

# **SmartBright Street** Reliable Savings, lasting brightness



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- Product Features and Benefits
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# Lighting needs are transforming

#### l want to feel safe and comfortable



#### Urbanization

We are increasingly urban and global. Today, 50% of the world's population lives in cities. This is expected to rise to 70% by 2050, presenting new challenges



#### The people's city Better experiences and better lives

l need to think about the future



## Resourcefulness & Economic uncertainty

Surging demand for raw materials/energy means prices and availability are a concern. Impact on the environment too. Tighter budgets are encouraging cities to outsource operations more and more too



## Sustainability Doing more to help people use less

l want to inspire



The public's enhanced sense of personal identity is today matched by their cities. Intercity competition aimed at attracting people, tourists and businesses is growing



#### Urban development, Iconic landmarks

Enhanced experiences, in and around landmarks, and regeneration of old districts

I want to be in control



#### Connectivity

Branding

There are huge new opportunities to improve urban life through connected intelligence, using highly efficient solutions enabled by ICT



#### **Connected city**

Intelligent and connected city infrastructure to improve mobility and community life



# **Trends in Road Lighting**

## An increasing level of social and environmental responsibility

- Stronger interest in 'Energy Saving Solutions'
- Need for recyclable 'green products'
- Govt. recyclable subsidies & legislation at municipal level for energy saving & CO2 reduction

## Improving 'quality of life' and 'well being' considerations

- Enhanced comfort, safety and security
- Not just light on the road but better uniformity and aesthetic lighting solutions
- Feeling of civic pride, belonging

## Rapid urbanization; Economic expansion; GDP Growth; Increasing Wealth

- More roads as a result of rapid infrastructure development
- Upgrading city centers, residential areas, parks & squares



# **Introducing ... Smart Bright**



"Maximize energy savings,

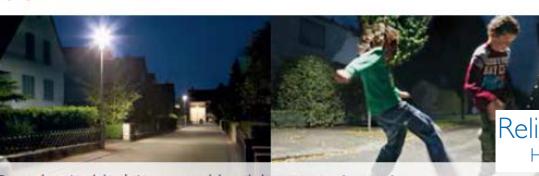
Simple & Economical" (s)ignify

# Signify Classified - Internal SmartBright Street (BRP056)

#### **Finless Design**



## Applications





## **PHILIPS**

Street Light

SmartBright Street

## Reliable Savings, lasting brightness High performance in a robust and compact design

Residential lighting and building apartments

## **Unique Selling Points:**

- Up-to 70% energy saving
- Polycarbonate cover with high impact resistance
- Robust PDC housing LM6 alloy with IP66 protection
- Long life of as compared to MH/SON streetlights
- System power consumption / Light output 50W/5500Im
- 1 to 1 replacement for 1x150W SON streetlights



# **Features and Benefits**

## Use with peace of mind

- 4KV Surge Protection
- 10KV Surge Protection(Optional)
- Impact Resistance of IK08 classification
- IP66 certified

## Long-lasting performance

- Designed for energy savings of up to 70% compared with conventional lighting
- L70 50k hours\*
- Designed for operations under diverse environment from -10°C to 45°C

\*Designed to sustain 70% of initial lumen output (L70) at 50,000 hours of lifetime

## High-quality materials and design

- Finless design with superior aesthetic looks
- Toughened and shatter-proof quality integrated built-in lens enhances to safety
- Pressure die-cast housing offers excellent corrosion-resistance and robustness

## **Uniform lighting**

• Dedicated Street light distribution with uniform lighting on the street

Reliable Savings, lasting brightness High performance in a robust and compact design



# **Highlights of the light Finless design**

## Energy saving up to 60%

- System efficacy 110 lumens per watt
- 1 to 1 replacement for retrofit SON 150W Street Light

## **Comfort light experience**

- Polycarbonate Cover with Integrated optics with good uniformity
- No direct LED dots (Lens plate use for glare protection)
- Accurate light, CRI :70
- Uniform Glare free Lighting Experience

## Long-lasting performance

- Robust aluminum die-casting housing
- Finless aluminum PDC (LM6 Alloy )housing offers excellent thermal dispersion to assure the long life time
- L70B50 50k hours @ Ta35°C
- Designed for operations under diverse environment from -10°C to 35°C

## Usage flexibility

- Suits for Pole Dial Mounting up to 60mm
- Dedicated Integrated optics for different Roads-
- Compact form factor that makes this smaller and lighter than conventional luminaires, easy to handle









# Safe and Reliable performance

#### Philips Xitanium<sup>®</sup> driver

- 4KV internal surge protection
- High Voltage cutoff& auto restart @320V+-15V
- Phase to phase 440V protection for 8 hours



High-quality Pressure die-cast aluminum housing LM6 alloy (Excellent corrosion resistance and robustness)

