# PRODUCT
# CATALOGUE

ecolighting

*Ultra-Lumen, Ultra-Duration, Ultra-Saving*

# Contents

# Open Letter

*Dear our valued customers and partners,*

Light has always been an essential part of human life from ancient times to the present. In today's modern society, light not only symbolizes progress and development but also reflects the advancement of civilization. As cities grow and develop, their nightscapes become brighter, representing prosperity and innovation. High-quality artificial light sources are increasingly vital in this context.

Excessive waste and carbon emissions, on the other hand, have become an excruciating concern as the use of short-duration and low-quality LED lights contributes significantly to environmental degradation.

As a strategic partner of Chang-Yu Technology—a leader in semiconductor manufacturing in Taiwan and a trusted supplier of LED drivers for Samsung Group and lighting solutions for Taoyuan Airport—PFC Ecolighting is committed to provide high-quality lighting solutions that are both environmentally friendly and safe for human health. Our goal is to create a bright, healthy future with long-lasting, energy-efficient products that reduce environmental impact. Our commitment to quality is reflected in our **1-for-1 warranty** for **50,000 lighting hours** or within **5 years**.

With a long-term vision and a heart dedicated to the community, we believe that our efforts today will yield sustainable values in the future. High-quality light sources will enhance the quality of life and contribute to building a happy and prosperous life for current and future generations. PFC Ecolighting always welcomes partners who share our vision of bringing superior products to the market.

We deeply appreciate the support of our customers and partners as we embark on this journey to revolutionize light sources, leading to a brighter and more sustainable future for all.

Best regards,
PFC Ecolighting Board of Directors

# COMPANY INTRODUCTION

# Introduction to PFC Trading & Investment

Driven by a commitment to revolutionize environmentally friendly light sources that prioritize human health without negative impacts, in 2023, PFC became a strategic partner of Taiwan's leading technology corporation, Chang-Yu Technology.

More than the exclusive distributor of Chang-Yu's renowned LED chips and drivers, PFC also collaborates closely with Chang-Yu Technology in researching, developing, and jointly producing the PFC Ecolighting product line, ensuring maximum customization for various projects:

**Office buildings**



**Residential buildings**



**Factories**



**Public buildings**



We take pride in delivering innovative lighting solutions to customers, while integrating advanced technology with practical value:

**140-160 Lm/W**

Outstanding luminous efficacy:
- Regular LED light: 90 Lm/W
- **PFC Ecolighting: 140-160 Lm/W**

**≧ 0.92 PF**

Utilized power factor:
- Regular LED light: [0.5 PF; 0.6 PF]
- **PFC Ecolighting: ≧ 0.92 PF**

**50,000 HOURS**

1-for-1 warranty:
- Within 5 years
- Or **50,000** lighting hours

**Reduce CO$_2$**

- Saving energy
- Reducing technology waste
- Reducing CO2 emission

# Introduction to Chang-Yu Technology

In 2000, Chang-Yu Technology, a strategic partner of PFC, was founded with a mission to bring advanced solutions to the semiconductor manufacturing industry. Over more than 20 years of relentless effort and with a professional team, Chang-Yu Technology has successfully developed innovative LED drivers.

It has become a source of pride for the Taiwan government in providing comprehensive solutions for LED lamp design, testing, and measurement. With a robust R&D team comprising experts across various fields, Chang-Yu Technology leads with its advanced technology product lineup, including:

- Automated LED testing system
- Microspectrometer
- Optoelectronic testing equipment
- Automated LED solutions

Chang-Yu Technology's LED power converters, used in PFC Ecolighting products, have been trusted in numerous landmark projects in Taiwan, notably at Taoyuan International Airport.

They have successfully entered demanding markets like **Japan** and **South Korea** through partnerships with corporations such as East Asia (Taiwan) and Samsung (South Korea).

Utilizing core technology from Chang-Yu Technology and assembly processes in Vietnam, PFC Ecolighting ensures product quality that meets international standards.

| CE Standards | EMC Standards | FCC Standards | ISO 9001 | ISO 14001 |
|---|---|---|---|---|

# Introduction to lighting specifications

LEDs, short for Light Emitting Diodes, employ semiconductor technology to emit light, boasting significant advantages over traditional lighting sources.

