



**PROJECT**

**TYPE**

**NOTES**

**QUANTITY**

**DATE**



Round ceiling recessed downlight made from die-cast aluminium; surface Black Matt; powder coated; matt texture; RAL 9011; installation without tools using wire springs; suitable for ceiling thickness of 4-25 mm; recessed depth 85 mm; beam angle 30°; with COB (Chip on Board) technology for maximum efficiency; light colour 3000 K; binning initial MacAdam  $\leq 2$  SDCM; CRI  $\geq 90$ ; UGR  $\leq 16$ ; degree of protection IP65; Class 3; IC rated; driver not included; light source not replaceable;



**GENERAL**

Ceiling  
Recessed  
Black Matt  
RAL 9011 <sup>a</sup>  
IP65  
IC rated  
Exterior  
CIE flux code: 99 100 100 100 100

**LED**

3000 K  
CRI  $\geq 90$   
L80 / 55000h  
initial MacAdam  $\leq 2$  SDCM

**OPTICAL**

Standard  
beam angle 30°

**ELECTRICAL**

excl. driver  
8 V  
inset 4.1 W  
Class 3

**PHYSICAL**

diameter 57 mm  
height 55 mm  
0.09 kg  
wire springs

**CUTOUT**

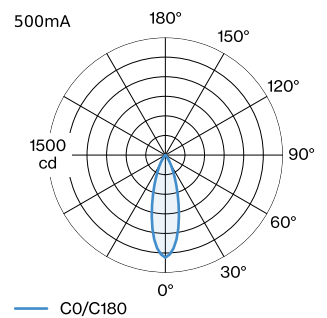
diameter 50-52 mm  
min. ceiling thickness 4 mm  
max. ceiling thickness 25 mm  
recessed depth 85 mm

<sup>a</sup> Colour may deviate slightly due to production conditions.

**OUTPUT**

500mA  
450 lm  
5.5 W

**LIGHT DISTRIBUTION**





## CONE DIAGRAM

standard 30° 500mA

| h (m) | E0° (lx) | ø (m) |
|-------|----------|-------|
| 1     | 1310     | 0.54  |
| 2     | 330      | 1.07  |
| 3     | 150      | 1.61  |
| 4     | 80       | 2.15  |
| 5     | 50       | 2.68  |

## Maintenance Factor

| Operating Time [h] | 10.000 | 20.000 | 30.000 | 40.000 | 50.000 |
|--------------------|--------|--------|--------|--------|--------|
| LLMF               | 0.96   | 0.92   | 0.88   | 0.85   | 0.81   |
| LSF                | 1      | 1      | 1      | 1      | 1      |

MF LMF × RSMF × LLMF × LSF

MF Maintenance Factor

LMF<sup>a</sup> Luminaire Maintenance Factor

RSMF<sup>a</sup> Room Surface Maintenance Factor

LLMF Lamp Lumens 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.

## ELECTRICAL ACCESSORIES

### Driver

| Type                                 | Voltage | L·W·H (MM) | Item number |
|--------------------------------------|---------|------------|-------------|
| 6W   500mA   3-12V                   | 3-12V   | 68-35-21   | 90214201    |
| 7W   500mA   5-14.5V   IP67          | 5-14.5V | 57-41-24   | 90214301    |
| 6.5W   500mA   7-13V   phase-cut dim | 7-13V   | 122-41-23  | 90224301    |