# **PHILIPS** Lighting



# **Essential recessed**

# TCBRLR 46S/940 DIA OC WH401

Essential recessed, 3D printed, 34.5 W, D590 mm, 4600 lm, 4000 K, CRI>90, DALI, Interact Ready, UGR19, TP(b)

Philips Essential is a 3D printed lighting that offers you unparalleled functionality and customization matching every style. With a wide range of color and textures, it seamlessly blends into any decor, while providing functional lighting that meets office lighting requirements. This luminaire can be connected to other systems to create a smart office lighting solution with integrated sensors to avoid a 'sensor acne' in your beautifully designed ceilings. This family is available in 3 sizes and can be mounted in 3 different ways. It offers a VPC (Visible Profile Ceiling) option for easy installation and provides perfect rimless ceiling integration providing you with numerous design options to meet your needs. Philips Essential is made from recycled materials, 3D printed carbon neutral, making it a conscious choice for those looking to contribute to a circular economy. So, choose this lighting solution without compromising on style, performance, functionality, or sustainability.

#### **Product data**

General Information	
Number of gear units	1 unit
Driver included	Yes
Value ladder	Specification
Warranty period	5 years
Sustainability rating	Lighting for circularity
Light Technical	
Luminous Flux	4,600 lm
Correlated Color Temperature (Nom)	4000 K
Luminous Efficacy (rated) (Nom)	133 lm/W

Color rendering index (CRI)	>90
Beam angle of light source	90 degree(s)
Light source color	940 neutral white
Optic type	Beam angle 90°
Luminaire light beam spread	90°
Unified glare rating CEN	19
Indirect glare reduction measure for Display Screen	L65≤3000 cd/m²
Equipment (EN 12464-2021)	
Operating and Electrical	
Input Voltage	220/240 V

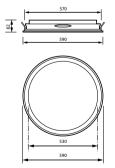
## **Essential recessed**

Line Frequency	50 to 60 Hz
Inrush current	20.4 A
Inrush time	0.2 ms
Power Consumption	34.5 W
Power Factor (Fraction)	0.9
Connection	2 Push-in connector 5-pole
Cable	-
Number of products on MCB of 16 A type B	24
Suitable for random switching	No
Protection class IEC	Safety class II
Feed-through wiring	Feed-through wiring 1-phase
Total harmonic distortion	2 %
Controls and Dimming	
Dimmable	Yes
Driver/power unit/transformer	Dali dimming Intaract System ready
Control interface	DALI
Constant light output	No
DALI Standard	D4i™ DALI-2™
Connectivity	Interact Ready
Mechanical and Housing	
Housing Material	Polycarbonate
Reflector material	-
Optic material	Polycarbonate
Optical cover material	Polystyrene
Fixation material	-
Housing Color	White
Optical cover finish	Micro-hexagonal optic
Overall height	82 mm
Overall diameter	590 mm
Ingress protection code	IP20 [Finger-protected]
Mech. impact protection code	IK04 [0.5 J standard plus]
Mounting	Recessed
Net Weight (Piece)	4.000 kg