The following three basic concepts will help you to recognize high-quality LED products and thereby choose the optimal products that meet your requirements.

## Luminous Flux - A measure of the brightness

Luminous flux (Lumen-Lm) quantifies the total visible light emitted per unit time (usually seconds) in all directions from a light source.

**Luminous flux**

measures the amount of visible light that the human eye perceives

**Power**

only indicates the electrical power consumption of the light without directly reflecting its brightness.

**8 W
1120 Lm** > **10 W
900 Lm**

**BRIGHTER**
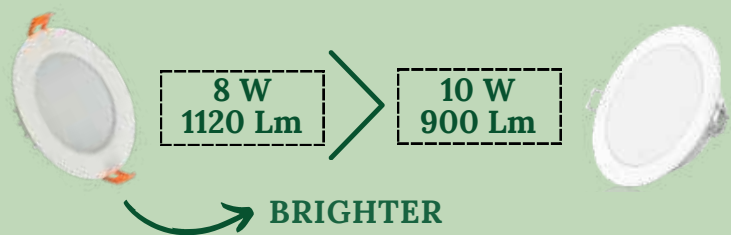
## Luminous efficacy - Key to energy savings

Regular LED light

**90 Lm/W**

ecolighting

**140 - 160 Lm/W**

The luminous efficacy measures how efficiently LED lights convert electrical power into light, calculated as the ratio of luminous flux to power consumption (unit: Lm/W). A higher luminous efficacy signifies greater energy efficiency and environmental friendliness of LED lights.
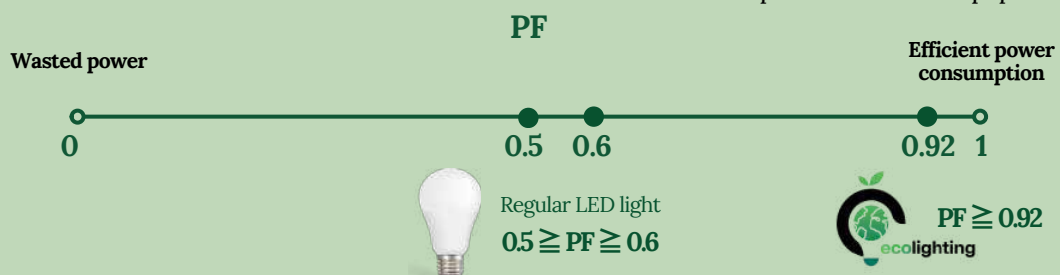
## Power factor - A measure of electrical efficiency

Power Factor (PF) measures how effectively an electrical device uses electrical power.

$$PF = \frac{\text{Useful power}}{\text{Total power consumption}}$$

Impacts of low power factor:
- Increased electricity costs
- Increased strain on electrical transmission systems
- Reduced lifespan of electrical equipment

**PF**

**Wasted power**

**Efficient power consumption**

0          0.5    0.6                    0.92   1

Regular LED light

$0.5 \geqq PF \geqq 0.6$

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$PF \geqq 0.92$
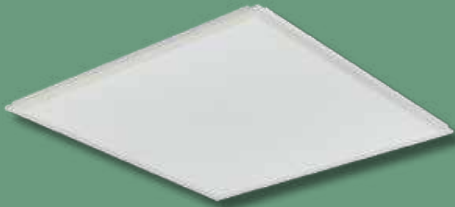
# PRODUCT SPECIFICATIONS

