

# CLOUD RANGE

UNGRANULAR

LED

100  
Lm/W

INDELAGUE GROUP

**INDELAGUE**<sup>™</sup>

HIGH TECH | LIGHTING SOLUTIONS

ROXO lighting

# CONCEPT

2 CLOUD range

MINIMALISTIC AND  
CONTEMPORARY STYLE



*CLOUD range was developed to achieve a superior light quality in any space, such as offices, classrooms, meeting rooms or auditoriums. CLOUD offers perfect lighting distribution with no unpleasant shadow effect on walls, that combined with daylight*

*colour temperatures provides a superb light quality. CLOUD LED it's one of the best recessed luminaires with high LOR, up to 100 lm/w efficiency and UGR<19 according with EN12464-1 to working places.*



# BLINE TECHNOLOGY

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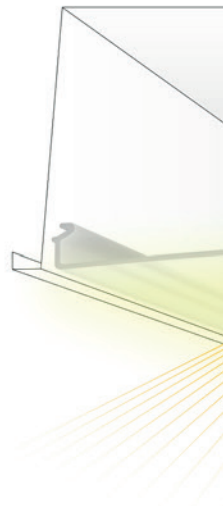
CLOUD range

## BLINE TECHNOLOGY

### LED

The LED version total system efficiency goes up to 100lm/W and combined with LOR up to 75%. We use the latest LED technology thereby our luminaire offers CRI >80, 50.000h life (L80F10) and a chromaticity tolerance MacAdam 3 SDCM

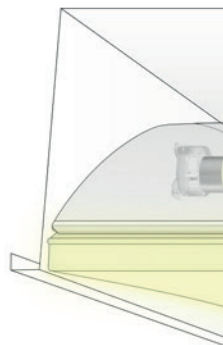
colour stability, which makes CLOUD LED the perfect choice for office lighting. The optical technology BLINE was developed to reduce glare without compromising uniformity and light quality, according to EN12464-1 UGR<19 for office lighting.



### T5 / TC-L

The optic of T5/TC-L versions was developed and designed to achieve up to 62lm/w and LOR up to 81%. With our high performance microprismatic diffuser or our

