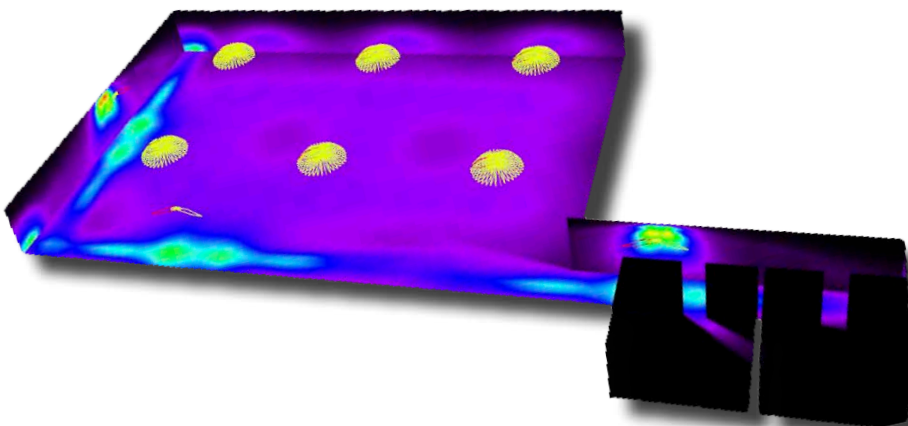


EN 1838 compliant Emergency Exit Route Lighting

Application requirements

Target application:	Emergency Exit Route Lighting
Target dimensions:	Office space
Illuminance Requirements:	EN 1838 compliant illuminance levels on the exit routes and anti-panic areas.



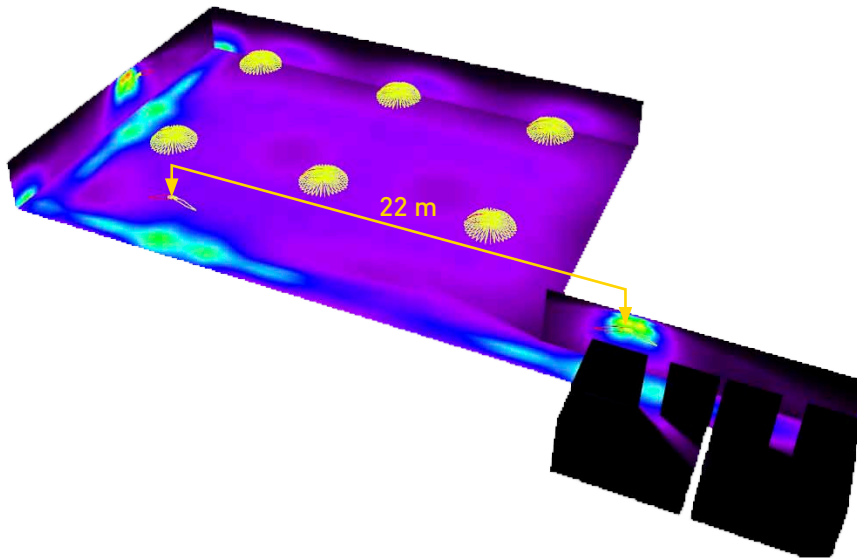
CA13156_EMERALD-A



C12473_SIRI-A



Application simulation



Exit routes are lit with LEDiL's EMERALD-A lens optimized for emergency lighting. Extremely wide and narrow beam pattern makes it possible to mount exit light fixtures with a height/distance ratio higher than 1:7.

Anti-panic lighting of the open area is done with the SIRI-A lens using only six lighting fixtures.

High efficiency and application optimized light distributions of these optics make them perfect choice for exit route and anti-panic lighting applications powered with back-up batteries.

Simulated results:

Exit route lighting

Optic used: CA13156_EMERALD-A

Power / fixture: 1,5 W

Luminous flux: 180 lm

Installation height: 3 m

Escape route central axis

Illuminance uniformity: 1:3,24

Central axis

illuminance (E_{min}): 1,47 lx

Simulated exit route lighting

complies with the EN 1838 demands regarding:

- Uniformity ratio better than 1:40
- Minimum central axis floor level illuminance ($E_{min} > 1$ lx along the central axis).

Anti-panic lighting

Optic used: C12473_SIRI-A

Power / fixture: 1 W

Luminous flux: 130 lm

Area lit: 404 m²

Illuminance uniformity: 1:5

Minimum illuminance (E_{min}): 0,54 lx

Simulated anti-panic lighting

complies with the EN 1838 demands

regarding minimum illuminance

levels ($E_{min} > 0,5$ lx) and uniformity

(better than 1:40) with only six

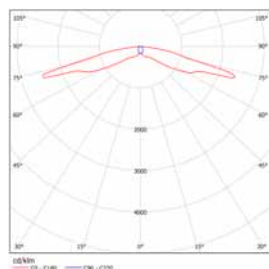
fixtures and power levels suitable for systems powered with emergency batteries.

Optics used

CA13156_EMERALD-A

Optimized for exit route lighting

- FWHM: 158° x 78°
- Good efficiency: 94%
- Extremely wide beam pattern with narrow vertical cutoff
- Optimized light distribution for exit route lighting compliant with EN 1838 standard
- Cost effective solution
- Diameter: 21,6 mm
- Height: 6,9 mm



C12473_SIRI-A

Wide and uniform area light in small package suitable for lighting of the anti-panic areas with good efficiency

- Very wide batwing light distribution over large areas
- Dimensions: 13,9 x 13,9 mm
- Height: 4,2 mm

