

# NYCECC 2020

## Lighting and Receptacle Control Requirements for New Construction and Major Renovations<sup>1</sup>



### OPEN OFFICES AND DINING AREAS<sup>2</sup>

#### **PARTIAL-OFF** C405.2.1.3 | 9.4.1.1(g)

Automatic reduction of lighting power by at least 80% (Full OFF complies) when zones are vacant for more than 15 minutes. Lighting in the entire space goes OFF when all occupants have left for by 15 minutes.

#### **KEY EXCEPTIONS**

None

#### **LUTRON SOLUTIONS**

- Wireless Occupancy Sensors
- LRF2-OWLB-P

### OTHER INTERIOR SPACES

#### **AREA CONTROL** C405.2.1.1; C405.2.2 | 9.4.1.1(a)

Manual lighting control for general lighting is required in each space.

#### **KEY EXCEPTIONS**

The controls shall be located where the controlled lights are visible, or shall identify the area served by the lights and indicate their status.

#### **LUTRON SOLUTIONS**

- Pico Wireless Remotes
- PJ2-3BRL-GWH-L01

#### **LIGHT REDUCTION CONTROL** C405.2.2.2 | 9.4.1.1(d)

Each space must have controls that allow occupants to select at 50% level (30% to 70% for ASHRAE path). Continuous dimming complies.

#### **KEY EXCEPTIONS**

Spaces where lighting is controlled by an occupancy sensor and lighting in daylight zones controlled by a daylight sensor.

#### **LUTRON SOLUTIONS**

- PowPak 0-10V Dimming Module
- RMJS-8T-DV-B

#### **AUTOMATIC LIGHTING SHUT-OFF**

C405.2.1; C405.2.2 | 9.4.1.1(h); 9.4.1.1(i)

Automatic lighting shut-off required (e.g., occupancy sensor or time clock).

#### **KEY EXCEPTIONS**

Continuously illuminated 24/7 spaces and up to 0.01 to 0.02 W/ft<sup>2</sup> may be uncontrolled.

#### **LUTRON SOLUTIONS**

- Wireless Occupancy & Vacancy Sensors
- LRF2-OCR2B-P-WH
- LRF2-VCR2B-P-WH

#### **DAYLIGHT ZONE CONTROL<sup>3</sup>** C405.2.3 | 9.4.1.1(e); 9.4.1.1(f)

Luminaires in daylight zones shall have automatic daylight responsive controls.

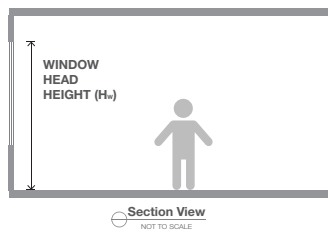
#### **KEY EXCEPTIONS**

Spaces with windows less than 24 ft<sup>2</sup> in area; and spaces that have less than 100W of lighting power in all daylight zones.

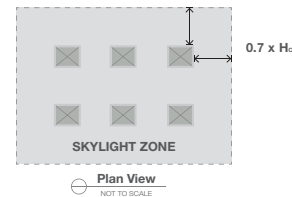
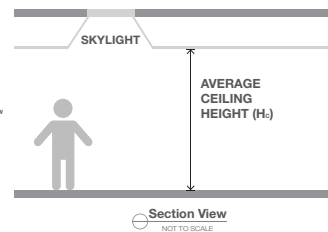
#### **LUTRON SOLUTIONS**

- Wireless Daylight Sensors
- LRF2-DCRB-WH

Sidelighting (Window)



Toplighting (Skylight)



#### **ENHANCED DIGITAL LIGHTING CONTROLS (IECC path only)<sup>4</sup>** C406.4

Continuous dimmable and reconfigurable digitally addressable fixtures with load shedding and personal control capability.

#### **KEY EXCEPTIONS**

Previously occupied tenant spaces that have already complied with this code.

#### **LUTRON SOLUTIONS**

- Vive Wireless Hub
- HJS-1-FM

#### **RECEPTACLE CONTROL (ASHRAE Path only)** 8.4.2

Automatic control of receptacles in certain spaces to help reduce plug loads. Spaces include: office (open and private), conference rooms, break rooms areas in office spaces, copy rooms, and classrooms.

#### **KEY EXCEPTIONS**

Receptacles specifically designed for equipment requiring continuous operation. Spaces where automatic control would endanger safety or security.

#### **LUTRON SOLUTIONS**

- Wireless Receptacle
- CAR2S-20-STR-WH

### EXTERIOR AREAS

#### **EXTERIOR LIGHTING CONTROL** C405.2.6 | 9.4.14

**Daylight shutoff** – automatic OFF when daylight is available.

**Lighting setback** – parking lot poles automatically reduced by at least 50% via motion sensing. Other exterior lighting automatically reduced by at least 50% (30% for ASHRAE 90.1 path) via scheduling or motion sensing.

#### **KEY EXCEPTIONS**

Parking lot poles greater than 24 ft. in height.

#### **LUTRON SOLUTIONS**

- Limelight Gateway & Sensor
- LL-CELLGATE
- LL-EXTMOUNT

### FUNCTIONAL TESTING

#### **FUNCTIONAL TESTING** C408.3 | 9.7.3.1

Lighting controls must be tested to ensure that they are working properly (shutoff controls, daylight controls, demand response controls and exterior controls).

#### **KEY EXCEPTIONS**

N/A

#### **LUTRON SOLUTIONS**

- Lutron Field Services

1. Requirements are for new construction, and building renovations that replace 10% or more of the luminaires in a space.  
 2. Only for dining areas of cafeterias and fast food restaurants.  
 3. For ASHRAE 90.1 compliance path, the sidelighting zone is half a window head height on each side of the window and there is a secondary sidelighting daylight zone that is two window head heights into the space.  
 4. One of the mandatory efficiency option packages that must be chosen for every project.

For more code-based resources, visit [lutron.com/energycodes](http://lutron.com/energycodes)

This document summarizes the lighting and receptacle control requirements for commercial buildings. It is for information purposes only. It is not meant to replace your state's or local jurisdiction's official energy code. Please refer to your local building energy code or authority having jurisdiction for your precise requirements. Only the authority having jurisdiction can guarantee code compliance.