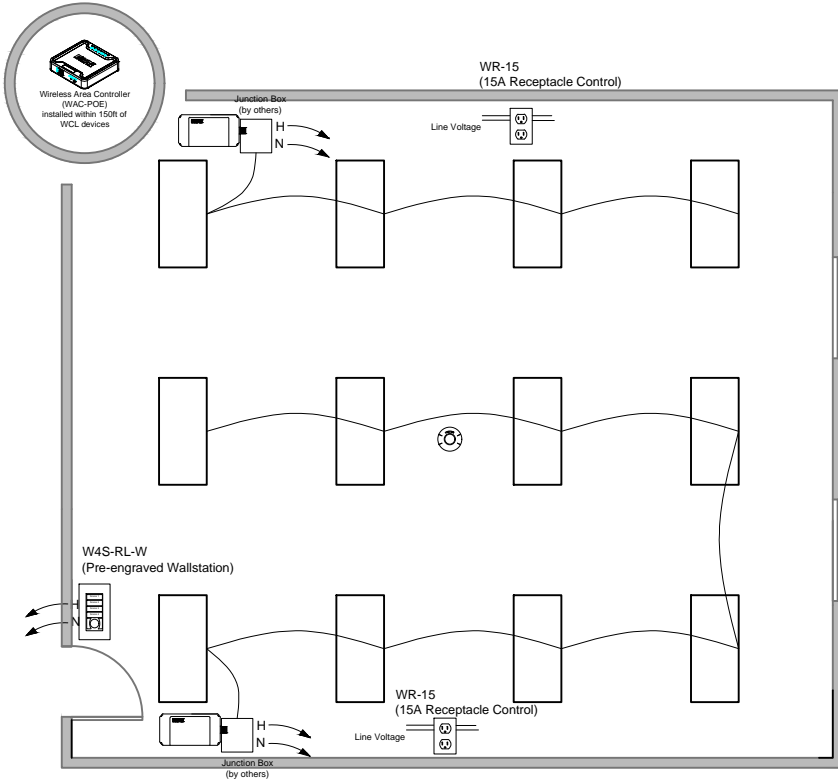




WaveLinx Connected Lighting

ASHRAE 90.1 2016 DESIGN GUIDE

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



Bill of Materials

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

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.

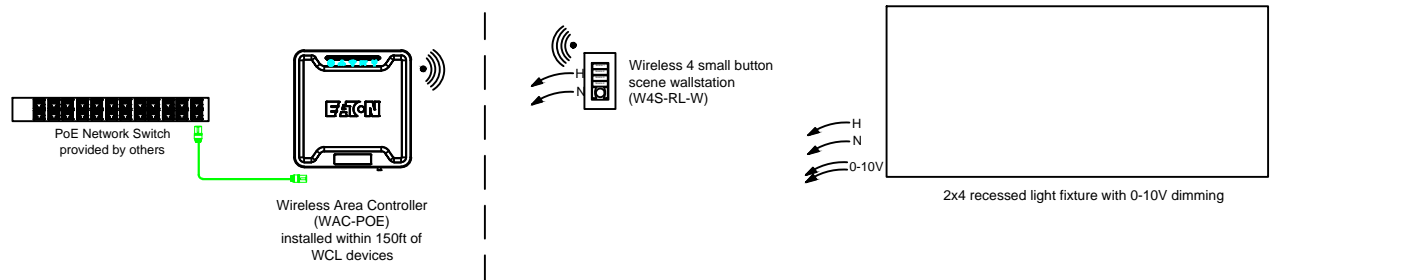
MANUAL CONTROLS

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

ADDITIONAL FEATURES

- ENERGY CALCULATIONS AVAILABLE THROUGH TRELIX
- 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

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	15 + construction area	15 + construction area
Number of zones per area	3	16
Number of scenes per area	16	16

ASHRAE 90.1-2016	9.4.1(a)	9.4.1.1(b)	9.4.1.1(c)	9.4.1.1(d)	9.4.1.1(e)	9.4.1.1(f)	9.4.1.1(g)	9.4.1.1(h)	9.4.1.1(i)	8.4.2	8.4.3.2	9.4.3	
	Local Control ON	Manual ON	Partial ON	Bilevel Lighting	Daylight Side	Daylight Top	Partial OFF	Automatic OFF	Scheduled OFF	Receptacle Control	Energy Monitoring	Functional Testing	Demand Response