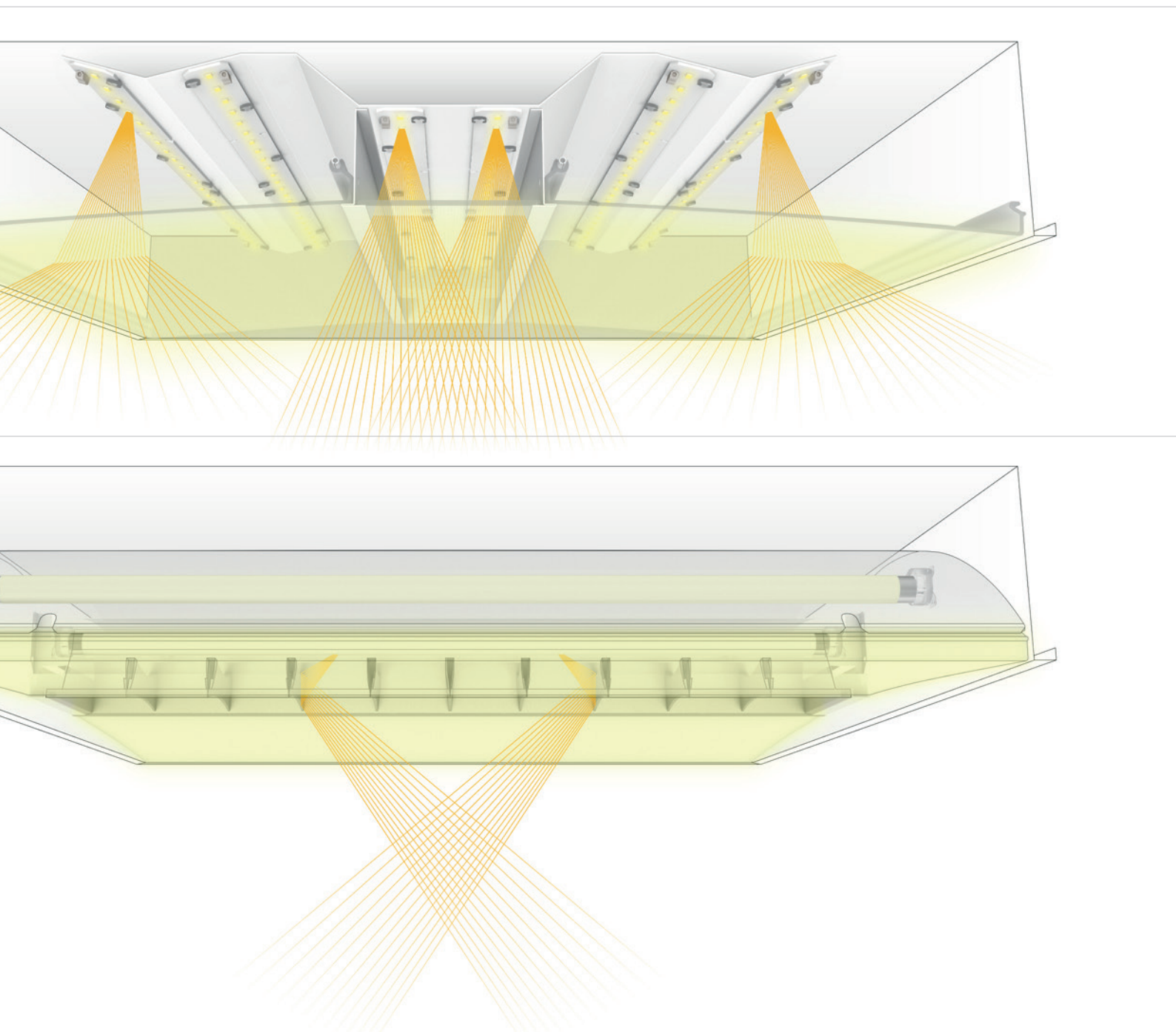
aluminium louvres you can achieve perfect wall uniformity and a glare-free application. Compliance with EN12464-1 can be reached depending on the lamp configuration.



CLOUD LED  
**100**  
Lm/W

*CLOUD range exceed all expectations with high performance and a gentle homogeneous light due to internal design and highly advanced optical technology. The side diffuser BLINE is*

*manufactured from a complex polycarbonate material that diverts light through all optic delivering an extremely diffuse and homogeneous light.*



# PERFORMANCE

6 CLOUD range

## PERFORMANCE AND WELL-BEING

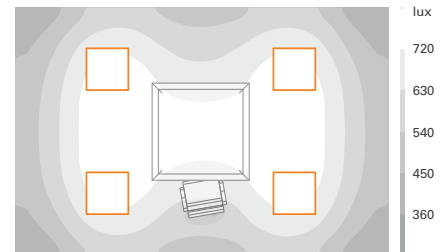
*CLOUD range offers performance and well-being to people. High quality BLINE diffuser gives homogeneous light distribution in rooms, providing daylight quality and glare free applications in all angles. The light uniformity conveys well-being to people during all day.*

### CLOUD LED



#### CLOUD LED 4x14W DAM

LED: 4 x 14W  
SPACING: 5,4m x 3,6m  
CEILING HEIGHT: 2,8m  
MAINTENANCE: 0,8  
REFLECTANCE: 20/70/50  
WORKING PLANE: 0,8m  
ILLUMINANCE: 622 lux

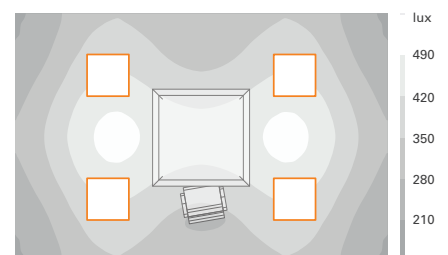


### CONVENCIONAL T8 LUMINAIRE WITH LOUVRE



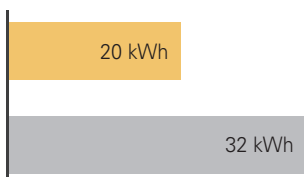
#### 4x18W Louvre

LAMP: 4 x 18W  
SPACING: 5,4m x 3,6m  
CEILING HEIGHT: 2,8m  
MAINTENANCE: 0,8  
REFLECTANCE: 20/70/50  
WORKING PLANE: 0,8m  
ILLUMINANCE: 359 lux

