



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 miniaturised 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

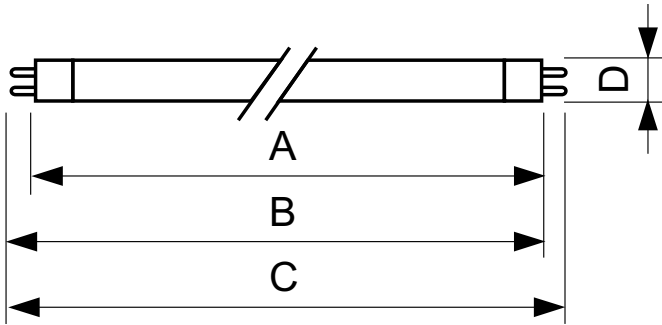
- Suitable for use at locations where need compact, high efficient, energy saving lighting. Including offices, shops, supermarkets, schools, hospitals and industrial lighting.

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 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

Approval and Application

Mercury (Hg) Content (Nom)	2.0 mg
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Controls and Dimming

Dimmable	No
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Operating and Electrical

Lamp Current (Nom)	0.170 A
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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
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Temperature

Design Temperature (Nom)	30 °C
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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
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

TL5 Essential HE Super 80

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

Order Code	Full Product Name	Power (Rated) (Nom)
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)

Order Code	Full Product Name	Colour Code	Colour Designation	Correlated Colour Temperature (Nom)	Luminous Efficacy (@ Max Lumen, Rated)
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

Order Code	Full Product Name	Colour Code	Colour Designation	Correlated Colour Temperature (Nom)	Luminous Efficacy (@ Max Lumen, Rated)
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

Order Code	Full Product Name	Luminous Efficacy (rated) (Nom)	Luminous Flux (Nom)	Luminous Flux (Rated) (Nom)
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