# PRODUCT LINES
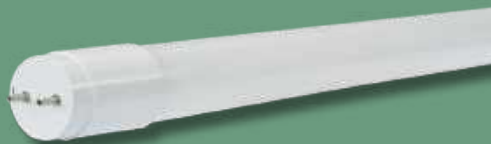
ecolighting

## RESIDENTIAL LIGHT

**DOWNLIGHT**
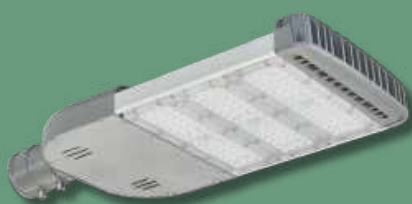
**SPOTLIGHT**

**PANEL LIGHT**

**SEMI-CIRCULAR LIGHT**

**TUBE LIGHT
WATERPROOF TUBE LIGHT**

**FLUSH MOUNT CEILING LIGHT**

## COMMERCIAL LIGHT

**STREET LAMP**

**FLOOD LIGHT
FACTORY LIGHT**

# ULTRA LUMEN DOWNLIGHT

## Multi-colors
## Ultra Lumen Downlight



**PF ≧ 0.92** · **100-265V AC in 50-60HZ** · **50V DC out <300MA** · **Driver Ecolighting** · **PC Plastic Base Aluminum**

| SKU | Size (mm) | Power (W) | Luminous Flux (Lm) | Luminous Efficacy (Lm/W) | Quoted price (VND) |
|---|---|---|---|---|---|
| ECO-DL-001 | Ø 90/ D120x40 | 5 | 800 | **160** | 240,000 |
| ECO-DL-002 | Ø 90/ D120x40 | 7 | 1120 | **160** | 250,000 |
| ECO-DL-023 | Ø 110/ D140x40 | 9 | 1440 | **160** | 267,000 |

## Mono-color
## Ultra Lumen Downlight



**PF ≧ 0.92** · **100-265V AC in 50-60HZ** · **50V DC out <300MA** · **Driver Ecolighting** · **PC Plastic Base Aluminum**

| SKU | Size (mm) | Power (W) | Luminous Flux (Lm) | Luminous Efficacy (Lm/W) | Quoted price (VND) |
|---|---|---|---|---|---|
| ECO-DL-020 | Ø 90/ D120x40 | 5 | 800 | **160** | 235,000 |
| ECO-DL-021 | Ø 90/ D120x40 | 7 | 1120 | **160** | 243,000 |
| ECO-DL-025 | Ø 110/ D140x40 | 9 | 1440 | **160** | 250,000 |
| ECO-DL-026 | Ø 140/ D182x40 | 12 | 1920 | **160** | 297,000 |
| ECO-DL-027 | Ø 140/ D182x40 | 16 | 2560 | **160** | 320,000 |

| DOWNLIGHT | SPOTLIGHT | PANEL | SEMI-CIRCULAR LIGHT | FLUSH MOUNT CEILING | TUBE | STREET LAMP | INDUSTRIAL LIGHT |

# DOWNLIGHT

## Multi-colors downlight

**PF ≧ 0.92**

**100-265V AC in 50-60HZ**

**50V DC out <300MA**

**Ecolighting**

**PC Plastic Base Aluminum**

| SKU | Size (mm) | Power (W) | Luminous Flux (Lm) | Luminous Efficacy (Lm/W) | Quoted price (VND) |
|---|---|---|---|---|---|
| ECO-DL-005 | Ø 90 / D120x40 | 5 | 700 | 140 | 212,000 |
| ECO-DL-004 | Ø 90 / D120x40 | 7 | 980 | 140 | 240,000 |
| ECO-DL-011 | Ø 110 / D140x40 | 9 | 1260 | 140 | 245,000 |

## Mono-color downlight

**PF ≧ 0.92**

**100-265V AC in 50-60HZ**

**50V DC out <300MA**

**Ecolighting**

**PC Plastic Base Aluminum**

| SKU | Size (mm) | Power (W) | Luminous Flux (Lm) | Luminous Efficacy (Lm/W) | Quoted price (VND) |
|---|---|---|---|---|---|
| ECO-DL-008 | Ø 90 / D120x40 | 5 | 700 | 140 | 185,000 |
| ECO-DL-009 | Ø 90 / D120x40 | 7 | 980 | 140 | 193,000 |
| ECO-DL-015 | Ø 110 / D140x40 | 9 | 1260 | 140 | 208,000 |
| ECO-DL-016 | Ø 140 / D182x40 | 12 | 1680 | 140 | 289,000 |
| ECO-DL-017 | Ø 140 / D182x40 | 16 | 2240 | 140 | 299,000 |

