



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

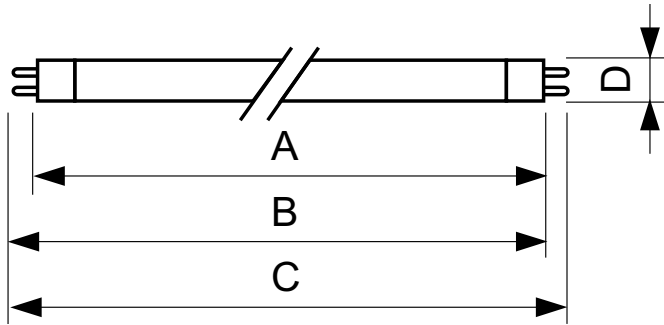
- Suitable for use at locations where need compact, high efficient, energy saving lighting. Including offices, shops, supermarkets, schools, hospitals and industrial lighting.

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	Energy Efficiency Label (EEL)
927925983058	TL5 Essential 14W/830 1SL/40	-	A
927925984058	TL5 Essential 14W/840 1SL/40	15 kWh	A
927925986558	TL5 Essential 14W/865 1SL/40	15 kWh	A
927926483058	TL5 Essential 21W/830 1SL/40	23 kWh	A
927926484058	TL5 Essential 21W/840 1SL/40	-	A
927926486558	TL5 Essential 21W/865 1SL/40	-	A
927926783058	TL5 Essential 28W/830 1SL/40	31 kWh	A
927926784058	TL5 Essential 28W/840 1SL/40	31 kWh	A+
927926786558	TL5 Essential 28W/865 1SL/40	31 kWh	A

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)	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	927926486558	TL5 Essential 21W/865 1SL/40	865	Cool Daylight	6500 K	92 lm/W
927925984058	TL5 Essential 14W/840 1SL/40	840	Cool White (CW)	4000 K	96 lm/W	927926783058	TL5 Essential 28W/830 1SL/40	830	Warm white (WW)	3000 K	104 lm/W
927925986558	TL5 Essential 14W/865 1SL/40	865	Cool Daylight	6500 K	90 lm/W	927926784058	TL5 Essential 28W/840 1SL/40	840	Cool White (CW)	4000 K	104 lm/W
927926483058	TL5 Essential 21W/830 1SL/40	830	Warm white (WW)	3000 K	101 lm/W	927926786558	TL5 Essential 28W/865 1SL/40	865	Cool Daylight	6500 K	97 lm/W
927926484058	TL5 Essential 21W/840 1SL/40	840	Cool White (CW)	4000 K	101 lm/W						

Light Technical (2/2)

Order Code	Full Product Name	Luminous Efficacy (rated) (Nom)	Luminous Flux (Nom)	Luminous Flux (Rated) (Nom)	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	927926486558	TL5 Essential 21W/865 1SL/40	84 lm/W	1900 lm	1750 lm
927925984058	TL5 Essential 14W/840 1SL/40	88 lm/W	1350 lm	1260 lm	927926783058	TL5 Essential 28W/830 1SL/40	94 lm/W	2900 lm	2600 lm
927925986558	TL5 Essential 14W/865 1SL/40	84 lm/W	1260 lm	1200 lm	927926784058	TL5 Essential 28W/840 1SL/40	94 lm/W	2900 lm	2600 lm
927926483058	TL5 Essential 21W/830 1SL/40	94 lm/W	2100 lm	1950 lm	927926786558	TL5 Essential 28W/865 1SL/40	94 lm/W	2700 lm	2600 lm
927926484058	TL5 Essential 21W/840 1SL/40	94 lm/W	2100 lm	1950 lm					