> Polycarbonate cover comes with IK08 protection

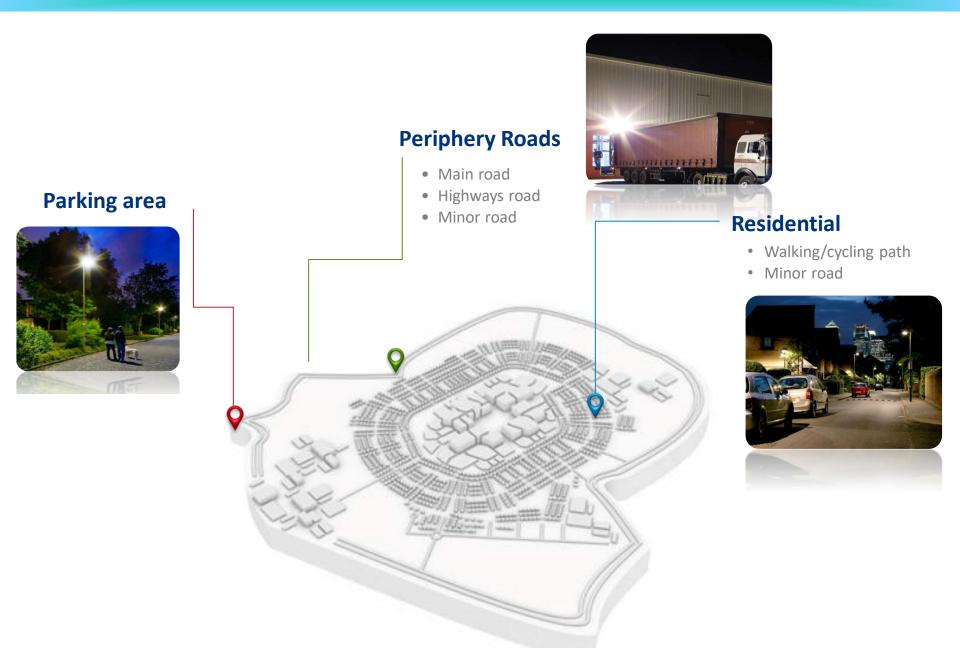
FINLESS Design for higher aesthetics (NO EXTRENAL FINS ) design for excellent heat dissipation

- High-efficiency LED module with CRI 70
  Integrated optics for
  - different Roads

High-performance LED module, high-quality LED driver, professional mechanical structure assure the safety and reliability



# **Application Areas**



# **Key Differentiators**



- Unique Road optics option for better uniformity
- Polycarbonate cover for higher IK protections



- Constant light over wide voltage range
- Potted driver to protect against Moisture



High Ingress Protection and Installer Friendly • Screw arrangement enable Higher Ingress Protections



# Signify



✓ IS 10322 / IEC60598

(Part 5/sec 1) -1985



✓ Class I

✓ IP 66

✓IS 15885 / IEC61347

(Part 2/sec 13) -1985

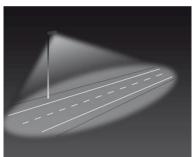
✓ CISPR15(9Khz-30mHz)

# **Dedicated optics**

# **Optimized Road Lighting Performance**

Unique peanut optic design guarantees light uniformity for today and in future.

#### Multi-layer Distribution with Peanut optics



Maximized Energy Savings
 Optimized Road Lighting Performance
 Selection of unique dedicated optical lens with flexible lumen packages to suit different applications.
 More Light on the Road

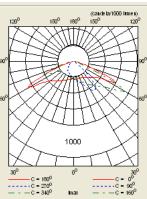
Superior watts per square meter (W/m2) performance – Using less energy to light per m2 on the road. Philips Smart Bright out-performs other Road Lightings

#### Vultiple spot with modules based LED street light





Typical competition distribution with modules



# **Ordering Information**

12NC	12NC Global Product description	Spare Driver 12 NC
919515813521	BRP056 LED55 CW SLF S1 PSU GR SPD	
919515813886	BRP056 LED55 CW SLF S1 PSU GR	



# **Beauty Shots**





## **Specification Sheet**

Model nameBRP056System Power50WSystem Lumen output5500lm CWCCT/ CRI5700K/ 70System Efficacy110lm/wInsulation classificationClass ISurge4KV (Inbuilt)Volt/Frequency120 - 270V/ 50HzPower factor>0.95IP rating/ IK ratingIP66 / IK 08Surge protection4KV InbuiltLifetime50,000 hrs @Ta 35°CAmbient Temp0 - 35°CServiceabilityClass BCasing colour/ CertificateDark Grey/ IS10322ServiceClass B Driver replacementProtection440V for 8 Hrs (P2P)High Cut325V (+-15V)Auto RestartYES10KV SPDOptionalOpticsIntegrated		555656
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10KV SPD Optional Optics Integrated	High Cut	325V (+-15V)
Optics Integrated PHILIPS	Auto Restart	YES
PHILIPS	10KV SPD	Optional
PHILIPS	Optics	Integrated
	te : All are nominal values at Nominal operating v	oltage 220 -240V and will vary ±/-10% PHILPS

Note : All are nominal values at Nominal operating voltage 220 -240V and will vary +/-10%

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## **Caution : Earthing terminal to be connected**

#### Installation

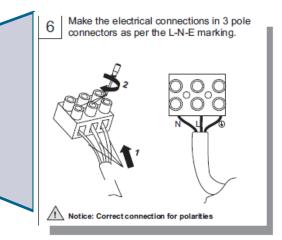
 Connect the red wire to live, Black wire to Neutral and the Green-yellow wire to ground. After joining Property insulate the wires using good quality Electrical insulation tape.

