

**WAC 51-11C-405028 Section C405.2.8—Advanced lighting controls.**

**C405.2.8 Advanced lighting controls.** Any contiguous open office area larger than 5,000 square feet shall have its *general lighting* controlled by either:

1. *Luminaire-level lighting controls* (LLLC) conforming to the requirements of Section C405.2.8.1.
2. Networked lighting control (NLC) conforming to the requirements of Section C405.2.8.2.

**C405.2.8.1 Luminaire-level lighting controls.** Where *luminaire-level lighting controls* are required, they shall be configured to provide the controls or equivalent control function specified in Sections C405.2.1, C405.2.3, and C405.2.5. In addition, each LLLC luminaire shall be independently configured to:

1. Provide for continuous full range dimming.
2. Monitor occupant activity to brighten or dim lights when occupied or unoccupied, respectively.
3. Monitor ambient lighting, both electric and daylight, and brighten or dim artificial light to maintain desired light level. A maximum of 8 fixtures are permitted to be controlled together to maintain uniform light levels within a single daylight zone.
4. Allow configuration and reconfiguration of performance parameters for each control strategy including: High trim and low trim set-points, timeouts, dimming fade rates, and sensor sensitivity adjustment.
5. Construction documents shall include a submittal of a sequence of operations including a specification outlining each of the functions required by this section.
6. Luminaires shall be configured with high end trim in accordance with Section C405.2.8.3.

**C405.2.8.2 Networked lighting control (NLC).** Where NLC are required, they shall be configured to provide controls and minimum function as specified in Section C405.2. In addition, each NLC luminaire shall be independently configured to:

1. Provide for continuous full range dimming.
2. Each luminaire shall be individually addressed.

**EXCEPTIONS TO ITEM 2:**

1. Multiple luminaires mounted on no more than 12 linear feet of a single lighting track and addressed as a single luminaire.
2. Multiple linear luminaires that are ganged together to create the appearance of a single longer fixture and addressed as a single luminaire, where the total length of the combined luminaires is not more than 12 feet.

3. Monitor occupant activity to brighten or dim lighting when occupied or unoccupied, respectively.
4. Monitor ambient lighting, both electric and daylight, and brighten or dim artificial light to maintain desired light level. A maximum of 8 fixtures are permitted to be controlled together to maintain uniform light levels within a single daylight zone.
5. Allow configuration and reconfiguration of performance parameters for each control strategy including: High trim and low trim set-points, timeouts, dimming fade rates, and sensor sensitivity adjustment.
6. Allow for demand response load shed.
7. Construction documents shall include a submittal of a sequence of operations including a specification outlining each of the functions required by this section.
8. Luminaires shall be configured with high end trim in accordance with Section C405.2.8.3.

**C405.2.8.3 High end trim.** Luminaires subject to high end trim shall be initially configured with the following:

1. Programmed to limit the initial maximum lumen output or maximum lighting power to 85 percent or less of full light output or full power or to meet the target light level documented in project sequence of operations using the least amount of power.

2. High end trim power levels are allowed to automatically reset to accommodate lumen maintenance.

3. High end trim controls shall be accessible only to authorized personnel.

[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapters 19.27A and 19.27 RCW. WSR 22-14-091, 23-12-101, and 23-20-021 § 51-11C-405028, filed 7/1/22, 6/7/23, and 9/25/23, effective 3/15/24. Statutory Authority: RCW 19.27A.025, 19.27A.045 and chapter 19.27 RCW. WSR 20-21-080, § 51-11C-405028, filed 10/19/20, effective 2/1/21. Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-405028, 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-405028, filed 1/19/16, effective 7/1/16.]