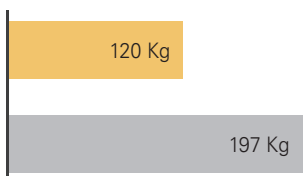


# ENERGY EFFICIENCY AND LOW CARBON FOOTPRINT

## ENERGY CONSUMPTION (kWh/m<sup>2</sup> per year)



## CO<sub>2</sub> EMISSION (Kg per year)



## FEATURES COMPARISON

### CLOUD LED luminaires

4x CLOUD LED 4x14W.

Illuminance: 622 lux.

Lm/W of each luminaire: 100Lm/W.

### Convencional T8 luminaire with louvre

4x T8 luminaire 4x18W

Illuminance: 359 lux

Lm/W of each luminaire: 48 Lm/W

### Calculation period

1 year

- CLOUD LED
- CONVENCIONAL T8 LUMINAIRE WITH LOUVRE

CLOUD LED  
**20**  
kWh / m<sup>2</sup> YEAR

# PERFORMANCE

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## CONTROLLED GLARE

CLOUD range reduces the sensation produced by bright areas within the field of view, usually known as glare. In order to avoid errors, fatigue and accidents in indoor work places we developed the CLOUD range to meet discomfort glare limits specified in the EN12464-1.

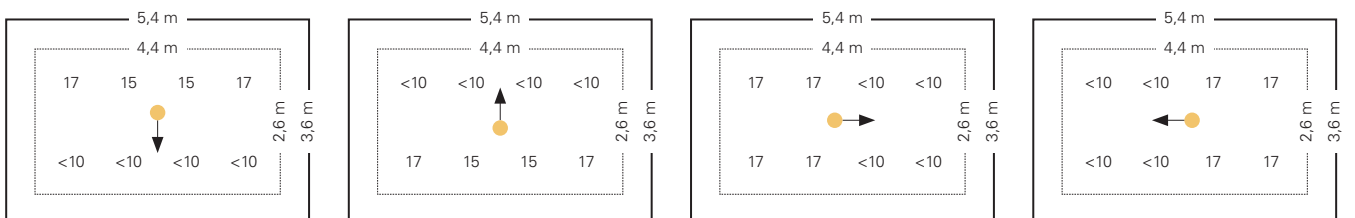
### LED VERSION | CLOUD LED 4x14W DAM



**UGR = 15** on the observer eye level  
**UGR ≤ 17** in any part of the room at 1,2m height

A - OBSERVER EYE LEVEL

### UGR SURFACE CALCULATION INSIDE THE ROOM





CLOUD range is suitable for indoor work places with Display Screen Equipment (DSE) including VDUs . With CLOUD range the lighting for the DSE work stations is appropriate for all tasks performed at the work station, such as, reading from screen, printed text, writing on paper, keyboard work.



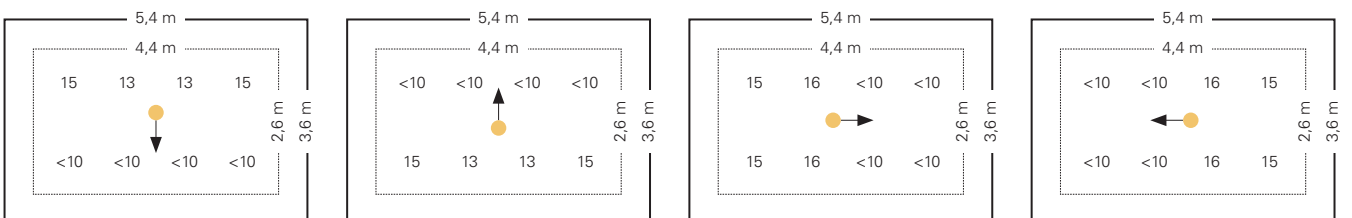
**FLUORESCENT (T5) VERSION | CLOUD 4x14W PB**



