

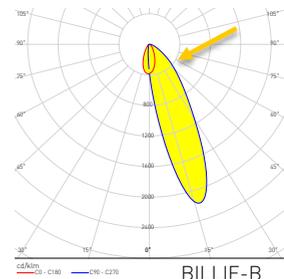
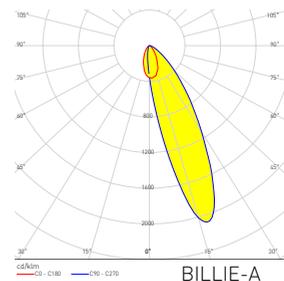
## BILLIE-A and BILLIE-B – For illuminating vertical surfaces

Asymmetric secondary optics for illumination of walls and vertical surfaces.

Vertical illuminance contributes significantly to the impression of brightness in the space and makes the architecture more legible. Luminous flux is focused on the walls ensuring higher average illuminance values and better uniformity. Typical applications of vertical illuminance include museum, retail, office and residential lighting.

### TYPICAL LAYOUT

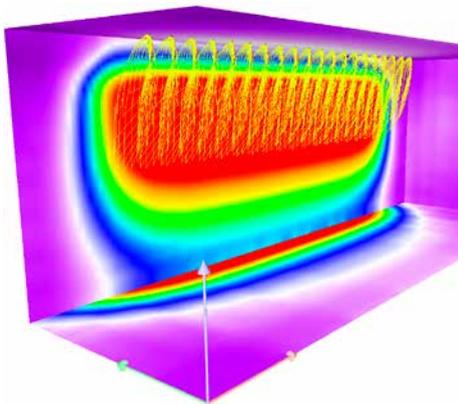
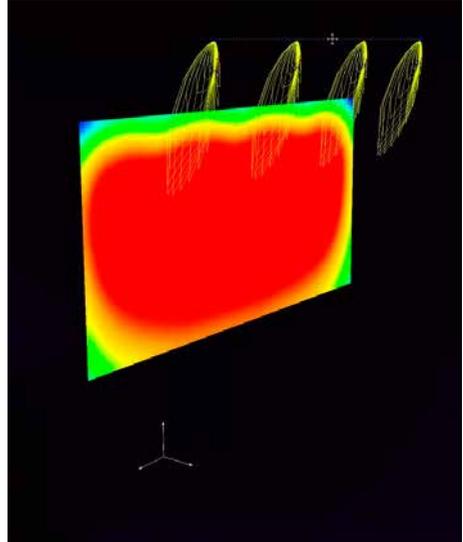
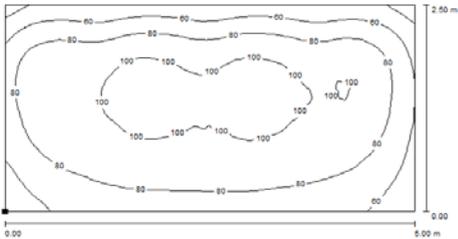
- Linear luminaires are placed at a distance from the wall that is one third of ceiling height
- A good result can be achieved without the need to tilt the luminaire
- Different setups can be used in order to obtain different distributions of the light on the wall or on the billboard



## APPLICATION EXAMPLE

### BILLIE-A FOR BILLBOARD LIGHTING

- Illuminated surface width x height: 5.0 x 2.5 m
- Lighting fixtures are installed 0.75 m above the top edge and 1.2 m from the billboard surface
- Pitch between luminaires 1.3 m
- $E_{av}$ : 83 lx,  $E_{max}$ : 109 lx,  $U_0$ : 0.342



### BILLIE-B FOR WALL-WASHING APPLICATION

- Wall 2.7 m
- Luminaire height: 2,7 m
- Distance from the wall: 0,9 m
- LED interdistance: 10 cm
- LED flux 220 lm
- Emed 393
- Emax 535 lux

