8.0:1

Symbol Avg Max Min Max/Min Avg/Min

+ | 1.2 fc | 9.4 fc | 0.1 fc | 9.4:1 | 12.0:1

2783 0.9 21.3

4901 0.9 51.34

4533 0.9 51.34

4300 0.9 51.34

1163 0.9 10.0002

3592 0.9 26.57

474 0.9 8.6

Max: 4818cd

Max: 3706cd

Max: 877cd

Max: 979cd

1.6 fc | 6.1 fc | 0.2 fc | 3.1:1

1 of 1

⁺0.1 ⁺0.1 ⁺0.1 ⁺0.2 ⁺0.2 ⁺0.2 ⁺0.1 ⁺0.1

0.7 +0.**\$A2(H\$)**6@0**15**:**5**:4 +0.4 +0.2 +0.1 +0.1 +0.2 +0.3 +0.3 +0.2 +0.1 ⁺0.2 ⁺0.3 ⁺0.3 ⁺0.3 ⁺0.5 ⁺0.6 ⁺0.6 ⁺0.3 ⁺0.1 ⁺0.2 ⁺0.4 ⁺0.6 ⁺0.6 ⁺0.4 ⁺0.1

0.1 +0.1 +0.1 +0.3 +0.8 +1.1 +0.9 +0.5 +0.2 +0.2 +0.6 +1.0 +1.1 +0.7 +0.1

**\bigcup_0.1 **

0.1 +0.1 +0.4 +2.1 +2.8 +2.1 +0.9 +0.3 +0.3 +1.1 +2.3 +3.0 +1.9 +0.3 +0.1

**\bigcup_0.1 **\dot_0.2 **\dot_0.5 **\dot_3.1 **\dot_4.0 **\dot_2.8 **\dot_1.1 **\dot_0.3 **\dot_0.3 **\dot_1.2 **\dot_3.0 **\dot_4.2 **\dot_3.1 **\dot_0.5 **\dot_0.2 **\dot_0.1 **

\bigcup_0.1 **\bigcup_0.3 ** †0.1 †0.3 †0.3 †4.2 †6.3 †3.6 †1.1 †0.3 †0.3 †1.0 †3.5 †6.3 †4.4 †0.9 †0.3 †0.1 **SA2(HS) @ 17.5

**SA2(HS) @ 17.5'+
**O.1 **O.3 **O.7 **3.9 **5.7 **3.6 **1.3 **O.3 **O.3 **1.0 **3.3 **5.4 **4.2 **O.7 **O.3 **O.3

**\bigcup_0.1 \bigcup_0.3 \bigcup_1.8 \bigcup_2.9 \bigcup_2.4 \bigcup_1.2 \bigcup_0.3 \bigcup_0.3 \bigcup_0.9 \bigcup_2.1 \bigcup_2.8 \bigcup_2.1 \bigcup_0.4 \bigcup_0.1

[†]0.1 [†]0.2 [†]1.1 [†]1.9 [†]1.7 [†]0.9 [†]0.3 [†]0.2 [†]0.7 [†]1.5 [†]1.8 [†]1.3 [†]0.3 [†]0.1

*0.1 *0.6 *1.1 *1.0 *0.6 *0.2 *0.2 *0.5 *0.9 *1.1 *0.8 *0.2

**\bigcup_0.1 **\bigcup_0.6 **\bigcup_0.6 **\bigcup_0.6 **\bigcup_0.6 **\bigcup_0.1 **\bigcup_0.3 **\bigcup_0.5 **\bigcup_0.6 **\bigcup_0.4 **\bigcup_0.2 **\bigcup_0.1 **\bigcup_0.6 **

+0.2 +0.3 +0.3 +0.3 +0.1 +0.1 +0.2 +0.3 +0.3 +0.2 +0.1

+0.1 +0.1 +0.2 +0.1 +0.1 +0.1 +0.1 +0.1 +0.2 +0.1 +0.1

⁺0.1 ⁺0.1 ⁺0.1 ⁺0.1 ⁺0.1 ⁺0.1 ⁺0.1 ⁺0.1 ⁺0.1

Statistics

Luminaires

7 RAB LIGHTING INC. [WP, A]LED18Y

6 RAB LIGHTING INC.

7 Lithonia Lighting

9 Lithonia Lighting

2 Lithonia Lighting

6 Lithonia Lighting

4 Lithonia Lighting

(EX)AREA

(EX)WALL PACK

SA2(HS)