**UGR = 13** on the observer eye level  
**UGR ≤ 16** in any part of the room at 1,2m height

A - OBSERVER EYE LEVEL

**UGR SURFACE CALCULATION INSIDE THE ROOM**



# OPTICAL RANGE

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CLOUD range

## AESTHETICS AND OPTICAL ARRANGEMENTS

*CLOUD range offers a wide range of optical solutions. On the sides BLINE technology with micro-polymers to diffuse light and central optics such as DAM, DOP, PB or PM to comply with lighting of indoor workplace requirements.*

### DAM

#### **MICROPRISMATIC DIFFUSER**

Choose microprismatic diffuser (DAM) with the latest micro-pyramidal technology where you can match modern design with maximum energy efficiency. The DAM diffuser uses the latest optical technology to divert light into the correct place allowing high LOR and UGR<19 to comply with EN 12464-1 lighting of work places.

### PB

#### **POLISHED DOUBLE PARABOLIC LOUVRE**

Choose polished double parabolic louvre (PB) for an exceptional performance, high efficiency and glare-free applications. The 99.85% pure aluminium used on this louvre allow us to have high LOR, keeping with the EN12464-1 standards for workplace lighting.

### DOP

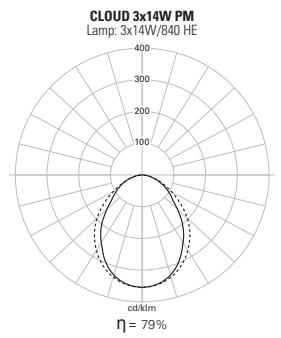
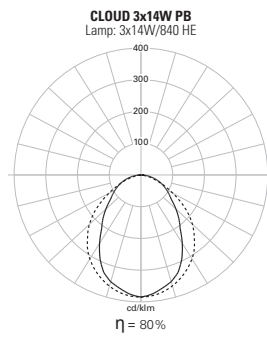
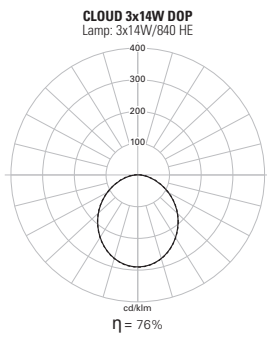
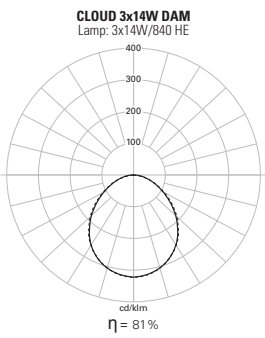
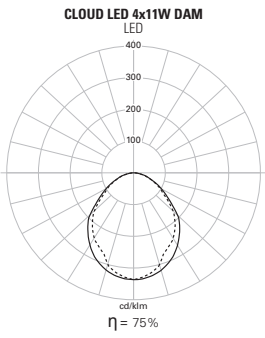
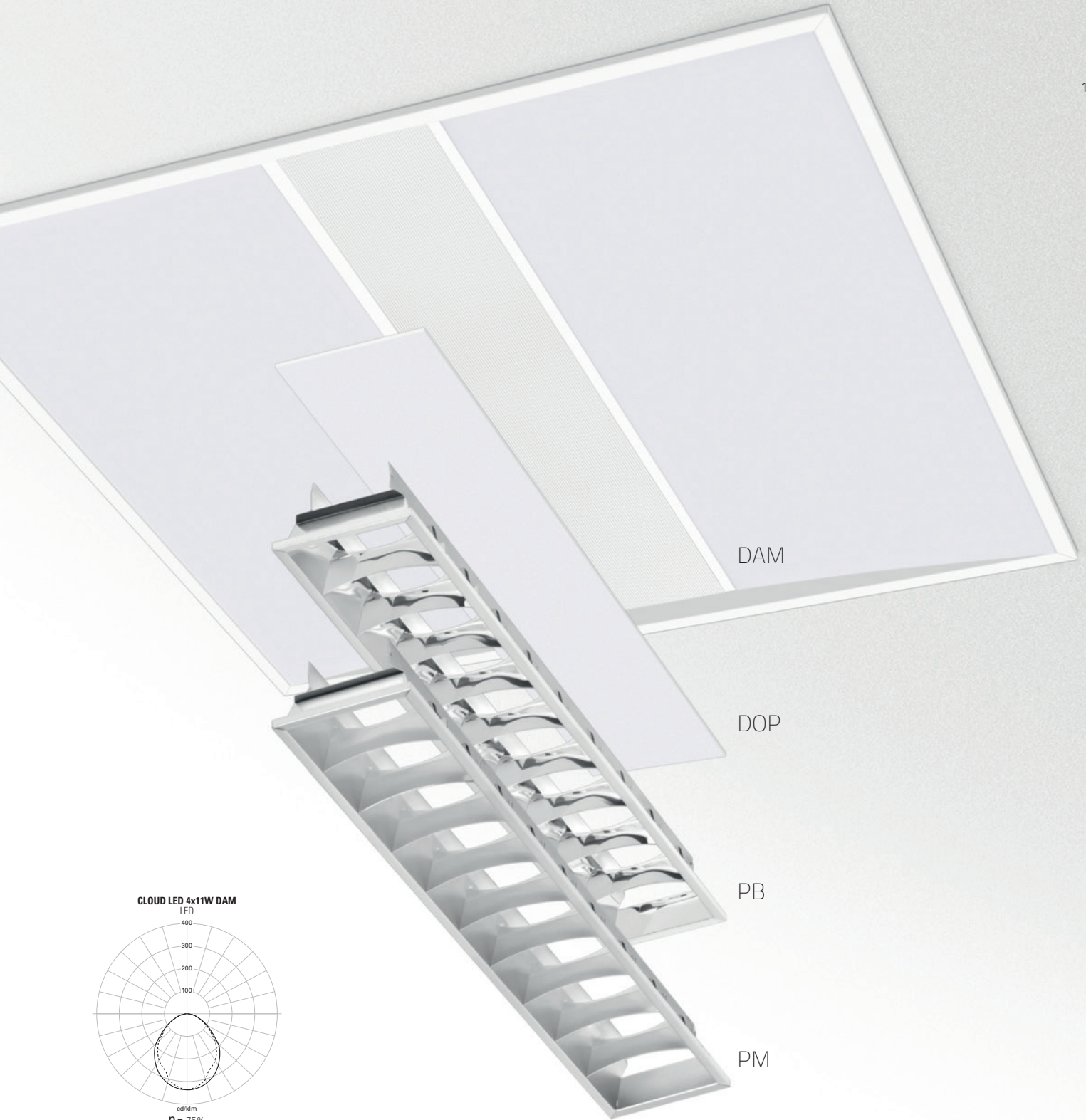
#### **OPAL POLYCARBONATE DIFFUSER**

