

High Bay Warehouse Lighting

Application requirements

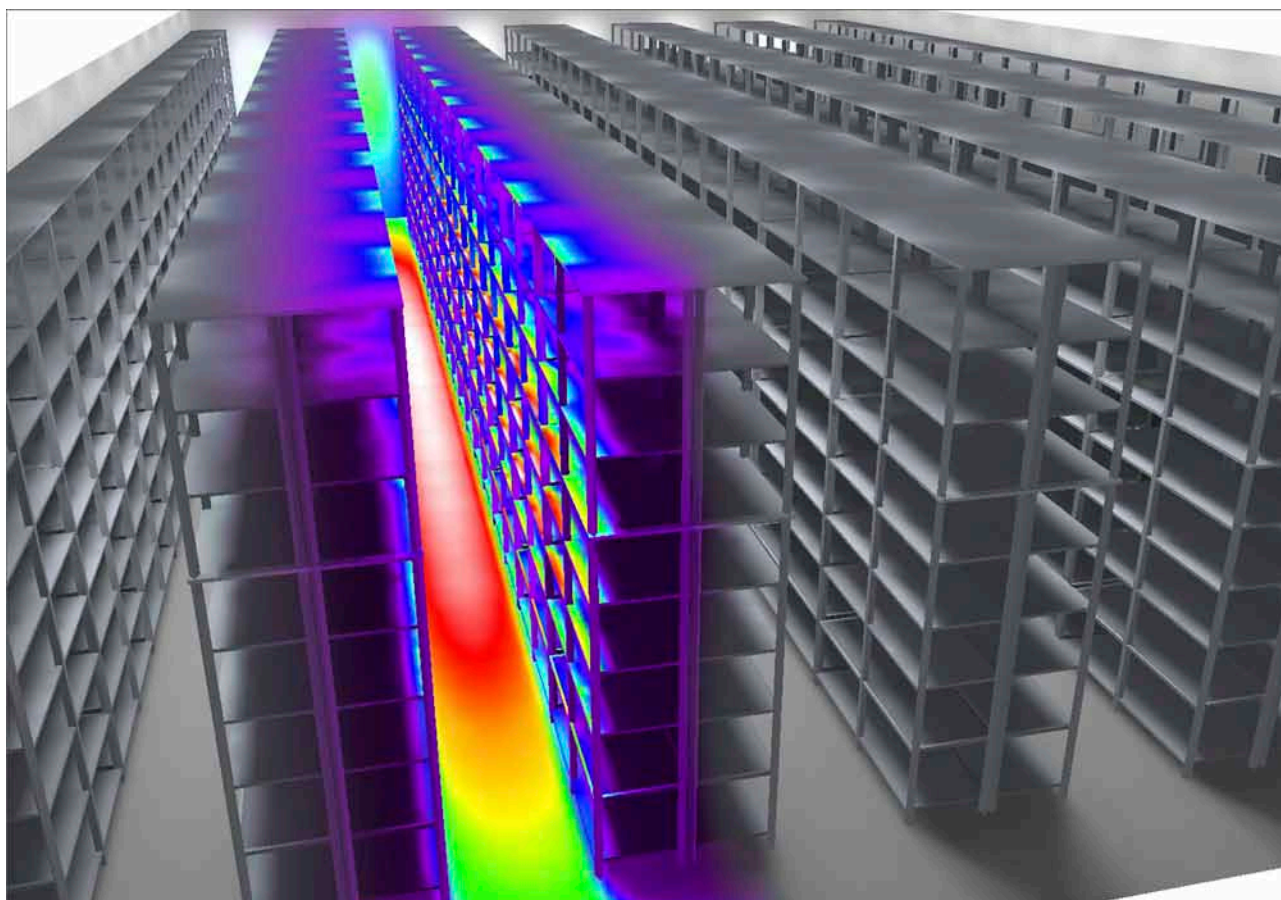
Target application:	High Bay aisle lighting
Ceiling height:	14 meters
Warehouse dimensions:	70 x 47 meters
Shelf height:	13 meters
Aisle width:	3 meters
Design goal:	100 lx at floor level ¹⁾ , equal illumination on shelf frontal faces

Optics used:	CA13057_FLARE-MINI-AD <ul style="list-style-type: none"> • Diameter: 16 mm • Height: 8,6 mm • Viewing angle 100°+20° • Designed for LEDs from Cree, Nichia, Seoul, Osram and Philips Lumileds
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CA13057_FLARE-MINI-AD

1) Floor under the shelves is not included in the calculations.



Solution with FLARE-MINI-AD

Luminaire installation height: 14 meters
 Luminaire spacing: 6 meters
 Luminaires are installed on the aisle centerline

Number of luminaires: 66 pcs
 Number of LEDs / luminaire: 25 pcs @ 1000 mA
 Power consumption / luminaire: approx. 70W

Avg. illuminance at floor level: ≈ 100 lx

Illuminance uniformity on
 the shelf vertical face (E_{min}/E_{avg}): better than 0,5

Total power consumption: 4,6 kW ($\approx 1,9$ W/m²)

Approximated energy savings
 when compared to conventional
 fluorescent lighting: $\approx 40\%$

- Luminaire installation height: 14 m
- Installed in the aisle centerline
- Fixture luminous flux 6200 lm
- LED luminous flux 7000 lm

- Illuminance levels:
- | | |
|--|--------|
| | 130 lx |
| | 100 lx |
| | 80 lx |
| | 60 lx |
| | 45 lx |
| | 30 lx |
| | 15 lx |
| | 10 lx |