



# Wireless Connected Lighting

## DESIGN GUIDE

### TWO ZONE CLASSROOM WITH 0-10V DIMMING AND DEMAND RESPONSE

#### SEQUENCE OF OPERATIONS:

##### LIGHTING

- 0-10V LIGHTING LOADS
- UP TO 3 DIMMING ZONES
- OUT OF THE BOX 75% HIGH END TRIM

##### OCCUPANCY

- OUT OF THE BOX AUTO ON TO 50%
- OPTIONAL VACANCY MODE
- OPTIONAL AUTO ON TO SCENE
- PLUG LOAD TURNS ON WITH OCCUPANCY
- AUTOMATIC OFF OF LIGHTING AND PLUG LOAD ON VACANCY

##### DAYLIGHTING

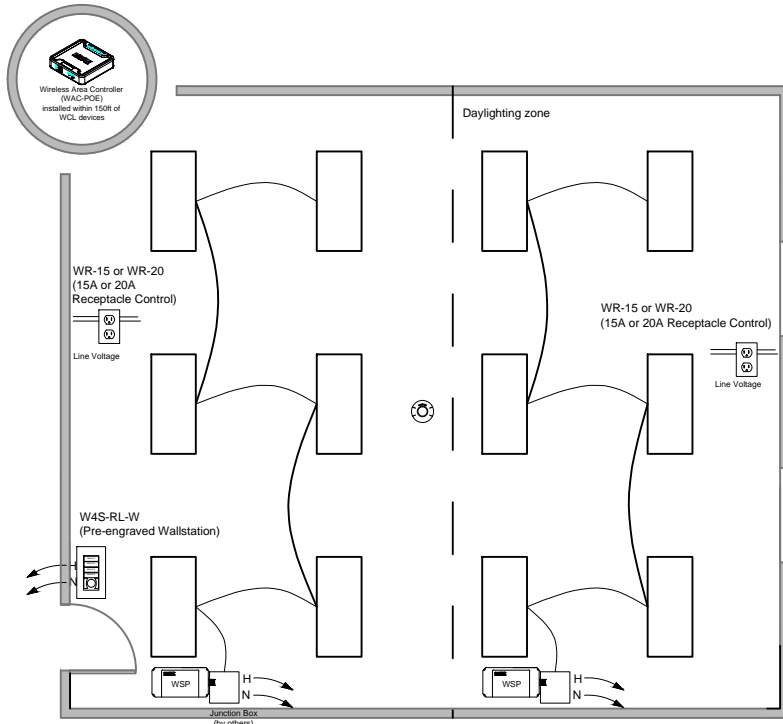
- CONTINUOUS DIMMING TO OFF
- INDIVIDUAL LUMINAIRE DAYLIGHT DIMMING
- DAYLIGHTING NOT REQUIRED FOR INDOOR OFFICES
- NOT REQUIRED IN SPACES WITHOUT WINDOWS THAT ARE LESS THAN 120W.

##### MANUAL CONTROLS

- PROGRAMMABLE SCENES
- SCENE RAISE
- SCENE LOWER
- ALL OFF

##### ADDITIONAL FEATURES

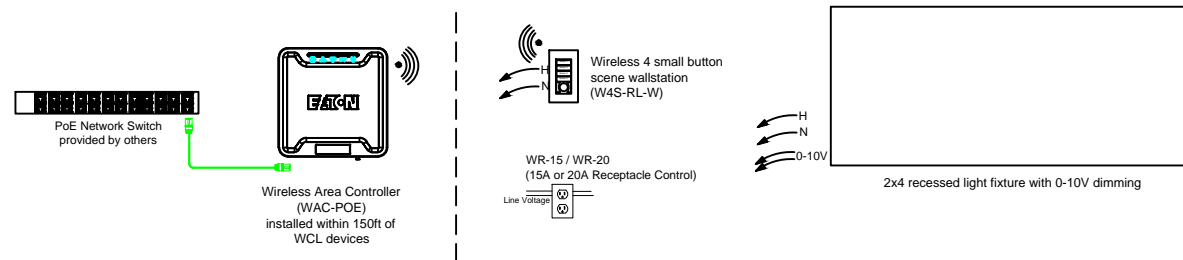
- POWER MEASUREMENT REPORTING THROUGH MOBILE APPLICATION
- AUTOMATIC DEMAND RESPONSE AVAILABLE FROM WIRELESS AREA CONTROLLER
- SCHEDULING OF PARTIAL OFF LIGHT LEVELS AND TIMES FROM WIRELESS AREA CONTROLLER
- UL924 EMERGENCY CONTROL CAPABILITIES AVAILABLE VIA LUMINAIRE BATTERY BACKUP



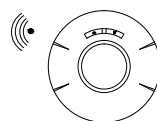
#### Bill of Materials

| Qty | Catalog #      | Description                       |
|-----|----------------|-----------------------------------|
| 1   | WAC-POE        | Wireless Area Controller          |
| 1   | W4S-RL-W       | 4 Small button scene wallstation  |
| 2   | WR-15 or WR-20 | Wireless Receptacle               |
| 2   | WSP-MV-010     | 20A relay with 0-10V dimming      |
| 1   | CWPD-1500      | Wireless ceiling occupancy sensor |

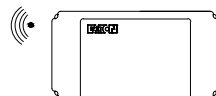
#### TYPICAL WIRING DETAIL



| Design Consideration:               | Best Practice:           | Best Practice: |
|-------------------------------------|--------------------------|----------------|
| Gateway/WAC range                   | 150 feet to 250 feet LOS | 300 feet LOS   |
| Number of interior walls            | 2 walls                  | 3 walls        |
| Distance from WAC to 1st WCL device | 150 feet                 | 200 feet       |
| Distance between WCL devices        | 75 feet                  | 150 feet       |
| Number of hops from WAC             | 4 hops                   | 5 hops         |
| Number of areas per WAC             | 16                       | 16             |
| Number of zones per area            | 3                        | 16             |
| Number of scenes per area           | 6                        | 10             |



Wireless Ceiling Mount Occupancy Sensor (CWPD-1500)



20A Relay w/ 0-10V Dimming (WSP-MV-010)



Manually Switched ON/OFF



Manual Dimmer



Occupancy Sensor



Daylighting Control



Receptacle Control



Demand Response



UL924 (Energy Back-up Circuit)