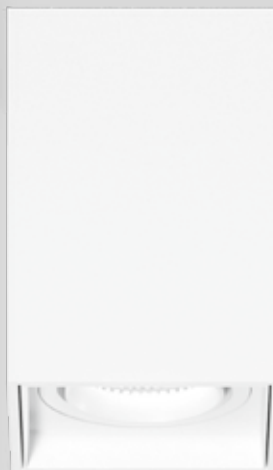


# KARO

## ceiling

[xal.com/karo](http://xal.com/karo)



### Quickinfo

#### GENERAL

ceiling mounted  
IP20  
light engine exchangeable

#### LED

COB LED module  
up to 93lm/W  
2700K, 3000K  
CRI ≥ 90  
Binning initial ≤ 3 MacAdam

#### ESTIMATED LED LIFETIME

L80 / 50000h

#### OPTICAL

beam angle 18°, 24°, 36°  
optical accessories

#### ELECTRICAL

non DIM, DIM DALI

#### PHYSICAL

aluminium  
powder-coated

### Description

**DE** Kubischer Aufbaustrahler aus Aluminium; 360° dreh- und 15° schwenkbar; Oberfläche weiß oder schwarz pulverbeschichtet; optische Aufsätze sind als Zubehör erhältlich; passive Kühlung der LEDs durch optimierte Kühlkörpergeometrie; COB (Chip on Board) Technologie für höchste Effizienz; keine Bildung von Mehrfachschatten; energieeffiziente LEDs mit sehr guter Farbwiedergabe; Binning initial ≤ 3 MacAdam; lieferbar in den Lichtfarben 2700K und 3000K; CRI ≥ 90; min. 80% des Lichtstromes nach 50000h Lebensdauer; hochwertiger Aluminiumreflektor mit sphärischer Facettenoptik; hochglänzend eloxiert; präzise Abstrahlcharakteristik mit drei verschiedenen Ausstrahlwinkeln; werkzeuglos einsetz- bzw. austauschbar; Schutzart IP20; SK I; optional DALI-dimmbar

**EN** Cubic surface mounted spotlight made of aluminium; 360° rotatable and 15° tiltable; surface powder coated in white or black; optical attachments available as accessories; passive cooling of LEDs with optimised heat sink geometry; COB (Chip on Board) technology for maximum efficiency; no multiple shadows; energy-efficient LEDs with very good colour rendering; binning initial ≤ 3 MacAdam; available in the light colours 2700K and 3000K; CRI ≥ 90; min. 80% of the luminous flux after 50000 hours; high quality aluminium reflector with spherical facet finish; high gloss anodised; precise radiation characteristic with three different beam angles; installed and exchanged without tools; protection class IP20; PC I; optional DALI dimmable

### Standard configuration

**COLOUR TEMPERATURE**   
3000K 5

**CONTROL**   
non DIM 1

**MATERIAL COLOUR**   
white 7



**REFLECTOR**   
flood 36° F

### Extended configuration

**COLOUR TEMPERATURE**   
2700K 4

**CONTROL**   
DIM DALI 3

**MATERIAL COLOUR**   
grey G  
black 8

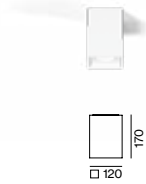


+5% surcharges

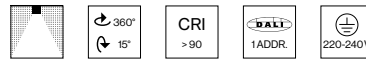
**REFLECTOR**   
spot 18° S  
medium 24° M




### Options on request

**INDIVIDUAL MATERIAL COLOUR**  
please contact factory



### KARO ceiling







SYSTEM POWER	COLOUR TEMP.	LUMINOUS FLUX	ORDER CODE
13 W	2700K 3000K	1170lm 1210lm	0 4 8 - 4 4 3 0   

### LIGHT DISTRIBUTION for 3000K

spot 18°			medium 24°			flood 36°		
h (m)	E (lx)	ø (m)	h (m)	E (lx)	ø (m)	h (m)	E (lx)	ø (m)
1	7637	ø 0,31	1	4945	ø 0,42	1	2899	ø 0,65
2	1909	ø 0,62	2	1236	ø 0,84	2	724	ø 1,31
3	848	ø 0,93	3	549	ø 1,27	3	322	ø 1,96
4	477	ø 1,24	4	309	ø 1,69	4	181	ø 2,61
5	305	ø 1,55	5	197	ø 2,11	5	115	ø 3,27

### Optical accessories

#### HONEYCOMB, LENS AND SNOOT

TYPE	øH (mm)	ORDER CODE
honeycomb	74-11	0 4 8 - 2 1 9 1 3 1 
linear prismatic lens	74-11	0 4 8 - 2 1 9 2 3 1 
snoot	74-25	0 4 8 - 2 1 9 1 1 1 
snoot + honeycomb	74-25	0 4 8 - 2 1 9 1 2 1 

use only 1 optical accessory



## Inspiration

Ryser Optical Store  
St. Gallen, Switzerland

**PRODUCT**  
KARO ceiling

**ARCHITECT**  
Heikaus, shopfitting  
Mundelsheim, Germany



