

# MINO 60 CIRCLE 3000

## direct

ceiling  
034-2114637H



Project / Type \_\_\_\_\_

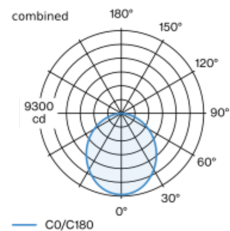
Notes \_\_\_\_\_

Count / Date \_\_\_\_\_

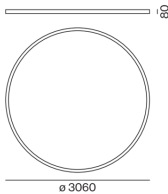


Ring-shaped light fitting in rolled and seamlessly welded extruded aluminium profile; suitable for ceiling mounting; surface white powder coated; LED light inset consisting of highly reflective lacquered aluminium for improved thermal management; light colour 4000 K; binning initial MacAdam  $\leq 3$  SDCM; CRI  $\geq 80$ ; min. 90% of luminous flux after 50000 operating hours; energy efficient LEDs with high CRI; HPO (High Performance Opal) cover for uniform illumination; degree of protection IP20; PC1; 220-240 V; internal wiring in light halogen free; incl. DALI-2 converter; light source replaceable by an authorized professional; control gear replaceable by an authorized professional;

### Light distribution



### Product drawing



### General

Ceiling , Surface \_\_\_\_\_

white , RAL 9010 <sup>1</sup> \_\_\_\_\_

IP20 \_\_\_\_\_

24100 lm \_\_\_\_\_

### LED

4000 K \_\_\_\_\_

CRI  $\geq 80$  \_\_\_\_\_

L90 / 50000 h \_\_\_\_\_

initial MacAdam  $\leq 3$  SDCM \_\_\_\_\_

MR 0.72 \_\_\_\_\_

MDER 0.65 \_\_\_\_\_

### Optical

High Performance Opal \_\_\_\_\_

opal (lambertsch) \_\_\_\_\_

PstLM  $\leq 1.0^2$  <sup>3</sup> \_\_\_\_\_

SVM  $\leq 0.4^2$  <sup>3</sup> \_\_\_\_\_

### Electrical

DALI-2 \_\_\_\_\_

220-240 V \_\_\_\_\_

system 167 W \_\_\_\_\_

system 144 lm/W<sup>4</sup> \_\_\_\_\_

PC1 \_\_\_\_\_

8 DALI Addr. \_\_\_\_\_

### Physical

diameter 3060 mm \_\_\_\_\_

height 80 mm \_\_\_\_\_

centerline radius 1500 mm \_\_\_\_\_

25.2 kg \_\_\_\_\_

<sup>1</sup> RAL code <sup>2</sup> combined  
<sup>3</sup> Value of containing product at full load (undimmed)  
<sup>4</sup> incl. consideration of optical losses, internal control unit losses & operating device efficiency

### Installation instructions



### Lighting calculator



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### Maintenance Factors

Operating Time [h]	10 000	20 000	30 000	40 000	50 000
LLMF	0.98	0.96	0.94	0.92	0.9
LSF	1	1	1	1	1

MF

MF

LMF<sup>a</sup>

LMF × RSMF × LLMF × LSF

Maintenance Factor

Luminaire Maintenance Factor

RSMF<sup>a</sup>

LLMF

LSF

Room Surface Maintenance Factor

Lamp Lumens Maintenance Factor

Lamp Survival Faktor

<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	2
B13	2
B16	3
B20	4
C10	3
C13	4
C16	5
C20	7