SA3(HS)

SA4(HS)

Typical Parking Area Average With New

RWLED3T78SF -

WDGE1 LED P1 30K

IC1LED G4 06LM 30K

90CRI 120 FRPC + 12

Site Overall With Existing & New Luminaires

ALED3T78 - RWLED3T78 -CAST FINNED METAL HOUSING, 6 CIRCUIT

WPLED3T78 (TYPE III) | PLASTIC REFLECTOR WITH SPECULAR

RSX1 LED P1 30K R2 HS | RSX LED Area Luminaire Size 1 P1 Lumen

with HS shield

RSX1 LED P1 30K R3 HS RSX LED Area Luminaire Size 1 P1 Lumen

with HS shield

RSX1 LED P1 30K R4 HS RSX LED Area Luminaire Size 1 P1 Lumen

BOARDS EACH WITH 1 LED, MOLDED

FLAT GLASS LENS IN CAST WHITE

PAINTED METAL LENS FRAME.

FINISH AND 1 APERTURE PER LED, CLEAR

Package 3000K CCT Type R2 Distribution

Package 3000K CCT Type R3 Distribution

Package 3000K CCT Type R4 Distribution

WDGE1 LED WITH P1 - PERFORMANCE

PACKAGE, 3000K, 80CRI, VISUAL

PACKAGE, 3000K, T5W OPTIC TYPE

COMFORT WIDE OPTIC

VCPG LED P1 30K T5W VCPG LED WITH P1 - PERFORMANCE

4" IC LED HOUSING

⁺0.1 ⁺0.2 ⁺0.5 ⁺2.9 ⁺4.2 ⁺3.1 ⁺1.3 ⁺0.3 ⁺0.3 ⁺1.0 ⁺2.8 ⁺4.0 ⁺3.1 ⁺0.5 ⁺0.2 ⁺0.1

⁺0.1 ⁺0.1 ⁺0.1 ⁺0.1 ⁺0.1 ⁺0.1 ⁺0.1 ⁺0.1 ⁺0.1 ⁺0.2 ⁺0.3 ⁺0.4 ⁺0.4 ⁺0.3 ⁺0.2 ⁺0.1 ⁺0.1 ⁺0.1 ⁺0.1 ⁺0.1 ⁺0.2 ⁺0.3 ⁺0.5 ⁺0.5 ⁺0.4 ⁺0.2 ⁺0.1 ⁺0.1 **\dots** 1 *\dots** 1 *\dot** 1 *\dots** 1 *\dot** 1.0 ⁺1.2 ⁺1.4 ⁺1.7 ⁺2.0 ⁺1.8 ⁺1.5 ⁺1.1 ⁺08 ⁺0.5 ⁺0.4 ⁺0.3 ⁺0.2 ⁺0.1 ⁺0.2 ⁺0.2 ⁺0.2 ⁺0.1 ⁺0.1 ⁺0.1 ⁺0.1 ⁺0.1 ⁺0.1 ⁺0.1 ⁺0.2 ⁺0.3 ⁺0.2 ⁺0.1 ⁺0.1 ⁺0.1 ⁺0.1 ⁺0.1 ⁺0.1 ⁺0.2 ⁺0.3 ⁺0.2 ⁺0.1 ⁺0.1 ⁺0.1 ⁺0.1 ⁺0.1 ⁺0.1 ⁺0.2 ⁺0.3 ⁺0.2 ⁺0.1 **10.8 **10.8 **10.8 **10.8 **10.8 **10.7 **10.7 **10.6 **10.5 **10.4 **10.3 **10.2 **10.2 **10.1 ** *** 10.1 *** 10.1 *** 10.2 *** 10.3 *** 10.3 *** 10.3 *** 10.3

*\dot 0.8 *\dot 0.5 *\dot 0.4 *\dot 0.3 *\dot 0.2 *\dot 0.4 *\dot 0.3 *\dot 0.5 *\dot **10. 10.**