#### CAUTION

- 1. Ensure Earthing is connected.
- 2. Ensure 3 core CABLE for Connections(diameter8-10mm)
- Cable Entry gland should be properly tightened.
- Product should be operated between 100-300V a.c.
- 5. Use Surge protection (up to 10kV) to protect against surges
- Use Type B+C surge type SPD in distribution box to arrest switching and lighting surges.

FAILURE OF PRODUCT DUE TO NON COMPLIANCE TO ANY OF THE ABOVE, VOIDS WARRANTY OF PRODUCT



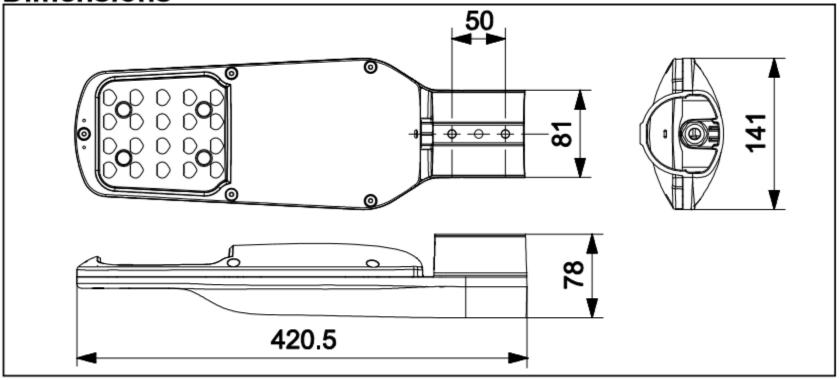


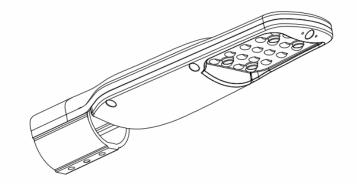
- Earthing is a must for all LED based product
- Ensure Surge protector are installed in the supply panel
- Ensure LED products are in a separate circuit and not connected with other heavy duty loads
- The warranty will be void if earthing is not provided as per applicable standards

## **PHILIPS**

# **Dimensions**

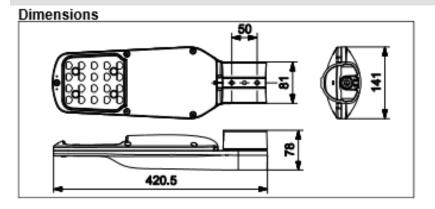
**Dimensions** 







## **Mounting Instructions**



#### Installation

- 1. Connect the red wire to live, Black wire to Neutral and the Green-yellow wire to ground. After joining Properly insulate the wires using good quality Electrical insulation tape.
- 2. Unfasten the Check nuts and loosen the M8 hex bolts to the required height as per the pole size.(Fig 1)
- 3. Insert the pole up to the position shown in the drawing below (Fig 2)
- 4. Tighten both the M8 hex bolts with tightening torque of 8Nm and then tighten the Check nuts fully (Fig 3).



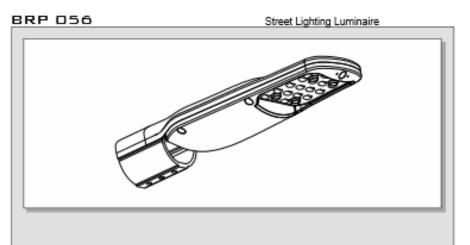
#### CAUTION

- Ensure Earthing is connected.
- 2. Ensure 3 core CABLE for Connections(diameter 5-7mm)
- 3. Cable Entry gland should be properly tightened.
- 4. Product should be operated between 100-300V a.c.
- 5. Use Surge protection (upto 10kV) to protect against surges
- Use Type B+C surge type SPD in distribution box to arrest switching and lighting surges.

FAILURE OF PRODUCT DUE TO NON COMPLIANCE TO ANY OF THE ABOVE. VOIDS WARRANTY OF PRODUCT

#### Signify Innovations

Installation Instruction



Туре	:	BRP056	
Light Source	:	LED's	
Voltage	:	240 V, 50 Hz	
IP Classification	:	IP-66	
Net Weight	:	1.5 kg approx	
Max. Projected Area	i :	.06 m²	
Application	:	Outdoor use only	
Mounting position	:	Horizontal	
Application height	:	Upto 6m	
Pole Outer Diamete	r:	48-60mm	

## PHILIPS

#### Signify Innovations India Limited

# Signify