

PROJECT: BURLINGTON HARBOR WATERFRONT -EAST PARKING
BURLINGTON, VT.

SECTION 5.5.2 OUTDOOR LIGHTING

SEC. 5.5.2-a Site Plan Review Required

SEC. 5.5.2-b Exemptions
Project claims no exemptions

SEC. 5.5.2-c Lighting Prohibited
Project is in compliance, no items on the project are falling within these criteria.

SEC. 5.5.2-d Lighting Plan Submission Requirements

SEC. 5.5.2-1- A site plan showing:

- A. See Attached site plan illustrates area being illuminated.
- B. Point by Point photometric analysis spacing is 2' x 2' grid.
 - Maximum: 1.2 foot-candles
 - Minimum: 0.2 foot-candles
 - Average: 0.58 foot-candles
- C. Calculation of the initial and mean lamps lumens per net acre across the entire site.

NET AREA = 0.7395 acres

TYPE B-4 = 3434 initial lumens X 2 = 6,868 total

TYPE B-4-HS= 2196 initial Lumens X 3 = 6,588 total

TYPE B-3 = 3108initial Lumens X 3 = 9,324 total

GRAND TOTAL 22,780 INITIAL LUMENS

Mean lumens 22,780 x .80 = 18,224 mean lumens

30,804.6 LUMENS PER ACRE INITIAL

Drawing TYPE B-4, B-4-HS, B-5 are LED using a depreciation factor of .80.

- D. The number, type, location, and mounting height.
All luminaires are in compliance with City of Burlington criteria.
All luminaires are DLC

Drawing TYPE B-4

Philips RVS-3532LED4K-LE4-UNIV-CLO-RC-BKTX

MOUNTING HEIGHT: 25' FROM FLAT OPTICAL ASSEMBLY TO THE
GROUND

ARM LENGTH: 6'-0" (AC-6-1A-BKTX)

PHOTOMETRIC FILE: RVS-35W-32LED4K-R-LE4

TEST NO.: S1210243-R1

MOUNTING HEIGHT 25'-0" ABOVE GRADE

QUANTITY: 2

Drawing TYPE B-4-HS

Philips RVS-3532LED4K-LE4-HS-UNIV-CLO-RC-BKTX

MOUNTING HEIGHT: 25' FROM FLAT OPTICAL ASSEMBLY TO THE
GROUND

ARM LENGTH: 6'-0" (AC-6-1A-BKTX)

PHOTOMETRIC FILE: RVS-35W-32LED4K-R-LE4-HS

TEST NO.: S1210262-R1

MOUNTING HEIGHT 25'-0" ABOVE GRADE

QUANTITY: 3

Drawing TYPE B-5

Philips RVS-3532LED4K-LE5-UNIV-CLO-RC-BKTX

MOUNTING HEIGHT: 25' FROM FLAT OPTICAL ASSEMBLY TO THE
GROUND

ARM LENGTH: 6'-0" (AC-6-1A-BKTX)

PHOTOMETRIC FILE: RVS-35W-32LED4K-R-LE5

TEST NO.: S1210301-R1

MOUNTING HEIGHT 25'-0" ABOVE GRADE

QUANTITY: 3

SEC. 5.5.2-2

Vertical surfaces are not being illuminated by this proposed design.

SEC. 5.5.2-3

See attached documents Exhibit A

SEC. 5.5.2-4

To be determined by Administrative Officer

SEC. 5.5.2-e General Outdoor Lighting Standards

SEC. 5.5.2-1 Standard used was IES RP-33-2014 Lighting for Exterior Environments

SEC. 5.5.2-2 Standard used was IES RP-20-2014 Lighting for Parking Facilities

SEC. 5.5.2-3 Outdoor Lighting Manual for Vermont Municipalities edition 1996

SEC. 5.5.2-4 Fixtures used on this project comply with current BUG ratings rather than
deprecated "Full cut-off" "Cut-Off" criteria.

Drawing TYPE B-4 B1-U0-G1

Drawing TYPE B-4-HS B0-U0-G1

Drawing TYPE B-5 B2-U0-G1

Light levels on adjacent property are in compliance with the 0.1 foot-candle 20
feet beyond the development site.

SEC. 5.5.2-5 All LED luminaires are in compliance with a minimum CRI of 70 (75 CRI typical)
for the drawing TYPE B series of luminaires.

SEC. 5.5.2-6 Illumination levels are the highest levels measured horizontally at ground level.
The print-out assumes a flat site. Levels might fluctuate 20% over the life of the
LED, about 70,000 hours.

SEC. 5.5.2-7 The project is in compliance with no laser light sources.

SEC. 5.5.2-8 There are no flag poles on this project.

SEC. 5.5.2-9 There shall be no neon tubing or banding on this project.

SEC. 5.5.2-f Specific Outdoor Lighting Standards

SEC. 5.5.2-f-1 Parking Lot Lighting

- A. Street lighting pole height complies with the 25'-0" requirement for the parking areas
- B. Project complies with criteria of illumination levels do not exceed 4 initial foot-candles at any point.

"East Parking" Calculated 1.2 foot-candles maximum

- C. Illumination levels are for the functional area of the parking
- D. Maximum to minimum uniformity ratios are under the 20:1 calculated at 6:00:1.
- E. Illumination shall be reduced to 50% one hour after the end of public business hours
Project, as proposed, is not in compliance.

No parking garages are part of this project

SEC. 5.5.2-f-2 Walkway Lighting

Not applicable

SEC. 5.5.2-f-3 Lighting of Gasoline Fueling Pump Islands and Canopies

Not applicable

SEC. 5.5.2-f-4 Other Vehicular Canopies:

Not applicable

SEC. 5.5.2-f-5 Parking Garage Lighting

Not applicable

SEC. 5.5.2-f-6 Lighting of Exterior Sales/Display Areas

Not applicable

SEC. 5.5.2-f-7 Security

Not applicable

SEC. 5.5.2-f-8 Outdoor Recreational Facility Lighting

Not applicable

SEC. 5.5.2-f-9 Lighting of Building Facades

Not applicable

SEC. 5.5.2-g Exception

We are only using LED technologies on this project