



# Fit-for-use TL5 lamp

## TL5 Essential HE Super 80

Philips TL5 Essential Super80 is a new fluorescent lamp which provides home users and professional end-users an aesthetic miniaturized lighting solution with high reliability at low price.

### Benefits

- 40% less tube dimension than T8 fluorescent lamps. Reducing luminaire, stock and transportation cost
- Slim 16 mm tube allows more compact and flexible luminaire design
- Max lumen output at 35°C ambient temperature, more suitable to actual lighting situation
- Comfortable working and living ambiances with CRI more than 80
- Provides highly reliable and high quality lighting solution at low cost
- Creates atmospheres from warm white to cool daylight

### Features

- Small diameter of 16mm only
- "Cold Chamber" technology
- Applied with electronic ballast for TL5 only
- Operate at temperature from 5°C to 50°C

### Application

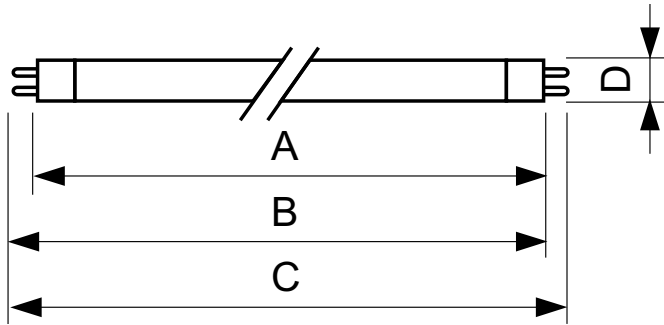
- Suitable for use at locations where need compact, high efficient, energy saving lighting. Including offices, shops, supermarkets, schools, hospitals and industrial lighting.

### Warnings and Safety

- 20,000 hours lifetime (50% survival point, 3 hour cycle) with preheat ballast which is ENEC compliant. Lifetime performance may differ on non-ENEC compliant ballasts.

# TL5 Essential HE Super 80

## Dimensional drawing



| Product                         | D (max) | A (max)   | B (max)   | B (min)   | C (max)   |
|---------------------------------|---------|-----------|-----------|-----------|-----------|
| TL5 Essential 14W/830<br>1SL/40 | 17.0 mm | 549.0 mm  | 556.1 mm  | 553.7 mm  | 563.2 mm  |
| TL5 Essential 14W/840<br>1SL/40 | 17.0 mm | 549.0 mm  | 556.1 mm  | 553.7 mm  | 563.2 mm  |
| TL5 Essential 14W/865<br>1SL/40 | 17.0 mm | 549.0 mm  | 556.1 mm  | 553.7 mm  | 563.2 mm  |
| TL5 Essential 21W/830<br>1SL/40 | 17.0 mm | 849.0 mm  | 856.1 mm  | 853.7 mm  | 863.2 mm  |
| TL5 Essential 21W/840<br>1SL/40 | 17.0 mm | 849.0 mm  | 856.1 mm  | 853.7 mm  | 863.2 mm  |
| TL5 Essential 21W/865<br>1SL/40 | 17.0 mm | 849.0 mm  | 856.1 mm  | 853.7 mm  | 863.2 mm  |
| TL5 Essential 28W/830<br>1SL/40 | 17.0 mm | 1149.0 mm | 1156.1 mm | 1153.7 mm | 1163.2 mm |
| TL5 Essential 28W/840<br>1SL/40 | 17.0 mm | 1149.0 mm | 1156.1 mm | 1153.7 mm | 1163.2 mm |
| TL5 Essential 28W/865<br>1SL/40 | 17.0 mm | 1149.0 mm | 1156.1 mm | 1153.7 mm | 1163.2 mm |

# TL5 Essential HE Super 80

## Approval and application

Mercury (Hg) Content (Nom) 2.0 mg

## Controls and dimming

Dimmable No

## Operating and electrical

Lamp Current (Nom) 0.170 A

## General information

Cap-Base G5

Life To 50% Failures Preheat (Nom) 20000 h

LSF Preheat 16000 h Rated 70 %

LSF Preheat 20000 h Rated 50 %

LSF Preheat 2000 h Rated 98 %

LSF Preheat 4000 h Rated 97 %

LSF Preheat 6000 h Rated 95 %

LSF Preheat 8000 h Rated 93 %

## Light technical

Colour Rendering Index (Max) 85

Colour Rendering Index (Min) 80

Colour Rendering Index (Nom) 82

LLMF 12000 h Rated 88 %

LLMF 16000 h Rated 87 %

LLMF 2000 h Rated 94 %

LLMF 20000 h Rated 86 %

LLMF 4000 h Rated 92 %

LLMF 6000 h Rated 91 %

LLMF 8000 h Rated 90 %

## Mechanical and housing

Bulb Shape T5

## Temperature

Design Temperature (Nom) 30 °C

## Approval and application

| Order Code   | Full Product Name            | Energy Consumption kWh/1000 h |
|--------------|------------------------------|-------------------------------|
| 927925983058 | TL5 Essential 14W/830 1SL/40 | -                             |
| 927925984058 | TL5 Essential 14W/840 1SL/40 | 15 kWh                        |
| 927925986558 | TL5 Essential 14W/865 1SL/40 | 15 kWh                        |
| 927926483058 | TL5 Essential 21W/830 1SL/40 | 23 kWh                        |
| 927926484058 | TL5 Essential 21W/840 1SL/40 | -                             |
| 927926486558 | TL5 Essential 21W/865 1SL/40 | -                             |
| 927926783058 | TL5 Essential 28W/830 1SL/40 | 31 kWh                        |
| 927926784058 | TL5 Essential 28W/840 1SL/40 | 31 kWh                        |
| 927926786558 | TL5 Essential 28W/865 1SL/40 | 31 kWh                        |

