

**(Effective until July 1, 2020)**

**WAC 51-11C-405051 Section C405.4.1—Total connected interior lighting power.**

**C405.4.1 Total connected interior lighting power.** The total connected interior lighting power shall be determined in accordance with Equation 4-10.

$$\text{TCLP} = [\text{SL} + \text{LV} + \text{LTPB} + \text{Other}]$$

**(Equation 4-10)**

Where:

TCLP = Total connected lighting power (watts).

SL = Labeled wattage of luminaires for screw-in lamps.

LV = Wattage of the transformer supplying low-voltage lighting.

LTPB = Wattage of line-voltage lighting tracks and plug-in busways as the specified wattage of the luminaires but at least 50 W/lin. ft., or the wattage limit of the system's circuit breaker, or the wattage limit of other permanent current limiting devices on the system.

Other = The wattage of all other luminaires and lighting, sources not covered above and associated with interior lighting verified by data supplied by the manufacturer or other *approved* sources.

EXCEPTIONS:

1. The connected power associated with the following lighting equipment is not included in calculating total connected lighting power.
  - 1.1. Professional sports arena playing field lighting.
  - 1.2. Emergency lighting automatically off during normal building operation.
  - 1.3. Lighting in spaces specifically designed for use by occupants with special lighting needs including the visually impaired and other medical and age-related issues.
  - 1.4. Casino gaming areas.
  - 1.5. General area lighting power in industrial and manufacturing occupancies dedicated to the inspection or quality control of goods and products.
  - 1.6. Lighting in sleeping units, provided that the lighting complies with Section R404.1.
  - 1.7. Mirror lighting in dressing rooms.
2. Lighting equipment used for the following shall be exempt provided that it is in addition to general lighting and is controlled by an independent control device:
  - 2.1. Task lighting for medical and dental purposes.
  - 2.2. Display lighting for exhibits in galleries, museums and monuments.
  3. Lighting for theatrical purposes, including performance, stage, film production and video production.
  4. Lighting for photographic processes.
  5. Lighting integral to equipment or instrumentation and is installed by the manufacturer.
  6. Task lighting for plant growth or maintenance where the lamp efficacy is not less than 90 lumens per watt.
  7. Advertising signage or directional signage.
  8. In restaurant buildings and areas, lighting for food warming or integral to food preparation equipment.
  9. Lighting equipment that is for sale.
  10. Lighting demonstration equipment in lighting education facilities.
  11. Lighting *approved* because of safety or emergency considerations, inclusive of exit lights.
  12. Lighting integral to both open and glass enclosed refrigerator and freezer cases.
  13. Lighting in retail display windows, provided the display area is enclosed by ceiling-height partitions.
  14. Furniture mounted supplemental task lighting that is controlled by automatic shutoff.
  15. Lighting used for aircraft painting.

[Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-405051, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-405051, filed 2/1/13, effective 7/1/13.]

**Reviser's note:** The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency.

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**WAC 51-11C-405051 Section C405.4.1—Total connected interior lighting power.**

**C405.4.1 Total connected interior lighting power.** The total connected interior lighting power shall be determined in accordance with Equation 4-10.

$$\text{TCLP} = [\text{LVL} + \text{BLL} + \text{TRK} + \text{POE} + \text{Other}]$$

**(Equation 4-10)**

Where:

TCLP = Total connected lighting power (watts).

LVL = For luminaires with lamps connected directly to building power, such as line voltage lamps, the rated wattage of the lamp, which must be minimum 60 lumens/watt.

BLL = For luminaires incorporating a ballast or transformer, the rated input wattage of the ballast or transformer when operating the lamp.

TRK = For lighting track, cable conductor, rail conductor and plug-in busway systems that allow the addition and relocation of luminaires without rewiring. The wattage shall be one of the following:

1. The specified wattage of the luminaires, but not less than 16 W/lin. ft. (52 W/lin. m).

2. The wattage limit of the permanent current limiting devices protecting the system.

3. The wattage limit of the transformer supplying the system.

POE = For other modular lighting systems served with power supplied by a driver, power supply for transformer including, but not limited to, low-voltage lighting systems, the wattage of the system shall be the maximum rated input wattage of the driver, power supply or transformed published in the manufacturer's catalogs, as specified by UL 2108 or 8750. For power-over-Ethernet lighting systems, power provided to installed nonlighting devices may be subtracted from the total power rating of the power-over-Ethernet systems.

Other = The wattage of all other luminaires and lighting, sources not covered above and associated with interior lighting verified by data supplied by the manufacturer or other *approved* sources.

The connected power associated with the following lighting equipment is not included in calculating total connected lighting power.

1. Television broadcast lighting for playing areas in sports arenas.

2. Emergency lighting automatically off during normal building operation.

3. Lighting in spaces specifically designed for use by occupants with special lighting needs including those with visual impairment and other medical and age-related issues.

4. Casino gaming areas.

5. General area lighting power in industrial and manufacturing occupancies dedicated to the inspection or quality control of goods and products.

6. Mirror lighting in dressing rooms.

7. Task lighting for medical and dental purposes that is in addition to general lighting and controlled by an independent control device.

8. Display lighting for exhibits in galleries, museums and monuments that is in addition to general lighting and controlled by an independent control device.

9. Lighting for theatrical purposes, including performance, stage, film production and video production.

10. Lighting for photographic processes.

11. Lighting integral to equipment or instrumentation and installed by the manufacturer.

12. Task lighting for plant growth or maintenance where the lamp efficacy is not less than 90 lumens per watt.

13. Advertising signage or directional signage.
14. Lighting for food warming.
15. Lighting equipment that is for sale.
16. Lighting demonstration equipment in lighting education facilities.
17. Lighting *approved* because of safety considerations.
18. Lighting in retail display windows, provided the display area is enclosed by ceiling-height partitions.
19. Furniture mounted supplemental task lighting that is controlled by automatic shutoff.
20. Exit signs.
21. Lighting used for aircraft painting.

[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-405051, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-405051, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-405051, filed 2/1/13, effective 7/1/13.]

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