

LIGHTING LAYOUT GUIDE SERIES

SMALL PARKING LOT GUIDE 3

SPACE CHARACTERISTICS

Length: 120'
Width: 60'
Mounting Height: 25'

PRODUCT SPECIFICATIONS



Dimensions: ~16" x 21"
Optics: Type II, III, IV, V
(Depends on parking lot configuration)
Light Source: High Output LED
CCT: 4000K
CRI: 70
Lumens: 6000-6400 Delivered
(Depends on optical distribution)
Depreciation: 0.9 @ 60,000 hrs.
Lumen Rated Life: 60,000 hrs.
Watts: 87

SMALL PARKING LOT

LED LUMINAIRE REPLACEMENT



THE OPPORTUNITY

It is possible to replace the existing 250w High Pressure Sodium Type III shoe box luminaires with LED luminaires, which provide high quality lighting that illuminates the parking lot surface to recognized standards, and meets or beats the local energy codes (typically ~.10 watts/sq.ft. for parking areas and drives in Zone 3).

THE SOLUTION

Using existing poles, install new Design Lights Consortium (DLC) qualified LED luminaires. This will provide superior color rendering properties that aid in facial recognition, while extending the maintenance schedule, and saving maintenance dollars by using a longer lasting source compared to high pressure sodium lamps. Fixture options also allow for integrally mounted occupancy sensors and photocells for additional energy savings.

DESIGN CONSIDERATIONS

Parking lot fixtures are typically available with at least five (5) different optical distributions. Well thought out employment of these distributions will result in a uniformly lit parking lot with good visibility.



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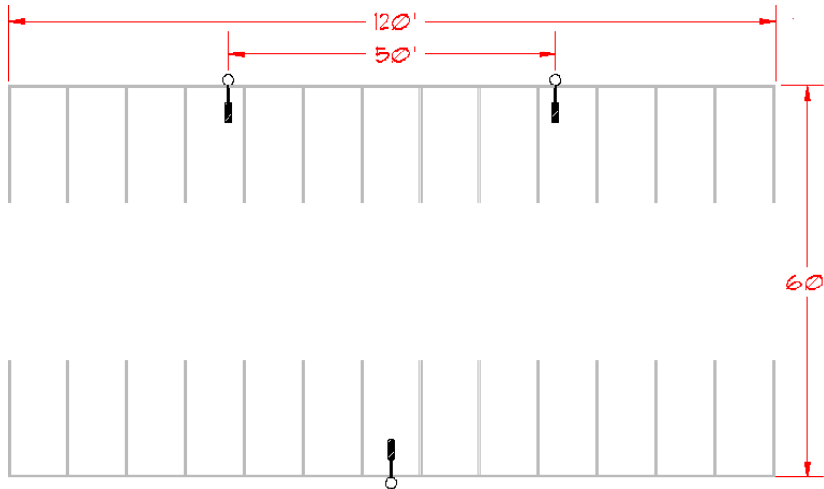
www.lightingdesignlab.com

NORTHWEST
LIGHTING NETWORK

www.nwlightingnetwork.com

LAYOUT OPTIONS

Small Parking Lot | LED Replacement



INSTALLATION SPECS

Number of Luminaires: 3
Luminaire Spacing: 50'
Mounting Condition: Pole w/3' Arm
Mounting Height: 25'
Average Illumination: 3.07 fc
Watts/sq. ft.: 0.072

IES Recommended Footcandles (fc):
Average Maintained Horizontal:
 1.5 fc (range 0.75 - 3 fc)
Average Maintained Vertical:
 0.8 fc (range 0.4 - 1.6 fc)

LIGHTING TIP

Each installation is unique. Ensure that you achieve your footcandle (fc) and lighting power density (LPD) levels, use lighting software, and contact a design professional or manufacturer's representative for assistance.

CONTROLS STRATEGY

For lights that are needed throughout the night, all jurisdictions require a photocell or an astronomical time clock.

EXTERIOR LIGHTING ZONES

LIGHTING ZONE	DESCRIPTION
1	Developed areas of national parks, state parks, forest land, and rural areas
2	Areas predominately consisting of residential zoning, neighborhood business districts, light industrial with limited nighttime use and residential mixed use areas
3	All other areas
4	High-activity commercial districts in major metropolitan areas as designated by the local land use planning authority

ENERGY SAVING STRATEGIES

STRATEGY	BENEFIT	TECH NOTE
Add astronomical time clock to existing photocell to reduce light levels and wattage during times of low activity, such as late night	Energy savings can be considerable depending on timer setting	Make sure main override is part of the circuiting

ENERGY CODE INFORMATION

JURISDICTION	CODE	LIGHTING POWER ALLOWANCE (ZONES 3 & 4)
Seattle	2012 Seattle Energy Code	z3 0.1 w/sq. ft. (Zone 4 not used in Seattle)
Washington	2012 WSEC	z3 0.1 w/sq. ft. z4 0.13 w/sq. ft.
Oregon	2014 OEESC	z3 0.1 w/sq. ft. z4 0.13 w/sq. ft.
Idaho	2012 IECC	z3 0.1 w/sq. ft. z4 0.13 w/sq. ft.
Montana	2012 IECC	z3 0.1 w/sq. ft. z4 0.13 w/sq. ft.