Choose opal polycarbonate diffuser (DOP) for modern style and low maintenance cost.

### PM

#### **SATIN DOUBLE PARABOLIC LOUVRE**

Choose satin double parabolic louvre (PM) for an exceptional performance, high efficiency and glare-free applications. The satin aluminium used avoids interference reflections in the reflector, keeping with the EN12464-1 standards for workplace lighting.



# FEATURES / COMPONENTS

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CLOUD range

## WIDE RANGE OF OPTIONS

*CLOUD range provide a huge variety of options, such as LED or fluorescent light source, DALI dimming and emergency unit.*

### LED VERSION

The use of the latest LED technology on CLOUD LED allow us to have high LED standards, such as CRI >80, 50.000h life (L80F10) and a MacAdam 3 SDCM colour stability, which makes CLOUD LED the perfect choice for office lighting. The LED version is supplied with 4000K but you can have 3000K as optional.

### DSI/DALI DIMMING

Smart buildings demand smart solutions such as DSI or DALI dimming where you can combine optimum lighting quality with maximum energy saving potential.





### AIR HANDLING

Air handling option can provide 20~40lts/s.

### T5 AND TC-L VERSION

The luminaire for fluorescent lamps can be supplied with BLINE on the sides and DAM/DOP diffuser or PB/PM reflector on the main optic cell.



