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 Equipment (EN 12464-2021)	L65≤3000 cd/m²

Operating and Electrical	
Input Voltage	220/240 V

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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

Glow-wire test	Temperature 650 °C, duration 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%

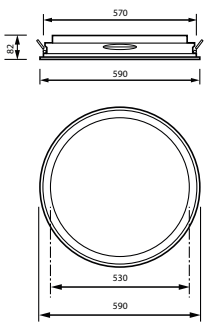
Over Time Performance (IEC Compliant)

Control gear failure rate at median useful life 50000 h	10 %
Lumen maintenance at median useful life* 50000 h	L80
Lumen maintenance at median useful life* 100000 h	L80

Product Data

Order product name	TCBRLR 46S/940 DIA OC WH401
Full product name	TCBRLR 46S/940 DIA OC WH401
Full product code	872016986435100
Order code	912500108786
Material Nr. (12NC)	912500108786
Numerator - Quantity Per Pack	1
EAN/UPC - Product/Case	8720169864351
Numerator - Packs per outer box	1
EAN/UPC - Case	8720169864351

Dimensional drawing



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