# SPOTLIGHT

## Mono-color
## Ultra Lumen Spotlight

- ⚡ PF ≧ 0.92
- 🔌 100-265V AC in 50-60HZ
- 🔌 50V DC out <300MA
- Ecolighting
- 🗂 PC Plastic Base Aluminum

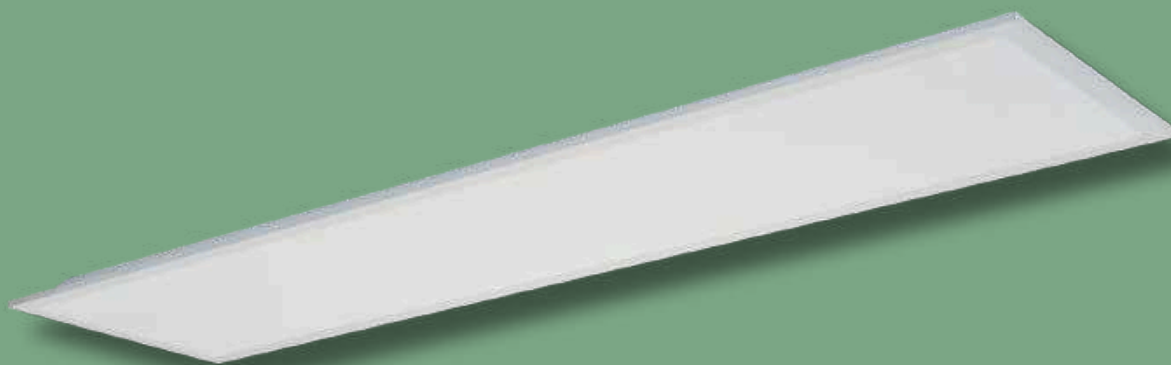| SKU | Size (mm) | Power (W) | Luminous Flux (Lm) | Luminous Efficacy (Lm/W) | Color | Quoted price (VND) |
|---|---|---|---|---|---|---|
| ECO-SL-001 | D90/ 112x112x45 | 5 | 800 | **160** | **4000K** | 271,000 |
| ECO-SL-002 | D90/ 112x112x45 | 7 | 1120 | **160** | **4000K** | 290,000 |
| ECO-SL-009 | D110/ 132-45 | 9 | 1440 | **160** | **4000K** | 316,000 |
| ECO-SL-011 | D110/ 132-45 | 9 | 1440 | **160** | **6000K** | 316,000 |

# PANEL LIGHT

⚡ PF≧0.92

🔌 100-265V AC in 50-60HZ

🔌 50V DC out <300MA

Ecolighting

PC Plastic Base Aluminum
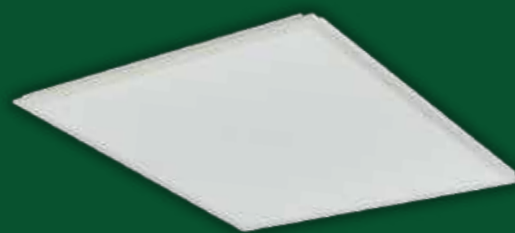
| SKU | Size (mm) | Power (W) | Luminous Flux (Lm) | Luminous Efficacy (Lm/W) | Quoted price (VND) |
|---|---|---|---|---|---|
| ECO-PN-001 | 600x600 | 21 | 3360 | **160** | 1,485,000 |
| ECO-PN-002 | 600x600 | 25 | 3625 | **145** | 1,434,000 |
| ECO-PN-003 | 600x600 | 32 | 3680 | **115** | 1,308,000 |
| ECO-PN-007 | 600x1200 | 40 | 4000 | **100** | 1,978,000 |
| ECO-PN-008 | 600x1200 | 32 | 5120 | **160** | 2,306,000 |
| ECO-PN-005 | 300x1200 | 36 | 4320 | **120** | 1,589,000 |
| ECO-PN-006 | 300x1200 | 40 | 4000 | **100** | 1,566,000 |