⁺0.1 ⁺0.1 ⁺0.1 ⁺0.1 ⁺0.1 ⁺0.1

10.1 + 0.1 + 0.1 + 0.1 + 0.1 + 0.2 + 0.3 + 0.5 + 0.9 + 1.4 + 2.3 + 3.4 + 4.6 + 6.0 + 6.7 + 5.8 + 4.9 + 3.4 + 1.7 + 0.7 + 0.3 + 0.1 + 0.1

TOWN OF RICHMON

⁺0.1 ⁺0.4 ⁺0.9 ⁺2.4 ⁺4.9 ⁺7.0

⁺0.1 ⁺0.4 ⁺0.9 ⁺2.5 ⁺5.2 ⁺7.0

[†]0.1 [†]0.3 [†]0.8 [†]2.3 [†]5.5 [†]9.2 ⁺0.1 ⁺0.3 ⁺0.6 ⁺1.7 ⁺3.7 ⁺5.3

⁺0.2 ⁺0.4 ⁺1.0 ⁺1.6 ⁺1.7

0.1 +0.2 +0.4 +0.6 +0.5

⁺0.1 ⁺0.1 ⁺0.2 ⁺0.2 ⁺0.1

⁺0.1 ⁺0.1

0.1 +0.1 +0.2 +0.2 +0.4 +0.5 +0.6 +0.5 +0.2 +0.2 +0.2 +0.1 +0.1 0.1 +0.2 +0.3 +0.6 +1.0 +2.1 +2.6 +2.3 +2.6 +1.6 +1.3 +0.8 +0.5 +0.2 +0.1

+0.1 +0.1 +0.2 +0.4 +0.8 +1.4 +2.8 +4.4 +5.5 +7.7 +8 (EX) AREA @.12057 +0.3 +0.1 +0.1

\dots\frac{1}{0.1}**\dots* **O.1 **O.1 **O.2 **O.2 **O.2 **O.3 **O.4 **O.5 **O.5 **O.6 **O.7 **O.7 **O.6 **O.5 **O.6 **O.7 **O.8 **O.6 **O.7 **O.8 **O.0 **O.4 **O.5 **O.6 **O.7 **O.8 **O.9 **O.9 **O.4 **O.5 **O.8 **O.9 **O.9 **O.9 **O.4 **O.5 **O.8 **O.9 **O.9 **O.9 **O.4 **O.5 **O.8 **O.9 **O.9

***O.1 **O.1 **O.2 ***O.3 **O.3 **O. **O.1 **O.1 **O.1 **O.2 **O.2 **O.5 **O.7 **O.8 **O.7 **O.8 **O.7 **O.6 **O.5 **O.7 **O.6 **O.5 **O.4 **O.5 **O.5 **O.6 **O.6 **O.6 **O.6 **O.6 **O.7 **I.0 **I.4 **I.9 **2.6 **2.2 **O.7 **O.3 **O.2 **O.2 **O.2 **O.2 **O.3 **O.8 **I.5 **3.4 **2.9 **2.2 **I.4 **O.8 **O.7 **I.2 **I.7 **2.2 **2.6 **I.6 **3.8 **I.5 **3.4 **2.9 **2.2 **I.4 **O.8 **O.7 **I.2 **I.7 **2.2 **2.6 **I.6 **3.8 **I.5 **3.4 **2.9 **2.2 **I.4 **O.8 **O.7 **I.2 **I.7 **2.2 **2.6 **I.6 **3.8 **I.5 **3.4 **2.9 **2.2 **I.4 **O.8 **O.7 **I.2 **I.7 **2.2 **2.6 **I.6 **3.8 **I.5 **3.4 **2.9 **2.2 **I.4 **O.8 **O.7 **I.2 **I.7 **2.2 **2.6 **I.6 **3.8 **I.5 **3.4 **2.9 **2.2 **I.4 **O.8 **O.7 **I.2 **I.7 **2.2 **2.6 **I.6 **3.8 **I.5 **3.4 **2.9 **2.2 **I.4 **O.8 **O.7 **I.2 **I.7 **2.2 **2.6 **I.6 **3.8 **I.5 **3.4 **2.9 **2.2 **I.4 **O.8 **O.7 **I.2 **I.7 **2.2 **2.6 **I.6 **3.8 **I.5 **3.4 **2.9 **2.2 **I.4 **O.8 **O.7 **I.2 **I.7 **I.2 **O.1**O.1 **O.1**O.2 **O.4 **O.6 **O.7 **O.7 **O.6 ** ***\bar{1}**\bar{1}**\bar{1}**\bar{2}*\bar{3}*\bar{4}*\bar{1}*\bar{2}*\bar{3}*\bar{4}*\bar{1}*\bar{2}*\bar{3}*\bar{4}*\bar{2}*\bar{1}* *** 1.0 *** 1. **O.1 **O.1 **O.1 **O.2 **O.3 **O.5 **O.9 **I.4 **I.9 **D.2 **D.3 **D.5 **O.9 **I.4 **I.9 **D.2 **D.3 **D.5 **D.9 **I.4 **I.9 **D.2 **D.3 **D.5 **D.9 **I.4 **I.9 **D.3

