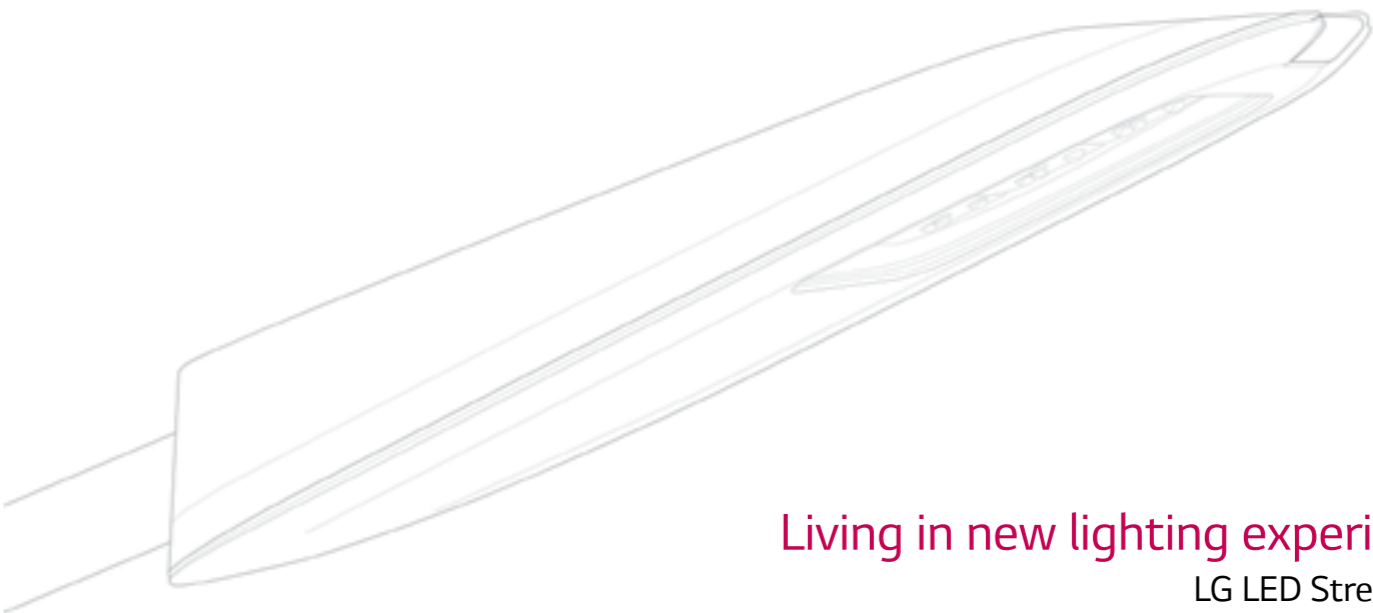
Order guide

S	40	50	0	T1	9	1	A
Product type	Power consumption	Color temperature	Mounting	Optic	Driver	Fixture platform	CRI
S : Streetlight	A4 : 13.6 W 40 : 38 W 50 : 47~48 W 60 : 56 W 70 : 72 W 11 : 108 W 13 : 126 W 15 : 145 W 18 : 180 W	40 : 4000 K 50 : 5000 K 57 : 5700 K	0 : Direct Arm (Side Mount)	T1 : Type I T2 : Type II T3 : Type III T5 : Type V	9 : 700 mA (1-10V Dimming)	1 : Star Fighter A : Victoria Small B : Victoria Medium C : Victoria Large	A : 70>CRI

Family model

	SA4400T191A	13.6	Type I	1,540	4000
	SA4400T291A	13.6	Type II	1,540	4000
	SA4400T391A	13.6	Type III	1,540	4000
	S40400T191A	38	Type I	3,870	4000
	S40400T291A	38	Type II	3,870	4000
	S40400T391A	38	Type III	3,770	4000
	S40500T191A	38	Type I	4,030	5000
	S40500T291A	38	Type II	4,030	5000
	S40500T391A	38	Type III	3,920	5000
	S50400T191A	47	Type I	4,830	4000
	S50400T291A	47	Type II	4,830	4000
	S50400T391A	47	Type III	4,700	4000
	S50500T191A	47	Type I	5,030	5000
	S50500T291A	47	Type II	5,030	5000
	S50500T391A	47	Type III	4,900	5000
	S60400T191A	56	Type I	5,750	4000
	S60400T291A	56	Type II	5,750	4000
	S60400T391A	56	Type III	5,600	4000
	S60500T191A	56	Type I	5,990	5000
	S60500T291A	56	Type II	5,990	5000
	S60500T391A	56	Type III	5,830	5000

Model no.	Power consumption	Optical distribution	Luminous flux	Color temperature
S40570T29AA	38	Type II	3,680	5700
S50570T29AA	48	Type II	4,900	5700
S60400T29AA	56	Type II	5,415	4000
S70400T29AA	72	Type II	7,200	4000
S70570T19AA	72	Type I	7,900	5700
S70570T29AA	72	Type II	7,550	5700
S70570T59AA	72	Type V	7,300	5700
S11400T29BA	108	Type II	11,130	4000
S11570T29BA	108	Type II	11,800	5700
S11570T39BA	108	Type III	11,700	5700
S13400T29BA	126	Type II	13,020	4000
S13570T29BA	126	Type II	13,700	5700
S13570T39BA	126	Type III	13,400	5700
S15400T29BA	145	Type II	14,670	4000
S18570T29CA	180	Type II	19,700	5700
S18570T39CA	180	Type III	19,500	5700



Living in new lighting experience,
LG LED Streetlight