| DOWNLIGHT | SPOTLIGHT | PANEL | SEMI-CIRCULAR LIGHT | FLUSH MOUNT CEILING | TUBE | STREET LAMP | INDUSTRIAL LIGHT |

# SEMI-CIRCULAR LIGHT

**PF ≧ 0.92**  |  **100-265V AC** in **50-60HZ**  |  **50V DC** out **<300MA**  |  Ecolighting  |  PC Plastic Base

| SKU | Size (mm) | Power (W) | Luminous Flux (Lm) | Luminous Efficacy (Lm/W) | Color | Quoted price (VND) |
|---|---|---|---|---|---|---|
| ECO-BN-001 | 600 | 18 | 2520 | 140 | 4000K - 6000K | 221,000 |
| ECO-BN-002 | 900 | 27 | 3780 | 140 | 4000K - 6000K | 234,000 |
| ECO-BN-003 | 1200 | 28 | 3920 | 140 | 4000K - 6000K | 258,000 |
| ECO-BN-004 | 1200 | 36 | 5040 | 140 | 4000K - 6000K | 272,000 |
| ECO-BN-005 | 1200 | 54 | 7560 | 140 | 4000K - 6000K | 287,000 |

# FLUSH MOUNT CEILING LIGHT

**PF ≧ 0.92**  |  **100-265V AC** in **50-60HZ**  |  **50V DC** out **<300MA**  |  Ecolighting  |  PC Plastic Base

| SKU | Size (mm) | Power (W) | Luminous Flux (Lm) | Luminous Efficacy (Lm/W) | Shape | Quoted price (VND) |
|---|---|---|---|---|---|---|
| ECO-LT-001 | D160x28 | 7 | 980 | 140 | Round | - |
| ECO-LT-002 | D220x28 | 9 | 1260 | 140 | Round | - |
| ECO-LT-003 | D220x28 | 12 | 1680 | 140 | Round | - |
| ECO-LT-004 | D280x28 | 16 | 2240 | 140 | Round | - |
| ECO-LT-005 | 160x160x28 | 9 | 1260 | 140 | Square | - |
| ECO-LT-006 | 210x210x28 | 12 | 1680 | 140 | Square | - |
| ECO-LT-007 | 285x285x28 | 16 | 2240 | 140 | Square | - |

| DOWNLIGHT | SPOTLIGHT | PANEL | SEMI-CIRCULAR LIGHT | FLUSH MOUNT CEILING | TUBE | STREET LAMP | INDUSTRIAL LIGHT |

# TUBE T5 LIGHT

| SKU | Size (mm) | Power (W) | Luminous Flux (Lm) | Luminous Efficacy (Lm/W) | Color | Quoted price (VND) |
|---|---|---|---|---|---|---|
| ECO-T5-001 | 300x36x22 | 5 | 700 | **140** | 4000K | 124,000 |
| ECO-T5-002 | 600x36x22 | 10 | 1400 | **140** | 4000K | 152,000 |
| ECO-T5-003 | 900x36x22 | 14 | 1960 | **140** | 4000K | 165,000 |
| ECO-T5-004 | 1200x36x22 | 18 | 2520 | **140** | 4000K | 193,000 |

**PF≧0.92**

**100-265V AC** in 50-60HZ

**50V DC** out <300MA

Ecolighting

PC Plastic Base

# TUBE T8 LIGHT

| SKU | Size (mm) | Power (W) | Luminous Flux (Lm) | Luminous Efficacy (Lm/W) | Color | Quoted price (VND) |
|---|---|---|---|---|---|---|
| ECO-T8-001 | 600 | 6 | 840 | **140** | 6000K | 159,000 |
| ECO-T8-002 | 600 | 6 | 960 | **160** | 6000K | 172,000 |
| ECO-T8-003 | 1200 | 13 | 1820 | **140** | 6000K | 212,000 |
| ECO-T8-004 | 1200 | 13 | 2080 | **160** | 6000K | 234,000 |

# WATERPROOF TUBE LIGHT

| SKU | Size (mm) | Power (W) | Luminous Flux (Lm) | Luminous Efficacy (Lm/W) | Color | Quoted price (VND) |
|---|---|---|---|---|---|---|
| ECO-CN-002 | 1200 | 18 | 1800 | **100** | 4000K | 223,000 |
| ECO-CN-001 | 1200 | 9 | 900 | **100** | 4000K | 193,000 |

| DOWNLIGHT | SPOTLIGHT | PANEL | SEMI-CIRCULAR LIGHT | FLUSH MOUNT CEILING | TUBE | STREET LAMP | INDUSTRIAL LIGHT |
|---|---|---|---|---|---|---|---|

