

NOTES:


ALL INFORMATION IN THIS TABLE IS INTENDED TO PRODUCE A LIGHTING DESIGN WITH LUMINANCE LEVELS AND LUMINANCE UNIFORMITY FOR STRAIGHT ROADWAYS AND ILLUMINANCE LEVELS AND UNIFORMITY FOR INTERSECTIONS AND CURVED ROADWAYS. LIGHT LEVELS AND UNIFORMITY VALUES MEET OR EXCEED THOSE IN THE I.E.S., LIGHTING HANDBOOK, RP-8-14. INSTALLATION OF ADDITIONAL LIGHTS MAY BE NECESSARY TO MEET THE INTENT OF THIS STANDARD.

1. AVERAGE MAINTAINED LUMINANCE IS MEASURED IN CANDELA PER SQUARE METER. AVERAGE MAINTAINED ILLUMINANCE IS MEASURED IN FOOTCANDLES.
2. AT SIGNALIZED INTERSECTIONS, THE AVERAGE MAINTAINED ILLUMINANCE SHALL BE AS NOTED IN THE ILLUMINATION FOR INTERSECTIONS TABLE ON T21-01C. FOR INTERSECTIONS WITH ONLY ONE ROADWAY LIT, THE AVERAGE MAINTAINED LUMINANCE SHALL BE 1.5 TIMES THE HIGHEST LIT APPROACH.
3. LUMINANCE UNIFORMITY IS THE RATIO OF AVERAGE OR MAXIMUM MAINTAINED LUMINANCE TO MINIMUM LUMINANCE. LUMINANCE VALUES OUTSIDE THE ROADWAY SHALL NOT BE INCLUDED IN THE RATIO.
4. THE LATERAL LOCATION OF THE LIGHT STANDARD FOUNDATION SHALL BE A MINIMUM OF TWO FEET FROM THE FACE OF CURB TO THE FACE OF THE LIGHT POLE, SEE THE INDIVIDUAL LIGHTING DETAILS, LIGHTING SCHEDULES AND LOCATION ON PLANS FOR ADDITIONAL INFORMATION. THE LATERAL LOCATION OF THE CONDUIT AND JUNCTION BOXES SHALL BE ADJACENT TO THE BACK OF CURB, EXCEPT WHEN AN ALTERNATE LOCATION BETWEEN THE CURB AND SIDEWALK IS SHOWN ON THE PLANS. WHERE A PLANTING STRIP IS NOT PROVIDED AND THE SIDEWALK IS ADJACENT TO THE BACK OF CURB, THE LIGHT STANDARD SHALL NOT BE LOCATED MORE THAN EIGHT FEET FROM THE BACK OF CURB. WHERE THE SIDEWALK IS ATTACHED TO THE BACK OF CURB, THE CONDUITS AND JUNCTION BOXES SHALL BE LOCATED BEHIND THE SIDEWALK BUT NOT MORE THAT EIGHT FEET FROM THE BACK OF CURB. IF NO SIDEWALK IS PROVIDED.
5. LIGHTING LAYOUTS WILL REQUIRE APPROVAL AND POSSIBLE ADJUSTMENT TO MEET THE COV LIGHTING OBJECTIVES AND I.E.S. STANDARDS. THIS MAY INCLUDE ADJUSTMENT TO THE POLE SPACING AS LISTED AND MAY RESULT IN ADDITIONAL OR FEWER LIGHTS.
6. LIGHTING STANDARDS TYPE D, TYPE O, TYPE P, AND TYPE R SHALL ONLY BE USED IN THE DESIGNATED LIGHTING DISTRICTS. LIGHT STANDARDS LISTED ARE DEFINED IN MORE DETAIL IN THE "STANDARDS AND SPECIFICATIONS FOR TRAFFIC CONTROL DEVICES AND LIGHTING" DOCUMENT AND THE CITY'S APPROVED PRODUCTS LIST. STANDARD DETAILS FOR THE LIGHT STANDARDS ARE AVAILABLE.
7. ALL LIGHTING FIXTURES SHALL BE LIGHT EMITTING DIODE (LED) OR AS DIRECTED BY THE CITY. LIGHTING CIRCUITS SHALL BE 120 VOLTS. POST TOP FIXTURES IN RESIDENTIAL LAND USE AREAS SHALL BE I.E.S. TYPE V DISTRIBUTION. SEE THE "STANDARDS AND SPECIFICATIONS FOR TRAFFIC.
8. THE MOUNTING HEIGHT OF THE FIXTURE IS MEASURED FROM THE ROADWAY SURFACE TO THE CENTER OF THE LIGHT SOURCE. 6 FEET ARMS ARE USED IN ROADWAYS WITH PLANTER STRIPS AND 10 FEET ARMS IN CURB TIE AREAS.
9. ALTERNATIVE LIGHTING LAYOUTS MAY BE SUBMITTED FOR REVIEW. WHERE LIGHTING IS REQUIRED ON BOTH SIDES, DESIGNS SHALL BE "OPPOSITE LIGHTING" ON MAJOR ROADWAYS GREATER THAN 48 FEET IN THE USE OF STAGGERED LIGHTING SHALL ONLY BE USED WHERE "OPPOSITE LIGHTING" IS NOT PRACTICAL. LIGHTING LAYOUTS ON LOCAL RESIDENTIAL STREETS WITHIN A SUBDIVISION MAY VARY FROM SIDE TO SIDE.
10. LOW, MEDIUM, AND HIGH PEDESTRIAN CONFLICT AREAS ARE AS DEFINED IN THE ANSI/IES RP-8-14. **LOW PEDESTRIAN CONFLICT AREAS** ARE GENERALLY IN RESIDENTIAL AREAS. **MEDIUM PEDESTRIAN CONFLICT AREAS** HAVE MODERATE NIGHT PEDESTRIAN ACTIVITIES TYPICALLY FOUND NEAR COMMUNITY FACILITIES SUCH AS LIBRARIES AND RECREATION CENTERS. **HIGH PEDESTRIAN CONFLICT AREAS** ARE TYPICALLY FOUND NEAR COMMERCIAL AREAS IN URBAN ENVIRONMENTS. CONSULT THE ANSI/IES RP-8-14 FOR COMPLETE DEFINITIONS OF PEDESTRIAN CONFLICT AREAS. THE CITY OF VANCOUVER TRAFFIC ENGINEER'S DETERMINATION OF THE CORRECT PEDESTRIAN CONFLICT DESIGNATION FOR AN AREA SHALL BE USED FOR LIGHTING SYSTEM DESIGN.

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REV NO.	DATE	BY	APPR	
1	1/15	RAW	CJC	
2	7/19	RAW	CJC	
3	9/21	RAW	CJC	

PUBLIC WORKS - STREETS AND TRANSPORTATION

APPROVED BY: 
 TRAFFIC ENGINEER MANAGER
 APPROVED DATE: 9/1/2021



CITY STREET LIGHTING REQUIRMENTS NOTES	STANDARD PLAN NUMBER T21-01D
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