Emergency Operation         Central Emergency       No         Approval and Application       Image: Complexition of the second seco	ation 30 s
Approval and Application         Glow-wire test       Temperature 650 °C, dura         Flammability mark       -         CE mark       Yes         ENEC mark       ENEC mark         EU RoHS compliant       Yes         Performance ambient temperature Tq       25 °C         Ambient temperature range       +10 to +35 °C         Initial Performance (IEC Compliant)       Initial Performance (IEC Compliant)         Luminous flux tolerance       -10% / +10%         Initial chromaticity       (0.38, 0.38) SDCM < 3         Power consumption tolerance       +/-10%         Over Time Performance (IEC Compliant)       Initial chromaticity         Control gear failure rate at median useful life       10 %         S0000 h       Lumen maintenance at median useful life* 50000 h       L80	ation 30 s
Glow-wire test       Temperature 650 °C, dura         Flammability mark       -         CE mark       Yes         ENEC mark       ENEC mark         EU RoHS compliant       Yes         Performance ambient temperature Tq       25 °C         Ambient temperature range       +10 to +35 °C         Initial Performance (IEC Compliant)       Initial chromaticity         Luminous flux tolerance       -10% / +10%         Initial chromaticity       (0.38, 0.38) SDCM < 3         Power consumption tolerance       +/-10%         Over Time Performance (IEC Compliant)       Initial chromaticity         Control gear failure rate at median useful life*       10 %         S0000 h       Lumen maintenance at median useful life* 100000       L80	ation 30 s
Glow-wire test       Temperature 650 °C, dura         Flammability mark       -         CE mark       Yes         ENEC mark       ENEC mark         EU RoHS compliant       Yes         Performance ambient temperature Tq       25 °C         Ambient temperature range       +10 to +35 °C         Initial Performance (IEC Compliant)       Initial chromaticity         Luminous flux tolerance       -10% / +10%         Initial chromaticity       (0.38, 0.38) SDCM < 3         Power consumption tolerance       +/-10%         Over Time Performance (IEC Compliant)       Initial chromaticity         Control gear failure rate at median useful life*       10 %         S0000 h       Lumen maintenance at median useful life* 100000       L80	ation 30 s
Flammability mark       -         CE mark       Yes         ENEC mark       ENEC mark         EU RoHS compliant       Yes         Performance ambient temperature Tq       25 °C         Ambient temperature range       +10 to +35 °C         Initial Performance (IEC Compliant)       -         Luminous flux tolerance       -10% / +10%         Initial chromaticity       (0.38, 0.38) SDCM < 3         Power consumption tolerance       +/-10%         Over Time Performance (IEC Compliant)       -         Control gear failure rate at median useful life       10 %         50000 h       Lumen maintenance at median useful life* 50000 h       L80	ation 30 s
CE mark       Yes         ENEC mark       ENEC mark         EU RoHS compliant       Yes         Performance ambient temperature Tq       25 °C         Ambient temperature range       +10 to +35 °C         Initial Performance (IEC Compliant)       Initial Performance (IEC Compliant)         Luminous flux tolerance       -10% / +10%         Initial chromaticity       (0.38, 0.38) SDCM < 3         Power consumption tolerance       +/-10%         Over Time Performance (IEC Compliant)       Vertion         Control gear failure rate at median useful life       10 %         S0000 h       Lumen maintenance at median useful life* 50000 h       L80	
ENEC mark       ENEC mark         EU RoHS compliant       Yes         Performance ambient temperature Tq       25 °C         Ambient temperature range       +10 to +35 °C         Initial Performance (IEC Compliant)       Initial Performance (IEC Compliant)         Luminous flux tolerance       -10% / +10%         Initial chromaticity       (0.38, 0.38) SDCM < 3         Power consumption tolerance       +/-10%         Over Time Performance (IEC Compliant)       Ver         Control gear failure rate at median useful life       10 %         50000 h       Lumen maintenance at median useful life* 50000 h       L80	
EU RoHS compliant       Yes         Performance ambient temperature Tq       25 °C         Ambient temperature range       +10 to +35 °C         Initial Performance (IEC Compliant)       -10% / +10%         Luminous flux tolerance       -10% / +10%         Initial chromaticity       (0.38, 0.38) SDCM < 3         Power consumption tolerance       +/-10%         Over Time Performance (IEC Compliant)	
Performance ambient temperature Tq       25 °C         Ambient temperature range       +10 to +35 °C         Initial Performance (IEC Compliant)       -10% / +10%         Luminous flux tolerance       -10% / +10%         Initial chromaticity       (0.38, 0.38) SDCM < 3         Power consumption tolerance       +/-10%         Over Time Performance (IEC Compliant)	
Ambient temperature range       +10 to +35 °C         Initial Performance (IEC Compliant)         Luminous flux tolerance       -10% / +10%         Initial chromaticity       (0.38, 0.38) SDCM < 3         Power consumption tolerance       +/-10%         Over Time Performance (IEC Compliant)	
Initial Performance (IEC Compliant)         Luminous flux tolerance       -10% / +10%         Initial chromaticity       (0.38, 0.38) SDCM < 3         Power consumption tolerance       +/-10%         Over Time Performance (IEC Compliant)       Ver Time Performance (IEC Compliant)         Control gear failure rate at median useful life       10 %         50000 h       Lumen maintenance at median useful life* 50000 h         Lumen maintenance at median useful life* 100000       L80	
Luminous flux tolerance       -10% / +10%         Initial chromaticity       (0.38, 0.38) SDCM < 3         Power consumption tolerance       +/-10%         Over Time Performance (IEC Compliant)       0         Control gear failure rate at median useful life       10 %         50000 h       Lumen maintenance at median useful life* 50000 h       L80	
Luminous flux tolerance       -10% / +10%         Initial chromaticity       (0.38, 0.38) SDCM < 3         Power consumption tolerance       +/-10%         Over Time Performance (IEC Compliant)       0         Control gear failure rate at median useful life       10 %         50000 h       Lumen maintenance at median useful life* 50000 h       L80	
Initial chromaticity       (0.38, 0.38) SDCM < 3         Power consumption tolerance       +/-10%         Over Time Performance (IEC Compliant)          Control gear failure rate at median useful life       10 %         50000 h       Lumen maintenance at median useful life* 50000 h       L80	
Power consumption tolerance       +/-10%         Over Time Performance (IEC Compliant)         Control gear failure rate at median useful life       10 %         50000 h         Lumen maintenance at median useful life* 50000 h         Lumen maintenance at median useful life* 100000         L80	
Over Time Performance (IEC Compliant)         Control gear failure rate at median useful life       10 %         50000 h       Lumen maintenance at median useful life* 50000 h       L80         Lumen maintenance at median useful life* 100000       L80	
Control gear failure rate at median useful life       10 %         50000 h       Lumen maintenance at median useful life* 50000 h         Lumen maintenance at median useful life* 100000       L80	
Control gear failure rate at median useful life       10 %         50000 h       Lumen maintenance at median useful life* 50000 h         Lumen maintenance at median useful life* 100000       L80	
50000 h         Lumen maintenance at median useful life* 50000 h         Lumen maintenance at median useful life* 100000         L80	
Lumen maintenance at median useful life* 50000 h L80 Lumen maintenance at median useful life* 100000 L80	
Lumen maintenance at median useful life* 100000 L80	
h	
Product Data	
Order product name TCBRLR 46S/940 DIA OC	WH401
Full product name TCBRLR 46S/940 DIA OC	
Full product code 872016986435100	WH401
Order code 912500108786	WH401
Material Nr. (12NC) 912500108786	WH401
Numerator - Quantity Per Pack 1	WH401
EAN/UPC - Product/Case 8720169864351	WH401
Numerator - Packs per outer box 1	WH401

8720169864351

### Dimensional drawing



EAN/UPC - Case

**Essential recessed** 



© 2025 Signify Holding All rights reserved. Signify does not give any representation or warranty as to the accuracy or completeness of the information included herein and shall not be liable for any action in reliance thereon. The information presented in this document is not intended as any commercial offer and does not form part of any quotation or contract, unless otherwise agreed by Signify. Philips and the Philips Shield Emblem are registered trademarks of Koninklijke Philips N.V.

www.lighting.philips.com 2025, January 20 - data subject to change