

# TASK 450 square direct

surface

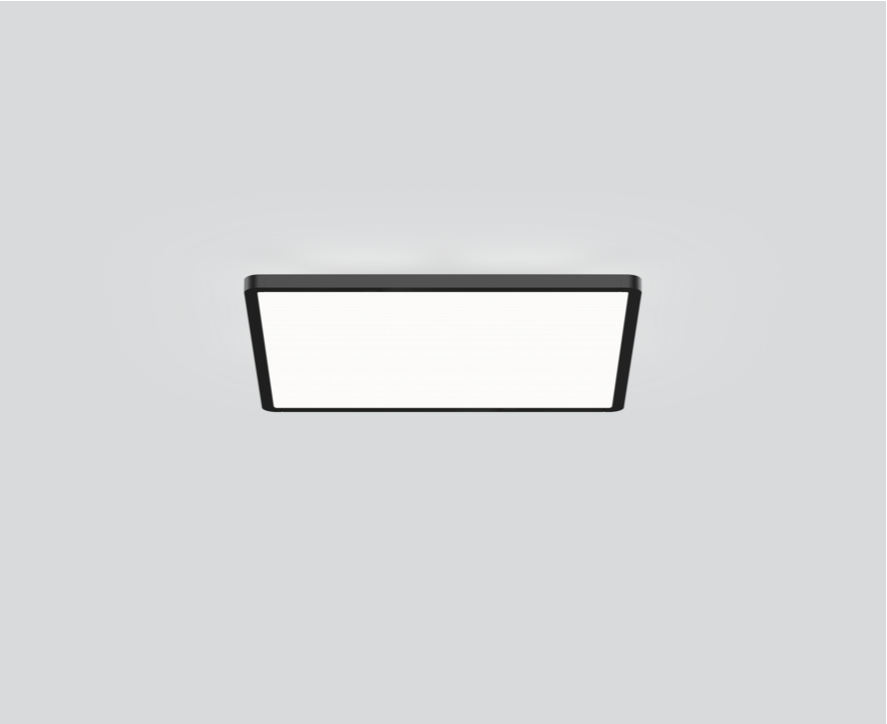
059-2141138K



Project / Type

Notes

Count / Date



square luminaire housing with rounded edges in aluminium; extremely flat design (only 15mm); modern shape in an elegant design for high demands; surface black powder coated; suitable for wall or ceiling mounting; convenient quick mounting system without tools; direct light distribution through LGP body (Light Guiding Prism); side coupled light directed downwards by laser engraving; light control via highly reflective reflector material; microprismatic PMMA cover; completely homogeneous illumination; same light density for all surface lights with the same components;  $UGR \leq 19$ ; VDU compatible workplace luminaire according to DIN EN 12464-1; luminance above  $65^\circ \leq 3000 \text{ cd/m}^2$ ; light colour 4000 K; binning initial MacAdam  $\leq 3 \text{ SDCM}$ ;  $CRI \geq 90$ ; min. 90% of luminous flux after 50000 operating hours; energy efficient LEDs with high CRI; luminaire with 2 cable openings and plug-in terminals for through wiring; degree of protection IP20; PC1; 220-240 V; internal wiring in light halogen free; incl. DALI-2 converter; sound absorbing accessories available; light source replaceable by an authorized professional; control gear replaceable by an authorized professional;



General

Ceiling / Wall | Surface

black | RAL 9005<sup>1</sup>

IP20

2000 lm

LED

4000 K

$CRI \geq 90$

L90 / 50000 h

initial MacAdam  $\leq 3 \text{ SDCM}$

$R_g: 96 \mid R_f: 90 \mid R_{[-15]}: 87$

MR 0.75 | MDER 0.68

Optical

Microprismatic | microprismatic

$UGR \leq 19 \mid \geq 65^\circ < 3000 \text{ cd/m}^2$

$PstLM \leq 1.0 \text{ }^2 \mid SVM \leq 0.4 \text{ }^2$

Electrical

DALI-2 | 1 DALI Addr.

PC1 | 220-240 V

system 15.0 W

system 133 lm/W<sup>3</sup>

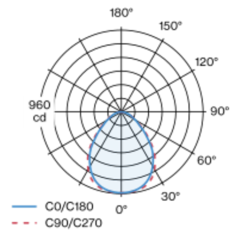
Physical

length 450 mm | width 450 mm | height 46 mm

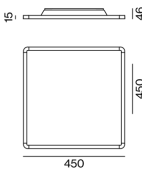
3.9 kg

<sup>1</sup> RAL code <sup>2</sup> Value of containing product at full load (undimmed)  
<sup>3</sup> incl. consideration of optical losses, internal control unit losses & operating device efficiency

## Light distribution



## Product drawing



## Installation instructions



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## Maintenance Factors

Operating Time [h]	10 000	20 000	30 000	40 000	50 000
LLMF	0.98	0.97	0.95	0.93	0.92
LSF	1	1	1	1	1
MF	LMF × RSMF × LLMF × LSF		RSMF <sup>a</sup>	Room Surface Maintenance Factor	
MF	Maintenance Factor		LLMF	Lamp Lumens Maintenance Factor	
LMF <sup>a</sup>	Luminaire Maintenance Factor		LSF	Lamp Survival Factor	

<sup>a</sup> According to "CIE 97, Maintenance of indoor electric lighting systems", 2005, ISBN 3-900-734-34-8. The values must be determined by the planner.

## Circuit Breaker Types

Automatic Circuit Breaker Type	Number of Fixtures
B10	21
B13	28
B16	35
B20	44
C10	35
C13	46
C16	58
C20	73

