

# BETO direct / indirect power

suspended

074-6249047R

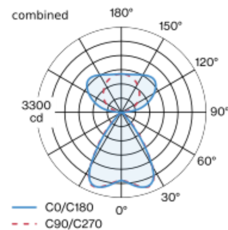


|                |
|----------------|
| Project / Type |
| Notes          |
| Count / Date   |



Luminaire housing made of extruded aluminium profile; extremely slim design (only 42 x 42 mm); light tight final end caps made of aluminium; no visible screws; angular design; surface white powder coated; suspended luminaire with 1500mm cable suspension; with integrated toolless suspension height adjustment on the luminaire; spring clip attachment to the luminaire; freely positionable; incl. feed (white); extruded profile for improved thermal management; high gloss reflector with faceted design; Reflector chrome; direct/indirect illumination characteristic; light colour 3000 K; binning initial MacAdam  $\leq 3$  SDCM; CRI  $\geq 90$ ; min. 90% of luminous flux after 50000 operating hours; energy efficient LEDs with high CRI; UGR  $\leq 13$ ; VDU compatible workplace luminaire according to DIN EN 12464-1; luminance above  $65^\circ \leq 1500$  cd/m<sup>2</sup>; indirect light component with integrated PC boards and high quality lens system for maximum, homogeneous ceiling illumination, separately controllable; 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 , Suspended           |
| white , RAL 9010 <sup>1</sup> |
| Reflector chrome              |
| IP20                          |
| indirect 5940 lm              |
| direct 4200 lm                |
| total 10140 lm                |

### LED

|   |
|---|
| 3000 K  |
| CRI $\geq 90$   |
| L90 / 50000 h   |
| initial MacAdam $\leq 3$ SDCM   |
| R <sub>g</sub> : 99 , R <sub>r</sub> : 91 , R <sub>t(1-15)</sub> : 89 |
| MR 0.61   |
| MDER 0.55   |

### Optical

|   |
|---|
| Reflector   |
| symmetric   |
| UGR $< 13$ , $\geq 65^\circ < 1500$ cd/m <sup>2</sup> |
| P <sub>st</sub> LM $\leq 1.0^2$ <sup>3</sup>          |
| SVM $\leq 0.4^2$ <sup>3</sup>                         |

### Electrical

|                                    |
|------------------------------------|
| DALI-2 D/I separately controllable |
| 220-240 V                          |
| system 86 W                        |
| system 118 lm/W <sup>4</sup>       |
| PC1                                |
| 2 DALI Addr.                       |

### Physical

|                |
|----------------|
| length 3057 mm |
| width 42 mm    |
| height 42 mm   |
| 4.5 kg         |

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

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 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                            | 4                  |
| B13                            | 6                  |
| B16                            | 7                  |
| B20                            | 9                  |
| C10                            | 7                  |
| C13                            | 10                 |
| C16                            | 11                 |
| C20                            | 15                 |

