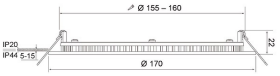
Flat R Duo

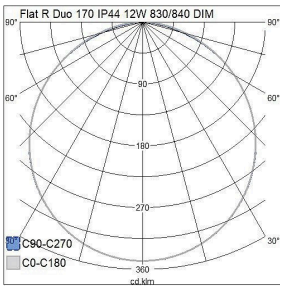


170 IP44 12W 830/840 DIM WH

Downlight

The Flat R Duo downlight with changeable colour temperature can be mounted in a low ceiling structure. Made of high-quality materials and with a good looking finish, this luminaire is versatile as a general luminaire for the home. While IP44 rated, this luminaire is also particularly suitable for bathrooms and other wet spaces. The luminaire has a matt body in structured aluminum and a diffuser in opal acrylic. All models are dimmable. The luminaire can also be linked.





Flat R Duo Downlight 12W 3000K/4000K 1000lm Beam angle Open beam; Dim phase cut-off; Dim phase cut-on; IP44; IK03; Protection cl. II; L70B50 80000h; LED not exchangeable; Lamp included; CRI>80; SDCM6; Suitable for through wiring; 3x2.5mm²; Housing al; Colour wh; Cover Plastic, opal; C16 max. 92

Stocked: Yes



170 IP44 12W 830/840 DIM WH			
PRODUCT CODE	CODE	KG	PRODUCT FAMILY
4146519	4146519	0.45	Flat R Duo

170 IP44 12W 830/840 DIM WH

EC001744 Downlight / spot luminaire / floodlight

Mounting	
Suitable for surface mounting	No
Suitable for recessed mounting	Yes
Suitable for wall mounting	No
Suitable for suspended mounting	No
Suitable for ceiling mounting	Yes
Suitable for traverse mounting	No
Suitable for pedestal/floor mounting	No
Suitable for light-track mounting	No
Suitable for clamp-mounting	No
Suitable for low voltage cable system	No
Degree of protection (IP)	IP44
Degree of protection (IP), rear side	IP20
Degree of protection (IP), front side	IP44
Impact strength	IK03
Emergency function monitoring system	None
Type of wiring	Suitable for through wiring
Number of poles	3
Conductor cross section (mm²)	2.5 mm²
Connectable conductor cross section (min) (mm²)	1.5 mm²
Connectable conductor cross section (max) (mm²)	2.5 mm²
Connection type	Screwless terminal
Luminaire with limited surface temperature, class "D“ in acc. with EN 60598-2-24	No
Max. number of luminaires per miniature circuit breaker B16	61
Max. number of luminaires per miniature circuit breaker C16	92
Fit for workplace acc. EN 12464-1	No
Luminaire may be covered with thermally insulating material	No

Structure	
Adjustability	Not adjustable
Lamp type	LED not exchangeable
Light source included	Yes
Suitable for number of lamps	1
Lamp holder	Other
Housing material	Aluminium
Surface protection	Powder coating
Housing colour	White
Cover material	Plastic, opal
Surface brushed	No
Control gear included	Yes
Exchangeable control gear	Yes
Reflector	None
Energy efficiency class of light source according to EU regulation 2019/2015	G
Containing product according to 2019/2020/EU	Yes
Emergency power supply system	None
Emergency power supply integrated	No
Filament test according to IEC 60695-2-11	650 °C - 30 s

Dimming and control	
With movement sensor	No
With presence indicator	No
With light sensor	No
Dimmable	Yes
Dimming 0-10 V	No
Dimming 1-10 V	No
Dimming DALI-2	No
Dimming DALI	No
Dimming DMX	No
Dimming DSI	No
Dimming potentiometer (integrated)	No
Dimming LineSwitch	No
Dimming manufacturer's proprietary system	No
Dimming mains voltage modulation	No
Dimming trailing edge	Yes
Dimming leading edge	Yes
Dimming programmable	No
Dimming RF	No
Dimming Sine Wave Reduction	No
Dimming Touch and Dim	No
Dimming Zigbee	No
Dimming with push-button	No
No dimming function	No
Constant luminous flux control	No
IFTTT support available	No
Compatible with Apple HomeKit	No
Bluetooth operated	No
Compatible with Google Assistant	No
Compatible with Casambi	No
Compatible with Amazon Alexa	No

Electrotechnical data	
Voltage type	AC
Nominal voltage (min) (V)	220 V
Nominal voltage (max) (V)	240 V
Nominal current (min) (mA)	300 mA
Nominal current (max) (mA)	300 mA
Type of control gear	LED operating device current-controlled
Total harmonic distortion (THD) (%)	20 %
Total harmonic distortion	20 THD
Protection class according to IEC 61140	II
Suitable for lamp power (min) (W)	12 W
Suitable for lamp power (max) (W)	12 W
Maximum system power (W)	12 W
Luminaire efficacy (min) (lm/W)	83 lm/W
Luminaire efficacy (max) (lm/W)	83 lm/W
Power factor	0.9
Luminaire efficacy (lm/W)	83 lm/W

Photometric data	
Light distributor	Diffuser lens/optic/panel
Light sharing	Symmetric
Beam angle	Open beam
Light outlet	Direct
Colour of light (alphanumeric)	White
Colour temperature (min) (K)	3000 K
Colour temperature (max) (K)	4000 K
Colour temperature switchable	Discrete positions
Colour rendering index (CRI/Ra)	80-89
Luminous flux (min) (lm)	1000 lm
Luminous flux (max) (lm)	1000 lm
Effective luminous flux (lm)	1000 lm
Rated luminous flux according to IEC 62722-2- 1 (min) (lm)	1000 lm
Rated luminous flux according to IEC 62722-2- 1 (max) (lm)	1000 lm
Lumen setting adjustable	No
Flickering value Pst LM	1
Beam angle adjustable	No
Stroboscope effect value SVM	0.4
Photobiological safety according to EN 62471	RG1
Colour consistency (McAdam ellipse)	SDCM6
Unified Glare Rating (UGR)	22

Lifetime and capacity	
Rated life time L70/B50 at 25 °C (h)	80000 h
Rated life time L80/B50 at 25 °C	50000 h
Lumen maintenance at median useful life of 35,000 hrs at 25 °C ambient (tq) (%)	80 %
Lumen maintenance at median useful life of 50,000 hrs at 25 °C ambient (tq) (%)	70 %
Failure rate at median useful life of 35,000 hrs at 25 °C ambient (tq) (%)	5 %
Failure rate at median useful life of 50,000 hrs at 25 °C ambient (tq) (%)	10 %
Rated ambient temperature acc. IEC62722-2-1 (min) (°C)	0 °C
Rated ambient temperature acc. IEC62722-2-1 (max) (°C)	25 °C

Measurements	
Length (mm)	170 mm
Width (mm)	170 mm
Height/depth (mm)	22 mm
Outer diameter (mm)	170 mm
Built-in length (mm)	160 mm
Built-in length (min) (mm)	155 mm
Built-in length (max) (mm)	160 mm
Built-in width (mm)	160 mm
Built-in width (min) (mm)	155 mm
Built-in width (max) (mm)	160 mm
Built-in height/depth (mm)	31 mm
Installation height (min) (mm)	2000 mm
Installation height (max) (mm)	5000 mm
Recess diameter (min) (mm)	155 mm
Recess diameter (max) (mm)	160 mm