### EMERGENCY UNIT

CLOUD range offers 1 or 3 hours emergency units either for LED or T5/TC-L versions. The LED version provides sufficient orientation light, allowing escape routes or obstacles visible. This option reduces the added cost of other emergency lighting systems. CLOUD LED offers efficient emergency lighting with low power consumption.

# TYPES OF CEILING

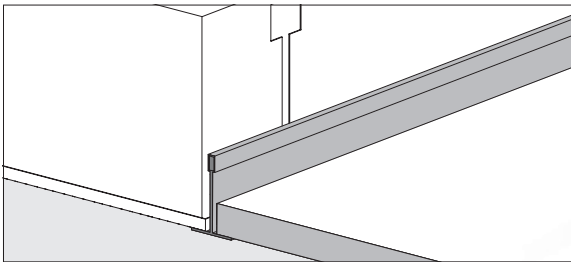
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CLOUD range

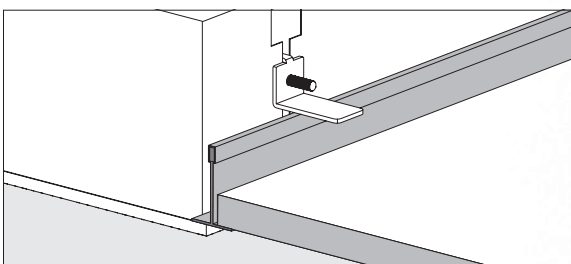
## SUITABLE SOLUTION FOR ANY INSTALLATION

*CLOUD range is suitable for a wide range of modular metal ceilings available on the market. Other type of ceilings can be done under request.*

