



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

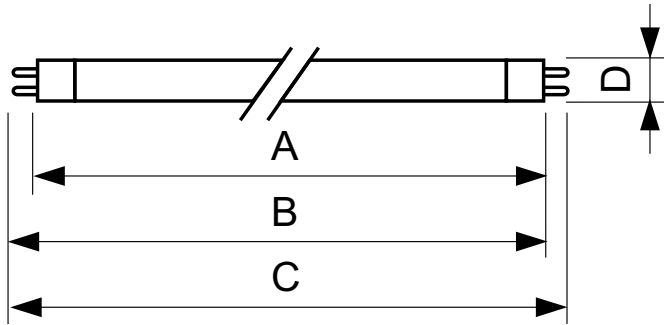
- Suitable for use at locations where need compact, high efficient, energy saving lighting. Including offices, shops, supermarkets, schools, hospitals and industrial lighting.

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 28W/840 1SL/40	17.0 mm	1149.0 mm	1156.1 mm	1153.7 mm	1163.2 mm
TL5 Essential 14W/865 1SL/40	17.0 mm	549.0 mm	556.1 mm	553.7 mm	563.2 mm
TL5 Essential 21W/830 1SL/40	17.0 mm	849.0 mm	856.1 mm	853.7 mm	863.2 mm
TL5 Essential 21W/840 1SL/40	17.0 mm	849.0 mm	856.1 mm	853.7 mm	863.2 mm
TL5 Essential 28W/830 1SL/40	17.0 mm	1149.0 mm	1156.1 mm	1153.7 mm	1163.2 mm
TL5 Essential 14W/840 1SL/40	17.0 mm	549.0 mm	556.1 mm	553.7 mm	563.2 mm
TL5 Essential 14W/830 1SL/40	17.0 mm	549.0 mm	556.1 mm	553.7 mm	563.2 mm
TL5 Essential 28W/865 1SL/40	17.0 mm	1149.0 mm	1156.1 mm	1153.7 mm	1163.2 mm
TL5 Essential 21W/865 1SL/40	17.0 mm	849.0 mm	856.1 mm	853.7 mm	863.2 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 (Rated) (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 (Rated) (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