*** 10.1 *** 0.5 ** 1.6 *** 2.0 *** 0.7 *** 0.7 *** 2.5 *** 0.8 *** 0.7 ** 1.2 5.5; 6 16 0.3 2.3 50 6010 5.3 6.5 6.8 5.8 5.8 5.8 5.8 5.8 5.8 5.2 5.2 5.2 5.2 6.3 6.3 6.3 6.3 6.3 6.4 6.7 6.8 6.8 6.8 6.7 6.2 [†]0.1 [†]0.6 [†]2.2 [†]2.8 *0.1 *0.3 *0.4 *0.4 *0.3 *0.2 *0.2 *0.1 *0.1 *0.2 *0.2 *0.3 *0.3 *0.5 *0.8 *0.9 *0.9 *0.7 *0.4 *0.1 ⁺0.1 ⁺0.3 ⁺0.9 ⁺0.9 [†]0.1 [†]0.1 [†]0.1 [†]0.1 [†]0.1 [†]0.1 [†]0.1 [†]0.2 [†]0.2 [†]0.2 [†]0.2 [†]0.3 [†]0.4 [†]0.7 [†]1.0 [†]1.2 [†]1.1 [†]0.9 [†]0.3 [†]0.1 +0.1 +0.1 +0.3 +0.3 +0.1 +0 **\bigcup_1 **\bigcup_0.1 **\bigcup_0.1 **\bigcup_0.1 **\bigcup_0.1 **\bigcup_0.1 **\bigcup_0.1 **\bigcup_0.1 **\bigcup_0.1 **\bigcup_0.1 **\bigcup_0.2 **\bigcup_0.2 **\bigcup_0.3 **\bigcup_0.2 **\bigcup_0.3 **\bigcup_0.5 **\bigcup_0.9 **\bigcup_1.2 **\bigcup_1.4 **\bigcup_1.4 **\bigcup_1.9 **\bigcup_0.2 **\bigcup_0.1 **\b +0.1 +0.1 +0.2 +0.3 +0 +0.1 +0.1 +0.2 +0.3 +0.8 +1.1 +0.8 +0.5 +0.3 +0.3 +0.4 +0.7 +1.3 +1.5 +1.7 +1.7 +0.7 +0.2 +0.1

6.1 + 1.3 + 0.2 + 0.2 + 0.3 + 0.5 + 1.5 + 2.6 + 2.0 + 1.2 + 0.6 + 0.3 + 0.3 + 0.5 + 1.0 + 1.7 + 2.1 + 2.3 + 2.1 + 0.5 + 0.2 + 0.1 ⁺0,1 ⁺0.2 ⁺0.9 ⁺2.9 ⁺2.8 +0.6 +0.3 +0.2 +0.4 +0.9 +2.7 +5.1 +4.0 +2.4 +1.1 +0.4 +0.2 +0.3 +0.6 +1.3 +2.0 +2.7 +3.0 +1.8 +0.6 +0.3 +0.1 +0.1 +0.1 +0.2 +0.7 +3.1542(Hss) +0.2 +5155 +0.6 +0.2 +0.2 +0.4 +0.8 +1.5 +2.2 +3.0 +3.3 +1.3 +0.8 +0.3 +0.1 ⁺0.1 ⁺0.2 ⁺1.1 ⁺4.0 ⁻4.4_{SB @ 10'} *0.1 *0.2 *0.8 *2.2 *2.1 **\dots**