# STREET LAMP
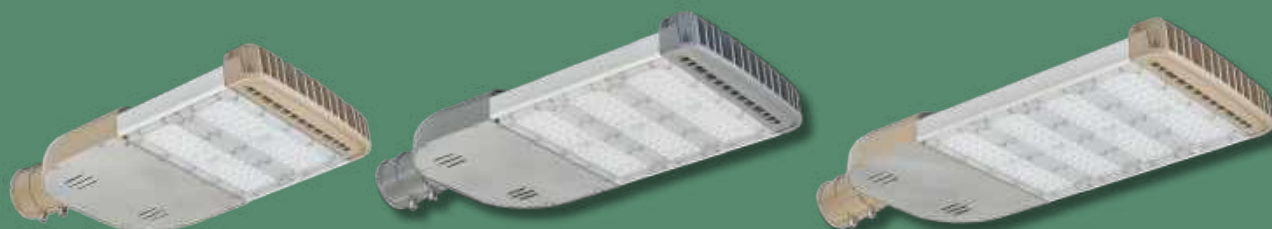
**100W**     **150W**     **200W**

PF≧0.92    100-265V AC in 50-60HZ    50V DC out <300MA    Anti-corrosion paint    Aluminum

| SKU | Size (mm) | Power (W) | Luminous Flux (Lm) | Luminous Efficacy (Lm/W) | LED Driver | Quoted price (VND) |
|---|---|---|---|---|---|---|
| ECO-DD-001 | 550x280x100 | 100 | 14000 | 140 | Phillips | 4,766,000 |
| ECO-DD-002 | 675x280x100 | 150 | 21000 | 140 | Phillips | 5,370,000 |
| ECO-DD-003 | 675x280x100 | 200 | 28000 | 140 | Phillips | 5,885,000 |
| ECO-DD-004 | 550x280x100 | 100 | 14000 | 140 | Phillips | 4,313,000 |
| ECO-DD-005 | 675x280x100 | 150 | 21000 | 140 | Phillips | 5,271,000 |
| ECO-DD-006 | 675x280x100 | 200 | 28000 | 140 | Phillips | 5,795,000 |

# FLOODLIGHT

- ⚡ PF≧0.92
- 🔌 100-265V AC in 50-60HZ
- 🔌 50V DC out <300MA
- Anti-corrosion paint
- Aluminum



**100W**   **250W**   **400W**

| SKU | Size (mm) | Power (W) | Luminous Flux (Lm) | Luminous Efficacy (Lm/W) | LED Driver | Quoted price (VND) |
|---|---|---|---|---|---|---|
| ECO-MD-001 | 178x285x80 | 100 | 14000 | **140** | Phillips | 3,181,000 |
| ECO-MD-002 | 290x263x120 | 150 | 21000 | **140** | Phillips | 3,666,000 |
| ECO-MD-004 | 290x430x120 | 250 | 35000 | **140** | Phillips | 5,193,000 |
| ECO-MD-006 | 350x570x120 | 400 | 56000 | **140** | Phillips | 7,860,000 |
| ECO-MD-007 | 178x285x80 | 100 | 14000 | **140** | **Ecolighting** | 2,853,000 |
| ECO-MD-008 | 290x263x120 | 150 | 21000 | **140** | **Ecolighting** | 3,720,000 |
| ECO-MD-010 | 290x430x120 | 250 | 35000 | **140** | **Ecolighting** | 5,411,000 |
| ECO-MD-011 | 265x570x120 | 300 | 42000 | **140** | **Ecolighting** | 6,163,000 |
| ECO-MD-012 | 350x570x120 | 400 | 56000 | **140** | **Ecolighting** | 7,741,000 |

| DOWNLIGHT | SPOTLIGHT | PANEL | SEMI-CIRCULAR LIGHT | FLUSH MOUNT CEILING | TUBE | STREET LAMP | INDUSTRIAL LIGHT |
|---|---|---|---|---|---|---|---|