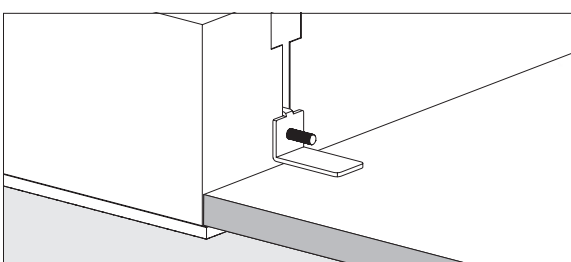
**15/24mm LAY-IN**



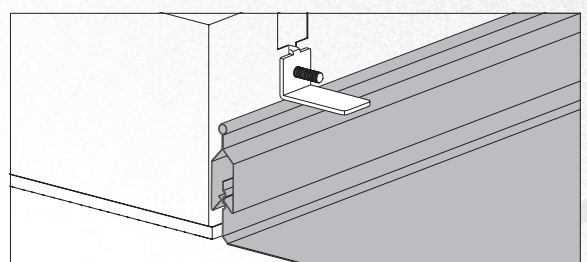
**15/24mm PULL-UP**

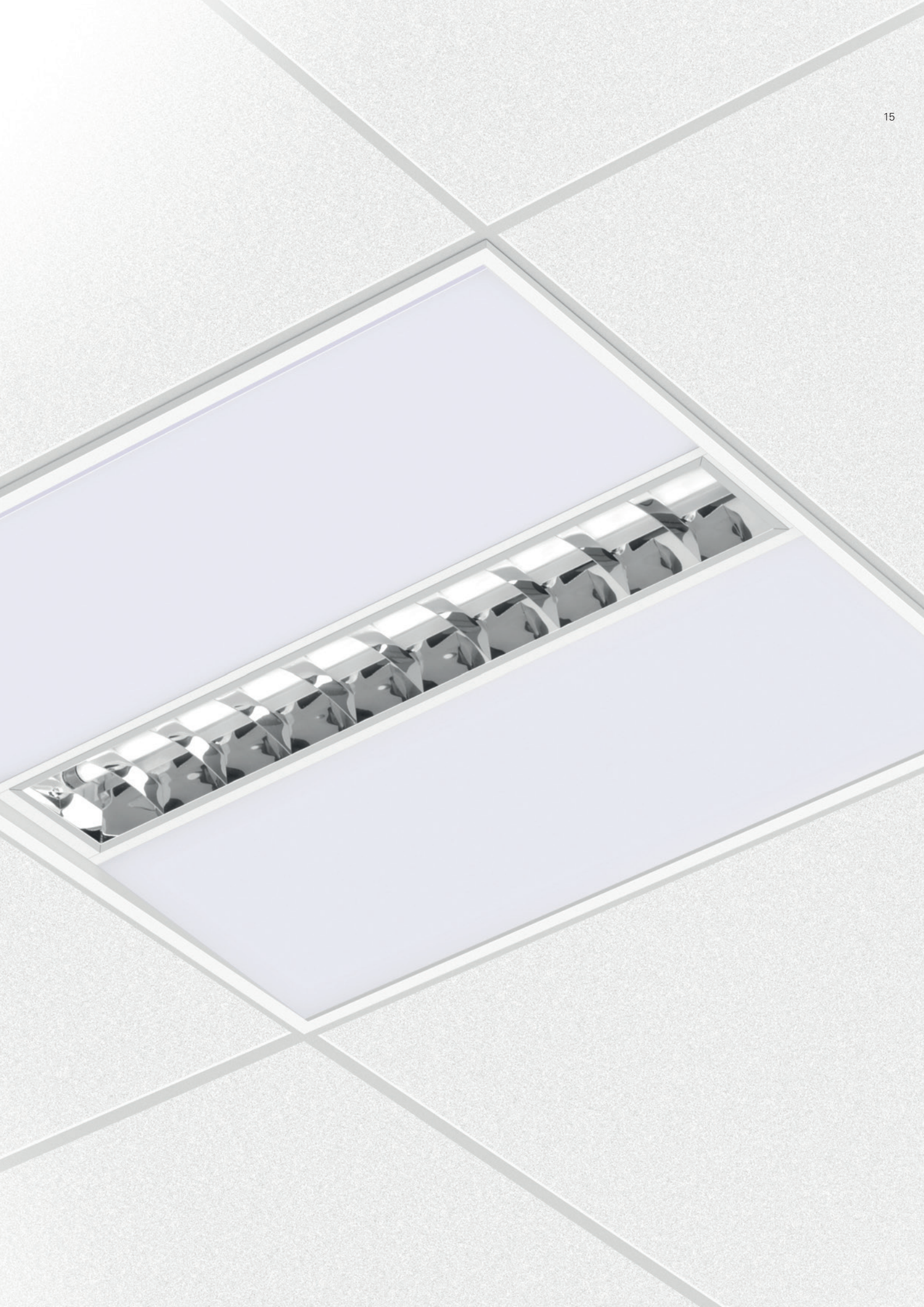


**WITH BRACKETS FOR PLASTERBOARD CEILINGS**



**SAS 150 154**





# INSTALLATION/MAINTENANCE

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CLOUD range

## EASY LAMP REPLACEMENT

*The BLINE diffuser was developed with a CLIP-IN system to allow an easy lamp replacement.*

1. Open side diffuser with special tool provided with the luminaire



2. Install/Replace lamps



3. Push the side diffuser against luminaire body until listen "CLICK"



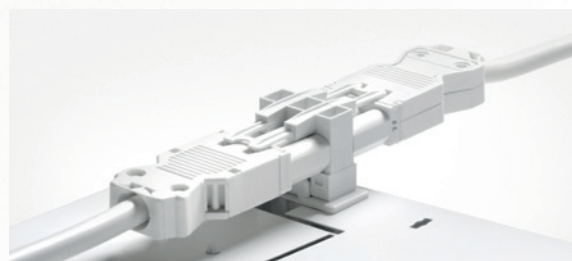
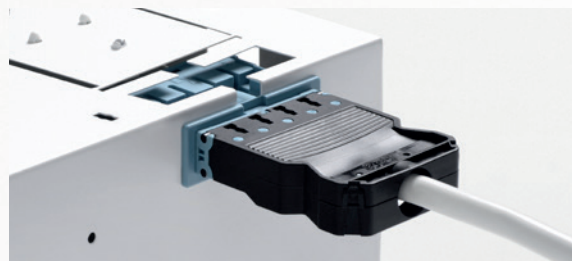