***1.0 ***1.0 ***1.0 ***1.0 ***1.0 ***1.1 ***1.2 ***1.1 ***1.0 ***0.8 **0.7 **0.7 **0.8 **0.7 **0.7 **0.8 **0.9 **1.0 **0.9 **0.9 **0.9 **0.7 **0.6 **0.6 **0.5 **0.5 **0.5 **0.5 **0.5 **0.5 **0.5 **0.4 **0.3 **0.2 **0.3 **0.3 **0.3 **0.3 **0.3 **0.3 **0.3 **0.1 ** \\^{\dagger{1}}_{\tau}\\^{\dagger{1}}_{\tau

**\bigs_1 \frac{1}{0.1} \frac{1}{0.2} \frac{1}{0.5} \frac{ \\daggregation \daggregation \

**\begin{picture}(10,10) & \displaystyle{1} & \disp [†]0.1 [†]0.2 [†]0.4 [†]0.4 [†]0.3 +0.1 +0.2 +0.2 +0.2 1 +0.2 +0.2 +0.2 +0.2 +0.1 +0.1 +0.1 \\^\0.1 \\^\0.1 \\^\0.1 \\^\0.1 \\^\0.1 [†]0.1 [†]0.1 [†]0.1 [†]0.1

<u>Plan View</u>

Scale - 1" = 30ft

1. ALL "ZERO" CALCULATION POINTS HAVE BEEN REMOVED TO ELIMINATE DIVIDE BY ZERO ERRORS FOR RATIOS IN THE

2. CALCULATIONS BASED ON IES FILES FOR THE SPECIFIC BASIS OF DESIGN PRODUCTS. EXISTING LUMINAIRES,

3. EXISTING LUMINARES MOUNTING HEIGHT IS ESTIMATED BASED ON BEST AVAILABLE INFORMATION

4. POINT BY POINT CALCULATION IS 6' ON CENTER CALCULATION POINTS AT GRADE (0' AFF).

5. CALCULATION IS PREPARED UTILIZING VISUAL LIGHTING 2020 PROGRAM, RELEASE 2.11.0062.

6. CONTROLS FOR ALL EXTERIOR LIGHTING WILL BE THROUGH A LIGHTING CONTROLLER WITH BOTH TIME AND PHOTOCELL INPUT.

7. SELECT POLE LUMINAIRES SHALL BE 15'-6" ABOVE FINISHED GRADE TO BOTTOM OF LUMINOUS DOWN LIGHT SURFACE WHERE INDICATED; THIS TO INCLUDE 15' POLE AND 6" CONCRETE BASE ABOVE GRADE ON THE LAWNED AREAS NOT SUSCEPTIBLE TO VEHICLE CONTACT.

DRIVE AREAS WHERE SUSCEPTIBLE TO VEHICLE CONTACT.

LUMINOUS DOWN LIGHT SURFACE.

11. LUMINAIRES RECESSED INTO THE BUILDING ENTRANCE CANOPY ARE APPROXIMATELY 10' ABOVE FINISHED GRADE

12. EXISTING STREET LIGHTING CONTRIBUTION IS NOT INCLUDED IN THESE CALCULATIONS.

STATISTICS MATRIX. CALCULATION RESULTS ARE TO TENTHS; LOWEST LEVELS INDICATED ARE 0.1 FOOT-CANDLES

INDECATED BY (EX) PREFIX ARE ESTIMATED BASED ON BEST AVAILABLE INFORMATION.

8. SELECT POLE LUMINAIRES SHALL BE 17'-6" ABOVE FINISHED GRADE TO BOTTOM OF LUMINOUS DOWN LIGHT SURFACE WHERE INDICATED; THIS TO INCLUDE 15' POLE AND 30" CONCRETE BASE ABOVE GRADE ON THE PARKING OR

9. BUILDING MOUNTED WALL PACK LUMINAIRES SHALL BE LOCATED ~10' ABOVE FINISHED GRADE TO BOTTOM OF

10. LIGHTING UNDER SOLAR CANOPIES SHALL BE MOUNTED ~13' ABOVE FINISHED GRADE TO BOTTOM OF LUMINOUS DOWN LIGHT SURFACE.

TO BOTTOM OF LUMINOUS DOWN LIGHT SURFACE.