## Operating and electrical

| Order Code   | Full Product Name            | Power (Nom) |
|--------------|------------------------------|-------------|
| 927925983058 | TL5 Essential 14W/830 1SL/40 | 14.3 W      |
| 927925984058 | TL5 Essential 14W/840 1SL/40 | 14.3 W      |
| 927925986558 | TL5 Essential 14W/865 1SL/40 | 14 W        |
| 927926483058 | TL5 Essential 21W/830 1SL/40 | 20.8 W      |
| 927926484058 | TL5 Essential 21W/840 1SL/40 | 20.8 W      |

| Order Code   | Full Product Name            | Power (Nom) |
|--------------|------------------------------|-------------|
| 927926486558 | TL5 Essential 21W/865 1SL/40 | 20.8 W      |
| 927926783058 | TL5 Essential 28W/830 1SL/40 | 27.8 W      |
| 927926784058 | TL5 Essential 28W/840 1SL/40 | 27.8 W      |
| 927926786558 | TL5 Essential 28W/865 1SL/40 | 27.8 W      |

## Light technical (1/2)

## TL5 Essential HE Super 80

| Order Code   | Full Product Name            | Colour Code | Colour Designation | Correlated Colour Temperature (Nom) | Luminous Efficacy (@ Max Lumen, Rated) (Nom) |
|--------------|------------------------------|-------------|--------------------|-------------------------------------|--|
| 927925983058 | TL5 Essential 14W/830 1SL/40 | 830         | Warm white (WW)    | 3000 K                              | 96 lm/W                                      |
| 927925984058 | TL5 Essential 14W/840 1SL/40 | 840         | Cool White (CW)    | 4000 K                              | 96 lm/W                                      |
| 927925986558 | TL5 Essential 14W/865 1SL/40 | 865         | Cool Daylight      | 6500 K                              | 90 lm/W                                      |
| 927926483058 | TL5 Essential 21W/830 1SL/40 | 830         | Warm white (WW)    | 3000 K                              | 101 lm/W                                     |
| 927926484058 | TL5 Essential 21W/840 1SL/40 | 840         | Cool White (CW)    | 4000 K                              | 101 lm/W                                     |

| Order Code   | Full Product Name            | Colour Code | Colour Designation | Correlated Colour Temperature (Nom) | Luminous Efficacy (@ Max Lumen, Rated) (Nom) |
|--------------|------------------------------|-------------|--------------------|-------------------------------------|--|
| 927926486558 | TL5 Essential 21W/865 1SL/40 | 865         | Cool Daylight      | 6500 K                              | 92 lm/W                                      |
| 927926783058 | TL5 Essential 28W/830 1SL/40 | 830         | Warm white (WW)    | 3000 K                              | 104 lm/W                                     |
| 927926784058 | TL5 Essential 28W/840 1SL/40 | 840         | Cool White (CW)    | 4000 K                              | 104 lm/W                                     |
| 927926786558 | TL5 Essential 28W/865 1SL/40 | 865         | Cool Daylight      | 6500 K                              | 97 lm/W                                      |

### Light technical (2/2)

| Order Code   | Full Product Name            | Luminous Efficacy (rated) (Nom) | Luminous Flux (Nom) | Luminous Flux (Rated) (Nom) |
|--------------|------------------------------|---------------------------------|---------------------|-----------------------------|
| 927925983058 | TL5 Essential 14W/830 1SL/40 | 88 lm/W                         | 1350 lm             | 1260 lm                     |
| 927925984058 | TL5 Essential 14W/840 1SL/40 | 88 lm/W                         | 1350 lm             | 1260 lm                     |
| 927925986558 | TL5 Essential 14W/865 1SL/40 | 84 lm/W                         | 1260 lm             | 1200 lm                     |
| 927926483058 | TL5 Essential 21W/830 1SL/40 | 94 lm/W                         | 2100 lm             | 1950 lm                     |
| 927926484058 | TL5 Essential 21W/840 1SL/40 | 94 lm/W                         | 2100 lm             | 1950 lm                     |

| Order Code   | Full Product Name            | Luminous Efficacy (rated) (Nom) | Luminous Flux (Nom) | Luminous Flux (Rated) (Nom) |
|--------------|------------------------------|---------------------------------|---------------------|-----------------------------|
| 927926486558 | TL5 Essential 21W/865 1SL/40 | 84 lm/W                         | 1900 lm             | 1750 lm                     |
| 927926783058 | TL5 Essential 28W/830 1SL/40 | 94 lm/W                         | 2900 lm             | 2600 lm                     |
| 927926784058 | TL5 Essential 28W/840 1SL/40 | 94 lm/W                         | 2900 lm             | 2600 lm                     |
| 927926786558 | TL5 Essential 28W/865 1SL/40 | 94 lm/W                         | 2700 lm             | 2600 lm                     |

