



## LARGE VOLUME SPACE GUIDE 1

## LED HIGH BAY

# LARGE VOLUME SPACE



### SPACE CHARACTERISTICS

**Length:** 150'  
**Width:** 72'  
**Height:** 28' Open Ceiling  
**Reflectivity:** Ceiling = 80%  
Walls = 30%  
Floor = 20%

### PRODUCT SPECIFICATIONS

**Dimensions:** Variable  
**Optics:** Wide Distribution  
**Light Source:** High Output LEDs  
**CCT:** 5000K  
**CRI:** 68  
**Lumen:** 10,778 Delivered  
**Depreciation:** 0.70 @ 100,000 hrs.  
**Rated Life:** 100,000 hrs.  
**Watts:** 112

## THE OPPORTUNITY

In large volume spaces, such as a warehouse or manufacturing facility, it is possible to provide high quality lighting that illuminates the stacks and floor area to recognized standards, as well as meet or beat local energy codes, and extend the maintenance schedule.

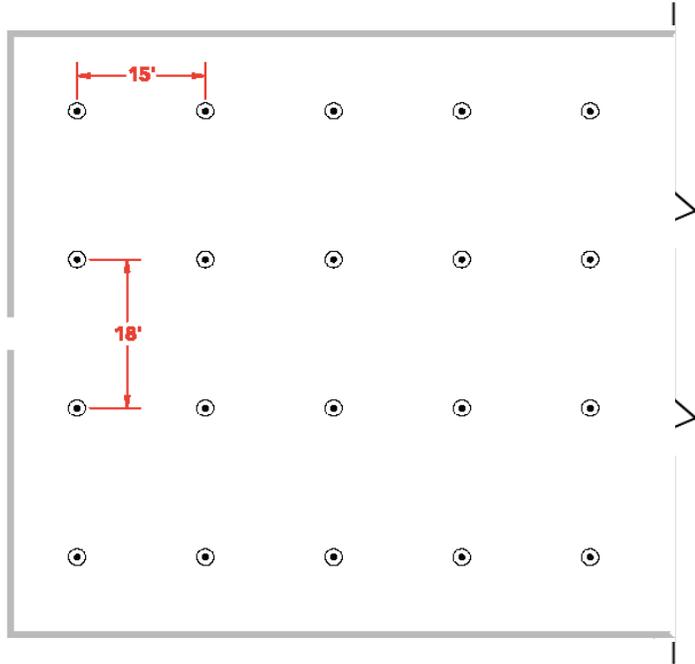
## THE SOLUTION

Install industrial high bay LED luminaires equipped with broad optical distribution and superior color rendering properties. This type of fixture typically has options for integrally mounted occupancy sensors and photocells for additional energy savings.

## DESIGN CONSIDERATIONS

Tall obstructions, such as stacks and large machinery, have a large impact on the illumination of the space. Vertical surfaces absorb and block light. If shelving stacks approach the ceiling height, fixtures should be centered in the aisles. Lower stacks allow more flexibility with luminaire layout.

## Cold Storage LED High Bay | 15' x 18' Spacing



### INSTALLATION SPECS

**Number of Luminaires:** 28 (20 shown here)

**Luminaire Spacing:** 20' x 22'

**Mounting Condition:** 24" Pendant

**Mounting Height:** 26' 0" AFF

**Average Illumination:**

-17 fc horizontal

-5.5 fc vertical

**Watts/sq. ft.:** ~0.28

**IES Recommended Footcandles (fc):**

10 - 30 fc horizontal

5 - 15 fc vertical

## CONTROLS STRATEGY

Significant energy savings can be gained by use of occupancy sensors to turn lights OFF automatically after hours, and when the space is empty during business hours. Consider selecting luminaries with integral occupancy sensors to minimize installation cost.

## ENERGY SAVING STRATEGIES

STRATEGY	BENEFIT	TECH NOTE
Integrated occupancy sensors	Simple to commission, minimizes installation costs	Not all sensors function in large environment