

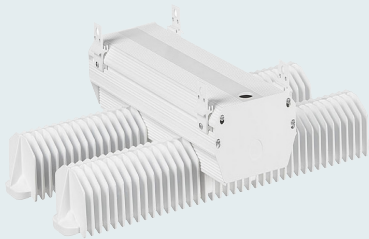
LIGHTING LAYOUT GUIDE SERIES

LARGE VOLUME SPACE GUIDE 1

ROOM 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 LED
CCT: 5000K
CRI: 68
Lumens: 10,778 delivered
Depreciation: 0.70 @ 100,000 hrs.
Rated Life: 100,000 hours
Watts: 112

LARGE VOLUME SPACE

LED HIGH BAY



Photo: Bobcat Co. (GE Lighting)

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.



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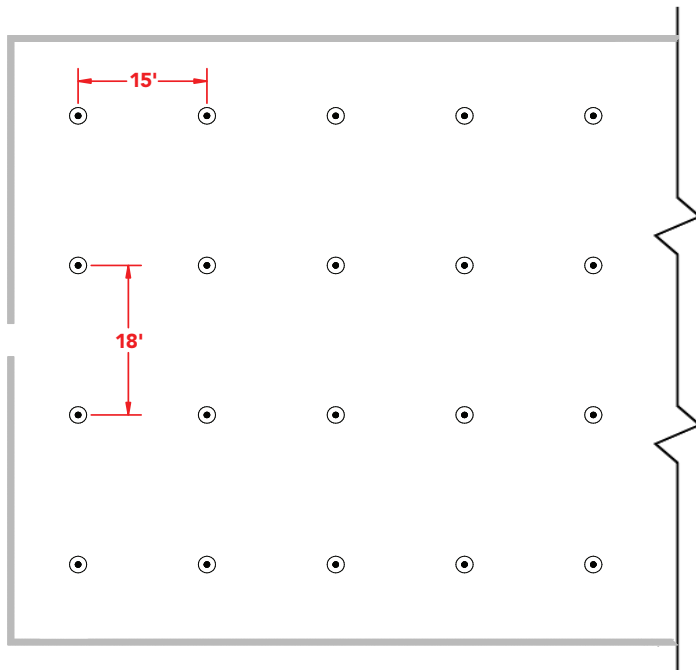
www.lightingdesignlab.com

NORTHWEST
LIGHTING NETWORK

www.nwlightingnetwork.com

LAYOUT OPTIONS

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 luminaires 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

CODE INFORMATION

JURISDICTION	CODE	LIGHTING POWER ALLOWANCE
Seattle	2012 Seattle Energy Code	0.50 w/sq. ft. (0.58 space x space)
Washington	2012 WSEC	0.50 w/sq. ft. (0.58 space x space)
Oregon	2014 OEESC	0.66 w/sq. ft. (0.58 space x space)
Idaho	2012 IECC	0.60 w/sq. ft. (0.60 space x space)
Montana	2012 IECC	0.60 w/sq. ft. (0.60 space x space)