# FACTORY LIGHT

- ⚡ PF≧0.92
- 🔌 100-265V AC in 50-60HZ
- 🔌 50V DC out <300MA
- Anti-corrosion paint
- Aluminum

**50W**

**100W**

**250W**

| SKU | Size (mm) | Power (W) | Luminous Flux (Lm) | Luminous Efficacy (Lm/W) | LED Driver | Quoted price (VND) |
|---|---|---|---|---|---|---|
| ECO-PHA-001 | 280x180x100 | 50 | 7000 | **140** | **Phillips** | 3,285,000 |
| ECO-PHA-002 | 290x280x100 | 100 | 14000 | **140** | **Phillips** | 4,206,000 |
| ECO-PHA-003 | 280x360x100 | 150 | 21000 | **140** | **Phillips** | 4,910,000 |
| ECO-PHA-004 | 280x450x100 | 200 | 28000 | **140** | **Phillips** | 5,891,000 |
| ECO-PHA-005 | 280x530x100 | 250 | 35000 | **140** | **Phillips** | 6,986,000 |
| ECO-PHA-006 | 280x180x100 | 50 | 7000 | **140** | **Ecolighting** | 1,926,000 |
| ECO-PHA-007 | 290x280x100 | 100 | 14000 | **140** | **Ecolighting** | 2,830,000 |
| ECO-PHA-008 | 280x360x100 | 150 | 21000 | **140** | **Ecolighting** | 3,731,000 |
| ECO-PHA-009 | 280x450x100 | 200 | 28000 | **140** | **Ecolighting** | 4,635,000 |
| ECO-PHA-010 | 280x530x100 | 250 | 35000 | **140** | **Ecolighting** | 5,493,000 |

| DOWNLIGHT | SPOTLIGHT | PANEL | SEMI-CIRCULAR LIGHT | FLUSH MOUNT CEILING | TUBE | STREET LAMP | INDUSTRIAL LIGHT |
|---|---|---|---|---|---|---|---|

# HIGHBAY - FACTORY LIGHT

**PF≧0.92**

**100-265V AC in 50-60HZ**

**50V DC out <300MA**

**Anti-corrosion paint**

**Aluminum**



| SKU | Size (mm) | Power (W) | Luminous Flux (Lm) | Luminous Efficacy (Lm/W) | LED Driver | Quoted price (VND) |
|---|---|---|---|---|---|---|
| ECO-HB-001 | 280x180x100 | 100 | 14000 | **140** | **Ecolighting** | 3,347,000 |
| ECO-HB-002 | 290x280x100 | 150 | 21000 | **140** | **Ecolighting** | 3,897,000 |
| ECO-HB-003 | 280x360x100 | 200 | 28000 | **140** | **Ecolighting** | 4,706,000 |

# STATEMENTS

# Statements

## About quality

**PFC Ecolighting** is committed to ensuring the quality of each and every product through:

> Providing outstanding brightness, energy saving, and high durability LED products,

> Manufacturing with modern processes and ensuring strict inspection before delivery

### 1-for-1 warranty

**5 YEARS WARRANTY**

**50.000 Hours**

> *At PFC Ecolighting, the interests of our partners and consumers guide every decision we make.*

✓ Manufactured and supplied by PFC Ecolighting

✓ Within the warranty period

✓ Valid warranty card

✓ Defected by manufacturer's error

✓ Not tampered with by a third party

✗ Warranty period expired

✗ Invalid warranty card or information

✗ User error

✗ Damage caused by mechanical impacts, animal intrusion, natural disasters, and fires

# Statements

## About sustainability

" We believe that integrating business activities with social responsibility will help create a healthier, brighter future. "

### Enhancing energy efficiency

$\geqq$ 0.92 PF   140-160 Lm/W

### Reducing environmental waste

Product lifetime:
$\geqq$ 70.000 lighting hours

### Reducing $CO_2$ emission

during manufacturing and consumption

**Joint manufactured and exclusively distributed by:**