Division 26 Electrical
Lighting Control Requirements

26-21a
Construction Documents Requirements
- Daylit Zones are marked ON plans
- One or more photo sensors must be used for each Daylit Zone
- Fixture specifications are labeled on plans (Dimming type, and, Lumen output and or wattage)
- Sequence of Operations (Schedule of programming) is marked on plans
- Square footage
- Occupancy type

26-21b
Functional Testing and Verification
- Provided by Certified ATT – Acceptant Testing Technician

26-21c
Conduct a field test comprise of:
- Daylit Testing:
  - 1) Skylit skylight zones,
  - 2) Primary window zones,
  - 3) Secondary window zones
- Full Daylight Test: full daylight lighting system is at 35% less than full output when switched.
- Partial Daylight Test: light level between 60% and 95% during full load output test

26-21d
Occupancy Sensor Test
- Max time out for all sensors is 15 minutes
- Verify lights turn ON at 50% and automatically shut OFF
- Ensure zones can turn ON during scheduled OFF times
- Verify settings, time of day, and sensitivity
- Buildings with more than 7 sensors: test 1 in each sampling group
- Occupancy sensor sensitivity testing

26-21e
Automatic Time Control
- is not permitted
26-21f
Demand Response
- Buildings 10,000 sf or above must provide systems capable of supporting Demand Response
- Spaces not included shall be one of the following: have a power density less than 0.5W/sf: bathrooms, utility closets, mechanical rooms, and stairwells
- Reduce load in response to a utility request
  - Utility service provider
  - Independent Systems operator (ISO)
  - Designated curtailment provider or approved aggregator
- **Each fixture** shall be capable of shedding load by at least 15%, and NO more than 50% of full output

26-21g
Outdoor Lighting Controls
- Controls are OFF during daytime hours and reduced during vacant evening hours
- Photo controls, astronomical time switches, sensors, and other controls shall be incorporated as required
- All outdoor luminaries must be wired and powered prior to testing
- Verify all controls are functioning and in place

26-21h
Outdoor Motion Sensors
- Auto ON function is required
  - All lighting must automatically turn ON
- All lighting mounted 24 feet or less must be controlled by a motion sensor that automatically reduces lighting power by 40% to 80% based on vacancy
- Exception 3 to section 130.2(c)3 if the laminar is less than 75w
- One single control may not serve more than 1500w
- Functional Test Procedure
  - Conduct an “Occupied test”
  - Conduct a “Vacancy test”
  - Lights turn OFF or Dim within 15 minutes of becoming unoccupied
    - Lights must be reduced between 40% and 80% when unoccupied
  - Perform a partial night test