# PLUG&PLAY CONNECTORS AND SENSORS

*During development of CLOUD range we took in consideration the installation and maintenance issues. An easy and quick installation was our gold, either for LED or fluorescent versions.*



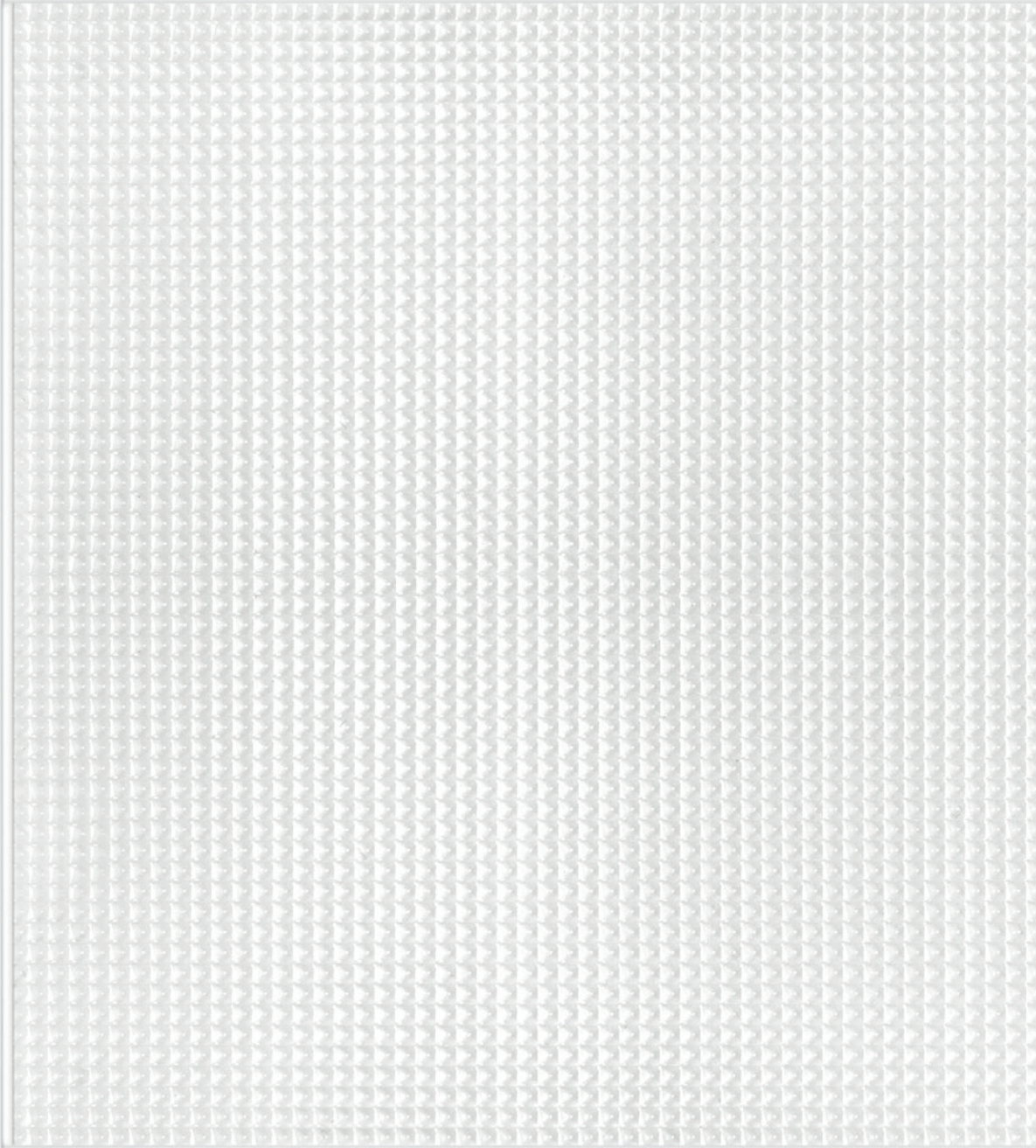
## CONNECTORS



## SENSORS







**DAM**  
MICROPRISMATIC DIFFUSER

LED 100  
Lm/W  
RANGE  
**CLOUD**  
UGR ≤ 17

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